

Page 1 of 6
REQUEST NUMBER: 10-2151

ATTN: Valerie Davis

These Samples are on:

LANL Request Number:10-2151

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 REQD: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA.300.0	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
EPA:300.0						
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
SW-846:60108						
		1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6020	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6850	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6850						
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
SW-846:7471A						
		1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:7471A						
1	RE36-10-7484	R	2/24/2010			
1	RE36-10-7485	R	2/24/2010			
1	RE36-10-7486	R	2/24/2010			
1	RE36-10-7487	R	2/24/2010			
1	RE36-10-7488	R	2/24/2010			
1	RE36-10-7489	R	2/24/2010			
1	RE36-10-7490	R	2/24/2010			
1	RE36-10-7415	R	2/24/2010			
SW-846:9012A						
1	RE36-10-7416	R	2/24/2010			
1	RE36-10-7417	R	2/24/2010			
1	RE36-10-7418	R	2/24/2010			
1	RE36-10-7419	R	2/24/2010			
1	RE36-10-7420	R	2/24/2010			
1	RE36-10-7477	R	2/24/2010			
1	RE36-10-7478	R	2/24/2010			
1	RE36-10-7479	R	2/24/2010			
1	RE36-10-7480	R	2/24/2010			
1	RE36-10-7481	R	2/24/2010			
1	RE36-10-7482	R	2/24/2010			
1	RE36-10-7483	R	2/24/2010			
1	RE36-10-7484	R	2/24/2010			
1	RE36-10-7485	R	2/24/2010			
1	RE36-10-7486	R	2/24/2010			
1	RE36-10-7487	R	2/24/2010			
1	RE36-10-7488	R	2/24/2010			
1	RE36-10-7489	R	2/24/2010			
1	RE36-10-7490	R	2/24/2010			
CNAI 046:0015EN						
1	RE36-10-7415	R	2/24/2010			

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9045C						
1		1	RE36-10-7416	R	2/24/2010	
1		1	RE36-10-7417	R	2/24/2010	
1		1	RE36-10-7418	R	2/24/2010	
1		1	RE36-10-7419	R	2/24/2010	
1		1	RE36-10-7420	R	2/24/2010	
1		1	RE36-10-7477	R	2/24/2010	
1		1	RE36-10-7478	R	2/24/2010	
1		1	RE36-10-7479	R	2/24/2010	
1		1	RE36-10-7480	R	2/24/2010	
1		1	RE36-10-7481	R	2/24/2010	
1		1	RE36-10-7482	R	2/24/2010	
1		1	RE36-10-7483	R	2/24/2010	
1		1	RE36-10-7484	R	2/24/2010	
1		1	RE36-10-7485	R	2/24/2010	
1		1	RE36-10-7486	R	2/24/2010	
1		1	RE36-10-7487	R	2/24/2010	
1		1	RE36-10-7488	R	2/24/2010	
1		1	RE36-10-7489	R	2/24/2010	
1		1	RE36-10-7490	R	2/24/2010	

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Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2151

LOS ALAMOS

REQUEST NUMBER: 10-2151

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7415	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7415	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7420	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7420	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7418	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7418	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7417	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7417	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7419	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7419	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7416	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7416	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7478	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7478	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7490	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7490	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7487	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7487	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7483	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7483	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7481	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7481	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2151

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7486	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7477	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7477	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7489	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7489	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7479	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7479	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7482	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7482	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7480	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7480	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7485	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7485	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7488	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7488	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7484	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7484	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7415

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)		09:42		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610580	↓		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	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
							NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS 424110 clear	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, organic topsoil

SAMPLE COMMENTS:

roots

LOCATION DESC: 8-56

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm

Beta/Gamma = 1558 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ 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) Sherin Newwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sherin Newwood	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: RE36-10-7416

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/10		MEDIA:	QBT3	ALLA	
TIME COLLECTED (HH:MM)		10:00		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610580	↓		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	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS <i>2.2m clear</i>	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 topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-56

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1814 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) J. Marin	2/25/10
(Signature) J. R. Marin	0750 AM	(Signature) J. Marin	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: RE36-10-7417

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)		11:00	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610581	↓	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	NO/NA		BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS <i>from sample clear</i>	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, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-32

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm
Beta/Gamma = 1368 dpm

PID $\frac{\text{Ambient Reading}}{0} \text{ ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY

(Printed Name) JON MARIN

(Signature) Jon R. Marin

Date/Time

2/25/10

0750 AM

RECEIVED BY

(Printed Name) Sheri Sherwood

(Signature) Sheri Sherwood

Date/Time

2/25/10

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: RE36-10-7418

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)		11:15		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610581		↓	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		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS <i>gem clear</i>	Ice	Y	
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 topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-32

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 2080 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sherri Greenwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherri Greenwood	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: RE36-10-7419

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)		14:10		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610582		↓	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, silty sandy topsoil, organic

SAMPLE COMMENTS: NA

LOCATION DESC: 8-35

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 82 dpm
Beta/Gamma = 2146 dpmPID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

B. Saunders

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: RE36-10-7420

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)		14:20		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610582		↓	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		METALS+U-GEL	125 ML POLY	Ice		
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice		
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brown, dry, silty, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-35

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 94 dpm
Beta/Gamma = 2070 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ 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) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(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: RE36-10-7477

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)		09:00		SUB-MEDIA:	TUFF 1	N/A	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610611	↓		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	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	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 1 AM 2/24/10	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown clayey silty topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8- 58

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 53 dpm
Beta/Gamma = 1980 dpmPID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Sheri Herwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Herwood	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: RE36-10-7478

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010	MEDIA:	QBT3	ALL IT		
TIME COLLECTED (HH:MM)		09:10	SUB-MEDIA:	TUFF 1	NA		
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA	OK		
LOCATION ID:	36-610611	↓	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 7.5% 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, clayey, silty topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-58

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 2450 dpmPID $\frac{\text{Ambient Reading}}{0} = \text{ppm}$ 7.2m 2/24/10

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) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(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: RE36-10-7479

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		09:25		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 36-610612		↓		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 <i>from 2/24/10 clear</i>	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, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-57

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1819 dpm

PID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY

(Printed Name) JON MARIN

(Signature) Jon R. Marin

Date/Time

2/25/10

0750 AM

RECEIVED BY

(Printed Name) Sherri Sherwood

(Signature) Sherri Sherwood

Date/Time

2/25/10

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: RE36-10-7480

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)		09:35		SUB-MEDIA: TUFF 1		NA	
PRS ID: 36-008		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 36-610612		↓		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 <i>2.0m 2/24/10 clear</i>	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Dark brown, dry, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 857

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 5 dpm
Beta/Gamma = 2220 dpm

PID $\frac{\text{Ambient Reading}}{0} \frac{0}{0}$ 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	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: RE36-10-7481

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)		10:10		SUB-MEDIA:	TUFF 1		NA
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	36-610613	↓		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		
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 1/2 in 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, organic topsoil

SAMPLE COMMENTS:

LOCATION DESC: 8-48

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1931 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) JON MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	2/25/10	(Printed Name) Merrick Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Merrick 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: RE36-10-7482

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)		10:35		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610613	↓		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		
BOREHOLE: YES/NO/NA	NO/NA			WATER FLOWING: YES/NO/NA	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 <i>1mm clear</i>	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: 8-48

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 47 dpm
Beta/Gamma = 1931 dpm

PID $\frac{\text{Ambient Reading}}{0}$ 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) Sherin Sherwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sherin 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: RE36-10-7483

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)		11:35		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610614	↓		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		
BOREHOLE: YES/NO	NA			WATER FLOWING: YES/NO	NA		
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS <i>from 2-25-10 clear</i>	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, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1844 dpm

PID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

R. Sanders

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) <i>Jon R. Marin</i>	0750 AM	(Signature) <i>Sherrill Sherwood</i>	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: RE36-10-7484

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)		11:50		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610614	↓		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:

Brown, dry, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-31

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 17 dpm
Beta/Gamma = 2030 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0}{0}$ 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	(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: RE36-10-7485

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)		11:25		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610615	↓		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	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			WATER FLOWING: YES/NO/NA	NO		
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, moist, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-33

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 58 dpm
Beta/Gamma = 1800 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0}{0}$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY

(Printed Name) JON MARIN

(Signature) Jon R. Marin

RELINQUISHED BY

Date/Time

2/25/10

0750 AM

Date/Time

RECEIVED BY

(Printed Name) Sherin Sherwood

(Signature) Sherin Sherwood

RECEIVED BY

Date/Time

2/25/10

0750

Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2485

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

SAMPLE ID: RE36-10-7486

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/27/2010		MEDIA:		OBT3	
TIME COLLECTED(HH:MM)		11:35		SUB-MEDIA:		TUFF 1	
PRS ID: 36-008		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 36-610615		↓		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		(NO) NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		(NO) NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS 2/27/10 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, organic topsoil

SAMPLE COMMENTS: NA

LOCATION DESC: 8-33

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 23 dpm
Beta/Gamma = 1726 dpm

PID $\frac{\text{Ambient Reading}}{0}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

JON 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: RE36-10-7487

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)		11:45		SUB-MEDIA: TUFF 1		NA	
PRS ID: 36-008		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 36-610616		↓		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 ^{2/24/10 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, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC: 8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 29 dpm
Beta/Gamma = 1848 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) J. MARIN	2/25/10	(Printed Name) Sheri Sherwood	2/25/10
(Signature) J. R. Marin	6750 AM	(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: RE36-10-7488

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: 36-610616		↓		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 AM 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, dry, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-47

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 41 dpm
Beta/Gamma = 1844 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ 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	0750 AM	(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: RE36-10-7489

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)		13:05	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	36-008	OK	SAMPLE TECH CODE:	HA		OK	
LOCATION ID:	36-610617	↓	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 1/24/10 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, organic topsoil

SAMPLE COMMENTS:

NA

LOCATION DESC:

8-46

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 11 dpm
Beta/Gamma = 1829 dpm

PID $\frac{\text{Ambient Reading}}{0} = 0$ 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 Newwood	2/25/10
(Signature) Jon R. Marin	0750AM	(Signature) Sheri Newwood	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: RE36-10-7490

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/24/2010		MEDIA:	QBT3	ALL H	
TIME COLLECTED (HH:MM)		13:15	12:41:10	SUB-MEDIA:	TUFF 1	NA	
PRS ID:	36-008	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	36-610617	↓		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		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
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: 8-46

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 64 dpm
Beta/Gamma = 1775 dpm

PID $\frac{\text{Ambient Reading}}{0}$ 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) Sheri Sherwood	2/25/10
(Signature) Jon R. Marin	0750 AM	(Signature) Sheri Sherwood	0750
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



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: RE36-10-7415

ARS Sample ID: ARS2-10-00074-001

Sample Collection Date: 02/24/10 09:42

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	14.40	20.31	34.06	20.59		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.36	12.44	17.92	12.64		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	30.15	0.10	30.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	8.84	4.73	1.04	4.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.24	0.14	0.11	0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.49	0.26	0.06	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.53	0.48	0.25	0.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.44	0.27	0.09	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.31	0.43	0.25	0.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.25	0.45	0.48	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	1.18	1.41	0.74	1.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.03	0.12	0.07	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 5.56										

Matthew A. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7416
Sample Collection Date: 02/24/10 10:00
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-002
Date Received: 02/25/10 00:00
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	12.43	19.18	32.78	19.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	26.00	13.78	18.31	14.15		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.04	0.16	0.13	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	23.83	9.17	1.45	9.20		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	-0.03	-0.74	0.15	-0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.02	0.04	0.08	0.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.06	0.09	0.37	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.09	0.51	0.18	0.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	2.33	0.97	0.35	0.98		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.61	212.57	0.48	212.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.54	3.21	1.20	3.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.47	0.35	0.12	0.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.27										

Matthew L. Edger
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7417

Sample Collection Date: 02/24/10 11:00

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-003

Date Received: 02/25/10 00:00

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	18.93	22.32	33.91	22.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.91	13.80	17.73	14.25		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	38.90	0.12	38.90		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	14.67	6.91	1.34	6.93		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.16	0.18	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.41	0.27	0.07	0.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.52	150.57	0.34	150.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.13	0.46	0.13	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.08	0.73	0.46	0.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	0.60	0.66	0.49	0.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	4.96	3.81	1.48	3.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.01	0.13	0.09	0.13		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 3.14

Matthew J. Edin
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7418

Sample Collection Date: 02/24/10 11:15

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-004

Date Received: 02/25/10 00:00

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	Yracer/Chem Recovery
GROSS ALPHA	24.54	26.00	37.46	26.17		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	42.33	15.61	18.42	16.44		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	29.64	0.09	29.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.11	7.24	1.02	7.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.07	0.10	0.11	0.10		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.93	0.36	0.06	0.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.38	0.44	0.29	0.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.90	0.39	0.14	0.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.06	0.64	0.29	0.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.20	-0.82	0.35	-0.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.05	2.21	0.97	2.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.18	0.31	0.14	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.19										

Matthew L. Edler
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7419

Sample Collection Date: 02/24/10 14:10

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-005

Date Received: 02/25/10 00:00

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	Trace/Chem Recovery
GROSS ALPHA	42.05	30.21	34.06	30.64		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	55.22	17.35	17.92	18.77		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.05	0.18	0.15	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.92	10.55	1.64	10.55		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	-0.06	46.27	0.11	46.27		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	1.01	0.75	0.41	0.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.32	0.56	0.17	0.56		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.19	1.00	0.40	1.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.95	1.23	0.58	1.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.04	3.80	1.46	3.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.25	0.42	0.18	0.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.70										

Matthew J. Eden
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7420

Sample Collection Date: 02/24/10 14:20

Sample Matrix: Soil/Solid

Request or PD Number:

ARS Sample ID: ARS2-10-00074-006

Date Received: 02/25/10 00:00

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	17.26	21.39	32.75	21.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	42.28	15.85	16.31	16.68		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	50.71	0.16	50.71		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.62	10.83	1.75	10.86		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	0.30	0.21	0.15	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.02	0.05	0.10	0.05		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.68	210.75	0.47	210.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.23	0.61	0.22	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	1.94	0.89	0.42	0.89		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.89	0.37	0.60	0.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.09	2.57	1.30	2.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.72	0.41	0.12	0.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.14										

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ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7477

ARS Sample ID: ARS2-10-00074-007

Sample Collection Date: 02/24/10 09:00

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	28.10	25.70	33.91	25.93		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	53.09	16.60	17.73	17.83		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	2.04	3.82	1.88	3.82		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	0.03	0.06	0.07	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.23	0.16	0.05	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.06	0.12	0.21	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.63	0.25	0.05	0.25		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.19	0.53	0.20	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.35	139.39	0.30	139.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.58	2.59	1.03	2.72		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.01	-0.14	0.06	-0.14		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.57										

Matthew J. Edna
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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7478
Sample Collection Date: 02/24/10 09:10
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-008
Date Received: 02/25/10 00:00
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	19.98	24.12	37.46	24.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	43.56	15.66	18.42	16.54		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	44.27	0.14	44.27		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	16.69	7.87	1.93	7.88		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	-0.06	43.04	0.10	43.04		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	-0.60	171.36	0.38	171.36		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.96	0.49	0.18	0.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.27	0.77	0.37	0.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.18	0.70	0.61	0.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	8.68	4.01	1.33	4.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.03	34.42	0.08	34.42		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.23										

Matthew A. Edler
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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7479
Sample Collection Date: 02/24/10 09:25
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-009
Date Received: 02/25/10 00:00
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	32.84	27.36	34.06	27.65		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	44.36	15.83	17.92	16.74		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	0.04	0.18	0.13	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	17.50	8.23	1.60	8.26		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	0.24	0.23	0.11	0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.00	39.78	0.09	39.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.63	179.63	0.40	179.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.92	0.47	0.14	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	2.23	1.07	0.39	1.07		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.16	-0.30	0.55	-0.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.37	5.45	2.04	5.64		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.70	0.47	0.16	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.96										

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NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

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ARS Sample Delivery Group: ARS2-10-00074

Request or PO Number:

Client Sample ID: RE36-10-7480

ARS Sample ID: ARS2-10-00074-010

Sample Collection Date: 02/24/10 09:35

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	32.75	23.55		pCi/g	EPA 909.0M	2/26/2010	ME	N/A
GROSS BETA	53.91	17.21	18.31	18.44		pCi/g	EPA 909.0M	2/26/2010	ME	N/A
NA-22	-0.04	46.41	0.15	46.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	30.14	10.83	1.60	10.86		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	0.02	0.06	0.17	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.27	0.24	0.09	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.01	0.02	0.40	0.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.25	0.63	0.25	0.63		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.60	0.84	0.39	0.85		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.84	0.74	0.48	0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.28	4.32	1.72	4.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.19	0.32	0.14	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.22										

Matthew J. Eden
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7481
Sample Collection Date: 02/24/10 10:10
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-011
Date Received: 02/25/10 00:00
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	41.88	30.07	33.91	30.50		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	54.90	16.97	17.73	18.23		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	27.16	0.09	27.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	14.22	5.69	0.94	5.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.02	0.04	0.08	0.04		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.79	0.32	0.05	0.32		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.29	-3.38	0.29	-3.38		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.93	0.35	0.10	0.35		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.82	0.73	0.23	0.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.16	0.26	0.34	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.95	2.56	0.91	2.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.22	0.21	0.09	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.88										

Matthew J. Foley
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00074
 Client Sample ID: RE36-10-7482
 Sample Collection Date: 02/24/10 10:35
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: ARS2-10-00074-012
 Date Received: 02/25/10 00:00
 Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	34.47	29.39	37.46	29.69		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	32.15	14.66	16.42	15.18		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	34.82	0.11	34.82		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	26.26	8.75	1.20	8.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.07	0.09	0.12	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.15	0.26	0.13	0.26		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.20	0.18	0.07	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.47	134.78	0.30	134.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.39	0.47	0.12	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-226	0.89	0.77	0.45	0.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.49	0.83	0.44	0.83		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.17	4.03	1.53	4.14		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: 2.93										

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133 State Road 4, White Rock, NM 87544
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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7483
Sample Collection Date: 02/24/10 11:35
Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-013

Date Received: 02/25/10 00:00

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	0.56	13.25	34.07	13.25		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	23.99	12.96	18.08	13.29		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.08	49.02	0.16	49.02		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	15.40	7.95	1.69	7.97		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.80	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.15	0.21	0.20	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.08	0.31	0.15	0.31		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.04	-0.08	0.43	-0.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.20	0.60	0.23	0.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.87	0.90	0.47	0.91		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	1.08	1.08	0.51	1.08		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	-1.15	561.65	1.26	561.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.39	0.58	0.24	0.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A

NOTES: % Moisture: 2.51

Matthew A. Edner
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NE LAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
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ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7484

Sample Collection Date: 02/24/10 11:50

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-014

Date Received: 02/25/10 00:00

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	7.61	16.69	32.75	16.71		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	31.12	14.31	18.31	14.81		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	47.03	0.16	47.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	21.67	9.24	1.62	9.26		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	-0.06	45.73	0.11	45.73		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.04	0.12	0.10	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
HU-182	0.40	0.48	0.42	0.48		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.30	0.96	0.18	0.57		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.86	1.17	0.39	1.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	-0.36	-1.80	0.56	-1.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.26	3.80	1.44	3.98		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: 1.89										

Matthew A. Eder
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7485

Sample Collection Date: 02/24/10 11:25

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-015

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDG	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	23.52	24.07	33.91	24.24		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	28.52	13.85	17.73	14.28		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	35.44	0.11	35.44		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	23.76	8.40	1.22	8.43		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.14	0.20	0.12	0.20		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	-0.04	34.46	0.08	34.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.50	0.29	0.07	0.29		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.09	0.12	0.31	0.12		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.19	0.50	0.18	0.50		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.53	0.74	0.30	0.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.58	0.47	0.40	0.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	3.65	3.37	1.39	3.47		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.13	0.24	0.11	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.81										

[Signature]
Quality Assurance Review

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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7486

Sample Collection Date: 02/24/10 11:35

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-016

Date Received: 02/25/10 00:00

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	19.59	24.06	37.39	24.17		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	24.47	13.40	18.23	13.73		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.05	48.09	0.15	48.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	27.10	10.47	1.68	10.50		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	-0.06	46.75	0.11	46.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.73	0.40	0.09	0.41		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.12	-0.23	0.42	-0.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	2.04	0.67	0.17	0.68		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.68	0.91	0.40	0.91		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.42	0.60	0.50	0.60		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	6.88	4.23	1.66	4.51		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.53	0.55	0.19	0.55		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.52										

Matthew A. Eder
Quality Assurance Review

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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7487

Sample Collection Date: 02/24/10 11:45

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-017

Date Received: 02/25/10 00:00

Report Date: 02/26/10 14:37

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-4.05	9.67	34.07	9.69		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	13.97	11.49	18.08	11.62		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	11.26	6.79	1.68	6.79		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	-0.06	47.49	0.11	47.49		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.03	0.06	0.09	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	0.13	0.24	0.42	0.24		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.09	0.53	0.17	0.53		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.25	0.78	0.41	0.78		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.06	0.09	0.55	0.09		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	2.20	3.76	1.73	3.80		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.07	0.19	0.10	0.19		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.23										

Matthew J. Foley
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7488
Sample Collection Date: 02/24/10 11:52
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-018
Date Received: 02/25/10 00:00
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	55.11	15.94	15.12	15.28		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.02	-0.15	0.17	-0.15		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	22.71	9.68	1.70	9.70		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	0.20	0.23	0.13	0.23		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-182	-0.66	190.74	0.43	190.74		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.02	0.54	0.20	0.54		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.00	1.00	0.41	1.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.25	0.94	0.59	0.94		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	5.80	4.02	1.51	4.23		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.01	0.17	0.12	0.17		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 1.36										

Quality Assurance Review

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505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074

Client Sample ID: RE36-10-7489

Sample Collection Date: 02/24/10 13:05

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00074-019

Date Received: 02/25/10 00:00

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	28.12	25.70	33.91	25.93		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	18.67	12.72	17.73	12.92		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.04	38.58	0.12	38.58		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.59	7.73	1.33	7.77		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.03	0.06	0.12	0.06		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.18	0.18	0.07	0.18		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
SU-152	0.02	0.03	0.33	0.03		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	1.11	0.46	0.14	0.46		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	0.00	203.70	0.46	203.70		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.26	0.21	0.46	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	7.19	3.38	1.14	3.75		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	0.49	0.33	0.11	0.33		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 2.93										

Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00074
Client Sample ID: RE36-10-7490
Sample Collection Date: 02/24/10 13:15
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00074-020
Date Received: 02/25/10 00:00
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	9.69	19.63	37.46	19.86		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
GROSS BETA	40.03	15.12	18.42	15.89		pCi/g	EPA 900.0M	2/26/2010	ME	N/A
NA-22	-0.03	36.22	0.12	36.22		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
K-40	18.97	7.59	1.25	7.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CO-60	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-134	0.17	0.16	0.12	0.16		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
CS-137	0.23	0.21	0.07	0.21		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
EU-152	-0.49	150.54	0.34	150.54		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
PB-212	0.95	0.45	0.16	0.45		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
RA-228	1.49	0.61	0.30	0.61		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-235	0.56	0.66	0.38	0.66		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
U-238	4.90	3.20	1.22	3.39		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
AM-241	-0.03	34.30	0.08	34.30		pCi/g	EPA 901.1M	2/26/2010	ME	N/A
NOTES: % Moisture: 3.44										

Matthew J. Eder
Quality Assurance Review


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DATA VALIDATION COVER SHEET	
5121-1 <div style="text-align: center; padding-top: 20px;">Data Validation Cover Sheet</div>	<div style="text-align: right; font-size: small;">Records Use only</div> <div style="text-align: center; padding-top: 20px;">  </div>


Section I.							
REQUEST NUMBER: <u>10-2151</u>		VALIDATION DATE: <u>04/30/10</u>		LAB CODE: <u>GEL</u>			
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>							
VALIDATOR: <u>David Schwent</u>		ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>					
ANALYTICAL SUITE (CHECK ALL THAT APPLY):							
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input checked="" type="checkbox"/> LCMSMS PERCHLORATES				
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS				
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES					
<input type="checkbox"/> OTHER (DESCRIBE): _____							
Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. QUANTITATION REPORTS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. SAMPLE CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. TICS MASS SPECTRA
Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):							
None.							
Reviewed by: <u>Mary Donovan</u>				Level: <u>I</u>		Date: <u>04/30/10</u>	
VALIDATOR'S SIGNATURE: <u>David Schwent</u>				DATE: <u>04/30/10</u>			
Form 5121-1, Revision 0.0				LOS ALAMOS Environmental Restoration Project			

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

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

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST		
5121-2		Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist		 Los Alamos NATIONAL LABORATORY 251.1542

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

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7415
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371001
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 58

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc.*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.857	3.43	1.04	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate Isotope Ratio			2.83			1	22-MAR-10 20:11	per0322044a
14797-73-0	Perchlorate-101	.857	3.43	1.12	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate-O(18)			9.31	ug/kg		1	22-MAR-10 20:11	per0322044a

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

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

DJS
 04/30/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7420
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371002
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 91.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.19	8.77	21.9	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate Isotope Ratio			3.2			4	23-MAR-10 09:07	per0322108a
14797-73-0	Perchlorate-101	2.19	8.77	20.7	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate-O(18)			22.9	ug/kg		4	23-MAR-10 09:07	per0322108a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7418
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371003
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:35	per0322051a
14797-73-0	Perchlorate-101	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate-O(18)			6.43	ug/kg		1	22-MAR-10 21:35	per0322051a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7417
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371004
 Date Filtered: 15-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	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:47	per0322052a
14797-73-0	Perchlorate-101	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate-O(18)			6.69	ug/kg		1	22-MAR-10 21:47	per0322052a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7419
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371005
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 83

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.41	9.63	18.8	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate Isotope Ratio			3.18			4	23-MAR-10 09:19	per0322109a
14797-73-0	Perchlorate-101	2.41	9.63	18.0	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate-O(18)			24.6	ug/kg		4	23-MAR-10 09:19	per0322109a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7416
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371006
 Date Filtered: 15-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	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per0322110a
	Perchlorate Isotope Ratio						1	23-MAR-10 09:31	per0322110a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per0322110a
	Perchlorate-O(18)			5.97	ug/kg		1	23-MAR-10 09:31	per0322110a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7478
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371007
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 90.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:23	per0322055a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate-O(18)			5.91	ug/kg		1	22-MAR-10 22:23	per0322055a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7490
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371008
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 74

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:36	per0322056a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate-O(18)			6.95	ug/kg		1	22-MAR-10 22:36	per0322056a

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

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

DJS
 04/30/10

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: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7487

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371009

Date Filtered: 15-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	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:48	per0322057a
14797-73-0	Perchlorate-101	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate-O(18)			6.89	ug/kg		1	22-MAR-10 22:48	per0322057a

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

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

DJS

04/30/10

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: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7483
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 24837101Q
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 76

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.658	2.63	0.724	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate Isotope Ratio			2.58			1	22-MAR-10 23:00	per0322058a
14797-73-0	Perchlorate-101	.658	2.63	0.854	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate-O(18)			6.77	ug/kg		1	22-MAR-10 23:00	per0322058a

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

*Concentration =
 Instrument Value X Concentrated Extract Volume X ¹/_{Aliquot} %Solids

DJS
04/30/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7481
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371011
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 % Solids: 67

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate Isotope Ratio						1	22-MAR-10 23:12	per0322059a
14797-73-0	Perchlorate-101	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate-O(18)			7.69	ug/kg		1	22-MAR-10 23:12	per0322059a

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

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

DJS
04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7486
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371012
 Date Filtered: 15-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	2.53	1.73	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate Isotope Ratio			2.89			1	22-MAR-10 23:24	per0322060a
14797-73-0	Perchlorate-101	.634	2.53	1.82	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate-O(18)			6.42	ug/kg		1	22-MAR-10 23:24	per0322060a

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

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

DJS
 04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7477
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371013
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate-O(18)			6.83	ug/kg		1	23-MAR-10 00:12	per0322064a

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

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

DJS
04/30/10

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: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7489
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371014
 Date Filtered: 15-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	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:24	per0322065a
14797-73-0	Perchlorate-101	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate-O(18)			7.61	ug/kg		1	23-MAR-10 00:24	per0322065a

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

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

DJS
 04/30/10

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: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7479
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371015
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 73
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:36	per0322066a
14797-73-0	Perchlorate-101	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate-O(18)			7.26	ug/kg		1	23-MAR-10 00:36	per0322066a

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

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

DJS

04/30/10

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: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7482

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371016

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:48	per0322067a
14797-73-0	Perchlorate-101	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate-O(18)			6.62	ug/kg		1	23-MAR-10 00:48	per0322067a

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

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

DJS

04/30/10

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: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7480

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371017

Date Filtered: 15-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	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate Isotope Ratio						1	23-MAR-10 01:00	per0322068a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate-O(18)			5.76	ug/kg		1	23-MAR-10 01:00	per0322068a

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

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

DJS

04/30/10

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: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7485

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371018

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.68	2.72	1.37	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate Isotope Ratio			3.2			1	23-MAR-10 01:12	per0322069a
14797-73-0	Perchlorate-101	.68	2.72	1.30	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate-O(18)			6.98	ug/kg		1	23-MAR-10 01:12	per0322069a

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

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

DJS
04/30/10

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: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7488

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371019

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.22	0.627	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 01:24	per0322070a
14797-73-0	Perchlorate-101	.556	2.22	0.665	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 01:24	per0322070a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846.6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7484
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371020
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 83


Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.606	2.42	0.817	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate Isotope Ratio			3.22			1	23-MAR-10 01:36	per0322071a
14797-73-0	Perchlorate-101	.606	2.42	0.771	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate-O(18)			6.50	ug/kg		1	23-MAR-10 01:36	per0322071a

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

*Concentration =
 Instrument Value X Concentrated Extract Volume X ¹/_{%Solids}
 Aliquot

DJS
 04/30/10

DATA VALIDATION COVER SHEET	
5118-1	Records Use only
Data Validation Cover Sheet	

Section I.

REQUEST NUMBER: 10-2151 VALIDATION DATE: 04/30/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: David Schwent ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):


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


Section II. Completeness Check

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


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

- In the MB, Sb, U, and V were detected. The Sb results of samples RE36-10-7417, -7481, -7486, and -7482 were detects $\leq 5X$ the MB concentration and, thus, were qualified U,I4. All other associated Sb results were NDs and, thus, were not qualified. All associated U sample results, except the results of samples -7415, -7483, -7481, and -7486 were detects $> 5X$ but $\leq 50X$ the MB concentration and, thus, were qualified J,I4a. All other associated sample results were detects $> 50X$ the MB concentrations and, thus, were not qualified, based on professional judgment.
- In the CCBs, Sb, U, and V were detected. The Sb results of samples -7417, -7481, -7486, and -7482 were detects $\leq 5X$ the CCB concentration and, thus, were qualified U,I4b. All other associated sample results were either NDs or detects $> 5X$ the CCB concentrations and, thus, were not qualified.
- In the FR blanks, samples -7533 (from RN 10-2155) and -7534 (from RN 10-2203), associated with all the samples in this RN, Fe, K, and Na were detected. All associated Na sample results, except the results of samples -7416, -7477, and -7488 were detects $\leq 5X$ 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.


DATA VALIDATION COVER SHEET	
5118-1	Records Use only
Data Validation Cover Sheet	
	
4. The MS %Rs of Mg and K were > the laboratory UAL. All associated sample results were detects and, thus, were qualified J+,I6b. Also, the MS %Rs of Al, Ca, and Fe were > laboratory UAL. However, the parent sample concentrations were >4X the spike concentrations. Based on professional judgment, no sample data were qualified.	
Reviewed by: <u>Mary Donovan</u> Level: <u>I</u> Date: <u>04/30/10</u>	
VALIDATOR'S SIGNATURE: <u><i>David Schwartz</i></u> DATE: <u>04/30/10</u>	
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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


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

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

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

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

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

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371001

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7415

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 58

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch	
7429-90-5	Aluminum	6700000	ug/Kg		11600	34100	34100	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-36-0	Antimony	1710	ug/Kg	U	563	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-38-2	Arsenic	1.36	mg/kg	J	0.339	1.69	1.69	2	MS	BCD1	04/17/10 14:40	100417-3	960816	
7440-39-3	Barium	184000	ug/Kg	N	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-41-7	Beryllium	0.483	mg/kg		0.0339	0.169	0.169	2	MS	PRB	04/17/10 19:45	100417-2	960816	
7440-43-9	Cadmium	234	ug/Kg	J	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-70-2	Calcium	8490000	ug/Kg		13700	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-47-3	Chromium	13100	ug/Kg	*	256	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-48-4	Cobalt	3310	ug/Kg		256	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-50-8	Copper	10300	ug/Kg		512	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813	
7439-89-6	Iron	8180000	ug/Kg		13700	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813	
7439-92-1	Lead	13800	ug/Kg		427	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813	
7439-95-4	Magnesium	J+,16b	1880000	ug/Kg	N	14500	51200	51200	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-96-5	Mangancsc	549000	ug/Kg		341	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813	
7439-97-6	Mercury	64.2	ug/kg		6.73	19.8	19.8	1	AV	JXL1	03/17/10 13:54	031710S2-4	964726	
7440-02-0	Nickcl	6.8	mg/kg		0.169	0.677	0.677	2	MS	BCD1	04/17/10 14:40	100417-3	960816	
7440-09-7	Potassium	J+,16b	1920000	ug/Kg	N	10900	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7782-49-2	Selenium	1.69	mg/kg	U	0.846	1.69	1.69	2	MS	BCD1	04/17/10 14:40	100417-3	960816	
7440-22-4	Silver	189	ug/Kg	J	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-23-5	Sodium	U,14d	94300	ug/Kg		11900	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-28-0	Thallium	0.140	mg/kg	J	0.102	0.339	0.339	2	MS	BCD1	04/17/10 14:40	100417-3	960816	
7440-61-1	Uranium	3.55	mg/kg		0.0223	0.0677	0.0677	2	MS	BCD1	04/17/10 14:40	100417-3	960816	
7440-62-2	Vanadium	11400	ug/Kg		171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813	
7440-66-6	Zinc	42700	ug/Kg		563	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813	

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.502	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.519	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371002

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7420

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4130000	ug/Kg		7410	21800	21800	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-36-0	Antimony	1090	ug/Kg	U	359	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-38-2	Arsenic	1.28	mg/kg		0.215	1.08	1.08	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-39-3	Barium	22000	ug/Kg	N	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-41-7	Beryllium	0.598	mg/kg		0.0215	0.108	0.108	2	MS	PRB	04/17/10 19:54	100417-2	960816
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-70-2	Calcium	1700000	ug/Kg		8710	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-47-3	Chromium	6630	ug/Kg	*	163	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-48-4	Cobalt	1470	ug/Kg		163	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-50-8	Copper	3120	ug/Kg		327	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-89-6	Iron	8540000	ug/Kg		8710	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-92-1	Lead	6120	ug/Kg		272	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-95-4	Magnesium J+,16b	934000	ug/Kg	N	9260	32700	32700	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-96-5	Manganese	177000	ug/Kg		218	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-97-6	Mercury	49	ug/kg		3.96	11.7	11.7	1	AV	JXL1	03/17/10 14:06	031710S2-4	964726
7440-02-0	Nickel	3.74	mg/kg		0.108	0.431	0.431	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-09-7	Potassium J+,16b	894000	ug/Kg	N	6970	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7782-49-2	Selenium	1.08	mg/kg	U	0.538	1.08	1.08	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-22-4	Silver	136	ug/Kg	J	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-23-5	Sodium U,14d	79300	ug/Kg		7620	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-28-0	Thallium	0.0685	mg/kg	J	0.0646	0.215	0.215	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-61-1	Uranium J,14a	0.743	mg/kg		0.0142	0.0431	0.0431	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-62-2	Vanadium	9690	ug/Kg		109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-66-6	Zinc	37400	ug/Kg		359	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.509	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.564	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371003

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7418

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6100000	ug/Kg		8200	24100	24100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-36-0	Antimony	1210	ug/Kg	U	398	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-38-2	Arsenic	1.91	mg/kg		0.235	1.18	1.18	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-39-3	Barium	84300	ug/Kg	N	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-41-7	Beryllium	0.579	mg/kg		0.0235	0.118	0.118	2	MS	PRB	04/17/10 19:55	100417-2	960816
7440-43-9	Cadmium	603	ug/Kg	U	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-70-2	Calcium	1830000	ug/Kg		9650	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-47-3	Chromium	13000	ug/Kg	*	181	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-48-4	Cobalt	3030	ug/Kg		181	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-50-8	Copper	5430	ug/Kg		362	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-89-6	Iron	10100000	ug/Kg		9650	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-92-1	Lead	9260	ug/Kg		301	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-95-4	Magnesium J+,16b	1440000	ug/Kg	N	10300	36200	36200	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-96-5	Manganesec	263000	ug/Kg		241	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-97-6	Mercury	40.8	ug/kg		4.22	12.4	12.4	1	AV	JXL1	03/17/10 14:08	031710S2-4	964726
7440-02-0	Nickel	7.03	mg/kg		0.118	0.47	0.47	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-09-7	Potassium J+,16b	1020000	ug/Kg	N	7720	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7782-49-2	Selenium	1.18	mg/kg	U	0.588	1.18	1.18	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-22-4	Silver	603	ug/Kg	U	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-23-5	Sodium U,14d	87500	ug/Kg		8440	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-28-0	Thallium	0.108	mg/kg	J	0.0706	0.235	0.235	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-61-1	Uranium J,14a	1.22	mg/kg		0.0155	0.047	0.047	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-62-2	Vanadium	16300	ug/Kg		121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-66-6	Zinc	32600	ug/Kg		398	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.51	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.523	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.595	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371004

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7417

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	5620000	ug/Kg		7870	23100	23100	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-36-0	Antimony U,14	816	ug/Kg	J	382	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-38-2	Arsenic	1.9	mg/kg		0.243	1.21	1.21	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-39-3	Barium	66700	ug/Kg	N	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-41-7	Beryllium	0.555	mg/kg		0.0243	0.121	0.121	2	MS	PRB	04/17/10 20:00	100417-2	960816
7440-43-9	Cadmium	578	ug/Kg	U	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-70-2	Calcium	1770000	ug/Kg		9260	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-47-3	Chromium	22200	ug/Kg	*	174	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-48-4	Cobalt	2680	ug/Kg		174	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-50-8	Copper	5200	ug/Kg		347	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-89-6	Iron	14000000	ug/Kg		9260	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-92-1	Lead	12000	ug/Kg		289	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-95-4	Magnesium J+,16b	1220000	ug/Kg	N	9830	34700	34700	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-96-5	Manganesec	330000	ug/Kg		231	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-97-6	Mercury	38.8	ug/kg		4.93	14.5	14.5	1	AV	JXL1	03/17/10 14:10	031710S2-4	964726
7440-02-0	Nickel	6.84	mg/kg		0.121	0.486	0.486	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-09-7	Potassium J+,16b	923000	ug/Kg	N	7400	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7782-49-2	Selenium	1.21	mg/kg	U	0.607	1.21	1.21	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-22-4	Silver	578	ug/Kg	U	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-23-5	Sodium U,14d	83800	ug/Kg		8100	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-28-0	Thallium	0.0918	mg/kg	J	0.0729	0.243	0.243	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-61-1	Uranium J,14a	1.45	mg/kg		0.016	0.0486	0.0486	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-62-2	Vanadium	21000	ug/Kg		116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-66-6	Zinc	61700	ug/Kg		382	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.547	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.521	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371005

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7419

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4480000	ug/Kg		8110	23800	23800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-36-0	Antimony	1190	ug/Kg	U	393	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-38-2	Arsenic	1.34	mg/kg		0.238	1.19	1.19	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-39-3	Barium	66200	ug/Kg	N	119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-41-7	Beryllium	0.534	mg/kg		0.0238	0.119	0.119	2	MS	PRB	04/17/10 20:02	100417-2	960816
7440-43-9	Cadmium	596	ug/Kg	U	119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-70-2	Calcium	3720000	ug/Kg		9540	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-47-3	Chromium	6580	ug/Kg	*	179	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-48-4	Cobalt	1700	ug/Kg		179	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-50-8	Copper	5760	ug/Kg		358	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-89-6	Iron	7680000	ug/Kg		9540	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-92-1	Lead	10900	ug/Kg		298	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-95-4	Magnesium J+,16b	1110000	ug/Kg	N	10100	35800	35800	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-96-5	Manganesec	610000	ug/Kg		238	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-97-6	Mercury	302	ug/kg		4.71	13.8	13.8	1	AV	JXL1	03/17/10 14:11	031710S2-4	964726
7440-02-0	Nickel	3.98	mg/kg		0.119	0.476	0.476	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-09-7	Potassium J+,16b	1130000	ug/Kg	N	7630	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.595	1.19	1.19	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-22-4	Silver	633	ug/Kg		119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-23-5	Sodium U,14d	75900	ug/Kg		8340	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-28-0	Thallium	0.238	mg/kg	U	0.0714	0.238	0.238	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-61-1	Uranium J,14a	1.44	mg/kg		0.0157	0.0476	0.0476	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-62-2	Vanadium	8800	ug/Kg		119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-66-6	Zinc	38100	ug/Kg		393	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.505	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.522	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371006

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7416

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	8220000	ug/Kg		7640	22500	22500	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-36-0	Antimony	1120	ug/Kg	U	371	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-38-2	Arsenic	1.1	mg/kg		0.219	1.09	1.09	2	MS	BCD1	04/17/10 15:25	100417-3	960816
7440-39-3	Barium	89700	ug/Kg	N	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-41-7	Beryllium	0.608	mg/kg		0.0219	0.109	0.109	2	MS	PRB	04/17/10 20:04	100417-2	960816
7440-43-9	Cadmium	562	ug/Kg	U	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-70-2	Calcium	2480000	ug/Kg		8980	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-47-3	Chromium	11400	ug/Kg	*	168	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-48-4	Cobalt	4680	ug/Kg		168	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-50-8	Copper	4890	ug/Kg		337	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-89-6	Iron	12000000	ug/Kg		8980	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-92-1	Lead	9560	ug/Kg		281	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-95-4	Magnesium J+,16b	1590000	ug/Kg	N	9550	33700	33700	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-96-5	Manganese	279000	ug/Kg		225	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-97-6	Mercury	19.1	ug/kg		4.18	12.3	12.3	1	AV	JXL1	03/17/10 14:13	031710S2-4	964726
7440-02-0	Nickel	7.11	mg/kg		0.109	0.437	0.437	2	MS	BCD1	04/17/10 15:25	100417-3	960816
7440-09-7	Potassium J+,16b	1610000	ug/Kg	N	7190	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7782-49-2	Selenium	1.09	mg/kg	U	0.546	1.09	1.09	2	MS	BCD1	04/17/10 15:25	100417-3	960816
7440-22-4	Silver	137	ug/Kg	J	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-23-5	Sodium	97400	ug/Kg		7860	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-28-0	Thallium	0.124	mg/kg	J	0.0656	0.219	0.219	2	MS	BCD1	04/17/10 15:25	100417-3	960816
7440-61-1	Uranium J,14a	0.635	mg/kg		0.0144	0.0437	0.0437	2	MS	BCD1	04/17/10 15:25	100417-3	960816
7440-62-2	Vanadium	22100	ug/Kg		112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-66-6	Zinc	29800	ug/Kg		371	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.502	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.516	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.55	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371007

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7478

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 90.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4620000	ug/Kg		7470	22000	22000	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-36-0	Antimony	1100	ug/Kg	U	362	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-38-2	Arsenic	1.21	mg/kg		0.216	1.08	1.08	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-39-3	Barium	52800	ug/Kg	N	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-41-7	Beryllium	0.485	mg/kg		0.0216	0.108	0.108	2	MS	PRB	04/17/10 20:06	100417-2	960816
7440-43-9	Cadmium	549	ug/Kg	U	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-70-2	Calcium	1810000	ug/Kg		8780	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-47-3	Chromium	10800	ug/Kg	*	165	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-48-4	Cobalt	2330	ug/Kg		165	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-50-8	Copper	4640	ug/Kg		329	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-89-6	Iron	9500000	ug/Kg		8780	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-92-1	Lead	8470	ug/Kg		274	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-95-4	Magnesium J+,16b	922000	ug/Kg	N	9330	32900	32900	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-96-5	Manganese	250000	ug/Kg		220	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-97-6	Mercury	14	ug/kg		4.02	11.8	11.8	1	AV	JXLI	03/17/10 14:15	031710S2-4	964726
7440-02-0	Nickel	5.14	mg/kg		0.108	0.431	0.431	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-09-7	Potassium J+,16b	786000	ug/Kg	N	7030	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7782-49-2	Selenium	1.08	mg/kg	U	0.539	1.08	1.08	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-22-4	Silver	127	ug/Kg	J	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-23-5	Sodium U,14d	82600	ug/Kg		7680	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-28-0	Thallium	0.0725	mg/kg	J	0.0647	0.216	0.216	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-61-1	Uranium J,14a	1.32	mg/kg		0.0142	0.0431	0.0431	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-62-2	Vanadium	13000	ug/Kg		110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-66-6	Zinc	37300	ug/Kg		362	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.505	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.514	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.563	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371008

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7490

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5110000	ug/Kg		8170	24000	24000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-36-0	Antimony	1200	ug/Kg	U	397	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-38-2	Arsenic	1.77	mg/kg		0.239	1.19	1.19	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-39-3	Barium	57200	ug/Kg	N	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-41-7	Beryllium	0.479	mg/kg		0.0239	0.119	0.119	2	MS	PRB	04/17/10 20:07	100417-2	960816
7440-43-9	Cadmium	601	ug/Kg	U	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-70-2	Calcium	1830000	ug/Kg		9610	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-47-3	Chromium	21400	ug/Kg	*	180	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-48-4	Cobalt	3470	ug/Kg		180	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-50-8	Copper	4520	ug/Kg		361	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-89-6	Iron	10100000	ug/Kg		9610	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-92-1	Lead	10600	ug/Kg		300	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-95-4	Magnesium J+, I6b	1030000	ug/Kg	N	10200	36100	36100	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-96-5	Manganese	296000	ug/Kg		240	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-97-6	Mercury	22.8	ug/kg		5.22	15.4	15.4	1	AV	JXL1	03/17/10 14:20	031710S2-4	964726
7440-02-0	Nickel	5.34	mg/kg		0.119	0.477	0.477	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-09-7	Potassium J+, I6b	957000	ug/Kg	N	7690	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-22-4	Silver	148	ug/Kg	J	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-23-5	Sodium U, I4d	76400	ug/Kg		8410	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-28-0	Thallium	0.0735	mg/kg	J	0.0716	0.239	0.239	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-61-1	Uranium J, I4a	0.880	mg/kg		0.0158	0.0477	0.0477	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-62-2	Vanadium	14100	ug/Kg		120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-66-6	Zinc	39500	ug/Kg		397	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.562	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.566	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.528	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371009

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7487

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	10500000	ug/Kg		8960	26300	26300	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-36-0	Antimony	1320	ug/Kg	U	435	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-38-2	Arsenic	2.44	mg/kg		0.259	1.29	1.29	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-39-3	Barium	127000	ug/Kg	N	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-41-7	Beryllium	0.595	mg/kg		0.0259	0.129	0.129	2	MS	PRB	04/17/10 20:09	100417-2	960816
7440-43-9	Cadmium	659	ug/Kg	U	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-70-2	Calcium	3420000	ug/Kg		10500	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-47-3	Chromium	17000	ug/Kg	*	198	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-48-4	Cobalt	4440	ug/Kg		198	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-50-8	Copper	7340	ug/Kg		395	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-89-6	Iron	12600000	ug/Kg		10500	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-92-1	Lead	12700	ug/Kg		329	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-95-4	Magnesium J+,16b	1830000	ug/Kg	N	11200	39500	39500	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-96-5	Manganese	301000	ug/Kg		263	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-97-6	Mercury	36.9	ug/kg		5.16	15.2	15.2	1	AV	JXL1	03/17/10 14:21	031710S2-4	964726
7440-02-0	Nickel	7.01	mg/kg		0.129	0.518	0.518	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-09-7	Potassium J+,16b	2030000	ug/Kg	N	8430	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7782-49-2	Selenium	1.29	mg/kg	U	0.647	1.29	1.29	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-22-4	Silver	659	ug/Kg	U	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-23-5	Sodium U,14d	94400	ug/Kg		9220	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-28-0	Thallium	0.107	mg/kg	J	0.0777	0.259	0.259	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-61-1	Uranium J,14a	0.982	mg/kg		0.0171	0.0518	0.0518	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-62-2	Vanadium	22500	ug/Kg		132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-66-6	Zinc	32700	ug/Kg		435	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.512	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371010

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7483

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4450000	ug/Kg		8890	26200	26200	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-36-0	Antimony	1310	ug/Kg	U	432	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-38-2	Arsenic	1.52	mg/kg		0.249	1.25	1.25	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-39-3	Barium	54900	ug/Kg	N	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-41-7	Beryllium	0.545	mg/kg		0.0249	0.125	0.125	2	MS	PRB	04/17/10 20:11	100417-2	960816
7440-43-9	Cadmium	654	ug/Kg	U	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-70-2	Calcium	3210000	ug/Kg		10500	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-47-3	Chromium	5880	ug/Kg	*	196	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-48-4	Cobalt	1460	ug/Kg		196	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-50-8	Copper	5800	ug/Kg		392	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-89-6	Iron	8400000	ug/Kg		10500	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-92-1	Lead	9920	ug/Kg		327	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-95-4	Magnesium J+,16b	1080000	ug/Kg	N	11100	39200	39200	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-96-5	Manganese	417000	ug/Kg		262	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-97-6	Mercury	51.2	ug/kg		4.77	14	14	1	AV	JXL1	03/17/10 14:23	031710S2-4	964726
7440-02-0	Nickel	4.84	mg/kg		0.125	0.498	0.498	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-09-7	Potassium J+,16b	1100000	ug/Kg	N	8370	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7782-49-2	Selenium	1.25	mg/kg	U	0.623	1.25	1.25	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-22-4	Silver	209	ug/Kg	J	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-23-5	Sodium U,14d	92900	ug/Kg		9150	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-28-0	Thallium	0.249	mg/kg	U	0.0748	0.249	0.249	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-61-1	Uranium	2.43	mg/kg		0.0164	0.0498	0.0498	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-62-2	Vanadium	8830	ug/Kg		131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-66-6	Zinc	42000	ug/Kg		432	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.528	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.563	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371011

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7481

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 67

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg		9950	29300	29300	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-36-0	Antimony U,14	581	ug/Kg	J	483	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-38-2	Arsenic	1.86	mg/kg		0.272	1.36	1.36	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-39-3	Barium	79200	ug/Kg	N	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-41-7	Beryllium	0.556	mg/kg		0.0272	0.136	0.136	2	MS	PRB	04/17/10 20:12	100417-2	960816
7440-43-9	Cadmium	150	ug/Kg	J	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-70-2	Calcium	2320000	ug/Kg		11700	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-47-3	Chromium	20000	ug/Kg	*	219	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-48-4	Cobalt	2480	ug/Kg		219	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-50-8	Copper	13600	ug/Kg		439	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-89-6	Iron	8670000	ug/Kg		11700	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-92-1	Lead	20300	ug/Kg		366	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-95-4	Magnesium J+,16b	999000	ug/Kg	N	12400	43900	43900	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-96-5	Manganese	402000	ug/Kg		293	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-97-6	Mercury	36.7	ug/kg		6	17.7	17.7	1	AV	JXL1	03/17/10 14:25	031710S2-4	964726
7440-02-0	Nickel	6.17	mg/kg		0.136	0.544	0.544	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-09-7	Potassium J+,16b	928000	ug/Kg	N	9360	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7782-49-2	Selenium	1.36	mg/kg	U	0.681	1.36	1.36	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-22-4	Silver	731	ug/Kg	U	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-23-5	Sodium U,14d	79100	ug/Kg		10200	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-28-0	Thallium	0.272	mg/kg	U	0.0817	0.272	0.272	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-61-1	Uranium	2.78	mg/kg		0.018	0.0544	0.0544	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-62-2	Vanadium	11000	ug/Kg		146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-66-6	Zinc	47600	ug/Kg		483	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.509	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.547	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.506	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371012

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7486

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	6880000	ug/Kg		8600	25300	25300	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-36-0	Antimony U,14	608	ug/Kg	J	417	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-38-2	Arsenic	1.6	mg/kg		0.244	1.22	1.22	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-39-3	Barium	69700	ug/Kg	N	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-41-7	Beryllium	0.495	mg/kg		0.0244	0.122	0.122	2	MS	PRB	04/17/10 20:14	100417-2	960816
7440-43-9	Cadmium	632	ug/Kg	U	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-70-2	Calcium	1710000	ug/Kg		10100	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-47-3	Chromium	20600	ug/Kg	*	190	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-48-4	Cobalt	2890	ug/Kg		190	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-50-8	Copper	6340	ug/Kg		379	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-89-6	Iron	10600000	ug/Kg		10100	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-92-1	Lead	10100	ug/Kg		316	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-95-4	Magnesium J+,16b	1500000	ug/Kg	N	10800	37900	37900	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-96-5	Mangancsc	221000	ug/Kg		253	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-97-6	Mercury	45.8	ug/kg		4.42	13	13	1	AV	JXL1	03/17/10 14:27	031710S2-4	964726
7440-02-0	Nickel	4.93	mg/kg		0.122	0.488	0.488	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-09-7	Potassium J+,16b	882000	ug/Kg	N	8090	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7782-49-2	Selenium	1.22	mg/kg	U	0.61	1.22	1.22	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-22-4	Silver	632	ug/Kg	U	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-23-5	Sodium U,14d	87300	ug/Kg		8850	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-28-0	Thallium	0.0806	mg/kg	J	0.0733	0.244	0.244	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-61-1	Uranium	2.21	mg/kg		0.0161	0.0488	0.0488	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-62-2	Vanadium	16300	ug/Kg		126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-66-6	Zinc	37900	ug/Kg		417	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.501	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.519	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.585	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371013

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7477

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3260000	ug/Kg		8260	24300	24300	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-36-0	Antimony	1210	ug/Kg	U	401	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-38-2	Arsenic	1.43	mg/kg		0.232	1.16	1.16	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-39-3	Barium	61700	ug/Kg	N	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-41-7	Beryllium	0.359	mg/kg		0.0232	0.116	0.116	2	MS	PRB	04/17/10 20:19	100417-2	960816
7440-43-9	Cadmium	607	ug/Kg	U	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-70-2	Calcium	1640000	ug/Kg		9720	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-47-3	Chromium	7710	ug/Kg	*	182	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-48-4	Cobalt	1750	ug/Kg		182	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-50-8	Copper	4820	ug/Kg		364	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-89-6	Iron	6730000	ug/Kg		9720	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-92-1	Lead	6140	ug/Kg		304	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-95-4	Magnesium J+,16b	615000	ug/Kg	N	10300	36400	36400	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-96-5	Manganese	189000	ug/Kg		243	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-97-6	Mercury	12.4	ug/kg	J	4.95	14.6	14.6	1	AV	JXL1	03/17/10 14:28	031710S2-4	964726
7440-02-0	Nickel	3.16	mg/kg		0.116	0.464	0.464	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-09-7	Potassium J+,16b	593000	ug/Kg	N	7770	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-22-4	Silver	607	ug/Kg	U	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-23-5	Sodium	165000	ug/Kg		8500	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-28-0	Thallium	0.232	mg/kg	U	0.0696	0.232	0.232	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-61-1	Uranium J,14a	0.739	mg/kg		0.0153	0.0464	0.0464	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-62-2	Vanadium	12100	ug/Kg		121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-66-6	Zinc	32800	ug/Kg		401	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.539	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.564	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.539	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371014

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7489

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	5800000	ug/Kg		9640	28400	28400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-36-0	Antimony	1420	ug/Kg	U	468	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-38-2	Arsenic	2.02	mg/kg		0.277	1.38	1.38	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-39-3	Barium	59700	ug/Kg	N	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-41-7	Beryllium	0.538	mg/kg		0.0277	0.138	0.138	2	MS	PRB	04/17/10 20:21	100417-2	960816
7440-43-9	Cadmium	709	ug/Kg	U	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-70-2	Calcium	2120000	ug/Kg		11300	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-47-3	Chromium	29900	ug/Kg	*	213	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-48-4	Cobalt	3370	ug/Kg		213	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-50-8	Copper	5340	ug/Kg		425	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-89-6	Iron	10600000	ug/Kg		11300	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-92-1	Lead	10500	ug/Kg		354	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-95-4	Magnesium J+,16b	1210000	ug/Kg	N	12100	42500	42500	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-96-5	Manganese	260000	ug/Kg		284	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-97-6	Mercury	21.7	ug/kg		5.64	16.6	16.6	1	AV	JXL1	03/17/10 14:30	031710S2-4	964726
7440-02-0	Nickel	6.57	mg/kg		0.138	0.554	0.554	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-09-7	Potassium J+,16b	1160000	ug/Kg	N	9070	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7782-49-2	Selenium	1.38	mg/kg	U	0.692	1.38	1.38	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-22-4	Silver	203	ug/Kg	J	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-23-5	Sodium U,14d	77400	ug/Kg		9920	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-28-0	Thallium	0.277	mg/kg	U	0.0831	0.277	0.277	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-61-1	Uranium J,14a	1.24	mg/kg		0.0183	0.0554	0.0554	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-62-2	Vanadium	14600	ug/Kg		142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-66-6	Zinc	41900	ug/Kg		468	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.543	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.556	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.557	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371015

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7479

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	5200000	ug/Kg		9240	27200	27200	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-36-0	Antimony	1360	ug/Kg	U	448	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-38-2	Arsenic	1.13	mg/kg	J	0.272	1.36	1.36	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-39-3	Barium	75500	ug/Kg	N	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-41-7	Beryllium	0.445	mg/kg		0.0272	0.136	0.136	2	MS	PRB	04/17/10 20:23	100417-2	960816
7440-43-9	Cadmium	679	ug/Kg	U	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-70-2	Calcium	2710000	ug/Kg		10900	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-47-3	Chromium	22000	ug/Kg	*	204	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-48-4	Cobalt	2850	ug/Kg		204	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-50-8	Copper	5360	ug/Kg		408	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-89-6	Iron	9160000	ug/Kg		10900	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-92-1	Lead	9550	ug/Kg		340	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-95-4	Magnesium J+, I6b	1020000	ug/Kg	N	11500	40800	40800	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-96-5	Manganese	319000	ug/Kg		272	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-97-6	Mercury	24.7	ug/kg		5.61	16.5	16.5	1	AV	JXL1	03/17/10 14:32	031710S2-4	964726
7440-02-0	Nickel	5.1	mg/kg		0.136	0.543	0.543	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-09-7	Potassium J+, I6b	1150000	ug/Kg	N	8700	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7782-49-2	Selenium	1.36	mg/kg	U	0.679	1.36	1.36	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-22-4	Silver	679	ug/Kg	U	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-23-5	Sodium U, I4d	90600	ug/Kg		9510	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-28-0	Thallium	0.272	mg/kg	U	0.0815	0.272	0.272	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-61-1	Uranium J, I4a	1.6	mg/kg		0.0179	0.0543	0.0543	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-62-2	Vanadium	12300	ug/Kg		136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-66-6	Zinc	36000	ug/Kg		448	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.5	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371016

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7482

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5130000	ug/Kg		7880	23200	23200	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-36-0	Antimony U,14	1100	ug/Kg	J	382	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-38-2	Arsenic	1.31	mg/kg		0.239	1.19	1.19	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-39-3	Barium	57600	ug/Kg	N	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-41-7	Beryllium	0.557	mg/kg		0.0239	0.119	0.119	2	MS	PRB	04/17/10 20:24	100417-2	960816
7440-43-9	Cadmium	579	ug/Kg	U	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-70-2	Calcium	1640000	ug/Kg		9270	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-47-3	Chromium	47300	ug/Kg	*	174	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-48-4	Cobalt	2280	ug/Kg		174	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-50-8	Copper	7870	ug/Kg		348	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-89-6	Iron	9570000	ug/Kg		9270	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-92-1	Lead	11500	ug/Kg		290	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-95-4	Magnesium J+,16b	918000	ug/Kg	N	9850	34800	34800	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-96-5	Manganese	321000	ug/Kg		232	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-97-6	Mercury	21.6	ug/kg		4.69	13.8	13.8	1	AV	JXL1	03/17/10 14:34	031710S2-4	964726
7440-02-0	Nickel	5.56	mg/kg		0.119	0.478	0.478	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-09-7	Potassium J+,16b	836000	ug/Kg	N	7420	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-22-4	Silver	193	ug/Kg	J	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-23-5	Sodium U,14d	89900	ug/Kg		8110	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-28-0	Thallium	0.239	mg/kg	U	0.0717	0.239	0.239	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-61-1	Uranium J,14a	0.926	mg/kg		0.0158	0.0478	0.0478	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-62-2	Vanadium	10800	ug/Kg		116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-66-6	Zinc	43700	ug/Kg		382	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.57	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.553	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.575	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371017

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7480

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	4740000	ug/Kg		7510	22100	22100	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-36-0	Antimony	1100	ug/Kg	U	365	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-38-2	Arsenic	0.995	mg/kg	J	0.221	1.1	1.1	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-39-3	Barium	52200	ug/Kg	N	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-41-7	Beryllium	0.483	mg/kg		0.0221	0.11	0.11	2	MS	PRB	04/17/10 20:26	100417-2	960816
7440-43-9	Cadmium	552	ug/Kg	U	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-70-2	Calcium	1370000	ug/Kg		8840	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-47-3	Chromium	7510	ug/Kg	*	166	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-48-4	Cobalt	2410	ug/Kg		166	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-50-8	Copper	3440	ug/Kg		331	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-89-6	Iron	9270000	ug/Kg		8840	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-92-1	Lead	6400	ug/Kg		276	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-95-4	Magnesium J+,16b	938000	ug/Kg	N	9390	33100	33100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-96-5	Manganese	263000	ug/Kg		221	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-97-6	Mercury	13	ug/kg		4.08	12	12	1	AV	JXL1	03/17/10 14:35	031710S2-4	964726
7440-02-0	Nickel	4.64	mg/kg		0.11	0.442	0.442	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-09-7	Potassium J+,16b	855000	ug/Kg	N	7070	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7782-49-2	Selenium	1.1	mg/kg	U	0.552	1.1	1.1	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-22-4	Silver	155	ug/Kg	J	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-23-5	Sodium U,14d	85300	ug/Kg		7730	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-28-0	Thallium	0.221	mg/kg	U	0.0663	0.221	0.221	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-61-1	Uranium J,14a	0.647	mg/kg		0.0146	0.0442	0.0442	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-62-2	Vanadium	11000	ug/Kg		110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-66-6	Zinc	34100	ug/Kg		365	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.569	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371018

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7485

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5220000	ug/Kg		9100	26800	26800	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-36-0	Antimony	1340	ug/Kg	U	442	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-38-2	Arsenic	1.22	mg/kg	J	0.25	1.25	1.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-39-3	Barium	50600	ug/Kg	N	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-41-7	Beryllium	0.383	mg/kg		0.025	0.125	0.125	2	MS	PRB	04/17/10 20:28	100417-2	960816
7440-43-9	Cadmium	669	ug/Kg	U	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-70-2	Calcium	1580000	ug/Kg		10700	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-47-3	Chromium	7510	ug/Kg	*	201	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-48-4	Cobalt	2190	ug/Kg		201	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-50-8	Copper	5160	ug/Kg		402	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-89-6	Iron	9570000	ug/Kg		10700	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-92-1	Lead	11100	ug/Kg		335	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-95-4	Magnesium J+,16b	1020000	ug/Kg	N	11400	40200	40200	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-96-5	Manganesec	243000	ug/Kg		268	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-97-6	Mercury	51.2	ug/kg		5.43	16	16	1	AV	JXL1	03/17/10 14:40	031710S2-4	964726
7440-02-0	Nickel	3.66	mg/kg		0.125	0.499	0.499	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-09-7	Potassium J+,16b	770000	ug/Kg	N	8570	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7782-49-2	Selenium	1.25	mg/kg	U	0.624	1.25	1.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-22-4	Silver	669	ug/Kg	U	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-23-5	Sodium U,14d	74500	ug/Kg		9370	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-28-0	Thallium	0.250	mg/kg	U	0.0749	0.25	0.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-61-1	Uranium J,14a	1.52	mg/kg		0.0165	0.0499	0.0499	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-62-2	Vanadium	12800	ug/Kg		134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-66-6	Zinc	38100	ug/Kg		442	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.508	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.545	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.511	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371019

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7488

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11100000	ug/Kg		7200	21200	21200	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-36-0	Antimony	1060	ug/Kg	U	349	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-38-2	Arsenic	2.2	mg/kg		0.221	1.11	1.11	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-39-3	Barium	118000	ug/Kg	N	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-41-7	Beryllium	0.661	mg/kg		0.0221	0.111	0.111	2	MS	PRB	04/17/10 20:30	100417-2	960816
7440-43-9	Cadmium	529	ug/Kg	U	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-70-2	Calcium	2560000	ug/Kg		8470	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-47-3	Chromium	13900	ug/Kg	*	159	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-48-4	Cobalt	5540	ug/Kg		159	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-50-8	Copper	7820	ug/Kg		318	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-89-6	Iron	13900000	ug/Kg		8470	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-92-1	Lead	10600	ug/Kg		265	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-95-4	Magnesium J+,16b	1990000	ug/Kg	N	9000	31800	31800	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-96-5	Mangancsc	205000	ug/Kg		212	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-97-6	Mercury	32	ug/kg		4.32	12.7	12.7	1	AV	JXL1	03/17/10 14:42	031710S2-4	964726
7440-02-0	Nickel	7.82	mg/kg		0.111	0.442	0.442	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-09-7	Potassium J+,16b	1500000	ug/Kg	N	6780	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-22-4	Silver	107	ug/Kg	J	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-23-5	Sodium	203000	ug/Kg		7410	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-28-0	Thallium	0.143	mg/kg	J	0.0663	0.221	0.221	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-61-1	Uranium J,14a	1	mg/kg		0.0146	0.0442	0.0442	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-62-2	Vanadium	26600	ug/Kg		106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-66-6	Zinc	28500	ug/Kg		349	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.525	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.525	g	30	mL	03/16/10	TXB3

DJS
04/30/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371020

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7484

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4120000	ug/Kg		7840	23100	23100	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-36-0	Antimony	1150	ug/Kg	U	381	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-38-2	Arsenic	1.56	mg/kg		0.242	1.21	1.21	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-39-3	Barium	59800	ug/Kg	N	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-41-7	Beryllium	0.584	mg/kg		0.0242	0.121	0.121	2	MS	PRB	04/17/10 20:31	100417-2	960816
7440-43-9	Cadmium	577	ug/Kg	U	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-70-2	Calcium	3360000	ug/Kg		9230	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-47-3	Chromium	4840	ug/Kg	*	173	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-48-4	Cobalt	1800	ug/Kg		173	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-50-8	Copper	5250	ug/Kg		346	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-89-6	Iron	6590000	ug/Kg		9230	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-92-1	Lead	9300	ug/Kg		288	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-95-4	Magnesium J+,I6b	1080000	ug/Kg	N	9800	34600	34600	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-96-5	Manganesec	384000	ug/Kg		231	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-97-6	Mercury	27.1	ug/kg		4.62	13.6	13.6	1	AV	JXL1	03/17/10 14:44	031710S2-4	964726
7440-02-0	Nickel	4.59	mg/kg		0.121	0.483	0.483	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-09-7	Potassium J+,I6b	1070000	ug/Kg	N	7380	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7782-49-2	Selenium	1.21	mg/kg	U	0.604	1.21	1.21	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-22-4	Silver	176	ug/Kg	J	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-23-5	Sodium U,I4d	65000	ug/Kg		8070	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-28-0	Thallium	0.242	mg/kg	U	0.0725	0.242	0.242	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-61-1	Uranium J,I4a	1.51	mg/kg		0.016	0.0483	0.0483	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-62-2	Vanadium	8020	ug/Kg		115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-66-6	Zinc	30700	ug/Kg		381	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.525	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.501	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.535	g	30	mL	03/16/10	TXB3

DJS
04/30/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2151 VALIDATION DATE: 04/30/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: David Schwent ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ OTHER (DESCRIBE):


Section II. Completeness Check


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

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


1. 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 DonovanLevel: IDate: 04/30/10


DATA VALIDATION COVER SHEET	
5120-1	Records Use only
Data Validation Cover Sheet	 Los Alamos NATIONAL LABORATORY EST 1945
VALIDATOR'S SIGNATURE: <u>David Schwant</u> DATE: <u>04/30/10</u>	
Form 5120-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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

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

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

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

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

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7415
Sample ID: 248371001
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 41.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	6.65	0.010	0.100	SU	1	TXT1	03/03/10	1431	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total		633	102	376	ug/kg	1	AXC2	03/10/10	1635	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		12.4	0.513	1.71	mg/kg	1	GXM	03/24/10	0830	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7420
Sample ID: 248371002
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 8.74%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.61	0.010	0.100	SU	1	TXT1	03/03/10	1436	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	71.8	70.3	258	ug/kg	1	AXC2	03/10/10	1636	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.73	0.325	1.08	mg/kg	1	GXM	03/24/10	1030	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7418
Sample ID: 248371003
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 18.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.68	0.010	0.100	SU	1	TXT1	03/03/10	1438	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	82.0	301	ug/kg	1	AXC2	03/10/10	1637	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.47	0.363	1.21	mg/kg	1	GXM	03/24/10	1100	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7417
Sample ID: 248371004
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 21%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.56	0.010	0.100	SU	1	TXT1	03/03/10	1443	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	143	82.8	304	ug/kg	1	AXC2	03/10/10	1642	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.34	0.372	1.24	mg/kg	1	GXM	03/24/10	1130	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7419
Sample ID: 248371005
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 16.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.97	0.010	0.100	SU	1	TXT1	03/03/10	1445	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	195	69.4	255	ug/kg	1	AXC2	03/10/10	1643	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		5.29	0.360	1.20	mg/kg	1	GXM	03/24/10	1200	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7416
Sample ID: 248371006
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 11.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	6.81	0.010	0.100	SU	1	TXT1	03/03/10	1447	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	92.7	73.7	271	ug/kg	1	AXC2	03/10/10	1643	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.97	0.332	1.11	mg/kg	1	GXM	03/24/10	1329	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7490
Sample ID: 248371008
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 26%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	6.80	0.010	0.100	SU	1	TXT1	03/03/10	1451	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.8	286	ug/kg	1	AXC2	03/10/10	1559	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.45	0.405	1.35	mg/kg	1	GXM	03/24/10	1429	967018	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	GXM3	03/23/10	1555	967014
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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04/30/10

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Certificate of Analysis

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Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7478
Sample ID: 248371007
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 9.81%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.23	0.010	0.100	SU	1	TXT1	03/03/10	1449	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2	03/10/10	1644	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.23	0.329	1.10	mg/kg	1	GXM	03/24/10	1359	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

The following Analytical Methods were performed

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

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

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7487
Sample ID: 248371009
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.11	0.010	0.100	SU	1	TXT1	03/03/10	1454	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.5	296	ug/kg	1	AXC2	03/10/10	1606	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		6.15	0.398	1.33	mg/kg	1	GXM	03/24/10	1459	967018	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	GXM3	03/23/10	1555	967014
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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Company : Los Alamos National Laboratory
Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7483
Sample ID: 248371010
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	6.71	0.010	0.100	SU	1	TXT1	03/03/10	1457	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total		448	89.5	329	ug/kg	1	AXC2	03/10/10	1609	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.96	0.395	1.32	mg/kg	1	GXM	03/24/10	1529	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7481
Sample ID: 248371011
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 32.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.7C	H	6.57	0.010	0.100	SU	1	TXT1	03/03/10	1500	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	95.5	351	ug/kg	1	AXC2	03/10/10	1610	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.447	1.49	mg/kg	1	GXM	03/24/10	1558	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7486
Sample ID: 248371012
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 21.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	6.33	0.010	0.100	SU	1	TXT1	03/03/10	1501	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.3	273	ug/kg	1	AXC2	03/10/10	1611	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	GXM	03/24/10	1628	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7477
Sample ID: 248371013
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 23.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	7.10	0.010	0.100	SU	1	TXT1	03/03/10	1514	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	89.0	327	ug/kg	1	AXC2	03/10/10	1612	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.389	1.30	mg/kg	1	GXM	03/24/10	1658	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7489
Sample ID: 248371014
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 35%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	6.78	0.010	0.100	SU	1	TXT1	03/03/10	1516	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	105	385	ug/kg	1	AXC2	03/10/10	1617	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.462	1.54	mg/kg	1	GXM	03/24/10	1728	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7479
Sample ID: 248371015
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											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.48	0.010	0.100	SU	1	TXT1	03/03/10	1518	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	85.0	312	ug/kg	1	AXC2	03/10/10	1617	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.400	1.33	mg/kg	1	GXM	03/24/10	1758	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7482
Sample ID: 248371016
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.6C	H	6.47	0.010	0.100	SU	1	TXT1	03/03/10	1520	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	84.7	312	ug/kg	1	AXC2	03/10/10	1618	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.387	1.29	mg/kg	1	GXM	03/24/10	1927	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7480
Sample ID: 248371017
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 12.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.24	0.010	0.100	SU	1	TXT1	03/03/10	1521	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	98.4	77.4	284	ug/kg	1	AXC2	03/10/10	1619	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.340	1.13	mg/kg	1	GXM	03/24/10	1957	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7485
Sample ID: 248371018
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 26.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.49	0.010	0.100	SU	1	TXT1	03/03/10	1524	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	164	85.6	315	ug/kg	1	AXC2	03/10/10	1620	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.408	1.36	mg/kg	1	GXM	03/24/10	2027	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7488
Sample ID: 248371019
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 10%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.92	0.010	0.100	SU	1	TXT1	03/03/10	1526	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2	03/10/10	1621	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.67	0.334	1.11	mg/kg	1	GXM	03/24/10	2057	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7484
Sample ID: 248371020
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 17.4%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.72	0.010	0.100	SU	1	TXT1	03/03/10	1528	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	105	69.8	257	ug/kg	1	AXC2	03/10/10	1622	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.70	0.361	1.20	mg/kg	1	GXM	03/24/10	2127	967018	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	GXM3	03/23/10	1555	967014
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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04/30/10

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2151

LOS ALAMOS

REQUEST NUMBER: 10-2151

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

248371/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7415	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7415	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7420	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7420	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7418	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7418	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7417	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7417	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7419	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7419	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7416	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7416	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7478	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7478	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7490	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7490	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7487	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7487	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7483	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7483	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7481	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7481	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2151

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7486	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7477	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7477	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7489	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7489	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7479	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7479	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7482	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7482	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7480	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7480	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7485	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7485	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7488	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7488	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7484	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7484	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Page 1 of 6
REQUEST NUMBER: 10-2151

Monday, March 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-2151

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

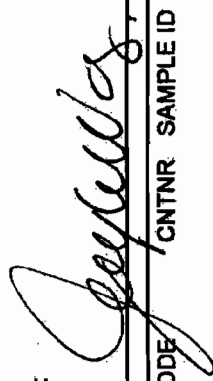
TURNAROUND REQ'D: 30 Days

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	RE38-10-7415	R	2/24/2010	
		1	RE38-10-7416	R	2/24/2010	
		1	RE38-10-7417	R	2/24/2010	
		1	RE38-10-7418	R	2/24/2010	
		1	RE38-10-7419	R	2/24/2010	
		1	RE38-10-7420	R	2/24/2010	
		1	RE38-10-7477	R	2/24/2010	
		1	RE38-10-7478	R	2/24/2010	
		1	RE38-10-7479	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-300.0	1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6010B	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6020	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6850	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7440	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.6850	1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846.7471A	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.7471A	1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846.9012A	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846.9012A	1	RE36-10-7415	R	2/24/2010	

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2151



March 09, 2010

www.gel.com

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

Re: LANL ER Project
Work Order: 248371
SDG: 10-2151

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,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-2151
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248371
SDG: 10-2151

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248371
SDG # : 10-2151**

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:

<u>Laboratory ID</u>	<u>Client ID</u>
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484

Case Narrative

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

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

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



Valerie Davis

Project Manager

List of current GEL Certifications as of 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: 10-2151

LOS ALAMOS

REQUEST NUMBER: 10-2151

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/31/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Request Hard Copy Flag: True

Charleston, SC 29407

LAB REQUEST COMMENTS:

248371/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7415	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7415	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7420	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7420	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7418	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7418	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7417	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7417	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7419	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7419	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7416	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7416	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7478	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7478	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7490	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7490	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7487	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7487	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7483	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7483	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7481	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7481	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Monday, March 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2151

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE36-10-7486	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7486	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7477	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7477	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7489	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7489	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7479	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7479	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7482	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7482	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7480	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7480	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7485	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7485	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7488	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7488	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE36-10-7484	1	POLY	METALS+U-GEL	Ice	R
RE36-10-7484	1	POLY	Perchlorate+CN+N03+pH	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, March 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 3/1/2010

TURNAROUND/REPORT DUE: 3/31/2010

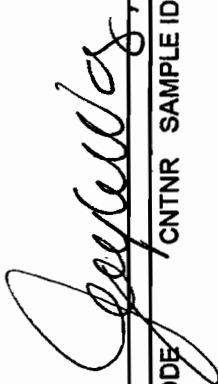
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



These Samples are on:

LANL Request Number: 10-2151
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Page 1 of 6
REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	

Monday, March 01, 2010

Page 2 of 6

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6010B	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		4	RE36-10-7487	R	2/24/2010	

Monday, March 01, 2010

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REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6020	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:6850	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	

Monday, March 01, 2010

Page 5 of 6

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	
	SW-846:9012A	1	RE36-10-7415	R	2/24/2010	
		1	RE36-10-7416	R	2/24/2010	
		1	RE36-10-7417	R	2/24/2010	
		1	RE36-10-7418	R	2/24/2010	
		1	RE36-10-7419	R	2/24/2010	
		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
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		1	RE36-10-7487	R	2/24/2010	
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		1	RE36-10-7489	R	2/24/2010	
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SW-846:7471A

Monday, March 01, 2010

REQUEST NUMBER: 10-2151

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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		1	RE36-10-7418	R	2/24/2010	
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		1	RE36-10-7420	R	2/24/2010	
		1	RE36-10-7477	R	2/24/2010	
		1	RE36-10-7478	R	2/24/2010	
		1	RE36-10-7479	R	2/24/2010	
		1	RE36-10-7480	R	2/24/2010	
		1	RE36-10-7481	R	2/24/2010	
		1	RE36-10-7482	R	2/24/2010	
		1	RE36-10-7483	R	2/24/2010	
		1	RE36-10-7484	R	2/24/2010	
		1	RE36-10-7485	R	2/24/2010	
		1	RE36-10-7486	R	2/24/2010	
		1	RE36-10-7487	R	2/24/2010	
		1	RE36-10-7488	R	2/24/2010	
		1	RE36-10-7489	R	2/24/2010	
		1	RE36-10-7490	R	2/24/2010	

Final Page of REQUEST NUMBER 10-2151



SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCO/Work Order: 10-2151	
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

Date

3/3/10

ORIGIN ID: SHFA (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: 6B010AMR1A015AGWMO

Qc



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2 of 2
NPS# 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

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: 6B010AMR1A015AGWMO

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2 of 2
NPS# 0263 7209 7850 2775

Mstr# 7209 7850 2764 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SHFA (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: 6B010AMR1A015AGWMO

1c



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1 of 2
TRK# 0201 7209 7850 2764

Mstr# 7209 7850 2786 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

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1 of 2
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Mstr# 7209 7850 2764 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: 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: 6B010AMR1A015AGWMO

2c

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

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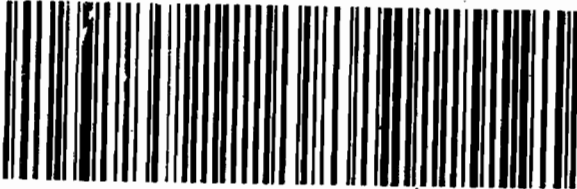


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TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

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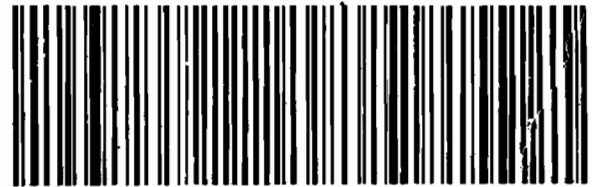
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TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

B. SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR2A051BYDO

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1 of 2
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0201

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PRIORITY OVERNIGHT

XX CHSA

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TRKH 7209 7850 2720
201

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

29407
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ORIGIN ID: SAFA (505) 665-9968

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 41.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

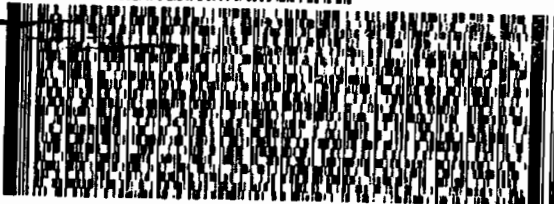
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(843) 556-8171
REF: 6B010AMR3A0532VA00

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR3A0532VA00



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TUE - 02MAR A1
PRIORITY OVERNIGHT

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2 of 2
MPS# 0263 7209 7850 2867

Mstr# 7209 7850 2856 0201

TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 17.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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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GENERAL ENGINEERING LAB
2040 SAVAGE RD

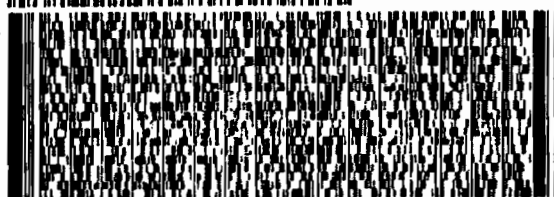
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(843) 556-8171
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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TUE - 02MAR A1
PRIORITY OVERNIGHT

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2 of 2
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TUE - 02MAR A1
PRIORITY OVERNIGHT

XX CHSA

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ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 03

S ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843) 556-8171

REF: 6B010AMR1A015AGWMO

SHIP DATE: 01MAR10
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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

LOS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

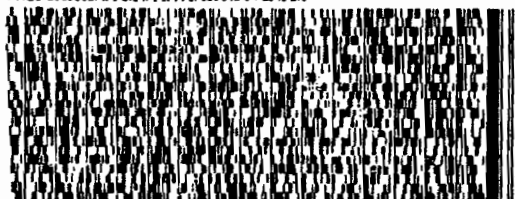
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(843) 556-8171

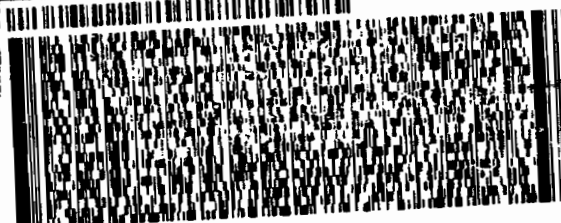
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CAD: 0014176/CAFE2450

BILL SENDER



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7209 7850 2786

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1 of 2
TRKH 7209 7850 2890
0201

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S ALAMOS NATL LAB
100 BLDG 1237 DPU 03

S ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR3A05529E00

BILL SENDER

LOS ALAMOS NATL LAB
100 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843) 556-8171

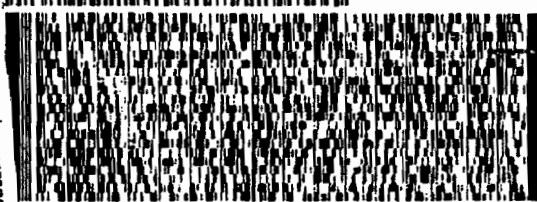
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ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER



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2 of 2
MPSH 7209 7850 2683
0263

Master 7209 7850 2672 0201

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PRIORITY OVERNIGHT

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3 of 3
MPSH 7209 7850 2661
0263

Master 7209 7850 2640 0201

XX CHSA

TUE - 02MAR A1
PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01MAR10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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

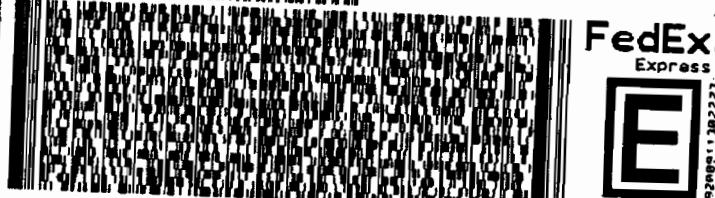
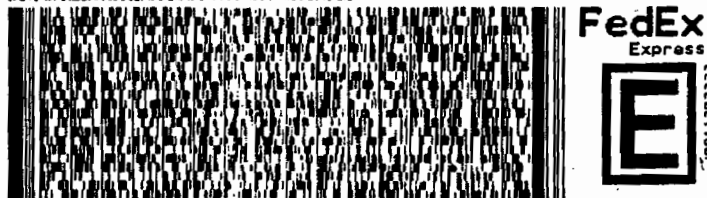
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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00



1 of 2
TRK# 7209 7850 2672
0201
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XX CHSA

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

2 of 3
MPS# 7209 7850 2650
0263
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XX CHSA

TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

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

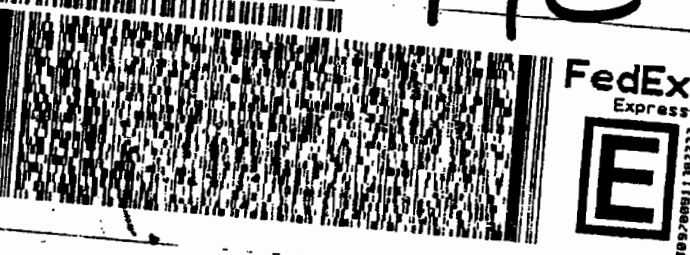
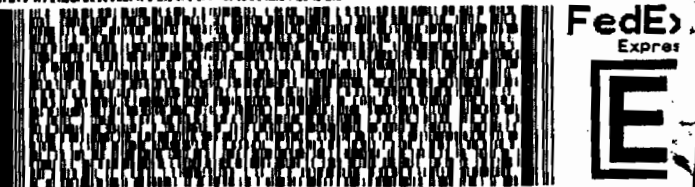
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR2A051BYDO



TRK# 7209 7850 2694
0201

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TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
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1 of 2
TRK# 7209 7850 2709
0201
MM MASTER MM

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TUE - 02MAR A1
PRIORITY OVERNIGHT

29407
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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 10-2151**

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:	962127
Prep Batch Number:	962126

Sample Analysis

Sample ID	Client ID
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484
1202063746	Interference Check Sample (ICS)
1202063742	Method Blank (MB)
1202063743	Laboratory Control Sample (LCS)
1202063744	248371001(RE36-10-7415) Matrix Spike (MS)
1202063745	248371001(RE36-10-7415) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.
10-2151-PERLCMS

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 248371001 (RE36-10-7415) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

Samples 248371002 (RE36-10-7420) and 248371005 (RE36-10-7419) were diluted to bring the over range concentrations within the calibration range. The diluted analyses are reported.

Sample Re-extraction/Re-analysis

Sample 248371006 (RE36-10-7416) was re-analyzed to confirm the potential of carryover from the previous sample. The re-analysis is reported.

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

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

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

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

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

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

Reviewer: Heather Mauer Date: 03/26/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7415

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371001

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 58

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.857	3.43	1.04	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate Isotope Ratio			2.83			1	22-MAR-10 20:11	per0322044a
14797-73-0	Perchlorate-101	.857	3.43	1.12	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate-O(18)			9.31	ug/kg		1	22-MAR-10 20:11	per0322044a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7420

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371002

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.19	8.77	21.9	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate Isotope Ratio			3.2			4	23-MAR-10 09:07	per0322108a
14797-73-0	Perchlorate-101	2.19	8.77	20.7	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate-O(18)			22.9	ug/kg		4	23-MAR-10 09:07	per0322108a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7418

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371003

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:35	per0322051a
14797-73-0	Perchlorate-101	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate-O(18)			6.43	ug/kg		1	22-MAR-10 21:35	per0322051a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7417
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371004
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 79

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:47	per0322052a
14797-73-0	Perchlorate-101	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate-O(18)			6.69	ug/kg		1	22-MAR-10 21:47	per0322052a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7419

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371005

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.41	9.63	18.8	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate Isotope Ratio			3.18			4	23-MAR-10 09:19	per0322109a
14797-73-0	Perchlorate-101	2.41	9.63	18.0	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate-O(18)			24.6	ug/kg		4	23-MAR-10 09:19	per0322109a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7416
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371006
 Date Filtered: 15-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	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per03222110a
	Perchlorate Isotope Ratio						1	23-MAR-10 09:31	per03222110a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per03222110a
	Perchlorate-O(18)			5.97	ug/kg		1	23-MAR-10 09:31	per03222110a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7478
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371007
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 20.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:23	per0322055a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate-O(18)			5.91	ug/kg		1	22-MAR-10 22:23	per0322055a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7490

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371008

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate-O(18)			6.95	ug/kg		1	22-MAR-10 22:36	per0322056a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7487
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371009
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 75

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:48	per0322057a
14797-73-0	Perchlorate-101	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate-O(18)			6.89	ug/kg		1	22-MAR-10 22:48	per0322057a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7483
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371010
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 76

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.658	2.63	0.724	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate Isotope Ratio			2.58			1	22-MAR-10 23:00	per0322058a
14797-73-0	Perchlorate-101	.658	2.63	0.854	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate-O(18)			6.77	ug/kg		1	22-MAR-10 23:00	per0322058a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7481

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371011

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 67

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate Isotope Ratio						1	22-MAR-10 23:12	per0322059a
14797-73-0	Perchlorate-101	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate-O(18)			7.69	ug/kg		1	22-MAR-10 23:12	per0322059a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7486

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371012

Date Filtered: 15-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	2.53	1.73	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate Isotope Ratio			2.89			1	22-MAR-10 23:24	per0322060a
14797-73-0	Perchlorate-101	.634	2.53	1.82	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate-O(18)			6.42	ug/kg		1	22-MAR-10 23:24	per0322060a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 262126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7477

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371013

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:12	per0322064a
14797-73-0	Perchlorate-101	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate-O(18)			6.83	ug/kg		1	23-MAR-10 00:12	per0322064a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7489
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371014
 Date Filtered: 15-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	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:24	per0322065a
14797-73-0	Perchlorate-101	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate-O(18)			7.61	ug/kg		1	23-MAR-10 00:24	per0322065a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7479
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371015
 Date Filtered: 15-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	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:36	per0322066a
14797-73-0	Perchlorate-101	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate-O(18)			7.26	ug/kg		1	23-MAR-10 00:36	per0322066a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7482
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371016
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:48	per0322067a
14797-73-0	Perchlorate-101	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate-O(18)			6.62	ug/kg		1	23-MAR-10 00:48	per0322067a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7480
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371017
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 88

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate Isotope Ratio						1	23-MAR-10 01:00	per0322068a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate-O(18)			5.76	ug/kg		1	23-MAR-10 01:00	per0322068a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7485
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371018
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 74

Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.68	2.72	1.37	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate Isotope Ratio			3.2			1	23-MAR-10 01:12	per0322069a
14797-73-0	Perchlorate-101	.68	2.72	1.30	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate-O(18)			6.98	ug/kg		1	23-MAR-10 01:12	per0322069a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

Client Sample No.
RE36-10-7488

Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371019
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.22	0.627	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 01:24	per0322070a
14797-73-0	Perchlorate-101	.556	2.22	0.665	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 01:24	per0322070a

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7484
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371020
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 83

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.606	2.42	0.817	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate Isotope Ratio			3.22			1	23-MAR-10 01:36	per0322071a
14797-73-0	Perchlorate-101	.606	2.42	0.771	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate-O(18)			6.50	ug/kg		1	23-MAR-10 01:36	per0322071a

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

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2151

Extract Batch Code: 962126

Date Filtered: 15-MAR-10

Matrix: SOIL

Sample ID: 1202063743

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.95	ug/kg	97.7		70 - 130
Perchlorate Isotope Ratio		2.97				-
Perchlorate-101	2.00	2	ug/kg	99.8		70 - 130
Perchlorate-O(18)		4.82	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2151

Extract Batch Code: 962126

Date Filtered: 15-MAR-10

Matrix: SOIL

Sample ID: 1202063746

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.29	ug/kg	114		70 - 130
Perchlorate Isotope Ratio		2.88				
Perchlorate-101	2.00	2.41	ug/kg	120		70 - 130
Perchlorate-O(18)		5.69	ug/kg			

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

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: per0322043a

Date: 22-Mar-2010

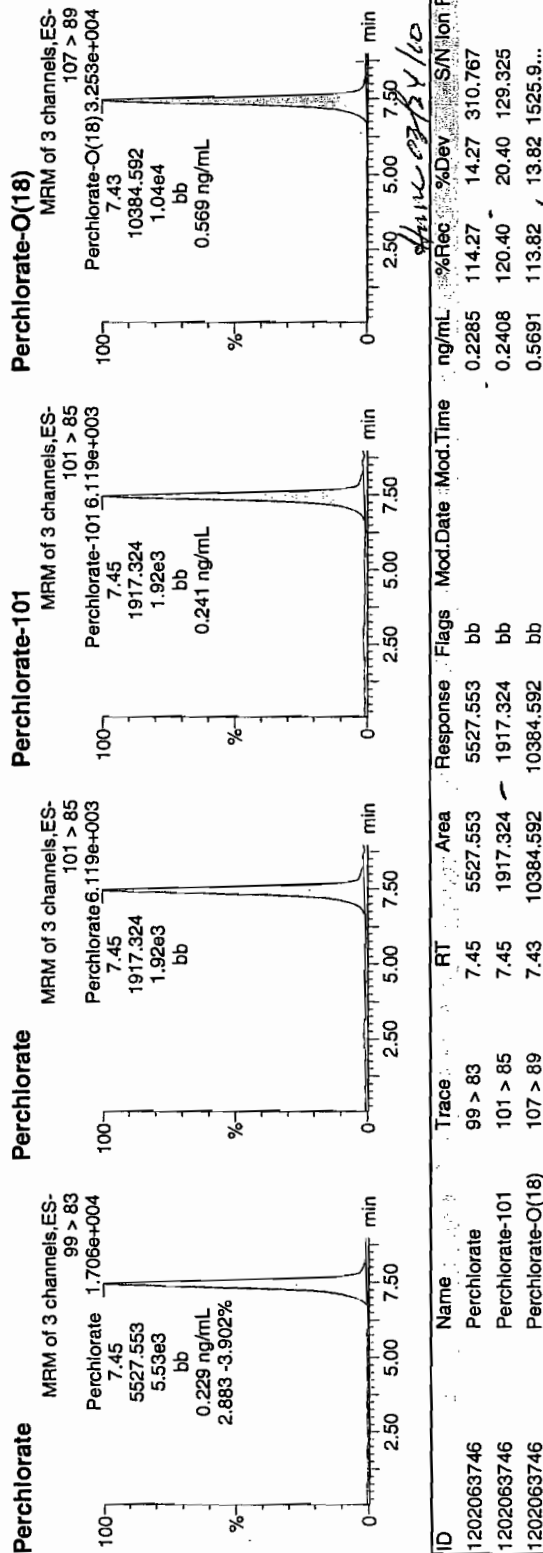
Time: 19:59:15

ID: 1202063746

Vial: 2:1,C

03-23-10

1202063746 | 1962127 | 50120 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063746	Perchlorate	99 > 83	7.45	5527.553	5527.553	bb			0.2285	114.27	14.27	310.767	2.88
1202063746	Perchlorate-101	101 > 85	7.45	1917.324	1917.324	bb			0.2408	120.40	20.40	129.325	
1202063746	Perchlorate-O(18)	107 > 89	7.43	10384.592	10384.592	bb			0.5691	113.82	13.82	1525.9...	

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

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 962126

GEL Job No (SDG): 10-2151

Date Extracted: 15-MAR-10

GEL MS/PS ID: 1202063744

Client ID: RE36-10-7415

GEL MSD/PSD ID: 1202063745

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD [^] Conc	MSD Rec #	RPD	#	RPD Limit	Recovery Limit
Perchlorate	3.43	1.04	ug/kg	4.81	110	4.97	115	3.28		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.94		2.9		0			-
Perchlorate-101	3.43	1.12	ug/kg	4.97	112	5.21	119	4.8		30	75 - 125
Perchlorate-O(18)	0	9.31	ug/kg	9.11		8.81		3.36			-

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

Comments:

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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

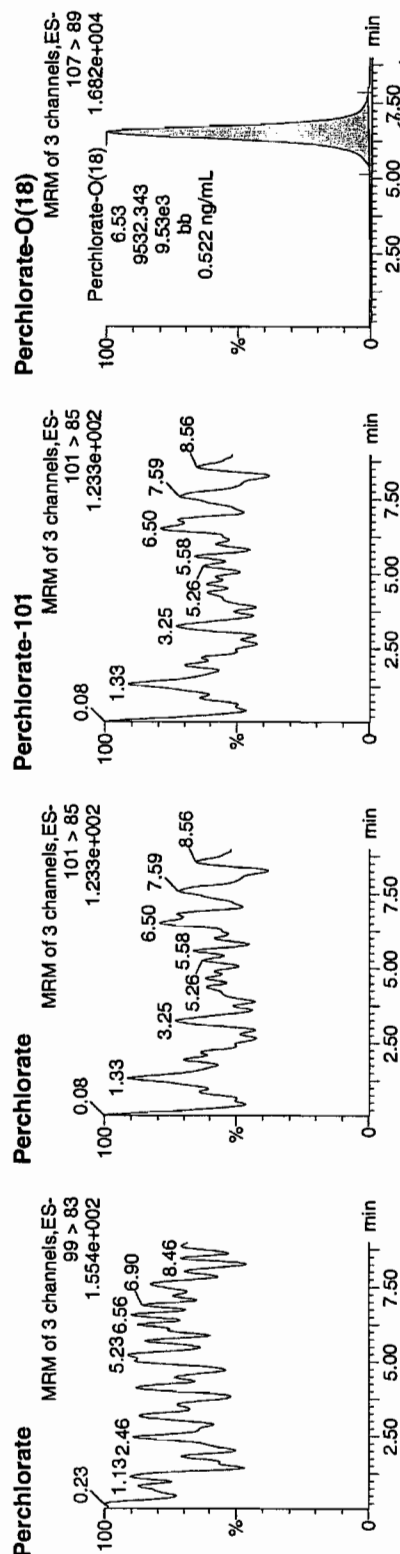
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Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

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

032210



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

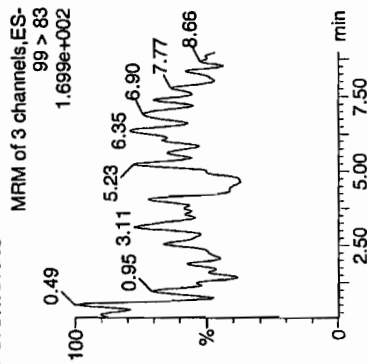
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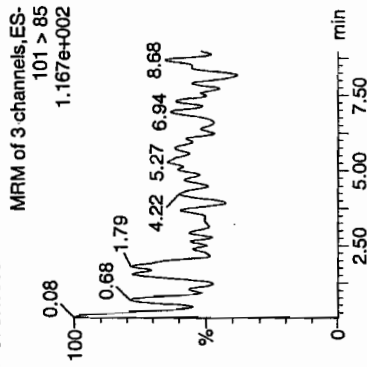
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03-23-10

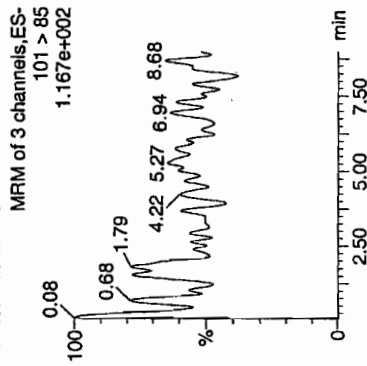
Perchlorate



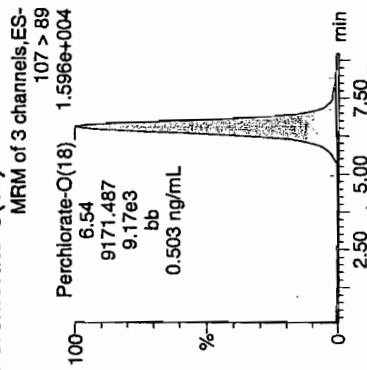
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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	

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

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-2151

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	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

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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	per03222062a	IPB008
Perchlorate	0.00	0	NA	23-MAR-10	per03222073a	IPB009
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222073a	IPB009
Perchlorate	0.00	0	NA	23-MAR-10	per03222086a	IPB010
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222086a	IPB010
Perchlorate	0.00	0	NA	23-MAR-10	per03222099a	IPB011
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222099a	IPB011
Perchlorate	0.00	0	NA	23-MAR-10	per03222105a	IPB012
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222105a	IPB012
Perchlorate	0.00	0	NA	23-MAR-10	per03222107a	IPB013
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222107a	IPB013
Perchlorate	0.00	0	NA	23-MAR-10	per03222112a	IPB014
Perchlorate-101	0.00	0	NA	23-MAR-10	per03222112a	IPB014

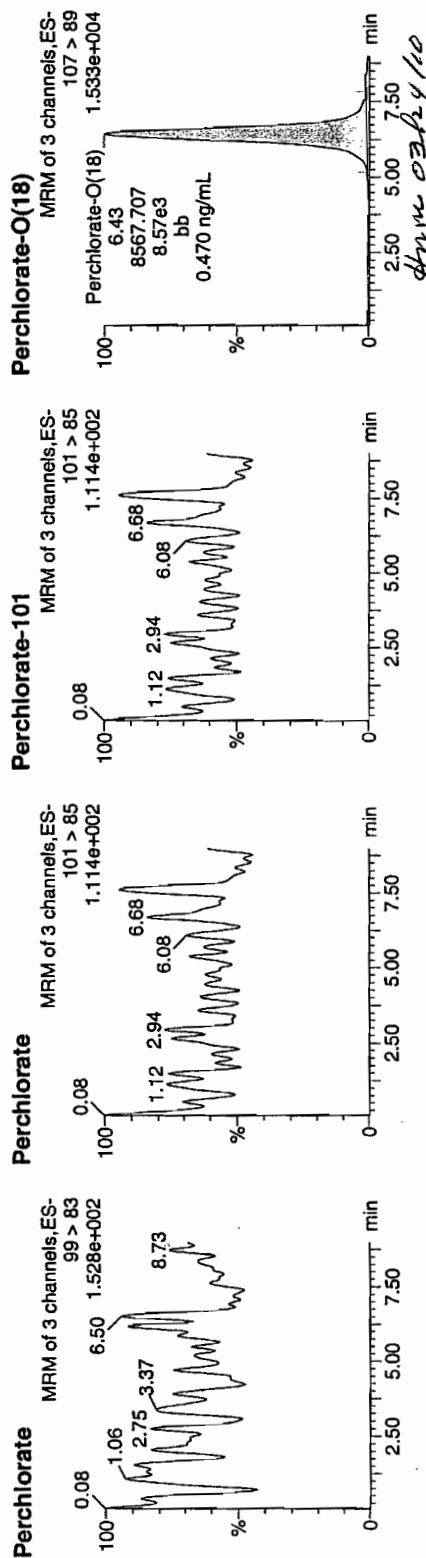
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

03-23-10



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	

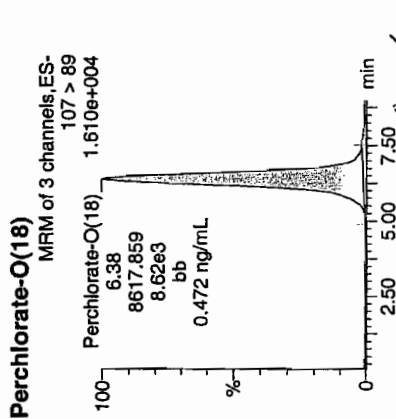
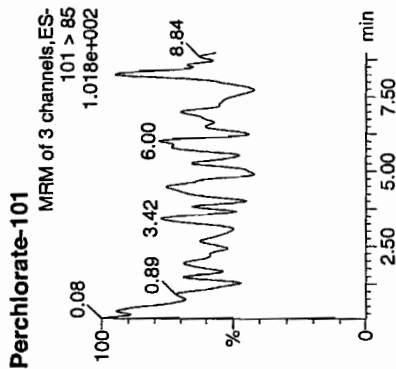
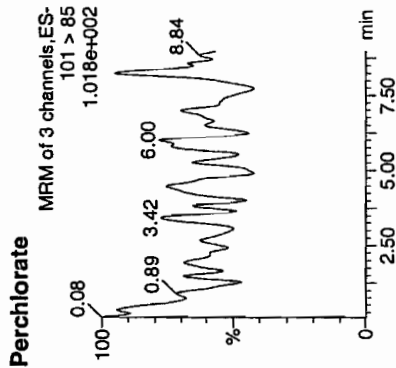
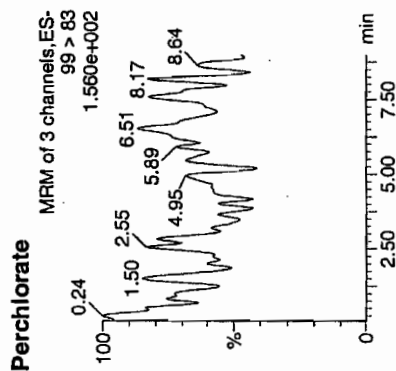
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB003	Perchlorate	99 > 83											
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	

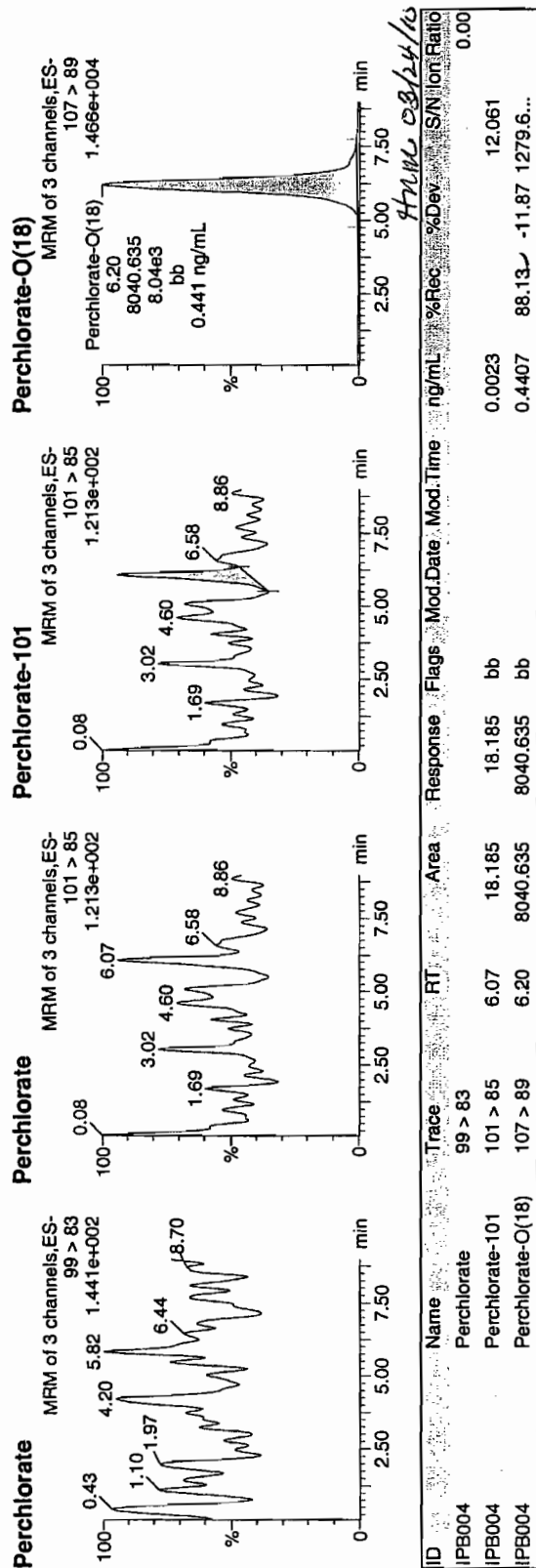
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

03-23-10



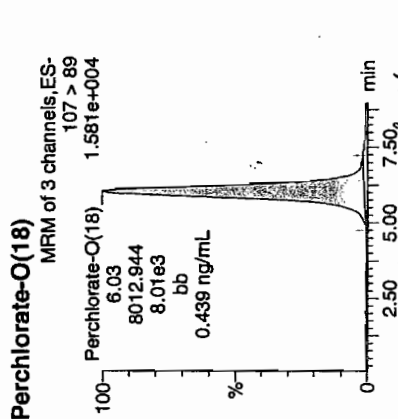
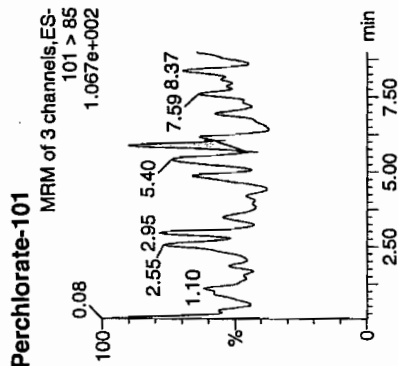
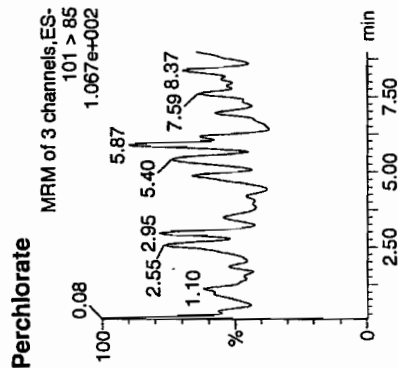
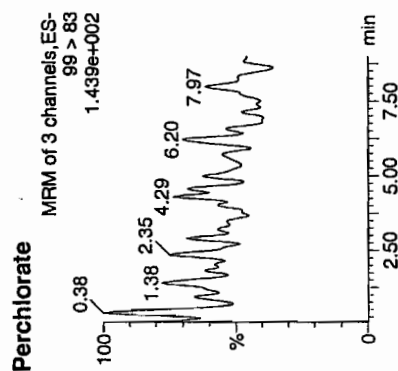
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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



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

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

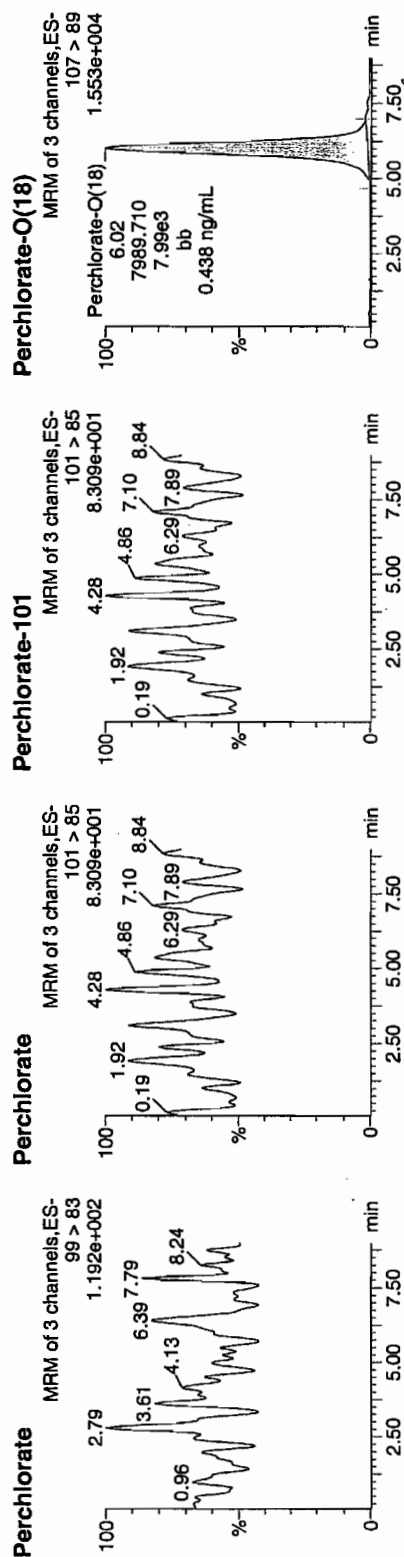
Name: per0322040a

Date: 22-Mar-2010

Time: 19:22:34

ID: IPB006

Vial: 1:1,A



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...	

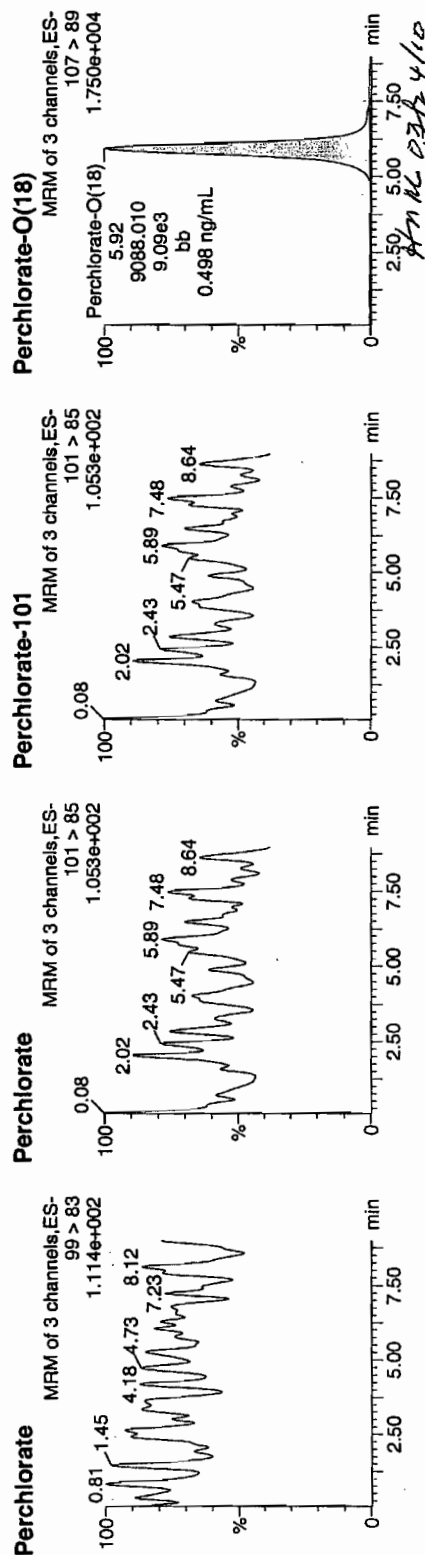
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

Name: per0322049a
Date: 22-Mar-2010
Time: 21:11:37
ID: IPB007
Vial: 1:1,A

0323-10



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	

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: per0322062a

Date: 22-Mar-2010

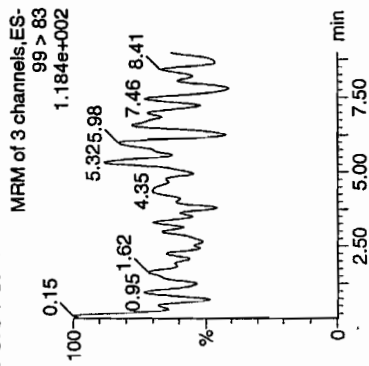
Time: 23:48:27

ID: IPB008

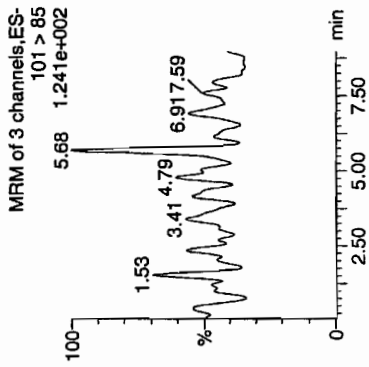
Vial: 1:1,A

37-23-10

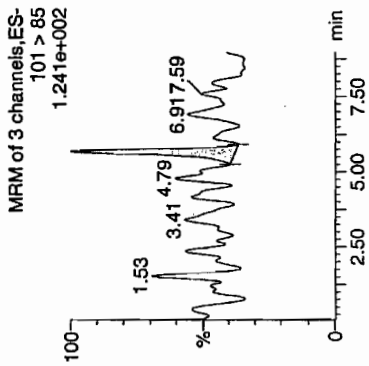
Perchlorate



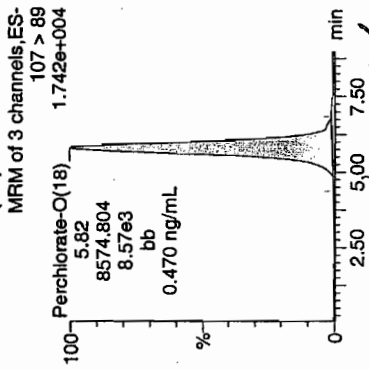
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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

Handwritten note: 4/10

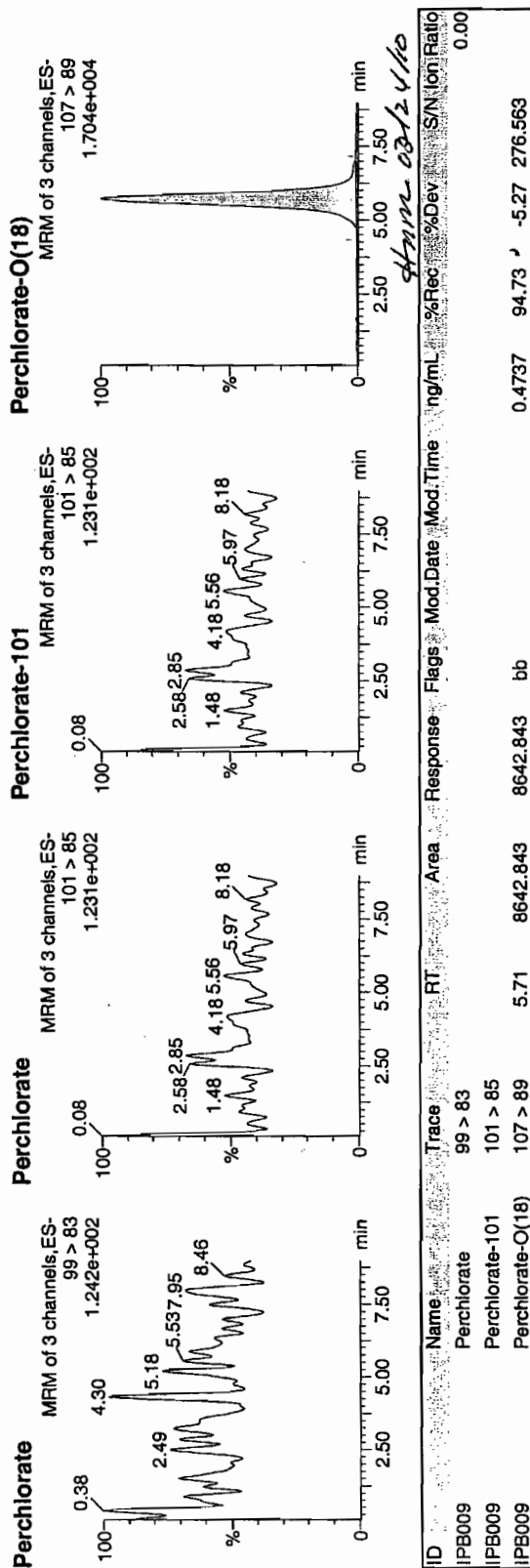
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0322073a
Date: 23-Mar-2010
Time: 02:01:20
ID: IPB009
Vial: 1:1,A

03-23-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers 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

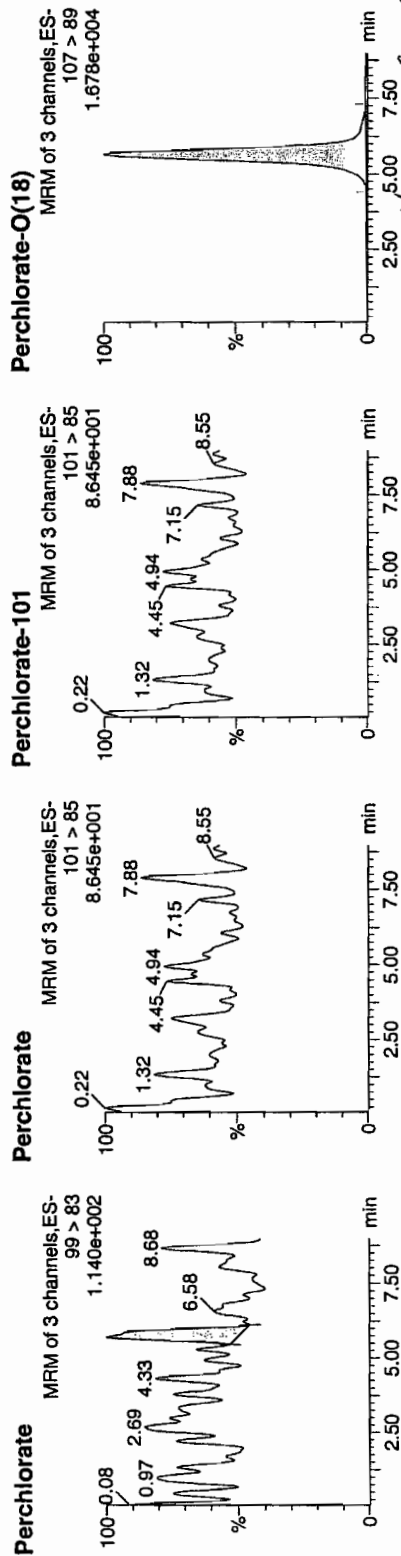
Date: 23-Mar-2010

Time: 04:38:11

ID: IPB010

Vial: 1:1,A

03-23-10



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...	

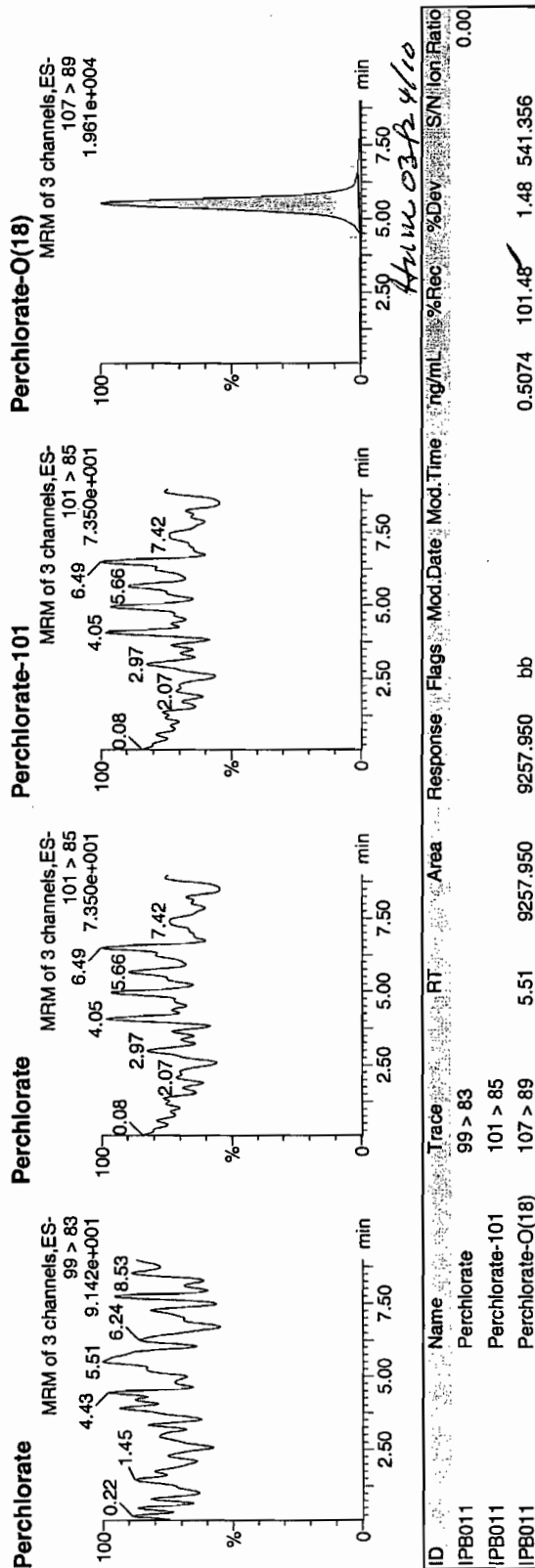
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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
ID: IPB011
Vial: 1:1,A

03-23-10



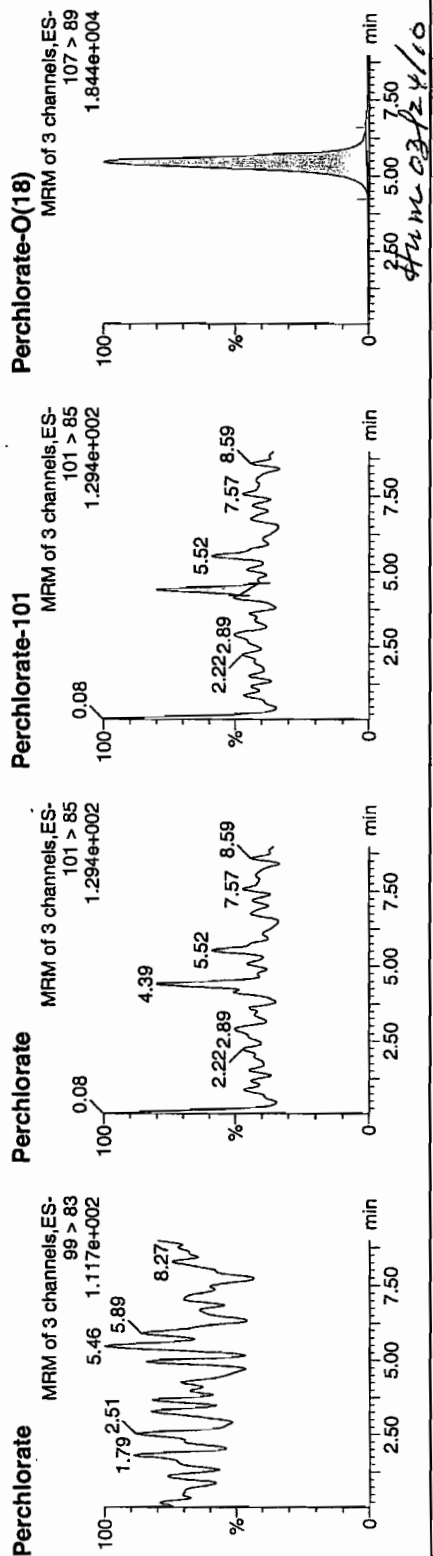
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0322105a
Date: 23-Mar-2010
Time: 08:31:10
ID: IPB012
Vial: 1:1,A

03-23-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB012	Perchlorate	99 > 83											0.00
IPB012	Perchlorate-101	101 > 85	4.39	8.788	8.788	bb			0.0011			16.388	
IPB012	Perchlorate-O(18)	107 > 89	5.45	8970.789	8970.789	bb			0.4916	98.33	-1.67	697.456	

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

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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: per0322107a

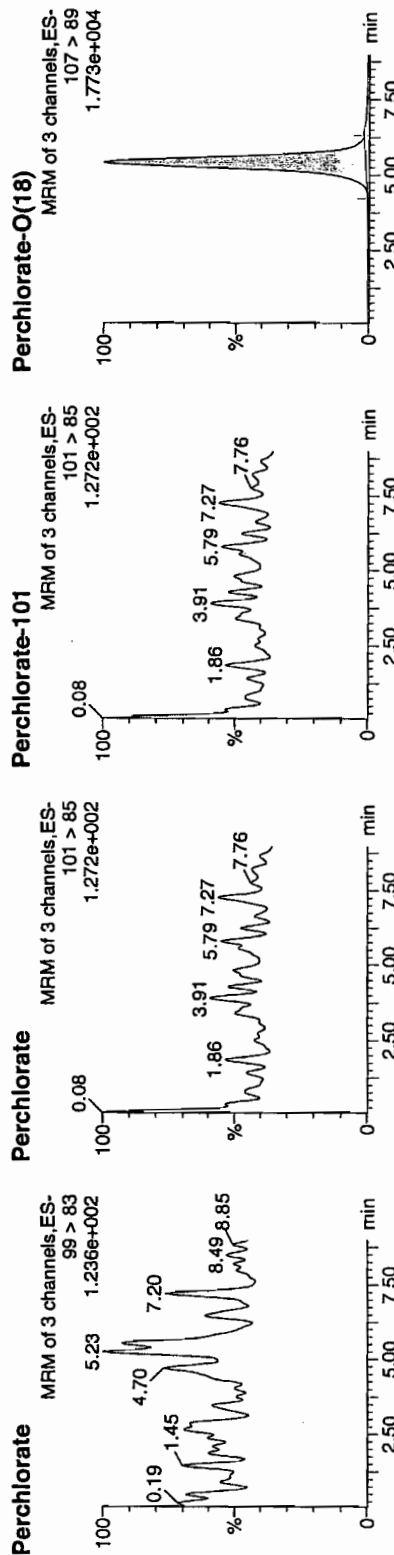
Date: 23-Mar-2010

Time: 08:55:27

ID: IPB013

Vial: 1:1,A

03-23-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB013	Perchlorate	99 > 83											0.00
IPB013	Perchlorate-101	101 > 85											
IPB013	Perchlorate-O(18)	107 > 89	5.42	8393.238	8393.238	bb			0.4500	92.00	-8.00	398.146	

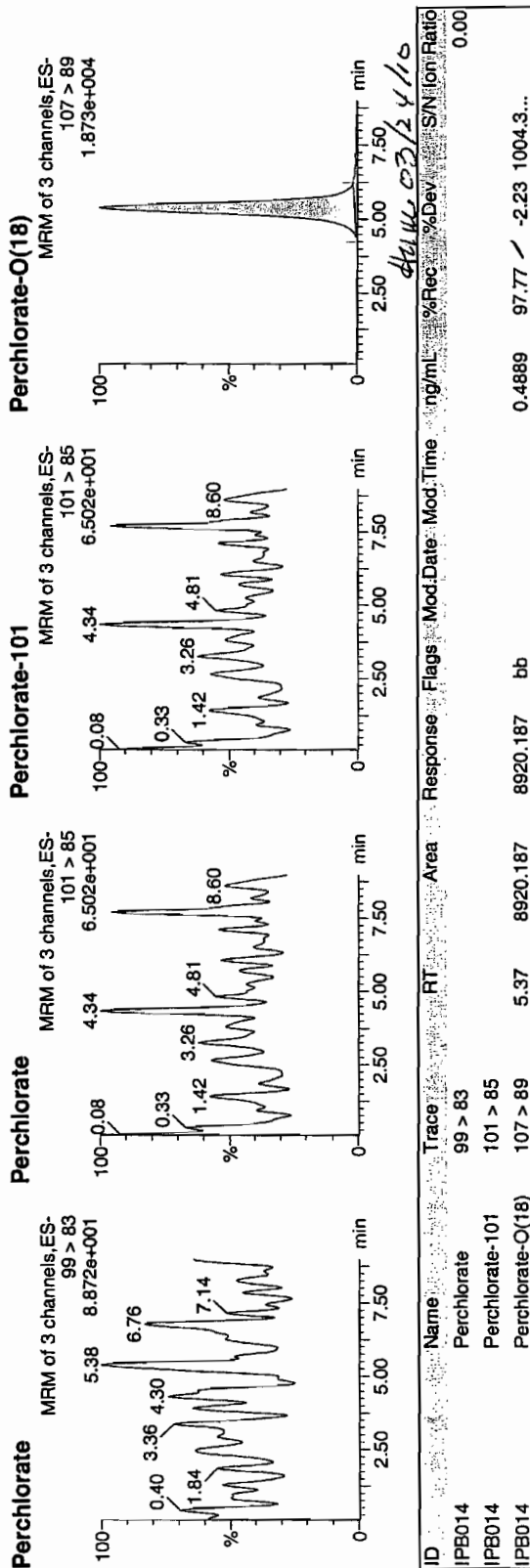
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0322112a
Date: 23-Mar-2010
Time: 09:55:44
ID: IPB014
Vial: 1:1,A

3723-10



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

QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

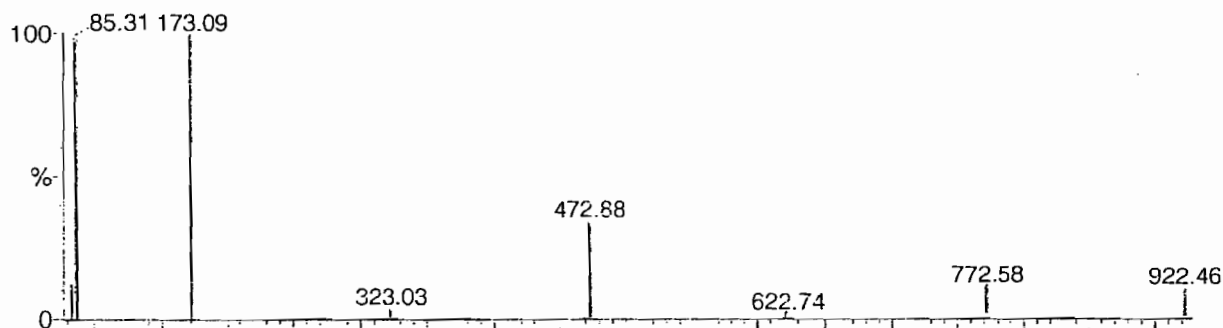
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

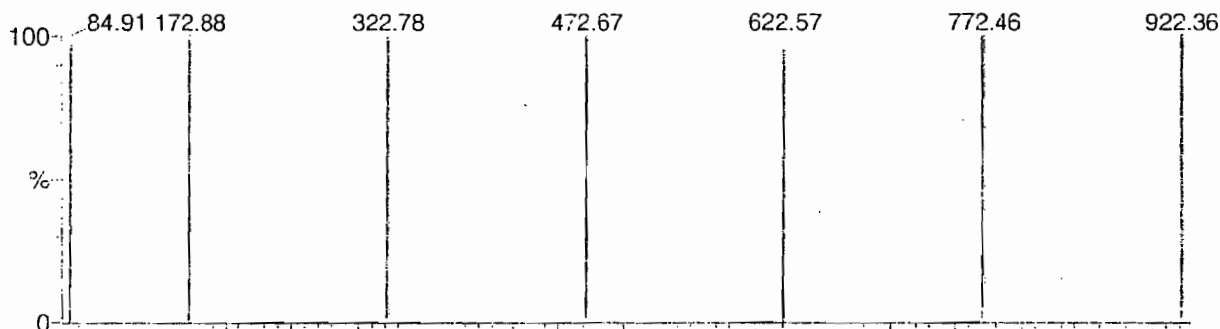
POINTS HIGHLIGHTED BY CURVE 01-07-03

Data file: STATMS1 - Uncalibrated

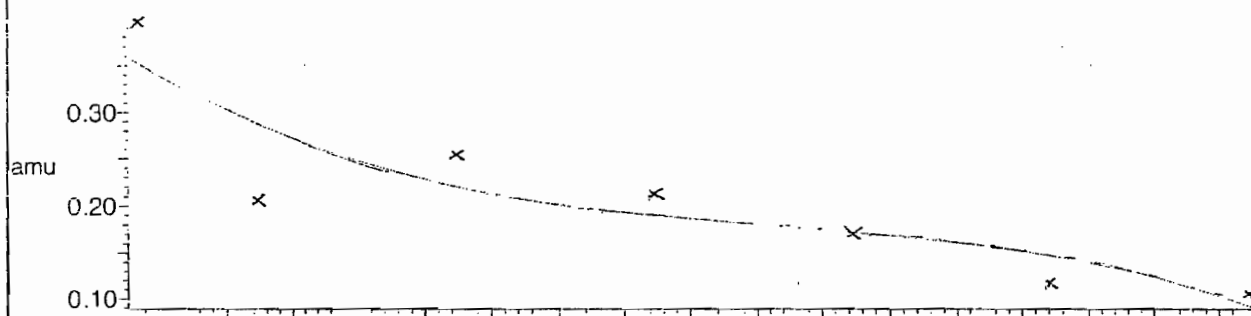
7 matches of 7 tested references



Reference file: Nairb

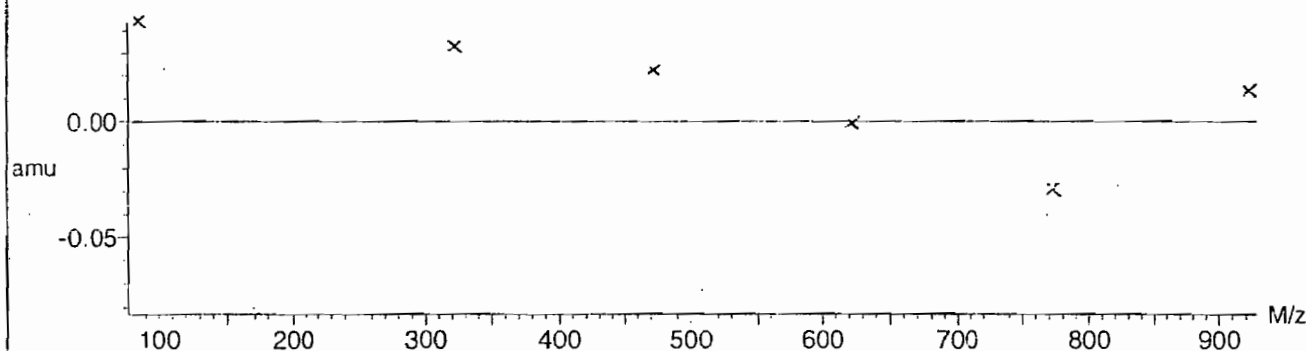


Mass difference (Raw - Ref mass)



Residuals

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



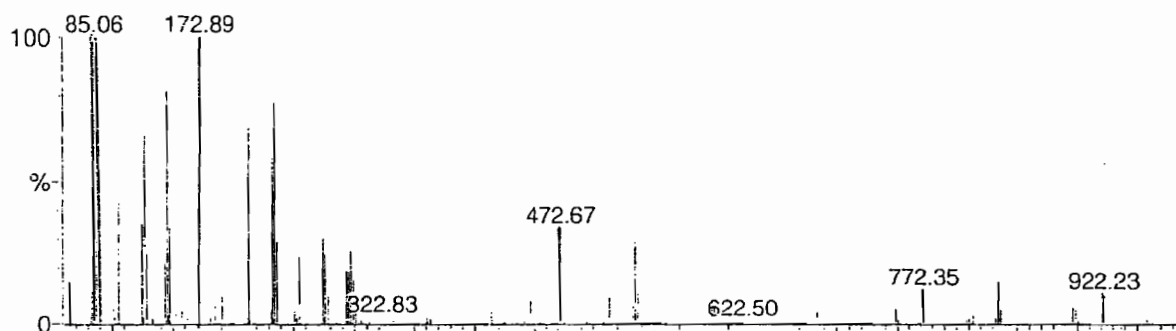
Calibration Report - MS1 Scanning

Page 1 of 1

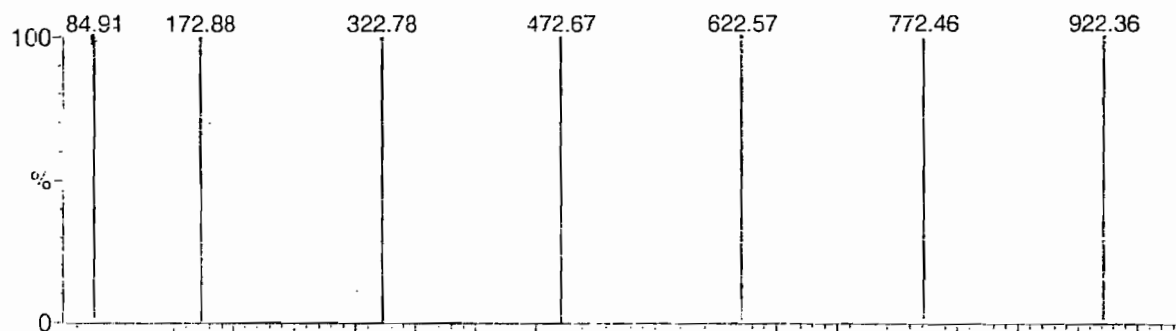
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

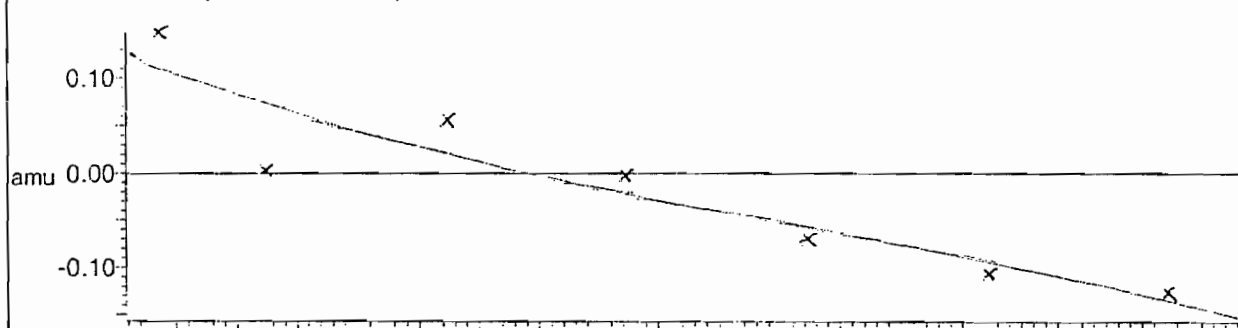
7 matches of 7 tested references



Reference file: Nairb

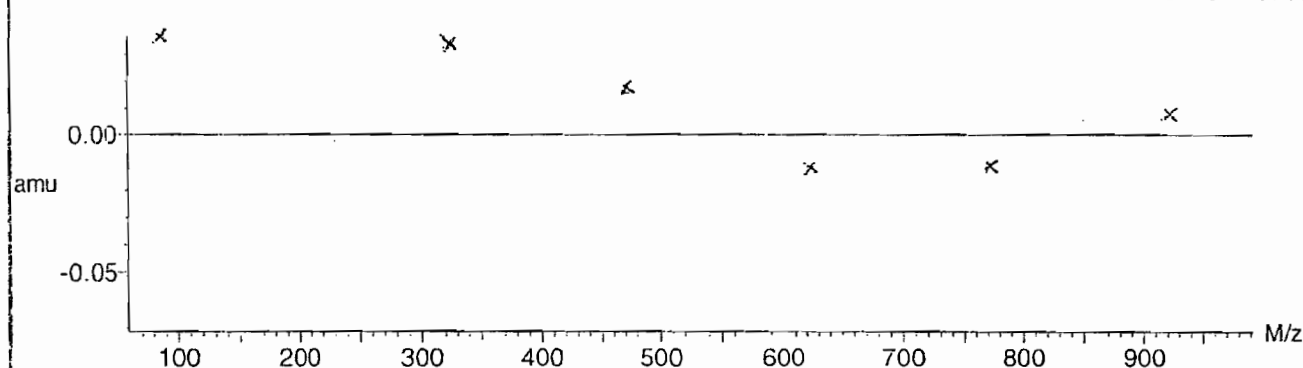


Mass difference (Raw - Ref mass)



Residuals

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



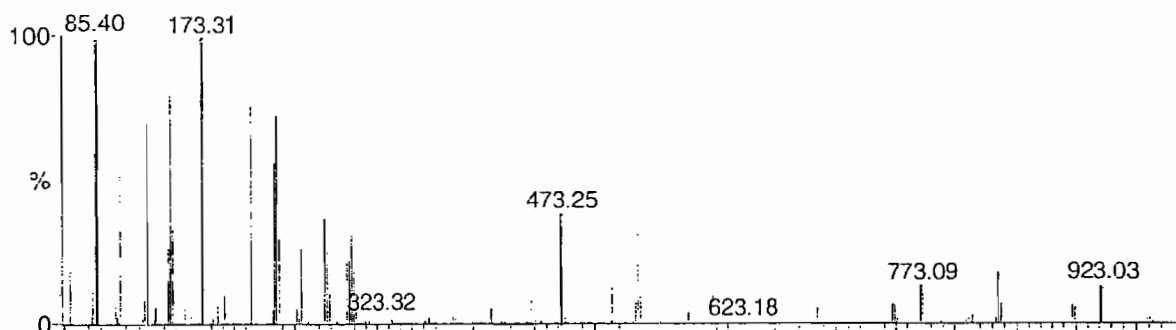
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

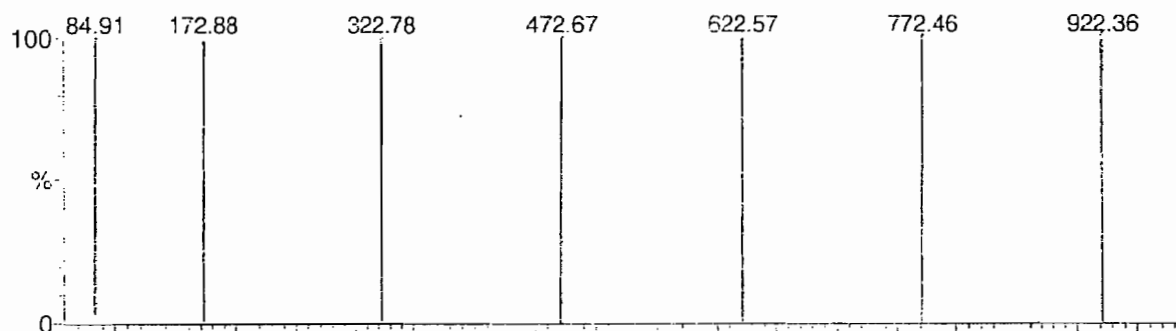
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

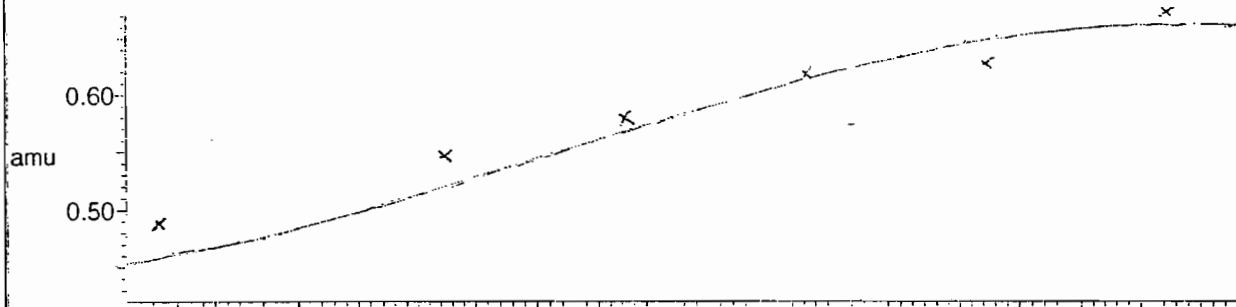
7 matches of 7 tested references



Reference file: Nairb

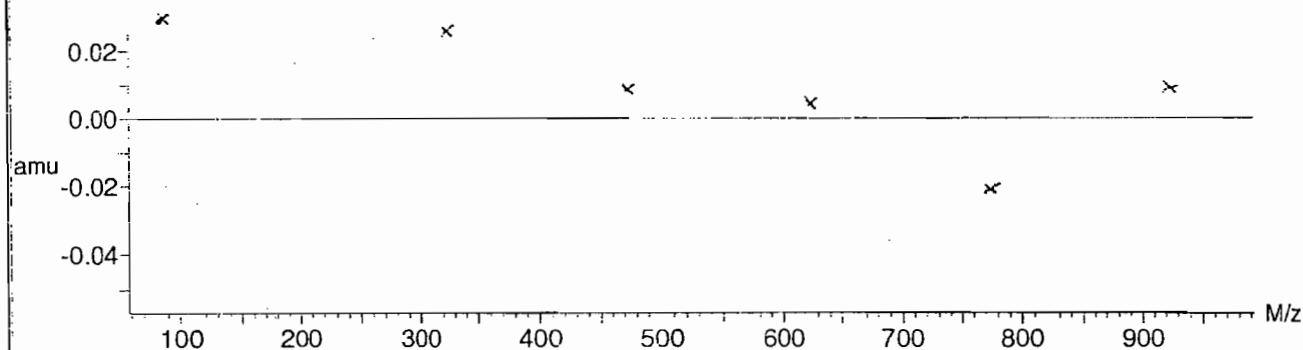


Mass difference (Raw - Ref mass)



Residuals

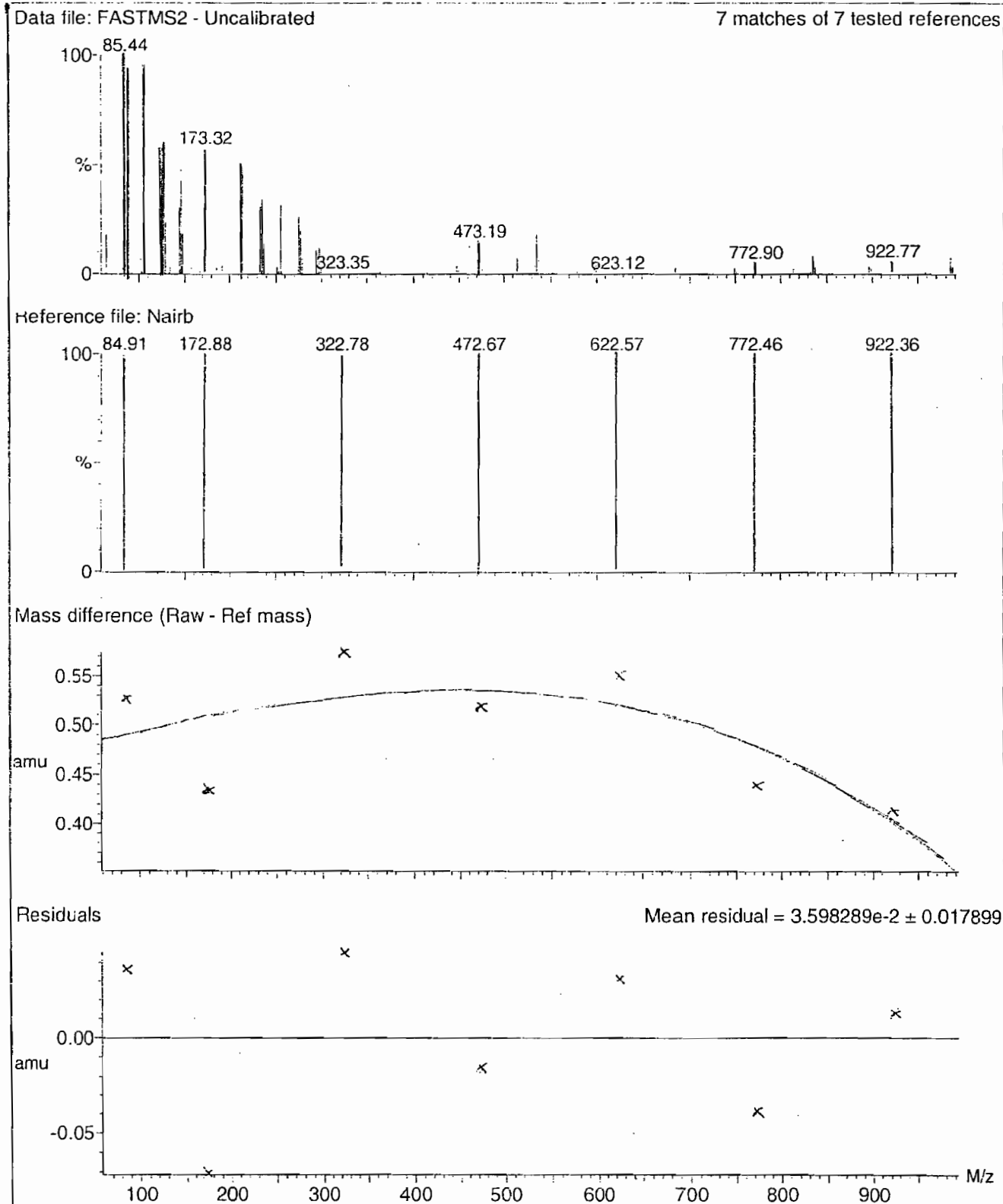
Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

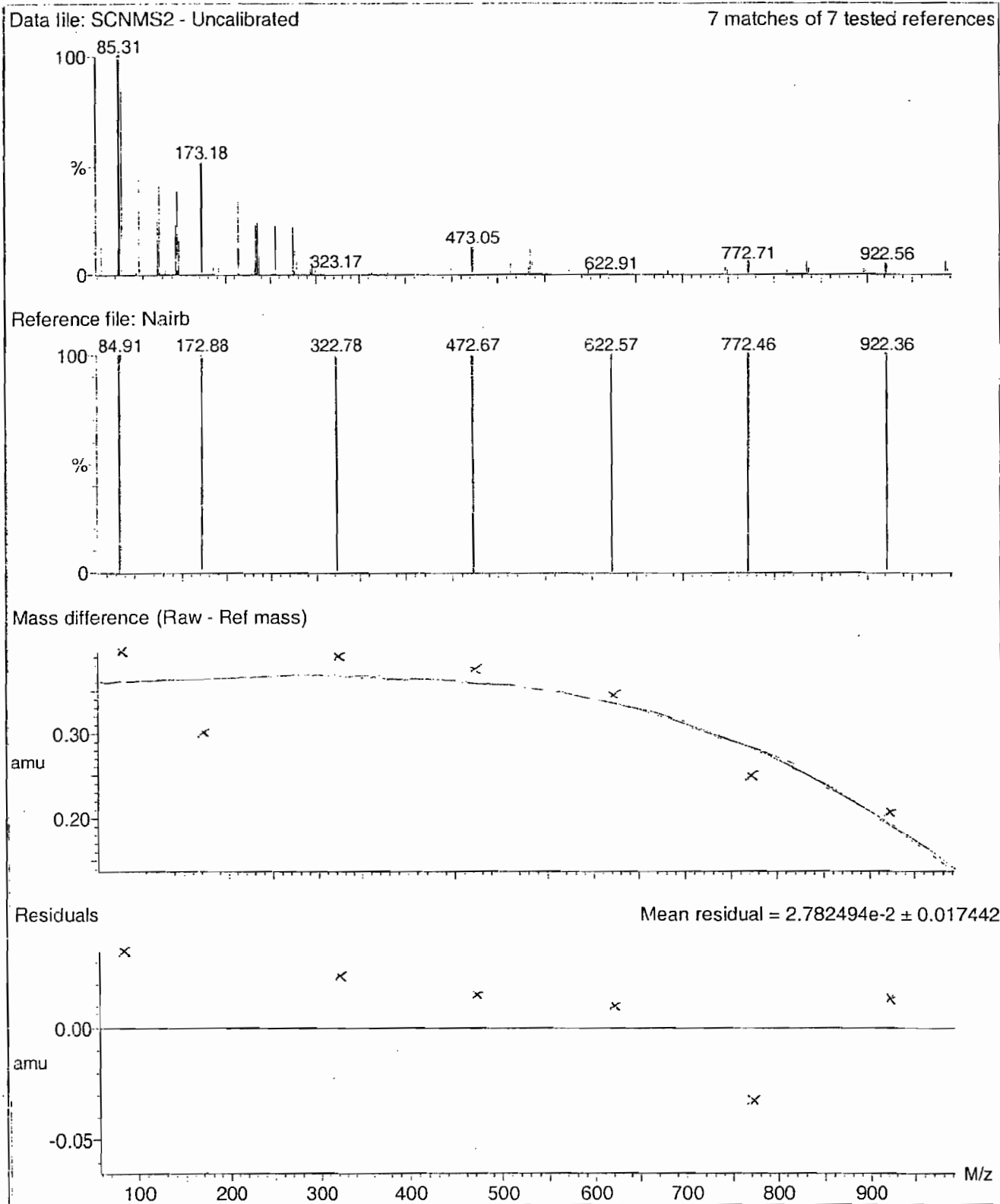
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



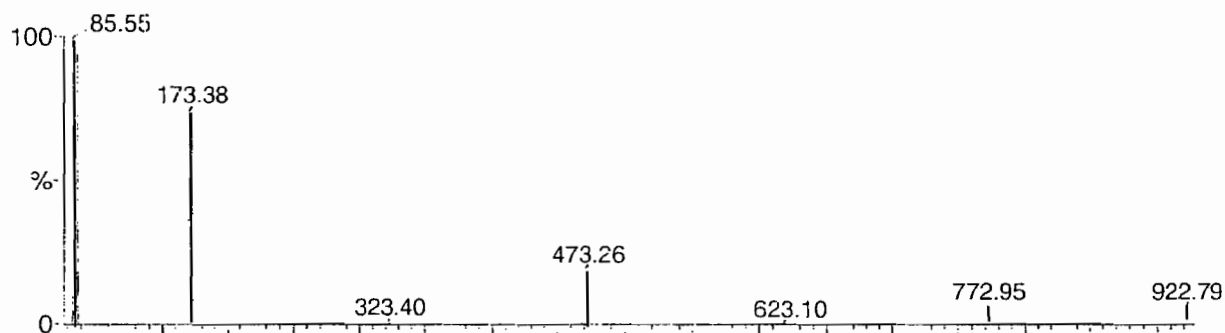
Calibration Report - MS2 Static

Page 1 of 1

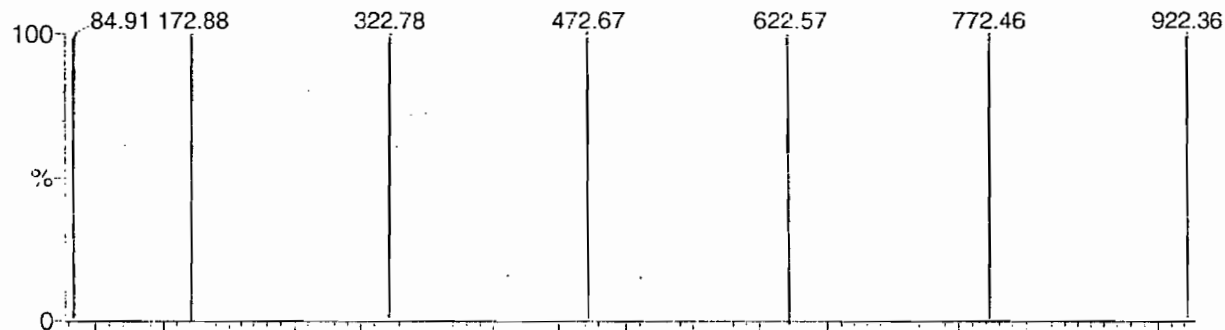
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

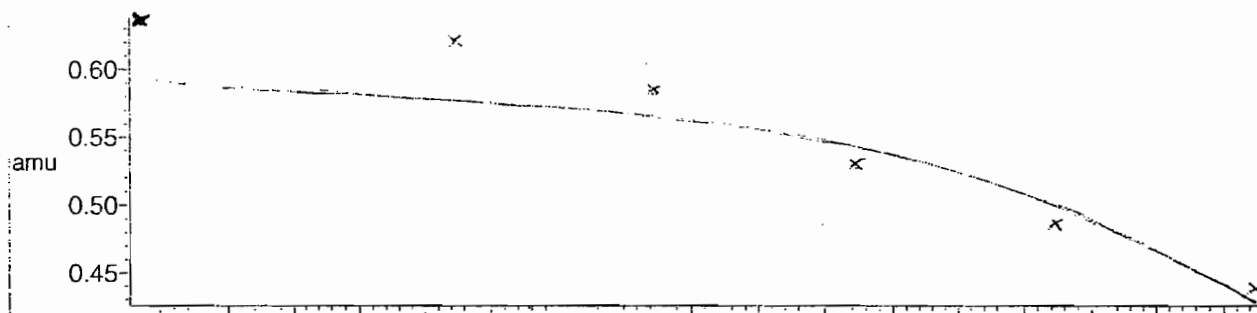
7 matches of 7 tested references



Reference file: Nairb

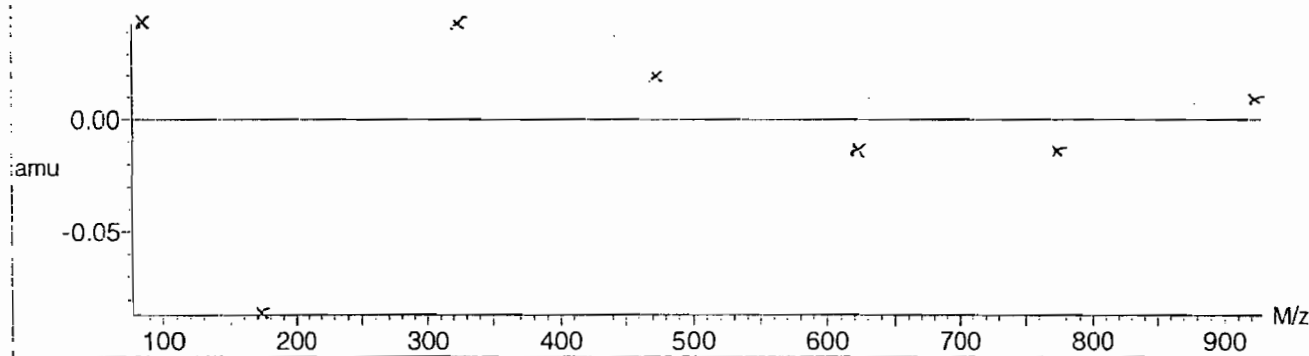


Mass difference (Raw - Ref mass)



Residuals

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



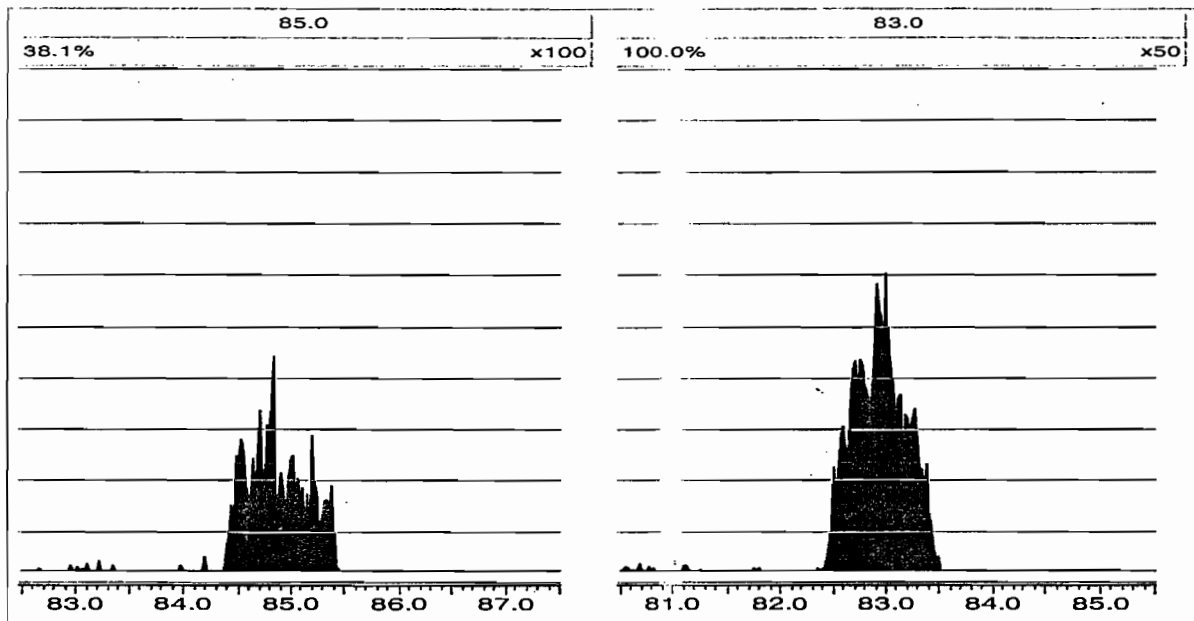
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

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



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2151

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				
1202063742	per0322041a	22-MAR-10 19:34	8193.26	5.98	6.02945	1.008	
1202063743	per0322042a	22-MAR-10 19:47	8792.4	6.02	6.04187	1.004	
1202063746	per0322043a	22-MAR-10 19:59	10384.6	7.43	7.44555	1.002	
248371001	per0322044a	22-MAR-10 20:11	9916.69	5.99	6.00467	1.002	
1202063744	per0322045a	22-MAR-10 20:23	9701.17	5.95	5.97973	1.005	
1202063745	per0322046a	22-MAR-10 20:35	9380.19	5.94	5.9674	1.005	
248371003	per0322051a	22-MAR-10 21:35	9534.51	5.92	5.95497	1.006	
248371004	per0322052a	22-MAR-10 21:47	9650.58	5.92	5.90523	.998	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2151

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				
248371007	per0322055a	22-MAR-10 22:23	9720.31	5.87	5.86792	1	
248371008	per0322056a	22-MAR-10 22:36	9387.11	5.87	5.89285	1.004	
248371009	per0322057a	22-MAR-10 22:48	9488.41	5.86	5.88038	1.003	
248371010	per0322058a	22-MAR-10 23:00	9383.64	5.83	5.83065	1	
248371011	per0322059a	22-MAR-10 23:12	9424.35	5.81	5.86788	1.01	
248371012	per0322060a	22-MAR-10 23:24	9246.97	5.82	5.81828	1	
248371013	per0322064a	23-MAR-10 00:12	9523.67	5.79	5.78107	.998	
248371014	per0322065a	23-MAR-10 00:24	9024.19	5.77	5.8183	1.008	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2151

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				
248371015	per0322006a	23-MAR-10 00:36	9637.99	5.78	5.78102	1	
248371016	per03220067a	23-MAR-10 00:48	9139.82	5.78	5.81832	1.007	
248371017	per03220068a	23-MAR-10 01:00	9228.23	5.77	5.81825	1.008	
248371018	per03220069a	23-MAR-10 01:12	9360.04	5.76	5.78107	1.004	
248371019	per03220070a	23-MAR-10 01:24	9109.78	5.76	5.75612	.999	
248371020	per03220071a	23-MAR-10 01:36	9787.86	5.72	5.75612	1.006	
248371002	per0322108a	23-MAR-10 09:07	9549.64	5.43	5.44563	1.003	
248371005	per0322109a	23-MAR-10 09:19	9307.13	5.41	5.43323	1.004	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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				
248371006	per0322110a	23-MAR-10 09:31	9657.42	5.41	5.42067	1.002	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7415

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371001

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 58

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.857	3.43	1.04	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate Isotope Ratio			2.83			1	22-MAR-10 20:11	per0322044a
14797-73-0	Perchlorate-101	.857	3.43	1.12	ug/kg	J	1	22-MAR-10 20:11	per0322044a
	Perchlorate-O(18)			9.31	ug/kg		1	22-MAR-10 20:11	per0322044a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322044a

Date: 22-Mar-2010

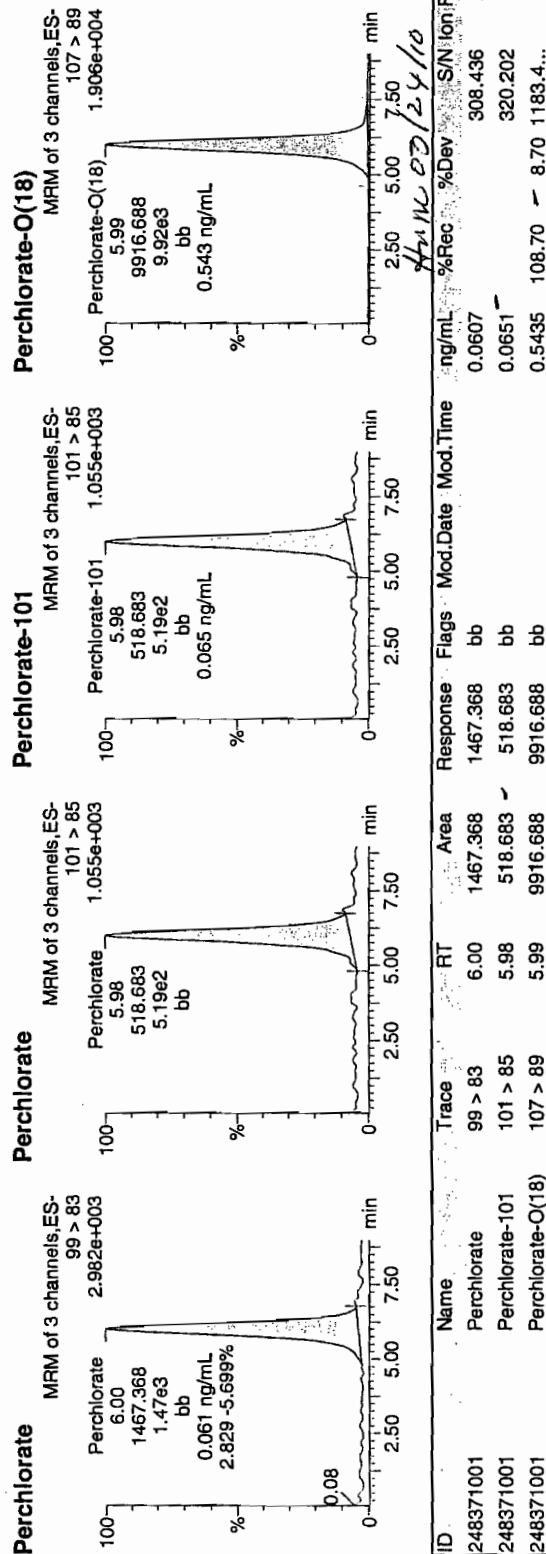
Time: 20:11:16

ID: 248371001

Vial: 2:1,D

03-23-10

162127 | 30220 | 11



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7420
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371002
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 91.3

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.19	8.77	21.9	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate Isotope Ratio			3.2			4	23-MAR-10 09:07	per0322108a
14797-73-0	Perchlorate-101	2.19	8.77	20.7	ug/kg		4	23-MAR-10 09:07	per0322108a
	Perchlorate-O(18)			22.9	ug/kg		4	23-MAR-10 09:07	per0322108a

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

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

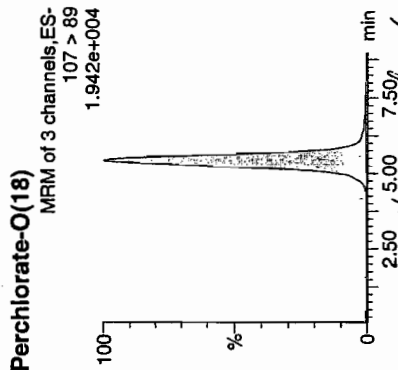
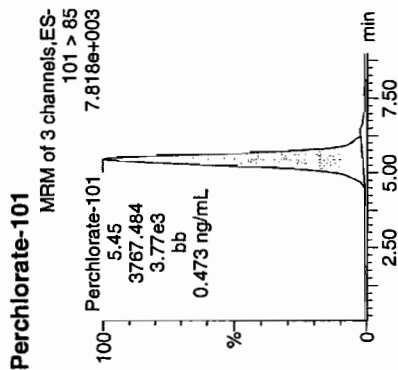
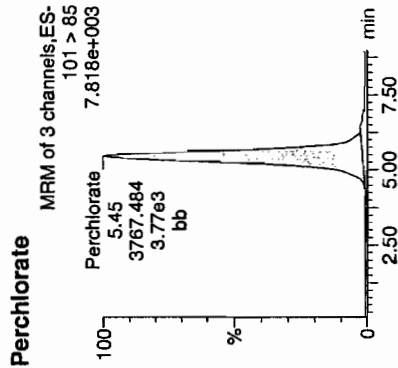
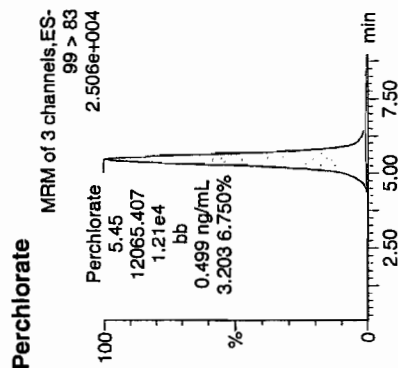
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322108a
Date: 23-Mar-2010
Time: 09:07:29
ID: 248371002
Vial: 1:7,A

LANC | 962127 | 5050 | 4 | DL



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
248371002	Perchlorate	99 > 83	5.45	12065.407	12065.407	bb			0.4989	~		921.274	3.20
248371002	Perchlorate-101	101 > 85	5.45	3767.484	3767.484	bb			0.4732			135.812	
248371002	Perchlorate-O(18)	107 > 89	5.43	9549.641	9549.641	bb			0.5234	104.67	~	4.67	720.531

12065.407	10	100	4	= 21.9
24186.2		91.26		

Handwritten calculations: 1.94 = 1.94, 1.89 = 1.89

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Client Sample No.

RE36-10-7418

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371003

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 81

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:35	per0322051a
14797-73-0	Perchlorate-101	.615	2.46	0.615	ug/kg	U	1	22-MAR-10 21:35	per0322051a
	Perchlorate-O(18)			6.43	ug/kg		1	22-MAR-10 21:35	per0322051a

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

*Concentration =

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

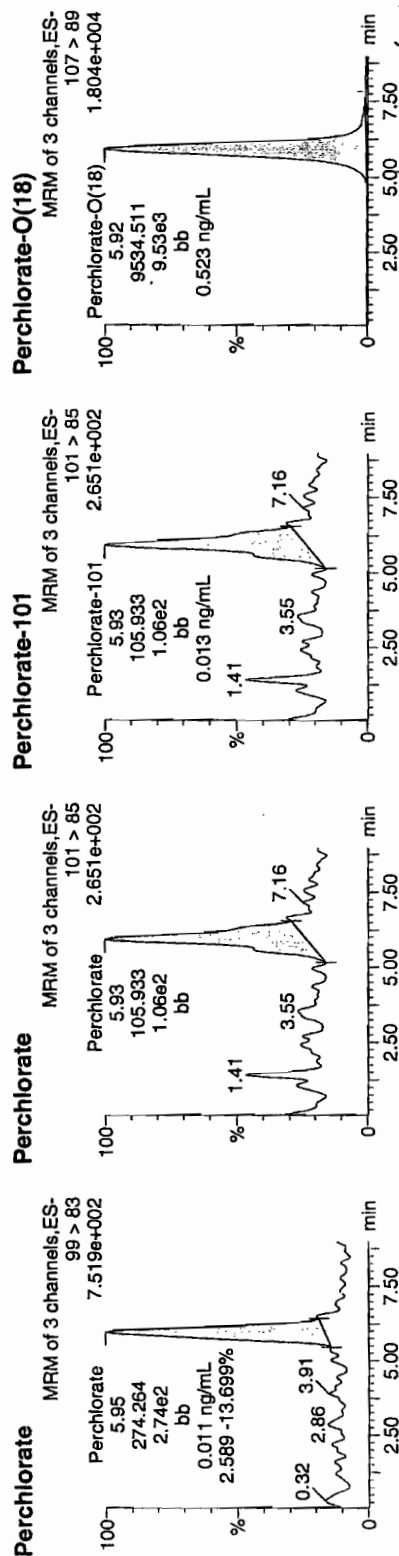
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

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: per0322051a
Date: 22-Mar-2010
Time: 21:35:41
ID: 248371003
Vial: 2:2,B

032310
LANC | 962127 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371003	Perchlorate	99 > 83	5.95	274.264	274.264	bb			0.0113	-		126.531	2.59
248371003	Perchlorate-101	101 > 85	5.93	105.933	105.933	bb			0.0133			27.067	
248371003	Perchlorate-O(18)	107 > 89	5.92	9534.511	9534.511	bb			0.5225	104.51	4.51	381.004	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7417
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371004
 Date Filtered: 15-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	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate Isotope Ratio						1	22-MAR-10 21:47	per0322052a
14797-73-0	Perchlorate-101	.633	2.53	0.633	ug/kg	U	1	22-MAR-10 21:47	per0322052a
	Perchlorate-O(18)			6.69	ug/kg		1	22-MAR-10 21:47	per0322052a

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

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322052a

Date: 22-Mar-2010

Time: 21:47:55

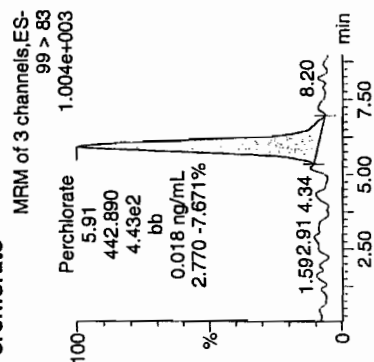
ID: 248371004

Vial: 2:2,C

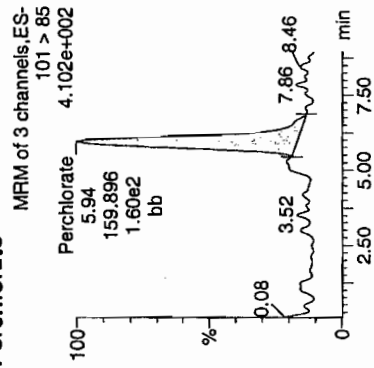
0323-10

15722 | 962127 | 30220 | 11

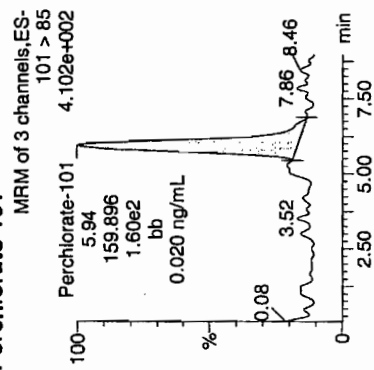
Perchlorate



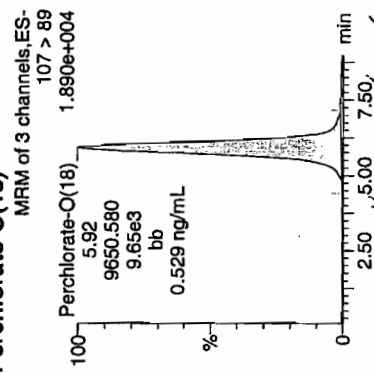
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371004	Perchlorate	99 > 83	5.91	442.890	442.890	bb			0.0183			109.983	2.77
248371004	Perchlorate-101	101 > 85	5.94	159.896	159.896	bb			0.0201			29.675	
248371004	Perchlorate-O(18)	107 > 89	5.92	9650.580	9650.580	bb			0.5289	105.78	5.78	38.670	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7419
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371005
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 83

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	2.41	9.63	18.8	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate Isotope Ratio			3.18			4	23-MAR-10 09:19	per0322109a
14797-73-0	Perchlorate-101	2.41	9.63	18.0	ug/kg		4	23-MAR-10 09:19	per0322109a
	Perchlorate-O(18)			24.6	ug/kg		4	23-MAR-10 09:19	per0322109a

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

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322109a

Date: 23-Mar-2010

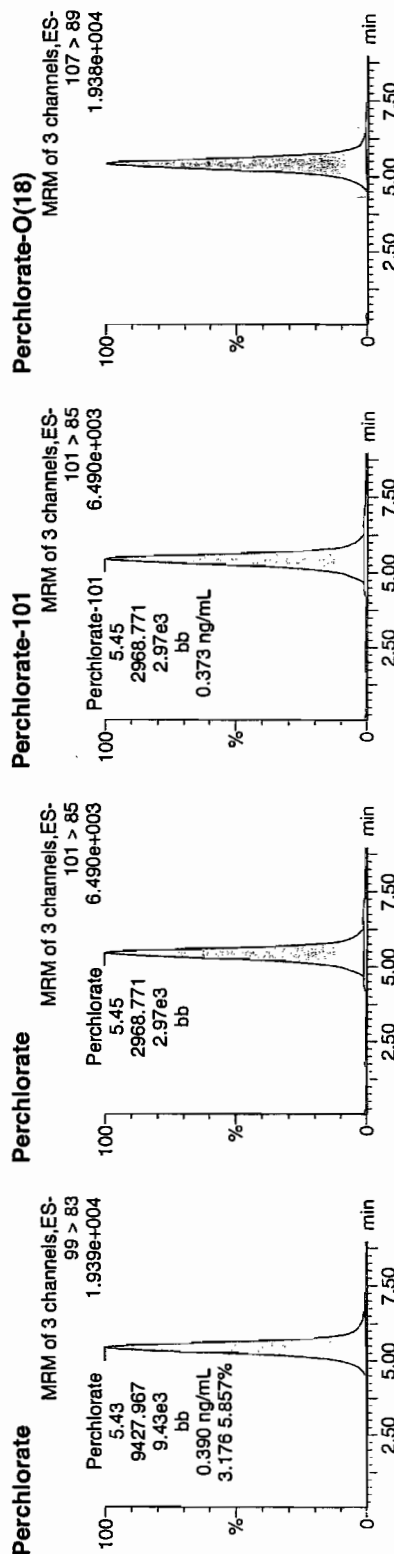
Time: 09:19:33

ID: 248371005

Vial: 1:7,B

03-23-10

12/21/2009 14:00



Handwritten notes: 1.56, 1.49, and 24/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7416
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371006
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 89

Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per0322110a
	Perchlorate Isotope Ratio						1	23-MAR-10 09:31	per0322110a
14797-73-0	Perchlorate-101	.564	2.25	0.564	ug/kg	U	1	23-MAR-10 09:31	per0322110a
	Perchlorate-O(18)			5.97	ug/kg		1	23-MAR-10 09:31	per0322110a

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

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322110a

Date: 23-Mar-2010

Time: 09:31:38

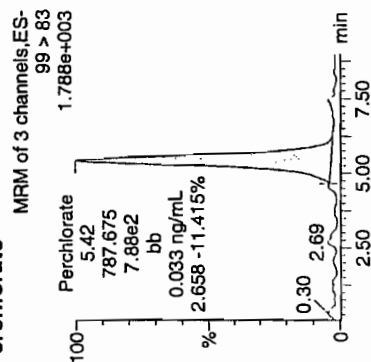
ID: 248371006

Vial: 1:7,C

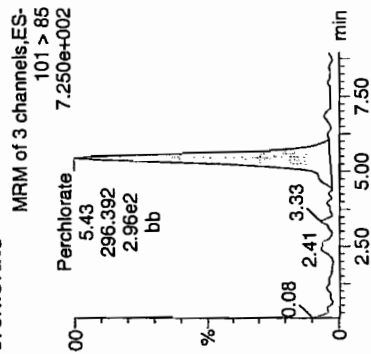
LANC | 962127 | 50520 | 11 NA

0323-10

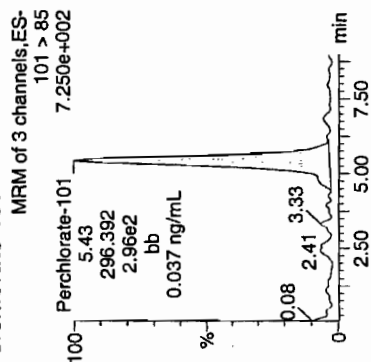
Perchlorate



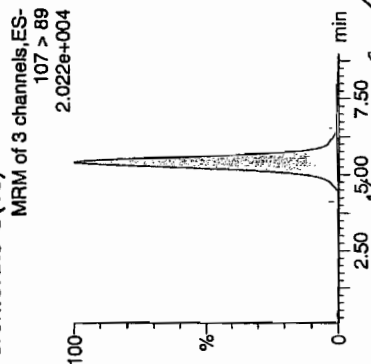
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371006	Perchlorate	99 > 83	5.42	787.675	787.675	bb			0.0326			271.247	2.66
248371006	Perchlorate-101	101 > 85	5.43	296.392	296.392	bb			0.0372			47.656	
248371006	Perchlorate-O(18)	107 > 89	5.41	9657.420	9657.420	bb			0.5293	105.85	5.85	186.662	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7478
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371007
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 90.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:23	per0322055a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	22-MAR-10 22:23	per0322055a
	Perchlorate-O(18)			5.91	ug/kg		1	22-MAR-10 22:23	per0322055a

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

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

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

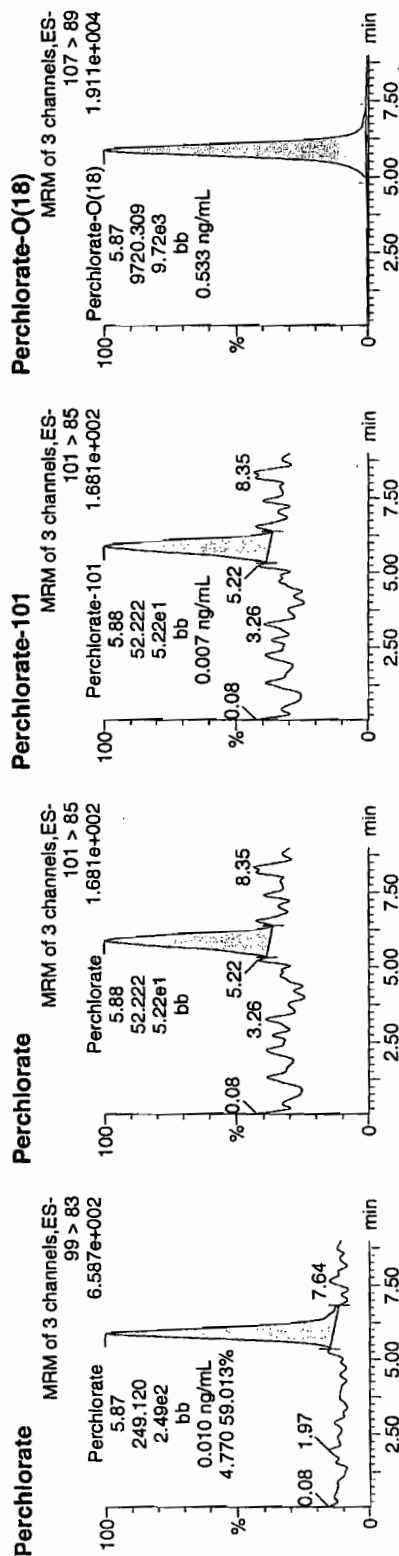
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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: per0322055a
Date: 22-Mar-2010
Time: 22:23:59
ID: 248371007
Vial: 2:2,F

0323-10

15220 | 962127 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371007	Perchlorate	99 > 83	5.87	249.120	249.120	bb			0.0103			66.078	4.77
248371007	Perchlorate-101	101 > 85	5.88	52.222	52.222	bb			0.0066			34.840	
248371007	Perchlorate-O(18)	107 > 89	5.87	9720.309	9720.309	bb			0.5327	106.54	6.54	1207.2...	

OKAY
20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7490

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371008

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:36	per0322056a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	22-MAR-10 22:36	per0322056a
	Perchlorate-O(18)			6.95	ug/kg		1	22-MAR-10 22:36	per0322056a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322056a

Date: 22-Mar-2010

Time: 22:36:00

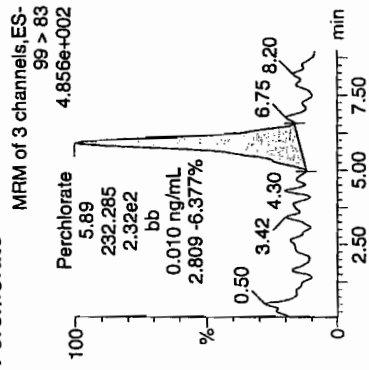
ID: 248371008

Vial: 2:3,A

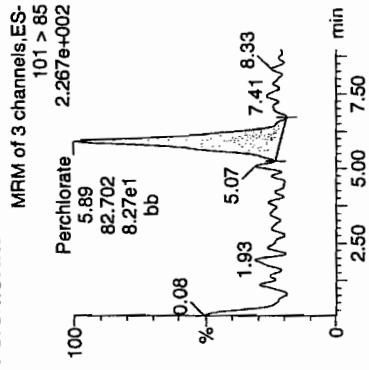
03-23-10

1962127 | 5000 | 11

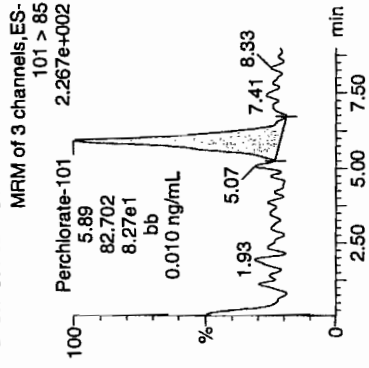
Perchlorate



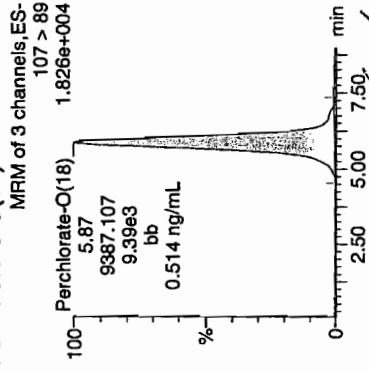
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371008	Perchlorate	99 > 83	5.89	232.285	232.285	bb			0.0096			10.205	2.81
248371008	Perchlorate-101	101 > 85	5.89	82.702	82.702	bb			0.0104			31.224	
248371008	Perchlorate-O(18)	107 > 89	5.87	9387.107	9387.107	bb			0.5145	102.89	2.89	908.302	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7487
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371009
 Date Filtered: 15-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	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate Isotope Ratio						1	22-MAR-10 22:48	per0322057a
14797-73-0	Perchlorate-101	.663	2.65	0.663	ug/kg	U	1	22-MAR-10 22:48	per0322057a
	Perchlorate-O(18)			6.89	ug/kg		1	22-MAR-10 22:48	per0322057a

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

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

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

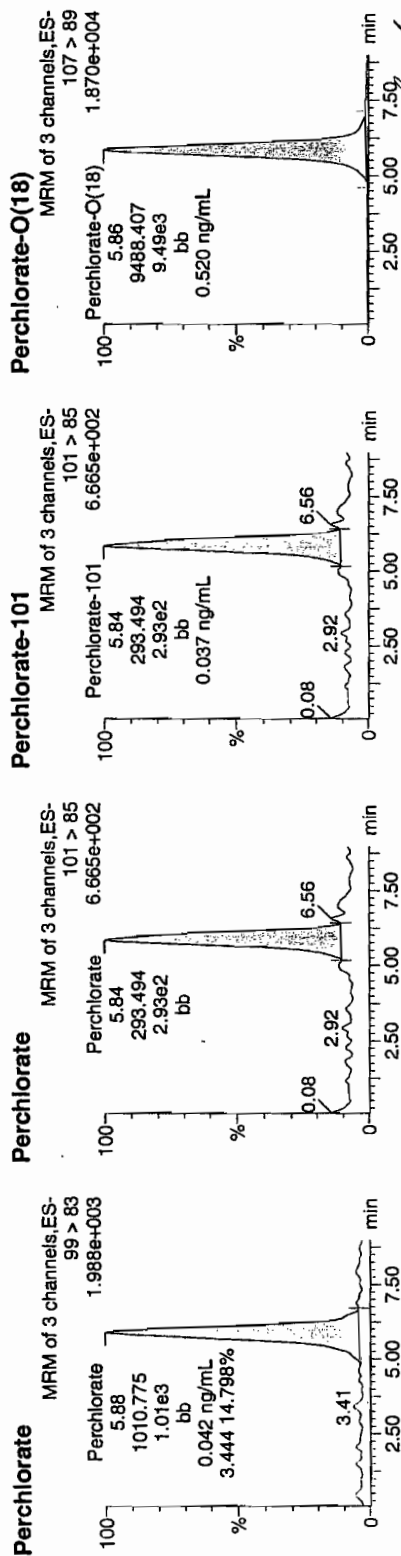
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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: per0322057a
Date: 22-Mar-2010
Time: 22:48:03
ID: 248371009
Vial: 2:3,B

63-23-10

1522 | 962127 | 3220 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371009	Perchlorate	99 > 83	5.88	1010.775	1010.775	bb			0.0418			204.895	3.44
248371009	Perchlorate-101	101 > 85	5.84	293.494	293.494	bb			0.0369			26.810	
248371009	Perchlorate-O(18)	107 > 89	5.86	9488.407	9488.407	bb			0.5200	104.00	4.00	2466.7...	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7483

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371010

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.658	2.63	0.724	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate Isotope Ratio			2.58			1	22-MAR-10 23:00	per0322058a
14797-73-0	Perchlorate-101	.658	2.63	0.854	ug/kg	J	1	22-MAR-10 23:00	per0322058a
	Perchlorate-O(18)			6.77	ug/kg		1	22-MAR-10 23:00	per0322058a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322058a

Date: 22-Mar-2010

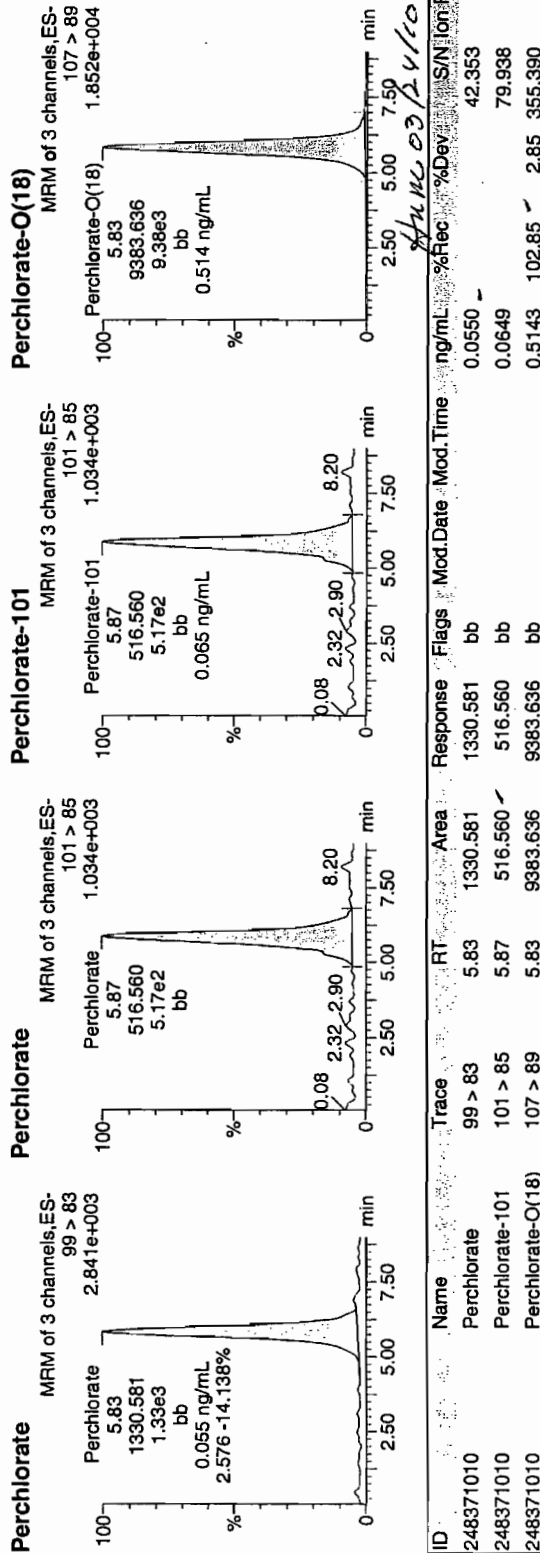
Time: 23:00:05

ID: 248371010

Vial: 2:3,C

03-23-10

1722-1962127 | 3020 | 1



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7481
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371011
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 67

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate Isotope Ratio						1	22-MAR-10 23:12	per0322059a
14797-73-0	Perchlorate-101	.745	2.98	0.745	ug/kg	U	1	22-MAR-10 23:12	per0322059a
	Perchlorate-O(18)			7.69	ug/kg		1	22-MAR-10 23:12	per0322059a

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

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

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers 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: per0322059a

Date: 22-Mar-2010

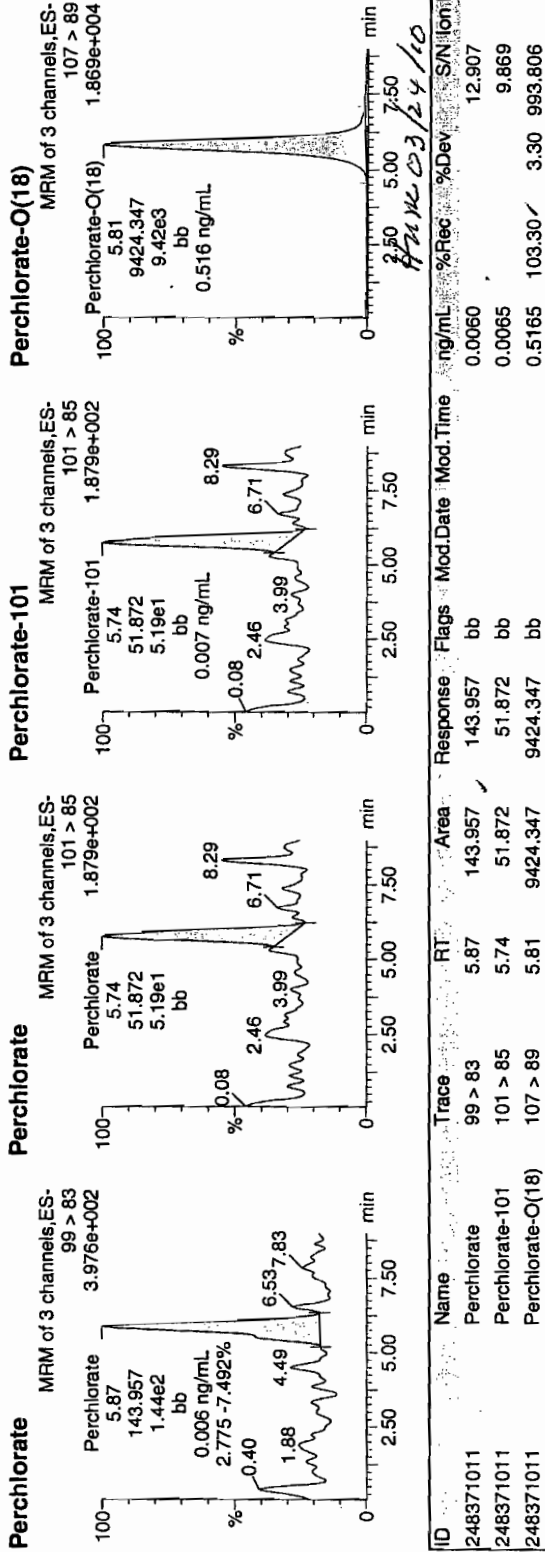
Time: 23:12:07

ID: 248371011

Vial: 2:3,D

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03-23-10

1962127 | SWD | 11



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7486
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371012
 Date Filtered: 15-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	2.53	1.73	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate Isotope Ratio			2.89			1	22-MAR-10 23:24	per0322060a
14797-73-0	Perchlorate-101	.634	2.53	1.82	ug/kg	J	1	22-MAR-10 23:24	per0322060a
	Perchlorate-O(18)			6.42	ug/kg		1	22-MAR-10 23:24	per0322060a

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

*Concentration =

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

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

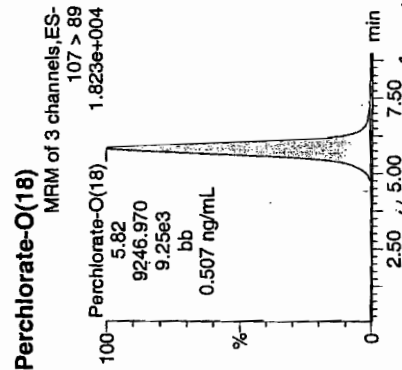
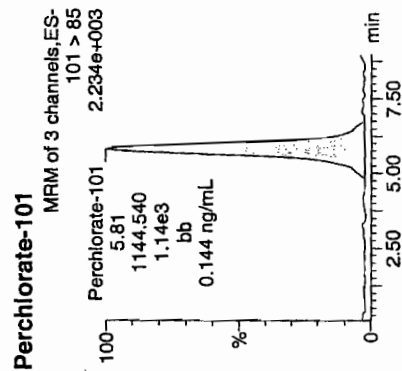
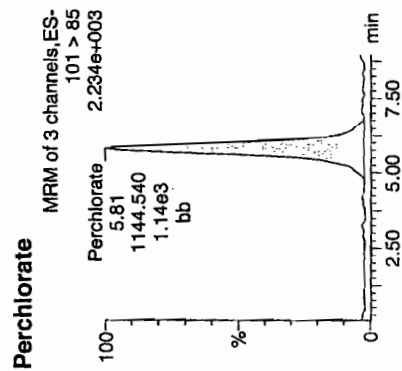
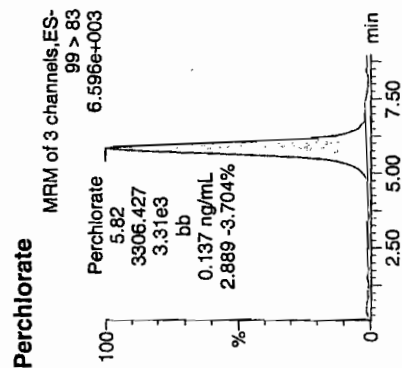
Dataset: C:\MassLynx\Perchlorate.PRO\per032210a.qld

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

Name: per0322060a
Date: 22-Mar-2010
Time: 23:24:08
ID: 248371012
Vial: 2:3,E

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03-23-10

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ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371012	Perchlorate	99 > 83	5.82	3306.427	3306.427	bb			0.1367			115.363	2.89
248371012	Perchlorate-101	101 > 85	5.81	1144.540	1144.540	bb			0.1437			48.978	
248371012	Perchlorate-O(18)	107 > 89	5.82	9246.970	9246.970	bb			0.5068	101.35	1.35	201.634	

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7477

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371013

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:12	per0322064a
14797-73-0	Perchlorate-101	.655	2.62	0.655	ug/kg	U	1	23-MAR-10 00:12	per0322064a
	Perchlorate-O(18)			6.83	ug/kg		1	23-MAR-10 00:12	per0322064a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322064a

Date: 23-Mar-2010

Time: 00:12:32

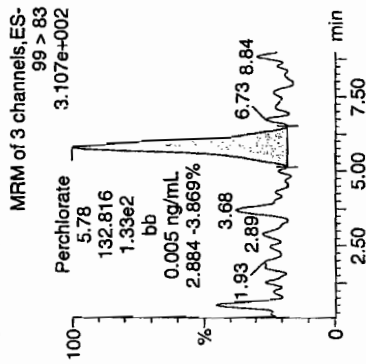
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Vial: 2:3,F

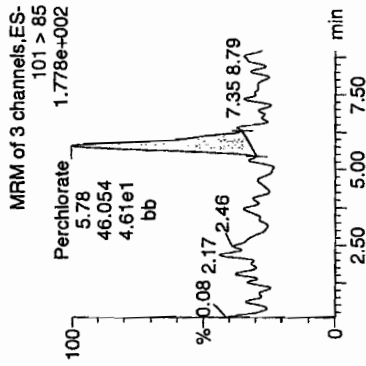
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03-23-10

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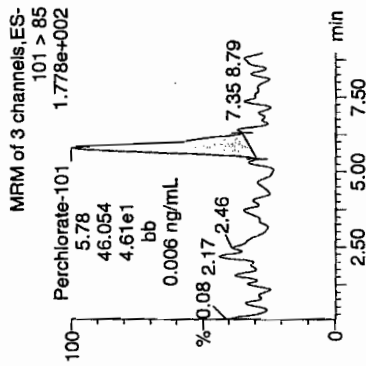
Perchlorate



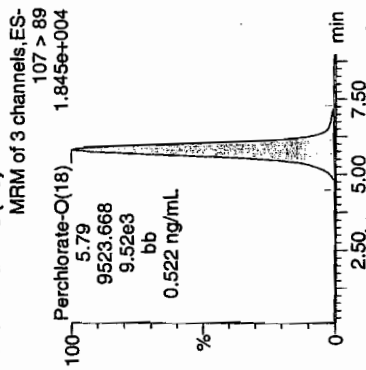
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371013	Perchlorate	99 > 83	5.78	132.816	132.816	bb			0.0055			52.502	2.88
248371013	Perchlorate-101	101 > 85	5.78	46.054	46.054	bb			0.0058			46.194	
248371013	Perchlorate-O(18)	107 > 89	5.79	9523.668	9523.668	bb			0.5219	104.39	4.39	494.479	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7489

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371014

Date Filtered: 15-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	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:24	per0322065a
14797-73-0	Perchlorate-101	.77	3.08	0.770	ug/kg	U	1	23-MAR-10 00:24	per0322065a
	Perchlorate-O(18)			7.61	ug/kg		1	23-MAR-10 00:24	per0322065a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322065a

Date: 23-Mar-2010

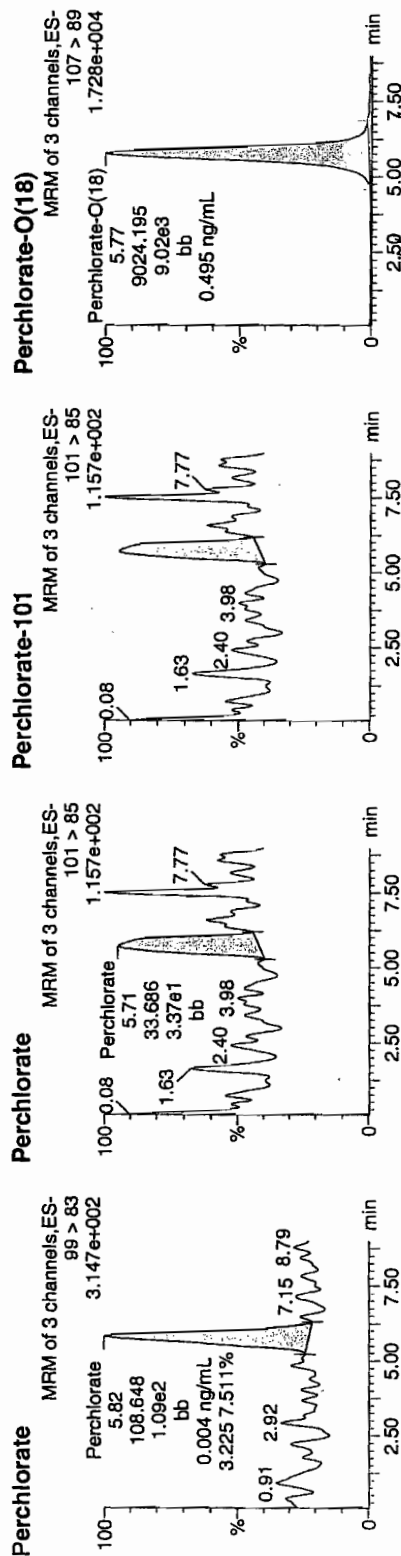
Time: 00:24:45

ID: 248371014

Vial: 2:4,A

03-23-10

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ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371014	Perchlorate	99 > 83	5.82	108.648	108.648	bb			0.0045			15.675	3.23
248371014	Perchlorate-101	101 > 85	5.71	33.686	33.686	bb			0.0042			8.421	
248371014	Perchlorate-O(18)	107 > 89	5.77	9024.195	9024.195	bb			0.4946	98.91	-1.09	256.855	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7479

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371015

Date Filtered: 15-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	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:36	per0322066a
14797-73-0	Perchlorate-101	.687	2.75	0.687	ug/kg	U	1	23-MAR-10 00:36	per0322066a
	Perchlorate-O(18)			7.26	ug/kg		1	23-MAR-10 00:36	per0322066a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322066a

Date: 23-Mar-2010

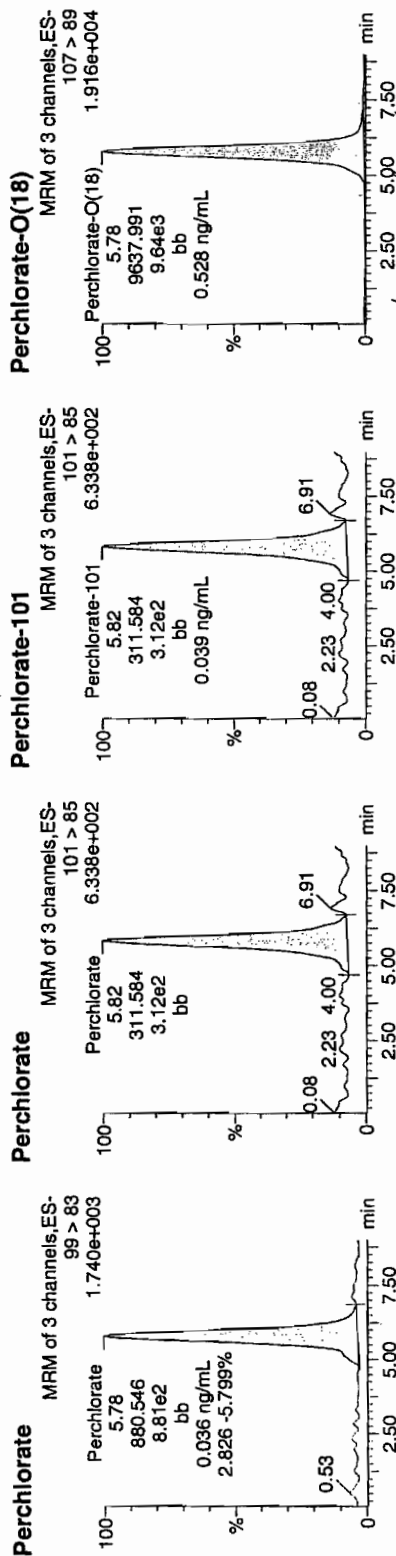
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ID: 248371015

Vial: 2:4,B

03-23-10

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ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371015	Perchlorate	99 > 83	5.78	880.546	880.546	bb			0.0364			6.260	2.83
248371015	Perchlorate-101	101 > 85	5.82	311.584	311.584	bb			0.0391			58.183	
248371015	Perchlorate-O(18)	107 > 89	5.78	9637.991	9637.991	bb			0.5282	105.64	5.64	929.111	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7482
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371016
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 76

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate Isotope Ratio						1	23-MAR-10 00:48	per0322067a
14797-73-0	Perchlorate-101	.661	2.64	0.661	ug/kg	U	1	23-MAR-10 00:48	per0322067a
	Perchlorate-O(18)			6.62	ug/kg		1	23-MAR-10 00:48	per0322067a

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

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

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

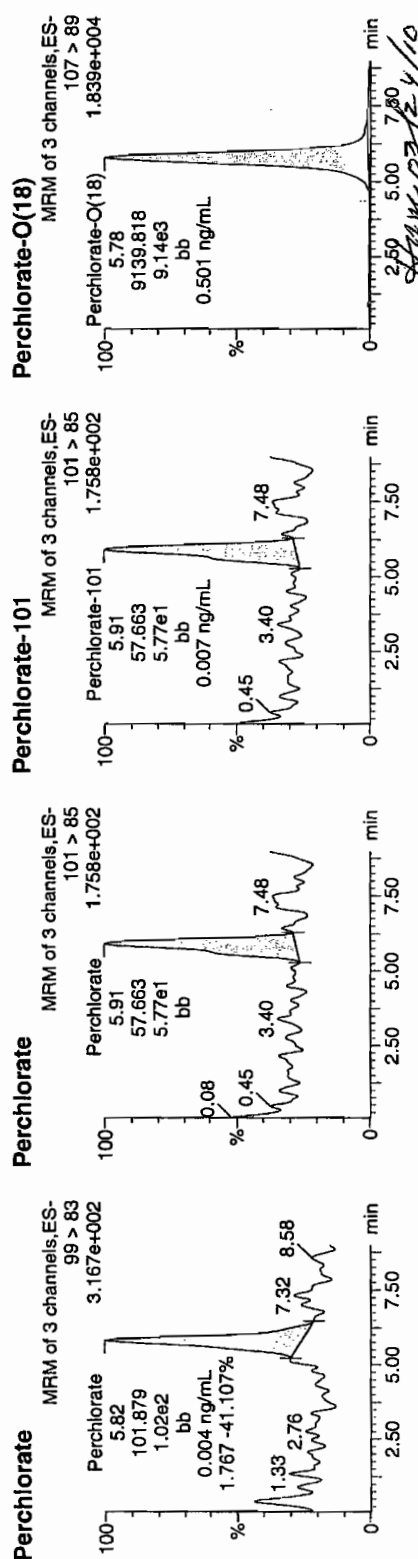
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Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322067a
Date: 23-Mar-2010
Time: 00:48:51
ID: 248371016
Vial: 2:4,C

0323-10

157-1 | 902127 | 5020 | 111



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371016	Perchlorate	99 > 83	5.82	101.879	101.879	bb			0.0042			24.059	1.77
248371016	Perchlorate-101	101 > 85	5.91	57.663	57.663	bb			0.0072			30.050	
248371016	Perchlorate-O(18)	107 > 89	5.78	9139.818	9139.818	bb			0.5009	100.18	0.18	2387.0...	

0.501
20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7480
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371017
 Date Filtered: 15-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	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate Isotope Ratio						1	23-MAR-10 01:00	per0322068a
14797-73-0	Perchlorate-101	.569	2.28	0.569	ug/kg	U	1	23-MAR-10 01:00	per0322068a
	Perchlorate-O(18)			5.76	ug/kg		1	23-MAR-10 01:00	per0322068a

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

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

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers 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: per0322068a

Date: 23-Mar-2010

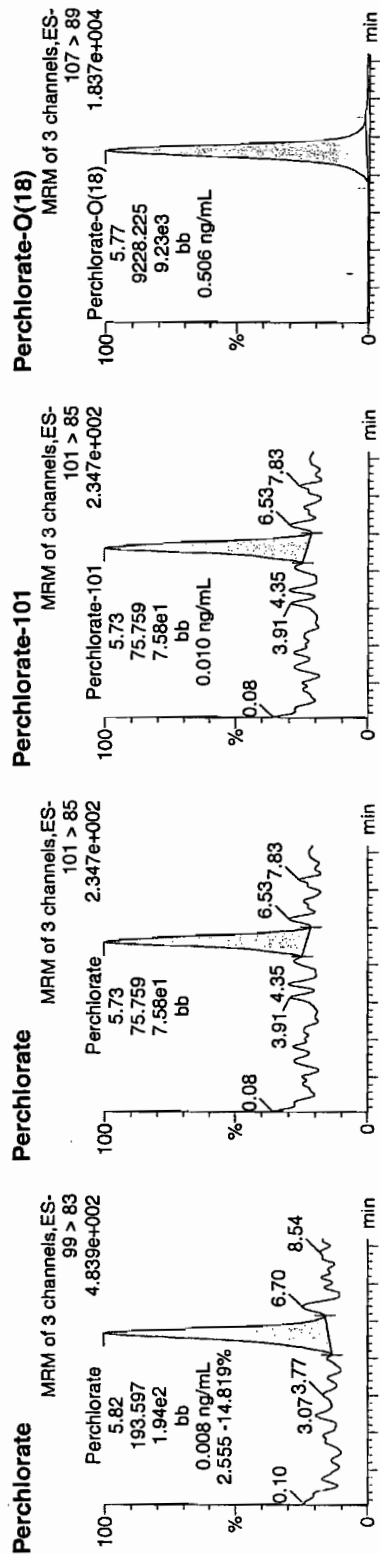
Time: 01:00:53

ID: 248371017

Vial: 2:4,D

03-23-10

1962127 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371017	Perchlorate	99 > 83	5.82	193.597	193.597	bb			0.0080			55.436	2.56
248371017	Perchlorate-101	101 > 85	5.73	75.759	75.759	bb			0.0095			25.715	
248371017	Perchlorate-O(18)	107 > 89	5.77	9228.225	9228.225	bb			0.5057	101.15	1.15	390.872	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE36-10-7485

Date Received: 02-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 248371018

Date Filtered: 15-MAR-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.68	2.72	1.37	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate Isotope Ratio			3.2			1	23-MAR-10 01:12	per0322069a
14797-73-0	Perchlorate-101	.68	2.72	1.30	ug/kg	J	1	23-MAR-10 01:12	per0322069a
	Perchlorate-O(18)			6.98	ug/kg		1	23-MAR-10 01:12	per0322069a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322069a

Date: 23-Mar-2010

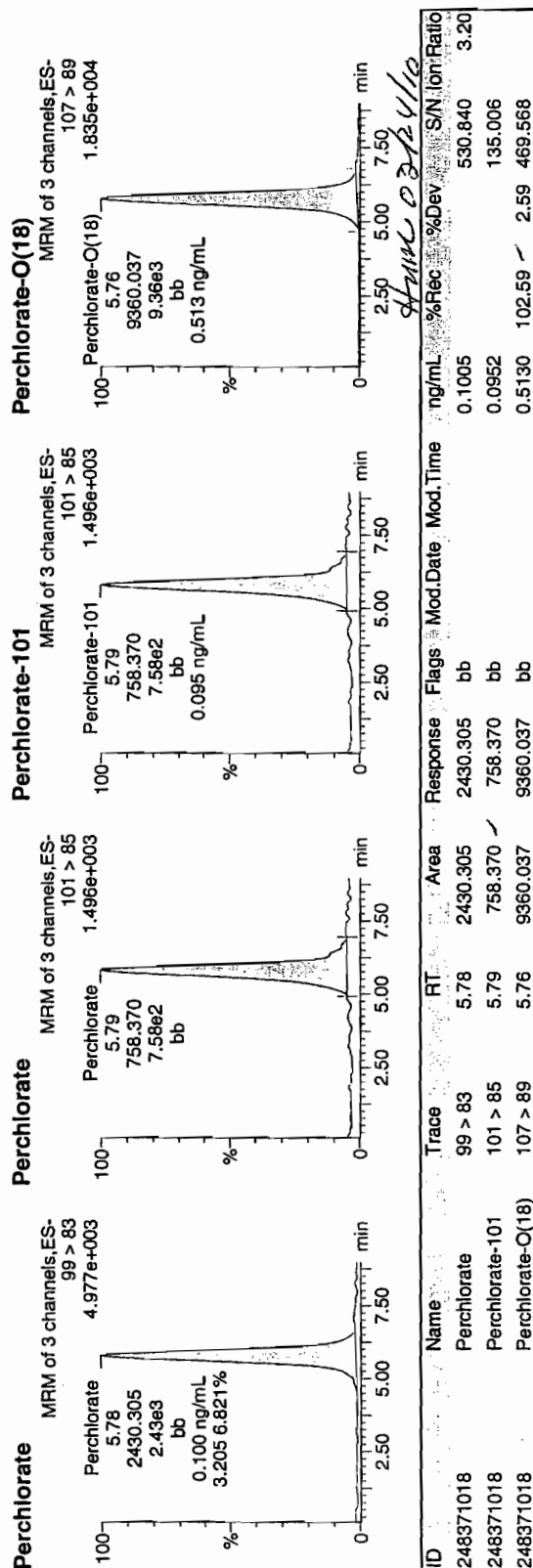
Time: 01:12:56

ID: 248371018

Vial: 2:4,E

03-23-10

127 | 5020 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE36-10-7488
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371019
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 %Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.22	0.627	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate Isotope Ratio			2.86			1	23-MAR-10 01:24	per0322070a
14797-73-0	Perchlorate-101	.556	2.22	0.665	ug/kg	J	1	23-MAR-10 01:24	per0322070a
	Perchlorate-O(18)			5.55	ug/kg		1	23-MAR-10 01:24	per0322070a

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

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322070a

Date: 23-Mar-2010

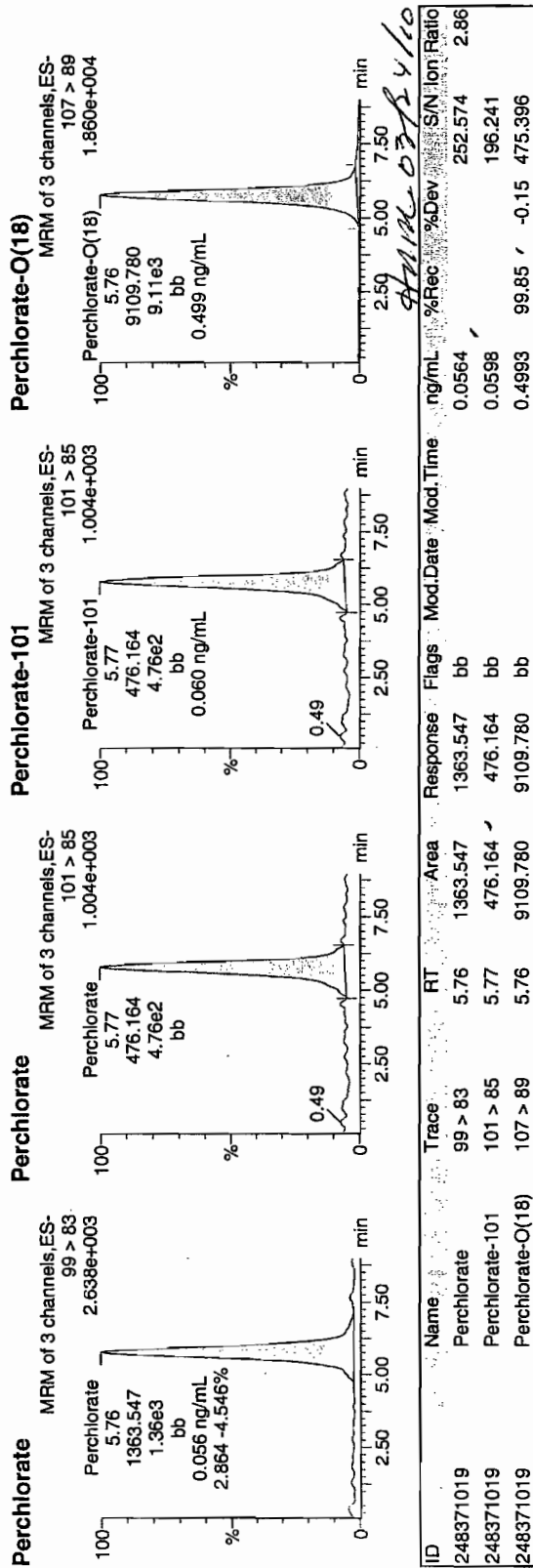
Time: 01:24:57

ID: 248371019

Vial: 2:4,F

03-23-10

162127 | 30750 | 11



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7484
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 248371020
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 83

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.606	2.42	0.817	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate Isotope Ratio			3.22			1	23-MAR-10 01:36	per0322071a
14797-73-0	Perchlorate-101	.606	2.42	0.771	ug/kg	J	1	23-MAR-10 01:36	per0322071a
	Perchlorate-O(18)			6.50	ug/kg		1	23-MAR-10 01:36	per0322071a

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

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

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

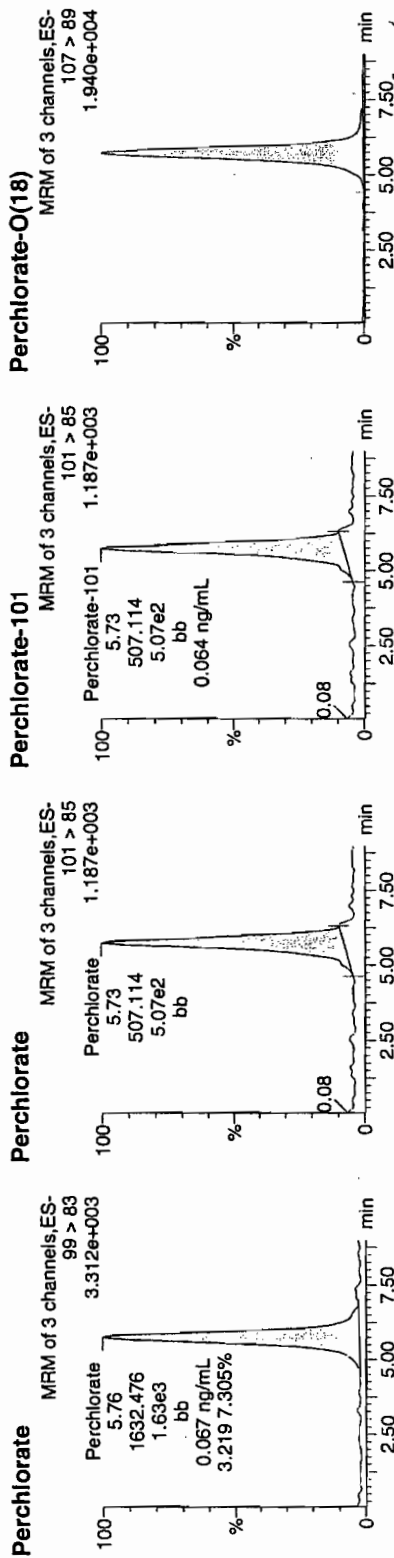
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Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322071a
Date: 23-Mar-2010
Time: 01:36:59
ID: 248371020
Vial: 2:5,A

03-23-10

1722 | 962127 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
248371020	Perchlorate	99 > 83	5.76	1632.476	1632.476	bb			0.0675			144.341	3.22
248371020	Perchlorate-101	101 > 85	5.73	507.114	507.114	bb			0.0637			107.412	
248371020	Perchlorate-O(18)	107 > 89	5.72	9787.865	9787.865	bb			0.5364	107.28	7.28	1895.9...	

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

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2151

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

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2151

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

Parname 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

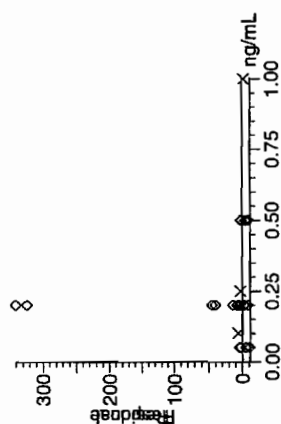
Compound name: Perchlorate

Response Factor: 24186.2

RRF SD: 1053.84, % Relative SD: 4.3572

Response type: External Std, Area

Curve type: RF



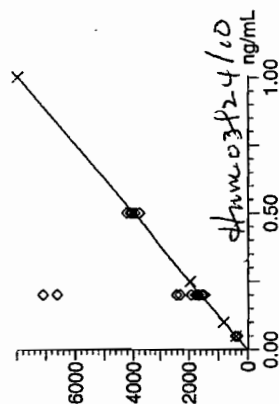
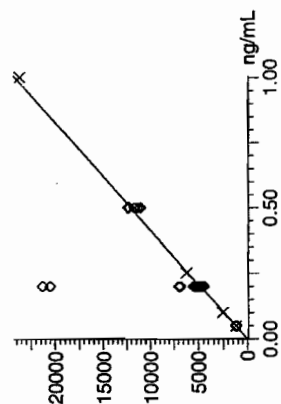
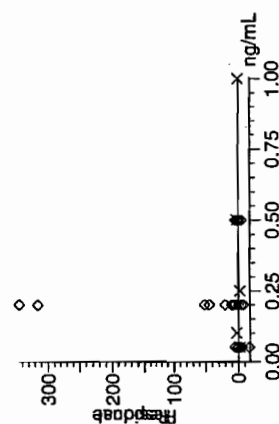
Compound name: Perchlorate-101

Response Factor: 7962.2

RRF SD: 189.293, % Relative SD: 2.3774

Response type: External Std, Area

Curve type: RF



03-23-10

03-24-10

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

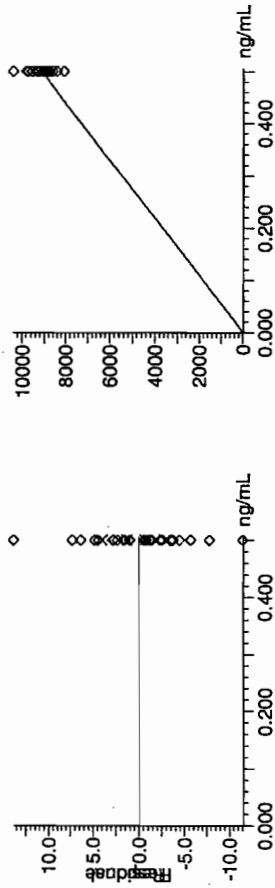
Compound name: Perchlorate-O(18)

Response Factor: 18246.7

RRF SD: 488.232, % Relative SD: 2.67573

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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

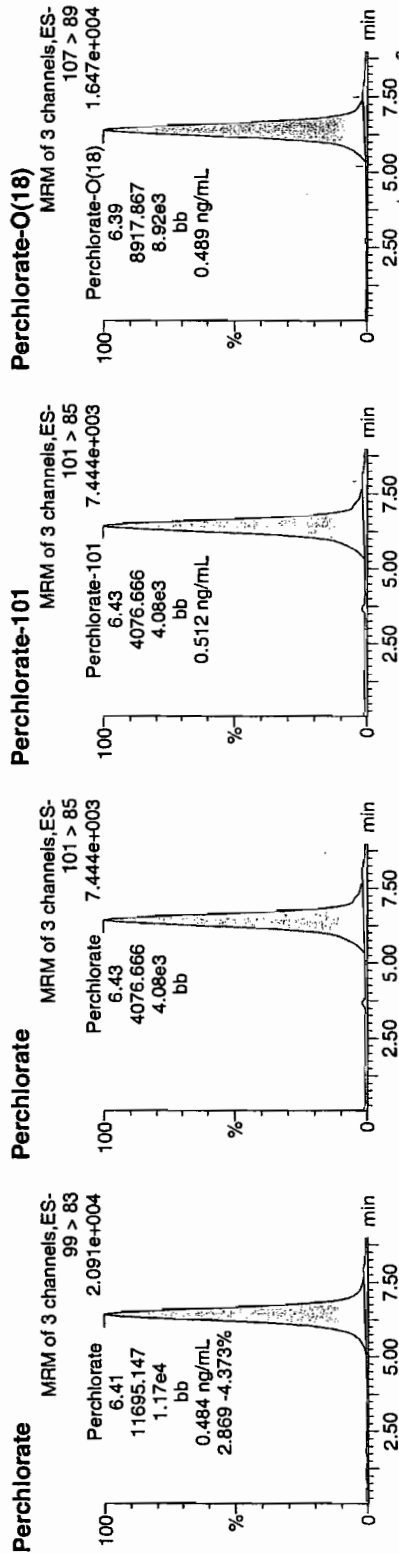
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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

Perms
03-23-10



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-Q(18)	107 > 89	6.39	8917.867	8917.867	bb			0.4887	97.75	-2.25	457.149	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

Lab Code: GEL

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

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

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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
Perchlorate	.5	.5	100.89	23-MAR-10 09:43	per0322111a
Perchlorate Isotope Ratio		3.1		23-MAR-10 09:43	per0322111a
Perchlorate-101	.5	.49	98.95	23-MAR-10 09:43	per0322111a

Quantity 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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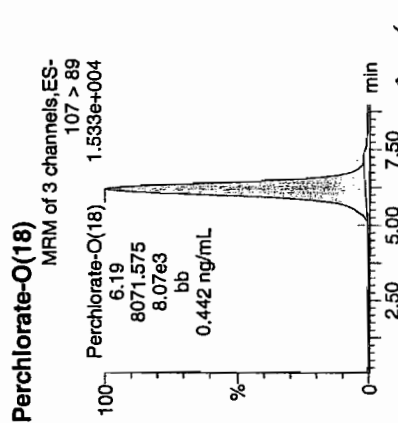
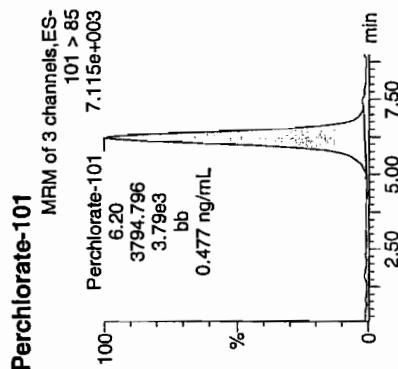
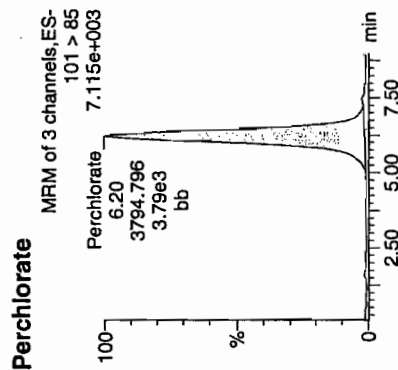
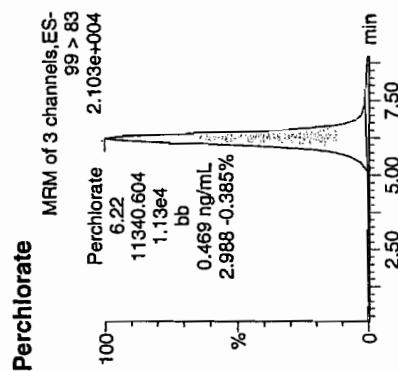
Date: 22-Mar-2010

Time: 15:44:41

ID: WCL100318-06CCV

Vial: 1:2,A

Pure
03-23-10



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

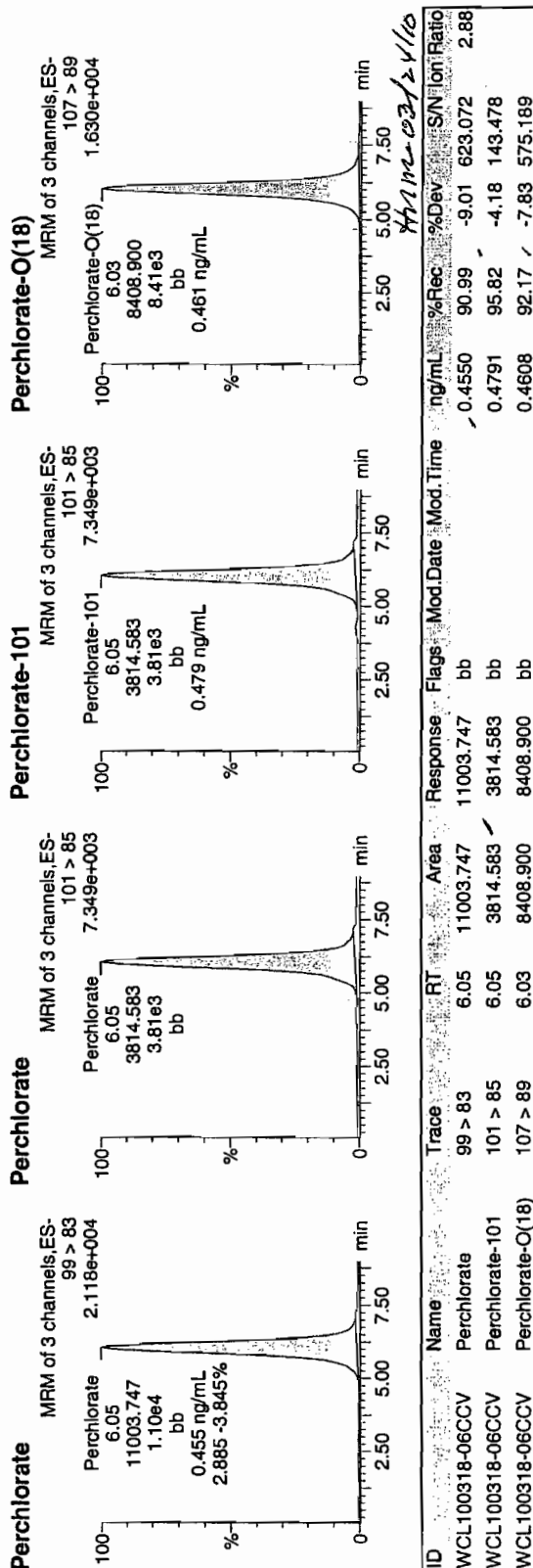
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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: per0322035a
Date: 22-Mar-2010
Time: 18:21:57
ID: WCL100318-06CCV
Vial: 1:2,A

Run
03-23-10



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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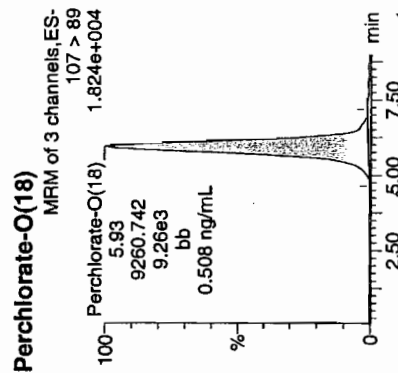
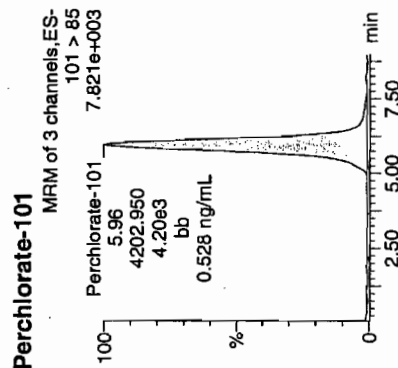
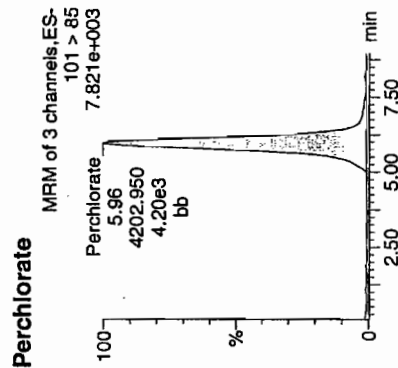
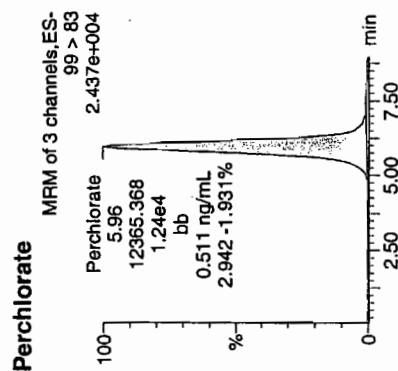
Date: 22-Mar-2010

Time: 20:59:20

ID: WCL100318-06CCV

Vial: 1:2,A

Per
and
07-27-10



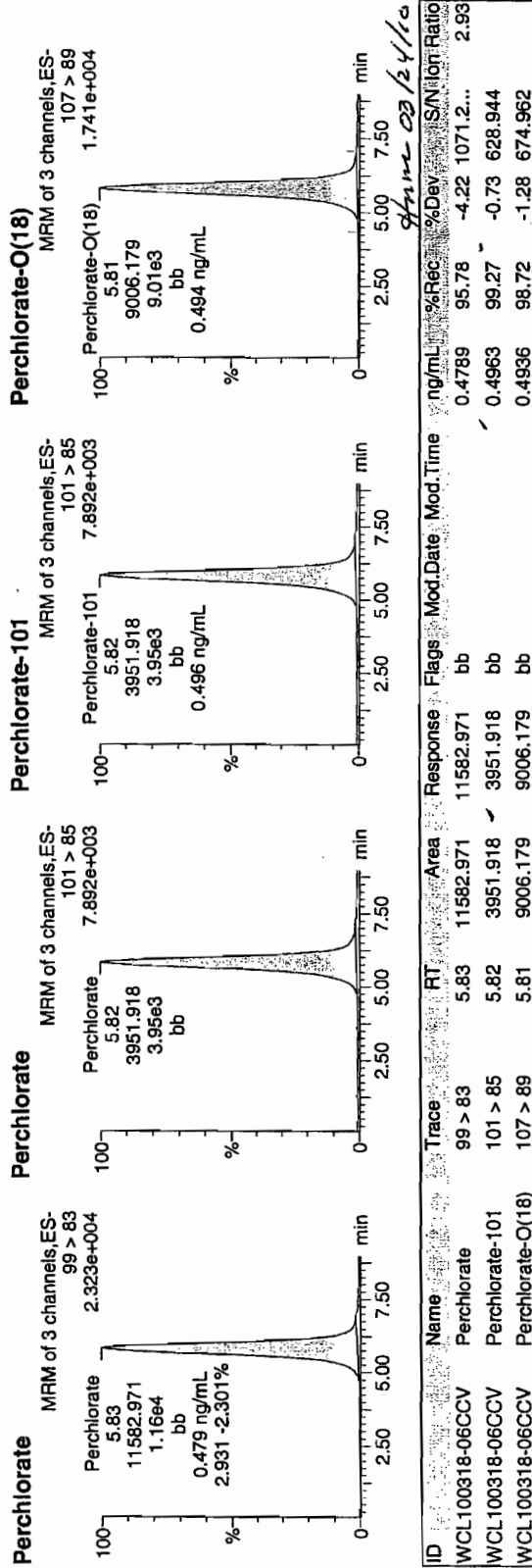
ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.96	12365.368	12365.368	bb			0.5113	102.25	2.25	749.044	2.94
WCL100318-06CCV	Perchlorate-101	101 > 85	5.96	4202.950	4202.950	bb			0.5279	105.57	5.57	86.876	
WCL100318-06CCV	Perchlorate-O(18)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

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: 23:36:10
ID: WCL100318-06CCV
Vial: 1:2,A

Per
and
03-23-10



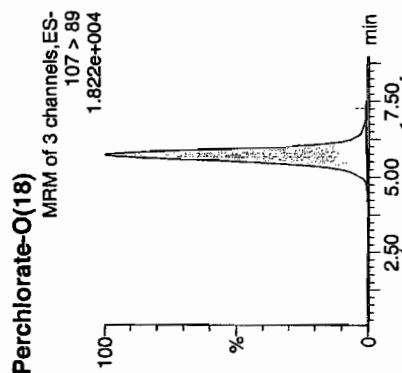
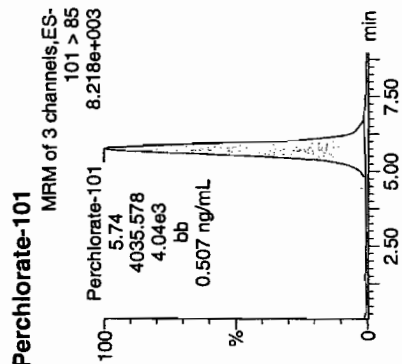
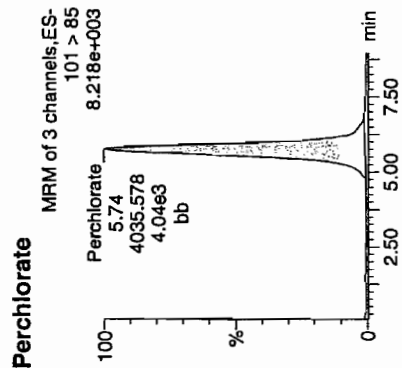
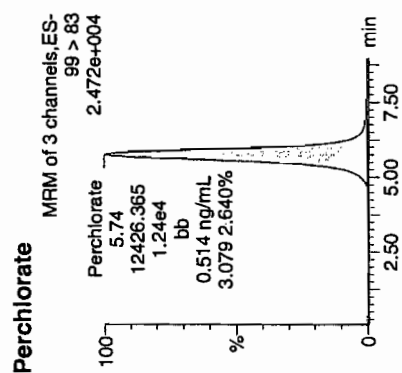
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

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

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

Name: per0322072a
Date: 23-Mar-2010
Time: 01:49:03
ID: WCL100318-06CCV
Vial: 1:2,A

Run
and
03-23-10



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	

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

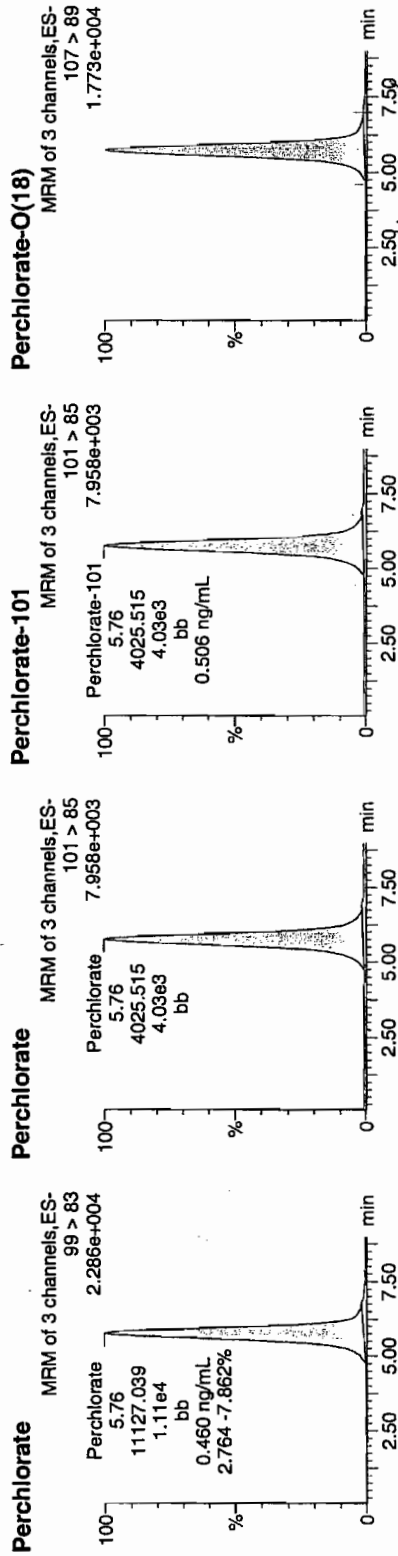
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0322085a
Date: 23-Mar-2010
Time: 04:25:55
ID: WCL100318-06CCV
Vial: 1:2,A

Pass
and
03-23-10



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	

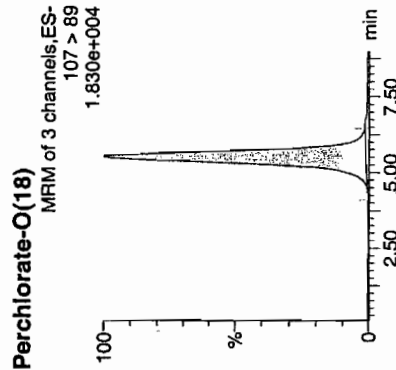
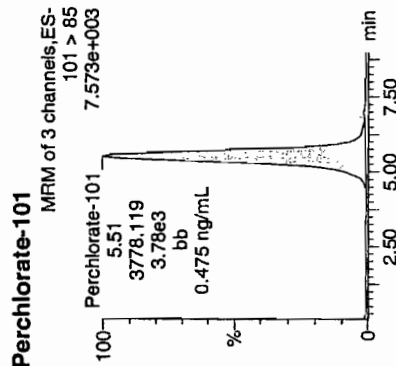
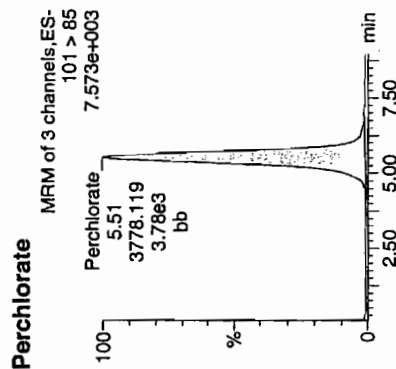
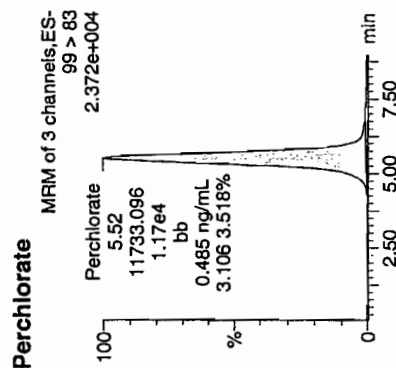
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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: per0322098a
Date: 23-Mar-2010
Time: 07:02:53
ID: WCL100318-06CCV
Vial: 1:2,A

Handwritten:
Pure
0323-10



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...	

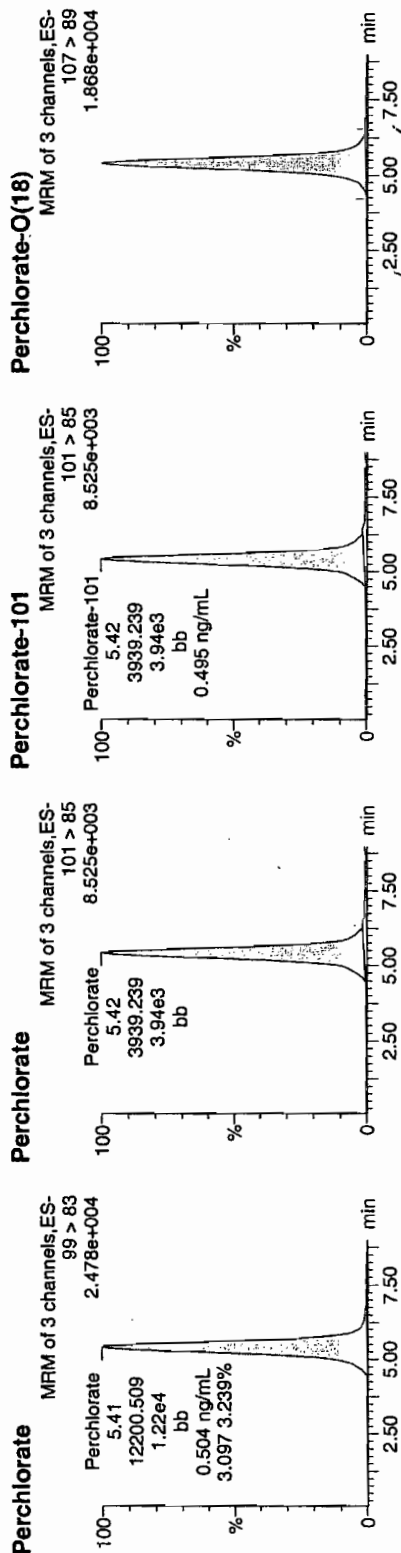
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per032211a
Date: 23-Mar-2010
Time: 09:43:42
ID: WCL100318-06CCV
Vial: 1:2,A

per
0.00
03-23-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100318-06CCV	Perchlorate	99 > 83	5.41	12200.509	12200.509	bb			0.5044	100.89	0.89	670.332	3.10
WCL100318-06CCV	Perchlorate-101	101 > 85	5.42	3939.239	3939.239	bb			0.4947	98.95	-1.05	577.183	
WCL100318-06CCV	Perchlorate-O(18)	107 > 89	5.38	9063.763	9063.763	bb			0.4967	99.35	-0.65	1064.0...	

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2151

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
Perchlorate	.05	.05	102.72	23-MAR-10 10:07	per0322113a
Perchlorate Isotope Ratio		3.28		23-MAR-10 10:07	per0322113a
Perchlorate-101	.05	.05	95.09	23-MAR-10 10:07	per0322113a

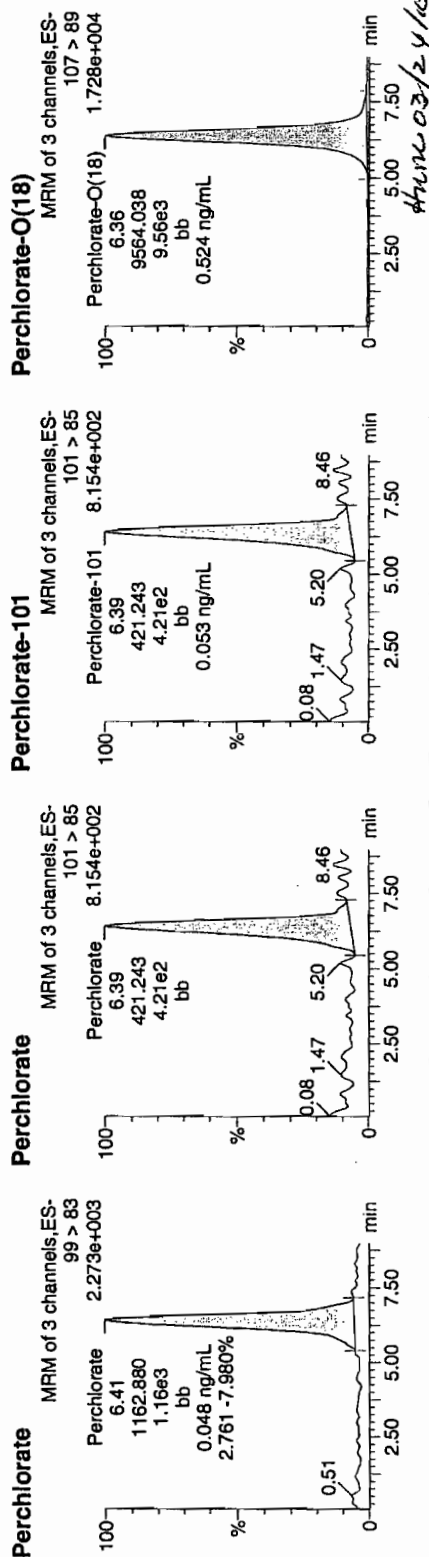
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

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

Per
and
03-23-10



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-Q(18)	107 > 89	6.36	9564.038	9564.038	bb			0.5242	104.83	4.83	664.087	

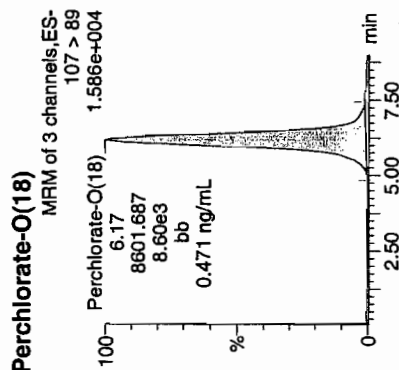
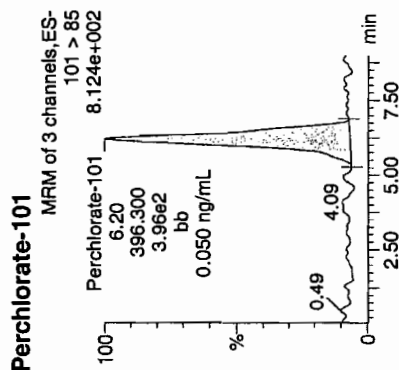
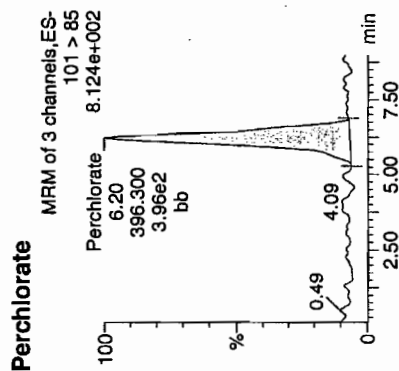
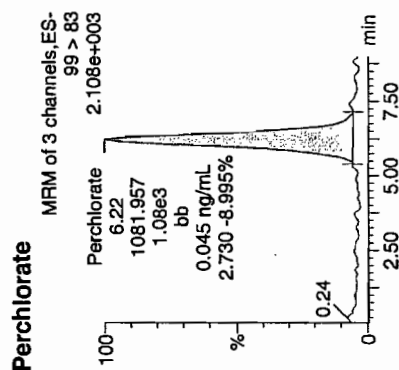
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

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

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

Name: per0322024a
Date: 22-Mar-2010
Time: 16:09:02
ID: WCL100318-07CRI
Vial: 1;2,B

Pass
Ans
03-23-10



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: Charfers 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: per0322037a

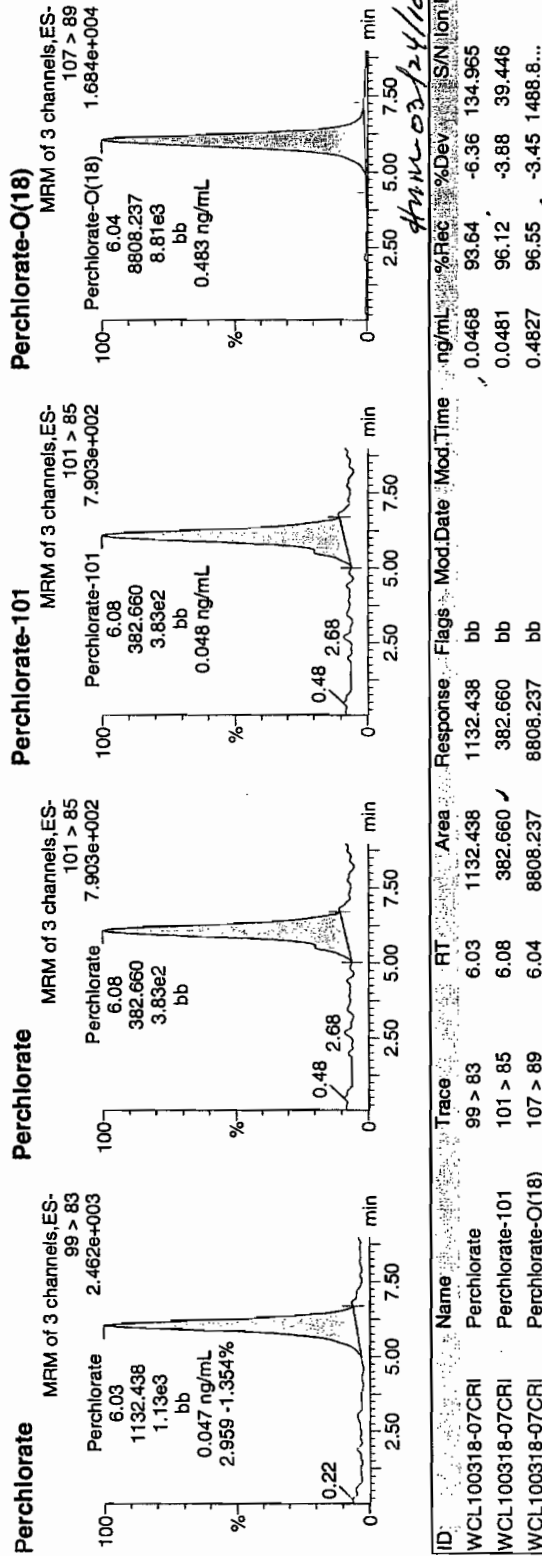
Date: 22-Mar-2010

Time: 18:46:17

ID: WCL100318-07CRI

Vial: 1:2,B

Per0322037a
03-23-10



Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers 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: per0322050a

Date: 22-Mar-2010

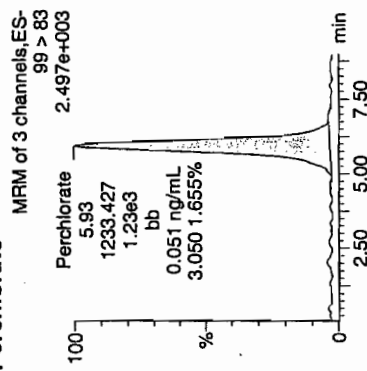
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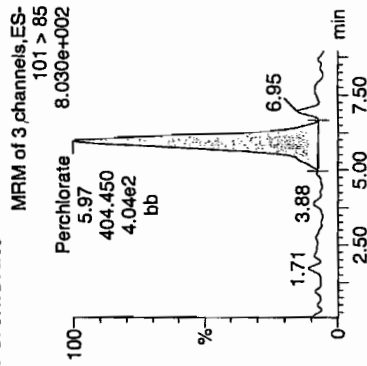
Vial: 1:2,B

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0323-10

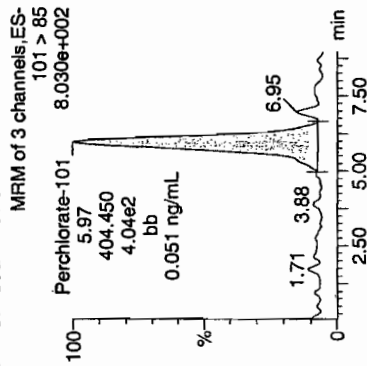
Perchlorate



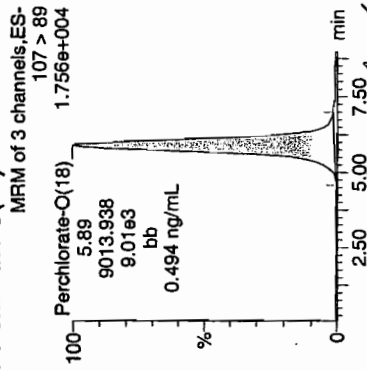
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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...	

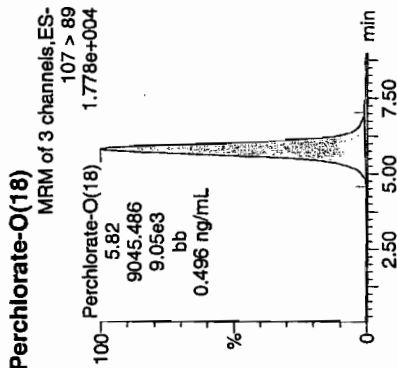
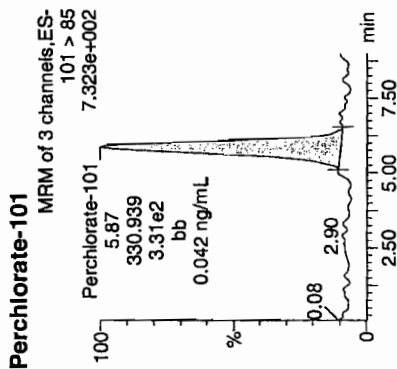
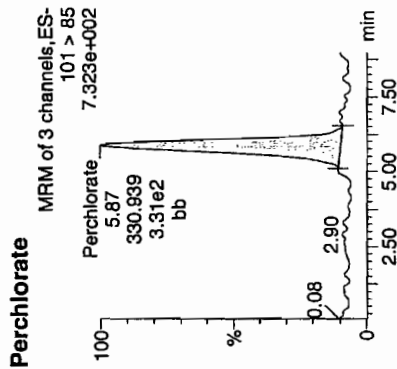
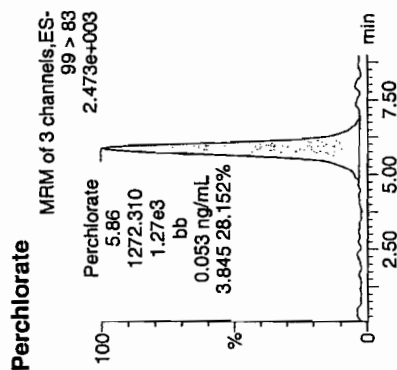
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

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

Perchlorate
03.23.10



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...	

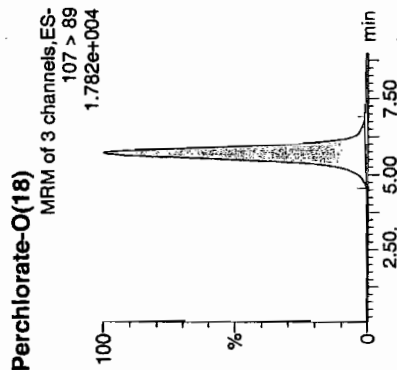
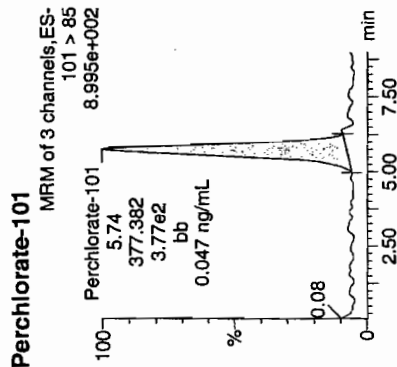
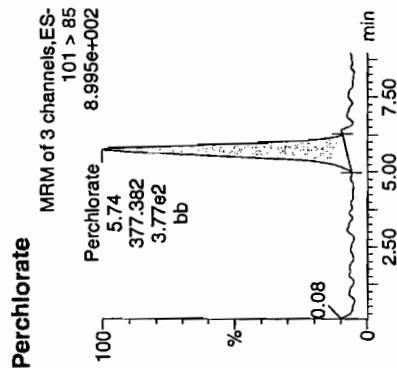
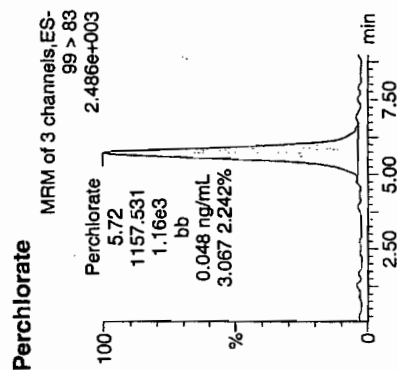
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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

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

Perchlorate
03-23-10



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

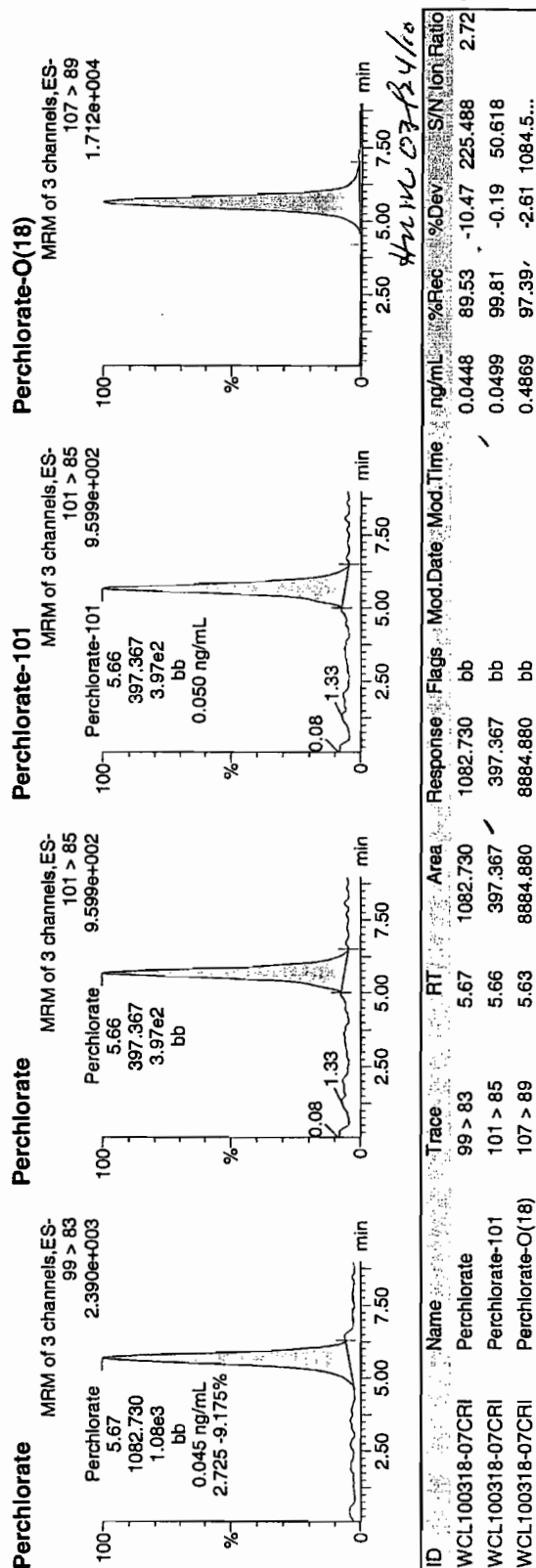
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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

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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



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

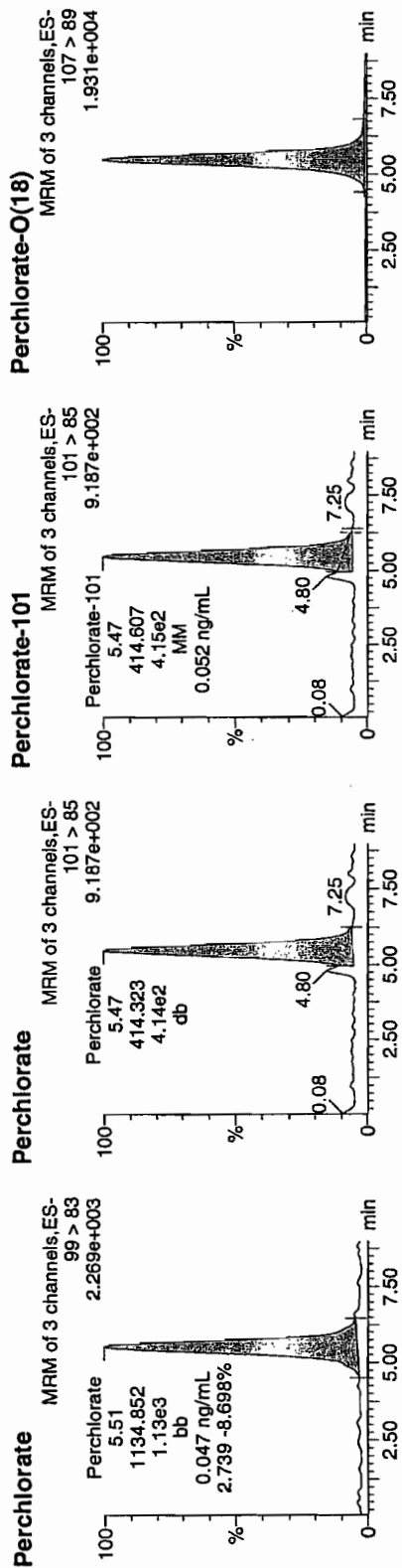
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Printed: Thursday, March 25, 2010 8:02:25 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per032210a.mdb 23 Mar 2010 10:24:18
Callibration: 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

Handwritten:
CWS
03-25-10



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	% Rec	Dev	SS/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	

Handwritten:
LWH
3/25/10

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\per032210a.qld

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

Name: per0322113a

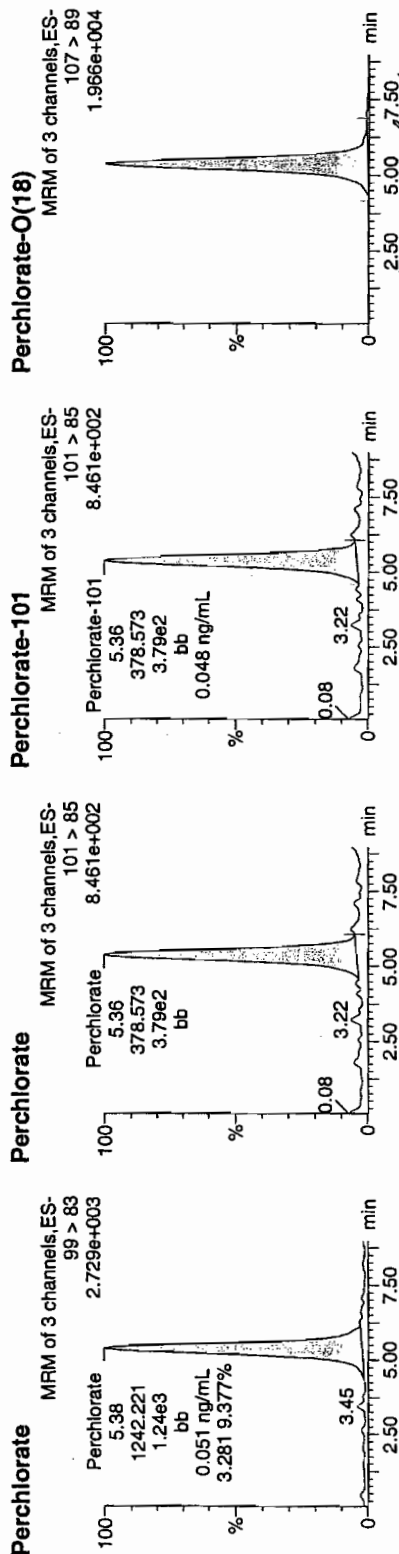
Date: 23-Mar-2010

Time: 10:07:47

ID: WCL100318-07CRI

Vial: 1:2,B

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03-23-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100318-07CRI	Perchlorate	99 > 83	5.38	1242.221	1242.221	bb			0.0514	102.72	2.72	115.935	3.28
WCL100318-07CRI	Perchlorate-101	101 > 85	5.36	378.573	378.573	bb			0.0475	95.09	-4.91	26.582	
WCL100318-07CRI	Perchlorate-O(18)	107 > 89	5.36	9522.026	9522.026	bb			0.5218	104.37	4.37	2703.2...	

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

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 962126

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 15-MAR-10

GEL Job No (SDG): 10-2151

GEL Sample ID: 1202063742

Date Filtered: 15-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	22-MAR-10 19:34	per0322041a
	Perchlorate Isotope Ratio						1	22-MAR-10 19:34	per0322041a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	22-MAR-10 19:34	per0322041a
	Perchlorate-O(18)			4.49	ug/kg		1	22-MAR-10 19:34	per0322041a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

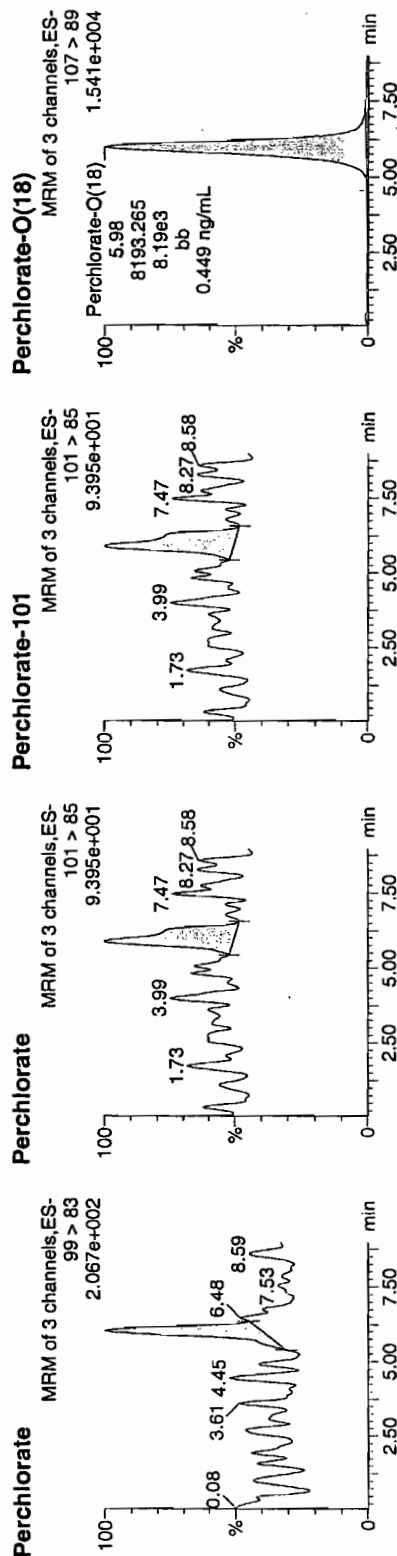
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Last Altered: Tuesday, March 23, 2010 10:27:00 AM Eastern Standard Time
Printed: Tuesday, March 23, 2010 10:37:35 AM Eastern Standard Time

Name: per0322041a
Date: 22-Mar-2010
Time: 19:34:45
ID: 1202063742
Vial: 2:1,A

LANC | 902127 | 3070 | MB | 1 |

03.23.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202063742	Perchlorate	99 > 83	6.03	46.304	46.304	bb			0.0019			21.282	1.87
1202063742	Perchlorate-101	101 > 85	5.89	24.784	24.784	bb			0.0031			13.762	
1202063742	Perchlorate-O(18)	107 > 89	5.98	8193.265	8193.265	bb			0.4490	89.81	-10.19	865.846	

OKAY
20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 962126
 Extraction Type: Solid Prep
 Client Sample No. LCS
 Date Received: 15-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 1202063743
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 %Solids: 100

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	1.95	ug/kg	J	1	22-MAR-10 19:47	per0322042a
	Perchlorate Isotope Ratio			2.97			1	22-MAR-10 19:47	per0322042a
14797-73-0	Perchlorate-101	.5	2	2.00	ug/kg	J	1	22-MAR-10 19:47	per0322042a
	Perchlorate-O(18)			4.82	ug/kg		1	22-MAR-10 19:47	per0322042a

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

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

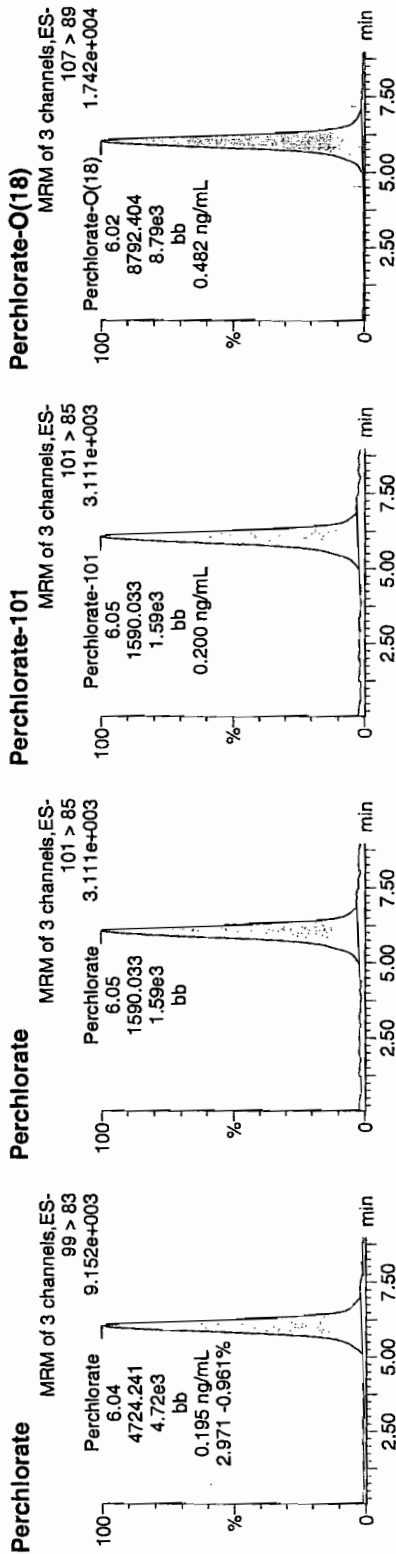
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\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: per0322042a
Date: 22-Mar-2010
Time: 19:47:06
ID: 1202063743
Vial: 2:1,B

157.00 | 962127 | 3020 | 4.5 | 11
03.23-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
1202063743	Perchlorate	99 > 83	6.04	4724.241	4724.241	bb			0.1953	97.66	-2.34	323.893	2.97
1202063743	Perchlorate-101	101 > 85	6.05	1590.033	1590.033	bb			0.1997	99.85	-0.15	294.582	
1202063743	Perchlorate-O(18)	107 > 89	6.02	8792.404	8792.404	bb			0.4819	96.37	-3.63	1199.3...	

4724.241 / 24186.2 = 0.1953
HML 03/24/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE36-10-7415MS

Lab Code: GEL Date Received: 02-MAR-10

Instrument: LCMSMS GEL Job No (SDG): 10-2151

Method: SW846 6850 Modified GEL Sample ID: 1202063744

Matrix: SOIL Date Filtered: 15-MAR-10

Extraction Batch ID: 262126 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 58

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.857	3.43	4.81	ug/kg		1	22-MAR-10 20:23	per0322045a
	Perchlorate Isotope Ratio			2.94			1	22-MAR-10 20:23	per0322045a
14797-73-0	Perchlorate-101	.857	3.43	4.97	ug/kg		1	22-MAR-10 20:23	per0322045a
	Perchlorate-O(18)			9.11	ug/kg		1	22-MAR-10 20:23	per0322045a

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

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

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles 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: per0322045a

Date: 22-Mar-2010

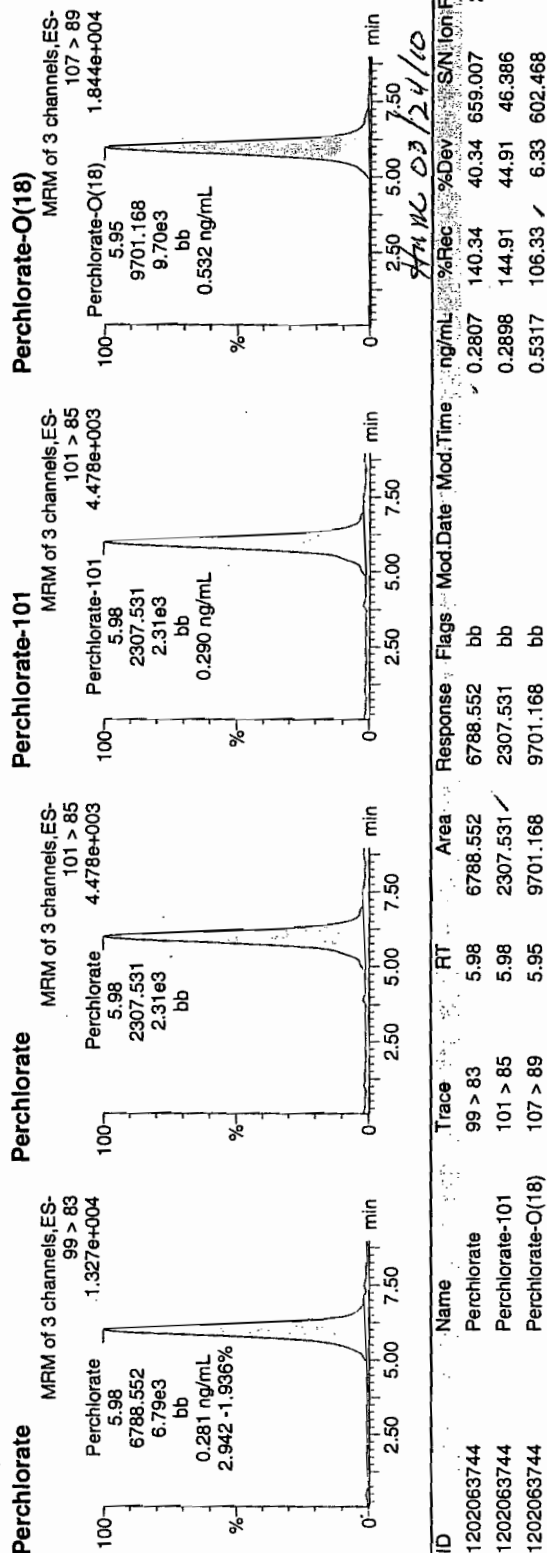
Time: 20:23:17

ID: 1202063744

Vial: 2:1,E

03-23-10

Law | 962127 | SWD | MS | 1



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 262126
 Extraction Type: Solid Prep
 Client Sample No. RE36-10-7415MSD
 Date Received: 02-MAR-10
 GEL Job No (SDG): 10-2151
 GEL Sample ID: 1202063745
 Date Filtered: 15-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 58

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.857	3.43	4.97	ug/kg		1	22-MAR-10 20:35	per0322046a
	Perchlorate Isotope Ratio			2.9			1	22-MAR-10 20:35	per0322046a
14797-73-0	Perchlorate-101	.857	3.43	5.21	ug/kg		1	22-MAR-10 20:35	per0322046a
	Perchlorate-O(18)			8.81	ug/kg		1	22-MAR-10 20:35	per0322046a

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

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

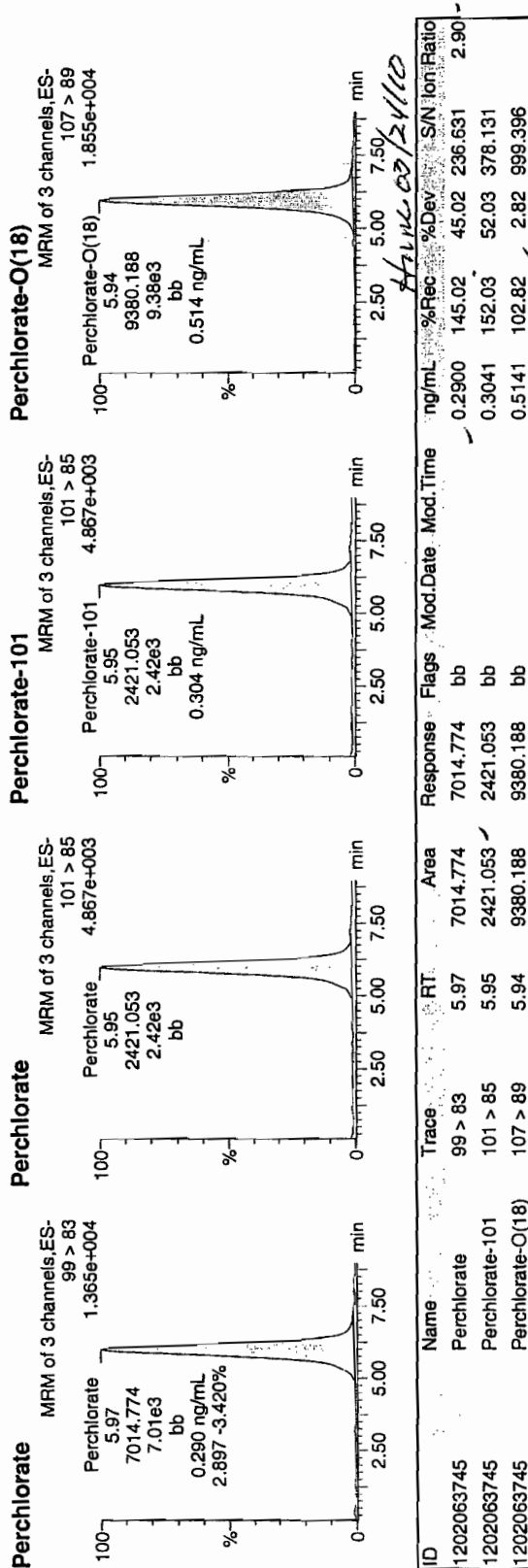
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

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: per0322046a
Date: 22-Mar-2010
Time: 20:35:18
ID: 1202063745
Vial: 2:1,F

03223-10
1522-1962127 | 5025 | MSO | 11



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: 962126 Verified by:
 Analyst: Jarrell Shirley
 Method: SW846 6850 Modified
 Lab SOP: GL-OA-E-067 REV# 6
 Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202063742 MB	15-MAR-2010 15:15:00	2	20	10
1202063743 LCS	15-MAR-2010 15:15:00	2	20	10
248371001	15-MAR-2010 15:15:00	2	20	10
1202063744 MS (248371001)	15-MAR-2010 15:15:00	2	20	10
1202063745 MSD (248371001)	15-MAR-2010 15:15:00	2	20	10
248371002	15-MAR-2010 15:15:00	2	20	10
248371003	15-MAR-2010 15:15:00	2	20	10
248371004	15-MAR-2010 15:15:00	2	20	10
248371005	15-MAR-2010 15:15:00	2	20	10
248371006	15-MAR-2010 15:15:00	2	20	10
248371007	15-MAR-2010 15:15:00	2	20	10
248371008	15-MAR-2010 15:15:00	2	20	10
248371009	15-MAR-2010 15:15:00	2	20	10
248371010	15-MAR-2010 15:15:00	2	20	10
248371011	15-MAR-2010 15:15:00	2	20	10
248371012	15-MAR-2010 15:15:00	2	20	10
248371013	15-MAR-2010 15:15:00	2	20	10
248371014	15-MAR-2010 15:15:00	2	20	10
248371015	15-MAR-2010 15:15:00	2	20	10
248371016	15-MAR-2010 15:15:00	2	20	10
248371017	15-MAR-2010 15:15:00	2	20	10
248371018	15-MAR-2010 15:15:00	2	20	10
248371019	15-MAR-2010 15:15:00	2	20	10
248371020	15-MAR-2010 15:15:00	2	20	10
1202063746 LCS	15-MAR-2010 15:15:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202063746	10 ug/L R/V/CCV Second Source	UCL100311-01.1	.4	mL	Desalting cartridges used: 100223-1-Ba & 100216-1-H
LCS	1202063743	10 ug/L R/V/CCV Second Source	UCL100311-01.1	.4	mL	
MS	1202063744	10 ug/L R/V/CCV Second Source	UCL100311-01.1	.4	mL	
MSD	1202063745	10 ug/L R/V/CCV Second Source	UCL100311-01.1	.4	mL	

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: *AMN*
 Date: *3/24/10*
 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	USE	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

Isotope Ratio Criteria

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

2.31-3.85

Tune Criteria

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

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2151**

Sample Analysis

Sample ID	Client ID
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484
1202060824	Method Blank (MB) ICP
1202060825	Laboratory Control Sample (LCS)
1202060828	248371001(RE36-10-7415L) Serial Dilution (SD)
1202060826	248371001(RE36-10-7415D) Sample Duplicate (DUP)
1202060827	248371001(RE36-10-7415S) Matrix Spike (MS)
1202060829	248371001(RE36-10-7415SD) Matrix Spike Duplicate (MSD)
1202060830	Method Blank (MB) ICP-MS
1202060831	Laboratory Control Sample (LCS)
1202060834	248371001(RE36-10-7415L) Serial Dilution (SD)

1202060832	248371001(RE36-10-7415D) Sample Duplicate (DUP)
1202060833	248371001(RE36-10-7415S) Matrix Spike (MS)
1202060835	248371001(RE36-10-7415SD) Matrix Spike Duplicate (MSD)
1202069720	Method Blank (MB) CVAA
1202069721	Laboratory Control Sample (LCS)
1202069724	248371001(RE36-10-7415L) Serial Dilution (SD)
1202069722	248371001(RE36-10-7415D) Sample Duplicate (DUP)
1202069723	248371001(RE36-10-7415S) Matrix Spike (MS)
1202069725	248371001(RE36-10-7415SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	960813, 960816 and 964726
Prep Batch :	960812, 960815 and 964724
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of

360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits with the exceptions of uranium and magnesium that recovered outside of the advisory control limits of 70-130%.

ICSA/ICSAB Statement

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

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria with the exception of uranium in CCB02.

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 analyzed with this SDG met the acceptance criteria of percent recovery with the exception of antimony. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

Quality Control (QC) Sample Statement

The following sample was selected as the quality control (QC) sample for this SDG: 248371001 (RE36-10-7415)-ICP, ICP-MS and CVAA.

Matrix Spike (MS) Recovery Statement

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the

recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of 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, potassium and barium as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

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

Serial Dilution % Difference Statement

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

Technical Information

Holding Time Specifications

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

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG 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 are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: DER ID 813635. 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: T. K. Cole A. Elmer Date: 4.19.10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371001

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7415

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 58

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6700000	ug/Kg		11600	34100	34100	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-36-0	Antimony	1710	ug/Kg	U	563	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-38-2	Arsenic	1.36	mg/kg	J	0.339	1.69	1.69	2	MS	BCD1	04/17/10 14:40	100417-3	960816
7440-39-3	Barium	184000	ug/Kg	N	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-41-7	Beryllium	0.483	mg/kg		0.0339	0.169	0.169	2	MS	PRB	04/17/10 19:45	100417-2	960816
7440-43-9	Cadmium	234	ug/Kg	J	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-70-2	Calcium	8490000	ug/Kg		13700	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-47-3	Chromium	13100	ug/Kg	*	256	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-48-4	Cobalt	3310	ug/Kg		256	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-50-8	Copper	10300	ug/Kg		512	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-89-6	Iron	8180000	ug/Kg		13700	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-92-1	Lead	13800	ug/Kg		427	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-95-4	Magnesium	1880000	ug/Kg	N	14500	51200	51200	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-96-5	Manganese	549000	ug/Kg		341	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813
7439-97-6	Mercury	64.2	ug/kg		6.73	19.8	19.8	1	AV	JXL1	03/17/10 13:54	031710S2-4	964726
7440-02-0	Nickel	6.8	mg/kg		0.169	0.677	0.677	2	MS	BCD1	04/17/10 14:40	100417-3	960816
7440-09-7	Potassium	1920000	ug/Kg	N	10900	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7782-49-2	Selenium	1.69	mg/kg	U	0.846	1.69	1.69	2	MS	BCD1	04/17/10 14:40	100417-3	960816
7440-22-4	Silver	189	ug/Kg	J	171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-23-5	Sodium	94300	ug/Kg		11900	42700	42700	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-28-0	Thallium	0.140	mg/kg	J	0.102	0.339	0.339	2	MS	BCD1	04/17/10 14:40	100417-3	960816
7440-61-1	Uranium	3.55	mg/kg		0.0223	0.0677	0.0677	2	MS	BCD1	04/17/10 14:40	100417-3	960816
7440-62-2	Vanadium	11400	ug/Kg		171	853	853	1	P	HSC	03/31/10 09:46	033110-1	960813
7440-66-6	Zinc	42700	ug/Kg		563	1710	1710	1	P	HSC	03/31/10 09:46	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.502	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.519	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371002

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7420

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4130000	ug/Kg		7410	21800	21800	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-36-0	Antimony	1090	ug/Kg	U	359	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-38-2	Arsenic	1.28	mg/kg		0.215	1.08	1.08	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-39-3	Barium	22000	ug/Kg	N	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-41-7	Beryllium	0.598	mg/kg		0.0215	0.108	0.108	2	MS	PRB	04/17/10 19:54	100417-2	960816
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-70-2	Calcium	1700000	ug/Kg		8710	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-47-3	Chromium	6630	ug/Kg	*	163	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-48-4	Cobalt	1470	ug/Kg		163	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-50-8	Copper	3120	ug/Kg		327	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-89-6	Iron	8540000	ug/Kg		8710	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-92-1	Lead	6120	ug/Kg		272	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-95-4	Magnesium	934000	ug/Kg	N	9260	32700	32700	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-96-5	Manganese	177000	ug/Kg		218	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813
7439-97-6	Mercury	49	ug/kg		3.96	11.7	11.7	1	AV	JXL1	03/17/10 14:06	031710S2-4	964726
7440-02-0	Nickel	3.74	mg/kg		0.108	0.431	0.431	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-09-7	Potassium	894000	ug/Kg	N	6970	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7782-49-2	Selenium	1.08	mg/kg	U	0.538	1.08	1.08	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-22-4	Silver	136	ug/Kg	J	109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-23-5	Sodium	79300	ug/Kg		7620	27200	27200	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-28-0	Thallium	0.0685	mg/kg	J	0.0646	0.215	0.215	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-61-1	Uranium	0.743	mg/kg		0.0142	0.0431	0.0431	2	MS	BCD1	04/17/10 15:08	100417-3	960816
7440-62-2	Vanadium	9690	ug/Kg		109	545	545	1	P	HSC	03/31/10 10:21	033110-1	960813
7440-66-6	Zinc	37400	ug/Kg		359	1090	1090	1	P	HSC	03/31/10 10:21	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.509	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.564	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371003

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7418

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6100000	ug/Kg		8200	24100	24100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-36-0	Antimony	1210	ug/Kg	U	398	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-38-2	Arsenic	1.91	mg/kg		0.235	1.18	1.18	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-39-3	Barium	84300	ug/Kg	N	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-41-7	Beryllium	0.579	mg/kg		0.0235	0.118	0.118	2	MS	PRB	04/17/10 19:55	100417-2	960816
7440-43-9	Cadmium	603	ug/Kg	U	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-70-2	Calcium	1830000	ug/Kg		9650	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-47-3	Chromium	13000	ug/Kg	*	181	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-48-4	Cobalt	3030	ug/Kg		181	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-50-8	Copper	5430	ug/Kg		362	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-89-6	Iron	10100000	ug/Kg		9650	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-92-1	Lead	9260	ug/Kg		301	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-95-4	Magnesium	1440000	ug/Kg	N	10300	36200	36200	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-96-5	Manganese	263000	ug/Kg		241	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813
7439-97-6	Mercury	40.8	ug/kg		4.22	12.4	12.4	1	AV	JXL1	03/17/10 14:08	031710S2-4	964726
7440-02-0	Nickel	7.03	mg/kg		0.118	0.47	0.47	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-09-7	Potassium	1020000	ug/Kg	N	7720	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7782-49-2	Selenium	1.18	mg/kg	U	0.588	1.18	1.18	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-22-4	Silver	603	ug/Kg	U	121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-23-5	Sodium	87500	ug/Kg		8440	30100	30100	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-28-0	Thallium	0.108	mg/kg	J	0.0706	0.235	0.235	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-61-1	Uranium	1.22	mg/kg		0.0155	0.047	0.047	2	MS	BCD1	04/17/10 15:13	100417-3	960816
7440-62-2	Vanadium	16300	ug/Kg		121	603	603	1	P	HSC	03/31/10 10:28	033110-1	960813
7440-66-6	Zinc	32600	ug/Kg		398	1210	1210	1	P	HSC	03/31/10 10:28	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.51	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.523	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.595	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371004

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7417

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	5620000	ug/Kg		7870	23100	23100	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-36-0	Antimony	816	ug/Kg	J	382	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-38-2	Arsenic	1.9	mg/kg		0.243	1.21	1.21	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-39-3	Barium	66700	ug/Kg	N	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-41-7	Beryllium	0.555	mg/kg		0.0243	0.121	0.121	2	MS	PRB	04/17/10 20:00	100417-2	960816
7440-43-9	Cadmium	578	ug/Kg	U	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-70-2	Calcium	1770000	ug/Kg		9260	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-47-3	Chromium	22200	ug/Kg	*	174	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-48-4	Cobalt	2680	ug/Kg		174	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-50-8	Copper	5200	ug/Kg		347	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-89-6	Iron	14000000	ug/Kg		9260	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-92-1	Lead	12000	ug/Kg		289	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-95-4	Magnesium	1220000	ug/Kg	N	9830	34700	34700	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-96-5	Manganese	330000	ug/Kg		231	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813
7439-97-6	Mercury	38.8	ug/kg		4.93	14.5	14.5	1	AV	JXL1	03/17/10 14:10	031710S2-4	964726
7440-02-0	Nickel	6.84	mg/kg		0.121	0.486	0.486	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-09-7	Potassium	923000	ug/Kg	N	7400	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7782-49-2	Selenium	1.21	mg/kg	U	0.607	1.21	1.21	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-22-4	Silver	578	ug/Kg	U	116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-23-5	Sodium	83800	ug/Kg		8100	28900	28900	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-28-0	Thallium	0.0918	mg/kg	J	0.0729	0.243	0.243	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-61-1	Uranium	1.45	mg/kg		0.016	0.0486	0.0486	2	MS	BCD1	04/17/10 15:17	100417-3	960816
7440-62-2	Vanadium	21000	ug/Kg		116	578	578	1	P	HSC	03/31/10 10:49	033110-1	960813
7440-66-6	Zinc	61700	ug/Kg		382	1160	1160	1	P	HSC	03/31/10 10:49	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.547	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.521	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371005

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7419

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4480000	ug/Kg		8110	23800	23800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-36-0	Antimony	1190	ug/Kg	U	393	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-38-2	Arsenic	1.34	mg/kg		0.238	1.19	1.19	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-39-3	Barium	66200	ug/Kg	N	119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-41-7	Beryllium	0.534	mg/kg		0.0238	0.119	0.119	2	MS	PRB	04/17/10 20:02	100417-2	960816
7440-43-9	Cadmium	596	ug/Kg	U	119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-70-2	Calcium	3720000	ug/Kg		9540	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-47-3	Chromium	6580	ug/Kg	*	179	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-48-4	Cobalt	1700	ug/Kg		179	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-50-8	Copper	5760	ug/Kg		358	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-89-6	Iron	7680000	ug/Kg		9540	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-92-1	Lead	10900	ug/Kg		298	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-95-4	Magnesium	1110000	ug/Kg	N	10100	35800	35800	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-96-5	Manganese	610000	ug/Kg		238	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813
7439-97-6	Mercury	302	ug/kg		4.71	13.8	13.8	1	AV	JXL1	03/17/10 14:11	031710S2-4	964726
7440-02-0	Nickel	3.98	mg/kg		0.119	0.476	0.476	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-09-7	Potassium	1130000	ug/Kg	N	7630	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.595	1.19	1.19	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-22-4	Silver	633	ug/Kg		119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-23-5	Sodium	75900	ug/Kg		8340	29800	29800	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-28-0	Thallium	0.238	mg/kg	U	0.0714	0.238	0.238	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-61-1	Uranium	1.44	mg/kg		0.0157	0.0476	0.0476	2	MS	BCD1	04/17/10 15:21	100417-3	960816
7440-62-2	Vanadium	8800	ug/Kg		119	596	596	1	P	HSC	03/31/10 10:56	033110-1	960813
7440-66-6	Zinc	38100	ug/Kg		393	1190	1190	1	P	HSC	03/31/10 10:56	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.505	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.522	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371006

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7416

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	8220000	ug/Kg		7640	22500	22500	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-36-0	Antimony	1120	ug/Kg	U	371	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-38-2	Arsenic	1.1	mg/kg		0.219	1.09	1.09	2	MS	BCDI	04/17/10 15:25	100417-3	960816
7440-39-3	Barium	89700	ug/Kg	N	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-41-7	Beryllium	0.608	mg/kg		0.0219	0.109	0.109	2	MS	PRB	04/17/10 20:04	100417-2	960816
7440-43-9	Cadmium	562	ug/Kg	U	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-70-2	Calcium	2480000	ug/Kg		8980	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-47-3	Chromium	11400	ug/Kg	*	168	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-48-4	Cobalt	4680	ug/Kg		168	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-50-8	Copper	4890	ug/Kg		337	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-89-6	Iron	12000000	ug/Kg		8980	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-92-1	Lead	9560	ug/Kg		281	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-95-4	Magnesium	1590000	ug/Kg	N	9550	33700	33700	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-96-5	Manganese	279000	ug/Kg		225	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813
7439-97-6	Mercury	19.1	ug/kg		4.18	12.3	12.3	1	AV	JXL1	03/17/10 14:13	031710S2-4	964726
7440-02-0	Nickel	7.11	mg/kg		0.109	0.437	0.437	2	MS	BCDI	04/17/10 15:25	100417-3	960816
7440-09-7	Potassium	1610000	ug/Kg	N	7190	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7782-49-2	Selenium	1.09	mg/kg	U	0.546	1.09	1.09	2	MS	BCDI	04/17/10 15:25	100417-3	960816
7440-22-4	Silver	137	ug/Kg	J	112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-23-5	Sodium	97400	ug/Kg		7860	28100	28100	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-28-0	Thallium	0.124	mg/kg	J	0.0656	0.219	0.219	2	MS	BCDI	04/17/10 15:25	100417-3	960816
7440-61-1	Uranium	0.635	mg/kg		0.0144	0.0437	0.0437	2	MS	BCDI	04/17/10 15:25	100417-3	960816
7440-62-2	Vanadium	22100	ug/Kg		112	562	562	1	P	HSC	03/31/10 11:03	033110-1	960813
7440-66-6	Zinc	29800	ug/Kg		371	1120	1120	1	P	HSC	03/31/10 11:03	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.502	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.516	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.55	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371007

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7478

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 90.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4620000	ug/Kg		7470	22000	22000	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-36-0	Antimony	1100	ug/Kg	U	362	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-38-2	Arsenic	1.21	mg/kg		0.216	1.08	1.08	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-39-3	Barium	52800	ug/Kg	N	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-41-7	Beryllium	0.485	mg/kg		0.0216	0.108	0.108	2	MS	PRB	04/17/10 20:06	100417-2	960816
7440-43-9	Cadmium	549	ug/Kg	U	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-70-2	Calcium	1810000	ug/Kg		8780	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-47-3	Chromium	10800	ug/Kg	*	165	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-48-4	Cobalt	2330	ug/Kg		165	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-50-8	Copper	4640	ug/Kg		329	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-89-6	Iron	9500000	ug/Kg		8780	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-92-1	Lead	8470	ug/Kg		274	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-95-4	Magnesium	922000	ug/Kg	N	9330	32900	32900	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-96-5	Manganese	250000	ug/Kg		220	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813
7439-97-6	Mercury	14	ug/kg		4.02	11.8	11.8	1	AV	JXL1	03/17/10 14:15	031710S2-4	964726
7440-02-0	Nickel	5.14	mg/kg		0.108	0.431	0.431	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-09-7	Potassium	786000	ug/Kg	N	7030	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7782-49-2	Selenium	1.08	mg/kg	U	0.539	1.08	1.08	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-22-4	Silver	127	ug/Kg	J	110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-23-5	Sodium	82600	ug/Kg		7680	27400	27400	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-28-0	Thallium	0.0725	mg/kg	J	0.0647	0.216	0.216	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-61-1	Uranium	1.32	mg/kg		0.0142	0.0431	0.0431	2	MS	BCD1	04/17/10 15:29	100417-3	960816
7440-62-2	Vanadium	13000	ug/Kg		110	549	549	1	P	HSC	03/31/10 11:10	033110-1	960813
7440-66-6	Zinc	37300	ug/Kg		362	1100	1100	1	P	HSC	03/31/10 11:10	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.505	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.514	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.563	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371008

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7490

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5110000	ug/Kg		8170	24000	24000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-36-0	Antimony	1200	ug/Kg	U	397	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-38-2	Arsenic	1.77	mg/kg		0.239	1.19	1.19	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-39-3	Barium	57200	ug/Kg	N	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-41-7	Beryllium	0.479	mg/kg		0.0239	0.119	0.119	2	MS	PRB	04/17/10 20:07	100417-2	960816
7440-43-9	Cadmium	601	ug/Kg	U	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-70-2	Calcium	1830000	ug/Kg		9610	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-47-3	Chromium	21400	ug/Kg	*	180	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-48-4	Cobalt	3470	ug/Kg		180	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-50-8	Copper	4520	ug/Kg		361	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-89-6	Iron	10100000	ug/Kg		9610	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-92-1	Lead	10600	ug/Kg		300	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-95-4	Magnesium	1030000	ug/Kg	N	10200	36100	36100	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-96-5	Manganese	296000	ug/Kg		240	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813
7439-97-6	Mercury	22.8	ug/kg		5.22	15.4	15.4	1	AV	JXL1	03/17/10 14:20	031710S2-4	964726
7440-02-0	Nickel	5.34	mg/kg		0.119	0.477	0.477	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-09-7	Potassium	957000	ug/Kg	N	7690	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-22-4	Silver	148	ug/Kg	J	120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-23-5	Sodium	76400	ug/Kg		8410	30000	30000	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-28-0	Thallium	0.0735	mg/kg	J	0.0716	0.239	0.239	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-61-1	Uranium	0.880	mg/kg		0.0158	0.0477	0.0477	2	MS	BCD1	04/17/10 15:33	100417-3	960816
7440-62-2	Vanadium	14100	ug/Kg		120	601	601	1	P	HSC	03/31/10 11:17	033110-1	960813
7440-66-6	Zinc	39500	ug/Kg		397	1200	1200	1	P	HSC	03/31/10 11:17	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.562	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.566	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.528	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371009

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7487

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	10500000	ug/Kg		8960	26300	26300	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-36-0	Antimony	1320	ug/Kg	U	435	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-38-2	Arsenic	2.44	mg/kg		0.259	1.29	1.29	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-39-3	Barium	127000	ug/Kg	N	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-41-7	Beryllium	0.595	mg/kg		0.0259	0.129	0.129	2	MS	PRB	04/17/10 20:09	100417-2	960816
7440-43-9	Cadmium	659	ug/Kg	U	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-70-2	Calcium	3420000	ug/Kg		10500	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-47-3	Chromium	17000	ug/Kg	*	198	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-48-4	Cobalt	4440	ug/Kg		198	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-50-8	Copper	7340	ug/Kg		395	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-89-6	Iron	12600000	ug/Kg		10500	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-92-1	Lead	12700	ug/Kg		329	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-95-4	Magnesium	1830000	ug/Kg	N	11200	39500	39500	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-96-5	Manganese	301000	ug/Kg		263	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813
7439-97-6	Mercury	36.9	ug/kg		5.16	15.2	15.2	1	AV	JXL1	03/17/10 14:21	031710S2-4	964726
7440-02-0	Nickel	7.01	mg/kg		0.129	0.518	0.518	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-09-7	Potassium	2030000	ug/Kg	N	8430	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7782-49-2	Selenium	1.29	mg/kg	U	0.647	1.29	1.29	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-22-4	Silver	659	ug/Kg	U	132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-23-5	Sodium	94400	ug/Kg		9220	32900	32900	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-28-0	Thallium	0.107	mg/kg	J	0.0777	0.259	0.259	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-61-1	Uranium	0.982	mg/kg		0.0171	0.0518	0.0518	2	MS	BCD1	04/17/10 15:37	100417-3	960816
7440-62-2	Vanadium	22500	ug/Kg		132	659	659	1	P	HSC	03/31/10 11:24	033110-1	960813
7440-66-6	Zinc	32700	ug/Kg		435	1320	1320	1	P	HSC	03/31/10 11:24	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.512	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.524	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371010

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7483

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4450000	ug/Kg		8890	26200	26200	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-36-0	Antimony	1310	ug/Kg	U	432	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-38-2	Arsenic	1.52	mg/kg		0.249	1.25	1.25	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-39-3	Barium	54900	ug/Kg	N	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-41-7	Beryllium	0.545	mg/kg		0.0249	0.125	0.125	2	MS	PRB	04/17/10 20:11	100417-2	960816
7440-43-9	Cadmium	654	ug/Kg	U	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-70-2	Calcium	3210000	ug/Kg		10500	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-47-3	Chromium	5880	ug/Kg	*	196	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-48-4	Cobalt	1460	ug/Kg		196	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-50-8	Copper	5800	ug/Kg		392	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-89-6	Iron	8400000	ug/Kg		10500	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-92-1	Lead	9920	ug/Kg		327	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-95-4	Magnesium	1080000	ug/Kg	N	11100	39200	39200	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-96-5	Manganese	417000	ug/Kg		262	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813
7439-97-6	Mercury	51.2	ug/kg		4.77	14	14	1	AV	JXL1	03/17/10 14:23	031710S2-4	964726
7440-02-0	Nickel	4.84	mg/kg		0.125	0.498	0.498	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-09-7	Potassium	1100000	ug/Kg	N	8370	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7782-49-2	Selenium	1.25	mg/kg	U	0.623	1.25	1.25	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-22-4	Silver	209	ug/Kg	J	131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-23-5	Sodium	92900	ug/Kg		9150	32700	32700	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-28-0	Thallium	0.249	mg/kg	U	0.0748	0.249	0.249	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-61-1	Uranium	2.43	mg/kg		0.0164	0.0498	0.0498	2	MS	BCD1	04/17/10 15:41	100417-3	960816
7440-62-2	Vanadium	8830	ug/Kg		131	654	654	1	P	HSC	03/31/10 11:32	033110-1	960813
7440-66-6	Zinc	42000	ug/Kg		432	1310	1310	1	P	HSC	03/31/10 11:32	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.528	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.563	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371011

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7481

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 67

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg		9950	29300	29300	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-36-0	Antimony	581	ug/Kg	J	483	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-38-2	Arsenic	1.86	mg/kg		0.272	1.36	1.36	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-39-3	Barium	79200	ug/Kg	N	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-41-7	Beryllium	0.556	mg/kg		0.0272	0.136	0.136	2	MS	PRB	04/17/10 20:12	100417-2	960816
7440-43-9	Cadmium	150	ug/Kg	J	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-70-2	Calcium	2320000	ug/Kg		11700	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-47-3	Chromium	20000	ug/Kg	*	219	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-48-4	Cobalt	2480	ug/Kg		219	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-50-8	Copper	13600	ug/Kg		439	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-89-6	Iron	8670000	ug/Kg		11700	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-92-1	Lead	20300	ug/Kg		366	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-95-4	Magnesium	999000	ug/Kg	N	12400	43900	43900	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-96-5	Manganese	402000	ug/Kg		293	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813
7439-97-6	Mercury	36.7	ug/kg		6	17.7	17.7	1	AV	JXL1	03/17/10 14:25	031710S2-4	964726
7440-02-0	Nickel	6.17	mg/kg		0.136	0.544	0.544	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-09-7	Potassium	928000	ug/Kg	N	9360	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7782-49-2	Selenium	1.36	mg/kg	U	0.681	1.36	1.36	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-22-4	Silver	731	ug/Kg	U	146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-23-5	Sodium	79100	ug/Kg		10200	36600	36600	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-28-0	Thallium	0.272	mg/kg	U	0.0817	0.272	0.272	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-61-1	Uranium	2.78	mg/kg		0.018	0.0544	0.0544	2	MS	BCD1	04/17/10 15:46	100417-3	960816
7440-62-2	Vanadium	11000	ug/Kg		146	731	731	1	P	HSC	03/31/10 11:39	033110-1	960813
7440-66-6	Zinc	47600	ug/Kg		483	1460	1460	1	P	HSC	03/31/10 11:39	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.509	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.547	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.506	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371012

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7486

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	6880000	ug/Kg		8600	25300	25300	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-36-0	Antimony	608	ug/Kg	J	417	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-38-2	Arsenic	1.6	mg/kg		0.244	1.22	1.22	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-39-3	Barium	69700	ug/Kg	N	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-41-7	Beryllium	0.495	mg/kg		0.0244	0.122	0.122	2	MS	PRB	04/17/10 20:14	100417-2	960816
7440-43-9	Cadmium	632	ug/Kg	U	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-70-2	Calcium	1710000	ug/Kg		10100	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-47-3	Chromium	20600	ug/Kg	*	190	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-48-4	Cobalt	2890	ug/Kg		190	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-50-8	Copper	6340	ug/Kg		379	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-89-6	Iron	10600000	ug/Kg		10100	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-92-1	Lead	10100	ug/Kg		316	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-95-4	Magnesium	1500000	ug/Kg	N	10800	37900	37900	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-96-5	Manganese	221000	ug/Kg		253	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813
7439-97-6	Mercury	45.8	ug/kg		4.42	13	13	1	AV	JXL1	03/17/10 14:27	031710S2-4	964726
7440-02-0	Nickel	4.93	mg/kg		0.122	0.488	0.488	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-09-7	Potassium	882000	ug/Kg	N	8090	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7782-49-2	Selenium	1.22	mg/kg	U	0.61	1.22	1.22	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-22-4	Silver	632	ug/Kg	U	126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-23-5	Sodium	87300	ug/Kg		8850	31600	31600	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-28-0	Thallium	0.0806	mg/kg	J	0.0733	0.244	0.244	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-61-1	Uranium	2.21	mg/kg		0.0161	0.0488	0.0488	2	MS	BCD1	04/17/10 15:58	100417-3	960816
7440-62-2	Vanadium	16300	ug/Kg		126	632	632	1	P	HSC	03/31/10 11:46	033110-1	960813
7440-66-6	Zinc	37900	ug/Kg		417	1260	1260	1	P	HSC	03/31/10 11:46	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.501	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.519	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.585	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371013

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7477

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3260000	ug/Kg		8260	24300	24300	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-36-0	Antimony	1210	ug/Kg	U	401	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-38-2	Arsenic	1.43	mg/kg		0.232	1.16	1.16	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-39-3	Barium	61700	ug/Kg	N	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-41-7	Beryllium	0.359	mg/kg		0.0232	0.116	0.116	2	MS	PRB	04/17/10 20:19	100417-2	960816
7440-43-9	Cadmium	607	ug/Kg	U	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-70-2	Calcium	1640000	ug/Kg		9720	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-47-3	Chromium	7710	ug/Kg	*	182	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-48-4	Cobalt	1750	ug/Kg		182	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-50-8	Copper	4820	ug/Kg		364	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-89-6	Iron	6730000	ug/Kg		9720	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-92-1	Lead	6140	ug/Kg		304	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-95-4	Magnesium	615000	ug/Kg	N	10300	36400	36400	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-96-5	Manganese	189000	ug/Kg		243	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813
7439-97-6	Mercury	12.4	ug/kg	J	4.95	14.6	14.6	1	AV	JXL1	03/17/10 14:28	031710S2-4	964726
7440-02-0	Nickel	3.16	mg/kg		0.116	0.464	0.464	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-09-7	Potassium	593000	ug/Kg	N	7770	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-22-4	Silver	607	ug/Kg	U	121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-23-5	Sodium	165000	ug/Kg		8500	30400	30400	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-28-0	Thallium	0.232	mg/kg	U	0.0696	0.232	0.232	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-61-1	Uranium	0.739	mg/kg		0.0153	0.0464	0.0464	2	MS	BCD1	04/17/10 16:02	100417-3	960816
7440-62-2	Vanadium	12100	ug/Kg		121	607	607	1	P	HSC	03/31/10 12:07	033110-1	960813
7440-66-6	Zinc	32800	ug/Kg		401	1210	1210	1	P	HSC	03/31/10 12:07	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.539	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.564	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.539	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371014

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7489

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	5800000	ug/Kg		9640	28400	28400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-36-0	Antimony	1420	ug/Kg	U	468	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-38-2	Arsenic	2.02	mg/kg		0.277	1.38	1.38	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-39-3	Barium	59700	ug/Kg	N	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-41-7	Beryllium	0.538	mg/kg		0.0277	0.138	0.138	2	MS	PRB	04/17/10 20:21	100417-2	960816
7440-43-9	Cadmium	709	ug/Kg	U	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-70-2	Calcium	2120000	ug/Kg		11300	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-47-3	Chromium	29900	ug/Kg	*	213	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-48-4	Cobalt	3370	ug/Kg		213	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-50-8	Copper	5340	ug/Kg		425	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-89-6	Iron	10600000	ug/Kg		11300	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-92-1	Lead	10500	ug/Kg		354	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-95-4	Magnesium	1210000	ug/Kg	N	12100	42500	42500	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-96-5	Manganese	260000	ug/Kg		284	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813
7439-97-6	Mercury	21.7	ug/kg		5.64	16.6	16.6	1	AV	JXL1	03/17/10 14:30	031710S2-4	964726
7440-02-0	Nickel	6.57	mg/kg		0.138	0.554	0.554	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-09-7	Potassium	1160000	ug/Kg	N	9070	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7782-49-2	Selenium	1.38	mg/kg	U	0.692	1.38	1.38	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-22-4	Silver	203	ug/Kg	J	142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-23-5	Sodium	77400	ug/Kg		9920	35400	35400	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-28-0	Thallium	0.277	mg/kg	U	0.0831	0.277	0.277	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-61-1	Uranium	1.24	mg/kg		0.0183	0.0554	0.0554	2	MS	BCD1	04/17/10 16:06	100417-3	960816
7440-62-2	Vanadium	14600	ug/Kg		142	709	709	1	P	HSC	03/31/10 12:13	033110-1	960813
7440-66-6	Zinc	41900	ug/Kg		468	1420	1420	1	P	HSC	03/31/10 12:13	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.543	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.556	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.557	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371015

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7479

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	5200000	ug/Kg		9240	27200	27200	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-36-0	Antimony	1360	ug/Kg	U	448	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-38-2	Arsenic	1.13	mg/kg	J	0.272	1.36	1.36	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-39-3	Barium	75500	ug/Kg	N	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-41-7	Beryllium	0.445	mg/kg		0.0272	0.136	0.136	2	MS	PRB	04/17/10 20:23	100417-2	960816
7440-43-9	Cadmium	679	ug/Kg	U	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-70-2	Calcium	2710000	ug/Kg		10900	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-47-3	Chromium	22000	ug/Kg	*	204	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-48-4	Cobalt	2850	ug/Kg		204	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-50-8	Copper	5360	ug/Kg		408	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-89-6	Iron	9160000	ug/Kg		10900	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-92-1	Lead	9550	ug/Kg		340	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-95-4	Magnesium	1020000	ug/Kg	N	11500	40800	40800	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-96-5	Manganese	319000	ug/Kg		272	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813
7439-97-6	Mercury	24.7	ug/kg		5.61	16.5	16.5	1	AV	JXL1	03/17/10 14:32	031710S2-4	964726
7440-02-0	Nickel	5.1	mg/kg		0.136	0.543	0.543	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-09-7	Potassium	1150000	ug/Kg	N	8700	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7782-49-2	Selenium	1.36	mg/kg	U	0.679	1.36	1.36	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-22-4	Silver	679	ug/Kg	U	136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-23-5	Sodium	90600	ug/Kg		9510	34000	34000	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-28-0	Thallium	0.272	mg/kg	U	0.0815	0.272	0.272	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-61-1	Uranium	1.6	mg/kg		0.0179	0.0543	0.0543	2	MS	BCD1	04/17/10 16:10	100417-3	960816
7440-62-2	Vanadium	12300	ug/Kg		136	679	679	1	P	HSC	03/31/10 12:20	033110-1	960813
7440-66-6	Zinc	36000	ug/Kg		448	1360	1360	1	P	HSC	03/31/10 12:20	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.506	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.5	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371016

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7482

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 76

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5130000	ug/Kg		7880	23200	23200	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-36-0	Antimony	1100	ug/Kg	J	382	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-38-2	Arsenic	1.31	mg/kg		0.239	1.19	1.19	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-39-3	Barium	57600	ug/Kg	N	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-41-7	Beryllium	0.557	mg/kg		0.0239	0.119	0.119	2	MS	PRB	04/17/10 20:24	100417-2	960816
7440-43-9	Cadmium	579	ug/Kg	U	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-70-2	Calcium	1640000	ug/Kg		9270	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-47-3	Chromium	47300	ug/Kg	*	174	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-48-4	Cobalt	2280	ug/Kg		174	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-50-8	Copper	7870	ug/Kg		348	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-89-6	Iron	9570000	ug/Kg		9270	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-92-1	Lead	11500	ug/Kg		290	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-95-4	Magnesium	918000	ug/Kg	N	9850	34800	34800	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-96-5	Manganese	321000	ug/Kg		232	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813
7439-97-6	Mercury	21.6	ug/kg		4.69	13.8	13.8	1	AV	JXL1	03/17/10 14:34	031710S2-4	964726
7440-02-0	Nickel	5.56	mg/kg		0.119	0.478	0.478	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-09-7	Potassium	836000	ug/Kg	N	7420	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7782-49-2	Selenium	1.19	mg/kg	U	0.597	1.19	1.19	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-22-4	Silver	193	ug/Kg	J	116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-23-5	Sodium	89900	ug/Kg		8110	29000	29000	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-28-0	Thallium	0.239	mg/kg	U	0.0717	0.239	0.239	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-61-1	Uranium	0.926	mg/kg		0.0158	0.0478	0.0478	2	MS	BCD1	04/17/10 16:15	100417-3	960816
7440-62-2	Vanadium	10800	ug/Kg		116	579	579	1	P	HSC	03/31/10 12:27	033110-1	960813
7440-66-6	Zinc	43700	ug/Kg		382	1160	1160	1	P	HSC	03/31/10 12:27	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.57	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.553	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.575	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371017

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7480

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	4740000	ug/Kg		7510	22100	22100	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-36-0	Antimony	1100	ug/Kg	U	365	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-38-2	Arsenic	0.995	mg/kg	J	0.221	1.1	1.1	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-39-3	Barium	52200	ug/Kg	N	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-41-7	Beryllium	0.483	mg/kg		0.0221	0.11	0.11	2	MS	PRB	04/17/10 20:26	100417-2	960816
7440-43-9	Cadmium	552	ug/Kg	U	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-70-2	Calcium	1370000	ug/Kg		8840	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-47-3	Chromium	7510	ug/Kg	*	166	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-48-4	Cobalt	2410	ug/Kg		166	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-50-8	Copper	3440	ug/Kg		331	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-89-6	Iron	9270000	ug/Kg		8840	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-92-1	Lead	6400	ug/Kg		276	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-95-4	Magnesium	938000	ug/Kg	N	9390	33100	33100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-96-5	Manganese	263000	ug/Kg		221	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813
7439-97-6	Mercury	13	ug/kg		4.08	12	12	1	AV	JXL1	03/17/10 14:35	031710S2-4	964726
7440-02-0	Nickel	4.64	mg/kg		0.11	0.442	0.442	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-09-7	Potassium	855000	ug/Kg	N	7070	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7782-49-2	Selenium	1.1	mg/kg	U	0.552	1.1	1.1	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-22-4	Silver	155	ug/Kg	J	110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-23-5	Sodium	85300	ug/Kg		7730	27600	27600	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-28-0	Thallium	0.221	mg/kg	U	0.0663	0.221	0.221	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-61-1	Uranium	0.647	mg/kg		0.0146	0.0442	0.0442	2	MS	BCD1	04/17/10 16:19	100417-3	960816
7440-62-2	Vanadium	11000	ug/Kg		110	552	552	1	P	HSC	03/31/10 12:35	033110-1	960813
7440-66-6	Zinc	34100	ug/Kg		365	1100	1100	1	P	HSC	03/31/10 12:35	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.515	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.569	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371018

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7485

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5220000	ug/Kg		9100	26800	26800	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-36-0	Antimony	1340	ug/Kg	U	442	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-38-2	Arsenic	1.22	mg/kg	J	0.25	1.25	1.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-39-3	Barium	50600	ug/Kg	N	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-41-7	Beryllium	0.383	mg/kg		0.025	0.125	0.125	2	MS	PRB	04/17/10 20:28	100417-2	960816
7440-43-9	Cadmium	669	ug/Kg	U	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-70-2	Calcium	1580000	ug/Kg		10700	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-47-3	Chromium	7510	ug/Kg	*	201	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-48-4	Cobalt	2190	ug/Kg		201	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-50-8	Copper	5160	ug/Kg		402	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-89-6	Iron	9570000	ug/Kg		10700	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-92-1	Lead	11100	ug/Kg		335	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-95-4	Magnesium	1020000	ug/Kg	N	11400	40200	40200	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-96-5	Manganese	243000	ug/Kg		268	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813
7439-97-6	Mercury	51.2	ug/kg		5.43	16	16	1	AV	JXL1	03/17/10 14:40	031710S2-4	964726
7440-02-0	Nickel	3.66	mg/kg		0.125	0.499	0.499	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-09-7	Potassium	770000	ug/Kg	N	8570	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7782-49-2	Selenium	1.25	mg/kg	U	0.624	1.25	1.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-22-4	Silver	669	ug/Kg	U	134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-23-5	Sodium	74500	ug/Kg		9370	33500	33500	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-28-0	Thallium	0.250	mg/kg	U	0.0749	0.25	0.25	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-61-1	Uranium	1.52	mg/kg		0.0165	0.0499	0.0499	2	MS	BCD1	04/17/10 16:23	100417-3	960816
7440-62-2	Vanadium	12800	ug/Kg		134	669	669	1	P	HSC	03/31/10 12:42	033110-1	960813
7440-66-6	Zinc	38100	ug/Kg		442	1340	1340	1	P	HSC	03/31/10 12:42	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.508	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.545	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.511	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371019

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7488

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11100000	ug/Kg		7200	21200	21200	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-36-0	Antimony	1060	ug/Kg	U	349	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-38-2	Arsenic	2.2	mg/kg		0.221	1.11	1.11	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-39-3	Barium	118000	ug/Kg	N	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-41-7	Beryllium	0.661	mg/kg		0.0221	0.111	0.111	2	MS	PRB	04/17/10 20:30	100417-2	960816
7440-43-9	Cadmium	529	ug/Kg	U	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-70-2	Calcium	2560000	ug/Kg		8470	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-47-3	Chromium	13900	ug/Kg	*	159	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-48-4	Cobalt	5540	ug/Kg		159	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-50-8	Copper	7820	ug/Kg		318	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-89-6	Iron	13900000	ug/Kg		8470	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-92-1	Lead	10600	ug/Kg		265	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-95-4	Magnesium	1990000	ug/Kg	N	9000	31800	31800	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-96-5	Manganese	205000	ug/Kg		212	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813
7439-97-6	Mercury	32	ug/kg		4.32	12.7	12.7	1	AV	JXL1	03/17/10 14:42	031710S2-4	964726
7440-02-0	Nickel	7.82	mg/kg		0.111	0.442	0.442	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-09-7	Potassium	1500000	ug/Kg	N	6780	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-22-4	Silver	107	ug/Kg	J	106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-23-5	Sodium	203000	ug/Kg		7410	26500	26500	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-28-0	Thallium	0.143	mg/kg	J	0.0663	0.221	0.221	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-61-1	Uranium	1	mg/kg		0.0146	0.0442	0.0442	2	MS	BCD1	04/17/10 16:27	100417-3	960816
7440-62-2	Vanadium	26600	ug/Kg		106	529	529	1	P	HSC	03/31/10 12:49	033110-1	960813
7440-66-6	Zinc	28500	ug/Kg		349	1060	1060	1	P	HSC	03/31/10 12:49	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.525	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.503	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.525	g	30	mL	03/16/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2151

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248371020

BASIS: Dry Weight

DATE COLLECTED 24-FEB-10

CLIENT ID: RE36-10-7484

LEVEL: Low

DATE RECEIVED 02-MAR-10

MATRIX: SOIL

%SOLIDS: 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4120000	ug/Kg		7840	23100	23100	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-36-0	Antimony	1150	ug/Kg	U	381	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-38-2	Arsenic	1.56	mg/kg		0.242	1.21	1.21	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-39-3	Barium	59800	ug/Kg	N	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-41-7	Beryllium	0.584	mg/kg		0.0242	0.121	0.121	2	MS	PRB	04/17/10 20:31	100417-2	960816
7440-43-9	Cadmium	577	ug/Kg	U	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-70-2	Calcium	3360000	ug/Kg		9230	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-47-3	Chromium	4840	ug/Kg	*	173	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-48-4	Cobalt	1800	ug/Kg		173	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-50-8	Copper	5250	ug/Kg		346	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-89-6	Iron	6590000	ug/Kg		9230	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-92-1	Lead	9300	ug/Kg		288	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-95-4	Magnesium	1080000	ug/Kg	N	9800	34600	34600	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-96-5	Manganese	384000	ug/Kg		231	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813
7439-97-6	Mercury	27.1	ug/kg		4.62	13.6	13.6	1	AV	JXL1	03/17/10 14:44	031710S2-4	964726
7440-02-0	Nickel	4.59	mg/kg		0.121	0.483	0.483	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-09-7	Potassium	1070000	ug/Kg	N	7380	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7782-49-2	Selenium	1.21	mg/kg	U	0.604	1.21	1.21	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-22-4	Silver	176	ug/Kg	J	115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-23-5	Sodium	65000	ug/Kg		8070	28800	28800	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-28-0	Thallium	0.242	mg/kg	U	0.0725	0.242	0.242	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-61-1	Uranium	1.51	mg/kg		0.016	0.0483	0.0483	2	MS	BCD1	04/17/10 16:31	100417-3	960816
7440-62-2	Vanadium	8020	ug/Kg		115	577	577	1	P	HSC	03/31/10 12:56	033110-1	960813
7440-66-6	Zinc	30700	ug/Kg		381	1150	1150	1	P	HSC	03/31/10 12:56	033110-1	960813

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
960813	960812	SW846 3050B	0.525	g	50	mL	03/09/10	AXG2
960816	960815	SW846 3050B	0.501	g	50	mL	03/09/10	AXG2
964726	964724	SW846 7471A Prep	0.535	g	30	mL	03/16/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.13	ug/L	5	ug/L	102.6	90.0 – 110.0	AV	17-MAR-10 09:48	031710S2-4
	Aluminum	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Antimony	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Barium	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Cadmium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Magnesium	5450	ug/L	5000	ug/L	109	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Manganese	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Potassium	2530	ug/L	2500	ug/L	101.3	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Silver	255	ug/L	250	ug/L	102.1	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Sodium	2550	ug/L	2500	ug/L	102.2	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Vanadium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Zinc	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	31-MAR-10 07:08	033110-1
	Arsenic	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	17-APR-10 13:49	100417-3
	Nickel	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	17-APR-10 13:49	100417-3
	Selenium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	17-APR-10 13:49	100417-3
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	17-APR-10 13:49	100417-3
	Uranium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	17-APR-10 13:49	100417-3
	Beryllium	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	17-APR-10 19:29	100417-2
CCV01										
	Mercury	5.11	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	17-MAR-10 09:53	031710S2-4
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Antimony	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Barium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	31-MAR-10 07:56	033110-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Cobalt	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Copper	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Magnesium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Potassium	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Zinc	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31-MAR-10 07:56	033110-1
	Arsenic	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	17-APR-10 14:10	100417-3
	Nickel	49	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	17-APR-10 14:10	100417-3
	Selenium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	17-APR-10 14:10	100417-3
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	17-APR-10 14:10	100417-3
	Uranium	52.4	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	17-APR-10 14:10	100417-3
	Beryllium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	17-APR-10 19:37	100417-2
CCV02										
	Mercury	5.2	ug/L	5	ug/L	104	80.0 – 120.0	AV	17-MAR-10 10:13	031710S2-4
	Aluminum	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Antimony	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Barium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Cadmium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Cobalt	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	31-MAR-10 08:18	033110-1
	Iron	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	31-MAR-10 08:18	033110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Potassium	5070	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Silver	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	31-MAR-10 08:18	033110-1
	Arsenic	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	17-APR-10 14:22	100417-3
	Nickel	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	17-APR-10 14:22	100417-3
	Selenium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	17-APR-10 14:22	100417-3
	Thallium	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	17-APR-10 14:22	100417-3
	Uranium	53.2	ug/L	50	ug/L	106.5	90.0 - 110.0	MS	17-APR-10 14:22	100417-3
	Beryllium	49.9	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	17-APR-10 19:57	100417-2
CCV03										
	Mercury	5.22	ug/L	5	ug/L	104.4	80.0 - 120.0	AV	17-MAR-10 10:33	031710S2-4
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Antimony	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Barium	490	ug/L	500	ug/L	98	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Chromium	490	ug/L	500	ug/L	98	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Cobalt	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Copper	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Lead	490	ug/L	500	ug/L	98	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Magnesium	5100	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 - 110.0	P	31-MAR-10 09:19	033110-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	31-MAR-10 09:19	033110-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	10200	ug/L	10000	ug/L	101.6	90.0 – 110.0	P	31-MAR-10 09:19	033110-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	31-MAR-10 09:19	033110-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	31-MAR-10 09:19	033110-1
	Arsenic	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	17-APR-10 15:00	100417-3
	Nickel	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	17-APR-10 15:00	100417-3
	Selenium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	17-APR-10 15:00	100417-3
	Thallium	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	17-APR-10 15:00	100417-3
	Uranium	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	17-APR-10 15:00	100417-3
	Beryllium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	17-APR-10 20:16	100417-2
CCV04										
	Mercury	4.91	ug/L	5	ug/L	98.3	80.0 – 120.0	AV	17-MAR-10 10:54	031710S2-4
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Antimony	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Barium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Cadmium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Calcium	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Chromium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Cobalt	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Copper	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Iron	4840	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Lead	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Magnesium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Manganese	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Potassium	4870	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Silver	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	31-MAR-10 10:35	033110-1
	Arsenic	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	17-APR-10 15:50	100417-3
	Nickel	52.8	ug/L	50	ug/L	105.5	90.0 – 110.0	MS	17-APR-10 15:50	100417-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	17-APR-10 15:50	100417-3
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	17-APR-10 15:50	100417-3
	Uranium	54.6	ug/L	50	ug/L	109.1	90.0 – 110.0	MS	17-APR-10 15:50	100417-3
	Beryllium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	17-APR-10 20:33	100417-2
CCV05										
	Mercury	4.93	ug/L	5	ug/L	98.6	80.0 – 120.0	AV	17-MAR-10 11:14	031710S2-4
	Aluminum	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Antimony	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Calcium	4830	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Chromium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Cobalt	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Iron	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Lead	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Magnesium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Potassium	4770	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Silver	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	31-MAR-10 11:53	033110-1
	Arsenic	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	17-APR-10 16:35	100417-3
	Nickel	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	17-APR-10 16:35	100417-3
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	17-APR-10 16:35	100417-3
	Thallium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	17-APR-10 16:35	100417-3
	Uranium	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	17-APR-10 16:35	100417-3
CCV06										
	Mercury	4.96	ug/L	5	ug/L	99.1	80.0 – 120.0	AV	17-MAR-10 11:34	031710S2-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Aluminum	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Antimony	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Cadmium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Chromium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Cobalt	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Lead	490	ug/L	500	ug/L	98	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Silver	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Sodium	9970	ug/L	10000	ug/L	99.7	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	31-MAR-10 13:03	033110-1
CCV07										
	Mercury	4.97	ug/L	5	ug/L	99.3	80.0 – 120.0	AV	17-MAR-10 11:54	031710S2-4
CCV08										
	Mercury	4.91	ug/L	5	ug/L	98.1	80.0 – 120.0	AV	17-MAR-10 12:14	031710S2-4
CCV09										
	Mercury	4.94	ug/L	5	ug/L	98.8	80.0 – 120.0	AV	17-MAR-10 12:34	031710S2-4
CCV10										
	Mercury	4.93	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	17-MAR-10 12:55	031710S2-4
CCV11										
	Mercury	5.08	ug/L	5	ug/L	101.5	80.0 – 120.0	AV	17-MAR-10 13:15	031710S2-4
CCV12										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	17-MAR-10 13:35	031710S2-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV13	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	17-MAR-10 13:56	031710S2-4
CCV14	Mercury	5.14	ug/L	5	ug/L	102.9	80.0 – 120.0	AV	17-MAR-10 14:16	031710S2-4
CCV15	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	17-MAR-10 14:37	031710S2-4
CCV16	Mercury	5.01	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	17-MAR-10 14:45	031710S2-4

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS4,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.199	ug/L	.2	ug/L	99.5	70.0 – 130.0	AV	17-MAR-10 09:52	031710S2-4
	Nickel	2.31	ug/L	2	ug/L	115.5	70.0 – 130.0	MS	17-APR-10 13:57	100417-3
	Thallium	1.1	ug/L	1	ug/L	109.9	70.0 – 130.0	MS	17-APR-10 13:57	100417-3
	Selenium	5.44	ug/L	5	ug/L	108.8	70.0 – 130.0	MS	17-APR-10 13:57	100417-3
	Uranium	.274	ug/L	.2	ug/L	137	70.0 – 130.0	MS	17-APR-10 13:57	100417-3
	Arsenic	5.71	ug/L	5	ug/L	114.1	70.0 – 130.0	MS	17-APR-10 13:57	100417-3
	Beryllium	.644	ug/L	.5	ug/L	128.8	70.0 – 130.0	MS	17-APR-10 19:32	100417-2
PQL01										
	Aluminum	213	ug/L	200	ug/L	106.3	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Iron	87.1	ug/L	100	ug/L	87.1	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Lead	10.2	ug/L	10	ug/L	102.3	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Magnesium	410	ug/L	300	ug/L	136.7	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Manganese	10.6	ug/L	10	ug/L	106	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Potassium	142	ug/L	150	ug/L	94.8	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Silver	4.98	ug/L	5	ug/L	99.7	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Sodium	317	ug/L	300	ug/L	105.8	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Antimony	12.5	ug/L	10	ug/L	125.1	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Barium	5.06	ug/L	5	ug/L	101.1	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Cadmium	4.79	ug/L	5	ug/L	95.9	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Chromium	4.59	ug/L	5	ug/L	91.8	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Cobalt	4.89	ug/L	5	ug/L	97.8	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Copper	10.5	ug/L	10	ug/L	104.5	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Vanadium	5.61	ug/L	5	ug/L	112.3	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Zinc	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	31-MAR-10 07:22	033110-1
	Calcium	216	ug/L	200	ug/L	108	70.0 – 130.0	P	31-MAR-10 07:22	033110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 09:50	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 07:15	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 07:15	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 07:15	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 07:15	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 07:15	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 07:15	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 07:15	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 07:15	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 07:15	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 07:15	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 07:15	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 07:15	033110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 13:53	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 13:53	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 13:53	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 13:53	100417-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	17-APR-10 13:53	100417-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	17-APR-10 19:30	100417-2
CCB01	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 09:55	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 08:03	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 08:03	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 08:03	033110-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 08:03	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 08:03	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 08:03	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 08:03	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 08:03	033110-1
	Potassium	117.36	+/-250	J	64.0	250	SOL	P	31-MAR-10 08:03	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Sodium	79.94	+/-250	J	70.0	250	SOL	P	31-MAR-10 08:03	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:03	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 08:03	033110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 14:14	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 14:14	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 14:14	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 14:14	100417-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	17-APR-10 14:14	100417-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	17-APR-10 19:39	100417-2
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 10:15	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 08:25	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 08:25	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 08:25	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 08:25	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 08:25	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 08:25	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 08:25	033110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 08:25	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 08:25	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 08:25	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 08:25	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 08:25	033110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 14:26	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 14:26	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 14:26	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 14:26	100417-3
	Uranium	0.2	+/-2		0.066	0.2	SOL	MS	17-APR-10 14:26	100417-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	17-APR-10 19:59	100417-2
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 10:35	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 09:26	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 09:26	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 09:26	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 09:26	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 09:26	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 09:26	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 09:26	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 09:26	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 09:26	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 09:26	033110-1
	Vanadium	1.1	+/-5	J	1.0	5.0	SOL	P	31-MAR-10 09:26	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 09:26	033110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 15:04	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 15:04	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 15:04	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 15:04	100417-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	17-APR-10 15:04	100417-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	17-APR-10 20:18	100417-2
CCB04										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 10:55	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 10:42	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 10:42	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 10:42	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 10:42	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 10:42	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 10:42	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 10:42	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 10:42	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 10:42	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 10:42	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 10:42	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 10:42	033110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 15:54	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 15:54	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 15:54	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 15:54	100417-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	17-APR-10 15:54	100417-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	17-APR-10 20:35	100417-2

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 11:15	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 12:00	033110-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 12:00	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 12:00	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 12:00	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 12:00	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 12:00	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 12:00	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 12:00	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 12:00	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 12:00	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 12:00	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 12:00	033110-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	17-APR-10 16:39	100417-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	17-APR-10 16:39	100417-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	17-APR-10 16:39	100417-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-APR-10 16:39	100417-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	17-APR-10 16:39	100417-3
CCB06										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 11:35	031710S2-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	31-MAR-10 13:10	033110-1
	Antimony	4.17	+/-10	J	3.3	10.0	SOL	P	31-MAR-10 13:10	033110-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 13:10	033110-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 13:10	033110-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 13:10	033110-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 13:10	033110-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	31-MAR-10 13:10	033110-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	31-MAR-10 13:10	033110-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	31-MAR-10 13:10	033110-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	31-MAR-10 13:10	033110-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	31-MAR-10 13:10	033110-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	31-MAR-10 13:10	033110-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	31-MAR-10 13:10	033110-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 13:10	033110-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	31-MAR-10 13:10	033110-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	31-MAR-10 13:10	033110-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	31-MAR-10 13:10	033110-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 11:56	031710S2-4
CCB08	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 12:16	031710S2-4
CCB09	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 12:36	031710S2-4
CCB10	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 12:56	031710S2-4
CCB11	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 13:17	031710S2-4
CCB12	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 13:37	031710S2-4
CCB13	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 13:58	031710S2-4
CCB14	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 14:18	031710S2-4
CCB15	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 14:39	031710S2-4
CCB16	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	17-MAR-10 14:47	031710S2-4

SW846

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-2151
Contract: LANL01004
Matrix: SOIL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202060824	Aluminum	6610	ug/Kg	+/-19500	U	P	6610	19500
	Antimony	351	ug/Kg	+/-973	J	P	321	973
	Barium	97.3	ug/Kg	+/-486	U	P	97.3	486
	Cadmium	97.3	ug/Kg	+/-486	U	P	97.3	486
	Calcium	7780	ug/Kg	+/-24300	U	P	7780	24300
	Chromium	146	ug/Kg	+/-486	U	P	146	486
	Cobalt	146	ug/Kg	+/-486	U	P	146	486
	Copper	292	ug/Kg	+/-973	U	P	292	973
	Iron	7780	ug/Kg	+/-24300	U	P	7780	24300
	Lead	243	ug/Kg	+/-973	U	P	243	973
	Magnesium	8270	ug/Kg	+/-29200	U	P	8270	29200
	Manganese	195	ug/Kg	+/-973	U	P	195	973
	Potassium	-6980	ug/Kg	+/-24300	J	P	6230	24300
	Silver	97.3	ug/Kg	+/-486	U	P	97.3	486
	Sodium	6810	ug/Kg	+/-24300	U	P	6810	24300
	Vanadium	104	ug/Kg	+/-486	J	P	97.3	486
	Zinc	321	ug/Kg	+/-973	U	P	321	973
1202060830	Arsenic	0.192	mg/kg	+/-0.962	U	MS	0.192	0.962
	Beryllium	0.0192	mg/kg	+/-0.0962	U	MS	0.0192	0.0962
	Nickel	0.0962	mg/kg	+/-0.385	U	MS	0.0962	0.385
	Selenium	0.481	mg/kg	+/-0.962	U	MS	0.481	0.962
	Thallium	0.0577	mg/kg	+/-0.192	U	MS	0.0577	0.192
	Uranium	0.0219	mg/kg	+/-0.0385	J	MS	0.0127	0.0385
1202069720	Mercury	3.43	ug/kg	+/-10.1	U	AV	3.43	10.1

METALS
-4-
Interference Check Sample

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	528000	ug/L	500000	ug/L	106	80.0 – 120.0	31-MAR-10 07:29	033110-1
	Antimony	-1.37	ug/L					31-MAR-10 07:29	033110-1
	Barium	-0.261	ug/L					31-MAR-10 07:29	033110-1
	Cadmium	-1.41	ug/L					31-MAR-10 07:29	033110-1
	Calcium	484000	ug/L	500000	ug/L	96.9	80.0 – 120.0	31-MAR-10 07:29	033110-1
	Chromium	-3.76	ug/L					31-MAR-10 07:29	033110-1
	Cobalt	-0.936	ug/L					31-MAR-10 07:29	033110-1
	Copper	0.321	ug/L					31-MAR-10 07:29	033110-1
	Iron	187000	ug/L	200000	ug/L	93.4	80.0 – 120.0	31-MAR-10 07:29	033110-1
	Lead	-1.82	ug/L					31-MAR-10 07:29	033110-1
	Magnesium	491000	ug/L	500000	ug/L	98.1	80.0 – 120.0	31-MAR-10 07:29	033110-1
	Manganese	-3.6	ug/L					31-MAR-10 07:29	033110-1
	Potassium	-164.0	ug/L					31-MAR-10 07:29	033110-1
	Silver	-2.66	ug/L					31-MAR-10 07:29	033110-1
	Sodium	57.2	ug/L					31-MAR-10 07:29	033110-1
	Vanadium	-3.55	ug/L					31-MAR-10 07:29	033110-1
	Zinc	-1.76	ug/L					31-MAR-10 07:29	033110-1
ICSAB01									
	Aluminum	514000	ug/L	500000	ug/L	103	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Antimony	522	ug/L	500	ug/L	104	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Barium	491	ug/L	500	ug/L	98.2	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Cadmium	473	ug/L	500	ug/L	94.7	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Calcium	477000	ug/L	500000	ug/L	95.5	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Chromium	490	ug/L	500	ug/L	98	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Cobalt	447	ug/L	500	ug/L	89.4	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Copper	553	ug/L	500	ug/L	111	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Iron	189000	ug/L	200000	ug/L	94.3	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Lead	464	ug/L	500	ug/L	92.8	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Magnesium	495000	ug/L	500000	ug/L	99	80.0 – 120.0	31-MAR-10 07:35	033110-1

METALS
-4-
Interference Check Sample

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	486	ug/L	500	ug/L	97.3	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Potassium	5260	ug/L	5000	ug/L	105	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Silver	277	ug/L	250	ug/L	111	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Sodium	5480	ug/L	5000	ug/L	110	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Vanadium	514	ug/L	500	ug/L	103	80.0 – 120.0	31-MAR-10 07:35	033110-1
	Zinc	499	ug/L	500	ug/L	99.7	80.0 – 120.0	31-MAR-10 07:35	033110-1

METALS

-4-

Interference Check Sample

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.089	ug/L					17-APR-10 19:34	100417-2
ICSAB01	Beryllium	20.1	ug/L	20	ug/L	100	80.0 - 120.0	17-APR-10 19:35	100417-2

METALS

-4-

Interference Check Sample

SDG No: 10-2151

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	-0.642	ug/L					17-APR-10 14:01	100417-3
	Nickel	2.6	ug/L					17-APR-10 14:01	100417-3
	Selenium	-0.19	ug/L					17-APR-10 14:01	100417-3
	Thallium	-0.006	ug/L					17-APR-10 14:01	100417-3
	Uranium	0.001	ug/L					17-APR-10 14:01	100417-3
ICSAB01									
	Arsenic	21.2	ug/L	20	ug/L	106	80.0 - 120.0	17-APR-10 14:06	100417-3
	Nickel	21.5	ug/L	23.31	ug/L	92.1	80.0 - 120.0	17-APR-10 14:06	100417-3
	Selenium	23.4	ug/L	20	ug/L	117	80.0 - 120.0	17-APR-10 14:06	100417-3
	Thallium	18.4	ug/L	20	ug/L	92.1	80.0 - 120.0	17-APR-10 14:06	100417-3
	Uranium	20.1	ug/L	20	ug/L	100	80.0 - 120.0	17-APR-10 14:06	100417-3

METALS

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Matrix Spike Summary

SDG NO. 10-2151 Client ID RE36-10-7415S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 58

Sample ID: 248371001 Spike ID: 1202060827

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		11800000		6700000		840000	605	N/A	P
Antimony	ug/Kg	75-125	71000		563	U	84000	84		P
Barium	ug/Kg	75-125	274000		184000		84000	106		P
Cadmium	ug/Kg	75-125	70000		234	J	84000	83.1		P
Calcium	ug/Kg		10400000		8490000		840000	230	N/A	P
Chromium	ug/Kg	75-125	100000		13100		84000	104		P
Cobalt	ug/Kg	75-125	72600		3310		84000	82.5		P
Copper	ug/Kg	75-125	96800		10300		84000	103		P
Iron	ug/Kg		9810000		8180000		840000	194	N/A	P
Lead	ug/Kg	75-125	84000		13800		84000	83.6		P
Magnesium	ug/Kg	75-125	2990000		1880000		840000	132	N	P
Manganese	ug/Kg		643000		549000		84000	111	N/A	P
Potassium	ug/Kg	75-125	2990000		1920000		840000	127	N	P
Silver	ug/Kg	75-125	71000		189	J	84000	84.3		P
Sodium	ug/Kg	75-125	800000		94300		840000	84		P
Vanadium	ug/Kg	75-125	96300		11400		84000	101		P
Zinc	ug/Kg	75-125	124000		42700		84000	96.3		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2151 Client ID RE36-10-7415SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 58

Sample ID: 248371001 Spike ID: 1202060829

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/Kg	75-125	71100		234	J	83800	84.5		P
Calcium	ug/Kg		11400000		8490000		838000	344	N/A	P
Chromium	ug/Kg	75-125	98000		13100		83800	101		P
Cobalt	ug/Kg	75-125	73500		3310		83800	83.7		P
Copper	ug/Kg	75-125	102000		10300		83800	109		P
Iron	ug/Kg		10000000		8180000		838000	218	N/A	P
Lead	ug/Kg	75-125	86600		13800		83800	86.8		P
Magnesium	ug/Kg	75-125	3180000		1880000		838000	155	N	P
Manganese	ug/Kg		702000		549000		83800	183	N/A	P
Potassium	ug/Kg	75-125	3080000		1920000		838000	138	N	P
Silver	ug/Kg	75-125	73400		189	J	83800	87.3		P
Sodium	ug/Kg	75-125	804000		94300		838000	84.7		P
Vanadium	ug/Kg	75-125	100000		11400		83800	106		P
Zinc	ug/Kg	75-125	128000		42700		83800	102		P
Barium	ug/Kg	75-125	304000		184000		83800	143	N	P
Aluminum	ug/Kg		12300000		6700000		838000	663	N/A	P
Antimony	ug/Kg	75-125	72900		563	U	83800	86.5		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2151 Client ID RE36-10-7415S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 58

Sample ID: 248371001 Spike ID: 1202060833

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	mg/kg	75-125	7.64		0.483		8.51	84		MS
Nickel	mg/kg	75-125	16.9		6.8		8.51	119		MS
Selenium	mg/kg	75-125	3.58		0.846	U	3.41	95.4		MS
Thallium	mg/kg	75-125	17.1		0.14	J	17	99.8		MS
Uranium	mg/kg	75-125	12.2		3.55		8.51	101		MS
Arsenic	mg/kg	75-125	16.3		1.36	J	13.6	109		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2151 Client ID RE36-10-7415SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 58

Sample ID: 248371001 Spike ID: 1202060835

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	14.4		1.36	J	13.5	96.3		MS
Beryllium	mg/kg	75-125	7.26		0.483		8.46	80.1		MS
Nickel	mg/kg	75-125	15.4		6.8		8.46	101		MS
Selenium	mg/kg	75-125	3.32		0.846	U	3.39	88.2		MS
Thallium	mg/kg	75-125	15.7		0.14	J	16.9	91.8		MS
Uranium	mg/kg	75-125	11.2		3.55		8.46	90.1		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2151 Client ID RE36-10-7415S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 58

Sample ID: 248371001 Spike ID: 1202069723

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	271		64.2		202	102		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2151 **Client ID** RE36-10-7415SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 58**Sample ID:** 248371001 **Spike ID:** 1202069725

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	240		64.2		175	100		AV

Metals
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Duplicate Sample Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE36-10-7415D

Sample ID: 248371001

Duplicate ID: 1202060826

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	6700000		6460000		3.66		P
Antimony	ug/Kg		563 U		564 U				P
Barium	ug/Kg	+/-20%	184000		160000		13.8		P
Cadmium	ug/Kg	+/-855	234 J		222 J		5.32		P
Calcium	ug/Kg	+/-20%	8490000		7330000		14.7		P
Chromium	ug/Kg	+/-20%	13100		16300		22	*	P
Cobalt	ug/Kg	+/-855	3310		3090		7.15		P
Copper	ug/Kg	+/-20%	10300		9320		9.71		P
Iron	ug/Kg	+/-20%	8180000		8300000		1.37		P
Lead	ug/Kg	+/-20%	13800		12500		9.92		P
Magnesium	ug/Kg	+/-20%	1880000		1770000		5.88		P
Manganese	ug/Kg	+/-20%	549000		495000		10.4		P
Potassium	ug/Kg	+/-20%	1920000		1720000		11.1		P
Silver	ug/Kg	+/-855	189 J		186 J		1.78		P
Sodium	ug/Kg	+/-42700	94300		84100		11.4		P
Vanadium	ug/Kg	+/-20%	11400		12300		7.47		P
Zinc	ug/Kg	+/-20%	42700		41700		2.35		P

Metals
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Duplicate Sample Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE36-10-7415SD

Sample ID: 1202060827

Duplicate ID: 1202060829

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	11800000		12300000		3.96		P
Antimony	ug/Kg	+/-20	71000		72900		2.69		P
Barium	ug/Kg	+/-20	274000		304000		10.7		P
Cadmium	ug/Kg	+/-20	70000		71100		1.51		P
Calcium	ug/Kg	+/-20	10400000		11400000		8.74		P
Chromium	ug/Kg	+/-20	100000		98000		2.48		P
Cobalt	ug/Kg	+/-20	72600		73500		1.26		P
Copper	ug/Kg	+/-20	96800		102000		4.85		P
Iron	ug/Kg	+/-20	9810000		10000000		2.05		P
Lead	ug/Kg	+/-20	84000		86600		2.97		P
Magnesium	ug/Kg	+/-20	2990000		3180000		6.39		P
Manganese	ug/Kg	+/-20	643000		702000		8.91		P
Potassium	ug/Kg	+/-20	2990000		3080000		2.79		P
Silver	ug/Kg	+/-20	71000		73400		3.32		P
Sodium	ug/Kg	+/-20	800000		804000		.551		P
Vanadium	ug/Kg	+/-20	96300		100000		3.79		P
Zinc	ug/Kg	+/-20	124000		128000		3.68		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE36-10-7415D

Sample ID: 248371001

Duplicate ID: 1202060832

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.69	1.36 J		1.5 J		9.82		MS
Beryllium	mg/kg	+/-1.69	0.483		0.49		1.55		MS
Nickel	mg/kg	+/-20%	6.8		7.42		8.76		MS
Selenium	mg/kg		0.846 U		0.843 U				MS
Thallium	mg/kg	+/-0.337	0.14 J		0.111 J		23.3		MS
Uranium	mg/kg	+/-20%	3.55		3.32		6.6		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE36-10-7415SD

Sample ID: 1202060833

Duplicate ID: 1202060835

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	16.3		14.4		12.1		MS
Beryllium	mg/kg	+/-20	7.64		7.26		5.09		MS
Nickel	mg/kg	+/-20	16.9		15.4		9.7		MS
Selenium	mg/kg	+/-20	3.58		3.32		7.69		MS
Thallium	mg/kg	+/-20	17.1		15.7		8.79		MS
Uranium	mg/kg	+/-20	12.2		11.2		8.32		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2151

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE36-10-7415D

Sample ID: 248371001

Duplicate ID: 1202069722

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-19.7	64.2		70.9		9.9		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2151

Lab Code: GEL

Level: Low

Client ID: RE36-10-7415SD

Duplicate ID: 1202069725

Percent Solids for Dup: 58

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	271		240		11.8		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2151

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202060825								
	Aluminum	ug/Kg	10500000	8820000		84	56-144	P
	Antimony	ug/Kg	173000	112000		64.6	71-130	P
	Barium	ug/Kg	198000	194000		97.8	80-120	P
	Cadmium	ug/Kg	60700	57400		94.6	81-120	P
	Calcium	ug/Kg	9870000	9480000		96	83-117	P
	Chromium	ug/Kg	236000	242000		103	80-120	P
	Cobalt	ug/Kg	91200	90000		98.7	81-120	P
	Copper	ug/Kg	174000	186000		107	81-118	P
	Iron	ug/Kg	18000000	17400000		96.9	51-149	P
	Lead	ug/Kg	86000	88800		103	79-121	P
	Magnesium	ug/Kg	4000000	3560000		88.9	79-122	P
	Manganese	ug/Kg	558000	548000		98.3	81-119	P
	Potassium	ug/Kg	4300000	3870000		90.1	74-127	P
	Silver	ug/Kg	30100	31300		104	66-134	P
	Sodium	ug/Kg	1020000	1030000		101	74-127	P
	Vanadium	ug/Kg	115000	124000		107	79-121	P
	Zinc	ug/Kg	594000	572000		96.2	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2151

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202060831								
	Beryllium	mg/kg	77.6	82.5		106	84-116	MS
	Nickel	mg/kg	134	140		104	78-123	MS
	Selenium	mg/kg	286	297		104	77-123	MS
	Thallium	mg/kg	121	123		102	78-122	MS
	Uranium	mg/kg	2.13	2.04		95.6	73-127	MS
	Arsenic	mg/kg	104	108		104	78-123	MS

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2151

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202069721	Mercury	ug/kg	5150	5440		106	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2151 Client ID RE36-10-7415L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 248371001 Serial Dilution ID: 1202060828

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	39300		37900		3.56		10	P
Antimony	3.3	U	16.5	U				P
Barium	1080		1080		.463		10	P
Cadmium	1.37	J	5	U	100			P
Calcium	49700		48100		3.32		10	P
Chromium	76.6		76.5		.131		10	P
Cobalt	19.4		18.9	J	2.84			P
Copper	60.2		57.5		4.49			P
Iron	48000		47300		1.56		10	P
Lead	81		81		0			P
Magnesium	11000		11000		0		10	P
Manganese	3220		3240		.621		10	P
Potassium	11300		10500		7.08		10	P
Silver	1.11	J	5	U	100			P
Sodium	553		690	J	24.8			P
Vanadium	66.8		69.5		4.04		10	P
Zinc	250		244		2.4		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2151 Client ID RE36-10-7415L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 248371001 Serial Dilution ID: 1202060834

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	4.02	J	5	U	100			MS
Beryllium	1.43		1.55	J	8.04			MS
Nickel	20.1		21.2		5.22			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.414	J	1.5	U	100			MS
Uranium	10.5		10.9		3.33		10	MS

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2151 Client ID RE36-10-7415L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 248371001 Serial Dilution ID: 1202069724

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.648		.555	J	14.4			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 960812							
1202060824	MB for batch 960812	MB	S	09-MAR-10	.514g	50mL	
1202060825	LCS for batch 960812	LCS	S	09-MAR-10	.512g	50mL	
1202060827	RE36-10-7415S	MS	S	09-MAR-10	.51g	50mL	
1202060829	RE36-10-7415SD	MSD	S	09-MAR-10	.511g	50mL	
1202060826	RE36-10-7415D	DUP	S	09-MAR-10	.501g	50mL	
248371001	RE36-10-7415	SAMPLE	S	09-MAR-10	.502g	50mL	
248371002	RE36-10-7420	SAMPLE	S	09-MAR-10	.503g	50mL	
248371003	RE36-10-7418	SAMPLE	S	09-MAR-10	.51g	50mL	
248371004	RE36-10-7417	SAMPLE	S	09-MAR-10	.547g	50mL	
248371005	RE36-10-7419	SAMPLE	S	09-MAR-10	.505g	50mL	
248371006	RE36-10-7416	SAMPLE	S	09-MAR-10	.502g	50mL	
248371007	RE36-10-7478	SAMPLE	S	09-MAR-10	.505g	50mL	
248371008	RE36-10-7490	SAMPLE	S	09-MAR-10	.562g	50mL	
248371009	RE36-10-7487	SAMPLE	S	09-MAR-10	.503g	50mL	
248371010	RE36-10-7483	SAMPLE	S	09-MAR-10	.503g	50mL	
248371011	RE36-10-7481	SAMPLE	S	09-MAR-10	.509g	50mL	
248371012	RE36-10-7486	SAMPLE	S	09-MAR-10	.501g	50mL	
248371013	RE36-10-7477	SAMPLE	S	09-MAR-10	.539g	50mL	
248371014	RE36-10-7489	SAMPLE	S	09-MAR-10	.543g	50mL	

SW846

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
248371015	RE36-10-7479	SAMPLE	S	09-MAR-10	.506g	50mL	
248371016	RE36-10-7482	SAMPLE	S	09-MAR-10	.57g	50mL	
248371017	RE36-10-7480	SAMPLE	S	09-MAR-10	.515g	50mL	
248371018	RE36-10-7485	SAMPLE	S	09-MAR-10	.508g	50mL	
248371019	RE36-10-7488	SAMPLE	S	09-MAR-10	.525g	50mL	
248371020	RE36-10-7484	SAMPLE	S	09-MAR-10	.525g	50mL	

SW846

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 960815							
1202060830	MB for batch 960815	MB	S	09-MAR-10	.52g	50mL	
1202060831	LCS for batch 960815	LCS	S	09-MAR-10	.511g	50mL	
1202060833	RE36-10-7415S	MS	S	09-MAR-10	.503g	50mL	
1202060835	RE36-10-7415SD	MSD	S	09-MAR-10	.506g	50mL	
1202060832	RE36-10-7415D	DUP	S	09-MAR-10	.508g	50mL	
248371001	RE36-10-7415	SAMPLE	S	09-MAR-10	.506g	50mL	
248371002	RE36-10-7420	SAMPLE	S	09-MAR-10	.509g	50mL	
248371003	RE36-10-7418	SAMPLE	S	09-MAR-10	.523g	50mL	
248371004	RE36-10-7417	SAMPLE	S	09-MAR-10	.521g	50mL	
248371005	RE36-10-7419	SAMPLE	S	09-MAR-10	.506g	50mL	
248371006	RE36-10-7416	SAMPLE	S	09-MAR-10	.516g	50mL	
248371007	RE36-10-7478	SAMPLE	S	09-MAR-10	.514g	50mL	
248371008	RE36-10-7490	SAMPLE	S	09-MAR-10	.566g	50mL	
248371009	RE36-10-7487	SAMPLE	S	09-MAR-10	.512g	50mL	
248371010	RE36-10-7483	SAMPLE	S	09-MAR-10	.528g	50mL	
248371011	RE36-10-7481	SAMPLE	S	09-MAR-10	.547g	50mL	
248371012	RE36-10-7486	SAMPLE	S	09-MAR-10	.519g	50mL	
248371013	RE36-10-7477	SAMPLE	S	09-MAR-10	.564g	50mL	
248371014	RE36-10-7489	SAMPLE	S	09-MAR-10	.556g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
248371015	RE36-10-7479	SAMPLE	S	09-MAR-10	.506g	50mL	
248371016	RE36-10-7482	SAMPLE	S	09-MAR-10	.553g	50mL	
248371017	RE36-10-7480	SAMPLE	S	09-MAR-10	.515g	50mL	
248371018	RE36-10-7485	SAMPLE	S	09-MAR-10	.545g	50mL	
248371019	RE36-10-7488	SAMPLE	S	09-MAR-10	.503g	50mL	
248371020	RE36-10-7484	SAMPLE	S	09-MAR-10	.501g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 964724							
1202069720	MB for batch 964724	MB	S	16-MAR-10	.594g	30mL	
1202069721	LCS for batch 964724	LCS	S	16-MAR-10	.207g	30mL	
1202069723	RE36-10-7415S	MS	S	16-MAR-10	.508g	30mL	
1202069725	RE36-10-7415SD	MSD	S	16-MAR-10	.586g	30mL	
1202069722	RE36-10-7415D	DUP	S	16-MAR-10	.523g	30mL	
248371001	RE36-10-7415	SAMPLE	S	16-MAR-10	.519g	30mL	
248371002	RE36-10-7420	SAMPLE	S	16-MAR-10	.564g	30mL	
248371003	RE36-10-7418	SAMPLE	S	16-MAR-10	.595g	30mL	
248371004	RE36-10-7417	SAMPLE	S	16-MAR-10	.524g	30mL	
248371005	RE36-10-7419	SAMPLE	S	16-MAR-10	.522g	30mL	
248371006	RE36-10-7416	SAMPLE	S	16-MAR-10	.55g	30mL	
248371007	RE36-10-7478	SAMPLE	S	16-MAR-10	.563g	30mL	
248371008	RE36-10-7490	SAMPLE	S	16-MAR-10	.528g	30mL	
248371009	RE36-10-7487	SAMPLE	S	16-MAR-10	.524g	30mL	
248371010	RE36-10-7483	SAMPLE	S	16-MAR-10	.563g	30mL	
248371011	RE36-10-7481	SAMPLE	S	16-MAR-10	.506g	30mL	
248371012	RE36-10-7486	SAMPLE	S	16-MAR-10	.585g	30mL	
248371013	RE36-10-7477	SAMPLE	S	16-MAR-10	.539g	30mL	
248371014	RE36-10-7489	SAMPLE	S	16-MAR-10	.557g	30mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2151

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
248371015	RE36-10-7479	SAMPLE	S	16-MAR-10	.5g	30mL	
248371016	RE36-10-7482	SAMPLE	S	16-MAR-10	.575g	30mL	
248371017	RE36-10-7480	SAMPLE	S	16-MAR-10	.569g	30mL	
248371018	RE36-10-7485	SAMPLE	S	16-MAR-10	.511g	30mL	
248371019	RE36-10-7488	SAMPLE	S	16-MAR-10	.525g	30mL	
248371020	RE36-10-7484	SAMPLE	S	16-MAR-10	.535g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 31-MAR-10

End Date: 31-MAR-10

Client Sdg: 10-2151

Method P

Data File: 033110-1

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	06:35:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
S0.1	1	06:42:00		X		X		X		X	X	X		X		X			X	X					X	X
S0.5	1	06:49:00	X	X		X		X	X	X	X	X		X	X	X			X	X					X	X
SCAL	1	06:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
S10	1	07:03:00	X					X				X		X								X				
ICV01	1	07:08:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
ICB01	1	07:15:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
PQL01	1	07:22:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
ICSA01	1	07:29:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
ICSAB01	1	07:35:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
LR01	1	07:42:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
LR02	1	07:49:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCV01	1	07:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCB01	1	08:03:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
LR03	1	08:11:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCV02	1	08:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCB02	1	08:25:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
ZZZZZZ	1	08:32:00																								
ZZZZZZ	1	08:38:00																								
ZZZZZZ	1	08:45:00																								
ZZZZZZ	1	08:52:00																								
ZZZZZZ	1	08:59:00																								
ZZZZZZ	1	09:05:00																								
ZZZZZZ	1	09:12:00																								
CCV03	1	09:19:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCB03	1	09:26:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060824	1	09:32:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060825	1	09:38:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371001	1	09:46:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060826	1	09:53:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060827	1	10:00:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060829	1	10:07:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
1202060828	5	10:14:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371002	1	10:21:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371003	1	10:28:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCV04	1	10:35:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
CCB04	1	10:42:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371004	1	10:49:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371005	1	10:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X
248371006	1	11:03:00	X	X		X		X	X	X	X	X	X	X	X	X			X	X	X				X	X

Samp No.	D/F	Run Time																								
248371007	1	11:10:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371008	1	11:17:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371009	1	11:24:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371010	1	11:32:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371011	1	11:39:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371012	1	11:46:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
CCV05	1	11:53:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
CCB05	1	12:00:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371013	1	12:07:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371014	1	12:13:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371015	1	12:20:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371016	1	12:27:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371017	1	12:35:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371018	1	12:42:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371019	1	12:49:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
248371020	1	12:56:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
CCV06	1	13:03:00	X	X		X		X	X	X	X	X	X	X	X			X	X	X			X	X		
CCB06	1	13:10:00	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: 17-MAR-10

End Date: 17-MAR-10

Client Sdg: 10-2151

Method AV

Data File: 031710S2-4

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	09:38:00															X									
S0.2	1	09:40:00															X									
S0.5	1	09:42:00															X									
S2.0	1	09:43:00															X									
S5.0	1	09:45:00															X									
S10.0	1	09:47:00															X									
ICV01	1	09:48:00															X									
ICB01	1	09:50:00															X									
CRDL01	1	09:52:00															X									
CCV01	1	09:53:00															X									
CCB01	1	09:55:00															X									
ZZZZZZ	1	09:57:00																								
ZZZZZZ	10	09:58:00																								
ZZZZZZ	1	10:00:00																								
ZZZZZZ	1	10:02:00																								
ZZZZZZ	1	10:03:00																								
ZZZZZZ	1	10:05:00																								
ZZZZZZ	5	10:07:00																								
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:10:00																								
ZZZZZZ	1	10:12:00																								
CCV02	1	10:13:00															X									
CCB02	1	10:15:00															X									
ZZZZZZ	1	10:17:00																								
ZZZZZZ	1	10:18:00																								
ZZZZZZ	1	10:20:00																								
ZZZZZZ	1	10:22:00																								
ZZZZZZ	1	10:24:00																								
ZZZZZZ	1	10:25:00																								
ZZZZZZ	1	10:27:00																								
ZZZZZZ	1	10:28:00																								
ZZZZZZ	1	10:30:00																								
ZZZZZZ	1	10:32:00																								
CCV03	1	10:33:00															X									
CCB03	1	10:35:00															X									
ZZZZZZ	1	10:37:00																								
ZZZZZZ	1	10:38:00																								
ZZZZZZ	1	10:40:00																								
ZZZZZZ	1	10:42:00																								
ZZZZZZ	1	10:43:00																								

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	11:52:00																								
CCV07	1	11:54:00																X								
CCB07	1	11:56:00																X								
ZZZZZZ	1	11:57:00																								
ZZZZZZ	1	11:59:00																								
ZZZZZZ	1	12:01:00																								
ZZZZZZ	1	12:02:00																								
ZZZZZZ	1	12:04:00																								
ZZZZZZ	1	12:06:00																								
ZZZZZZ	1	12:07:00																								
ZZZZZZ	1	12:09:00																								
ZZZZZZ	1	12:11:00																								
ZZZZZZ	1	12:12:00																								
CCV08	1	12:14:00																X								
CCB08	1	12:16:00																X								
ZZZZZZ	1	12:17:00																								
ZZZZZZ	1	12:19:00																								
ZZZZZZ	10	12:21:00																								
ZZZZZZ	1	12:23:00																								
ZZZZZZ	1	12:24:00																								
ZZZZZZ	1	12:26:00																								
ZZZZZZ	1	12:28:00																								
ZZZZZZ	1	12:29:00																								
ZZZZZZ	1	12:31:00																								
ZZZZZZ	1	12:33:00																								
CCV09	1	12:34:00																X								
CCB09	1	12:36:00																X								
ZZZZZZ	1	12:38:00																								
ZZZZZZ	1	12:39:00																								
ZZZZZZ	1	12:41:00																								
ZZZZZZ	1	12:43:00																								
ZZZZZZ	1	12:44:00																								
ZZZZZZ	1	12:46:00																								
ZZZZZZ	1	12:48:00																								
ZZZZZZ	5	12:50:00																								
ZZZZZZ	1	12:51:00																								
ZZZZZZ	1	12:53:00																								
CCV10	1	12:55:00																X								
CCB10	1	12:56:00																X								
ZZZZZZ	1	12:58:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	13:00:00
ZZZZZZ	1	13:01:00
ZZZZZZ	1	13:03:00
ZZZZZZ	1	13:05:00
ZZZZZZ	1	13:07:00
ZZZZZZ	1	13:08:00
ZZZZZZ	10	13:10:00
ZZZZZZ	1	13:12:00
ZZZZZZ	1	13:13:00
CCV11	1	13:15:00
CCB11	1	13:17:00
ZZZZZZ	1	13:18:00
ZZZZZZ	1	13:20:00
ZZZZZZ	5	13:22:00
ZZZZZZ	1	13:23:00
ZZZZZZ	1	13:25:00
ZZZZZZ	1	13:27:00
ZZZZZZ	1	13:29:00
ZZZZZZ	1	13:30:00
ZZZZZZ	1	13:32:00
ZZZZZZ	1	13:34:00
CCV12	1	13:35:00
CCB12	1	13:37:00
ZZZZZZ	1	13:39:00
ZZZZZZ	1	13:41:00
ZZZZZZ	1	13:42:00
ZZZZZZ	1	13:44:00
ZZZZZZ	1	13:46:00
ZZZZZZ	1	13:47:00
ZZZZZZ	1	13:49:00
1202069720	1	13:51:00
1202069721	10	13:53:00
248371001	1	13:54:00
CCV13	1	13:56:00
CCB13	1	13:58:00
1202069722	1	13:59:00
1202069723	1	14:01:00
1202069725	1	14:03:00
1202069724	5	14:04:00
248371002	1	14:06:00

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
248371003	1	14:08:00															X									
248371004	1	14:10:00															X									
248371005	1	14:11:00															X									
248371006	1	14:13:00															X									
248371007	1	14:15:00															X									
CCV14	1	14:16:00															X									
CCB14	1	14:18:00															X									
248371008	1	14:20:00															X									
248371009	1	14:21:00															X									
248371010	1	14:23:00															X									
248371011	1	14:25:00															X									
248371012	1	14:27:00															X									
248371013	1	14:28:00															X									
248371014	1	14:30:00															X									
248371015	1	14:32:00															X									
248371016	1	14:34:00															X									
248371017	1	14:35:00															X									
CCV15	1	14:37:00															X									
CCB15	1	14:39:00															X									
248371018	1	14:40:00															X									
248371019	1	14:42:00															X									
248371020	1	14:44:00															X									
CCV16	1	14:45:00															X									
CCB16	1	14:47:00															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS3**Start Date:** 17-APR-10**End Date:** 17-APR-10**Client Sdg:** 10-2151**Method:** MS**Data File:** 100417-2

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	Ti	U	V	Zn
S0.0	1	19:24:00					X																			
S10	1	19:25:00					X																			
S100	1	19:27:00					X																			
ICV01	1	19:29:00					X																			
ICB01	1	19:30:00					X																			
CRDL01	1	19:32:00					X																			
ICSA01	1	19:34:00					X																			
ICSAB01	1	19:35:00					X																			
CCV01	1	19:37:00					X																			
CCB01	1	19:39:00					X																			
1202060830	2	19:42:00					X																			
1202060831	40	19:43:00					X																			
248371001	2	19:45:00					X																			
1202060832	2	19:47:00					X																			
1202060833	2	19:48:00					X																			
1202060835	2	19:50:00					X																			
1202060834	10	19:52:00					X																			
248371002	2	19:54:00					X																			
248371003	2	19:55:00					X																			
CCV02	1	19:57:00					X																			
CCB02	1	19:59:00					X																			
248371004	2	20:00:00					X																			
248371005	2	20:02:00					X																			
248371006	2	20:04:00					X																			
248371007	2	20:06:00					X																			
248371008	2	20:07:00					X																			
248371009	2	20:09:00					X																			
248371010	2	20:11:00					X																			
248371011	2	20:12:00					X																			
248371012	2	20:14:00					X																			
CCV03	1	20:16:00					X																			
CCB03	1	20:18:00					X																			
248371013	2	20:19:00					X																			
248371014	2	20:21:00					X																			
248371015	2	20:23:00					X																			
248371016	2	20:24:00					X																			
248371017	2	20:26:00					X																			
248371018	2	20:28:00					X																			
248371019	2	20:30:00					X																			
248371020	2	20:31:00					X																			

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 17-APR-10

End Date: 17-APR-10

Client Sdg: 10-2151

Method MS

Data File: 100417-3

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	13:37:00			X													X	X			X	X			
S10	1	13:41:00			X													X	X			X	X			
S100	1	13:45:00			X													X	X			X	X			
ICV01	1	13:49:00			X													X	X			X	X			
ICB01	1	13:53:00			X													X	X			X	X			
CRDL01	1	13:57:00			X													X	X			X	X			
ICSA01	1	14:01:00			X													X	X			X	X			
ICSAB01	1	14:06:00			X													X	X			X	X			
CCV01	1	14:10:00			X													X	X			X	X			
CCB01	1	14:14:00			X													X	X			X	X			
LR01	1	14:18:00			X													X	X			X	X			
CCV02	1	14:22:00			X													X	X			X	X			
CCB02	1	14:26:00			X													X	X			X	X			
1202060830	2	14:31:00			X													X	X			X	X			
1202060831	40	14:35:00			X													X	X			X	X			
248371001	2	14:40:00			X													X	X			X	X			
1202060832	2	14:44:00			X													X	X			X	X			
1202060833	2	14:48:00			X													X	X			X	X			
1202060835	2	14:52:00			X													X	X			X	X			
1202060834	10	14:56:00			X													X	X			X	X			
CCV03	1	15:00:00			X													X	X			X	X			
CCB03	1	15:04:00			X													X	X			X	X			
248371002	2	15:08:00			X													X	X			X	X			
248371003	2	15:13:00			X													X	X			X	X			
248371004	2	15:17:00			X													X	X			X	X			
248371005	2	15:21:00			X													X	X			X	X			
248371006	2	15:25:00			X													X	X			X	X			
248371007	2	15:29:00			X													X	X			X	X			
248371008	2	15:33:00			X													X	X			X	X			
248371009	2	15:37:00			X													X	X			X	X			
248371010	2	15:41:00			X													X	X			X	X			
248371011	2	15:46:00			X													X	X			X	X			
CCV04	1	15:50:00			X													X	X			X	X			
CCB04	1	15:54:00			X													X	X			X	X			
248371012	2	15:58:00			X													X	X			X	X			
248371013	2	16:02:00			X													X	X			X	X			
248371014	2	16:06:00			X													X	X			X	X			
248371015	2	16:10:00			X													X	X			X	X			
248371016	2	16:15:00			X													X	X			X	X			
248371017	2	16:19:00			X													X	X			X	X			

Samp No.	D/F	Run Time														X	X			X	X				
248371018	2	16:23:00			X											X	X			X	X				
248371019	2	16:27:00			X											X	X			X	X				
248371020	2	16:31:00			X											X	X			X	X				
CCV05	1	16:35:00			X											X	X			X	X				
CCB05	1	16:39:00			X											X	X			X	X				

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength (nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2151**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2151**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
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Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2151**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2151**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Potassium	Selenium	Silica
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interement Correction Factors

Lab Code: GELGEL Job No: **10-2151**

Contract: LANL01004

Instrument: OPTIMA3

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

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2151

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-2151

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

Raw Data

=====
Analysis Begun

Start Time: 3/31/2010 06:35:28

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\033110.sif

Batch ID:

Results Data Set: 033110

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

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/31/2010 06:35:30

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	3549.2	3549.2	0.000	%	06:37:42
1	Y RADIAL	3979.0	3979.0	0.000	%	06:37:22
1	Al 396.153Radial†	-113.6	-114.9	[0.00]	ug/L	06:37:22
1	Ca 317.933Radial†	14.5	14.7	[0.00]	ug/L	06:37:42
1	Fe 238.204 Radial†	9.4	9.5	[0.00]	ug/L	06:37:42
1	K 766.490 Radial†	2998.3	3031.6	[0.00]	ug/L	06:37:22
1	Mg 279.077 IEC†	2.0	2.0	[0.00]	ug/L	06:37:42
1	Na 589.592 Radial†	-884.0	-893.8	[0.00]	ug/L	06:37:22
1	Sr 421.552†	-2.5	-2.5	[0.00]	ug/L	06:37:22
1	Sc 361.383	670771.5	670771.5	0.0000	%	06:38:39
1	Y 371.029	530319.3	530319.3	0.0000	%	06:38:39
1	Ag 328.068†	163.6	162.7	[0.00]	ug/L	06:38:39
1	As 188.979†	-29.3	-29.1	[0.00]	ug/L	06:38:59
1	B 249.677†	-415.2	-412.8	[0.00]	ug/L	06:38:59
1	Ba 233.527†	-2.0	-2.0	[0.00]	ug/L	06:38:59
1	Be 313.107†	-4098.6	-4074.9	[0.00]	ug/L	06:38:39
1	Cd 226.502†	-206.0	-204.8	[0.00]	ug/L	06:38:59
1	Co 228.616†	-55.6	-55.2	[0.00]	ug/L	06:38:59
1	Cr 267.716†	84.0	83.5	[0.00]	ug/L	06:38:59
1	Cu 324.752†	5269.5	5239.1	[0.00]	ug/L	06:38:39
1	Mn 257.610†	442.5	439.9	[0.00]	ug/L	06:38:59
1	Mo 202.031†	4.7	4.6	[0.00]	ug/L	06:38:59
1	Ni 231.604†	89.5	88.9	[0.00]	ug/L	06:38:59
1	P 214.914†	207.1	205.9	[0.00]	ug/L	06:38:59
1	Pb 220.353†	-79.1	-78.6	[0.00]	ug/L	06:38:59
1	S 181.975 Axial†	37.7	37.5	[0.00]	ug/L	06:38:59
1	Sb 206.836†	27.9	27.8	[0.00]	ug/L	06:38:59
1	Se 196.026†	-25.3	-25.1	[0.00]	ug/L	06:38:59
1	Si 251.611†	545.5	542.4	[0.00]	ug/L	06:38:59
1	Sn 189.927†	9.8	9.8	[0.00]	ug/L	06:38:59
1	Ti 334.940†	-1434.5	-1426.2	[0.00]	ug/L	06:38:39
1	Tl 190.801†	-33.4	-33.2	[0.00]	ug/L	06:38:59
1	U 409.014†	-2397.9	-2384.1	[0.00]	ug/L	06:38:39
1	V 292.402†	-1756.6	-1746.5	[0.00]	ug/L	06:38:39
1	Zn 213.857†	696.0	691.9	[0.00]	ug/L	06:38:59
1	SiO2†	566.6	563.4	[0.00]	ug/L	06:39:55
2	Sc Radial	3654.7	3654.7	0.000	%	06:38:07
2	Y RADIAL	3984.8	3984.8	0.000	%	06:37:47
2	Al 396.153Radial†	-102.7	-100.8	[0.00]	ug/L	06:37:47
2	Ca 317.933Radial†	14.8	14.5	[0.00]	ug/L	06:38:07
2	Fe 238.204 Radial†	7.7	7.6	[0.00]	ug/L	06:38:07
2	K 766.490 Radial†	3110.2	3054.0	[0.00]	ug/L	06:37:47
2	Mg 279.077 IEC†	0.0	0.0	[0.00]	ug/L	06:38:07
2	Na 589.592 Radial†	-908.5	-892.1	[0.00]	ug/L	06:37:47
2	Sr 421.552†	26.9	26.4	[0.00]	ug/L	06:37:47
2	Sc 361.383	660750.2	660750.2	0.0000	%	06:39:04
2	Y 371.029	523393.6	523393.6	0.0000	%	06:39:04

2	Ag 328.068†	207.6	209.6	[0.00]	ug/L	06:39:04
2	As 188.979†	-27.9	-28.2	[0.00]	ug/L	06:39:24
2	B 249.677†	-413.4	-417.3	[0.00]	ug/L	06:39:24
2	Ba 233.527†	28.9	29.1	[0.00]	ug/L	06:39:24
2	Be 313.107†	-4208.0	-4247.1	[0.00]	ug/L	06:39:04
2	Cd 226.502†	-204.5	-206.4	[0.00]	ug/L	06:39:24
2	Co 228.616†	-46.3	-46.7	[0.00]	ug/L	06:39:24
2	Cr 267.716†	117.0	118.1	[0.00]	ug/L	06:39:24
2	Cu 324.752†	5404.8	5455.1	[0.00]	ug/L	06:39:04
2	Mn 257.610†	463.6	467.9	[0.00]	ug/L	06:39:24
2	Mo 202.031†	3.3	3.3	[0.00]	ug/L	06:39:24
2	Ni 231.604†	84.8	85.6	[0.00]	ug/L	06:39:24
2	P 214.914†	201.5	203.4	[0.00]	ug/L	06:39:24
2	Pb 220.353†	-59.7	-60.3	[0.00]	ug/L	06:39:24
2	S 181.975 Axial†	35.6	35.9	[0.00]	ug/L	06:39:24
2	Sb 206.836†	24.7	25.0	[0.00]	ug/L	06:39:24
2	Se 196.026†	-20.7	-20.9	[0.00]	ug/L	06:39:24
2	Si 251.611†	534.7	539.7	[0.00]	ug/L	06:39:24
2	Sn 189.927†	11.1	11.2	[0.00]	ug/L	06:39:24
2	Ti 334.940†	-1318.9	-1331.2	[0.00]	ug/L	06:39:04
2	Tl 190.801†	-28.7	-29.0	[0.00]	ug/L	06:39:24
2	U 409.014†	-2313.1	-2334.6	[0.00]	ug/L	06:39:04
2	V 292.402†	-1750.8	-1767.1	[0.00]	ug/L	06:39:04
2	Zn 213.857†	685.7	692.0	[0.00]	ug/L	06:39:24
2	SiO2†	510.9	515.7	[0.00]	ug/L	06:40:00
3	Sc Radial	3562.0	3562.0	0.000	%	06:38:32
3	Y RADIAL	4235.4	4235.4	0.000	%	06:38:12
3	Al 396.153Radial†	-113.4	-114.3	[0.00]	ug/L	06:38:12
3	Ca 317.933Radial†	17.8	18.0	[0.00]	ug/L	06:38:32
3	Fe 238.204 Radial†	7.4	7.5	[0.00]	ug/L	06:38:32
3	K 766.490 Radial†	2949.2	2971.2	[0.00]	ug/L	06:38:12
3	Mg 279.077 IEC†	-0.2	-0.2	[0.00]	ug/L	06:38:32
3	Na 589.592 Radial†	-899.7	-906.4	[0.00]	ug/L	06:38:12
3	Sr 421.552†	17.3	17.4	[0.00]	ug/L	06:38:12
3	Sc 361.383	669166.4	669166.4	0.0000	%	06:39:30
3	Y 371.029	530543.0	530543.0	0.0000	%	06:39:30
3	Ag 328.068†	234.7	233.9	[0.00]	ug/L	06:39:30
3	As 188.979†	-18.5	-18.5	[0.00]	ug/L	06:39:50
3	B 249.677†	-416.6	-415.2	[0.00]	ug/L	06:39:50
3	Ba 233.527†	12.5	12.5	[0.00]	ug/L	06:39:50
3	Be 313.107†	-4227.2	-4212.8	[0.00]	ug/L	06:39:30
3	Cd 226.502†	-187.1	-186.5	[0.00]	ug/L	06:39:50
3	Co 228.616†	-47.9	-47.8	[0.00]	ug/L	06:39:50
3	Cr 267.716†	84.4	84.1	[0.00]	ug/L	06:39:50
3	Cu 324.752†	5386.9	5368.6	[0.00]	ug/L	06:39:30
3	Mn 257.610†	457.0	455.4	[0.00]	ug/L	06:39:50
3	Mo 202.031†	6.3	6.2	[0.00]	ug/L	06:39:50
3	Ni 231.604†	80.0	79.7	[0.00]	ug/L	06:39:50
3	P 214.914†	196.3	195.7	[0.00]	ug/L	06:39:50
3	Pb 220.353†	-58.6	-58.4	[0.00]	ug/L	06:39:50
3	S 181.975 Axial†	44.8	44.6	[0.00]	ug/L	06:39:50
3	Sb 206.836†	23.1	23.0	[0.00]	ug/L	06:39:50
3	Se 196.026†	-33.9	-33.7	[0.00]	ug/L	06:39:50
3	Si 251.611†	529.0	527.2	[0.00]	ug/L	06:39:50
3	Sn 189.927†	8.3	8.3	[0.00]	ug/L	06:39:50
3	Ti 334.940†	-1464.7	-1459.7	[0.00]	ug/L	06:39:30
3	Tl 190.801†	-32.3	-32.2	[0.00]	ug/L	06:39:50
3	U 409.014†	-2506.5	-2498.0	[0.00]	ug/L	06:39:30
3	V 292.402†	-1737.4	-1731.5	[0.00]	ug/L	06:39:30
3	Zn 213.857†	689.5	687.1	[0.00]	ug/L	06:39:50
3	SiO2†	573.6	571.6	[0.00]	ug/L	06:40:05

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	666896.0	5382.63	0.81%	0.0000 %
Sc Radial	3588.6	57.54	1.60%	0.000 %
Y 371.029	528085.3	4064.67	0.77%	0.0000 %
Y RADIAL	4066.4	146.35	3.60%	0.000 %
Ag 328.068†	202.0	36.22	17.93%	[0.00] ug/L

Al 396.153Radial†	-110.0	7.95	7.23%	[0.00]	ug/L
As 188.979†	-25.2	5.89	23.33%	[0.00]	ug/L
B 249.677†	-415.1	2.24	0.54%	[0.00]	ug/L
Ba 233.527†	13.2	15.58	117.92%	[0.00]	ug/L
Be 313.107†	-4178.3	91.14	2.18%	[0.00]	ug/L
Ca 317.933Radial†	15.7	1.95	12.40%	[0.00]	ug/L
Cd 226.502†	-199.2	11.09	5.57%	[0.00]	ug/L
Co 228.616†	-49.9	4.64	9.31%	[0.00]	ug/L
Cr 267.716†	95.2	19.77	20.76%	[0.00]	ug/L
Cu 324.752†	5354.2	108.71	2.03%	[0.00]	ug/L
Fe 238.204 Radial†	8.2	1.11	13.54%	[0.00]	ug/L
K 766.490 Radial†	3019.0	42.81	1.42%	[0.00]	ug/L
Mg 279.077 IEC†	0.6	1.21	190.91%	[0.00]	ug/L
Mn 257.610†	454.4	14.03	3.09%	[0.00]	ug/L
Mo 202.031†	4.7	1.45	30.58%	[0.00]	ug/L
Na 589.592 Radial†	-897.4	7.80	0.87%	[0.00]	ug/L
Ni 231.604†	84.7	4.67	5.51%	[0.00]	ug/L
P 214.914†	201.7	5.34	2.65%	[0.00]	ug/L
Pb 220.353†	-65.8	11.17	16.98%	[0.00]	ug/L
S 181.975 Axial†	39.4	4.64	11.78%	[0.00]	ug/L
Sb 206.836†	25.2	2.38	9.44%	[0.00]	ug/L
Se 196.026†	-26.6	6.55	24.64%	[0.00]	ug/L
Si 251.611†	536.4	8.11	1.51%	[0.00]	ug/L
Sn 189.927†	9.8	1.46	14.91%	[0.00]	ug/L
Sr 421.552†	13.8	14.82	107.59%	[0.00]	ug/L
Ti 334.940†	-1405.7	66.69	4.74%	[0.00]	ug/L
Tl 190.801†	-31.5	2.18	6.94%	[0.00]	ug/L
U 409.014†	-2405.5	83.77	3.48%	[0.00]	ug/L
V 292.402†	-1748.4	17.86	1.02%	[0.00]	ug/L
Zn 213.857†	690.4	2.80	0.41%	[0.00]	ug/L
SiO2†	550.2	30.22	5.49%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/31/2010 06:42:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3979.1	3979.1	111 %	06:44:29
1	Y RADIAL	4345.5	4345.5	106.9 %	06:44:29
1	K 766.490 Radial†	8404.1	4560.4	[1000] ug/L	06:44:09
1	Sr 421.552†	10011.7	9015.4	[100] ug/L	06:44:29
1	Sc 361.383	680196.7	680196.7	101.99 %	06:45:26
1	Y 371.029	538210.6	538210.6	101.92 %	06:45:26
1	Ag 328.068†	17607.5	17061.2	[100] ug/L	06:45:26
1	As 188.979†	174.3	196.1	[100] ug/L	06:45:46
1	B 249.677†	3187.8	3540.6	[100] ug/L	06:45:26
1	Ba 233.527†	10161.1	9949.2	[100] ug/L	06:45:26
1	Be 313.107†	234917.2	234501.9	[100] ug/L	06:45:26
1	Cd 226.502†	6217.0	6294.6	[100] ug/L	06:45:46
1	Co 228.616†	3866.7	3841.0	[100] ug/L	06:45:46
1	Cr 267.716†	6654.3	6429.0	[100] ug/L	06:45:26
1	Cu 324.752†	33826.6	27810.9	[100] ug/L	06:45:26
1	Mn 257.610†	76334.6	74387.5	[100] ug/L	06:45:26
1	Mo 202.031†	1040.3	1015.2	[100] ug/L	06:45:46
1	Ni 231.604†	3068.0	2923.3	[100] ug/L	06:45:46
1	P 214.914†	943.9	723.8	[500] ug/L	06:45:46
1	Pb 220.353†	548.1	603.2	[100] ug/L	06:45:46
1	S 181.975 Axial†	162.3	119.7	[200] ug/L	06:45:46
1	Sb 206.836†	268.4	237.9	[100] ug/L	06:45:46
1	Se 196.026†	103.3	127.9	[100] ug/L	06:45:46
1	Si 251.611†	13660.3	12856.8	[500] ug/L	06:45:26
1	Sn 189.927†	432.2	414.0	[100] ug/L	06:45:46
1	Ti 334.940†	52716.9	53091.8	[100] ug/L	06:45:26
1	Tl 190.801†	219.8	246.9	[100] ug/L	06:45:46
1	U 409.014†	189.7	2591.5	[100] ug/L	06:45:26
1	V 292.402†	9158.5	10727.8	[100] ug/L	06:45:26
1	Zn 213.857†	9080.2	8212.3	[100] ug/L	06:45:26
1	SiO2†	13067.5	12261.8	[1069.5] ug/L	06:46:42
2	Sc Radial	3809.4	3809.4	106 %	06:44:54
2	Y RADIAL	4168.0	4168.0	102.5 %	06:44:54
2	K 766.490 Radial†	8255.2	4757.8	[1000] ug/L	06:44:34
2	Sr 421.552†	9646.0	9073.2	[100] ug/L	06:44:54
2	Sc 361.383	700867.6	700867.6	105.09 %	06:45:52
2	Y 371.029	553477.5	553477.5	104.81 %	06:45:52
2	Ag 328.068†	18583.5	17480.7	[100] ug/L	06:45:52
2	As 188.979†	172.7	189.6	[100] ug/L	06:46:12
2	B 249.677†	3390.1	3640.9	[100] ug/L	06:45:52
2	Ba 233.527†	10602.8	10075.7	[100] ug/L	06:45:52
2	Be 313.107†	248712.2	240835.3	[100] ug/L	06:45:52
2	Cd 226.502†	6139.5	6041.2	[100] ug/L	06:46:12
2	Co 228.616†	3807.7	3673.0	[100] ug/L	06:46:12
2	Cr 267.716†	7001.7	6567.1	[100] ug/L	06:45:52
2	Cu 324.752†	35743.7	28657.0	[100] ug/L	06:45:52
2	Mn 257.610†	80465.7	76111.0	[100] ug/L	06:45:52
2	Mo 202.031†	1032.3	977.5	[100] ug/L	06:46:12
2	Ni 231.604†	3035.1	2803.2	[100] ug/L	06:46:12
2	P 214.914†	914.0	668.0	[500] ug/L	06:46:12
2	Pb 220.353†	532.8	572.8	[100] ug/L	06:46:12
2	S 181.975 Axial†	158.6	111.6	[200] ug/L	06:46:12
2	Sb 206.836†	269.5	231.2	[100] ug/L	06:46:12
2	Se 196.026†	93.9	115.9	[100] ug/L	06:46:12
2	Si 251.611†	14365.2	13132.5	[500] ug/L	06:45:52
2	Sn 189.927†	431.7	401.0	[100] ug/L	06:46:12
2	Ti 334.940†	55730.6	54435.0	[100] ug/L	06:45:52
2	Tl 190.801†	214.4	235.5	[100] ug/L	06:46:12
2	U 409.014†	240.9	2634.8	[100] ug/L	06:45:52

2	V 292.402†	9698.6	10976.9	[100]	ug/L	06:45:52
2	Zn 213.857†	9499.8	8349.0	[100]	ug/L	06:45:52
2	SiO2†	13158.2	11970.2	[1069.5]	ug/L	06:46:47
3	Sc Radial	4008.6	4008.6	112	%	06:45:19
3	Y RADIAL	4370.4	4370.4	107.5	%	06:45:19
3	K 766.490 Radial†	7858.4	4016.1	[1000]	ug/L	06:44:59
3	Sr 421.552†	10121.5	9047.3	[100]	ug/L	06:45:19
3	Sc 361.383	671910.1	671910.1	100.75	%	06:46:17
3	Y 371.029	531325.8	531325.8	100.61	%	06:46:17
3	Ag 328.068†	17744.5	17410.0	[100]	ug/L	06:46:17
3	As 188.979†	155.7	179.8	[100]	ug/L	06:46:37
3	B 249.677†	3350.9	3741.0	[100]	ug/L	06:46:17
3	Ba 233.527†	10238.2	10148.6	[100]	ug/L	06:46:17
3	Be 313.107†	237075.7	239484.9	[100]	ug/L	06:46:17
3	Cd 226.502†	5971.2	6125.9	[100]	ug/L	06:46:37
3	Co 228.616†	3714.3	3736.4	[100]	ug/L	06:46:37
3	Cr 267.716†	6737.0	6591.5	[100]	ug/L	06:46:17
3	Cu 324.752†	34444.2	28832.9	[100]	ug/L	06:46:17
3	Mn 257.610†	77035.1	76005.8	[100]	ug/L	06:46:17
3	Mo 202.031†	1009.8	997.6	[100]	ug/L	06:46:37
3	Ni 231.604†	2928.3	2821.7	[100]	ug/L	06:46:37
3	P 214.914†	891.9	683.6	[500]	ug/L	06:46:37
3	Pb 220.353†	518.9	580.8	[100]	ug/L	06:46:37
3	S 181.975 Axial†	156.4	115.8	[200]	ug/L	06:46:37
3	Sb 206.836†	261.0	233.8	[100]	ug/L	06:46:37
3	Se 196.026†	96.5	122.3	[100]	ug/L	06:46:37
3	Si 251.611†	13693.7	13055.1	[500]	ug/L	06:46:17
3	Sn 189.927†	414.8	402.0	[100]	ug/L	06:46:37
3	Ti 334.940†	53468.4	54475.1	[100]	ug/L	06:46:17
3	Tl 190.801†	220.6	250.4	[100]	ug/L	06:46:37
3	U 409.014†	413.8	2816.2	[100]	ug/L	06:46:17
3	V 292.402†	9256.2	10935.5	[100]	ug/L	06:46:17
3	Zn 213.857†	9131.4	8372.9	[100]	ug/L	06:46:17
3	SiO2†	13323.5	12673.8	[1069.5]	ug/L	06:46:53

Mean Data: S0.1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	684324.8	14913.57	2.18%	102.61	%
Sc Radial	3932.3	107.51	2.73%	110	%
Y 371.029	541004.6	11337.06	2.10%	102.45	%
Y RADIAL	4294.6	110.36	2.57%	105.6	%
Ag 328.068†	17317.3	224.61	1.30%	[100]	ug/L
As 188.979†	188.5	8.23	4.36%	[100]	ug/L
B 249.677†	3640.8	100.20	2.75%	[100]	ug/L
Ba 233.527†	10057.8	100.88	1.00%	[100]	ug/L
Be 313.107†	238274.0	3335.78	1.40%	[100]	ug/L
Cd 226.502†	6153.9	129.03	2.10%	[100]	ug/L
Co 228.616†	3750.2	84.80	2.26%	[100]	ug/L
Cr 267.716†	6529.2	87.65	1.34%	[100]	ug/L
Cu 324.752†	28433.6	546.35	1.92%	[100]	ug/L
K 766.490 Radial†	4444.8	384.12	8.64%	[1000]	ug/L
Mn 257.610†	75501.4	966.16	1.28%	[100]	ug/L
Mo 202.031†	996.8	18.85	1.89%	[100]	ug/L
Ni 231.604†	2849.4	64.64	2.27%	[100]	ug/L
P 214.914†	691.8	28.79	4.16%	[500]	ug/L
Pb 220.353†	585.6	15.74	2.69%	[100]	ug/L
S 181.975 Axial†	115.7	4.08	3.53%	[200]	ug/L
Sb 206.836†	234.3	3.39	1.45%	[100]	ug/L
Se 196.026†	122.1	6.00	4.91%	[100]	ug/L
Si 251.611†	13014.8	142.19	1.09%	[500]	ug/L
Sn 189.927†	405.7	7.23	1.78%	[100]	ug/L
Sr 421.552†	9045.3	28.93	0.32%	[100]	ug/L
Ti 334.940†	54000.6	787.32	1.46%	[100]	ug/L
Tl 190.801†	244.3	7.78	3.19%	[100]	ug/L
U 409.014†	2680.8	119.22	4.45%	[100]	ug/L
V 292.402†	10880.1	133.48	1.23%	[100]	ug/L
Zn 213.857†	8311.4	86.68	1.04%	[100]	ug/L
SiO2†	12301.9	353.55	2.87%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/31/2010 06:49:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	3917.2	3917.2	109 %		06:51:16
1	Y RADIAL	4173.4	4173.4	102.6 %		06:50:56
1	Al 396.153Radial†	4425.0	4163.8	[5000] ug/L		06:50:56
1	Ca 317.933Radial†	2709.6	2466.6	[5000] ug/L		06:51:16
1	K 766.490 Radial†	27808.6	22457.1	[5000] ug/L		06:50:56
1	Mg 279.077 IEC†	131.2	119.5	[5000] ug/L		06:51:16
1	Sr 421.552†	48511.6	44428.7	[500] ug/L		06:50:56
1	Sc 361.383	684985.1	684985.1	102.71 %		06:52:13
1	Y 371.029	536878.6	536878.6	101.67 %		06:52:13
1	Ag 328.068†	90561.5	87967.9	[500] ug/L		06:52:18
1	As 188.979†	908.6	909.9	[500] ug/L		06:52:38
1	B 249.677†	18935.3	18850.4	[500] ug/L		06:52:18
1	Ba 233.527†	51473.6	50101.1	[500] ug/L		06:52:18
1	Be 313.107†	1196245.7	1168833.6	[500] ug/L		06:52:13
1	Cd 226.502†	33682.4	32992.1	[500] ug/L		06:52:18
1	Co 228.616†	20283.9	19798.2	[500] ug/L		06:52:18
1	Cr 267.716†	33811.6	32823.5	[500] ug/L		06:52:18
1	Cu 324.752†	152606.7	143222.5	[500] ug/L		06:52:18
1	Mn 257.610†	379251.5	368781.9	[500] ug/L		06:52:18
1	Mo 202.031†	5022.8	4885.4	[500] ug/L		06:52:38
1	Ni 231.604†	15696.8	15197.5	[500] ug/L		06:52:18
1	P 214.914†	3772.2	3470.9	[2500] ug/L		06:52:38
1	Pb 220.353†	2936.9	2925.1	[500] ug/L		06:52:38
1	S 181.975 Axial†	646.2	589.8	[1000] ug/L		06:52:38
1	Sb 206.836†	1216.7	1159.3	[500] ug/L		06:52:38
1	Se 196.026†	605.0	615.6	[500] ug/L		06:52:38
1	Si 251.611†	70160.5	67771.3	[2500] ug/L		06:52:18
1	Sn 189.927†	2071.9	2007.4	[500] ug/L		06:52:38
1	Ti 334.940†	273135.0	267327.8	[500] ug/L		06:52:18
1	Tl 190.801†	1199.0	1198.8	[500] ug/L		06:52:38
1	U 409.014†	10451.4	12580.9	[500] ug/L		06:52:18
1	V 292.402†	54588.1	54894.9	[500] ug/L		06:52:18
1	Zn 213.857†	44021.8	42168.9	[500] ug/L		06:52:18
1	SiO2†	66005.0	63711.8	[5347.5] ug/L		06:53:45
2	Sc Radial	3760.2	3760.2	105 %		06:51:41
2	Y RADIAL	4104.2	4104.2	100.9 %		06:51:21
2	Al 396.153Radial†	4342.7	4254.5	[5000] ug/L		06:51:21
2	Ca 317.933Radial†	2603.3	2468.8	[5000] ug/L		06:51:41
2	K 766.490 Radial†	27632.9	23352.9	[5000] ug/L		06:51:21
2	Mg 279.077 IEC†	120.6	114.5	[5000] ug/L		06:51:41
2	Sr 421.552†	47422.7	45244.8	[500] ug/L		06:51:21
2	Sc 361.383	700499.1	700499.1	105.04 %		06:52:44
2	Y 371.029	549076.4	549076.4	103.97 %		06:52:44
2	Ag 328.068†	86866.8	82497.7	[500] ug/L		06:52:49
2	As 188.979†	921.5	902.6	[500] ug/L		06:53:09
2	B 249.677†	18128.5	17674.0	[500] ug/L		06:52:49
2	Ba 233.527†	49535.9	47146.5	[500] ug/L		06:52:49
2	Be 313.107†	1223165.5	1168668.2	[500] ug/L		06:52:44
2	Cd 226.502†	32238.7	30891.5	[500] ug/L		06:52:49
2	Co 228.616†	19386.8	18506.7	[500] ug/L		06:52:49
2	Cr 267.716†	32515.2	30860.2	[500] ug/L		06:52:49
2	Cu 324.752†	145774.6	133427.5	[500] ug/L		06:52:49
2	Mn 257.610†	364423.1	346487.2	[500] ug/L		06:52:49
2	Mo 202.031†	5066.8	4819.0	[500] ug/L		06:53:09
2	Ni 231.604†	14953.0	14151.0	[500] ug/L		06:52:49
2	P 214.914†	3798.8	3414.9	[2500] ug/L		06:53:09
2	Pb 220.353†	2962.7	2886.4	[500] ug/L		06:53:09
2	S 181.975 Axial†	654.2	583.5	[1000] ug/L		06:53:09
2	Sb 206.836†	1209.6	1126.3	[500] ug/L		06:53:09

2	Se 196.026†	601.5	599.2	[500]	ug/L	06:53:09
2	Si 251.611†	67001.8	63251.3	[2500]	ug/L	06:52:49
2	Sn 189.927†	2079.7	1970.2	[500]	ug/L	06:53:09
2	Ti 334.940†	262417.1	251234.6	[500]	ug/L	06:52:49
2	Tl 190.801†	1211.7	1185.0	[500]	ug/L	06:53:09
2	U 409.014†	9891.2	11822.3	[500]	ug/L	06:52:49
2	V 292.402†	52435.6	51668.7	[500]	ug/L	06:52:49
2	Zn 213.857†	42185.2	39471.1	[500]	ug/L	06:52:49
2	SiO2†	65983.9	62268.4	[5347.5]	ug/L	06:53:50
3	Sc Radial	3749.1	3749.1	104	%	06:52:06
3	Y RADIAL	4247.9	4247.9	104.5	%	06:51:46
3	Al 396.153Radial†	4494.9	4412.5	[5000]	ug/L	06:51:46
3	Ca 317.933Radial†	2600.7	2473.7	[5000]	ug/L	06:52:06
3	K 766.490 Radial†	28419.6	24184.3	[5000]	ug/L	06:51:46
3	Mg 279.077 IEC†	122.7	116.8	[5000]	ug/L	06:52:06
3	Sr 421.552†	49359.9	47233.6	[500]	ug/L	06:51:46
3	Sc 361.383	649969.5	649969.5	97.462	%	06:53:14
3	Y 371.029	511574.7	511574.7	96.874	%	06:53:14
3	Ag 328.068†	83117.9	85080.4	[500]	ug/L	06:53:20
3	As 188.979†	911.0	959.9	[500]	ug/L	06:53:40
3	B 249.677†	17124.7	17985.8	[500]	ug/L	06:53:20
3	Ba 233.527†	47369.0	48589.3	[500]	ug/L	06:53:20
3	Be 313.107†	1127079.5	1160609.3	[500]	ug/L	06:53:14
3	Cd 226.502†	30523.6	31517.7	[500]	ug/L	06:53:20
3	Co 228.616†	18510.7	19042.6	[500]	ug/L	06:53:20
3	Cr 267.716†	31122.0	31837.2	[500]	ug/L	06:53:20
3	Cu 324.752†	139241.2	137513.1	[500]	ug/L	06:53:20
3	Mn 257.610†	347453.0	356046.9	[500]	ug/L	06:53:20
3	Mo 202.031†	5004.2	5129.8	[500]	ug/L	06:53:40
3	Ni 231.604†	14304.5	14592.3	[500]	ug/L	06:53:20
3	P 214.914†	3776.5	3673.2	[2500]	ug/L	06:53:40
3	Pb 220.353†	2900.8	3042.1	[500]	ug/L	06:53:40
3	S 181.975 Axial†	641.8	619.2	[1000]	ug/L	06:53:40
3	Sb 206.836†	1199.9	1205.9	[500]	ug/L	06:53:40
3	Se 196.026†	604.5	646.8	[500]	ug/L	06:53:40
3	Si 251.611†	63554.2	64672.9	[2500]	ug/L	06:53:20
3	Sn 189.927†	2068.0	2112.1	[500]	ug/L	06:53:40
3	Ti 334.940†	250682.2	258616.2	[500]	ug/L	06:53:20
3	Tl 190.801†	1205.1	1268.0	[500]	ug/L	06:53:40
3	U 409.014†	9598.0	12253.5	[500]	ug/L	06:53:20
3	V 292.402†	50051.2	53103.0	[500]	ug/L	06:53:20
3	Zn 213.857†	40120.8	40475.2	[500]	ug/L	06:53:20
3	SiO2†	68081.3	69304.1	[5347.5]	ug/L	06:53:55

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	678484.6	25884.42	3.82%	101.74 %
Sc Radial	3808.8	94.01	2.47%	106 %
Y 371.029	532509.9	19128.75	3.59%	100.84 %
Y RADIAL	4175.2	71.88	1.72%	102.7 %
Ag 328.068†	85182.0	2736.51	3.21%	[500] ug/L
Al 396.153Radial†	4276.9	125.85	2.94%	[5000] ug/L
As 188.979†	924.1	31.22	3.38%	[500] ug/L
B 249.677†	18170.1	609.44	3.35%	[500] ug/L
Ba 233.527†	48612.3	1477.44	3.04%	[500] ug/L
Be 313.107†	1166037.0	4701.30	0.40%	[500] ug/L
Ca 317.933Radial†	2469.7	3.62	0.15%	[5000] ug/L
Cd 226.502†	31800.4	1078.50	3.39%	[500] ug/L
Co 228.616†	19115.8	648.83	3.39%	[500] ug/L
Cr 267.716†	31840.3	981.65	3.08%	[500] ug/L
Cu 324.752†	138054.3	4919.86	3.56%	[500] ug/L
K 766.490 Radial†	23331.4	863.83	3.70%	[5000] ug/L
Mg 279.077 IEC†	116.9	2.53	2.16%	[5000] ug/L
Mn 257.610†	357105.3	11184.93	3.13%	[500] ug/L
Mo 202.031†	4944.8	163.67	3.31%	[500] ug/L
Ni 231.604†	14646.9	525.42	3.59%	[500] ug/L
P 214.914†	3519.6	135.87	3.86%	[2500] ug/L
Pb 220.353†	2951.2	81.08	2.75%	[500] ug/L
S 181.975 Axial†	597.5	19.06	3.19%	[1000] ug/L

Sb 206.836†	1163.9	40.00	3.44%	[500]	ug/L
Se 196.026†	620.6	24.17	3.90%	[500]	ug/L
Si 251.611†	65231.8	2311.24	3.54%	[2500]	ug/L
Sn 189.927†	2029.9	73.58	3.62%	[500]	ug/L
Sr 421.552†	45635.7	1442.71	3.16%	[500]	ug/L
Ti 334.940†	259059.5	8055.75	3.11%	[500]	ug/L
Tl 190.801†	1217.3	44.43	3.65%	[500]	ug/L
U 409.014†	12218.9	380.50	3.11%	[500]	ug/L
V 292.402†	53222.2	1616.43	3.04%	[500]	ug/L
Zn 213.857†	40705.1	1363.48	3.35%	[500]	ug/L
SiO2†	65094.7	3716.16	5.71%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/31/2010 06:56:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3752.9	3752.9	105 %	06:58:19
1	Y RADIAL	4238.6	4238.6	104.2 %	06:57:59
1	Al 396.153Radial†	9119.4	8830.2	[10000] ug/L	06:57:59
1	Ca 317.933Radial†	5318.7	5070.2	[10000] ug/L	06:57:59
1	Fe 238.204 Radial†	772.5	730.5	[10000] ug/L	06:58:19
1	K 766.490 Radial†	54073.2	48687.5	[10000] ug/L	06:57:59
1	Mg 279.077 IEC†	249.7	238.2	[10000] ug/L	06:58:19
1	Na 589.592 Radial†	20037.4	20057.8	[10000] ug/L	06:57:59
1	Sr 421.552†	97513.7	93231.8	[1000] ug/L	06:57:59
1	Sc 361.383	663625.3	663625.3	99.510 %	06:59:22
1	Y 371.029	521497.5	521497.5	98.753 %	06:59:22
1	Ag 328.068†	172797.9	173447.5	[1000] ug/L	06:59:22
1	As 188.979†	1923.7	1958.5	[1000] ug/L	06:59:42
1	B 249.677†	36980.0	37577.3	[1000] ug/L	06:59:22
1	Ba 233.527†	98637.1	99110.0	[1000] ug/L	06:59:22
1	Be 313.107†	2344381.7	2360114.3	[1000] ug/L	06:59:17
1	Cd 226.502†	64861.3	65380.2	[1000] ug/L	06:59:22
1	Co 228.616†	38432.5	38671.8	[1000] ug/L	06:59:42
1	Cr 267.716†	65242.6	65469.0	[1000] ug/L	06:59:22
1	Cu 324.752†	286879.2	282938.8	[1000] ug/L	06:59:22
1	Mn 257.610†	726648.1	729774.9	[1000] ug/L	06:59:22
1	Mo 202.031†	10278.6	10324.5	[1000] ug/L	06:59:42
1	Ni 231.604†	29779.1	29841.1	[1000] ug/L	06:59:42
1	P 214.914†	7684.4	7520.6	[5000] ug/L	06:59:42
1	Pb 220.353†	6107.6	6203.5	[1000] ug/L	06:59:42
1	S 181.975 Axial†	1313.5	1280.6	[2000] ug/L	06:59:42
1	Sb 206.836†	2448.5	2435.3	[1000] ug/L	06:59:42
1	Se 196.026†	1272.1	1304.9	[1000] ug/L	06:59:42
1	Si 251.611†	130695.6	130803.3	[5000] ug/L	06:59:22
1	Sn 189.927†	4276.5	4287.8	[1000] ug/L	06:59:42
1	Ti 334.940†	525287.7	529282.3	[1000] ug/L	06:59:22
1	Tl 190.801†	2502.7	2546.5	[1000] ug/L	06:59:42
1	U 409.014†	22405.8	24921.8	[1000] ug/L	06:59:22
1	V 292.402†	106679.7	108953.8	[1000] ug/L	06:59:22
1	Zn 213.857†	83599.4	83321.0	[1000] ug/L	06:59:22
1	SiO2†	130582.3	130675.7	[10695] ug/L	07:00:50
2	Sc Radial	3661.4	3661.4	102 %	06:58:45
2	Y RADIAL	3963.7	3963.7	97.47 %	06:58:25
2	Al 396.153Radial†	8526.6	8467.0	[10000] ug/L	06:58:25
2	Ca 317.933Radial†	5023.3	4907.7	[10000] ug/L	06:58:25
2	Fe 238.204 Radial†	752.7	729.5	[10000] ug/L	06:58:45
2	K 766.490 Radial†	51119.8	47084.1	[10000] ug/L	06:58:25
2	Mg 279.077 IEC†	245.2	239.7	[10000] ug/L	06:58:45
2	Na 589.592 Radial†	18639.3	19166.1	[10000] ug/L	06:58:25
2	Sr 421.552†	90341.7	88531.2	[1000] ug/L	06:58:25
2	Sc 361.383	656626.3	656626.3	98.460 %	06:59:53
2	Y 371.029	516429.7	516429.7	97.793 %	06:59:53
2	Ag 328.068†	171568.6	174049.9	[1000] ug/L	06:59:53
2	As 188.979†	1899.3	1954.2	[1000] ug/L	07:00:13
2	B 249.677†	36743.1	37732.9	[1000] ug/L	06:59:53
2	Ba 233.527†	97670.2	99184.6	[1000] ug/L	06:59:53
2	Be 313.107†	2364338.0	2405494.9	[1000] ug/L	06:59:48
2	Cd 226.502†	63794.9	64991.9	[1000] ug/L	06:59:53
2	Co 228.616†	38062.2	38707.4	[1000] ug/L	07:00:13
2	Cr 267.716†	64396.9	65308.9	[1000] ug/L	06:59:53
2	Cu 324.752†	285186.4	284292.5	[1000] ug/L	06:59:53
2	Mn 257.610†	718622.3	729407.2	[1000] ug/L	06:59:53
2	Mo 202.031†	10203.0	10357.8	[1000] ug/L	07:00:13
2	Ni 231.604†	29489.3	29865.8	[1000] ug/L	07:00:13

2	P 214.914†	7552.7	7469.1	[5000]	ug/L	07:00:13
2	Pb 220.353†	6042.3	6202.5	[1000]	ug/L	07:00:13
2	S 181.975 Axial†	1303.9	1284.9	[2000]	ug/L	07:00:13
2	Sb 206.836†	2433.4	2446.2	[1000]	ug/L	07:00:13
2	Se 196.026†	1263.3	1309.6	[1000]	ug/L	07:00:13
2	Si 251.611†	129463.8	130952.2	[5000]	ug/L	06:59:53
2	Sn 189.927†	4224.2	4280.5	[1000]	ug/L	07:00:13
2	Ti 334.940†	521167.7	530724.5	[1000]	ug/L	06:59:53
2	Tl 190.801†	2472.3	2542.4	[1000]	ug/L	07:00:13
2	U 409.014†	22655.7	25415.6	[1000]	ug/L	06:59:53
2	V 292.402†	105648.3	109049.1	[1000]	ug/L	06:59:53
2	Zn 213.857†	82710.5	83313.8	[1000]	ug/L	06:59:53
2	SiO2†	128264.6	129720.5	[10695]	ug/L	07:00:55
3	Sc Radial	3590.1	3590.1	100	%	06:59:10
3	Y RADIAL	3904.0	3904.0	96.01	%	06:58:50
3	Al 396.153Radial†	8487.6	8594.1	[10000]	ug/L	06:58:50
3	Ca 317.933Radial†	4972.4	4954.6	[10000]	ug/L	06:58:50
3	Fe 238.204 Radial†	739.4	730.9	[10000]	ug/L	06:59:10
3	K 766.490 Radial†	50550.1	47510.0	[10000]	ug/L	06:58:50
3	Mg 279.077 IEC†	237.7	236.9	[10000]	ug/L	06:59:10
3	Na 589.592 Radial†	18451.1	19340.8	[10000]	ug/L	06:58:50
3	Sr 421.552†	89977.7	89926.3	[1000]	ug/L	06:58:50
3	Sc 361.383	649666.6	649666.6	97.416	%	07:00:24
3	Y 371.029	511387.3	511387.3	96.838	%	07:00:24
3	Ag 328.068†	169807.3	174108.6	[1000]	ug/L	07:00:24
3	As 188.979†	1851.2	1925.6	[1000]	ug/L	07:00:44
3	B 249.677†	36081.5	37453.5	[1000]	ug/L	07:00:24
3	Ba 233.527†	96876.0	99432.0	[1000]	ug/L	07:00:24
3	Be 313.107†	2370869.0	2437923.7	[1000]	ug/L	07:00:19
3	Cd 226.502†	63107.1	64980.0	[1000]	ug/L	07:00:24
3	Co 228.616†	37404.0	38445.8	[1000]	ug/L	07:00:44
3	Cr 267.716†	63828.2	65425.8	[1000]	ug/L	07:00:24
3	Cu 324.752†	281153.5	283255.6	[1000]	ug/L	07:00:24
3	Mn 257.610†	711196.5	729603.3	[1000]	ug/L	07:00:24
3	Mo 202.031†	10002.8	10263.3	[1000]	ug/L	07:00:44
3	Ni 231.604†	28960.3	29643.6	[1000]	ug/L	07:00:44
3	P 214.914†	7375.5	7369.4	[5000]	ug/L	07:00:44
3	Pb 220.353†	5936.4	6159.6	[1000]	ug/L	07:00:44
3	S 181.975 Axial†	1274.3	1268.7	[2000]	ug/L	07:00:44
3	Sb 206.836†	2382.2	2420.1	[1000]	ug/L	07:00:44
3	Se 196.026†	1210.9	1269.6	[1000]	ug/L	07:00:44
3	Si 251.611†	127628.6	130476.9	[5000]	ug/L	07:00:24
3	Sn 189.927†	4154.8	4255.2	[1000]	ug/L	07:00:44
3	Ti 334.940†	515625.4	530705.7	[1000]	ug/L	07:00:24
3	Tl 190.801†	2442.9	2539.2	[1000]	ug/L	07:00:44
3	U 409.014†	22198.0	25192.3	[1000]	ug/L	07:00:24
3	V 292.402†	104627.6	109150.7	[1000]	ug/L	07:00:24
3	Zn 213.857†	81551.7	83024.1	[1000]	ug/L	07:00:24
3	SiO2†	132345.4	135305.0	[10695]	ug/L	07:01:00

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	656639.4	6979.38	1.06%	98.462	%
Sc Radial	3668.1	81.59	2.22%	102	%
Y 371.029	516438.2	5055.10	0.98%	97.794	%
Y RADIAL	4035.4	178.46	4.42%	99.24	%
Ag 328.068†	173868.7	365.94	0.21%	[1000]	ug/L
Al 396.153Radial†	8630.4	184.33	2.14%	[10000]	ug/L
As 188.979†	1946.1	17.89	0.92%	[1000]	ug/L
B 249.677†	37587.9	139.99	0.37%	[1000]	ug/L
Ba 233.527†	99242.2	168.52	0.17%	[1000]	ug/L
Be 313.107†	2401177.6	39083.92	1.63%	[1000]	ug/L
Ca 317.933Radial†	4977.5	83.62	1.68%	[10000]	ug/L
Cd 226.502†	65117.4	227.72	0.35%	[1000]	ug/L
Co 228.616†	38608.4	141.86	0.37%	[1000]	ug/L
Cr 267.716†	65401.2	82.82	0.13%	[1000]	ug/L
Cu 324.752†	283495.6	708.04	0.25%	[1000]	ug/L
Fe 238.204 Radial†	730.3	0.69	0.09%	[10000]	ug/L
K 766.490 Radial†	47760.5	830.53	1.74%	[10000]	ug/L

Mg 279.077 IEC†	238.3	1.39	0.59%	[10000]	ug/L
Mn 257.610†	729595.1	183.99	0.03%	[1000]	ug/L
Mo 202.031†	10315.2	47.94	0.46%	[1000]	ug/L
Na 589.592 Radial†	19521.6	472.57	2.42%	[10000]	ug/L
Ni 231.604†	29783.5	121.76	0.41%	[1000]	ug/L
P 214.914†	7453.1	76.84	1.03%	[5000]	ug/L
Pb 220.353†	6188.5	25.06	0.40%	[1000]	ug/L
S 181.975 Axial†	1278.1	8.38	0.66%	[2000]	ug/L
Sb 206.836†	2433.9	13.09	0.54%	[1000]	ug/L
Se 196.026†	1294.7	21.86	1.69%	[1000]	ug/L
Si 251.611†	130744.1	243.08	0.19%	[5000]	ug/L
Sn 189.927†	4274.5	17.12	0.40%	[1000]	ug/L
Sr 421.552†	90563.1	2414.13	2.67%	[1000]	ug/L
Ti 334.940†	530237.5	827.28	0.16%	[1000]	ug/L
Tl 190.801†	2542.7	3.64	0.14%	[1000]	ug/L
U 409.014†	25176.6	247.29	0.98%	[1000]	ug/L
V 292.402†	109051.2	98.44	0.09%	[1000]	ug/L
Zn 213.857†	83219.6	169.37	0.20%	[1000]	ug/L
SiO2†	131900.4	2986.93	2.26%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/31/2010 07:03:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3752.9	3752.9	105 %	07:05:25
1	Y RADIAL	4084.5	4084.5	100.4 %	07:05:25
1	Al 396.153Radial†	44794.6	42943.2	[50000] ug/L	07:05:05
1	Ca 317.933Radial†	25107.1	23992.0	[50000] ug/L	07:05:05
1	Fe 238.204 Radial†	1474.5	1401.7	[20000] ug/L	07:05:25
1	Mg 279.077 IEC†	1182.9	1130.5	[50000] ug/L	07:05:25
1	Na 589.592 Radial†	39133.2	38317.2	[20000] ug/L	07:05:05
1	Sc 361.383	640064.1	640064.1	95.977 %	07:06:22
1	Y 371.029	500865.1	500865.1	94.846 %	07:06:22
2	Sc Radial	3673.6	3673.6	102 %	07:05:50
2	Y RADIAL	3996.6	3996.6	98.28 %	07:05:50
2	Al 396.153Radial†	45135.2	44201.0	[50000] ug/L	07:05:30
2	Ca 317.933Radial†	25306.4	24705.3	[50000] ug/L	07:05:30
2	Fe 238.204 Radial†	1443.4	1401.8	[20000] ug/L	07:05:50
2	Mg 279.077 IEC†	1157.6	1130.1	[50000] ug/L	07:05:50
2	Na 589.592 Radial†	39040.4	39034.6	[20000] ug/L	07:05:30
2	Sc 361.383	638811.1	638811.1	95.789 %	07:06:28
2	Y 371.029	500298.1	500298.1	94.738 %	07:06:28
3	Sc Radial	3600.7	3600.7	100 %	07:06:15
3	Y RADIAL	3913.0	3913.0	96.23 %	07:06:15
3	Al 396.153Radial†	43690.8	43653.9	[50000] ug/L	07:05:55
3	Ca 317.933Radial†	24728.8	24629.9	[50000] ug/L	07:05:55
3	Fe 238.204 Radial†	1419.6	1406.6	[20000] ug/L	07:06:15
3	Mg 279.077 IEC†	1133.4	1128.9	[50000] ug/L	07:06:15
3	Na 589.592 Radial†	38051.7	38821.2	[20000] ug/L	07:05:55
3	Sc 361.383	643854.1	643854.1	96.545 %	07:06:34
3	Y 371.029	503994.3	503994.3	95.438 %	07:06:34

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	640909.7	2625.69	0.41%	96.103 %
Sc Radial	3675.8	76.13	2.07%	102 %
Y 371.029	501719.1	1990.60	0.40%	95.007 %
Y RADIAL	3998.0	85.76	2.14%	98.32 %
Al 396.153Radial†	43599.4	630.63	1.45%	[50000] ug/L
Ca 317.933Radial†	24442.4	391.83	1.60%	[50000] ug/L
Fe 238.204 Radial†	1403.4	2.80	0.20%	[20000] ug/L
Mg 279.077 IEC†	1129.8	0.83	0.07%	[50000] ug/L
Na 589.592 Radial†	38724.3	368.38	0.95%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	173.2	0.00000	0.999967	
Al 396.153Radial	3	Lin Thru 0	0.0	0.8715	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	1.926	0.00000	0.999794	
B 249.677	3	Lin Thru 0	0.0	37.33	0.00000	0.999909	
Ba 233.527	3	Lin Thru 0	0.0	98.85	0.00000	0.999966	
Be 313.107	3	Lin Thru 0	0.0	2387	0.00000	0.999933	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4892	0.00000	0.999993	
Cd 226.502	3	Lin Thru 0	0.0	64.79	0.00000	0.999946	
Co 228.616	3	Lin Thru 0	0.0	38.52	0.00000	0.999990	
Cr 267.716	3	Lin Thru 0	0.0	65.06	0.00000	0.999944	
Cu 324.752	3	Lin Thru 0	0.0	282.0	0.00000	0.999945	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0707	0.00000	0.999869	
K 766.490 Radial	3	Lin Thru 0	0.0	4.752	0.00000	0.999941	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0227	0.00000	0.999941
Mn 257.610	3	Lin Thru 0	0.0	726.7	0.00000	0.999958
Mo 202.031	3	Lin Thru 0	0.0	10.23	0.00000	0.999860
Na 589.592 Radia	2	Lin Thru 0	0.0	1.939	0.00000	0.999995
Ni 231.604	3	Lin Thru 0	0.0	29.68	0.00000	0.999972
P 214.914	3	Lin Thru 0	0.0	1.473	0.00000	0.999735
Pb 220.353	3	Lin Thru 0	0.0	6.129	0.00000	0.999819
S 181.975 Axial	3	Lin Thru 0	0.0	0.6303	0.00000	0.999628
Sb 206.836	3	Lin Thru 0	0.0	2.412	0.00000	0.999843
Se 196.026	3	Lin Thru 0	0.0	1.283	0.00000	0.999852
Si 251.611	3	Lin Thru 0	0.0	26.14	0.00000	1.000000
Sn 189.927	3	Lin Thru 0	0.0	4.230	0.00000	0.999789
Sr 421.552	3	Lin Thru 0	0.0	90.70	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	527.9	0.00000	0.999956
Tl 190.801	3	Lin Thru 0	0.0	2.520	0.00000	0.999850
U 409.014	3	Lin Thru 0	0.0	25.04	0.00000	0.999911
V 292.402	3	Lin Thru 0	0.0	108.5	0.00000	0.999954
Zn 213.857	3	Lin Thru 0	0.0	82.86	0.00000	0.999962
Sio2	3	Lin Thru 0	0.0	12.29	0.00000	0.999970

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/31/2010 07:08:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3727.8	3727.8	104 %		07:10:58
1	Y RADIAL	4324.8	4324.8	106.4 %		07:10:38
1	Al 396.153Radial†	4720.0	4653.8	5314.8 ug/L	5314.8 ppb	07:10:38
1	Ca 317.933Radial†	2588.0	2475.7	5060.4 ug/L	5060.4 ppb	07:10:58
1	Fe 238.204 Radial†	391.1	368.3	5221.8 ug/L	5221.8 ppb	07:10:58
1	K 766.490 Radial†	16206.1	12582.2	2644.4 ug/L	2644.4 ppb	07:10:38
1	Mg 279.077 IEC†	129.6	124.2	5482.0 ug/L	5482.0 ppb	07:10:58
1	Na 589.592 Radial†	4391.7	5125.2	2642.7 ug/L	2642.7 ppb	07:10:38
1	Sr 421.552†	52812.4	50827.3	560.33 ug/L	560.33 ppb	07:10:38
1	Sc 361.383	679234.7	679234.7	101.85 %		07:11:55
1	Y 371.029	533574.5	533574.5	101.04 %		07:11:55
1	Ag 328.068†	44773.0	43757.7	255.87 ug/L	255.87 ppb	07:11:55
1	As 188.979†	881.8	891.0	466.86 ug/L	466.86 ppb	07:12:15
1	B 249.677†	18970.0	19040.5	507.78 ug/L	507.78 ppb	07:11:55
1	Ba 233.527†	50821.2	49884.8	505.91 ug/L	505.91 ppb	07:11:55
1	Be 313.107†	620535.5	613441.4	258.09 ug/L	258.09 ppb	07:11:55
1	Cd 226.502†	31476.1	31103.6	479.95 ug/L	479.95 ppb	07:12:15
1	Co 228.616†	19482.2	19178.2	497.94 ug/L	497.94 ppb	07:12:15
1	Cr 267.716†	32004.5	31327.9	482.60 ug/L	482.60 ppb	07:11:55
1	Cu 324.752†	149785.1	141709.9	502.46 ug/L	502.46 ppb	07:11:55
1	Mn 257.610†	383447.4	376027.4	517.70 ug/L	517.70 ppb	07:11:55
1	Mo 202.031†	5433.3	5329.8	521.57 ug/L	521.57 ppb	07:12:15
1	Ni 231.604†	14933.3	14577.3	490.91 ug/L	490.91 ppb	07:12:15
1	P 214.914†	3850.6	3578.9	2331.3 ug/L	2331.3 ppb	07:12:15
1	Pb 220.353†	2969.7	2981.6	488.37 ug/L	488.37 ppb	07:12:15
1	S 181.975 Axial†	1566.0	1498.2	2375.9 ug/L	2375.9 ppb	07:12:15
1	Sb 206.836†	1209.0	1161.8	500.34 ug/L	500.34 ppb	07:12:15
1	Se 196.026†	3201.9	3170.4	2487.0 ug/L	2487.0 ppb	07:12:15
1	Si 251.611†	130757.3	127845.6	4885.0 ug/L	4885.0 ppb	07:11:55
1	Sn 189.927†	2241.7	2191.2	518.93 ug/L	518.93 ppb	07:12:15
1	Ti 334.940†	266619.8	263182.2	498.38 ug/L	498.38 ppb	07:11:55
1	Tl 190.801†	1293.9	1301.9	520.02 ug/L	520.02 ppb	07:12:15
1	U 409.014†	10062.8	12285.5	488.91 ug/L	488.91 ppb	07:11:55
1	V 292.402†	53929.8	54698.5	510.93 ug/L	510.93 ppb	07:11:55
1	Zn 213.857†	43333.7	41856.2	500.56 ug/L	500.56 ppb	07:11:55
1	SiO2†	134496.9	131503.5	10682 ug/L	10682 ppb	07:13:13
2	Sc Radial	3676.0	3676.0	102 %		07:11:23
2	Y RADIAL	4050.6	4050.6	99.61 %		07:11:03
2	Al 396.153Radial†	4399.9	4405.3	5029.5 ug/L	5029.5 ppb	07:11:03
2	Ca 317.933Radial†	2532.2	2456.2	5020.6 ug/L	5020.6 ppb	07:11:23
2	Fe 238.204 Radial†	381.2	364.0	5160.5 ug/L	5160.5 ppb	07:11:23
2	K 766.490 Radial†	15183.7	11803.8	2480.7 ug/L	2480.7 ppb	07:11:03
2	Mg 279.077 IEC†	126.5	122.9	5424.1 ug/L	5424.1 ppb	07:11:23
2	Na 589.592 Radial†	3997.8	4800.2	2475.1 ug/L	2475.1 ppb	07:11:03
2	Sr 421.552†	49193.2	48009.8	529.27 ug/L	529.27 ppb	07:11:03
2	Sc 361.383	675952.3	675952.3	101.36 %		07:12:21
2	Y 371.029	530413.9	530413.9	100.44 %		07:12:21
2	Ag 328.068†	44308.3	43512.6	254.43 ug/L	254.43 ppb	07:12:21
2	As 188.979†	874.4	887.9	465.20 ug/L	465.20 ppb	07:12:41
2	B 249.677†	18827.0	18989.8	506.41 ug/L	506.41 ppb	07:12:21
2	Ba 233.527†	50325.7	49638.2	503.41 ug/L	503.41 ppb	07:12:21
2	Be 313.107†	615453.7	611386.2	257.22 ug/L	257.22 ppb	07:12:21
2	Cd 226.502†	31737.5	31511.5	486.26 ug/L	486.26 ppb	07:12:41
2	Co 228.616†	19617.9	19404.9	503.83 ug/L	503.83 ppb	07:12:41
2	Cr 267.716†	31760.9	31240.1	481.24 ug/L	481.24 ppb	07:12:21
2	Cu 324.752†	148443.0	141099.9	500.29 ug/L	500.29 ppb	07:12:21
2	Mn 257.610†	380074.7	374528.0	515.64 ug/L	515.64 ppb	07:12:21
2	Mo 202.031†	5436.9	5359.3	524.45 ug/L	524.45 ppb	07:12:41
2	Ni 231.604†	15038.2	14752.0	496.80 ug/L	496.80 ppb	07:12:41

2	P 214.914†	3872.0	3618.4	2358.6 ug/L	2358.6 ppb	07:12:41
2	Pb 220.353†	2988.1	3013.8	493.58 ug/L	493.58 ppb	07:12:41
2	S 181.975 Axial†	1589.2	1528.6	2424.1 ug/L	2424.1 ppb	07:12:41
2	Sb 206.836†	1210.4	1168.9	503.48 ug/L	503.48 ppb	07:12:41
2	Se 196.026†	3238.2	3221.4	2526.6 ug/L	2526.6 ppb	07:12:41
2	Si 251.611†	129594.2	127321.5	4864.9 ug/L	4864.9 ppb	07:12:21
2	Sn 189.927†	2258.0	2218.0	525.26 ug/L	525.26 ppb	07:12:41
2	Ti 334.940†	264091.5	261958.9	496.06 ug/L	496.06 ppb	07:12:21
2	Tl 190.801†	1292.6	1306.7	521.88 ug/L	521.88 ppb	07:12:41
2	U 409.014†	9960.4	12232.5	486.80 ug/L	486.80 ppb	07:12:21
2	V 292.402†	53375.2	54408.5	508.30 ug/L	508.30 ppb	07:12:21
2	Zn 213.857†	42998.0	41731.5	499.03 ug/L	499.03 ppb	07:12:21
2	SiO2†	129807.1	127517.7	10358 ug/L	10358 ppb	07:13:18
3	Sc Radial	3797.9	3797.9	106 %		07:11:48
3	Y RADIAL	4241.9	4241.9	104.3 %		07:11:28
3	Al 396.153Radial†	4569.1	4427.3	5053.4 ug/L	5053.4 ppb	07:11:28
3	Ca 317.933Radial†	2621.2	2461.1	5030.4 ug/L	5030.4 ppb	07:11:48
3	Fe 238.204 Radial†	396.2	366.1	5191.6 ug/L	5191.6 ppb	07:11:48
3	K 766.490 Radial†	15633.9	11753.3	2470.0 ug/L	2470.0 ppb	07:11:28
3	Mg 279.077 IEC†	131.3	123.5	5450.6 ug/L	5450.6 ppb	07:11:48
3	Na 589.592 Radial†	4276.8	4938.6	2546.4 ug/L	2546.4 ppb	07:11:28
3	Sr 421.552†	51479.4	48628.4	536.09 ug/L	536.09 ppb	07:11:28
3	Sc 361.383	655275.5	655275.5	98.258 %		07:12:47
3	Y 371.029	515549.1	515549.1	97.626 %		07:12:47
3	Ag 328.068†	43169.2	43732.7	255.72 ug/L	255.72 ppb	07:12:47
3	As 188.979†	895.6	936.7	490.50 ug/L	490.50 ppb	07:13:07
3	B 249.677†	18350.8	19091.4	509.06 ug/L	509.06 ppb	07:12:47
3	Ba 233.527†	49213.4	50072.9	507.81 ug/L	507.81 ppb	07:12:47
3	Be 313.107†	598301.3	613089.8	257.94 ug/L	257.94 ppb	07:12:47
3	Cd 226.502†	32243.6	33014.7	509.47 ug/L	509.47 ppb	07:13:07
3	Co 228.616†	19896.0	20298.7	527.09 ug/L	527.09 ppb	07:13:07
3	Cr 267.716†	31123.0	31579.7	486.47 ug/L	486.47 ppb	07:12:47
3	Cu 324.752†	144294.9	141499.5	501.71 ug/L	501.71 ppb	07:12:47
3	Mn 257.610†	370827.4	376949.1	518.97 ug/L	518.97 ppb	07:12:47
3	Mo 202.031†	5531.4	5624.8	550.40 ug/L	550.40 ppb	07:13:07
3	Ni 231.604†	15255.9	15441.7	520.02 ug/L	520.02 ppb	07:13:07
3	P 214.914†	3937.4	3805.6	2485.6 ug/L	2485.6 ppb	07:13:07
3	Pb 220.353†	2997.1	3116.0	510.31 ug/L	510.31 ppb	07:13:07
3	S 181.975 Axial†	1622.5	1611.9	2556.3 ug/L	2556.3 ppb	07:13:07
3	Sb 206.836†	1252.0	1248.9	537.60 ug/L	537.60 ppb	07:13:07
3	Se 196.026†	3291.8	3376.8	2647.8 ug/L	2647.8 ppb	07:13:07
3	Si 251.611†	126006.1	127704.3	4879.2 ug/L	4879.2 ppb	07:12:47
3	Sn 189.927†	2297.4	2328.4	551.36 ug/L	551.36 ppb	07:13:07
3	Ti 334.940†	257473.1	263444.8	498.87 ug/L	498.87 ppb	07:12:47
3	Tl 190.801†	1308.7	1363.4	544.31 ug/L	544.31 ppb	07:13:07
3	U 409.014†	9658.2	12235.0	486.88 ug/L	486.88 ppb	07:12:47
3	V 292.402†	51983.1	54653.3	510.92 ug/L	510.92 ppb	07:12:47
3	Zn 213.857†	41982.2	42036.3	502.55 ug/L	502.55 ppb	07:12:47
3	SiO2†	130038.7	131794.6	10705 ug/L	10705 ppb	07:13:23

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	670154.2	100.49 %	1.948			1.94%
Sc Radial	3733.9	104 %	1.7			1.64%
Y 371.029	526512.5	99.702 %	1.8227			1.83%
Y RADIAL	4205.8	103.4 %	3.46			3.34%
Ag 328.068†	43667.7	255.34 ug/L	0.793	255.34 ppb	0.793	0.31%
QC value within limits for Ag 328.068 Recovery = 102.13%						
Al 396.153Radial†	4495.4	5132.6 ug/L	158.28	5132.6 ppb	158.28	3.08%
QC value within limits for Al 396.153Radial Recovery = 102.65%						
As 188.979†	905.2	474.19 ug/L	14.152	474.19 ppb	14.152	2.98%
QC value within limits for As 188.979 Recovery = 94.84%						
B 249.677†	19040.6	507.75 ug/L	1.325	507.75 ppb	1.325	0.26%
QC value within limits for B 249.677 Recovery = 101.55%						
Ba 233.527†	49865.3	505.71 ug/L	2.208	505.71 ppb	2.208	0.44%
QC value within limits for Ba 233.527 Recovery = 101.14%						
Be 313.107†	612639.1	257.75 ug/L	0.464	257.75 ppb	0.464	0.18%
QC value within limits for Be 313.107 Recovery = 103.10%						
Ca 317.933Radial†	2464.3	5037.1 ug/L	20.71	5037.1 ppb	20.71	0.41%

QC value within limits for Ca 317.933 Radial Recovery = 100.74%							
Cd 226.502†	31876.6	491.89 ug/L	15.546	491.89 ppb	15.546	3.16%	
QC value within limits for Cd 226.502 Recovery = 98.38%							
Co 228.616†	19627.3	509.62 ug/L	15.413	509.62 ppb	15.413	3.02%	
QC value within limits for Co 228.616 Recovery = 101.92%							
Cr 267.716†	31382.6	483.44 ug/L	2.712	483.44 ppb	2.712	0.56%	
QC value within limits for Cr 267.716 Recovery = 96.69%							
Cu 324.752†	141436.5	501.49 ug/L	1.100	501.49 ppb	1.100	0.22%	
QC value within limits for Cu 324.752 Recovery = 100.30%							
Fe 238.204 Radial†	366.2	5191.3 ug/L	30.68	5191.3 ppb	30.68	0.59%	
QC value within limits for Fe 238.204 Radial Recovery = 103.83%							
K 766.490 Radial†	12046.4	2531.7 ug/L	97.77	2531.7 ppb	97.77	3.86%	
QC value within limits for K 766.490 Radial Recovery = 101.27%							
Mg 279.077 IEC†	123.5	5452.2 ug/L	28.96	5452.2 ppb	28.96	0.53%	
QC value within limits for Mg 279.077 IEC Recovery = 109.04%							
Mn 257.610†	375834.9	517.44 ug/L	1.683	517.44 ppb	1.683	0.33%	
QC value within limits for Mn 257.610 Recovery = 103.49%							
Mo 202.031†	5438.0	532.14 ug/L	15.881	532.14 ppb	15.881	2.98%	
QC value within limits for Mo 202.031 Recovery = 106.43%							
Na 589.592 Radial†	4954.7	2554.7 ug/L	84.11	2554.7 ppb	84.11	3.29%	
QC value within limits for Na 589.592 Radial Recovery = 102.19%							
Ni 231.604†	14923.7	502.58 ug/L	15.392	502.58 ppb	15.392	3.06%	
QC value within limits for Ni 231.604 Recovery = 100.52%							
P 214.914†	3667.6	2391.8 ug/L	82.32	2391.8 ppb	82.32	3.44%	
QC value within limits for P 214.914 Recovery = 95.67%							
Pb 220.353†	3037.1	497.42 ug/L	11.463	497.42 ppb	11.463	2.30%	
QC value within limits for Pb 220.353 Recovery = 99.48%							
S 181.975 Axial†	1546.2	2452.1 ug/L	93.43	2452.1 ppb	93.43	3.81%	
QC value within limits for S 181.975 Axial Recovery = 98.08%							
Sb 206.836†	1193.2	513.81 ug/L	20.668	513.81 ppb	20.668	4.02%	
QC value within limits for Sb 206.836 Recovery = 102.76%							
Se 196.026†	3256.2	2553.8 ug/L	83.77	2553.8 ppb	83.77	3.28%	
QC value within limits for Se 196.026 Recovery = 102.15%							
Si 251.611†	127623.8	4876.4 ug/L	10.34	4876.4 ppb	10.34	0.21%	
QC value within limits for Si 251.611 Recovery = 97.53%							
Sn 189.927†	2245.9	531.85 ug/L	17.189	531.85 ppb	17.189	3.23%	
QC value within limits for Sn 189.927 Recovery = 106.37%							
Sr 421.552†	49155.2	541.90 ug/L	16.325	541.90 ppb	16.325	3.01%	
QC value within limits for Sr 421.552 Recovery = 108.38%							
Ti 334.940†	262862.0	497.77 ug/L	1.501	497.77 ppb	1.501	0.30%	
QC value within limits for Ti 334.940 Recovery = 99.55%							
Tl 190.801†	1324.0	528.73 ug/L	13.519	528.73 ppb	13.519	2.56%	
QC value within limits for Tl 190.801 Recovery = 105.75%							
U 409.014†	12251.0	487.53 ug/L	1.193	487.53 ppb	1.193	0.24%	
QC value within limits for U 409.014 Recovery = 97.51%							
V 292.402†	54586.8	510.05 ug/L	1.512	510.05 ppb	1.512	0.30%	
QC value within limits for V 292.402 Recovery = 102.01%							
Zn 213.857†	41874.7	500.71 ug/L	1.767	500.71 ppb	1.767	0.35%	
QC value within limits for Zn 213.857 Recovery = 100.14%							
SiO2†	130271.9	10581 ug/L	194.2	10581 ppb	194.2	1.83%	
QC value within limits for SiO2 Recovery = 98.94%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/31/2010 07:15:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3702.8	3702.8	103 %		07:17:47
1	Y RADIAL	4043.3	4043.3	99.43 %		07:17:27
1	Al 396.153Radial†	-94.7	18.2	20.795 ug/L	20.795 ppb	07:17:47
1	Ca 317.933Radial†	17.9	1.6	3.3390 ug/L	3.3390 ppb	07:17:47
1	Fe 238.204 Radial†	8.3	-0.2	-2.2291 ug/L	-2.2291 ppb	07:17:47
1	K 766.490 Radial†	3026.7	-85.5	-17.993 ug/L	-17.993 ppb	07:17:27
1	Mg 279.077 IEC†	-1.1	-1.7	-74.404 ug/L	-74.404 ppb	07:17:47
1	Na 589.592 Radial†	-993.5	-65.4	-33.721 ug/L	-33.721 ppb	07:17:27
1	Sr 421.552†	26.0	11.4	0.1262 ug/L	0.1262 ppb	07:17:27
1	Sc 361.383	654511.6	654511.6	98.143 %		07:18:44
1	Y 371.029	517681.4	517681.4	98.030 %		07:18:44
1	Ag 328.068†	304.8	108.5	0.6264 ug/L	0.6264 ppb	07:18:44
1	As 188.979†	-18.9	6.0	3.1107 ug/L	3.1107 ppb	07:19:04
1	B 249.677†	-285.4	124.3	3.3315 ug/L	3.3315 ppb	07:19:04
1	Ba 233.527†	21.7	8.9	0.0884 ug/L	0.0884 ppb	07:19:04
1	Be 313.107†	-4175.7	-76.5	-0.0324 ug/L	-0.0324 ppb	07:18:44
1	Cd 226.502†	-206.6	-11.3	-0.1743 ug/L	-0.1743 ppb	07:19:04
1	Co 228.616†	-55.8	-6.9	-0.1756 ug/L	-0.1756 ppb	07:19:04
1	Cr 267.716†	108.8	15.6	0.2400 ug/L	0.2400 ppb	07:19:04
1	Cu 324.752†	5378.5	126.0	0.4491 ug/L	0.4491 ppb	07:18:44
1	Mn 257.610†	461.7	16.0	0.0248 ug/L	0.0248 ppb	07:19:04
1	Mo 202.031†	20.5	16.2	1.5824 ug/L	1.5824 ppb	07:19:04
1	Ni 231.604†	113.7	31.2	1.0499 ug/L	1.0499 ppb	07:19:04
1	P 214.914†	199.5	1.6	0.9962 ug/L	0.9962 ppb	07:19:04
1	Pb 220.353†	-49.1	15.7	2.5745 ug/L	2.5745 ppb	07:19:04
1	S 181.975 Axial†	34.8	-3.9	-6.2041 ug/L	-6.2041 ppb	07:19:04
1	Sb 206.836†	15.6	-9.4	-3.8284 ug/L	-3.8284 ppb	07:19:04
1	Se 196.026†	-17.4	8.8	6.8900 ug/L	6.8900 ppb	07:19:04
1	Si 251.611†	529.8	3.5	0.1130 ug/L	0.1130 ppb	07:19:04
1	Sn 189.927†	15.3	5.8	1.3776 ug/L	1.3776 ppb	07:19:04
1	Ti 334.940†	-1460.3	-82.3	-0.1474 ug/L	-0.1474 ppb	07:18:44
1	Tl 190.801†	-22.8	8.2	3.2663 ug/L	3.2663 ppb	07:19:04
1	U 409.014†	-2473.0	-114.2	-4.5606 ug/L	-4.5606 ppb	07:18:44
1	V 292.402†	-1794.8	-80.4	-0.7283 ug/L	-0.7283 ppb	07:18:44
1	Zn 213.857†	679.6	2.0	0.0176 ug/L	0.0176 ppb	07:19:04
1	SiO2†	538.3	-1.7	-0.1809 ug/L	-0.1809 ppb	07:20:00
2	Sc Radial	3752.6	3752.6	105 %		07:18:12
2	Y RADIAL	4100.3	4100.3	100.8 %		07:17:52
2	Al 396.153Radial†	-107.2	7.4	8.5029 ug/L	8.5029 ppb	07:18:12
2	Ca 317.933Radial†	8.4	-7.7	-15.677 ug/L	-15.677 ppb	07:18:12
2	Fe 238.204 Radial†	5.4	-3.1	-43.179 ug/L	-43.179 ppb	07:18:12
2	K 766.490 Radial†	3163.5	6.3	1.3250 ug/L	1.3250 ppb	07:17:52
2	Mg 279.077 IEC†	-0.2	-0.9	-38.443 ug/L	-38.443 ppb	07:18:12
2	Na 589.592 Radial†	-920.1	17.6	9.0546 ug/L	9.0546 ppb	07:17:52
2	Sr 421.552†	25.3	10.4	0.1151 ug/L	0.1151 ppb	07:17:52
2	Sc 361.383	693074.1	693074.1	103.93 %		07:19:09
2	Y 371.029	547155.6	547155.6	103.61 %		07:19:09
2	Ag 328.068†	183.2	-25.8	-0.1618 ug/L	-0.1618 ppb	07:19:09
2	As 188.979†	-17.9	8.0	4.1640 ug/L	4.1640 ppb	07:19:29
2	B 249.677†	-296.0	130.2	3.4953 ug/L	3.4953 ppb	07:19:29
2	Ba 233.527†	12.0	-1.6	-0.0154 ug/L	-0.0154 ppb	07:19:29
2	Be 313.107†	-4323.1	18.5	0.0076 ug/L	0.0076 ppb	07:19:09
2	Cd 226.502†	-206.4	0.7	0.0153 ug/L	0.0153 ppb	07:19:29
2	Co 228.616†	-45.3	6.3	0.1653 ug/L	0.1653 ppb	07:19:29
2	Cr 267.716†	89.5	-9.1	-0.1452 ug/L	-0.1452 ppb	07:19:29
2	Cu 324.752†	5593.2	27.7	0.0934 ug/L	0.0934 ppb	07:19:09
2	Mn 257.610†	473.2	0.9	-0.0015 ug/L	-0.0015 ppb	07:19:29
2	Mo 202.031†	10.3	5.2	0.5042 ug/L	0.5042 ppb	07:19:29
2	Ni 231.604†	81.6	-6.3	-0.2107 ug/L	-0.2107 ppb	07:19:29

2	P 214.914†	197.3	-11.8	-8.0134 ug/L	-8.0134 ppb	07:19:29
2	Pb 220.353†	-83.4	-14.5	-2.3591 ug/L	-2.3591 ppb	07:19:29
2	S 181.975 Axial†	32.5	-8.1	-12.826 ug/L	-12.826 ppb	07:19:29
2	Sb 206.836†	30.9	4.5	1.8841 ug/L	1.8841 ppb	07:19:29
2	Se 196.026†	-21.0	6.4	4.8618 ug/L	4.8618 ppb	07:19:29
2	Si 251.611†	547.9	-9.2	-0.3572 ug/L	-0.3572 ppb	07:19:29
2	Sn 189.927†	14.2	3.9	0.9197 ug/L	0.9197 ppb	07:19:29
2	Ti 334.940†	-1489.5	-27.6	-0.0532 ug/L	-0.0532 ppb	07:19:09
2	Tl 190.801†	-44.0	-10.8	-4.3049 ug/L	-4.3049 ppb	07:19:29
2	U 409.014†	-2378.6	116.8	4.6703 ug/L	4.6703 ppb	07:19:09
2	V 292.402†	-1698.5	114.0	1.0721 ug/L	1.0721 ppb	07:19:09
2	Zn 213.857†	681.4	-34.7	-0.4109 ug/L	-0.4109 ppb	07:19:29
2	SiO2†	545.4	-25.4	-2.0838 ug/L	-2.0838 ppb	07:20:05
3	Sc Radial	3835.8	3835.8	107 %		07:18:37
3	Y RADIAL	4101.9	4101.9	100.9 %		07:18:17
3	Al 396.153Radial†	-87.2	28.4	32.578 ug/L	32.578 ppb	07:18:37
3	Ca 317.933Radial†	14.0	-2.6	-5.2815 ug/L	-5.2815 ppb	07:18:37
3	Fe 238.204 Radial†	6.7	-1.9	-26.807 ug/L	-26.807 ppb	07:18:37
3	K 766.490 Radial†	3051.8	-163.8	-34.480 ug/L	-34.480 ppb	07:18:17
3	Mg 279.077 IEC†	2.1	1.3	56.969 ug/L	56.969 ppb	07:18:37
3	Na 589.592 Radial†	-953.7	5.2	2.6865 ug/L	2.6865 ppb	07:18:17
3	Sr 421.552†	16.8	2.0	0.0218 ug/L	0.0218 ppb	07:18:17
3	Sc 361.383	658450.7	658450.7	98.734 %		07:19:35
3	Y 371.029	521328.2	521328.2	98.720 %		07:19:35
3	Ag 328.068†	216.1	16.8	0.0852 ug/L	0.0852 ppb	07:19:35
3	As 188.979†	-20.3	4.7	2.4138 ug/L	2.4138 ppb	07:19:55
3	B 249.677†	-225.7	186.5	5.0009 ug/L	5.0009 ppb	07:19:55
3	Ba 233.527†	6.8	-6.3	-0.0640 ug/L	-0.0640 ppb	07:19:55
3	Be 313.107†	-4157.8	-32.9	-0.0134 ug/L	-0.0134 ppb	07:19:35
3	Cd 226.502†	-214.9	-18.4	-0.2798 ug/L	-0.2798 ppb	07:19:55
3	Co 228.616†	-48.1	1.2	0.0311 ug/L	0.0311 ppb	07:19:55
3	Cr 267.716†	75.5	-18.8	-0.2936 ug/L	-0.2936 ppb	07:19:55
3	Cu 324.752†	5380.6	95.4	0.3336 ug/L	0.3336 ppb	07:19:35
3	Mn 257.610†	432.3	-16.6	-0.0278 ug/L	-0.0278 ppb	07:19:55
3	Mo 202.031†	6.2	1.5	0.1475 ug/L	0.1475 ppb	07:19:55
3	Ni 231.604†	95.7	12.2	0.4110 ug/L	0.4110 ppb	07:19:55
3	P 214.914†	199.0	-0.1	-0.1172 ug/L	-0.1172 ppb	07:19:55
3	Pb 220.353†	-73.0	-8.1	-1.3171 ug/L	-1.3171 ppb	07:19:55
3	S 181.975 Axial†	36.0	-2.9	-4.6341 ug/L	-4.6341 ppb	07:19:55
3	Sb 206.836†	31.3	6.4	2.6658 ug/L	2.6658 ppb	07:19:55
3	Se 196.026†	-21.9	4.4	3.3869 ug/L	3.3869 ppb	07:19:55
3	Si 251.611†	535.6	6.0	0.2286 ug/L	0.2286 ppb	07:19:55
3	Sn 189.927†	8.6	-1.0	-0.2441 ug/L	-0.2441 ppb	07:19:55
3	Ti 334.940†	-1307.2	81.7	0.1470 ug/L	0.1470 ppb	07:19:35
3	Tl 190.801†	-29.3	1.8	0.7210 ug/L	0.7210 ppb	07:19:55
3	U 409.014†	-2230.9	146.0	5.8335 ug/L	5.8335 ppb	07:19:35
3	V 292.402†	-1697.4	29.2	0.2873 ug/L	0.2873 ppb	07:19:35
3	Zn 213.857†	687.2	5.7	0.0694 ug/L	0.0694 ppb	07:19:55
3	SiO2†	578.7	35.9	2.9192 ug/L	2.9192 ppb	07:20:10

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	668678.8	100.27 %		3.182			3.17%
Sc Radial	3763.7	105 %		1.9			1.79%
Y 371.029	528721.7	100.12 %		3.043			3.04%
Y RADIAL	4081.8	100.4 %		0.82			0.82%
Ag 328.068†	33.2	0.1833 ug/L		0.40314	0.1833 ppb	0.40314	219.94%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	18.0	20.625 ug/L		12.0382	20.625 ppb	12.0382	58.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	6.2	3.2295 ug/L		0.88111	3.2295 ppb	0.88111	27.28%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	147.0	3.9426 ug/L		0.92018	3.9426 ppb	0.92018	23.34%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.3	0.0030 ug/L		0.07784	0.0030 ppb	0.07784	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-30.3	-0.0127 ug/L		0.02002	-0.0127 ppb	0.02002	157.34%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.9	-5.8731 ug/L		9.52159	-5.8731 ppb	9.52159	162.12%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-9.7	-0.1463 ug/L	0.14951	-0.1463 ppb	0.14951	102.22%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.2	0.0069 ug/L	0.17173	0.0069 ppb	0.17173	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-4.1	-0.0663 ug/L	0.27541	-0.0663 ppb	0.27541	415.56%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	83.0	0.2920 ug/L	0.18145	0.2920 ppb	0.18145	62.14%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.7	-24.072 ug/L	20.6115	-24.072 ppb	20.6115	85.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-81.0	-17.049 ug/L	17.9210	-17.049 ppb	17.9210	105.11%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.4	-18.626 ug/L	67.8916	-18.626 ppb	67.8916	364.50%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	0.1	-0.0015 ug/L	0.02632	-0.0015 ppb	0.02632	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.6	0.7447 ug/L	0.74711	0.7447 ppb	0.74711	100.32%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-14.2	-7.3267 ug/L	23.07898	-7.3267 ppb	23.07898	315.00%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	12.4	0.4167 ug/L	0.63034	0.4167 ppb	0.63034	151.26%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-3.5	-2.3781 ug/L	4.91194	-2.3781 ppb	4.91194	206.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.3	-0.3672 ug/L	2.60033	-0.3672 ppb	2.60033	708.09%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-5.0	-7.8881 ug/L	4.34793	-7.8881 ppb	4.34793	55.12%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	0.5	0.2405 ug/L	3.54540	0.2405 ppb	3.54540	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.5	5.0462 ug/L	1.75882	5.0462 ppb	1.75882	34.85%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	0.1	-0.0052 ug/L	0.31029	-0.0052 ppb	0.31029	>999.9%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.9	0.6844 ug/L	0.83609	0.6844 ppb	0.83609	122.16%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	7.9	0.0877 ug/L	0.05734	0.0877 ppb	0.05734	65.39%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-9.4	-0.0178 ug/L	0.15036	-0.0178 ppb	0.15036	842.84%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.3	-0.1059 ug/L	3.85269	-0.1059 ppb	3.85269	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	49.5	1.9811 ug/L	5.69501	1.9811 ppb	5.69501	287.47%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	20.9	0.2104 ug/L	0.90264	0.2104 ppb	0.90264	429.06%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-9.0	-0.1080 ug/L	0.26360	-0.1080 ppb	0.26360	244.12%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	2.9	0.2182 ug/L	2.52525	0.2182 ppb	2.52525	>999.9%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/31/2010 07:22:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3685.4	3685.4	103 %		07:24:35
1	Y RADIAL	4041.2	4041.2	99.38 %		07:24:15
1	Al 396.153Radial†	70.6	178.8	204.60 ug/L	204.60 ppb	07:24:15
1	Ca 317.933Radial†	123.4	104.5	213.55 ug/L	213.55 ppb	07:24:35
1	Fe 238.204 Radial†	14.5	6.0	84.652 ug/L	84.652 ppb	07:24:35
1	K 766.490 Radial†	3787.1	668.7	140.52 ug/L	140.52 ppb	07:24:15
1	Mg 279.077 IEC†	11.5	10.6	466.76 ug/L	466.76 ppb	07:24:35
1	Na 589.592 Radial†	-339.0	567.3	292.52 ug/L	292.52 ppb	07:24:15
1	Sr 421.552†	477.3	451.0	4.9702 ug/L	4.9702 ppb	07:24:15
1	Sc 361.383	668720.7	668720.7	100.27 %		07:25:32
1	Y 371.029	528209.7	528209.7	100.02 %		07:25:32
1	Ag 328.068†	1022.5	817.6	4.7286 ug/L	4.7286 ppb	07:25:32
1	As 188.979†	37.8	62.9	32.704 ug/L	32.704 ppb	07:25:52
1	B 249.677†	1435.0	1846.2	49.426 ug/L	49.426 ppb	07:25:32
1	Ba 233.527†	527.3	512.7	5.1991 ug/L	5.1991 ppb	07:25:52
1	Be 313.107†	7620.4	11777.9	4.9446 ug/L	4.9446 ppb	07:25:32
1	Cd 226.502†	110.6	309.5	4.7810 ug/L	4.7810 ppb	07:25:52
1	Co 228.616†	141.9	191.4	4.9834 ug/L	4.9834 ppb	07:25:52
1	Cr 267.716†	383.8	287.6	4.4186 ug/L	4.4186 ppb	07:25:52
1	Cu 324.752†	8351.1	2974.0	10.525 ug/L	10.525 ppb	07:25:32
1	Mn 257.610†	8150.3	7673.6	10.548 ug/L	10.548 ppb	07:25:32
1	Mo 202.031†	115.7	110.6	10.822 ug/L	10.822 ppb	07:25:52
1	Ni 231.604†	250.6	165.2	5.5644 ug/L	5.5644 ppb	07:25:52
1	P 214.914†	413.1	210.3	140.69 ug/L	140.69 ppb	07:25:52
1	Pb 220.353†	-3.9	61.9	10.166 ug/L	10.166 ppb	07:25:52
1	S 181.975 Axial†	100.1	60.4	95.815 ug/L	95.815 ppb	07:25:52
1	Sb 206.836†	52.5	27.1	11.617 ug/L	11.617 ppb	07:25:52
1	Se 196.026†	8.6	35.2	27.738 ug/L	27.738 ppb	07:25:52
1	Si 251.611†	3173.1	2628.0	100.42 ug/L	100.42 ppb	07:25:52
1	Sn 189.927†	50.2	40.3	9.5685 ug/L	9.5685 ppb	07:25:52
1	Ti 334.940†	1184.7	2587.1	4.8707 ug/L	4.8707 ppb	07:25:32
1	Tl 190.801†	14.5	46.0	18.302 ug/L	18.302 ppb	07:25:52
1	U 409.014†	-1331.5	1077.7	43.014 ug/L	43.014 ppb	07:25:32
1	V 292.402†	-1245.0	506.8	4.8947 ug/L	4.8947 ppb	07:25:32
1	Zn 213.857†	1550.3	855.7	10.265 ug/L	10.265 ppb	07:25:52
1	SiO2†	3338.8	2779.5	225.78 ug/L	225.78 ppb	07:26:48
2	Sc Radial	3747.4	3747.4	104 %		07:25:00
2	Y RADIAL	4191.9	4191.9	103.1 %		07:24:40
2	Al 396.153Radial†	70.4	177.4	202.98 ug/L	202.98 ppb	07:24:40
2	Ca 317.933Radial†	128.7	107.6	219.85 ug/L	219.85 ppb	07:25:00
2	Fe 238.204 Radial†	12.6	3.9	55.580 ug/L	55.580 ppb	07:25:00
2	K 766.490 Radial†	3883.5	699.9	147.09 ug/L	147.09 ppb	07:24:40
2	Mg 279.077 IEC†	8.4	7.4	326.93 ug/L	326.93 ppb	07:25:00
2	Na 589.592 Radial†	-337.2	574.5	296.23 ug/L	296.23 ppb	07:24:40
2	Sr 421.552†	513.4	477.9	5.2673 ug/L	5.2673 ppb	07:24:40
2	Sc 361.383	667000.9	667000.9	100.02 %		07:25:57
2	Y 371.029	526955.5	526955.5	99.786 %		07:25:57
2	Ag 328.068†	1022.8	820.6	4.7415 ug/L	4.7415 ppb	07:25:57
2	As 188.979†	34.4	59.7	31.019 ug/L	31.019 ppb	07:26:17
2	B 249.677†	1469.3	1884.2	50.450 ug/L	50.450 ppb	07:25:57
2	Ba 233.527†	520.5	507.2	5.1472 ug/L	5.1472 ppb	07:26:17
2	Be 313.107†	7819.2	11996.3	5.0365 ug/L	5.0365 ppb	07:25:57
2	Cd 226.502†	105.3	304.5	4.7066 ug/L	4.7066 ppb	07:26:17
2	Co 228.616†	136.5	186.4	4.8530 ug/L	4.8530 ppb	07:26:17
2	Cr 267.716†	411.3	316.0	4.8546 ug/L	4.8546 ppb	07:26:17
2	Cu 324.752†	8277.4	2921.9	10.338 ug/L	10.338 ppb	07:25:57
2	Mn 257.610†	8228.4	7772.7	10.687 ug/L	10.687 ppb	07:25:57
2	Mo 202.031†	118.4	113.6	11.114 ug/L	11.114 ppb	07:26:17
2	Ni 231.604†	258.0	173.2	5.8332 ug/L	5.8332 ppb	07:26:17

2	P 214.914†	412.9	211.2	141.37 ug/L	141.37 ppb	07:26:17
2	Pb 220.353†	6.3	72.1	11.834 ug/L	11.834 ppb	07:26:17
2	S 181.975 Axial†	89.7	50.3	79.763 ug/L	79.763 ppb	07:26:17
2	Sb 206.836†	55.0	29.8	12.740 ug/L	12.740 ppb	07:26:17
2	Se 196.026†	13.0	39.6	31.065 ug/L	31.065 ppb	07:26:17
2	Si 251.611†	3122.3	2585.4	98.780 ug/L	98.780 ppb	07:26:17
2	Sn 189.927†	54.9	45.2	10.716 ug/L	10.716 ppb	07:26:17
2	Ti 334.940†	1266.9	2672.3	5.0431 ug/L	5.0431 ppb	07:25:57
2	Tl 190.801†	14.4	45.9	18.262 ug/L	18.262 ppb	07:26:17
2	U 409.014†	-1261.7	1144.0	45.665 ug/L	45.665 ppb	07:25:57
2	V 292.402†	-1052.8	695.8	6.6461 ug/L	6.6461 ppb	07:25:57
2	Zn 213.857†	1520.1	829.5	9.9518 ug/L	9.9518 ppb	07:26:17
2	SiO2†	3369.5	2818.8	228.97 ug/L	228.97 ppb	07:26:53
3	Sc Radial	3782.6	3782.6	105 %		07:25:25
3	Y RADIAL	4458.6	4458.6	109.6 %		07:25:05
3	Al 396.153Radial†	96.2	201.2	230.35 ug/L	230.35 ppb	07:25:05
3	Ca 317.933Radial†	127.2	105.0	214.53 ug/L	214.53 ppb	07:25:25
3	Fe 238.204 Radial†	17.6	8.6	121.08 ug/L	121.08 ppb	07:25:25
3	K 766.490 Radial†	3879.2	661.3	138.94 ug/L	138.94 ppb	07:25:05
3	Mg 279.077 IEC†	11.1	9.9	436.84 ug/L	436.84 ppb	07:25:25
3	Na 589.592 Radial†	-202.6	705.2	363.62 ug/L	363.62 ppb	07:25:05
3	Sr 421.552†	547.6	505.8	5.5744 ug/L	5.5744 ppb	07:25:05
3	Sc 361.383	692274.8	692274.8	103.81 %		07:26:23
3	Y 371.029	545764.4	545764.4	103.35 %		07:26:23
3	Ag 328.068†	1191.9	946.1	5.4773 ug/L	5.4773 ppb	07:26:23
3	As 188.979†	24.8	49.1	25.554 ug/L	25.554 ppb	07:26:43
3	B 249.677†	1505.5	1865.5	49.937 ug/L	49.937 ppb	07:26:23
3	Ba 233.527†	506.9	475.1	4.8210 ug/L	4.8210 ppb	07:26:43
3	Be 313.107†	8206.6	12084.0	5.0733 ug/L	5.0733 ppb	07:26:23
3	Cd 226.502†	122.0	316.7	4.8891 ug/L	4.8891 ppb	07:26:43
3	Co 228.616†	141.0	185.7	4.8351 ug/L	4.8351 ppb	07:26:43
3	Cr 267.716†	402.6	292.6	4.4974 ug/L	4.4974 ppb	07:26:43
3	Cu 324.752†	8637.8	2966.8	10.498 ug/L	10.498 ppb	07:26:23
3	Mn 257.610†	8450.0	7685.8	10.570 ug/L	10.570 ppb	07:26:23
3	Mo 202.031†	122.3	113.1	11.067 ug/L	11.067 ppb	07:26:43
3	Ni 231.604†	226.6	133.5	4.4965 ug/L	4.4965 ppb	07:26:43
3	P 214.914†	416.3	199.4	133.29 ug/L	133.29 ppb	07:26:43
3	Pb 220.353†	-13.5	52.8	8.6813 ug/L	8.6813 ppb	07:26:43
3	S 181.975 Axial†	100.6	57.5	91.204 ug/L	91.204 ppb	07:26:43
3	Sb 206.836†	58.3	30.9	13.176 ug/L	13.176 ppb	07:26:43
3	Se 196.026†	12.6	38.8	30.615 ug/L	30.615 ppb	07:26:43
3	Si 251.611†	3171.4	2518.7	96.230 ug/L	96.230 ppb	07:26:43
3	Sn 189.927†	51.2	39.6	9.3961 ug/L	9.3961 ppb	07:26:43
3	Ti 334.940†	1324.2	2681.3	5.0485 ug/L	5.0485 ppb	07:26:23
3	Tl 190.801†	26.8	57.3	22.798 ug/L	22.798 ppb	07:26:43
3	U 409.014†	-1184.3	1264.7	50.476 ug/L	50.476 ppb	07:26:23
3	V 292.402†	-1244.3	549.7	5.3019 ug/L	5.3019 ppb	07:26:23
3	Zn 213.857†	1529.3	782.9	9.3869 ug/L	9.3869 ppb	07:26:43
3	SiO2†	3335.9	2663.3	216.33 ug/L	216.33 ppb	07:26:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	675998.8	101.36 %	2.118			2.09%
Sc Radial	3738.5	104 %	1.4			1.32%
Y 371.029	533643.2	101.05 %	1.991			1.97%
Y RADIAL	4230.6	104.0 %	5.20			5.00%
Ag 328.068†	861.4	4.9825 ug/L	0.42861	4.9825 ppb	0.42861	8.60%
QC value within limits for Ag 328.068 Recovery = 99.65%						
Al 396.153Radial†	185.8	212.64 ug/L	15.354	212.64 ppb	15.354	7.22%
QC value within limits for Al 396.153Radial Recovery = 106.32%						
As 188.979†	57.3	29.759 ug/L	3.7377	29.759 ppb	3.7377	12.56%
QC value within limits for As 188.979 Recovery = 99.20%						
B 249.677†	1865.3	49.938 ug/L	0.5122	49.938 ppb	0.5122	1.03%
QC value within limits for B 249.677 Recovery = 99.88%						
Ba 233.527†	498.3	5.0558 ug/L	0.20497	5.0558 ppb	0.20497	4.05%
QC value within limits for Ba 233.527 Recovery = 101.12%						
Be 313.107†	11952.7	5.0181 ug/L	0.06626	5.0181 ppb	0.06626	1.32%
QC value within limits for Be 313.107 Recovery = 100.36%						
Ca 317.933Radial†	105.7	215.97 ug/L	3.392	215.97 ppb	3.392	1.57%

QC value within limits for Ca 317.933 Radial Recovery = 107.99%

Cd 226.502† 310.3 4.7923 ug/L 0.09175 4.7923 ppb 0.09175 1.91%

QC value within limits for Cd 226.502 Recovery = 95.85%

Co 228.616† 187.9 4.8905 ug/L 0.08093 4.8905 ppb 0.08093 1.65%

QC value within limits for Co 228.616 Recovery = 97.81%

Cr 267.716† 298.7 4.5902 ug/L 0.23235 4.5902 ppb 0.23235 5.06%

QC value within limits for Cr 267.716 Recovery = 91.80%

Cu 324.752† 2954.2 10.454 ug/L 0.1015 10.454 ppb 0.1015 0.97%

QC value within limits for Cu 324.752 Recovery = 104.54%

Fe 238.204 Radial† 6.2 87.104 ug/L 32.8193 87.104 ppb 32.8193 37.68%

QC value within limits for Fe 238.204 Radial Recovery = 87.10%

K 766.490 Radial† 676.6 142.18 ug/L 4.325 142.18 ppb 4.325 3.04%

QC value within limits for K 766.490 Radial Recovery = 94.79%

Mg 279.077 IEC† 9.3 410.18 ug/L 73.625 410.18 ppb 73.625 17.95%

QC value greater than the upper limit for Mg 279.077 IEC Recovery = 136.73%

Mn 257.610† 7710.7 10.602 ug/L 0.0749 10.602 ppb 0.0749 0.71%

QC value within limits for Mn 257.610 Recovery = 106.02%

Mo 202.031† 112.4 11.001 ug/L 0.1568 11.001 ppb 0.1568 1.42%

QC value within limits for Mo 202.031 Recovery = 110.01%

Na 589.592 Radial† 615.7 317.45 ug/L 40.020 317.45 ppb 40.020 12.61%

QC value within limits for Na 589.592 Radial Recovery = 105.82%

Ni 231.604† 157.3 5.2981 ug/L 0.70704 5.2981 ppb 0.70704 13.35%

QC value within limits for Ni 231.604 Recovery = 105.96%

P 214.914† 206.9 138.45 ug/L 4.477 138.45 ppb 4.477 3.23%

QC value within limits for P 214.914 Recovery = 92.30%

Pb 220.353† 62.3 10.227 ug/L 1.5771 10.227 ppb 1.5771 15.42%

QC value within limits for Pb 220.353 Recovery = 102.27%

S 181.975 Axial† 56.1 88.927 ug/L 8.2648 88.927 ppb 8.2648 9.29%

QC value within limits for S 181.975 Axial Recovery = 88.93%

Sb 206.836† 29.3 12.511 ug/L 0.8042 12.511 ppb 0.8042 6.43%

QC value within limits for Sb 206.836 Recovery = 125.11%

Se 196.026† 37.8 29.806 ug/L 1.8052 29.806 ppb 1.8052 6.06%

QC value within limits for Se 196.026 Recovery = 99.35%

Si 251.611† 2577.4 98.475 ug/L 2.1097 98.475 ppb 2.1097 2.14%

QC value within limits for Si 251.611 Recovery = 98.48%

Sn 189.927† 41.7 9.8936 ug/L 0.71749 9.8936 ppb 0.71749 7.25%

QC value within limits for Sn 189.927 Recovery = 98.94%

Sr 421.552† 478.2 5.2707 ug/L 0.30213 5.2707 ppb 0.30213 5.73%

QC value within limits for Sr 421.552 Recovery = 105.41%

Ti 334.940† 2646.9 4.9874 ug/L 0.10112 4.9874 ppb 0.10112 2.03%

QC value within limits for Ti 334.940 Recovery = 99.75%

Tl 190.801† 49.7 19.787 ug/L 2.6074 19.787 ppb 2.6074 13.18%

QC value within limits for Tl 190.801 Recovery = 98.94%

U 409.014† 1162.1 46.385 ug/L 3.7830 46.385 ppb 3.7830 8.16%

QC value within limits for U 409.014 Recovery = 92.77%

V 292.402† 584.1 5.6142 ug/L 0.91653 5.6142 ppb 0.91653 16.33%

QC value within limits for V 292.402 Recovery = 112.28%

Zn 213.857† 822.7 9.8679 ug/L 0.44497 9.8679 ppb 0.44497 4.51%

QC value within limits for Zn 213.857 Recovery = 98.68%

SiO2† 2753.9 223.69 ug/L 6.573 223.69 ppb 6.573 2.94%

QC value within limits for SiO2 Recovery = 105.02%

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 3/31/2010 07:29:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3523.8	3523.8	98.2 %		07:31:24
1	Y RADIAL	3846.0	3846.0	94.58 %		07:31:24
1	Al 396.153Radial†	448447.8	456809.5	524170 ug/L	524170 ppb	07:31:04
1	Ca 317.933Radial†	232415.1	236676.0	483770 ug/L	483770 ppb	07:31:04
1	Fe 238.204 Radial†	12978.2	13208.8	186720 ug/L	186720 ppb	07:31:24
1	K 766.490 Radial†	3047.2	84.3	-144.08 ug/L	-144.08 ppb	07:31:04
1	Mg 279.077 IEC†	10881.7	11081.3	489020 ug/L	489020 ppb	07:31:24
1	Na 589.592 Radial†	-811.2	71.3	36.790 ug/L	36.790 ppb	07:31:24
1	Sr 421.552†	361.8	354.6	0.2976 ug/L	0.2976 ppb	07:31:24
1	Sc 361.383	613548.0	613548.0	92.001 %		07:32:21
1	Y 371.029	480955.3	480955.3	91.075 %		07:32:21
1	Ag 328.068†	-8398.2	-9330.4	-2.6917 ug/L	-2.6917 ppb	07:32:21
1	As 188.979†	-65.7	-46.2	19.614 ug/L	19.614 ppb	07:32:41
1	B 249.677†	30.5	448.2	-18.320 ug/L	-18.320 ppb	07:32:21
1	Ba 233.527†	-527.8	-586.9	-0.2233 ug/L	-0.2233 ppb	07:32:41
1	Be 313.107†	-4627.7	-851.8	-0.4078 ug/L	-0.4078 ppb	07:32:21
1	Cd 226.502†	861.7	1135.9	-1.7430 ug/L	-1.7430 ppb	07:32:41
1	Co 228.616†	15.6	66.8	-0.9573 ug/L	-0.9573 ppb	07:32:41
1	Cr 267.716†	-1251.0	-1455.1	-2.5797 ug/L	-2.5797 ppb	07:32:41
1	Cu 324.752†	2527.4	-2607.1	0.6146 ug/L	0.6146 ppb	07:32:21
1	Mn 257.610†	-910.1	-1443.7	-3.5475 ug/L	-3.5475 ppb	07:32:21
1	Mo 202.031†	-194.2	-215.8	-0.8516 ug/L	-0.8516 ppb	07:32:41
1	Ni 231.604†	208.7	142.1	4.7884 ug/L	4.7884 ppb	07:32:41
1	P 214.914†	184.4	-1.2	-19.480 ug/L	-19.480 ppb	07:32:41
1	Pb 220.353†	-764.4	-765.1	-4.5334 ug/L	-4.5334 ppb	07:32:41
1	S 181.975 Axial†	46.9	11.6	-79.816 ug/L	-79.816 ppb	07:32:41
1	Sb 206.836†	74.6	55.8	5.2921 ug/L	5.2921 ppb	07:32:41
1	Se 196.026†	-779.7	-820.9	1.5886 ug/L	1.5886 ppb	07:32:41
1	Si 251.611†	480.8	-13.8	-0.2676 ug/L	-0.2676 ppb	07:32:41
1	Sn 189.927†	-321.1	-358.8	2.0730 ug/L	2.0730 ppb	07:32:41
1	Ti 334.940†	-12213.4	-11869.7	2.4319 ug/L	2.4319 ppb	07:32:21
1	Tl 190.801†	-57.9	-31.4	-12.701 ug/L	-12.701 ppb	07:32:41
1	U 409.014†	-1180.5	1122.5	23.585 ug/L	23.585 ppb	07:32:21
1	V 292.402†	-124.0	1613.6	-3.0594 ug/L	-3.0594 ppb	07:32:41
1	Zn 213.857†	2581.7	2115.8	-2.4253 ug/L	-2.4253 ppb	07:32:41
1	SiO2†	431.9	-80.8	-5.9991 ug/L	-5.9991 ppb	07:33:37
2	Sc Radial	3605.6	3605.6	100 %		07:31:49
2	Y RADIAL	3957.8	3957.8	97.33 %		07:31:49
2	Al 396.153Radial†	456609.8	454571.1	521600 ug/L	521600 ppb	07:31:29
2	Ca 317.933Radial†	235274.1	234151.3	478610 ug/L	478610 ppb	07:31:29
2	Fe 238.204 Radial†	13264.7	13194.1	186510 ug/L	186510 ppb	07:31:49
2	K 766.490 Radial†	3018.8	-14.3	-163.11 ug/L	-163.11 ppb	07:31:29
2	Mg 279.077 IEC†	11156.3	11103.2	489980 ug/L	489980 ppb	07:31:49
2	Na 589.592 Radial†	-768.8	132.3	68.205 ug/L	68.205 ppb	07:31:49
2	Sr 421.552†	349.2	333.8	0.1063 ug/L	0.1063 ppb	07:31:49
2	Sc 361.383	603520.2	603520.2	90.497 %		07:32:46
2	Y 371.029	472538.9	472538.9	89.482 %		07:32:46
2	Ag 328.068†	-8129.6	-9185.4	-1.8481 ug/L	-1.8481 ppb	07:32:46
2	As 188.979†	-76.8	-59.6	12.592 ug/L	12.592 ppb	07:33:06
2	B 249.677†	16.6	433.4	-18.684 ug/L	-18.684 ppb	07:32:46
2	Ba 233.527†	-495.8	-561.1	0.0310 ug/L	0.0310 ppb	07:33:06
2	Be 313.107†	-4456.5	-746.1	-0.3610 ug/L	-0.3610 ppb	07:32:46
2	Cd 226.502†	880.2	1171.9	-1.1651 ug/L	-1.1651 ppb	07:33:06
2	Co 228.616†	26.2	78.8	-0.6461 ug/L	-0.6461 ppb	07:33:06
2	Cr 267.716†	-1327.9	-1562.6	-4.2539 ug/L	-4.2539 ppb	07:33:06
2	Cu 324.752†	2421.5	-2678.5	0.3511 ug/L	0.3511 ppb	07:32:46
2	Mn 257.610†	-989.3	-1547.6	-3.7503 ug/L	-3.7503 ppb	07:32:46
2	Mo 202.031†	-197.3	-222.8	-1.6104 ug/L	-1.6104 ppb	07:33:06
2	Ni 231.604†	215.4	153.3	5.1651 ug/L	5.1651 ppb	07:33:06

2	P 214.914†	165.7	-18.5	-31.759 ug/L	-31.759 ppb	07:33:06
2	Pb 220.353†	-715.0	-724.4	1.4175 ug/L	1.4175 ppb	07:33:06
2	S 181.975 Axial†	46.3	11.8	-78.977 ug/L	-78.977 ppb	07:33:06
2	Sb 206.836†	54.8	35.3	-3.3159 ug/L	-3.3159 ppb	07:33:06
2	Se 196.026†	-797.7	-854.9	-26.125 ug/L	-26.125 ppb	07:33:06
2	Si 251.611†	491.9	7.1	0.5406 ug/L	0.5406 ppb	07:33:06
2	Sn 189.927†	-353.5	-400.4	-8.6656 ug/L	-8.6656 ppb	07:33:06
2	Ti 334.940†	-11474.6	-11273.8	2.7909 ug/L	2.7909 ppb	07:32:46
2	Tl 190.801†	-72.1	-48.2	-19.347 ug/L	-19.347 ppb	07:33:06
2	U 409.014†	-1191.0	1089.4	22.294 ug/L	22.294 ppb	07:32:46
2	V 292.402†	-145.5	1587.6	-3.2622 ug/L	-3.2622 ppb	07:33:06
2	Zn 213.857†	2612.5	2196.5	-1.4234 ug/L	-1.4234 ppb	07:33:06
2	SiO2†	465.7	-35.6	-2.2998 ug/L	-2.2998 ppb	07:33:42
3	Sc Radial	3628.7	3628.7	101 %		07:32:14
3	Y RADIAL	3985.0	3985.0	98.00 %		07:32:14
3	Al 396.153Radial†	473601.1	468482.7	537570 ug/L	537570 ppb	07:31:54
Saturated within auto integration window (code 4)						
3	Ca 317.933Radial†	242715.3	240020.1	490600 ug/L	490600 ppb	07:31:54
3	Fe 238.204 Radial†	13407.1	13250.9	187310 ug/L	187310 ppb	07:32:14
3	K 766.490 Radial†	2950.0	-101.5	-185.48 ug/L	-185.48 ppb	07:31:54
3	Mg 279.077 IEC†	11289.0	11163.8	492660 ug/L	492660 ppb	07:32:14
3	Na 589.592 Radial†	-776.7	129.3	66.679 ug/L	66.679 ppb	07:32:14
3	Sr 421.552†	371.3	353.4	0.2331 ug/L	0.2331 ppb	07:32:14
3	Sc 361.383	599894.7	599894.7	89.953 %		07:33:12
3	Y 371.029	469680.4	469680.4	88.940 %		07:33:12
3	Ag 328.068†	-8344.0	-9478.0	-3.4499 ug/L	-3.4499 ppb	07:33:12
3	As 188.979†	-70.7	-53.4	16.022 ug/L	16.022 ppb	07:33:32
3	B 249.677†	-22.9	389.6	-19.986 ug/L	-19.986 ppb	07:33:12
3	Ba 233.527†	-550.0	-624.6	-0.5897 ug/L	-0.5897 ppb	07:33:32
3	Be 313.107†	-4466.3	-786.8	-0.3805 ug/L	-0.3805 ppb	07:33:12
3	Cd 226.502†	871.0	1167.5	-1.3179 ug/L	-1.3179 ppb	07:33:32
3	Co 228.616†	6.9	57.6	-1.2048 ug/L	-1.2048 ppb	07:33:32
3	Cr 267.716†	-1335.4	-1579.8	-4.4324 ug/L	-4.4324 ppb	07:33:32
3	Cu 324.752†	2305.2	-2791.6	-0.0029 ug/L	-0.0029 ppb	07:33:12
3	Mn 257.610†	-800.6	-1344.5	-3.5009 ug/L	-3.5009 ppb	07:33:12
3	Mo 202.031†	-190.4	-216.4	-0.7807 ug/L	-0.7807 ppb	07:33:32
3	Ni 231.604†	187.5	123.7	4.1667 ug/L	4.1667 ppb	07:33:32
3	P 214.914†	181.1	-0.3	-15.912 ug/L	-15.912 ppb	07:33:32
3	Pb 220.353†	-754.1	-772.5	-2.3404 ug/L	-2.3404 ppb	07:33:32
3	S 181.975 Axial†	28.8	-7.3	-112.39 ug/L	-112.39 ppb	07:33:32
3	Sb 206.836†	49.1	29.4	-6.0919 ug/L	-6.0919 ppb	07:33:32
3	Se 196.026†	-816.0	-880.5	-39.554 ug/L	-39.554 ppb	07:33:32
3	Si 251.611†	459.1	-26.1	-0.7365 ug/L	-0.7365 ppb	07:33:32
3	Sn 189.927†	-328.2	-374.6	-0.4391 ug/L	-0.4391 ppb	07:33:32
3	Ti 334.940†	-11914.7	-11839.8	3.1130 ug/L	3.1130 ppb	07:33:12
3	Tl 190.801†	-65.4	-41.2	-16.590 ug/L	-16.590 ppb	07:33:32
3	U 409.014†	-1366.3	886.7	14.108 ug/L	14.108 ppb	07:33:12
3	V 292.402†	-242.6	1478.7	-4.3370 ug/L	-4.3370 ppb	07:33:32
3	Zn 213.857†	2605.4	2206.0	-1.4213 ug/L	-1.4213 ppb	07:33:32
3	SiO2†	445.4	-55.1	-3.9017 ug/L	-3.9017 ppb	07:33:47

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	605654.3	90.817 %	1.0605			1.17%
Sc Radial	3586.0	99.9 %	1.54			1.54%
Y 371.029	474391.5	89.832 %	1.1099			1.24%
Y RADIAL	3929.6	96.64 %	1.811			1.87%
Ag 328.068†	-9331.3	-2.6632 ug/L	0.80131	-2.6632 ppb	0.80131	30.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	459954.5	527780 ug/L	8571.5	527780 ppb	8571.5	1.62%
Saturated within auto integration window (code 4)						
QC value within limits for Al 396.153Radial Recovery = 105.56%						
As 188.979†	-53.1	16.076 ug/L	3.5113	16.076 ppb	3.5113	21.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	423.8	-18.997 ug/L	0.8759	-18.997 ppb	0.8759	4.61%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-590.9	-0.2607 ug/L	0.31205	-0.2607 ppb	0.31205	119.70%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-794.9	-0.3831 ug/L	0.02351	-0.3831 ppb	0.02351	6.14%

QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	236949.1	484330 ug/L	6017.4	484330 ppb	6017.4	1.24%	
QC value within limits for Ca 317.933Radial Recovery = 96.87%							
Cd 226.502†	1158.4	-1.4087 ug/L	0.29945	-1.4087 ppb	0.29945	21.26%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	67.7	-0.9361 ug/L	0.27997	-0.9361 ppb	0.27997	29.91%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1532.5	-3.7553 ug/L	1.02205	-3.7553 ppb	1.02205	27.22%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2692.4	0.3209 ug/L	0.30983	0.3209 ppb	0.30983	96.55%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	13217.9	186850 ug/L	416.8	186850 ppb	416.8	0.22%	
QC value within limits for Fe 238.204 Radial Recovery = 93.42%							
K 766.490 Radial†	-10.5	-164.22 ug/L	20.723	-164.22 ppb	20.723	12.62%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	11116.1	490550 ug/L	1884.8	490550 ppb	1884.8	0.38%	
QC value within limits for Mg 279.077 IEC Recovery = 98.11%							
Mn 257.610†	-1445.3	-3.5996 ug/L	0.13262	-3.5996 ppb	0.13262	3.68%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-218.3	-1.0809 ug/L	0.45989	-1.0809 ppb	0.45989	42.55%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	111.0	57.224 ug/L	17.7136	57.224 ppb	17.7136	30.95%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	139.7	4.7068 ug/L	0.50420	4.7068 ppb	0.50420	10.71%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-6.7	-22.384 ug/L	8.3133	-22.384 ppb	8.3133	37.14%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-754.0	-1.8188 ug/L	3.00952	-1.8188 ppb	3.00952	165.47%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	5.4	-90.396 ug/L	19.0554	-90.396 ppb	19.0554	21.08%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	40.2	-1.3719 ug/L	5.93571	-1.3719 ppb	5.93571	432.66%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-852.1	-21.364 ug/L	20.9806	-21.364 ppb	20.9806	98.21%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-10.9	-0.1545 ug/L	0.64606	-0.1545 ppb	0.64606	418.16%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-377.9	-2.3439 ug/L	5.61703	-2.3439 ppb	5.61703	239.64%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	347.3	0.2124 ug/L	0.09734	0.2124 ppb	0.09734	45.84%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-11661.1	2.7786 ug/L	0.34070	2.7786 ppb	0.34070	12.26%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-40.3	-16.213 ug/L	3.3387	-16.213 ppb	3.3387	20.59%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1032.9	19.995 ug/L	5.1398	19.995 ppb	5.1398	25.70%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	1560.0	-3.5529 ug/L	0.68659	-3.5529 ppb	0.68659	19.32%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	2172.8	-1.7567 ug/L	0.57909	-1.7567 ppb	0.57909	32.97%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-57.1	-4.0668 ug/L	1.85517	-4.0668 ppb	1.85517	45.62%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 3/31/2010 07:35:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3706.2	3706.2	103 %		07:38:11
1	Y RADIAL	4059.2	4059.2	99.82 %		07:38:11
1	Al 396.153Radial†	452808.5	438547.4	503190 ug/L	503190 ppb	07:37:51
1	Ca 317.933Radial†	236393.1	228874.8	467820 ug/L	467820 ppb	07:37:51
1	Fe 238.204 Radial†	13658.6	13216.9	186850 ug/L	186850 ppb	07:38:11
1	K 766.490 Radial†	29194.3	25248.8	5154.3 ug/L	5154.3 ppb	07:37:51
1	Mg 279.077 IEC†	11462.4	11098.0	489760 ug/L	489760 ppb	07:38:11
1	Na 589.592 Radial†	10063.4	10641.4	5487.0 ug/L	5487.0 ppb	07:38:11
1	Sr 421.552†	46561.6	45070.1	493.41 ug/L	493.41 ppb	07:37:51
1	Sc 361.383	599484.9	599484.9	89.892 %		07:39:09
1	Y 371.029	468428.6	468428.6	88.703 %		07:39:09
1	Ag 328.068†	34814.1	38526.8	275.57 ug/L	275.57 ppb	07:39:09
1	As 188.979†	828.5	946.9	538.45 ug/L	538.45 ppb	07:39:29
1	B 249.677†	17422.9	19797.2	498.68 ug/L	498.68 ppb	07:39:09
1	Ba 233.527†	43200.3	48044.9	492.87 ug/L	492.87 ppb	07:39:09
1	Be 313.107†	527594.3	591099.8	248.70 ug/L	248.70 ppb	07:39:09
1	Cd 226.502†	28870.6	32316.3	479.91 ug/L	479.91 ppb	07:39:29
1	Co 228.616†	15717.9	17535.2	452.56 ug/L	452.56 ppb	07:39:29
1	Cr 267.716†	27555.0	30558.3	490.02 ug/L	490.02 ppb	07:39:09
1	Cu 324.752†	141925.3	152530.3	550.40 ug/L	550.40 ppb	07:39:09
1	Mn 257.610†	320126.6	355669.9	487.82 ug/L	487.82 ppb	07:39:09
1	Mo 202.031†	4302.9	4782.0	487.61 ug/L	487.61 ppb	07:39:29
1	Ni 231.604†	12659.9	13998.8	471.44 ug/L	471.44 ppb	07:39:29
1	P 214.914†	3561.0	3759.8	2423.2 ug/L	2423.2 ppb	07:39:29
1	Pb 220.353†	1869.5	2145.5	465.76 ug/L	465.76 ppb	07:39:29
1	S 181.975 Axial†	1564.5	1701.1	2604.5 ug/L	2604.5 ppb	07:39:29
1	Sb 206.836†	1173.4	1280.1	531.19 ug/L	531.19 ppb	07:39:29
1	Se 196.026†	2147.0	2415.0	2518.8 ug/L	2518.8 ppb	07:39:29
1	Si 251.611†	121807.6	134968.2	5158.2 ug/L	5158.2 ppb	07:39:09
1	Sn 189.927†	1555.4	1720.5	490.80 ug/L	490.80 ppb	07:39:29
1	Ti 334.940†	229536.5	256753.2	508.67 ug/L	508.67 ppb	07:39:09
1	Tl 190.801†	971.0	1111.7	444.46 ug/L	444.46 ppb	07:39:29
1	U 409.014†	10406.4	13982.1	535.98 ug/L	535.98 ppb	07:39:09
1	V 292.402†	49672.2	57006.1	514.48 ug/L	514.48 ppb	07:39:09
1	Zn 213.857†	40249.4	44085.0	500.35 ug/L	500.35 ppb	07:39:09
1	SiO2†	122321.3	135525.9	11011 ug/L	11011 ppb	07:40:27
2	Sc Radial	3530.8	3530.8	98.4 %		07:38:37
2	Y RADIAL	3886.3	3886.3	95.57 %		07:38:37
2	Al 396.153Radial†	449623.5	457093.9	524480 ug/L	524480 ppb	07:38:16
2	Ca 317.933Radial†	235175.3	239009.5	488540 ug/L	488540 ppb	07:38:16
2	Fe 238.204 Radial†	13187.2	13394.9	189360 ug/L	189360 ppb	07:38:37
2	K 766.490 Radial†	28997.3	26453.0	5400.8 ug/L	5400.8 ppb	07:38:16
2	Mg 279.077 IEC†	11094.9	11275.9	497610 ug/L	497610 ppb	07:38:37
2	Na 589.592 Radial†	9515.0	10568.2	5449.2 ug/L	5449.2 ppb	07:38:37
2	Sr 421.552†	46064.1	46804.4	512.37 ug/L	512.37 ppb	07:38:16
2	Sc 361.383	607799.1	607799.1	91.139 %		07:39:35
2	Y 371.029	475551.0	475551.0	90.052 %		07:39:35
2	Ag 328.068†	35514.5	38765.5	277.45 ug/L	277.45 ppb	07:39:35
2	As 188.979†	801.3	904.4	517.00 ug/L	517.00 ppb	07:39:55
2	B 249.677†	17857.4	20008.7	503.95 ug/L	503.95 ppb	07:39:35
2	Ba 233.527†	43716.1	47953.4	492.02 ug/L	492.02 ppb	07:39:35
2	Be 313.107†	535517.8	591765.0	248.98 ug/L	248.98 ppb	07:39:35
2	Cd 226.502†	28751.0	31745.7	470.84 ug/L	470.84 ppb	07:39:55
2	Co 228.616†	15673.0	17246.8	445.02 ug/L	445.02 ppb	07:39:55
2	Cr 267.716†	28035.6	30666.2	491.94 ug/L	491.94 ppb	07:39:35
2	Cu 324.752†	144428.5	153117.2	552.62 ug/L	552.62 ppb	07:39:35
2	Mn 257.610†	323999.4	355047.8	486.89 ug/L	486.89 ppb	07:39:35
2	Mo 202.031†	4288.7	4701.0	480.13 ug/L	480.13 ppb	07:39:55
2	Ni 231.604†	12632.6	13776.2	463.95 ug/L	463.95 ppb	07:39:55

2	P 214.914†	3530.4	3672.0	2366.5 ug/L	2366.5 ppb	07:39:55
2	Pb 220.353†	1894.1	2144.0	470.88 ug/L	470.88 ppb	07:39:55
2	S 181.975 Axial†	1542.8	1653.4	2524.8 ug/L	2524.8 ppb	07:39:55
2	Sb 206.836†	1142.5	1228.3	508.82 ug/L	508.82 ppb	07:39:55
2	Se 196.026†	2111.8	2343.7	2475.8 ug/L	2475.8 ppb	07:39:55
2	Si 251.611†	123483.8	134953.8	5157.7 ug/L	5157.7 ppb	07:39:35
2	Sn 189.927†	1543.3	1683.5	485.75 ug/L	485.75 ppb	07:39:55
2	Ti 334.940†	232536.6	256552.1	510.43 ug/L	510.43 ppb	07:39:35
2	Tl 190.801†	961.5	1086.5	434.49 ug/L	434.49 ppb	07:39:55
2	U 409.014†	10406.5	13823.9	529.37 ug/L	529.37 ppb	07:39:35
2	V 292.402†	50329.7	56971.7	513.83 ug/L	513.83 ppb	07:39:35
2	Zn 213.857†	40720.7	43989.7	498.87 ug/L	498.87 ppb	07:39:35
2	SiO2†	121050.5	132270.1	10746 ug/L	10746 ppb	07:40:32
3	Sc Radial	3524.9	3524.9	98.2 %		07:39:02
3	Y RADIAL	3876.4	3876.4	95.33 %		07:39:02
3	Al 396.153Radial†	439330.2	447383.3	513330 ug/L	513330 ppb	07:38:42
3	Ca 317.933Radial†	228528.9	232645.0	475530 ug/L	475530 ppb	07:38:42
3	Fe 238.204 Radial†	13179.7	13409.8	189570 ug/L	189570 ppb	07:39:02
3	K 766.490 Radial†	28145.9	25635.8	5233.2 ug/L	5233.2 ppb	07:38:42
3	Mg 279.077 IEC†	11061.9	11261.3	496960 ug/L	496960 ppb	07:39:02
3	Na 589.592 Radial†	9589.8	10660.6	5496.9 ug/L	5496.9 ppb	07:39:02
3	Sr 421.552†	44902.0	45700.0	500.29 ug/L	500.29 ppb	07:38:42
3	Sc 361.383	616966.7	616966.7	92.513 %		07:40:01
3	Y 371.029	482752.6	482752.6	91.416 %		07:40:01
3	Ag 328.068†	36141.3	38864.1	278.25 ug/L	278.25 ppb	07:40:01
3	As 188.979†	830.1	922.5	526.42 ug/L	526.42 ppb	07:40:21
3	B 249.677†	18176.7	20062.8	505.37 ug/L	505.37 ppb	07:40:01
3	Ba 233.527†	44072.1	47625.5	488.71 ug/L	488.71 ppb	07:40:01
3	Be 313.107†	541816.6	589842.5	248.17 ug/L	248.17 ppb	07:40:01
3	Cd 226.502†	29082.4	31635.2	469.11 ug/L	469.11 ppb	07:40:21
3	Co 228.616†	15867.2	17201.1	443.84 ug/L	443.84 ppb	07:40:21
3	Cr 267.716†	28219.2	30407.7	487.99 ug/L	487.99 ppb	07:40:01
3	Cu 324.752†	147261.2	153824.4	555.13 ug/L	555.13 ppb	07:40:01
3	Mn 257.610†	327135.0	353154.7	484.34 ug/L	484.34 ppb	07:40:01
3	Mo 202.031†	4339.9	4686.4	478.57 ug/L	478.57 ppb	07:40:21
3	Ni 231.604†	12787.3	13737.4	462.64 ug/L	462.64 ppb	07:40:21
3	P 214.914†	3567.6	3654.6	2351.2 ug/L	2351.2 ppb	07:40:21
3	Pb 220.353†	1853.8	2069.6	455.73 ug/L	455.73 ppb	07:40:21
3	S 181.975 Axial†	1568.7	1656.3	2531.5 ug/L	2531.5 ppb	07:40:21
3	Sb 206.836†	1195.4	1266.9	525.14 ug/L	525.14 ppb	07:40:21
3	Se 196.026†	2147.9	2348.3	2476.8 ug/L	2476.8 ppb	07:40:21
3	Si 251.611†	125170.4	134763.6	5150.5 ug/L	5150.5 ppb	07:40:01
3	Sn 189.927†	1573.5	1691.1	485.22 ug/L	485.22 ppb	07:40:21
3	Ti 334.940†	235045.5	255472.8	506.69 ug/L	506.69 ppb	07:40:01
3	Tl 190.801†	966.4	1076.0	430.32 ug/L	430.32 ppb	07:40:21
3	U 409.014†	10680.2	13950.0	534.39 ug/L	534.39 ppb	07:40:01
3	V 292.402†	50994.1	56869.3	512.84 ug/L	512.84 ppb	07:40:01
3	Zn 213.857†	41185.2	43827.8	496.89 ug/L	496.89 ppb	07:40:01
3	SiO2†	122698.2	132077.6	10730 ug/L	10730 ppb	07:40:37

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	608083.6	91.181 %	1.3112			1.44%
Sc Radial	3587.3	100.0 %	2.87			2.87%
Y 371.029	475577.4	90.057 %	1.3562			1.51%
Y RADIAL	3940.6	96.91 %	2.528			2.61%
Ag 328.068†	38718.8	277.09 ug/L	1.377	277.09 ppb	1.377	0.50%
QC value within limits for Ag 328.068 Recovery = 110.84%						
Al 396.153Radial†	447674.9	513670 ug/L	10644.8	513670 ppb	10644.8	2.07%
QC value within limits for Al 396.153Radial Recovery = 102.73%						
As 188.979†	924.6	527.29 ug/L	10.751	527.29 ppb	10.751	2.04%
QC value within limits for As 188.979 Recovery = 105.46%						
B 249.677†	19956.3	502.67 ug/L	3.529	502.67 ppb	3.529	0.70%
QC value within limits for B 249.677 Recovery = 100.53%						
Ba 233.527†	47874.6	491.20 ug/L	2.199	491.20 ppb	2.199	0.45%
QC value within limits for Ba 233.527 Recovery = 98.24%						
Be 313.107†	590902.4	248.62 ug/L	0.412	248.62 ppb	0.412	0.17%
QC value within limits for Be 313.107 Recovery = 99.45%						
Ca 317.933Radial†	233509.8	477300 ug/L	10470.2	477300 ppb	10470.2	2.19%

QC value within limits for Ca 317.933 Radial Recovery = 95.46%

Cd 226.502†	31899.1	473.29 ug/L	5.801	473.29 ppb	5.801	1.23%
QC value within limits for Cd 226.502 Recovery = 94.66%						
Co 228.616†	17327.7	447.14 ug/L	4.734	447.14 ppb	4.734	1.06%
QC value within limits for Co 228.616 Recovery = 89.43%						
Cr 267.716†	30544.1	489.98 ug/L	1.978	489.98 ppb	1.978	0.40%
QC value within limits for Cr 267.716 Recovery = 98.00%						
Cu 324.752†	153157.3	552.71 ug/L	2.368	552.71 ppb	2.368	0.43%
QC value within limits for Cu 324.752 Recovery = 110.54%						
Fe 238.204 Radial†	13340.5	188600 ug/L	1517.2	188600 ppb	1517.2	0.80%
QC value within limits for Fe 238.204 Radial Recovery = 94.30%						
K 766.490 Radial†	25779.2	5262.8 ug/L	125.90	5262.8 ppb	125.90	2.39%
QC value within limits for K 766.490 Radial Recovery = 105.26%						
Mg 279.077 IEC†	11211.7	494780 ug/L	4358.5	494780 ppb	4358.5	0.88%
QC value within limits for Mg 279.077 IEC Recovery = 98.96%						
Mn 257.610†	354624.1	486.35 ug/L	1.805	486.35 ppb	1.805	0.37%
QC value within limits for Mn 257.610 Recovery = 97.27%						
Mo 202.031†	4723.1	482.10 ug/L	4.831	482.10 ppb	4.831	1.00%
QC value within limits for Mo 202.031 Recovery = 96.42%						
Na 589.592 Radial†	10623.4	5477.7 ug/L	25.16	5477.7 ppb	25.16	0.46%
QC value within limits for Na 589.592 Radial Recovery = 109.55%						
Ni 231.604†	13837.5	466.01 ug/L	4.750	466.01 ppb	4.750	1.02%
QC value within limits for Ni 231.604 Recovery = 93.20%						
P 214.914†	3695.5	2380.3 ug/L	37.95	2380.3 ppb	37.95	1.59%
QC value within limits for P 214.914 Recovery = 95.21%						
Pb 220.353†	2119.7	464.12 ug/L	7.706	464.12 ppb	7.706	1.66%
QC value within limits for Pb 220.353 Recovery = 92.82%						
S 181.975 Axial†	1670.3	2553.6 ug/L	44.19	2553.6 ppb	44.19	1.73%
QC value within limits for S 181.975 Axial Recovery = 102.14%						
Sb 206.836†	1258.4	521.72 ug/L	11.571	521.72 ppb	11.571	2.22%
QC value within limits for Sb 206.836 Recovery = 104.34%						
Se 196.026†	2369.0	2490.5 ug/L	24.54	2490.5 ppb	24.54	0.99%
QC value within limits for Se 196.026 Recovery = 99.62%						
Si 251.611†	134895.2	5155.4 ug/L	4.33	5155.4 ppb	4.33	0.08%
QC value within limits for Si 251.611 Recovery = 103.11%						
Sn 189.927†	1698.4	487.26 ug/L	3.079	487.26 ppb	3.079	0.63%
QC value within limits for Sn 189.927 Recovery = 97.45%						
Sr 421.552†	45858.2	502.02 ug/L	9.601	502.02 ppb	9.601	1.91%
QC value within limits for Sr 421.552 Recovery = 100.40%						
Ti 334.940†	256259.3	508.60 ug/L	1.870	508.60 ppb	1.870	0.37%
QC value within limits for Ti 334.940 Recovery = 101.72%						
Tl 190.801†	1091.4	436.42 ug/L	7.267	436.42 ppb	7.267	1.67%
QC value within limits for Tl 190.801 Recovery = 87.28%						
U 409.014†	13918.7	533.24 ug/L	3.450	533.24 ppb	3.450	0.65%
QC value within limits for U 409.014 Recovery = 106.65%						
V 292.402†	56949.0	513.72 ug/L	0.830	513.72 ppb	0.830	0.16%
QC value within limits for V 292.402 Recovery = 102.74%						
Zn 213.857†	43967.5	498.70 ug/L	1.737	498.70 ppb	1.737	0.35%
QC value within limits for Zn 213.857 Recovery = 99.74%						
SiO2†	133291.2	10829 ug/L	157.5	10829 ppb	157.5	1.45%
QC value within limits for SiO2 Recovery = 101.25%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 3/31/2010 07:42:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3463.9	3463.9	96.5 %		07:45:00
1	Y RADIAL	3821.0	3821.0	93.96 %		07:45:00
1	Al 396.153Radial†	433718.9	449438.7	515720 ug/L	515720 ppb	07:44:40
1	Ca 317.933Radial†	227640.4	235817.6	482010 ug/L	482010 ppb	07:44:40
1	Fe 238.204 Radial†	29767.4	30830.5	435820 ug/L	435820 ppb	07:45:00
1	K 766.490 Radial†	2870.8	-44.8	-376.03 ug/L	-376.03 ppb	07:44:40
1	Mg 279.077 IEC†	10647.0	11029.6	486470 ug/L	486470 ppb	07:45:00
1	Na 589.592 Radial†	984965.2	1021312.1	526610 ug/L	526610 ppb	07:44:40
1	Sr 421.552†	1120.8	1147.4	9.0506 ug/L	9.0506 ppb	07:45:00
1	Sc 361.383	581979.9	581979.9	87.267 %		07:45:58
1	Y 371.029	457743.7	457743.7	86.680 %		07:45:58
1	Ag 328.068†	-19270.0	-22283.7	-12.848 ug/L	-12.848 ppb	07:45:58
1	As 188.979†	-145.0	-140.9	28.888 ug/L	28.888 ppb	07:46:19
1	B 249.677†	649.9	1159.9	-39.726 ug/L	-39.726 ppb	07:45:58
1	Ba 233.527†	-1515.1	-1749.4	-4.3848 ug/L	-4.3848 ppb	07:46:19
1	Be 313.107†	-8941.0	-6067.3	-2.5851 ug/L	-2.5851 ppb	07:45:58
1	Cd 226.502†	2329.0	2868.0	2.2343 ug/L	2.2343 ppb	07:46:19
1	Co 228.616†	204.7	284.5	1.0268 ug/L	1.0268 ppb	07:46:19
1	Cr 267.716†	-1338.8	-1629.3	15.100 ug/L	15.100 ppb	07:46:19
1	Cu 324.752†	-62.7	-5426.1	-4.6377 ug/L	-4.6377 ppb	07:45:58
1	Mn 257.610†	-20984.2	-24500.4	-10.577 ug/L	-10.577 ppb	07:45:58
1	Mo 202.031†	-400.1	-463.2	-5.7189 ug/L	-5.7189 ppb	07:46:19
1	Ni 231.604†	289.8	247.4	8.3308 ug/L	8.3308 ppb	07:46:19
1	P 214.914†	496.7	367.5	29.868 ug/L	29.868 ppb	07:46:19
1	Pb 220.353†	-564.1	-580.7	-0.8483 ug/L	-0.8483 ppb	07:46:19
1	S 181.975 Axial†	47.2	14.7	-73.339 ug/L	-73.339 ppb	07:46:19
1	Sb 206.836†	53.4	35.9	-6.2325 ug/L	-6.2325 ppb	07:46:19
1	Se 196.026†	-1868.9	-2115.0	-346.99 ug/L	-346.99 ppb	07:46:19
1	Si 251.611†	-424.3	-1022.6	-38.569 ug/L	-38.569 ppb	07:46:19
1	Sn 189.927†	-363.9	-426.8	-12.735 ug/L	-12.735 ppb	07:46:19
1	Ti 334.940†	-10078.7	-10143.6	-1.0427 ug/L	-1.0427 ppb	07:45:58
1	Tl 190.801†	-111.6	-96.4	-38.644 ug/L	-38.644 ppb	07:46:19
1	U 409.014†	332133.4	383000.2	15244 ug/L	15244 ppb	07:45:58
1	V 292.402†	736.5	2592.3	-1.5254 ug/L	-1.5254 ppb	07:46:19
1	Zn 213.857†	4460.9	4421.4	-11.887 ug/L	-11.887 ppb	07:46:19
1	SiO2†	-428.9	-1041.7	-83.496 ug/L	-83.496 ppb	07:47:15
2	Sc Radial	3540.0	3540.0	98.6 %		07:45:26
2	Y RADIAL	3895.3	3895.3	95.79 %		07:45:26
2	Al 396.153Radial†	426273.9	432243.7	495990 ug/L	495990 ppb	07:45:06
2	Ca 317.933Radial†	223835.8	226897.1	463780 ug/L	463780 ppb	07:45:06
2	Fe 238.204 Radial†	30244.8	30652.4	433300 ug/L	433300 ppb	07:45:26
2	K 766.490 Radial†	2811.5	-168.8	-386.77 ug/L	-386.77 ppb	07:45:06
2	Mg 279.077 IEC†	10872.0	11020.8	486090 ug/L	486090 ppb	07:45:26
2	Na 589.592 Radial†	961233.7	975344.9	502910 ug/L	502910 ppb	07:45:06
2	Sr 421.552†	1143.8	1145.8	9.1690 ug/L	9.1690 ppb	07:45:26
2	Sc 361.383	587383.9	587383.9	88.077 %		07:46:24
2	Y 371.029	461592.2	461592.2	87.409 %		07:46:24
2	Ag 328.068†	-19497.4	-22338.8	-13.671 ug/L	-13.671 ppb	07:46:24
2	As 188.979†	-159.6	-156.0	20.463 ug/L	20.463 ppb	07:46:44
2	B 249.677†	470.4	949.2	-44.960 ug/L	-44.960 ppb	07:46:24
2	Ba 233.527†	-1470.4	-1682.6	-3.7865 ug/L	-3.7865 ppb	07:46:44
2	Be 313.107†	-9014.5	-6056.5	-2.5803 ug/L	-2.5803 ppb	07:46:24
2	Cd 226.502†	2359.4	2878.1	2.6423 ug/L	2.6423 ppb	07:46:44
2	Co 228.616†	199.4	276.3	0.8584 ug/L	0.8584 ppb	07:46:44
2	Cr 267.716†	-1322.4	-1596.7	15.348 ug/L	15.348 ppb	07:46:44
2	Cu 324.752†	-162.2	-5538.4	-5.1510 ug/L	-5.1510 ppb	07:46:24
2	Mn 257.610†	-21447.5	-24805.2	-11.230 ug/L	-11.230 ppb	07:46:24
2	Mo 202.031†	-370.7	-425.7	-2.4633 ug/L	-2.4633 ppb	07:46:44
2	Ni 231.604†	259.5	209.9	7.0700 ug/L	7.0700 ppb	07:46:44

2	P 214.914†	490.7	355.5	18.920 ug/L	18.920 ppb	07:46:44
2	Pb 220.353†	-563.0	-573.5	-4.6304 ug/L	-4.6304 ppb	07:46:44
2	S 181.975 Axial†	72.4	42.8	-25.003 ug/L	-25.003 ppb	07:46:44
2	Sb 206.836†	46.2	27.2	-9.1731 ug/L	-9.1731 ppb	07:46:44
2	Se 196.026†	-1892.7	-2122.3	-364.82 ug/L	-364.82 ppb	07:46:44
2	Si 251.611†	-400.1	-990.6	-37.389 ug/L	-37.389 ppb	07:46:44
2	Sn 189.927†	-356.8	-414.9	-13.172 ug/L	-13.172 ppb	07:46:44
2	Ti 334.940†	-10116.5	-10080.2	-3.3222 ug/L	-3.3222 ppb	07:46:24
2	Tl 190.801†	-110.9	-94.4	-37.851 ug/L	-37.851 ppb	07:46:44
2	U 409.014†	334494.7	382179.6	15212 ug/L	15212 ppb	07:46:24
2	V 292.402†	714.8	2560.0	-1.4754 ug/L	-1.4754 ppb	07:46:44
2	Zn 213.857†	4503.2	4422.5	-11.489 ug/L	-11.489 ppb	07:46:44
2	SiO2†	-560.3	-1186.4	-95.360 ug/L	-95.360 ppb	07:47:20
3	Sc Radial	3521.8	3521.8	98.1 %		07:45:51
3	Y RADIAL	3897.8	3897.8	95.85 %		07:45:51
3	Al 396.153Radial†	440307.9	448773.4	514950 ug/L	514950 ppb	07:45:31
3	Ca 317.933Radial†	230754.0	235117.1	480580 ug/L	480580 ppb	07:45:31
3	Fe 238.204 Radial†	30464.8	31034.8	438710 ug/L	438710 ppb	07:45:51
3	K 766.490 Radial†	2818.5	-147.0	-395.56 ug/L	-395.56 ppb	07:45:31
3	Mg 279.077 IEC†	10968.4	11175.9	492930 ug/L	492930 ppb	07:45:51
3	Na 589.592 Radial†	994152.4	1013915.3	522800 ug/L	522800 ppb	07:45:31
3	Sr 421.552†	1146.4	1154.4	9.1389 ug/L	9.1389 ppb	07:45:51
3	Sc 361.383	575248.5	575248.5	86.258 %		07:46:50
3	Y 371.029	452380.7	452380.7	85.664 %		07:46:50
3	Ag 328.068†	-19087.3	-22330.3	-12.141 ug/L	-12.141 ppb	07:46:50
3	As 188.979†	-156.1	-155.7	21.849 ug/L	21.849 ppb	07:47:10
3	B 249.677†	359.9	832.3	-48.973 ug/L	-48.973 ppb	07:46:50
3	Ba 233.527†	-1452.9	-1697.6	-3.7744 ug/L	-3.7744 ppb	07:47:10
3	Be 313.107†	-8697.5	-5904.9	-2.5167 ug/L	-2.5167 ppb	07:46:50
3	Cd 226.502†	2342.1	2914.4	2.6347 ug/L	2.6347 ppb	07:47:10
3	Co 228.616†	259.6	350.8	2.7158 ug/L	2.7158 ppb	07:47:10
3	Cr 267.716†	-1308.2	-1611.8	15.706 ug/L	15.706 ppb	07:47:10
3	Cu 324.752†	-192.1	-5576.9	-4.9741 ug/L	-4.9741 ppb	07:46:50
3	Mn 257.610†	-21096.9	-24912.5	-11.123 ug/L	-11.123 ppb	07:46:50
3	Mo 202.031†	-363.4	-426.0	-1.8746 ug/L	-1.8746 ppb	07:47:10
3	Ni 231.604†	221.0	171.5	5.7738 ug/L	5.7738 ppb	07:47:10
3	P 214.914†	527.9	410.3	56.575 ug/L	56.575 ppb	07:47:10
3	Pb 220.353†	-553.8	-576.3	-0.6164 ug/L	-0.6164 ppb	07:47:10
3	S 181.975 Axial†	72.6	44.8	-25.437 ug/L	-25.437 ppb	07:47:10
3	Sb 206.836†	51.7	34.7	-6.5783 ug/L	-6.5783 ppb	07:47:10
3	Se 196.026†	-1864.2	-2134.6	-354.78 ug/L	-354.78 ppb	07:47:10
3	Si 251.611†	-374.1	-970.1	-36.604 ug/L	-36.604 ppb	07:47:10
3	Sn 189.927†	-340.9	-405.0	-7.8310 ug/L	-7.8310 ppb	07:47:10
3	Ti 334.940†	-9891.4	-10061.6	-1.5709 ug/L	-1.5709 ppb	07:46:50
3	Tl 190.801†	-81.8	-63.4	-25.555 ug/L	-25.555 ppb	07:47:10
3	U 409.014†	326516.2	380941.6	15162 ug/L	15162 ppb	07:46:50
3	V 292.402†	653.2	2505.6	-2.7261 ug/L	-2.7261 ppb	07:47:10
3	Zn 213.857†	4424.9	4439.4	-12.085 ug/L	-12.085 ppb	07:47:10
3	SiO2†	-398.9	-1012.6	-81.230 ug/L	-81.230 ppb	07:47:26

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	581537.4	87.201 %		0.9117			1.05%
Sc Radial	3508.6	97.8 %		1.11			1.13%
Y 371.029	457238.8	86.584 %		0.8761			1.01%
Y RADIAL	3871.4	95.20 %		1.074			1.13%
Ag 328.068†	-22317.6	-12.887 ug/L		0.7660	-12.887 ppb	0.7660	5.94%
Al 396.153Radial†	443485.3	508880 ug/L		11177.6	508880 ppb	11177.6	2.20%
QC value within limits for Al 396.153Radial Recovery = 101.78%							
As 188.979†	-150.9	23.734 ug/L		4.5175	23.734 ppb	4.5175	19.03%
B 249.677†	980.5	-44.553 ug/L		4.6372	-44.553 ppb	4.6372	10.41%
Ba 233.527†	-1709.9	-3.9819 ug/L		0.34898	-3.9819 ppb	0.34898	8.76%
Be 313.107†	-6009.6	-2.5607 ug/L		0.03817	-2.5607 ppb	0.03817	1.49%
Ca 317.933Radial†	232610.6	475460 ug/L		10139.1	475460 ppb	10139.1	2.13%
QC value within limits for Ca 317.933Radial Recovery = 95.09%							
Cd 226.502†	2886.9	2.5038 ug/L		0.23340	2.5038 ppb	0.23340	9.32%
Co 228.616†	303.9	1.5337 ug/L		1.02722	1.5337 ppb	1.02722	66.98%
Cr 267.716†	-1612.6	15.385 ug/L		0.3048	15.385 ppb	0.3048	1.98%
Cu 324.752†	-5513.8	-4.9209 ug/L		0.26077	-4.9209 ppb	0.26077	5.30%

Fe 238.204 Radial†	30839.2	435940 ug/L	2704.7	435940 ppb	2704.7	0.62%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.19%						
K 766.490 Radial†	-120.2	-386.12 ug/L	9.784	-386.12 ppb	9.784	2.53%
Mg 279.077 IEC†	11075.4	488500 ug/L	3843.3	488500 ppb	3843.3	0.79%
QC value within limits for Mg 279.077 IEC Recovery = 97.70%						
Mn 257.610†	-24739.4	-10.977 ug/L	0.3499	-10.977 ppb	0.3499	3.19%
Mo 202.031†	-438.3	-3.3523 ug/L	2.07059	-3.3523 ppb	2.07059	61.77%
Na 589.592 Radial†	1003524.1	517440 ug/L	12726.9	517440 ppb	12726.9	2.46%
QC value within limits for Na 589.592 Radial Recovery = 103.49%						
Ni 231.604†	209.6	7.0582 ug/L	1.27856	7.0582 ppb	1.27856	18.11%
P 214.914†	377.8	35.121 ug/L	19.3693	35.121 ppb	19.3693	55.15%
Pb 220.353†	-576.8	-2.0317 ug/L	2.25352	-2.0317 ppb	2.25352	110.92%
S 181.975 Axial†	34.1	-41.259 ug/L	27.7828	-41.259 ppb	27.7828	67.34%
Sb 206.836†	32.6	-7.3280 ug/L	1.60728	-7.3280 ppb	1.60728	21.93%
Se 196.026†	-2124.0	-355.53 ug/L	8.935	-355.53 ppb	8.935	2.51%
Si 251.611†	-994.5	-37.521 ug/L	0.9889	-37.521 ppb	0.9889	2.64%
Sn 189.927†	-415.5	-11.246 ug/L	2.9655	-11.246 ppb	2.9655	26.37%
Sr 421.552†	1149.2	9.1195 ug/L	0.06155	9.1195 ppb	0.06155	0.67%
Ti 334.940†	-10095.1	-1.9786 ug/L	1.19317	-1.9786 ppb	1.19317	60.30%
Tl 190.801†	-84.7	-34.016 ug/L	7.3385	-34.016 ppb	7.3385	21.57%
U 409.014†	382040.5	15206 ug/L	41.6	15206 ppb	41.6	0.27%
QC value within limits for U 409.014 Recovery = 101.37%						
V 292.402†	2552.7	-1.9089 ug/L	0.70810	-1.9089 ppb	0.70810	37.09%
Zn 213.857†	4427.8	-11.821 ug/L	0.3033	-11.821 ppb	0.3033	2.57%
SiO2†	-1080.2	-86.695 ug/L	7.5890	-86.695 ppb	7.5890	8.75%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/31/2010 07:49:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3821.7	3821.7	106 %		07:51:53
1	Y RADIAL	4260.0	4260.0	104.8 %		07:51:33
1	Al 396.153Radial†	361.8	449.7	56.410 ug/L	56.410 ppb	07:51:33
1	Ca 317.933Radial†	31.5	13.9	28.432 ug/L	28.432 ppb	07:51:53
1	Fe 238.204 Radial†	-14.0	-21.4	-24.421 ug/L	-24.421 ppb	07:51:53
1	K 766.490 Radial†	1524199.8	1428216.3	300560 ug/L	300560 ppb	07:51:28
1	Mg 279.077 IEC†	-2.4	-2.9	-29.843 ug/L	-29.843 ppb	07:51:53
1	Na 589.592 Radial†	-582.3	350.7	180.81 ug/L	180.81 ppb	07:51:33
1	Sr 421.552†	977339.7	917715.7	10118 ug/L	10118 ppb	07:51:28
1	Sc 361.383	676215.6	676215.6	101.40 %		07:53:10
1	Y 371.029	530305.9	530305.9	100.42 %		07:53:10
1	Ag 328.068†	-5610.8	-5735.6	7.4463 ug/L	7.4463 ppb	07:53:16
1	As 188.979†	19576.5	19331.9	10099 ug/L	10099 ppb	07:53:16
1	B 249.677†	191865.2	189636.0	5053.4 ug/L	5053.4 ppb	07:53:10
1	Ba 233.527†	1416268.9	1396736.7	14152 ug/L	14152 ppb	07:53:10
1	Be 313.107†	6893252.8	6802428.3	2871.9 ug/L	2871.9 ppb	07:53:04
1	Cd 226.502†	638678.6	630075.6	9731.4 ug/L	9731.4 ppb	07:53:10
1	Co 228.616†	362179.9	357238.3	9270.4 ug/L	9270.4 ppb	07:53:16
1	Cr 267.716†	1582942.6	1561031.3	24008 ug/L	24008 ppb	07:53:10
1	Cu 324.752†	5713527.1	5629429.1	19960 ug/L	19960 ppb	07:53:04
1	Mn 257.610†	7020920.5	6923703.8	9527.0 ug/L	9527.0 ppb	07:53:04
1	Mo 202.031†	98301.7	96942.1	9478.1 ug/L	9478.1 ppb	07:53:16
1	Ni 231.604†	291481.4	287379.4	9678.3 ug/L	9678.3 ppb	07:53:16
1	P 214.914†	25549.2	24995.4	13094 ug/L	13094 ppb	07:53:16
1	Pb 220.353†	146900.6	144941.8	23660 ug/L	23660 ppb	07:53:16
1	S 181.975 Axial†	32901.0	32408.2	51416 ug/L	51416 ppb	07:53:16
1	Sb 206.836†	24264.2	23904.5	10263 ug/L	10263 ppb	07:53:16
1	Se 196.026†	12989.0	12836.6	10030 ug/L	10030 ppb	07:53:16
1	Si 251.611†	1262025.3	1244095.7	47483 ug/L	47483 ppb	07:53:10
1	Sn 189.927†	42745.8	42147.0	9963.4 ug/L	9963.4 ppb	07:53:16
1	Ti 334.940†	5295861.9	5224280.1	9887.5 ug/L	9887.5 ppb	07:53:04
1	Tl 190.801†	24189.6	23887.7	9545.6 ug/L	9545.6 ppb	07:53:16
1	U 409.014†	-1357.1	1067.1	-11.050 ug/L	-11.050 ppb	07:53:16
1	V 292.402†	1105688.1	1092197.9	10178 ug/L	10178 ppb	07:53:10
1	Zn 213.857†	1173139.6	1156281.1	13866 ug/L	13866 ppb	07:53:10
1	SiO2†	1269262.6	1251219.5	101510 ug/L	101510 ppb	07:54:02
2	Sc Radial	3895.9	3895.9	109 %		07:52:24
2	Y RADIAL	4323.0	4323.0	106.3 %		07:52:04
2	Al 396.153Radial†	354.5	436.5	38.696 ug/L	38.696 ppb	07:52:04
2	Ca 317.933Radial†	21.4	4.0	8.1671 ug/L	8.1671 ppb	07:52:24
2	Fe 238.204 Radial†	-18.8	-25.5	-82.294 ug/L	-82.294 ppb	07:52:24
2	K 766.490 Radial†	1531647.6	1407815.4	296260 ug/L	296260 ppb	07:51:59
2	Mg 279.077 IEC†	-3.8	-4.1	-82.687 ug/L	-82.687 ppb	07:52:24
2	Na 589.592 Radial†	-619.3	327.0	168.60 ug/L	168.60 ppb	07:52:04
2	Sr 421.552†	972655.1	895920.3	9877.5 ug/L	9877.5 ppb	07:51:59
2	Sc 361.383	691932.2	691932.2	103.75 %		07:53:30
2	Y 371.029	542441.1	542441.1	102.72 %		07:53:30
2	Ag 328.068†	-5690.6	-5686.7	7.7186 ug/L	7.7186 ppb	07:53:35
2	As 188.979†	20311.0	19601.3	10237 ug/L	10237 ppb	07:53:35
2	B 249.677†	197813.3	191071.0	5091.7 ug/L	5091.7 ppb	07:53:30
2	Ba 233.527†	1444132.2	1391866.0	14102 ug/L	14102 ppb	07:53:30
2	Be 313.107†	6942122.4	6695113.8	2826.5 ug/L	2826.5 ppb	07:53:24
2	Cd 226.502†	653980.5	630516.8	9738.2 ug/L	9738.2 ppb	07:53:30
2	Co 228.616†	372334.6	358912.3	9314.4 ug/L	9314.4 ppb	07:53:35
2	Cr 267.716†	1618073.9	1559431.9	23984 ug/L	23984 ppb	07:53:30
2	Cu 324.752†	5746843.1	5533550.7	19620 ug/L	19620 ppb	07:53:24
2	Mn 257.610†	7045690.8	6790302.0	9343.4 ug/L	9343.4 ppb	07:53:24
2	Mo 202.031†	101152.9	97488.2	9531.5 ug/L	9531.5 ppb	07:53:35
2	Ni 231.604†	300172.0	289226.1	9740.5 ug/L	9740.5 ppb	07:53:35

2	P 214.914†	26467.8	25308.5	13375 ug/L	13375 ppb	07:53:35
2	Pb 220.353†	151129.5	145726.9	23789 ug/L	23789 ppb	07:53:35
2	S 181.975 Axial†	34194.8	32918.1	52225 ug/L	52225 ppb	07:53:35
2	Sb 206.836†	25129.2	24194.7	10385 ug/L	10385 ppb	07:53:35
2	Se 196.026†	13485.0	13023.7	10175 ug/L	10175 ppb	07:53:35
2	Si 251.611†	1296574.2	1249123.8	47675 ug/L	47675 ppb	07:53:30
2	Sn 189.927†	43904.4	42306.0	10001 ug/L	10001 ppb	07:53:35
2	Ti 334.940†	5316880.5	5125905.4	9701.1 ug/L	9701.1 ppb	07:53:24
2	Tl 190.801†	24888.1	24019.0	9595.1 ug/L	9595.1 ppb	07:53:35
2	U 409.014†	-1098.1	1347.2	0.1948 ug/L	0.1948 ppb	07:53:35
2	V 292.402†	1131871.9	1092665.7	10183 ug/L	10183 ppb	07:53:30
2	Zn 213.857†	1200908.1	1156765.3	13872 ug/L	13872 ppb	07:53:30
2	SiO2†	1262379.4	1216152.4	98658 ug/L	98658 ppb	07:54:07
3	Sc Radial	3938.8	3938.8	110 %		07:52:54
3	Y RADIAL	4400.0	4400.0	108.2 %		07:52:34
3	Al 396.153Radial†	377.2	453.7	65.303 ug/L	65.303 ppb	07:52:34
3	Ca 317.933Radial†	32.8	14.2	28.977 ug/L	28.977 ppb	07:52:54
3	Fe 238.204 Radial†	-14.5	-21.4	-28.056 ug/L	-28.056 ppb	07:52:54
3	K 766.490 Radial†	1584326.9	1440441.6	303130 ug/L	303130 ppb	07:52:29
3	Mg 279.077 IEC†	-6.1	-6.2	-173.79 ug/L	-173.79 ppb	07:52:54
3	Na 589.592 Radial†	-625.2	327.8	169.04 ug/L	169.04 ppb	07:52:34
3	Sr 421.552†	1018248.6	927699.9	10228 ug/L	10228 ppb	07:52:29
3	Sc 361.383	690757.5	690757.5	103.58 %		07:53:50
3	Y 371.029	541813.3	541813.3	102.60 %		07:53:50
3	Ag 328.068†	-5526.5	-5537.6	8.5590 ug/L	8.5590 ppb	07:53:55
3	As 188.979†	19868.1	19207.0	10034 ug/L	10034 ppb	07:53:55
3	B 249.677†	197249.0	190850.3	5086.3 ug/L	5086.3 ppb	07:53:50
3	Ba 233.527†	1439372.8	1389637.9	14080 ug/L	14080 ppb	07:53:50
3	Be 313.107†	7010548.1	6772554.0	2859.2 ug/L	2859.2 ppb	07:53:44
3	Cd 226.502†	650025.5	627770.2	9695.7 ug/L	9695.7 ppb	07:53:50
3	Co 228.616†	365321.7	352751.9	9153.9 ug/L	9153.9 ppb	07:53:55
3	Cr 267.716†	1612368.0	1556575.1	23940 ug/L	23940 ppb	07:53:50
3	Cu 324.752†	5817913.5	5611585.3	19897 ug/L	19897 ppb	07:53:44
3	Mn 257.610†	7102794.4	6856981.0	9435.2 ug/L	9435.2 ppb	07:53:44
3	Mo 202.031†	99457.5	96017.1	9387.7 ug/L	9387.7 ppb	07:53:55
3	Ni 231.604†	294251.8	284002.5	9564.5 ug/L	9564.5 ppb	07:53:55
3	P 214.914†	25804.6	24711.5	12913 ug/L	12913 ppb	07:53:55
3	Pb 220.353†	148344.0	143285.4	23390 ug/L	23390 ppb	07:53:55
3	S 181.975 Axial†	33326.7	32136.1	50984 ug/L	50984 ppb	07:53:55
3	Sb 206.836†	24637.2	23760.9	10199 ug/L	10199 ppb	07:53:55
3	Se 196.026†	13155.8	12727.9	9944.8 ug/L	9944.8 ppb	07:53:55
3	Si 251.611†	1293004.7	1247802.8	47626 ug/L	47626 ppb	07:53:50
3	Sn 189.927†	43040.6	41544.0	9820.9 ug/L	9820.9 ppb	07:53:55
3	Ti 334.940†	5366622.0	5182643.1	9808.6 ug/L	9808.6 ppb	07:53:44
3	Tl 190.801†	24456.6	23643.3	9448.1 ug/L	9448.1 ppb	07:53:55
3	U 409.014†	-1303.7	1146.9	-7.7107 ug/L	-7.7107 ppb	07:53:55
3	V 292.402†	1128691.2	1091450.1	10170 ug/L	10170 ppb	07:53:50
3	Zn 213.857†	1194504.4	1152551.1	13822 ug/L	13822 ppb	07:53:50
3	SiO2†	1286607.1	1241612.3	100730 ug/L	100730 ppb	07:54:13

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	686301.8	102.91 %		1.313			1.28%
Sc Radial	3885.5	108 %		1.7			1.52%
Y 371.029	538186.8	101.91 %		1.294			1.27%
Y RADIAL	4327.6	106.4 %		1.72			1.62%
Ag 328.068†	-5653.3	7.9080 ug/L		0.58002	7.9080 ppb	0.58002	7.33%
Al 396.153Radial†	446.6	53.470 ug/L		13.5454	53.470 ppb	13.5454	25.33%
As 188.979†	19380.1	10123 ug/L		103.9	10123 ppb	103.9	1.03%
QC value within limits for As 188.979 Recovery = 101.23%							
B 249.677†	190519.1	5077.2 ug/L		20.73	5077.2 ppb	20.73	0.41%
QC value within limits for B 249.677 Recovery = 101.54%							
Ba 233.527†	1392746.9	14111 ug/L		36.7	14111 ppb	36.7	0.26%
QC value within limits for Ba 233.527 Recovery = 94.08%							
Be 313.107†	6756698.7	2852.5 ug/L		23.41	2852.5 ppb	23.41	0.82%
QC value within limits for Be 313.107 Recovery = 95.08%							
Ca 317.933Radial†	10.7	21.859 ug/L		11.8603	21.859 ppb	11.8603	54.26%
Cd 226.502†	629454.2	9721.8 ug/L		22.82	9721.8 ppb	22.82	0.23%
QC value within limits for Cd 226.502 Recovery = 97.22%							

Co 228.616†	356300.8	9246.2 ug/L	82.92	9246.2 ppb	82.92	0.90%
QC value within limits for Co 228.616 Recovery = 92.46%						
Cr 267.716†	1559012.8	23977 ug/L	34.7	23977 ppb	34.7	0.14%
QC value within limits for Cr 267.716 Recovery = 95.91%						
Cu 324.752†	5591521.7	19825 ug/L	180.8	19825 ppb	180.8	0.91%
QC value within limits for Cu 324.752 Recovery = 99.13%						
Fe 238.204 Radial†	-22.8	-44.923 ug/L	32.4149	-44.923 ppb	32.4149	72.16%
K 766.490 Radial†	1425491.1	299980 ug/L	3468.9	299980 ppb	3468.9	1.16%
QC value within limits for K 766.490 Radial Recovery = 99.99%						
Mg 279.077 IEC†	-4.4	-95.440 ug/L	72.8151	-95.440 ppb	72.8151	76.29%
Mn 257.610†	6856995.6	9435.2 ug/L	91.78	9435.2 ppb	91.78	0.97%
QC value within limits for Mn 257.610 Recovery = 94.35%						
Mo 202.031†	96815.8	9465.8 ug/L	72.70	9465.8 ppb	72.70	0.77%
QC value within limits for Mo 202.031 Recovery = 94.66%						
Na 589.592 Radial†	335.2	172.82 ug/L	6.924	172.82 ppb	6.924	4.01%
Ni 231.604†	286869.3	9661.1 ug/L	89.21	9661.1 ppb	89.21	0.92%
QC value within limits for Ni 231.604 Recovery = 96.61%						
P 214.914†	25005.1	13127 ug/L	232.7	13127 ppb	232.7	1.77%
QC value less than the lower limit for P 214.914 Recovery = 87.52%						
Pb 220.353†	144651.4	23613 ug/L	203.6	23613 ppb	203.6	0.86%
QC value within limits for Pb 220.353 Recovery = 94.45%						
S 181.975 Axial†	32487.5	51541 ug/L	629.8	51541 ppb	629.8	1.22%
QC value within limits for S 181.975 Axial Recovery = 103.08%						
Sb 206.836†	23953.4	10282 ug/L	94.6	10282 ppb	94.6	0.92%
QC value within limits for Sb 206.836 Recovery = 102.82%						
Se 196.026†	12862.7	10050 ug/L	116.7	10050 ppb	116.7	1.16%
QC value within limits for Se 196.026 Recovery = 100.50%						
Si 251.611†	1247007.4	47594 ug/L	99.6	47594 ppb	99.6	0.21%
QC value within limits for Si 251.611 Recovery = 95.19%						
Sn 189.927†	41999.0	9928.5 ug/L	95.03	9928.5 ppb	95.03	0.96%
QC value within limits for Sn 189.927 Recovery = 99.28%						
Sr 421.552†	913778.6	10074 ug/L	179.2	10074 ppb	179.2	1.78%
QC value within limits for Sr 421.552 Recovery = 100.74%						
Ti 334.940†	5177609.5	9799.1 ug/L	93.54	9799.1 ppb	93.54	0.95%
QC value within limits for Ti 334.940 Recovery = 97.99%						
Tl 190.801†	23850.0	9529.6 ug/L	74.81	9529.6 ppb	74.81	0.78%
QC value within limits for Tl 190.801 Recovery = 95.30%						
U 409.014†	1187.1	-6.1886 ug/L	5.77480	-6.1886 ppb	5.77480	93.31%
V 292.402†	1092104.6	10177 ug/L	6.7	10177 ppb	6.7	0.07%
QC value within limits for V 292.402 Recovery = 101.77%						
Zn 213.857†	1155199.1	13853 ug/L	27.4	13853 ppb	27.4	0.20%
QC value within limits for Zn 213.857 Recovery = 92.36%						
SiO2†	1236328.1	100300 ug/L	1475.1	100300 ppb	1475.1	1.47%
QC value within limits for SiO2 Recovery = 93.74%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2010 07:56:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3920.0	3920.0	109 %		07:58:35
1	Y RADIAL	4281.7	4281.7	105.3 %		07:58:15
1	Al 396.153Radial†	4653.4	4370.0	4990.5 ug/L	4990.5 ppb	07:58:15
1	Ca 317.933Radial†	2716.1	2470.8	5050.3 ug/L	5050.3 ppb	07:58:35
1	Fe 238.204 Radial†	402.8	360.5	5111.5 ug/L	5111.5 ppb	07:58:35
1	K 766.490 Radial†	30160.2	24591.5	5168.9 ug/L	5168.9 ppb	07:58:15
1	Mg 279.077 IEC†	130.2	118.5	5232.5 ug/L	5232.5 ppb	07:58:35
1	Na 589.592 Radial†	20652.1	19803.6	10211 ug/L	10211 ppb	07:58:15
1	Sr 421.552†	50263.2	46000.1	507.11 ug/L	507.11 ppb	07:58:15
1	Sc 361.383	683360.6	683360.6	102.47 %		07:59:33
1	Y 371.029	535161.1	535161.1	101.34 %		07:59:33
1	Ag 328.068†	87214.4	84911.0	493.44 ug/L	493.44 ppb	07:59:38
1	As 188.979†	951.8	954.2	499.59 ug/L	499.59 ppb	07:59:58
1	B 249.677†	19694.5	19635.1	523.72 ug/L	523.72 ppb	07:59:38
1	Ba 233.527†	49813.5	48600.1	492.88 ug/L	492.88 ppb	07:59:38
1	Be 313.107†	1206747.9	1181851.4	496.16 ug/L	496.16 ppb	07:59:33
1	Cd 226.502†	32745.3	32155.6	496.20 ug/L	496.20 ppb	07:59:38
1	Co 228.616†	19596.6	19174.4	497.78 ug/L	497.78 ppb	07:59:38
1	Cr 267.716†	32950.2	32061.1	493.84 ug/L	493.84 ppb	07:59:38
1	Cu 324.752†	147032.4	138135.6	489.78 ug/L	489.78 ppb	07:59:38
1	Mn 257.610†	367601.7	358290.4	493.30 ug/L	493.30 ppb	07:59:38
1	Mo 202.031†	5171.3	5042.0	493.41 ug/L	493.41 ppb	07:59:58
1	Ni 231.604†	15140.9	14691.3	494.75 ug/L	494.75 ppb	07:59:38
1	P 214.914†	3930.7	3634.3	2371.3 ug/L	2371.3 ppb	07:59:58
1	Pb 220.353†	3028.4	3021.2	494.70 ug/L	494.70 ppb	07:59:58
1	S 181.975 Axial†	686.1	630.2	998.88 ug/L	998.88 ppb	07:59:58
1	Sb 206.836†	1249.1	1193.7	512.72 ug/L	512.72 ppb	07:59:58
1	Se 196.026†	636.3	647.5	520.96 ug/L	520.96 ppb	07:59:58
1	Si 251.611†	67725.9	65557.8	2502.2 ug/L	2502.2 ppb	07:59:38
1	Sn 189.927†	2171.1	2109.1	499.51 ug/L	499.51 ppb	07:59:58
1	Ti 334.940†	263184.2	258248.9	489.05 ug/L	489.05 ppb	07:59:38
1	Tl 190.801†	1260.2	1261.3	503.74 ug/L	503.74 ppb	07:59:58
1	U 409.014†	9938.3	12104.4	481.66 ug/L	481.66 ppb	07:59:38
1	V 292.402†	52844.1	53319.3	497.83 ug/L	497.83 ppb	07:59:38
1	Zn 213.857†	42961.4	41235.9	493.08 ug/L	493.08 ppb	07:59:38
1	SiO2†	68156.1	65963.7	5351.8 ug/L	5351.8 ppb	08:01:05
2	Sc Radial	3870.1	3870.1	108 %		07:59:01
2	Y RADIAL	4396.5	4396.5	108.1 %		07:58:40
2	Al 396.153Radial†	4687.3	4456.4	5090.4 ug/L	5090.4 ppb	07:58:40
2	Ca 317.933Radial†	2670.1	2460.2	5028.6 ug/L	5028.6 ppb	07:59:01
2	Fe 238.204 Radial†	395.2	358.3	5080.1 ug/L	5080.1 ppb	07:59:01
2	K 766.490 Radial†	30528.6	25289.3	5315.7 ug/L	5315.7 ppb	07:58:40
2	Mg 279.077 IEC†	131.3	121.1	5346.4 ug/L	5346.4 ppb	07:59:01
2	Na 589.592 Radial†	20703.4	20095.1	10361 ug/L	10361 ppb	07:58:40
2	Sr 421.552†	50646.0	46948.7	517.57 ug/L	517.57 ppb	07:58:40
2	Sc 361.383	694716.7	694716.7	104.17 %		08:00:03
2	Y 371.029	542598.8	542598.8	102.75 %		08:00:03
2	Ag 328.068†	89769.7	85972.8	499.57 ug/L	499.57 ppb	08:00:09
2	As 188.979†	929.5	917.5	480.65 ug/L	480.65 ppb	08:00:29
2	B 249.677†	20189.0	19795.6	528.02 ug/L	528.02 ppb	08:00:09
2	Ba 233.527†	50971.4	48917.0	496.09 ug/L	496.09 ppb	08:00:09
2	Be 313.107†	1235780.9	1190471.1	499.79 ug/L	499.79 ppb	08:00:03
2	Cd 226.502†	33529.6	32386.1	499.77 ug/L	499.77 ppb	08:00:09
2	Co 228.616†	20050.4	19297.4	500.93 ug/L	500.93 ppb	08:00:09
2	Cr 267.716†	33672.5	32228.8	496.42 ug/L	496.42 ppb	08:00:09
2	Cu 324.752†	151621.2	140195.1	497.08 ug/L	497.08 ppb	08:00:09
2	Mn 257.610†	376110.7	360594.6	496.46 ug/L	496.46 ppb	08:00:09
2	Mo 202.031†	5093.1	4884.4	478.01 ug/L	478.01 ppb	08:00:29
2	Ni 231.604†	15510.0	14804.2	498.56 ug/L	498.56 ppb	08:00:09

2	P 214.914†	3870.9	3514.2	2288.2 ug/L	2288.2 ppb	08:00:29
2	Pb 220.353†	3000.1	2945.7	482.37 ug/L	482.37 ppb	08:00:29
2	S 181.975 Axial†	668.3	602.2	954.46 ug/L	954.46 ppb	08:00:29
2	Sb 206.836†	1217.8	1143.8	491.44 ug/L	491.44 ppb	08:00:29
2	Se 196.026†	618.4	620.2	499.54 ug/L	499.54 ppb	08:00:29
2	Si 251.611†	69585.6	66262.5	2529.3 ug/L	2529.3 ppb	08:00:09
2	Sn 189.927†	2136.8	2041.5	483.52 ug/L	483.52 ppb	08:00:29
2	Ti 334.940†	270543.1	261114.6	494.46 ug/L	494.46 ppb	08:00:09
2	Tl 190.801†	1244.9	1226.5	489.96 ug/L	489.96 ppb	08:00:29
2	U 409.014†	10208.3	12205.1	485.68 ug/L	485.68 ppb	08:00:09
2	V 292.402†	54172.3	53751.3	501.60 ug/L	501.60 ppb	08:00:09
2	Zn 213.857†	43910.0	41461.2	495.77 ug/L	495.77 ppb	08:00:09
2	SiO2†	69606.3	66268.6	5377.1 ug/L	5377.1 ppb	08:01:10
3	Sc Radial	3803.1	3803.1	106 %		07:59:26
3	Y RADIAL	4194.4	4194.4	103.1 %		07:59:06
3	Al 396.153Radial†	4507.2	4363.0	4982.5 ug/L	4982.5 ppb	07:59:06
3	Ca 317.933Radial†	2646.6	2481.6	5072.4 ug/L	5072.4 ppb	07:59:26
3	Fe 238.204 Radial†	392.4	362.1	5133.6 ug/L	5133.6 ppb	07:59:26
3	K 766.490 Radial†	29448.2	24768.4	5206.2 ug/L	5206.2 ppb	07:59:06
3	Mg 279.077 IEC†	125.6	117.9	5202.8 ug/L	5202.8 ppb	07:59:26
3	Na 589.592 Radial†	19746.2	19530.0	10070 ug/L	10070 ppb	07:59:06
3	Sr 421.552†	48570.3	45817.2	505.10 ug/L	505.10 ppb	07:59:06
3	Sc 361.383	675981.3	675981.3	101.36 %		08:00:34
3	Y 371.029	530395.1	530395.1	100.44 %		08:00:34
3	Ag 328.068†	88133.5	86746.9	504.08 ug/L	504.08 ppb	08:00:39
3	As 188.979†	938.6	951.2	498.17 ug/L	498.17 ppb	08:00:59
3	B 249.677†	19697.6	19848.0	529.40 ug/L	529.40 ppb	08:00:39
3	Ba 233.527†	50067.6	49381.4	500.80 ug/L	500.80 ppb	08:00:39
3	Be 313.107†	1191515.3	1179679.5	495.28 ug/L	495.28 ppb	08:00:34
3	Cd 226.502†	32816.8	32575.0	502.68 ug/L	502.68 ppb	08:00:39
3	Co 228.616†	19698.7	19483.8	505.79 ug/L	505.79 ppb	08:00:39
3	Cr 267.716†	33087.3	32547.4	501.33 ug/L	501.33 ppb	08:00:39
3	Cu 324.752†	148748.9	141395.5	501.34 ug/L	501.34 ppb	08:00:39
3	Mn 257.610†	369695.2	364272.0	501.53 ug/L	501.53 ppb	08:00:39
3	Mo 202.031†	5105.5	5032.1	492.46 ug/L	492.46 ppb	08:00:59
3	Ni 231.604†	15255.8	14966.0	504.01 ug/L	504.01 ppb	08:00:39
3	P 214.914†	3850.8	3597.3	2343.8 ug/L	2343.8 ppb	08:00:59
3	Pb 220.353†	3005.7	3031.0	496.30 ug/L	496.30 ppb	08:00:59
3	S 181.975 Axial†	669.6	621.3	984.70 ug/L	984.70 ppb	08:00:59
3	Sb 206.836†	1223.7	1182.0	507.79 ug/L	507.79 ppb	08:00:59
3	Se 196.026†	625.5	643.7	518.00 ug/L	518.00 ppb	08:00:59
3	Si 251.611†	68283.5	66829.4	2550.9 ug/L	2550.9 ppb	08:00:39
3	Sn 189.927†	2130.1	2091.8	495.42 ug/L	495.42 ppb	08:00:59
3	Ti 334.940†	265981.8	263812.7	499.59 ug/L	499.59 ppb	08:00:39
3	Tl 190.801†	1234.3	1249.2	499.02 ug/L	499.02 ppb	08:00:59
3	U 409.014†	9858.3	12131.4	482.72 ug/L	482.72 ppb	08:00:39
3	V 292.402†	53242.3	54275.1	506.60 ug/L	506.60 ppb	08:00:39
3	Zn 213.857†	43112.7	41842.8	500.33 ug/L	500.33 ppb	08:00:39
3	SiO2†	68976.6	67499.3	5476.8 ug/L	5476.8 ppb	08:01:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	684686.2	102.67 %		1.415			1.38%
Sc Radial	3864.4	108 %		1.6			1.52%
Y 371.029	536051.7	101.51 %		1.165			1.15%
Y RADIAL	4290.9	105.5 %		2.49			2.36%
Ag 328.068†	85876.9	499.03 ug/L		5.342	499.03 ppb	5.342	1.07%
QC value within limits for Ag 328.068 Recovery = 99.81%							
Al 396.153Radial†	4396.5	5021.1 ug/L		60.09	5021.1 ppb	60.09	1.20%
QC value within limits for Al 396.153Radial Recovery = 100.42%							
As 188.979†	941.0	492.81 ug/L		10.551	492.81 ppb	10.551	2.14%
QC value within limits for As 188.979 Recovery = 98.56%							
B 249.677†	19759.6	527.05 ug/L		2.961	527.05 ppb	2.961	0.56%
QC value within limits for B 249.677 Recovery = 105.41%							
Ba 233.527†	48966.2	496.59 ug/L		3.986	496.59 ppb	3.986	0.80%
QC value within limits for Ba 233.527 Recovery = 99.32%							
Be 313.107†	1184000.7	497.08 ug/L		2.389	497.08 ppb	2.389	0.48%
QC value within limits for Be 313.107 Recovery = 99.42%							
Ca 317.933Radial†	2470.9	5050.4 ug/L		21.88	5050.4 ppb	21.88	0.43%

QC value within limits for Ca 317.933 Radial Recovery = 101.01%							
Cd 226.502†	32372.2	499.55 ug/L	3.244	499.55 ppb	3.244	0.65%	
QC value within limits for Cd 226.502 Recovery = 99.91%							
Co 228.616†	19318.5	501.50 ug/L	4.034	501.50 ppb	4.034	0.80%	
QC value within limits for Co 228.616 Recovery = 100.30%							
Cr 267.716†	32279.1	497.20 ug/L	3.804	497.20 ppb	3.804	0.77%	
QC value within limits for Cr 267.716 Recovery = 99.44%							
Cu 324.752†	139908.7	496.07 ug/L	5.846	496.07 ppb	5.846	1.18%	
QC value within limits for Cu 324.752 Recovery = 99.21%							
Fe 238.204 Radial†	360.3	5108.4 ug/L	26.86	5108.4 ppb	26.86	0.53%	
QC value within limits for Fe 238.204 Radial Recovery = 102.17%							
K 766.490 Radial†	24883.0	5230.3 ug/L	76.32	5230.3 ppb	76.32	1.46%	
QC value within limits for K 766.490 Radial Recovery = 104.61%							
Mg 279.077 IEC†	119.2	5260.6 ug/L	75.82	5260.6 ppb	75.82	1.44%	
QC value within limits for Mg 279.077 IEC Recovery = 105.21%							
Mn 257.610†	361052.3	497.10 ug/L	4.154	497.10 ppb	4.154	0.84%	
QC value within limits for Mn 257.610 Recovery = 99.42%							
Mo 202.031†	4986.2	487.96 ug/L	8.632	487.96 ppb	8.632	1.77%	
QC value within limits for Mo 202.031 Recovery = 97.59%							
Na 589.592 Radial†	19809.6	10214 ug/L	145.7	10214 ppb	145.7	1.43%	
QC value within limits for Na 589.592 Radial Recovery = 102.14%							
Ni 231.604†	14820.5	499.11 ug/L	4.651	499.11 ppb	4.651	0.93%	
QC value within limits for Ni 231.604 Recovery = 99.82%							
P 214.914†	3582.0	2334.4 ug/L	42.34	2334.4 ppb	42.34	1.81%	
QC value within limits for P 214.914 Recovery = 93.38%							
Pb 220.353†	2999.3	491.12 ug/L	7.622	491.12 ppb	7.622	1.55%	
QC value within limits for Pb 220.353 Recovery = 98.22%							
S 181.975 Axial†	617.9	979.35 ug/L	22.690	979.35 ppb	22.690	2.32%	
QC value within limits for S 181.975 Axial Recovery = 97.93%							
Sb 206.836†	1173.2	503.98 ug/L	11.138	503.98 ppb	11.138	2.21%	
QC value within limits for Sb 206.836 Recovery = 100.80%							
Se 196.026†	637.1	512.83 ug/L	11.609	512.83 ppb	11.609	2.26%	
QC value within limits for Se 196.026 Recovery = 102.57%							
Si 251.611†	66216.6	2527.5 ug/L	24.39	2527.5 ppb	24.39	0.96%	
QC value within limits for Si 251.611 Recovery = 101.10%							
Sn 189.927†	2080.8	492.82 ug/L	8.305	492.82 ppb	8.305	1.69%	
QC value within limits for Sn 189.927 Recovery = 98.56%							
Sr 421.552†	46255.3	509.93 ug/L	6.696	509.93 ppb	6.696	1.31%	
QC value within limits for Sr 421.552 Recovery = 101.99%							
Ti 334.940†	261058.7	494.37 ug/L	5.271	494.37 ppb	5.271	1.07%	
QC value within limits for Ti 334.940 Recovery = 98.87%							
Tl 190.801†	1245.7	497.57 ug/L	7.007	497.57 ppb	7.007	1.41%	
QC value within limits for Tl 190.801 Recovery = 99.51%							
U 409.014†	12147.0	483.35 ug/L	2.082	483.35 ppb	2.082	0.43%	
QC value within limits for U 409.014 Recovery = 96.67%							
V 292.402†	53781.9	502.01 ug/L	4.403	502.01 ppb	4.403	0.88%	
QC value within limits for V 292.402 Recovery = 100.40%							
Zn 213.857†	41513.3	496.39 ug/L	3.663	496.39 ppb	3.663	0.74%	
QC value within limits for Zn 213.857 Recovery = 99.28%							
SiO2†	66577.2	5401.9 ug/L	66.06	5401.9 ppb	66.06	1.22%	
QC value within limits for SiO2 Recovery = 101.02%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 08:03:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3870.1	3870.1	108 %		08:05:38
1	Y RADIAL	4323.3	4323.3	106.3 %		08:05:18
1	Al 396.153Radial†	-91.7	24.9	28.550 ug/L	28.550 ppb	08:05:18
1	Ca 317.933Radial†	16.2	-0.7	-1.4720 ug/L	-1.4720 ppb	08:05:38
1	Fe 238.204 Radial†	7.9	-0.9	-12.150 ug/L	-12.150 ppb	08:05:38
1	K 766.490 Radial†	3940.3	634.8	133.55 ug/L	133.55 ppb	08:05:18
1	Mg 279.077 IEC†	3.6	2.7	119.05 ug/L	119.05 ppb	08:05:38
1	Na 589.592 Radial†	-795.1	160.2	82.590 ug/L	82.590 ppb	08:05:18
1	Sr 421.552†	49.4	32.0	0.3531 ug/L	0.3531 ppb	08:05:18
1	Sc 361.383	667449.2	667449.2	100.08 %		08:06:35
1	Y 371.029	528816.5	528816.5	100.14 %		08:06:35
1	Ag 328.068†	99.7	-102.5	-0.5852 ug/L	-0.5852 ppb	08:06:35
1	As 188.979†	-23.7	1.6	0.8146 ug/L	0.8146 ppb	08:06:55
1	B 249.677†	325.3	740.1	19.827 ug/L	19.827 ppb	08:06:35
1	Ba 233.527†	26.7	13.5	0.1373 ug/L	0.1373 ppb	08:06:55
1	Be 313.107†	-4122.5	59.2	0.0246 ug/L	0.0246 ppb	08:06:35
1	Cd 226.502†	-155.4	43.9	0.6778 ug/L	0.6778 ppb	08:06:55
1	Co 228.616†	-44.9	5.1	0.1357 ug/L	0.1357 ppb	08:06:55
1	Cr 267.716†	118.5	23.2	0.3593 ug/L	0.3593 ppb	08:06:55
1	Cu 324.752†	5552.4	193.5	0.6910 ug/L	0.6910 ppb	08:06:35
1	Mn 257.610†	463.1	8.3	0.0054 ug/L	0.0054 ppb	08:06:55
1	Mo 202.031†	19.1	14.3	1.3970 ug/L	1.3970 ppb	08:06:55
1	Ni 231.604†	94.0	9.2	0.3101 ug/L	0.3101 ppb	08:06:55
1	P 214.914†	200.8	-1.1	-0.8049 ug/L	-0.8049 ppb	08:06:55
1	Pb 220.353†	-75.0	-9.2	-1.4861 ug/L	-1.4861 ppb	08:06:55
1	S 181.975 Axial†	35.5	-3.9	-6.1868 ug/L	-6.1868 ppb	08:06:55
1	Sb 206.836†	31.7	6.4	2.7496 ug/L	2.7496 ppb	08:06:55
1	Se 196.026†	-16.8	9.8	7.5906 ug/L	7.5906 ppb	08:06:55
1	Si 251.611†	597.0	60.1	2.2816 ug/L	2.2816 ppb	08:06:55
1	Sn 189.927†	24.5	14.7	3.4776 ug/L	3.4776 ppb	08:06:55
1	Ti 334.940†	-1468.1	-61.2	-0.1216 ug/L	-0.1216 ppb	08:06:35
1	Tl 190.801†	-20.7	10.8	4.2902 ug/L	4.2902 ppb	08:06:55
1	U 409.014†	-2657.3	-249.6	-9.9658 ug/L	-9.9658 ppb	08:06:35
1	V 292.402†	-1692.3	57.5	0.5346 ug/L	0.5346 ppb	08:06:35
1	Zn 213.857†	818.5	127.5	1.5376 ug/L	1.5376 ppb	08:06:55
1	SiO2†	594.4	43.7	3.5166 ug/L	3.5166 ppb	08:07:51
2	Sc Radial	3918.6	3918.6	109 %		08:06:03
2	Y RADIAL	4302.2	4302.2	105.8 %		08:05:43
2	Al 396.153Radial†	-98.0	20.3	23.154 ug/L	23.154 ppb	08:05:43
2	Ca 317.933Radial†	17.1	-0.1	-0.1891 ug/L	-0.1891 ppb	08:06:03
2	Fe 238.204 Radial†	6.7	-2.1	-29.427 ug/L	-29.427 ppb	08:06:03
2	K 766.490 Radial†	3775.1	438.3	92.200 ug/L	92.200 ppb	08:05:43
2	Mg 279.077 IEC†	0.9	0.1	6.6215 ug/L	6.6215 ppb	08:06:03
2	Na 589.592 Radial†	-783.0	180.4	93.009 ug/L	93.009 ppb	08:05:43
2	Sr 421.552†	28.3	12.1	0.1335 ug/L	0.1335 ppb	08:05:43
2	Sc 361.383	675502.8	675502.8	101.29 %		08:07:00
2	Y 371.029	534112.3	534112.3	101.14 %		08:07:00
2	Ag 328.068†	316.3	110.3	0.6313 ug/L	0.6313 ppb	08:07:00
2	As 188.979†	-28.2	-2.6	-1.3674 ug/L	-1.3674 ppb	08:07:20
2	B 249.677†	214.6	627.0	16.800 ug/L	16.800 ppb	08:07:00
2	Ba 233.527†	14.8	1.4	0.0151 ug/L	0.0151 ppb	08:07:20
2	Be 313.107†	-4376.6	-142.6	-0.0596 ug/L	-0.0596 ppb	08:07:00
2	Cd 226.502†	-154.4	46.8	0.7251 ug/L	0.7251 ppb	08:07:20
2	Co 228.616†	-45.2	5.3	0.1435 ug/L	0.1435 ppb	08:07:20
2	Cr 267.716†	89.1	-7.2	-0.1131 ug/L	-0.1131 ppb	08:07:20
2	Cu 324.752†	5479.8	55.7	0.1968 ug/L	0.1968 ppb	08:07:00
2	Mn 257.610†	458.3	-1.9	-0.0058 ug/L	-0.0058 ppb	08:07:20
2	Mo 202.031†	26.7	21.6	2.1084 ug/L	2.1084 ppb	08:07:20
2	Ni 231.604†	96.0	10.0	0.3383 ug/L	0.3383 ppb	08:07:20

2	P 214.914†	199.9	-4.3	-2.9067 ug/L	-2.9067 ppb	08:07:20
2	Pb 220.353†	-61.3	5.3	0.8706 ug/L	0.8706 ppb	08:07:20
2	S 181.975 Axial†	36.6	-3.2	-5.1122 ug/L	-5.1122 ppb	08:07:20
2	Sb 206.836†	19.5	-6.0	-2.4004 ug/L	-2.4004 ppb	08:07:20
2	Se 196.026†	-14.1	12.6	9.7759 ug/L	9.7759 ppb	08:07:20
2	Si 251.611†	580.1	36.3	1.3624 ug/L	1.3624 ppb	08:07:20
2	Sn 189.927†	19.9	9.9	2.3440 ug/L	2.3440 ppb	08:07:20
2	Ti 334.940†	-1403.1	20.4	0.0388 ug/L	0.0388 ppb	08:07:00
2	Tl 190.801†	-21.5	10.2	4.0437 ug/L	4.0437 ppb	08:07:20
2	U 409.014†	-2472.5	-35.5	-1.4132 ug/L	-1.4132 ppb	08:07:00
2	V 292.402†	-1701.9	68.1	0.6592 ug/L	0.6592 ppb	08:07:00
2	Zn 213.857†	802.0	101.4	1.2254 ug/L	1.2254 ppb	08:07:20
2	SiO2†	642.7	84.3	6.7960 ug/L	6.7960 ppb	08:07:56
3	Sc Radial	3837.5	3837.5	107 %		08:06:28
3	Y RADIAL	4385.6	4385.6	107.8 %		08:06:08
3	Al 396.153Radial†	-102.7	13.9	15.888 ug/L	15.888 ppb	08:06:08
3	Ca 317.933Radial†	18.7	1.8	3.6817 ug/L	3.6817 ppb	08:06:28
3	Fe 238.204 Radial†	7.9	-0.8	-11.120 ug/L	-11.120 ppb	08:06:28
3	K 766.490 Radial†	3870.4	600.4	126.33 ug/L	126.33 ppb	08:06:08
3	Mg 279.077 IEC†	2.8	2.0	86.688 ug/L	86.688 ppb	08:06:28
3	Na 589.592 Radial†	-826.5	124.6	64.232 ug/L	64.232 ppb	08:06:08
3	Sr 421.552†	29.3	13.6	0.1500 ug/L	0.1500 ppb	08:06:08
3	Sc 361.383	657539.8	657539.8	98.597 %		08:07:26
3	Y 371.029	520240.0	520240.0	98.514 %		08:07:26
3	Ag 328.068†	256.2	57.8	0.3334 ug/L	0.3334 ppb	08:07:26
3	As 188.979†	-21.8	3.1	1.5992 ug/L	1.5992 ppb	08:07:46
3	B 249.677†	190.4	608.2	16.293 ug/L	16.293 ppb	08:07:26
3	Ba 233.527†	13.6	0.6	0.0042 ug/L	0.0042 ppb	08:07:46
3	Be 313.107†	-4148.4	-29.2	-0.0125 ug/L	-0.0125 ppb	08:07:26
3	Cd 226.502†	-164.9	32.0	0.4943 ug/L	0.4943 ppb	08:07:46
3	Co 228.616†	-46.7	2.5	0.0704 ug/L	0.0704 ppb	08:07:46
3	Cr 267.716†	83.3	-10.7	-0.1638 ug/L	-0.1638 ppb	08:07:46
3	Cu 324.752†	5466.8	190.4	0.6782 ug/L	0.6782 ppb	08:07:26
3	Mn 257.610†	481.7	34.1	0.0423 ug/L	0.0423 ppb	08:07:46
3	Mo 202.031†	21.3	16.9	1.6512 ug/L	1.6512 ppb	08:07:46
3	Ni 231.604†	108.4	25.2	0.8501 ug/L	0.8501 ppb	08:07:46
3	P 214.914†	200.9	2.1	1.2916 ug/L	1.2916 ppb	08:07:46
3	Pb 220.353†	-75.5	-10.8	-1.7532 ug/L	-1.7532 ppb	08:07:46
3	S 181.975 Axial†	37.6	-1.2	-1.9230 ug/L	-1.9230 ppb	08:07:46
3	Sb 206.836†	30.7	5.9	2.5305 ug/L	2.5305 ppb	08:07:46
3	Se 196.026†	-19.2	7.2	5.5582 ug/L	5.5582 ppb	08:07:46
3	Si 251.611†	615.7	88.1	3.3497 ug/L	3.3497 ppb	08:07:46
3	Sn 189.927†	19.0	9.6	2.2604 ug/L	2.2604 ppb	08:07:46
3	Ti 334.940†	-1447.4	-62.3	-0.1215 ug/L	-0.1215 ppb	08:07:26
3	Tl 190.801†	-35.8	-4.8	-1.9214 ug/L	-1.9214 ppb	08:07:46
3	U 409.014†	-2540.7	-171.3	-6.8376 ug/L	-6.8376 ppb	08:07:26
3	V 292.402†	-1781.8	-58.8	-0.5278 ug/L	-0.5278 ppb	08:07:26
3	Zn 213.857†	779.2	99.9	1.2014 ug/L	1.2014 ppb	08:07:46
3	SiO2†	615.2	73.7	5.9514 ug/L	5.9514 ppb	08:08:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	666830.6	99.990 %		1.3492			1.35%
Sc Radial	3875.4	108 %		1.1			1.05%
Y 371.029	527722.9	99.931 %		1.3256			1.33%
Y RADIAL	4337.0	106.7 %		1.07			1.00%
Ag 328.068†	21.8	0.1265 ug/L		0.63411	0.1265 ppb	0.63411	501.33%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	19.7	22.531 ug/L		6.3541	22.531 ppb	6.3541	28.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.7	0.3488 ug/L		1.53721	0.3488 ppb	1.53721	440.70%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	658.4	17.640 ug/L		1.9106	17.640 ppb	1.9106	10.83%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.2	0.0522 ug/L		0.07390	0.0522 ppb	0.07390	141.54%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-37.5	-0.0159 ug/L		0.04220	-0.0159 ppb	0.04220	266.11%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.3	0.6735 ug/L		2.68296	0.6735 ppb	2.68296	398.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	40.9	0.6324 ug/L	0.12190	0.6324 ppb	0.12190	19.28%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	4.3	0.1165 ug/L	0.04013	0.1165 ppb	0.04013	34.45%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	1.7	0.0275 ug/L	0.28849	0.0275 ppb	0.28849	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	146.5	0.5220 ug/L	0.28167	0.5220 ppb	0.28167	53.96%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.2	-17.565 ug/L	10.2852	-17.565 ppb	10.2852	58.55%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	557.8	117.36 ug/L	22.087	117.36 ppb	22.087	18.82%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.6	70.787 ug/L	57.8768	70.787 ppb	57.8768	81.76%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	13.5	0.0139 ug/L	0.02518	0.0139 ppb	0.02518	180.66%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	17.6	1.7189 ug/L	0.36049	1.7189 ppb	0.36049	20.97%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	155.0	79.944 ug/L	14.5698	79.944 ppb	14.5698	18.23%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	14.8	0.4995 ug/L	0.30394	0.4995 ppb	0.30394	60.85%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-1.1	-0.8067 ug/L	2.09913	-0.8067 ppb	2.09913	260.22%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-4.9	-0.7896 ug/L	1.44392	-0.7896 ppb	1.44392	182.87%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-2.8	-4.4073 ug/L	2.21754	-4.4073 ppb	2.21754	50.31%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.1	0.9599 ug/L	2.91217	0.9599 ppb	2.91217	303.38%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	9.9	7.6416 ug/L	2.10932	7.6416 ppb	2.10932	27.60%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	61.5	2.3312 ug/L	0.99455	2.3312 ppb	0.99455	42.66%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	11.4	2.6940 ug/L	0.67992	2.6940 ppb	0.67992	25.24%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	19.2	0.2122 ug/L	0.12231	0.2122 ppb	0.12231	57.64%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-34.3	-0.0681 ug/L	0.09256	-0.0681 ppb	0.09256	135.94%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	5.4	2.1375 ug/L	3.51726	2.1375 ppb	3.51726	164.55%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-152.1	-6.0722 ug/L	4.32738	-6.0722 ppb	4.32738	71.27%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	22.3	0.2220 ug/L	0.65234	0.2220 ppb	0.65234	293.82%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	109.6	1.3214 ug/L	0.18759	1.3214 ppb	0.18759	14.20%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		67.2	5.4213 ug/L	1.70272	5.4213 ppb	1.70272	31.41%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/31/2010 08:11:20

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\033110.sif

Batch ID:

Results Data Set: 033110

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

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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/31/2010 05:48:28

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: 3/31/2010 08:11:22

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3775.6	3775.6	105 %		08:13:35
1	Y RADIAL	4175.3	4175.3	102.7 %		08:13:15
1	Al 396.153Radial†	-125.5	-9.3	-9.5186 ug/L	-9.5186 ppb	08:13:15

1	Ca 317.933Radial†	14.2	-2.2	-4.4607 ug/L	-4.4607 ppb	08:13:35
1	Fe 238.204 Radial†	29195.0	27741.1	392150 ug/L	392150 ppb	08:13:15
1	K 766.490 Radial†	3196.7	19.5	4.1362 ug/L	4.1362 ppb	08:13:15
1	Mg 279.077 IEC†	9.0	8.0	-59.416 ug/L	-59.416 ppb	08:13:35
1	Na 589.592 Radial†	-853.0	86.7	44.698 ug/L	44.698 ppb	08:13:15
1	Sr 421.552†	73.6	56.2	0.6191 ug/L	0.6191 ppb	08:13:15
1	Sc 361.383	681715.9	681715.9	102.22 %		08:14:32
1	Y 371.029	540314.5	540314.5	102.32 %		08:14:32
1	Ag 328.068†	-22158.6	-21879.0	-4.9343 ug/L	-4.9343 ppb	08:14:32
1	As 188.979†	-179.6	-150.4	13.810 ug/L	13.810 ppb	08:14:53
1	B 249.677†	1157.5	1547.4	-22.292 ug/L	-22.292 ppb	08:14:32
1	Ba 233.527†	-1687.7	-1664.2	-4.7855 ug/L	-4.7855 ppb	08:14:32
1	Be 313.107†	-4109.0	158.6	0.0662 ug/L	0.0662 ppb	08:14:32
1	Cd 226.502†	2357.5	2505.5	-1.8128 ug/L	-1.8128 ppb	08:14:32
1	Co 228.616†	774.0	807.1	15.225 ug/L	15.225 ppb	08:14:53
1	Cr 267.716†	-572.7	-655.5	31.510 ug/L	31.510 ppb	08:14:32
1	Cu 324.752†	-3023.2	-8311.7	-8.7663 ug/L	-8.7663 ppb	08:14:32
1	Mn 257.610†	-35766.7	-35443.6	-10.054 ug/L	-10.054 ppb	08:14:32
1	Mo 202.031†	-253.0	-252.3	5.7759 ug/L	5.7759 ppb	08:14:32
1	Ni 231.604†	211.5	122.2	4.1035 ug/L	4.1035 ppb	08:14:53
1	P 214.914†	638.8	423.2	-22.853 ug/L	-22.853 ppb	08:14:53
1	Pb 220.353†	115.7	178.9	-8.9524 ug/L	-8.9524 ppb	08:14:53
1	S 181.975 Axial†	48.7	8.3	13.094 ug/L	13.094 ppb	08:14:53
1	Sb 206.836†	36.2	10.2	-0.6386 ug/L	-0.6386 ppb	08:14:53
1	Se 196.026†	-1820.8	-1754.6	-324.87 ug/L	-324.87 ppb	08:14:53
1	Si 251.611†	-293.6	-823.7	-31.210 ug/L	-31.210 ppb	08:14:32
1	Sn 189.927†	-33.4	-42.4	-7.5718 ug/L	-7.5718 ppb	08:14:53
1	Ti 334.940†	-1505.6	-67.1	-0.1944 ug/L	-0.1944 ppb	08:14:32
1	Tl 190.801†	-29.4	2.7	0.6602 ug/L	0.6602 ppb	08:14:53
1	U 409.014†	-37.5	2368.9	49.909 ug/L	49.909 ppb	08:14:32
1	V 292.402†	4175.4	5833.0	-3.5255 ug/L	-3.5255 ppb	08:14:32
1	Zn 213.857†	3684.4	2913.9	-23.504 ug/L	-23.504 ppb	08:14:53
1	SiO2†	-433.6	-974.4	-78.581 ug/L	-78.581 ppb	08:15:50
2	Sc Radial	3856.3	3856.3	107 %		08:14:00
2	Y RADIAL	4383.1	4383.1	107.8 %		08:13:40
2	Al 396.153Radial†	-116.3	1.8	3.2904 ug/L	3.2904 ppb	08:13:40
2	Ca 317.933Radial†	20.9	3.7	7.6227 ug/L	7.6227 ppb	08:14:00
2	Fe 238.204 Radial†	30518.9	28392.1	401350 ug/L	401350 ppb	08:13:40
2	K 766.490 Radial†	3217.7	-24.6	-5.1605 ug/L	-5.1605 ppb	08:13:40
2	Mg 279.077 IEC†	9.7	8.4	-48.009 ug/L	-48.009 ppb	08:14:00
2	Na 589.592 Radial†	-821.8	132.7	68.405 ug/L	68.405 ppb	08:13:40
2	Sr 421.552†	55.4	37.8	0.4169 ug/L	0.4169 ppb	08:13:40
2	Sc 361.383	679733.7	679733.7	101.92 %		08:14:58
2	Y 371.029	538841.0	538841.0	102.04 %		08:14:58
2	Ag 328.068†	-22117.4	-21901.7	-2.2173 ug/L	-2.2173 ppb	08:14:58
2	As 188.979†	-182.6	-153.9	14.192 ug/L	14.192 ppb	08:15:19
2	B 249.677†	1113.3	1507.4	-24.852 ug/L	-24.852 ppb	08:14:58
2	Ba 233.527†	-1649.6	-1631.6	-4.1762 ug/L	-4.1762 ppb	08:14:58
2	Be 313.107†	-4135.6	120.8	0.0504 ug/L	0.0504 ppb	08:14:58
2	Cd 226.502†	2428.8	2582.2	-1.5812 ug/L	-1.5812 ppb	08:14:58
2	Co 228.616†	693.1	729.9	13.084 ug/L	13.084 ppb	08:15:19
2	Cr 267.716†	-506.8	-592.4	33.455 ug/L	33.455 ppb	08:14:58
2	Cu 324.752†	-3039.6	-8336.4	-8.3652 ug/L	-8.3652 ppb	08:14:58
2	Mn 257.610†	-35573.7	-35356.3	-9.0256 ug/L	-9.0256 ppb	08:14:58
2	Mo 202.031†	-270.1	-269.8	4.7805 ug/L	4.7805 ppb	08:14:58
2	Ni 231.604†	183.0	94.8	3.1836 ug/L	3.1836 ppb	08:15:19
2	P 214.914†	673.6	459.2	-5.7912 ug/L	-5.7912 ppb	08:15:19
2	Pb 220.353†	145.6	208.6	-5.0058 ug/L	-5.0058 ppb	08:15:19
2	S 181.975 Axial†	47.5	7.2	11.414 ug/L	11.414 ppb	08:15:19
2	Sb 206.836†	11.8	-13.7	-10.652 ug/L	-10.652 ppb	08:15:19
2	Se 196.026†	-1852.2	-1790.6	-328.44 ug/L	-328.44 ppb	08:15:19
2	Si 251.611†	-352.5	-882.3	-33.432 ug/L	-33.432 ppb	08:14:58
2	Sn 189.927†	-22.7	-32.0	-5.0428 ug/L	-5.0428 ppb	08:15:19
2	Ti 334.940†	-1466.6	-33.2	-0.1292 ug/L	-0.1292 ppb	08:14:58
2	Tl 190.801†	-33.0	-0.9	-0.7790 ug/L	-0.7790 ppb	08:15:19
2	U 409.014†	-114.5	2293.2	45.836 ug/L	45.836 ppb	08:14:58
2	V 292.402†	4171.5	5841.1	-4.8210 ug/L	-4.8210 ppb	08:14:58
2	Zn 213.857†	3729.4	2968.6	-24.216 ug/L	-24.216 ppb	08:15:19
2	SiO2†	-469.0	-1010.4	-81.463 ug/L	-81.463 ppb	08:15:55
3	Sc Radial	3842.5	3842.5	107 %		08:14:25
3	Y RADIAL	4358.5	4358.5	107.2 %		08:14:05

3	Al 396.153Radial†	-98.7	17.8	21.652 ug/L	21.652 ppb	08:14:05
3	Ca 317.933Radial†	14.1	-2.6	-5.2735 ug/L	-5.2735 ppb	08:14:25
3	Fe 238.204 Radial†	30293.7	28283.7	399820 ug/L	399820 ppb	08:14:05
3	K 766.490 Radial†	3125.8	-99.7	-20.960 ug/L	-20.960 ppb	08:14:05
3	Mg 279.077 IEC†	7.7	6.6	-129.24 ug/L	-129.24 ppb	08:14:25
3	Na 589.592 Radial†	-786.6	162.9	83.975 ug/L	83.975 ppb	08:14:05
3	Sr 421.552†	66.8	48.6	0.5363 ug/L	0.5363 ppb	08:14:05
3	Sc 361.383	684685.4	684685.4	102.67 %		08:15:24
3	Y 371.029	542168.6	542168.6	102.67 %		08:15:24
3	Ag 328.068†	-22322.3	-21944.4	-2.9366 ug/L	-2.9366 ppb	08:15:24
3	As 188.979†	-182.4	-152.4	14.594 ug/L	14.594 ppb	08:15:45
3	B 249.677†	1110.9	1497.1	-24.873 ug/L	-24.873 ppb	08:15:24
3	Ba 233.527†	-1705.1	-1674.1	-4.6518 ug/L	-4.6518 ppb	08:15:24
3	Be 313.107†	-4193.9	93.3	0.0388 ug/L	0.0388 ppb	08:15:24
3	Cd 226.502†	2381.7	2519.1	-2.3961 ug/L	-2.3961 ppb	08:15:24
3	Co 228.616†	632.3	665.7	11.444 ug/L	11.444 ppb	08:15:45
3	Cr 267.716†	-539.9	-621.1	32.852 ug/L	32.852 ppb	08:15:24
3	Cu 324.752†	-3080.4	-8354.6	-8.5104 ug/L	-8.5104 ppb	08:15:24
3	Mn 257.610†	-35880.1	-35402.3	-9.2368 ug/L	-9.2368 ppb	08:15:24
3	Mo 202.031†	-259.0	-257.0	5.9133 ug/L	5.9133 ppb	08:15:24
3	Ni 231.604†	211.2	121.0	4.0662 ug/L	4.0662 ppb	08:15:45
3	P 214.914†	644.0	425.5	-27.370 ug/L	-27.370 ppb	08:15:45
3	Pb 220.353†	142.2	204.3	-5.5592 ug/L	-5.5592 ppb	08:15:45
3	S 181.975 Axial†	40.1	-0.3	-0.4163 ug/L	-0.4163 ppb	08:15:45
3	Sb 206.836†	17.9	-7.8	-8.1558 ug/L	-8.1558 ppb	08:15:45
3	Se 196.026†	-1823.8	-1749.8	-300.71 ug/L	-300.71 ppb	08:15:45
3	Si 251.611†	-412.9	-938.6	-35.603 ug/L	-35.603 ppb	08:15:24
3	Sn 189.927†	-18.7	-28.0	-4.1136 ug/L	-4.1136 ppb	08:15:45
3	Ti 334.940†	-1507.5	-62.7	-0.1796 ug/L	-0.1796 ppb	08:15:24
3	Tl 190.801†	-37.3	-4.9	-2.3512 ug/L	-2.3512 ppb	08:15:45
3	U 409.014†	-128.6	2280.2	45.495 ug/L	45.495 ppb	08:15:24
3	V 292.402†	4205.5	5844.6	-4.5504 ug/L	-4.5504 ppb	08:15:24
3	Zn 213.857†	3665.9	2880.3	-25.058 ug/L	-25.058 ppb	08:15:45
3	SiO2†	-404.4	-944.1	-76.108 ug/L	-76.108 ppb	08:16:00

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	682045.0	102.27 %		0.374			0.37%
Sc Radial	3824.8	107 %		1.2			1.13%
Y 371.029	540441.4	102.34 %		0.316			0.31%
Y RADIAL	4305.7	105.9 %		2.79			2.64%
Ag 328.068†	-21908.4	-3.3627 ug/L		1.40773	-3.3627 ppb	1.40773	41.86%
Al 396.153Radial†	3.4	5.1411 ug/L		15.66725	5.1411 ppb	15.66725	304.74%
As 188.979†	-152.2	14.199 ug/L		0.3919	14.199 ppb	0.3919	2.76%
B 249.677†	1517.3	-24.005 ug/L		1.4843	-24.005 ppb	1.4843	6.18%
Ba 233.527†	-1656.6	-4.5378 ug/L		0.32027	-4.5378 ppb	0.32027	7.06%
Be 313.107†	124.2	0.0518 ug/L		0.01372	0.0518 ppb	0.01372	26.48%
Ca 317.933Radial†	-0.3	-0.7038 ug/L		7.22244	-0.7038 ppb	7.22244	>999.9%
Cd 226.502†	2535.6	-1.9300 ug/L		0.41993	-1.9300 ppb	0.41993	21.76%
Co 228.616†	734.2	13.251 ug/L		1.8964	13.251 ppb	1.8964	14.31%
Cr 267.716†	-623.0	32.606 ug/L		0.9957	32.606 ppb	0.9957	3.05%
Cu 324.752†	-8334.3	-8.5473 ug/L		0.20312	-8.5473 ppb	0.20312	2.38%
Fe 238.204 Radial†	28139.0	397770 ug/L		4930.5	397770 ppb	4930.5	1.24%
K 766.490 Radial†	-34.9	-7.3281 ug/L		12.68769	-7.3281 ppb	12.68769	173.14%
Mg 279.077 IEC†	7.6	-78.887 ug/L		43.9746	-78.887 ppb	43.9746	55.74%
Mn 257.610†	-35400.7	-9.4387 ug/L		0.54295	-9.4387 ppb	0.54295	5.75%
Mo 202.031†	-259.7	5.4899 ug/L		0.61816	5.4899 ppb	0.61816	11.26%
Na 589.592 Radial†	127.4	65.693 ug/L		19.7785	65.693 ppb	19.7785	30.11%
Ni 231.604†	112.6	3.7844 ug/L		0.52066	3.7844 ppb	0.52066	13.76%
P 214.914†	436.0	-18.671 ug/L		11.3807	-18.671 ppb	11.3807	60.95%
Pb 220.353†	197.3	-6.5058 ug/L		2.13678	-6.5058 ppb	2.13678	32.84%
S 181.975 Axial†	5.1	8.0307 ug/L		7.36341	8.0307 ppb	7.36341	91.69%
Sb 206.836†	-3.8	-6.4821 ug/L		5.21217	-6.4821 ppb	5.21217	80.41%
Se 196.026†	-1765.0	-318.01 ug/L		15.086	-318.01 ppb	15.086	4.74%
Si 251.611†	-881.5	-33.415 ug/L		2.1965	-33.415 ppb	2.1965	6.57%
Sn 189.927†	-34.1	-5.5761 ug/L		1.78967	-5.5761 ppb	1.78967	32.10%
Sr 421.552†	47.5	0.5241 ug/L		0.10164	0.5241 ppb	0.10164	19.39%
Ti 334.940†	-54.3	-0.1677 ug/L		0.03415	-0.1677 ppb	0.03415	20.36%
Tl 190.801†	-1.0	-0.8234 ug/L		1.50620	-0.8234 ppb	1.50620	182.93%

U 409.014†	2314.1	47.080 ug/L	2.4559	47.080 ppb	2.4559	5.22%
V 292.402†	5839.6	-4.2990 ug/L	0.68338	-4.2990 ppb	0.68338	15.90%
Zn 213.857†	2920.9	-24.259 ug/L	0.7776	-24.259 ppb	0.7776	3.21%
SiO2†	-976.3	-78.717 ug/L	2.6805	-78.717 ppb	2.6805	3.41%

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2010 08:18:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3835.1	3835.1	107 %		08:20:25
1	Y RADIAL	4375.2	4375.2	107.6 %		08:20:05
1	Al 396.153Radial†	4669.7	4479.6	5117.0 ug/L	5117.0 ppb	08:20:05
1	Ca 317.933Radial†	2665.8	2478.8	5066.7 ug/L	5066.7 ppb	08:20:25
1	Fe 238.204 Radial†	393.4	359.9	5102.2 ug/L	5102.2 ppb	08:20:25
1	K 766.490 Radial†	28801.4	23931.5	5030.1 ug/L	5030.1 ppb	08:20:05
1	Mg 279.077 IEC†	125.0	116.3	5134.9 ug/L	5134.9 ppb	08:20:25
1	Na 589.592 Radial†	19733.7	19362.9	9984.0 ug/L	9984.0 ppb	08:20:05
1	Sr 421.552†	49694.3	46487.0	512.48 ug/L	512.48 ppb	08:20:05
1	Sc 361.383	698307.8	698307.8	104.71 %		08:21:22
1	Y 371.029	546156.5	546156.5	103.42 %		08:21:22
1	Ag 328.068†	87826.5	83673.8	486.26 ug/L	486.26 ppb	08:21:27
1	As 188.979†	948.9	931.5	487.79 ug/L	487.79 ppb	08:21:47
1	B 249.677†	18790.7	18360.6	489.61 ug/L	489.61 ppb	08:21:27
1	Ba 233.527†	50015.0	47752.0	484.28 ug/L	484.28 ppb	08:21:27
1	Be 313.107†	1233833.8	1182511.0	496.42 ug/L	496.42 ppb	08:21:22
1	Cd 226.502†	32738.0	31464.6	485.53 ug/L	485.53 ppb	08:21:27
1	Co 228.616†	19694.2	18858.2	489.55 ug/L	489.55 ppb	08:21:27
1	Cr 267.716†	33068.0	31485.3	484.98 ug/L	484.98 ppb	08:21:27
1	Cu 324.752†	147994.4	135983.0	482.15 ug/L	482.15 ppb	08:21:27
1	Mn 257.610†	369174.2	352113.4	484.80 ug/L	484.80 ppb	08:21:27
1	Mo 202.031†	5112.8	4878.1	477.39 ug/L	477.39 ppb	08:21:47
1	Ni 231.604†	15286.0	14513.6	488.77 ug/L	488.77 ppb	08:21:27
1	P 214.914†	3905.4	3528.0	2300.5 ug/L	2300.5 ppb	08:21:47
1	Pb 220.353†	3018.1	2948.1	482.78 ug/L	482.78 ppb	08:21:47
1	S 181.975 Axial†	675.8	606.0	960.49 ug/L	960.49 ppb	08:21:47
1	Sb 206.836†	1223.2	1142.9	491.02 ug/L	491.02 ppb	08:21:47
1	Se 196.026†	625.9	624.3	502.84 ug/L	502.84 ppb	08:21:47
1	Si 251.611†	68172.6	64569.6	2464.6 ug/L	2464.6 ppb	08:21:27
1	Sn 189.927†	2136.2	2030.4	480.90 ug/L	480.90 ppb	08:21:47
1	Ti 334.940†	264843.2	254335.5	481.65 ug/L	481.65 ppb	08:21:27
1	Tl 190.801†	1237.1	1213.0	484.51 ug/L	484.51 ppb	08:21:47
1	U 409.014†	10067.4	12020.1	478.31 ug/L	478.31 ppb	08:21:27
1	V 292.402†	52934.3	52301.5	488.23 ug/L	488.23 ppb	08:21:27
1	Zn 213.857†	42949.7	40327.3	482.16 ug/L	482.16 ppb	08:21:27
1	SiO2†	68476.6	64846.2	5261.4 ug/L	5261.4 ppb	08:22:54
2	Sc Radial	3802.7	3802.7	106 %		08:20:50
2	Y RADIAL	4348.4	4348.4	106.9 %		08:20:30
2	Al 396.153Radial†	4659.5	4507.2	5148.3 ug/L	5148.3 ppb	08:20:30
2	Ca 317.933Radial†	2646.0	2481.3	5071.8 ug/L	5071.8 ppb	08:20:50
2	Fe 238.204 Radial†	390.3	360.1	5105.9 ug/L	5105.9 ppb	08:20:50
2	K 766.490 Radial†	29199.4	24536.7	5157.4 ug/L	5157.4 ppb	08:20:30
2	Mg 279.077 IEC†	128.4	120.5	5319.5 ug/L	5319.5 ppb	08:20:50
2	Na 589.592 Radial†	19851.9	19631.8	10123 ug/L	10123 ppb	08:20:30
2	Sr 421.552†	49658.0	46848.8	516.47 ug/L	516.47 ppb	08:20:30
2	Sc 361.383	690868.4	690868.4	103.59 %		08:21:52
2	Y 371.029	542241.2	542241.2	102.68 %		08:21:52
2	Ag 328.068†	88163.8	84902.5	493.39 ug/L	493.39 ppb	08:21:58
2	As 188.979†	960.1	952.0	498.49 ug/L	498.49 ppb	08:22:18
2	B 249.677†	18907.0	18666.0	497.77 ug/L	497.77 ppb	08:21:58
2	Ba 233.527†	50279.8	48521.9	492.09 ug/L	492.09 ppb	08:21:58
2	Be 313.107†	1217751.4	1179675.0	495.25 ug/L	495.25 ppb	08:21:52
2	Cd 226.502†	32899.1	31956.8	493.13 ug/L	493.13 ppb	08:21:58
2	Co 228.616†	19747.3	19112.0	496.15 ug/L	496.15 ppb	08:21:58
2	Cr 267.716†	33275.0	32025.2	493.29 ug/L	493.29 ppb	08:21:58
2	Cu 324.752†	148741.3	138225.8	490.10 ug/L	490.10 ppb	08:21:58
2	Mn 257.610†	370359.3	357053.8	491.59 ug/L	491.59 ppb	08:21:58
2	Mo 202.031†	5151.7	4968.2	486.20 ug/L	486.20 ppb	08:22:18
2	Ni 231.604†	15312.3	14696.2	494.92 ug/L	494.92 ppb	08:21:58

2	P 214.914†	3912.4	3575.0	2330.9 ug/L	2330.9 ppb	08:22:18
2	Pb 220.353†	3034.4	2994.9	490.43 ug/L	490.43 ppb	08:22:18
2	S 181.975 Axial†	677.1	614.2	973.53 ug/L	973.53 ppb	08:22:18
2	Sb 206.836†	1226.4	1158.6	497.85 ug/L	497.85 ppb	08:22:18
2	Se 196.026†	627.9	632.7	509.42 ug/L	509.42 ppb	08:22:18
2	Si 251.611†	68460.1	65548.2	2501.9 ug/L	2501.9 ppb	08:21:58
2	Sn 189.927†	2147.4	2063.2	488.66 ug/L	488.66 ppb	08:22:18
2	Ti 334.940†	265877.2	258057.2	488.68 ug/L	488.68 ppb	08:21:58
2	Tl 190.801†	1248.7	1236.8	494.01 ug/L	494.01 ppb	08:22:18
2	U 409.014†	9982.3	12041.5	479.15 ug/L	479.15 ppb	08:21:58
2	V 292.402†	53461.9	53355.2	498.05 ug/L	498.05 ppb	08:21:58
2	Zn 213.857†	43165.4	40977.2	489.96 ug/L	489.96 ppb	08:21:58
2	SiO2†	67783.2	64881.0	5264.0 ug/L	5264.0 ppb	08:22:59
3	Sc Radial	3886.4	3886.4	108 %		08:21:15
3	Y RADIAL	4363.7	4363.7	107.3 %		08:20:55
3	Al 396.153Radial†	4656.2	4409.4	5036.1 ug/L	5036.1 ppb	08:20:55
3	Ca 317.933Radial†	2674.9	2454.2	5016.5 ug/L	5016.5 ppb	08:21:15
3	Fe 238.204 Radial†	394.4	356.0	5047.8 ug/L	5047.8 ppb	08:21:15
3	K 766.490 Radial†	29082.1	23834.6	5009.7 ug/L	5009.7 ppb	08:20:55
3	Mg 279.077 IEC†	131.0	120.4	5313.5 ug/L	5313.5 ppb	08:21:15
3	Na 589.592 Radial†	19876.0	19250.4	9925.9 ug/L	9925.9 ppb	08:20:55
3	Sr 421.552†	49837.3	46004.4	507.16 ug/L	507.16 ppb	08:20:55
3	Sc 361.383	691183.5	691183.5	103.64 %		08:22:23
3	Y 371.029	541049.9	541049.9	102.46 %		08:22:23
3	Ag 328.068†	89062.0	85730.4	498.16 ug/L	498.16 ppb	08:22:29
3	As 188.979†	939.2	931.4	487.82 ug/L	487.82 ppb	08:22:49
3	B 249.677†	19093.5	18837.7	502.37 ug/L	502.37 ppb	08:22:29
3	Ba 233.527†	50642.3	48849.6	495.41 ug/L	495.41 ppb	08:22:29
3	Be 313.107†	1221676.2	1182926.1	496.62 ug/L	496.62 ppb	08:22:23
3	Cd 226.502†	33061.4	32098.9	495.34 ug/L	495.34 ppb	08:22:29
3	Co 228.616†	19848.5	19201.0	498.45 ug/L	498.45 ppb	08:22:29
3	Cr 267.716†	33475.9	32204.3	496.04 ug/L	496.04 ppb	08:22:29
3	Cu 324.752†	149967.5	139343.6	494.06 ug/L	494.06 ppb	08:22:29
3	Mn 257.610†	372862.7	359306.3	494.69 ug/L	494.69 ppb	08:22:29
3	Mo 202.031†	5136.9	4951.7	484.58 ug/L	484.58 ppb	08:22:49
3	Ni 231.604†	15366.5	14741.8	496.45 ug/L	496.45 ppb	08:22:29
3	P 214.914†	3891.0	3552.6	2314.9 ug/L	2314.9 ppb	08:22:49
3	Pb 220.353†	3014.3	2974.2	487.03 ug/L	487.03 ppb	08:22:49
3	S 181.975 Axial†	675.5	612.4	970.67 ug/L	970.67 ppb	08:22:49
3	Sb 206.836†	1239.8	1171.0	502.91 ug/L	502.91 ppb	08:22:49
3	Se 196.026†	623.5	628.2	505.68 ug/L	505.68 ppb	08:22:49
3	Si 251.611†	68879.1	65922.4	2516.3 ug/L	2516.3 ppb	08:22:29
3	Sn 189.927†	2142.9	2057.9	487.39 ug/L	487.39 ppb	08:22:49
3	Ti 334.940†	268027.6	260015.0	492.38 ug/L	492.38 ppb	08:22:29
3	Tl 190.801†	1248.5	1236.1	493.77 ug/L	493.77 ppb	08:22:49
3	U 409.014†	10146.7	12195.7	485.31 ug/L	485.31 ppb	08:22:29
3	V 292.402†	53852.8	53708.9	501.30 ug/L	501.30 ppb	08:22:29
3	Zn 213.857†	43301.9	41090.0	491.31 ug/L	491.31 ppb	08:22:29
3	SiO2†	68490.3	65533.4	5317.1 ug/L	5317.1 ppb	08:23:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	693453.2	103.98 %	0.631			0.61%
Sc Radial	3841.4	107 %	1.2			1.10%
Y 371.029	543149.2	102.85 %	0.506			0.49%
Y RADIAL	4362.4	107.3 %	0.33			0.31%
Ag 328.068†	84768.9	492.60 ug/L	5.993	492.60 ppb	5.993	1.22%
QC value within limits for Ag 328.068 Recovery = 98.52%						
Al 396.153Radial†	4465.4	5100.5 ug/L	57.87	5100.5 ppb	57.87	1.13%
QC value within limits for Al 396.153Radial Recovery = 102.01%						
As 188.979†	938.3	491.37 ug/L	6.168	491.37 ppb	6.168	1.26%
QC value within limits for As 188.979 Recovery = 98.27%						
B 249.677†	18621.4	496.58 ug/L	6.464	496.58 ppb	6.464	1.30%
QC value within limits for B 249.677 Recovery = 99.32%						
Ba 233.527†	48374.5	490.59 ug/L	5.714	490.59 ppb	5.714	1.16%
QC value within limits for Ba 233.527 Recovery = 98.12%						
Be 313.107†	1181704.1	496.10 ug/L	0.741	496.10 ppb	0.741	0.15%
QC value within limits for Be 313.107 Recovery = 99.22%						
Ca 317.933Radial†	2471.4	5051.7 ug/L	30.58	5051.7 ppb	30.58	0.61%

QC value within limits for Ca 317.933 Radial Recovery = 101.03%

Cd 226.502†	31840.1	491.33 ug/L	5.143	491.33 ppb	5.143	1.05%
QC value within limits for Cd 226.502 Recovery = 98.27%						
Co 228.616†	19057.1	494.72 ug/L	4.616	494.72 ppb	4.616	0.93%
QC value within limits for Co 228.616 Recovery = 98.94%						
Cr 267.716†	31905.0	491.44 ug/L	5.759	491.44 ppb	5.759	1.17%
QC value within limits for Cr 267.716 Recovery = 98.29%						
Cu 324.752†	137850.8	488.77 ug/L	6.065	488.77 ppb	6.065	1.24%
QC value within limits for Cu 324.752 Recovery = 97.75%						
Fe 238.204 Radial†	358.7	5085.3 ug/L	32.51	5085.3 ppb	32.51	0.64%
QC value within limits for Fe 238.204 Radial Recovery = 101.71%						
K 766.490 Radial†	24100.9	5065.8 ug/L	80.03	5065.8 ppb	80.03	1.58%
QC value within limits for K 766.490 Radial Recovery = 101.32%						
Mg 279.077 IEC†	119.1	5255.9 ug/L	104.89	5255.9 ppb	104.89	2.00%
QC value within limits for Mg 279.077 IEC Recovery = 105.12%						
Mn 257.610†	356157.8	490.36 ug/L	5.056	490.36 ppb	5.056	1.03%
QC value within limits for Mn 257.610 Recovery = 98.07%						
Mo 202.031†	4932.6	482.72 ug/L	4.690	482.72 ppb	4.690	0.97%
QC value within limits for Mo 202.031 Recovery = 96.54%						
Na 589.592 Radial†	19415.0	10011 ug/L	101.1	10011 ppb	101.1	1.01%
QC value within limits for Na 589.592 Radial Recovery = 100.11%						
Ni 231.604†	14650.5	493.38 ug/L	4.066	493.38 ppb	4.066	0.82%
QC value within limits for Ni 231.604 Recovery = 98.68%						
P 214.914†	3551.9	2315.4 ug/L	15.20	2315.4 ppb	15.20	0.66%
QC value within limits for P 214.914 Recovery = 92.62%						
Pb 220.353†	2972.4	486.75 ug/L	3.833	486.75 ppb	3.833	0.79%
QC value within limits for Pb 220.353 Recovery = 97.35%						
S 181.975 Axial†	610.9	968.23 ug/L	6.856	968.23 ppb	6.856	0.71%
QC value within limits for S 181.975 Axial Recovery = 96.82%						
Sb 206.836†	1157.5	497.26 ug/L	5.966	497.26 ppb	5.966	1.20%
QC value within limits for Sb 206.836 Recovery = 99.45%						
Se 196.026†	628.4	505.98 ug/L	3.300	505.98 ppb	3.300	0.65%
QC value within limits for Se 196.026 Recovery = 101.20%						
Si 251.611†	65346.7	2494.2 ug/L	26.67	2494.2 ppb	26.67	1.07%
QC value within limits for Si 251.611 Recovery = 99.77%						
Sn 189.927†	2050.5	485.65 ug/L	4.163	485.65 ppb	4.163	0.86%
QC value within limits for Sn 189.927 Recovery = 97.13%						
Sr 421.552†	46446.7	512.04 ug/L	4.670	512.04 ppb	4.670	0.91%
QC value within limits for Sr 421.552 Recovery = 102.41%						
Ti 334.940†	257469.3	487.57 ug/L	5.451	487.57 ppb	5.451	1.12%
QC value within limits for Ti 334.940 Recovery = 97.51%						
Tl 190.801†	1228.6	490.77 ug/L	5.418	490.77 ppb	5.418	1.10%
QC value within limits for Tl 190.801 Recovery = 98.15%						
U 409.014†	12085.7	480.92 ug/L	3.820	480.92 ppb	3.820	0.79%
QC value within limits for U 409.014 Recovery = 96.18%						
V 292.402†	53121.9	495.86 ug/L	6.809	495.86 ppb	6.809	1.37%
QC value within limits for V 292.402 Recovery = 99.17%						
Zn 213.857†	40798.2	487.81 ug/L	4.937	487.81 ppb	4.937	1.01%
QC value within limits for Zn 213.857 Recovery = 97.56%						
SiO2†	65086.9	5280.8 ug/L	31.44	5280.8 ppb	31.44	0.60%
QC value within limits for SiO2 Recovery = 98.75%						

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 08:25:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3906.9	3906.9	109 %		08:27:28
1	Y RADIAL	4457.5	4457.5	109.6 %		08:27:08
1	Al 396.153Radial†	-111.8	7.3	8.3012 ug/L	8.3012 ppb	08:27:08
1	Ca 317.933Radial†	21.2	3.7	7.6626 ug/L	7.6626 ppb	08:27:28
1	Fe 238.204 Radial†	8.1	-0.7	-9.9991 ug/L	-9.9991 ppb	08:27:28
1	K 766.490 Radial†	3461.6	160.7	33.799 ug/L	33.799 ppb	08:27:08
1	Mg 279.077 IEC†	0.7	-0.0	-1.0774 ug/L	-1.0774 ppb	08:27:28
1	Na 589.592 Radial†	-922.9	49.7	25.620 ug/L	25.620 ppb	08:27:08
1	Sr 421.552†	6.7	-7.6	-0.0838 ug/L	-0.0838 ppb	08:27:08
1	Sc 361.383	693792.1	693792.1	104.03 %		08:28:25
1	Y 371.029	549354.4	549354.4	104.03 %		08:28:25
1	Ag 328.068†	210.6	0.4	-0.0041 ug/L	-0.0041 ppb	08:28:25
1	As 188.979†	-22.9	3.3	1.6984 ug/L	1.6984 ppb	08:28:45
1	B 249.677†	17.0	431.4	11.559 ug/L	11.559 ppb	08:28:25
1	Ba 233.527†	17.1	3.3	0.0332 ug/L	0.0332 ppb	08:28:45
1	Be 313.107†	-4275.1	69.0	0.0290 ug/L	0.0290 ppb	08:28:25
1	Cd 226.502†	-202.7	4.4	0.0710 ug/L	0.0710 ppb	08:28:45
1	Co 228.616†	-53.6	-1.6	-0.0411 ug/L	-0.0411 ppb	08:28:45
1	Cr 267.716†	102.5	3.3	0.0473 ug/L	0.0473 ppb	08:28:45
1	Cu 324.752†	5586.3	15.5	0.0517 ug/L	0.0517 ppb	08:28:25
1	Mn 257.610†	447.6	-24.2	-0.0342 ug/L	-0.0342 ppb	08:28:45
1	Mo 202.031†	12.4	7.2	0.6994 ug/L	0.6994 ppb	08:28:45
1	Ni 231.604†	106.8	17.9	0.6049 ug/L	0.6049 ppb	08:28:45
1	P 214.914†	195.3	-13.9	-9.4549 ug/L	-9.4549 ppb	08:28:45
1	Pb 220.353†	-74.8	-6.2	-0.9993 ug/L	-0.9993 ppb	08:28:45
1	S 181.975 Axial†	36.1	-4.7	-7.4578 ug/L	-7.4578 ppb	08:28:45
1	Sb 206.836†	27.0	0.7	0.3085 ug/L	0.3085 ppb	08:28:45
1	Se 196.026†	-14.6	12.6	9.7865 ug/L	9.7865 ppb	08:28:45
1	Si 251.611†	566.4	8.0	0.2971 ug/L	0.2971 ppb	08:28:45
1	Sn 189.927†	12.9	2.7	0.6327 ug/L	0.6327 ppb	08:28:45
1	Ti 334.940†	-1436.5	24.9	0.0460 ug/L	0.0460 ppb	08:28:25
1	Tl 190.801†	-30.2	2.4	0.9592 ug/L	0.9592 ppb	08:28:45
1	U 409.014†	-2372.6	125.0	4.9909 ug/L	4.9909 ppb	08:28:25
1	V 292.402†	-1792.7	25.2	0.2529 ug/L	0.2529 ppb	08:28:25
1	Zn 213.857†	739.1	20.1	0.2399 ug/L	0.2399 ppb	08:28:45
1	SiO2†	527.8	-42.9	-3.5083 ug/L	-3.5083 ppb	08:29:41
2	Sc Radial	3862.1	3862.1	108 %		08:27:53
2	Y RADIAL	4390.4	4390.4	108.0 %		08:27:33
2	Al 396.153Radial†	-92.8	23.8	27.216 ug/L	27.216 ppb	08:27:33
2	Ca 317.933Radial†	23.6	6.2	12.707 ug/L	12.707 ppb	08:27:53
2	Fe 238.204 Radial†	5.6	-3.0	-41.791 ug/L	-41.791 ppb	08:27:53
2	K 766.490 Radial†	3498.3	231.6	48.721 ug/L	48.721 ppb	08:27:33
2	Mg 279.077 IEC†	3.8	2.9	126.35 ug/L	126.35 ppb	08:27:53
2	Na 589.592 Radial†	-908.4	53.4	27.541 ug/L	27.541 ppb	08:27:33
2	Sr 421.552†	27.4	11.7	0.1285 ug/L	0.1285 ppb	08:27:33
2	Sc 361.383	710275.8	710275.8	106.50 %		08:28:50
2	Y 371.029	562547.9	562547.9	106.53 %		08:28:50
2	Ag 328.068†	196.0	-18.0	-0.1186 ug/L	-0.1186 ppb	08:28:50
2	As 188.979†	-21.0	5.5	2.8619 ug/L	2.8619 ppb	08:29:10
2	B 249.677†	-93.7	327.1	8.7686 ug/L	8.7686 ppb	08:28:50
2	Ba 233.527†	16.4	2.2	0.0226 ug/L	0.0226 ppb	08:29:10
2	Be 313.107†	-4364.6	80.3	0.0338 ug/L	0.0338 ppb	08:28:50
2	Cd 226.502†	-202.4	9.2	0.1475 ug/L	0.1475 ppb	08:29:10
2	Co 228.616†	-44.3	8.3	0.2190 ug/L	0.2190 ppb	08:29:10
2	Cr 267.716†	106.3	4.6	0.0650 ug/L	0.0650 ppb	08:29:10
2	Cu 324.752†	5690.9	-10.9	-0.0444 ug/L	-0.0444 ppb	08:28:50
2	Mn 257.610†	432.1	-48.7	-0.0763 ug/L	-0.0763 ppb	08:29:10
2	Mo 202.031†	17.6	11.7	1.1454 ug/L	1.1454 ppb	08:29:10
2	Ni 231.604†	106.7	15.4	0.5198 ug/L	0.5198 ppb	08:29:10

2	P 214.914†	195.8	-17.8	-12.035 ug/L	-12.035 ppb	08:29:10
2	Pb 220.353†	-63.4	6.3	1.0369 ug/L	1.0369 ppb	08:29:10
2	S 181.975 Axial†	34.0	-7.5	-11.869 ug/L	-11.869 ppb	08:29:10
2	Sb 206.836†	29.1	2.1	0.9187 ug/L	0.9187 ppb	08:29:10
2	Se 196.026†	-29.4	-1.0	-0.9120 ug/L	-0.9120 ppb	08:29:10
2	Si 251.611†	583.0	11.0	0.4076 ug/L	0.4076 ppb	08:29:10
2	Sn 189.927†	14.4	3.7	0.8882 ug/L	0.8882 ppb	08:29:10
2	Ti 334.940†	-1456.1	38.5	0.0615 ug/L	0.0615 ppb	08:28:50
2	Tl 190.801†	-33.5	0.0	0.0155 ug/L	0.0155 ppb	08:29:10
2	U 409.014†	-2389.7	161.8	6.4658 ug/L	6.4658 ppb	08:28:50
2	V 292.402†	-1758.2	97.6	0.9360 ug/L	0.9360 ppb	08:28:50
2	Zn 213.857†	734.9	-0.4	-0.0018 ug/L	-0.0018 ppb	08:29:10
2	SiO2†	599.5	12.6	0.9952 ug/L	0.9952 ppb	08:29:46
3	Sc Radial	3869.2	3869.2	108 %		08:28:18
3	Y RADIAL	4338.7	4338.7	106.7 %		08:27:58
3	Al 396.153Radial†	-111.6	6.5	7.3888 ug/L	7.3888 ppb	08:27:58
3	Ca 317.933Radial†	16.2	-0.7	-1.3833 ug/L	-1.3833 ppb	08:28:18
3	Fe 238.204 Radial†	7.3	-1.4	-20.114 ug/L	-20.114 ppb	08:28:18
3	K 766.490 Radial†	3285.7	28.4	5.9752 ug/L	5.9752 ppb	08:27:58
3	Mg 279.077 IEC†	-1.2	-1.8	-77.586 ug/L	-77.586 ppb	08:28:18
3	Na 589.592 Radial†	-940.1	25.5	13.173 ug/L	13.173 ppb	08:27:58
3	Sr 421.552†	36.2	19.8	0.2179 ug/L	0.2179 ppb	08:27:58
3	Sc 361.383	671961.9	671961.9	100.76 %		08:29:15
3	Y 371.029	532330.0	532330.0	100.80 %		08:29:15
3	Ag 328.068†	251.5	47.5	0.2737 ug/L	0.2737 ppb	08:29:15
3	As 188.979†	-21.3	4.2	2.1459 ug/L	2.1459 ppb	08:29:35
3	B 249.677†	-81.1	334.6	8.9668 ug/L	8.9668 ppb	08:29:15
3	Ba 233.527†	4.0	-9.3	-0.0944 ug/L	-0.0944 ppb	08:29:35
3	Be 313.107†	-4145.4	64.2	0.0266 ug/L	0.0266 ppb	08:29:15
3	Cd 226.502†	-183.8	16.8	0.2608 ug/L	0.2608 ppb	08:29:35
3	Co 228.616†	-47.5	2.8	0.0765 ug/L	0.0765 ppb	08:29:35
3	Cr 267.716†	101.7	5.7	0.0886 ug/L	0.0886 ppb	08:29:35
3	Cu 324.752†	5397.9	2.9	0.0128 ug/L	0.0128 ppb	08:29:15
3	Mn 257.610†	446.6	-11.2	-0.0142 ug/L	-0.0142 ppb	08:29:35
3	Mo 202.031†	21.3	16.4	1.6058 ug/L	1.6058 ppb	08:29:35
3	Ni 231.604†	108.7	23.1	0.7798 ug/L	0.7798 ppb	08:29:35
3	P 214.914†	189.1	-14.0	-9.4754 ug/L	-9.4754 ppb	08:29:35
3	Pb 220.353†	-80.6	-14.2	-2.3057 ug/L	-2.3057 ppb	08:29:35
3	S 181.975 Axial†	34.0	-5.7	-8.9963 ug/L	-8.9963 ppb	08:29:35
3	Sb 206.836†	38.0	12.5	5.2398 ug/L	5.2398 ppb	08:29:35
3	Se 196.026†	-16.8	9.9	7.6687 ug/L	7.6687 ppb	08:29:35
3	Si 251.611†	583.7	42.9	1.6231 ug/L	1.6231 ppb	08:29:35
3	Sn 189.927†	14.4	4.5	1.0671 ug/L	1.0671 ppb	08:29:35
3	Ti 334.940†	-1475.4	-58.6	-0.1022 ug/L	-0.1022 ppb	08:29:15
3	Tl 190.801†	-35.6	-3.8	-1.5198 ug/L	-1.5198 ppb	08:29:35
3	U 409.014†	-2581.0	-156.0	-6.2275 ug/L	-6.2275 ppb	08:29:15
3	V 292.402†	-1752.7	8.9	0.0945 ug/L	0.0945 ppb	08:29:15
3	Zn 213.857†	740.2	44.3	0.5321 ug/L	0.5321 ppb	08:29:35
3	SiO2†	614.1	59.2	4.7746 ug/L	4.7746 ppb	08:29:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	692009.9	103.77 %	2.882			2.78%
Sc Radial	3879.4	108 %	0.7			0.62%
Y 371.029	548077.5	103.79 %	2.869			2.76%
Y RADIAL	4395.5	108.1 %	1.46			1.35%
Ag 328.068†	10.0	0.0503 ug/L	0.20171	0.0503 ppb	0.20171	400.73%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.5	14.302 ug/L	11.1931	14.302 ppb	11.1931	78.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.3	2.2354 ug/L	0.58690	2.2354 ppb	0.58690	26.25%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	364.4	9.7648 ug/L	1.55687	9.7648 ppb	1.55687	15.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.3	-0.0128 ug/L	0.07079	-0.0128 ppb	0.07079	551.03%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	71.1	0.0298 ug/L	0.00365	0.0298 ppb	0.00365	12.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.1	6.3287 ug/L	7.13910	6.3287 ppb	7.13910	112.81%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated								
Cd	226.502†	10.1	0.1598 ug/L	0.09548	0.1598 ppb	0.09548	59.76%	
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co	228.616†	3.2	0.0848 ug/L	0.13025	0.0848 ppb	0.13025	153.59%	
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr	267.716†	4.5	0.0670 ug/L	0.02070	0.0670 ppb	0.02070	30.92%	
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu	324.752†	2.5	0.0067 ug/L	0.04836	0.0067 ppb	0.04836	721.08%	
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe	238.204 Radial†	-1.7	-23.968 ug/L	16.2425	-23.968 ppb	16.2425	67.77%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated								
K	766.490 Radial†	140.2	29.498 ug/L	21.6949	29.498 ppb	21.6949	73.55%	
QC value within limits for K 766.490 Radial Recovery = Not calculated								
Mg	279.077 IEC†	0.4	15.895 ug/L	103.0216	15.895 ppb	103.0216	648.14%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated								
Mn	257.610†	-28.0	-0.0416 ug/L	0.03173	-0.0416 ppb	0.03173	76.30%	
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo	202.031†	11.8	1.1502 ug/L	0.45322	1.1502 ppb	0.45322	39.40%	
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na	589.592 Radial†	42.9	22.111 ug/L	7.8001	22.111 ppb	7.8001	35.28%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated								
Ni	231.604†	18.8	0.6348 ug/L	0.13261	0.6348 ppb	0.13261	20.89%	
QC value within limits for Ni 231.604 Recovery = Not calculated								
P	214.914†	-15.3	-10.322 ug/L	1.4839	-10.322 ppb	1.4839	14.38%	
QC value within limits for P 214.914 Recovery = Not calculated								
Pb	220.353†	-4.7	-0.7560 ug/L	1.68454	-0.7560 ppb	1.68454	222.82%	
QC value within limits for Pb 220.353 Recovery = Not calculated								
S	181.975 Axial†	-5.9	-9.4409 ug/L	2.23873	-9.4409 ppb	2.23873	23.71%	
QC value within limits for S 181.975 Axial Recovery = Not calculated								
Sb	206.836†	5.1	2.1557 ug/L	2.68829	2.1557 ppb	2.68829	124.71%	
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se	196.026†	7.1	5.5144 ug/L	5.66530	5.5144 ppb	5.66530	102.74%	
QC value within limits for Se 196.026 Recovery = Not calculated								
Si	251.611†	20.7	0.7759 ug/L	0.73572	0.7759 ppb	0.73572	94.82%	
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn	189.927†	3.6	0.8627 ug/L	0.21835	0.8627 ppb	0.21835	25.31%	
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr	421.552†	7.9	0.0875 ug/L	0.15498	0.0875 ppb	0.15498	177.11%	
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti	334.940†	1.6	0.0018 ug/L	0.09038	0.0018 ppb	0.09038	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl	190.801†	-0.5	-0.1817 ug/L	1.25121	-0.1817 ppb	1.25121	688.62%	
QC value within limits for Tl 190.801 Recovery = Not calculated								
U	409.014†	43.6	1.7431 ug/L	6.94197	1.7431 ppb	6.94197	398.26%	
QC value within limits for U 409.014 Recovery = Not calculated								
V	292.402†	43.9	0.4278 ug/L	0.44719	0.4278 ppb	0.44719	104.53%	
QC value within limits for V 292.402 Recovery = Not calculated								
Zn	213.857†	21.3	0.2567 ug/L	0.26738	0.2567 ppb	0.26738	104.15%	
QC value within limits for Zn 213.857 Recovery = Not calculated								
SiO2†		9.7	0.7538 ug/L	4.14671	0.7538 ppb	4.14671	550.10%	
QC value within limits for SiO2 Recovery = Not calculated								
All analyte(s) passed QC.								

Sequence No.: 11

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2010 09:19:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3890.4	3890.4	108 %		09:21:36
1	Y RADIAL	4316.9	4316.9	106.2 %		09:21:16
1	Al 396.153Radial†	4668.4	4416.2	5043.6 ug/L	5043.6 ppb	09:21:16
1	Ca 317.933Radial†	2683.2	2459.3	5026.9 ug/L	5026.9 ppb	09:21:36
1	Fe 238.204 Radial†	398.4	359.3	5094.3 ug/L	5094.3 ppb	09:21:36
1	K 766.490 Radial†	28702.7	23457.1	4930.2 ug/L	4930.2 ppb	09:21:16
1	Mg 279.077 IEC†	125.9	115.5	5100.8 ug/L	5100.8 ppb	09:21:36
1	Na 589.592 Radial†	20358.9	19676.9	10146 ug/L	10146 ppb	09:21:16
1	Sr 421.552†	50580.8	46643.1	514.20 ug/L	514.20 ppb	09:21:16
1	Sc 361.383	683600.3	683600.3	102.50 %		09:22:33
1	Y 371.029	535310.4	535310.4	101.37 %		09:22:33
1	Ag 328.068†	87913.6	85563.3	497.21 ug/L	497.21 ppb	09:22:39
1	As 188.979†	951.6	953.6	499.33 ug/L	499.33 ppb	09:22:59
1	B 249.677†	18387.5	18353.3	489.39 ug/L	489.39 ppb	09:22:39
1	Ba 233.527†	50029.1	48793.4	494.84 ug/L	494.84 ppb	09:22:39
1	Be 313.107†	1204549.5	1179293.6	495.10 ug/L	495.10 ppb	09:22:33
1	Cd 226.502†	32630.3	32032.2	494.30 ug/L	494.30 ppb	09:22:39
1	Co 228.616†	19623.3	19193.7	498.27 ug/L	498.27 ppb	09:22:39
1	Cr 267.716†	33047.4	32144.7	495.13 ug/L	495.13 ppb	09:22:39
1	Cu 324.752†	147870.5	138902.9	492.50 ug/L	492.50 ppb	09:22:39
1	Mn 257.610†	368801.8	359335.4	494.74 ug/L	494.74 ppb	09:22:39
1	Mo 202.031†	5158.3	5027.5	492.00 ug/L	492.00 ppb	09:22:59
1	Ni 231.604†	15216.1	14759.5	497.05 ug/L	497.05 ppb	09:22:39
1	P 214.914†	3922.9	3625.3	2364.6 ug/L	2364.6 ppb	09:22:59
1	Pb 220.353†	3033.5	3025.1	495.35 ug/L	495.35 ppb	09:22:59
1	S 181.975 Axial†	671.9	616.1	976.47 ug/L	976.47 ppb	09:22:59
1	Sb 206.836†	1227.9	1172.6	503.82 ug/L	503.82 ppb	09:22:59
1	Se 196.026†	625.1	636.4	512.27 ug/L	512.27 ppb	09:22:59
1	Si 251.611†	67937.9	65741.4	2509.2 ug/L	2509.2 ppb	09:22:39
1	Sn 189.927†	2139.4	2077.4	492.02 ug/L	492.02 ppb	09:22:59
1	Ti 334.940†	265076.8	260005.1	492.38 ug/L	492.38 ppb	09:22:39
1	Tl 190.801†	1245.7	1246.7	497.97 ug/L	497.97 ppb	09:22:59
1	U 409.014†	10026.9	12187.4	484.98 ug/L	484.98 ppb	09:22:39
1	V 292.402†	53199.2	53647.6	500.83 ug/L	500.83 ppb	09:22:39
1	Zn 213.857†	42771.7	41036.2	490.65 ug/L	490.65 ppb	09:22:39
1	SiO2†	68342.2	66122.0	5364.8 ug/L	5364.8 ppb	09:24:06
2	Sc Radial	3913.2	3913.2	109 %		09:22:01
2	Y RADIAL	4352.7	4352.7	107.0 %		09:21:41
2	Al 396.153Radial†	4685.8	4407.1	5033.2 ug/L	5033.2 ppb	09:21:41
2	Ca 317.933Radial†	2704.6	2464.6	5037.6 ug/L	5037.6 ppb	09:22:01
2	Fe 238.204 Radial†	401.4	359.9	5102.5 ug/L	5102.5 ppb	09:22:01
2	K 766.490 Radial†	28715.1	23314.6	4900.2 ug/L	4900.2 ppb	09:21:41
2	Mg 279.077 IEC†	126.5	115.4	5092.9 ug/L	5092.9 ppb	09:22:01
2	Na 589.592 Radial†	20332.8	19543.9	10077 ug/L	10077 ppb	09:21:41
2	Sr 421.552†	50612.6	46401.1	511.54 ug/L	511.54 ppb	09:21:41
2	Sc 361.383	699922.8	699922.8	104.95 %		09:23:04
2	Y 371.029	548266.9	548266.9	103.82 %		09:23:04
2	Ag 328.068†	89725.4	85289.5	495.61 ug/L	495.61 ppb	09:23:10
2	As 188.979†	969.8	949.2	497.06 ug/L	497.06 ppb	09:23:30
2	B 249.677†	18838.6	18364.8	489.71 ug/L	489.71 ppb	09:23:10
2	Ba 233.527†	50795.3	48385.3	490.71 ug/L	490.71 ppb	09:23:10
2	Be 313.107†	1229289.0	1175461.7	493.49 ug/L	493.49 ppb	09:23:04
2	Cd 226.502†	33077.7	31716.1	489.42 ug/L	489.42 ppb	09:23:10
2	Co 228.616†	19864.8	18977.4	492.66 ug/L	492.66 ppb	09:23:10
2	Cr 267.716†	33518.1	31841.2	490.46 ug/L	490.46 ppb	09:23:10
2	Cu 324.752†	151412.9	138914.0	492.54 ug/L	492.54 ppb	09:23:10
2	Mn 257.610†	374673.3	356539.5	490.89 ug/L	490.89 ppb	09:23:10
2	Mo 202.031†	5276.3	5022.5	491.51 ug/L	491.51 ppb	09:23:30
2	Ni 231.604†	15362.3	14552.6	490.08 ug/L	490.08 ppb	09:23:10

2	P 214.914†	4013.6	3622.6	2362.7 ug/L	2362.7 ppb	09:23:30
2	Pb 220.353†	3086.0	3006.2	492.26 ug/L	492.26 ppb	09:23:30
2	S 181.975 Axial†	689.4	617.5	978.71 ug/L	978.71 ppb	09:23:30
2	Sb 206.836†	1269.3	1184.2	508.61 ug/L	508.61 ppb	09:23:30
2	Se 196.026†	644.5	640.7	515.61 ug/L	515.61 ppb	09:23:30
2	Si 251.611†	69149.0	65349.7	2494.3 ug/L	2494.3 ppb	09:23:10
2	Sn 189.927†	2190.9	2077.7	492.10 ug/L	492.10 ppb	09:23:30
2	Ti 334.940†	270270.1	258922.8	490.33 ug/L	490.33 ppb	09:23:10
2	Tl 190.801†	1269.1	1240.7	495.57 ug/L	495.57 ppb	09:23:30
2	U 409.014†	10422.5	12336.3	490.93 ug/L	490.93 ppb	09:23:10
2	V 292.402†	54095.3	53291.1	497.56 ug/L	497.56 ppb	09:23:10
2	Zn 213.857†	43491.9	40749.3	487.24 ug/L	487.24 ppb	09:23:10
2	SiO2†	69019.0	65212.1	5290.8 ug/L	5290.8 ppb	09:24:11
3	Sc Radial	3875.4	3875.4	108 %		09:22:27
3	Y RADIAL	4385.7	4385.7	107.9 %		09:22:07
3	Al 396.153Radial†	4663.1	4428.0	5057.8 ug/L	5057.8 ppb	09:22:07
3	Ca 317.933Radial†	2672.1	2458.6	5025.4 ug/L	5025.4 ppb	09:22:27
3	Fe 238.204 Radial†	396.4	358.8	5087.2 ug/L	5087.2 ppb	09:22:27
3	K 766.490 Radial†	28859.8	23704.9	4982.3 ug/L	4982.3 ppb	09:22:07
3	Mg 279.077 IEC†	125.4	115.5	5098.0 ug/L	5098.0 ppb	09:22:27
3	Na 589.592 Radial†	20490.6	19871.6	10246 ug/L	10246 ppb	09:22:07
3	Sr 421.552†	50786.4	47013.9	518.29 ug/L	518.29 ppb	09:22:07
3	Sc 361.383	709824.8	709824.8	106.44 %		09:23:35
3	Y 371.029	555511.9	555511.9	105.19 %		09:23:35
3	Ag 328.068†	89571.1	83951.9	487.87 ug/L	487.87 ppb	09:23:40
3	As 188.979†	967.9	934.6	489.45 ug/L	489.45 ppb	09:24:00
3	B 249.677†	18813.7	18091.0	482.39 ug/L	482.39 ppb	09:23:40
3	Ba 233.527†	50928.6	47835.3	485.13 ug/L	485.13 ppb	09:23:40
3	Be 313.107†	1250002.7	1178583.4	494.78 ug/L	494.78 ppb	09:23:35
3	Cd 226.502†	33221.5	31411.6	484.71 ug/L	484.71 ppb	09:23:40
3	Co 228.616†	20011.7	18851.4	489.37 ug/L	489.37 ppb	09:23:40
3	Cr 267.716†	33605.7	31478.1	484.87 ug/L	484.87 ppb	09:23:40
3	Cu 324.752†	151002.6	136516.1	484.04 ug/L	484.04 ppb	09:23:40
3	Mn 257.610†	375817.0	352634.0	485.52 ug/L	485.52 ppb	09:23:40
3	Mo 202.031†	5200.8	4881.6	477.73 ug/L	477.73 ppb	09:24:00
3	Ni 231.604†	15500.7	14478.5	487.59 ug/L	487.59 ppb	09:23:40
3	P 214.914†	3954.0	3513.2	2290.0 ug/L	2290.0 ppb	09:24:00
3	Pb 220.353†	3065.0	2945.4	482.33 ug/L	482.33 ppb	09:24:00
3	S 181.975 Axial†	684.1	603.3	956.23 ug/L	956.23 ppb	09:24:00
3	Sb 206.836†	1246.0	1145.4	492.09 ug/L	492.09 ppb	09:24:00
3	Se 196.026†	620.1	609.2	490.99 ug/L	490.99 ppb	09:24:00
3	Si 251.611†	69362.6	64631.3	2466.9 ug/L	2466.9 ppb	09:23:40
3	Sn 189.927†	2177.1	2035.7	482.15 ug/L	482.15 ppb	09:24:00
3	Ti 334.940†	270210.8	255274.7	483.43 ug/L	483.43 ppb	09:23:40
3	Tl 190.801†	1271.7	1226.3	489.81 ug/L	489.81 ppb	09:24:00
3	U 409.014†	10178.9	11968.8	476.27 ug/L	476.27 ppb	09:23:40
3	V 292.402†	54006.1	52488.3	489.95 ug/L	489.95 ppb	09:23:40
3	Zn 213.857†	43668.8	40337.4	482.29 ug/L	482.29 ppb	09:23:40
3	SiO2†	68938.8	64219.3	5210.4 ug/L	5210.4 ppb	09:24:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	697782.6	104.63 %		1.986			1.90%
Sc Radial	3893.0	108 %		0.5			0.49%
Y 371.029	546363.1	103.46 %		1.938			1.87%
Y RADIAL	4351.8	107.0 %		0.85			0.79%
Ag 328.068†	84934.9	493.56 ug/L		4.998	493.56 ppb	4.998	1.01%
QC value within limits for Ag 328.068 Recovery = 98.71%							
Al 396.153Radial†	4417.1	5044.9 ug/L		12.37	5044.9 ppb	12.37	0.25%
QC value within limits for Al 396.153Radial Recovery = 100.90%							
As 188.979†	945.8	495.28 ug/L		5.174	495.28 ppb	5.174	1.04%
QC value within limits for As 188.979 Recovery = 99.06%							
B 249.677†	18269.7	487.16 ug/L		4.138	487.16 ppb	4.138	0.85%
QC value within limits for B 249.677 Recovery = 97.43%							
Ba 233.527†	48338.0	490.22 ug/L		4.876	490.22 ppb	4.876	0.99%
QC value within limits for Ba 233.527 Recovery = 98.04%							
Be 313.107†	1177779.6	494.46 ug/L		0.853	494.46 ppb	0.853	0.17%
QC value within limits for Be 313.107 Recovery = 98.89%							
Ca 317.933Radial†	2460.8	5030.0 ug/L		6.63	5030.0 ppb	6.63	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 100.60%

Cd 226.502†	31720.0	489.48 ug/L	4.793	489.48 ppb	4.793	0.98%
QC value within limits for Cd 226.502 Recovery = 97.90%						
Co 228.616†	19007.5	493.44 ug/L	4.500	493.44 ppb	4.500	0.91%
QC value within limits for Co 228.616 Recovery = 98.69%						
Cr 267.716†	31821.3	490.15 ug/L	5.136	490.15 ppb	5.136	1.05%
QC value within limits for Cr 267.716 Recovery = 98.03%						
Cu 324.752†	138111.0	489.69 ug/L	4.894	489.69 ppb	4.894	1.00%
QC value within limits for Cu 324.752 Recovery = 97.94%						
Fe 238.204 Radial†	359.4	5094.6 ug/L	7.66	5094.6 ppb	7.66	0.15%
QC value within limits for Fe 238.204 Radial Recovery = 101.89%						
K 766.490 Radial†	23492.2	4937.6 ug/L	41.55	4937.6 ppb	41.55	0.84%
QC value within limits for K 766.490 Radial Recovery = 98.75%						
Mg 279.077 IEC†	115.5	5097.2 ug/L	4.03	5097.2 ppb	4.03	0.08%
QC value within limits for Mg 279.077 IEC Recovery = 101.94%						
Mn 257.610†	356169.6	490.38 ug/L	4.632	490.38 ppb	4.632	0.94%
QC value within limits for Mn 257.610 Recovery = 98.08%						
Mo 202.031†	4977.2	487.08 ug/L	8.102	487.08 ppb	8.102	1.66%
QC value within limits for Mo 202.031 Recovery = 97.42%						
Na 589.592 Radial†	19697.4	10156 ug/L	85.0	10156 ppb	85.0	0.84%
QC value within limits for Na 589.592 Radial Recovery = 101.56%						
Ni 231.604†	14596.9	491.57 ug/L	4.905	491.57 ppb	4.905	1.00%
QC value within limits for Ni 231.604 Recovery = 98.31%						
P 214.914†	3587.0	2339.1 ug/L	42.49	2339.1 ppb	42.49	1.82%
QC value within limits for P 214.914 Recovery = 93.56%						
Pb 220.353†	2992.2	489.98 ug/L	6.807	489.98 ppb	6.807	1.39%
QC value within limits for Pb 220.353 Recovery = 98.00%						
S 181.975 Axial†	612.3	970.47 ug/L	12.379	970.47 ppb	12.379	1.28%
QC value within limits for S 181.975 Axial Recovery = 97.05%						
Sb 206.836†	1167.4	501.51 ug/L	8.497	501.51 ppb	8.497	1.69%
QC value within limits for Sb 206.836 Recovery = 100.30%						
Se 196.026†	628.8	506.29 ug/L	13.353	506.29 ppb	13.353	2.64%
QC value within limits for Se 196.026 Recovery = 101.26%						
Si 251.611†	65240.8	2490.1 ug/L	21.45	2490.1 ppb	21.45	0.86%
QC value within limits for Si 251.611 Recovery = 99.61%						
Sn 189.927†	2063.6	488.75 ug/L	5.720	488.75 ppb	5.720	1.17%
QC value within limits for Sn 189.927 Recovery = 97.75%						
Sr 421.552†	46686.0	514.68 ug/L	3.403	514.68 ppb	3.403	0.66%
QC value within limits for Sr 421.552 Recovery = 102.94%						
Ti 334.940†	258067.5	488.72 ug/L	4.691	488.72 ppb	4.691	0.96%
QC value within limits for Ti 334.940 Recovery = 97.74%						
Tl 190.801†	1237.9	494.45 ug/L	4.194	494.45 ppb	4.194	0.85%
QC value within limits for Tl 190.801 Recovery = 98.89%						
U 409.014†	12164.2	484.06 ug/L	7.372	484.06 ppb	7.372	1.52%
QC value within limits for U 409.014 Recovery = 96.81%						
V 292.402†	53142.3	496.11 ug/L	5.585	496.11 ppb	5.585	1.13%
QC value within limits for V 292.402 Recovery = 99.22%						
Zn 213.857†	40707.6	486.73 ug/L	4.203	486.73 ppb	4.203	0.86%
QC value within limits for Zn 213.857 Recovery = 97.35%						
SiO2†	65184.4	5288.6 ug/L	77.21	5288.6 ppb	77.21	1.46%
QC value within limits for SiO2 Recovery = 98.90%						

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 09:26:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3885.8	3885.8	108 %		09:28:40
1	Y RADIAL	4349.7	4349.7	107.0 %		09:28:20
1	Al 396.153Radial†	-103.4	14.5	16.570 ug/L	16.570 ppb	09:28:20
1	Ca 317.933Radial†	20.6	3.3	6.6847 ug/L	6.6847 ppb	09:28:40
1	Fe 238.204 Radial†	7.5	-1.2	-17.570 ug/L	-17.570 ppb	09:28:40
1	K 766.490 Radial†	3287.8	17.4	3.6611 ug/L	3.6611 ppb	09:28:20
1	Mg 279.077 IEC†	0.5	-0.2	-8.4725 ug/L	-8.4725 ppb	09:28:40
1	Na 589.592 Radial†	-963.0	8.0	4.1497 ug/L	4.1497 ppb	09:28:20
1	Sr 421.552†	0.2	-13.6	-0.1501 ug/L	-0.1501 ppb	09:28:20
1	Sc 361.383	686335.3	686335.3	102.91 %		09:29:36
1	Y 371.029	543029.2	543029.2	102.83 %		09:29:36
1	Ag 328.068†	216.3	8.1	0.0456 ug/L	0.0456 ppb	09:29:36
1	As 188.979†	-28.6	-2.5	-1.3056 ug/L	-1.3056 ppb	09:29:56
1	B 249.677†	-337.9	86.8	2.3274 ug/L	2.3274 ppb	09:29:56
1	Ba 233.527†	4.2	-9.1	-0.0908 ug/L	-0.0908 ppb	09:29:56
1	Be 313.107†	-4326.9	-26.1	-0.0112 ug/L	-0.0112 ppb	09:29:36
1	Cd 226.502†	-197.1	7.8	0.1220 ug/L	0.1220 ppb	09:29:56
1	Co 228.616†	-55.9	-4.4	-0.1129 ug/L	-0.1129 ppb	09:29:56
1	Cr 267.716†	89.2	-8.5	-0.1313 ug/L	-0.1313 ppb	09:29:56
1	Cu 324.752†	5573.4	61.3	0.2172 ug/L	0.2172 ppb	09:29:36
1	Mn 257.610†	447.0	-20.1	-0.0290 ug/L	-0.0290 ppb	09:29:56
1	Mo 202.031†	13.2	8.1	0.7871 ug/L	0.7871 ppb	09:29:56
1	Ni 231.604†	112.0	24.1	0.8129 ug/L	0.8129 ppb	09:29:56
1	P 214.914†	198.1	-9.2	-6.2397 ug/L	-6.2397 ppb	09:29:56
1	Pb 220.353†	-69.9	-2.1	-0.3413 ug/L	-0.3413 ppb	09:29:56
1	S 181.975 Axial†	40.9	0.4	0.5710 ug/L	0.5710 ppb	09:29:56
1	Sb 206.836†	20.1	-5.7	-2.3639 ug/L	-2.3639 ppb	09:29:56
1	Se 196.026†	-15.8	11.2	8.6873 ug/L	8.6873 ppb	09:29:56
1	Si 251.611†	560.4	8.1	0.2992 ug/L	0.2992 ppb	09:29:56
1	Sn 189.927†	8.8	-1.2	-0.2921 ug/L	-0.2921 ppb	09:29:56
1	Ti 334.940†	-1500.8	-52.6	-0.0973 ug/L	-0.0973 ppb	09:29:36
1	Tl 190.801†	-29.2	3.1	1.2344 ug/L	1.2344 ppb	09:29:56
1	U 409.014†	-2517.4	-40.5	-1.6165 ug/L	-1.6165 ppb	09:29:36
1	V 292.402†	-1717.7	79.4	0.7418 ug/L	0.7418 ppb	09:29:36
1	Zn 213.857†	710.8	0.3	0.0010 ug/L	0.0010 ppb	09:29:56
1	SiO2†	555.5	-10.5	-0.8729 ug/L	-0.8729 ppb	09:30:52
2	Sc Radial	3939.3	3939.3	110 %		09:29:05
2	Y RADIAL	4380.5	4380.5	107.7 %		09:28:45
2	Al 396.153Radial†	-81.0	36.2	41.533 ug/L	41.533 ppb	09:28:45
2	Ca 317.933Radial†	16.7	-0.5	-1.0532 ug/L	-1.0532 ppb	09:29:05
2	Fe 238.204 Radial†	8.9	-0.0	-0.6860 ug/L	-0.6860 ppb	09:29:05
2	K 766.490 Radial†	3162.5	-138.0	-29.050 ug/L	-29.050 ppb	09:28:45
2	Mg 279.077 IEC†	-0.0	-0.7	-29.045 ug/L	-29.045 ppb	09:29:05
2	Na 589.592 Radial†	-947.2	34.6	17.829 ug/L	17.829 ppb	09:28:45
2	Sr 421.552†	25.9	9.8	0.1085 ug/L	0.1085 ppb	09:28:45
2	Sc 361.383	688270.5	688270.5	103.21 %		09:30:02
2	Y 371.029	544506.6	544506.6	103.11 %		09:30:02
2	Ag 328.068†	223.4	14.4	0.0842 ug/L	0.0842 ppb	09:30:02
2	As 188.979†	-25.8	0.2	0.1232 ug/L	0.1232 ppb	09:30:22
2	B 249.677†	-368.1	58.5	1.5667 ug/L	1.5667 ppb	09:30:22
2	Ba 233.527†	3.8	-9.6	-0.0947 ug/L	-0.0947 ppb	09:30:22
2	Be 313.107†	-4331.4	-18.6	-0.0077 ug/L	-0.0077 ppb	09:30:02
2	Cd 226.502†	-194.6	10.7	0.1664 ug/L	0.1664 ppb	09:30:22
2	Co 228.616†	-50.6	0.9	0.0239 ug/L	0.0239 ppb	09:30:22
2	Cr 267.716†	69.7	-27.7	-0.4261 ug/L	-0.4261 ppb	09:30:22
2	Cu 324.752†	5551.0	24.4	0.0847 ug/L	0.0847 ppb	09:30:02
2	Mn 257.610†	452.2	-16.3	-0.0213 ug/L	-0.0213 ppb	09:30:22
2	Mo 202.031†	12.6	7.4	0.7276 ug/L	0.7276 ppb	09:30:22
2	Ni 231.604†	102.1	14.2	0.4785 ug/L	0.4785 ppb	09:30:22

2	P 214.914†	191.0	-16.6	-11.283 ug/L	-11.283 ppb	09:30:22
2	Pb 220.353†	-68.5	-0.6	-0.0889 ug/L	-0.0889 ppb	09:30:22
2	S 181.975 Axial†	30.7	-9.7	-15.327 ug/L	-15.327 ppb	09:30:22
2	Sb 206.836†	29.9	3.7	1.5432 ug/L	1.5432 ppb	09:30:22
2	Se 196.026†	-22.7	4.6	3.5578 ug/L	3.5578 ppb	09:30:22
2	Si 251.611†	542.0	-11.2	-0.4381 ug/L	-0.4381 ppb	09:30:22
2	Sn 189.927†	10.1	-0.0	-0.0013 ug/L	-0.0013 ppb	09:30:22
2	Ti 334.940†	-1418.1	31.6	0.0610 ug/L	0.0610 ppb	09:30:02
2	Tl 190.801†	-18.7	13.3	5.2871 ug/L	5.2871 ppb	09:30:22
2	U 409.014†	-2404.0	76.2	3.0445 ug/L	3.0445 ppb	09:30:02
2	V 292.402†	-1697.5	103.6	0.9705 ug/L	0.9705 ppb	09:30:02
2	Zn 213.857†	716.6	3.9	0.0444 ug/L	0.0444 ppb	09:30:22
2	SiO2†	515.1	-51.1	-4.1797 ug/L	-4.1797 ppb	09:30:57
3	Sc Radial	3986.7	3986.7	111 %		09:29:30
3	Y RADIAL	4520.6	4520.6	111.2 %		09:29:10
3	Al 396.153Radial†	-109.3	11.6	13.229 ug/L	13.229 ppb	09:29:10
3	Ca 317.933Radial†	20.1	2.4	4.8195 ug/L	4.8195 ppb	09:29:30
3	Fe 238.204 Radial†	8.6	-0.4	-6.1322 ug/L	-6.1322 ppb	09:29:30
3	K 766.490 Radial†	3016.7	-303.4	-63.866 ug/L	-63.866 ppb	09:29:10
3	Mg 279.077 IEC†	3.1	2.1	93.675 ug/L	93.675 ppb	09:29:30
3	Na 589.592 Radial†	-969.5	24.7	12.740 ug/L	12.740 ppb	09:29:10
3	Sr 421.552†	-28.2	-39.2	-0.4322 ug/L	-0.4322 ppb	09:29:10
3	Sc 361.383	685400.2	685400.2	102.77 %		09:30:27
3	Y 371.029	542512.3	542512.3	102.73 %		09:30:27
3	Ag 328.068†	185.9	-21.2	-0.1210 ug/L	-0.1210 ppb	09:30:27
3	As 188.979†	-21.5	4.3	2.2253 ug/L	2.2253 ppb	09:30:47
3	B 249.677†	-395.6	30.2	0.8089 ug/L	0.8089 ppb	09:30:47
3	Ba 233.527†	14.9	1.2	0.0159 ug/L	0.0159 ppb	09:30:47
3	Be 313.107†	-4351.3	-55.5	-0.0231 ug/L	-0.0231 ppb	09:30:27
3	Cd 226.502†	-198.5	6.1	0.0964 ug/L	0.0964 ppb	09:30:47
3	Co 228.616†	-47.4	3.8	0.1041 ug/L	0.1041 ppb	09:30:47
3	Cr 267.716†	83.8	-13.7	-0.2100 ug/L	-0.2100 ppb	09:30:47
3	Cu 324.752†	5408.5	-91.7	-0.3275 ug/L	-0.3275 ppb	09:30:27
3	Mn 257.610†	456.4	-10.3	-0.0186 ug/L	-0.0186 ppb	09:30:47
3	Mo 202.031†	27.9	22.4	2.1851 ug/L	2.1851 ppb	09:30:47
3	Ni 231.604†	102.7	15.2	0.5113 ug/L	0.5113 ppb	09:30:47
3	P 214.914†	196.1	-10.8	-7.2930 ug/L	-7.2930 ppb	09:30:47
3	Pb 220.353†	-97.7	-29.3	-4.7741 ug/L	-4.7741 ppb	09:30:47
3	S 181.975 Axial†	39.8	-0.6	-1.0240 ug/L	-1.0240 ppb	09:30:47
3	Sb 206.836†	29.6	3.6	1.5152 ug/L	1.5152 ppb	09:30:47
3	Se 196.026†	-33.6	-6.1	-4.7708 ug/L	-4.7708 ppb	09:30:47
3	Si 251.611†	541.7	-9.3	-0.3835 ug/L	-0.3835 ppb	09:30:47
3	Sn 189.927†	6.9	-3.0	-0.7151 ug/L	-0.7151 ppb	09:30:47
3	Ti 334.940†	-1404.0	39.6	0.0665 ug/L	0.0665 ppb	09:30:27
3	Tl 190.801†	-26.8	5.4	2.1505 ug/L	2.1505 ppb	09:30:47
3	U 409.014†	-2382.1	87.8	3.5066 ug/L	3.5066 ppb	09:30:27
3	V 292.402†	-1623.9	168.3	1.5914 ug/L	1.5914 ppb	09:30:27
3	Zn 213.857†	718.8	9.0	0.1065 ug/L	0.1065 ppb	09:30:47
3	SiO2†	552.7	-12.4	-1.0685 ug/L	-1.0685 ppb	09:31:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	686668.7	102.96 %	0.220			0.21%
Sc Radial	3937.3	110 %	1.4			1.28%
Y 371.029	543349.4	102.89 %	0.196			0.19%
Y RADIAL	4416.9	108.6 %	2.24			2.06%
Ag 328.068†	0.4	0.0029 ug/L	0.10904	0.0029 ppb	0.10904	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	20.8	23.778 ug/L	15.4668	23.778 ppb	15.4668	65.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.7	0.3476 ug/L	1.77616	0.3476 ppb	1.77616	510.94%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	58.5	1.5677 ug/L	0.75926	1.5677 ppb	0.75926	48.43%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-5.8	-0.0566 ug/L	0.06274	-0.0566 ppb	0.06274	110.93%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-33.4	-0.0140 ug/L	0.00809	-0.0140 ppb	0.00809	57.94%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.7	3.4837 ug/L	4.03822	3.4837 ppb	4.03822	115.92%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	8.2 0.1283 ug/L	0.03542 0.1283 ppb	0.03542 27.61%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	0.1 0.0050 ug/L	0.10972 0.0050 ppb	0.10972 >999.9%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-16.6 -0.2558 ug/L	0.15267 -0.2558 ppb	0.15267 59.68%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-2.0 -0.0085 ug/L	0.28408 -0.0085 ppb	0.28408 >999.9%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.6 -8.1294 ug/L	8.61736 -8.1294 ppb	8.61736 106.00%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-141.3 -29.752 ug/L	33.7691 -29.752 ppb	33.7691 113.50%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.4 18.719 ug/L	65.7236 18.719 ppb	65.7236 351.11%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-15.6 -0.0230 ug/L	0.00541 -0.0230 ppb	0.00541 23.57%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	12.6 1.2333 ug/L	0.82484 1.2333 ppb	0.82484 66.88%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	22.4 11.573 ug/L	6.9139 11.573 ppb	6.9139 59.74%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	17.8 0.6009 ug/L	0.18431 0.6009 ppb	0.18431 30.67%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-12.2 -8.2720 ug/L	2.66046 -8.2720 ppb	2.66046 32.16%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-10.7 -1.7348 ug/L	2.63515 -1.7348 ppb	2.63515 151.90%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-3.3 -5.2601 ug/L	8.75482 -5.2601 ppb	8.75482 166.44%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	0.5 0.2315 ug/L	2.24772 0.2315 ppb	2.24772 970.88%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.2 2.4915 ug/L	6.79214 2.4915 ppb	6.79214 272.62%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	-4.2 -0.1741 ug/L	0.41081 -0.1741 ppb	0.41081 235.91%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-1.4 -0.3362 ug/L	0.35896 -0.3362 ppb	0.35896 106.77%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-14.3 -0.1579 ug/L	0.27041 -0.1579 ppb	0.27041 171.22%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	6.2 0.0101 ug/L	0.09302 0.0101 ppb	0.09302 923.80%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	7.3 2.8907 ug/L	2.12532 2.8907 ppb	2.12532 73.52%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	41.2 1.6449 ug/L	2.83388 1.6449 ppb	2.83388 172.29%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	117.1 1.1012 ug/L	0.43962 1.1012 ppb	0.43962 39.92%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	4.4 0.0507 ug/L	0.05304 0.0507 ppb	0.05304 104.70%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	-24.7 -2.0404 ug/L	1.85527 -2.0404 ppb	1.85527 90.93%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/31/2010 09:32:05

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\033010.sif

Batch ID:

Results Data Set: 033110

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

Sequence No.: 1

Autosampler Location: 112

Sample ID: 1202060824|960813|1

Date Collected: 3/31/2010 09:32:08

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: 1202060824|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4141.1	4141.1	115 %		09:34:01
1	Y RADIAL	4542.3	4542.3	111.7 %		09:34:01
1	Al 396.153Radial†	-76.1	44.1	50.520 ug/L	50.520 ppb	09:34:21
1	Ca 317.933Radial†	22.6	3.9	7.9865 ug/L	7.9865 ppb	09:34:21
1	Fe 238.204 Radial†	9.5	0.0	0.1723 ug/L	0.1723 ppb	09:34:21
1	K 766.490 Radial†	3082.0	-348.1	-73.304 ug/L	-73.304 ppb	09:34:01
1	Mg 279.077 IEC†	3.9	2.7	120.10 ug/L	120.10 ppb	09:34:21
1	Na 589.592 Radial†	-853.3	158.0	81.470 ug/L	81.470 ppb	09:34:01
1	Sr 421.552†	6.2	-8.4	-0.0924 ug/L	-0.0924 ppb	09:34:01
1	Sc 361.383	698476.1	698476.1	104.74 %		09:35:18
1	Y 371.029	554242.3	554242.3	104.95 %		09:35:18
1	Ag 328.068†	205.5	-5.9	-0.0326 ug/L	-0.0326 ppb	09:35:18
1	As 188.979†	-17.6	8.4	4.3750 ug/L	4.3750 ppb	09:35:38
1	B 249.677†	-382.1	50.2	1.3449 ug/L	1.3449 ppb	09:35:38
1	Ba 233.527†	37.3	22.4	0.2289 ug/L	0.2289 ppb	09:35:38
1	Be 313.107†	-4202.3	166.0	0.0708 ug/L	0.0708 ppb	09:35:18
1	Cd 226.502†	-176.5	30.7	0.4749 ug/L	0.4749 ppb	09:35:38
1	Co 228.616†	-40.5	11.2	0.2929 ug/L	0.2929 ppb	09:35:38
1	Cr 267.716†	112.4	12.1	0.1864 ug/L	0.1864 ppb	09:35:38
1	Cu 324.752†	5662.4	52.2	0.1829 ug/L	0.1829 ppb	09:35:18
1	Mn 257.610†	996.3	496.8	0.6787 ug/L	0.6787 ppb	09:35:38
1	Mo 202.031†	14.3	8.9	0.8738 ug/L	0.8738 ppb	09:35:38
1	Ni 231.604†	108.1	18.5	0.6224 ug/L	0.6224 ppb	09:35:38
1	P 214.914†	192.6	-17.8	-12.088 ug/L	-12.088 ppb	09:35:38
1	Pb 220.353†	-85.0	-15.4	-2.5002 ug/L	-2.5002 ppb	09:35:38
1	S 181.975 Axial†	33.4	-7.5	-11.930 ug/L	-11.930 ppb	09:35:38
1	Sb 206.836†	37.3	10.3	4.3426 ug/L	4.3426 ppb	09:35:38
1	Se 196.026†	-25.2	2.5	1.9962 ug/L	1.9962 ppb	09:35:38
1	Si 251.611†	1361.3	763.4	29.196 ug/L	29.196 ppb	09:35:38
1	Sn 189.927†	19.8	9.1	2.1591 ug/L	2.1591 ppb	09:35:38
1	Ti 334.940†	-1160.0	298.1	0.5542 ug/L	0.5542 ppb	09:35:18
1	Tl 190.801†	-23.9	8.7	3.4543 ug/L	3.4543 ppb	09:35:38
1	U 409.014†	-2418.3	96.6	3.8559 ug/L	3.8559 ppb	09:35:18
1	V 292.402†	-1703.0	122.3	1.1486 ug/L	1.1486 ppb	09:35:18
1	Zn 213.857†	790.7	64.6	0.7755 ug/L	0.7755 ppb	09:35:38
1	SiO2†	1374.9	762.5	61.997 ug/L	61.997 ppb	09:36:34
2	Sc Radial	4075.0	4075.0	114 %		09:34:26
2	Y RADIAL	4471.4	4471.4	110.0 %		09:34:26
2	Al 396.153Radial†	-84.5	35.6	40.742 ug/L	40.742 ppb	09:34:46
2	Ca 317.933Radial†	28.2	9.1	18.574 ug/L	18.574 ppb	09:34:46
2	Fe 238.204 Radial†	10.6	1.1	15.835 ug/L	15.835 ppb	09:34:46
2	K 766.490 Radial†	3031.8	-349.0	-73.483 ug/L	-73.483 ppb	09:34:26
2	Mg 279.077 IEC†	0.9	0.2	8.1333 ug/L	8.1333 ppb	09:34:46
2	Na 589.592 Radial†	-868.1	132.9	68.529 ug/L	68.529 ppb	09:34:26
2	Sr 421.552†	48.7	29.1	0.3206 ug/L	0.3206 ppb	09:34:26
2	Sc 361.383	684150.2	684150.2	102.59 %		09:35:43
2	Y 371.029	542387.5	542387.5	102.71 %		09:35:43

2	Ag 328.068†	136.2	-69.3	-0.3930 ug/L	-0.3930 ppb	09:35:43
2	As 188.979†	-29.5	-3.5	-1.8035 ug/L	-1.8035 ppb	09:36:03
2	B 249.677†	-405.1	20.2	0.5385 ug/L	0.5385 ppb	09:36:03
2	Ba 233.527†	20.3	6.6	0.0684 ug/L	0.0684 ppb	09:36:03
2	Be 313.107†	-4256.6	29.0	0.0133 ug/L	0.0133 ppb	09:35:43
2	Cd 226.502†	-188.8	15.2	0.2339 ug/L	0.2339 ppb	09:36:03
2	Co 228.616†	-47.2	3.9	0.1050 ug/L	0.1050 ppb	09:36:03
2	Cr 267.716†	138.7	40.0	0.6171 ug/L	0.6171 ppb	09:36:03
2	Cu 324.752†	5715.0	216.6	0.7690 ug/L	0.7690 ppb	09:35:43
2	Mn 257.610†	1001.8	522.1	0.7196 ug/L	0.7196 ppb	09:36:03
2	Mo 202.031†	28.4	23.0	2.2456 ug/L	2.2456 ppb	09:36:03
2	Ni 231.604†	118.1	30.4	1.0233 ug/L	1.0233 ppb	09:36:03
2	P 214.914†	185.9	-20.4	-14.013 ug/L	-14.013 ppb	09:36:03
2	Pb 220.353†	-73.1	-5.5	-0.8840 ug/L	-0.8840 ppb	09:36:03
2	S 181.975 Axial†	36.8	-3.4	-5.4788 ug/L	-5.4788 ppb	09:36:03
2	Sb 206.836†	37.3	11.1	4.6436 ug/L	4.6436 ppb	09:36:03
2	Se 196.026†	-28.9	-1.6	-1.1486 ug/L	-1.1486 ppb	09:36:03
2	Si 251.611†	1314.4	744.9	28.472 ug/L	28.472 ppb	09:36:03
2	Sn 189.927†	12.3	2.3	0.5376 ug/L	0.5376 ppb	09:36:03
2	Ti 334.940†	-1159.6	275.3	0.5232 ug/L	0.5232 ppb	09:35:43
2	Tl 190.801†	-21.9	10.1	4.0295 ug/L	4.0295 ppb	09:36:03
2	U 409.014†	-2474.1	-6.2	-0.2495 ug/L	-0.2495 ppb	09:35:43
2	V 292.402†	-1730.7	61.4	0.5936 ug/L	0.5936 ppb	09:35:43
2	Zn 213.857†	788.1	77.9	0.9298 ug/L	0.9298 ppb	09:36:03
2	SiO2†	1353.0	768.6	62.455 ug/L	62.455 ppb	09:36:39
3	Sc Radial	4079.7	4079.7	114 %		09:34:51
3	Y RADIAL	4490.9	4490.9	110.4 %		09:34:51
3	Al 396.153Radial†	-83.7	36.3	41.597 ug/L	41.597 ppb	09:35:11
3	Ca 317.933Radial†	23.8	5.2	10.700 ug/L	10.700 ppb	09:35:11
3	Fe 238.204 Radial†	12.9	3.2	44.638 ug/L	44.638 ppb	09:35:11
3	K 766.490 Radial†	3062.5	-325.1	-68.440 ug/L	-68.440 ppb	09:34:51
3	Mg 279.077 IEC†	1.3	0.5	20.589 ug/L	20.589 ppb	09:35:11
3	Na 589.592 Radial†	-938.3	72.1	37.166 ug/L	37.166 ppb	09:34:51
3	Sr 421.552†	33.2	15.5	0.1703 ug/L	0.1703 ppb	09:34:51
3	Sc 361.383	700182.1	700182.1	104.99 %		09:36:09
3	Y 371.029	555123.3	555123.3	105.12 %		09:36:09
3	Ag 328.068†	87.9	-118.4	-0.6682 ug/L	-0.6682 ppb	09:36:09
3	As 188.979†	-18.2	7.9	4.1325 ug/L	4.1325 ppb	09:36:29
3	B 249.677†	-399.0	35.0	0.9307 ug/L	0.9307 ppb	09:36:29
3	Ba 233.527†	33.0	18.3	0.1892 ug/L	0.1892 ppb	09:36:29
3	Be 313.107†	-4277.2	104.5	0.0446 ug/L	0.0446 ppb	09:36:09
3	Cd 226.502†	-214.4	-5.0	-0.0801 ug/L	-0.0801 ppb	09:36:29
3	Co 228.616†	-41.3	10.6	0.2770 ug/L	0.2770 ppb	09:36:29
3	Cr 267.716†	117.0	16.2	0.2536 ug/L	0.2536 ppb	09:36:29
3	Cu 324.752†	5719.1	93.0	0.3292 ug/L	0.3292 ppb	09:36:09
3	Mn 257.610†	981.0	480.0	0.6640 ug/L	0.6640 ppb	09:36:29
3	Mo 202.031†	23.7	17.8	1.7442 ug/L	1.7442 ppb	09:36:29
3	Ni 231.604†	111.0	21.0	0.7073 ug/L	0.7073 ppb	09:36:29
3	P 214.914†	197.5	-13.6	-9.2980 ug/L	-9.2980 ppb	09:36:29
3	Pb 220.353†	-62.9	5.9	0.9704 ug/L	0.9704 ppb	09:36:29
3	S 181.975 Axial†	36.1	-5.0	-7.9051 ug/L	-7.9051 ppb	09:36:29
3	Sb 206.836†	31.0	4.3	1.8357 ug/L	1.8357 ppb	09:36:29
3	Se 196.026†	-23.4	4.3	3.4888 ug/L	3.4888 ppb	09:36:29
3	Si 251.611†	1321.3	722.1	27.605 ug/L	27.605 ppb	09:36:29
3	Sn 189.927†	20.5	9.8	2.3126 ug/L	2.3126 ppb	09:36:29
3	Ti 334.940†	-1269.0	197.0	0.3707 ug/L	0.3707 ppb	09:36:09
3	Tl 190.801†	-26.3	6.5	2.5671 ug/L	2.5671 ppb	09:36:29
3	U 409.014†	-2392.7	126.6	5.0511 ug/L	5.0511 ppb	09:36:09
3	V 292.402†	-1672.4	155.5	1.4602 ug/L	1.4602 ppb	09:36:09
3	Zn 213.857†	796.5	68.3	0.8125 ug/L	0.8125 ppb	09:36:29
3	SiO2†	1405.4	788.4	64.079 ug/L	64.079 ppb	09:36:44

Mean Data: 1202060824|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	694269.5	104.10 %	1.320			1.27%
Sc Radial	4098.6	114 %	1.0			0.90%
Y 371.029	550584.4	104.26 %	1.347			1.29%
Y RADIAL	4501.6	110.7 %	0.90			0.81%
Ag 328.068†	-64.5	-0.3646 ug/L	0.31878	-0.3646 ppb	0.31878	87.44%

Al 396.153Radial†	38.7	44.287 ug/L	5.4154	44.287 ppb	5.4154	12.23%
As 188.979†	4.3	2.2347 ug/L	3.49923	2.2347 ppb	3.49923	156.59%
B 249.677†	35.2	0.9380 ug/L	0.40325	0.9380 ppb	0.40325	42.99%
Ba 233.527†	15.7	0.1622 ug/L	0.08360	0.1622 ppb	0.08360	51.55%
Be 313.107†	99.8	0.0429 ug/L	0.02876	0.0429 ppb	0.02876	67.03%
Ca 317.933Radial†	6.1	12.420 ug/L	5.4993	12.420 ppb	5.4993	44.28%
Cd 226.502†	13.6	0.2096 ug/L	0.27833	0.2096 ppb	0.27833	132.81%
Co 228.616†	8.6	0.2250 ug/L	0.10423	0.2250 ppb	0.10423	46.33%
Cr 267.716†	22.8	0.3524 ug/L	0.23174	0.3524 ppb	0.23174	65.77%
Cu 324.752†	120.6	0.4270 ug/L	0.30504	0.4270 ppb	0.30504	71.44%
Fe 238.204 Radial†	1.4	20.215 ug/L	22.5541	20.215 ppb	22.5541	111.57%
K 766.490 Radial†	-340.8	-71.743 ug/L	2.8613	-71.743 ppb	2.8613	3.99%
Mg 279.077 IEC†	1.1	49.608 ug/L	61.3653	49.608 ppb	61.3653	123.70%
Mn 257.610†	499.6	0.6874 ug/L	0.02881	0.6874 ppb	0.02881	4.19%
Mo 202.031†	16.6	1.6212 ug/L	0.69415	1.6212 ppb	0.69415	42.82%
Na 589.592 Radial†	121.0	62.388 ug/L	22.7810	62.388 ppb	22.7810	36.51%
Ni 231.604†	23.3	0.7843 ug/L	0.21124	0.7843 ppb	0.21124	26.93%
P 214.914†	-17.3	-11.799 ug/L	2.3705	-11.799 ppb	2.3705	20.09%
Pb 220.353†	-5.0	-0.8046 ug/L	1.73665	-0.8046 ppb	1.73665	215.84%
S 181.975 Axial†	-5.3	-8.4379 ug/L	3.25839	-8.4379 ppb	3.25839	38.62%
Sb 206.836†	8.6	3.6073 ug/L	1.54160	3.6073 ppb	1.54160	42.74%
Se 196.026†	1.8	1.4455 ug/L	2.36723	1.4455 ppb	2.36723	163.77%
Si 251.611†	743.4	28.425 ug/L	0.7967	28.425 ppb	0.7967	2.80%
Sn 189.927†	7.1	1.6698 ug/L	0.98347	1.6698 ppb	0.98347	58.90%
Sr 421.552†	12.1	0.1329 ug/L	0.20905	0.1329 ppb	0.20905	157.35%
Ti 334.940†	256.8	0.4827 ug/L	0.09825	0.4827 ppb	0.09825	20.35%
Tl 190.801†	8.4	3.3503 ug/L	0.73675	3.3503 ppb	0.73675	21.99%
U 409.014†	72.3	2.8859 ug/L	2.78024	2.8859 ppb	2.78024	96.34%
V 292.402†	113.1	1.0675 ug/L	0.43893	1.0675 ppb	0.43893	41.12%
Zn 213.857†	70.3	0.8392 ug/L	0.08056	0.8392 ppb	0.08056	9.60%
SiO2†	773.2	62.843 ug/L	1.0939	62.843 ppb	1.0939	1.74%

Sequence No.: 2

Sample ID: 1202060825|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 113

Date Collected: 3/31/2010 09:38:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202060825|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4159.1	4159.1	116 %		09:41:10
1	Y RADIAL	5002.8	5002.8	123.0 %		09:41:10
1	Al 396.153Radial†	92761.5	80147.1	91942 ug/L	91942 ppb	09:40:50
1	Ca 317.933Radial†	56013.2	48314.0	98754 ug/L	98754 ppb	09:40:50
1	Fe 238.204 Radial†	14935.5	12878.6	182080 ug/L	182080 ppb	09:40:50
1	K 766.490 Radial†	226089.8	192057.5	40379 ug/L	40379 ppb	09:40:50
1	Mg 279.077 IEC†	962.4	829.8	36446 ug/L	36446 ppb	09:41:10
1	Na 589.592 Radial†	23359.7	21052.8	10855 ug/L	10855 ppb	09:40:50
1	Sr 421.552†	249141.9	214952.6	2369.1 ug/L	2369.1 ppb	09:40:50
1	Sc 361.383	700062.9	700062.9	104.97 %		09:42:14
1	Y 371.029	608244.6	608244.6	115.18 %		09:42:14
1	Ag 328.068†	47606.2	45148.7	321.04 ug/L	321.04 ppb	09:42:14
1	As 188.979†	2059.7	1987.4	1124.1 ug/L	1124.1 ppb	09:42:34
1	B 249.677†	59658.4	57247.0	1501.2 ug/L	1501.2 ppb	09:42:14
1	Ba 233.527†	204679.4	194969.1	1980.7 ug/L	1980.7 ppb	09:42:14
1	Be 313.107†	1970884.2	1881687.8	801.54 ug/L	801.54 ppb	09:42:08
1	Cd 226.502†	41343.8	39584.3	593.02 ug/L	593.02 ppb	09:42:34
1	Co 228.616†	38073.6	36319.7	928.84 ug/L	928.84 ppb	09:42:34
1	Cr 267.716†	167869.6	159821.2	2477.7 ug/L	2477.7 ppb	09:42:14
1	Cu 324.752†	564945.4	532825.7	1898.9 ug/L	1898.9 ppb	09:42:14
1	Mn 257.610†	4221705.1	4021238.7	5549.7 ug/L	5549.7 ppb	09:42:08
1	Mo 202.031†	5342.9	5085.1	512.48 ug/L	512.48 ppb	09:42:34
1	Ni 231.604†	43212.7	41080.7	1383.7 ug/L	1383.7 ppb	09:42:14
1	P 214.914†	12899.5	12086.6	7714.1 ug/L	7714.1 ppb	09:42:34
1	Pb 220.353†	5797.0	5588.1	918.68 ug/L	918.68 ppb	09:42:34
1	S 181.975 Axial†	2635.4	2471.2	3903.3 ug/L	3903.3 ppb	09:42:34
1	Sb 206.836†	2934.1	2769.8	1155.0 ug/L	1155.0 ppb	09:42:34
1	Se 196.026†	3245.0	3117.9	2940.0 ug/L	2940.0 ppb	09:42:34
1	Si 251.611†	1231726.8	1172834.8	44867 ug/L	44867 ppb	09:42:08
1	Sn 189.927†	4480.2	4258.1	1025.3 ug/L	1025.3 ppb	09:42:34
1	Ti 334.940†	3254525.5	3101741.4	5884.9 ug/L	5884.9 ppb	09:42:08
1	Tl 190.801†	2996.3	2885.8	1213.6 ug/L	1213.6 ppb	09:42:34
1	U 409.014†	-7055.8	-4316.0	-198.59 ug/L	-198.59 ppb	09:42:14
1	V 292.402†	145138.0	140010.2	1263.8 ug/L	1263.8 ppb	09:42:14
1	Zn 213.857†	512989.2	487994.9	5850.8 ug/L	5850.8 ppb	09:42:14
1	SiO2†	1219720.9	1161383.9	94450 ug/L	94450 ppb	09:43:44
2	Sc Radial	4187.7	4187.7	117 %		09:41:35
2	Y RADIAL	5059.7	5059.7	124.4 %		09:41:35
2	Al 396.153Radial†	89275.8	76614.4	87888 ug/L	87888 ppb	09:41:15
2	Ca 317.933Radial†	54100.1	46345.1	94730 ug/L	94730 ppb	09:41:15
2	Fe 238.204 Radial†	14369.5	12305.7	173980 ug/L	173980 ppb	09:41:15
2	K 766.490 Radial†	217948.5	183750.9	38633 ug/L	38633 ppb	09:41:15
2	Mg 279.077 IEC†	958.9	821.1	36073 ug/L	36073 ppb	09:41:35
2	Na 589.592 Radial†	22166.4	19892.8	10257 ug/L	10257 ppb	09:41:15
2	Sr 421.552†	238439.3	204315.6	2251.9 ug/L	2251.9 ppb	09:41:15
2	Sc 361.383	700110.0	700110.0	104.98 %		09:42:46
2	Y 371.029	607056.1	607056.1	114.95 %		09:42:46
2	Ag 328.068†	47668.6	45205.1	318.92 ug/L	318.92 ppb	09:42:46
2	As 188.979†	2016.2	1945.8	1101.6 ug/L	1101.6 ppb	09:43:06
2	B 249.677†	59786.5	57365.3	1505.8 ug/L	1505.8 ppb	09:42:46
2	Ba 233.527†	205306.7	195553.5	1986.4 ug/L	1986.4 ppb	09:42:46
2	Be 313.107†	2008381.6	1917280.1	816.71 ug/L	816.71 ppb	09:42:41
2	Cd 226.502†	40690.7	38959.6	584.22 ug/L	584.22 ppb	09:43:06
2	Co 228.616†	37503.5	35774.2	914.55 ug/L	914.55 ppb	09:43:06
2	Cr 267.716†	168372.8	160289.8	2484.1 ug/L	2484.1 ppb	09:42:46
2	Cu 324.752†	567520.4	535242.4	1907.1 ug/L	1907.1 ppb	09:42:46
2	Mn 257.610†	4308636.1	4103775.2	5662.5 ug/L	5662.5 ppb	09:42:41
2	Mo 202.031†	5306.7	5050.2	508.40 ug/L	508.40 ppb	09:43:06
2	Ni 231.604†	43305.9	41166.7	1386.6 ug/L	1386.6 ppb	09:42:46

2	P 214.914†	12656.3	11854.2	7560.0 ug/L	7560.0 ppb	09:43:06
2	Pb 220.353†	5696.8	5492.3	902.76 ug/L	902.76 ppb	09:43:06
2	S 181.975 Axial†	2612.4	2449.1	3869.1 ug/L	3869.1 ppb	09:43:06
2	Sb 206.836†	2890.4	2728.0	1137.2 ug/L	1137.2 ppb	09:43:06
2	Se 196.026†	3160.7	3037.3	2854.6 ug/L	2854.6 ppb	09:43:06
2	Si 251.611†	1261052.3	1200690.2	45933 ug/L	45933 ppb	09:42:41
2	Sn 189.927†	4425.4	4205.7	1012.1 ug/L	1012.1 ppb	09:43:06
2	Ti 334.940†	3318710.4	3162672.9	5999.9 ug/L	5999.9 ppb	09:42:41
2	Tl 190.801†	2948.8	2840.4	1197.1 ug/L	1197.1 ppb	09:43:06
2	U 409.014†	-6872.9	-4141.3	-190.71 ug/L	-190.71 ppb	09:42:46
2	V 292.402†	145443.6	140292.0	1267.4 ug/L	1267.4 ppb	09:42:46
2	Zn 213.857†	514751.9	489641.1	5871.8 ug/L	5871.8 ppb	09:42:46
2	SiO2†	1210250.5	1152284.7	93710 ug/L	93710 ppb	09:43:50
3	Sc Radial	4282.4	4282.4	119 %		09:42:00
3	Y RADIAL	5179.7	5179.7	127.4 %		09:42:00
3	Al 396.153Radial†	94693.1	79462.2	91156 ug/L	91156 ppb	09:41:40
3	Ca 317.933Radial†	57055.2	47796.1	97696 ug/L	97696 ppb	09:41:40
3	Fe 238.204 Radial†	15197.5	12727.2	179940 ug/L	179940 ppb	09:41:40
3	K 766.490 Radial†	230523.2	190158.0	39980 ug/L	39980 ppb	09:41:40
3	Mg 279.077 IEC†	999.3	836.8	36760 ug/L	36760 ppb	09:42:00
3	Na 589.592 Radial†	23418.2	20521.8	10581 ug/L	10581 ppb	09:41:40
3	Sr 421.552†	253631.5	212527.7	2342.4 ug/L	2342.4 ppb	09:41:40
3	Sc 361.383	696845.4	696845.4	104.49 %		09:43:18
3	Y 371.029	605355.1	605355.1	114.63 %		09:43:18
3	Ag 328.068†	47371.2	45133.2	320.30 ug/L	320.30 ppb	09:43:18
3	As 188.979†	2039.8	1977.4	1119.2 ug/L	1119.2 ppb	09:43:38
3	B 249.677†	59405.1	57267.1	1502.1 ug/L	1502.1 ppb	09:43:18
3	Ba 233.527†	203717.2	194948.5	1980.4 ug/L	1980.4 ppb	09:43:18
3	Be 313.107†	1990072.0	1908719.8	813.07 ug/L	813.07 ppb	09:43:13
3	Cd 226.502†	40760.6	39208.0	587.43 ug/L	587.43 ppb	09:43:38
3	Co 228.616†	37597.7	36031.7	921.19 ug/L	921.19 ppb	09:43:38
3	Cr 267.716†	167038.1	159763.8	2476.6 ug/L	2476.6 ppb	09:43:18
3	Cu 324.752†	562966.8	533417.0	1900.9 ug/L	1900.9 ppb	09:43:18
3	Mn 257.610†	4265497.0	4081717.6	5632.7 ug/L	5632.7 ppb	09:43:13
3	Mo 202.031†	5263.0	5032.1	507.12 ug/L	507.12 ppb	09:43:38
3	Ni 231.604†	42808.4	40883.8	1377.1 ug/L	1377.1 ppb	09:43:18
3	P 214.914†	12673.7	11927.3	7606.9 ug/L	7606.9 ppb	09:43:38
3	Pb 220.353†	5698.9	5519.7	907.51 ug/L	907.51 ppb	09:43:38
3	S 181.975 Axial†	2618.0	2466.2	3895.5 ug/L	3895.5 ppb	09:43:38
3	Sb 206.836†	2883.8	2734.6	1139.9 ug/L	1139.9 ppb	09:43:38
3	Se 196.026†	3180.5	3070.4	2897.1 ug/L	2897.1 ppb	09:43:38
3	Si 251.611†	1244360.1	1190342.9	45537 ug/L	45537 ppb	09:43:13
3	Sn 189.927†	4420.7	4221.0	1016.3 ug/L	1016.3 ppb	09:43:38
3	Ti 334.940†	3289369.9	3149403.2	5975.1 ug/L	5975.1 ppb	09:43:13
3	Tl 190.801†	2988.0	2891.0	1216.9 ug/L	1216.9 ppb	09:43:38
3	U 409.014†	-6886.1	-4184.6	-193.10 ug/L	-193.10 ppb	09:43:18
3	V 292.402†	144486.0	140024.6	1264.1 ug/L	1264.1 ppb	09:43:18
3	Zn 213.857†	509696.1	487099.7	5840.3 ug/L	5840.3 ppb	09:43:18
3	SiO2†	1221296.9	1168257.1	95009 ug/L	95009 ppb	09:43:56

Mean Data: 1202060825|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	699006.1	104.81 %		0.281			0.27%
Sc Radial	4209.7	117 %		1.8			1.53%
Y 371.029	606885.3	114.92 %		0.275			0.24%
Y RADIAL	5080.7	124.9 %		2.22			1.78%
Ag 328.068†	45162.3	320.08 ug/L		1.075	320.08 ppb	1.075	0.34%
Al 396.153Radial†	78741.2	90329 ug/L		2149.7	90329 ppb	2149.7	2.38%
As 188.979†	1970.2	1115.0 ug/L		11.82	1115.0 ppb	11.82	1.06%
B 249.677†	57293.1	1503.1 ug/L		2.39	1503.1 ppb	2.39	0.16%
Ba 233.527†	195157.1	1982.5 ug/L		3.36	1982.5 ppb	3.36	0.17%
Be 313.107†	1902562.6	810.44 ug/L		7.920	810.44 ppb	7.920	0.98%
Ca 317.933Radial†	47485.1	97060 ug/L		2086.1	97060 ppb	2086.1	2.15%
Cd 226.502†	39250.6	588.22 ug/L		4.455	588.22 ppb	4.455	0.76%
Co 228.616†	36041.9	921.53 ug/L		7.152	921.53 ppb	7.152	0.78%
Cr 267.716†	159958.3	2479.5 ug/L		4.02	2479.5 ppb	4.02	0.16%
Cu 324.752†	533828.4	1902.3 ug/L		4.24	1902.3 ppb	4.24	0.22%
Fe 238.204 Radial†	12637.2	178670 ug/L		4197.1	178670 ppb	4197.1	2.35%
K 766.490 Radial†	188655.4	39664 ug/L		915.2	39664 ppb	915.2	2.31%

Mg 279.077 IEC†	829.2	36427 ug/L	343.7	36427 ppb	343.7	0.94%
Mn 257.610†	4068910.5	5615.0 ug/L	58.45	5615.0 ppb	58.45	1.04%
Mo 202.031†	5055.8	509.33 ug/L	2.798	509.33 ppb	2.798	0.55%
Na 589.592 Radial†	20489.1	10565 ug/L	299.4	10565 ppb	299.4	2.83%
Ni 231.604†	41043.7	1382.5 ug/L	4.89	1382.5 ppb	4.89	0.35%
P 214.914†	11956.0	7627.0 ug/L	78.98	7627.0 ppb	78.98	1.04%
Pb 220.353†	5533.4	909.65 ug/L	8.175	909.65 ppb	8.175	0.90%
S 181.975 Axial†	2462.2	3889.3 ug/L	17.93	3889.3 ppb	17.93	0.46%
Sb 206.836†	2744.2	1144.0 ug/L	9.57	1144.0 ppb	9.57	0.84%
Se 196.026†	3075.2	2897.3 ug/L	42.69	2897.3 ppb	42.69	1.47%
Si 251.611†	1187956.0	45445 ug/L	538.7	45445 ppb	538.7	1.19%
Sn 189.927†	4228.3	1017.9 ug/L	6.72	1017.9 ppb	6.72	0.66%
Sr 421.552†	210598.6	2321.1 ug/L	61.45	2321.1 ppb	61.45	2.65%
Ti 334.940†	3137939.1	5953.3 ug/L	60.47	5953.3 ppb	60.47	1.02%
Tl 190.801†	2872.4	1209.2 ug/L	10.57	1209.2 ppb	10.57	0.87%
U 409.014†	-4214.0	-194.14 ug/L	4.042	-194.14 ppb	4.042	2.08%
V 292.402†	140108.9	1265.1 ug/L	2.00	1265.1 ppb	2.00	0.16%
Zn 213.857†	488245.2	5854.3 ug/L	16.04	5854.3 ppb	16.04	0.27%
SiO2†	1160641.9	94389 ug/L	651.7	94389 ppb	651.7	0.69%

Sequence No.: 3

Sample ID: 248371001|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 3/31/2010 09:46:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371001|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4042.4	4042.4	113 %		09:48:22
1	Y RADIAL	5004.9	5004.9	123.1 %		09:48:02
1	Al 396.153Radial†	39396.1	35084.0	40258 ug/L	40258 ppb	09:48:02
1	Ca 317.933Radial†	28012.9	24852.9	50799 ug/L	50799 ppb	09:48:02
1	Fe 238.204 Radial†	3950.0	3498.4	49455 ug/L	49455 ppb	09:48:02
1	K 766.490 Radial†	65409.9	55048.9	11567 ug/L	11567 ppb	09:48:02
1	Mg 279.077 IEC†	281.3	249.1	10945 ug/L	10945 ppb	09:48:22
1	Na 589.592 Radial†	261.2	1129.3	582.30 ug/L	582.30 ppb	09:48:02
1	Sr 421.552†	33613.2	29826.5	328.46 ug/L	328.46 ppb	09:48:02
1	Sc 361.383	712670.1	712670.1	106.86 %		09:49:19
1	Y 371.029	593448.7	593448.7	112.38 %		09:49:19
1	Ag 328.068†	-2289.8	-2344.8	1.4348 ug/L	1.4348 ppb	09:49:25
1	As 188.979†	-38.7	-11.0	18.703 ug/L	18.703 ppb	09:49:45
1	B 249.677†	2281.7	2550.3	60.220 ug/L	60.220 ppb	09:49:25
1	Ba 233.527†	114367.9	107009.0	1084.2 ug/L	1084.2 ppb	09:49:25
1	Be 313.107†	-4196.4	251.5	3.4654 ug/L	3.4654 ppb	09:49:25
1	Cd 226.502†	214.9	400.4	1.0893 ug/L	1.0893 ppb	09:49:45
1	Co 228.616†	881.7	874.9	19.383 ug/L	19.383 ppb	09:49:45
1	Cr 267.716†	5030.1	4611.8	76.265 ug/L	76.265 ppb	09:49:45
1	Cu 324.752†	23137.4	16297.1	60.447 ug/L	60.447 ppb	09:49:25
1	Mn 257.610†	2505963.7	2344553.9	3230.5 ug/L	3230.5 ppb	09:49:19
1	Mo 202.031†	-8.1	-12.3	3.2419 ug/L	3.2419 ppb	09:49:45
1	Ni 231.604†	1784.4	1585.1	53.398 ug/L	53.398 ppb	09:49:45
1	P 214.914†	4021.4	3561.5	2375.6 ug/L	2375.6 ppb	09:49:45
1	Pb 220.353†	428.7	466.9	82.170 ug/L	82.170 ppb	09:49:45
1	S 181.975 Axial†	1599.1	1457.1	2304.1 ug/L	2304.1 ppb	09:49:45
1	Sb 206.836†	49.2	20.8	1.6910 ug/L	1.6910 ppb	09:49:45
1	Se 196.026†	-231.0	-189.6	-5.1645 ug/L	-5.1645 ppb	09:49:45
1	Si 251.611†	937765.0	876997.0	33554 ug/L	33554 ppb	09:49:19
1	Sn 189.927†	-171.3	-170.0	-30.884 ug/L	-30.884 ppb	09:49:45
1	Ti 334.940†	833446.5	781320.8	1486.0 ug/L	1486.0 ppb	09:49:19
1	Tl 190.801†	-120.0	-80.8	-4.5990 ug/L	-4.5990 ppb	09:49:45
1	U 409.014†	-4767.4	-2055.7	-87.883 ug/L	-87.883 ppb	09:49:25
1	V 292.402†	6889.3	8195.2	66.751 ug/L	66.751 ppb	09:49:25
1	Zn 213.857†	23690.0	21478.1	251.39 ug/L	251.39 ppb	09:49:25
1	SiO2†	936184.6	875504.2	71211 ug/L	71211 ppb	09:50:53
2	Sc Radial	4024.1	4024.1	112 %		09:48:47
2	Y RADIAL	4729.4	4729.4	116.3 %		09:48:27
2	Al 396.153Radial†	37366.0	33432.1	38362 ug/L	38362 ppb	09:48:27
2	Ca 317.933Radial†	26733.0	23824.2	48697 ug/L	48697 ppb	09:48:27
2	Fe 238.204 Radial†	3714.9	3304.7	46716 ug/L	46716 ppb	09:48:27
2	K 766.490 Radial†	61996.0	52267.7	10982 ug/L	10982 ppb	09:48:27
2	Mg 279.077 IEC†	281.6	250.5	11009 ug/L	11009 ppb	09:48:47
2	Na 589.592 Radial†	105.0	991.0	511.00 ug/L	511.00 ppb	09:48:27
2	Sr 421.552†	31662.4	28222.1	310.79 ug/L	310.79 ppb	09:48:27
2	Sc 361.383	705276.2	705276.2	105.76 %		09:49:50
2	Y 371.029	587659.4	587659.4	111.28 %		09:49:50
2	Ag 328.068†	-2229.3	-2310.0	0.8147 ug/L	0.8147 ppb	09:49:56
2	As 188.979†	-31.2	-4.2	21.551 ug/L	21.551 ppb	09:50:16
2	B 249.677†	2268.6	2560.2	60.930 ug/L	60.930 ppb	09:49:56
2	Ba 233.527†	112636.3	106493.6	1078.9 ug/L	1078.9 ppb	09:49:56
2	Be 313.107†	-4154.5	249.8	3.4614 ug/L	3.4614 ppb	09:49:56
2	Cd 226.502†	230.5	417.2	1.6324 ug/L	1.6324 ppb	09:50:16
2	Co 228.616†	881.1	883.1	19.632 ug/L	19.632 ppb	09:50:16
2	Cr 267.716†	5080.8	4709.0	77.469 ug/L	77.469 ppb	09:50:16
2	Cu 324.752†	22748.7	16156.5	59.803 ug/L	59.803 ppb	09:49:56
2	Mn 257.610†	2471453.6	2336505.9	3219.2 ug/L	3219.2 ppb	09:49:50
2	Mo 202.031†	-16.7	-20.5	2.2015 ug/L	2.2015 ppb	09:50:16
2	Ni 231.604†	1792.5	1610.2	54.245 ug/L	54.245 ppb	09:50:16

2	P 214.914†	4029.3	3608.4	2409.2 ug/L	2409.2 ppb	09:50:16
2	Pb 220.353†	416.4	459.5	80.713 ug/L	80.713 ppb	09:50:16
2	S 181.975 Axial†	1594.4	1468.3	2322.2 ug/L	2322.2 ppb	09:50:16
2	Sb 206.836†	51.2	23.1	2.6871 ug/L	2.6871 ppb	09:50:16
2	Se 196.026†	-242.2	-202.4	-22.939 ug/L	-22.939 ppb	09:50:16
2	Si 251.611†	924919.9	874050.6	33441 ug/L	33441 ppb	09:49:50
2	Sn 189.927†	-185.5	-185.2	-34.853 ug/L	-34.853 ppb	09:50:16
2	Ti 334.940†	823997.8	780562.6	1484.2 ug/L	1484.2 ppb	09:49:50
2	Tl 190.801†	-114.8	-77.1	-3.1862 ug/L	-3.1862 ppb	09:50:16
2	U 409.014†	-4707.9	-2046.2	-87.194 ug/L	-87.194 ppb	09:49:56
2	V 292.402†	6755.0	8135.8	66.594 ug/L	66.594 ppb	09:49:56
2	Zn 213.857†	23234.3	21279.6	249.40 ug/L	249.40 ppb	09:49:56
2	SiO2†	939033.7	887382.5	72177 ug/L	72177 ppb	09:50:59
3	Sc Radial	4045.7	4045.7	113 %		09:49:12
3	Y RADIAL	4852.0	4852.0	119.3 %		09:48:52
3	Al 396.153Radial†	38369.6	34144.5	39180 ug/L	39180 ppb	09:48:52
3	Ca 317.933Radial†	27423.3	24309.2	49688 ug/L	49688 ppb	09:48:52
3	Fe 238.204 Radial†	3815.3	3376.0	47724 ug/L	47724 ppb	09:48:52
3	K 766.490 Radial†	63690.7	53475.8	11236 ug/L	11236 ppb	09:48:52
3	Mg 279.077 IEC†	285.7	252.8	11111 ug/L	11111 ppb	09:49:12
3	Na 589.592 Radial†	221.8	1094.2	564.18 ug/L	564.18 ppb	09:48:52
3	Sr 421.552†	32453.3	28772.8	316.85 ug/L	316.85 ppb	09:48:52
3	Sc 361.383	719859.9	719859.9	107.94 %		09:50:22
3	Y 371.029	600087.9	600087.9	113.63 %		09:50:22
3	Ag 328.068†	-2280.9	-2315.1	1.0779 ug/L	1.0779 ppb	09:50:27
3	As 188.979†	-29.5	-2.1	22.895 ug/L	22.895 ppb	09:50:47
3	B 249.677†	2363.2	2604.4	61.951 ug/L	61.951 ppb	09:50:27
3	Ba 233.527†	114501.1	106063.4	1074.6 ug/L	1074.6 ppb	09:50:27
3	Be 313.107†	-4243.3	247.2	3.4561 ug/L	3.4561 ppb	09:50:27
3	Cd 226.502†	225.6	408.3	1.3920 ug/L	1.3920 ppb	09:50:47
3	Co 228.616†	884.6	869.4	19.267 ug/L	19.267 ppb	09:50:47
3	Cr 267.716†	5075.9	4607.2	76.007 ug/L	76.007 ppb	09:50:47
3	Cu 324.752†	23372.0	16298.1	60.354 ug/L	60.354 ppb	09:50:27
3	Mn 257.610†	2515314.0	2329794.7	3210.1 ug/L	3210.1 ppb	09:50:22
3	Mo 202.031†	-8.4	-12.5	3.0720 ug/L	3.0720 ppb	09:50:47
3	Ni 231.604†	1797.8	1580.8	53.254 ug/L	53.254 ppb	09:50:47
3	P 214.914†	4025.8	3528.0	2354.0 ug/L	2354.0 ppb	09:50:47
3	Pb 220.353†	419.8	454.7	80.053 ug/L	80.053 ppb	09:50:47
3	S 181.975 Axial†	1595.9	1439.1	2275.8 ug/L	2275.8 ppb	09:50:47
3	Sb 206.836†	53.0	23.9	2.9592 ug/L	2.9592 ppb	09:50:47
3	Se 196.026†	-225.6	-182.4	-4.4708 ug/L	-4.4708 ppb	09:50:47
3	Si 251.611†	943189.3	873257.5	33411 ug/L	33411 ppb	09:50:22
3	Sn 189.927†	-196.6	-191.9	-36.266 ug/L	-36.266 ppb	09:50:47
3	Ti 334.940†	839986.1	779589.6	1482.5 ug/L	1482.5 ppb	09:50:22
3	Tl 190.801†	-103.2	-64.2	1.8779 ug/L	1.8779 ppb	09:50:47
3	U 409.014†	-4565.0	-1823.5	-78.416 ug/L	-78.416 ppb	09:50:27
3	V 292.402†	6946.1	8183.4	66.919 ug/L	66.919 ppb	09:50:27
3	Zn 213.857†	23711.9	21276.9	249.22 ug/L	249.22 ppb	09:50:27
3	SiO2†	924209.8	855660.6	69597 ug/L	69597 ppb	09:51:05

Mean Data: 248371001|960813|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity	Units			Units			
Sc 361.383	712602.1	106.85 %		1.093				1.02%
Sc Radial	4037.4	113 %		0.3				0.29%
Y 371.029	593732.0	112.43 %		1.178				1.05%
Y RADIAL	4862.1	119.6 %		3.39				2.84%
Ag 328.068†	-2323.3	1.1091 ug/L		0.31120	1.1091 ppb	0.31120		28.06%
Al 396.153Radial†	34220.2	39266 ug/L		950.7	39266 ppb	950.7		2.42%
As 188.979†	-5.8	21.050 ug/L		2.1406	21.050 ppb	2.1406		10.17%
B 249.677†	2571.6	61.034 ug/L		0.8705	61.034 ppb	0.8705		1.43%
Ba 233.527†	106522.0	1079.2 ug/L		4.82	1079.2 ppb	4.82		0.45%
Be 313.107†	249.5	3.4610 ug/L		0.00464	3.4610 ppb	0.00464		0.13%
Ca 317.933Radial†	24328.7	49728 ug/L		1051.9	49728 ppb	1051.9		2.12%
Cd 226.502†	408.6	1.3712 ug/L		0.27217	1.3712 ppb	0.27217		19.85%
Co 228.616†	875.8	19.427 ug/L		0.1863	19.427 ppb	0.1863		0.96%
Cr 267.716†	4642.7	76.580 ug/L		0.7801	76.580 ppb	0.7801		1.02%
Cu 324.752†	16250.5	60.201 ug/L		0.3479	60.201 ppb	0.3479		0.58%
Fe 238.204 Radial†	3393.1	47965 ug/L		1385.3	47965 ppb	1385.3		2.89%
K 766.490 Radial†	53597.5	11262 ug/L		293.1	11262 ppb	293.1		2.60%

Mg 279.077 IEC†	250.8	11022 ug/L	84.1	11022 ppb	84.1	0.76%
Mn 257.610†	2336951.5	3219.9 ug/L	10.26	3219.9 ppb	10.26	0.32%
Mo 202.031†	-15.1	2.8384 ug/L	0.55815	2.8384 ppb	0.55815	19.66%
Na 589.592 Radial†	1071.5	552.50 ug/L	37.059	552.50 ppb	37.059	6.71%
Ni 231.604†	1592.0	53.632 ug/L	0.5352	53.632 ppb	0.5352	1.00%
P 214.914†	3565.9	2379.6 ug/L	27.86	2379.6 ppb	27.86	1.17%
Pb 220.353†	460.4	80.979 ug/L	1.0835	80.979 ppb	1.0835	1.34%
S 181.975 Axial†	1454.8	2300.7 ug/L	23.39	2300.7 ppb	23.39	1.02%
Sb 206.836†	22.6	2.4458 ug/L	0.66765	2.4458 ppb	0.66765	27.30%
Se 196.026†	-191.5	-10.858 ug/L	10.4684	-10.858 ppb	10.4684	96.41%
Si 251.611†	874768.3	33469 ug/L	75.4	33469 ppb	75.4	0.23%
Sn 189.927†	-182.4	-34.001 ug/L	2.7900	-34.001 ppb	2.7900	8.21%
Sr 421.552†	28940.5	318.70 ug/L	8.980	318.70 ppb	8.980	2.82%
Ti 334.940†	780491.0	1484.2 ug/L	1.72	1484.2 ppb	1.72	0.12%
Tl 190.801†	-74.0	-1.9691 ug/L	3.40568	-1.9691 ppb	3.40568	172.96%
U 409.014†	-1975.1	-84.498 ug/L	5.2781	-84.498 ppb	5.2781	6.25%
V 292.402†	8171.5	66.755 ug/L	0.1621	66.755 ppb	0.1621	0.24%
Zn 213.857†	21344.8	250.00 ug/L	1.204	250.00 ppb	1.204	0.48%
SiO2†	872849.1	70995 ug/L	1303.6	70995 ppb	1303.6	1.84%

Sequence No.: 4

Sample ID: 1202060826|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 115

Date Collected: 3/31/2010 09:53:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202060826|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4159.3	4159.3	116 %		09:55:31
1	Y RADIAL	4824.1	4824.1	118.6 %		09:55:31
1	Al 396.153Radial†	38096.8	32979.6	37843 ug/L	37843 ppb	09:55:11
1	Ca 317.933Radial†	24331.1	20977.0	42877 ug/L	42877 ppb	09:55:11
1	Fe 238.204 Radial†	3981.3	3426.8	48442 ug/L	48442 ppb	09:55:31
1	K 766.490 Radial†	59226.1	48080.9	10103 ug/L	10103 ppb	09:55:11
1	Mg 279.077 IEC†	275.4	237.0	10411 ug/L	10411 ppb	09:55:31
1	Na 589.592 Radial†	118.1	999.4	515.30 ug/L	515.30 ppb	09:55:11
1	Sr 421.552†	29331.3	25293.1	278.54 ug/L	278.54 ppb	09:55:11
1	Sc 361.383	708000.1	708000.1	106.16 %		09:56:28
1	Y 371.029	586842.0	586842.0	111.13 %		09:56:28
1	Ag 328.068†	-2215.0	-2288.5	1.5712 ug/L	1.5712 ppb	09:56:33
1	As 188.979†	-28.7	-1.8	24.503 ug/L	24.503 ppb	09:56:54
1	B 249.677†	1816.6	2126.2	49.029 ug/L	49.029 ppb	09:56:33
1	Ba 233.527†	98165.0	92452.7	936.91 ug/L	936.91 ppb	09:56:33
1	Be 313.107†	-5568.2	-1066.6	3.2461 ug/L	3.2461 ppb	09:56:33
1	Cd 226.502†	213.3	400.2	1.1974 ug/L	1.1974 ppb	09:56:54
1	Co 228.616†	826.5	828.4	17.802 ug/L	17.802 ppb	09:56:54
1	Cr 267.716†	6276.2	5816.6	94.682 ug/L	94.682 ppb	09:56:54
1	Cu 324.752†	21202.6	14617.4	54.434 ug/L	54.434 ppb	09:56:33
1	Mn 257.610†	2235736.8	2105483.1	2901.5 ug/L	2901.5 ppb	09:56:28
1	Mo 202.031†	-18.0	-21.7	2.1526 ug/L	2.1526 ppb	09:56:54
1	Ni 231.604†	2016.1	1814.3	61.123 ug/L	61.123 ppb	09:56:54
1	P 214.914†	3822.5	3398.9	2266.7 ug/L	2266.7 ppb	09:56:54
1	Pb 220.353†	367.9	412.3	72.642 ug/L	72.642 ppb	09:56:54
1	S 181.975 Axial†	1419.9	1298.1	2052.3 ug/L	2052.3 ppb	09:56:54
1	Sb 206.836†	46.6	18.6	0.3236 ug/L	0.3236 ppb	09:56:54
1	Se 196.026†	-244.7	-203.9	-19.686 ug/L	-19.686 ppb	09:56:54
1	Si 251.611†	911540.9	858083.5	32831 ug/L	32831 ppb	09:56:28
1	Sn 189.927†	-190.3	-189.0	-36.781 ug/L	-36.781 ppb	09:56:54
1	Ti 334.940†	910139.1	858705.2	1631.5 ug/L	1631.5 ppb	09:56:28
1	Tl 190.801†	-102.2	-64.8	1.3988 ug/L	1.3988 ppb	09:56:54
1	U 409.014†	-4546.9	-1877.4	-80.689 ug/L	-80.689 ppb	09:56:33
1	V 292.402†	7481.2	8795.3	72.256 ug/L	72.256 ppb	09:56:33
1	Zn 213.857†	22816.8	20801.8	243.34 ug/L	243.34 ppb	09:56:33
1	SiO2†	905566.5	852442.1	69335 ug/L	69335 ppb	09:58:02
2	Sc Radial	4164.1	4164.1	116 %		09:55:56
2	Y RADIAL	4831.3	4831.3	118.8 %		09:55:56
2	Al 396.153Radial†	38002.4	32860.8	37707 ug/L	37707 ppb	09:55:36
2	Ca 317.933Radial†	24258.0	20890.1	42699 ug/L	42699 ppb	09:55:36
2	Fe 238.204 Radial†	3991.3	3431.5	48508 ug/L	48508 ppb	09:55:56
2	K 766.490 Radial†	58836.4	47686.8	10020 ug/L	10020 ppb	09:55:36
2	Mg 279.077 IEC†	273.8	235.3	10338 ug/L	10338 ppb	09:55:56
2	Na 589.592 Radial†	55.5	945.3	487.40 ug/L	487.40 ppb	09:55:36
2	Sr 421.552†	29133.7	25093.9	276.34 ug/L	276.34 ppb	09:55:36
2	Sc 361.383	709185.1	709185.1	106.34 %		09:56:59
2	Y 371.029	588755.3	588755.3	111.49 %		09:56:59
2	Ag 328.068†	-2318.8	-2382.6	1.0479 ug/L	1.0479 ppb	09:57:05
2	As 188.979†	-24.2	2.5	26.723 ug/L	26.723 ppb	09:57:25
2	B 249.677†	1819.6	2126.2	49.015 ug/L	49.015 ppb	09:57:05
2	Ba 233.527†	98381.8	92502.0	937.41 ug/L	937.41 ppb	09:57:05
2	Be 313.107†	-5734.8	-1214.6	3.1769 ug/L	3.1769 ppb	09:57:05
2	Cd 226.502†	215.9	402.3	1.2218 ug/L	1.2218 ppb	09:57:25
2	Co 228.616†	844.0	843.6	18.202 ug/L	18.202 ppb	09:57:25
2	Cr 267.716†	6357.5	5883.2	95.711 ug/L	95.711 ppb	09:57:25
2	Cu 324.752†	21192.8	14574.8	54.288 ug/L	54.288 ppb	09:57:05
2	Mn 257.610†	2233055.5	2099442.7	2893.2 ug/L	2893.2 ppb	09:56:59
2	Mo 202.031†	-12.1	-16.1	2.6988 ug/L	2.6988 ppb	09:57:25
2	Ni 231.604†	2004.5	1800.2	60.648 ug/L	60.648 ppb	09:57:25

2	P 214.914†	3859.1	3427.3	2285.9 ug/L	2285.9 ppb	09:57:25
2	Pb 220.353†	382.7	425.7	74.775 ug/L	74.775 ppb	09:57:25
2	S 181.975 Axial†	1442.4	1317.0	2082.4 ug/L	2082.4 ppb	09:57:25
2	Sb 206.836†	49.6	21.4	1.5577 ug/L	1.5577 ppb	09:57:25
2	Se 196.026†	-247.3	-206.0	-21.148 ug/L	-21.148 ppb	09:57:25
2	Si 251.611†	909102.6	854355.8	32688 ug/L	32688 ppb	09:56:59
2	Sn 189.927†	-177.6	-176.8	-33.926 ug/L	-33.926 ppb	09:57:25
2	Ti 334.940†	909888.0	857036.6	1628.3 ug/L	1628.3 ppb	09:56:59
2	Tl 190.801†	-104.1	-66.4	0.6925 ug/L	0.6925 ppb	09:57:25
2	U 409.014†	-4643.9	-1961.5	-84.056 ug/L	-84.056 ppb	09:57:05
2	V 292.402†	7345.3	8655.7	70.963 ug/L	70.963 ppb	09:57:05
2	Zn 213.857†	22860.1	20806.6	243.39 ug/L	243.39 ppb	09:57:05
2	SiO2†	905727.6	851168.3	69231 ug/L	69231 ppb	09:58:08
3	Sc Radial	4103.0	4103.0	114 %		09:56:21
3	Y RADIAL	4750.6	4750.6	116.8 %		09:56:21
3	Al 396.153Radial†	37527.7	32933.2	37790 ug/L	37790 ppb	09:56:01
3	Ca 317.933Radial†	24047.8	21017.5	42960 ug/L	42960 ppb	09:56:01
3	Fe 238.204 Radial†	3943.3	3440.8	48639 ug/L	48639 ppb	09:56:21
3	K 766.490 Radial†	58165.3	47854.7	10056 ug/L	10056 ppb	09:56:01
3	Mg 279.077 IEC†	270.5	236.0	10367 ug/L	10367 ppb	09:56:21
3	Na 589.592 Radial†	24.5	918.8	473.78 ug/L	473.78 ppb	09:56:01
3	Sr 421.552†	28684.5	25074.8	276.13 ug/L	276.13 ppb	09:56:01
3	Sc 361.383	709712.5	709712.5	106.42 %		09:57:30
3	Y 371.029	590440.0	590440.0	111.81 %		09:57:30
3	Ag 328.068†	-2402.6	-2459.7	0.6430 ug/L	0.6430 ppb	09:57:36
3	As 188.979†	-28.6	-1.7	24.602 ug/L	24.602 ppb	09:57:56
3	B 249.677†	1861.1	2163.9	50.005 ug/L	50.005 ppb	09:57:36
3	Ba 233.527†	98744.6	92774.2	940.17 ug/L	940.17 ppb	09:57:36
3	Be 313.107†	-5686.6	-1165.2	3.1992 ug/L	3.1992 ppb	09:57:36
3	Cd 226.502†	234.3	419.4	1.4735 ug/L	1.4735 ppb	09:57:56
3	Co 228.616†	842.5	841.6	18.147 ug/L	18.147 ppb	09:57:56
3	Cr 267.716†	6353.5	5875.0	95.600 ug/L	95.600 ppb	09:57:56
3	Cu 324.752†	21369.4	14726.0	54.830 ug/L	54.830 ppb	09:57:36
3	Mn 257.610†	2237031.4	2101618.4	2896.2 ug/L	2896.2 ppb	09:57:30
3	Mo 202.031†	-18.3	-21.9	2.1436 ug/L	2.1436 ppb	09:57:56
3	Ni 231.604†	2030.4	1823.2	61.424 ug/L	61.424 ppb	09:57:56
3	P 214.914†	3857.5	3423.1	2282.8 ug/L	2282.8 ppb	09:57:56
3	Pb 220.353†	365.6	409.3	72.113 ug/L	72.113 ppb	09:57:56
3	S 181.975 Axial†	1445.9	1319.3	2086.0 ug/L	2086.0 ppb	09:57:56
3	Sb 206.836†	52.0	23.6	2.4961 ug/L	2.4961 ppb	09:57:56
3	Se 196.026†	-244.6	-203.3	-18.665 ug/L	-18.665 ppb	09:57:56
3	Si 251.611†	910021.4	854584.0	32697 ug/L	32697 ppb	09:57:30
3	Sn 189.927†	-163.6	-163.5	-30.734 ug/L	-30.734 ppb	09:57:56
3	Ti 334.940†	910971.7	857419.0	1629.1 ug/L	1629.1 ppb	09:57:30
3	Tl 190.801†	-107.5	-69.5	-0.5273 ug/L	-0.5273 ppb	09:57:56
3	U 409.014†	-4594.4	-1911.6	-82.081 ug/L	-82.081 ppb	09:57:36
3	V 292.402†	7492.4	8788.8	72.166 ug/L	72.166 ppb	09:57:36
3	Zn 213.857†	22968.0	20892.0	244.40 ug/L	244.40 ppb	09:57:36
3	SiO2†	911093.0	855577.1	69590 ug/L	69590 ppb	09:58:14

Mean Data: 1202060826|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	708965.9	106.31 %	0.132			0.12%
Sc Radial	4142.1	115 %	0.9			0.82%
Y 371.029	588679.1	111.47 %	0.341			0.31%
Y RADIAL	4802.0	118.1 %	1.10			0.93%
Ag 328.068†	-2376.9	1.0874 ug/L	0.46536	1.0874 ppb	0.46536	42.80%
Al 396.153Radial†	32924.6	37780 ug/L	68.7	37780 ppb	68.7	0.18%
As 188.979†	-0.3	25.276 ug/L	1.2538	25.276 ppb	1.2538	4.96%
B 249.677†	2138.8	49.349 ug/L	0.5678	49.349 ppb	0.5678	1.15%
Ba 233.527†	92576.3	938.16 ug/L	1.755	938.16 ppb	1.755	0.19%
Be 313.107†	-1148.8	3.2074 ug/L	0.03529	3.2074 ppb	0.03529	1.10%
Ca 317.933Radial†	20961.5	42845 ug/L	133.0	42845 ppb	133.0	0.31%
Cd 226.502†	407.3	1.2976 ug/L	0.15285	1.2976 ppb	0.15285	11.78%
Co 228.616†	837.9	18.050 ug/L	0.2169	18.050 ppb	0.2169	1.20%
Cr 267.716†	5858.2	95.331 ug/L	0.5651	95.331 ppb	0.5651	0.59%
Cu 324.752†	14639.4	54.517 ug/L	0.2805	54.517 ppb	0.2805	0.51%
Fe 238.204 Radial†	3433.0	48530 ug/L	100.3	48530 ppb	100.3	0.21%
K 766.490 Radial†	47874.2	10060 ug/L	41.6	10060 ppb	41.6	0.41%

Mg 279.077 IEC†	236.1	10372 ug/L	36.6	10372 ppb	36.6	0.35%
Mn 257.610†	2102181.4	2897.0 ug/L	4.20	2897.0 ppb	4.20	0.15%
Mo 202.031†	-19.9	2.3316 ug/L	0.31797	2.3316 ppb	0.31797	13.64%
Na 589.592 Radial†	954.5	492.16 ug/L	21.166	492.16 ppb	21.166	4.30%
Ni 231.604†	1812.6	61.065 ug/L	0.3911	61.065 ppb	0.3911	0.64%
P 214.914†	3416.4	2278.5 ug/L	10.33	2278.5 ppb	10.33	0.45%
Pb 220.353†	415.8	73.177 ug/L	1.4091	73.177 ppb	1.4091	1.93%
S 181.975 Axial†	1311.5	2073.6 ug/L	18.49	2073.6 ppb	18.49	0.89%
Sb 206.836†	21.2	1.4591 ug/L	1.08959	1.4591 ppb	1.08959	74.67%
Se 196.026†	-204.4	-19.833 ug/L	1.2477	-19.833 ppb	1.2477	6.29%
Si 251.611†	855674.4	32738 ug/L	79.9	32738 ppb	79.9	0.24%
Sn 189.927†	-176.4	-33.814 ug/L	3.0247	-33.814 ppb	3.0247	8.95%
Sr 421.552†	25153.9	277.00 ug/L	1.333	277.00 ppb	1.333	0.48%
Ti 334.940†	857720.3	1629.6 ug/L	1.66	1629.6 ppb	1.66	0.10%
Tl 190.801†	-66.9	0.5213 ug/L	0.97438	0.5213 ppb	0.97438	186.91%
U 409.014†	-1916.8	-82.275 ug/L	1.6918	-82.275 ppb	1.6918	2.06%
V 292.402†	8746.6	71.795 ug/L	0.7219	71.795 ppb	0.7219	1.01%
Zn 213.857†	20833.4	243.71 ug/L	0.596	243.71 ppb	0.596	0.24%
SiO2†	853062.5	69385 ug/L	184.6	69385 ppb	184.6	0.27%

Sequence No.: 5

Sample ID: 1202060827|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 116

Date Collected: 3/31/2010 10:00:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202060827|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4091.7	4091.7	114 %		10:02:39
1	Y RADIAL	4762.2	4762.2	117.1 %		10:02:39
1	Al 396.153Radial†	68285.6	59999.1	68826 ug/L	68826 ppb	10:02:19
1	Ca 317.933Radial†	33997.4	29801.4	60914 ug/L	60914 ppb	10:02:19
1	Fe 238.204 Radial†	4714.0	4126.2	58341 ug/L	58341 ppb	10:02:39
1	K 766.490 Radial†	98454.7	83329.8	17513 ug/L	17513 ppb	10:02:19
1	Mg 279.077 IEC†	459.6	402.5	17712 ug/L	17712 ppb	10:02:39
1	Na 589.592 Radial†	9360.6	9107.0	4695.8 ug/L	4695.8 ppb	10:02:19
1	Sr 421.552†	82082.0	71975.4	793.08 ug/L	793.08 ppb	10:02:19
1	Sc 361.383	692338.6	692338.6	103.82 %		10:03:38
1	Y 371.029	576506.7	576506.7	109.17 %		10:03:38
1	Ag 328.068†	72591.4	69721.7	421.85 ug/L	421.85 ppb	10:03:38
1	As 188.979†	809.3	804.8	451.46 ug/L	451.46 ppb	10:03:58
1	B 249.677†	18980.4	18698.0	490.16 ug/L	490.16 ppb	10:03:38
1	Ba 233.527†	166816.7	160673.1	1628.4 ug/L	1628.4 ppb	10:03:38
1	Be 313.107†	1100946.2	1064666.1	451.48 ug/L	451.48 ppb	10:03:38
1	Cd 226.502†	28161.6	27325.9	416.17 ug/L	416.17 ppb	10:03:58
1	Co 228.616†	17359.5	16771.5	430.95 ug/L	430.95 ppb	10:03:58
1	Cr 267.716†	39985.4	38420.8	597.39 ug/L	597.39 ppb	10:03:38
1	Cu 324.752†	173001.5	161289.7	574.74 ug/L	574.74 ppb	10:03:38
1	Mn 257.610†	2883399.5	2776983.7	3826.2 ug/L	3826.2 ppb	10:03:38
1	Mo 202.031†	4639.2	4464.0	441.70 ug/L	441.70 ppb	10:03:58
1	Ni 231.604†	16734.7	16034.9	540.07 ug/L	540.07 ppb	10:03:58
1	P 214.914†	5266.8	4871.6	3166.9 ug/L	3166.9 ppb	10:03:58
1	Pb 220.353†	3029.3	2983.7	500.05 ug/L	500.05 ppb	10:03:58
1	S 181.975 Axial†	4915.9	4695.9	7437.2 ug/L	7437.2 ppb	10:03:58
1	Sb 206.836†	1056.3	992.3	418.23 ug/L	418.23 ppb	10:03:58
1	Se 196.026†	346.8	360.7	456.43 ug/L	456.43 ppb	10:03:58
1	Si 251.611†	878088.1	845283.0	32335 ug/L	32335 ppb	10:03:38
1	Sn 189.927†	1812.9	1736.6	421.68 ug/L	421.68 ppb	10:03:58
1	Ti 334.940†	1329639.8	1282182.9	2435.1 ug/L	2435.1 ppb	10:03:38
1	Tl 190.801†	887.1	886.0	386.93 ug/L	386.93 ppb	10:03:58
1	U 409.014†	7733.8	9855.2	385.56 ug/L	385.56 ppb	10:03:38
1	V 292.402†	63249.2	62673.2	573.44 ug/L	573.44 ppb	10:03:38
1	Zn 213.857†	65028.6	61948.5	734.69 ug/L	734.69 ppb	10:03:38
1	SiO2†	927813.6	893167.4	72635 ug/L	72635 ppb	10:04:59
2	Sc Radial	4043.7	4043.7	113 %		10:03:04
2	Y RADIAL	4714.5	4714.5	115.9 %		10:03:04
2	Al 396.153Radial†	68653.7	61036.6	70016 ug/L	70016 ppb	10:02:44
2	Ca 317.933Radial†	34200.7	30335.6	62006 ug/L	62006 ppb	10:02:44
2	Fe 238.204 Radial†	4648.7	4117.3	58215 ug/L	58215 ppb	10:03:04
2	K 766.490 Radial†	98513.0	84406.3	17739 ug/L	17739 ppb	10:02:44
2	Mg 279.077 IEC†	453.0	401.4	17664 ug/L	17664 ppb	10:03:04
2	Na 589.592 Radial†	9304.9	9155.1	4720.6 ug/L	4720.6 ppb	10:02:44
2	Sr 421.552†	81970.6	72730.9	801.40 ug/L	801.40 ppb	10:02:44
2	Sc 361.383	699074.6	699074.6	104.83 %		10:04:05
2	Y 371.029	582104.5	582104.5	110.23 %		10:04:05
2	Ag 328.068†	73274.1	69699.2	421.65 ug/L	421.65 ppb	10:04:05
2	As 188.979†	829.1	816.2	457.30 ug/L	457.30 ppb	10:04:25
2	B 249.677†	19148.8	18682.5	489.75 ug/L	489.75 ppb	10:04:05
2	Ba 233.527†	167644.3	159914.4	1620.7 ug/L	1620.7 ppb	10:04:05
2	Be 313.107†	1110726.9	1063778.1	451.09 ug/L	451.09 ppb	10:04:05
2	Cd 226.502†	28591.3	27474.5	418.48 ug/L	418.48 ppb	10:04:25
2	Co 228.616†	17637.1	16875.1	433.66 ug/L	433.66 ppb	10:04:25
2	Cr 267.716†	40260.1	38311.7	595.70 ug/L	595.70 ppb	10:04:05
2	Cu 324.752†	174739.3	161341.7	574.92 ug/L	574.92 ppb	10:04:05
2	Mn 257.610†	2896472.2	2762692.4	3806.5 ug/L	3806.5 ppb	10:04:05
2	Mo 202.031†	4732.6	4510.0	446.21 ug/L	446.21 ppb	10:04:25
2	Ni 231.604†	17021.8	16153.5	544.06 ug/L	544.06 ppb	10:04:25

2	P 214.914†	5357.1	4908.8	3192.6 ug/L	3192.6 ppb	10:04:25
2	Pb 220.353†	3072.6	2997.0	502.56 ug/L	502.56 ppb	10:04:25
2	S 181.975 Axial†	5028.7	4757.9	7535.3 ug/L	7535.3 ppb	10:04:25
2	Sb 206.836†	1083.5	1008.4	425.04 ug/L	425.04 ppb	10:04:25
2	Se 196.026†	357.8	368.0	462.10 ug/L	462.10 ppb	10:04:25
2	Si 251.611†	886207.6	844878.8	32320 ug/L	32320 ppb	10:04:05
2	Sn 189.927†	1846.6	1751.8	425.48 ug/L	425.48 ppb	10:04:25
2	Ti 334.940†	1338772.8	1278554.4	2428.4 ug/L	2428.4 ppb	10:04:05
2	Tl 190.801†	920.9	910.0	396.30 ug/L	396.30 ppb	10:04:25
2	U 409.014†	7773.1	9820.8	384.21 ug/L	384.21 ppb	10:04:05
2	V 292.402†	63465.2	62292.2	570.02 ug/L	570.02 ppb	10:04:05
2	Zn 213.857†	65487.4	61782.7	732.68 ug/L	732.68 ppb	10:04:05
2	SiO2†	905944.3	863693.2	70238 ug/L	70238 ppb	10:05:05
3	Sc Radial	4007.2	4007.2	112 %		10:03:29
3	Y RADIAL	4657.9	4657.9	114.5 %		10:03:29
3	Al 396.153Radial†	69617.0	62455.5	71644 ug/L	71644 ppb	10:03:09
3	Ca 317.933Radial†	34479.7	30862.6	63083 ug/L	63083 ppb	10:03:09
3	Fe 238.204 Radial†	4642.3	4149.2	58666 ug/L	58666 ppb	10:03:29
3	K 766.490 Radial†	99876.2	86425.1	18163 ug/L	18163 ppb	10:03:09
3	Mg 279.077 IEC†	456.7	408.3	17970 ug/L	17970 ppb	10:03:29
3	Na 589.592 Radial†	9552.3	9452.0	4873.7 ug/L	4873.7 ppb	10:03:09
3	Sr 421.552†	83460.3	74729.0	823.42 ug/L	823.42 ppb	10:03:09
3	Sc 361.383	696692.1	696692.1	104.47 %		10:04:33
3	Y 371.029	580509.5	580509.5	109.93 %		10:04:33
3	Ag 328.068†	73539.3	70192.1	424.64 ug/L	424.64 ppb	10:04:33
3	As 188.979†	819.0	809.2	453.98 ug/L	453.98 ppb	10:04:53
3	B 249.677†	19395.7	18981.3	497.69 ug/L	497.69 ppb	10:04:33
3	Ba 233.527†	168642.7	161416.9	1636.0 ug/L	1636.0 ppb	10:04:33
3	Be 313.107†	1117790.3	1074163.0	455.49 ug/L	455.49 ppb	10:04:33
3	Cd 226.502†	28314.3	27302.6	415.78 ug/L	415.78 ppb	10:04:53
3	Co 228.616†	17486.9	16788.9	431.37 ug/L	431.37 ppb	10:04:53
3	Cr 267.716†	40511.6	38683.8	601.47 ug/L	601.47 ppb	10:04:33
3	Cu 324.752†	175344.2	162490.9	579.02 ug/L	579.02 ppb	10:04:33
3	Mn 257.610†	2915062.9	2789937.2	3844.0 ug/L	3844.0 ppb	10:04:33
3	Mo 202.031†	4668.1	4463.7	441.72 ug/L	441.72 ppb	10:04:53
3	Ni 231.604†	16847.7	16042.5	540.32 ug/L	540.32 ppb	10:04:53
3	P 214.914†	5290.6	4862.6	3160.5 ug/L	3160.5 ppb	10:04:53
3	Pb 220.353†	3033.2	2969.2	498.40 ug/L	498.40 ppb	10:04:53
3	S 181.975 Axial†	4970.8	4718.9	7473.1 ug/L	7473.1 ppb	10:04:53
3	Sb 206.836†	1078.7	1007.4	424.45 ug/L	424.45 ppb	10:04:53
3	Se 196.026†	360.9	372.0	466.91 ug/L	466.91 ppb	10:04:53
3	Si 251.611†	889676.5	851090.5	32558 ug/L	32558 ppb	10:04:33
3	Sn 189.927†	1847.0	1758.3	427.20 ug/L	427.20 ppb	10:04:53
3	Ti 334.940†	1345940.9	1289783.4	2449.8 ug/L	2449.8 ppb	10:04:33
3	Tl 190.801†	890.0	883.4	386.13 ug/L	386.13 ppb	10:04:53
3	U 409.014†	7978.5	10042.8	393.01 ug/L	393.01 ppb	10:04:33
3	V 292.402†	63996.1	63007.5	576.48 ug/L	576.48 ppb	10:04:33
3	Zn 213.857†	65882.1	62374.0	739.77 ug/L	739.77 ppb	10:04:33
3	SiO2†	874792.4	836829.1	68053 ug/L	68053 ppb	10:05:11

Mean Data: 1202060827|960813|1

Mean Corrected		Calib.		Sample				
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	696035.1	104.37	%	0.512				0.49%
Sc Radial	4047.6	113	%	1.2				1.05%
Y 371.029	579706.9	109.78	%	0.546				0.50%
Y RADIAL	4711.5	115.9	%	1.28				1.11%
Ag 328.068†	69871.0	422.71	ug/L	1.673	422.71	ppb	1.673	0.40%
Al 396.153Radial†	61163.8	70162	ug/L	1414.9	70162	ppb	1414.9	2.02%
As 188.979†	810.1	454.24	ug/L	2.930	454.24	ppb	2.930	0.64%
B 249.677†	18787.3	492.53	ug/L	4.470	492.53	ppb	4.470	0.91%
Ba 233.527†	160668.1	1628.4	ug/L	7.61	1628.4	ppb	7.61	0.47%
Be 313.107†	1067535.8	452.69	ug/L	2.435	452.69	ppb	2.435	0.54%
Ca 317.933Radial†	30333.2	62001	ug/L	1084.6	62001	ppb	1084.6	1.75%
Cd 226.502†	27367.7	416.81	ug/L	1.459	416.81	ppb	1.459	0.35%
Co 228.616†	16811.8	431.99	ug/L	1.461	431.99	ppb	1.461	0.34%
Cr 267.716†	38472.1	598.19	ug/L	2.967	598.19	ppb	2.967	0.50%
Cu 324.752†	161707.4	576.23	ug/L	2.417	576.23	ppb	2.417	0.42%
Fe 238.204 Radial†	4130.9	58407	ug/L	233.0	58407	ppb	233.0	0.40%
K 766.490 Radial†	84720.4	17805	ug/L	330.3	17805	ppb	330.3	1.86%

Mg 279.077 IEC†	404.1	17782 ug/L	164.5	17782 ppb	164.5	0.93%
Mn 257.610†	2776537.8	3825.6 ug/L	18.77	3825.6 ppb	18.77	0.49%
Mo 202.031†	4479.2	443.21 ug/L	2.596	443.21 ppb	2.596	0.59%
Na 589.592 Radial†	9238.1	4763.3 ug/L	96.35	4763.3 ppb	96.35	2.02%
Ni 231.604†	16077.0	541.48 ug/L	2.237	541.48 ppb	2.237	0.41%
P 214.914†	4881.0	3173.3 ug/L	16.98	3173.3 ppb	16.98	0.54%
Pb 220.353†	2983.3	500.34 ug/L	2.094	500.34 ppb	2.094	0.42%
S 181.975 Axial†	4724.2	7481.9 ug/L	49.63	7481.9 ppb	49.63	0.66%
Sb 206.836†	1002.7	422.57 ug/L	3.769	422.57 ppb	3.769	0.89%
Se 196.026†	366.9	461.81 ug/L	5.248	461.81 ppb	5.248	1.14%
Si 251.611†	847084.1	32404 ug/L	133.0	32404 ppb	133.0	0.41%
Sn 189.927†	1748.9	424.79 ug/L	2.826	424.79 ppb	2.826	0.67%
Sr 421.552†	73145.1	805.96 ug/L	15.678	805.96 ppb	15.678	1.95%
Ti 334.940†	1283506.9	2437.8 ug/L	10.94	2437.8 ppb	10.94	0.45%
Tl 190.801†	893.1	389.79 ug/L	5.658	389.79 ppb	5.658	1.45%
U 409.014†	9906.3	387.59 ug/L	4.739	387.59 ppb	4.739	1.22%
V 292.402†	62657.7	573.31 ug/L	3.231	573.31 ppb	3.231	0.56%
Zn 213.857†	62035.1	735.71 ug/L	3.653	735.71 ppb	3.653	0.50%
SiO2†	864563.2	70309 ug/L	2292.0	70309 ppb	2292.0	3.26%

Sequence No.: 6

Sample ID: 1202060829|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 117

Date Collected: 3/31/2010 10:07:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202060829|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4003.1	4003.1	112 %		10:09:38
1	Y RADIAL	4685.0	4685.0	115.2 %		10:09:38
1	Al 396.153Radial†	70409.7	63229.6	72532 ug/L	72532 ppb	10:09:18
1	Ca 317.933Radial†	36792.0	32966.9	67385 ug/L	67385 ppb	10:09:18
1	Fe 238.204 Radial†	4720.1	4223.2	59713 ug/L	59713 ppb	10:09:38
1	K 766.490 Radial†	100137.7	86750.7	18230 ug/L	18230 ppb	10:09:18
1	Mg 279.077 IEC†	478.1	427.9	18835 ug/L	18835 ppb	10:09:38
1	Na 589.592 Radial†	9372.9	9299.9	4795.2 ug/L	4795.2 ppb	10:09:18
1	Sr 421.552†	85841.0	76939.4	847.76 ug/L	847.76 ppb	10:09:18
1	Sc 361.383	704816.2	704816.2	105.69 %		10:10:37
1	Y 371.029	585984.7	585984.7	110.96 %		10:10:37
1	Ag 328.068†	76840.3	72504.1	438.34 ug/L	438.34 ppb	10:10:37
1	As 188.979†	846.8	826.5	463.10 ug/L	463.10 ppb	10:10:57
1	B 249.677†	20433.7	19749.4	518.09 ug/L	518.09 ppb	10:10:37
1	Ba 233.527†	189972.8	179738.8	1821.4 ug/L	1821.4 ppb	10:10:37
1	Be 313.107†	1170918.2	1112099.3	471.37 ug/L	471.37 ppb	10:10:37
1	Cd 226.502†	28959.6	27600.8	420.27 ug/L	420.27 ppb	10:10:57
1	Co 228.616†	17806.4	16898.3	434.32 ug/L	434.32 ppb	10:10:57
1	Cr 267.716†	39990.7	37743.9	587.16 ug/L	587.16 ppb	10:10:37
1	Cu 324.752†	185683.6	170339.3	606.89 ug/L	606.89 ppb	10:10:37
1	Mn 257.610†	3228081.6	3053951.5	4207.4 ug/L	4207.4 ppb	10:10:37
1	Mo 202.031†	4820.0	4556.0	450.88 ug/L	450.88 ppb	10:10:57
1	Ni 231.604†	16850.3	15859.0	534.14 ug/L	534.14 ppb	10:10:57
1	P 214.914†	5433.6	4939.6	3206.6 ug/L	3206.6 ppb	10:10:57
1	Pb 220.353†	3160.5	3056.2	512.78 ug/L	512.78 ppb	10:10:57
1	S 181.975 Axial†	5146.2	4830.0	7649.2 ug/L	7649.2 ppb	10:10:57
1	Sb 206.836†	1101.7	1017.2	428.77 ug/L	428.77 ppb	10:10:57
1	Se 196.026†	367.4	374.2	471.64 ug/L	471.64 ppb	10:10:57
1	Si 251.611†	874997.1	827384.5	31651 ug/L	31651 ppb	10:10:37
1	Sn 189.927†	1880.6	1769.7	430.66 ug/L	430.66 ppb	10:10:57
1	Ti 334.940†	1358859.1	1287156.1	2445.3 ug/L	2445.3 ppb	10:10:37
1	Tl 190.801†	933.6	914.9	400.24 ug/L	400.24 ppb	10:10:57
1	U 409.014†	8436.5	10388.1	406.71 ug/L	406.71 ppb	10:10:37
1	V 292.402†	67275.1	65404.0	598.59 ug/L	598.59 ppb	10:10:37
1	Zn 213.857†	69232.4	64817.2	769.10 ug/L	769.10 ppb	10:10:37
1	SiO2†	867107.3	819905.4	66676 ug/L	66676 ppb	10:11:58
2	Sc Radial	4074.3	4074.3	114 %		10:10:03
2	Y RADIAL	4730.2	4730.2	116.3 %		10:10:03
2	Al 396.153Radial†	70922.1	62577.6	71784 ug/L	71784 ppb	10:09:43
2	Ca 317.933Radial†	36938.8	32519.7	66471 ug/L	66471 ppb	10:09:43
2	Fe 238.204 Radial†	4786.7	4207.9	59496 ug/L	59496 ppb	10:10:03
2	K 766.490 Radial†	100278.7	85305.8	17927 ug/L	17927 ppb	10:09:43
2	Mg 279.077 IEC†	488.4	429.6	18907 ug/L	18907 ppb	10:10:03
2	Na 589.592 Radial†	9335.5	9120.1	4702.5 ug/L	4702.5 ppb	10:09:43
2	Sr 421.552†	86356.8	76048.6	837.94 ug/L	837.94 ppb	10:09:43
2	Sc 361.383	702230.2	702230.2	105.30 %		10:11:04
2	Y 371.029	584650.2	584650.2	110.71 %		10:11:04
2	Ag 328.068†	76494.3	72443.3	437.91 ug/L	437.91 ppb	10:11:04
2	As 188.979†	839.5	822.5	460.93 ug/L	460.93 ppb	10:11:24
2	B 249.677†	20252.7	19648.8	515.43 ug/L	515.43 ppb	10:11:04
2	Ba 233.527†	188170.3	178688.9	1810.8 ug/L	1810.8 ppb	10:11:04
2	Be 313.107†	1162158.6	1107860.5	469.58 ug/L	469.58 ppb	10:11:04
2	Cd 226.502†	28762.2	27514.2	418.96 ug/L	418.96 ppb	10:11:24
2	Co 228.616†	17695.7	16855.2	433.21 ug/L	433.21 ppb	10:11:24
2	Cr 267.716†	39557.8	37472.1	582.95 ug/L	582.95 ppb	10:11:04
2	Cu 324.752†	185000.0	170337.1	606.87 ug/L	606.87 ppb	10:11:04
2	Mn 257.610†	3195593.6	3034346.2	4180.4 ug/L	4180.4 ppb	10:11:04
2	Mo 202.031†	4781.5	4536.2	448.92 ug/L	448.92 ppb	10:11:24
2	Ni 231.604†	16721.5	15795.4	532.00 ug/L	532.00 ppb	10:11:24

2	P 214.914†	5405.9	4932.2	3201.6 ug/L	3201.6 ppb	10:11:24
2	Pb 220.353†	3125.3	3033.8	508.94 ug/L	508.94 ppb	10:11:24
2	S 181.975 Axial†	5089.4	4793.9	7592.1 ug/L	7592.1 ppb	10:11:24
2	Sb 206.836†	1100.0	1019.4	429.73 ug/L	429.73 ppb	10:11:24
2	Se 196.026†	358.5	367.1	465.30 ug/L	465.30 ppb	10:11:24
2	Si 251.611†	866937.2	822779.1	31474 ug/L	31474 ppb	10:11:04
2	Sn 189.927†	1883.4	1778.8	432.67 ug/L	432.67 ppb	10:11:24
2	Ti 334.940†	1350091.9	1283564.9	2438.4 ug/L	2438.4 ppb	10:11:04
2	Tl 190.801†	934.7	919.1	401.75 ug/L	401.75 ppb	10:11:24
2	U 409.014†	8582.0	10555.7	413.43 ug/L	413.43 ppb	10:11:04
2	V 292.402†	66668.6	65062.4	595.46 ug/L	595.46 ppb	10:11:04
2	Zn 213.857†	68518.1	64380.1	763.87 ug/L	763.87 ppb	10:11:04
2	SiO2†	864359.6	820317.3	66710 ug/L	66710 ppb	10:12:04
3	Sc Radial	3936.2	3936.2	110 %		10:10:28
3	Y RADIAL	4590.4	4590.4	112.9 %		10:10:28
3	Al 396.153Radial†	71701.8	65479.8	75113 ug/L	75113 ppb	10:10:08
3	Ca 317.933Radial†	37331.7	34019.2	69535 ug/L	69535 ppb	10:10:08
3	Fe 238.204 Radial†	4663.1	4243.1	59994 ug/L	59994 ppb	10:10:28
3	K 766.490 Radial†	101852.0	89838.4	18879 ug/L	18879 ppb	10:10:08
3	Mg 279.077 IEC†	480.1	437.0	19237 ug/L	19237 ppb	10:10:28
3	Na 589.592 Radial†	9437.5	9501.5	4899.2 ug/L	4899.2 ppb	10:10:08
3	Sr 421.552†	87246.7	79528.2	876.28 ug/L	876.28 ppb	10:10:08
3	Sc 361.383	682205.9	682205.9	102.30 %		10:11:31
3	Y 371.029	568747.3	568747.3	107.70 %		10:11:31
3	Ag 328.068†	74172.7	72306.1	437.24 ug/L	437.24 ppb	10:11:31
3	As 188.979†	837.4	843.8	472.05 ug/L	472.05 ppb	10:11:51
3	B 249.677†	19426.3	19405.5	508.79 ug/L	508.79 ppb	10:11:31
3	Ba 233.527†	183191.5	179067.2	1814.6 ug/L	1814.6 ppb	10:11:31
3	Be 313.107†	1122395.4	1101385.3	466.86 ug/L	466.86 ppb	10:11:31
3	Cd 226.502†	28855.9	28407.6	432.71 ug/L	432.71 ppb	10:11:51
3	Co 228.616†	17751.6	17403.1	447.47 ug/L	447.47 ppb	10:11:51
3	Cr 267.716†	38494.4	37535.3	583.98 ug/L	583.98 ppb	10:11:31
3	Cu 324.752†	178993.6	169622.4	604.36 ug/L	604.36 ppb	10:11:31
3	Mn 257.610†	3107060.4	3036878.3	4183.9 ug/L	4183.9 ppb	10:11:31
3	Mo 202.031†	4812.2	4699.4	464.95 ug/L	464.95 ppb	10:11:51
3	Ni 231.604†	16821.1	16358.9	550.97 ug/L	550.97 ppb	10:11:51
3	P 214.914†	5416.0	5092.8	3311.6 ug/L	3311.6 ppb	10:11:51
3	Pb 220.353†	3148.0	3143.1	527.64 ug/L	527.64 ppb	10:11:51
3	S 181.975 Axial†	5135.9	4981.2	7888.7 ug/L	7888.7 ppb	10:11:51
3	Sb 206.836†	1108.7	1058.6	446.39 ug/L	446.39 ppb	10:11:51
3	Se 196.026†	363.1	381.5	478.89 ug/L	478.89 ppb	10:11:51
3	Si 251.611†	839187.1	819817.9	31361 ug/L	31361 ppb	10:11:31
3	Sn 189.927†	1872.3	1820.5	443.06 ug/L	443.06 ppb	10:11:51
3	Ti 334.940†	1310263.3	1282264.5	2436.3 ug/L	2436.3 ppb	10:11:31
3	Tl 190.801†	927.9	938.6	409.40 ug/L	409.40 ppb	10:11:51
3	U 409.014†	8286.2	10505.8	411.38 ug/L	411.38 ppb	10:11:31
3	V 292.402†	64790.0	65084.4	595.83 ug/L	595.83 ppb	10:11:31
3	Zn 213.857†	66368.2	64188.4	761.36 ug/L	761.36 ppb	10:11:31
3	SiO2†	861714.1	841825.5	68459 ug/L	68459 ppb	10:12:09

Mean Data: 1202060829|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	696417.4	104.43	%	1.856			1.78%
Sc Radial	4004.5	112	%	1.9			1.72%
Y 371.029	579794.0	109.79	%	1.816			1.65%
Y RADIAL	4668.6	114.8	%	1.75			1.53%
Ag 328.068†	72417.8	437.83	ug/L	0.556	437.83 ppb	0.556	0.13%
Al 396.153Radial†	63762.3	73143	ug/L	1746.8	73143 ppb	1746.8	2.39%
As 188.979†	830.9	465.36	ug/L	5.895	465.36 ppb	5.895	1.27%
B 249.677†	19601.2	514.10	ug/L	4.788	514.10 ppb	4.788	0.93%
Ba 233.527†	179165.0	1815.6	ug/L	5.38	1815.6 ppb	5.38	0.30%
Be 313.107†	1107115.0	469.27	ug/L	2.270	469.27 ppb	2.270	0.48%
Ca 317.933Radial†	33168.6	67797	ug/L	1573.5	67797 ppb	1573.5	2.32%
Cd 226.502†	27840.9	423.98	ug/L	7.588	423.98 ppb	7.588	1.79%
Co 228.616†	17052.2	438.33	ug/L	7.931	438.33 ppb	7.931	1.81%
Cr 267.716†	37583.8	584.70	ug/L	2.194	584.70 ppb	2.194	0.38%
Cu 324.752†	170099.6	606.04	ug/L	1.454	606.04 ppb	1.454	0.24%
Fe 238.204 Radial†	4224.7	59734	ug/L	249.9	59734 ppb	249.9	0.42%
K 766.490 Radial†	87298.3	18345	ug/L	486.7	18345 ppb	486.7	2.65%

Mg 279.077 IEC†	431.5	18993 ug/L	214.4	18993 ppb	214.4	1.13%
Mn 257.610†	3041725.3	4190.5 ug/L	14.68	4190.5 ppb	14.68	0.35%
Mo 202.031†	4597.2	454.91 ug/L	8.746	454.91 ppb	8.746	1.92%
Na 589.592 Radial†	9307.2	4799.0 ug/L	98.38	4799.0 ppb	98.38	2.05%
Ni 231.604†	16004.4	539.04 ug/L	10.395	539.04 ppb	10.395	1.93%
P 214.914†	4988.2	3240.0 ug/L	62.13	3240.0 ppb	62.13	1.92%
Pb 220.353†	3077.7	516.45 ug/L	9.877	516.45 ppb	9.877	1.91%
S 181.975 Axial†	4868.4	7710.0 ug/L	157.35	7710.0 ppb	157.35	2.04%
Sb 206.836†	1031.7	434.96 ug/L	9.908	434.96 ppb	9.908	2.28%
Se 196.026†	374.3	471.94 ug/L	6.797	471.94 ppb	6.797	1.44%
Si 251.611†	823327.2	31495 ug/L	146.0	31495 ppb	146.0	0.46%
Sn 189.927†	1789.7	435.46 ug/L	6.655	435.46 ppb	6.655	1.53%
Sr 421.552†	77505.4	853.99 ug/L	19.916	853.99 ppb	19.916	2.33%
Ti 334.940†	1284328.5	2440.0 ug/L	4.72	2440.0 ppb	4.72	0.19%
Tl 190.801†	924.2	403.80 ug/L	4.914	403.80 ppb	4.914	1.22%
U 409.014†	10483.2	410.51 ug/L	3.447	410.51 ppb	3.447	0.84%
V 292.402†	65183.6	596.63 ug/L	1.707	596.63 ppb	1.707	0.29%
Zn 213.857†	64461.9	764.78 ug/L	3.947	764.78 ppb	3.947	0.52%
SiO2†	827349.4	67282 ug/L	1019.6	67282 ppb	1019.6	1.52%

Sequence No.: 7

Sample ID: 1202060828|960813|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 118

Date Collected: 3/31/2010 10:14:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202060828|960813|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4039.4	4039.4	113 %		10:16:35
1	Y RADIAL	4549.4	4549.4	111.9 %		10:16:15
1	Al 396.153Radial†	7275.8	6573.9	7543.3 ug/L	7543.3 ppb	10:16:15
1	Ca 317.933Radial†	5271.1	4667.1	9539.6 ug/L	9539.6 ppb	10:16:15
1	Fe 238.204 Radial†	761.2	668.1	9443.8 ug/L	9443.8 ppb	10:16:35
1	K 766.490 Radial†	14669.2	10013.3	2103.8 ug/L	2103.8 ppb	10:16:15
1	Mg 279.077 IEC†	56.4	49.5	2175.2 ug/L	2175.2 ppb	10:16:35
1	Na 589.592 Radial†	-707.3	269.0	138.73 ug/L	138.73 ppb	10:16:15
1	Sr 421.552†	6220.8	5512.8	60.708 ug/L	60.708 ppb	10:16:15
1	Sc 361.383	707226.7	707226.7	106.05 %		10:17:32
1	Y 371.029	563146.0	563146.0	106.64 %		10:17:32
1	Ag 328.068†	-361.9	-543.3	-0.2804 ug/L	-0.2804 ppb	10:17:32
1	As 188.979†	-23.6	3.0	6.2873 ug/L	6.2873 ppb	10:17:52
1	B 249.677†	92.2	502.1	11.903 ug/L	11.903 ppb	10:17:52
1	Ba 233.527†	22509.6	21212.7	214.91 ug/L	214.91 ppb	10:17:32
1	Be 313.107†	-4375.7	52.1	0.6771 ug/L	0.6771 ppb	10:17:32
1	Cd 226.502†	-114.6	91.2	0.4383 ug/L	0.4383 ppb	10:17:52
1	Co 228.616†	132.8	175.1	3.9011 ug/L	3.9011 ppb	10:17:52
1	Cr 267.716†	1076.8	920.1	15.167 ug/L	15.167 ppb	10:17:52
1	Cu 324.752†	8881.8	3021.1	11.214 ug/L	11.214 ppb	10:17:32
1	Mn 257.610†	498856.6	469954.2	647.50 ug/L	647.50 ppb	10:17:32
1	Mo 202.031†	4.9	-0.1	0.8375 ug/L	0.8375 ppb	10:17:52
1	Ni 231.604†	462.1	351.0	11.826 ug/L	11.826 ppb	10:17:52
1	P 214.914†	923.2	668.9	446.00 ug/L	446.00 ppb	10:17:52
1	Pb 220.353†	24.5	88.9	15.611 ug/L	15.611 ppb	10:17:52
1	S 181.975 Axial†	341.8	282.9	447.47 ug/L	447.47 ppb	10:17:52
1	Sb 206.836†	35.1	7.9	1.8002 ug/L	1.8002 ppb	10:17:52
1	Se 196.026†	-56.3	-26.5	6.5399 ug/L	6.5399 ppb	10:17:52
1	Si 251.611†	183163.8	172182.2	6587.7 ug/L	6587.7 ppb	10:17:32
1	Sn 189.927†	-65.1	-71.2	-15.079 ug/L	-15.079 ppb	10:17:52
1	Ti 334.940†	160101.9	152377.5	289.74 ug/L	289.74 ppb	10:17:32
1	Tl 190.801†	-49.9	-15.6	-0.7380 ug/L	-0.7380 ppb	10:17:52
1	U 409.014†	-2688.9	-130.0	-6.3002 ug/L	-6.3002 ppb	10:17:32
1	V 292.402†	-90.6	1663.0	13.668 ug/L	13.668 ppb	10:17:52
1	Zn 213.857†	5130.6	4147.7	48.554 ug/L	48.554 ppb	10:17:52
1	SiO2†	181689.1	170777.7	13891 ug/L	13891 ppb	10:18:49
2	Sc Radial	4049.3	4049.3	113 %		10:17:00
2	Y RADIAL	4635.0	4635.0	114.0 %		10:16:40
2	Al 396.153Radial†	7327.7	6603.9	7577.8 ug/L	7577.8 ppb	10:16:40
2	Ca 317.933Radial†	5349.2	4724.9	9657.7 ug/L	9657.7 ppb	10:16:40
2	Fe 238.204 Radial†	764.6	669.4	9462.6 ug/L	9462.6 ppb	10:17:00
2	K 766.490 Radial†	14646.2	9960.9	2092.8 ug/L	2092.8 ppb	10:16:40
2	Mg 279.077 IEC†	57.3	50.2	2205.7 ug/L	2205.7 ppb	10:17:00
2	Na 589.592 Radial†	-745.9	236.4	121.91 ug/L	121.91 ppb	10:16:40
2	Sr 421.552†	6347.5	5611.6	61.796 ug/L	61.796 ppb	10:16:40
2	Sc 361.383	698311.6	698311.6	104.71 %		10:17:58
2	Y 371.029	556136.8	556136.8	105.31 %		10:17:58
2	Ag 328.068†	-320.3	-508.0	-0.0727 ug/L	-0.0727 ppb	10:17:58
2	As 188.979†	-21.7	4.6	7.1101 ug/L	7.1101 ppb	10:18:18
2	B 249.677†	79.7	491.2	11.610 ug/L	11.610 ppb	10:18:18
2	Ba 233.527†	22492.2	21467.1	217.49 ug/L	217.49 ppb	10:17:58
2	Be 313.107†	-4441.0	-62.9	0.6364 ug/L	0.6364 ppb	10:17:58
2	Cd 226.502†	-115.8	88.7	0.3982 ug/L	0.3982 ppb	10:18:18
2	Co 228.616†	120.8	165.3	3.6396 ug/L	3.6396 ppb	10:18:18
2	Cr 267.716†	1072.1	928.6	15.300 ug/L	15.300 ppb	10:18:18
2	Cu 324.752†	8980.6	3222.3	11.927 ug/L	11.927 ppb	10:17:58
2	Mn 257.610†	497499.3	474663.4	653.98 ug/L	653.98 ppb	10:17:58
2	Mo 202.031†	5.6	0.6	0.9070 ug/L	0.9070 ppb	10:18:18
2	Ni 231.604†	437.6	333.2	11.224 ug/L	11.224 ppb	10:18:18

2	P 214.914†	948.9	704.6	470.05 ug/L	470.05 ppb	10:18:18
2	Pb 220.353†	24.3	89.0	15.630 ug/L	15.630 ppb	10:18:18
2	S 181.975 Axial†	344.6	289.8	458.28 ug/L	458.28 ppb	10:18:18
2	Sb 206.836†	34.2	7.4	1.5798 ug/L	1.5798 ppb	10:18:18
2	Se 196.026†	-63.0	-33.6	1.0842 ug/L	1.0842 ppb	10:18:18
2	Si 251.611†	182635.8	173882.9	6652.8 ug/L	6652.8 ppb	10:17:58
2	Sn 189.927†	-66.9	-73.6	-15.634 ug/L	-15.634 ppb	10:18:18
2	Ti 334.940†	159892.7	154105.1	293.03 ug/L	293.03 ppb	10:17:58
2	Tl 190.801†	-54.6	-20.7	-2.7235 ug/L	-2.7235 ppb	10:18:18
2	U 409.014†	-2586.7	-64.8	-3.6990 ug/L	-3.6990 ppb	10:17:58
2	V 292.402†	-41.4	1708.8	14.091 ug/L	14.091 ppb	10:18:18
2	Zn 213.857†	5125.9	4204.9	49.245 ug/L	49.245 ppb	10:18:18
2	SiO2†	181338.8	172630.5	14041 ug/L	14041 ppb	10:18:54
3	Sc Radial	4096.3	4096.3	114 %		10:17:25
3	Y RADIAL	4719.8	4719.8	116.1 %		10:17:05
3	Al 396.153Radial†	7446.0	6633.1	7611.3 ug/L	7611.3 ppb	10:17:05
3	Ca 317.933Radial†	5402.7	4717.4	9642.3 ug/L	9642.3 ppb	10:17:05
3	Fe 238.204 Radial†	772.9	669.0	9456.6 ug/L	9456.6 ppb	10:17:25
3	K 766.490 Radial†	14826.1	9969.5	2094.6 ug/L	2094.6 ppb	10:17:05
3	Mg 279.077 IEC†	58.6	50.7	2229.3 ug/L	2229.3 ppb	10:17:25
3	Na 589.592 Radial†	-687.2	295.4	152.32 ug/L	152.32 ppb	10:17:05
3	Sr 421.552†	6391.8	5585.8	61.512 ug/L	61.512 ppb	10:17:05
3	Sc 361.383	712632.2	712632.2	106.86 %		10:18:23
3	Y 371.029	568758.5	568758.5	107.70 %		10:18:23
3	Ag 328.068†	-324.7	-505.9	-0.0617 ug/L	-0.0617 ppb	10:18:23
3	As 188.979†	-26.6	0.4	4.9174 ug/L	4.9174 ppb	10:18:43
3	B 249.677†	44.1	456.4	10.676 ug/L	10.676 ppb	10:18:43
3	Ba 233.527†	22545.6	21085.4	213.62 ug/L	213.62 ppb	10:18:23
3	Be 313.107†	-4474.0	-8.5	0.6495 ug/L	0.6495 ppb	10:18:23
3	Cd 226.502†	-108.0	98.2	0.5450 ug/L	0.5450 ppb	10:18:43
3	Co 228.616†	128.1	169.8	3.7634 ug/L	3.7634 ppb	10:18:43
3	Cr 267.716†	1094.7	929.2	15.308 ug/L	15.308 ppb	10:18:43
3	Cu 324.752†	8960.5	3031.2	11.250 ug/L	11.250 ppb	10:18:23
3	Mn 257.610†	497903.9	465494.4	641.36 ug/L	641.36 ppb	10:18:23
3	Mo 202.031†	-0.1	-4.9	0.3745 ug/L	0.3745 ppb	10:18:43
3	Ni 231.604†	432.0	319.5	10.764 ug/L	10.764 ppb	10:18:43
3	P 214.914†	953.2	690.4	460.55 ug/L	460.55 ppb	10:18:43
3	Pb 220.353†	36.2	99.6	17.375 ug/L	17.375 ppb	10:18:43
3	S 181.975 Axial†	340.0	278.9	440.98 ug/L	440.98 ppb	10:18:43
3	Sb 206.836†	26.5	-0.5	-1.6737 ug/L	-1.6737 ppb	10:18:43
3	Se 196.026†	-60.9	-30.4	3.5766 ug/L	3.5766 ppb	10:18:43
3	Si 251.611†	183163.4	170871.7	6537.6 ug/L	6537.6 ppb	10:18:23
3	Sn 189.927†	-68.0	-73.4	-15.584 ug/L	-15.584 ppb	10:18:43
3	Ti 334.940†	160764.8	151852.7	288.76 ug/L	288.76 ppb	10:18:23
3	Tl 190.801†	-46.6	-12.2	0.5728 ug/L	0.5728 ppb	10:18:43
3	U 409.014†	-2658.0	-81.8	-4.3783 ug/L	-4.3783 ppb	10:18:23
3	V 292.402†	-45.7	1705.6	14.058 ug/L	14.058 ppb	10:18:43
3	Zn 213.857†	5184.4	4161.3	48.723 ug/L	48.723 ppb	10:18:43
3	SiO2†	179794.3	167705.0	13641 ug/L	13641 ppb	10:18:59

Mean Data: 1202060828|960813|5

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	706056.8	105.87 %	1.084			1.02%
Sc Radial	4061.7	113 %	0.8			0.75%
Y 371.029	562680.4	106.55 %	1.197			1.12%
Y RADIAL	4634.7	114.0 %	2.09			1.84%
Ag 328.068†	-519.0	-0.1383 ug/L	0.12321	-0.1383 ppb	0.12321	89.11%
Al 396.153Radial†	6603.7	7577.5 ug/L	33.98	7577.5 ppb	33.98	0.45%
As 188.979†	2.7	6.1049 ug/L	1.10767	6.1049 ppb	1.10767	18.14%
B 249.677†	483.2	11.396 ug/L	0.6404	11.396 ppb	0.6404	5.62%
Ba 233.527†	21255.1	215.34 ug/L	1.966	215.34 ppb	1.966	0.91%
Be 313.107†	-6.5	0.6543 ug/L	0.02081	0.6543 ppb	0.02081	3.18%
Ca 317.933Radial†	4703.1	9613.2 ug/L	64.19	9613.2 ppb	64.19	0.67%
Cd 226.502†	92.7	0.4605 ug/L	0.07583	0.4605 ppb	0.07583	16.47%
Co 228.616†	170.0	3.7680 ug/L	0.13080	3.7680 ppb	0.13080	3.47%
Cr 267.716†	926.0	15.258 ug/L	0.0788	15.258 ppb	0.0788	0.52%
Cu 324.752†	3091.5	11.464 ug/L	0.4018	11.464 ppb	0.4018	3.51%
Fe 238.204 Radial†	668.8	9454.4 ug/L	9.59	9454.4 ppb	9.59	0.10%
K 766.490 Radial†	9981.2	2097.1 ug/L	5.94	2097.1 ppb	5.94	0.28%

Mg 279.077 IEC†	50.1	2203.4 ug/L	27.16	2203.4 ppb	27.16	1.23%
Mn 257.610†	470037.3	647.61 ug/L	6.310	647.61 ppb	6.310	0.97%
Mo 202.031†	-1.5	0.7063 ug/L	0.28944	0.7063 ppb	0.28944	40.98%
Na 589.592 Radial†	267.0	137.65 ug/L	15.232	137.65 ppb	15.232	11.07%
Ni 231.604†	334.6	11.271 ug/L	0.5325	11.271 ppb	0.5325	4.72%
P 214.914†	687.9	458.87 ug/L	12.113	458.87 ppb	12.113	2.64%
Pb 220.353†	92.5	16.205 ug/L	1.0128	16.205 ppb	1.0128	6.25%
S 181.975 Axial†	283.9	448.91 ug/L	8.738	448.91 ppb	8.738	1.95%
Sb 206.836†	4.9	0.5688 ug/L	1.94518	0.5688 ppb	1.94518	342.00%
Se 196.026†	-30.1	3.7336 ug/L	2.73122	3.7336 ppb	2.73122	73.15%
Si 251.611†	172312.3	6592.7 ug/L	57.76	6592.7 ppb	57.76	0.88%
Sn 189.927†	-72.7	-15.432 ug/L	0.3068	-15.432 ppb	0.3068	1.99%
Sr 421.552†	5570.1	61.338 ug/L	0.5643	61.338 ppb	0.5643	0.92%
Ti 334.940†	152778.5	290.51 ug/L	2.236	290.51 ppb	2.236	0.77%
Tl 190.801†	-16.1	-0.9629 ug/L	1.65965	-0.9629 ppb	1.65965	172.36%
U 409.014†	-92.2	-4.7925 ug/L	1.34915	-4.7925 ppb	1.34915	28.15%
V 292.402†	1692.5	13.939 ug/L	0.2354	13.939 ppb	0.2354	1.69%
Zn 213.857†	4171.3	48.840 ug/L	0.3603	48.840 ppb	0.3603	0.74%
SiO2†	170371.1	13857 ug/L	202.3	13857 ppb	202.3	1.46%

Sequence No.: 8

Sample ID: 248371002|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 119

Date Collected: 3/31/2010 10:21:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371002|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4196.8	4196.8	117 %		10:23:05
1	Y RADIAL	5343.4	5343.4	131.4 %		10:23:05
1	Al 396.153Radial†	38518.6	33046.6	37920 ug/L	37920 ppb	10:23:05
1	Ca 317.933Radial†	8955.5	7642.0	15620 ug/L	15620 ppb	10:23:05
1	Fe 238.204 Radial†	6516.5	5563.9	78652 ug/L	78652 ppb	10:23:05
1	K 766.490 Radial†	49113.0	38976.8	8196.7 ug/L	8196.7 ppb	10:23:05
1	Mg 279.077 IEC†	230.1	196.1	8576.5 ug/L	8576.5 ppb	10:23:25
1	Na 589.592 Radial†	612.4	1421.1	732.73 ug/L	732.73 ppb	10:23:05
1	Sr 421.552†	10170.6	8683.0	95.613 ug/L	95.613 ppb	10:23:05
1	Sc 361.383	717499.2	717499.2	107.59 %		10:24:23
1	Y 371.029	649503.0	649503.0	122.99 %		10:24:23
1	Ag 328.068†	-4166.7	-4074.9	1.1620 ug/L	1.1620 ppb	10:24:23
1	As 188.979†	-26.0	1.0	38.406 ug/L	38.406 ppb	10:24:43
1	B 249.677†	925.1	1275.0	21.326 ug/L	21.326 ppb	10:24:23
1	Ba 233.527†	21287.9	19773.3	202.65 ug/L	202.65 ppb	10:24:23
1	Be 313.107†	-1935.8	2379.1	6.0914 ug/L	6.0914 ppb	10:24:23
1	Cd 226.502†	402.0	572.9	0.7062 ug/L	0.7062 ppb	10:24:43
1	Co 228.616†	737.4	735.3	13.323 ug/L	13.323 ppb	10:24:43
1	Cr 267.716†	3753.3	3393.4	60.718 ug/L	60.718 ppb	10:24:43
1	Cu 324.752†	13298.6	7006.4	29.117 ug/L	29.117 ppb	10:24:23
1	Mn 257.610†	1265964.3	1176225.0	1625.9 ug/L	1625.9 ppb	10:24:23
1	Mo 202.031†	3.2	-1.8	6.1170 ug/L	6.1170 ppb	10:24:43
1	Ni 231.604†	1419.7	1234.8	41.599 ug/L	41.599 ppb	10:24:43
1	P 214.914†	1412.8	1111.5	695.42 ug/L	695.42 ppb	10:24:43
1	Pb 220.353†	289.6	335.0	56.744 ug/L	56.744 ppb	10:24:43
1	S 181.975 Axial†	552.8	474.5	745.64 ug/L	745.64 ppb	10:24:43
1	Sb 206.836†	50.2	21.4	-0.3946 ug/L	-0.3946 ppb	10:24:43
1	Se 196.026†	-379.9	-326.5	-34.849 ug/L	-34.849 ppb	10:24:43
1	Si 251.611†	1154111.4	1072178.8	41022 ug/L	41022 ppb	10:24:23
1	Sn 189.927†	-69.4	-74.2	-14.286 ug/L	-14.286 ppb	10:24:43
1	Ti 334.940†	1273097.3	1184715.0	2245.6 ug/L	2245.6 ppb	10:24:23
1	Tl 190.801†	-94.9	-56.7	3.5793 ug/L	3.5793 ppb	10:24:43
1	U 409.014†	-8023.2	-5051.8	-210.81 ug/L	-210.81 ppb	10:24:23
1	V 292.402†	10195.7	11225.0	89.352 ug/L	89.352 ppb	10:24:23
1	Zn 213.857†	32423.8	29446.7	343.31 ug/L	343.31 ppb	10:24:23
1	SiO2†	1175078.8	1091653.6	88792 ug/L	88792 ppb	10:25:41
2	Sc Radial	4310.3	4310.3	120 %		10:23:30
2	Y RADIAL	5538.3	5538.3	136.2 %		10:23:30
2	Al 396.153Radial†	39622.3	33098.2	37979 ug/L	37979 ppb	10:23:30
2	Ca 317.933Radial†	9218.8	7659.5	15656 ug/L	15656 ppb	10:23:30
2	Fe 238.204 Radial†	6675.2	5549.4	78446 ug/L	78446 ppb	10:23:30
2	K 766.490 Radial†	50551.4	39068.5	8215.9 ug/L	8215.9 ppb	10:23:30
2	Mg 279.077 IEC†	234.3	194.4	8501.6 ug/L	8501.6 ppb	10:23:50
2	Na 589.592 Radial†	645.8	1435.1	739.99 ug/L	739.99 ppb	10:23:30
2	Sr 421.552†	10472.1	8705.0	95.856 ug/L	95.856 ppb	10:23:30
2	Sc 361.383	714619.2	714619.2	107.16 %		10:24:49
2	Y 371.029	647512.8	647512.8	122.62 %		10:24:49
2	Ag 328.068†	-4151.2	-4076.1	1.0919 ug/L	1.0919 ppb	10:24:49
2	As 188.979†	-16.3	10.1	43.001 ug/L	43.001 ppb	10:25:09
2	B 249.677†	947.4	1299.2	22.008 ug/L	22.008 ppb	10:24:49
2	Ba 233.527†	21156.6	19730.5	202.21 ug/L	202.21 ppb	10:24:49
2	Be 313.107†	-1940.6	2367.3	6.0765 ug/L	6.0765 ppb	10:24:49
2	Cd 226.502†	372.3	546.7	0.3223 ug/L	0.3223 ppb	10:25:09
2	Co 228.616†	751.1	750.9	13.738 ug/L	13.738 ppb	10:25:09
2	Cr 267.716†	3761.9	3415.5	61.036 ug/L	61.036 ppb	10:25:09
2	Cu 324.752†	13110.7	6880.9	28.664 ug/L	28.664 ppb	10:24:49
2	Mn 257.610†	1257341.2	1172920.0	1621.3 ug/L	1621.3 ppb	10:24:49
2	Mo 202.031†	5.0	-0.1	6.2687 ug/L	6.2687 ppb	10:25:09
2	Ni 231.604†	1431.3	1250.9	42.141 ug/L	42.141 ppb	10:25:09

2	P 214.914†	1427.1	1130.1	708.31 ug/L	708.31 ppb	10:25:09
2	Pb 220.353†	289.9	336.3	56.994 ug/L	56.994 ppb	10:25:09
2	S 181.975 Axial†	554.3	477.9	751.08 ug/L	751.08 ppb	10:25:09
2	Sb 206.836†	53.9	25.0	1.1315 ug/L	1.1315 ppb	10:25:09
2	Se 196.026†	-390.9	-338.2	-44.523 ug/L	-44.523 ppb	10:25:09
2	Si 251.611†	1145257.1	1068239.0	40871 ug/L	40871 ppb	10:24:49
2	Sn 189.927†	-68.9	-74.1	-14.239 ug/L	-14.239 ppb	10:25:09
2	Ti 334.940†	1265518.3	1182411.2	2241.3 ug/L	2241.3 ppb	10:24:49
2	Tl 190.801†	-121.2	-81.6	-6.3684 ug/L	-6.3684 ppb	10:25:09
2	U 409.014†	-8112.4	-5165.1	-215.31 ug/L	-215.31 ppb	10:24:49
2	V 292.402†	10072.8	11148.5	88.675 ug/L	88.675 ppb	10:24:49
2	Zn 213.857†	32322.4	29473.5	343.66 ug/L	343.66 ppb	10:24:49
2	SiO2†	1167460.5	1088945.8	88571 ug/L	88571 ppb	10:25:47
3	Sc Radial	4220.5	4220.5	118 %		10:23:55
3	Y RADIAL	5383.9	5383.9	132.4 %		10:23:55
3	Al 396.153Radial†	38680.6	32999.2	37865 ug/L	37865 ppb	10:23:55
3	Ca 317.933Radial†	9028.7	7661.2	15659 ug/L	15659 ppb	10:23:55
3	Fe 238.204 Radial†	6519.7	5535.4	78248 ug/L	78248 ppb	10:23:55
3	K 766.490 Radial†	49410.2	38993.4	8200.1 ug/L	8200.1 ppb	10:23:55
3	Mg 279.077 IEC†	233.4	197.8	8651.7 ug/L	8651.7 ppb	10:24:15
3	Na 589.592 Radial†	568.2	1380.6	711.84 ug/L	711.84 ppb	10:23:55
3	Sr 421.552†	10154.3	8620.1	94.920 ug/L	94.920 ppb	10:23:55
3	Sc 361.383	715155.1	715155.1	107.24 %		10:25:15
3	Y 371.029	648619.2	648619.2	122.82 %		10:25:15
3	Ag 328.068†	-4066.0	-3993.6	1.5037 ug/L	1.5037 ppb	10:25:15
3	As 188.979†	-21.5	5.2	40.432 ug/L	40.432 ppb	10:25:35
3	B 249.677†	977.4	1326.6	22.773 ug/L	22.773 ppb	10:25:15
3	Ba 233.527†	21148.2	19707.9	201.97 ug/L	201.97 ppb	10:25:15
3	Be 313.107†	-1862.0	2442.0	6.1014 ug/L	6.1014 ppb	10:25:15
3	Cd 226.502†	371.7	545.9	0.3300 ug/L	0.3300 ppb	10:25:35
3	Co 228.616†	742.8	742.6	13.531 ug/L	13.531 ppb	10:25:35
3	Cr 267.716†	3758.2	3409.4	60.920 ug/L	60.920 ppb	10:25:35
3	Cu 324.752†	13003.3	6771.6	28.263 ug/L	28.263 ppb	10:25:15
3	Mn 257.610†	1255035.1	1169890.3	1617.1 ug/L	1617.1 ppb	10:25:15
3	Mo 202.031†	3.7	-1.3	6.1367 ug/L	6.1367 ppb	10:25:35
3	Ni 231.604†	1400.1	1220.9	41.130 ug/L	41.130 ppb	10:25:35
3	P 214.914†	1420.1	1122.6	703.39 ug/L	703.39 ppb	10:25:35
3	Pb 220.353†	276.2	323.4	54.878 ug/L	54.878 ppb	10:25:35
3	S 181.975 Axial†	546.8	470.6	739.46 ug/L	739.46 ppb	10:25:35
3	Sb 206.836†	46.7	18.3	-1.6846 ug/L	-1.6846 ppb	10:25:35
3	Se 196.026†	-386.6	-334.0	-41.752 ug/L	-41.752 ppb	10:25:35
3	Si 251.611†	1142631.2	1064989.5	40747 ug/L	40747 ppb	10:25:15
3	Sn 189.927†	-74.7	-79.4	-15.515 ug/L	-15.515 ppb	10:25:35
3	Ti 334.940†	1264874.1	1180925.4	2238.4 ug/L	2238.4 ppb	10:25:15
3	Tl 190.801†	-105.5	-66.9	-0.5585 ug/L	-0.5585 ppb	10:25:35
3	U 409.014†	-7989.0	-5044.3	-210.46 ug/L	-210.46 ppb	10:25:15
3	V 292.402†	10110.0	11176.2	88.972 ug/L	88.972 ppb	10:25:15
3	Zn 213.857†	32203.2	29339.8	342.08 ug/L	342.08 ppb	10:25:15
3	SiO2†	1166152.7	1086909.9	88406 ug/L	88406 ppb	10:25:53

Mean Data: 248371002|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	715757.8	107.33 %		0.230			0.21%
Sc Radial	4242.5	118 %		1.7			1.41%
Y 371.029	648545.0	122.81 %		0.189			0.15%
Y RADIAL	5421.9	133.3 %		2.53			1.90%
Ag 328.068†	-4048.2	1.2525 ug/L		0.22033	1.2525 ppb	0.22033	17.59%
Al 396.153Radial†	33048.0	37921 ug/L		56.8	37921 ppb	56.8	0.15%
As 188.979†	5.4	40.613 ug/L		2.3030	40.613 ppb	2.3030	5.67%
B 249.677†	1300.3	22.036 ug/L		0.7238	22.036 ppb	0.7238	3.28%
Ba 233.527†	19737.2	202.28 ug/L		0.343	202.28 ppb	0.343	0.17%
Be 313.107†	2396.1	6.0898 ug/L		0.01252	6.0898 ppb	0.01252	0.21%
Ca 317.933Radial†	7654.2	15645 ug/L		21.7	15645 ppb	21.7	0.14%
Cd 226.502†	555.2	0.4529 ug/L		0.21948	0.4529 ppb	0.21948	48.46%
Co 228.616†	742.9	13.531 ug/L		0.2077	13.531 ppb	0.2077	1.54%
Cr 267.716†	3406.1	60.891 ug/L		0.1612	60.891 ppb	0.1612	0.26%
Cu 324.752†	6886.3	28.681 ug/L		0.4274	28.681 ppb	0.4274	1.49%
Fe 238.204 Radial†	5549.6	78449 ug/L		202.0	78449 ppb	202.0	0.26%
K 766.490 Radial†	39012.9	8204.2 ug/L		10.27	8204.2 ppb	10.27	0.13%

Mg 279.077 IEC†	196.1	8576.6 ug/L	75.09	8576.6 ppb	75.09	0.88%
Mn 257.610†	1173011.7	1621.5 ug/L	4.38	1621.5 ppb	4.38	0.27%
Mo 202.031†	-1.0	6.1741 ug/L	0.08250	6.1741 ppb	0.08250	1.34%
Na 589.592 Radial†	1412.2	728.19 ug/L	14.611	728.19 ppb	14.611	2.01%
Ni 231.604†	1235.6	41.623 ug/L	0.5062	41.623 ppb	0.5062	1.22%
P 214.914†	1121.4	702.37 ug/L	6.507	702.37 ppb	6.507	0.93%
Pb 220.353†	331.5	56.205 ug/L	1.1563	56.205 ppb	1.1563	2.06%
S 181.975 Axial†	474.3	745.39 ug/L	5.816	745.39 ppb	5.816	0.78%
Sb 206.836†	21.6	-0.3159 ug/L	1.40969	-0.3159 ppb	1.40969	446.21%
Se 196.026†	-332.9	-40.374 ug/L	4.9821	-40.374 ppb	4.9821	12.34%
Si 251.611†	1068469.1	40880 ug/L	137.7	40880 ppb	137.7	0.34%
Sn 189.927†	-75.9	-14.680 ug/L	0.7236	-14.680 ppb	0.7236	4.93%
Sr 421.552†	8669.4	95.463 ug/L	0.4854	95.463 ppb	0.4854	0.51%
Ti 334.940†	1182683.9	2241.8 ug/L	3.62	2241.8 ppb	3.62	0.16%
Tl 190.801†	-68.4	-1.1159 ug/L	4.99722	-1.1159 ppb	4.99722	447.82%
U 409.014†	-5087.1	-212.19 ug/L	2.705	-212.19 ppb	2.705	1.27%
V 292.402†	11183.2	89.000 ug/L	0.3397	89.000 ppb	0.3397	0.38%
Zn 213.857†	29420.0	343.02 ug/L	0.828	343.02 ppb	0.828	0.24%
SiO2†	1089169.8	88589 ug/L	193.6	88589 ppb	193.6	0.22%

Sequence No.: 9

Sample ID: 248371003|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 120

Date Collected: 3/31/2010 10:28:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371003|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4179.9	4179.9	116 %		10:30:18
1	Y RADIAL	5433.8	5433.8	133.6 %		10:30:18
1	Al 396.153Radial†	51919.5	44685.3	51275 ug/L	51275 ppb	10:29:58
1	Ca 317.933Radial†	8796.9	7536.9	15405 ug/L	15405 ppb	10:29:58
1	Fe 238.204 Radial†	6910.4	5924.7	83753 ug/L	83753 ppb	10:30:18
1	K 766.490 Radial†	51017.5	40782.0	8576.4 ug/L	8576.4 ppb	10:29:58
1	Mg 279.077 IEC†	319.6	273.8	11998 ug/L	11998 ppb	10:30:18
1	Na 589.592 Radial†	646.5	1452.5	748.94 ug/L	748.94 ppb	10:29:58
1	Sr 421.552†	17123.5	14687.6	161.82 ug/L	161.82 ppb	10:29:58
1	Sc 361.383	722159.4	722159.4	108.29 %		10:31:16
1	Y 371.029	676444.4	676444.4	128.09 %		10:31:16
1	Ag 328.068†	-4694.2	-4537.0	0.2677 ug/L	0.2677 ppb	10:31:21
1	As 188.979†	-35.1	-7.1	39.162 ug/L	39.162 ppb	10:31:41
1	B 249.677†	479.9	858.2	9.2985 ug/L	9.2985 ppb	10:31:21
1	Ba 233.527†	74683.2	68954.9	700.43 ug/L	700.43 ppb	10:31:21
1	Be 313.107†	-5482.8	-885.0	5.7174 ug/L	5.7174 ppb	10:31:21
1	Cd 226.502†	421.9	588.9	0.4455 ug/L	0.4455 ppb	10:31:41
1	Co 228.616†	1268.5	1221.4	25.159 ug/L	25.159 ppb	10:31:41
1	Cr 267.716†	7102.0	6463.3	108.51 ug/L	108.51 ppb	10:31:21
1	Cu 324.752†	18187.2	11441.2	45.113 ug/L	45.113 ppb	10:31:21
1	Mn 257.610†	1707580.3	1576452.9	2177.0 ug/L	2177.0 ppb	10:31:16
1	Mo 202.031†	-34.5	-36.6	3.1090 ug/L	3.1090 ppb	10:31:41
1	Ni 231.604†	2468.7	2195.0	73.946 ug/L	73.946 ppb	10:31:41
1	P 214.914†	1120.6	833.2	502.60 ug/L	502.60 ppb	10:31:41
1	Pb 220.353†	408.9	443.4	77.274 ug/L	77.274 ppb	10:31:41
1	S 181.975 Axial†	343.2	277.6	430.74 ug/L	430.74 ppb	10:31:41
1	Sb 206.836†	54.9	25.4	-0.5402 ug/L	-0.5402 ppb	10:31:41
1	Se 196.026†	-425.1	-366.0	-48.372 ug/L	-48.372 ppb	10:31:41
1	Si 251.611†	1145178.6	1057007.1	40441 ug/L	40441 ppb	10:31:16
1	Sn 189.927†	-84.7	-88.0	-17.546 ug/L	-17.546 ppb	10:31:41
1	Ti 334.940†	1531459.6	1415670.1	2682.8 ug/L	2682.8 ppb	10:31:16
1	Tl 190.801†	-116.8	-76.4	1.8721 ug/L	1.8721 ppb	10:31:41
1	U 409.014†	-8164.4	-5134.0	-214.78 ug/L	-214.78 ppb	10:31:16
1	V 292.402†	15828.9	16365.9	135.51 ug/L	135.51 ppb	10:31:21
1	Zn 213.857†	26293.4	23591.0	271.65 ug/L	271.65 ppb	10:31:21
1	SiO2†	1151707.6	1063022.7	86463 ug/L	86463 ppb	10:32:49
2	Sc Radial	4245.7	4245.7	118 %		10:30:43
2	Y RADIAL	5502.3	5502.3	135.3 %		10:30:43
2	Al 396.153Radial†	52070.7	44121.9	50628 ug/L	50628 ppb	10:30:23
2	Ca 317.933Radial†	8806.5	7427.9	15183 ug/L	15183 ppb	10:30:23
2	Fe 238.204 Radial†	6954.1	5869.6	82974 ug/L	82974 ppb	10:30:43
2	K 766.490 Radial†	51018.3	40103.4	8433.7 ug/L	8433.7 ppb	10:30:23
2	Mg 279.077 IEC†	323.4	272.7	11952 ug/L	11952 ppb	10:30:43
2	Na 589.592 Radial†	576.6	1384.8	714.02 ug/L	714.02 ppb	10:30:23
2	Sr 421.552†	17156.6	14487.6	159.61 ug/L	159.61 ppb	10:30:23
2	Sc 361.383	726297.0	726297.0	108.91 %		10:31:47
2	Y 371.029	679175.6	679175.6	128.61 %		10:31:47
2	Ag 328.068†	-4685.6	-4504.5	0.2087 ug/L	0.2087 ppb	10:31:52
2	As 188.979†	-18.3	8.5	47.069 ug/L	47.069 ppb	10:32:12
2	B 249.677†	500.2	874.4	9.8588 ug/L	9.8588 ppb	10:31:52
2	Ba 233.527†	74893.5	68755.0	698.39 ug/L	698.39 ppb	10:31:52
2	Be 313.107†	-5520.6	-890.8	5.7161 ug/L	5.7161 ppb	10:31:52
2	Cd 226.502†	419.2	584.2	0.4543 ug/L	0.4543 ppb	10:32:12
2	Co 228.616†	1274.0	1219.7	25.128 ug/L	25.128 ppb	10:32:12
2	Cr 267.716†	7046.4	6374.9	107.07 ug/L	107.07 ppb	10:31:52
2	Cu 324.752†	18237.9	11392.0	44.892 ug/L	44.892 ppb	10:31:52
2	Mn 257.610†	1715831.9	1575046.2	2175.0 ug/L	2175.0 ppb	10:31:47
2	Mo 202.031†	-23.8	-26.6	4.0199 ug/L	4.0199 ppb	10:32:12
2	Ni 231.604†	2432.4	2148.7	72.387 ug/L	72.387 ppb	10:32:12

2	P 214.914†	1099.2	807.7	485.78 ug/L	485.78 ppb	10:32:12
2	Pb 220.353†	417.0	448.7	78.048 ug/L	78.048 ppb	10:32:12
2	S 181.975 Axial†	345.2	277.6	430.92 ug/L	430.92 ppb	10:32:12
2	Sb 206.836†	48.8	19.6	-2.8877 ug/L	-2.8877 ppb	10:32:12
2	Se 196.026†	-412.7	-352.4	-40.039 ug/L	-40.039 ppb	10:32:12
2	Si 251.611†	1151790.8	1057053.9	40443 ug/L	40443 ppb	10:31:47
2	Sn 189.927†	-73.8	-77.5	-15.117 ug/L	-15.117 ppb	10:32:12
2	Ti 334.940†	1540524.2	1415936.4	2683.3 ug/L	2683.3 ppb	10:31:47
2	Tl 190.801†	-107.8	-67.5	5.4211 ug/L	5.4211 ppb	10:32:12
2	U 409.014†	-7944.9	-4889.6	-204.93 ug/L	-204.93 ppb	10:31:47
2	V 292.402†	15885.1	16334.3	135.36 ug/L	135.36 ppb	10:31:52
2	Zn 213.857†	26350.9	23505.4	270.74 ug/L	270.74 ppb	10:31:52
2	SiO2†	1136392.5	1042901.2	84826 ug/L	84826 ppb	10:32:55
3	Sc Radial	4251.6	4251.6	118 %		10:31:08
3	Y RADIAL	5527.2	5527.2	135.9 %		10:31:08
3	Al 396.153Radial†	51410.3	43504.0	49919 ug/L	49919 ppb	10:30:48
3	Ca 317.933Radial†	8646.4	7282.5	14885 ug/L	14885 ppb	10:30:48
3	Fe 238.204 Radial†	7000.5	5900.7	83413 ug/L	83413 ppb	10:31:08
3	K 766.490 Radial†	50618.8	39706.9	8350.4 ug/L	8350.4 ppb	10:30:48
3	Mg 279.077 IEC†	323.2	272.2	11930 ug/L	11930 ppb	10:31:08
3	Na 589.592 Radial†	579.2	1386.3	714.81 ug/L	714.81 ppb	10:30:48
3	Sr 421.552†	16963.2	14304.3	157.59 ug/L	157.59 ppb	10:30:48
3	Sc 361.383	714029.1	714029.1	107.07 %		10:32:18
3	Y 371.029	669040.9	669040.9	126.69 %		10:32:18
3	Ag 328.068†	-4548.1	-4449.9	0.6708 ug/L	0.6708 ppb	10:32:23
3	As 188.979†	-31.4	-4.1	40.661 ug/L	40.661 ppb	10:32:43
3	B 249.677†	390.6	779.9	7.2567 ug/L	7.2567 ppb	10:32:23
3	Ba 233.527†	73696.7	68818.8	699.04 ug/L	699.04 ppb	10:32:23
3	Be 313.107†	-5563.8	-1018.2	5.6587 ug/L	5.6587 ppb	10:32:23
3	Cd 226.502†	424.3	595.5	0.5825 ug/L	0.5825 ppb	10:32:43
3	Co 228.616†	1249.5	1216.9	25.055 ug/L	25.055 ppb	10:32:43
3	Cr 267.716†	6914.4	6362.8	106.93 ug/L	106.93 ppb	10:32:23
3	Cu 324.752†	17973.8	11433.1	45.067 ug/L	45.067 ppb	10:32:23
3	Mn 257.610†	1691712.4	1579588.0	2181.3 ug/L	2181.3 ppb	10:32:18
3	Mo 202.031†	-17.3	-20.9	4.6068 ug/L	4.6068 ppb	10:32:43
3	Ni 231.604†	2447.3	2201.1	74.150 ug/L	74.150 ppb	10:32:43
3	P 214.914†	1095.4	821.4	494.53 ug/L	494.53 ppb	10:32:43
3	Pb 220.353†	391.5	431.4	75.008 ug/L	75.008 ppb	10:32:43
3	S 181.975 Axial†	345.0	282.9	439.39 ug/L	439.39 ppb	10:32:43
3	Sb 206.836†	59.0	29.9	1.3763 ug/L	1.3763 ppb	10:32:43
3	Se 196.026†	-431.7	-376.7	-57.965 ug/L	-57.965 ppb	10:32:43
3	Si 251.611†	1129975.4	1054849.3	40359 ug/L	40359 ppb	10:32:18
3	Sn 189.927†	-80.8	-85.2	-16.975 ug/L	-16.975 ppb	10:32:43
3	Ti 334.940†	1513505.7	1415004.9	2681.5 ug/L	2681.5 ppb	10:32:18
3	Tl 190.801†	-122.8	-83.2	-0.7976 ug/L	-0.7976 ppb	10:32:43
3	U 409.014†	-8102.8	-5162.4	-215.87 ug/L	-215.87 ppb	10:32:18
3	V 292.402†	15560.5	16281.7	134.80 ug/L	134.80 ppb	10:32:23
3	Zn 213.857†	25780.3	23388.2	269.25 ug/L	269.25 ppb	10:32:23
3	SiO2†	1153659.8	1076956.5	87596 ug/L	87596 ppb	10:33:01

Mean Data: 248371003|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	720828.5	108.09 %		0.936				0.87%
Sc Radial	4225.7	118 %		1.1				0.94%
Y 371.029	674887.0	127.80 %		0.993				0.78%
Y RADIAL	5487.8	135.0 %		1.19				0.88%
Ag 328.068†	-4497.1	0.3824 ug/L		0.25148	0.3824 ppb		0.25148	65.77%
Al 396.153Radial†	44103.7	50608 ug/L		678.1	50608 ppb		678.1	1.34%
As 188.979†	-0.9	42.298 ug/L		4.1998	42.298 ppb		4.1998	9.93%
B 249.677†	837.5	8.8046 ug/L		1.36953	8.8046 ppb		1.36953	15.55%
Ba 233.527†	68842.9	699.29 ug/L		1.044	699.29 ppb		1.044	0.15%
Be 313.107†	-931.3	5.6974 ug/L		0.03352	5.6974 ppb		0.03352	0.59%
Ca 317.933Radial†	7415.7	15158 ug/L		260.9	15158 ppb		260.9	1.72%
Cd 226.502†	589.5	0.4941 ug/L		0.07668	0.4941 ppb		0.07668	15.52%
Co 228.616†	1219.3	25.114 ug/L		0.0534	25.114 ppb		0.0534	0.21%
Cr 267.716†	6400.3	107.50 ug/L		0.877	107.50 ppb		0.877	0.82%
Cu 324.752†	11422.1	45.024 ug/L		0.1166	45.024 ppb		0.1166	0.26%
Fe 238.204 Radial†	5898.4	83380 ug/L		390.5	83380 ppb		390.5	0.47%
K 766.490 Radial†	40197.5	8453.5 ug/L		114.32	8453.5 ppb		114.32	1.35%

Mg 279.077 IEC†	272.9	11960 ug/L	34.9	11960 ppb	34.9	0.29%
Mn 257.610†	1577029.1	2177.7 ug/L	3.21	2177.7 ppb	3.21	0.15%
Mo 202.031†	-28.0	3.9119 ug/L	0.75472	3.9119 ppb	0.75472	19.29%
Na 589.592 Radial†	1407.9	725.93 ug/L	19.938	725.93 ppb	19.938	2.75%
Ni 231.604†	2181.6	73.495 ug/L	0.9643	73.495 ppb	0.9643	1.31%
P 214.914†	820.8	494.30 ug/L	8.412	494.30 ppb	8.412	1.70%
Pb 220.353†	441.1	76.777 ug/L	1.5797	76.777 ppb	1.5797	2.06%
S 181.975 Axial†	279.3	433.68 ug/L	4.943	433.68 ppb	4.943	1.14%
Sb 206.836†	25.0	-0.6839 ug/L	2.13566	-0.6839 ppb	2.13566	312.29%
Se 196.026†	-365.0	-48.792 ug/L	8.9703	-48.792 ppb	8.9703	18.38%
Si 251.611†	1056303.5	40415 ug/L	48.2	40415 ppb	48.2	0.12%
Sn 189.927†	-83.6	-16.546 ug/L	1.2701	-16.546 ppb	1.2701	7.68%
Sr 421.552†	14493.2	159.67 ug/L	2.111	159.67 ppb	2.111	1.32%
Ti 334.940†	1415537.1	2682.5 ug/L	0.93	2682.5 ppb	0.93	0.03%
Tl 190.801†	-75.7	2.1652 ug/L	3.11967	2.1652 ppb	3.11967	144.08%
U 409.014†	-5062.0	-211.86 ug/L	6.029	-211.86 ppb	6.029	2.85%
V 292.402†	16327.3	135.22 ug/L	0.373	135.22 ppb	0.373	0.28%
Zn 213.857†	23494.8	270.55 ug/L	1.211	270.55 ppb	1.211	0.45%
SiO2†	1060960.1	86295 ug/L	1392.6	86295 ppb	1392.6	1.61%

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2010 10:35:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4066.7	4066.7	113 %		10:37:26
1	Y RADIAL	4408.3	4408.3	108.4 %		10:37:06
1	Al 396.153Radial†	4815.5	4359.4	4979.3 ug/L	4979.3 ppb	10:37:06
1	Ca 317.933Radial†	2621.8	2297.8	4696.8 ug/L	4696.8 ppb	10:37:26
1	Fe 238.204 Radial†	384.0	330.7	4689.4 ug/L	4689.4 ppb	10:37:26
1	K 766.490 Radial†	29408.1	22931.9	4820.0 ug/L	4820.0 ppb	10:37:06
1	Mg 279.077 IEC†	125.0	109.7	4843.1 ug/L	4843.1 ppb	10:37:26
1	Na 589.592 Radial†	20367.5	18870.5	9730.1 ug/L	9730.1 ppb	10:37:06
1	Sr 421.552†	51637.5	45553.1	502.19 ug/L	502.19 ppb	10:37:06
1	Sc 361.383	722108.9	722108.9	108.28 %		10:38:23
1	Y 371.029	564459.4	564459.4	106.89 %		10:38:23
1	Ag 328.068†	89992.9	82909.9	481.70 ug/L	481.70 ppb	10:38:29
1	As 188.979†	964.0	915.5	479.36 ug/L	479.36 ppb	10:38:49
1	B 249.677†	18874.5	17846.5	475.93 ug/L	475.93 ppb	10:38:29
1	Ba 233.527†	50934.3	47026.6	476.92 ug/L	476.92 ppb	10:38:29
1	Be 313.107†	1265356.1	1172784.6	492.34 ug/L	492.34 ppb	10:38:23
1	Cd 226.502†	33203.0	30863.5	476.29 ug/L	476.29 ppb	10:38:29
1	Co 228.616†	19969.8	18492.8	480.08 ug/L	480.08 ppb	10:38:29
1	Cr 267.716†	33672.3	31002.5	477.51 ug/L	477.51 ppb	10:38:29
1	Cu 324.752†	151538.7	134597.7	477.22 ug/L	477.22 ppb	10:38:29
1	Mn 257.610†	375729.1	346546.2	477.11 ug/L	477.11 ppb	10:38:29
1	Mo 202.031†	5252.1	4845.7	474.19 ug/L	474.19 ppb	10:38:49
1	Ni 231.604†	15461.7	14194.8	478.03 ug/L	478.03 ppb	10:38:29
1	P 214.914†	3980.4	3474.4	2265.3 ug/L	2265.3 ppb	10:38:49
1	Pb 220.353†	3059.1	2891.0	473.46 ug/L	473.46 ppb	10:38:49
1	S 181.975 Axial†	693.0	600.7	952.00 ug/L	952.00 ppb	10:38:49
1	Sb 206.836†	1253.4	1132.3	486.45 ug/L	486.45 ppb	10:38:49
1	Se 196.026†	637.5	615.3	494.66 ug/L	494.66 ppb	10:38:49
1	Si 251.611†	69922.8	64040.1	2444.4 ug/L	2444.4 ppb	10:38:29
1	Sn 189.927†	2171.7	1995.9	472.69 ug/L	472.69 ppb	10:38:49
1	Ti 334.940†	270740.5	251445.2	476.15 ug/L	476.15 ppb	10:38:29
1	Tl 190.801†	1264.0	1198.8	478.87 ug/L	478.87 ppb	10:38:49
1	U 409.014†	10477.4	12081.9	480.85 ug/L	480.85 ppb	10:38:29
1	V 292.402†	54108.6	51719.8	482.89 ug/L	482.89 ppb	10:38:29
1	Zn 213.857†	43703.7	39671.7	474.39 ug/L	474.39 ppb	10:38:29
1	SiO2†	68452.0	62667.9	5084.3 ug/L	5084.3 ppb	10:39:56
2	Sc Radial	4023.9	4023.9	112 %		10:37:51
2	Y RADIAL	4654.2	4654.2	114.5 %		10:37:31
2	Al 396.153Radial†	4870.2	4453.4	5086.5 ug/L	5086.5 ppb	10:37:31
2	Ca 317.933Radial†	2698.1	2390.5	4886.3 ug/L	4886.3 ppb	10:37:51
2	Fe 238.204 Radial†	395.5	344.5	4884.9 ug/L	4884.9 ppb	10:37:51
2	K 766.490 Radial†	29451.2	23246.3	4886.0 ug/L	4886.0 ppb	10:37:31
2	Mg 279.077 IEC†	125.9	111.6	4928.7 ug/L	4928.7 ppb	10:37:51
2	Na 589.592 Radial†	20451.8	19136.8	9867.4 ug/L	9867.4 ppb	10:37:31
2	Sr 421.552†	52160.4	46504.0	512.67 ug/L	512.67 ppb	10:37:31
2	Sc 361.383	697078.3	697078.3	104.53 %		10:38:54
2	Y 371.029	546068.1	546068.1	103.41 %		10:38:54
2	Ag 328.068†	89116.1	85055.4	494.19 ug/L	494.19 ppb	10:38:59
2	As 188.979†	964.6	948.1	496.41 ug/L	496.41 ppb	10:39:19
2	B 249.677†	18590.7	18200.9	485.36 ug/L	485.36 ppb	10:38:59
2	Ba 233.527†	50454.5	48256.7	489.39 ug/L	489.39 ppb	10:38:59
2	Be 313.107†	1225632.7	1176743.1	494.02 ug/L	494.02 ppb	10:38:54
2	Cd 226.502†	32853.9	31630.6	488.12 ug/L	488.12 ppb	10:38:59
2	Co 228.616†	19758.9	18953.3	492.03 ug/L	492.03 ppb	10:38:59
2	Cr 267.716†	33320.2	31782.3	489.53 ug/L	489.53 ppb	10:38:59
2	Cu 324.752†	150376.5	138511.2	491.10 ug/L	491.10 ppb	10:38:59
2	Mn 257.610†	372273.1	355699.9	489.72 ug/L	489.72 ppb	10:38:59
2	Mo 202.031†	5210.5	4980.2	487.35 ug/L	487.35 ppb	10:39:19
2	Ni 231.604†	15310.9	14563.3	490.44 ug/L	490.44 ppb	10:38:59

2	P 214.914†	3960.4	3587.3	2339.1 ug/L	2339.1 ppb	10:39:19
2	Pb 220.353†	3031.0	2965.5	485.65 ug/L	485.65 ppb	10:39:19
2	S 181.975 Axial†	684.6	615.6	975.73 ug/L	975.73 ppb	10:39:19
2	Sb 206.836†	1232.4	1153.8	495.80 ug/L	495.80 ppb	10:39:19
2	Se 196.026†	632.9	632.1	508.32 ug/L	508.32 ppb	10:39:19
2	Si 251.611†	69150.8	65620.3	2504.7 ug/L	2504.7 ppb	10:38:59
2	Sn 189.927†	2149.2	2046.4	484.67 ug/L	484.67 ppb	10:39:19
2	Ti 334.940†	268501.9	258281.9	489.12 ug/L	489.12 ppb	10:38:59
2	Tl 190.801†	1250.8	1228.1	490.58 ug/L	490.58 ppb	10:39:19
2	U 409.014†	10232.9	12195.4	485.33 ug/L	485.33 ppb	10:38:59
2	V 292.402†	53618.6	53045.4	495.25 ug/L	495.25 ppb	10:38:59
2	Zn 213.857†	43222.6	40660.8	486.20 ug/L	486.20 ppb	10:38:59
2	SiO2†	69679.2	66112.0	5364.1 ug/L	5364.1 ppb	10:40:01
3	Sc Radial	4020.3	4020.3	112 %		10:38:16
3	Y RADIAL	4554.5	4554.5	112.0 %		10:37:56
3	Al 396.153Radial†	4858.7	4447.0	5079.0 ug/L	5079.0 ppb	10:37:56
3	Ca 317.933Radial†	2719.8	2412.0	4930.2 ug/L	4930.2 ppb	10:38:16
3	Fe 238.204 Radial†	401.0	349.7	4958.7 ug/L	4958.7 ppb	10:38:16
3	K 766.490 Radial†	29457.3	23275.2	4892.0 ug/L	4892.0 ppb	10:37:56
3	Mg 279.077 IEC†	130.1	115.5	5099.6 ug/L	5099.6 ppb	10:38:16
3	Na 589.592 Radial†	20536.2	19228.4	9914.6 ug/L	9914.6 ppb	10:37:56
3	Sr 421.552†	52189.3	46571.4	513.41 ug/L	513.41 ppb	10:37:56
3	Sc 361.383	696227.4	696227.4	104.40 %		10:39:25
3	Y 371.029	546455.0	546455.0	103.48 %		10:39:25
3	Ag 328.068†	90740.9	86716.1	503.83 ug/L	503.83 ppb	10:39:30
3	As 188.979†	974.5	958.7	502.02 ug/L	502.02 ppb	10:39:50
3	B 249.677†	19034.5	18647.7	497.29 ug/L	497.29 ppb	10:39:30
3	Ba 233.527†	51310.3	49135.5	498.31 ug/L	498.31 ppb	10:39:30
3	Be 313.107†	1233072.1	1185302.2	497.63 ug/L	497.63 ppb	10:39:25
3	Cd 226.502†	33378.5	32171.5	496.47 ug/L	496.47 ppb	10:39:30
3	Co 228.616†	20040.2	19245.9	499.62 ug/L	499.62 ppb	10:39:30
3	Cr 267.716†	33918.2	32394.0	498.95 ug/L	498.95 ppb	10:39:30
3	Cu 324.752†	153598.2	141773.0	502.66 ug/L	502.66 ppb	10:39:30
3	Mn 257.610†	378578.5	362174.9	498.63 ug/L	498.63 ppb	10:39:30
3	Mo 202.031†	5244.0	5018.3	491.09 ug/L	491.09 ppb	10:39:50
3	Ni 231.604†	15542.0	14802.5	498.50 ug/L	498.50 ppb	10:39:30
3	P 214.914†	3991.4	3621.6	2360.1 ug/L	2360.1 ppb	10:39:50
3	Pb 220.353†	3075.2	3011.4	493.13 ug/L	493.13 ppb	10:39:50
3	S 181.975 Axial†	686.8	618.5	980.31 ug/L	980.31 ppb	10:39:50
3	Sb 206.836†	1260.1	1181.8	507.59 ug/L	507.59 ppb	10:39:50
3	Se 196.026†	644.1	643.6	517.48 ug/L	517.48 ppb	10:39:50
3	Si 251.611†	70496.9	66990.5	2557.0 ug/L	2557.0 ppb	10:39:30
3	Sn 189.927†	2178.1	2076.6	491.80 ug/L	491.80 ppb	10:39:50
3	Ti 334.940†	273272.8	263165.7	498.35 ug/L	498.35 ppb	10:39:30
3	Tl 190.801†	1264.2	1242.4	496.32 ug/L	496.32 ppb	10:39:50
3	U 409.014†	10464.2	12428.9	494.63 ug/L	494.63 ppb	10:39:30
3	V 292.402†	54568.3	54017.8	504.26 ug/L	504.26 ppb	10:39:30
3	Zn 213.857†	44089.9	41542.1	496.76 ug/L	496.76 ppb	10:39:30
3	SiO2†	70143.2	66637.9	5406.7 ug/L	5406.7 ppb	10:40:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705138.2	105.73 %	2.205			2.09%
Sc Radial	4037.0	112 %	0.7			0.64%
Y 371.029	552327.5	104.59 %	1.990			1.90%
Y RADIAL	4539.0	111.6 %	3.04			2.72%
Ag 328.068†	84893.8	493.24 ug/L	11.097	493.24 ppb	11.097	2.25%
QC value within limits for Ag 328.068 Recovery = 98.65%						
Al 396.153Radial†	4419.9	5048.2 ug/L	59.83	5048.2 ppb	59.83	1.19%
QC value within limits for Al 396.153Radial Recovery = 100.96%						
As 188.979†	940.8	492.60 ug/L	11.801	492.60 ppb	11.801	2.40%
QC value within limits for As 188.979 Recovery = 98.52%						
B 249.677†	18231.7	486.19 ug/L	10.706	486.19 ppb	10.706	2.20%
QC value within limits for B 249.677 Recovery = 97.24%						
Ba 233.527†	48139.6	488.21 ug/L	10.744	488.21 ppb	10.744	2.20%
QC value within limits for Ba 233.527 Recovery = 97.64%						
Be 313.107†	1178276.6	494.66 ug/L	2.704	494.66 ppb	2.704	0.55%
QC value within limits for Be 313.107 Recovery = 98.93%						
Ca 317.933Radial†	2366.8	4837.8 ug/L	124.03	4837.8 ppb	124.03	2.56%

QC value within limits for Ca 317.933 Radial Recovery = 96.76%							
Cd 226.502†	31555.2	486.96 ug/L	10.139	486.96 ppb	10.139	2.08%	
QC value within limits for Cd 226.502 Recovery = 97.39%							
Co 228.616†	18897.3	490.58 ug/L	9.850	490.58 ppb	9.850	2.01%	
QC value within limits for Co 228.616 Recovery = 98.12%							
Cr 267.716†	31726.3	488.66 ug/L	10.748	488.66 ppb	10.748	2.20%	
QC value within limits for Cr 267.716 Recovery = 97.73%							
Cu 324.752†	138294.0	490.33 ug/L	12.741	490.33 ppb	12.741	2.60%	
QC value within limits for Cu 324.752 Recovery = 98.07%							
Fe 238.204 Radial†	341.7	4844.3 ug/L	139.17	4844.3 ppb	139.17	2.87%	
QC value within limits for Fe 238.204 Radial Recovery = 96.89%							
K 766.490 Radial†	23151.1	4866.0 ug/L	39.98	4866.0 ppb	39.98	0.82%	
QC value within limits for K 766.490 Radial Recovery = 97.32%							
Mg 279.077 IEC†	112.3	4957.1 ug/L	130.61	4957.1 ppb	130.61	2.63%	
QC value within limits for Mg 279.077 IEC Recovery = 99.14%							
Mn 257.610†	354807.0	488.49 ug/L	10.813	488.49 ppb	10.813	2.21%	
QC value within limits for Mn 257.610 Recovery = 97.70%							
Mo 202.031†	4948.1	484.21 ug/L	8.877	484.21 ppb	8.877	1.83%	
QC value within limits for Mo 202.031 Recovery = 96.84%							
Na 589.592 Radial†	19078.6	9837.4 ug/L	95.86	9837.4 ppb	95.86	0.97%	
QC value within limits for Na 589.592 Radial Recovery = 98.37%							
Ni 231.604†	14520.2	488.99 ug/L	10.309	488.99 ppb	10.309	2.11%	
QC value within limits for Ni 231.604 Recovery = 97.80%							
P 214.914†	3561.1	2321.5 ug/L	49.81	2321.5 ppb	49.81	2.15%	
QC value within limits for P 214.914 Recovery = 92.86%							
Pb 220.353†	2956.0	484.08 ug/L	9.929	484.08 ppb	9.929	2.05%	
QC value within limits for Pb 220.353 Recovery = 96.82%							
S 181.975 Axial†	611.6	969.35 ug/L	15.197	969.35 ppb	15.197	1.57%	
QC value within limits for S 181.975 Axial Recovery = 96.93%							
Sb 206.836†	1156.0	496.62 ug/L	10.593	496.62 ppb	10.593	2.13%	
QC value within limits for Sb 206.836 Recovery = 99.32%							
Se 196.026†	630.3	506.82 ug/L	11.481	506.82 ppb	11.481	2.27%	
QC value within limits for Se 196.026 Recovery = 101.36%							
Si 251.611†	65550.3	2502.0 ug/L	56.38	2502.0 ppb	56.38	2.25%	
QC value within limits for Si 251.611 Recovery = 100.08%							
Sn 189.927†	2039.6	483.05 ug/L	9.654	483.05 ppb	9.654	2.00%	
QC value within limits for Sn 189.927 Recovery = 96.61%							
Sr 421.552†	46209.5	509.42 ug/L	6.277	509.42 ppb	6.277	1.23%	
QC value within limits for Sr 421.552 Recovery = 101.88%							
Ti 334.940†	257631.0	487.87 ug/L	11.151	487.87 ppb	11.151	2.29%	
QC value within limits for Ti 334.940 Recovery = 97.57%							
Tl 190.801†	1223.1	488.59 ug/L	8.894	488.59 ppb	8.894	1.82%	
QC value within limits for Tl 190.801 Recovery = 97.72%							
U 409.014†	12235.4	486.93 ug/L	7.029	486.93 ppb	7.029	1.44%	
QC value within limits for U 409.014 Recovery = 97.39%							
V 292.402†	52927.7	494.14 ug/L	10.730	494.14 ppb	10.730	2.17%	
QC value within limits for V 292.402 Recovery = 98.83%							
Zn 213.857†	40624.9	485.78 ug/L	11.190	485.78 ppb	11.190	2.30%	
QC value within limits for Zn 213.857 Recovery = 97.16%							
SiO2†	65139.3	5285.0 ug/L	175.15	5285.0 ppb	175.15	3.31%	
QC value within limits for SiO2 Recovery = 98.83%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 10:42:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4027.6	4027.6	112 %		10:44:29
1	Y RADIAL	4384.8	4384.8	107.8 %		10:44:09
1	Al 396.153Radial†	-102.7	18.5	21.076 ug/L	21.076 ppb	10:44:09
1	Ca 317.933Radial†	23.3	5.0	10.319 ug/L	10.319 ppb	10:44:29
1	Fe 238.204 Radial†	7.3	-1.6	-23.081 ug/L	-23.081 ppb	10:44:29
1	K 766.490 Radial†	3146.7	-215.2	-45.302 ug/L	-45.302 ppb	10:44:09
1	Mg 279.077 IEC†	1.4	0.6	27.558 ug/L	27.558 ppb	10:44:29
1	Na 589.592 Radial†	-983.1	21.5	11.076 ug/L	11.076 ppb	10:44:09
1	Sr 421.552†	8.5	-6.2	-0.0687 ug/L	-0.0687 ppb	10:44:09
1	Sc 361.383	698790.0	698790.0	104.78 %		10:45:26
1	Y 371.029	552478.6	552478.6	104.62 %		10:45:26
1	Ag 328.068†	184.7	-25.8	-0.1516 ug/L	-0.1516 ppb	10:45:26
1	As 188.979†	-20.4	5.8	3.0050 ug/L	3.0050 ppb	10:45:46
1	B 249.677†	-404.8	28.8	0.7755 ug/L	0.7755 ppb	10:45:46
1	Ba 233.527†	3.4	-9.9	-0.0970 ug/L	-0.0970 ppb	10:45:46
1	Be 313.107†	-4356.8	20.3	0.0089 ug/L	0.0089 ppb	10:45:26
1	Cd 226.502†	-206.7	2.0	0.0341 ug/L	0.0341 ppb	10:45:46
1	Co 228.616†	-47.8	4.3	0.1154 ug/L	0.1154 ppb	10:45:46
1	Cr 267.716†	103.5	3.5	0.0529 ug/L	0.0529 ppb	10:45:46
1	Cu 324.752†	5655.4	43.0	0.1491 ug/L	0.1491 ppb	10:45:26
1	Mn 257.610†	492.2	15.3	0.0177 ug/L	0.0177 ppb	10:45:46
1	Mo 202.031†	26.8	20.8	2.0330 ug/L	2.0330 ppb	10:45:46
1	Ni 231.604†	83.3	-5.2	-0.1758 ug/L	-0.1758 ppb	10:45:46
1	P 214.914†	209.9	-1.4	-0.9599 ug/L	-0.9599 ppb	10:45:46
1	Pb 220.353†	-67.8	1.1	0.1842 ug/L	0.1842 ppb	10:45:46
1	S 181.975 Axial†	37.6	-3.5	-5.5265 ug/L	-5.5265 ppb	10:45:46
1	Sb 206.836†	25.4	-1.0	-0.3774 ug/L	-0.3774 ppb	10:45:46
1	Se 196.026†	-28.6	-0.7	-0.6235 ug/L	-0.6235 ppb	10:45:46
1	Si 251.611†	702.7	134.2	5.1110 ug/L	5.1110 ppb	10:45:46
1	Sn 189.927†	3.2	-6.7	-1.5746 ug/L	-1.5746 ppb	10:45:46
1	Ti 334.940†	-1369.3	98.9	0.1847 ug/L	0.1847 ppb	10:45:26
1	Tl 190.801†	-23.8	8.8	3.4884 ug/L	3.4884 ppb	10:45:46
1	U 409.014†	-2416.2	99.6	3.9805 ug/L	3.9805 ppb	10:45:26
1	V 292.402†	-1608.5	213.3	2.0053 ug/L	2.0053 ppb	10:45:26
1	Zn 213.857†	736.0	12.0	0.1492 ug/L	0.1492 ppb	10:45:46
1	SiO2†	730.1	146.6	11.867 ug/L	11.867 ppb	10:46:42
2	Sc Radial	3926.2	3926.2	109 %		10:44:54
2	Y RADIAL	4308.1	4308.1	105.9 %		10:44:34
2	Al 396.153Radial†	-94.9	23.2	26.647 ug/L	26.647 ppb	10:44:34
2	Ca 317.933Radial†	20.7	3.2	6.5941 ug/L	6.5941 ppb	10:44:54
2	Fe 238.204 Radial†	7.1	-1.7	-24.101 ug/L	-24.101 ppb	10:44:54
2	K 766.490 Radial†	3146.2	-143.3	-30.139 ug/L	-30.139 ppb	10:44:34
2	Mg 279.077 IEC†	3.3	2.4	105.19 ug/L	105.19 ppb	10:44:54
2	Na 589.592 Radial†	-1043.5	-56.4	-29.064 ug/L	-29.064 ppb	10:44:34
2	Sr 421.552†	30.2	13.8	0.1526 ug/L	0.1526 ppb	10:44:34
2	Sc 361.383	693536.4	693536.4	103.99 %		10:45:51
2	Y 371.029	548151.6	548151.6	103.80 %		10:45:51
2	Ag 328.068†	307.3	93.5	0.5340 ug/L	0.5340 ppb	10:45:51
2	As 188.979†	-22.4	3.8	1.9461 ug/L	1.9461 ppb	10:46:11
2	B 249.677†	-472.9	-39.6	-1.0575 ug/L	-1.0575 ppb	10:46:11
2	Ba 233.527†	25.5	11.3	0.1143 ug/L	0.1143 ppb	10:46:11
2	Be 313.107†	-4233.8	107.1	0.0450 ug/L	0.0450 ppb	10:45:51
2	Cd 226.502†	-195.4	11.4	0.1791 ug/L	0.1791 ppb	10:46:11
2	Co 228.616†	-38.9	12.5	0.3252 ug/L	0.3252 ppb	10:46:11
2	Cr 267.716†	100.7	1.6	0.0219 ug/L	0.0219 ppb	10:46:11
2	Cu 324.752†	5585.5	16.7	0.0578 ug/L	0.0578 ppb	10:45:51
2	Mn 257.610†	493.0	19.7	0.0204 ug/L	0.0204 ppb	10:46:11
2	Mo 202.031†	4.5	-0.4	-0.0441 ug/L	-0.0441 ppb	10:46:11
2	Ni 231.604†	126.4	36.8	1.2403 ug/L	1.2403 ppb	10:46:11

2	P 214.914†	193.6	-15.5	-10.520 ug/L	-10.520 ppb	10:46:11
2	Pb 220.353†	-72.7	-4.1	-0.6666 ug/L	-0.6666 ppb	10:46:11
2	S 181.975 Axial†	32.9	-7.7	-12.276 ug/L	-12.276 ppb	10:46:11
2	Sb 206.836†	25.5	-0.7	-0.3202 ug/L	-0.3202 ppb	10:46:11
2	Se 196.026†	-19.8	7.6	5.8592 ug/L	5.8592 ppb	10:46:11
2	Si 251.611†	670.6	108.5	4.1509 ug/L	4.1509 ppb	10:46:11
2	Sn 189.927†	6.6	-3.4	-0.8144 ug/L	-0.8144 ppb	10:46:11
2	Ti 334.940†	-1424.6	35.8	0.0600 ug/L	0.0600 ppb	10:45:51
2	Tl 190.801†	-28.0	4.6	1.8192 ug/L	1.8192 ppb	10:46:11
2	U 409.014†	-2493.6	7.7	0.3099 ug/L	0.3099 ppb	10:45:51
2	V 292.402†	-1763.7	52.5	0.4888 ug/L	0.4888 ppb	10:45:51
2	Zn 213.857†	733.4	14.9	0.1752 ug/L	0.1752 ppb	10:46:11
2	SiO2†	674.9	98.8	8.0341 ug/L	8.0341 ppb	10:46:47
3	Sc Radial	3972.3	3972.3	111 %		10:45:19
3	Y RADIAL	4464.8	4464.8	109.8 %		10:44:59
3	Al 396.153Radial†	-62.2	53.8	61.642 ug/L	61.642 ppb	10:44:59
3	Ca 317.933Radial†	21.1	3.3	6.7663 ug/L	6.7663 ppb	10:45:19
3	Fe 238.204 Radial†	6.4	-2.4	-33.595 ug/L	-33.595 ppb	10:45:19
3	K 766.490 Radial†	3100.3	-218.1	-45.899 ug/L	-45.899 ppb	10:44:59
3	Mg 279.077 IEC†	1.9	1.0	45.917 ug/L	45.917 ppb	10:45:19
3	Na 589.592 Radial†	-1000.9	-6.8	-3.5220 ug/L	-3.5220 ppb	10:44:59
3	Sr 421.552†	15.2	-0.0	-0.0003 ug/L	-0.0003 ppb	10:44:59
3	Sc 361.383	688516.4	688516.4	103.24 %		10:46:17
3	Y 371.029	546086.9	546086.9	103.41 %		10:46:17
3	Ag 328.068†	268.4	58.0	0.3255 ug/L	0.3255 ppb	10:46:17
3	As 188.979†	-27.1	-1.0	-0.5284 ug/L	-0.5284 ppb	10:46:37
3	B 249.677†	-439.3	-10.4	-0.2737 ug/L	-0.2737 ppb	10:46:37
3	Ba 233.527†	19.4	5.5	0.0560 ug/L	0.0560 ppb	10:46:37
3	Be 313.107†	-4259.0	53.0	0.0229 ug/L	0.0229 ppb	10:46:17
3	Cd 226.502†	-207.0	-1.3	-0.0154 ug/L	-0.0154 ppb	10:46:37
3	Co 228.616†	-40.7	10.5	0.2747 ug/L	0.2747 ppb	10:46:37
3	Cr 267.716†	98.2	-0.1	-0.0052 ug/L	-0.0052 ppb	10:46:37
3	Cu 324.752†	5481.6	-44.8	-0.1609 ug/L	-0.1609 ppb	10:46:17
3	Mn 257.610†	495.2	25.2	0.0295 ug/L	0.0295 ppb	10:46:37
3	Mo 202.031†	16.1	10.8	1.0551 ug/L	1.0551 ppb	10:46:37
3	Ni 231.604†	108.4	20.2	0.6818 ug/L	0.6818 ppb	10:46:37
3	P 214.914†	186.2	-21.3	-14.393 ug/L	-14.393 ppb	10:46:37
3	Pb 220.353†	-61.9	5.9	0.9767 ug/L	0.9767 ppb	10:46:37
3	S 181.975 Axial†	32.0	-8.4	-13.365 ug/L	-13.365 ppb	10:46:37
3	Sb 206.836†	36.7	10.3	4.2760 ug/L	4.2760 ppb	10:46:37
3	Se 196.026†	-22.8	4.5	3.4086 ug/L	3.4086 ppb	10:46:37
3	Si 251.611†	666.9	109.6	4.1787 ug/L	4.1787 ppb	10:46:37
3	Sn 189.927†	6.4	-3.5	-0.8311 ug/L	-0.8311 ppb	10:46:37
3	Ti 334.940†	-1298.5	148.0	0.2771 ug/L	0.2771 ppb	10:46:17
3	Tl 190.801†	-25.4	6.9	2.7426 ug/L	2.7426 ppb	10:46:37
3	U 409.014†	-2463.5	19.4	0.7782 ug/L	0.7782 ppb	10:46:17
3	V 292.402†	-1751.6	51.8	0.4995 ug/L	0.4995 ppb	10:46:17
3	Zn 213.857†	730.3	17.0	0.2055 ug/L	0.2055 ppb	10:46:37
3	SiO2†	672.4	101.1	8.1916 ug/L	8.1916 ppb	10:46:52

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	693614.3	104.01 %		0.770			0.74%
Sc Radial	3975.4	111 %		1.4			1.28%
Y 371.029	548905.7	103.94 %		0.618			0.59%
Y RADIAL	4385.9	107.9 %		1.93			1.79%
Ag 328.068†	41.9	0.2360 ug/L		0.35146	0.2360 ppb	0.35146	148.94%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	31.8	36.455 ug/L		21.9899	36.455 ppb	21.9899	60.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.9	1.4742 ug/L		1.81334	1.4742 ppb	1.81334	123.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-7.1	-0.1852 ug/L		0.91970	-0.1852 ppb	0.91970	496.46%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	2.3	0.0245 ug/L		0.10912	0.0245 ppb	0.10912	446.30%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	60.1	0.0256 ug/L		0.01820	0.0256 ppb	0.01820	71.10%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.9	7.8930 ug/L		2.10236	7.8930 ppb	2.10236	26.64%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	4.0	0.0659 ug/L	0.10108	0.0659 ppb	0.10108	153.39%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	9.1	0.2384 ug/L	0.10949	0.2384 ppb	0.10949	45.92%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	1.6	0.0232 ug/L	0.02907	0.0232 ppb	0.02907	125.29%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	5.0	0.0153 ug/L	0.15931	0.0153 ppb	0.15931	>999.9%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.9	-26.925 ug/L	5.7987	-26.925 ppb	5.7987	21.54%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-192.2	-40.447 ug/L	8.9316	-40.447 ppb	8.9316	22.08%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.3	59.556 ug/L	40.5744	59.556 ppb	40.5744	68.13%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	20.1	0.0225 ug/L	0.00618	0.0225 ppb	0.00618	27.47%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	10.4	1.0147 ug/L	1.03916	1.0147 ppb	1.03916	102.41%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-13.9	-7.1699 ug/L	20.31738	-7.1699 ppb	20.31738	283.37%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	17.3	0.5821 ug/L	0.71328	0.5821 ppb	0.71328	122.54%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-12.7	-8.6244 ug/L	6.91443	-8.6244 ppb	6.91443	80.17%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	0.9	0.1648 ug/L	0.82184	0.1648 ppb	0.82184	498.80%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-6.5	-10.389 ug/L	4.2464	-10.389 ppb	4.2464	40.87%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.9	1.1928 ug/L	2.67027	1.1928 ppb	2.67027	223.86%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.8	2.8814 ug/L	3.27335	2.8814 ppb	3.27335	113.60%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	117.4	4.4802 ug/L	0.54647	4.4802 ppb	0.54647	12.20%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-4.5	-1.0734 ug/L	0.43415	-1.0734 ppb	0.43415	40.45%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	2.5	0.0279 ug/L	0.11335	0.0279 ppb	0.11335	406.68%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	94.2	0.1739 ug/L	0.10895	0.1739 ppb	0.10895	62.65%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	6.8	2.6834 ug/L	0.83617	2.6834 ppb	0.83617	31.16%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	42.2	1.6895 ug/L	1.99777	1.6895 ppb	1.99777	118.24%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	105.9	0.9978 ug/L	0.87247	0.9978 ppb	0.87247	87.44%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	14.6	0.1766 ug/L	0.02817	0.1766 ppb	0.02817	15.95%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		115.5	9.3643 ug/L	2.16895	9.3643 ppb	2.16895	23.16%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 248371004|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 121

Date Collected: 3/31/2010 10:49:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371004|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4230.5	4230.5	118 %		10:50:57
1	Y RADIAL	5297.6	5297.6	130.3 %		10:50:57
1	Al 396.153Radial†	49750.8	42311.9	48551 ug/L	48551 ppb	10:50:57
1	Ca 317.933Radial†	8873.8	7511.7	15354 ug/L	15354 ppb	10:50:57
1	Fe 238.204 Radial†	10097.0	8556.8	120960 ug/L	120960 ppb	10:50:57
1	K 766.490 Radial†	48295.9	37948.8	7979.9 ug/L	7979.9 ppb	10:50:57
1	Mg 279.077 IEC†	282.2	238.8	10414 ug/L	10414 ppb	10:51:17
1	Na 589.592 Radial†	611.9	1416.5	730.38 ug/L	730.38 ppb	10:50:57
1	Sr 421.552†	16050.5	13601.3	149.84 ug/L	149.84 ppb	10:50:57
1	Sc 361.383	712501.3	712501.3	106.84 %		10:52:15
1	Y 371.029	638835.6	638835.6	120.97 %		10:52:15
1	Ag 328.068†	-6975.3	-6730.9	-0.6730 ug/L	-0.6730 ppb	10:52:20
1	As 188.979†	-48.8	-20.4	53.796 ug/L	53.796 ppb	10:52:40
1	B 249.677†	625.0	1000.1	7.0494 ug/L	7.0494 ppb	10:52:20
1	Ba 233.527†	61532.7	57580.9	586.63 ug/L	586.63 ppb	10:52:20
1	Be 313.107†	-14797.4	-9672.0	5.3996 ug/L	5.3996 ppb	10:52:20
1	Cd 226.502†	707.3	861.3	0.8250 ug/L	0.8250 ppb	10:52:40
1	Co 228.616†	1336.8	1301.1	23.502 ug/L	23.502 ppb	10:52:40
1	Cr 267.716†	12739.9	11829.2	195.01 ug/L	195.01 ppb	10:52:20
1	Cu 324.752†	17620.2	11138.1	46.001 ug/L	46.001 ppb	10:52:20
1	Mn 257.610†	2205392.5	2063776.8	2851.3 ug/L	2851.3 ppb	10:52:15
1	Mo 202.031†	-7.3	-11.6	8.4384 ug/L	8.4384 ppb	10:52:40
1	Ni 231.604†	3234.4	2942.7	99.139 ug/L	99.139 ppb	10:52:40
1	P 214.914†	1367.0	1077.8	638.25 ug/L	638.25 ppb	10:52:40
1	Pb 220.353†	600.3	627.6	103.04 ug/L	103.04 ppb	10:52:40
1	S 181.975 Axial†	421.1	354.8	553.82 ug/L	553.82 ppb	10:52:40
1	Sb 206.836†	87.0	56.2	7.3300 ug/L	7.3300 ppb	10:52:40
1	Se 196.026†	-585.6	-521.5	-71.386 ug/L	-71.386 ppb	10:52:40
1	Si 251.611†	1077943.3	1008410.6	38582 ug/L	38582 ppb	10:52:15
1	Sn 189.927†	-49.1	-55.7	-9.6933 ug/L	-9.6933 ppb	10:52:40
1	Ti 334.940†	2346444.6	2197660.6	4164.2 ug/L	4164.2 ppb	10:52:15
1	Tl 190.801†	-144.6	-103.9	6.3474 ug/L	6.3474 ppb	10:52:40
1	U 409.014†	-7726.9	-4826.8	-206.94 ug/L	-206.94 ppb	10:52:15
1	V 292.402†	22256.9	22580.7	185.78 ug/L	185.78 ppb	10:52:20
1	Zn 213.857†	50637.2	46705.7	544.88 ug/L	544.88 ppb	10:52:20
1	SiO2†	1084676.1	1014698.6	82532 ug/L	82532 ppb	10:53:48
2	Sc Radial	4168.2	4168.2	116 %		10:51:22
2	Y RADIAL	5247.8	5247.8	129.1 %		10:51:22
2	Al 396.153Radial†	48997.9	42294.3	48531 ug/L	48531 ppb	10:51:22
2	Ca 317.933Radial†	8701.1	7475.4	15280 ug/L	15280 ppb	10:51:22
2	Fe 238.204 Radial†	9920.8	8533.0	120620 ug/L	120620 ppb	10:51:22
2	K 766.490 Radial†	47590.6	37953.8	7981.0 ug/L	7981.0 ppb	10:51:22
2	Mg 279.077 IEC†	283.7	243.6	10628 ug/L	10628 ppb	10:51:42
2	Na 589.592 Radial†	574.6	1392.2	717.84 ug/L	717.84 ppb	10:51:22
2	Sr 421.552†	15769.4	13562.7	149.42 ug/L	149.42 ppb	10:51:22
2	Sc 361.383	720702.0	720702.0	108.07 %		10:52:46
2	Y 371.029	646043.1	646043.1	122.34 %		10:52:46
2	Ag 328.068†	-6888.5	-6576.3	0.0863 ug/L	0.0863 ppb	10:52:51
2	As 188.979†	-43.9	-15.4	56.381 ug/L	56.381 ppb	10:53:11
2	B 249.677†	614.6	983.8	6.6708 ug/L	6.6708 ppb	10:52:51
2	Ba 233.527†	60601.6	56064.0	571.26 ug/L	571.26 ppb	10:52:51
2	Be 313.107†	-14828.5	-9543.2	5.4618 ug/L	5.4618 ppb	10:52:51
2	Cd 226.502†	699.4	846.4	0.6311 ug/L	0.6311 ppb	10:53:11
2	Co 228.616†	1320.7	1272.0	22.741 ug/L	22.741 ppb	10:53:11
2	Cr 267.716†	12539.2	11507.8	190.02 ug/L	190.02 ppb	10:52:51
2	Cu 324.752†	17301.3	10655.3	44.267 ug/L	44.267 ppb	10:52:51
2	Mn 257.610†	2227137.7	2060410.2	2846.6 ug/L	2846.6 ppb	10:52:46
2	Mo 202.031†	-0.4	-5.1	9.0473 ug/L	9.0473 ppb	10:53:11
2	Ni 231.604†	3213.9	2889.2	97.339 ug/L	97.339 ppb	10:53:11

2	P 214.914†	1361.1	1057.8	625.28 ug/L	625.28 ppb	10:53:11
2	Pb 220.353†	613.2	633.2	103.98 ug/L	103.98 ppb	10:53:11
2	S 181.975 Axial†	413.7	343.5	535.82 ug/L	535.82 ppb	10:53:11
2	Sb 206.836†	88.3	56.4	7.3653 ug/L	7.3653 ppb	10:53:11
2	Se 196.026†	-593.8	-522.8	-73.342 ug/L	-73.342 ppb	10:53:11
2	Si 251.611†	1091358.1	1009343.3	38618 ug/L	38618 ppb	10:52:46
2	Sn 189.927†	-63.3	-68.4	-12.695 ug/L	-12.695 ppb	10:53:11
2	Ti 334.940†	2375537.3	2199590.8	4167.8 ug/L	4167.8 ppb	10:52:46
2	Tl 190.801†	-152.9	-110.0	3.9569 ug/L	3.9569 ppb	10:53:11
2	U 409.014†	-7629.2	-4654.1	-199.99 ug/L	-199.99 ppb	10:52:46
2	V 292.402†	21786.6	21908.4	179.66 ug/L	179.66 ppb	10:52:51
2	Zn 213.857†	49744.3	45340.1	528.47 ug/L	528.47 ppb	10:52:51
2	SiO2†	1115880.0	1032020.7	83941 ug/L	83941 ppb	10:53:54
3	Sc Radial	4242.0	4242.0	118 %		10:51:47
3	Y RADIAL	5329.8	5329.8	131.1 %		10:51:47
3	Al 396.153Radial†	49875.4	42303.0	48541 ug/L	48541 ppb	10:51:47
3	Ca 317.933Radial†	8857.4	7477.4	15284 ug/L	15284 ppb	10:51:47
3	Fe 238.204 Radial†	10102.5	8538.2	120700 ug/L	120700 ppb	10:51:47
3	K 766.490 Radial†	48343.0	37877.7	7965.0 ug/L	7965.0 ppb	10:51:47
3	Mg 279.077 IEC†	289.2	244.0	10647 ug/L	10647 ppb	10:52:07
3	Na 589.592 Radial†	603.4	1407.9	725.94 ug/L	725.94 ppb	10:51:47
3	Sr 421.552†	16015.9	13535.2	149.11 ug/L	149.11 ppb	10:51:47
3	Sc 361.383	711990.3	711990.3	106.76 %		10:53:17
3	Y 371.029	639834.1	639834.1	121.16 %		10:53:17
3	Ag 328.068†	-6754.5	-6528.7	0.3881 ug/L	0.3881 ppb	10:53:22
3	As 188.979†	-48.9	-20.5	53.806 ug/L	53.806 ppb	10:53:42
3	B 249.677†	597.3	974.6	6.4097 ug/L	6.4097 ppb	10:53:22
3	Ba 233.527†	59968.9	56157.5	572.21 ug/L	572.21 ppb	10:53:22
3	Be 313.107†	-14730.7	-9619.4	5.4517 ug/L	5.4517 ppb	10:53:22
3	Cd 226.502†	676.3	832.7	0.4102 ug/L	0.4102 ppb	10:53:42
3	Co 228.616†	1328.4	1294.2	23.293 ug/L	23.293 ppb	10:53:42
3	Cr 267.716†	12383.5	11504.0	189.97 ug/L	189.97 ppb	10:53:22
3	Cu 324.752†	17188.4	10745.6	44.595 ug/L	44.595 ppb	10:53:22
3	Mn 257.610†	2204851.1	2064751.2	2852.6 ug/L	2852.6 ppb	10:53:17
3	Mo 202.031†	-9.0	-13.2	8.2644 ug/L	8.2644 ppb	10:53:42
3	Ni 231.604†	3194.5	2907.5	97.953 ug/L	97.953 ppb	10:53:42
3	P 214.914†	1370.1	1081.6	641.30 ug/L	641.30 ppb	10:53:42
3	Pb 220.353†	608.3	635.5	104.35 ug/L	104.35 ppb	10:53:42
3	S 181.975 Axial†	427.6	361.2	563.93 ug/L	563.93 ppb	10:53:42
3	Sb 206.836†	85.0	54.4	6.4730 ug/L	6.4730 ppb	10:53:42
3	Se 196.026†	-594.1	-529.9	-78.657 ug/L	-78.657 ppb	10:53:42
3	Si 251.611†	1078428.0	1009588.7	38627 ug/L	38627 ppb	10:53:17
3	Sn 189.927†	-59.8	-65.8	-12.085 ug/L	-12.085 ppb	10:53:42
3	Ti 334.940†	2352242.6	2204667.7	4177.4 ug/L	4177.4 ppb	10:53:17
3	Tl 190.801†	-157.5	-116.0	1.6630 ug/L	1.6630 ppb	10:53:42
3	U 409.014†	-7725.3	-4830.4	-207.04 ug/L	-207.04 ppb	10:53:17
3	V 292.402†	21489.4	21876.7	179.32 ug/L	179.32 ppb	10:53:22
3	Zn 213.857†	48950.2	45159.5	526.27 ug/L	526.27 ppb	10:53:22
3	SiO2†	1090261.5	1020659.0	83017 ug/L	83017 ppb	10:54:00

Mean Data: 248371004|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	715064.6	107.22 %		0.733			0.68%
Sc Radial	4213.6	117 %		1.1			0.94%
Y 371.029	641570.9	121.49 %		0.739			0.61%
Y RADIAL	5291.7	130.1 %		1.02			0.78%
Ag 328.068†	-6612.0	-0.0662 ug/L		0.54676	-0.0662 ppb	0.54676	825.77%
Al 396.153Radial†	42303.1	48541 ug/L		10.1	48541 ppb	10.1	0.02%
As 188.979†	-18.8	54.661 ug/L		1.4892	54.661 ppb	1.4892	2.72%
B 249.677†	986.1	6.7100 ug/L		0.32167	6.7100 ppb	0.32167	4.79%
Ba 233.527†	56600.8	576.70 ug/L		8.613	576.70 ppb	8.613	1.49%
Be 313.107†	-9611.5	5.4377 ug/L		0.03342	5.4377 ppb	0.03342	0.61%
Ca 317.933Radial†	7488.2	15306 ug/L		41.6	15306 ppb	41.6	0.27%
Cd 226.502†	846.8	0.6221 ug/L		0.20759	0.6221 ppb	0.20759	33.37%
Co 228.616†	1289.1	23.179 ug/L		0.3936	23.179 ppb	0.3936	1.70%
Cr 267.716†	11613.7	191.67 ug/L		2.893	191.67 ppb	2.893	1.51%
Cu 324.752†	10846.3	44.954 ug/L		0.9208	44.954 ppb	0.9208	2.05%
Fe 238.204 Radial†	8542.7	120760 ug/L		176.6	120760 ppb	176.6	0.15%
K 766.490 Radial†	37926.8	7975.3 ug/L		8.95	7975.3 ppb	8.95	0.11%

Mg 279.077 IEC†	242.1	10563 ug/L	129.1	10563 ppb	129.1	1.22%
Mn 257.610†	2062979.4	2850.1 ug/L	3.14	2850.1 ppb	3.14	0.11%
Mo 202.031†	-10.0	8.5834 ug/L	0.41106	8.5834 ppb	0.41106	4.79%
Na 589.592 Radial†	1405.5	724.72 ug/L	6.362	724.72 ppb	6.362	0.88%
Ni 231.604†	2913.1	98.144 ug/L	0.9149	98.144 ppb	0.9149	0.93%
P 214.914†	1072.4	634.94 ug/L	8.505	634.94 ppb	8.505	1.34%
Pb 220.353†	632.1	103.79 ug/L	0.676	103.79 ppb	0.676	0.65%
S 181.975 Axial†	353.2	551.19 ug/L	14.239	551.19 ppb	14.239	2.58%
Sb 206.836†	55.7	7.0561 ug/L	0.50531	7.0561 ppb	0.50531	7.16%
Se 196.026†	-524.8	-74.461 ug/L	3.7626	-74.461 ppb	3.7626	5.05%
Si 251.611†	1009114.2	38609 ug/L	23.8	38609 ppb	23.8	0.06%
Sn 189.927†	-63.3	-11.491 ug/L	1.5865	-11.491 ppb	1.5865	13.81%
Sr 421.552†	13566.4	149.46 ug/L	0.366	149.46 ppb	0.366	0.24%
Ti 334.940†	2200639.7	4169.8 ug/L	6.85	4169.8 ppb	6.85	0.16%
Tl 190.801†	-110.0	3.9891 ug/L	2.34237	3.9891 ppb	2.34237	58.72%
U 409.014†	-4770.4	-204.66 ug/L	4.041	-204.66 ppb	4.041	1.97%
V 292.402†	22122.0	181.59 ug/L	3.635	181.59 ppb	3.635	2.00%
Zn 213.857†	45735.1	533.21 ug/L	10.171	533.21 ppb	10.171	1.91%
SiO2†	1022459.4	83164 ug/L	715.8	83164 ppb	715.8	0.86%

Sequence No.: 13

Sample ID: 248371005|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 122

Date Collected: 3/31/2010 10:56:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371005|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4039.9	4039.9	113 %		10:58:26
1	Y RADIAL	5279.4	5279.4	129.8 %		10:58:06
1	Al 396.153Radial†	36542.1	32569.9	37373 ug/L	37373 ppb	10:58:06
1	Ca 317.933Radial†	17094.5	15169.1	31006 ug/L	31006 ppb	10:58:06
1	Fe 238.204 Radial†	5130.0	4548.7	64301 ug/L	64301 ppb	10:58:06
1	K 766.490 Radial†	53786.7	44759.1	9407.1 ug/L	9407.1 ppb	10:58:06
1	Mg 279.077 IEC†	241.1	213.5	9358.1 ug/L	9358.1 ppb	10:58:26
1	Na 589.592 Radial†	422.1	1272.4	656.05 ug/L	656.05 ppb	10:58:06
1	Sr 421.552†	19787.7	17563.4	193.41 ug/L	193.41 ppb	10:58:06
1	Sc 361.383	723649.9	723649.9	108.51 %		10:59:25
1	Y 371.029	651548.7	651548.7	123.38 %		10:59:25
1	Ag 328.068†	-2532.0	-2535.4	5.3317 ug/L	5.3317 ppb	10:59:30
1	As 188.979†	-22.6	4.4	33.949 ug/L	33.949 ppb	10:59:50
1	B 249.677†	2103.1	2353.2	52.541 ug/L	52.541 ppb	10:59:30
1	Ba 233.527†	59145.6	54493.8	553.41 ug/L	553.41 ppb	10:59:30
1	Be 313.107†	-1155.8	3113.1	5.6546 ug/L	5.6546 ppb	10:59:30
1	Cd 226.502†	319.8	493.9	0.9712 ug/L	0.9712 ppb	10:59:50
1	Co 228.616†	745.0	736.5	14.417 ug/L	14.417 ppb	10:59:50
1	Cr 267.716†	3489.7	3120.8	54.982 ug/L	54.982 ppb	10:59:50
1	Cu 324.752†	19579.8	12690.0	48.508 ug/L	48.508 ppb	10:59:30
1	Mn 257.610†	4039295.6	3722050.4	5127.5 ug/L	5127.5 ppb	10:59:25
1	Mo 202.031†	5.6	0.4	5.3994 ug/L	5.3994 ppb	10:59:50
1	Ni 231.604†	1510.6	1307.4	44.043 ug/L	44.043 ppb	10:59:50
1	P 214.914†	2430.1	2037.8	1331.4 ug/L	1331.4 ppb	10:59:50
1	Pb 220.353†	532.1	556.1	94.286 ug/L	94.286 ppb	10:59:50
1	S 181.975 Axial†	1050.8	929.0	1466.8 ug/L	1466.8 ppb	10:59:50
1	Sb 206.836†	58.0	28.2	3.4339 ug/L	3.4339 ppb	10:59:50
1	Se 196.026†	-307.3	-256.6	-18.692 ug/L	-18.692 ppb	10:59:50
1	Si 251.611†	907659.6	835938.0	31983 ug/L	31983 ppb	10:59:25
1	Sn 189.927†	-132.5	-131.8	-25.265 ug/L	-25.265 ppb	10:59:50
1	Ti 334.940†	1096207.2	1011640.4	1919.8 ug/L	1919.8 ppb	10:59:25
1	Tl 190.801†	-159.5	-115.5	-5.6825 ug/L	-5.6825 ppb	10:59:50
1	U 409.014†	-8053.7	-5016.5	-207.75 ug/L	-207.75 ppb	10:59:25
1	V 292.402†	8189.6	9295.7	74.035 ug/L	74.035 ppb	10:59:30
1	Zn 213.857†	30467.5	27387.6	320.57 ug/L	320.57 ppb	10:59:30
1	SiO2†	883988.7	814109.7	66217 ug/L	66217 ppb	11:01:00
2	Sc Radial	4061.8	4061.8	113 %		10:58:51
2	Y RADIAL	5445.6	5445.6	133.9 %		10:58:31
2	Al 396.153Radial†	37456.7	33203.4	38100 ug/L	38100 ppb	10:58:31
2	Ca 317.933Radial†	17534.2	15476.0	31633 ug/L	31633 ppb	10:58:31
2	Fe 238.204 Radial†	5233.8	4615.9	65251 ug/L	65251 ppb	10:58:31
2	K 766.490 Radial†	55027.7	45598.6	9583.5 ug/L	9583.5 ppb	10:58:31
2	Mg 279.077 IEC†	238.7	210.2	9212.6 ug/L	9212.6 ppb	10:58:51
2	Na 589.592 Radial†	409.9	1259.6	649.47 ug/L	649.47 ppb	10:58:31
2	Sr 421.552†	20084.2	17730.8	195.25 ug/L	195.25 ppb	10:58:31
2	Sc 361.383	711409.0	711409.0	106.67 %		10:59:57
2	Y 371.029	642248.6	642248.6	121.62 %		10:59:57
2	Ag 328.068†	-2505.4	-2550.7	5.5294 ug/L	5.5294 ppb	11:00:02
2	As 188.979†	-21.5	5.1	34.508 ug/L	34.508 ppb	11:00:22
2	B 249.677†	1990.7	2281.2	50.458 ug/L	50.458 ppb	11:00:02
2	Ba 233.527†	58604.5	54924.4	557.79 ug/L	557.79 ppb	11:00:02
2	Be 313.107†	-1123.5	3125.1	5.6540 ug/L	5.6540 ppb	11:00:02
2	Cd 226.502†	305.2	485.4	0.7403 ug/L	0.7403 ppb	11:00:22
2	Co 228.616†	724.8	729.4	14.228 ug/L	14.228 ppb	11:00:22
2	Cr 267.716†	3451.4	3140.2	55.381 ug/L	55.381 ppb	11:00:22
2	Cu 324.752†	19150.0	12597.5	48.233 ug/L	48.233 ppb	11:00:02
2	Mn 257.610†	3963336.4	3714895.4	5117.8 ug/L	5117.8 ppb	10:59:57
2	Mo 202.031†	9.1	3.8	5.8114 ug/L	5.8114 ppb	11:00:22
2	Ni 231.604†	1498.0	1319.5	44.452 ug/L	44.452 ppb	11:00:22

2	P 214.914†	2400.4	2048.5	1338.2 ug/L	1338.2 ppb	11:00:22
2	Pb 220.353†	498.6	533.2	90.648 ug/L	90.648 ppb	11:00:22
2	S 181.975 Axial†	1040.1	935.7	1477.3 ug/L	1477.3 ppb	11:00:22
2	Sb 206.836†	37.4	9.8	-4.2301 ug/L	-4.2301 ppb	11:00:22
2	Se 196.026†	-314.0	-267.8	-24.680 ug/L	-24.680 ppb	11:00:22
2	Si 251.611†	888978.7	832818.7	31864 ug/L	31864 ppb	10:59:57
2	Sn 189.927†	-132.7	-134.1	-25.689 ug/L	-25.689 ppb	11:00:22
2	Ti 334.940†	1076283.7	1010346.1	1917.4 ug/L	1917.4 ppb	10:59:57
2	Tl 190.801†	-156.7	-115.5	-5.7410 ug/L	-5.7410 ppb	11:00:22
2	U 409.014†	-8012.2	-5105.3	-211.41 ug/L	-211.41 ppb	10:59:57
2	V 292.402†	7987.7	9236.3	73.348 ug/L	73.348 ppb	11:00:02
2	Zn 213.857†	29918.3	27355.9	320.04 ug/L	320.04 ppb	11:00:02
2	SiO2†	889246.2	833055.7	67758 ug/L	67758 ppb	11:01:05
3	Sc Radial	3989.7	3989.7	111 %		10:59:17
3	Y RADIAL	5183.8	5183.8	127.5 %		10:58:57
3	Al 396.153Radial†	35951.6	32447.1	37232 ug/L	37232 ppb	10:58:57
3	Ca 317.933Radial†	16835.6	15127.3	30920 ug/L	30920 ppb	10:58:57
3	Fe 238.204 Radial†	5018.4	4505.7	63693 ug/L	63693 ppb	10:58:57
3	K 766.490 Radial†	52828.9	44498.6	9352.3 ug/L	9352.3 ppb	10:58:57
3	Mg 279.077 IEC†	236.7	212.2	9303.5 ug/L	9303.5 ppb	10:59:17
3	Na 589.592 Radial†	305.5	1172.2	604.42 ug/L	604.42 ppb	10:58:57
3	Sr 421.552†	19288.2	17335.3	190.89 ug/L	190.89 ppb	10:58:57
3	Sc 361.383	707399.4	707399.4	106.07 %		11:00:29
3	Y 371.029	639167.4	639167.4	121.03 %		11:00:29
3	Ag 328.068†	-2488.9	-2548.5	5.0708 ug/L	5.0708 ppb	11:00:34
3	As 188.979†	-12.9	13.1	38.273 ug/L	38.273 ppb	11:00:54
3	B 249.677†	1956.8	2259.9	50.140 ug/L	50.140 ppb	11:00:34
3	Ba 233.527†	58057.7	54720.3	555.68 ug/L	555.68 ppb	11:00:34
3	Be 313.107†	-1206.2	3041.1	5.6182 ug/L	5.6182 ppb	11:00:34
3	Cd 226.502†	309.6	491.1	0.9900 ug/L	0.9900 ppb	11:00:54
3	Co 228.616†	720.4	729.1	14.241 ug/L	14.241 ppb	11:00:54
3	Cr 267.716†	3428.0	3136.5	55.160 ug/L	55.160 ppb	11:00:54
3	Cu 324.752†	19075.5	12629.1	48.261 ug/L	48.261 ppb	11:00:34
3	Mn 257.610†	3935481.6	3709694.3	5110.4 ug/L	5110.4 ppb	11:00:29
3	Mo 202.031†	2.2	-2.6	5.0537 ug/L	5.0537 ppb	11:00:54
3	Ni 231.604†	1481.2	1311.7	44.189 ug/L	44.189 ppb	11:00:54
3	P 214.914†	2377.7	2039.9	1333.4 ug/L	1333.4 ppb	11:00:54
3	Pb 220.353†	491.1	528.8	89.848 ug/L	89.848 ppb	11:00:54
3	S 181.975 Axial†	1023.7	925.7	1461.7 ug/L	1461.7 ppb	11:00:54
3	Sb 206.836†	49.6	21.5	0.6494 ug/L	0.6494 ppb	11:00:54
3	Se 196.026†	-311.1	-266.7	-28.221 ug/L	-28.221 ppb	11:00:54
3	Si 251.611†	881772.4	830748.6	31785 ug/L	31785 ppb	11:00:29
3	Sn 189.927†	-131.7	-133.9	-25.784 ug/L	-25.784 ppb	11:00:54
3	Ti 334.940†	1070053.9	1010191.8	1917.0 ug/L	1917.0 ppb	11:00:29
3	Tl 190.801†	-150.2	-110.1	-3.6605 ug/L	-3.6605 ppb	11:00:54
3	U 409.014†	-7905.3	-5047.2	-208.91 ug/L	-208.91 ppb	11:00:29
3	V 292.402†	8011.5	9301.2	74.170 ug/L	74.170 ppb	11:00:34
3	Zn 213.857†	29672.1	27282.8	319.39 ug/L	319.39 ppb	11:00:34
3	SiO2†	880946.9	829956.6	67506 ug/L	67506 ppb	11:01:11

Mean Data: 248371005|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	714152.8	107.09 %		1.269			1.19%
Sc Radial	4030.5	112 %		1.0			0.92%
Y 371.029	644321.6	122.01 %		1.221			1.00%
Y RADIAL	5303.0	130.4 %		3.26			2.50%
Ag 328.068†	-2544.9	5.3106 ug/L		0.23001	5.3106 ppb	0.23001	4.33%
Al 396.153Radial†	32740.1	37568 ug/L		465.7	37568 ppb	465.7	1.24%
As 188.979†	7.5	35.577 ug/L		2.3521	35.577 ppb	2.3521	6.61%
B 249.677†	2298.1	51.046 ug/L		1.3040	51.046 ppb	1.3040	2.55%
Ba 233.527†	54712.8	555.63 ug/L		2.192	555.63 ppb	2.192	0.39%
Be 313.107†	3093.1	5.6422 ug/L		0.02085	5.6422 ppb	0.02085	0.37%
Ca 317.933Radial†	15257.4	31186 ug/L		389.2	31186 ppb	389.2	1.25%
Cd 226.502†	490.1	0.9005 ug/L		0.13905	0.9005 ppb	0.13905	15.44%
Co 228.616†	731.6	14.295 ug/L		0.1058	14.295 ppb	0.1058	0.74%
Cr 267.716†	3132.5	55.174 ug/L		0.2003	55.174 ppb	0.2003	0.36%
Cu 324.752†	12638.9	48.334 ug/L		0.1517	48.334 ppb	0.1517	0.31%
Fe 238.204 Radial†	4556.8	64415 ug/L		785.2	64415 ppb	785.2	1.22%
K 766.490 Radial†	44952.1	9447.6 ug/L		120.84	9447.6 ppb	120.84	1.28%

Mg 279.077 IEC†	212.0	9291.4 ug/L	73.53	9291.4 ppb	73.53	0.79%
Mn 257.610†	3715546.7	5118.6 ug/L	8.56	5118.6 ppb	8.56	0.17%
Mo 202.031†	0.5	5.4215 ug/L	0.37930	5.4215 ppb	0.37930	7.00%
Na 589.592 Radial†	1234.7	636.65 ug/L	28.105	636.65 ppb	28.105	4.41%
Ni 231.604†	1312.9	44.228 ug/L	0.2074	44.228 ppb	0.2074	0.47%
P 214.914†	2042.1	1334.3 ug/L	3.48	1334.3 ppb	3.48	0.26%
Pb 220.353†	539.4	91.594 ug/L	2.3654	91.594 ppb	2.3654	2.58%
S 181.975 Axial†	930.1	1468.6 ug/L	7.96	1468.6 ppb	7.96	0.54%
Sb 206.836†	19.8	-0.0489 ug/L	3.87942	-0.0489 ppb	3.87942	>999.9%
Se 196.026†	-263.7	-23.864 ug/L	4.8162	-23.864 ppb	4.8162	20.18%
Si 251.611†	833168.4	31877 ug/L	99.9	31877 ppb	99.9	0.31%
Sn 189.927†	-133.3	-25.579 ug/L	0.2765	-25.579 ppb	0.2765	1.08%
Sr 421.552†	17543.2	193.18 ug/L	2.187	193.18 ppb	2.187	1.13%
Ti 334.940†	1010726.1	1918.1 ug/L	1.49	1918.1 ppb	1.49	0.08%
Tl 190.801†	-113.7	-5.0280 ug/L	1.18467	-5.0280 ppb	1.18467	23.56%
U 409.014†	-5056.3	-209.36 ug/L	1.868	-209.36 ppb	1.868	0.89%
V 292.402†	9277.7	73.851 ug/L	0.4412	73.851 ppb	0.4412	0.60%
Zn 213.857†	27342.1	320.00 ug/L	0.588	320.00 ppb	0.588	0.18%
SiO2†	825707.3	67160 ug/L	826.6	67160 ppb	826.6	1.23%

Sequence No.: 14

Sample ID: 248371006|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 123

Date Collected: 3/31/2010 11:03:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371006|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4151.5	4151.5	116 %		11:05:37
1	Y RADIAL	5069.0	5069.0	124.7 %		11:05:37
1	Al 396.153Radial†	75105.9	65032.0	74622 ug/L	74622 ppb	11:05:17
1	Ca 317.933Radial†	12707.0	10968.3	22419 ug/L	22419 ppb	11:05:17
1	Fe 238.204 Radial†	8913.9	7697.0	108810 ug/L	108810 ppb	11:05:17
1	K 766.490 Radial†	83615.5	69258.8	14567 ug/L	14567 ppb	11:05:17
1	Mg 279.077 IEC†	371.4	320.4	14029 ug/L	14029 ppb	11:05:37
1	Na 589.592 Radial†	955.2	1723.1	888.48 ug/L	888.48 ppb	11:05:17
1	Sr 421.552†	22588.0	19511.4	214.95 ug/L	214.95 ppb	11:05:17
1	Sc 361.383	711687.3	711687.3	106.72 %		11:06:34
1	Y 371.029	624579.9	624579.9	118.27 %		11:06:34
1	Ag 328.068†	-5584.6	-5435.1	2.9535 ug/L	2.9535 ppb	11:06:39
1	As 188.979†	-56.5	-27.7	45.861 ug/L	45.861 ppb	11:06:59
1	B 249.677†	885.9	1245.2	15.541 ug/L	15.541 ppb	11:06:39
1	Ba 233.527†	81167.8	76046.1	773.06 ug/L	773.06 ppb	11:06:39
1	Be 313.107†	-9286.9	-4524.1	7.2128 ug/L	7.2128 ppb	11:06:39
1	Cd 226.502†	561.1	725.1	-0.0407 ug/L	-0.0407 ppb	11:06:59
1	Co 228.616†	2043.4	1964.7	41.340 ug/L	41.340 ppb	11:06:59
1	Cr 267.716†	6144.6	5662.7	98.935 ug/L	98.935 ppb	11:06:39
1	Cu 324.752†	16635.3	10234.1	42.148 ug/L	42.148 ppb	11:06:39
1	Mn 257.610†	1923700.7	1802174.8	2490.0 ug/L	2490.0 ppb	11:06:34
1	Mo 202.031†	-56.7	-57.9	3.0509 ug/L	3.0509 ppb	11:06:59
1	Ni 231.604†	2239.5	2013.8	67.828 ug/L	67.828 ppb	11:06:59
1	P 214.914†	2576.3	2212.5	1425.2 ug/L	1425.2 ppb	11:06:59
1	Pb 220.353†	417.2	456.7	82.972 ug/L	82.972 ppb	11:06:59
1	S 181.975 Axial†	499.9	429.0	666.67 ug/L	666.67 ppb	11:06:59
1	Sb 206.836†	78.1	48.0	3.5125 ug/L	3.5125 ppb	11:06:59
1	Se 196.026†	-518.6	-459.4	-48.103 ug/L	-48.103 ppb	11:06:59
1	Si 251.611†	1322613.6	1238836.2	47398 ug/L	47398 ppb	11:06:34
1	Sn 189.927†	-111.2	-113.9	-22.275 ug/L	-22.275 ppb	11:06:59
1	Ti 334.940†	2258619.3	2117874.8	4013.7 ug/L	4013.7 ppb	11:06:34
1	Tl 190.801†	-146.6	-105.9	2.5049 ug/L	2.5049 ppb	11:06:59
1	U 409.014†	-7530.4	-4650.9	-198.32 ug/L	-198.32 ppb	11:06:34
1	V 292.402†	22351.1	22692.8	188.80 ug/L	188.80 ppb	11:06:39
1	Zn 213.857†	24846.0	22591.9	255.89 ug/L	255.89 ppb	11:06:39
1	SiO2†	1294804.9	1212763.9	98642 ug/L	98642 ppb	11:08:08
2	Sc Radial	4104.7	4104.7	114 %		11:06:02
2	Y RADIAL	4991.2	4991.2	122.7 %		11:06:02
2	Al 396.153Radial†	72485.6	63481.8	72843 ug/L	72843 ppb	11:05:42
2	Ca 317.933Radial†	12351.2	10782.5	22040 ug/L	22040 ppb	11:05:42
2	Fe 238.204 Radial†	8605.9	7515.7	106240 ug/L	106240 ppb	11:05:42
2	K 766.490 Radial†	80901.7	67710.9	14241 ug/L	14241 ppb	11:05:42
2	Mg 279.077 IEC†	372.1	324.7	14222 ug/L	14222 ppb	11:06:02
2	Na 589.592 Radial†	840.8	1632.5	841.75 ug/L	841.75 ppb	11:05:42
2	Sr 421.552†	21682.6	18942.6	208.68 ug/L	208.68 ppb	11:05:42
2	Sc 361.383	695912.2	695912.2	104.35 %		11:07:05
2	Y 371.029	612692.4	612692.4	116.02 %		11:07:05
2	Ag 328.068†	-5691.4	-5656.1	0.9363 ug/L	0.9363 ppb	11:07:11
2	As 188.979†	-40.6	-13.7	52.735 ug/L	52.735 ppb	11:07:31
2	B 249.677†	921.7	1298.4	17.380 ug/L	17.380 ppb	11:07:11
2	Ba 233.527†	83255.9	79771.3	810.69 ug/L	810.69 ppb	11:07:11
2	Be 313.107†	-9560.9	-4984.0	7.0697 ug/L	7.0697 ppb	11:07:11
2	Cd 226.502†	585.7	760.5	0.7720 ug/L	0.7720 ppb	11:07:31
2	Co 228.616†	2019.0	1984.8	41.870 ug/L	41.870 ppb	11:07:31
2	Cr 267.716†	6298.4	5940.6	102.95 ug/L	102.95 ppb	11:07:11
2	Cu 324.752†	16830.7	10774.7	43.932 ug/L	43.932 ppb	11:07:11
2	Mn 257.610†	1890266.1	1810996.7	2501.8 ug/L	2501.8 ppb	11:07:05
2	Mo 202.031†	-48.8	-51.5	3.4746 ug/L	3.4746 ppb	11:07:31
2	Ni 231.604†	2257.5	2078.6	70.012 ug/L	70.012 ppb	11:07:31

2	P 214.914†	2587.9	2278.3	1471.1 ug/L	1471.1 ppb	11:07:31
2	Pb 220.353†	419.8	468.1	84.632 ug/L	84.632 ppb	11:07:31
2	S 181.975 Axial†	505.7	445.3	692.81 ug/L	692.81 ppb	11:07:31
2	Sb 206.836†	79.5	51.0	4.8169 ug/L	4.8169 ppb	11:07:31
2	Se 196.026†	-511.9	-463.9	-58.967 ug/L	-58.967 ppb	11:07:31
2	Si 251.611†	1297307.8	1242680.0	47545 ug/L	47545 ppb	11:07:05
2	Sn 189.927†	-105.6	-110.9	-21.655 ug/L	-21.655 ppb	11:07:31
2	Ti 334.940†	2220570.7	2129389.4	4035.5 ug/L	4035.5 ppb	11:07:05
2	Tl 190.801†	-143.8	-106.3	2.5693 ug/L	2.5693 ppb	11:07:31
2	U 409.014†	-7513.9	-4795.0	-203.79 ug/L	-203.79 ppb	11:07:05
2	V 292.402†	23026.5	23814.7	199.48 ug/L	199.48 ppb	11:07:11
2	Zn 213.857†	25439.5	23688.4	269.49 ug/L	269.49 ppb	11:07:11
2	SiO2†	1300968.1	1246173.8	101360 ug/L	101360 ppb	11:08:14
3	Sc Radial	4142.4	4142.4	115 %		11:06:27
3	Y RADIAL	5064.1	5064.1	124.5 %		11:06:27
3	Al 396.153Radial†	72390.4	62822.3	72086 ug/L	72086 ppb	11:06:07
3	Ca 317.933Radial†	12288.8	10630.1	21728 ug/L	21728 ppb	11:06:07
3	Fe 238.204 Radial†	8615.6	7455.5	105390 ug/L	105390 ppb	11:06:07
3	K 766.490 Radial†	80818.0	66994.2	14091 ug/L	14091 ppb	11:06:07
3	Mg 279.077 IEC†	372.6	322.1	14110 ug/L	14110 ppb	11:06:27
3	Na 589.592 Radial†	914.4	1689.6	871.18 ug/L	871.18 ppb	11:06:07
3	Sr 421.552†	21639.4	18732.6	206.36 ug/L	206.36 ppb	11:06:07
3	Sc 361.383	700248.8	700248.8	105.00 %		11:07:36
3	Y 371.029	614310.0	614310.0	116.33 %		11:07:36
3	Ag 328.068†	-5894.0	-5815.4	-0.2386 ug/L	-0.2386 ppb	11:07:42
3	As 188.979†	-51.1	-23.4	46.909 ug/L	46.909 ppb	11:08:02
3	B 249.677†	975.1	1343.8	18.735 ug/L	18.735 ppb	11:07:42
3	Ba 233.527†	84057.0	80040.2	813.39 ug/L	813.39 ppb	11:07:42
3	Be 313.107†	-9648.3	-5010.5	6.9058 ug/L	6.9058 ppb	11:07:42
3	Cd 226.502†	575.6	747.4	0.6585 ug/L	0.6585 ppb	11:08:02
3	Co 228.616†	2024.2	1977.7	41.843 ug/L	41.843 ppb	11:08:02
3	Cr 267.716†	6342.8	5945.4	102.94 ug/L	102.94 ppb	11:07:42
3	Cu 324.752†	17096.1	10927.6	44.427 ug/L	44.427 ppb	11:07:42
3	Mn 257.610†	1871527.8	1781932.7	2461.8 ug/L	2461.8 ppb	11:07:36
3	Mo 202.031†	-42.0	-44.7	4.0699 ug/L	4.0699 ppb	11:08:02
3	Ni 231.604†	2263.5	2070.9	69.754 ug/L	69.754 ppb	11:08:02
3	P 214.914†	2583.7	2258.9	1458.4 ug/L	1458.4 ppb	11:08:02
3	Pb 220.353†	443.9	488.5	87.852 ug/L	87.852 ppb	11:08:02
3	S 181.975 Axial†	518.5	454.4	707.45 ug/L	707.45 ppb	11:08:02
3	Sb 206.836†	63.5	35.2	-1.4388 ug/L	-1.4388 ppb	11:08:02
3	Se 196.026†	-512.1	-461.2	-59.252 ug/L	-59.252 ppb	11:08:02
3	Si 251.611†	1285193.4	1223443.3	46809 ug/L	46809 ppb	11:07:36
3	Sn 189.927†	-105.1	-109.9	-21.461 ug/L	-21.461 ppb	11:08:02
3	Ti 334.940†	2197109.3	2093866.9	3968.1 ug/L	3968.1 ppb	11:07:36
3	Tl 190.801†	-145.7	-107.3	1.4299 ug/L	1.4299 ppb	11:08:02
3	U 409.014†	-7431.4	-4671.9	-198.77 ug/L	-198.77 ppb	11:07:36
3	V 292.402†	23372.8	24008.0	201.48 ug/L	201.48 ppb	11:07:42
3	Zn 213.857†	25727.6	23811.8	271.11 ug/L	271.11 ppb	11:07:42
3	SiO2†	1306795.3	1244002.5	101180 ug/L	101180 ppb	11:08:20

Mean Data: 248371006|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	702616.1	105.36 %		1.222			1.16%
Sc Radial	4132.9	115 %		0.7			0.60%
Y 371.029	617194.1	116.87 %		1.221			1.04%
Y RADIAL	5041.4	124.0 %		1.07			0.86%
Ag 328.068†	-5635.5	1.2171 ug/L		1.61446	1.2171 ppb	1.61446	132.65%
Al 396.153Radial†	63778.7	73184 ug/L		1301.7	73184 ppb	1301.7	1.78%
As 188.979†	-21.6	48.502 ug/L		3.7032	48.502 ppb	3.7032	7.64%
B 249.677†	1295.8	17.219 ug/L		1.6030	17.219 ppb	1.6030	9.31%
Ba 233.527†	78619.2	799.05 ug/L		22.544	799.05 ppb	22.544	2.82%
Be 313.107†	-4839.5	7.0628 ug/L		0.15361	7.0628 ppb	0.15361	2.17%
Ca 317.933Radial†	10793.7	22062 ug/L		346.2	22062 ppb	346.2	1.57%
Cd 226.502†	744.3	0.4633 ug/L		0.44009	0.4633 ppb	0.44009	95.00%
Co 228.616†	1975.7	41.685 ug/L		0.2984	41.685 ppb	0.2984	0.72%
Cr 267.716†	5849.6	101.61 ug/L		2.315	101.61 ppb	2.315	2.28%
Cu 324.752†	10645.4	43.503 ug/L		1.1987	43.503 ppb	1.1987	2.76%
Fe 238.204 Radial†	7556.1	106810 ug/L		1776.9	106810 ppb	1776.9	1.66%
K 766.490 Radial†	67988.0	14300 ug/L		243.5	14300 ppb	243.5	1.70%

Mg 279.077 IEC†	322.4	14121 ug/L	96.8	14121 ppb	96.8	0.69%
Mn 257.610†	1798368.1	2484.5 ug/L	20.58	2484.5 ppb	20.58	0.83%
Mo 202.031†	-51.4	3.5318 ug/L	0.51193	3.5318 ppb	0.51193	14.49%
Na 589.592 Radial†	1681.7	867.14 ug/L	23.624	867.14 ppb	23.624	2.72%
Ni 231.604†	2054.4	69.198 ug/L	1.1936	69.198 ppb	1.1936	1.72%
P 214.914†	2249.9	1451.6 ug/L	23.71	1451.6 ppb	23.71	1.63%
Pb 220.353†	471.1	85.152 ug/L	2.4814	85.152 ppb	2.4814	2.91%
S 181.975 Axial†	442.9	688.98 ug/L	20.656	688.98 ppb	20.656	3.00%
Sb 206.836†	44.7	2.2969 ug/L	3.30027	2.2969 ppb	3.30027	143.69%
Se 196.026†	-461.5	-55.440 ug/L	6.3564	-55.440 ppb	6.3564	11.47%
Si 251.611†	1234986.5	47251 ug/L	389.5	47251 ppb	389.5	0.82%
Sn 189.927†	-111.6	-21.797 ug/L	0.4255	-21.797 ppb	0.4255	1.95%
Sr 421.552†	19062.2	210.00 ug/L	4.440	210.00 ppb	4.440	2.11%
Ti 334.940†	2113710.4	4005.8 ug/L	34.36	4005.8 ppb	34.36	0.86%
Tl 190.801†	-106.5	2.1680 ug/L	0.64002	2.1680 ppb	0.64002	29.52%
U 409.014†	-4705.9	-200.29 ug/L	3.036	-200.29 ppb	3.036	1.52%
V 292.402†	23505.2	196.59 ug/L	6.819	196.59 ppb	6.819	3.47%
Zn 213.857†	23364.0	265.49 ug/L	8.359	265.49 ppb	8.359	3.15%
SiO2†	1234313.4	100400 ug/L	1520.5	100400 ppb	1520.5	1.51%

Sequence No.: 15

Sample ID: 248371007|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 124

Date Collected: 3/31/2010 11:10:33

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371007|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4159.4	4159.4	116 %		11:12:27
1	Y RADIAL	5293.3	5293.3	130.2 %		11:12:27
1	Al 396.153Radial†	42223.0	36538.6	41927 ug/L	41927 ppb	11:12:27
1	Ca 317.933Radial†	9395.5	8090.5	16537 ug/L	16537 ppb	11:12:27
1	Fe 238.204 Radial†	7090.8	6109.5	86365 ug/L	86365 ppb	11:12:27
1	K 766.490 Radial†	42846.1	33947.3	7137.6 ug/L	7137.6 ppb	11:12:27
1	Mg 279.077 IEC†	223.3	192.0	8387.5 ug/L	8387.5 ppb	11:12:47
1	Na 589.592 Radial†	627.1	1438.5	741.70 ug/L	741.70 ppb	11:12:27
1	Sr 421.552†	11934.6	10283.0	113.25 ug/L	113.25 ppb	11:12:27
1	Sc 361.383	718267.1	718267.1	107.70 %		11:13:45
1	Y 371.029	654805.7	654805.7	124.00 %		11:13:45
1	Ag 328.068†	-4753.6	-4615.7	0.5624 ug/L	0.5624 ppb	11:13:50
1	As 188.979†	-23.5	3.4	43.490 ug/L	43.490 ppb	11:14:10
1	B 249.677†	258.4	655.0	3.4413 ug/L	3.4413 ppb	11:13:50
1	Ba 233.527†	51377.0	47689.2	485.36 ug/L	485.36 ppb	11:13:50
1	Be 313.107†	-4859.6	-333.7	5.4960 ug/L	5.4960 ppb	11:13:50
1	Cd 226.502†	431.8	600.2	0.3406 ug/L	0.3406 ppb	11:14:10
1	Co 228.616†	1101.2	1072.3	21.583 ug/L	21.583 ppb	11:14:10
1	Cr 267.716†	6344.0	5795.1	98.505 ug/L	98.505 ppb	11:14:10
1	Cu 324.752†	17505.4	10899.1	43.340 ug/L	43.340 ppb	11:13:50
1	Mn 257.610†	1772753.8	1645510.5	2272.4 ug/L	2272.4 ppb	11:13:45
1	Mo 202.031†	18.7	12.7	8.1382 ug/L	8.1382 ppb	11:14:10
1	Ni 231.604†	2171.7	1931.7	65.075 ug/L	65.075 ppb	11:14:10
1	P 214.914†	1927.1	1587.6	1010.6 ug/L	1010.6 ppb	11:14:10
1	Pb 220.353†	429.6	464.6	78.165 ug/L	78.165 ppb	11:14:10
1	S 181.975 Axial†	337.9	274.4	427.44 ug/L	427.44 ppb	11:14:10
1	Sb 206.836†	56.8	27.5	1.2455 ug/L	1.2455 ppb	11:14:10
1	Se 196.026†	-421.1	-364.4	-42.775 ug/L	-42.775 ppb	11:14:10
1	Si 251.611†	1149346.1	1066607.5	40809 ug/L	40809 ppb	11:13:45
1	Sn 189.927†	-84.2	-87.9	-17.311 ug/L	-17.311 ppb	11:14:10
1	Ti 334.940†	1409927.8	1310494.3	2484.0 ug/L	2484.0 ppb	11:13:45
1	Tl 190.801†	-111.7	-72.3	2.3736 ug/L	2.3736 ppb	11:14:10
1	U 409.014†	-8648.4	-5624.3	-234.63 ug/L	-234.63 ppb	11:13:45
1	V 292.402†	14019.0	14764.7	120.55 ug/L	120.55 ppb	11:13:50
1	Zn 213.857†	32695.7	29666.9	344.65 ug/L	344.65 ppb	11:13:50
1	SiO2†	1146395.1	1063853.8	86530 ug/L	86530 ppb	11:15:18
2	Sc Radial	4221.4	4221.4	118 %		11:12:52
2	Y RADIAL	5384.4	5384.4	132.4 %		11:12:52
2	Al 396.153Radial†	43008.6	36671.9	42079 ug/L	42079 ppb	11:12:52
2	Ca 317.933Radial†	9484.7	8047.2	16449 ug/L	16449 ppb	11:12:52
2	Fe 238.204 Radial†	7221.3	6130.7	86664 ug/L	86664 ppb	11:12:52
2	K 766.490 Radial†	43651.0	34089.0	7167.4 ug/L	7167.4 ppb	11:12:52
2	Mg 279.077 IEC†	225.6	191.2	8349.7 ug/L	8349.7 ppb	11:13:12
2	Na 589.592 Radial†	693.2	1486.7	766.57 ug/L	766.57 ppb	11:12:52
2	Sr 421.552†	12121.7	10290.9	113.33 ug/L	113.33 ppb	11:12:52
2	Sc 361.383	707960.6	707960.6	106.16 %		11:14:16
2	Y 371.029	645780.6	645780.6	122.29 %		11:14:16
2	Ag 328.068†	-4628.5	-4562.0	0.9560 ug/L	0.9560 ppb	11:14:21
2	As 188.979†	-25.7	1.1	42.338 ug/L	42.338 ppb	11:14:41
2	B 249.677†	300.6	698.3	4.5533 ug/L	4.5533 ppb	11:14:21
2	Ba 233.527†	50440.5	47501.5	483.46 ug/L	483.46 ppb	11:14:21
2	Be 313.107†	-4727.4	-274.9	5.5166 ug/L	5.5166 ppb	11:14:21
2	Cd 226.502†	446.6	619.9	0.6159 ug/L	0.6159 ppb	11:14:41
2	Co 228.616†	1075.5	1063.1	21.342 ug/L	21.342 ppb	11:14:41
2	Cr 267.716†	6310.9	5849.6	99.372 ug/L	99.372 ppb	11:14:41
2	Cu 324.752†	16957.8	10619.9	42.362 ug/L	42.362 ppb	11:14:21
2	Mn 257.610†	1747108.4	1645314.6	2272.2 ug/L	2272.2 ppb	11:14:16
2	Mo 202.031†	25.9	19.7	8.8488 ug/L	8.8488 ppb	11:14:41
2	Ni 231.604†	2165.1	1954.8	65.853 ug/L	65.853 ppb	11:14:41

2	P 214.914†	1927.3	1613.8	1028.4 ug/L	1028.4 ppb	11:14:41
2	Pb 220.353†	411.2	453.1	76.297 ug/L	76.297 ppb	11:14:41
2	S 181.975 Axial†	329.9	271.4	422.76 ug/L	422.76 ppb	11:14:41
2	Sb 206.836†	60.0	31.3	2.8426 ug/L	2.8426 ppb	11:14:41
2	Se 196.026†	-433.2	-381.5	-55.234 ug/L	-55.234 ppb	11:14:41
2	Si 251.611†	1130702.8	1064581.1	40731 ug/L	40731 ppb	11:14:16
2	Sn 189.927†	-77.6	-82.9	-16.133 ug/L	-16.133 ppb	11:14:41
2	Ti 334.940†	1388705.0	1309560.2	2482.2 ug/L	2482.2 ppb	11:14:16
2	Tl 190.801†	-115.3	-77.1	0.4362 ug/L	0.4362 ppb	11:14:41
2	U 409.014†	-8350.2	-5460.3	-228.12 ug/L	-228.12 ppb	11:14:16
2	V 292.402†	13692.6	14646.8	119.44 ug/L	119.44 ppb	11:14:21
2	Zn 213.857†	31968.2	29423.5	341.66 ug/L	341.66 ppb	11:14:21
2	SiO2†	1136336.1	1069873.8	87020 ug/L	87020 ppb	11:15:24
3	Sc Radial	4209.5	4209.5	117 %		11:13:17
3	Y RADIAL	5354.0	5354.0	131.7 %		11:13:17
3	Al 396.153Radial†	42933.4	36710.9	42124 ug/L	42124 ppb	11:13:17
3	Ca 317.933Radial†	9442.2	8033.8	16421 ug/L	16421 ppb	11:13:17
3	Fe 238.204 Radial†	7203.4	6132.7	86693 ug/L	86693 ppb	11:13:17
3	K 766.490 Radial†	43515.3	34078.0	7165.1 ug/L	7165.1 ppb	11:13:17
3	Mg 279.077 IEC†	227.8	193.5	8453.2 ug/L	8453.2 ppb	11:13:37
3	Na 589.592 Radial†	653.6	1454.7	750.06 ug/L	750.06 ppb	11:13:17
3	Sr 421.552†	12200.4	10387.1	114.40 ug/L	114.40 ppb	11:13:17
3	Sc 361.383	719599.0	719599.0	107.90 %		11:14:47
3	Y 371.029	654924.6	654924.6	124.02 %		11:14:47
3	Ag 328.068†	-4518.2	-4389.4	1.9523 ug/L	1.9523 ppb	11:14:52
3	As 188.979†	-18.7	7.9	45.902 ug/L	45.902 ppb	11:15:12
3	B 249.677†	262.9	658.7	3.4898 ug/L	3.4898 ppb	11:14:52
3	Ba 233.527†	50184.6	46495.9	473.28 ug/L	473.28 ppb	11:14:52
3	Be 313.107†	-4590.4	-75.9	5.6027 ug/L	5.6027 ppb	11:14:52
3	Cd 226.502†	436.1	603.4	0.3552 ug/L	0.3552 ppb	11:15:12
3	Co 228.616†	1066.2	1038.0	20.682 ug/L	20.682 ppb	11:15:12
3	Cr 267.716†	6252.5	5699.3	97.061 ug/L	97.061 ppb	11:15:12
3	Cu 324.752†	16823.7	10237.3	41.009 ug/L	41.009 ppb	11:14:52
3	Mn 257.610†	1779755.9	1648953.3	2277.2 ug/L	2277.2 ppb	11:14:47
3	Mo 202.031†	14.8	9.0	7.8033 ug/L	7.8033 ppb	11:15:12
3	Ni 231.604†	2117.7	1877.9	63.264 ug/L	63.264 ppb	11:15:12
3	P 214.914†	1928.3	1585.4	1009.3 ug/L	1009.3 ppb	11:15:12
3	Pb 220.353†	422.2	457.0	76.942 ug/L	76.942 ppb	11:15:12
3	S 181.975 Axial†	328.3	264.9	412.39 ug/L	412.39 ppb	11:15:12
3	Sb 206.836†	42.7	14.3	-4.2372 ug/L	-4.2372 ppb	11:15:12
3	Se 196.026†	-414.0	-357.1	-36.149 ug/L	-36.149 ppb	11:15:12
3	Si 251.611†	1152125.6	1067208.3	40832 ug/L	40832 ppb	11:14:47
3	Sn 189.927†	-84.1	-87.7	-17.281 ug/L	-17.281 ppb	11:15:12
3	Ti 334.940†	1412232.1	1310206.8	2483.4 ug/L	2483.4 ppb	11:14:47
3	Tl 190.801†	-114.9	-75.1	1.2943 ug/L	1.2943 ppb	11:15:12
3	U 409.014†	-8592.1	-5557.3	-231.99 ug/L	-231.99 ppb	11:14:47
3	V 292.402†	13532.9	14290.1	116.13 ug/L	116.13 ppb	11:14:52
3	Zn 213.857†	31814.3	28793.8	334.07 ug/L	334.07 ppb	11:14:52
3	SiO2†	1138789.8	1054835.4	85797 ug/L	85797 ppb	11:15:30

Mean Data: 248371007|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	715275.6	107.25 %	0.955			0.89%
Sc Radial	4196.8	117 %	0.9			0.78%
Y 371.029	651837.0	123.43 %	0.993			0.80%
Y RADIAL	5343.9	131.4 %	1.14			0.87%
Ag 328.068†	-4522.4	1.1569 ug/L	0.71638	1.1569 ppb	0.71638	61.92%
Al 396.153Radial†	36640.5	42043 ug/L	103.6	42043 ppb	103.6	0.25%
As 188.979†	4.1	43.910 ug/L	1.8186	43.910 ppb	1.8186	4.14%
B 249.677†	670.7	3.8281 ug/L	0.62847	3.8281 ppb	0.62847	16.42%
Ba 233.527†	47228.9	480.70 ug/L	6.492	480.70 ppb	6.492	1.35%
Be 313.107†	-228.2	5.5384 ug/L	0.05663	5.5384 ppb	0.05663	1.02%
Ca 317.933Radial†	8057.2	16469 ug/L	60.5	16469 ppb	60.5	0.37%
Cd 226.502†	607.8	0.4372 ug/L	0.15491	0.4372 ppb	0.15491	35.43%
Co 228.616†	1057.8	21.202 ug/L	0.4660	21.202 ppb	0.4660	2.20%
Cr 267.716†	5781.3	98.313 ug/L	1.1672	98.313 ppb	1.1672	1.19%
Cu 324.752†	10585.4	42.237 ug/L	1.1704	42.237 ppb	1.1704	2.77%
Fe 238.204 Radial†	6124.3	86574 ug/L	181.6	86574 ppb	181.6	0.21%
K 766.490 Radial†	34038.1	7156.7 ug/L	16.60	7156.7 ppb	16.60	0.23%

Mg 279.077 IEC†	192.2	8396.8 ug/L	52.40	8396.8 ppb	52.40	0.62%
Mn 257.610†	1646592.8	2273.9 ug/L	2.82	2273.9 ppb	2.82	0.12%
Mo 202.031†	13.8	8.2634 ug/L	0.53385	8.2634 ppb	0.53385	6.46%
Na 589.592 Radial†	1459.9	752.78 ug/L	12.657	752.78 ppb	12.657	1.68%
Ni 231.604†	1921.4	64.730 ug/L	1.3286	64.730 ppb	1.3286	2.05%
P 214.914†	1595.6	1016.1 ug/L	10.65	1016.1 ppb	10.65	1.05%
Pb 220.353†	458.3	77.135 ug/L	0.9483	77.135 ppb	0.9483	1.23%
S 181.975 Axial†	270.2	420.86 ug/L	7.705	420.86 ppb	7.705	1.83%
Sb 206.836†	24.4	-0.0497 ug/L	3.71336	-0.0497 ppb	3.71336	>999.9%
Se 196.026†	-367.7	-44.719 ug/L	9.6898	-44.719 ppb	9.6898	21.67%
Si 251.611†	1066132.3	40791 ug/L	52.7	40791 ppb	52.7	0.13%
Sn 189.927†	-86.2	-16.908 ug/L	0.6718	-16.908 ppb	0.6718	3.97%
Sr 421.552†	10320.4	113.66 ug/L	0.639	113.66 ppb	0.639	0.56%
Ti 334.940†	1310087.1	2483.2 ug/L	0.91	2483.2 ppb	0.91	0.04%
Tl 190.801†	-74.8	1.3681 ug/L	0.97078	1.3681 ppb	0.97078	70.96%
U 409.014†	-5547.3	-231.58 ug/L	3.275	-231.58 ppb	3.275	1.41%
V 292.402†	14567.2	118.71 ug/L	2.299	118.71 ppb	2.299	1.94%
Zn 213.857†	29294.8	340.13 ug/L	5.450	340.13 ppb	5.450	1.60%
SiO2†	1062854.3	86449 ug/L	615.6	86449 ppb	615.6	0.71%

Sequence No.: 16

Sample ID: 248371008|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 125

Date Collected: 3/31/2010 11:17:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371008|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4037.9	4037.9	113 %		11:19:57
1	Y RADIAL	5179.2	5179.2	127.4 %		11:19:37
1	Al 396.153Radial†	41435.2	36935.1	42382 ug/L	42382 ppb	11:19:37
1	Ca 317.933Radial†	8403.4	7452.7	15233 ug/L	15233 ppb	11:19:37
1	Fe 238.204 Radial†	6696.9	5943.6	84020 ug/L	84020 ppb	11:19:37
1	K 766.490 Radial†	45745.8	37637.1	7914.5 ug/L	7914.5 ppb	11:19:37
1	Mg 279.077 IEC†	223.8	198.2	8663.4 ug/L	8663.4 ppb	11:19:57
1	Na 589.592 Radial†	379.0	1234.3	636.43 ug/L	636.43 ppb	11:19:37
1	Sr 421.552†	13091.6	11621.3	128.01 ug/L	128.01 ppb	11:19:37
1	Sc 361.383	721841.5	721841.5	108.24 %		11:20:54
1	Y 371.029	633679.8	633679.8	120.00 %		11:20:54
1	Ag 328.068†	-4584.0	-4437.1	0.8568 ug/L	0.8568 ppb	11:20:59
1	As 188.979†	-25.4	1.8	42.336 ug/L	42.336 ppb	11:21:19
1	B 249.677†	349.7	738.2	6.0296 ug/L	6.0296 ppb	11:20:59
1	Ba 233.527†	51206.8	47295.8	481.30 ug/L	481.30 ppb	11:20:59
1	Be 313.107†	-7197.9	-2471.7	4.6559 ug/L	4.6559 ppb	11:20:59
1	Cd 226.502†	407.4	575.6	0.2277 ug/L	0.2277 ppb	11:21:19
1	Co 228.616†	1404.2	1347.3	28.658 ug/L	28.658 ppb	11:21:19
1	Cr 267.716†	12193.5	11170.1	180.86 ug/L	180.86 ppb	11:20:59
1	Cu 324.752†	16153.8	9570.0	38.488 ug/L	38.488 ppb	11:20:59
1	Mn 257.610†	1936117.8	1788289.1	2468.6 ug/L	2468.6 ppb	11:20:54
1	Mo 202.031†	-5.4	-9.8	5.7479 ug/L	5.7479 ppb	11:21:19
1	Ni 231.604†	3103.1	2782.2	93.731 ug/L	93.731 ppb	11:21:19
1	P 214.914†	1658.3	1330.4	838.98 ug/L	838.98 ppb	11:21:19
1	Pb 220.353†	502.6	530.1	89.171 ug/L	89.171 ppb	11:21:19
1	S 181.975 Axial†	502.7	425.0	666.37 ug/L	666.37 ppb	11:21:19
1	Sb 206.836†	55.8	26.3	0.7209 ug/L	0.7209 ppb	11:21:19
1	Se 196.026†	-405.7	-348.2	-36.287 ug/L	-36.287 ppb	11:21:19
1	Si 251.611†	1076800.9	994300.0	38042 ug/L	38042 ppb	11:20:54
1	Sn 189.927†	-71.7	-76.0	-14.731 ug/L	-14.731 ppb	11:21:19
1	Ti 334.940†	1430926.1	1323412.0	2508.2 ug/L	2508.2 ppb	11:20:54
1	Tl 190.801†	-114.1	-74.0	2.8042 ug/L	2.8042 ppb	11:21:19
1	U 409.014†	-7932.1	-4922.7	-206.53 ug/L	-206.53 ppb	11:20:59
1	V 292.402†	13898.5	14588.9	119.24 ug/L	119.24 ppb	11:20:59
1	Zn 213.857†	31896.2	28777.9	334.09 ug/L	334.09 ppb	11:20:59
1	SiO2†	1073166.2	990928.2	80599 ug/L	80599 ppb	11:22:28
2	Sc Radial	4084.2	4084.2	114 %		11:20:22
2	Y RADIAL	5146.9	5146.9	126.6 %		11:20:02
2	Al 396.153Radial†	41681.7	36734.3	42151 ug/L	42151 ppb	11:20:02
2	Ca 317.933Radial†	8445.6	7405.2	15136 ug/L	15136 ppb	11:20:02
2	Fe 238.204 Radial†	6715.3	5892.3	83295 ug/L	83295 ppb	11:20:02
2	K 766.490 Radial†	46198.3	37573.9	7901.3 ug/L	7901.3 ppb	11:20:02
2	Mg 279.077 IEC†	221.7	194.2	8485.2 ug/L	8485.2 ppb	11:20:22
2	Na 589.592 Radial†	345.0	1200.5	619.03 ug/L	619.03 ppb	11:20:02
2	Sr 421.552†	13136.1	11528.5	126.99 ug/L	126.99 ppb	11:20:02
2	Sc 361.383	719214.9	719214.9	107.85 %		11:21:25
2	Y 371.029	631942.8	631942.8	119.67 %		11:21:25
2	Ag 328.068†	-4430.5	-4310.2	1.3548 ug/L	1.3548 ppb	11:21:31
2	As 188.979†	-30.2	-2.8	39.769 ug/L	39.769 ppb	11:21:51
2	B 249.677†	434.0	817.5	8.2729 ug/L	8.2729 ppb	11:21:31
2	Ba 233.527†	49453.9	45843.2	466.57 ug/L	466.57 ppb	11:21:31
2	Be 313.107†	-7096.9	-2402.4	4.6782 ug/L	4.6782 ppb	11:21:31
2	Cd 226.502†	414.3	583.4	0.4198 ug/L	0.4198 ppb	11:21:51
2	Co 228.616†	1408.6	1356.0	28.897 ug/L	28.897 ppb	11:21:51
2	Cr 267.716†	11713.3	10766.0	174.57 ug/L	174.57 ppb	11:21:31
2	Cu 324.752†	15451.2	8973.0	36.338 ug/L	36.338 ppb	11:21:31
2	Mn 257.610†	1925614.1	1785082.1	2464.1 ug/L	2464.1 ppb	11:21:25
2	Mo 202.031†	-5.6	-9.9	5.6753 ug/L	5.6753 ppb	11:21:51
2	Ni 231.604†	3081.6	2772.7	93.412 ug/L	93.412 ppb	11:21:51

2	P 214.914†	1644.0	1322.8	834.71 ug/L	834.71 ppb	11:21:51
2	Pb 220.353†	491.8	521.8	87.830 ug/L	87.830 ppb	11:21:51
2	S 181.975 Axial†	500.9	425.1	666.57 ug/L	666.57 ppb	11:21:51
2	Sb 206.836†	54.2	25.0	0.1574 ug/L	0.1574 ppb	11:21:51
2	Se 196.026†	-409.1	-352.7	-41.792 ug/L	-41.792 ppb	11:21:51
2	Si 251.611†	1071134.3	992678.9	37980 ug/L	37980 ppb	11:21:25
2	Sn 189.927†	-77.0	-81.2	-15.990 ug/L	-15.990 ppb	11:21:51
2	Ti 334.940†	1424010.1	1321827.0	2505.2 ug/L	2505.2 ppb	11:21:25
2	Tl 190.801†	-108.4	-69.0	4.7238 ug/L	4.7238 ppb	11:21:51
2	U 409.014†	-8174.1	-5174.0	-216.47 ug/L	-216.47 ppb	11:21:31
2	V 292.402†	13277.4	14059.9	114.46 ug/L	114.46 ppb	11:21:31
2	Zn 213.857†	30620.4	27702.6	321.23 ug/L	321.23 ppb	11:21:31
2	SiO2†	1082401.6	1003112.7	81590 ug/L	81590 ppb	11:22:34
3	Sc Radial	4144.3	4144.3	115 %		11:20:47
3	Y RADIAL	5355.4	5355.4	131.7 %		11:20:27
3	Al 396.153Radial†	43055.2	37392.4	42906 ug/L	42906 ppb	11:20:27
3	Ca 317.933Radial†	8718.3	7533.7	15399 ug/L	15399 ppb	11:20:27
3	Fe 238.204 Radial†	6975.9	6032.4	85275 ug/L	85275 ppb	11:20:27
3	K 766.490 Radial†	47865.6	38428.9	8081.1 ug/L	8081.1 ppb	11:20:27
3	Mg 279.077 IEC†	224.5	193.8	8466.9 ug/L	8466.9 ppb	11:20:47
3	Na 589.592 Radial†	421.2	1262.2	650.80 ug/L	650.80 ppb	11:20:27
3	Sr 421.552†	13591.8	11755.6	129.49 ug/L	129.49 ppb	11:20:27
3	Sc 361.383	712286.4	712286.4	106.81 %		11:21:56
3	Y 371.029	625894.5	625894.5	118.52 %		11:21:56
3	Ag 328.068†	-4478.6	-4395.2	1.4911 ug/L	1.4911 ppb	11:22:02
3	As 188.979†	-16.8	9.6	46.626 ug/L	46.626 ppb	11:22:22
3	B 249.677†	436.0	823.3	8.1056 ug/L	8.1056 ppb	11:22:02
3	Ba 233.527†	50338.3	47117.3	479.53 ug/L	479.53 ppb	11:22:02
3	Be 313.107†	-7099.0	-2468.3	4.6491 ug/L	4.6491 ppb	11:22:02
3	Cd 226.502†	426.4	598.5	0.4490 ug/L	0.4490 ppb	11:22:22
3	Co 228.616†	1400.6	1361.2	29.008 ug/L	29.008 ppb	11:22:22
3	Cr 267.716†	11924.8	11069.7	179.45 ug/L	179.45 ppb	11:22:02
3	Cu 324.752†	15804.0	9442.6	38.108 ug/L	38.108 ppb	11:22:02
3	Mn 257.610†	1905824.1	1783921.2	2462.7 ug/L	2462.7 ppb	11:21:56
3	Mo 202.031†	-9.3	-13.5	5.4874 ug/L	5.4874 ppb	11:22:22
3	Ni 231.604†	3090.9	2809.2	94.639 ug/L	94.639 ppb	11:22:22
3	P 214.914†	1648.7	1342.0	846.00 ug/L	846.00 ppb	11:22:22
3	Pb 220.353†	492.4	526.8	88.646 ug/L	88.646 ppb	11:22:22
3	S 181.975 Axial†	499.6	428.4	671.66 ug/L	671.66 ppb	11:22:22
3	Sb 206.836†	48.9	20.5	-1.7353 ug/L	-1.7353 ppb	11:22:22
3	Se 196.026†	-397.6	-345.7	-30.800 ug/L	-30.800 ppb	11:22:22
3	Si 251.611†	1057784.1	989840.5	37872 ug/L	37872 ppb	11:21:56
3	Sn 189.927†	-77.3	-82.1	-16.148 ug/L	-16.148 ppb	11:22:22
3	Ti 334.940†	1409920.8	1321479.4	2504.6 ug/L	2504.6 ppb	11:21:56
3	Tl 190.801†	-118.1	-79.1	0.6951 ug/L	0.6951 ppb	11:22:22
3	U 409.014†	-8099.0	-5177.3	-216.84 ug/L	-216.84 ppb	11:22:02
3	V 292.402†	13670.2	14547.4	118.66 ug/L	118.66 ppb	11:22:02
3	Zn 213.857†	31287.7	28603.6	331.79 ug/L	331.79 ppb	11:22:02
3	SiO2†	1077434.1	1008224.5	82006 ug/L	82006 ppb	11:22:40

Mean Data: 248371008|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	717780.9	107.63 %	0.740			0.69%
Sc Radial	4088.8	114 %	1.5			1.30%
Y 371.029	630505.7	119.39 %	0.774			0.65%
Y RADIAL	5227.2	128.5 %	2.76			2.15%
Ag 328.068†	-4380.8	1.2342 ug/L	0.33392	1.2342 ppb	0.33392	27.06%
Al 396.153Radial†	37020.6	42480 ug/L	387.0	42480 ppb	387.0	0.91%
As 188.979†	2.9	42.910 ug/L	3.4646	42.910 ppb	3.4646	8.07%
B 249.677†	793.0	7.4694 ug/L	1.24973	7.4694 ppb	1.24973	16.73%
Ba 233.527†	46752.1	475.80 ug/L	8.041	475.80 ppb	8.041	1.69%
Be 313.107†	-2447.5	4.6611 ug/L	0.01522	4.6611 ppb	0.01522	0.33%
Ca 317.933Radial†	7463.9	15256 ug/L	132.8	15256 ppb	132.8	0.87%
Cd 226.502†	585.8	0.3655 ug/L	0.12024	0.3655 ppb	0.12024	32.90%
Co 228.616†	1354.8	28.854 ug/L	0.1792	28.854 ppb	0.1792	0.62%
Cr 267.716†	11001.9	178.30 ug/L	3.302	178.30 ppb	3.302	1.85%
Cu 324.752†	9328.5	37.645 ug/L	1.1472	37.645 ppb	1.1472	3.05%
Fe 238.204 Radial†	5956.1	84197 ug/L	1002.0	84197 ppb	1002.0	1.19%
K 766.490 Radial†	37880.0	7965.7 ug/L	100.22	7965.7 ppb	100.22	1.26%

Mg 279.077 IEC†	195.4	8538.5 ug/L	108.54	8538.5 ppb	108.54	1.27%
Mn 257.610†	1785764.1	2465.2 ug/L	3.07	2465.2 ppb	3.07	0.12%
Mo 202.031†	-11.1	5.6369 ug/L	0.13444	5.6369 ppb	0.13444	2.38%
Na 589.592 Radial†	1232.3	635.42 ug/L	15.912	635.42 ppb	15.912	2.50%
Ni 231.604†	2788.0	93.927 ug/L	0.6369	93.927 ppb	0.6369	0.68%
P 214.914†	1331.7	839.90 ug/L	5.701	839.90 ppb	5.701	0.68%
Pb 220.353†	526.3	88.549 ug/L	0.6758	88.549 ppb	0.6758	0.76%
S 181.975 Axial†	426.2	668.20 ug/L	2.999	668.20 ppb	2.999	0.45%
Sb 206.836†	24.0	-0.2857 ug/L	1.28668	-0.2857 ppb	1.28668	450.40%
Se 196.026†	-348.9	-36.293 ug/L	5.4963	-36.293 ppb	5.4963	15.14%
Si 251.611†	992273.1	37965 ug/L	86.4	37965 ppb	86.4	0.23%
Sn 189.927†	-79.8	-15.623 ug/L	0.7768	-15.623 ppb	0.7768	4.97%
Sr 421.552†	11635.1	128.16 ug/L	1.258	128.16 ppb	1.258	0.98%
Ti 334.940†	1322239.5	2506.0 ug/L	1.93	2506.0 ppb	1.93	0.08%
Tl 190.801†	-74.1	2.7410 ug/L	2.01509	2.7410 ppb	2.01509	73.52%
U 409.014†	-5091.4	-213.28 ug/L	5.846	-213.28 ppb	5.846	2.74%
V 292.402†	14398.8	117.45 ug/L	2.610	117.45 ppb	2.610	2.22%
Zn 213.857†	28361.3	329.04 ug/L	6.861	329.04 ppb	6.861	2.09%
SiO2†	1000755.1	81398 ug/L	722.8	81398 ppb	722.8	0.89%

Sequence No.: 17

Sample ID: 248371009|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 126

Date Collected: 3/31/2010 11:24:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371009|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4098.7	4098.7	114 %		11:27:05
1	Y RADIAL	5055.8	5055.8	124.3 %		11:27:05
1	Al 396.153Radial†	79316.8	69555.4	79812 ug/L	79812 ppb	11:26:45
1	Ca 317.933Radial†	14516.5	12694.2	25947 ug/L	25947 ppb	11:26:45
1	Fe 238.204 Radial†	7736.9	6765.8	95643 ug/L	95643 ppb	11:26:45
1	K 766.490 Radial†	86754.5	72938.4	15340 ug/L	15340 ppb	11:26:45
1	Mg 279.077 IEC†	365.7	319.6	14008 ug/L	14008 ppb	11:27:05
1	Na 589.592 Radial†	577.1	1402.7	723.29 ug/L	723.29 ppb	11:26:45
1	Sr 421.552†	21607.8	18904.8	208.23 ug/L	208.23 ppb	11:26:45
1	Sc 361.383	711622.7	711622.7	106.71 %		11:28:03
1	Y 371.029	631735.6	631735.6	119.63 %		11:28:03
1	Ag 328.068†	-5177.6	-5054.3	0.9446 ug/L	0.9446 ppb	11:28:08
1	As 188.979†	-29.0	-2.0	49.980 ug/L	49.980 ppb	11:28:28
1	B 249.677†	1628.9	1941.7	36.360 ug/L	36.360 ppb	11:28:08
1	Ba 233.527†	101726.3	95319.4	967.59 ug/L	967.59 ppb	11:28:08
1	Be 313.107†	-7099.7	-2475.2	6.4560 ug/L	6.4560 ppb	11:28:08
1	Cd 226.502†	520.6	687.1	0.7440 ug/L	0.7440 ppb	11:28:28
1	Co 228.616†	1674.7	1619.3	34.140 ug/L	34.140 ppb	11:28:28
1	Cr 267.716†	8388.4	7765.9	129.84 ug/L	129.84 ppb	11:28:08
1	Cu 324.752†	21131.0	14448.7	56.386 ug/L	56.386 ppb	11:28:08
1	Mn 257.610†	1766436.4	1654958.5	2286.1 ug/L	2286.1 ppb	11:28:03
1	Mo 202.031†	-33.2	-35.9	4.2252 ug/L	4.2252 ppb	11:28:28
1	Ni 231.604†	2617.2	2368.0	79.768 ug/L	79.768 ppb	11:28:28
1	P 214.914†	3239.9	2834.6	1856.3 ug/L	1856.3 ppb	11:28:28
1	Pb 220.353†	503.1	537.3	98.754 ug/L	98.754 ppb	11:28:28
1	S 181.975 Axial†	765.9	678.4	1061.4 ug/L	1061.4 ppb	11:28:28
1	Sb 206.836†	60.1	31.1	-1.1934 ug/L	-1.1934 ppb	11:28:28
1	Se 196.026†	-463.8	-408.1	-41.687 ug/L	-41.687 ppb	11:28:28
1	Si 251.611†	1227106.1	1149444.1	43978 ug/L	43978 ppb	11:28:03
1	Sn 189.927†	-128.0	-129.7	-25.469 ug/L	-25.469 ppb	11:28:28
1	Ti 334.940†	1857670.2	1742318.3	3302.8 ug/L	3302.8 ppb	11:28:03
1	Tl 190.801†	-126.7	-87.2	3.1169 ug/L	3.1169 ppb	11:28:28
1	U 409.014†	-7083.0	-4232.2	-180.17 ug/L	-180.17 ppb	11:28:08
1	V 292.402†	20168.0	20648.8	172.68 ug/L	172.68 ppb	11:28:08
1	Zn 213.857†	24211.1	21999.0	250.61 ug/L	250.61 ppb	11:28:08
1	SiO2†	1223447.8	1146001.9	93212 ug/L	93212 ppb	11:29:36
2	Sc Radial	4114.9	4114.9	115 %		11:27:30
2	Y RADIAL	5095.8	5095.8	125.3 %		11:27:30
2	Al 396.153Radial†	79645.0	69568.3	79827 ug/L	79827 ppb	11:27:10
2	Ca 317.933Radial†	14598.8	12715.9	25991 ug/L	25991 ppb	11:27:10
2	Fe 238.204 Radial†	7776.4	6773.7	95754 ug/L	95754 ppb	11:27:10
2	K 766.490 Radial†	87186.0	73015.9	15357 ug/L	15357 ppb	11:27:10
2	Mg 279.077 IEC†	366.4	318.9	13979 ug/L	13979 ppb	11:27:30
2	Na 589.592 Radial†	545.0	1372.7	707.80 ug/L	707.80 ppb	11:27:10
2	Sr 421.552†	21575.9	18802.6	207.10 ug/L	207.10 ppb	11:27:10
2	Sc 361.383	724188.8	724188.8	108.59 %		11:28:34
2	Y 371.029	642138.7	642138.7	121.60 %		11:28:34
2	Ag 328.068†	-5328.3	-5108.8	0.6563 ug/L	0.6563 ppb	11:28:39
2	As 188.979†	-29.8	-2.2	49.880 ug/L	49.880 ppb	11:28:59
2	B 249.677†	1621.3	1908.2	35.448 ug/L	35.448 ppb	11:28:39
2	Ba 233.527†	102496.8	94374.8	958.03 ug/L	958.03 ppb	11:28:39
2	Be 313.107†	-6967.8	-2238.3	6.5546 ug/L	6.5546 ppb	11:28:39
2	Cd 226.502†	520.6	678.7	0.6014 ug/L	0.6014 ppb	11:28:59
2	Co 228.616†	1655.6	1574.6	32.973 ug/L	32.973 ppb	11:28:59
2	Cr 267.716†	8426.5	7664.6	128.29 ug/L	128.29 ppb	11:28:39
2	Cu 324.752†	21290.5	14251.9	55.694 ug/L	55.694 ppb	11:28:39
2	Mn 257.610†	1796008.9	1653466.9	2284.1 ug/L	2284.1 ppb	11:28:34
2	Mo 202.031†	-38.2	-39.9	3.8372 ug/L	3.8372 ppb	11:28:59
2	Ni 231.604†	2598.9	2308.5	77.766 ug/L	77.766 ppb	11:28:59

2	P 214.914†	3219.2	2762.9	1807.7 ug/L	1807.7 ppb	11:28:59
2	Pb 220.353†	491.4	518.3	95.645 ug/L	95.645 ppb	11:28:59
2	S 181.975 Axial†	755.7	656.5	1026.6 ug/L	1026.6 ppb	11:28:59
2	Sb 206.836†	73.4	42.4	3.5417 ug/L	3.5417 ppb	11:28:59
2	Se 196.026†	-462.4	-399.2	-34.462 ug/L	-34.462 ppb	11:28:59
2	Si 251.611†	1250502.4	1151035.0	44039 ug/L	44039 ppb	11:28:34
2	Sn 189.927†	-115.3	-116.0	-22.206 ug/L	-22.206 ppb	11:28:59
2	Ti 334.940†	1890321.6	1742178.3	3302.5 ug/L	3302.5 ppb	11:28:34
2	Tl 190.801†	-133.5	-91.5	1.4389 ug/L	1.4389 ppb	11:28:59
2	U 409.014†	-7223.7	-4246.7	-180.76 ug/L	-180.76 ppb	11:28:39
2	V 292.402†	20309.5	20451.1	170.84 ug/L	170.84 ppb	11:28:39
2	Zn 213.857†	24422.0	21799.5	248.20 ug/L	248.20 ppb	11:28:39
2	SiO2†	1211174.3	1114804.4	90675 ug/L	90675 ppb	11:29:42
3	Sc Radial	4186.9	4186.9	117 %		11:27:55
3	Y RADIAL	5179.2	5179.2	127.4 %		11:27:55
3	Al 396.153Radial†	81340.9	69827.8	80125 ug/L	80125 ppb	11:27:35
3	Ca 317.933Radial†	14855.6	12717.1	25994 ug/L	25994 ppb	11:27:35
3	Fe 238.204 Radial†	7891.9	6756.0	95504 ug/L	95504 ppb	11:27:35
3	K 766.490 Radial†	89112.7	73360.1	15429 ug/L	15429 ppb	11:27:35
3	Mg 279.077 IEC†	367.0	313.9	13758 ug/L	13758 ppb	11:27:55
3	Na 589.592 Radial†	578.2	1393.0	718.26 ug/L	718.26 ppb	11:27:35
3	Sr 421.552†	22120.5	18945.9	208.68 ug/L	208.68 ppb	11:27:35
3	Sc 361.383	709921.3	709921.3	106.45 %		11:29:05
3	Y 371.029	629913.0	629913.0	119.28 %		11:29:05
3	Ag 328.068†	-5161.1	-5050.4	0.9127 ug/L	0.9127 ppb	11:29:10
3	As 188.979†	-17.4	8.9	55.623 ug/L	55.623 ppb	11:29:30
3	B 249.677†	1527.7	1850.2	33.933 ug/L	33.933 ppb	11:29:10
3	Ba 233.527†	100613.4	94502.4	959.31 ug/L	959.31 ppb	11:29:10
3	Be 313.107†	-6880.1	-2284.8	6.5390 ug/L	6.5390 ppb	11:29:10
3	Cd 226.502†	527.0	694.3	0.8684 ug/L	0.8684 ppb	11:29:30
3	Co 228.616†	1661.7	1610.9	33.916 ug/L	33.916 ppb	11:29:30
3	Cr 267.716†	8247.6	7652.5	128.07 ug/L	128.07 ppb	11:29:10
3	Cu 324.752†	20658.2	14051.9	54.972 ug/L	54.972 ppb	11:29:10
3	Mn 257.610†	1760197.8	1653065.4	2283.5 ug/L	2283.5 ppb	11:29:05
3	Mo 202.031†	-46.6	-48.5	2.9807 ug/L	2.9807 ppb	11:29:30
3	Ni 231.604†	2584.1	2342.8	78.919 ug/L	78.919 ppb	11:29:30
3	P 214.914†	3190.8	2795.8	1830.5 ug/L	1830.5 ppb	11:29:30
3	Pb 220.353†	482.5	519.0	95.865 ug/L	95.865 ppb	11:29:30
3	S 181.975 Axial†	748.9	664.1	1038.6 ug/L	1038.6 ppb	11:29:30
3	Sb 206.836†	53.5	25.0	-3.7145 ug/L	-3.7145 ppb	11:29:30
3	Se 196.026†	-461.5	-406.9	-41.045 ug/L	-41.045 ppb	11:29:30
3	Si 251.611†	1222641.6	1148006.2	43923 ug/L	43923 ppb	11:29:05
3	Sn 189.927†	-117.0	-119.7	-23.094 ug/L	-23.094 ppb	11:29:30
3	Ti 334.940†	1854039.2	1743079.6	3304.2 ug/L	3304.2 ppb	11:29:05
3	Tl 190.801†	-133.1	-93.5	0.6240 ug/L	0.6240 ppb	11:29:30
3	U 409.014†	-7085.2	-4250.2	-180.87 ug/L	-180.87 ppb	11:29:10
3	V 292.402†	19800.9	20349.3	169.92 ug/L	169.92 ppb	11:29:10
3	Zn 213.857†	23790.7	21658.5	246.52 ug/L	246.52 ppb	11:29:10
3	SiO2†	1220043.1	1145551.3	93176 ug/L	93176 ppb	11:29:48

Mean Data: 248371009|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	715244.2	107.25 %		1.169				1.09%
Sc Radial	4133.5	115 %		1.3				1.14%
Y 371.029	634595.7	120.17 %		1.249				1.04%
Y RADIAL	5110.3	125.7 %		1.55				1.23%
Ag 328.068†	-5071.2	0.8379 ug/L		0.15808	0.8379 ppb		0.15808	18.87%
Al 396.153Radial†	69650.5	79922 ug/L		176.4	79922 ppb		176.4	0.22%
As 188.979†	1.6	51.828 ug/L		3.2874	51.828 ppb		3.2874	6.34%
B 249.677†	1900.0	35.247 ug/L		1.2259	35.247 ppb		1.2259	3.48%
Ba 233.527†	94732.2	961.64 ug/L		5.187	961.64 ppb		5.187	0.54%
Be 313.107†	-2332.8	6.5165 ug/L		0.05302	6.5165 ppb		0.05302	0.81%
Ca 317.933Radial†	12709.1	25977 ug/L		26.4	25977 ppb		26.4	0.10%
Cd 226.502†	686.7	0.7379 ug/L		0.13361	0.7379 ppb		0.13361	18.11%
Co 228.616†	1601.6	33.676 ug/L		0.6194	33.676 ppb		0.6194	1.84%
Cr 267.716†	7694.3	128.73 ug/L		0.961	128.73 ppb		0.961	0.75%
Cu 324.752†	14250.8	55.684 ug/L		0.7069	55.684 ppb		0.7069	1.27%
Fe 238.204 Radial†	6765.2	95634 ug/L		125.0	95634 ppb		125.0	0.13%
K 766.490 Radial†	73104.8	15375 ug/L		47.2	15375 ppb		47.2	0.31%

Mg 279.077 IEC†	317.5	13915 ug/L	136.9	13915 ppb	136.9	0.98%
Mn 257.610†	1653830.3	2284.5 ug/L	1.37	2284.5 ppb	1.37	0.06%
Mo 202.031†	-41.4	3.6810 ug/L	0.63677	3.6810 ppb	0.63677	17.30%
Na 589.592 Radial†	1389.5	716.45 ug/L	7.901	716.45 ppb	7.901	1.10%
Ni 231.604†	2339.8	78.818 ug/L	1.0047	78.818 ppb	1.0047	1.27%
P 214.914†	2797.7	1831.5 ug/L	24.30	1831.5 ppb	24.30	1.33%
Pb 220.353†	524.9	96.755 ug/L	1.7350	96.755 ppb	1.7350	1.79%
S 181.975 Axial†	666.4	1042.2 ug/L	17.67	1042.2 ppb	17.67	1.70%
Sb 206.836†	32.8	-0.4554 ug/L	3.68394	-0.4554 ppb	3.68394	808.91%
Se 196.026†	-404.7	-39.065 ug/L	3.9991	-39.065 ppb	3.9991	10.24%
Si 251.611†	1149495.1	43980 ug/L	58.0	43980 ppb	58.0	0.13%
Sn 189.927†	-121.8	-23.589 ug/L	1.6873	-23.589 ppb	1.6873	7.15%
Sr 421.552†	18884.4	208.01 ug/L	0.814	208.01 ppb	0.814	0.39%
Ti 334.940†	1742525.4	3303.2 ug/L	0.93	3303.2 ppb	0.93	0.03%
Tl 190.801†	-90.7	1.7266 ug/L	1.27112	1.7266 ppb	1.27112	73.62%
U 409.014†	-4243.0	-180.60 ug/L	0.375	-180.60 ppb	0.375	0.21%
V 292.402†	20483.1	171.15 ug/L	1.408	171.15 ppb	1.408	0.82%
Zn 213.857†	21819.0	248.44 ug/L	2.052	248.44 ppb	2.052	0.83%
SiO2†	1135452.6	92354 ug/L	1454.6	92354 ppb	1454.6	1.57%

Sequence No.: 18

Sample ID: 248371010|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 127

Date Collected: 3/31/2010 11:32:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371010|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4042.7	4042.7	113 %		11:34:14
1	Y RADIAL	5462.3	5462.3	134.3 %		11:33:54
1	Al 396.153Radial†	32944.2	29353.9	33682 ug/L	33682 ppb	11:33:54
1	Ca 317.933Radial†	13429.6	11905.5	24335 ug/L	24335 ppb	11:33:54
1	Fe 238.204 Radial†	5100.9	4519.8	63892 ug/L	63892 ppb	11:33:54
1	K 766.490 Radial†	47948.6	39544.1	8312.5 ug/L	8312.5 ppb	11:33:54
1	Mg 279.077 IEC†	213.6	188.9	8274.5 ug/L	8274.5 ppb	11:34:14
1	Na 589.592 Radial†	513.0	1352.8	697.54 ug/L	697.54 ppb	11:33:54
1	Sr 421.552†	15481.2	13728.6	151.18 ug/L	151.18 ppb	11:33:54
1	Sc 361.383	699938.9	699938.9	104.95 %		11:35:12
1	Y 371.029	643510.6	643510.6	121.86 %		11:35:12
1	Ag 328.068†	-3161.5	-3214.3	1.3323 ug/L	1.3323 ppb	11:35:17
1	As 188.979†	-19.5	6.6	34.408 ug/L	34.408 ppb	11:35:37
1	B 249.677†	1544.1	1886.3	40.106 ug/L	40.106 ppb	11:35:17
1	Ba 233.527†	43843.2	41760.3	424.57 ug/L	424.57 ppb	11:35:17
1	Be 313.107†	-4535.7	-143.3	4.1318 ug/L	4.1318 ppb	11:35:17
1	Cd 226.502†	300.5	485.5	0.8838 ug/L	0.8838 ppb	11:35:37
1	Co 228.616†	603.4	624.8	11.617 ug/L	11.617 ppb	11:35:37
1	Cr 267.716†	2713.9	2490.5	45.232 ug/L	45.232 ppb	11:35:37
1	Cu 324.752†	17954.9	11753.1	45.150 ug/L	45.150 ppb	11:35:17
1	Mn 257.610†	2421513.3	2306743.7	3180.0 ug/L	3180.0 ppb	11:35:12
1	Mo 202.031†	17.9	12.3	6.4555 ug/L	6.4555 ppb	11:35:37
1	Ni 231.604†	1225.6	1083.0	36.485 ug/L	36.485 ppb	11:35:37
1	P 214.914†	2639.4	2313.1	1518.7 ug/L	1518.7 ppb	11:35:37
1	Pb 220.353†	418.1	464.1	78.300 ug/L	78.300 ppb	11:35:37
1	S 181.975 Axial†	763.2	687.8	1084.8 ug/L	1084.8 ppb	11:35:37
1	Sb 206.836†	38.9	11.9	-2.4424 ug/L	-2.4424 ppb	11:35:37
1	Se 196.026†	-320.8	-279.1	-38.313 ug/L	-38.313 ppb	11:35:37
1	Si 251.611†	970943.3	924570.5	35374 ug/L	35374 ppb	11:35:12
1	Sn 189.927†	33.8	22.4	10.012 ug/L	10.012 ppb	11:35:37
1	Ti 334.940†	1021544.9	974725.3	1849.0 ug/L	1849.0 ppb	11:35:12
1	Tl 190.801†	-113.1	-76.3	-0.0044 ug/L	-0.0044 ppb	11:35:37
1	U 409.014†	-7101.2	-4360.4	-181.49 ug/L	-181.49 ppb	11:35:17
1	V 292.402†	7306.1	8709.5	68.818 ug/L	68.818 ppb	11:35:17
1	Zn 213.857†	29885.6	27784.4	325.47 ug/L	325.47 ppb	11:35:17
1	SiO2†	981683.0	934789.3	76033 ug/L	76033 ppb	11:36:46
2	Sc Radial	4056.2	4056.2	113 %		11:34:40
2	Y RADIAL	5292.2	5292.2	130.1 %		11:34:20
2	Al 396.153Radial†	33138.0	29427.7	33767 ug/L	33767 ppb	11:34:20
2	Ca 317.933Radial†	13506.9	11934.0	24393 ug/L	24393 ppb	11:34:20
2	Fe 238.204 Radial†	5099.7	4503.6	63663 ug/L	63663 ppb	11:34:20
2	K 766.490 Radial†	48052.8	39494.2	8302.0 ug/L	8302.0 ppb	11:34:20
2	Mg 279.077 IEC†	210.9	186.0	8144.4 ug/L	8144.4 ppb	11:34:40
2	Na 589.592 Radial†	553.9	1387.5	715.42 ug/L	715.42 ppb	11:34:20
2	Sr 421.552†	15571.3	13762.4	151.55 ug/L	151.55 ppb	11:34:20
2	Sc 361.383	720185.2	720185.2	107.99 %		11:35:43
2	Y 371.029	659994.6	659994.6	124.98 %		11:35:43
2	Ag 328.068†	-3228.7	-3191.9	1.3732 ug/L	1.3732 ppb	11:35:48
2	As 188.979†	-19.2	7.5	34.672 ug/L	34.672 ppb	11:36:08
2	B 249.677†	1590.8	1888.2	40.197 ug/L	40.197 ppb	11:35:48
2	Ba 233.527†	44246.8	40959.6	416.46 ug/L	416.46 ppb	11:35:48
2	Be 313.107†	-4590.2	-72.2	4.1347 ug/L	4.1347 ppb	11:35:48
2	Cd 226.502†	324.3	499.6	1.1255 ug/L	1.1255 ppb	11:36:08
2	Co 228.616†	600.5	605.9	11.152 ug/L	11.152 ppb	11:36:08
2	Cr 267.716†	2740.5	2442.5	44.462 ug/L	44.462 ppb	11:36:08
2	Cu 324.752†	18184.2	11484.4	44.180 ug/L	44.180 ppb	11:35:48
2	Mn 257.610†	2473682.8	2290191.3	3157.3 ug/L	3157.3 ppb	11:35:43
2	Mo 202.031†	22.9	16.5	6.8453 ug/L	6.8453 ppb	11:36:08
2	Ni 231.604†	1217.5	1042.7	35.126 ug/L	35.126 ppb	11:36:08

2	P 214.914†	2662.5	2263.8	1485.6 ug/L	1485.6 ppb	11:36:08
2	Pb 220.353†	414.7	449.8	76.010 ug/L	76.010 ppb	11:36:08
2	S 181.975 Axial†	798.0	699.6	1103.6 ug/L	1103.6 ppb	11:36:08
2	Sb 206.836†	45.9	17.3	-0.1623 ug/L	-0.1623 ppb	11:36:08
2	Se 196.026†	-302.6	-253.6	-19.072 ug/L	-19.072 ppb	11:36:08
2	Si 251.611†	995089.3	920922.5	35235 ug/L	35235 ppb	11:35:43
2	Sn 189.927†	30.0	18.0	8.9832 ug/L	8.9832 ppb	11:36:08
2	Ti 334.940†	1044367.7	968496.7	1837.2 ug/L	1837.2 ppb	11:35:43
2	Tl 190.801†	-115.2	-75.3	0.2116 ug/L	0.2116 ppb	11:36:08
2	U 409.014†	-7025.5	-4100.1	-171.06 ug/L	-171.06 ppb	11:35:48
2	V 292.402†	7263.2	8474.1	66.718 ug/L	66.718 ppb	11:35:48
2	Zn 213.857†	30232.6	27305.2	319.73 ug/L	319.73 ppb	11:35:48
2	SiO2†	975044.0	902346.6	73394 ug/L	73394 ppb	11:36:52
3	Sc Radial	4050.4	4050.4	113 %		11:35:05
3	Y RADIAL	5400.8	5400.8	132.8 %		11:34:45
3	Al 396.153Radial†	33832.7	30085.2	34522 ug/L	34522 ppb	11:34:45
3	Ca 317.933Radial†	13772.2	12186.2	24909 ug/L	24909 ppb	11:34:45
3	Fe 238.204 Radial†	5217.9	4614.8	65235 ug/L	65235 ppb	11:34:45
3	K 766.490 Radial†	49074.2	40460.1	8505.1 ug/L	8505.1 ppb	11:34:45
3	Mg 279.077 IEC†	213.4	188.5	8251.7 ug/L	8251.7 ppb	11:35:05
3	Na 589.592 Radial†	558.3	1392.1	717.78 ug/L	717.78 ppb	11:34:45
3	Sr 421.552†	15840.4	14020.6	154.39 ug/L	154.39 ppb	11:34:45
3	Sc 361.383	713975.6	713975.6	107.06 %		11:36:14
3	Y 371.029	657178.7	657178.7	124.45 %		11:36:14
3	Ag 328.068†	-3156.6	-3150.5	2.0914 ug/L	2.0914 ppb	11:36:19
3	As 188.979†	-18.0	8.5	35.951 ug/L	35.951 ppb	11:36:39
3	B 249.677†	1521.8	1836.5	38.558 ug/L	38.558 ppb	11:36:19
3	Ba 233.527†	43958.6	41046.7	417.39 ug/L	417.39 ppb	11:36:19
3	Be 313.107†	-4628.2	-144.7	4.2065 ug/L	4.2065 ppb	11:36:19
3	Cd 226.502†	300.0	479.5	0.6536 ug/L	0.6536 ppb	11:36:39
3	Co 228.616†	586.3	597.6	10.818 ug/L	10.818 ppb	11:36:39
3	Cr 267.716†	2760.8	2483.5	45.260 ug/L	45.260 ppb	11:36:39
3	Cu 324.752†	17873.8	11341.0	43.753 ug/L	43.753 ppb	11:36:19
3	Mn 257.610†	2506822.2	2341067.8	3227.4 ug/L	3227.4 ppb	11:36:14
3	Mo 202.031†	21.4	15.3	6.8546 ug/L	6.8546 ppb	11:36:39
3	Ni 231.604†	1220.6	1055.4	35.554 ug/L	35.554 ppb	11:36:39
3	P 214.914†	2659.9	2282.8	1497.6 ug/L	1497.6 ppb	11:36:39
3	Pb 220.353†	392.7	432.6	73.250 ug/L	73.250 ppb	11:36:39
3	S 181.975 Axial†	777.1	686.5	1082.6 ug/L	1082.6 ppb	11:36:39
3	Sb 206.836†	43.9	15.7	-0.9824 ug/L	-0.9824 ppb	11:36:39
3	Se 196.026†	-317.7	-270.2	-27.584 ug/L	-27.584 ppb	11:36:39
3	Si 251.611†	1009939.9	942808.0	36072 ug/L	36072 ppb	11:36:14
3	Sn 189.927†	32.8	20.9	9.7582 ug/L	9.7582 ppb	11:36:39
3	Ti 334.940†	1060783.8	992241.4	1882.3 ug/L	1882.3 ppb	11:36:14
3	Tl 190.801†	-125.4	-85.7	-3.2274 ug/L	-3.2274 ppb	11:36:39
3	U 409.014†	-6895.8	-4035.5	-168.67 ug/L	-168.67 ppb	11:36:19
3	V 292.402†	7266.3	8535.5	67.012 ug/L	67.012 ppb	11:36:19
3	Zn 213.857†	29941.2	27276.5	319.15 ug/L	319.15 ppb	11:36:19
3	SiO2†	978915.9	913816.0	74327 ug/L	74327 ppb	11:36:58

Mean Data: 248371010|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	711366.6	106.67 %		1.555				1.46%
Sc Radial	4049.8	113 %		0.2				0.17%
Y 371.029	653561.3	123.76 %		1.670				1.35%
Y RADIAL	5385.1	132.4 %		2.12				1.60%
Ag 328.068†	-3185.5	1.5990 ug/L		0.42697	1.5990 ppb		0.42697	26.70%
Al 396.153Radial†	29622.3	33990 ug/L		462.0	33990 ppb		462.0	1.36%
As 188.979†	7.5	35.010 ug/L		0.8255	35.010 ppb		0.8255	2.36%
B 249.677†	1870.3	39.620 ug/L		0.9213	39.620 ppb		0.9213	2.33%
Ba 233.527†	41255.5	419.47 ug/L		4.439	419.47 ppb		4.439	1.06%
Be 313.107†	-120.1	4.1577 ug/L		0.04231	4.1577 ppb		0.04231	1.02%
Ca 317.933Radial†	12008.6	24546 ug/L		315.8	24546 ppb		315.8	1.29%
Cd 226.502†	488.2	0.8876 ug/L		0.23597	0.8876 ppb		0.23597	26.58%
Co 228.616†	609.4	11.196 ug/L		0.4014	11.196 ppb		0.4014	3.59%
Cr 267.716†	2472.2	44.985 ug/L		0.4526	44.985 ppb		0.4526	1.01%
Cu 324.752†	11526.1	44.361 ug/L		0.7160	44.361 ppb		0.7160	1.61%
Fe 238.204 Radial†	4546.0	64263 ug/L		849.3	64263 ppb		849.3	1.32%
K 766.490 Radial†	39832.8	8373.2 ug/L		114.33	8373.2 ppb		114.33	1.37%

Mg 279.077 IEC†	187.8	8223.6 ug/L	69.46	8223.6 ppb	69.46	0.84%
Mn 257.610†	2312667.6	3188.2 ug/L	35.79	3188.2 ppb	35.79	1.12%
Mo 202.031†	14.7	6.7185 ug/L	0.22782	6.7185 ppb	0.22782	3.39%
Na 589.592 Radial†	1377.5	710.25 ug/L	11.068	710.25 ppb	11.068	1.56%
Ni 231.604†	1060.4	35.722 ug/L	0.6949	35.722 ppb	0.6949	1.95%
P 214.914†	2286.6	1500.6 ug/L	16.74	1500.6 ppb	16.74	1.12%
Pb 220.353†	448.8	75.853 ug/L	2.5283	75.853 ppb	2.5283	3.33%
S 181.975 Axial†	691.3	1090.3 ug/L	11.54	1090.3 ppb	11.54	1.06%
Sb 206.836†	15.0	-1.1957 ug/L	1.15494	-1.1957 ppb	1.15494	96.59%
Se 196.026†	-267.6	-28.323 ug/L	9.6417	-28.323 ppb	9.6417	34.04%
Si 251.611†	929433.7	35560 ug/L	448.6	35560 ppb	448.6	1.26%
Sn 189.927†	20.4	9.5845 ug/L	0.53594	9.5845 ppb	0.53594	5.59%
Sr 421.552†	13837.2	152.37 ug/L	1.758	152.37 ppb	1.758	1.15%
Ti 334.940†	978487.8	1856.2 ug/L	23.36	1856.2 ppb	23.36	1.26%
Tl 190.801†	-79.1	-1.0067 ug/L	1.92618	-1.0067 ppb	1.92618	191.33%
U 409.014†	-4165.3	-173.74 ug/L	6.815	-173.74 ppb	6.815	3.92%
V 292.402†	8573.1	67.516 ug/L	1.1370	67.516 ppb	1.1370	1.68%
Zn 213.857†	27455.4	321.45 ug/L	3.494	321.45 ppb	3.494	1.09%
SiO2†	916984.0	74584 ug/L	1338.1	74584 ppb	1338.1	1.79%

Sequence No.: 19

Sample ID: 248371011|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 128

Date Collected: 3/31/2010 11:39:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371011|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4175.9	4175.9	116 %		11:41:03
1	Y RADIAL	5183.3	5183.3	127.5 %		11:41:03
1	Al 396.153Radial†	37102.8	31994.9	36713 ug/L	36713 ppb	11:41:03
1	Ca 317.933Radial†	9166.7	7861.8	16070 ug/L	16070 ppb	11:41:03
1	Fe 238.204 Radial†	4923.2	4222.6	59692 ug/L	59692 ppb	11:41:03
1	K 766.490 Radial†	39007.5	30502.8	6412.8 ug/L	6412.8 ppb	11:41:03
1	Mg 279.077 IEC†	183.7	157.2	6877.3 ug/L	6877.3 ppb	11:41:23
1	Na 589.592 Radial†	181.0	1053.0	542.94 ug/L	542.94 ppb	11:41:03
1	Sr 421.552†	11785.1	10114.0	111.39 ug/L	111.39 ppb	11:41:03
1	Sc 361.383	708881.7	708881.7	106.30 %		11:42:21
1	Y 371.029	631859.5	631859.5	119.65 %		11:42:21
1	Ag 328.068†	-3011.7	-3035.4	1.1606 ug/L	1.1606 ppb	11:42:26
1	As 188.979†	-25.2	1.6	28.172 ug/L	28.172 ppb	11:42:46
1	B 249.677†	263.2	662.7	8.0009 ug/L	8.0009 ppb	11:42:26
1	Ba 233.527†	55008.8	51737.5	525.38 ug/L	525.38 ppb	11:42:26
1	Be 313.107†	-1906.1	2385.1	4.5080 ug/L	4.5080 ppb	11:42:26
1	Cd 226.502†	278.3	461.1	0.9755 ug/L	0.9755 ppb	11:42:46
1	Co 228.616†	791.5	794.5	16.730 ug/L	16.730 ppb	11:42:46
1	Cr 267.716†	8838.0	8219.3	132.83 ug/L	132.83 ppb	11:42:26
1	Cu 324.752†	31443.3	24226.7	89.136 ug/L	89.136 ppb	11:42:26
1	Mn 257.610†	2075365.4	1951991.0	2691.6 ug/L	2691.6 ppb	11:42:21
1	Mo 202.031†	53.0	45.1	9.2376 ug/L	9.2376 ppb	11:42:46
1	Ni 231.604†	2667.6	2424.9	81.700 ug/L	81.700 ppb	11:42:46
1	P 214.914†	1722.3	1418.7	906.72 ug/L	906.72 ppb	11:42:46
1	Pb 220.353†	785.4	804.6	134.90 ug/L	134.90 ppb	11:42:46
1	S 181.975 Axial†	611.2	535.6	842.87 ug/L	842.87 ppb	11:42:46
1	Sb 206.836†	53.9	25.5	3.9137 ug/L	3.9137 ppb	11:42:46
1	Se 196.026†	-296.3	-252.2	-27.675 ug/L	-27.675 ppb	11:42:46
1	Si 251.611†	1097074.3	1031560.2	39468 ug/L	39468 ppb	11:42:21
1	Sn 189.927†	-74.0	-79.4	-15.547 ug/L	-15.547 ppb	11:42:46
1	Ti 334.940†	865827.7	815952.1	1547.2 ug/L	1547.2 ppb	11:42:21
1	Tl 190.801†	-105.9	-68.1	-1.6133 ug/L	-1.6133 ppb	11:42:46
1	U 409.014†	-6267.0	-3490.2	-146.46 ug/L	-146.46 ppb	11:42:26
1	V 292.402†	7678.1	8971.7	72.216 ug/L	72.216 ppb	11:42:26
1	Zn 213.857†	29310.5	26884.1	314.88 ug/L	314.88 ppb	11:42:26
1	SiO2†	1100309.8	1034590.3	84150 ug/L	84150 ppb	11:43:54
2	Sc Radial	4247.3	4247.3	118 %		11:41:28
2	Y RADIAL	5304.7	5304.7	130.5 %		11:41:28
2	Al 396.153Radial†	37219.7	31557.6	36211 ug/L	36211 ppb	11:41:28
2	Ca 317.933Radial†	9131.9	7700.0	15739 ug/L	15739 ppb	11:41:28
2	Fe 238.204 Radial†	4931.5	4158.6	58786 ug/L	58786 ppb	11:41:28
2	K 766.490 Radial†	38950.5	29891.0	6284.1 ug/L	6284.1 ppb	11:41:28
2	Mg 279.077 IEC†	183.7	154.6	6764.4 ug/L	6764.4 ppb	11:41:48
2	Na 589.592 Radial†	144.6	1019.6	525.72 ug/L	525.72 ppb	11:41:28
2	Sr 421.552†	11791.7	9949.2	109.57 ug/L	109.57 ppb	11:41:28
2	Sc 361.383	691413.4	691413.4	103.68 %		11:42:52
2	Y 371.029	617149.0	617149.0	116.87 %		11:42:52
2	Ag 328.068†	-3133.9	-3224.8	-0.1764 ug/L	-0.1764 ppb	11:42:57
2	As 188.979†	-13.0	12.7	34.054 ug/L	34.054 ppb	11:43:17
2	B 249.677†	374.5	776.3	11.190 ug/L	11.190 ppb	11:42:57
2	Ba 233.527†	56537.7	54519.7	553.51 ug/L	553.51 ppb	11:42:57
2	Be 313.107†	-1924.3	2322.3	4.5586 ug/L	4.5586 ppb	11:42:57
2	Cd 226.502†	279.2	468.6	1.1844 ug/L	1.1844 ppb	11:43:17
2	Co 228.616†	789.0	810.9	17.107 ug/L	17.107 ppb	11:43:17
2	Cr 267.716†	9054.7	8638.4	139.19 ug/L	139.19 ppb	11:42:57
2	Cu 324.752†	32476.1	25970.2	95.277 ug/L	95.277 ppb	11:42:57
2	Mn 257.610†	2070184.5	1996321.6	2752.5 ug/L	2752.5 ppb	11:42:52
2	Mo 202.031†	48.2	41.8	8.8327 ug/L	8.8327 ppb	11:43:17
2	Ni 231.604†	2694.2	2513.9	84.699 ug/L	84.699 ppb	11:43:17

2	P 214.914†	1744.6	1481.1	948.44 ug/L	948.44 ppb	11:43:17
2	Pb 220.353†	814.2	851.1	142.44 ug/L	142.44 ppb	11:43:17
2	S 181.975 Axial†	614.3	553.2	870.82 ug/L	870.82 ppb	11:43:17
2	Sb 206.836†	55.1	27.9	4.8123 ug/L	4.8123 ppb	11:43:17
2	Se 196.026†	-302.6	-265.3	-40.408 ug/L	-40.408 ppb	11:43:17
2	Si 251.611†	1093226.6	1053924.5	40323 ug/L	40323 ppb	11:42:52
2	Sn 189.927†	-82.3	-89.1	-17.911 ug/L	-17.911 ppb	11:43:17
2	Ti 334.940†	863036.5	833839.0	1581.1 ug/L	1581.1 ppb	11:42:52
2	Tl 190.801†	-109.8	-74.4	-3.5466 ug/L	-3.5466 ppb	11:43:17
2	U 409.014†	-6469.8	-3834.8	-160.13 ug/L	-160.13 ppb	11:42:57
2	V 292.402†	8087.1	9548.7	77.593 ug/L	77.593 ppb	11:42:57
2	Zn 213.857†	30244.6	28481.7	334.27 ug/L	334.27 ppb	11:42:57
2	SiO2†	1109946.1	1070037.4	87033 ug/L	87033 ppb	11:44:00
3	Sc Radial	4260.8	4260.8	119 %		11:41:53
3	Y RADIAL	5337.0	5337.0	131.2 %		11:41:53
3	Al 396.153Radial†	37627.7	31801.5	36491 ug/L	36491 ppb	11:41:53
3	Ca 317.933Radial†	9231.7	7759.6	15861 ug/L	15861 ppb	11:41:53
3	Fe 238.204 Radial†	4990.0	4194.6	59295 ug/L	59295 ppb	11:41:53
3	K 766.490 Radial†	39358.5	30130.3	6334.4 ug/L	6334.4 ppb	11:41:53
3	Mg 279.077 IEC†	186.3	156.3	6836.9 ug/L	6836.9 ppb	11:42:13
3	Na 589.592 Radial†	207.4	1072.1	552.82 ug/L	552.82 ppb	11:41:53
3	Sr 421.552†	11893.2	10003.1	110.17 ug/L	110.17 ppb	11:41:53
3	Sc 361.383	687781.8	687781.8	103.13 %		11:43:23
3	Y 371.029	616502.8	616502.8	116.74 %		11:43:23
3	Ag 328.068†	-3041.1	-3150.8	0.3945 ug/L	0.3945 ppb	11:43:28
3	As 188.979†	-24.1	1.8	28.803 ug/L	28.803 ppb	11:43:48
3	B 249.677†	293.1	699.3	9.0443 ug/L	9.0443 ppb	11:43:28
3	Ba 233.527†	55356.8	53662.6	544.85 ug/L	544.85 ppb	11:43:28
3	Be 313.107†	-2111.9	2130.5	4.5521 ug/L	4.5521 ppb	11:43:28
3	Cd 226.502†	263.4	454.7	0.9177 ug/L	0.9177 ppb	11:43:48
3	Co 228.616†	783.4	809.5	16.988 ug/L	16.988 ppb	11:43:48
3	Cr 267.716†	8948.4	8581.5	138.36 ug/L	138.36 ppb	11:43:28
3	Cu 324.752†	31909.4	25586.2	93.939 ug/L	93.939 ppb	11:43:28
3	Mn 257.610†	2093999.6	2029956.9	2798.8 ug/L	2798.8 ppb	11:43:23
3	Mo 202.031†	35.6	29.8	7.7004 ug/L	7.7004 ppb	11:43:48
3	Ni 231.604†	2630.6	2466.0	83.085 ug/L	83.085 ppb	11:43:48
3	P 214.914†	1687.3	1434.4	916.71 ug/L	916.71 ppb	11:43:48
3	Pb 220.353†	788.1	829.9	138.99 ug/L	138.99 ppb	11:43:48
3	S 181.975 Axial†	607.0	549.2	864.45 ug/L	864.45 ppb	11:43:48
3	Sb 206.836†	51.1	24.3	3.1849 ug/L	3.1849 ppb	11:43:48
3	Se 196.026†	-298.4	-262.7	-36.996 ug/L	-36.996 ppb	11:43:48
3	Si 251.611†	1109007.5	1074794.0	41122 ug/L	41122 ppb	11:43:23
3	Sn 189.927†	-76.6	-84.0	-16.672 ug/L	-16.672 ppb	11:43:48
3	Ti 334.940†	876198.4	850996.7	1613.6 ug/L	1613.6 ppb	11:43:23
3	Tl 190.801†	-119.6	-84.5	-7.0482 ug/L	-7.0482 ppb	11:43:48
3	U 409.014†	-6261.9	-3666.2	-153.45 ug/L	-153.45 ppb	11:43:28
3	V 292.402†	7854.6	9364.5	75.785 ug/L	75.785 ppb	11:43:28
3	Zn 213.857†	29539.3	27951.9	327.81 ug/L	327.81 ppb	11:43:28
3	SiO2†	1105292.8	1071178.3	87126 ug/L	87126 ppb	11:44:06

Mean Data: 248371011|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	696025.7	104.37 %	1.692			1.62%
Sc Radial	4228.0	118 %	1.3			1.08%
Y 371.029	621837.1	117.75 %	1.645			1.40%
Y RADIAL	5275.0	129.7 %	1.99			1.54%
Ag 328.068†	-3137.0	0.4595 ug/L	0.67085	0.4595 ppb	0.67085	145.98%
Al 396.153Radial†	31784.6	36472 ug/L	251.4	36472 ppb	251.4	0.69%
As 188.979†	5.4	30.343 ug/L	3.2292	30.343 ppb	3.2292	10.64%
B 249.677†	712.8	9.4116 ug/L	1.62582	9.4116 ppb	1.62582	17.27%
Ba 233.527†	53306.6	541.25 ug/L	14.406	541.25 ppb	14.406	2.66%
Be 313.107†	2279.3	4.5396 ug/L	0.02752	4.5396 ppb	0.02752	0.61%
Ca 317.933Radial†	7773.8	15890 ug/L	167.3	15890 ppb	167.3	1.05%
Cd 226.502†	461.4	1.0259 ug/L	0.14030	1.0259 ppb	0.14030	13.68%
Co 228.616†	805.0	16.942 ug/L	0.1928	16.942 ppb	0.1928	1.14%
Cr 267.716†	8479.7	136.80 ug/L	3.457	136.80 ppb	3.457	2.53%
Cu 324.752†	25261.1	92.784 ug/L	3.2295	92.784 ppb	3.2295	3.48%
Fe 238.204 Radial†	4191.9	59258 ug/L	454.0	59258 ppb	454.0	0.77%
K 766.490 Radial†	30174.7	6343.8 ug/L	64.84	6343.8 ppb	64.84	1.02%

Mg 279.077 IEC†	156.0	6826.2 ug/L	57.24	6826.2 ppb	57.24	0.84%
Mn 257.610†	1992756.5	2747.6 ug/L	53.79	2747.6 ppb	53.79	1.96%
Mo 202.031†	38.9	8.5903 ug/L	0.79676	8.5903 ppb	0.79676	9.28%
Na 589.592 Radial†	1048.2	540.49 ug/L	13.712	540.49 ppb	13.712	2.54%
Ni 231.604†	2468.3	83.161 ug/L	1.5012	83.161 ppb	1.5012	1.81%
P 214.914†	1444.7	923.96 ug/L	21.780	923.96 ppb	21.780	2.36%
Pb 220.353†	828.6	138.77 ug/L	3.775	138.77 ppb	3.775	2.72%
S 181.975 Axial†	546.0	859.38 ug/L	14.652	859.38 ppb	14.652	1.70%
Sb 206.836†	25.9	3.9703 ug/L	0.81519	3.9703 ppb	0.81519	20.53%
Se 196.026†	-260.1	-35.026 ug/L	6.5912	-35.026 ppb	6.5912	18.82%
Si 251.611†	1053426.2	40304 ug/L	827.2	40304 ppb	827.2	2.05%
Sn 189.927†	-84.2	-16.710 ug/L	1.1825	-16.710 ppb	1.1825	7.08%
Sr 421.552†	10022.1	110.38 ug/L	0.925	110.38 ppb	0.925	0.84%
Ti 334.940†	833595.9	1580.6 ug/L	33.18	1580.6 ppb	33.18	2.10%
Tl 190.801†	-75.7	-4.0694 ug/L	2.75487	-4.0694 ppb	2.75487	67.70%
U 409.014†	-3663.7	-153.35 ug/L	6.835	-153.35 ppb	6.835	4.46%
V 292.402†	9295.0	75.198 ug/L	2.7359	75.198 ppb	2.7359	3.64%
Zn 213.857†	27772.6	325.66 ug/L	9.873	325.66 ppb	9.873	3.03%
SiO2†	1058602.0	86103 ug/L	1692.0	86103 ppb	1692.0	1.97%

Sequence No.: 20

Sample ID: 248371012|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 129

Date Collected: 3/31/2010 11:46:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371012|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4114.8	4114.8	115 %		11:48:32
1	Y RADIAL	5294.1	5294.1	130.2 %		11:48:32
1	Al 396.153Radial†	53847.2	47070.9	54012 ug/L	54012 ppb	11:48:12
1	Ca 317.933Radial†	7607.7	6619.1	13529 ug/L	13529 ppb	11:48:32
1	Fe 238.204 Radial†	6808.8	5929.9	83825 ug/L	83825 ppb	11:48:32
1	K 766.490 Radial†	41277.5	32979.7	6935.2 ug/L	6935.2 ppb	11:48:12
1	Mg 279.077 IEC†	310.3	270.0	11833 ug/L	11833 ppb	11:48:32
1	Na 589.592 Radial†	494.7	1328.9	685.22 ug/L	685.22 ppb	11:48:12
1	Sr 421.552†	14068.4	12255.5	135.02 ug/L	135.02 ppb	11:48:12
1	Sc 361.383	717681.2	717681.2	107.62 %		11:49:30
1	Y 371.029	664315.2	664315.2	125.80 %		11:49:30
1	Ag 328.068†	-4740.5	-4607.1	-0.1534 ug/L	-0.1534 ppb	11:49:30
1	As 188.979†	-21.3	5.5	42.338 ug/L	42.338 ppb	11:49:50
1	B 249.677†	201.2	602.0	2.4322 ug/L	2.4322 ppb	11:49:30
1	Ba 233.527†	58287.8	54150.0	550.65 ug/L	550.65 ppb	11:49:30
1	Be 313.107†	-2712.4	1657.8	5.8945 ug/L	5.8945 ppb	11:49:30
1	Cd 226.502†	426.0	595.1	0.5527 ug/L	0.5527 ppb	11:49:50
1	Co 228.616†	1141.2	1110.4	23.001 ug/L	23.001 ppb	11:49:50
1	Cr 267.716†	10869.6	10005.2	162.93 ug/L	162.93 ppb	11:49:30
1	Cu 324.752†	19605.3	12863.7	50.136 ug/L	50.136 ppb	11:49:30
1	Mn 257.610†	1362763.4	1265875.9	1749.6 ug/L	1749.6 ppb	11:49:30
1	Mo 202.031†	-30.3	-32.9	3.4548 ug/L	3.4548 ppb	11:49:50
1	Ni 231.604†	2924.3	2632.6	88.693 ug/L	88.693 ppb	11:49:50
1	P 214.914†	1219.6	931.6	569.11 ug/L	569.11 ppb	11:49:50
1	Pb 220.353†	427.1	462.6	81.071 ug/L	81.071 ppb	11:49:50
1	S 181.975 Axial†	315.4	253.7	392.36 ug/L	392.36 ppb	11:49:50
1	Sb 206.836†	66.3	36.3	5.3768 ug/L	5.3768 ppb	11:49:50
1	Se 196.026†	-417.2	-361.1	-43.599 ug/L	-43.599 ppb	11:49:50
1	Si 251.611†	1144216.3	1062711.9	40660 ug/L	40660 ppb	11:49:30
1	Sn 189.927†	-31.9	-39.4	-6.3955 ug/L	-6.3955 ppb	11:49:50
1	Ti 334.940†	1299752.2	1209183.7	2291.4 ug/L	2291.4 ppb	11:49:30
1	Tl 190.801†	-101.2	-62.6	2.0981 ug/L	2.0981 ppb	11:49:50
1	U 409.014†	-6903.8	-4009.7	-170.01 ug/L	-170.01 ppb	11:49:30
1	V 292.402†	14934.8	15626.3	129.17 ug/L	129.17 ppb	11:49:30
1	Zn 213.857†	28724.5	26001.5	300.63 ug/L	300.63 ppb	11:49:30
1	SiO2†	1139138.3	1057979.4	86053 ug/L	86053 ppb	11:50:48
2	Sc Radial	4168.4	4168.4	116 %		11:48:57
2	Y RADIAL	5387.3	5387.3	132.5 %		11:48:57
2	Al 396.153Radial†	54994.9	47456.2	54454 ug/L	54454 ppb	11:48:37
2	Ca 317.933Radial†	7690.9	6605.5	13502 ug/L	13502 ppb	11:48:57
2	Fe 238.204 Radial†	6862.5	5899.8	83401 ug/L	83401 ppb	11:48:57
2	K 766.490 Radial†	42028.3	33164.0	6974.0 ug/L	6974.0 ppb	11:48:37
2	Mg 279.077 IEC†	314.7	270.3	11846 ug/L	11846 ppb	11:48:57
2	Na 589.592 Radial†	518.1	1343.5	692.74 ug/L	692.74 ppb	11:48:37
2	Sr 421.552†	14339.3	12331.2	135.85 ug/L	135.85 ppb	11:48:37
2	Sc 361.383	705132.4	705132.4	105.73 %		11:49:55
2	Y 371.029	654258.5	654258.5	123.89 %		11:49:55
2	Ag 328.068†	-4611.8	-4563.8	-0.0278 ug/L	-0.0278 ppb	11:49:55
2	As 188.979†	-24.5	2.1	40.448 ug/L	40.448 ppb	11:50:16
2	B 249.677†	169.3	575.3	1.7844 ug/L	1.7844 ppb	11:49:55
2	Ba 233.527†	57285.0	54165.4	550.80 ug/L	550.80 ppb	11:49:55
2	Be 313.107†	-2594.1	1724.8	5.9187 ug/L	5.9187 ppb	11:49:55
2	Cd 226.502†	414.6	591.4	0.5363 ug/L	0.5363 ppb	11:50:16
2	Co 228.616†	1112.1	1101.7	22.789 ug/L	22.789 ppb	11:50:16
2	Cr 267.716†	10664.7	9991.1	162.68 ug/L	162.68 ppb	11:49:55
2	Cu 324.752†	19201.2	12805.7	49.913 ug/L	49.913 ppb	11:49:55
2	Mn 257.610†	1338011.9	1265002.8	1748.4 ug/L	1748.4 ppb	11:49:55
2	Mo 202.031†	-16.4	-20.2	4.6573 ug/L	4.6573 ppb	11:50:16
2	Ni 231.604†	2867.9	2627.6	88.526 ug/L	88.526 ppb	11:50:16

2	P 214.914†	1188.3	922.2	563.22 ug/L	563.22 ppb	11:50:16
2	Pb 220.353†	406.2	450.0	79.157 ug/L	79.157 ppb	11:50:16
2	S 181.975 Axial†	317.5	260.9	403.70 ug/L	403.70 ppb	11:50:16
2	Sb 206.836†	52.4	24.3	0.3780 ug/L	0.3780 ppb	11:50:16
2	Se 196.026†	-413.3	-364.3	-47.101 ug/L	-47.101 ppb	11:50:16
2	Si 251.611†	1120117.3	1058841.7	40512 ug/L	40512 ppb	11:49:55
2	Sn 189.927†	-40.2	-47.8	-8.3828 ug/L	-8.3828 ppb	11:50:16
2	Ti 334.940†	1276068.1	1208278.0	2289.6 ug/L	2289.6 ppb	11:49:55
2	Tl 190.801†	-100.7	-63.8	1.6108 ug/L	1.6108 ppb	11:50:16
2	U 409.014†	-7019.7	-4233.5	-178.90 ug/L	-178.90 ppb	11:49:55
2	V 292.402†	14637.0	15591.6	128.91 ug/L	128.91 ppb	11:49:55
2	Zn 213.857†	28140.1	25923.8	299.76 ug/L	299.76 ppb	11:49:55
2	SiO2†	1133773.8	1071743.8	87172 ug/L	87172 ppb	11:50:54
3	Sc Radial	4118.3	4118.3	115 %		11:49:22
3	Y RADIAL	5322.6	5322.6	130.9 %		11:49:22
3	Al 396.153Radial†	54586.3	47675.7	54706 ug/L	54706 ppb	11:49:02
3	Ca 317.933Radial†	7582.2	6591.3	13473 ug/L	13473 ppb	11:49:22
3	Fe 238.204 Radial†	6774.4	5894.9	83331 ug/L	83331 ppb	11:49:22
3	K 766.490 Radial†	41758.8	33369.1	7017.2 ug/L	7017.2 ppb	11:49:02
3	Mg 279.077 IEC†	312.3	271.5	11899 ug/L	11899 ppb	11:49:22
3	Na 589.592 Radial†	512.5	1344.1	693.03 ug/L	693.03 ppb	11:49:02
3	Sr 421.552†	14209.4	12368.1	136.26 ug/L	136.26 ppb	11:49:02
3	Sc 361.383	701698.8	701698.8	105.22 %		11:50:21
3	Y 371.029	650608.9	650608.9	123.20 %		11:50:21
3	Ag 328.068†	-4601.8	-4575.6	-0.1182 ug/L	-0.1182 ppb	11:50:21
3	As 188.979†	-25.2	1.3	40.049 ug/L	40.049 ppb	11:50:41
3	B 249.677†	253.1	655.6	3.9487 ug/L	3.9487 ppb	11:50:21
3	Ba 233.527†	57018.2	54177.0	550.91 ug/L	550.91 ppb	11:50:21
3	Be 313.107†	-2671.4	1639.3	5.8834 ug/L	5.8834 ppb	11:50:21
3	Cd 226.502†	418.9	597.4	0.6371 ug/L	0.6371 ppb	11:50:41
3	Co 228.616†	1102.5	1097.7	22.686 ug/L	22.686 ppb	11:50:41
3	Cr 267.716†	10618.7	9996.8	162.76 ug/L	162.76 ppb	11:50:21
3	Cu 324.752†	19255.0	12945.7	50.405 ug/L	50.405 ppb	11:50:21
3	Mn 257.610†	1330159.5	1263732.0	1746.6 ug/L	1746.6 ppb	11:50:21
3	Mo 202.031†	-15.7	-19.7	4.7061 ug/L	4.7061 ppb	11:50:41
3	Ni 231.604†	2883.5	2655.8	89.475 ug/L	89.475 ppb	11:50:41
3	P 214.914†	1183.0	922.7	563.56 ug/L	563.56 ppb	11:50:41
3	Pb 220.353†	404.9	450.6	79.333 ug/L	79.333 ppb	11:50:41
3	S 181.975 Axial†	322.7	267.3	413.81 ug/L	413.81 ppb	11:50:41
3	Sb 206.836†	73.2	44.3	8.6719 ug/L	8.6719 ppb	11:50:41
3	Se 196.026†	-421.8	-374.3	-55.000 ug/L	-55.000 ppb	11:50:41
3	Si 251.611†	1114817.4	1058988.4	40517 ug/L	40517 ppb	11:50:21
3	Sn 189.927†	-35.4	-43.4	-7.3386 ug/L	-7.3386 ppb	11:50:41
3	Ti 334.940†	1269992.5	1208409.3	2289.9 ug/L	2289.9 ppb	11:50:21
3	Tl 190.801†	-107.1	-70.4	-1.0041 ug/L	-1.0041 ppb	11:50:41
3	U 409.014†	-6959.2	-4208.5	-177.89 ug/L	-177.89 ppb	11:50:21
3	V 292.402†	14565.2	15591.1	128.92 ug/L	128.92 ppb	11:50:21
3	Zn 213.857†	27957.8	25880.8	299.24 ug/L	299.24 ppb	11:50:21
3	SiO2†	1137196.6	1080243.9	87864 ug/L	87864 ppb	11:51:00

Mean Data: 248371012|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	708170.8	106.19 %		1.262			1.19%
Sc Radial	4133.8	115 %		0.8			0.72%
Y 371.029	656394.2	124.30 %		1.344			1.08%
Y RADIAL	5334.7	131.2 %		1.17			0.89%
Ag 328.068†	-4582.2	-0.0998 ug/L		0.06478	-0.0998 ppb	0.06478	64.91%
Al 396.153Radial†	47400.9	54391 ug/L		351.3	54391 ppb	351.3	0.65%
As 188.979†	3.0	40.945 ug/L		1.2227	40.945 ppb	1.2227	2.99%
B 249.677†	611.0	2.7218 ug/L		1.11085	2.7218 ppb	1.11085	40.81%
Ba 233.527†	54164.1	550.79 ug/L		0.129	550.79 ppb	0.129	0.02%
Be 313.107†	1674.0	5.8989 ug/L		0.01802	5.8989 ppb	0.01802	0.31%
Ca 317.933Radial†	6605.3	13501 ug/L		28.4	13501 ppb	28.4	0.21%
Cd 226.502†	594.6	0.5754 ug/L		0.05409	0.5754 ppb	0.05409	9.40%
Co 228.616†	1103.3	22.825 ug/L		0.1606	22.825 ppb	0.1606	0.70%
Cr 267.716†	9997.7	162.79 ug/L		0.132	162.79 ppb	0.132	0.08%
Cu 324.752†	12871.7	50.151 ug/L		0.2464	50.151 ppb	0.2464	0.49%
Fe 238.204 Radial†	5908.2	83519 ug/L		267.3	83519 ppb	267.3	0.32%
K 766.490 Radial†	33170.9	6975.5 ug/L		40.99	6975.5 ppb	40.99	0.59%

Mg 279.077 IEC†	270.6	11859 ug/L	35.0	11859 ppb	35.0	0.30%
Mn 257.610†	1264870.2	1748.2 ug/L	1.51	1748.2 ppb	1.51	0.09%
Mo 202.031†	-24.3	4.2727 ug/L	0.70874	4.2727 ppb	0.70874	16.59%
Na 589.592 Radial†	1338.8	690.33 ug/L	4.431	690.33 ppb	4.431	0.64%
Ni 231.604†	2638.7	88.898 ug/L	0.5069	88.898 ppb	0.5069	0.57%
P 214.914†	925.5	565.30 ug/L	3.309	565.30 ppb	3.309	0.59%
Pb 220.353†	454.4	79.854 ug/L	1.0577	79.854 ppb	1.0577	1.32%
S 181.975 Axial†	260.6	403.29 ug/L	10.730	403.29 ppb	10.730	2.66%
Sb 206.836†	35.0	4.8089 ug/L	4.17600	4.8089 ppb	4.17600	86.84%
Se 196.026†	-366.5	-48.567 ug/L	5.8402	-48.567 ppb	5.8402	12.03%
Si 251.611†	1060180.7	40563 ug/L	83.9	40563 ppb	83.9	0.21%
Sn 189.927†	-43.5	-7.3723 ug/L	0.99410	-7.3723 ppb	0.99410	13.48%
Sr 421.552†	12318.3	135.71 ug/L	0.633	135.71 ppb	0.633	0.47%
Ti 334.940†	1208623.7	2290.3 ug/L	0.93	2290.3 ppb	0.93	0.04%
Tl 190.801†	-65.6	0.9016 ug/L	1.66823	0.9016 ppb	1.66823	185.03%
U 409.014†	-4150.6	-175.60 ug/L	4.867	-175.60 ppb	4.867	2.77%
V 292.402†	15603.0	129.00 ug/L	0.145	129.00 ppb	0.145	0.11%
Zn 213.857†	25935.4	299.88 ug/L	0.702	299.88 ppb	0.702	0.23%
SiO2†	1069989.0	87029 ug/L	913.8	87029 ppb	913.8	1.05%

Sequence No.: 21
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/31/2010 11:53:11
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4099.7	4099.7	114 %		11:55:04
1	Y RADIAL	4477.8	4477.8	110.1 %		11:55:04
1	Al 396.153Radial†	4721.1	4242.6	4844.8 ug/L	4844.8 ppb	11:55:04
1	Ca 317.933Radial†	2657.6	2310.6	4722.8 ug/L	4722.8 ppb	11:55:24
1	Fe 238.204 Radial†	397.2	339.5	4814.7 ug/L	4814.7 ppb	11:55:24
1	K 766.490 Radial†	28528.4	21953.2	4614.0 ug/L	4614.0 ppb	11:55:04
1	Mg 279.077 IEC†	128.5	111.9	4938.5 ug/L	4938.5 ppb	11:55:24
1	Na 589.592 Radial†	20255.4	18627.9	9604.9 ug/L	9604.9 ppb	11:55:04
1	Sr 421.552†	51099.7	44716.0	492.96 ug/L	492.96 ppb	11:55:04
1	Sc 361.383	704321.1	704321.1	105.61 %		11:56:21
1	Y 371.029	552263.2	552263.2	104.58 %		11:56:21
1	Ag 328.068†	90679.5	85659.1	497.67 ug/L	497.67 ppb	11:56:27
1	As 188.979†	968.4	942.2	493.39 ug/L	493.39 ppb	11:56:47
1	B 249.677†	18705.6	18126.8	483.37 ug/L	483.37 ppb	11:56:27
1	Ba 233.527†	51182.1	48449.3	491.35 ug/L	491.35 ppb	11:56:27
1	Be 313.107†	1239043.3	1177383.3	494.30 ug/L	494.30 ppb	11:56:21
1	Cd 226.502†	33299.8	31729.6	489.66 ug/L	489.66 ppb	11:56:27
1	Co 228.616†	20110.8	19092.1	495.62 ug/L	495.62 ppb	11:56:27
1	Cr 267.716†	33801.4	31910.0	491.49 ug/L	491.49 ppb	11:56:27
1	Cu 324.752†	152926.0	139445.8	494.41 ug/L	494.41 ppb	11:56:27
1	Mn 257.610†	378182.2	357632.5	492.37 ug/L	492.37 ppb	11:56:27
1	Mo 202.031†	5215.4	4933.5	482.78 ug/L	482.78 ppb	11:56:47
1	Ni 231.604†	15506.9	14598.2	491.62 ug/L	491.62 ppb	11:56:27
1	P 214.914†	3923.7	3513.5	2288.4 ug/L	2288.4 ppb	11:56:47
1	Pb 220.353†	3034.5	2939.0	481.26 ug/L	481.26 ppb	11:56:47
1	S 181.975 Axial†	672.1	597.0	946.28 ug/L	946.28 ppb	11:56:47
1	Sb 206.836†	1247.7	1156.2	496.62 ug/L	496.62 ppb	11:56:47
1	Se 196.026†	635.3	628.2	505.01 ug/L	505.01 ppb	11:56:47
1	Si 251.611†	70069.3	65809.6	2512.0 ug/L	2512.0 ppb	11:56:27
1	Sn 189.927†	2150.3	2026.3	479.87 ug/L	479.87 ppb	11:56:47
1	Ti 334.940†	272868.1	259774.5	491.92 ug/L	491.92 ppb	11:56:27
1	Tl 190.801†	1261.3	1225.8	489.66 ug/L	489.66 ppb	11:56:47
1	U 409.014†	10335.2	12191.5	485.18 ug/L	485.18 ppb	11:56:27
1	V 292.402†	54556.3	53405.8	498.52 ug/L	498.52 ppb	11:56:27
1	Zn 213.857†	43831.5	40812.1	488.02 ug/L	488.02 ppb	11:56:27
1	SiO2†	69234.5	65005.4	5274.2 ug/L	5274.2 ppb	11:57:54
2	Sc Radial	4070.6	4070.6	113 %		11:55:29
2	Y RADIAL	4489.4	4489.4	110.4 %		11:55:29
2	Al 396.153Radial†	4969.7	4491.2	5129.6 ug/L	5129.6 ppb	11:55:29
2	Ca 317.933Radial†	2732.3	2393.0	4891.4 ug/L	4891.4 ppb	11:55:49
2	Fe 238.204 Radial†	408.7	352.1	4992.7 ug/L	4992.7 ppb	11:55:49
2	K 766.490 Radial†	29785.5	23239.9	4884.5 ug/L	4884.5 ppb	11:55:29
2	Mg 279.077 IEC†	131.5	115.3	5091.8 ug/L	5091.8 ppb	11:55:49
2	Na 589.592 Radial†	21366.0	19733.7	10175 ug/L	10175 ppb	11:55:29
2	Sr 421.552†	54137.9	47714.1	526.01 ug/L	526.01 ppb	11:55:29
2	Sc 361.383	690487.9	690487.9	103.54 %		11:56:52
2	Y 371.029	541772.5	541772.5	102.59 %		11:56:52
2	Ag 328.068†	91341.8	88018.9	511.39 ug/L	511.39 ppb	11:56:58
2	As 188.979†	964.7	957.0	501.17 ug/L	501.17 ppb	11:57:18
2	B 249.677†	19034.0	18798.7	501.31 ug/L	501.31 ppb	11:56:58
2	Ba 233.527†	51559.8	49785.0	504.89 ug/L	504.89 ppb	11:56:58
2	Be 313.107†	1217295.5	1179882.6	495.38 ug/L	495.38 ppb	11:56:52
2	Cd 226.502†	33482.5	32537.7	502.12 ug/L	502.12 ppb	11:56:58
2	Co 228.616†	20174.1	19534.8	507.10 ug/L	507.10 ppb	11:56:58
2	Cr 267.716†	34060.6	32801.6	505.23 ug/L	505.23 ppb	11:56:58
2	Cu 324.752†	154437.4	143806.5	509.87 ug/L	509.87 ppb	11:56:58
2	Mn 257.610†	380365.4	366915.1	505.16 ug/L	505.16 ppb	11:56:58
2	Mo 202.031†	5221.8	5038.7	493.08 ug/L	493.08 ppb	11:57:18
2	Ni 231.604†	15595.8	14978.2	504.42 ug/L	504.42 ppb	11:56:58

2	P 214.914†	3966.8	3629.5	2364.1 ug/L	2364.1 ppb	11:57:18
2	Pb 220.353†	3054.2	3015.6	493.82 ug/L	493.82 ppb	11:57:18
2	S 181.975 Axial†	695.3	632.2	1002.0 ug/L	1002.0 ppb	11:57:18
2	Sb 206.836†	1256.4	1188.2	510.28 ug/L	510.28 ppb	11:57:18
2	Se 196.026†	625.4	630.6	507.47 ug/L	507.47 ppb	11:57:18
2	Si 251.611†	70709.0	67756.7	2586.3 ug/L	2586.3 ppb	11:56:58
2	Sn 189.927†	2156.9	2073.5	491.07 ug/L	491.07 ppb	11:57:18
2	Ti 334.940†	274985.6	266995.9	505.60 ug/L	505.60 ppb	11:56:58
2	Tl 190.801†	1268.6	1256.7	502.03 ug/L	502.03 ppb	11:57:18
2	U 409.014†	10492.8	12539.8	499.04 ug/L	499.04 ppb	11:56:58
2	V 292.402†	54939.3	54810.6	511.59 ug/L	511.59 ppb	11:56:58
2	Zn 213.857†	44149.7	41950.9	501.64 ug/L	501.64 ppb	11:56:58
2	SiO2†	70102.1	67156.7	5448.9 ug/L	5448.9 ppb	11:57:59
3	Sc Radial	4064.4	4064.4	113 %		11:55:54
3	Y RADIAL	4464.5	4464.5	109.8 %		11:55:54
3	Al 396.153Radial†	4872.9	4412.5	5039.7 ug/L	5039.7 ppb	11:55:54
3	Ca 317.933Radial†	2711.5	2378.4	4861.4 ug/L	4861.4 ppb	11:56:15
3	Fe 238.204 Radial†	405.1	349.5	4955.8 ug/L	4955.8 ppb	11:56:15
3	K 766.490 Radial†	29412.1	22950.2	4823.7 ug/L	4823.7 ppb	11:55:54
3	Mg 279.077 IEC†	129.2	113.4	5006.7 ug/L	5006.7 ppb	11:56:15
3	Na 589.592 Radial†	20929.1	19376.6	9991.0 ug/L	9991.0 ppb	11:55:54
3	Sr 421.552†	53191.2	46950.9	517.60 ug/L	517.60 ppb	11:55:54
3	Sc 361.383	693127.3	693127.3	103.93 %		11:57:23
3	Y 371.029	543407.2	543407.2	102.90 %		11:57:23
3	Ag 328.068†	88444.2	84895.0	493.29 ug/L	493.29 ppb	11:57:28
3	As 188.979†	958.3	947.3	496.01 ug/L	496.01 ppb	11:57:48
3	B 249.677†	18240.0	17964.8	479.02 ug/L	479.02 ppb	11:57:28
3	Ba 233.527†	50280.4	48364.4	490.49 ug/L	490.49 ppb	11:57:28
3	Be 313.107†	1222977.7	1180872.6	495.75 ug/L	495.75 ppb	11:57:23
3	Cd 226.502†	32617.8	31582.6	487.37 ug/L	487.37 ppb	11:57:28
3	Co 228.616†	19692.9	18997.5	493.17 ug/L	493.17 ppb	11:57:28
3	Cr 267.716†	33243.3	31889.9	491.19 ug/L	491.19 ppb	11:57:28
3	Cu 324.752†	148924.8	137934.5	489.06 ug/L	489.06 ppb	11:57:28
3	Mn 257.610†	370869.1	356379.2	490.66 ug/L	490.66 ppb	11:57:28
3	Mo 202.031†	5156.3	4956.4	485.03 ug/L	485.03 ppb	11:57:48
3	Ni 231.604†	15242.9	14581.3	491.05 ug/L	491.05 ppb	11:57:28
3	P 214.914†	3901.3	3551.9	2315.4 ug/L	2315.4 ppb	11:57:48
3	Pb 220.353†	3010.5	2962.4	485.11 ug/L	485.11 ppb	11:57:48
3	S 181.975 Axial†	669.1	604.4	957.97 ug/L	957.97 ppb	11:57:48
3	Sb 206.836†	1237.5	1165.4	500.49 ug/L	500.49 ppb	11:57:48
3	Se 196.026†	620.7	623.8	502.05 ug/L	502.05 ppb	11:57:48
3	Si 251.611†	68401.5	65276.5	2491.5 ug/L	2491.5 ppb	11:57:28
3	Sn 189.927†	2115.6	2025.8	479.78 ug/L	479.78 ppb	11:57:48
3	Ti 334.940†	267025.5	258325.7	489.19 ug/L	489.19 ppb	11:57:28
3	Tl 190.801†	1235.8	1220.5	487.57 ug/L	487.57 ppb	11:57:48
3	U 409.014†	10193.2	12213.0	486.02 ug/L	486.02 ppb	11:57:28
3	V 292.402†	53459.1	53184.3	496.49 ug/L	496.49 ppb	11:57:28
3	Zn 213.857†	42936.0	40620.7	485.70 ug/L	485.70 ppb	11:57:28
3	SiO2†	69673.8	66486.8	5394.6 ug/L	5394.6 ppb	11:58:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	695978.8	104.36 %	1.101			1.06%
Sc Radial	4078.2	114 %	0.5			0.46%
Y 371.029	545814.3	103.36 %	1.069			1.03%
Y RADIAL	4477.3	110.1 %	0.31			0.28%
Ag 328.068†	86191.0	500.79 ug/L	9.444	500.79 ppb	9.444	1.89%
QC value within limits for Ag 328.068 Recovery = 100.16%						
Al 396.153Radial†	4382.1	5004.7 ug/L	145.60	5004.7 ppb	145.60	2.91%
QC value within limits for Al 396.153Radial Recovery = 100.09%						
As 188.979†	948.8	496.86 ug/L	3.962	496.86 ppb	3.962	0.80%
QC value within limits for As 188.979 Recovery = 99.37%						
B 249.677†	18296.8	487.90 ug/L	11.817	487.90 ppb	11.817	2.42%
QC value within limits for B 249.677 Recovery = 97.58%						
Ba 233.527†	48866.2	495.58 ug/L	8.080	495.58 ppb	8.080	1.63%
QC value within limits for Ba 233.527 Recovery = 99.12%						
Be 313.107†	1179379.5	495.14 ug/L	0.755	495.14 ppb	0.755	0.15%
QC value within limits for Be 313.107 Recovery = 99.03%						
Ca 317.933Radial†	2360.7	4825.2 ug/L	89.93	4825.2 ppb	89.93	1.86%

QC value within limits for Ca 317.933 Radial Recovery = 96.50%							
Cd 226.502†	31950.0	493.05 ug/L	7.939	493.05 ppb	7.939	1.61%	
QC value within limits for Cd 226.502 Recovery = 98.61%							
Co 228.616†	19208.1	498.63 ug/L	7.437	498.63 ppb	7.437	1.49%	
QC value within limits for Co 228.616 Recovery = 99.73%							
Cr 267.716†	32200.5	495.97 ug/L	8.017	495.97 ppb	8.017	1.62%	
QC value within limits for Cr 267.716 Recovery = 99.19%							
Cu 324.752†	140395.6	497.78 ug/L	10.809	497.78 ppb	10.809	2.17%	
QC value within limits for Cu 324.752 Recovery = 99.56%							
Fe 238.204 Radial†	347.1	4921.1 ug/L	93.97	4921.1 ppb	93.97	1.91%	
QC value within limits for Fe 238.204 Radial Recovery = 98.42%							
K 766.490 Radial†	22714.4	4774.1 ug/L	141.89	4774.1 ppb	141.89	2.97%	
QC value within limits for K 766.490 Radial Recovery = 95.48%							
Mg 279.077 IEC†	113.5	5012.3 ug/L	76.79	5012.3 ppb	76.79	1.53%	
QC value within limits for Mg 279.077 IEC Recovery = 100.25%							
Mn 257.610†	360309.0	496.06 ug/L	7.922	496.06 ppb	7.922	1.60%	
QC value within limits for Mn 257.610 Recovery = 99.21%							
Mo 202.031†	4976.2	486.97 ug/L	5.414	486.97 ppb	5.414	1.11%	
QC value within limits for Mo 202.031 Recovery = 97.39%							
Na 589.592 Radial†	19246.1	9923.7 ug/L	291.00	9923.7 ppb	291.00	2.93%	
QC value within limits for Na 589.592 Radial Recovery = 99.24%							
Ni 231.604†	14719.2	495.69 ug/L	7.559	495.69 ppb	7.559	1.52%	
QC value within limits for Ni 231.604 Recovery = 99.14%							
P 214.914†	3565.0	2322.6 ug/L	38.36	2322.6 ppb	38.36	1.65%	
QC value within limits for P 214.914 Recovery = 92.91%							
Pb 220.353†	2972.3	486.73 ug/L	6.438	486.73 ppb	6.438	1.32%	
QC value within limits for Pb 220.353 Recovery = 97.35%							
S 181.975 Axial†	611.2	968.76 ug/L	29.404	968.76 ppb	29.404	3.04%	
QC value within limits for S 181.975 Axial Recovery = 96.88%							
Sb 206.836†	1169.9	502.46 ug/L	7.038	502.46 ppb	7.038	1.40%	
QC value within limits for Sb 206.836 Recovery = 100.49%							
Se 196.026†	627.5	504.84 ug/L	2.717	504.84 ppb	2.717	0.54%	
QC value within limits for Se 196.026 Recovery = 100.97%							
Si 251.611†	66280.9	2529.9 ug/L	49.89	2529.9 ppb	49.89	1.97%	
QC value within limits for Si 251.611 Recovery = 101.20%							
Sn 189.927†	2041.8	483.57 ug/L	6.489	483.57 ppb	6.489	1.34%	
QC value within limits for Sn 189.927 Recovery = 96.71%							
Sr 421.552†	46460.3	512.19 ug/L	17.177	512.19 ppb	17.177	3.35%	
QC value within limits for Sr 421.552 Recovery = 102.44%							
Ti 334.940†	261698.7	495.57 ug/L	8.792	495.57 ppb	8.792	1.77%	
QC value within limits for Ti 334.940 Recovery = 99.11%							
Tl 190.801†	1234.3	493.09 ug/L	7.817	493.09 ppb	7.817	1.59%	
QC value within limits for Tl 190.801 Recovery = 98.62%							
U 409.014†	12314.8	490.08 ug/L	7.769	490.08 ppb	7.769	1.59%	
QC value within limits for U 409.014 Recovery = 98.02%							
V 292.402†	53800.2	502.20 ug/L	8.195	502.20 ppb	8.195	1.63%	
QC value within limits for V 292.402 Recovery = 100.44%							
Zn 213.857†	41127.9	491.79 ug/L	8.609	491.79 ppb	8.609	1.75%	
QC value within limits for Zn 213.857 Recovery = 98.36%							
SiO2†	66216.3	5372.6 ug/L	89.41	5372.6 ppb	89.41	1.66%	
QC value within limits for SiO2 Recovery = 100.47%							
All analyte(s) passed QC.							

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 12:00:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3925.8	3925.8	109 %		12:02:28
1	Y RADIAL	4436.7	4436.7	109.1 %		12:02:08
1	Al 396.153Radial†	-102.8	16.0	18.336 ug/L	18.336 ppb	12:02:08
1	Ca 317.933Radial†	17.4	0.2	0.4079 ug/L	0.4079 ppb	12:02:28
1	Fe 238.204 Radial†	7.7	-1.2	-16.521 ug/L	-16.521 ppb	12:02:28
1	K 766.490 Radial†	3082.0	-201.7	-42.448 ug/L	-42.448 ppb	12:02:08
1	Mg 279.077 IEC†	5.8	4.6	204.10 ug/L	204.10 ppb	12:02:28
1	Na 589.592 Radial†	-986.4	-4.2	-2.1677 ug/L	-2.1677 ppb	12:02:08
1	Sr 421.552†	29.4	13.1	0.1446 ug/L	0.1446 ppb	12:02:08
1	Sc 361.383	651612.7	651612.7	97.708 %		12:03:25
1	Y 371.029	515823.7	515823.7	97.678 %		12:03:25
1	Ag 328.068†	159.0	-39.3	-0.2330 ug/L	-0.2330 ppb	12:03:25
1	As 188.979†	-24.2	0.5	0.2625 ug/L	0.2625 ppb	12:03:45
1	B 249.677†	-491.7	-88.1	-2.3574 ug/L	-2.3574 ppb	12:03:45
1	Ba 233.527†	15.5	2.6	0.0263 ug/L	0.0263 ppb	12:03:45
1	Be 313.107†	-4078.9	3.7	0.0014 ug/L	0.0014 ppb	12:03:25
1	Cd 226.502†	-191.8	2.9	0.0475 ug/L	0.0475 ppb	12:03:45
1	Co 228.616†	-56.3	-7.7	-0.1981 ug/L	-0.1981 ppb	12:03:45
1	Cr 267.716†	57.3	-36.6	-0.5652 ug/L	-0.5652 ppb	12:03:45
1	Cu 324.752†	5298.2	68.3	0.2401 ug/L	0.2401 ppb	12:03:25
1	Mn 257.610†	508.7	66.2	0.0810 ug/L	0.0810 ppb	12:03:45
1	Mo 202.031†	10.9	6.4	0.6242 ug/L	0.6242 ppb	12:03:45
1	Ni 231.604†	98.3	15.8	0.5339 ug/L	0.5339 ppb	12:03:45
1	P 214.914†	207.1	10.3	6.9303 ug/L	6.9303 ppb	12:03:45
1	Pb 220.353†	-105.3	-42.0	-6.8442 ug/L	-6.8442 ppb	12:03:45
1	S 181.975 Axial†	37.8	-0.7	-1.1231 ug/L	-1.1231 ppb	12:03:45
1	Sb 206.836†	28.1	3.5	1.4720 ug/L	1.4720 ppb	12:03:45
1	Se 196.026†	-28.6	-2.6	-2.0987 ug/L	-2.0987 ppb	12:03:45
1	Si 251.611†	605.8	83.6	3.1922 ug/L	3.1922 ppb	12:03:45
1	Sn 189.927†	8.1	-1.5	-0.3443 ug/L	-0.3443 ppb	12:03:45
1	Ti 334.940†	-1415.9	-43.5	-0.0996 ug/L	-0.0996 ppb	12:03:25
1	Tl 190.801†	-27.4	3.4	1.3412 ug/L	1.3412 ppb	12:03:45
1	U 409.014†	-2303.2	48.3	1.9332 ug/L	1.9332 ppb	12:03:25
1	V 292.402†	-1694.4	14.3	0.1507 ug/L	0.1507 ppb	12:03:25
1	Zn 213.857†	728.8	55.5	0.6687 ug/L	0.6687 ppb	12:03:45
1	SiO2†	631.5	96.1	7.7971 ug/L	7.7971 ppb	12:04:41
2	Sc Radial	3813.8	3813.8	106 %		12:02:53
2	Y RADIAL	4366.1	4366.1	107.4 %		12:02:33
2	Al 396.153Radial†	-103.7	12.4	14.245 ug/L	14.245 ppb	12:02:33
2	Ca 317.933Radial†	19.1	2.3	4.6236 ug/L	4.6236 ppb	12:02:53
2	Fe 238.204 Radial†	7.2	-1.4	-20.431 ug/L	-20.431 ppb	12:02:53
2	K 766.490 Radial†	3069.7	-130.5	-27.443 ug/L	-27.443 ppb	12:02:33
2	Mg 279.077 IEC†	0.6	-0.1	-2.8408 ug/L	-2.8408 ppb	12:02:53
2	Na 589.592 Radial†	-1048.9	-89.5	-46.157 ug/L	-46.157 ppb	12:02:33
2	Sr 421.552†	31.9	16.3	0.1794 ug/L	0.1794 ppb	12:02:33
2	Sc 361.383	683535.9	683535.9	102.50 %		12:03:50
2	Y 371.029	541414.9	541414.9	102.52 %		12:03:50
2	Ag 328.068†	284.3	75.4	0.4325 ug/L	0.4325 ppb	12:03:50
2	As 188.979†	-22.2	3.6	1.8523 ug/L	1.8523 ppb	12:04:10
2	B 249.677†	-479.2	-52.4	-1.4014 ug/L	-1.4014 ppb	12:04:10
2	Ba 233.527†	10.0	-3.4	-0.0324 ug/L	-0.0324 ppb	12:04:10
2	Be 313.107†	-4198.3	82.2	0.0347 ug/L	0.0347 ppb	12:03:50
2	Cd 226.502†	-201.0	3.2	0.0512 ug/L	0.0512 ppb	12:04:10
2	Co 228.616†	-44.2	6.8	0.1776 ug/L	0.1776 ppb	12:04:10
2	Cr 267.716†	96.4	-1.2	-0.0192 ug/L	-0.0192 ppb	12:04:10
2	Cu 324.752†	5565.2	75.5	0.2657 ug/L	0.2657 ppb	12:03:50
2	Mn 257.610†	483.2	17.0	0.0216 ug/L	0.0216 ppb	12:04:10
2	Mo 202.031†	10.7	5.7	0.5571 ug/L	0.5571 ppb	12:04:10
2	Ni 231.604†	84.1	-2.7	-0.0897 ug/L	-0.0897 ppb	12:04:10

2	P 214.914†	182.1	-24.0	-16.316 ug/L	-16.316 ppb	12:04:10
2	Pb 220.353†	-73.5	-5.9	-0.9562 ug/L	-0.9562 ppb	12:04:10
2	S 181.975 Axial†	31.5	-8.6	-13.686 ug/L	-13.686 ppb	12:04:10
2	Sb 206.836†	33.2	7.2	2.9901 ug/L	2.9901 ppb	12:04:10
2	Se 196.026†	-18.4	8.6	6.6797 ug/L	6.6797 ppb	12:04:10
2	Si 251.611†	608.7	57.4	2.1907 ug/L	2.1907 ppb	12:04:10
2	Sn 189.927†	8.4	-1.5	-0.3589 ug/L	-0.3589 ppb	12:04:10
2	Ti 334.940†	-1370.9	68.2	0.1293 ug/L	0.1293 ppb	12:03:50
2	Tl 190.801†	-24.2	7.8	3.1013 ug/L	3.1013 ppb	12:04:10
2	U 409.014†	-2425.1	39.5	1.5781 ug/L	1.5781 ppb	12:03:50
2	V 292.402†	-1653.7	134.9	1.2567 ug/L	1.2567 ppb	12:03:50
2	Zn 213.857†	734.8	26.5	0.3234 ug/L	0.3234 ppb	12:04:10
2	SiO2†	591.5	26.8	2.1675 ug/L	2.1675 ppb	12:04:46
3	Sc Radial	3759.5	3759.5	105 %		12:03:18
3	Y RADIAL	4446.5	4446.5	109.3 %		12:02:58
3	Al 396.153Radial†	-124.1	-8.4	-9.7331 ug/L	-9.7331 ppb	12:02:58
3	Ca 317.933Radial†	23.6	6.8	13.931 ug/L	13.931 ppb	12:03:18
3	Fe 238.204 Radial†	6.4	-2.1	-29.902 ug/L	-29.902 ppb	12:03:18
3	K 766.490 Radial†	3026.1	-130.4	-27.442 ug/L	-27.442 ppb	12:02:58
3	Mg 279.077 IEC†	1.8	1.1	47.330 ug/L	47.330 ppb	12:03:18
3	Na 589.592 Radial†	-1021.3	-77.4	-39.933 ug/L	-39.933 ppb	12:02:58
3	Sr 421.552†	41.4	25.7	0.2836 ug/L	0.2836 ppb	12:02:58
3	Sc 361.383	684446.5	684446.5	102.63 %		12:04:15
3	Y 371.029	541397.5	541397.5	102.52 %		12:04:15
3	Ag 328.068†	197.6	-9.5	-0.0591 ug/L	-0.0591 ppb	12:04:15
3	As 188.979†	-25.9	-0.0	-0.0081 ug/L	-0.0081 ppb	12:04:35
3	B 249.677†	-488.0	-60.4	-1.6138 ug/L	-1.6138 ppb	12:04:35
3	Ba 233.527†	0.6	-12.6	-0.1262 ug/L	-0.1262 ppb	12:04:35
3	Be 313.107†	-4304.4	-15.7	-0.0060 ug/L	-0.0060 ppb	12:04:15
3	Cd 226.502†	-197.3	7.0	0.1106 ug/L	0.1106 ppb	12:04:35
3	Co 228.616†	-47.9	3.2	0.0860 ug/L	0.0860 ppb	12:04:35
3	Cr 267.716†	92.2	-5.4	-0.0848 ug/L	-0.0848 ppb	12:04:35
3	Cu 324.752†	5559.6	62.8	0.2215 ug/L	0.2215 ppb	12:04:15
3	Mn 257.610†	511.8	44.2	0.0559 ug/L	0.0559 ppb	12:04:35
3	Mo 202.031†	17.0	11.8	1.1525 ug/L	1.1525 ppb	12:04:35
3	Ni 231.604†	103.6	16.2	0.5469 ug/L	0.5469 ppb	12:04:35
3	P 214.914†	191.6	-15.0	-10.209 ug/L	-10.209 ppb	12:04:35
3	Pb 220.353†	-62.4	5.0	0.8184 ug/L	0.8184 ppb	12:04:35
3	S 181.975 Axial†	36.1	-4.2	-6.6794 ug/L	-6.6794 ppb	12:04:35
3	Sb 206.836†	32.4	6.3	2.6748 ug/L	2.6748 ppb	12:04:35
3	Se 196.026†	-12.4	14.5	11.235 ug/L	11.235 ppb	12:04:35
3	Si 251.611†	621.5	69.2	2.6334 ug/L	2.6334 ppb	12:04:35
3	Sn 189.927†	16.4	6.2	1.4756 ug/L	1.4756 ppb	12:04:35
3	Ti 334.940†	-1303.3	135.8	0.2557 ug/L	0.2557 ppb	12:04:15
3	Tl 190.801†	-38.7	-6.3	-2.4907 ug/L	-2.4907 ppb	12:04:35
3	U 409.014†	-2494.1	-24.6	-0.9769 ug/L	-0.9769 ppb	12:04:15
3	V 292.402†	-1672.7	118.5	1.1117 ug/L	1.1117 ppb	12:04:15
3	Zn 213.857†	728.9	19.8	0.2395 ug/L	0.2395 ppb	12:04:35
3	SiO2†	619.1	53.0	4.2786 ug/L	4.2786 ppb	12:04:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	673198.4	100.95 %		2.804			2.78%
Sc Radial	3833.1	107 %		2.4			2.21%
Y 371.029	532878.7	100.91 %		2.797			2.77%
Y RADIAL	4416.4	108.6 %		1.08			0.99%
Ag 328.068†	8.9	0.0468 ug/L		0.34519	0.0468 ppb	0.34519	737.59%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	6.7	7.6159 ug/L		15.16328	7.6159 ppb	15.16328	199.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.4	0.7022 ug/L		1.00515	0.7022 ppb	1.00515	143.13%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-67.0	-1.7909 ug/L		0.50199	-1.7909 ppb	0.50199	28.03%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.5	-0.0441 ug/L		0.07691	-0.0441 ppb	0.07691	174.40%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	23.4	0.0100 ug/L		0.02170	0.0100 ppb	0.02170	216.07%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.1	6.3209 ug/L		6.91969	6.3209 ppb	6.91969	109.47%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	4.3	0.0698 ug/L	0.03541	0.0698 ppb	0.03541	50.75%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	0.8	0.0218 ug/L	0.19587	0.0218 ppb	0.19587	897.66%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-14.4	-0.2231 ug/L	0.29810	-0.2231 ppb	0.29810	133.63%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	68.8	0.2424 ug/L	0.02222	0.2424 ppb	0.02222	9.16%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.6	-22.285 ug/L	6.8804	-22.285 ppb	6.8804	30.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-154.2	-32.444 ug/L	8.6633	-32.444 ppb	8.6633	26.70%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.9	82.862 ug/L	107.9470	82.862 ppb	107.9470	130.27%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	42.5	0.0529 ug/L	0.02987	0.0529 ppb	0.02987	56.52%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	8.0	0.7779 ug/L	0.32612	0.7779 ppb	0.32612	41.92%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-57.1	-29.419 ug/L	23.8048	-29.419 ppb	23.8048	80.92%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	9.8	0.3304 ug/L	0.36385	0.3304 ppb	0.36385	110.13%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-9.6	-6.5317 ug/L	12.05160	-6.5317 ppb	12.05160	184.51%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-14.3	-2.3273 ug/L	4.01110	-2.3273 ppb	4.01110	172.35%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-4.5	-7.1627 ug/L	6.29521	-7.1627 ppb	6.29521	87.89%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	5.7	2.3790 ug/L	0.80110	2.3790 ppb	0.80110	33.67%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	6.8	5.2721 ug/L	6.77748	5.2721 ppb	6.77748	128.55%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	70.1	2.6721 ug/L	0.50188	2.6721 ppb	0.50188	18.78%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.1	0.2575 ug/L	1.05499	0.2575 ppb	1.05499	409.78%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	18.4	0.2025 ug/L	0.07236	0.2025 ppb	0.07236	35.73%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	53.5	0.0952 ug/L	0.18010	0.0952 ppb	0.18010	189.27%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.6	0.6506 ug/L	2.85928	0.6506 ppb	2.85928	439.49%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	21.1	0.8448 ug/L	1.58763	0.8448 ppb	1.58763	187.93%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	89.2	0.8397 ug/L	0.60109	0.8397 ppb	0.60109	71.58%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	33.9	0.4105 ug/L	0.22744	0.4105 ppb	0.22744	55.40%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		58.6	4.7477 ug/L	2.84394	4.7477 ppb	2.84394	59.90%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: 248371013|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 130

Date Collected: 3/31/2010 12:07:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371013|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4091.0	4091.0	114 %		12:08:55
1	Y RADIAL	5033.0	5033.0	123.8 %		12:08:55
1	Al 396.153Radial†	26758.0	23582.1	27060 ug/L	27060 ppb	12:08:55
1	Ca 317.933Radial†	7605.9	6656.1	13605 ug/L	13605 ppb	12:08:55
1	Fe 238.204 Radial†	4533.2	3968.3	56097 ug/L	56097 ppb	12:08:55
1	K 766.490 Radial†	30111.9	23395.1	4917.9 ug/L	4917.9 ppb	12:08:55
1	Mg 279.077 IEC†	131.2	114.4	4993.0 ug/L	4993.0 ppb	12:09:15
1	Na 589.592 Radial†	2034.2	2681.9	1382.8 ug/L	1382.8 ppb	12:08:55
1	Sr 421.552†	7870.9	6890.6	75.867 ug/L	75.867 ppb	12:08:55
1	Sc 361.383	693117.3	693117.3	103.93 %		12:10:13
1	Y 371.029	604936.0	604936.0	114.55 %		12:10:13
1	Ag 328.068†	-2905.3	-2997.4	0.3829 ug/L	0.3829 ppb	12:10:13
1	As 188.979†	-38.7	-12.0	23.620 ug/L	23.620 ppb	12:10:33
1	B 249.677†	-91.7	326.9	-0.4097 ug/L	-0.4097 ppb	12:10:13
1	Ba 233.527†	52631.1	50626.8	514.10 ug/L	514.10 ppb	12:10:13
1	Be 313.107†	-8090.4	-3606.1	2.8629 ug/L	2.8629 ppb	12:10:13
1	Cd 226.502†	232.7	423.1	0.7476 ug/L	0.7476 ppb	12:10:33
1	Co 228.616†	733.1	755.3	14.982 ug/L	14.982 ppb	12:10:33
1	Cr 267.716†	4062.5	3813.5	64.756 ug/L	64.756 ppb	12:10:33
1	Cu 324.752†	16516.5	10537.4	40.386 ug/L	40.386 ppb	12:10:13
1	Mn 257.610†	1184236.1	1138980.8	1572.6 ug/L	1572.6 ppb	12:10:13
1	Mo 202.031†	12.9	7.7	5.2698 ug/L	5.2698 ppb	12:10:33
1	Ni 231.604†	1550.6	1407.2	47.405 ug/L	47.405 ppb	12:10:33
1	P 214.914†	3084.0	2765.7	1831.1 ug/L	1831.1 ppb	12:10:33
1	Pb 220.353†	262.0	317.9	53.385 ug/L	53.385 ppb	12:10:33
1	S 181.975 Axial†	366.6	313.4	492.12 ug/L	492.12 ppb	12:10:33
1	Sb 206.836†	40.1	13.3	-2.1124 ug/L	-2.1124 ppb	12:10:33
1	Se 196.026†	-280.2	-243.1	-32.790 ug/L	-32.790 ppb	12:10:33
1	Si 251.611†	782979.3	752822.0	28803 ug/L	28803 ppb	12:10:13
1	Sn 189.927†	-71.2	-78.2	-15.733 ug/L	-15.733 ppb	12:10:33
1	Ti 334.940†	1055482.0	1016957.7	1927.8 ug/L	1927.8 ppb	12:10:13
1	Tl 190.801†	-88.1	-53.3	2.0446 ug/L	2.0446 ppb	12:10:33
1	U 409.014†	-5098.6	-2500.2	-106.36 ug/L	-106.36 ppb	12:10:13
1	V 292.402†	10682.9	12027.1	100.50 ug/L	100.50 ppb	12:10:13
1	Zn 213.857†	25037.0	23399.4	273.65 ug/L	273.65 ppb	12:10:13
1	SiO2†	786879.2	756560.6	61536 ug/L	61536 ppb	12:11:30
2	Sc Radial	4066.7	4066.7	113 %		12:09:20
2	Y RADIAL	4925.6	4925.6	121.1 %		12:09:20
2	Al 396.153Radial†	26253.0	23276.8	26709 ug/L	26709 ppb	12:09:20
2	Ca 317.933Radial†	7474.1	6579.8	13449 ug/L	13449 ppb	12:09:20
2	Fe 238.204 Radial†	4430.8	3901.8	55156 ug/L	55156 ppb	12:09:20
2	K 766.490 Radial†	29696.4	23186.4	4874.0 ug/L	4874.0 ppb	12:09:20
2	Mg 279.077 IEC†	135.2	118.6	5179.5 ug/L	5179.5 ppb	12:09:40
2	Na 589.592 Radial†	1933.8	2603.9	1342.6 ug/L	1342.6 ppb	12:09:20
2	Sr 421.552†	7698.4	6779.6	74.645 ug/L	74.645 ppb	12:09:20
2	Sc 361.383	720716.8	720716.8	108.07 %		12:10:38
2	Y 371.029	626833.3	626833.3	118.70 %		12:10:38
2	Ag 328.068†	-2934.7	-2917.6	0.5400 ug/L	0.5400 ppb	12:10:38
2	As 188.979†	-31.0	-3.4	27.269 ug/L	27.269 ppb	12:10:59
2	B 249.677†	-82.7	338.6	0.0612 ug/L	0.0612 ppb	12:10:38
2	Ba 233.527†	52960.6	48992.5	497.53 ug/L	497.53 ppb	12:10:38
2	Be 313.107†	-8082.2	-3300.4	2.8470 ug/L	2.8470 ppb	12:10:38
2	Cd 226.502†	222.6	405.2	0.5668 ug/L	0.5668 ppb	12:10:59
2	Co 228.616†	707.9	705.0	13.817 ug/L	13.817 ppb	12:10:59
2	Cr 267.716†	3992.7	3599.3	61.358 ug/L	61.358 ppb	12:10:59
2	Cu 324.752†	16673.8	10074.4	38.693 ug/L	38.693 ppb	12:10:38
2	Mn 257.610†	1189236.8	1099974.0	1518.8 ug/L	1518.8 ppb	12:10:38
2	Mo 202.031†	19.4	13.2	5.7285 ug/L	5.7285 ppb	12:10:59
2	Ni 231.604†	1542.2	1342.3	45.221 ug/L	45.221 ppb	12:10:59

2	P 214.914†	3022.9	2595.5	1716.6 ug/L	1716.6 ppb	12:10:59
2	Pb 220.353†	230.5	279.1	47.062 ug/L	47.062 ppb	12:10:59
2	S 181.975 Axial†	375.1	307.7	483.14 ug/L	483.14 ppb	12:10:59
2	Sb 206.836†	57.7	28.2	4.2533 ug/L	4.2533 ppb	12:10:59
2	Se 196.026†	-265.0	-218.6	-16.323 ug/L	-16.323 ppb	12:10:59
2	Si 251.611†	788183.7	728788.3	27884 ug/L	27884 ppb	12:10:38
2	Sn 189.927†	-77.0	-81.0	-16.413 ug/L	-16.413 ppb	12:10:59
2	Ti 334.940†	1061329.6	983478.7	1864.4 ug/L	1864.4 ppb	12:10:38
2	Tl 190.801†	-88.9	-50.8	2.2405 ug/L	2.2405 ppb	12:10:59
2	U 409.014†	-5202.8	-2408.7	-102.59 ug/L	-102.59 ppb	12:10:38
2	V 292.402†	10766.6	11711.0	97.812 ug/L	97.812 ppb	12:10:38
2	Zn 213.857†	25126.5	22559.8	263.67 ug/L	263.67 ppb	12:10:38
2	SiO2†	800761.1	740412.6	60223 ug/L	60223 ppb	12:11:36
3	Sc Radial	4132.5	4132.5	115 %		12:09:45
3	Y RADIAL	5054.1	5054.1	124.3 %		12:09:45
3	Al 396.153Radial†	26755.1	23343.8	26786 ug/L	26786 ppb	12:09:45
3	Ca 317.933Radial†	7595.1	6579.7	13449 ug/L	13449 ppb	12:09:45
3	Fe 238.204 Radial†	4498.0	3897.8	55101 ug/L	55101 ppb	12:09:45
3	K 766.490 Radial†	30134.7	23149.6	4866.3 ug/L	4866.3 ppb	12:09:45
3	Mg 279.077 IEC†	133.4	115.2	5026.7 ug/L	5026.7 ppb	12:10:05
3	Na 589.592 Radial†	2006.0	2639.4	1361.0 ug/L	1361.0 ppb	12:09:45
3	Sr 421.552†	7897.4	6844.2	75.357 ug/L	75.357 ppb	12:09:45
3	Sc 361.383	698204.5	698204.5	104.69 %		12:11:04
3	Y 371.029	609132.8	609132.8	115.35 %		12:11:04
3	Ag 328.068†	-2919.9	-2991.0	0.1193 ug/L	0.1193 ppb	12:11:04
3	As 188.979†	-29.2	-2.6	28.151 ug/L	28.151 ppb	12:11:24
3	B 249.677†	-114.0	306.2	-0.7991 ug/L	-0.7991 ppb	12:11:04
3	Ba 233.527†	52977.1	50588.3	513.68 ug/L	513.68 ppb	12:11:04
3	Be 313.107†	-7912.6	-3379.5	2.9377 ug/L	2.9377 ppb	12:11:04
3	Cd 226.502†	216.9	406.4	0.5909 ug/L	0.5909 ppb	12:11:24
3	Co 228.616†	713.6	731.5	14.399 ug/L	14.399 ppb	12:11:24
3	Cr 267.716†	4063.4	3786.0	64.230 ug/L	64.230 ppb	12:11:24
3	Cu 324.752†	16512.8	10418.1	39.915 ug/L	39.915 ppb	12:11:04
3	Mn 257.610†	1189198.2	1135418.3	1567.6 ug/L	1567.6 ppb	12:11:04
3	Mo 202.031†	21.5	15.8	5.9854 ug/L	5.9854 ppb	12:11:24
3	Ni 231.604†	1582.6	1426.9	48.070 ug/L	48.070 ppb	12:11:24
3	P 214.914†	3075.5	2735.9	1811.7 ug/L	1811.7 ppb	12:11:24
3	Pb 220.353†	249.8	304.4	51.216 ug/L	51.216 ppb	12:11:24
3	S 181.975 Axial†	372.4	316.3	496.83 ug/L	496.83 ppb	12:11:24
3	Sb 206.836†	57.1	29.3	4.5469 ug/L	4.5469 ppb	12:11:24
3	Se 196.026†	-266.4	-227.9	-23.694 ug/L	-23.694 ppb	12:11:24
3	Si 251.611†	784267.1	748563.0	28640 ug/L	28640 ppb	12:11:04
3	Sn 189.927†	-81.0	-87.1	-17.867 ug/L	-17.867 ppb	12:11:24
3	Ti 334.940†	1058344.3	1012292.3	1919.0 ug/L	1919.0 ppb	12:11:04
3	Tl 190.801†	-81.8	-46.7	4.5727 ug/L	4.5727 ppb	12:11:24
3	U 409.014†	-5357.6	-2711.8	-114.70 ug/L	-114.70 ppb	12:11:04
3	V 292.402†	10713.3	11981.3	100.23 ug/L	100.23 ppb	12:11:04
3	Zn 213.857†	25085.0	23269.8	272.23 ug/L	272.23 ppb	12:11:04
3	SiO2†	792641.2	756547.8	61535 ug/L	61535 ppb	12:11:41

Mean Data: 248371013|960813|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	704012.9	105.57	%	2.202			2.09%
Sc Radial	4096.7	114	%	0.9			0.81%
Y 371.029	613634.1	116.20	%	2.201			1.89%
Y RADIAL	5004.2	123.1	%	1.69			1.38%
Ag 328.068†	-2968.7	0.3474	ug/L	0.21258	0.3474 ppb	0.21258	61.19%
Al 396.153Radial†	23400.9	26852	ug/L	184.1	26852 ppb	184.1	0.69%
As 188.979†	-6.0	26.347	ug/L	2.4022	26.347 ppb	2.4022	9.12%
B 249.677†	323.9	-0.3826	ug/L	0.43078	-0.3826 ppb	0.43078	112.61%
Ba 233.527†	50069.2	508.43	ug/L	9.446	508.43 ppb	9.446	1.86%
Be 313.107†	-3428.6	2.8825	ug/L	0.04846	2.8825 ppb	0.04846	1.68%
Ca 317.933Radial†	6605.2	13501	ug/L	90.1	13501 ppb	90.1	0.67%
Cd 226.502†	411.6	0.6351	ug/L	0.09815	0.6351 ppb	0.09815	15.45%
Co 228.616†	730.6	14.399	ug/L	0.5826	14.399 ppb	0.5826	4.05%
Cr 267.716†	3732.9	63.448	ug/L	1.8292	63.448 ppb	1.8292	2.88%
Cu 324.752†	10343.3	39.665	ug/L	0.8741	39.665 ppb	0.8741	2.20%
Fe 238.204 Radial†	3922.6	55451	ug/L	560.0	55451 ppb	560.0	1.01%
K 766.490 Radial†	23243.7	4886.1	ug/L	27.83	4886.1 ppb	27.83	0.57%

Mg 279.077 IEC†	116.1	5066.4 ug/L	99.37	5066.4 ppb	99.37	1.96%
Mn 257.610†	1124791.1	1553.0 ug/L	29.71	1553.0 ppb	29.71	1.91%
Mo 202.031†	12.2	5.6612 ug/L	0.36249	5.6612 ppb	0.36249	6.40%
Na 589.592 Radial†	2641.7	1362.1 ug/L	20.13	1362.1 ppb	20.13	1.48%
Ni 231.604†	1392.1	46.899 ug/L	1.4906	46.899 ppb	1.4906	3.18%
P 214.914†	2699.0	1786.5 ug/L	61.28	1786.5 ppb	61.28	3.43%
Pb 220.353†	300.5	50.554 ug/L	3.2131	50.554 ppb	3.2131	6.36%
S 181.975 Axial†	312.5	490.70 ug/L	6.951	490.70 ppb	6.951	1.42%
Sb 206.836†	23.6	2.2293 ug/L	3.76282	2.2293 ppb	3.76282	168.79%
Se 196.026†	-229.8	-24.269 ug/L	8.2487	-24.269 ppb	8.2487	33.99%
Si 251.611†	743391.1	28442 ug/L	490.7	28442 ppb	490.7	1.73%
Sn 189.927†	-82.1	-16.671 ug/L	1.0900	-16.671 ppb	1.0900	6.54%
Sr 421.552†	6838.1	75.290 ug/L	0.6140	75.290 ppb	0.6140	0.82%
Ti 334.940†	1004242.9	1903.7 ug/L	34.37	1903.7 ppb	34.37	1.81%
Tl 190.801†	-50.3	2.9526 ug/L	1.40647	2.9526 ppb	1.40647	47.64%
U 409.014†	-2540.2	-107.88 ug/L	6.195	-107.88 ppb	6.195	5.74%
V 292.402†	11906.5	99.514 ug/L	1.4804	99.514 ppb	1.4804	1.49%
Zn 213.857†	23076.3	269.85 ug/L	5.397	269.85 ppb	5.397	2.00%
SiO2†	751173.7	61098 ug/L	758.0	61098 ppb	758.0	1.24%

Sequence No.: 24

Sample ID: 248371014|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 131

Date Collected: 3/31/2010 12:13:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371014|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3878.7	3878.7	108 %		12:16:07
1	Y RADIAL	4955.7	4955.7	121.9 %		12:15:47
1	Al 396.153Radial†	39264.0	36437.4	41811 ug/L	41811 ppb	12:15:47
1	Ca 317.933Radial†	8086.1	7465.6	15260 ug/L	15260 ppb	12:15:47
1	Fe 238.204 Radial†	5875.9	5428.2	76734 ug/L	76734 ppb	12:15:47
1	K 766.490 Radial†	46479.1	39984.0	8408.7 ug/L	8408.7 ppb	12:15:47
1	Mg 279.077 IEC†	211.3	194.8	8520.8 ug/L	8520.8 ppb	12:16:07
1	Na 589.592 Radial†	216.0	1097.3	565.81 ug/L	565.81 ppb	12:15:47
1	Sr 421.552†	12601.2	11644.9	128.27 ug/L	128.27 ppb	12:15:47
1	Sc 361.383	703326.4	703326.4	105.46 %		12:17:05
1	Y 371.029	612296.9	612296.9	115.95 %		12:17:05
1	Ag 328.068†	-3825.0	-3828.9	1.9861 ug/L	1.9861 ppb	12:17:05
1	As 188.979†	-30.9	-4.1	36.162 ug/L	36.162 ppb	12:17:25
1	B 249.677†	266.8	668.1	5.3528 ug/L	5.3528 ppb	12:17:05
1	Ba 233.527†	43473.4	41208.3	419.46 ug/L	419.46 ppb	12:17:05
1	Be 313.107†	-8272.3	-3665.6	3.7839 ug/L	3.7839 ppb	12:17:05
1	Cd 226.502†	360.6	541.1	0.4688 ug/L	0.4688 ppb	12:17:25
1	Co 228.616†	1136.3	1127.4	23.357 ug/L	23.357 ppb	12:17:25
1	Cr 267.716†	13967.9	13149.2	210.46 ug/L	210.46 ppb	12:17:05
1	Cu 324.752†	15566.1	9405.5	37.482 ug/L	37.482 ppb	12:17:05
1	Mn 257.610†	1395589.3	1322847.2	1827.5 ug/L	1827.5 ppb	12:17:05
1	Mo 202.031†	1.5	-3.3	5.8118 ug/L	5.8118 ppb	12:17:25
1	Ni 231.604†	3431.4	3168.9	106.77 ug/L	106.77 ppb	12:17:25
1	P 214.914†	1655.9	1368.4	870.61 ug/L	870.61 ppb	12:17:25
1	Pb 220.353†	383.7	429.6	73.343 ug/L	73.343 ppb	12:17:25
1	S 181.975 Axial†	510.0	444.2	696.90 ug/L	696.90 ppb	12:17:25
1	Sb 206.836†	53.5	25.5	0.9749 ug/L	0.9749 ppb	12:17:25
1	Se 196.026†	-350.2	-305.5	-22.507 ug/L	-22.507 ppb	12:17:25
1	Si 251.611†	1027136.4	973397.2	37242 ug/L	37242 ppb	12:17:05
1	Sn 189.927†	-71.8	-77.8	-15.205 ug/L	-15.205 ppb	12:17:25
1	Ti 334.940†	1303013.2	1236926.4	2344.4 ug/L	2344.4 ppb	12:17:05
1	Tl 190.801†	-107.4	-70.4	-0.1365 ug/L	-0.1365 ppb	12:17:25
1	U 409.014†	-5956.3	-3242.2	-138.67 ug/L	-138.67 ppb	12:17:05
1	V 292.402†	11439.7	12595.6	102.24 ug/L	102.24 ppb	12:17:05
1	Zn 213.857†	27476.4	25362.8	293.88 ug/L	293.88 ppb	12:17:05
1	SiO2†	1072602.5	1016494.4	82678 ug/L	82678 ppb	12:18:23
2	Sc Radial	3936.0	3936.0	110 %		12:16:32
2	Y RADIAL	4784.1	4784.1	117.6 %		12:16:12
2	Al 396.153Radial†	38133.2	34877.4	40021 ug/L	40021 ppb	12:16:12
2	Ca 317.933Radial†	7859.4	7150.0	14615 ug/L	14615 ppb	12:16:12
2	Fe 238.204 Radial†	5700.5	5189.2	73355 ug/L	73355 ppb	12:16:12
2	K 766.490 Radial†	45019.9	38027.2	7997.1 ug/L	7997.1 ppb	12:16:12
2	Mg 279.077 IEC†	216.7	197.0	8619.2 ug/L	8619.2 ppb	12:16:32
2	Na 589.592 Radial†	161.3	1044.5	538.58 ug/L	538.58 ppb	12:16:12
2	Sr 421.552†	12167.6	11079.9	122.05 ug/L	122.05 ppb	12:16:12
2	Sc 361.383	702075.2	702075.2	105.28 %		12:17:30
2	Y 371.029	611202.7	611202.7	115.74 %		12:17:30
2	Ag 328.068†	-3860.8	-3869.4	0.7196 ug/L	0.7196 ppb	12:17:30
2	As 188.979†	-25.5	1.0	38.132 ug/L	38.132 ppb	12:17:51
2	B 249.677†	213.4	617.8	4.5502 ug/L	4.5502 ppb	12:17:30
2	Ba 233.527†	43668.8	41467.4	421.98 ug/L	421.98 ppb	12:17:30
2	Be 313.107†	-8175.8	-3587.8	3.8475 ug/L	3.8475 ppb	12:17:30
2	Cd 226.502†	350.1	531.8	0.6750 ug/L	0.6750 ppb	12:17:51
2	Co 228.616†	1166.2	1157.7	24.162 ug/L	24.162 ppb	12:17:51
2	Cr 267.716†	14032.6	13234.3	211.41 ug/L	211.41 ppb	12:17:30
2	Cu 324.752†	15672.4	9532.8	37.754 ug/L	37.754 ppb	12:17:30
2	Mn 257.610†	1402314.1	1331593.3	1839.2 ug/L	1839.2 ppb	12:17:30
2	Mo 202.031†	-8.5	-12.8	4.6190 ug/L	4.6190 ppb	12:17:51
2	Ni 231.604†	3452.2	3194.5	107.63 ug/L	107.63 ppb	12:17:51

2	P 214.914†	1658.3	1373.6	876.29 ug/L	876.29 ppb	12:17:51
2	Pb 220.353†	394.3	440.4	74.960 ug/L	74.960 ppb	12:17:51
2	S 181.975 Axial†	521.8	456.3	716.40 ug/L	716.40 ppb	12:17:51
2	Sb 206.836†	55.8	27.7	1.9178 ug/L	1.9178 ppb	12:17:51
2	Se 196.026†	-353.7	-309.4	-35.006 ug/L	-35.006 ppb	12:17:51
2	Si 251.611†	1032294.8	980032.8	37496 ug/L	37496 ppb	12:17:30
2	Sn 189.927†	-71.2	-77.4	-15.251 ug/L	-15.251 ppb	12:17:51
2	Ti 334.940†	1308284.5	1244135.4	2357.9 ug/L	2357.9 ppb	12:17:30
2	Tl 190.801†	-115.8	-78.5	-3.2015 ug/L	-3.2015 ppb	12:17:51
2	U 409.014†	-5935.7	-3232.7	-137.90 ug/L	-137.90 ppb	12:17:30
2	V 292.402†	11524.8	12695.7	103.62 ug/L	103.62 ppb	12:17:30
2	Zn 213.857†	27655.9	25579.7	297.00 ug/L	297.00 ppb	12:17:30
2	SiO2†	1062076.7	1008308.6	82013 ug/L	82013 ppb	12:18:29
3	Sc Radial	3944.7	3944.7	110 %		12:16:57
3	Y RADIAL	5048.5	5048.5	124.2 %		12:16:37
3	Al 396.153Radial†	39019.2	35606.7	40857 ug/L	40857 ppb	12:16:37
3	Ca 317.933Radial†	8033.6	7292.7	14906 ug/L	14906 ppb	12:16:37
3	Fe 238.204 Radial†	5788.3	5257.6	74322 ug/L	74322 ppb	12:16:37
3	K 766.490 Radial†	45921.7	38757.1	8150.7 ug/L	8150.7 ppb	12:16:37
3	Mg 279.077 IEC†	213.6	193.6	8471.0 ug/L	8471.0 ppb	12:16:57
3	Na 589.592 Radial†	151.5	1035.2	533.79 ug/L	533.79 ppb	12:16:37
3	Sr 421.552†	12471.1	11331.5	124.82 ug/L	124.82 ppb	12:16:37
3	Sc 361.383	711616.7	711616.7	106.71 %		12:17:56
3	Y 371.029	619430.8	619430.8	117.30 %		12:17:56
3	Ag 328.068†	-3806.9	-3769.8	1.5837 ug/L	1.5837 ppb	12:17:56
3	As 188.979†	-33.6	-6.2	34.590 ug/L	34.590 ppb	12:18:16
3	B 249.677†	269.1	667.3	5.7212 ug/L	5.7212 ppb	12:17:56
3	Ba 233.527†	44150.3	41362.5	420.95 ug/L	420.95 ppb	12:17:56
3	Be 313.107†	-8320.2	-3619.0	3.8293 ug/L	3.8293 ppb	12:17:56
3	Cd 226.502†	348.4	525.8	0.4829 ug/L	0.4829 ppb	12:18:16
3	Co 228.616†	1164.0	1140.8	23.716 ug/L	23.716 ppb	12:18:16
3	Cr 267.716†	14167.9	13182.3	210.71 ug/L	210.71 ppb	12:17:56
3	Cu 324.752†	15873.5	9521.7	37.761 ug/L	37.761 ppb	12:17:56
3	Mn 257.610†	1416336.4	1326874.1	1832.8 ug/L	1832.8 ppb	12:17:56
3	Mo 202.031†	2.1	-2.8	5.6718 ug/L	5.6718 ppb	12:18:16
3	Ni 231.604†	3496.6	3192.1	107.55 ug/L	107.55 ppb	12:18:16
3	P 214.914†	1672.2	1365.4	870.23 ug/L	870.23 ppb	12:18:16
3	Pb 220.353†	396.1	437.0	74.537 ug/L	74.537 ppb	12:18:16
3	S 181.975 Axial†	519.7	447.7	702.58 ug/L	702.58 ppb	12:18:16
3	Sb 206.836†	57.4	28.6	2.3016 ug/L	2.3016 ppb	12:18:16
3	Se 196.026†	-369.2	-319.4	-40.028 ug/L	-40.028 ppb	12:18:16
3	Si 251.611†	1043763.9	977633.5	37405 ug/L	37405 ppb	12:17:56
3	Sn 189.927†	-59.7	-65.7	-12.435 ug/L	-12.435 ppb	12:18:16
3	Ti 334.940†	1324789.7	1242940.7	2355.7 ug/L	2355.7 ppb	12:17:56
3	Tl 190.801†	-100.8	-63.0	2.9355 ug/L	2.9355 ppb	12:18:16
3	U 409.014†	-5810.2	-3039.6	-130.30 ug/L	-130.30 ppb	12:17:56
3	V 292.402†	11678.9	12693.4	103.49 ug/L	103.49 ppb	12:17:56
3	Zn 213.857†	27864.5	25423.0	294.97 ug/L	294.97 ppb	12:17:56
3	SiO2†	1061857.8	994576.5	80896 ug/L	80896 ppb	12:18:35

Mean Data: 248371014|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705672.7	105.81 %		0.778			0.73%
Sc Radial	3919.8	109 %		1.0			0.92%
Y 371.029	614310.1	116.33 %		0.846			0.73%
Y RADIAL	4929.5	121.2 %		3.30			2.72%
Ag 328.068†	-3822.7	1.4298 ug/L		0.64711	1.4298 ppb	0.64711	45.26%
Al 396.153Radial†	35640.5	40896 ug/L		895.6	40896 ppb	895.6	2.19%
As 188.979†	-3.1	36.295 ug/L		1.7750	36.295 ppb	1.7750	4.89%
B 249.677†	651.1	5.2081 ug/L		0.59875	5.2081 ppb	0.59875	11.50%
Ba 233.527†	41346.1	420.79 ug/L		1.267	420.79 ppb	1.267	0.30%
Be 313.107†	-3624.1	3.8202 ug/L		0.03274	3.8202 ppb	0.03274	0.86%
Ca 317.933Radial†	7302.8	14927 ug/L		323.1	14927 ppb	323.1	2.16%
Cd 226.502†	532.9	0.5423 ug/L		0.11519	0.5423 ppb	0.11519	21.24%
Co 228.616†	1142.0	23.745 ug/L		0.4035	23.745 ppb	0.4035	1.70%
Cr 267.716†	13188.6	210.86 ug/L		0.493	210.86 ppb	0.493	0.23%
Cu 324.752†	9486.7	37.666 ug/L		0.1593	37.666 ppb	0.1593	0.42%
Fe 238.204 Radial†	5291.7	74804 ug/L		1740.6	74804 ppb	1740.6	2.33%
K 766.490 Radial†	38922.8	8185.5 ug/L		207.99	8185.5 ppb	207.99	2.54%

Mg 279.077 IEC†	195.1	8537.0 ug/L	75.43	8537.0 ppb	75.43	0.88%
Mn 257.610†	1327104.9	1833.1 ug/L	5.86	1833.1 ppb	5.86	0.32%
Mo 202.031†	-6.3	5.3675 ug/L	0.65204	5.3675 ppb	0.65204	12.15%
Na 589.592 Radial†	1059.0	546.06 ug/L	17.270	546.06 ppb	17.270	3.16%
Ni 231.604†	3185.2	107.31 ug/L	0.475	107.31 ppb	0.475	0.44%
P 214.914†	1369.1	872.38 ug/L	3.392	872.38 ppb	3.392	0.39%
Pb 220.353†	435.7	74.280 ug/L	0.8382	74.280 ppb	0.8382	1.13%
S 181.975 Axial†	449.4	705.29 ug/L	10.028	705.29 ppb	10.028	1.42%
Sb 206.836†	27.3	1.7315 ug/L	0.68269	1.7315 ppb	0.68269	39.43%
Se 196.026†	-311.4	-32.514 ug/L	9.0228	-32.514 ppb	9.0228	27.75%
Si 251.611†	977021.1	37381 ug/L	128.6	37381 ppb	128.6	0.34%
Sn 189.927†	-73.7	-14.297 ug/L	1.6127	-14.297 ppb	1.6127	11.28%
Sr 421.552†	11352.1	125.05 ug/L	3.119	125.05 ppb	3.119	2.49%
Ti 334.940†	1241334.2	2352.7 ug/L	7.27	2352.7 ppb	7.27	0.31%
Tl 190.801†	-70.6	-0.1342 ug/L	3.06850	-0.1342 ppb	3.06850	>999.9%
U 409.014†	-3171.5	-135.62 ug/L	4.627	-135.62 ppb	4.627	3.41%
V 292.402†	12661.5	103.12 ug/L	0.766	103.12 ppb	0.766	0.74%
Zn 213.857†	25455.2	295.28 ug/L	1.583	295.28 ppb	1.583	0.54%
SiO2†	1006459.8	81862 ug/L	900.8	81862 ppb	900.8	1.10%

Sequence No.: 25

Sample ID: 248371015|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 132

Date Collected: 3/31/2010 12:20:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371015|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4079.6	4079.6	114 %		12:23:00
1	Y RADIAL	5179.7	5179.7	127.4 %		12:22:40
1	Al 396.153Radial†	38394.6	33883.9	38881 ug/L	38881 ppb	12:22:40
1	Ca 317.933Radial†	11286.8	9912.7	20262 ug/L	20262 ppb	12:22:40
1	Fe 238.204 Radial†	5527.1	4853.7	68613 ug/L	68613 ppb	12:22:40
1	K 766.490 Radial†	49931.8	40903.8	8600.4 ug/L	8600.4 ppb	12:22:40
1	Mg 279.077 IEC†	200.7	175.9	7695.5 ug/L	7695.5 ppb	12:23:00
1	Na 589.592 Radial†	484.1	1323.3	682.33 ug/L	682.33 ppb	12:22:40
1	Sr 421.552†	14679.7	12899.3	142.06 ug/L	142.06 ppb	12:22:40
1	Sc 361.383	711545.6	711545.6	106.70 %		12:23:57
1	Y 371.029	620936.6	620936.6	117.58 %		12:23:57
1	Ag 328.068†	-3429.4	-3416.2	1.7449 ug/L	1.7449 ppb	12:24:03
1	As 188.979†	-32.6	-5.3	33.349 ug/L	33.349 ppb	12:24:23
1	B 249.677†	346.5	739.8	8.5993 ug/L	8.5993 ppb	12:24:03
1	Ba 233.527†	58254.5	54585.8	554.51 ug/L	554.51 ppb	12:24:03
1	Be 313.107†	-7886.7	-3213.5	3.9020 ug/L	3.9020 ppb	12:24:03
1	Cd 226.502†	313.4	493.0	0.5495 ug/L	0.5495 ppb	12:24:23
1	Co 228.616†	1055.4	1039.0	21.333 ug/L	21.333 ppb	12:24:23
1	Cr 267.716†	10852.6	10076.4	162.35 ug/L	162.35 ppb	12:24:03
1	Cu 324.752†	16394.6	10011.6	39.208 ug/L	39.208 ppb	12:24:03
1	Mn 257.610†	1814508.2	1700193.1	2345.9 ug/L	2345.9 ppb	12:23:57
1	Mo 202.031†	3.9	-1.1	5.4573 ug/L	5.4573 ppb	12:24:23
1	Ni 231.604†	2854.2	2590.4	87.272 ug/L	87.272 ppb	12:24:23
1	P 214.914†	2704.0	2332.7	1530.4 ug/L	1530.4 ppb	12:24:23
1	Pb 220.353†	378.8	420.8	72.030 ug/L	72.030 ppb	12:24:23
1	S 181.975 Axial†	785.7	697.0	1098.6 ug/L	1098.6 ppb	12:24:23
1	Sb 206.836†	56.2	27.4	1.9156 ug/L	1.9156 ppb	12:24:23
1	Se 196.026†	-332.0	-284.6	-28.621 ug/L	-28.621 ppb	12:24:23
1	Si 251.611†	1028507.7	963432.2	36861 ug/L	36861 ppb	12:23:57
1	Sn 189.927†	-97.9	-101.5	-19.976 ug/L	-19.976 ppb	12:24:23
1	Ti 334.940†	1300545.3	1220341.6	2313.7 ug/L	2313.7 ppb	12:23:57
1	Tl 190.801†	-111.2	-72.8	1.1792 ug/L	1.1792 ppb	12:24:23
1	U 409.014†	-6394.7	-3587.9	-151.44 ug/L	-151.44 ppb	12:24:03
1	V 292.402†	9963.3	11086.4	89.524 ug/L	89.524 ppb	12:24:03
1	Zn 213.857†	25018.6	22758.3	263.79 ug/L	263.79 ppb	12:24:03
1	SiO2†	1009800.3	945884.9	76935 ug/L	76935 ppb	12:25:31
2	Sc Radial	4033.0	4033.0	112 %		12:23:25
2	Y RADIAL	5098.7	5098.7	125.4 %		12:23:05
2	Al 396.153Radial†	37786.1	33732.3	38707 ug/L	38707 ppb	12:23:05
2	Ca 317.933Radial†	11111.0	9870.9	20176 ug/L	20176 ppb	12:23:05
2	Fe 238.204 Radial†	5437.6	4830.3	68281 ug/L	68281 ppb	12:23:05
2	K 766.490 Radial†	49279.0	40829.8	8584.8 ug/L	8584.8 ppb	12:23:05
2	Mg 279.077 IEC†	192.2	170.4	7450.0 ug/L	7450.0 ppb	12:23:25
2	Na 589.592 Radial†	451.6	1299.3	669.93 ug/L	669.93 ppb	12:23:05
2	Sr 421.552†	14449.6	12843.6	141.45 ug/L	141.45 ppb	12:23:05
2	Sc 361.383	726555.9	726555.9	108.95 %		12:24:29
2	Y 371.029	633216.4	633216.4	119.91 %		12:24:29
2	Ag 328.068†	-3596.6	-3503.4	1.1347 ug/L	1.1347 ppb	12:24:34
2	As 188.979†	-49.7	-20.3	25.495 ug/L	25.495 ppb	12:24:54
2	B 249.677†	482.0	857.5	11.807 ug/L	11.807 ppb	12:24:34
2	Ba 233.527†	59291.1	54409.3	552.71 ug/L	552.71 ppb	12:24:34
2	Be 313.107†	-8057.8	-3217.8	3.9078 ug/L	3.9078 ppb	12:24:34
2	Cd 226.502†	312.7	486.3	0.4812 ug/L	0.4812 ppb	12:24:54
2	Co 228.616†	1054.6	1017.9	20.781 ug/L	20.781 ppb	12:24:54
2	Cr 267.716†	11054.3	10051.4	161.93 ug/L	161.93 ppb	12:24:34
2	Cu 324.752†	16892.6	10151.2	39.680 ug/L	39.680 ppb	12:24:34
2	Mn 257.610†	1855596.9	1702773.5	2349.5 ug/L	2349.5 ppb	12:24:29
2	Mo 202.031†	3.5	-1.5	5.3900 ug/L	5.3900 ppb	12:24:54
2	Ni 231.604†	2836.6	2518.9	84.865 ug/L	84.865 ppb	12:24:54

2	P 214.914†	2695.2	2272.2	1489.5 ug/L	1489.5 ppb	12:24:54
2	Pb 220.353†	363.3	399.3	68.497 ug/L	68.497 ppb	12:24:54
2	S 181.975 Axial†	786.1	682.2	1075.1 ug/L	1075.1 ppb	12:24:54
2	Sb 206.836†	43.0	14.2	-3.6411 ug/L	-3.6411 ppb	12:24:54
2	Se 196.026†	-328.5	-274.9	-22.009 ug/L	-22.009 ppb	12:24:54
2	Si 251.611†	1056948.1	969622.2	37098 ug/L	37098 ppb	12:24:29
2	Sn 189.927†	-122.8	-122.5	-24.953 ug/L	-24.953 ppb	12:24:54
2	Ti 334.940†	1329926.2	1222127.4	2317.1 ug/L	2317.1 ppb	12:24:29
2	Tl 190.801†	-105.2	-65.1	4.2831 ug/L	4.2831 ppb	12:24:54
2	U 409.014†	-6247.9	-3329.3	-141.07 ug/L	-141.07 ppb	12:24:34
2	V 292.402†	10254.0	11160.4	90.265 ug/L	90.265 ppb	12:24:34
2	Zn 213.857†	25601.5	22808.9	264.46 ug/L	264.46 ppb	12:24:34
2	SiO2†	1015310.6	931390.0	75756 ug/L	75756 ppb	12:25:37
3	Sc Radial	4100.0	4100.0	114 %		12:23:50
3	Y RADIAL	4983.5	4983.5	122.6 %		12:23:30
3	Al 396.153Radial†	36867.3	32379.1	37154 ug/L	37154 ppb	12:23:30
3	Ca 317.933Radial†	10857.1	9487.3	19392 ug/L	19392 ppb	12:23:30
3	Fe 238.204 Radial†	5294.2	4625.7	65390 ug/L	65390 ppb	12:23:30
3	K 766.490 Radial†	48147.4	39123.3	8226.0 ug/L	8226.0 ppb	12:23:30
3	Mg 279.077 IEC†	194.1	169.2	7402.5 ug/L	7402.5 ppb	12:23:50
3	Na 589.592 Radial†	412.5	1258.5	648.90 ug/L	648.90 ppb	12:23:30
3	Sr 421.552†	14108.8	12335.3	135.85 ug/L	135.85 ppb	12:23:30
3	Sc 361.383	711515.3	711515.3	106.69 %		12:25:00
3	Y 371.029	620022.1	620022.1	117.41 %		12:25:00
3	Ag 328.068†	-3551.7	-3531.0	0.1058 ug/L	0.1058 ppb	12:25:05
3	As 188.979†	-27.9	-0.9	34.952 ug/L	34.952 ppb	12:25:25
3	B 249.677†	452.6	839.4	11.790 ug/L	11.790 ppb	12:25:05
3	Ba 233.527†	58824.9	55122.8	559.85 ug/L	559.85 ppb	12:25:05
3	Be 313.107†	-7790.0	-3123.2	3.9594 ug/L	3.9594 ppb	12:25:05
3	Cd 226.502†	283.6	465.0	0.4507 ug/L	0.4507 ppb	12:25:25
3	Co 228.616†	1028.4	1013.8	20.710 ug/L	20.710 ppb	12:25:25
3	Cr 267.716†	10874.6	10097.5	162.34 ug/L	162.34 ppb	12:25:05
3	Cu 324.752†	16551.6	10159.4	39.561 ug/L	39.561 ppb	12:25:05
3	Mn 257.610†	1825201.6	1710288.3	2359.5 ug/L	2359.5 ppb	12:25:00
3	Mo 202.031†	4.0	-1.0	5.2134 ug/L	5.2134 ppb	12:25:25
3	Ni 231.604†	2816.7	2555.3	86.090 ug/L	86.090 ppb	12:25:25
3	P 214.914†	2675.5	2306.1	1514.4 ug/L	1514.4 ppb	12:25:25
3	Pb 220.353†	368.5	411.2	70.323 ug/L	70.323 ppb	12:25:25
3	S 181.975 Axial†	783.4	694.9	1095.6 ug/L	1095.6 ppb	12:25:25
3	Sb 206.836†	66.0	36.6	5.7319 ug/L	5.7319 ppb	12:25:25
3	Se 196.026†	-329.3	-282.1	-35.696 ug/L	-35.696 ppb	12:25:25
3	Si 251.611†	1034902.9	969467.5	37092 ug/L	37092 ppb	12:25:00
3	Sn 189.927†	-110.3	-113.1	-22.894 ug/L	-22.894 ppb	12:25:25
3	Ti 334.940†	1305350.4	1224897.3	2322.3 ug/L	2322.3 ppb	12:25:00
3	Tl 190.801†	-121.5	-82.4	-2.4929 ug/L	-2.4929 ppb	12:25:25
3	U 409.014†	-6345.0	-3541.5	-149.22 ug/L	-149.22 ppb	12:25:05
3	V 292.402†	10249.2	11354.9	92.456 ug/L	92.456 ppb	12:25:05
3	Zn 213.857†	25189.5	22919.5	266.22 ug/L	266.22 ppb	12:25:05
3	SiO2†	1008143.8	944372.7	76812 ug/L	76812 ppb	12:25:43

Mean Data: 248371015|960813|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity		Units		Units			
Sc 361.383	716538.9	107.44	%	1.301				1.21%
Sc Radial	4070.9	113	%	1.0				0.84%
Y 371.029	624725.0	118.30	%	1.395				1.18%
Y RADIAL	5087.3	125.1	%	2.43				1.94%
Ag 328.068†	-3483.5	0.9951	ug/L	0.82843	0.9951	ppb	0.82843	83.25%
Al 396.153Radial†	33331.8	38247	ug/L	950.7	38247	ppb	950.7	2.49%
As 188.979†	-8.8	31.265	ug/L	5.0610	31.265	ppb	5.0610	16.19%
B 249.677†	812.2	10.732	ug/L	1.8471	10.732	ppb	1.8471	17.21%
Ba 233.527†	54705.9	555.69	ug/L	3.711	555.69	ppb	3.711	0.67%
Be 313.107†	-3184.8	3.9231	ug/L	0.03160	3.9231	ppb	0.03160	0.81%
Ca 317.933Radial†	9757.0	19943	ug/L	479.3	19943	ppb	479.3	2.40%
Cd 226.502†	481.4	0.4938	ug/L	0.05058	0.4938	ppb	0.05058	10.24%
Co 228.616†	1023.6	20.942	ug/L	0.3413	20.942	ppb	0.3413	1.63%
Cr 267.716†	10075.1	162.21	ug/L	0.240	162.21	ppb	0.240	0.15%
Cu 324.752†	10107.4	39.483	ug/L	0.2453	39.483	ppb	0.2453	0.62%
Fe 238.204 Radial†	4769.9	67428	ug/L	1772.9	67428	ppb	1772.9	2.63%
K 766.490 Radial†	40285.6	8470.4	ug/L	211.81	8470.4	ppb	211.81	2.50%

Mg 279.077 IEC†	171.8	7516.0 ug/L	157.23	7516.0 ppb	157.23	2.09%
Mn 257.610†	1704418.3	2351.6 ug/L	7.05	2351.6 ppb	7.05	0.30%
Mo 202.031†	-1.2	5.3536 ug/L	0.12597	5.3536 ppb	0.12597	2.35%
Na 589.592 Radial†	1293.7	667.06 ug/L	16.899	667.06 ppb	16.899	2.53%
Ni 231.604†	2554.9	86.076 ug/L	1.2035	86.076 ppb	1.2035	1.40%
P 214.914†	2303.7	1511.4 ug/L	20.64	1511.4 ppb	20.64	1.37%
Pb 220.353†	410.4	70.283 ug/L	1.7672	70.283 ppb	1.7672	2.51%
S 181.975 Axial†	691.4	1089.7 ug/L	12.79	1089.7 ppb	12.79	1.17%
Sb 206.836†	26.1	1.3355 ug/L	4.71334	1.3355 ppb	4.71334	352.94%
Se 196.026†	-280.5	-28.776 ug/L	6.8449	-28.776 ppb	6.8449	23.79%
Si 251.611†	967507.3	37017 ug/L	135.1	37017 ppb	135.1	0.36%
Sn 189.927†	-112.4	-22.608 ug/L	2.5006	-22.608 ppb	2.5006	11.06%
Sr 421.552†	12692.7	139.79 ug/L	3.423	139.79 ppb	3.423	2.45%
Ti 334.940†	1222455.4	2317.7 ug/L	4.30	2317.7 ppb	4.30	0.19%
Tl 190.801†	-73.4	0.9898 ug/L	3.39197	0.9898 ppb	3.39197	342.69%
U 409.014†	-3486.2	-147.24 ug/L	5.458	-147.24 ppb	5.458	3.71%
V 292.402†	11200.6	90.748 ug/L	1.5244	90.748 ppb	1.5244	1.68%
Zn 213.857†	22828.9	264.83 ug/L	1.257	264.83 ppb	1.257	0.47%
SiO2†	940549.2	76501 ug/L	648.1	76501 ppb	648.1	0.85%

Sequence No.: 26

Sample ID: 248371016|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 133

Date Collected: 3/31/2010 12:27:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371016|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4061.1	4061.1	113 %		12:30:09
1	Y RADIAL	5411.1	5411.1	133.1 %		12:29:49
1	Al 396.153Radial†	43051.5	38153.0	43779 ug/L	43779 ppb	12:29:49
1	Ca 317.933Radial†	7752.1	6834.5	13970 ug/L	13970 ppb	12:29:49
1	Fe 238.204 Radial†	6577.1	5803.7	82042 ug/L	82042 ppb	12:29:49
1	K 766.490 Radial†	41997.8	34092.9	7168.9 ug/L	7168.9 ppb	12:29:49
1	Mg 279.077 IEC†	205.2	180.7	7891.0 ug/L	7891.0 ppb	12:30:09
1	Na 589.592 Radial†	651.6	1473.2	759.62 ug/L	759.62 ppb	12:29:49
1	Sr 421.552†	10759.5	9494.0	104.57 ug/L	104.57 ppb	12:29:49
1	Sc 361.383	712564.9	712564.9	106.85 %		12:31:07
1	Y 371.029	660288.7	660288.7	125.03 %		12:31:07
1	Ag 328.068†	-4245.0	-4175.0	1.6714 ug/L	1.6714 ppb	12:31:12
1	As 188.979†	-28.8	-1.7	36.999 ug/L	36.999 ppb	12:31:32
1	B 249.677†	263.2	661.5	4.3243 ug/L	4.3243 ppb	12:31:12
1	Ba 233.527†	52123.5	48769.7	496.09 ug/L	496.09 ppb	12:31:12
1	Be 313.107†	-2678.4	1671.6	5.6000 ug/L	5.6000 ppb	12:31:12
1	Cd 226.502†	370.7	546.2	0.0473 ug/L	0.0473 ppb	12:31:32
1	Co 228.616†	979.7	966.8	19.456 ug/L	19.456 ppb	12:31:32
1	Cr 267.716†	27803.2	25926.0	407.42 ug/L	407.42 ppb	12:31:12
1	Cu 324.752†	24810.0	17865.7	67.797 ug/L	67.797 ppb	12:31:12
1	Mn 257.610†	2142331.9	2004573.7	2766.1 ug/L	2766.1 ppb	12:31:07
1	Mo 202.031†	41.5	34.1	9.8706 ug/L	9.8706 ppb	12:31:32
1	Ni 231.604†	6550.9	6046.3	203.73 ug/L	203.73 ppb	12:31:32
1	P 214.914†	1649.2	1341.8	842.85 ug/L	842.85 ppb	12:31:32
1	Pb 220.353†	541.5	572.6	96.618 ug/L	96.618 ppb	12:31:32
1	S 181.975 Axial†	422.7	356.3	557.00 ug/L	557.00 ppb	12:31:32
1	Sb 206.836†	69.4	39.7	7.5802 ug/L	7.5802 ppb	12:31:32
1	Se 196.026†	-402.6	-350.2	-42.702 ug/L	-42.702 ppb	12:31:32
1	Si 251.611†	1198619.8	1121262.9	42900 ug/L	42900 ppb	12:31:07
1	Sn 189.927†	-52.5	-58.9	-10.942 ug/L	-10.942 ppb	12:31:32
1	Ti 334.940†	1215897.5	1139375.3	2159.4 ug/L	2159.4 ppb	12:31:07
1	Tl 190.801†	-131.6	-91.7	-5.6160 ug/L	-5.6160 ppb	12:31:32
1	U 409.014†	-7874.9	-4964.6	-208.49 ug/L	-208.49 ppb	12:31:07
1	V 292.402†	10689.0	11752.3	93.724 ug/L	93.724 ppb	12:31:12
1	Zn 213.857†	35398.0	32438.9	377.83 ug/L	377.83 ppb	12:31:12
1	SiO2†	1184129.2	1107687.2	90096 ug/L	90096 ppb	12:32:41
2	Sc Radial	4065.9	4065.9	113 %		12:30:34
2	Y RADIAL	5386.0	5386.0	132.5 %		12:30:14
2	Al 396.153Radial†	43846.6	38809.3	44532 ug/L	44532 ppb	12:30:14
2	Ca 317.933Radial†	7869.6	6930.1	14165 ug/L	14165 ppb	12:30:14
2	Fe 238.204 Radial†	6653.9	5864.6	82903 ug/L	82903 ppb	12:30:14
2	K 766.490 Radial†	42462.9	34459.1	7245.9 ug/L	7245.9 ppb	12:30:14
2	Mg 279.077 IEC†	208.2	183.2	7999.0 ug/L	7999.0 ppb	12:30:34
2	Na 589.592 Radial†	722.3	1534.9	791.45 ug/L	791.45 ppb	12:30:14
2	Sr 421.552†	10949.4	9650.3	106.29 ug/L	106.29 ppb	12:30:14
2	Sc 361.383	706205.7	706205.7	105.89 %		12:31:38
2	Y 371.029	653332.2	653332.2	123.72 %		12:31:38
2	Ag 328.068†	-4168.3	-4138.3	2.1376 ug/L	2.1376 ppb	12:31:43
2	As 188.979†	-25.0	1.6	38.895 ug/L	38.895 ppb	12:32:03
2	B 249.677†	207.1	610.7	2.8235 ug/L	2.8235 ppb	12:31:43
2	Ba 233.527†	51121.8	48263.0	490.99 ug/L	490.99 ppb	12:31:43
2	Be 313.107†	-2624.8	1699.6	5.5998 ug/L	5.5998 ppb	12:31:43
2	Cd 226.502†	409.1	585.6	0.5668 ug/L	0.5668 ppb	12:32:03
2	Co 228.616†	983.1	978.2	19.752 ug/L	19.752 ppb	12:32:03
2	Cr 267.716†	27224.1	25613.5	402.71 ug/L	402.71 ppb	12:31:43
2	Cu 324.752†	24271.6	17566.3	66.780 ug/L	66.780 ppb	12:31:43
2	Mn 257.610†	2122178.5	2003596.9	2764.8 ug/L	2764.8 ppb	12:31:38
2	Mo 202.031†	40.8	33.7	9.9030 ug/L	9.9030 ppb	12:32:03
2	Ni 231.604†	6513.4	6066.1	204.40 ug/L	204.40 ppb	12:32:03

2	P 214.914†	1653.2	1359.5	854.55 ug/L	854.55 ppb	12:32:03
2	Pb 220.353†	549.5	584.7	98.699 ug/L	98.699 ppb	12:32:03
2	S 181.975 Axial†	419.7	357.0	558.03 ug/L	558.03 ppb	12:32:03
2	Sb 206.836†	78.1	48.5	11.149 ug/L	11.149 ppb	12:32:03
2	Se 196.026†	-393.2	-344.7	-35.877 ug/L	-35.877 ppb	12:32:03
2	Si 251.611†	1184714.6	1118233.2	42784 ug/L	42784 ppb	12:31:38
2	Sn 189.927†	-63.9	-70.1	-13.551 ug/L	-13.551 ppb	12:32:03
2	Ti 334.940†	1202100.0	1136593.0	2154.2 ug/L	2154.2 ppb	12:31:38
2	Tl 190.801†	-114.8	-76.9	0.2085 ug/L	0.2085 ppb	12:32:03
2	U 409.014†	-7724.1	-4888.6	-205.54 ug/L	-205.54 ppb	12:31:38
2	V 292.402†	10407.0	11576.1	91.990 ug/L	91.990 ppb	12:31:43
2	Zn 213.857†	34472.6	31863.3	370.75 ug/L	370.75 ppb	12:31:43
2	SiO2†	1183297.7	1116881.4	90843 ug/L	90843 ppb	12:32:47
3	Sc Radial	4107.4	4107.4	114 %		12:31:00
3	Y RADIAL	5515.6	5515.6	135.6 %		12:30:39
3	Al 396.153Radial†	44253.8	38774.0	44492 ug/L	44492 ppb	12:30:39
3	Ca 317.933Radial†	7966.5	6944.5	14195 ug/L	14195 ppb	12:30:39
3	Fe 238.204 Radial†	6721.5	5864.3	82898 ug/L	82898 ppb	12:30:39
3	K 766.490 Radial†	42809.7	34383.4	7230.0 ug/L	7230.0 ppb	12:30:39
3	Mg 279.077 IEC†	206.9	180.2	7867.2 ug/L	7867.2 ppb	12:31:00
3	Na 589.592 Radial†	698.6	1507.8	777.47 ug/L	777.47 ppb	12:30:39
3	Sr 421.552†	11081.9	9668.3	106.49 ug/L	106.49 ppb	12:30:39
3	Sc 361.383	697330.4	697330.4	104.56 %		12:32:09
3	Y 371.029	645195.6	645195.6	122.18 %		12:32:09
3	Ag 328.068†	-4294.0	-4308.6	1.1813 ug/L	1.1813 ppb	12:32:14
3	As 188.979†	-27.1	-0.7	37.710 ug/L	37.710 ppb	12:32:34
3	B 249.677†	306.0	707.7	5.4234 ug/L	5.4234 ppb	12:32:14
3	Ba 233.527†	51799.3	49525.3	503.77 ug/L	503.77 ppb	12:32:14
3	Be 313.107†	-2684.5	1610.9	5.5619 ug/L	5.5619 ppb	12:32:14
3	Cd 226.502†	398.0	579.9	0.4795 ug/L	0.4795 ppb	12:32:34
3	Co 228.616†	976.4	983.7	19.898 ug/L	19.898 ppb	12:32:34
3	Cr 267.716†	27651.8	26349.8	414.04 ug/L	414.04 ppb	12:32:14
3	Cu 324.752†	24687.7	18256.0	69.236 ug/L	69.236 ppb	12:32:14
3	Mn 257.610†	2097412.7	2005418.5	2767.3 ug/L	2767.3 ppb	12:32:09
3	Mo 202.031†	45.9	39.1	10.432 ug/L	10.432 ppb	12:32:34
3	Ni 231.604†	6610.4	6237.2	210.16 ug/L	210.16 ppb	12:32:34
3	P 214.914†	1671.5	1396.8	879.38 ug/L	879.38 ppb	12:32:34
3	Pb 220.353†	572.5	613.3	103.36 ug/L	103.36 ppb	12:32:34
3	S 181.975 Axial†	428.0	370.0	578.65 ug/L	578.65 ppb	12:32:34
3	Sb 206.836†	73.4	45.0	9.7237 ug/L	9.7237 ppb	12:32:34
3	Se 196.026†	-392.9	-349.1	-39.358 ug/L	-39.358 ppb	12:32:34
3	Si 251.611†	1169120.1	1117558.4	42758 ug/L	42758 ppb	12:32:09
3	Sn 189.927†	-62.4	-69.4	-13.380 ug/L	-13.380 ppb	12:32:34
3	Ti 334.940†	1186801.7	1136410.4	2153.9 ug/L	2153.9 ppb	12:32:09
3	Tl 190.801†	-106.0	-69.9	2.9857 ug/L	2.9857 ppb	12:32:34
3	U 409.014†	-8148.8	-5387.6	-225.49 ug/L	-225.49 ppb	12:32:09
3	V 292.402†	10630.5	11914.9	95.075 ug/L	95.075 ppb	12:32:14
3	Zn 213.857†	35110.7	32887.9	383.08 ug/L	383.08 ppb	12:32:14
3	SiO2†	1189516.0	1137050.4	92484 ug/L	92484 ppb	12:32:52

Mean Data: 248371016|960813|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	705367.0	105.77	%	1.147			1.08%
Sc Radial	4078.1	114	%	0.7			0.62%
Y 371.029	652938.8	123.64	%	1.430			1.16%
Y RADIAL	5437.6	133.7	%	1.69			1.26%
Ag 328.068†	-4207.3	1.6635	ug/L	0.47819	1.6635 ppb	0.47819	28.75%
Al 396.153Radial†	38578.8	44268	ug/L	423.6	44268 ppb	423.6	0.96%
As 188.979†	-0.3	37.868	ug/L	0.9582	37.868 ppb	0.9582	2.53%
B 249.677†	660.0	4.1904	ug/L	1.30511	4.1904 ppb	1.30511	31.15%
Ba 233.527†	48852.6	496.95	ug/L	6.431	496.95 ppb	6.431	1.29%
Be 313.107†	1660.7	5.5872	ug/L	0.02196	5.5872 ppb	0.02196	0.39%
Ca 317.933Radial†	6903.0	14110	ug/L	122.2	14110 ppb	122.2	0.87%
Cd 226.502†	570.6	0.3645	ug/L	0.27815	0.3645 ppb	0.27815	76.30%
Co 228.616†	976.2	19.702	ug/L	0.2250	19.702 ppb	0.2250	1.14%
Cr 267.716†	25963.1	408.06	ug/L	5.691	408.06 ppb	5.691	1.39%
Cu 324.752†	17896.0	67.938	ug/L	1.2342	67.938 ppb	1.2342	1.82%
Fe 238.204 Radial†	5844.2	82614	ug/L	495.8	82614 ppb	495.8	0.60%
K 766.490 Radial†	34311.8	7214.9	ug/L	40.64	7214.9 ppb	40.64	0.56%

Mg 279.077 IEC†	181.3	7919.1 ug/L	70.27	7919.1 ppb	70.27	0.89%
Mn 257.610†	2004529.7	2766.1 ug/L	1.26	2766.1 ppb	1.26	0.05%
Mo 202.031†	35.7	10.068 ug/L	0.3150	10.068 ppb	0.3150	3.13%
Na 589.592 Radial†	1505.3	776.18 ug/L	15.954	776.18 ppb	15.954	2.06%
Ni 231.604†	6116.5	206.09 ug/L	3.536	206.09 ppb	3.536	1.72%
P 214.914†	1366.1	858.93 ug/L	18.657	858.93 ppb	18.657	2.17%
Pb 220.353†	590.2	99.558 ug/L	3.4512	99.558 ppb	3.4512	3.47%
S 181.975 Axial†	361.1	564.56 ug/L	12.215	564.56 ppb	12.215	2.16%
Sb 206.836†	44.4	9.4843 ug/L	1.79632	9.4843 ppb	1.79632	18.94%
Se 196.026†	-348.0	-39.312 ug/L	3.4125	-39.312 ppb	3.4125	8.68%
Si 251.611†	1119018.2	42814 ug/L	75.5	42814 ppb	75.5	0.18%
Sn 189.927†	-66.2	-12.624 ug/L	1.4598	-12.624 ppb	1.4598	11.56%
Sr 421.552†	9604.2	105.78 ug/L	1.056	105.78 ppb	1.056	1.00%
Ti 334.940†	1137459.6	2155.8 ug/L	3.13	2155.8 ppb	3.13	0.15%
Tl 190.801†	-79.5	-0.8073 ug/L	4.38990	-0.8073 ppb	4.38990	543.79%
U 409.014†	-5080.3	-213.17 ug/L	10.768	-213.17 ppb	10.768	5.05%
V 292.402†	11747.8	93.596 ug/L	1.5466	93.596 ppb	1.5466	1.65%
Zn 213.857†	32396.7	377.22 ug/L	6.186	377.22 ppb	6.186	1.64%
SiO2†	1120539.7	91141 ug/L	1221.6	91141 ppb	1221.6	1.34%

Sequence No.: 27

Sample ID: 248371017|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 134

Date Collected: 3/31/2010 12:35:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371017|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4069.3	4069.3	113 %		12:37:18
1	Y RADIAL	5377.6	5377.6	132.2 %		12:36:58
1	Al 396.153Radial†	42229.3	37350.9	42859 ug/L	42859 ppb	12:36:58
1	Ca 317.933Radial†	6896.2	6065.9	12399 ug/L	12399 ppb	12:36:58
1	Fe 238.204 Radial†	6727.1	5924.2	83746 ug/L	83746 ppb	12:36:58
1	K 766.490 Radial†	45112.6	36764.7	7731.9 ug/L	7731.9 ppb	12:36:58
1	Mg 279.077 IEC†	221.4	194.6	8503.7 ug/L	8503.7 ppb	12:37:18
1	Na 589.592 Radial†	693.5	1509.0	778.08 ug/L	778.08 ppb	12:36:58
1	Sr 421.552†	12208.2	10752.3	118.45 ug/L	118.45 ppb	12:36:58
1	Sc 361.383	703302.3	703302.3	105.46 %		12:38:16
1	Y 371.029	645337.0	645337.0	122.20 %		12:38:16
1	Ag 328.068†	-4378.3	-4353.7	1.2353 ug/L	1.2353 ppb	12:38:21
1	As 188.979†	-45.8	-18.2	31.906 ug/L	31.906 ppb	12:38:41
1	B 249.677†	157.3	564.3	1.4352 ug/L	1.4352 ppb	12:38:21
1	Ba 233.527†	49407.9	46837.1	476.61 ug/L	476.61 ppb	12:38:21
1	Be 313.107†	-4721.8	-299.1	5.5703 ug/L	5.5703 ppb	12:38:21
1	Cd 226.502†	378.5	558.1	-0.0461 ug/L	-0.0461 ppb	12:38:41
1	Co 228.616†	1089.4	1082.9	21.846 ug/L	21.846 ppb	12:38:41
1	Cr 267.716†	4126.8	3818.0	67.808 ug/L	67.808 ppb	12:38:41
1	Cu 324.752†	13541.3	7486.1	31.098 ug/L	31.098 ppb	12:38:21
1	Mn 257.610†	1821223.3	1726493.7	2383.6 ug/L	2383.6 ppb	12:38:16
1	Mo 202.031†	5.6	0.5	6.7020 ug/L	6.7020 ppb	12:38:41
1	Ni 231.604†	1685.4	1513.4	50.981 ug/L	50.981 ppb	12:38:41
1	P 214.914†	1491.1	1212.3	760.62 ug/L	760.62 ppb	12:38:41
1	Pb 220.353†	273.7	325.3	55.876 ug/L	55.876 ppb	12:38:41
1	S 181.975 Axial†	334.6	277.9	432.90 ug/L	432.90 ppb	12:38:41
1	Sb 206.836†	57.5	29.3	1.9270 ug/L	1.9270 ppb	12:38:41
1	Se 196.026†	-387.2	-340.5	-30.878 ug/L	-30.878 ppb	12:38:41
1	Si 251.611†	1105300.0	1047548.0	40080 ug/L	40080 ppb	12:38:16
1	Sn 189.927†	-51.2	-58.3	-11.056 ug/L	-11.056 ppb	12:38:41
1	Ti 334.940†	1395214.8	1324397.5	2509.8 ug/L	2509.8 ppb	12:38:16
1	Tl 190.801†	-113.9	-76.6	1.4568 ug/L	1.4568 ppb	12:38:41
1	U 409.014†	-8395.6	-5555.5	-231.52 ug/L	-231.52 ppb	12:38:16
1	V 292.402†	11356.0	12516.5	100.19 ug/L	100.19 ppb	12:38:21
1	Zn 213.857†	29048.2	26854.1	311.20 ug/L	311.20 ppb	12:38:21
1	SiO2†	1135053.5	1075747.5	87498 ug/L	87498 ppb	12:39:49
2	Sc Radial	4093.1	4093.1	114 %		12:37:43
2	Y RADIAL	5362.8	5362.8	131.9 %		12:37:23
2	Al 396.153Radial†	42191.7	37101.3	42572 ug/L	42572 ppb	12:37:23
2	Ca 317.933Radial†	6901.2	6034.8	12335 ug/L	12335 ppb	12:37:23
2	Fe 238.204 Radial†	6741.5	5902.4	83437 ug/L	83437 ppb	12:37:23
2	K 766.490 Radial†	45032.7	36463.2	7668.4 ug/L	7668.4 ppb	12:37:23
2	Mg 279.077 IEC†	222.3	194.3	8489.3 ug/L	8489.3 ppb	12:37:43
2	Na 589.592 Radial†	669.1	1484.0	765.21 ug/L	765.21 ppb	12:37:23
2	Sr 421.552†	12214.0	10694.8	117.82 ug/L	117.82 ppb	12:37:23
2	Sc 361.383	713265.5	713265.5	106.95 %		12:38:47
2	Y 371.029	654202.4	654202.4	123.88 %		12:38:47
2	Ag 328.068†	-4345.7	-4265.3	1.6474 ug/L	1.6474 ppb	12:38:52
2	As 188.979†	-19.5	7.0	44.924 ug/L	44.924 ppb	12:39:12
2	B 249.677†	130.3	536.9	0.7536 ug/L	0.7536 ppb	12:38:52
2	Ba 233.527†	49066.2	45863.2	466.74 ug/L	466.74 ppb	12:38:52
2	Be 313.107†	-4557.7	-83.1	5.6664 ug/L	5.6664 ppb	12:38:52
2	Cd 226.502†	376.3	551.0	-0.1255 ug/L	-0.1255 ppb	12:39:12
2	Co 228.616†	1098.3	1076.8	21.684 ug/L	21.684 ppb	12:39:12
2	Cr 267.716†	4188.7	3821.1	67.823 ug/L	67.823 ppb	12:39:12
2	Cu 324.752†	13616.3	7376.8	30.698 ug/L	30.698 ppb	12:38:52
2	Mn 257.610†	1847887.1	1727301.3	2384.7 ug/L	2384.7 ppb	12:38:47
2	Mo 202.031†	20.7	14.6	8.0490 ug/L	8.0490 ppb	12:39:12
2	Ni 231.604†	1691.2	1496.6	50.413 ug/L	50.413 ppb	12:39:12

2	P 214.914†	1499.6	1200.4	752.84 ug/L	752.84 ppb	12:39:12
2	Pb 220.353†	299.9	346.1	59.230 ug/L	59.230 ppb	12:39:12
2	S 181.975 Axial†	347.0	285.1	444.31 ug/L	444.31 ppb	12:39:12
2	Sb 206.836†	67.7	38.1	5.5462 ug/L	5.5462 ppb	12:39:12
2	Se 196.026†	-404.6	-351.7	-40.468 ug/L	-40.468 ppb	12:39:12
2	Si 251.611†	1122565.4	1049050.9	40137 ug/L	40137 ppb	12:38:47
2	Sn 189.927†	-63.1	-68.8	-13.554 ug/L	-13.554 ppb	12:39:12
2	Ti 334.940†	1416397.5	1325723.0	2512.3 ug/L	2512.3 ppb	12:38:47
2	Tl 190.801†	-122.1	-82.7	-0.9310 ug/L	-0.9310 ppb	12:39:12
2	U 409.014†	-8688.6	-5718.2	-237.98 ug/L	-237.98 ppb	12:38:47
2	V 292.402†	11249.4	12266.5	97.937 ug/L	97.937 ppb	12:38:52
2	Zn 213.857†	28730.9	26172.8	303.03 ug/L	303.03 ppb	12:38:52
2	SiO2†	1125435.2	1051720.3	85543 ug/L	85543 ppb	12:39:55
3	Sc Radial	4078.5	4078.5	114 %		12:38:08
3	Y RADIAL	5426.6	5426.6	133.4 %		12:37:48
3	Al 396.153Radial†	42774.6	37747.1	43313 ug/L	43313 ppb	12:37:48
3	Ca 317.933Radial†	6999.6	6143.2	12557 ug/L	12557 ppb	12:37:48
3	Fe 238.204 Radial†	6803.5	5978.2	84509 ug/L	84509 ppb	12:37:48
3	K 766.490 Radial†	45652.1	37150.1	7812.9 ug/L	7812.9 ppb	12:37:48
3	Mg 279.077 IEC†	221.6	194.3	8489.9 ug/L	8489.9 ppb	12:38:08
3	Na 589.592 Radial†	685.6	1500.7	773.79 ug/L	773.79 ppb	12:37:48
3	Sr 421.552†	12348.2	10851.4	119.54 ug/L	119.54 ppb	12:37:48
3	Sc 361.383	719377.3	719377.3	107.87 %		12:39:18
3	Y 371.029	659752.4	659752.4	124.93 %		12:39:18
3	Ag 328.068†	-4504.3	-4377.7	1.3315 ug/L	1.3315 ppb	12:39:23
3	As 188.979†	-30.4	-2.9	40.018 ug/L	40.018 ppb	12:39:43
3	B 249.677†	260.3	656.4	3.7789 ug/L	3.7789 ppb	12:39:23
3	Ba 233.527†	50233.6	46555.6	473.79 ug/L	473.79 ppb	12:39:23
3	Be 313.107†	-4729.3	-206.0	5.6086 ug/L	5.6086 ppb	12:39:23
3	Cd 226.502†	406.7	576.2	0.1539 ug/L	0.1539 ppb	12:39:43
3	Co 228.616†	1119.9	1088.1	21.969 ug/L	21.969 ppb	12:39:43
3	Cr 267.716†	4252.8	3847.3	68.340 ug/L	68.340 ppb	12:39:43
3	Cu 324.752†	13988.9	7614.1	31.593 ug/L	31.593 ppb	12:39:23
3	Mn 257.610†	1859508.1	1723395.5	2379.4 ug/L	2379.4 ppb	12:39:18
3	Mo 202.031†	8.5	3.1	7.0145 ug/L	7.0145 ppb	12:39:43
3	Ni 231.604†	1703.8	1494.7	50.351 ug/L	50.351 ppb	12:39:43
3	P 214.914†	1522.9	1210.1	758.57 ug/L	758.57 ppb	12:39:43
3	Pb 220.353†	298.7	342.7	58.751 ug/L	58.751 ppb	12:39:43
3	S 181.975 Axial†	346.3	281.7	438.76 ug/L	438.76 ppb	12:39:43
3	Sb 206.836†	54.1	24.9	0.0714 ug/L	0.0714 ppb	12:39:43
3	Se 196.026†	-401.3	-345.4	-32.527 ug/L	-32.527 ppb	12:39:43
3	Si 251.611†	1131896.6	1048784.0	40127 ug/L	40127 ppb	12:39:18
3	Sn 189.927†	-53.4	-59.2	-11.249 ug/L	-11.249 ppb	12:39:43
3	Ti 334.940†	1426926.7	1324232.7	2509.5 ug/L	2509.5 ppb	12:39:18
3	Tl 190.801†	-122.3	-81.9	-0.6982 ug/L	-0.6982 ppb	12:39:43
3	U 409.014†	-8585.0	-5553.2	-231.51 ug/L	-231.51 ppb	12:39:18
3	V 292.402†	11643.9	12542.8	100.33 ug/L	100.33 ppb	12:39:23
3	Zn 213.857†	29673.9	26818.7	310.66 ug/L	310.66 ppb	12:39:23
3	SiO2†	1141266.8	1057456.8	86010 ug/L	86010 ppb	12:40:01

Mean Data: 248371017|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	711981.7	106.76 %		1.217			1.14%
Sc Radial	4080.3	114 %		0.3			0.29%
Y 371.029	653097.3	123.67 %		1.377			1.11%
Y RADIAL	5389.0	132.5 %		0.82			0.62%
Ag 328.068†	-4332.2	1.4047 ug/L		0.21561	1.4047 ppb	0.21561	15.35%
Al 396.153Radial†	37399.8	42915 ug/L		373.7	42915 ppb	373.7	0.87%
As 188.979†	-4.7	38.949 ug/L		6.5743	38.949 ppb	6.5743	16.88%
B 249.677†	585.9	1.9892 ug/L		1.58692	1.9892 ppb	1.58692	79.78%
Ba 233.527†	46418.7	472.38 ug/L		5.081	472.38 ppb	5.081	1.08%
Be 313.107†	-196.0	5.6151 ug/L		0.04842	5.6151 ppb	0.04842	0.86%
Ca 317.933Radial†	6081.3	12430 ug/L		114.1	12430 ppb	114.1	0.92%
Cd 226.502†	561.8	-0.0059 ug/L		0.14395	-0.0059 ppb	0.14395	>999.9%
Co 228.616†	1082.6	21.833 ug/L		0.1428	21.833 ppb	0.1428	0.65%
Cr 267.716†	3828.8	67.990 ug/L		0.3027	67.990 ppb	0.3027	0.45%
Cu 324.752†	7492.3	31.130 ug/L		0.4480	31.130 ppb	0.4480	1.44%
Fe 238.204 Radial†	5934.9	83897 ug/L		551.9	83897 ppb	551.9	0.66%
K 766.490 Radial†	36792.7	7737.7 ug/L		72.42	7737.7 ppb	72.42	0.94%

Mg 279.077 IEC†	194.4	8494.3 ug/L	8.13	8494.3 ppb	8.13	0.10%
Mn 257.610†	1725730.2	2382.5 ug/L	2.78	2382.5 ppb	2.78	0.12%
Mo 202.031†	6.1	7.2552 ug/L	0.70501	7.2552 ppb	0.70501	9.72%
Na 589.592 Radial†	1497.9	772.36 ug/L	6.554	772.36 ppb	6.554	0.85%
Ni 231.604†	1501.6	50.582 ug/L	0.3471	50.582 ppb	0.3471	0.69%
P 214.914†	1207.6	757.35 ug/L	4.031	757.35 ppb	4.031	0.53%
Pb 220.353†	338.1	57.952 ug/L	1.8141	57.952 ppb	1.8141	3.13%
S 181.975 Axial†	281.6	438.66 ug/L	5.705	438.66 ppb	5.705	1.30%
Sb 206.836†	30.8	2.5149 ug/L	2.78433	2.5149 ppb	2.78433	110.71%
Se 196.026†	-345.9	-34.624 ug/L	5.1275	-34.624 ppb	5.1275	14.81%
Si 251.611†	1048461.0	40114 ug/L	30.7	40114 ppb	30.7	0.08%
Sn 189.927†	-62.1	-11.953 ug/L	1.3902	-11.953 ppb	1.3902	11.63%
Sr 421.552†	10766.2	118.60 ug/L	0.873	118.60 ppb	0.873	0.74%
Ti 334.940†	1324784.4	2510.5 ug/L	1.54	2510.5 ppb	1.54	0.06%
Tl 190.801†	-80.4	-0.0575 ug/L	1.31654	-0.0575 ppb	1.31654	>999.9%
U 409.014†	-5609.0	-233.67 ug/L	3.734	-233.67 ppb	3.734	1.60%
V 292.402†	12441.9	99.485 ug/L	1.3424	99.485 ppb	1.3424	1.35%
Zn 213.857†	26615.2	308.29 ug/L	4.571	308.29 ppb	4.571	1.48%
SiO2†	1061641.5	86350 ug/L	1020.7	86350 ppb	1020.7	1.18%

Sequence No.: 28

Sample ID: 248371018|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 135

Date Collected: 3/31/2010 12:42:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371018|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3989.9	3989.9	111 %		12:44:28
1	Y RADIAL	5077.8	5077.8	124.9 %		12:44:08
1	Al 396.153Radial†	38054.4	34337.2	39401 ug/L	39401 ppb	12:44:08
1	Ca 317.933Radial†	6489.8	5821.4	11899 ug/L	11899 ppb	12:44:08
1	Fe 238.204 Radial†	5718.8	5135.5	72596 ug/L	72596 ppb	12:44:08
1	K 766.490 Radial†	34305.1	27836.1	5853.3 ug/L	5853.3 ppb	12:44:08
1	Mg 279.077 IEC†	195.8	175.5	7671.7 ug/L	7671.7 ppb	12:44:28
1	Na 589.592 Radial†	227.5	1102.1	568.26 ug/L	568.26 ppb	12:44:08
1	Sr 421.552†	10311.9	9261.0	102.01 ug/L	102.01 ppb	12:44:08
1	Sc 361.383	704388.3	704388.3	105.62 %		12:45:25
1	Y 371.029	621149.9	621149.9	117.62 %		12:45:25
1	Ag 328.068†	-3700.1	-3705.2	1.4258 ug/L	1.4258 ppb	12:45:25
1	As 188.979†	-33.7	-6.7	32.281 ug/L	32.281 ppb	12:45:45
1	B 249.677†	103.3	512.9	1.8882 ug/L	1.8882 ppb	12:45:25
1	Ba 233.527†	39118.8	37023.4	376.98 ug/L	376.98 ppb	12:45:25
1	Be 313.107†	-7184.6	-2623.9	3.8148 ug/L	3.8148 ppb	12:45:25
1	Cd 226.502†	307.0	489.9	0.0633 ug/L	0.0633 ppb	12:45:45
1	Co 228.616†	828.6	834.4	16.231 ug/L	16.231 ppb	12:45:45
1	Cr 267.716†	3411.7	3134.9	56.077 ug/L	56.077 ppb	12:45:45
1	Cu 324.752†	16045.9	9837.6	38.789 ug/L	38.789 ppb	12:45:25
1	Mn 257.610†	1386136.6	1311902.7	1812.0 ug/L	1812.0 ppb	12:45:25
1	Mo 202.031†	-14.1	-18.1	4.0105 ug/L	4.0105 ppb	12:45:45
1	Ni 231.604†	1249.0	1097.8	36.979 ug/L	36.979 ppb	12:45:45
1	P 214.914†	1392.0	1116.2	701.92 ug/L	701.92 ppb	12:45:45
1	Pb 220.353†	435.3	477.9	80.970 ug/L	80.970 ppb	12:45:45
1	S 181.975 Axial†	370.7	311.6	486.97 ug/L	486.97 ppb	12:45:45
1	Sb 206.836†	55.2	27.0	2.2641 ug/L	2.2641 ppb	12:45:45
1	Se 196.026†	-338.4	-293.8	-25.090 ug/L	-25.090 ppb	12:45:45
1	Si 251.611†	983133.3	930268.0	35592 ug/L	35592 ppb	12:45:25
1	Sn 189.927†	-51.0	-58.0	-11.155 ug/L	-11.155 ppb	12:45:45
1	Ti 334.940†	1205405.0	1142651.0	2165.5 ug/L	2165.5 ppb	12:45:25
1	Tl 190.801†	-96.9	-60.3	2.3782 ug/L	2.3782 ppb	12:45:45
1	U 409.014†	-5697.5	-2988.7	-127.73 ug/L	-127.73 ppb	12:45:25
1	V 292.402†	10534.8	11722.5	95.022 ug/L	95.022 ppb	12:45:25
1	Zn 213.857†	26607.5	24500.9	284.54 ug/L	284.54 ppb	12:45:25
1	SiO2†	1010665.6	956321.1	77784 ug/L	77784 ppb	12:46:43
2	Sc Radial	3980.4	3980.4	111 %		12:44:53
2	Y RADIAL	4966.1	4966.1	122.1 %		12:44:33
2	Al 396.153Radial†	37413.5	33840.7	38831 ug/L	38831 ppb	12:44:33
2	Ca 317.933Radial†	6399.2	5753.5	11760 ug/L	11760 ppb	12:44:33
2	Fe 238.204 Radial†	5561.1	5005.5	70758 ug/L	70758 ppb	12:44:33
2	K 766.490 Radial†	33490.5	27174.9	5714.2 ug/L	5714.2 ppb	12:44:33
2	Mg 279.077 IEC†	193.3	173.6	7592.1 ug/L	7592.1 ppb	12:44:53
2	Na 589.592 Radial†	180.2	1059.9	546.50 ug/L	546.50 ppb	12:44:33
2	Sr 421.552†	10079.2	9073.3	99.945 ug/L	99.945 ppb	12:44:33
2	Sc 361.383	706454.5	706454.5	105.93 %		12:45:51
2	Y 371.029	621788.9	621788.9	117.74 %		12:45:51
2	Ag 328.068†	-3800.1	-3789.4	0.3789 ug/L	0.3789 ppb	12:45:51
2	As 188.979†	-28.8	-1.9	34.355 ug/L	34.355 ppb	12:46:11
2	B 249.677†	153.4	559.9	3.4473 ug/L	3.4473 ppb	12:45:51
2	Ba 233.527†	39496.3	37271.4	379.43 ug/L	379.43 ppb	12:45:51
2	Be 313.107†	-7098.6	-2522.8	3.8671 ug/L	3.8671 ppb	12:45:51
2	Cd 226.502†	320.0	501.3	0.4285 ug/L	0.4285 ppb	12:46:11
2	Co 228.616†	820.1	824.1	15.985 ug/L	15.985 ppb	12:46:11
2	Cr 267.716†	3415.5	3129.0	55.793 ug/L	55.793 ppb	12:46:11
2	Cu 324.752†	15976.5	9727.6	38.303 ug/L	38.303 ppb	12:45:51
2	Mn 257.610†	1398334.2	1319579.0	1822.4 ug/L	1822.4 ppb	12:45:51
2	Mo 202.031†	-0.7	-5.4	5.1082 ug/L	5.1082 ppb	12:46:11
2	Ni 231.604†	1243.3	1088.9	36.680 ug/L	36.680 ppb	12:46:11

2	P 214.914†	1385.2	1105.9	696.31 ug/L	696.31 ppb	12:46:11
2	Pb 220.353†	448.0	488.7	82.760 ug/L	82.760 ppb	12:46:11
2	S 181.975 Axial†	370.9	310.7	485.68 ug/L	485.68 ppb	12:46:11
2	Sb 206.836†	54.0	25.7	1.7429 ug/L	1.7429 ppb	12:46:11
2	Se 196.026†	-341.7	-296.0	-31.832 ug/L	-31.832 ppb	12:46:11
2	Si 251.611†	989633.6	933681.9	35723 ug/L	35723 ppb	12:45:51
2	Sn 189.927†	-58.4	-64.9	-12.806 ug/L	-12.806 ppb	12:46:11
2	Ti 334.940†	1211376.1	1144949.9	2169.8 ug/L	2169.8 ppb	12:45:51
2	Tl 190.801†	-105.6	-68.2	-0.6865 ug/L	-0.6865 ppb	12:46:11
2	U 409.014†	-5773.9	-3045.0	-129.77 ug/L	-129.77 ppb	12:45:51
2	V 292.402†	10676.7	11827.2	96.262 ug/L	96.262 ppb	12:45:51
2	Zn 213.857†	26759.8	24571.0	285.67 ug/L	285.67 ppb	12:45:51
2	SiO2†	997288.8	940894.6	76529 ug/L	76529 ppb	12:46:49
3	Sc Radial	3998.4	3998.4	111 %		12:45:18
3	Y RADIAL	5020.0	5020.0	123.5 %		12:44:58
3	Al 396.153Radial†	37466.1	33736.1	38711 ug/L	38711 ppb	12:44:58
3	Ca 317.933Radial†	6402.7	5730.8	11714 ug/L	11714 ppb	12:44:58
3	Fe 238.204 Radial†	5608.1	5025.1	71035 ug/L	71035 ppb	12:44:58
3	K 766.490 Radial†	33536.3	27080.1	5694.3 ug/L	5694.3 ppb	12:44:58
3	Mg 279.077 IEC†	196.2	175.5	7671.7 ug/L	7671.7 ppb	12:45:18
3	Na 589.592 Radial†	197.6	1074.8	554.21 ug/L	554.21 ppb	12:44:58
3	Sr 421.552†	10110.7	9060.6	99.806 ug/L	99.806 ppb	12:44:58
3	Sc 361.383	704181.1	704181.1	105.59 %		12:46:17
3	Y 371.029	620771.2	620771.2	117.55 %		12:46:17
3	Ag 328.068†	-3769.5	-3771.9	0.5650 ug/L	0.5650 ppb	12:46:17
3	As 188.979†	-32.1	-5.2	32.689 ug/L	32.689 ppb	12:46:37
3	B 249.677†	59.7	471.6	1.0339 ug/L	1.0339 ppb	12:46:17
3	Ba 233.527†	39155.0	37068.6	377.39 ug/L	377.39 ppb	12:46:17
3	Be 313.107†	-7165.5	-2607.8	3.8181 ug/L	3.8181 ppb	12:46:17
3	Cd 226.502†	346.8	527.7	0.8074 ug/L	0.8074 ppb	12:46:37
3	Co 228.616†	853.7	858.4	16.882 ug/L	16.882 ppb	12:46:37
3	Cr 267.716†	3446.5	3168.8	56.434 ug/L	56.434 ppb	12:46:37
3	Cu 324.752†	15989.5	9788.6	38.534 ug/L	38.534 ppb	12:46:17
3	Mn 257.610†	1386565.6	1312695.0	1813.0 ug/L	1813.0 ppb	12:46:17
3	Mo 202.031†	-0.7	-5.4	5.1268 ug/L	5.1268 ppb	12:46:37
3	Ni 231.604†	1279.1	1126.6	37.951 ug/L	37.951 ppb	12:46:37
3	P 214.914†	1422.3	1145.3	722.78 ug/L	722.78 ppb	12:46:37
3	Pb 220.353†	463.0	504.3	85.249 ug/L	85.249 ppb	12:46:37
3	S 181.975 Axial†	378.8	319.4	499.40 ug/L	499.40 ppb	12:46:37
3	Sb 206.836†	40.3	13.0	-3.5085 ug/L	-3.5085 ppb	12:46:37
3	Se 196.026†	-354.8	-309.4	-41.540 ug/L	-41.540 ppb	12:46:37
3	Si 251.611†	982281.6	929735.2	35572 ug/L	35572 ppb	12:46:17
3	Sn 189.927†	-55.2	-62.0	-12.145 ug/L	-12.145 ppb	12:46:37
3	Ti 334.940†	1204197.9	1141843.5	2163.9 ug/L	2163.9 ppb	12:46:17
3	Tl 190.801†	-112.6	-75.2	-3.5497 ug/L	-3.5497 ppb	12:46:37
3	U 409.014†	-5747.7	-3037.8	-129.51 ug/L	-129.51 ppb	12:46:17
3	V 292.402†	10618.2	11804.4	96.019 ug/L	96.019 ppb	12:46:17
3	Zn 213.857†	26598.7	24500.0	284.76 ug/L	284.76 ppb	12:46:17
3	SiO2†	1011334.7	957236.1	77858 ug/L	77858 ppb	12:46:55

Mean Data: 248371018|960813|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	705008.0	105.71	%	0.188				0.18%
Sc Radial	3989.6	111	%	0.3				0.23%
Y 371.029	621236.7	117.64	%	0.097				0.08%
Y RADIAL	5021.3	123.5	%	1.37				1.11%
Ag 328.068†	-3755.5	0.7899	ug/L	0.55851	0.7899	ppb	0.55851	70.71%
Al 396.153Radial†	33971.3	38981	ug/L	368.5	38981	ppb	368.5	0.95%
As 188.979†	-4.6	33.108	ug/L	1.0987	33.108	ppb	1.0987	3.32%
B 249.677†	514.8	2.1232	ug/L	1.22375	2.1232	ppb	1.22375	57.64%
Ba 233.527†	37121.1	377.93	ug/L	1.315	377.93	ppb	1.315	0.35%
Be 313.107†	-2584.9	3.8333	ug/L	0.02926	3.8333	ppb	0.02926	0.76%
Ca 317.933Radial†	5768.6	11791	ug/L	96.3	11791	ppb	96.3	0.82%
Cd 226.502†	506.3	0.4331	ug/L	0.37206	0.4331	ppb	0.37206	85.91%
Co 228.616†	839.0	16.366	ug/L	0.4633	16.366	ppb	0.4633	2.83%
Cr 267.716†	3144.2	56.101	ug/L	0.3210	56.101	ppb	0.3210	0.57%
Cu 324.752†	9784.6	38.542	ug/L	0.2430	38.542	ppb	0.2430	0.63%
Fe 238.204 Radial†	5055.3	71463	ug/L	990.7	71463	ppb	990.7	1.39%
K 766.490 Radial†	27363.7	5753.9	ug/L	86.64	5753.9	ppb	86.64	1.51%

Mg 279.077 IEC†	174.9	7645.2 ug/L	45.94	7645.2 ppb	45.94	0.60%
Mn 257.610†	1314725.6	1815.8 ug/L	5.74	1815.8 ppb	5.74	0.32%
Mo 202.031†	-9.6	4.7485 ug/L	0.63919	4.7485 ppb	0.63919	13.46%
Na 589.592 Radial†	1078.9	556.32 ug/L	11.036	556.32 ppb	11.036	1.98%
Ni 231.604†	1104.4	37.203 ug/L	0.6643	37.203 ppb	0.6643	1.79%
P 214.914†	1122.5	707.00 ug/L	13.951	707.00 ppb	13.951	1.97%
Pb 220.353†	490.3	82.993 ug/L	2.1494	82.993 ppb	2.1494	2.59%
S 181.975 Axial†	313.9	490.68 ug/L	7.574	490.68 ppb	7.574	1.54%
Sb 206.836†	21.9	0.1662 ug/L	3.19304	0.1662 ppb	3.19304	>999.9%
Se 196.026†	-299.7	-32.821 ug/L	8.2691	-32.821 ppb	8.2691	25.19%
Si 251.611†	931228.4	35629 ug/L	81.9	35629 ppb	81.9	0.23%
Sn 189.927†	-61.6	-12.036 ug/L	0.8309	-12.036 ppb	0.8309	6.90%
Sr 421.552†	9131.6	100.59 ug/L	1.237	100.59 ppb	1.237	1.23%
Ti 334.940†	1143148.1	2166.4 ug/L	3.06	2166.4 ppb	3.06	0.14%
Tl 190.801†	-67.9	-0.6193 ug/L	2.96454	-0.6193 ppb	2.96454	478.68%
U 409.014†	-3023.8	-129.00 ug/L	1.111	-129.00 ppb	1.111	0.86%
V 292.402†	11784.7	95.767 ug/L	0.6572	95.767 ppb	0.6572	0.69%
Zn 213.857†	24524.0	284.99 ug/L	0.596	284.99 ppb	0.596	0.21%
SiO2†	951483.9	77391 ug/L	746.8	77391 ppb	746.8	0.97%

Sequence No.: 29

Sample ID: 248371019|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 136

Date Collected: 3/31/2010 12:49:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371019|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4150.2	4150.2	116 %		12:51:22
1	Y RADIAL	5221.2	5221.2	128.4 %		12:51:22
1	Al 396.153Radial†	108684.5	94088.7	107960 ug/L	107960 ppb	12:51:02
1	Ca 317.933Radial†	14024.5	12111.1	24755 ug/L	24755 ppb	12:51:02
1	Fe 238.204 Radial†	11064.7	9559.4	135130 ug/L	135130 ppb	12:51:02
1	K 766.490 Radial†	83517.5	69198.0	14553 ug/L	14553 ppb	12:51:02
1	Mg 279.077 IEC†	496.4	428.6	18779 ug/L	18779 ppb	12:51:22
1	Na 589.592 Radial†	3412.8	3848.5	1984.4 ug/L	1984.4 ppb	12:51:02
1	Sr 421.552†	27209.4	23514.0	259.06 ug/L	259.06 ppb	12:51:02
1	Sc 361.383	715041.0	715041.0	107.22 %		12:52:19
1	Y 371.029	646721.6	646721.6	122.47 %		12:52:19
1	Ag 328.068†	-7366.8	-7072.8	1.8967 ug/L	1.8967 ppb	12:52:24
1	As 188.979†	-5.3	20.4	70.790 ug/L	70.790 ppb	12:52:44
1	B 249.677†	1272.8	1602.2	20.801 ug/L	20.801 ppb	12:52:24
1	Ba 233.527†	118501.5	110509.4	1122.6 ug/L	1122.6 ppb	12:52:24
1	Be 313.107†	525.3	4668.2	9.4392 ug/L	9.4392 ppb	12:52:24
1	Cd 226.502†	731.6	881.6	-0.3355 ug/L	-0.3355 ppb	12:52:44
1	Co 228.616†	2451.3	2336.2	52.255 ug/L	52.255 ppb	12:52:44
1	Cr 267.716†	8351.1	7693.6	133.05 ug/L	133.05 ppb	12:52:24
1	Cu 324.752†	26171.1	19054.7	74.830 ug/L	74.830 ppb	12:52:24
1	Mn 257.610†	1496374.3	1395166.4	1932.3 ug/L	1932.3 ppb	12:52:19
1	Mo 202.031†	-58.0	-58.8	5.0342 ug/L	5.0342 ppb	12:52:44
1	Ni 231.604†	2892.3	2612.8	88.007 ug/L	88.007 ppb	12:52:44
1	P 214.914†	2481.9	2113.1	1338.6 ug/L	1338.6 ppb	12:52:44
1	Pb 220.353†	486.2	519.2	99.019 ug/L	99.019 ppb	12:52:44
1	S 181.975 Axial†	538.7	463.0	714.38 ug/L	714.38 ppb	12:52:44
1	Sb 206.836†	70.3	40.4	1.7073 ug/L	1.7073 ppb	12:52:44
1	Se 196.026†	-643.7	-573.8	-58.024 ug/L	-58.024 ppb	12:52:44
1	Si 251.611†	1219793.7	1137126.4	43507 ug/L	43507 ppb	12:52:19
1	Sn 189.927†	-120.5	-122.1	-23.632 ug/L	-23.632 ppb	12:52:44
1	Ti 334.940†	1864341.1	1740217.4	3298.2 ug/L	3298.2 ppb	12:52:19
1	Tl 190.801†	-124.3	-84.4	2.2502 ug/L	2.2502 ppb	12:52:44
1	U 409.014†	-8243.3	-5282.7	-226.62 ug/L	-226.62 ppb	12:52:19
1	V 292.402†	30233.5	29946.2	252.58 ug/L	252.58 ppb	12:52:24
1	Zn 213.857†	26698.7	24210.6	271.31 ug/L	271.31 ppb	12:52:24
1	SiO2†	1227106.7	1143933.3	93044 ug/L	93044 ppb	12:53:53
2	Sc Radial	4146.9	4146.9	116 %		12:51:47
2	Y RADIAL	5225.3	5225.3	128.5 %		12:51:47
2	Al 396.153Radial†	104430.7	90481.5	103820 ug/L	103820 ppb	12:51:27
2	Ca 317.933Radial†	13539.1	11700.6	23916 ug/L	23916 ppb	12:51:27
2	Fe 238.204 Radial†	10659.0	9215.9	130280 ug/L	130280 ppb	12:51:27
2	K 766.490 Radial†	80896.9	66987.0	14088 ug/L	14088 ppb	12:51:27
2	Mg 279.077 IEC†	493.5	426.4	18689 ug/L	18689 ppb	12:51:47
2	Na 589.592 Radial†	3251.3	3711.0	1913.5 ug/L	1913.5 ppb	12:51:27
2	Sr 421.552†	26003.6	22489.0	247.76 ug/L	247.76 ppb	12:51:27
2	Sc 361.383	729363.8	729363.8	109.37 %		12:52:50
2	Y 371.029	658088.5	658088.5	124.62 %		12:52:50
2	Ag 328.068†	-7328.0	-6902.5	1.3638 ug/L	1.3638 ppb	12:52:56
2	As 188.979†	-8.3	17.7	68.299 ug/L	68.299 ppb	12:53:16
2	B 249.677†	1248.0	1556.2	20.361 ug/L	20.361 ppb	12:52:56
2	Ba 233.527†	117314.4	107253.6	1089.5 ug/L	1089.5 ppb	12:52:56
2	Be 313.107†	645.1	4768.2	9.4898 ug/L	9.4898 ppb	12:52:56
2	Cd 226.502†	735.3	871.6	0.0100 ug/L	0.0100 ppb	12:53:16
2	Co 228.616†	2464.7	2303.5	51.455 ug/L	51.455 ppb	12:53:16
2	Cr 267.716†	8256.4	7454.0	128.84 ug/L	128.84 ppb	12:52:56
2	Cu 324.752†	25854.0	18285.4	71.847 ug/L	71.847 ppb	12:52:56
2	Mn 257.610†	1529736.7	1398265.0	1936.1 ug/L	1936.1 ppb	12:52:50
2	Mo 202.031†	-56.6	-56.5	4.8712 ug/L	4.8712 ppb	12:53:16
2	Ni 231.604†	2912.5	2578.3	86.846 ug/L	86.846 ppb	12:53:16

2	P 214.914†	2486.6	2071.9	1314.1 ug/L	1314.1 ppb	12:53:16
2	Pb 220.353†	514.8	536.5	101.26 ug/L	101.26 ppb	12:53:16
2	S 181.975 Axial†	533.2	448.2	691.61 ug/L	691.61 ppb	12:53:16
2	Sb 206.836†	72.1	40.7	1.9653 ug/L	1.9653 ppb	12:53:16
2	Se 196.026†	-632.9	-552.1	-55.196 ug/L	-55.196 ppb	12:53:16
2	Si 251.611†	1249783.4	1142206.9	43701 ug/L	43701 ppb	12:52:50
2	Sn 189.927†	-123.1	-122.3	-23.860 ug/L	-23.860 ppb	12:53:16
2	Ti 334.940†	1903916.9	1742258.0	3302.0 ug/L	3302.0 ppb	12:52:50
2	Tl 190.801†	-135.5	-92.5	-0.8728 ug/L	-0.8728 ppb	12:53:16
2	U 409.014†	-8489.7	-5357.0	-229.02 ug/L	-229.02 ppb	12:52:50
2	V 292.402†	29987.7	29167.7	246.11 ug/L	246.11 ppb	12:52:56
2	Zn 213.857†	26461.7	23505.0	263.53 ug/L	263.53 ppb	12:52:56
2	SiO2†	1215292.7	1110656.5	90337 ug/L	90337 ppb	12:53:59
3	Sc Radial	4126.5	4126.5	115 %		12:52:12
3	Y RADIAL	5216.0	5216.0	128.3 %		12:52:12
3	Al 396.153Radial†	104100.3	90640.3	104010 ug/L	104010 ppb	12:51:52
3	Ca 317.933Radial†	13453.7	11684.2	23883 ug/L	23883 ppb	12:51:52
3	Fe 238.204 Radial†	10534.7	9153.3	129390 ug/L	129390 ppb	12:51:52
3	K 766.490 Radial†	79690.5	66283.6	13940 ug/L	13940 ppb	12:51:52
3	Mg 279.077 IEC†	495.3	430.1	18852 ug/L	18852 ppb	12:52:12
3	Na 589.592 Radial†	3131.1	3620.4	1866.8 ug/L	1866.8 ppb	12:51:52
3	Sr 421.552†	25799.7	22422.8	247.03 ug/L	247.03 ppb	12:51:52
3	Sc 361.383	712446.6	712446.6	106.83 %		12:53:21
3	Y 371.029	644751.1	644751.1	122.09 %		12:53:21
3	Ag 328.068†	-7410.7	-7138.9	-0.2364 ug/L	-0.2364 ppb	12:53:27
3	As 188.979†	-16.1	10.1	64.127 ug/L	64.127 ppb	12:53:47
3	B 249.677†	1235.5	1571.6	20.913 ug/L	20.913 ppb	12:53:27
3	Ba 233.527†	118407.2	110823.6	1125.6 ug/L	1125.6 ppb	12:53:27
3	Be 313.107†	647.2	4784.1	9.4842 ug/L	9.4842 ppb	12:53:27
3	Cd 226.502†	720.9	874.0	0.1390 ug/L	0.1390 ppb	12:53:47
3	Co 228.616†	2474.6	2366.3	53.126 ug/L	53.126 ppb	12:53:47
3	Cr 267.716†	8334.1	7706.0	132.63 ug/L	132.63 ppb	12:53:27
3	Cu 324.752†	26157.7	19131.1	74.802 ug/L	74.802 ppb	12:53:27
3	Mn 257.610†	1488497.4	1392875.2	1928.6 ug/L	1928.6 ppb	12:53:21
3	Mo 202.031†	-51.6	-53.1	5.1398 ug/L	5.1398 ppb	12:53:47
3	Ni 231.604†	2900.2	2630.1	88.589 ug/L	88.589 ppb	12:53:47
3	P 214.914†	2489.0	2128.1	1352.4 ug/L	1352.4 ppb	12:53:47
3	Pb 220.353†	492.0	526.3	99.717 ug/L	99.717 ppb	12:53:47
3	S 181.975 Axial†	546.1	471.8	729.01 ug/L	729.01 ppb	12:53:47
3	Sb 206.836†	60.8	31.6	-1.7217 ug/L	-1.7217 ppb	12:53:47
3	Se 196.026†	-651.6	-583.4	-81.851 ug/L	-81.851 ppb	12:53:47
3	Si 251.611†	1213815.5	1135673.3	43451 ug/L	43451 ppb	12:53:21
3	Sn 189.927†	-120.0	-122.1	-23.824 ug/L	-23.824 ppb	12:53:47
3	Ti 334.940†	1856692.9	1739390.1	3296.6 ug/L	3296.6 ppb	12:53:21
3	Tl 190.801†	-126.8	-87.2	1.1161 ug/L	1.1161 ppb	12:53:47
3	U 409.014†	-8432.0	-5487.4	-234.13 ug/L	-234.13 ppb	12:53:21
3	V 292.402†	30267.1	30080.3	254.65 ug/L	254.65 ppb	12:53:27
3	Zn 213.857†	26724.0	24325.0	273.55 ug/L	273.55 ppb	12:53:27
3	SiO2†	1246768.6	1166505.7	94880 ug/L	94880 ppb	12:54:05

Mean Data: 248371019|960813|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	718950.5	107.81	%	1.366				1.27%
Sc Radial	4141.2	115	%	0.4				0.31%
Y 371.029	649853.7	123.06	%	1.363				1.11%
Y RADIAL	5220.8	128.4	%	0.11				0.09%
Ag 328.068†	-7038.1	1.0080	ug/L	1.11015	1.0080	ppb	1.11015	110.13%
Al 396.153Radial†	91736.8	105260	ug/L	2338.9	105260	ppb	2338.9	2.22%
As 188.979†	16.1	67.739	ug/L	3.3665	67.739	ppb	3.3665	4.97%
B 249.677†	1576.7	20.691	ug/L	0.2916	20.691	ppb	0.2916	1.41%
Ba 233.527†	109528.9	1112.6	ug/L	20.03	1112.6	ppb	20.03	1.80%
Be 313.107†	4740.2	9.4711	ug/L	0.02775	9.4711	ppb	0.02775	0.29%
Ca 317.933Radial†	11832.0	24185	ug/L	494.4	24185	ppb	494.4	2.04%
Cd 226.502†	875.7	-0.0622	ug/L	0.24537	-0.0622	ppb	0.24537	394.78%
Co 228.616†	2335.3	52.279	ug/L	0.8355	52.279	ppb	0.8355	1.60%
Cr 267.716†	7617.9	131.51	ug/L	2.318	131.51	ppb	2.318	1.76%
Cu 324.752†	18823.7	73.827	ug/L	1.7141	73.827	ppb	1.7141	2.32%
Fe 238.204 Radial†	9309.5	131600	ug/L	3090.6	131600	ppb	3090.6	2.35%
K 766.490 Radial†	67489.5	14194	ug/L	319.9	14194	ppb	319.9	2.25%

Mg 279.077 IEC†	428.4	18773 ug/L	81.3	18773 ppb	81.3	0.43%
Mn 257.610†	1395435.5	1932.3 ug/L	3.76	1932.3 ppb	3.76	0.19%
Mo 202.031†	-56.1	5.0151 ug/L	0.13536	5.0151 ppb	0.13536	2.70%
Na 589.592 Radial†	3726.6	1921.5 ug/L	59.21	1921.5 ppb	59.21	3.08%
Ni 231.604†	2607.1	87.814 ug/L	0.8874	87.814 ppb	0.8874	1.01%
P 214.914†	2104.4	1335.0 ug/L	19.41	1335.0 ppb	19.41	1.45%
Pb 220.353†	527.3	99.998 ug/L	1.1453	99.998 ppb	1.1453	1.15%
S 181.975 Axial†	461.0	711.66 ug/L	18.847	711.66 ppb	18.847	2.65%
Sb 206.836†	37.5	0.6503 ug/L	2.05824	0.6503 ppb	2.05824	316.51%
Se 196.026†	-569.7	-65.024 ug/L	14.6414	-65.024 ppb	14.6414	22.52%
Si 251.611†	1138335.5	43553 ug/L	131.3	43553 ppb	131.3	0.30%
Sn 189.927†	-122.2	-23.772 ug/L	0.1225	-23.772 ppb	0.1225	0.52%
Sr 421.552†	22808.6	251.28 ug/L	6.742	251.28 ppb	6.742	2.68%
Ti 334.940†	1740621.9	3298.9 ug/L	2.79	3298.9 ppb	2.79	0.08%
Tl 190.801†	-88.0	0.8312 ug/L	1.58088	0.8312 ppb	1.58088	190.20%
U 409.014†	-5375.7	-229.92 ug/L	3.839	-229.92 ppb	3.839	1.67%
V 292.402†	29731.4	251.12 ug/L	4.455	251.12 ppb	4.455	1.77%
Zn 213.857†	24013.5	269.47 ug/L	5.256	269.47 ppb	5.256	1.95%
SiO2†	1140365.1	92754 ug/L	2285.2	92754 ppb	2285.2	2.46%

Sequence No.: 30

Sample ID: 248371020|960813|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 137

Date Collected: 3/31/2010 12:56:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248371020|960813|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3958.2	3958.2	110 %		12:58:30
1	Y RADIAL	5241.8	5241.8	128.9 %		12:58:10
1	Al 396.153Radial†	34565.7	31448.1	36086 ug/L	36086 ppb	12:58:10
1	Ca 317.933Radial†	15967.1	14460.5	29557 ug/L	29557 ppb	12:58:10
1	Fe 238.204 Radial†	4547.0	4114.3	58160 ug/L	58160 ppb	12:58:10
1	K 766.490 Radial†	52939.9	44977.7	9454.3 ug/L	9454.3 ppb	12:58:10
1	Mg 279.077 IEC†	234.0	211.5	9277.3 ug/L	9277.3 ppb	12:58:30
1	Na 589.592 Radial†	237.1	1112.4	573.60 ug/L	573.60 ppb	12:58:10
1	Sr 421.552†	18560.0	16813.2	185.15 ug/L	185.15 ppb	12:58:10
1	Sc 361.383	699243.1	699243.1	104.85 %		12:59:28
1	Y 371.029	629524.7	629524.7	119.21 %		12:59:28
1	Ag 328.068†	-2667.7	-2746.4	2.1987 ug/L	2.1987 ppb	12:59:33
1	As 188.979†	-19.3	6.9	31.226 ug/L	31.226 ppb	12:59:53
1	B 249.677†	1420.3	1769.7	37.904 ug/L	37.904 ppb	12:59:33
1	Ba 233.527†	53556.7	51066.0	518.53 ug/L	518.53 ppb	12:59:33
1	Be 313.107†	-1658.5	2596.5	4.7633 ug/L	4.7633 ppb	12:59:33
1	Cd 226.502†	250.4	438.1	0.7421 ug/L	0.7421 ppb	12:59:53
1	Co 228.616†	757.4	772.3	16.048 ug/L	16.048 ppb	12:59:53
1	Cr 267.716†	2596.9	2381.5	42.954 ug/L	42.954 ppb	12:59:53
1	Cu 324.752†	18088.3	11897.3	45.363 ug/L	45.363 ppb	12:59:33
1	Mn 257.610†	2527999.2	2410599.2	3322.3 ug/L	3322.3 ppb	12:59:28
1	Mo 202.031†	6.7	1.7	5.0315 ug/L	5.0315 ppb	12:59:53
1	Ni 231.604†	1237.3	1095.3	36.896 ug/L	36.896 ppb	12:59:53
1	P 214.914†	2620.8	2297.9	1513.1 ug/L	1513.1 ppb	12:59:53
1	Pb 220.353†	437.7	483.3	82.656 ug/L	82.656 ppb	12:59:53
1	S 181.975 Axial†	864.1	784.8	1238.3 ug/L	1238.3 ppb	12:59:53
1	Sb 206.836†	47.5	20.1	1.1455 ug/L	1.1455 ppb	12:59:53
1	Se 196.026†	-278.5	-239.0	-21.667 ug/L	-21.667 ppb	12:59:53
1	Si 251.611†	839961.6	800568.4	30630 ug/L	30630 ppb	12:59:28
1	Sn 189.927†	-124.0	-128.1	-24.671 ug/L	-24.671 ppb	12:59:53
1	Ti 334.940†	894701.1	854717.8	1622.3 ug/L	1622.3 ppb	12:59:28
1	Tl 190.801†	-133.5	-95.8	-8.9653 ug/L	-8.9653 ppb	12:59:53
1	U 409.014†	-7343.3	-4598.0	-190.32 ug/L	-190.32 ppb	12:59:33
1	V 292.402†	7297.9	8708.7	69.873 ug/L	69.873 ppb	12:59:33
1	Zn 213.857†	24565.7	22739.0	265.43 ug/L	265.43 ppb	12:59:33
1	SiO2†	840902.0	801451.5	65187 ug/L	65187 ppb	13:01:01
2	Sc Radial	4048.5	4048.5	113 %		12:58:56
2	Y RADIAL	5132.1	5132.1	126.2 %		12:58:36
2	Al 396.153Radial†	34095.2	30332.0	34805 ug/L	34805 ppb	12:58:36
2	Ca 317.933Radial†	15739.0	13935.4	28484 ug/L	28484 ppb	12:58:36
2	Fe 238.204 Radial†	4452.9	3938.9	55680 ug/L	55680 ppb	12:58:36
2	K 766.490 Radial†	52148.1	43205.2	9081.6 ug/L	9081.6 ppb	12:58:36
2	Mg 279.077 IEC†	244.5	216.1	9480.0 ug/L	9480.0 ppb	12:58:56
2	Na 589.592 Radial†	206.9	1080.9	557.32 ug/L	557.32 ppb	12:58:36
2	Sr 421.552†	18238.8	16153.1	177.88 ug/L	177.88 ppb	12:58:36
2	Sc 361.383	717549.3	717549.3	107.60 %		12:59:59
2	Y 371.029	645403.0	645403.0	122.22 %		12:59:59
2	Ag 328.068†	-2744.3	-2752.6	1.4026 ug/L	1.4026 ppb	13:00:04
2	As 188.979†	-20.7	6.0	30.206 ug/L	30.206 ppb	13:00:24
2	B 249.677†	1584.9	1888.1	41.480 ug/L	41.480 ppb	13:00:04
2	Ba 233.527†	54861.1	50975.1	517.54 ug/L	517.54 ppb	13:00:04
2	Be 313.107†	-1587.6	2702.8	4.8167 ug/L	4.8167 ppb	13:00:04
2	Cd 226.502†	254.2	435.5	0.9580 ug/L	0.9580 ppb	13:00:24
2	Co 228.616†	760.3	756.5	15.668 ug/L	15.668 ppb	13:00:24
2	Cr 267.716†	2578.4	2301.2	41.452 ug/L	41.452 ppb	13:00:24
2	Cu 324.752†	18619.7	11951.0	45.419 ug/L	45.419 ppb	13:00:04
2	Mn 257.610†	2599038.6	2415112.7	3328.3 ug/L	3328.3 ppb	12:59:59
2	Mo 202.031†	12.8	7.2	5.3630 ug/L	5.3630 ppb	13:00:24
2	Ni 231.604†	1205.6	1035.8	34.890 ug/L	34.890 ppb	13:00:24

2	P 214.914†	2600.6	2215.3	1458.7 ug/L	1458.7 ppb	13:00:24
2	Pb 220.353†	424.3	460.1	78.780 ug/L	78.780 ppb	13:00:24
2	S 181.975 Axial†	864.4	764.0	1205.6 ug/L	1205.6 ppb	13:00:24
2	Sb 206.836†	50.4	21.6	1.7909 ug/L	1.7909 ppb	13:00:24
2	Se 196.026†	-271.3	-225.6	-18.124 ug/L	-18.124 ppb	13:00:24
2	Si 251.611†	866725.0	805004.7	30800 ug/L	30800 ppb	12:59:59
2	Sn 189.927†	-143.1	-142.8	-28.361 ug/L	-28.361 ppb	13:00:24
2	Ti 334.940†	920332.3	856769.9	1626.1 ug/L	1626.1 ppb	12:59:59
2	Tl 190.801†	-125.1	-84.8	-4.5393 ug/L	-4.5393 ppb	13:00:24
2	U 409.014†	-7336.5	-4413.1	-182.65 ug/L	-182.65 ppb	13:00:04
2	V 292.402†	7438.0	8661.3	69.819 ug/L	69.819 ppb	13:00:04
2	Zn 213.857†	25212.3	22742.1	265.85 ug/L	265.85 ppb	13:00:04
2	SiO2†	839056.4	779275.5	63384 ug/L	63384 ppb	13:01:07
3	Sc Radial	3980.3	3980.3	111 %		12:59:21
3	Y RADIAL	5264.4	5264.4	129.5 %		12:59:01
3	Al 396.153Radial†	34819.4	31503.2	36149 ug/L	36149 ppb	12:59:01
3	Ca 317.933Radial†	15965.2	14378.5	29390 ug/L	29390 ppb	12:59:01
3	Fe 238.204 Radial†	4522.8	4069.6	57529 ug/L	57529 ppb	12:59:01
3	K 766.490 Radial†	52960.8	44730.6	9402.3 ug/L	9402.3 ppb	12:59:01
3	Mg 279.077 IEC†	236.3	212.4	9317.8 ug/L	9317.8 ppb	12:59:21
3	Na 589.592 Radial†	207.3	1084.3	559.11 ug/L	559.11 ppb	12:59:01
3	Sr 421.552†	18612.6	16767.4	184.64 ug/L	184.64 ppb	12:59:01
3	Sc 361.383	707303.2	707303.2	106.06 %		13:00:30
3	Y 371.029	636574.6	636574.6	120.54 %		13:00:30
3	Ag 328.068†	-2884.4	-2921.7	0.9840 ug/L	0.9840 ppb	13:00:35
3	As 188.979†	-12.0	13.9	34.753 ug/L	34.753 ppb	13:00:55
3	B 249.677†	1540.8	1867.9	40.639 ug/L	40.639 ppb	13:00:35
3	Ba 233.527†	54147.0	51040.5	518.25 ug/L	518.25 ppb	13:00:35
3	Be 313.107†	-1619.8	2651.0	4.7887 ug/L	4.7887 ppb	13:00:35
3	Cd 226.502†	248.5	433.5	0.7371 ug/L	0.7371 ppb	13:00:55
3	Co 228.616†	723.6	732.1	15.012 ug/L	15.012 ppb	13:00:55
3	Cr 267.716†	2523.2	2283.9	41.382 ug/L	41.382 ppb	13:00:55
3	Cu 324.752†	18418.5	12012.0	45.734 ug/L	45.734 ppb	13:00:35
3	Mn 257.610†	2558698.4	2412069.5	3324.3 ug/L	3324.3 ppb	13:00:30
3	Mo 202.031†	6.0	0.9	4.9014 ug/L	4.9014 ppb	13:00:55
3	Ni 231.604†	1194.5	1041.5	35.085 ug/L	35.085 ppb	13:00:55
3	P 214.914†	2551.1	2203.7	1449.6 ug/L	1449.6 ppb	13:00:55
3	Pb 220.353†	427.5	468.8	80.374 ug/L	80.374 ppb	13:00:55
3	S 181.975 Axial†	851.7	763.7	1204.8 ug/L	1204.8 ppb	13:00:55
3	Sb 206.836†	57.9	29.3	4.9502 ug/L	4.9502 ppb	13:00:55
3	Se 196.026†	-279.8	-237.2	-21.895 ug/L	-21.895 ppb	13:00:55
3	Si 251.611†	851141.6	801980.8	30684 ug/L	30684 ppb	13:00:30
3	Sn 189.927†	-133.6	-135.7	-26.518 ug/L	-26.518 ppb	13:00:55
3	Ti 334.940†	905652.3	855319.5	1623.4 ug/L	1623.4 ppb	13:00:30
3	Tl 190.801†	-120.6	-82.2	-3.5587 ug/L	-3.5587 ppb	13:00:55
3	U 409.014†	-7288.0	-4466.1	-184.97 ug/L	-184.97 ppb	13:00:35
3	V 292.402†	7243.1	8577.7	68.767 ug/L	68.767 ppb	13:00:35
3	Zn 213.857†	24912.6	22799.0	266.26 ug/L	266.26 ppb	13:00:35
3	SiO2†	845554.7	796699.2	64801 ug/L	64801 ppb	13:01:12

Mean Data: 248371020|960813|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	708031.9	106.17 %	1.376			1.30%
Sc Radial	3995.7	111 %	1.3			1.18%
Y 371.029	637167.5	120.66 %	1.507			1.25%
Y RADIAL	5212.8	128.2 %	1.74			1.36%
Ag 328.068†	-2806.9	1.5284 ug/L	0.61703	1.5284 ppb	0.61703	40.37%
Al 396.153Radial†	31094.5	35680 ug/L	758.3	35680 ppb	758.3	2.13%
As 188.979†	8.9	32.062 ug/L	2.3859	32.062 ppb	2.3859	7.44%
B 249.677†	1841.9	40.007 ug/L	1.8698	40.007 ppb	1.8698	4.67%
Ba 233.527†	51027.2	518.11 ug/L	0.513	518.11 ppb	0.513	0.10%
Be 313.107†	2650.1	4.7896 ug/L	0.02668	4.7896 ppb	0.02668	0.56%
Ca 317.933Radial†	14258.1	29144 ug/L	577.4	29144 ppb	577.4	1.98%
Cd 226.502†	435.7	0.8124 ug/L	0.12608	0.8124 ppb	0.12608	15.52%
Co 228.616†	753.7	15.576 ug/L	0.5238	15.576 ppb	0.5238	3.36%
Cr 267.716†	2322.2	41.929 ug/L	0.8879	41.929 ppb	0.8879	2.12%
Cu 324.752†	11953.4	45.505 ug/L	0.2000	45.505 ppb	0.2000	0.44%
Fe 238.204 Radial†	4040.9	57123 ug/L	1288.6	57123 ppb	1288.6	2.26%
K 766.490 Radial†	44304.5	9312.8 ug/L	201.84	9312.8 ppb	201.84	2.17%

Mg 279.077 IEC†	213.3	9358.4 ug/L	107.24	9358.4 ppb	107.24	1.15%
Mn 257.610†	2412593.8	3325.0 ug/L	3.04	3325.0 ppb	3.04	0.09%
Mo 202.031†	3.2	5.0986 ug/L	0.23799	5.0986 ppb	0.23799	4.67%
Na 589.592 Radial†	1092.5	563.34 ug/L	8.928	563.34 ppb	8.928	1.58%
Ni 231.604†	1057.5	35.624 ug/L	1.1059	35.624 ppb	1.1059	3.10%
P 214.914†	2239.0	1473.8 ug/L	34.35	1473.8 ppb	34.35	2.33%
Pb 220.353†	470.7	80.603 ug/L	1.9482	80.603 ppb	1.9482	2.42%
S 181.975 Axial†	770.8	1216.2 ug/L	19.11	1216.2 ppb	19.11	1.57%
Sb 206.836†	23.7	2.6289 ug/L	2.03607	2.6289 ppb	2.03607	77.45%
Se 196.026†	-233.9	-20.562 ug/L	2.1143	-20.562 ppb	2.1143	10.28%
Si 251.611†	802518.0	30705 ug/L	86.7	30705 ppb	86.7	0.28%
Sn 189.927†	-135.5	-26.517 ug/L	1.8448	-26.517 ppb	1.8448	6.96%
Sr 421.552†	16577.9	182.55 ug/L	4.059	182.55 ppb	4.059	2.22%
Ti 334.940†	855602.4	1623.9 ug/L	1.91	1623.9 ppb	1.91	0.12%
Tl 190.801†	-87.6	-5.6878 ug/L	2.88045	-5.6878 ppb	2.88045	50.64%
U 409.014†	-4492.4	-185.98 ug/L	3.934	-185.98 ppb	3.934	2.12%
V 292.402†	8649.2	69.486 ug/L	0.6237	69.486 ppb	0.6237	0.90%
Zn 213.857†	22760.0	265.85 ug/L	0.415	265.85 ppb	0.415	0.16%
SiO2†	792475.4	64457 ug/L	949.7	64457 ppb	949.7	1.47%

Sequence No.: 31

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2010 13:03:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3890.8	3890.8	108 %		13:05:38
1	Y RADIAL	4368.8	4368.8	107.4 %		13:05:18
1	Al 396.153Radial†	4794.5	4532.1	5176.4 ug/L	5176.4 ppb	13:05:18
1	Ca 317.933Radial†	2702.0	2476.4	5061.9 ug/L	5061.9 ppb	13:05:38
1	Fe 238.204 Radial†	399.0	359.8	5101.5 ug/L	5101.5 ppb	13:05:38
1	K 766.490 Radial†	28940.7	23673.8	4975.9 ug/L	4975.9 ppb	13:05:18
1	Mg 279.077 IEC†	132.3	121.4	5359.8 ug/L	5359.8 ppb	13:05:38
1	Na 589.592 Radial†	20045.8	19386.3	9996.0 ug/L	9996.0 ppb	13:05:18
1	Sr 421.552†	51449.5	47439.5	522.98 ug/L	522.98 ppb	13:05:18
1	Sc 361.383	694679.1	694679.1	104.17 %		13:06:35
1	Y 371.029	544257.1	544257.1	103.06 %		13:06:35
1	Ag 328.068†	90382.4	86565.6	503.02 ug/L	503.02 ppb	13:06:40
1	As 188.979†	985.8	971.6	508.74 ug/L	508.74 ppb	13:07:00
1	B 249.677†	18838.4	18500.1	493.31 ug/L	493.31 ppb	13:06:40
1	Ba 233.527†	51226.0	49164.0	498.60 ug/L	498.60 ppb	13:06:40
1	Be 313.107†	1234406.7	1189216.0	499.27 ug/L	499.27 ppb	13:06:35
1	Cd 226.502†	33514.3	32373.2	499.57 ug/L	499.57 ppb	13:06:40
1	Co 228.616†	20087.0	19333.5	501.90 ug/L	501.90 ppb	13:06:40
1	Cr 267.716†	33876.6	32426.5	499.47 ug/L	499.47 ppb	13:06:40
1	Cu 324.752†	152492.0	141039.0	500.07 ug/L	500.07 ppb	13:06:40
1	Mn 257.610†	377691.3	362131.4	498.58 ug/L	498.58 ppb	13:06:40
1	Mo 202.031†	5277.4	5061.6	495.33 ug/L	495.33 ppb	13:07:00
1	Ni 231.604†	15572.0	14864.4	500.59 ug/L	500.59 ppb	13:06:40
1	P 214.914†	4022.3	3659.7	2386.5 ug/L	2386.5 ppb	13:07:00
1	Pb 220.353†	3085.4	3027.8	495.83 ug/L	495.83 ppb	13:07:00
1	S 181.975 Axial†	699.0	631.7	1001.3 ug/L	1001.3 ppb	13:07:00
1	Sb 206.836†	1270.1	1194.1	512.84 ug/L	512.84 ppb	13:07:00
1	Se 196.026†	643.3	644.1	518.35 ug/L	518.35 ppb	13:07:00
1	Si 251.611†	70032.1	66694.9	2545.7 ug/L	2545.7 ppb	13:06:40
1	Sn 189.927†	2187.1	2089.8	494.96 ug/L	494.96 ppb	13:07:00
1	Ti 334.940†	272371.3	262883.8	497.81 ug/L	497.81 ppb	13:06:40
1	Tl 190.801†	1291.7	1271.5	507.85 ug/L	507.85 ppb	13:07:00
1	U 409.014†	10369.4	12360.2	491.86 ug/L	491.86 ppb	13:06:40
1	V 292.402†	54685.4	54246.7	506.41 ug/L	506.41 ppb	13:06:40
1	Zn 213.857†	43996.1	41546.1	496.77 ug/L	496.77 ppb	13:06:40
1	SiO2†	68315.6	65033.1	5276.1 ug/L	5276.1 ppb	13:08:07
2	Sc Radial	3874.1	3874.1	108 %		13:06:03
2	Y RADIAL	4439.4	4439.4	109.2 %		13:05:43
2	Al 396.153Radial†	4903.3	4652.0	5314.4 ug/L	5314.4 ppb	13:05:43
2	Ca 317.933Radial†	2675.7	2462.8	5034.0 ug/L	5034.0 ppb	13:06:03
2	Fe 238.204 Radial†	396.5	359.1	5090.7 ug/L	5090.7 ppb	13:06:03
2	K 766.490 Radial†	29302.4	24124.5	5070.7 ug/L	5070.7 ppb	13:05:43
2	Mg 279.077 IEC†	125.4	115.5	5098.7 ug/L	5098.7 ppb	13:06:03
2	Na 589.592 Radial†	20223.7	19631.1	10122 ug/L	10122 ppb	13:05:43
2	Sr 421.552†	52185.1	48326.3	532.76 ug/L	532.76 ppb	13:05:43
2	Sc 361.383	701453.4	701453.4	105.18 %		13:07:06
2	Y 371.029	549120.5	549120.5	103.98 %		13:07:06
2	Ag 328.068†	91494.5	86784.9	504.27 ug/L	504.27 ppb	13:07:11
2	As 188.979†	974.4	951.7	498.40 ug/L	498.40 ppb	13:07:31
2	B 249.677†	19003.1	18482.0	492.82 ug/L	492.82 ppb	13:07:11
2	Ba 233.527†	51736.0	49174.0	498.70 ug/L	498.70 ppb	13:07:11
2	Be 313.107†	1243136.5	1186071.1	497.96 ug/L	497.96 ppb	13:07:06
2	Cd 226.502†	33740.0	32277.0	498.09 ug/L	498.09 ppb	13:07:11
2	Co 228.616†	20343.1	19390.8	503.37 ug/L	503.37 ppb	13:07:11
2	Cr 267.716†	34126.0	32349.6	498.28 ug/L	498.28 ppb	13:07:11
2	Cu 324.752†	154685.4	141710.5	502.45 ug/L	502.45 ppb	13:07:11
2	Mn 257.610†	382550.0	363249.1	500.12 ug/L	500.12 ppb	13:07:11
2	Mo 202.031†	5255.1	4991.5	488.48 ug/L	488.48 ppb	13:07:31
2	Ni 231.604†	15747.3	14886.8	501.34 ug/L	501.34 ppb	13:07:11

2	P 214.914†	4006.2	3607.1	2350.3 ug/L	2350.3 ppb	13:07:31
2	Pb 220.353†	3074.6	2988.9	489.50 ug/L	489.50 ppb	13:07:31
2	S 181.975 Axial†	703.7	629.7	998.03 ug/L	998.03 ppb	13:07:31
2	Sb 206.836†	1270.7	1182.8	507.95 ug/L	507.95 ppb	13:07:31
2	Se 196.026†	636.3	631.6	508.52 ug/L	508.52 ppb	13:07:31
2	Si 251.611†	70999.8	66965.6	2556.1 ug/L	2556.1 ppb	13:07:11
2	Sn 189.927†	2188.2	2070.6	490.41 ug/L	490.41 ppb	13:07:31
2	Ti 334.940†	275888.3	263702.3	499.38 ug/L	499.38 ppb	13:07:11
2	Tl 190.801†	1282.3	1250.6	499.57 ug/L	499.57 ppb	13:07:31
2	U 409.014†	10667.1	12547.2	499.34 ug/L	499.34 ppb	13:07:11
2	V 292.402†	55216.1	54244.3	506.30 ug/L	506.30 ppb	13:07:11
2	Zn 213.857†	44452.5	41572.1	497.08 ug/L	497.08 ppb	13:07:11
2	SiO2†	69110.7	65155.7	5286.3 ug/L	5286.3 ppb	13:08:12
3	Sc Radial	3941.8	3941.8	110 %		13:06:28
3	Y RADIAL	4384.9	4384.9	107.8 %		13:06:08
3	Al 396.153Radial†	4829.5	4506.8	5147.9 ug/L	5147.9 ppb	13:06:08
3	Ca 317.933Radial†	2710.9	2452.2	5012.4 ug/L	5012.4 ppb	13:06:28
3	Fe 238.204 Radial†	399.9	355.9	5046.1 ug/L	5046.1 ppb	13:06:28
3	K 766.490 Radial†	29130.6	23501.5	4939.7 ug/L	4939.7 ppb	13:06:08
3	Mg 279.077 IEC†	131.2	118.8	5243.6 ug/L	5243.6 ppb	13:06:28
3	Na 589.592 Radial†	19897.7	19012.3	9803.2 ug/L	9803.2 ppb	13:06:08
3	Sr 421.552†	51572.3	46937.6	517.45 ug/L	517.45 ppb	13:06:08
3	Sc 361.383	693656.6	693656.6	104.01 %		13:07:36
3	Y 371.029	542969.5	542969.5	102.82 %		13:07:36
3	Ag 328.068†	88849.5	85219.7	495.20 ug/L	495.20 ppb	13:07:42
3	As 188.979†	948.8	937.5	490.94 ug/L	490.94 ppb	13:08:02
3	B 249.677†	18361.2	18067.9	481.76 ug/L	481.76 ppb	13:07:42
3	Ba 233.527†	50565.0	48601.1	492.89 ug/L	492.89 ppb	13:07:42
3	Be 313.107†	1232945.6	1189558.2	499.39 ug/L	499.39 ppb	13:07:36
3	Cd 226.502†	32916.6	31845.9	491.43 ug/L	491.43 ppb	13:07:42
3	Co 228.616†	19836.5	19121.2	496.38 ug/L	496.38 ppb	13:07:42
3	Cr 267.716†	33341.3	31959.8	492.28 ug/L	492.28 ppb	13:07:42
3	Cu 324.752†	149262.9	138150.2	489.83 ug/L	489.83 ppb	13:07:42
3	Mn 257.610†	372451.1	357627.9	492.38 ug/L	492.38 ppb	13:07:42
3	Mo 202.031†	5151.6	4948.1	484.24 ug/L	484.24 ppb	13:08:02
3	Ni 231.604†	15305.9	14630.7	492.71 ug/L	492.71 ppb	13:07:42
3	P 214.914†	3899.2	3547.1	2312.0 ug/L	2312.0 ppb	13:08:02
3	Pb 220.353†	3008.8	2958.5	484.50 ug/L	484.50 ppb	13:08:02
3	S 181.975 Axial†	679.7	614.1	973.35 ug/L	973.35 ppb	13:08:02
3	Sb 206.836†	1230.7	1158.0	497.42 ug/L	497.42 ppb	13:08:02
3	Se 196.026†	624.5	627.0	504.80 ug/L	504.80 ppb	13:08:02
3	Si 251.611†	68846.8	65654.3	2506.0 ug/L	2506.0 ppb	13:07:42
3	Sn 189.927†	2126.2	2034.4	481.84 ug/L	481.84 ppb	13:08:02
3	Ti 334.940†	267565.1	258648.4	489.80 ug/L	489.80 ppb	13:07:42
3	Tl 190.801†	1230.9	1214.9	485.33 ug/L	485.33 ppb	13:08:02
3	U 409.014†	9976.4	11997.1	477.39 ug/L	477.39 ppb	13:07:42
3	V 292.402†	53537.7	53220.7	496.79 ug/L	496.79 ppb	13:07:42
3	Zn 213.857†	43139.8	40785.1	487.66 ug/L	487.66 ppb	13:07:42
3	SiO2†	70000.4	66749.7	5416.0 ug/L	5416.0 ppb	13:08:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	696596.4	104.45 %		0.635			0.61%
Sc Radial	3902.2	109 %		1.0			0.90%
Y 371.029	545449.0	103.29 %		0.614			0.59%
Y RADIAL	4397.7	108.1 %		0.91			0.84%
Ag 328.068†	86190.1	500.83 ug/L		4.915	500.83 ppb	4.915	0.98%
QC value within limits for Ag 328.068 Recovery = 100.17%							
Al 396.153Radial†	4563.6	5212.9 ug/L		89.03	5212.9 ppb	89.03	1.71%
QC value within limits for Al 396.153Radial Recovery = 104.26%							
As 188.979†	953.6	499.36 ug/L		8.940	499.36 ppb	8.940	1.79%
QC value within limits for As 188.979 Recovery = 99.87%							
B 249.677†	18350.0	489.30 ug/L		6.533	489.30 ppb	6.533	1.34%
QC value within limits for B 249.677 Recovery = 97.86%							
Ba 233.527†	48979.7	496.73 ug/L		3.330	496.73 ppb	3.330	0.67%
QC value within limits for Ba 233.527 Recovery = 99.35%							
Be 313.107†	1188281.8	498.87 ug/L		0.797	498.87 ppb	0.797	0.16%
QC value within limits for Be 313.107 Recovery = 99.77%							
Ca 317.933Radial†	2463.8	5036.1 ug/L		24.80	5036.1 ppb	24.80	0.49%

QC value within limits for Ca 317.933 Radial Recovery = 100.72%							
Cd 226.502†	32165.4	496.36 ug/L	4.336	496.36 ppb	4.336	0.87%	
QC value within limits for Cd 226.502 Recovery = 99.27%							
Co 228.616†	19281.8	500.55 ug/L	3.684	500.55 ppb	3.684	0.74%	
QC value within limits for Co 228.616 Recovery = 100.11%							
Cr 267.716†	32245.3	496.68 ug/L	3.853	496.68 ppb	3.853	0.78%	
QC value within limits for Cr 267.716 Recovery = 99.34%							
Cu 324.752†	140299.9	497.45 ug/L	6.703	497.45 ppb	6.703	1.35%	
QC value within limits for Cu 324.752 Recovery = 99.49%							
Fe 238.204 Radial†	358.3	5079.4 ug/L	29.35	5079.4 ppb	29.35	0.58%	
QC value within limits for Fe 238.204 Radial Recovery = 101.59%							
K 766.490 Radial†	23766.6	4995.4 ug/L	67.64	4995.4 ppb	67.64	1.35%	
QC value within limits for K 766.490 Radial Recovery = 99.91%							
Mg 279.077 IEC†	118.6	5234.0 ug/L	130.83	5234.0 ppb	130.83	2.50%	
QC value within limits for Mg 279.077 IEC Recovery = 104.68%							
Mn 257.610†	361002.8	497.03 ug/L	4.099	497.03 ppb	4.099	0.82%	
QC value within limits for Mn 257.610 Recovery = 99.41%							
Mo 202.031†	5000.4	489.35 ug/L	5.601	489.35 ppb	5.601	1.14%	
QC value within limits for Mo 202.031 Recovery = 97.87%							
Na 589.592 Radial†	19343.2	9973.8 ug/L	160.69	9973.8 ppb	160.69	1.61%	
QC value within limits for Na 589.592 Radial Recovery = 99.74%							
Ni 231.604†	14794.0	498.21 ug/L	4.777	498.21 ppb	4.777	0.96%	
QC value within limits for Ni 231.604 Recovery = 99.64%							
P 214.914†	3604.7	2349.6 ug/L	37.25	2349.6 ppb	37.25	1.59%	
QC value within limits for P 214.914 Recovery = 93.98%							
Pb 220.353†	2991.7	489.94 ug/L	5.678	489.94 ppb	5.678	1.16%	
QC value within limits for Pb 220.353 Recovery = 97.99%							
S 181.975 Axial†	625.2	990.88 ug/L	15.268	990.88 ppb	15.268	1.54%	
QC value within limits for S 181.975 Axial Recovery = 99.09%							
Sb 206.836†	1178.3	506.07 ug/L	7.877	506.07 ppb	7.877	1.56%	
QC value within limits for Sb 206.836 Recovery = 101.21%							
Se 196.026†	634.2	510.55 ug/L	7.001	510.55 ppb	7.001	1.37%	
QC value within limits for Se 196.026 Recovery = 102.11%							
Si 251.611†	66438.3	2535.9 ug/L	26.44	2535.9 ppb	26.44	1.04%	
QC value within limits for Si 251.611 Recovery = 101.44%							
Sn 189.927†	2064.9	489.07 ug/L	6.662	489.07 ppb	6.662	1.36%	
QC value within limits for Sn 189.927 Recovery = 97.81%							
Sr 421.552†	47567.8	524.40 ug/L	7.753	524.40 ppb	7.753	1.48%	
QC value within limits for Sr 421.552 Recovery = 104.88%							
Ti 334.940†	261744.8	495.67 ug/L	5.137	495.67 ppb	5.137	1.04%	
QC value within limits for Ti 334.940 Recovery = 99.13%							
Tl 190.801†	1245.7	497.59 ug/L	11.390	497.59 ppb	11.390	2.29%	
QC value within limits for Tl 190.801 Recovery = 99.52%							
U 409.014†	12301.5	489.53 ug/L	11.159	489.53 ppb	11.159	2.28%	
QC value within limits for U 409.014 Recovery = 97.91%							
V 292.402†	53903.9	503.17 ug/L	5.523	503.17 ppb	5.523	1.10%	
QC value within limits for V 292.402 Recovery = 100.63%							
Zn 213.857†	41301.1	493.84 ug/L	5.352	493.84 ppb	5.352	1.08%	
QC value within limits for Zn 213.857 Recovery = 98.77%							
SiO2†	65646.2	5326.1 ug/L	78.02	5326.1 ppb	78.02	1.46%	
QC value within limits for SiO2 Recovery = 99.60%							
All analyte(s) passed QC.							

Sequence No.: 32

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/31/2010 13:10:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3844.2	3844.2	107 %		13:12:40
1	Y RADIAL	4259.4	4259.4	104.7 %		13:12:20
1	Al 396.153Radial†	-108.6	8.6	9.7812 ug/L	9.7812 ppb	13:12:20
1	Ca 317.933Radial†	19.8	2.7	5.5844 ug/L	5.5844 ppb	13:12:40
1	Fe 238.204 Radial†	7.0	-1.6	-22.657 ug/L	-22.657 ppb	13:12:40
1	K 766.490 Radial†	3179.9	-50.5	-10.622 ug/L	-10.622 ppb	13:12:20
1	Mg 279.077 IEC†	0.3	-0.3	-14.762 ug/L	-14.762 ppb	13:12:40
1	Na 589.592 Radial†	-1008.5	-44.0	-22.675 ug/L	-22.675 ppb	13:12:20
1	Sr 421.552†	36.5	20.3	0.2234 ug/L	0.2234 ppb	13:12:20
1	Sc 361.383	660916.8	660916.8	99.103 %		13:13:37
1	Y 371.029	523253.2	523253.2	99.085 %		13:13:37
1	Ag 328.068†	150.4	-50.3	-0.2905 ug/L	-0.2905 ppb	13:13:37
1	As 188.979†	-25.5	-0.4	-0.2429 ug/L	-0.2429 ppb	13:13:57
1	B 249.677†	-499.8	-89.2	-2.3867 ug/L	-2.3867 ppb	13:13:57
1	Ba 233.527†	2.4	-10.8	-0.1090 ug/L	-0.1090 ppb	13:13:57
1	Be 313.107†	-4100.9	40.3	0.0162 ug/L	0.0162 ppb	13:13:37
1	Cd 226.502†	-189.1	8.5	0.1321 ug/L	0.1321 ppb	13:13:57
1	Co 228.616†	-47.1	2.4	0.0678 ug/L	0.0678 ppb	13:13:57
1	Cr 267.716†	105.4	11.1	0.1712 ug/L	0.1712 ppb	13:13:57
1	Cu 324.752†	5538.4	234.2	0.8329 ug/L	0.8329 ppb	13:13:37
1	Mn 257.610†	474.8	24.7	0.0323 ug/L	0.0323 ppb	13:13:57
1	Mo 202.031†	27.2	22.7	2.2151 ug/L	2.2151 ppb	13:13:57
1	Ni 231.604†	90.7	6.8	0.2302 ug/L	0.2302 ppb	13:13:57
1	P 214.914†	195.7	-4.2	-2.9920 ug/L	-2.9920 ppb	13:13:57
1	Pb 220.353†	-89.3	-24.3	-3.9595 ug/L	-3.9595 ppb	13:13:57
1	S 181.975 Axial†	34.1	-4.9	-7.8001 ug/L	-7.8001 ppb	13:13:57
1	Sb 206.836†	38.9	14.0	5.8161 ug/L	5.8161 ppb	13:13:57
1	Se 196.026†	-28.4	-2.1	-1.6960 ug/L	-1.6960 ppb	13:13:57
1	Si 251.611†	598.2	67.2	2.5434 ug/L	2.5434 ppb	13:13:57
1	Sn 189.927†	1.7	-8.1	-1.9111 ug/L	-1.9111 ppb	13:13:57
1	Ti 334.940†	-1537.2	-145.5	-0.2708 ug/L	-0.2708 ppb	13:13:37
1	Tl 190.801†	-39.8	-8.7	-3.4633 ug/L	-3.4633 ppb	13:13:57
1	U 409.014†	-2544.3	-161.7	-6.4561 ug/L	-6.4561 ppb	13:13:37
1	V 292.402†	-1685.6	47.6	0.4604 ug/L	0.4604 ppb	13:13:37
1	Zn 213.857†	745.3	61.7	0.7453 ug/L	0.7453 ppb	13:13:57
1	SiO2†	583.3	38.4	3.0604 ug/L	3.0604 ppb	13:14:53
2	Sc Radial	3891.3	3891.3	108 %		13:13:05
2	Y RADIAL	4422.6	4422.6	108.8 %		13:12:45
2	Al 396.153Radial†	-116.6	2.5	2.8047 ug/L	2.8047 ppb	13:12:45
2	Ca 317.933Radial†	18.1	1.0	1.9615 ug/L	1.9615 ppb	13:13:05
2	Fe 238.204 Radial†	5.8	-2.8	-39.596 ug/L	-39.596 ppb	13:13:05
2	K 766.490 Radial†	3148.5	-115.3	-24.271 ug/L	-24.271 ppb	13:12:45
2	Mg 279.077 IEC†	2.0	1.2	55.018 ug/L	55.018 ppb	13:13:05
2	Na 589.592 Radial†	-979.0	-5.4	-2.7713 ug/L	-2.7713 ppb	13:12:45
2	Sr 421.552†	6.0	-8.2	-0.0904 ug/L	-0.0904 ppb	13:12:45
2	Sc 361.383	669151.4	669151.4	100.34 %		13:14:03
2	Y 371.029	529645.7	529645.7	100.30 %		13:14:03
2	Ag 328.068†	170.9	-31.7	-0.1909 ug/L	-0.1909 ppb	13:14:03
2	As 188.979†	-33.5	-8.1	-4.2392 ug/L	-4.2392 ppb	13:14:23
2	B 249.677†	-511.1	-94.3	-2.5185 ug/L	-2.5185 ppb	13:14:23
2	Ba 233.527†	6.1	-7.1	-0.0726 ug/L	-0.0726 ppb	13:14:23
2	Be 313.107†	-4146.9	45.3	0.0188 ug/L	0.0188 ppb	13:14:03
2	Cd 226.502†	-203.4	-3.5	-0.0503 ug/L	-0.0503 ppb	13:14:23
2	Co 228.616†	-49.5	0.6	0.0182 ug/L	0.0182 ppb	13:14:23
2	Cr 267.716†	91.9	-3.6	-0.0579 ug/L	-0.0579 ppb	13:14:23
2	Cu 324.752†	5416.7	44.2	0.1566 ug/L	0.1566 ppb	13:14:03
2	Mn 257.610†	488.1	32.1	0.0380 ug/L	0.0380 ppb	13:14:23
2	Mo 202.031†	18.0	13.2	1.2904 ug/L	1.2904 ppb	13:14:23
2	Ni 231.604†	95.3	10.2	0.3448 ug/L	0.3448 ppb	13:14:23

2	P 214.914†	182.6	-19.7	-13.389 ug/L	-13.389 ppb	13:14:23
2	Pb 220.353†	-73.4	-7.3	-1.1892 ug/L	-1.1892 ppb	13:14:23
2	S 181.975 Axial†	30.3	-9.2	-14.525 ug/L	-14.525 ppb	13:14:23
2	Sb 206.836†	38.1	12.8	5.3258 ug/L	5.3258 ppb	13:14:23
2	Se 196.026†	-14.1	12.5	9.6609 ug/L	9.6609 ppb	13:14:23
2	Si 251.611†	600.4	62.0	2.3548 ug/L	2.3548 ppb	13:14:23
2	Sn 189.927†	11.3	1.5	0.3582 ug/L	0.3582 ppb	13:14:23
2	Ti 334.940†	-1461.6	-51.0	-0.0992 ug/L	-0.0992 ppb	13:14:03
2	Tl 190.801†	-35.4	-3.8	-1.5012 ug/L	-1.5012 ppb	13:14:23
2	U 409.014†	-2499.1	-85.1	-3.3954 ug/L	-3.3954 ppb	13:14:03
2	V 292.402†	-1711.3	42.8	0.4135 ug/L	0.4135 ppb	13:14:03
2	Zn 213.857†	739.7	46.8	0.5687 ug/L	0.5687 ppb	13:14:23
2	SiO2†	616.2	63.9	5.1635 ug/L	5.1635 ppb	13:14:58
3	Sc Radial	3859.0	3859.0	108 %		13:13:31
3	Y RADIAL	4404.1	4404.1	108.3 %		13:13:11
3	Al 396.153Radial†	-99.3	17.7	20.240 ug/L	20.240 ppb	13:13:11
3	Ca 317.933Radial†	22.7	5.4	11.093 ug/L	11.093 ppb	13:13:31
3	Fe 238.204 Radial†	8.9	0.1	1.3981 ug/L	1.3981 ppb	13:13:31
3	K 766.490 Radial†	2943.6	-281.6	-59.273 ug/L	-59.273 ppb	13:13:11
3	Mg 279.077 IEC†	2.1	1.4	59.831 ug/L	59.831 ppb	13:13:31
3	Na 589.592 Radial†	-960.0	4.7	2.4245 ug/L	2.4245 ppb	13:13:11
3	Sr 421.552†	22.8	7.5	0.0821 ug/L	0.0821 ppb	13:13:11
3	Sc 361.383	671859.5	671859.5	100.74 %		13:14:28
3	Y 371.029	531547.5	531547.5	100.66 %		13:14:28
3	Ag 328.068†	130.5	-72.5	-0.4184 ug/L	-0.4184 ppb	13:14:28
3	As 188.979†	-30.0	-4.5	-2.3413 ug/L	-2.3413 ppb	13:14:48
3	B 249.677†	-475.5	-56.9	-1.5235 ug/L	-1.5235 ppb	13:14:48
3	Ba 233.527†	13.5	0.2	0.0024 ug/L	0.0024 ppb	13:14:48
3	Be 313.107†	-4201.1	8.2	0.0036 ug/L	0.0036 ppb	13:14:28
3	Cd 226.502†	-191.2	9.4	0.1458 ug/L	0.1458 ppb	13:14:48
3	Co 228.616†	-44.8	5.4	0.1424 ug/L	0.1424 ppb	13:14:48
3	Cr 267.716†	85.5	-10.3	-0.1587 ug/L	-0.1587 ppb	13:14:48
3	Cu 324.752†	5485.3	90.6	0.3202 ug/L	0.3202 ppb	13:14:28
3	Mn 257.610†	494.9	36.9	0.0484 ug/L	0.0484 ppb	13:14:48
3	Mo 202.031†	12.8	8.0	0.7805 ug/L	0.7805 ppb	13:14:48
3	Ni 231.604†	88.2	2.8	0.0944 ug/L	0.0944 ppb	13:14:48
3	P 214.914†	195.1	-8.0	-5.5045 ug/L	-5.5045 ppb	13:14:48
3	Pb 220.353†	-64.1	2.1	0.3575 ug/L	0.3575 ppb	13:14:48
3	S 181.975 Axial†	45.0	5.3	8.3746 ug/L	8.3746 ppb	13:14:48
3	Sb 206.836†	28.6	3.2	1.3611 ug/L	1.3611 ppb	13:14:48
3	Se 196.026†	-26.1	0.7	0.5457 ug/L	0.5457 ppb	13:14:48
3	Si 251.611†	591.8	51.0	1.9423 ug/L	1.9423 ppb	13:14:48
3	Sn 189.927†	15.7	5.9	1.3886 ug/L	1.3886 ppb	13:14:48
3	Ti 334.940†	-1370.5	45.3	0.0818 ug/L	0.0818 ppb	13:14:28
3	Tl 190.801†	-24.1	7.5	2.9823 ug/L	2.9823 ppb	13:14:48
3	U 409.014†	-2381.1	42.1	1.6794 ug/L	1.6794 ppb	13:14:28
3	V 292.402†	-1722.3	38.8	0.3729 ug/L	0.3729 ppb	13:14:28
3	Zn 213.857†	727.9	32.1	0.3866 ug/L	0.3866 ppb	13:14:48
3	SiO2†	603.1	48.4	3.9151 ug/L	3.9151 ppb	13:15:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	667309.2	100.06 %		0.855			0.85%
Sc Radial	3864.8	108 %		0.7			0.62%
Y 371.029	528148.8	100.01 %		0.823			0.82%
Y RADIAL	4362.0	107.3 %		2.20			2.05%
Ag 328.068†	-51.5	-0.2999 ug/L		0.11403	-0.2999 ppb	0.11403	38.02%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	9.6	10.942 ug/L		8.7752	10.942 ppb	8.7752	80.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.4	-2.2745 ug/L		1.99897	-2.2745 ppb	1.99897	87.89%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-80.1	-2.1429 ug/L		0.54045	-2.1429 ppb	0.54045	25.22%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-5.9	-0.0597 ug/L		0.05680	-0.0597 ppb	0.05680	95.08%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	31.3	0.0129 ug/L		0.00811	0.0129 ppb	0.00811	62.92%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.0	6.2128 ug/L		4.59783	6.2128 ppb	4.59783	74.01%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	4.8	0.0759 ug/L	0.10946	0.0759 ppb	0.10946 144.29%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	2.8	0.0761 ug/L	0.06250	0.0761 ppb	0.06250 82.10%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-1.0	-0.0151 ug/L	0.16905	-0.0151 ppb	0.16905 >999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	123.0	0.4366 ug/L	0.35281	0.4366 ppb	0.35281 80.81%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	-1.4	-20.285 ug/L	20.5997	-20.285 ppb	20.5997 101.55%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	-149.1	-31.389 ug/L	25.0947	-31.389 ppb	25.0947 79.95%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	0.8	33.363 ug/L	41.7462	33.363 ppb	41.7462 125.13%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	31.2	0.0396 ug/L	0.00816	0.0396 ppb	0.00816 20.62%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	14.6	1.4287 ug/L	0.72722	1.4287 ppb	0.72722 50.90%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	-14.9	-7.6739 ug/L	13.24853	-7.6739 ppb	13.24853 172.64%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	6.6	0.2231 ug/L	0.12535	0.2231 ppb	0.12535 56.18%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-10.6	-7.2953 ug/L	5.42510	-7.2953 ppb	5.42510 74.36%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-9.8	-1.5971 ug/L	2.18722	-1.5971 ppb	2.18722 136.95%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-2.9	-4.6501 ug/L	11.77025	-4.6501 ppb	11.77025 253.12%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	10.0	4.1677 ug/L	2.44292	4.1677 ppb	2.44292 58.62%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	3.7	2.8369 ug/L	6.01513	2.8369 ppb	6.01513 212.03%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	60.1	2.2801 ug/L	0.30744	2.2801 ppb	0.30744 13.48%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-0.2	-0.0548 ug/L	1.68820	-0.0548 ppb	1.68820 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	6.5	0.0717 ug/L	0.15718	0.0717 ppb	0.15718 219.21%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	-50.4	-0.0961 ug/L	0.17631	-0.0961 ppb	0.17631 183.49%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-1.7	-0.6607 ug/L	3.30400	-0.6607 ppb	3.30400 500.04%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	-68.3	-2.7240 ug/L	4.10909	-2.7240 ppb	4.10909 150.85%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	43.1	0.4156 ug/L	0.04382	0.4156 ppb	0.04382 10.54%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	46.9	0.5669 ug/L	0.17934	0.5669 ppb	0.17934 31.64%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		50.2	4.0463 ug/L	1.05767	4.0463 ppb	1.05767 26.14%
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: Saturday, April 17, 2010 11:57:28

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.8278

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	848.8	848.825	23.953	2.8
Mg	24.0	4274.0	4274.040	129.456	3.0
Co	58.9	13922.0	13921.982	259.279	1.9
Rh	102.9	51509.5	51509.502	469.277	0.9
In	114.9	68578.2	68578.220	609.802	0.9
Pb	208.0	56939.5	56939.456	539.352	0.9
[> Ba	137.9	65602.0	65601.957	1035.514	1.6
[Ba++	69.0	876.4	0.013	0.000	2.2
[> Ce	139.9	83975.3	83975.305	689.134	0.8
[CeO	155.9	1980.5	0.024	0.001	2.9
Bkgd	220.0	1.1	1.100	0.548	49.8

Current Optimization File Data

Current Value	Description
1.09	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1975.00	Analog Stage Voltage
1400.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset
0.00	Exit Lens
0.90	Makeup Gas Flow [MGAS]
0.90	DRC Mode MGAS

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.5	777.7
Co	59	13	5.8	28478.4
In	115	13	6.3	135586.7

Sample ID: Sample

Report Date/Time: Saturday, April 17, 2010 11:58:47

Page 1

ICPMS#3 Instrument Tuning Report

File Name: 100417.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	0.617
Be	9.0	9.0	2056	2040	0.634
Mg	24.0	24.0	5716	2110	0.560
Mg	25.0	25.0	5903	2020	0.635
Mg	26.0	26.0	6221	2140	0.619
Co	58.9	58.9	14202	2115	0.595
Rh	102.9	102.9	24904	2165	0.636
In	114.9	114.9	27829	2180	0.620
Ce	139.9	140.0	33929	2220	0.600
Pb	206.0	206.0	49991	2280	0.602
Pb	207.0	207.0	50284	2310	0.616
Pb	208.0	208.0	50474	2300	0.605
U	238.1	238.1	57851	2340	0.626

Report Date/Time: Saturday, April 17, 2010 11:56:05

Page 1

ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, April 17, 2010 19:24:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\Blank.056

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L			1
Sc	45		ug/L		271401	

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Saturday, April 17, 2010 19:24:20

Page 1

ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, April 17, 2010 19:25:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\Standard 1.057

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	14.294	820	0.003
Sc	45		ug/L		265171	265170.904

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Saturday, April 17, 2010 19:25:58

Page 1

ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, April 17, 2010 19:27:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\Standard 2.058

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.978	ug/L	9.511	7754	0.030
Sc	45		ug/L		256756	256756.066

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, April 17, 2010 19:29:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 1.059

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.148	ug/L	9.254	4068	0.015
Sc	45		ug/L		263185	263185.001

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		102.296								
Sc	45				97.0						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, April 17, 2010 19:30:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 2.060

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.041	ug/L	60.624	5	0.000
Sc	45		ug/L		272311	272310.843

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		100.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, April 17, 2010 19:32:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 3.061

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.644	ug/L	13.485	52	0.000
45		ug/L		262854	262853.864	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9	128.701				
45		96.9				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Saturday, April 17, 2010 19:32:41

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, April 17, 2010 19:34:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 4.062

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.089	ug/L	74.490	6	0.000
45		ug/L		185607	185607.260	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
45		68.4				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Sc 45 Int Std for QC Sc		45

QC Action

QC Action Line: Continue

Sample ID: QC Std 4

Report Date/Time: Saturday, April 17, 2010 19:34:22

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, April 17, 2010 19:35:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 5.063

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.083	ug/L	15.636	1613	0.006
Sc	45		ug/L		265249	265249.324

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	100.414				
Sc	45		97.7			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 19:37:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 6.064

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.701	ug/L	8.676	4279	0.016
Sc	45		ug/L		268849	268848.975

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	105.403				
Sc	45		99.1			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 19:39:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 7.065

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.027	ug/L	62.597	4	0.000
Sc	45		ug/L		275427	275427.417

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				101.5						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060830

Sample Date/Time: Saturday, April 17, 2010 19:42:06

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060830.066

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.034 ug/L	46.326	4	0.000
Sc	45	ug/L		268576	268576.245

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9				
Sc	45	99.0			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202060830

Report Date/Time: Saturday, April 17, 2010 19:42:17

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202060831

Sample Date/Time: Saturday, April 17, 2010 19:43:47

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 960816|40|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060831.067

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	21.089	ug/L	11.000	1727	0.006
Sc	45		ug/L		270809	270809.244

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup.	Rel. % Diff
Be	9										
Sc	45				99.8						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202060831

Report Date/Time: Saturday, April 17, 2010 19:43:58

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371001

Sample Date/Time: Saturday, April 17, 2010 19:45:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371001.068

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.426	ug/L	18.573	111	0.000
Sc	45		ug/L		253950	253949.682

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		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

Sample ID: 248371001

Report Date/Time: Saturday, April 17, 2010 19:45:40

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202060832

Sample Date/Time: Saturday, April 17, 2010 19:47:10

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060832.069

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.454	ug/L	10.033	113	0.000
Sc	45		ug/L		254584	254584.073

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		93.8			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202060832

Report Date/Time: Saturday, April 17, 2010 19:47:22

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202060833

Sample Date/Time: Saturday, April 17, 2010 19:48:53

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060833.070

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	22.427	ug/L	9.393	1710	0.007
Sc 45		ug/L		252398	252398.091

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be 9					
Sc 45		93.0			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202060835

Sample Date/Time: Saturday, April 17, 2010 19:50:36

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060835.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	21.441	ug/L	11.642	1661	0.006
[> Sc	45		ug/L		256253	256253.313

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
[> Sc	45		94.4			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202060835

Report Date/Time: Saturday, April 17, 2010 19:50:49

Page 1

ICPMS#3 - Summary Report

Sample ID: 1202060834

Sample Date/Time: Saturday, April 17, 2010 19:52:20

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 960816|10|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\1202060834.072

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.309	ug/L	13.133	27	0.000
Sc 45		ug/L		272525	272524.843

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be 9					
Sc 45		100.4			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202060834

Report Date/Time: Saturday, April 17, 2010 19:52:33

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371002

Sample Date/Time: Saturday, April 17, 2010 19:54:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371002.073

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.778 ug/L	22.549	223	0.001
Sc	45	ug/L		263027	263027.201	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
Sc	45	96.9				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371002

Report Date/Time: Saturday, April 17, 2010 19:54:14

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371003

Sample Date/Time: Saturday, April 17, 2010 19:55:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371003.074

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. intens. Mean	Net Intens. Mean
[	Be	9	2.462 ug/L	12.174	192	0.001
>	Sc	45	ug/L		256894	256894.276

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
>	Sc	45		94.7		

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371003

Report Date/Time: Saturday, April 17, 2010 19:55:55

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 19:57:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 6.075

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.846 ug/L	11.349	4033	0.015
Sc	45	ug/L		267835	267835.149	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[	Be	9	99.693								
Sc	45			98.7							

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 19:59:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 7.076

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.038 ug/L	39.333	5	0.000
Sc	45	ug/L		281079	281078.687

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9				
Sc	45	103.6			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 19:59:22

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371004

Sample Date/Time: Saturday, April 17, 2010 20:00:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371004.077

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	2.286	ug/L	22.910	180	0.001
Sc 45		ug/L		257314	257314.375

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be 9					
Sc 45		94.8			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248371005

Sample Date/Time: Saturday, April 17, 2010 20:02:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371005.078

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.246	ug/L	11.020	179	0.001
Sc	45		ug/L		261864	261863.791

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		96.5			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371005

Report Date/Time: Saturday, April 17, 2010 20:02:47

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371006

Sample Date/Time: Saturday, April 17, 2010 20:04:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371006.079

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.781	ug/L	15.819	217	0.001
Sc	45		ug/L		256691	256691.004

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		94.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371006

Report Date/Time: Saturday, April 17, 2010 20:04:30

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371007

Sample Date/Time: Saturday, April 17, 2010 20:06:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371007.080

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.249	ug/L	16.764	182	0.001
45		ug/L		266302	266301.537	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
45		98.1				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248371008

Sample Date/Time: Saturday, April 17, 2010 20:07:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371008.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.009	ug/L	12.412	162	0.001
Sc	45		ug/L		265187	265186.759

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		97.7			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371008

Report Date/Time: Saturday, April 17, 2010 20:07:59

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371009

Sample Date/Time: Saturday, April 17, 2010 20:09:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816[2]prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371009.082

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.298 ug/L	15.102	180	0.001
Sc	45	ug/L		257575	257574.774	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
Sc	45	94.9				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371009

Report Date/Time: Saturday, April 17, 2010 20:09:40

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371010

Sample Date/Time: Saturday, April 17, 2010 20:11:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371010.083

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.187	ug/L	9.970	175	0.001
Sc	45		ug/L		263978	263978.227

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				97.3						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248371011

Sample Date/Time: Saturday, April 17, 2010 20:12:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371011.084

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.041 ug/L	6.192	163	0.001
Sc	45	ug/L		263328	263328.406

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9				
Sc	45		97.0		

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371011

Report Date/Time: Saturday, April 17, 2010 20:13:05

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371012

Sample Date/Time: Saturday, April 17, 2010 20:14:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371012.085

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.028	ug/L	13.406	164	0.001
Sc	45		ug/L		265596	265595.714

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Be	9										
Sc	45				97.9						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371012

Report Date/Time: Saturday, April 17, 2010 20:14:49

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 20:16:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 6.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	48.914	ug/L	11.554	4016	0.015
45		ug/L		271834	271833.525	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9	97.827				
45		100.2				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 20:16:31

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 20:18:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 7.087

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.039	ug/L	63.422	5	0.000
Sc	45		ug/L		282292	282292.317

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		104.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 20:18:15

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371013

Sample Date/Time: Saturday, April 17, 2010 20:19:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371013.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.547	ug/L	17.841	125	0.000
Sc	45		ug/L		264172	264171.779

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		97.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371013

Report Date/Time: Saturday, April 17, 2010 20:19:59

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371014

Sample Date/Time: Saturday, April 17, 2010 20:21:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371014.089

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.944	ug/L	15.469	153	0.001
Sc	45		ug/L		257227	257227.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
Sc	45		94.8			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 248371015

Sample Date/Time: Saturday, April 17, 2010 20:23:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816[2]prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371015.090

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.637	ug/L	11.056	132	0.000
Sc	45		ug/L		264386	264386.416

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		97.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371015

Report Date/Time: Saturday, April 17, 2010 20:23:28

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371016

Sample Date/Time: Saturday, April 17, 2010 20:24:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371016.091

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.331 ug/L	12.986	189	0.001
Sc	45	ug/L		266948	266947.525	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
Sc	45	98.4				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371016

Report Date/Time: Saturday, April 17, 2010 20:25:11

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371017

Sample Date/Time: Saturday, April 17, 2010 20:26:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816[2]prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371017.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.187	ug/L	11.037	175	0.001
45		ug/L		262853	262852.792	

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					
45		96.9				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371017

Report Date/Time: Saturday, April 17, 2010 20:26:54

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371018

Sample Date/Time: Saturday, April 17, 2010 20:28:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371018.093

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.534 ug/L	11.970	124	0.000
Sc	45	ug/L		264894	264893.845

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9				
Sc	45	97.6			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371018

Report Date/Time: Saturday, April 17, 2010 20:28:37

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371019

Sample Date/Time: Saturday, April 17, 2010 20:30:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371019.094

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.990	ug/L	18.252	233	0.001
Sc	45		ug/L		255590	255589.588

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Be	9										
Sc	45				94.2						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371019

Report Date/Time: Saturday, April 17, 2010 20:30:22

Page 1

ICPMS#3 - Summary Report

Sample ID: 248371020

Sample Date/Time: Saturday, April 17, 2010 20:31:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|prb

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\248371020.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.417	ug/L	6.990	194	0.001
45		ug/L		264046	264046.186	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9					
45		97.3				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248371020

Report Date/Time: Saturday, April 17, 2010 20:32:06

Page 1

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 20:33:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 6.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.295	ug/L	8.954	4085	0.015
45		ug/L		268958	268958.456	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[Be	9	100.590				
45		99.1				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 20:35:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100417\QC Std 7.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.007	ug/L	153.681	2	0.000
Sc	45		ug/L		281102	281102.185

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
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QC Action

QC Action Line: No QC out of limits detected

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, April 17, 2010 13:13:50

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100125\Sample.725

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Be	9.0	1004.6	1004.635	21.653	2.2
Mg	24.0	14169.0	14169.034	614.547	4.3
Co	58.9	31069.4	31069.350	209.958	0.7
Rh	102.9	61997.0	61997.044	544.326	0.9
In	114.9	73944.7	73944.696	773.410	1.0
Pb	208.0	25254.5	25254.506	356.736	1.4
[> Ba	137.9	70952.2	70952.200	833.292	1.2
[Ba++	69.0	1017.5	0.014	0.000	3.1
[> Ce	139.9	83012.3	83012.342	1390.987	1.7
[CeO	155.9	1267.7	0.015	0.000	1.4
Bkgd	220.0	9.3	9.300	1.924	20.7

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
4.25	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	4.8	965.4
Co	59	13	5.3	28399.9
In	115	13	5.8	65405.0

ICPMS #4 TUNING REPORT

File Name: 100417.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	607	2080	0.587
Be	9.0	9.0	2049	2080	0.597
Mg	24.0	24.0	5673	2100	0.536
Mg	25.0	24.9	5949	2100	0.621
Mg	26.0	26.0	6126	2120	0.556
Co	58.9	58.8	14165	2150	0.607
Rh	102.9	102.9	24870	2240	0.589
In	114.9	114.9	27794	2275	0.596
Ce	139.9	139.9	33856	2310	0.618
Pb	206.0	206.0	49922	2485	0.644
Pb	207.0	207.0	50125	2400	0.645
Pb	208.0	208.0	50448	2510	0.710
U	238.1	238.1	57707	2520	0.641

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, April 17, 2010 13:37:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\Blank.918

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	ug/L		6	
|>	Sc	45	ug/L		536090	
[	Ni	60	ug/L		43	
|>	Ge	74	ug/L		185309	
|	As	75	ug/L		198	
|	Se	77	ug/L		4189	
|	Se	82	ug/L		10	
[	Kr	83	ug/L		49	
|>	Lu	175	ug/L		93421	
|	Tl	205	ug/L		139	
[	U	238	ug/L		88	

Sample ID: Blank

Report Date/Time: Saturday, April 17, 2010 13:38:00

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Simple Linear	
Sc	45Simple Linear	
Ni	60Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	
U	238Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45					
L	Ni	60					
[>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
L	Kr	83					
[>	Lu	175					
|	Tl	205					
L	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, April 17, 2010 13:41:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\Standard 1.919

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	10.000	ug/L	5.023	980	0.002
|>	Sc 45		ug/L		547614	547613.509
[	Ni 60	10.000	ug/L	3.999	6755	0.012
[>	Ge 74		ug/L		198049	198048.721
|	As 75	10.000	ug/L	6.184	4688	0.023
|	Se 77		ug/L		3057	-0.007
|	Se 82	10.000	ug/L	3.140	422	0.002
[	Kr 83		ug/L		50	-0.000
[>	Lu 175		ug/L		96939	96938.778
|	Tl 205	10.000	ug/L	1.691	13195	0.135
[	U 238	10.000	ug/L	3.093	52354	0.539

Sample ID: Standard 1

Report Date/Time: Saturday, April 17, 2010 13:42:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 1

Report Date/Time: Saturday, April 17, 2010 13:42:04

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45				
[	Ni	60				
[>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175				
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, April 17, 2010 13:45:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\Standard 2.920

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	99.982	ug/L	9.022	9865	0.018
|>	Sc 45		ug/L		565099	565099.015
[	Ni 60	99.923	ug/L	6.534	64218	0.114
|>	Ge 74		ug/L		197440	197440.229
|	As 75	100.070	ug/L	2.530	48204	0.243
|	Se 77		ug/L		6048	0.008
|	Se 82	100.094	ug/L	1.047	4541	0.023
[	Kr 83		ug/L		50	-0.000
|>	Lu 175		ug/L		98239	98238.605
|	Tl 205	99.990	ug/L	1.155	131100	1.333
[U 238	99.968	ug/L	0.674	513261	5.224

Sample ID: Standard 2

Report Date/Time: Saturday, April 17, 2010 13:46:09

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 2

Report Date/Time: Saturday, April 17, 2010 13:46:09

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45				
[	Ni	60				
[>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175				
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, April 17, 2010 13:49:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 1.921

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	51.804	ug/L	5.755	5064	0.009
|>	Sc 45		ug/L		558596	558595.758
[	Ni 60	52.956	ug/L	5.269	33693	0.060
|>	Ge 74		ug/L		197536	197536.265
|	As 75	51.841	ug/L	4.073	25081	0.126
|	Se 77		ug/L		5267	0.004
|	Se 82	52.515	ug/L	3.786	2387	0.012
[	Kr 83		ug/L		48	-0.000
|>	Lu 175		ug/L		96886	96885.758
|	Tl 205	49.719	ug/L	1.329	64356	0.663
[U 238	53.253	ug/L	1.774	269662	2.783

Sample ID: QC Std 1

Report Date/Time: Saturday, April 17, 2010 13:50:14

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	103.608				
|>	Sc	45		104.2			
[	Ni	60	105.912				
[>	Ge	74		106.6			
|	As	75	103.682				
|	Se	77					
|	Se	82	105.031				
[	Kr	83					
[>	Lu	175		103.7			
|	Tl	205	99.438				
[	U	238	106.507				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, April 17, 2010 13:53:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 2.922

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.008	ug/L	448.302	5	-0.000
|>	Sc 45		ug/L		540370	540369.809
[	Ni 60	0.029	ug/L	7.699	61	0.000
|>	Ge 74		ug/L		189335	189335.490
|	As 75	-0.661	ug/L	53.668	-102	-0.002
|	Se 77		ug/L		4445	0.001
|	Se 82	0.104	ug/L	103.796	15	0.000
[	Kr 83		ug/L		47	-0.000
|>	Lu 175		ug/L		93563	93563.326
|	Tl 205	0.058	ug/L	3.307	212	0.001
[	U 238	0.010	ug/L	15.101	138	0.001

Sample ID: QC Std 2

Report Date/Time: Saturday, April 17, 2010 13:54:24

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45		100.8			
[	Ni	60					
[>	Ge	74		102.2			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		100.2			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, April 17, 2010 13:57:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 3.923

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.499	ug/L	33.392	58	0.000
|>	Sc 45		ug/L		586596	586595.647
[	Ni 60	2.310	ug/L	3.704	1590	0.003
[>	Ge 74		ug/L		197527	197526.954
|	As 75	5.707	ug/L	5.658	2951	0.014
|	Se 77		ug/L		3111	-0.007
|	Se 82	5.439	ug/L	3.673	257	0.001
[	Kr 83		ug/L		54	0.000
[>	Lu 175		ug/L		96603	96602.551
|	Tl 205	1.099	ug/L	2.962	1559	0.015
[	U 238	0.274	ug/L	0.535	1472	0.014

Sample ID: QC Std 3

Report Date/Time: Saturday, April 17, 2010 13:58:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	99.749				
|>	Sc	45		109.4			
[	Ni	60	115.481				
[>	Ge	74		106.6			
|	As	75	114.142				
|	Se	77					
|	Se	82	108.788				
[	Kr	83					
[>	Lu	175		103.4			
|	Ti	205	109.918				
[	U	238	136.774				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, April 17, 2010 14:01:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 4.924

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.073	ug/L	31.942	15	0.000
|>	Sc 45		ug/L		611488	611487.726
[	Ni 60	2.601	ug/L	2.504	1860	0.003
[>	Ge 74		ug/L		196152	196152.177
|	As 75	-0.642	ug/L	95.452	-95	-0.002
|	Se 77		ug/L		3109	-0.007
|	Se 82	-0.190	ug/L	94.342	2	-0.000
[	Kr 83		ug/L		85	0.000
[>	Lu 175		ug/L		98779	98778.983
|	Tl 205	-0.006	ug/L	263.859	139	-0.000
[	U 238	0.001	ug/L	465.622	98	0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, April 17, 2010 14:02:37

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			114.1		
[	Ni	60	78.572				
[>	Ge	74			105.9		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			105.7		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, April 17, 2010 14:06:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 5.925

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	18.882	ug/L	2.815	1869	0.003
|>	Sc 45		ug/L		563345	563345.314
[	Ni 60	21.473	ug/L	2.755	13826	0.024
[>	Ge 74		ug/L		191833	191833.466
|	As 75	21.228	ug/L	2.124	10098	0.052
|	Se 77		ug/L		3782	-0.003
|	Se 82	23.394	ug/L	2.842	1039	0.005
[	Kr 83		ug/L		97	0.000
[>	Lu 175		ug/L		96789	96789.080
|	Tl 205	18.417	ug/L	2.811	23910	0.246
[	U 238	20.064	ug/L	0.633	101569	1.048

Sample ID: QC Std 5

Report Date/Time: Saturday, April 17, 2010 14:06:44

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	94.411				
|>	Sc	45		105.1			
[	Ni	60	92.118				
[>	Ge	74		103.5			
|	As	75	106.139				
|	Se	77					
|	Se	82	116.971				
[	Kr	83					
[>	Lu	175		103.6			
|	Ti	205	92.085				
[	U	238	100.319				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 14:10:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.926

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	47.347	ug/L	3.139	5075	0.008
|>	Sc 45		ug/L		611594	611594.074
[	Ni 60	48.954	ug/L	4.468	34142	0.056
[>	Ge 74		ug/L		203355	203354.732
|	As 75	51.924	ug/L	2.162	25873	0.126
|	Se 77		ug/L		5293	0.003
|	Se 82	52.783	ug/L	1.692	2472	0.012
[	Kr 83		ug/L		49	-0.000
[>	Lu 175		ug/L		99696	99696.363
|	Tl 205	49.351	ug/L	2.482	65727	0.658
[	U 238	52.439	ug/L	1.456	273254	2.740

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 14:10:51

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 14:10:51

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	94.695				
|>	Sc	45		114.1			
[	Ni	60	97.907				
[>	Ge	74		109.7			
|	As	75	103.848				
|	Se	77					
|	Se	82	105.566				
[	Kr	83					
[>	Lu	175		106.7			
|	Tl	205	98.702				
[	U	238	104.878				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 14:14:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.927

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.001	ug/L	1957.525	6	0.000
|>	Sc 45		ug/L		558227	558227.317
[	Ni 60	0.023	ug/L	17.919	60	0.000
[>	Ge 74		ug/L		194362	194362.308
|	As 75	-0.094	ug/L	411.448	163	-0.000
|	Se 77		ug/L		4410	0.000
|	Se 82	0.214	ug/L	120.170	20	0.000
[	Kr 83		ug/L		47	-0.000
[>	Lu 175		ug/L		94380	94380.025
|	Tl 205	0.064	ug/L	9.459	221	0.001
[	U 238	0.008	ug/L	73.208	130	0.000

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 14:15:01

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 14:15:01

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			104.1		
[	Ni	60					
[>	Ge	74			104.9		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			101.0		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Saturday, April 17, 2010 14:18:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 10.928

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	965.851	ug/L	3.262	94561	0.169
|>	Sc 45		ug/L		559309	559309.347
[	Ni 60	937.440	ug/L	2.051	597340	1.068
[>	Ge 74		ug/L		196187	196186.578
|	As 75	960.735	ug/L	1.616	458178	2.334
|	Se 77		ug/L		19559	0.077
|	Se 82	491.870	ug/L	1.074	22130	0.113
[	Kr 83		ug/L		63	0.000
[>	Lu 175		ug/L		99222	99221.818
|	Tl 205	464.716	ug/L	1.878	614712	6.195
[	U 238	5038.317	ug/L	2.922	26111374	263.274

Sample ID: QC Std 10

Report Date/Time: Saturday, April 17, 2010 14:19:06

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	96.585				
|>	Sc	45		104.3			
[	Ni	60	93.744				
[>	Ge	74		105.9			
|	As	75	96.073				
|	Se	77					
|	Se	82	98.374				
[	Kr	83					
[>	Lu	175		106.2			
|	Tl	205	92.943				
[	U	238	100.766				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Saturday, April 17, 2010 14:22:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 11.929

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	48.038	ug/L	7.175	4974	0.008
|>	Sc 45		ug/L		592345	592344.571
[	Ni 60	49.820	ug/L	7.453	33564	0.057
[>	Ge 74		ug/L		202388	202387.986
|	As 75	51.252	ug/L	3.882	25413	0.125
|	Se 77		ug/L		5332	0.004
|	Se 82	51.985	ug/L	3.521	2422	0.012
[	Kr 83		ug/L		57	0.000
[>	Lu 175		ug/L		99351	99351.009
|	Tl 205	50.911	ug/L	1.052	67570	0.679
[	U 238	53.236	ug/L	2.066	276415	2.782

Sample ID: QC Std 11

Report Date/Time: Saturday, April 17, 2010 14:23:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 11

Report Date/Time: Saturday, April 17, 2010 14:23:11

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	96.076				
|>	Sc	45		110.5			
[	Ni	60	99.640				
[>	Ge	74		109.2			
|	As	75	102.503				
|	Se	77					
|	Se	82	103.970				
[	Kr	83					
[>	Lu	175		106.3			
|	Tl	205	101.822				
[	U	238	106.473				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Saturday, April 17, 2010 14:26:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 12.930

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.008	ug/L	208.539	6	-0.000
[>	Sc 45		ug/L		576536	576535.790
[	Ni 60	0.034	ug/L	70.954	68	0.000
[>	Ge 74		ug/L		191838	191838.248
|	As 75	-0.567	ug/L	50.353	-59	-0.001
|	Se 77		ug/L		4413	0.000
|	Se 82	0.300	ug/L	118.475	24	0.000
[	Kr 83		ug/L		54	0.000
[>	Lu 175		ug/L		94214	94213.949
|	Tl 205	0.215	ug/L	9.284	410	0.003
[	U 238	0.200	ug/L	13.437	1073	0.010

Sample ID: QC Std 12

Report Date/Time: Saturday, April 17, 2010 14:27:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45				
[	Ni	60			107.5	
[>	Ge	74				103.5
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175				100.8
[	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060830

Sample Date/Time: Saturday, April 17, 2010 14:31:53

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060830.931

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.029	ug/L	28.678	10	0.000
|>	Sc 45		ug/L		615349	615349.488
[	Ni 60	0.152	ug/L	8.070	156	0.000
[>	Ge 74		ug/L		208628	208627.790
|	As 75	-0.749	ug/L	51.112	-157	-0.002
|	Se 77		ug/L		3615	-0.005
|	Se 82	-0.146	ug/L	243.400	4	-0.000
[	Kr 83		ug/L		53	-0.000
[>	Lu 175		ug/L		102732	102731.503
|	Tl 205	0.094	ug/L	13.607	282	0.001
[U 238	0.114	ug/L	11.900	708	0.006

Sample ID: 1202060830

Report Date/Time: Saturday, April 17, 2010 14:32:35

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45			114.8	
[	Ni	60				
|>	Ge	74			112.6	
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175			110.0	
|	Ti	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060831

Sample Date/Time: Saturday, April 17, 2010 14:35:59

Sample Type:

Sample Description: LANL6020 LCS

Number of Replicates: 3

Batch ID: 960816|40|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060831.932

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.437	ug/L	5.463	2167	0.004
Sc	45		ug/L		603957	603957.473
Ni	60	35.757	ug/L	4.233	24636	0.041
Ge	74		ug/L		206195	206194.754
As	75	27.516	ug/L	2.230	14005	0.067
Se	77		ug/L		7275	0.013
Se	82	75.918	ug/L	4.019	3598	0.017
Kr	83		ug/L		53	-0.000
Lu	175		ug/L		103257	103256.626
Tl	205	31.394	ug/L	1.270	43365	0.419
U	238	0.520	ug/L	5.400	2903	0.027

Sample ID: 1202060831

Report Date/Time: Saturday, April 17, 2010 14:36:41

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			112.7		
[	Ni	60					
[>	Ge	74			111.3		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			110.5		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371001

Sample Date/Time: Saturday, April 17, 2010 14:40:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371001.933

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1.565	ug/L	6.559	179	0.000
|>	Sc 45		ug/L		627460	627459.867
[	Ni 60	20.089	ug/L	0.779	14415	0.023
[>	Ge 74		ug/L		207019	207018.710
|	As 75	4.024	ug/L	9.622	2247	0.010
|	Se 77		ug/L		3638	-0.005
|	Se 82	0.985	ug/L	39.362	58	0.000
[	Kr 83		ug/L		64	0.000
[>	Lu 175		ug/L		104852	104851.824
|	Tl 205	0.414	ug/L	1.533	734	0.006
[U 238	10.488	ug/L	0.823	57557	0.548

Sample ID: 248371001

Report Date/Time: Saturday, April 17, 2010 14:40:48

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248371001

Report Date/Time: Saturday, April 17, 2010 14:40:48

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QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45				
|	Ni	60	117.0			
[>	Ge	74				
|	As	75	111.7			
|	Se	77				
|	Se	82				
|	Kr	83				
[>	Lu	175				
|	Tl	205	112.2			
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060832

Sample Date/Time: Saturday, April 17, 2010 14:44:12

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060832.934

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be 9	1.704	ug/L	13.355	188	0.000
[> Sc 45		ug/L		606690	606689.798
[Ni 60	22.016	ug/L	2.303	15267	0.025
[> Ge 74		ug/L		207113	207112.600
| As 75	4.457	ug/L	15.717	2464	0.011
| Se 77		ug/L		3510	-0.006
| Se 82	0.411	ug/L	25.946	31	0.000
[Kr 83		ug/L		83	0.000
[> Lu 175		ug/L		105243	105242.650
| Tl 205	0.329	ug/L	3.688	618	0.004
[U 238	9.857	ug/L	0.787	54308	0.515

Sample ID: 1202060832

Report Date/Time: Saturday, April 17, 2010 14:44:55

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45				
|	Ni	60				
|>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|>	Lu	175				
|	Tl	205				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060833

Sample Date/Time: Saturday, April 17, 2010 14:48:20

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060833.935

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	27.298	ug/L	4.655	2929	0.005
|>	Sc 45		ug/L		611714	611714.042
[	Ni 60	49.758	ug/L	3.750	34710	0.057
[>	Ge 74		ug/L		200865	200865.189
|	As 75	47.767	ug/L	3.238	23532	0.116
|	Se 77		ug/L		3689	-0.004
|	Se 82	10.524	ug/L	7.478	495	0.002
[	Kr 83		ug/L		86	0.000
[>	Lu 175		ug/L		104243	104243.038
|	Tl 205	50.287	ug/L	1.715	70029	0.670
[	U 238	35.680	ug/L	2.131	194428	1.864

Sample ID: 1202060833

Report Date/Time: Saturday, April 17, 2010 14:49:03

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 1202060833

Report Date/Time: Saturday, April 17, 2010 14:49:03

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45		114.1			
[	Ni	60					
[>	Ge	74		108.4			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		111.6			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060835

Sample Date/Time: Saturday, April 17, 2010 14:52:28

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060835.936

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	25.013	ug/L	2.275	2683	0.004
|>	Sc 45		ug/L		611259	611258.771
[	Ni 60	45.424	ug/L	4.592	31657	0.052
[>	Ge 74		ug/L		196605	196604.937
|	As 75	42.554	ug/L	0.699	20538	0.103
|	Se 77		ug/L		3506	-0.005
|	Se 82	9.803	ug/L	3.242	452	0.002
[	Kr 83		ug/L		82	0.000
[>	Lu 175		ug/L		104749	104749.007
|	Tl 205	46.329	ug/L	2.149	64853	0.618
[	U 238	33.025	ug/L	0.226	180867	1.726

Sample ID: 1202060835

Report Date/Time: Saturday, April 17, 2010 14:53:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			114.0		
[	Ni	60					
[>	Ge	74			106.1		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			112.1		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202060834

Sample Date/Time: Saturday, April 17, 2010 14:56:35

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 960816|10|bcd1

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\1202060834.937

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.348	ug/L	18.284	41	0.000
|>	Sc 45		ug/L		564374	564373.594
[	Ni 60	4.229	ug/L	3.079	2763	0.005
[>	Ge 74		ug/L		199703	199703.221
|	As 75	0.476	ug/L	105.905	446	0.001
|	Se 77		ug/L		4256	-0.001
|	Se 82	0.157	ug/L	66.082	18	0.000
[	Kr 83		ug/L		53	0.000
[>	Lu 175		ug/L		101301	101300.602
|	Tl 205	0.118	ug/L	23.320	310	0.002
[	U 238	2.169	ug/L	0.802	11574	0.113

Sample ID: 1202060834

Report Date/Time: Saturday, April 17, 2010 14:57:17

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45				
[	Ni	60			105.3	
[>	Ge	74				107.8
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175				108.4
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 15:00:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.938

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	52.953	ug/L	2.584	5019	0.009
|>	Sc 45		ug/L		540901	540901.054
[	Ni 60	52.655	ug/L	5.101	32464	0.060
[>	Ge 74		ug/L		194135	194135.239
|	As 75	51.611	ug/L	3.188	24547	0.125
|	Se 77		ug/L		5509	0.006
|	Se 82	52.139	ug/L	3.886	2330	0.012
[	Kr 83		ug/L		50	-0.000
[>	Lu 175		ug/L		99680	99680.273
|	Tl 205	50.508	ug/L	2.039	67253	0.673
[	U 238	53.392	ug/L	0.467	278193	2.790

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 15:01:25

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	105.905				
|>	Sc	45		100.9			
|	Ni	60	105.310				
[>	Ge	74		104.8			
|	As	75	103.223				
|	Se	77					
|	Se	82	104.277				
|	Kr	83					
[>	Lu	175		106.7			
|	Tl	205	101.015				
|	U	238	106.785				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 15:04:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.939

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.019	ug/L	197.555	8	0.000
[> Sc	45		ug/L		572558	572557.710
[Ni	60	0.016	ug/L	74.730	56	0.000
[> Ge	74		ug/L		192983	192982.985
[As	75	-0.107	ug/L	691.614	160	-0.000
[Se	77		ug/L		4687	0.002
[Se	82	-0.008	ug/L	2069.009	10	-0.000
[Kr	83		ug/L		50	-0.000
[> Lu	175		ug/L		99432	99432.498
[Tl	205	0.050	ug/L	44.371	214	0.001
[U	238	0.030	ug/L	24.539	249	0.002

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 15:05:34

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			106.8		
[	Ni	60					
[>	Ge	74			104.1		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			106.4		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371002

Sample Date/Time: Saturday, April 17, 2010 15:08:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371002.940

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.645	ug/L	9.420	374	0.001
[>	Sc 45		ug/L		576227	576226.900
[	Ni 60	17.352	ug/L	0.341	11441	0.020
[>	Ge 74		ug/L		189255	189254.921
[	As 75	5.933	ug/L	5.947	2931	0.014
[	Se 77		ug/L		3166	-0.006
[	Se 82	0.746	ug/L	39.853	43	0.000
[	Kr 83		ug/L		95	0.000
[>	Lu 175		ug/L		104937	104937.075
[	Tl 205	0.318	ug/L	2.483	601	0.004
[	U 238	3.452	ug/L	2.011	19025	0.180

Sample ID: 248371002

Report Date/Time: Saturday, April 17, 2010 15:09:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45		107.5			
[	Ni	60					
[>	Ge	74		102.1			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		112.3			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371003

Sample Date/Time: Saturday, April 17, 2010 15:13:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371003.941

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.532	ug/L	9.974	365	0.001
|>	Sc 45		ug/L		581266	581265.955
[	Ni 60	29.872	ug/L	5.833	19777	0.034
[>	Ge 74		ug/L		186903	186903.257
|	As 75	8.139	ug/L	5.106	3895	0.020
|	Se 77		ug/L		2905	-0.007
|	Se 82	0.323	ug/L	112.042	24	0.000
[	Kr 83		ug/L		90	0.000
[>	Lu 175		ug/L		105000	105000.183
|	Tl 205	0.459	ug/L	2.277	800	0.006
[	U 238	5.176	ug/L	1.948	28499	0.270

Sample ID: 248371003

Report Date/Time: Saturday, April 17, 2010 15:13:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45			108.4	
|	Ni	60				
|>	Ge	74			100.9	
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|>	Lu	175			112.4	
|	Tl	205				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371004

Sample Date/Time: Saturday, April 17, 2010 15:17:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371004.942

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.224	ug/L	6.756	323	0.001
[>	Sc 45		ug/L		560860	560860.160
[	Ni 60	28.174	ug/L	5.160	18019	0.032
[>	Ge 74		ug/L		187163	187162.642
[	As 75	7.825	ug/L	12.830	3759	0.019
[	Se 77		ug/L		2800	-0.008
[	Se 82	0.169	ug/L	339.009	17	0.000
[	Kr 83		ug/L		96	0.000
[>	Lu 175		ug/L		104498	104497.875
[	Ti 205	0.378	ug/L	0.702	683	0.005
[	U 238	5.960	ug/L	0.210	32642	0.311

Sample ID: 248371004

Report Date/Time: Saturday, April 17, 2010 15:17:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			104.6		
[	Ni	60					
[>	Ge	74			101.0		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			111.9		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371005

Sample Date/Time: Saturday, April 17, 2010 15:21:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371005.943

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.904	ug/L	7.744	296	0.001
|>	Sc 45		ug/L		571234	571234.026
[	Ni 60	16.734	ug/L	7.215	10909	0.019
[>	Ge 74		ug/L		186144	186144.344
|	As 75	5.642	ug/L	7.556	2751	0.014
|	Se 77		ug/L		2744	-0.008
|	Se 82	0.451	ug/L	49.549	29	0.000
[	Kr 83		ug/L		77	0.000
[>	Lu 175		ug/L		103790	103790.108
|	Tl 205	0.264	ug/L	2.519	520	0.004
[	U 238	6.056	ug/L	2.701	32935	0.316

Sample ID: 248371005

Report Date/Time: Saturday, April 17, 2010 15:22:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			106.6		
|	Ni	60					
[>	Ge	74			100.5		
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[>	Lu	175			111.1		
|	Tl	205					
|	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371006

Sample Date/Time: Saturday, April 17, 2010 15:25:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371006.944

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.777	ug/L	6.153	386	0.001
|>	Sc 45		ug/L		573595	573594.873
[	Ni 60	32.529	ug/L	1.686	21301	0.037
[>	Ge 74		ug/L		185698	185698.436
|	As 75	5.039	ug/L	9.926	2470	0.012
|	Se 77		ug/L		2683	-0.008
|	Se 82	-0.224	ug/L	109.106	0	-0.000
[	Kr 83		ug/L		99	0.000
[>	Lu 175		ug/L		101779	101778.959
|	Tl 205	0.568	ug/L	3.991	922	0.008
[	U 238	2.908	ug/L	0.838	15562	0.152

Sample ID: 248371006

Report Date/Time: Saturday, April 17, 2010 15:26:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45				
[	Ni	60			107.0	
[>	Ge	74				100.2
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175				108.9
|	Ti	205				
[U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371007

Sample Date/Time: Saturday, April 17, 2010 15:29:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\ani soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371007.945

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.115	ug/L	6.065	313	0.001
|>	Sc 45		ug/L		563147	563146.957
[	Ni 60	23.831	ug/L	4.633	15317	0.027
[>	Ge 74		ug/L		185370	185370.136
|	As 75	5.618	ug/L	14.913	2726	0.014
|	Se 77		ug/L		2649	-0.008
|	Se 82	0.362	ug/L	92.955	25	0.000
[	Kr 83		ug/L		86	0.000
[>	Lu 175		ug/L		103273	103272.749
|	Tl 205	0.336	ug/L	2.344	617	0.004
[	U 238	6.112	ug/L	1.917	33077	0.319

Sample ID: 248371007

Report Date/Time: Saturday, April 17, 2010 15:30:20

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			105.0		
[	Ni	60					
[>	Ge	74			100.0		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			110.5		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371008

Sample Date/Time: Saturday, April 17, 2010 15:33:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371008.946

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.772	ug/L	11.922	267	0.000
[>	Sc 45		ug/L		537844	537844.423
[	Ni 60	22.360	ug/L	1.916	13747	0.025
[>	Ge 74		ug/L		184999	184999.366
|	As 75	7.411	ug/L	7.966	3528	0.018
|	Se 77		ug/L		2615	-0.008
|	Se 82	0.088	ug/L	495.749	14	0.000
[	Kr 83		ug/L		84	0.000
[>	Lu 175		ug/L		103664	103664.207
|	Tl 205	0.308	ug/L	3.512	580	0.004
[	U 238	3.689	ug/L	1.884	20078	0.193

Sample ID: 248371008

Report Date/Time: Saturday, April 17, 2010 15:34:26

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		100.3		
[	Ni	60				
|>	Ge	74		99.8		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		111.0		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371009

Sample Date/Time: Saturday, April 17, 2010 15:37:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371009.947

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.947	ug/L	3.602	301	0.001
|>	Sc 45		ug/L		569940	569939.639
[	Ni 60	27.093	ug/L	6.496	17608	0.031
[>	Ge 74		ug/L		184267	184266.997
|	As 75	9.429	ug/L	6.901	4419	0.023
|	Se 77		ug/L		2691	-0.008
|	Se 82	0.181	ug/L	123.197	17	0.000
[	Kr 83		ug/L		100	0.000
[>	Lu 175		ug/L		101911	101910.601
|	Tl 205	0.412	ug/L	5.440	712	0.005
[	U 238	3.794	ug/L	2.100	20295	0.198

Sample ID: 248371009

Report Date/Time: Saturday, April 17, 2010 15:38:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248371009

Report Date/Time: Saturday, April 17, 2010 15:38:33

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		106.3		
[	Ni	60				
[>	Ge	74		99.4		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175		109.1		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371010

Sample Date/Time: Saturday, April 17, 2010 15:41:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\VanI soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371010.948

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.969	ug/L	4.353	286	0.001
|>	Sc 45		ug/L		539286	539285.517
[	Ni 60	19.439	ug/L	2.501	11986	0.022
[>	Ge 74		ug/L		186862	186861.704
|	As 75	6.086	ug/L	8.612	2960	0.015
|	Se 77		ug/L		2825	-0.007
|	Se 82	0.232	ug/L	32.588	20	0.000
[	Kr 83		ug/L		81	0.000
[>	Lu 175		ug/L		103701	103700.778
|	Ti 205	0.234	ug/L	13.665	477	0.003
[	U 238	9.740	ug/L	1.148	52874	0.509

Sample ID: 248371010

Report Date/Time: Saturday, April 17, 2010 15:42:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45				
|	Ni	60				
|>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|>	Lu	175				
|	Tl	205				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371011

Sample Date/Time: Saturday, April 17, 2010 15:46:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371011.949

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.074	ug/L	4.691	292	0.001
|>	Sc 45		ug/L		532138	532137.748
[	Ni 60	22.667	ug/L	3.528	13780	0.026
[>	Ge 74		ug/L		181827	181826.833
|	As 75	6.819	ug/L	4.070	3208	0.017
|	Se 77		ug/L		2693	-0.008
|	Se 82	0.452	ug/L	81.202	29	0.000
[	Kr 83		ug/L		89	0.000
[>	Lu 175		ug/L		104739	104738.650
|	Tl 205	0.252	ug/L	5.178	508	0.003
[	U 238	10.207	ug/L	1.647	55954	0.533

Sample ID: 248371011

Report Date/Time: Saturday, April 17, 2010 15:46:48

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248371011

Report Date/Time: Saturday, April 17, 2010 15:46:48

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			99.3		
[	Ni	60					
[>	Ge	74			98.1		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			112.1		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 15:50:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.950

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	55.728	ug/L	1.679	4932	0.010
|>	Sc 45		ug/L		504867	504867.313
[	Ni 60	52.762	ug/L	0.812	30396	0.060
[>	Ge 74		ug/L		184989	184988.970
|	As 75	51.422	ug/L	1.785	23309	0.125
|	Se 77		ug/L		4687	0.003
|	Se 82	51.402	ug/L	5.057	2189	0.012
[	Kr 83		ug/L		43	-0.000
[>	Lu 175		ug/L		97578	97578.090
|	Tl 205	50.176	ug/L	1.037	65417	0.669
[	U 238	54.554	ug/L	1.676	278254	2.851

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 15:50:56

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	111.456			
|>	Sc	45		94.2		
|	Ni	60	105.523			
[>	Ge	74		99.8		
|	As	75	102.844			
|	Se	77				
|	Se	82	102.804			
|	Kr	83				
[>	Lu	175		104.4		
|	Tl	205	100.352			
|	U	238	109.107			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 15:54:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.951

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.014	ug/L	217.274	7	0.000
[>	Sc 45		ug/L		490530	490529.906
[	Ni 60	0.035	ug/L	34.799	59	0.000
[>	Ge 74		ug/L		179938	179937.930
[	As 75	0.003	ug/L	9325.722	194	0.000
[	Se 77		ug/L		3725	-0.002
[	Se 82	-0.178	ug/L	209.689	2	-0.000
[	Kr 83		ug/L		45	-0.000
[>	Lu 175		ug/L		95584	95584.353
[	Tl 205	0.030	ug/L	4.682	180	0.000
[	U 238	0.022	ug/L	11.555	198	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 15:55:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
[>	Sc	45			91.5		
[	Ni	60					
[>	Ge	74			97.1		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			102.3		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371012

Sample Date/Time: Saturday, April 17, 2010 15:58:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371012.952

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.761	ug/L	6.002	264	0.000
|>	Sc 45		ug/L		534094	534093.805
L	Ni 60	20.188	ug/L	1.460	12327	0.023
[>	Ge 74		ug/L		177671	177670.622
|	As 75	6.571	ug/L	10.921	3026	0.016
|	Se 77		ug/L		2682	-0.008
|	Se 82	0.117	ug/L	371.475	14	0.000
L	Kr 83		ug/L		89	0.000
[>	Lu 175		ug/L		101936	101935.761
|	Tl 205	0.330	ug/L	4.858	600	0.004
L	U 238	9.037	ug/L	0.197	48233	0.472

Sample ID: 248371012

Report Date/Time: Saturday, April 17, 2010 15:59:14

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			99.6		
[	Ni	60					
|>	Ge	74			95.9		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175			109.1		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371013

Sample Date/Time: Saturday, April 17, 2010 16:02:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371013.953

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1.996	ug/L	8.697	187	0.000
|>	Sc 45		ug/L		519765	519764.996
[	Ni 60	13.613	ug/L	6.089	8090	0.016
|>	Ge 74		ug/L		179142	179141.946
|	As 75	6.158	ug/L	8.952	2869	0.015
|	Se 77		ug/L		2575	-0.008
|	Se 82	0.417	ug/L	21.070	27	0.000
[	Kr 83		ug/L		80	0.000
|>	Lu 175		ug/L		103073	103073.224
|	Tl 205	0.158	ug/L	6.452	370	0.002
[	U 238	3.182	ug/L	2.584	17233	0.166

Sample ID: 248371013

Report Date/Time: Saturday, April 17, 2010 16:03:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			97.0		
[	Ni	60					
|>	Ge	74			96.7		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175			110.3		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371014

Sample Date/Time: Saturday, April 17, 2010 16:06:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371014.954

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.658	ug/L	5.651	247	0.000
|>	Sc 45		ug/L		517118	517118.376
[	Ni 60	23.723	ug/L	0.915	14019	0.027
[>	Ge 74		ug/L		176020	176019.679
|	As 75	7.297	ug/L	7.797	3311	0.018
|	Se 77		ug/L		2558	-0.008
|	Se 82	0.413	ug/L	27.410	26	0.000
[	Kr 83		ug/L		75	0.000
[>	Lu 175		ug/L		100303	100302.595
|	Tl 205	0.282	ug/L	6.727	527	0.004
[	U 238	4.494	ug/L	2.625	23643	0.235

Sample ID: 248371014

Report Date/Time: Saturday, April 17, 2010 16:07:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			96.5		
[	Ni	60					
[>	Ge	74			95.0		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			107.4		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371015

Sample Date/Time: Saturday, April 17, 2010 16:10:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371015.955

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.304	ug/L	7.565	214	0.000
|>	Sc 45		ug/L		516555	516554.819
[	Ni 60	18.785	ug/L	6.420	11075	0.021
[>	Ge 74		ug/L		173535	173535.192
|	As 75	4.154	ug/L	12.449	1935	0.010
|	Se 77		ug/L		2567	-0.008
|	Se 82	0.301	ug/L	80.640	21	0.000
[	Kr 83		ug/L		79	0.000
[>	Lu 175		ug/L		99654	99653.713
|	Tl 205	0.251	ug/L	6.823	482	0.003
[	U 238	5.890	ug/L	2.220	30761	0.308

Sample ID: 248371015

Report Date/Time: Saturday, April 17, 2010 16:11:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			96.4		
[	Ni	60					
[>	Ge	74			93.6		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			106.7		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371016

Sample Date/Time: Saturday, April 17, 2010 16:15:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371016.956

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.217	ug/L	3.604	291	0.001
|>	Sc 45		ug/L		506168	506167.572
[	Ni 60	23.285	ug/L	2.625	13466	0.027
[>	Ge 74		ug/L		173640	173640.428
|	As 75	5.469	ug/L	8.262	2493	0.013
|	Se 77		ug/L		2579	-0.008
|	Se 82	0.444	ug/L	49.404	27	0.000
[	Kr 83		ug/L		89	0.000
[>	Lu 175		ug/L		103063	103063.171
|	Tl 205	0.201	ug/L	9.182	430	0.003
[	U 238	3.877	ug/L	2.111	20974	0.203

Sample ID: 248371016

Report Date/Time: Saturday, April 17, 2010 16:15:47

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248371016

Report Date/Time: Saturday, April 17, 2010 16:15:47

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		94.4		
[	Ni	60				
|>	Ge	74		93.7		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		110.3		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371017

Sample Date/Time: Saturday, April 17, 2010 16:19:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371017.957

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.322	ug/L	6.103	299	0.001
|>	Sc 45		ug/L		503650	503649.879
[	Ni 60	20.981	ug/L	2.341	12080	0.024
|>	Ge 74		ug/L		172393	172392.759
|	As 75	4.505	ug/L	16.986	2069	0.011
|	Se 77		ug/L		2575	-0.008
|	Se 82	0.351	ug/L	62.251	23	0.000
[	Kr 83		ug/L		72	0.000
|>	Lu 175		ug/L		101578	101577.865
|	Tl 205	0.282	ug/L	7.026	533	0.004
[	U 238	2.928	ug/L	1.245	15635	0.153

Sample ID: 248371017

Report Date/Time: Saturday, April 17, 2010 16:19:55

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		93.9		
[	Ni	60				
|>	Ge	74		93.0		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		108.7		
|	Ti	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371018

Sample Date/Time: Saturday, April 17, 2010 16:23:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371018.958

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.169	ug/L	8.522	200	0.000
|>	Sc 45		ug/L		511649	511649.344
[	Ni 60	14.647	ug/L	2.989	8580	0.017
|>	Ge 74		ug/L		176833	176833.162
|	As 75	4.908	ug/L	5.352	2296	0.012
|	Se 77		ug/L		2503	-0.008
|	Se 82	0.050	ug/L	502.834	11	0.000
[	Kr 83		ug/L		78	0.000
|>	Lu 175		ug/L		100974	100973.709
|	Tl 205	0.178	ug/L	0.963	390	0.002
[	U 238	6.099	ug/L	1.690	32271	0.319

Sample ID: 248371018

Report Date/Time: Saturday, April 17, 2010 16:24:04

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9					
|>	Sc	45			95.4		
[	Ni	60					
[>	Ge	74			95.4		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175			108.1		
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371019

Sample Date/Time: Saturday, April 17, 2010 16:27:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371019.959

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.206	ug/L	6.562	400	0.001
> Sc	45		ug/L		535328	535327.941
[Ni	60	35.390	ug/L	1.090	21630	0.040
> Ge	74		ug/L		173990	173989.975
| As	75	9.959	ug/L	5.367	4395	0.024
| Se	77		ug/L		2557	-0.008
| Se	82	-0.169	ug/L	56.200	3	-0.000
[Kr	83		ug/L		93	0.000
> Lu	175		ug/L		99950	99950.103
| Tl	205	0.648	ug/L	3.827	1012	0.009
[U	238	4.531	ug/L	0.587	23758	0.237

Sample ID: 248371019

Report Date/Time: Saturday, April 17, 2010 16:28:13

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		99.9		
[	Ni	60				
[>	Ge	74		93.9		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175		107.0		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 248371020

Sample Date/Time: Saturday, April 17, 2010 16:31:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 960816|2|bcd1

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\248371020.960

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	3.008	ug/L	3.269	284	0.001
|>	Sc 45		ug/L		527254	527254.386
[	Ni 60	18.969	ug/L	5.253	11431	0.022
|>	Ge 74		ug/L		175809	175809.014
|	As 75	6.452	ug/L	7.357	2944	0.016
|	Se 77		ug/L		2493	-0.008
|	Se 82	0.496	ug/L	67.333	29	0.000
[	Kr 83		ug/L		78	0.000
|>	Lu 175		ug/L		101655	101655.461
|	Tl 205	0.268	ug/L	6.754	515	0.004
[	U 238	6.241	ug/L	1.940	33246	0.326

Sample ID: 248371020

Report Date/Time: Saturday, April 17, 2010 16:32:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248371020

Report Date/Time: Saturday, April 17, 2010 16:32:23

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
[>	Sc	45		98.4		
[	Ni	60				
[>	Ge	74		94.9		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
[>	Lu	175		108.8		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, April 17, 2010 16:35:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.961

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	56.119	ug/L	0.796	4828	0.010
|>	Sc 45		ug/L		490718	490717.932
[	Ni 60	51.835	ug/L	1.338	29026	0.059
|>	Ge 74		ug/L		178899	178899.327
|	As 75	50.657	ug/L	0.551	22211	0.123
|	Se 77		ug/L		4534	0.003
|	Se 82	50.413	ug/L	1.898	2077	0.012
[	Kr 83		ug/L		49	0.000
|>	Lu 175		ug/L		96432	96431.672
|	Tl 205	51.234	ug/L	1.877	66010	0.683
[	U 238	53.672	ug/L	1.237	270554	2.805

Sample ID: QC Std 6

Report Date/Time: Saturday, April 17, 2010 16:36:30

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9	112.237				
[>	Sc	45			91.5		
[	Ni	60	103.671				
[>	Ge	74			96.5		
[	As	75	101.314				
[	Se	77					
[	Se	82	100.827				
[	Kr	83					
[>	Lu	175			103.2		
[	Tl	205	102.469				
[	U	238	107.344				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be		9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, April 17, 2010 16:39:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil short list.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.962

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.025	ug/L	157.019	7	0.000
|>	Sc 45		ug/L		472610	472610.248
[	Ni 60	0.038	ug/L	42.685	58	0.000
|>	Ge 74		ug/L		171643	171643.109
|	As 75	0.126	ug/L	103.302	236	0.000
|	Se 77		ug/L		3528	-0.002
|	Se 82	-0.087	ug/L	381.904	6	-0.000
[	Kr 83		ug/L		56	0.000
|>	Lu 175		ug/L		91916	91916.028
|	Tl 205	0.014	ug/L	46.403	154	0.000
[	U 238	0.018	ug/L	36.611	173	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 16:40:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Saturday, April 17, 2010 16:40:40

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QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
|>	Sc	45		88.2		
[	Ni	60				
|>	Ge	74		92.6		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
|>	Lu	175		98.4		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\031710S1.SIF

Batch ID:

Results Data Set: 031710S2

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Sequence No.: 1
Sample ID: Calib Blank
Analyst:Autosampler Location: 1
Date Collected: 3/17/2010 09:37:29
Data Type: Original-----
Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	-0.0002	0.0002	09:38:19	Yes
2		[0.00]	0.0002	-0.0002	0.0002	09:38:49	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	1.02				

Auto-zero performed.=====
Sequence No.: 2
Sample ID: S0.2
Analyst:Autosampler Location: 2
Date Collected: 3/17/2010 09:39:08
Data Type: Original-----
Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0026	0.0125	0.0028	09:39:59	Yes
2		[0.2]	0.0026	0.0127	0.0028	09:40:29	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0000				
%RSD:		0.0	0.59				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01304 Intercept: 0.00000=====
Sequence No.: 3
Sample ID: S0.5
Analyst:Autosampler Location: 3
Date Collected: 3/17/2010 09:40:48
Data Type: Original-----
Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0066	0.0314	0.0068	09:41:38	Yes
2		[0.5]	0.0065	0.0307	0.0067	09:42:08	Yes
Mean:		[0.5]	0.0066				
SD:		0.0	0.0000				
%RSD:		0.0	0.58				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999998 Slope: 0.01311 Intercept: -0.00000=====
Sequence No.: 4
Sample ID: S2.0
Analyst:Autosampler Location: 4
Date Collected: 3/17/2010 09:42:28
Data Type: Original-----
Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	--------------	----------------	-----------	-------------	------	-------------

1 [2.0] 0.0259 0.1207 0.0261 09:43:19 Yes
 2 [2.0] 0.0259 0.1200 0.0261 09:43:49 Yes
 Mean: [2.0] 0.0259
 SD: 0.0 0.0000
 %RSD: 0.0 0.07
 Standard number 3 applied. [2.0]
 Correlation Coef.: 0.999995 Slope: 0.01293 Intercept: 0.00003

Sequence No.: 5 Autosampler Location: 5
 Sample ID: S5.0 Date Collected: 3/17/2010 09:44:09
 Analyst: Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[5.0]	0.0635	0.2947	0.0637	09:45:01	Yes	
2	[5.0]	0.0631	0.2930	0.0633	09:45:31	Yes	
Mean:	[5.0]	0.0633					
SD:	0.0	0.0003					
%RSD:	0.0	0.40					

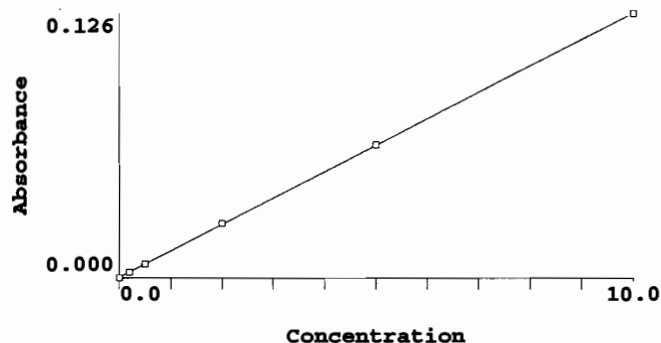
Standard number 4 applied. [5.0]
 Correlation Coef.: 0.999960 Slope: 0.01266 Intercept: 0.00018

Sequence No.: 6 Autosampler Location: 6
 Sample ID: S10.0 Date Collected: 3/17/2010 09:45:51
 Analyst: Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[10.0]	0.1260	0.5863	0.1262	09:46:41	Yes	
2	[10.0]	0.1253	0.5799	0.1255	09:47:11	Yes	
Mean:	[10.0]	0.1257					
SD:	0.0	0.0005					
%RSD:	0.0	0.41					

Standard number 5 applied. [10.0]
 Correlation Coef.: 0.999982 Slope: 0.01256 Intercept: 0.00029



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	-0.023	0.00	1.0
S0.2	0.0026	0.2	0.185	0.00	0.6
S0.5	0.0066	0.5	0.499	0.00	0.6
S2.0	0.0259	2.0	2.038	0.00	0.1
S5.0	0.0633	5.0	5.017	0.00	0.4
S10.0	0.1257	10.0	9.984	0.00	0.4

Correlation Coef.: 0.999982 Slope: 0.01256 Intercept: 0.00029

Sequence No.: 7
Sample ID: ICV
Analyst:

Autosampler Location: 9
Date Collected: 3/17/2010 09:47:30
Data Type: Original

Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.147	5.147	0.0649	0.2998	0.0651	09:48:21	Yes
2	5.115	5.115	0.0645	0.2978	0.0647	09:48:51	Yes
Mean:	5.131	5.131	0.0647				
SD:	0.023	0.023	0.0003				
%RSD:	0.444	0.444	0.44				

QC value within limits for Hg 253.7 Recovery = 102.62%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:

Autosampler Location: 10
Date Collected: 3/17/2010 09:49:11
Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0003	0.0027	0.0004	09:50:02	Yes
2	-0.003	-0.003	0.0002	0.0028	0.0004	09:50:32	Yes
Mean:	-0.003	-0.003	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	14.23	14.23	2.15				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CRDL
Analyst:

Autosampler Location: 11
Date Collected: 3/17/2010 09:50:52
Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.204	0.204	0.0029	0.0153	0.0030	09:51:44	Yes
2	0.194	0.194	0.0027	0.0138	0.0029	09:52:13	Yes
Mean:	0.199	0.199	0.0028				
SD:	0.007	0.007	0.0001				
%RSD:	3.655	3.655	3.28				

QC value within limits for Hg 253.7 Recovery = 99.54%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/17/2010 09:52:33
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.127	5.127	0.0647	0.2981	0.0649	09:53:24	Yes
2	5.101	5.101	0.0644	0.2968	0.0645	09:53:53	Yes
Mean:	5.114	5.114	0.0645				
SD:	0.018	0.018	0.0002				
%RSD:	0.360	0.360	0.36				

QC value within limits for Hg 253.7 Recovery = 102.29%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/17/2010 09:54:12
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	0.0001	0.0013	0.0003	09:55:03	Yes
2	-0.017	-0.017	0.0001	0.0011	0.0003	09:55:33	Yes
Mean:	-0.016	-0.016	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	8.640	8.640	20.06				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 12
Sample ID: 1202056199|958764|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 3/17/2010 09:55:52
Data Type: Original

Replicate Data: 1202056199|958764|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.012	-0.012	0.0001	0.0017	0.0003	09:56:44	Yes
2	-0.011	-0.011	0.0002	0.0018	0.0003	09:57:14	Yes
Mean:	-0.011	-0.011	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	11.25	11.25	11.37				

=====

Sequence No.: 13
Sample ID: 1202056200|958764|10
Analyst: JXL

Autosampler Location: 13
Date Collected: 3/17/2010 09:57:34
Data Type: Original

Replicate Data: 1202056200|958764|10

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.314	3.314	0.0419	0.1944	0.0421	09:58:26	Yes
2	3.316	3.316	0.0419	0.1936	0.0421	09:58:56	Yes
Mean:	3.315	3.315	0.0419				
SD:	0.002	0.002	0.0000				
%RSD:	0.058	0.058	0.06				

=====

Sequence No.: 14
Sample ID: 248159001|958764|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 3/17/2010 09:59:16
Data Type: Original

Replicate Data: 248159001|958764|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.057	0.057	0.0010	0.0057	0.0012	10:00:07	Yes
2	0.056	0.056	0.0010	0.0058	0.0012	10:00:37	Yes
Mean:	0.057	0.057	0.0010				
SD:	0.001	0.001	0.0000				
%RSD:	1.266	1.266	0.90				

=====

Sequence No.: 15
Sample ID: 1202056201|958764|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 3/17/2010 10:00:56
Data Type: Original

Replicate Data: 1202056201|958764|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.130	0.130	0.0019	0.0106	0.0021	10:01:46	Yes
2	0.139	0.139	0.0020	0.0121	0.0022	10:02:16	Yes
Mean:	0.134	0.134	0.0020				
SD:	0.006	0.006	0.0001				

1	0.355	0.355	0.0047	0.0229	0.0049	10:10:03	Yes
2	0.359	0.359	0.0048	0.0230	0.0050	10:10:33	Yes
Mean:	0.357	0.357	0.0048				
SD:	0.003	0.003	0.0000				
%RSD:	0.925	0.925	0.87				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 248159004|958764|1

Date Collected: 3/17/2010 10:10:52

Analyst: JXL

Data Type: Original

Replicate Data: 248159004|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.317	0.317	0.0043	0.0211	0.0045	10:11:44	Yes
2	0.321	0.321	0.0043	0.0210	0.0045	10:12:13	Yes
Mean:	0.319	0.319	0.0043				
SD:	0.002	0.002	0.0000				
%RSD:	0.716	0.716	0.67				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/17/2010 10:12:33

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.209	5.209	0.0657	0.3013	0.0659	10:13:24	Yes
2	5.190	5.190	0.0655	0.2997	0.0657	10:13:54	Yes
Mean:	5.199	5.199	0.0656				
SD:	0.014	0.014	0.0002				
%RSD:	0.262	0.262	0.26				

QC value within limits for Hg 253.7 Recovery = 103.99%
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/17/2010 10:14:13

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	0.0001	0.0018	0.0003	10:15:03	Yes
2	-0.015	-0.015	0.0001	0.0017	0.0003	10:15:33	Yes
Mean:	-0.014	-0.014	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	10.04	10.04	17.02				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 248159005|958764|1

Date Collected: 3/17/2010 10:15:52

Analyst: JXL

Data Type: Original

Replicate Data: 248159005|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.190	0.190	0.0027	0.0133	0.0029	10:16:44	Yes
2	0.187	0.187	0.0026	0.0131	0.0028	10:17:14	Yes
Mean:	0.188	0.188	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.003	1.003	0.89				

SD: 0.003 0.003 0.0000
%RSD: 4.214 4.214 3.12

Sequence No.: 30
Sample ID: 248171003|958764|1
Analyst: JXL

Autosampler Location: 28
Date Collected: 3/17/2010 10:25:59
Data Type: Original

Replicate Data: 248171003|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.394	0.394	0.0052	0.0249	0.0054	10:26:49	Yes
2	0.389	0.389	0.0052	0.0243	0.0054	10:27:19	Yes
Mean:	0.392	0.392	0.0052				
SD:	0.003	0.003	0.0000				
%RSD:	0.863	0.863	0.82				

Sequence No.: 31
Sample ID: 248171004|958764|1
Analyst: JXL

Autosampler Location: 29
Date Collected: 3/17/2010 10:27:38
Data Type: Original

Replicate Data: 248171004|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.269	0.269	0.0037	0.0180	0.0039	10:28:29	Yes
2	0.270	0.270	0.0037	0.0178	0.0039	10:28:59	Yes
Mean:	0.270	0.270	0.0037				
SD:	0.001	0.001	0.0000				
%RSD:	0.275	0.275	0.25				

Sequence No.: 32
Sample ID: 248171005|958764|1
Analyst: JXL

Autosampler Location: 30
Date Collected: 3/17/2010 10:29:18
Data Type: Original

Replicate Data: 248171005|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	88.91	88.91	1.1169	6.6233	1.1171	10:30:09	Yes
Sample concentration is greater than that of the highest standard.							
2	88.18	88.18	1.1078	6.5621	1.1080	10:30:38	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	88.54	88.54	1.1123				
SD:	0.512	0.512	0.0064				
%RSD:	0.578	0.578	0.58				
Sample concentration is greater than that of the highest standard.							

Sequence No.: 33
Sample ID: 248176001|958764|1
Analyst: JXL

Autosampler Location: 31
Date Collected: 3/17/2010 10:30:57
Data Type: Original

Replicate Data: 248176001|958764|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.166	0.166	0.0024	0.0060	0.0026	10:31:48	Yes
2	0.173	0.173	0.0025	0.0095	0.0027	10:32:18	Yes
Mean:	0.169	0.169	0.0024				
SD:	0.005	0.005	0.0001				
%RSD:	3.035	3.035	2.67				

Sequence No.: 34
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/17/2010 10:32:37
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.238	5.238	0.0661	0.3035	0.0663	10:33:28	Yes
2	5.207	5.207	0.0657	0.3015	0.0659	10:33:58	Yes
Mean:	5.222	5.222	0.0659				
SD:	0.022	0.022	0.0003				
%RSD:	0.428	0.428	0.43				

QC value within limits for Hg 253.7 Recovery = 104.45%
All analyte(s) passed QC.

Sequence No.: 35
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/17/2010 10:34:17
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0005	0.0027	0.0007	10:35:07	Yes
2	0.016	0.016	0.0005	0.0029	0.0007	10:35:37	Yes
Mean:	0.017	0.017	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	7.579	7.579	3.28				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36
Sample ID: 248176002|958764|1
Analyst: JXL

Autosampler Location: 32
Date Collected: 3/17/2010 10:35:56
Data Type: Original

Replicate Data: 248176002|958764|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.740	0.740	0.0096	0.0448	0.0098	10:36:47	Yes
2	0.737	0.737	0.0095	0.0448	0.0097	10:37:17	Yes
Mean:	0.739	0.739	0.0096				
SD:	0.003	0.003	0.0000				
%RSD:	0.367	0.367	0.36				

Sequence No.: 37
Sample ID: 248176003|958764|1
Analyst: JXL

Autosampler Location: 33
Date Collected: 3/17/2010 10:37:36
Data Type: Original

Replicate Data: 248176003|958764|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.251	0.251	0.0034	0.0166	0.0036	10:38:27	Yes
2	0.246	0.246	0.0034	0.0157	0.0036	10:38:57	Yes
Mean:	0.248	0.248	0.0034				
SD:	0.004	0.004	0.0000				
%RSD:	1.503	1.503	1.38				

Sequence No.: 38
Sample ID: 248176004|958764|1
Analyst: JXL

Autosampler Location: 34
Date Collected: 3/17/2010 10:39:16
Data Type: Original

Replicate Data: 248176004|958764|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.047	0.047	0.0009	0.0048	0.0011	10:40:07	Yes
2	0.047	0.047	0.0009	0.0047	0.0011	10:40:37	Yes
Mean:	0.047	0.047	0.0009				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.465	0.465	0.0061	0.0292	0.0063	10:48:33	Yes
2	0.465	0.465	0.0061	0.0286	0.0063	10:49:03	Yes
Mean:	0.465	0.465	0.0061				
SD:	0.000	0.000	0.0000				
%RSD:	0.048	0.048	0.05				

Sequence No.: 44

Sample ID: 248247002|958993|1

Analyst: JXL

Autosampler Location: 40

Date Collected: 3/17/2010 10:49:22

Data Type: Original

Replicate Data: 248247002|958993|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.881	0.881	0.0114	0.0529	0.0115	10:50:14	Yes
2	0.882	0.882	0.0114	0.0531	0.0116	10:50:43	Yes
Mean:	0.882	0.882	0.0114				
SD:	0.001	0.001	0.0000				
%RSD:	0.107	0.107	0.10				

Sequence No.: 45

Sample ID: 248247003|958993|1

Analyst: JXL

Autosampler Location: 41

Date Collected: 3/17/2010 10:51:03

Data Type: Original

Replicate Data: 248247003|958993|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.153	0.153	0.0022	0.0111	0.0024	10:51:54	Yes
2	0.153	0.153	0.0022	0.0111	0.0024	10:52:24	Yes
Mean:	0.153	0.153	0.0022				
SD:	0.000	0.000	0.0000				
%RSD:	0.015	0.015	0.01				

Sequence No.: 46

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 10:52:44

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.910	4.910	0.0620	0.2873	0.0622	10:53:34	Yes
2	4.916	4.916	0.0620	0.2864	0.0622	10:54:03	Yes
Mean:	4.913	4.913	0.0620				
SD:	0.004	0.004	0.0001				
%RSD:	0.084	0.084	0.08				

QC value within limits for Hg 253.7 Recovery = 98.27%

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 10:54:22

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.014	-0.014	0.0001	0.0012	0.0003	10:55:13	Yes
2	-0.013	-0.013	0.0001	0.0014	0.0003	10:55:43	Yes
Mean:	-0.014	-0.014	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	5.038	5.038	7.89				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.138	1.138	0.0146	0.0672	0.0148	11:12:01	Yes
2	1.140	1.140	0.0146	0.0672	0.0148	11:12:30	Yes
Mean:	1.139	1.139	0.0146				
SD:	0.001	0.001	0.0000				
%RSD:	0.099	0.099	0.10				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 11:12:50

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.942	4.942	0.0623	0.2863	0.0625	11:13:41	Yes
2	4.917	4.917	0.0620	0.2843	0.0622	11:14:11	Yes
Mean:	4.929	4.929	0.0622				
SD:	0.017	0.017	0.0002				
%RSD:	0.353	0.353	0.35				

QC value within limits for Hg 253.7 Recovery = 98.59%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 11:14:30

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	0.0001	0.0010	0.0003	11:15:20	Yes
2	-0.013	-0.013	0.0001	0.0016	0.0003	11:15:50	Yes
Mean:	-0.015	-0.015	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	14.68	14.68	28.15				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 1202056654|958993|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 3/17/2010 11:16:09

Data Type: Original

Replicate Data: 1202056654|958993|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.706	0.706	0.0092	0.0432	0.0093	11:17:00	Yes
2	0.706	0.706	0.0092	0.0426	0.0093	11:17:30	Yes
Mean:	0.706	0.706	0.0092				
SD:	0.000	0.000	0.0000				
%RSD:	0.011	0.011	0.01				

Sequence No.: 61

Sample ID: 1202056655|958993|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 3/17/2010 11:17:50

Data Type: Original

Replicate Data: 1202056655|958993|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.922	2.922	0.0370	0.1708	0.0372	11:18:40	Yes
2	2.920	2.920	0.0370	0.1707	0.0372	11:19:10	Yes
Mean:	2.921	2.921	0.0370				
SD:	0.001	0.001	0.0000				
%RSD:	0.032	0.032	0.03				

2	0.141	0.141	0.0021	0.0099	0.0022	11:27:33	Yes
Mean:	0.143	0.143	0.0021				
SD:	0.004	0.004	0.0000				
%RSD:	2.686	2.686	2.32				

Sequence No.: 67

Sample ID: 248256005|958993|1

Analyst: JXL

Autosampler Location: 59

Date Collected: 3/17/2010 11:27:53

Data Type: Original

Replicate Data: 248256005|958993|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.010	0.010	0.0004	0.0023	0.0006	11:28:44	Yes
2	0.010	0.010	0.0004	0.0024	0.0006	11:29:14	Yes
Mean:	0.010	0.010	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	2.750	2.750	0.83				

Sequence No.: 68

Sample ID: 248256006|958993|1

Analyst: JXL

Autosampler Location: 60

Date Collected: 3/17/2010 11:29:34

Data Type: Original

Replicate Data: 248256006|958993|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.044	0.044	0.0008	0.0042	0.0010	11:30:26	Yes
2	0.042	0.042	0.0008	0.0042	0.0010	11:30:56	Yes
Mean:	0.043	0.043	0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	2.360	2.360	1.54				

Sequence No.: 69

Sample ID: 248256007|958993|1

Analyst: JXL

Autosampler Location: 61

Date Collected: 3/17/2010 11:31:16

Data Type: Original

Replicate Data: 248256007|958993|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.109	0.109	0.0017	0.0080	0.0019	11:32:08	Yes
2	0.108	0.108	0.0016	0.0081	0.0018	11:32:37	Yes
Mean:	0.109	0.109	0.0017				
SD:	0.001	0.001	0.0000				
%RSD:	0.471	0.471	0.39				

Sequence No.: 70

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 11:32:58

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.959	4.959	0.0626	0.2876	0.0628	11:33:48	Yes
2	4.953	4.953	0.0625	0.2870	0.0627	11:34:18	Yes
Mean:	4.956	4.956	0.0625				
SD:	0.004	0.004	0.0001				
%RSD:	0.086	0.086	0.09				

QC value within limits for Hg 253.7 Recovery = 99.12%
All analyte(s) passed QC.

Sequence No.: 71

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 11:34:37

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	0.0000	0.0002	0.0002	11:35:28	Yes
2	-0.023	-0.023	-0.0000	0.0002	0.0002	11:35:58	Yes
Mean:	-0.023	-0.023	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.227	2.227	274.82				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 1202068551|964202|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 3/17/2010 11:36:17
Data Type: Original

Replicate Data: 1202068551|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.022	-0.022	0.0000	0.0002	0.0002	11:37:08	Yes
2	-0.023	-0.023	-0.0000	0.0003	0.0002	11:37:38	Yes
Mean:	-0.023	-0.023	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.685	2.685	422.20				

=====

Sequence No.: 73
Sample ID: 1202068552|964202|10
Analyst: JXL

Autosampler Location: 63
Date Collected: 3/17/2010 11:37:58
Data Type: Original

Replicate Data: 1202068552|964202|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.048	4.048	0.0511	0.2339	0.0513	11:38:49	Yes
2	4.059	4.059	0.0513	0.2340	0.0515	11:39:19	Yes
Mean:	4.053	4.053	0.0512				
SD:	0.008	0.008	0.0001				
%RSD:	0.194	0.194	0.19				

=====

Sequence No.: 74
Sample ID: 248527002|964202|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 3/17/2010 11:39:38
Data Type: Original

Replicate Data: 248527002|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.092	0.092	0.0014	0.0069	0.0016	11:40:29	Yes
2	0.091	0.091	0.0014	0.0068	0.0016	11:40:59	Yes
Mean:	0.091	0.091	0.0014				
SD:	0.001	0.001	0.0000				
%RSD:	0.583	0.583	0.47				

=====

Sequence No.: 75
Sample ID: 1202068553|964202|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 3/17/2010 11:41:19
Data Type: Original

Replicate Data: 1202068553|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.055	0.055	0.0010	0.0048	0.0012	11:42:10	Yes
2	0.058	0.058	0.0010	0.0049	0.0012	11:42:40	Yes
Mean:	0.057	0.057	0.0010				
SD:	0.002	0.002	0.0000				

1	0.194	0.194	0.0027	0.0128	0.0029	11:50:34	Yes
2	0.197	0.197	0.0028	0.0131	0.0030	11:51:04	Yes
Mean:	0.195	0.195	0.0027				
SD:	0.002	0.002	0.0000				
%RSD:	1.021	1.021	0.91				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 248527005|964202|1

Date Collected: 3/17/2010 11:51:24

Analyst: JXL

Data Type: Original

Replicate Data: 248527005|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.010	0.010	0.0004	0.0023	0.0006	11:52:16	Yes
2	0.014	0.014	0.0005	0.0027	0.0007	11:52:46	Yes
Mean:	0.012	0.012	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	22.86	22.86	7.76				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/17/2010 11:53:06

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.955	4.955	0.0625	0.2843	0.0627	11:53:56	Yes
2	4.975	4.975	0.0628	0.2832	0.0630	11:54:26	Yes
Mean:	4.965	4.965	0.0626				
SD:	0.014	0.014	0.0002				
%RSD:	0.282	0.282	0.28				

QC value within limits for Hg 253.7 Recovery = 99.30%
All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/17/2010 11:54:45

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	0.0001	0.0010	0.0002	11:55:36	Yes
2	-0.020	-0.020	0.0000	0.0006	0.0002	11:56:05	Yes
Mean:	-0.020	-0.020	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	6.798	6.798	40.24				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 248527006|964202|1

Date Collected: 3/17/2010 11:56:25

Analyst: JXL

Data Type: Original

Replicate Data: 248527006|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.024	0.024	0.0006	0.0034	0.0008	11:57:16	Yes
2	0.023	0.023	0.0006	0.0035	0.0008	11:57:46	Yes
Mean:	0.023	0.023	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	0.851	0.851	0.43				

SD: 0.001 0.001 0.0000
%RSD: 1.387 1.387 1.04

Sequence No.: 90
Sample ID: 248527012|964202|1
Analyst: JXL

Autosampler Location: 78
Date Collected: 3/17/2010 12:06:33
Data Type: Original

Replicate Data: 248527012|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.035	0.035	0.0007	0.0039	0.0009	12:07:25	Yes
2	0.033	0.033	0.0007	0.0036	0.0009	12:07:55	Yes
Mean:	0.034	0.034	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	2.601	2.601	1.56				

Sequence No.: 91
Sample ID: 248527013|964202|1
Analyst: JXL

Autosampler Location: 79
Date Collected: 3/17/2010 12:08:15
Data Type: Original

Replicate Data: 248527013|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.021	0.021	0.0006	0.0031	0.0007	12:09:06	Yes
2	0.017	0.017	0.0005	0.0029	0.0007	12:09:36	Yes
Mean:	0.019	0.019	0.0005				
SD:	0.003	0.003	0.0000				
%RSD:	13.83	13.83	6.33				

Sequence No.: 92
Sample ID: 248527014|964202|1
Analyst: JXL

Autosampler Location: 80
Date Collected: 3/17/2010 12:09:56
Data Type: Original

Replicate Data: 248527014|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.044	0.044	0.0008	0.0045	0.0010	12:10:47	Yes
2	0.043	0.043	0.0008	0.0043	0.0010	12:11:17	Yes
Mean:	0.043	0.043	0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	2.855	2.855	1.87				

Sequence No.: 93
Sample ID: 248527015|964202|1
Analyst: JXL

Autosampler Location: 81
Date Collected: 3/17/2010 12:11:37
Data Type: Original

Replicate Data: 248527015|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.046	0.046	0.0009	0.0046	0.0011	12:12:28	Yes
2	0.044	0.044	0.0008	0.0044	0.0010	12:12:58	Yes
Mean:	0.045	0.045	0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	3.428	3.428	2.27				

Sequence No.: 94
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/17/2010 12:13:18
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.906	4.906	0.0619	0.2788	0.0621	12:14:09	Yes
2	4.908	4.908	0.0619	0.2788	0.0621	12:14:38	Yes
Mean:	4.907	4.907	0.0619				
SD:	0.002	0.002	0.0000				
%RSD:	0.037	0.037	0.04				

QC value within limits for Hg 253.7 Recovery = 98.14%
All analyte(s) passed QC.

Sequence No.: 95

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/17/2010 12:14:57

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.022	-0.022	0.0000	0.0006	0.0002	12:15:48	Yes
2	-0.026	-0.026	-0.0000	0.0001	0.0002	12:16:18	Yes
Mean:	-0.024	-0.024	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	12.62	12.62	345.62				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96

Autosampler Location: 82

Sample ID: 248527016|964202|1

Date Collected: 3/17/2010 12:16:37

Analyst: JXL

Data Type: Original

Replicate Data: 248527016|964202|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.046	0.046	0.0009	0.0046	0.0011	12:17:29	Yes
2	0.044	0.044	0.0008	0.0045	0.0010	12:17:59	Yes
Mean:	0.045	0.045	0.0009				
SD:	0.001	0.001	0.0000				
%RSD:	2.920	2.920	1.94				

Sequence No.: 97

Autosampler Location: 83

Sample ID: 1202072123|965670|1

Date Collected: 3/17/2010 12:18:19

Analyst: JXL

Data Type: Original

Replicate Data: 1202072123|965670|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	0.0000	0.0007	0.0002	12:19:11	Yes
2	-0.022	-0.022	0.0000	0.0008	0.0002	12:19:41	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	5.826	5.826	55.45				

Sequence No.: 98

Autosampler Location: 84

Sample ID: 1202072124|965670|10

Date Collected: 3/17/2010 12:20:01

Analyst: JXL

Data Type: Original

Replicate Data: 1202072124|965670|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.816	3.816	0.0482	0.2163	0.0484	12:20:53	Yes
2	3.792	3.792	0.0479	0.2150	0.0481	12:21:22	Yes
Mean:	3.804	3.804	0.0481				
SD:	0.017	0.017	0.0002				
%RSD:	0.452	0.452	0.45				

Mean: 0.711 0.711 0.0092
SD: 0.000 0.000 0.0000
%RSD: 0.022 0.022 0.02

Sequence No.: 104

Sample ID: 248531006|965670|1

Analyst: JXL

Autosampler Location: 90

Date Collected: 3/17/2010 12:30:10

Data Type: Original

Replicate Data: 248531006|965670|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.359	0.359	0.0048	0.0225	0.0050	12:31:01	Yes
2	0.357	0.357	0.0048	0.0220	0.0050	12:31:31	Yes
Mean:	0.358	0.358	0.0048				
SD:	0.002	0.002	0.0000				
%RSD:	0.462	0.462	0.43				

Sequence No.: 105

Sample ID: 248531007|965670|1

Analyst: JXL

Autosampler Location: 91

Date Collected: 3/17/2010 12:31:51

Data Type: Original

Replicate Data: 248531007|965670|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.382	1.382	0.0176	0.0801	0.0178	12:32:43	Yes
2	1.385	1.385	0.0177	0.0800	0.0179	12:33:12	Yes
Mean:	1.384	1.384	0.0177				
SD:	0.002	0.002	0.0000				
%RSD:	0.122	0.122	0.12				

Sequence No.: 106

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 12:33:33

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.933	4.933	0.0622	0.2813	0.0624	12:34:23	Yes
2	4.951	4.951	0.0625	0.2810	0.0627	12:34:53	Yes
Mean:	4.942	4.942	0.0624				
SD:	0.013	0.013	0.0002				
%RSD:	0.261	0.261	0.26				

QC value within limits for Hg 253.7 Recovery = 98.84%
All analyte(s) passed QC.

Sequence No.: 107

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 12:35:12

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0000	0.0002	0.0002	12:36:02	Yes
2	-0.023	-0.023	-0.0000	0.0005	0.0002	12:36:32	Yes
Mean:	-0.023	-0.023	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.285	1.285	820.47				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108

Sample ID: 248531008|965670|1

Autosampler Location: 92

Date Collected: 3/17/2010 12:36:51

2	0.597	0.597	0.0078	0.0360	0.0080	12:53:30	Yes
Mean:	0.597	0.597	0.0078				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.08				

Sequence No.: 118

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 12:53:50

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.943	4.943	0.0624	0.2817	0.0626	12:54:41	Yes
2	4.925	4.925	0.0621	0.2812	0.0623	12:55:11	Yes
Mean:	4.934	4.934	0.0623				
SD:	0.013	0.013	0.0002				
%RSD:	0.266	0.266	0.27				

QC value within limits for Hg 253.7 Recovery = 98.68%

All analyte(s) passed QC.

Sequence No.: 119

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 12:55:30

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	0.0000	0.0007	0.0002	12:56:21	Yes
2	-0.020	-0.020	0.0000	0.0007	0.0002	12:56:51	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.431	2.431	23.56				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 120

Sample ID: 248534004|965670|1

Analyst: JXL

Autosampler Location: 102

Date Collected: 3/17/2010 12:57:10

Data Type: Original

Replicate Data: 248534004|965670|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.190	3.190	0.0403	0.1866	0.0405	12:58:02	Yes
2	3.188	3.188	0.0403	0.1848	0.0405	12:58:32	Yes
Mean:	3.189	3.189	0.0403				
SD:	0.001	0.001	0.0000				
%RSD:	0.027	0.027	0.03				

Sequence No.: 121

Sample ID: 248534005|965670|1

Analyst: JXL

Autosampler Location: 103

Date Collected: 3/17/2010 12:58:53

Data Type: Original

Replicate Data: 248534005|965670|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.844	0.844	0.0109	0.0509	0.0111	12:59:44	Yes
2	0.848	0.848	0.0109	0.0509	0.0111	13:00:14	Yes
Mean:	0.846	0.846	0.0109				
SD:	0.002	0.002	0.0000				
%RSD:	0.291	0.291	0.28				

Sequence No.: 122

Autosampler Location: 104

%RSD: 1.423 1.423 7.12

Sequence No.: 127

Sample ID: 1202072205|965699|10

Analyst: JXL

Autosampler Location: 109

Date Collected: 3/17/2010 13:09:05

Data Type: Original

Replicate Data: 1202072205|965699|10

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.091	3.091	0.0391	0.1768	0.0393	13:09:57	Yes
2	3.073	3.073	0.0389	0.1751	0.0391	13:10:27	Yes
Mean:	3.082	3.082	0.0390				
SD:	0.013	0.013	0.0002				
%RSD:	0.406	0.406	0.40				

Sequence No.: 128

Sample ID: 248635001|965699|1

Analyst: JXL

Autosampler Location: 110

Date Collected: 3/17/2010 13:10:47

Data Type: Original

Replicate Data: 248635001|965699|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.269	0.269	0.0037	0.0171	0.0039	13:11:39	Yes
2	0.266	0.266	0.0036	0.0171	0.0038	13:12:09	Yes
Mean:	0.267	0.267	0.0036				
SD:	0.002	0.002	0.0000				
%RSD:	0.582	0.582	0.54				

Sequence No.: 129

Sample ID: 1202072206|965699|1

Analyst: JXL

Autosampler Location: 111

Date Collected: 3/17/2010 13:12:30

Data Type: Original

Replicate Data: 1202072206|965699|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.139	0.139	0.0020	0.0100	0.0022	13:13:22	Yes
2	0.136	0.136	0.0020	0.0098	0.0022	13:13:51	Yes
Mean:	0.138	0.138	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.367	1.367	1.17				

Sequence No.: 130

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 13:14:12

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.059	5.059	0.0638	0.2890	0.0640	13:15:02	Yes
2	5.096	5.096	0.0643	0.2888	0.0645	13:15:32	Yes
Mean:	5.077	5.077	0.0641				
SD:	0.026	0.026	0.0003				
%RSD:	0.518	0.518	0.52				

QC value within limits for Hg 253.7 Recovery = 101.55%
All analyte(s) passed QC.

Sequence No.: 131

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 13:15:51

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.018	-0.018	0.0001	0.0009	0.0003	13:16:41	Yes
2	-0.028	-0.028	-0.0001	-0.0009	0.0001	13:17:11	Yes
Mean:	-0.023	-0.023	-0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	31.17	31.17	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132

Autosampler Location: 112

Sample ID: 1202072207|965699|1

Date Collected: 3/17/2010 13:17:31

Analyst: JXL

Data Type: Original

Replicate Data: 1202072207|965699|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.203	2.203	0.0280	0.1264	0.0282	13:18:22	Yes
2	2.197	2.197	0.0279	0.1259	0.0281	13:18:52	Yes
Mean:	2.200	2.200	0.0279				
SD:	0.004	0.004	0.0001				
%RSD:	0.192	0.192	0.19				

Sequence No.: 133

Autosampler Location: 113

Sample ID: 1202072213|965699|1

Date Collected: 3/17/2010 13:19:13

Analyst: JXL

Data Type: Original

Replicate Data: 1202072213|965699|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.274	2.274	0.0288	0.1304	0.0290	13:20:04	Yes
2	2.287	2.287	0.0290	0.1302	0.0292	13:20:34	Yes
Mean:	2.280	2.280	0.0289				
SD:	0.009	0.009	0.0001				
%RSD:	0.400	0.400	0.40				

Sequence No.: 134

Autosampler Location: 114

Sample ID: 1202072212|965699|5

Date Collected: 3/17/2010 13:20:55

Analyst: JXL

Data Type: Original

Replicate Data: 1202072212|965699|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0008	0.0042	0.0009	13:21:47	Yes
2	0.036	0.036	0.0007	0.0040	0.0009	13:22:16	Yes
Mean:	0.036	0.036	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	2.318	2.318	1.42				

Sequence No.: 135

Autosampler Location: 115

Sample ID: 248635002|965699|1

Date Collected: 3/17/2010 13:22:37

Analyst: JXL

Data Type: Original

Replicate Data: 248635002|965699|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.309	0.309	0.0042	0.0196	0.0044	13:23:29	Yes
2	0.311	0.311	0.0042	0.0196	0.0044	13:23:59	Yes
Mean:	0.310	0.310	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.514	0.514	0.48				

SD: 0.003 0.003 0.0000
%RSD: 16.34 16.34 7.64

Sequence No.: 141

Sample ID: 248635008|965699|1

Analyst: JXL

Autosampler Location: 121

Date Collected: 3/17/2010 13:32:52

Data Type: Original

Replicate Data: 248635008|965699|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.262	0.262	0.0036	0.0167	0.0038	13:33:44	Yes
2	0.260	0.260	0.0036	0.0165	0.0037	13:34:14	Yes
Mean:	0.261	0.261	0.0036				
SD:	0.001	0.001	0.0000				
%RSD:	0.461	0.461	0.42				

Sequence No.: 142

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 13:34:35

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.023	5.023	0.0634	0.2865	0.0636	13:35:26	Yes
2	5.020	5.020	0.0633	0.2854	0.0635	13:35:56	Yes
Mean:	5.022	5.022	0.0634				
SD:	0.002	0.002	0.0000				
%RSD:	0.045	0.045	0.04				

QC value within limits for Hg 253.7 Recovery = 100.44%
All analyte(s) passed QC.

Sequence No.: 143

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 13:36:15

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0001	0.0011	0.0003	13:37:06	Yes
2	-0.017	-0.017	0.0001	0.0008	0.0003	13:37:35	Yes
Mean:	-0.017	-0.017	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	6.374	6.374	17.07				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 144

Sample ID: 248635009|965699|1

Analyst: JXL

Autosampler Location: 122

Date Collected: 3/17/2010 13:37:55

Data Type: Original

Replicate Data: 248635009|965699|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.510	0.510	0.0067	0.0309	0.0069	13:38:47	Yes
2	0.508	0.508	0.0067	0.0309	0.0069	13:39:17	Yes
Mean:	0.509	0.509	0.0067				
SD:	0.002	0.002	0.0000				
%RSD:	0.322	0.322	0.31				

Sequence No.: 145

Sample ID: 248635010|965699|1

Analyst: JXL

Autosampler Location: 123

Date Collected: 3/17/2010 13:39:38

Data Type: Original

Sequence No.: 150

Sample ID: 248660002|965699|1

Analyst: JXL

Autosampler Location: 128

Date Collected: 3/17/2010 13:48:12

Data Type: Original

Replicate Data: 248660002|965699|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.139	0.139	0.0020	0.0099	0.0022	13:49:04	Yes
2	0.142	0.142	0.0021	0.0099	0.0023	13:49:34	Yes
Mean:	0.141	0.141	0.0021				
SD:	0.002	0.002	0.0000				
%RSD:	1.152	1.152	0.99				

Sequence No.: 151

Sample ID: 1202069720|964726|1

Analyst: JXL

Autosampler Location: 129

Date Collected: 3/17/2010 13:49:55

Data Type: Original

Replicate Data: 1202069720|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	0.0001	0.0009	0.0002	13:50:47	Yes
2	-0.023	-0.023	-0.0000	0.0004	0.0002	13:51:17	Yes
Mean:	-0.021	-0.021	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	15.76	15.76	189.86				

Sequence No.: 152

Sample ID: 1202069721|964726|10

Analyst: JXL

Autosampler Location: 130

Date Collected: 3/17/2010 13:51:38

Data Type: Original

Replicate Data: 1202069721|964726|10

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.747	3.747	0.0473	0.2137	0.0475	13:52:30	Yes
2	3.762	3.762	0.0475	0.2139	0.0477	13:53:00	Yes
Mean:	3.755	3.755	0.0474				
SD:	0.010	0.010	0.0001				
%RSD:	0.276	0.276	0.27				

Sequence No.: 153

Sample ID: 248371001|964726|1

Analyst: JXL

Autosampler Location: 131

Date Collected: 3/17/2010 13:53:21

Data Type: Original

Replicate Data: 248371001|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.650	0.650	0.0085	0.0402	0.0086	13:54:13	Yes
2	0.645	0.645	0.0084	0.0397	0.0086	13:54:43	Yes
Mean:	0.648	0.648	0.0084				
SD:	0.004	0.004	0.0000				
%RSD:	0.565	0.565	0.55				

Sequence No.: 154

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 13:55:03

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.032	5.032	0.0635	0.2892	0.0637	13:55:54	Yes
2	5.056	5.056	0.0638	0.2882	0.0640	13:56:23	Yes

Mean: 5.044 5.044 0.0636
SD: 0.017 0.017 0.0002
%RSD: 0.337 0.337 0.34

QC value within limits for Hg 253.7 Recovery = 100.88%
All analyte(s) passed QC.

Sequence No.: 155

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 13:56:42

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	0.0001	0.0009	0.0003	13:57:33	Yes
2	-0.018	-0.018	0.0001	0.0008	0.0002	13:58:03	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	6.773	6.773	22.97				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 156

Sample ID: 1202069722|964726|1

Analyst: JXL

Autosampler Location: 132

Date Collected: 3/17/2010 13:58:22

Data Type: Original

Replicate Data: 1202069722|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.724	0.724	0.0094	0.0443	0.0096	13:59:14	Yes
2	0.717	0.717	0.0093	0.0436	0.0095	13:59:44	Yes
Mean:	0.721	0.721	0.0093				
SD:	0.005	0.005	0.0001				
%RSD:	0.702	0.702	0.68				

Sequence No.: 157

Sample ID: 1202069723|964726|1

Analyst: JXL

Autosampler Location: 133

Date Collected: 3/17/2010 14:00:05

Data Type: Original

Replicate Data: 1202069723|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.678	2.678	0.0339	0.1581	0.0341	14:00:57	Yes
2	2.673	2.673	0.0339	0.1570	0.0340	14:01:27	Yes
Mean:	2.675	2.675	0.0339				
SD:	0.004	0.004	0.0001				
%RSD:	0.151	0.151	0.15				

Sequence No.: 158

Sample ID: 1202069725|964726|1

Analyst: JXL

Autosampler Location: 134

Date Collected: 3/17/2010 14:01:48

Data Type: Original

Replicate Data: 1202069725|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.743	2.743	0.0347	0.1607	0.0349	14:02:40	Yes
2	2.739	2.739	0.0347	0.1594	0.0349	14:03:09	Yes
Mean:	2.741	2.741	0.0347				
SD:	0.003	0.003	0.0000				
%RSD:	0.096	0.096	0.09				

Sequence No.: 159

Sample ID: 1202069724|964726|5

Autosampler Location: 135

Date Collected: 3/17/2010 14:03:30

Analyst: JXL

Data Type: Original

Replicate Data: 1202069724|964726|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.111	0.111	0.0017	0.0082	0.0019	14:04:23	Yes
2	0.112	0.112	0.0017	0.0081	0.0019	14:04:53	Yes
Mean:	0.111	0.111	0.0017				
SD:	0.000	0.000	0.0000				
%RSD:	0.338	0.338	0.28				

Sequence No.: 160

Autosampler Location: 136

Sample ID: 248371002|964726|1

Date Collected: 3/17/2010 14:05:14

Analyst: JXL

Data Type: Original

Replicate Data: 248371002|964726|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.839	0.839	0.0108	0.0498	0.0110	14:06:06	Yes
2	0.842	0.842	0.0109	0.0495	0.0111	14:06:36	Yes
Mean:	0.840	0.840	0.0108				
SD:	0.003	0.003	0.0000				
%RSD:	0.310	0.310	0.30				

Sequence No.: 161

Autosampler Location: 137

Sample ID: 248371003|964726|1

Date Collected: 3/17/2010 14:06:57

Analyst: JXL

Data Type: Original

Replicate Data: 248371003|964726|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.659	0.659	0.0086	0.0399	0.0088	14:07:50	Yes
2	0.656	0.656	0.0085	0.0392	0.0087	14:08:19	Yes
Mean:	0.658	0.658	0.0085				
SD:	0.002	0.002	0.0000				
%RSD:	0.337	0.337	0.33				

Sequence No.: 162

Autosampler Location: 138

Sample ID: 248371004|964726|1

Date Collected: 3/17/2010 14:08:40

Analyst: JXL

Data Type: Original

Replicate Data: 248371004|964726|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.532	0.532	0.0070	0.0323	0.0072	14:09:33	Yes
2	0.537	0.537	0.0070	0.0326	0.0072	14:10:03	Yes
Mean:	0.535	0.535	0.0070				
SD:	0.003	0.003	0.0000				
%RSD:	0.599	0.599	0.57				

Sequence No.: 163

Autosampler Location: 139

Sample ID: 248371005|964726|1

Date Collected: 3/17/2010 14:10:24

Analyst: JXL

Data Type: Original

Replicate Data: 248371005|964726|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.372	4.372	0.0552	0.2552	0.0554	14:11:16	Yes
2	4.361	4.361	0.0551	0.2541	0.0552	14:11:46	Yes
Mean:	4.366	4.366	0.0551				
SD:	0.008	0.008	0.0001				
%RSD:	0.186	0.186	0.19				

Sequence No.: 164

Sample ID: 248371006|964726|1

Analyst: JXL

Autosampler Location: 140

Date Collected: 3/17/2010 14:12:07

Data Type: Original

Replicate Data: 248371006|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.310	0.310	0.0042	0.0194	0.0044	14:12:59	Yes
2	0.310	0.310	0.0042	0.0194	0.0044	14:13:29	Yes
Mean:	0.310	0.310	0.0042				
SD:	0.000	0.000	0.0000				
%RSD:	0.116	0.116	0.11				

Sequence No.: 165

Sample ID: 248371007|964726|1

Analyst: JXL

Autosampler Location: 141

Date Collected: 3/17/2010 14:13:50

Data Type: Original

Replicate Data: 248371007|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.242	0.242	0.0033	0.0163	0.0035	14:14:43	Yes
2	0.232	0.232	0.0032	0.0148	0.0034	14:15:13	Yes
Mean:	0.237	0.237	0.0033				
SD:	0.007	0.007	0.0001				
%RSD:	3.056	3.056	2.79				

Sequence No.: 166

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 14:15:34

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.164	5.164	0.0651	0.2938	0.0653	14:16:24	Yes
2	5.121	5.121	0.0646	0.2919	0.0648	14:16:54	Yes
Mean:	5.143	5.143	0.0649				
SD:	0.030	0.030	0.0004				
%RSD:	0.583	0.583	0.58				

QC value within limits for Hg 253.7 Recovery = 102.85%
All analyte(s) passed QC.

Sequence No.: 167

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 14:17:13

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.018	-0.018	0.0001	0.0007	0.0003	14:18:04	Yes
2	-0.016	-0.016	0.0001	0.0010	0.0003	14:18:33	Yes
Mean:	-0.017	-0.017	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	7.927	7.927	21.69				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 168

Sample ID: 248371008|964726|1

Analyst: JXL

Autosampler Location: 142

Date Collected: 3/17/2010 14:18:53

Data Type: Original

Replicate Data: 248371008|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.298	0.298	0.0040	0.0191	0.0042	14:19:45	Yes
2	0.297	0.297	0.0040	0.0190	0.0042	14:20:15	Yes
Mean:	0.297	0.297	0.0040				
SD:	0.001	0.001	0.0000				
%RSD:	0.171	0.171	0.16				

Sequence No.: 169

Autosampler Location: 143

Sample ID: 248371009|964726|1

Date Collected: 3/17/2010 14:20:36

Analyst: JXL

Data Type: Original

Replicate Data: 248371009|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.488	0.488	0.0064	0.0301	0.0066	14:21:28	Yes
2	0.484	0.484	0.0064	0.0297	0.0066	14:21:58	Yes
Mean:	0.486	0.486	0.0064				
SD:	0.003	0.003	0.0000				
%RSD:	0.651	0.651	0.62				

Sequence No.: 170

Autosampler Location: 144

Sample ID: 248371010|964726|1

Date Collected: 3/17/2010 14:22:19

Analyst: JXL

Data Type: Original

Replicate Data: 248371010|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.728	0.728	0.0094	0.0437	0.0096	14:23:11	Yes
2	0.733	0.733	0.0095	0.0440	0.0097	14:23:41	Yes
Mean:	0.730	0.730	0.0095				
SD:	0.004	0.004	0.0001				
%RSD:	0.547	0.547	0.53				

Sequence No.: 171

Autosampler Location: 145

Sample ID: 248371011|964726|1

Date Collected: 3/17/2010 14:24:02

Analyst: JXL

Data Type: Original

Replicate Data: 248371011|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.416	0.416	0.0055	0.0256	0.0057	14:24:55	Yes
2	0.416	0.416	0.0055	0.0254	0.0057	14:25:25	Yes
Mean:	0.416	0.416	0.0055				
SD:	0.000	0.000	0.0000				
%RSD:	0.028	0.028	0.03				

Sequence No.: 172

Autosampler Location: 146

Sample ID: 248371012|964726|1

Date Collected: 3/17/2010 14:25:46

Analyst: JXL

Data Type: Original

Replicate Data: 248371012|964726|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.706	0.706	0.0092	0.0423	0.0093	14:26:38	Yes
2	0.703	0.703	0.0091	0.0420	0.0093	14:27:08	Yes
Mean:	0.704	0.704	0.0091				
SD:	0.002	0.002	0.0000				
%RSD:	0.279	0.279	0.27				

Sequence No.: 173

Autosampler Location: 147

Sample ID: 248371013|964726|1
Analyst: JXL

Date Collected: 3/17/2010 14:27:29
Data Type: Original

Replicate Data: 248371013|964726|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.170	0.170	0.0024	0.0117	0.0026	14:28:22	Yes
2	0.170	0.170	0.0024	0.0116	0.0026	14:28:52	Yes
Mean:	0.170	0.170	0.0024				
SD:	0.000	0.000	0.0000				
%RSD:	0.109	0.109	0.10				

Sequence No.: 174

Autosampler Location: 148

Sample ID: 248371014|964726|1
Analyst: JXL

Date Collected: 3/17/2010 14:29:13
Data Type: Original

Replicate Data: 248371014|964726|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.264	0.264	0.0036	0.0171	0.0038	14:30:05	Yes
2	0.260	0.260	0.0035	0.0169	0.0037	14:30:35	Yes
Mean:	0.262	0.262	0.0036				
SD:	0.003	0.003	0.0000				
%RSD:	1.213	1.213	1.12				

Sequence No.: 175

Autosampler Location: 149

Sample ID: 248371015|964726|1
Analyst: JXL

Date Collected: 3/17/2010 14:30:56
Data Type: Original

Replicate Data: 248371015|964726|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.300	0.300	0.0041	0.0195	0.0042	14:31:49	Yes
2	0.300	0.300	0.0041	0.0190	0.0042	14:32:18	Yes
Mean:	0.300	0.300	0.0041				
SD:	0.000	0.000	0.0000				
%RSD:	0.002	0.002	0.00				

Sequence No.: 176

Autosampler Location: 150

Sample ID: 248371016|964726|1
Analyst: JXL

Date Collected: 3/17/2010 14:32:39
Data Type: Original

Replicate Data: 248371016|964726|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.314	0.314	0.0042	0.0199	0.0044	14:33:32	Yes
2	0.313	0.313	0.0042	0.0199	0.0044	14:34:01	Yes
Mean:	0.314	0.314	0.0042				
SD:	0.001	0.001	0.0000				
%RSD:	0.429	0.429	0.40				

Sequence No.: 177

Autosampler Location: 151

Sample ID: 248371017|964726|1
Analyst: JXL

Date Collected: 3/17/2010 14:34:23
Data Type: Original

Replicate Data: 248371017|964726|1

Repl	SampleConc	StndConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.215	0.215	0.0030	0.0143	0.0032	14:35:15	Yes
2	0.217	0.217	0.0030	0.0147	0.0032	14:35:45	Yes
Mean:	0.216	0.216	0.0030				
SD:	0.001	0.001	0.0000				

%RSD: 0.642 0.642 0.58

Sequence No.: 178

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/17/2010 14:36:07

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.030	5.030	0.0635	0.2853	0.0637	14:36:57	Yes
2	5.012	5.012	0.0632	0.2823	0.0634	14:37:26	Yes
Mean:	5.021	5.021	0.0633				
SD:	0.013	0.013	0.0002				
%RSD:	0.250	0.250	0.25				

QC value within limits for Hg 253.7 Recovery = 100.42%
All analyte(s) passed QC.

Sequence No.: 179

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/17/2010 14:37:45

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	0.0000	0.0002	0.0002	14:38:36	Yes
2	-0.015	-0.015	0.0001	0.0011	0.0003	14:39:06	Yes
Mean:	-0.017	-0.017	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	17.14	17.14	54.43				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 180

Sample ID: 248371018|964726|1

Analyst: JXL

Autosampler Location: 152

Date Collected: 3/17/2010 14:39:25

Data Type: Original

Replicate Data: 248371018|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.642	0.642	0.0083	0.0390	0.0085	14:40:17	Yes
2	0.640	0.640	0.0083	0.0386	0.0085	14:40:47	Yes
Mean:	0.641	0.641	0.0083				
SD:	0.002	0.002	0.0000				
%RSD:	0.251	0.251	0.24				

Sequence No.: 181

Sample ID: 248371019|964726|1

Analyst: JXL

Autosampler Location: 153

Date Collected: 3/17/2010 14:41:08

Data Type: Original

Replicate Data: 248371019|964726|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.504	0.504	0.0066	0.0308	0.0068	14:42:00	Yes
2	0.503	0.503	0.0066	0.0302	0.0068	14:42:30	Yes
Mean:	0.504	0.504	0.0066				
SD:	0.001	0.001	0.0000				
%RSD:	0.146	0.146	0.14				

Sequence No.: 182

Sample ID: 248371020|964726|1

Analyst: JXL

Autosampler Location: 154

Date Collected: 3/17/2010 14:42:51

Data Type: Original

Replicate Data: 248371020|964726|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.403	0.403	0.0053	0.0250	0.0055	14:43:44	Yes
2	0.395	0.395	0.0052	0.0249	0.0054	14:44:14	Yes
Mean:	0.399	0.399	0.0053				
SD:	0.005	0.005	0.0001				
%RSD:	1.348	1.348	1.28				

=====

Sequence No.: 183

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/17/2010 14:44:35

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.986	4.986	0.0629	0.2831	0.0631	14:45:25	Yes
2	5.041	5.041	0.0636	0.2831	0.0638	14:45:55	Yes
Mean:	5.014	5.014	0.0633				
SD:	0.039	0.039	0.0005				
%RSD:	0.770	0.770	0.77				

QC value within limits for Hg 253.7 Recovery = 100.27%
All analyte(s) passed QC.

=====

Sequence No.: 184

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/17/2010 14:46:14

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	0.0001	0.0008	0.0003	14:47:05	Yes
2	-0.019	-0.019	0.0000	0.0009	0.0002	14:47:35	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	10.87	10.87	35.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 960815.0 Verified by: _____ Lab SOP: GL-MA-E-009 REV# 19
 Analyst: Anthony Green Instrument: BAL-001
 Method: SW846 3050B

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check
1202060830 MB	09-MAR-2010 09:00:00	0.52	50	96.15385	
1202060831 LCS	09-MAR-2010 09:00:00	0.511	50	97.84736	
248371001	09-MAR-2010 09:00:00	0.506	50	98.81423	
1202060832 DUP (248371001)	09-MAR-2010 09:00:00	0.508	50	98.4252	
1202060833 MS (248371001)	09-MAR-2010 09:00:00	0.503	50	99.40358	
1202060835 MSD (248371001)	09-MAR-2010 09:00:00	0.506	50	98.81423	
1202060834 SDILT (248371001)	09-MAR-2010 09:00:00	0.506	50	98.81423	
248371002	09-MAR-2010 09:00:00	0.509	50	98.23183	
248371003	09-MAR-2010 09:00:00	0.523	50	95.60229	
248371004	09-MAR-2010 09:00:00	0.521	50	95.96929	
248371005	09-MAR-2010 09:00:00	0.506	50	98.81423	
248371006	09-MAR-2010 09:00:00	0.516	50	96.89922	
248371007	09-MAR-2010 09:00:00	0.514	50	97.27626	
248371008	09-MAR-2010 09:00:00	0.566	50	88.33922	
248371009	09-MAR-2010 09:00:00	0.512	50	97.65625	
248371010	09-MAR-2010 09:00:00	0.528	50	94.69697	
248371011	09-MAR-2010 09:00:00	0.547	50	91.40768	
248371012	09-MAR-2010 09:00:00	0.519	50	96.33911	
248371013	09-MAR-2010 09:00:00	0.564	50	88.65248	
248371014	09-MAR-2010 09:00:00	0.556	50	89.92806	
248371015	09-MAR-2010 09:00:00	0.506	50	98.81423	
248371016	09-MAR-2010 09:00:00	0.553	50	90.41591	
248371017	09-MAR-2010 09:00:00	0.515	50	97.08738	
248371018	09-MAR-2010 09:00:00	0.545	50	91.74312	
248371019	09-MAR-2010 09:00:00	0.503	50	99.40358	
248371020	09-MAR-2010 09:00:00	0.501	50	99.8004	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202060831	Metals Soil LCS SRM ICPMS	U1062540-MS	.511	g	
MS	1202060833	ICP-MS Spike for soil products.	U1090827-A	.5	mL	
MS	1202060833	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
MSD	1202060835	ICP-MS Spike for soil products.	U1090827-A	.5	mL	
MSD	1202060835	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL	
REGNT	All	Nitric Acid CONC.	1277919	5	mL	

Sample 248371001 consist of moist, black soil with artifacts.

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 960812.0

Analyst: Anthony Green

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: BAL-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202060825	Metals Soil LCS SRM ICP/Hg	UI062540-I	.512	g
MS	1202060827	Metals Spike Mix I	UI1268741-01	.25	mL
MS	1202060827	Metals Spike Mix II	UI1268744-06	.25	mL
MSD	1202060829	Metals Spike Mix I	UI1268741-01	.25	mL
MSD	1202060829	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
1202060824 MB	09-MAR-2010 10:00:00	Soil	0.514	50	97.27626	
1202060825 LCS	09-MAR-2010 10:00:00	Soil	0.512	50	97.65625	
248371001	09-MAR-2010 10:00:00	Soil	0.502	50	99.60159	
1202060826 DUP (248371001)	09-MAR-2010 10:00:00	Soil	0.501	50	99.8004	
1202060827 MS (248371001)	09-MAR-2010 10:00:00	Soil	0.51	50	98.03922	
1202060829 MSD (248371001)	09-MAR-2010 10:00:00	Soil	0.511	50	97.84736	
1202060828 SDILT (248371001)	09-MAR-2010 10:00:00	Soil	0.502	50	99.60159	
248371002	09-MAR-2010 10:00:00	Soil	0.503	50	99.40358	
248371003	09-MAR-2010 10:00:00	Soil	0.51	50	98.03922	
248371004	09-MAR-2010 10:00:00	Soil	0.547	50	91.40768	
248371005	09-MAR-2010 10:00:00	Soil	0.505	50	99.0099	
248371006	09-MAR-2010 10:00:00	Soil	0.502	50	99.60159	
248371007	09-MAR-2010 10:00:00	Soil	0.505	50	99.0099	
248371008	09-MAR-2010 10:00:00	Soil	0.562	50	88.96797	
248371009	09-MAR-2010 10:00:00	Soil	0.503	50	99.40358	
248371010	09-MAR-2010 10:00:00	Soil	0.503	50	99.40358	
248371011	09-MAR-2010 10:00:00	Soil	0.509	50	98.23183	
248371012	09-MAR-2010 10:00:00	Soil	0.501	50	99.8004	
248371013	09-MAR-2010 10:00:00	Soil	0.539	50	92.76438	
248371014	09-MAR-2010 10:00:00	Soil	0.543	50	92.08103	
248371015	09-MAR-2010 10:00:00	Soil	0.506	50	98.81423	
248371016	09-MAR-2010 10:00:00	Soil	0.57	50	87.7193	
248371017	09-MAR-2010 10:00:00	Soil	0.515	50	97.08738	

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Prep Logbook

Batch ID: 960812.0
Analyst: Anthony Green
Method: SW846 3050B
Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202060825	Metals Soil LCS SRM ICP/Hg	UI062540-I	.512	g
MS	1202060827	Metals Spike Mix I	UI1268741-01	.25	mL
MS	1202060827	Metals Spike Mix II	UI1268744-06	.25	mL
MSD	1202060829	Metals Spike Mix I	UI1268741-01	.25	mL
MSD	1202060829	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
248371018	09-MAR-2010 10:00:00	Soil	0.508	50	98.4252	
248371019	09-MAR-2010 10:00:00	Soil	0.525	50	95.2381	
248371020	09-MAR-2010 10:00:00	Soil	0.525	50	95.2381	

Reagent/Solvent Lot ID	Description	Amount	Comments:
1277916	HYDROCHLORIC ACID	10 mL	Sample 248371001 consist of moist, black soil with artifacts.
1277919	Nitric Acid CONC.	1.25 mL	

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 964724.0	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst: Tara Griffin		LCS	1202069721	Metals LCS Soil SRM	U1031809A	.207	g
Method: SW846 7471A Prep		MS	1202069723	Mercury soil working intermediate standard for MS	WHG100316-14	.3	mL
Lab SOP: GL-MA-E-010 REV# 23		MSD	1202069725	Mercury soil working intermediate standard for MS	WHG100316-14	.3	mL
Instrument: BAL-002							

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202069720 MB	16-MAR-2010 12:55:00	Soil	0.594	30	50.50505	
1202069721 LCS	16-MAR-2010 12:55:00	Soil	0.207	30	144.92754	
248371001	16-MAR-2010 12:55:00	Soil	0.519	30	57.80347	
1202069722 DUP (248371001)	16-MAR-2010 12:55:00	Soil	0.523	30	57.36138	
1202069723 MS (248371001)	16-MAR-2010 12:55:00	Soil	0.508	30	59.05512	
1202069725 MSD (248371001)	16-MAR-2010 12:55:00	Soil	0.586	30	51.19454	
1202069724 SDILT (248371001)	16-MAR-2010 12:55:00	Soil	0.519	30	57.80347	
248371002	16-MAR-2010 12:55:00	Soil	0.564	30	53.19149	
248371003	16-MAR-2010 12:55:00	Soil	0.595	30	50.42017	
248371004	16-MAR-2010 12:55:00	Soil	0.524	30	57.25191	
248371005	16-MAR-2010 12:55:00	Soil	0.522	30	57.47126	
248371006	16-MAR-2010 12:55:00	Soil	0.55	30	54.54545	
248371007	16-MAR-2010 12:55:00	Soil	0.563	30	53.28597	
248371008	16-MAR-2010 12:55:00	Soil	0.528	30	56.81818	
248371009	16-MAR-2010 12:55:00	Soil	0.524	30	57.25191	
248371010	16-MAR-2010 12:55:00	Soil	0.563	30	53.28597	
248371011	16-MAR-2010 12:55:00	Soil	0.506	30	59.28854	
248371012	16-MAR-2010 12:55:00	Soil	0.585	30	51.28205	
248371013	16-MAR-2010 12:55:00	Soil	0.539	30	55.65863	
248371014	16-MAR-2010 12:55:00	Soil	0.557	30	53.85996	
248371015	16-MAR-2010 12:55:00	Soil	0.5	30	60	
248371016	16-MAR-2010 12:55:00	Soil	0.575	30	52.17391	
248371017	16-MAR-2010 12:55:00	Soil	0.569	30	52.72408	
248371018	16-MAR-2010 12:55:00	Soil	0.511	30	58.70841	
248371019	16-MAR-2010 12:55:00	Soil	0.525	30	57.14286	
248371020	16-MAR-2010 12:55:00	Soil	0.535	30	56.07477	

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Prep Logbook

Batch ID: 964724.0
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: BAL-002

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202069721	Metals LCS Soil SRM	UI031809A	.207	g
MS	1202069723	Mercury soil working intermediate standard for MS	WHG100316-14	.3	mL
MSD	1202069725	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
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Reagent/Solvent Lot ID	Description	Amount
1255532-C	Hg reducing agent	2 mL
1274391-I	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
WHG100316-08	Mercury Working Standard 1st Source CAL S 0.5	75 uL
WHG100316-09	Mercury Working 1st Source CAL S 2.0	300 uL
WHG100316-10	Mercury Working 1st Source CAL S 5.0/CCV	750 uL
WHG100316-11	Mercury Working 1st Source CAL S 10.0	1.5 mL
WHG100316-12	Mercury Working 2nd Source S 5.0/CCV	750 uL

Comments:

Sample 248371001 is a moist dark brown soil.
 Digestion Start Date: 16-MAR-10 12:55
 Digestion End Date: 16-MAR-10 13:25

DATA EXCEPTION REPORT

Mo.Day Yr. 05-APR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 960813	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 248371(10-2151)

Application Issues:

Failed Recovery for MS/PS
Failed RPD for DUP
Failed Recovery for LCS/LCSD
Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

DER Disposition:

1. Failed Recovery for MS/PS:
QC 1202060827MS
2. Failed RPD for DUP:
QC 1202060826DUP
3. Failed Recovery for LCS/LCSD:
QC 1202060825LCS
4. Failed Recovery for MSD/PSD:
QC 1202060829MSD

1. The matrix spike 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.
2. The sample and sample duplicate % RPD failed outside the control limits for chromium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
3. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.
4. The matrix spike duplicate recovery failed outside of the control limits for barium, 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:

Eric Lawson 13-APR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 12-JUN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 12-JUN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 27-AUG-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: 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		

Standard Logbook

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
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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		

Standard Logbook

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: O2SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100405-61 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 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: Q2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI1268741-01 **Opened:** 11-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI1268744-06 **Opened:** 11-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 11-FEB-10
Type: Source Material **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Standard Logbook

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

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		

Standard Logbook

Serial ID: UMS100415-03 **Opened:** 15-APR-11 **Amount :** 250 ml
Name: ICPMSCaISPIKEC **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: 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 + TypeI H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: 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

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

Standard Logbook

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

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

Standard Logbook

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: WI100331-42 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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.
WI100331-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100331-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100331-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100331-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100331-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100331-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100331-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100331-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100331-43 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100331-44 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100331-45 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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: WI100331-46 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100331-47 **Opened:** 31-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 01-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100417-04 **Opened:** 17-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 17-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 18-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100417-04A **Opened:** 17-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 17-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 18-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.
WMS100417-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100417-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100417-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100417-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100417-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100417-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100417-05 **Opened:** 17-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 17-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 18-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100417-06 **Opened:** 17-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 17-APR-10 **Pipet id :** 3820544
Type: Working **Expires:** 18-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100417-07 **Opened:** 17-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 17-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 18-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.
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100417-08 **Opened:** 17-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 17-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 18-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.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100417-70 **Opened:** 17-APR-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 17-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 18-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100405-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **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: Hydroxylamine Hydrochloride

Standard Logbook

Comments: None

Serial ID: 1250038-02 Opened: 04-JAN-10 Lot Number : ZU74081198 mL
Name: B-H2O2 Received: 04-JAN-10
Type: Reagent/Solvent Expires: 04-JAN-11
Employee: Bryan Davis
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 125532-C Opened: 15-JAN-10 Balance Id : BAL-002
Name: B-NaCl.NH2OH.HCl-MER Received: 15-JAN-10
Type: Reagent/Solvent Expires: 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	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

Standard Logbook

Description: 5% KMnO4 solution

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1277916 Opened: 02-MAR-10 Lot Number : J02039

Name: I-HCL Received: 02-MAR-10 Preservative_Id : 5 none

Type: Reagent/Solvent Expires: 02-MAR-11

Employee: Francena Armstrong

Supplier: J.T. BAKER

Description: HYDROCHLORIC ACID

Comments: None

Serial ID: 1277919 Opened: 02-MAR-10 Lot Number : J 04043 L

Name: I-HNO3 Received: 02-MAR-10

Type: Reagent/Solvent Expires: 02-MAR-11

Employee: Francena Armstrong

Supplier: BAKER

Description: Nitric Acid CONC.

Comments: None

Serial ID: 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: 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

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2151**

Method/Analysis Information

Product: **pH**

Analytical Batch: 960294 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484
1202059776	248371001(RE36-10-7415) Sample Duplicate (DUP)
1202059777	248371010(RE36-10-7483) Sample Duplicate (DUP)
1202059778	Laboratory Control Sample (LCS)

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 17.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Electrode analysis was performed on a PerpHect pH Meter Orion 370.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 248371001 (RE36-10-7415) and 248371010 (RE36-10-7483).

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: 1202059776 (RE36-10-7415), 1202059777 (RE36-10-7483), 248371001 (RE36-10-7415), 248371002 (RE36-10-7420), 248371003 (RE36-10-7418), 248371004 (RE36-10-7417), 248371005 (RE36-10-7419), 248371006 (RE36-10-7416), 248371007 (RE36-10-7478), 248371008 (RE36-10-7490), 248371009 (RE36-10-7487), 248371010 (RE36-10-7483), 248371011 (RE36-10-7481), 248371012 (RE36-10-7486), 248371013 (RE36-10-7477), 248371014 (RE36-10-7489), 248371015 (RE36-10-7479), 248371016 (RE36-10-7482), 248371017 (RE36-10-7480), 248371018 (RE36-10-7485), 248371019 (RE36-10-7488) and 248371020 (RE36-10-7484).

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: 960259 and 960263 **Method:** SW9012A Cyanide and Total

Prep Batch : 960258 and 960261 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484
1202059677	Method Blank (MB)
1202059678	248408015(RE11-10-1715) Sample Duplicate (DUP)
1202059679	248408016(RE11-10-1708) Sample Duplicate (DUP)
1202059680	248408015(RE11-10-1715) Matrix Spike (MS)
1202059681	248408016(RE11-10-1708) Matrix Spike (MS)
1202059682	248408015(RE11-10-1715) Matrix Spike Duplicate (MSD)
1202059683	248408016(RE11-10-1708) Matrix Spike Duplicate (MSD)
1202059684	Laboratory Control Sample (LCS)
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)

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: 248408015 (RE11-10-1715), 248408016 (RE11-10-1708)- Batch 960259, 248371008 (RE36-10-7490) and 248371009 (RE36-10-7487)- Batch 960263.

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 Relative Percent Difference (RPD) between the sample and its duplicate falls outside of the normal acceptance limits for sample 1202059678 (RE11-10-1715)- Batch 960259 because of the heterogeneous matrix of the sample. The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202059679 (RE11-10-1708)- Batch 960259, 1202059687 (RE36-10-7490), 1202059688 (RE36-10-7487), 248371008 (RE36-10-7490) and 248371009 (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: 1202059684 (LCS)- Batch 960259 and 1202059693 (LCS)- Batch 960263.

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: 802686 1202059678 (RE11-10-1715)- Batch 960259.

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: 967018 **Method:** EPA 300.0 Nitrate in Soil
Prep Batch : 967014 **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
248371001	RE36-10-7415
248371002	RE36-10-7420
248371003	RE36-10-7418
248371004	RE36-10-7417
248371005	RE36-10-7419
248371006	RE36-10-7416
248371007	RE36-10-7478
248371008	RE36-10-7490
248371009	RE36-10-7487
248371010	RE36-10-7483
248371011	RE36-10-7481
248371012	RE36-10-7486
248371013	RE36-10-7477
248371014	RE36-10-7489
248371015	RE36-10-7479
248371016	RE36-10-7482
248371017	RE36-10-7480
248371018	RE36-10-7485
248371019	RE36-10-7488
248371020	RE36-10-7484
1202075413	Method Blank (MB)
1202075414	248371001(RE36-10-7415) Sample Duplicate (DUP)
1202075415	248371020(RE36-10-7484) Sample Duplicate (DUP)
1202075416	248371001(RE36-10-7415) Matrix Spike (MS)
1202075417	248371020(RE36-10-7484) Matrix Spike (MS)
1202075418	248371001(RE36-10-7415) Matrix Spike Duplicate (MSD)
1202075419	248371020(RE36-10-7484) Matrix Spike Duplicate (MSD)
1202075420	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: 248371001 (RE36-10-7415) and 248371020 (RE36-10-7484).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

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

A DER was not required for this SDG.

Manual Integrations

The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 248371008 (RE36-10-7490).

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: Nick DeLore Date: 3-27-10

Sample Data Summary

GEL LABORATORIES LLC

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Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-2151 GEL Work Order: 248371

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

Nickelated Emore 3-27-10

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Certificate of Analysis

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

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7415
Sample ID: 248371001
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 41.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	6.65	0.010	0.100	SU	1	TXT1	03/03/10	1431	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total		633	102	376	ug/kg	1	AXC2	03/10/10	1635	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		12.4	0.513	1.71	mg/kg	1	GXM	03/24/10	0830	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7420
Sample ID: 248371002
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 8.74%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.61	0.010	0.100	SU	1	TXT1	03/03/10	1436	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	71.8	70.3	258	ug/kg	1	AXC2	03/10/10	1636	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.73	0.325	1.08	mg/kg	1	GXM	03/24/10	1030	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7418
Sample ID: 248371003
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 18.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.68	0.010	0.100	SU	1	TXT1	03/03/10	1438	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	82.0	301	ug/kg	1	AXC2	03/10/10	1637	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.47	0.363	1.21	mg/kg	1	GXM	03/24/10	1100	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7417
Sample ID: 248371004
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 21%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.56	0.010	0.100	SU	1	TXT1	03/03/10	1443	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	143	82.8	304	ug/kg	1	AXC2	03/10/10	1642	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.34	0.372	1.24	mg/kg	1	GXM	03/24/10	1130	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7419
Sample ID: 248371005
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 16.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.6C	H	6.97	0.010	0.100	SU	1	TXT1	03/03/10	1445	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	195	69.4	255	ug/kg	1	AXC2	03/10/10	1643	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		5.29	0.360	1.20	mg/kg	1	GXM	03/24/10	1200	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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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Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7416
Sample ID: 248371006
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 11.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	6.81	0.010	0.100	SU	1	TXT1	03/03/10	1447	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	92.7	73.7	271	ug/kg	1	AXC2	03/10/10	1643	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.97	0.332	1.11	mg/kg	1	GXM	03/24/10	1329	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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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Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7490
Sample ID: 248371008
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 26%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	6.80	0.010	0.100	SU	1	TXT1	03/03/10	1451	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.8	286	ug/kg	1	AXC2	03/10/10	1559	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.45	0.405	1.35	mg/kg	1	GXM	03/24/10	1429	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7478
Sample ID: 248371007
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 9.81%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.23	0.010	0.100	SU	1	TXT1	03/03/10	1449	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.8	257	ug/kg	1	AXC2	03/10/10	1644	960259	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.23	0.329	1.10	mg/kg	1	GXM	03/24/10	1359	967018	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	GXM3	03/23/10	1555	967014
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/10/10	1113	960258

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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Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7487
Sample ID: 248371009
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.3C	H	7.11	0.010	0.100	SU	1	TXT1	03/03/10	1454	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.5	296	ug/kg	1	AXC2	03/10/10	1606	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		6.15	0.398	1.33	mg/kg	1	GXM	03/24/10	1459	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7483
Sample ID: 248371010
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.4C	H	6.71	0.010	0.100	SU	1	TXT1	03/03/10	1457	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total		448	89.5	329	ug/kg	1	AXC2	03/10/10	1609	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.96	0.395	1.32	mg/kg	1	GXM	03/24/10	1529	967018	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	GXM3	03/23/10	1555	967014
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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Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7481
Sample ID: 248371011
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 32.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.7C	H	6.57	0.010	0.100	SU	1	TXT1	03/03/10	1500	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	95.5	351	ug/kg	1	AXC2	03/10/10	1610	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.447	1.49	mg/kg	1	GXM	03/24/10	1558	967018	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	GXM3	03/23/10	1555	967014
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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Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7486
Sample ID: 248371012
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 21.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.5C	H	6.33	0.010	0.100	SU	1	TXT1	03/03/10	1501	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.3	273	ug/kg	1	AXC2	03/10/10	1611	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	GXM	03/24/10	1628	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7477
Sample ID: 248371013
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 23.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	7.10	0.010	0.100	SU	1	TXT1	03/03/10	1514	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	89.0	327	ug/kg	1	AXC2	03/10/10	1612	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.389	1.30	mg/kg	1	GXM	03/24/10	1658	967018	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	GXM3	03/23/10	1555	967014
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
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7489
Sample ID: 248371014
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 35%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	6.78	0.010	0.100	SU	1	TXT1	03/03/10	1516	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	105	385	ug/kg	1	AXC2	03/10/10	1617	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.462	1.54	mg/kg	1	GXM	03/24/10	1728	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7479
Sample ID: 248371015
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											
<i>SW9045C pH "As Received"</i>											
pH-at Temp 18.7C	H	6.48	0.010	0.100	SU	1	TXT1	03/03/10	1518	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	85.0	312	ug/kg	1	AXC2	03/10/10	1617	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.400	1.33	mg/kg	1	GXM	03/24/10	1758	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7482
Sample ID: 248371016
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 24.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.6C	H	6.47	0.010	0.100	SU	1	TXT1	03/03/10	1520	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	84.7	312	ug/kg	1	AXC2	03/10/10	1618	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.387	1.29	mg/kg	1	GXM	03/24/10	1927	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7480
Sample ID: 248371017
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 12.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.24	0.010	0.100	SU	1	TXT1	03/03/10	1521	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	98.4	77.4	284	ug/kg	1	AXC2	03/10/10	1619	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.340	1.13	mg/kg	1	GXM	03/24/10	1957	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7485
Sample ID: 248371018
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 26.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.49	0.010	0.100	SU	1	TXT1	03/03/10	1524	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	164	85.6	315	ug/kg	1	AXC2	03/10/10	1620	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.408	1.36	mg/kg	1	GXM	03/24/10	2027	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7488
Sample ID: 248371019
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 10%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.92	0.010	0.100	SU	1	TXT1	03/03/10	1526	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2	03/10/10	1621	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		2.67	0.334	1.11	mg/kg	1	GXM	03/24/10	2057	967018	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	GXM3	03/23/10	1555	967014
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 27, 2010

Client SDG: 10-2151

Client Sample ID: RE36-10-7484
Sample ID: 248371020
Matrix: R
Collect Date: 24-FEB-10 12:00
Receive Date: 02-MAR-10
Collector: Client
Moisture: 17.4%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.7C	H	6.72	0.010	0.100	SU	1	TXT1	03/03/10	1528	960294	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	105	69.8	257	ug/kg	1	AXC2	03/10/10	1622	960263	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.70	0.361	1.20	mg/kg	1	GXM	03/24/10	2127	967018	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	GXM3	03/23/10	1555	967014
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	

Quality Control Summary

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QC Summary

Report Date: March 27, 2010

Page 1 of 3

Los Alamos National Laboratory
PO Box 1663
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Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 248371

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Electrode Analysis											
Batch	960294										
QC1202059776	248371001	DUP									
pH		H	6.65	H	6.71	SU	0.898	(0%-10%)	TXT1	03/03/10	14:34
QC1202059777	248371010	DUP									
pH		H	6.71	H	6.86	SU	2.21	(0%-10%)		03/03/10	14:58
QC1202059778	LCS										
pH	7.00				6.98	SU		99.7	(95%-105%)		03/03/10 14:28
Flow Injection Analysis											
Batch	960259										
QC1202059678	248408015	DUP									
Cyanide, Total		J	371		2050	ug/kg	139*^	(+/-376)	AXC2	03/10/10	16:46
QC1202059679	248408016	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/10/10	16:50
QC1202059684	LCS										
Cyanide, Total	67900				57300	ug/kg		84.3	(32%-157%)		03/10/10 16:34
QC1202059677	MB										
Cyanide, Total				U	250	ug/kg				03/10/10	16:34
QC1202059680	248408015	MS									
Cyanide, Total	8130	J	371		6690	ug/kg		77.7	(26%-158%)		03/10/10 16:47
QC1202059681	248408016	MS									
Cyanide, Total	5070	U	ND		4880	ug/kg		96	(26%-158%)		03/10/10 16:54
QC1202059682	248408015	MSD									
Cyanide, Total	7970	J	371		7050	ug/kg	5.28	83.8	(0%-30%)		03/10/10 16:48
QC1202059683	248408016	MSD									
Cyanide, Total	5280	U	ND		5050	ug/kg	3.30	95.4	(0%-30%)		03/10/10 16:55
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
Ion Chromatography											
Batch	967018										

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QC Summary

Workorder: 248371

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	967018										
QC1202075414	248371001	DUP									
Nitrate-N			12.4	12.8	mg/kg	3.48		(0%-20%)	GXM3	03/24/10	09:00
QC1202075415	248371020	DUP									
Nitrate-N			1.70	1.72	mg/kg	1.40	^	(+/-1.20)		03/24/10	21:57
QC1202075420	LCS										
Nitrate-N	50.0			45.9	mg/kg			91.8	(90%-110%)	03/24/10	08:01
QC1202075413	MB										
Nitrate-N			U	1.00	mg/kg					03/24/10	07:31
QC1202075416	248371001	MS									
Nitrate-N	85.2	12.4		94.3	mg/kg			96.1	(90%-110%)	03/24/10	09:30
QC1202075417	248371020	MS									
Nitrate-N	59.7	1.70		57.7	mg/kg			93.9	(90%-110%)	03/24/10	22:27
QC1202075418	248371001	MSD									
Nitrate-N	85.2	12.4		94.4	mg/kg	0.163		96.3	(0%-20%)	03/24/10	10:00
QC1202075419	248371020	MSD									
Nitrate-N	59.7	1.70		57.8	mg/kg	0.107		94	(0%-20%)	03/24/10	22:57

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

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QC Summary

Workorder: 248371

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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: 27-MAR-2010 12:07

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2151

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 15:48:24	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
CCV	10-MAR-2010 16:51:04	OM_3-10-2010_14-44-38	104	100	104	(90%-110%)	Yes
CCV	10-MAR-2010 17:03:38	OM_3-10-2010_14-44-38	106	100	106	(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 15:50:14	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
CCB	10-MAR-2010 16:52:54	OM_3-10-2010_14-44-38	-2.02	10	Yes
CCB	10-MAR-2010 17:05:28	OM_3-10-2010_14-44-38	-2.06	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 27-MAR-2010 12:07

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2151

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	23-MAR-2010 14:34:00	100323	4.8331	5	96.7	(90%-110%)	Yes
CCV	24-MAR-2010 06:31:00	100323	4.5868	5	91.7	(90%-110%)	Yes
CCV	24-MAR-2010 12:30:00	100323	7.5961	7.5	101	(90%-110%)	Yes
CCV	24-MAR-2010 18:27:00	100323	4.5896	5	91.8	(90%-110%)	Yes
CCV	24-MAR-2010 23:26:00	100323	7.5857	7.5	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-MAR-2010 15:04:00	100323	0	0.1	Yes
CCB	24-MAR-2010 07:01:00	100323	0	0.1	Yes
CCB	24-MAR-2010 13:00:00	100323	0	0.1	Yes
CCB	24-MAR-2010 18:57:00	100323	0	0.1	Yes
CCB	24-MAR-2010 23:56:00	100323	0	0.1	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 960261.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202059693	Total Cyanide Solid LCS	URFI200957-01	.25	g
MS	1202059689	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URFI269274-02	.025	mL
MS	1202059690	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URFI269274-02	.025	mL
MSD	1202059691	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URFI269274-02	.025	mL
MSD	1202059692	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URFI269274-02	.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

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GEL Laboratories LLC

Prep Logbook

Batch ID: 960261.0
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	Comments:
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	

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Cyanide Sample Distillation

Batch ID: 960258.0	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst: Alan Stanley		LCS	1202059684	Total Cyanide Solid LCS	URF1200957-01	.25	g
Method: SW846 9010B Prep		MS	1202059680	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
Lab SOP: GL-GC-E-067 REV# 13		MS	1202059681	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
Instrument: Sartorius Balance B-001		MSD	1202059682	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
		MSD	1202059683	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
1202059677 MB	10-MAR-2010 11:13:00	Soil	0.5	25	50	>12
1202059684 LCS	10-MAR-2010 11:13:00	Soil	0.25	25	100	>12
248371001	10-MAR-2010 11:13:00	Soil	0.57	25	43.85965	>12
248371002	10-MAR-2010 11:13:00	Soil	0.53	25	47.16981	>12
248371003	10-MAR-2010 11:13:00	Soil	0.51	25	49.01961	>12
248371004	10-MAR-2010 11:13:00	Soil	0.52	25	48.07692	>12
248371005	10-MAR-2010 11:13:00	Soil	0.59	25	42.37288	>12
248371006	10-MAR-2010 11:13:00	Soil	0.52	25	48.07692	>12
248371007	10-MAR-2010 11:13:00	Soil	0.54	25	46.2963	>12
248408015	10-MAR-2010 11:13:00	Soil	0.53	25	47.16981	>12
1202059678 DUP (248408015)	10-MAR-2010 11:13:00	Soil	0.54	25	46.2963	>12
1202059680 MS (248408015)	10-MAR-2010 11:13:00	Soil	0.5	25	50	>12
1202059682 MSD (248408015)	10-MAR-2010 11:13:00	Soil	0.51	25	49.01961	>12
248408016	10-MAR-2010 11:13:00	Soil	0.57	25	43.85965	>12
1202059679 DUP (248408016)	10-MAR-2010 11:13:00	Soil	0.52	25	48.07692	>12
1202059681 MS (248408016)	10-MAR-2010 11:13:00	Soil	0.52	25	48.07692	>12
1202059683 MSD (248408016)	10-MAR-2010 11:13:00	Soil	0.5	25	50	>12
248408017	10-MAR-2010 11:13:00	Soil	0.53	25	47.16981	>12
248408018	10-MAR-2010 11:13:00	Soil	0.59	25	42.37288	>12
248418001	10-MAR-2010 11:13:00	Soil	0.59	25	42.37288	>12
248418002	10-MAR-2010 11:13:00	Soil	0.57	25	43.85965	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 960258.0
 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	1202059684	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202059680	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202059681	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059682	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202059683	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
248418003	10-MAR-2010 11:13:00	Soil	0.54	25	46.2963	>12
248418004	10-MAR-2010 11:13:00	Soil	0.56	25	44.64286	>12
248418005	10-MAR-2010 11:13:00	Soil	0.52	25	48.07692	>12
248418006	10-MAR-2010 11:13:00	Soil	0.5	25	50	>12
248418007	10-MAR-2010 11:13:00	Soil	0.53	25	47.16981	>12
248418008	10-MAR-2010 11:13:00	Soil	0.55	25	45.45455	>12
248418009	10-MAR-2010 11:13:00	Soil	0.58	25	43.10345	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N H3NO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100310-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/10/2010 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

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		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
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
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

6.32

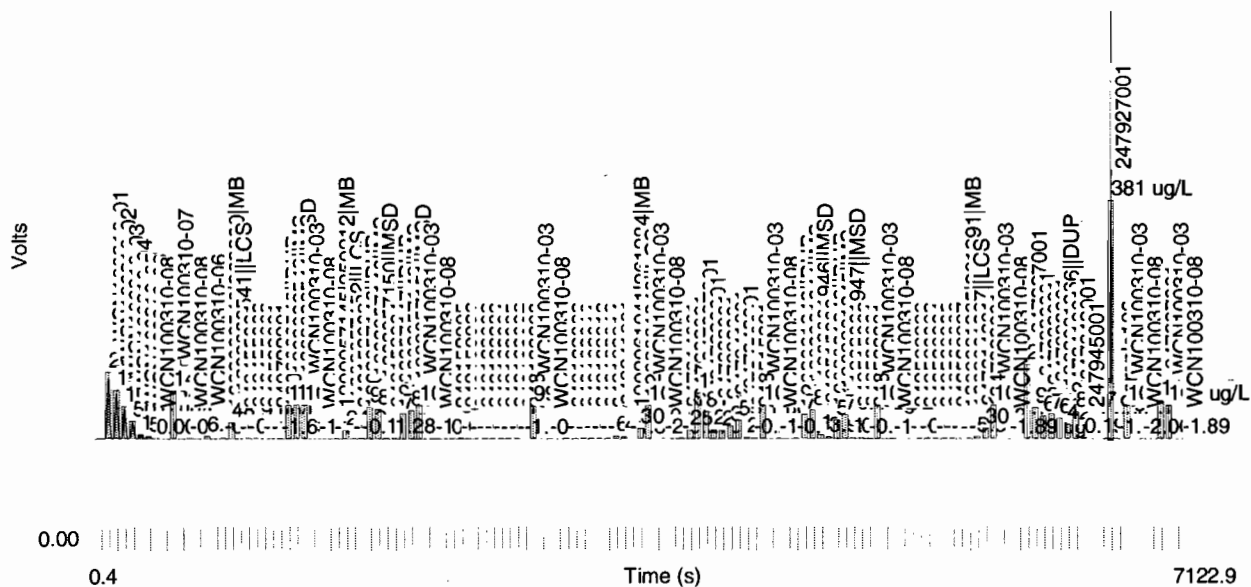
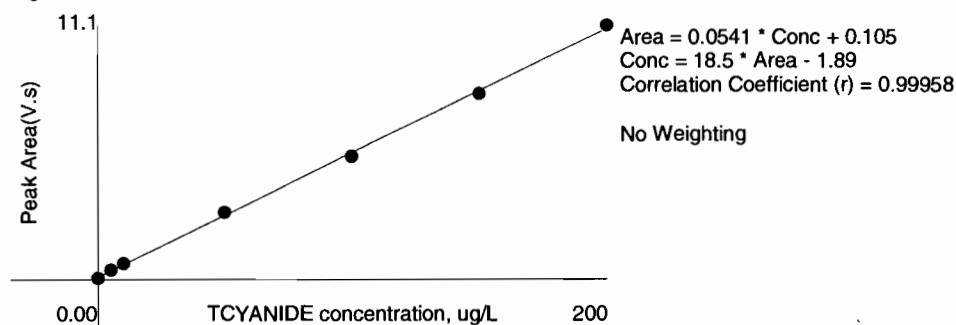


Table 1: TCYANIDE

	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
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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
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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
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248374009	960266	1	axc2	3/10/2010 15:40:26	OM_3-10-2010_14-44-38
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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
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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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248371012	960263	1	axc2	3/10/2010	16:11:38	OM_3-10-2010_14-44-38
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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
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248371018	960263	1	axc2	3/10/2010	16:20:32	OM_3-10-2010_14-44-38
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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
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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
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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
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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
248408017	960259	1	axc2	3/10/2010	16:56:30	OM_3-10-2010_14-44-38
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
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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
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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
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CCB		1	axc2	3/10/2010	17:30:44	OM_3-10-2010_14-44-38
248408004	960257	1	axc2	3/10/2010	17:32:33	OM_3-10-2010_14-44-38
248408005	960257	1	axc2	3/10/2010	17:33:26	OM_3-10-2010_14-44-38
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248408011	960257	1	axc2	3/10/2010	17:38:49	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
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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
248622001	961296	1	axc2	3/10/2010	17:59:37	OM_3-10-2010_14-44-38
248622002	961296	1	axc2	3/10/2010	18:00:32	OM_3-10-2010_14-44-38
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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
1202064173	962270	250	axc2	3/10/2010	18:25:01	OM_3-10-2010_14-44-38
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
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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
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248228001	960944	1	axc2	3/10/2010	18:38:38	OM_3-10-2010_14-44-38
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

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		Detection Time	ADF	MDF	Description
			TCYANIDE	Area				
			Conc. (ug/L)	(Vs)				
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
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar

Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

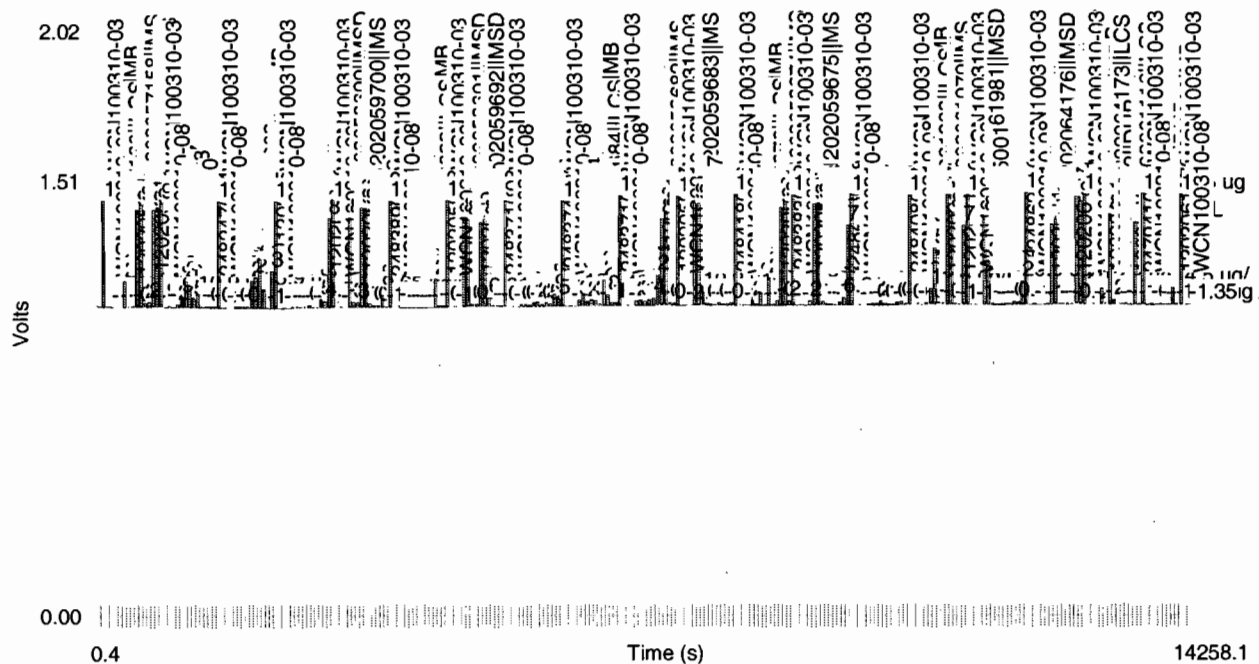
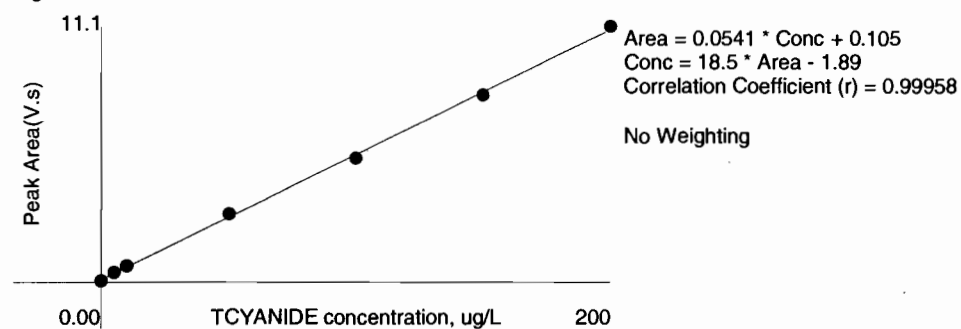


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	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



Ion Chromatography

Prep Logbook

Ion Chromatography (IC)

Batch ID: 967014.0	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst: Greg Milton		LCS	1202075420	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Method: EPA 300.0 PREP		MS	1202075416	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Lab SOP: GL-GC-E-086 REV# 17		MS	1202075417	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
Instrument: Sartorius Balance B-001		MSD	1202075418	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
		MSD	1202075419	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
1202075413 MB	23-MAR-2010 15:55:00	Soil	4	40	10	
1202075420 LCS	23-MAR-2010 15:55:00	Soil	4	40	10	
248371001	23-MAR-2010 15:55:00	Soil	4.01	40	9.97506	
1202075414 DUP (248371001)	23-MAR-2010 15:55:00	Soil	4	40	10	
1202075416 MS (248371001)	23-MAR-2010 15:55:00	Soil	4.02	40	9.95025	
1202075418 MSD (248371001)	23-MAR-2010 15:55:00	Soil	4.02	40	9.95025	
248371002	23-MAR-2010 15:55:00	Soil	4.05	40	9.87654	
248371003	23-MAR-2010 15:55:00	Soil	4.07	40	9.82801	
248371004	23-MAR-2010 15:55:00	Soil	4.08	40	9.80392	
248371005	23-MAR-2010 15:55:00	Soil	4.01	40	9.97506	
248371006	23-MAR-2010 15:55:00	Soil	4.08	40	9.80392	
248371007	23-MAR-2010 15:55:00	Soil	4.04	40	9.90099	
248371008	23-MAR-2010 15:55:00	Soil	4	40	10	
248371009	23-MAR-2010 15:55:00	Soil	4	40	10	
248371010	23-MAR-2010 15:55:00	Soil	4	40	10	
248371011	23-MAR-2010 15:55:00	Soil	4	40	10	
248371012	23-MAR-2010 15:55:00	Soil	4	40	10	
248371013	23-MAR-2010 15:55:00	Soil	4.04	40	9.90099	
248371014	23-MAR-2010 15:55:00	Soil	4	40	10	
248371015	23-MAR-2010 15:55:00	Soil	4.12	40	9.70874	
248371016	23-MAR-2010 15:55:00	Soil	4.1	40	9.7561	
248371017	23-MAR-2010 15:55:00	Soil	4.02	40	9.95025	
248371018	23-MAR-2010 15:55:00	Soil	4	40	10	

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 967014.0
Analyst: Greg Milton
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	1202075420	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075416	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MS	1202075417	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075418	GEL-ANION-4C Spiking Solution	UIC100224SPK	.8	mL
MSD	1202075419	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
248371019	23-MAR-2010 15:55:00	Soil	4	40	10	
248371020	23-MAR-2010 15:55:00	Soil	4.03	40	9.92556	
1202075415 DUP (248371020)	23-MAR-2010 15:55:00	Soil	4.05	40	9.87654	
1202075417 MS (248371020)	23-MAR-2010 15:55:00	Soil	4.06	40	9.85222	
1202075419 MSD (248371020)	23-MAR-2010 15:55:00	Soil	4.06	40	9.85222	

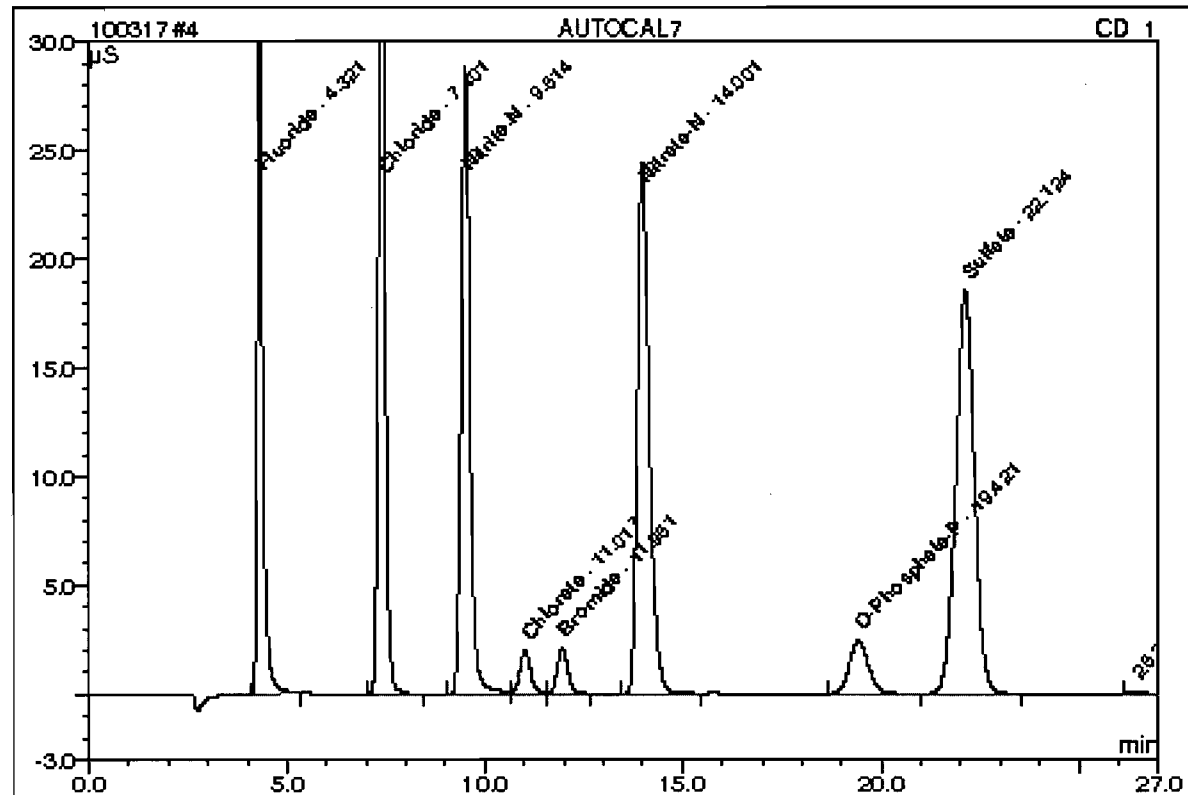
Reagent/Solvent Lot ID Description Amount Comments:

This is runlog for Sequence 100325.seq for IC7

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	03/17/10 09:15		1	100325	GXM3
ICAL-06	03/17/10 09:45		1	100325	GXM3
ICAL-05	03/17/10 10:15		1	100325	GXM3
ICAL-04	03/17/10 10:45		1	100325	GXM3
ICAL-03	03/17/10 11:15		1	100325	GXM3
ICAL-02	03/17/10 11:45		1	100325	GXM3
ICAL-01	03/17/10 13:14		1	100325	GXM3

4 AUTOCAL7

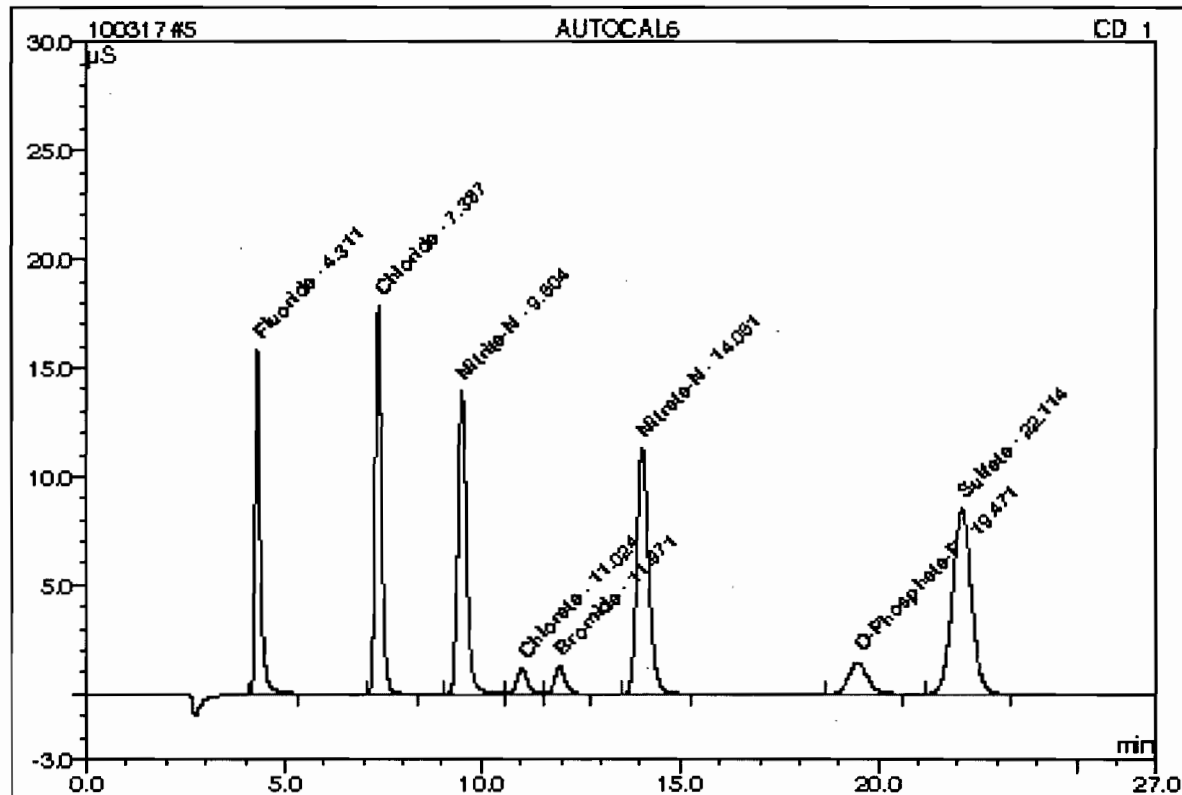
Sample Name:	AUTOCAL7	Injection Volume:	50.0
Vial Number:	4	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 9:15	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.32	Fluoride	10.0000	10.0024		5.01638	12.24
2	7.40	Chloride	20.0000	20.0097		7.37427	18.00
3	9.51	Nitrite-N	10.0000	10.0083		7.36725	17.98
4	11.02	Chlorate	5.0000	5.0490		0.60961	1.49
5	11.96	Bromide	5.0000	5.0206		0.64557	1.58
6	14.00	Nitrate-N	10.0000	10.0123		8.56118	20.89
7	19.42	O-Phosphate-P	5.0000	5.0000		1.32928	3.24
8	22.12	Sulfate	40.0000	40.0384		10.04798	24.52
Total:				105.1408	0.000	40.952	99.94

5 AUTOCAL6

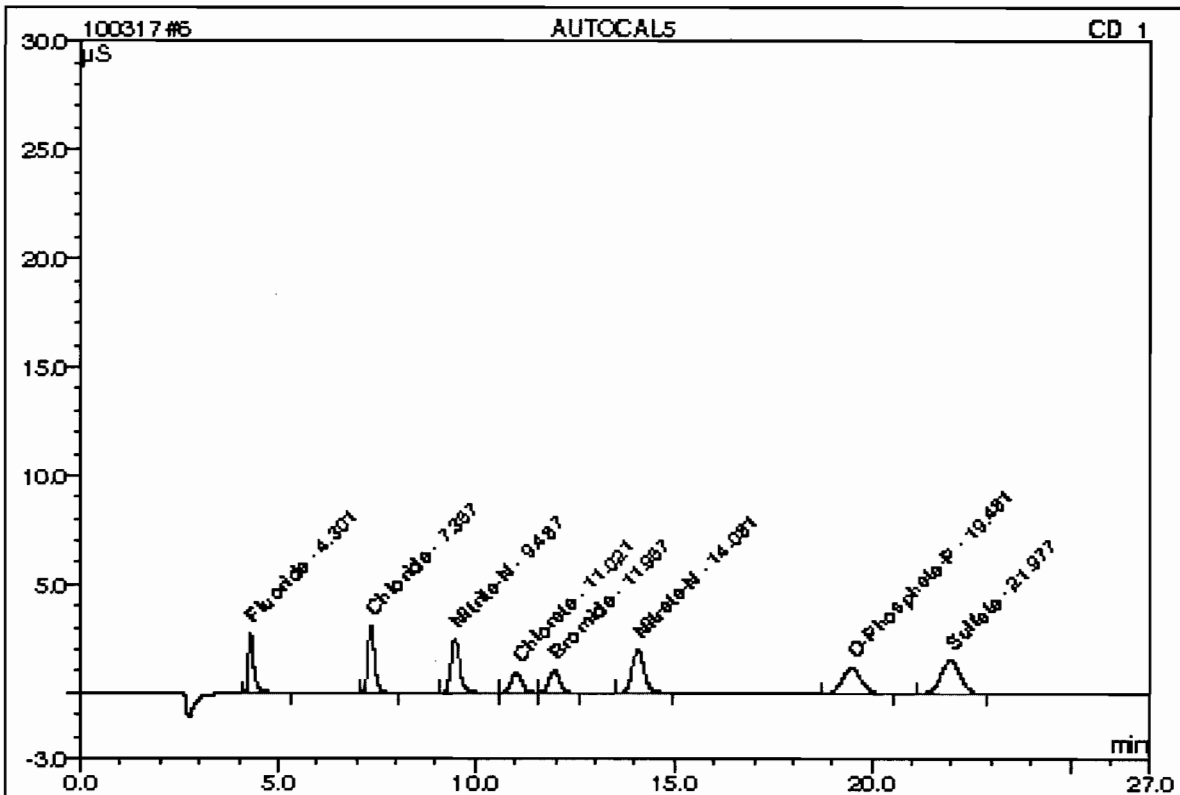
Sample Name:	AUTOCAL6	Injection Volume:	50.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantit. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 9:45	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086,300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.31	Fluoride	5.0000	4.8820		2.42594	12.44
2	7.39	Chloride	10.0000	9.3500		3.36519	17.26
3	9.50	Nitrite-N	5.0000	4.8693		3.54551	18.19
4	11.02	Chlorate	3.0000	2.9878		0.36137	1.85
5	11.97	Bromide	3.0000	2.9986		0.38556	1.98
6	14.05	Nitrate-N	5.0000	4.7145		3.94401	20.23
7	19.47	O-Phosphate-P	3.0000	2.9536		0.77886	4.00
8	22.11	Sulfate	20.0000	19.0326		4.68879	24.05
Total:				51.7885	0.000	19.495	100.00

6 AUTOCAL5

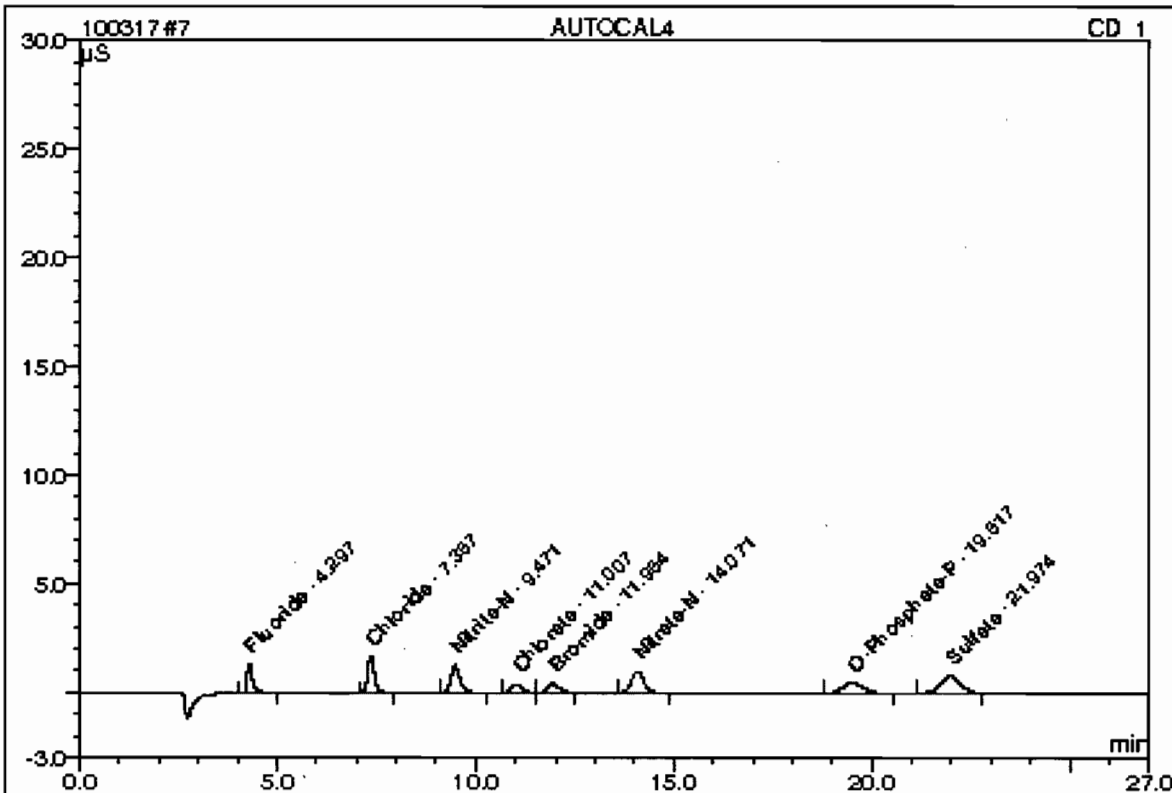
Sample Name:	AUTOCAL5	Injection Volume:	50.0
Vial Number:	6	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 10:15	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.30	Fluoride	1.0000	0.9378		0.44618	9.89
2	7.37	Chloride	2.0000	1.8432		0.61004	13.52
3	9.49	Nitrite-N	1.0000	0.9327		0.64234	14.24
4	11.02	Chlorate	2.5000	2.3781		0.28403	6.30
5	11.97	Bromide	2.5000	2.4513		0.31361	6.95
6	14.08	Nitrate-N	1.0000	0.9208		0.70455	15.62
7	19.48	O-Phosphate-P	2.5000	2.4823		0.65221	14.46
8	21.98	Sulfate	4.0000	3.7504		0.85753	19.01
Total:				15.6967	0.000	4.511	100.00

7 AUTOCAL4

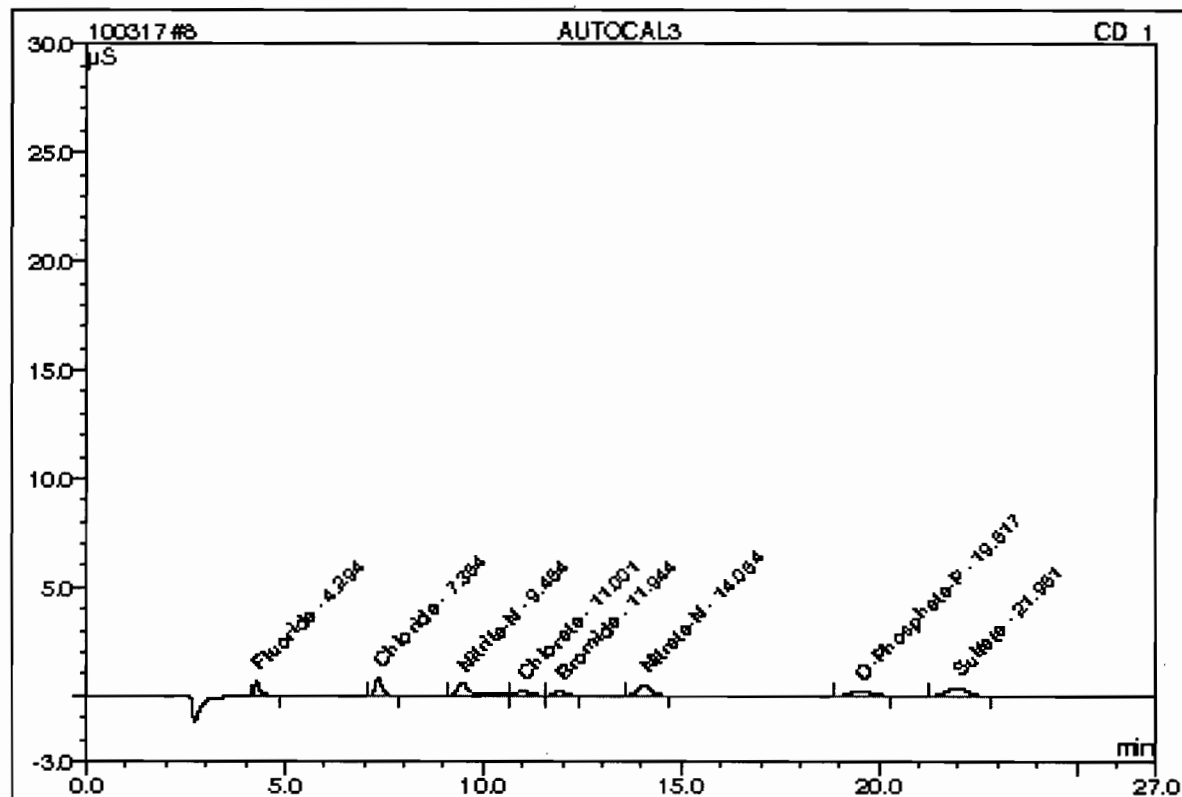
Sample Name:	AUTOCAL4	Injection Volume:	50.0
Vial Number:	7	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 10:45	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	0.5000	0.4925		0.21808	10.30
2	7.36	Chloride	1.0000	1.0808		0.32478	15.34
3	9.47	Nitrite-N	0.5000	0.4940		0.31326	14.80
4	11.01	Chlorate	1.0000	0.9498		0.10869	5.13
5	11.95	Bromide	1.0000	0.9722		0.12171	5.75
6	14.07	Nitrate-N	0.5000	0.5111		0.34644	16.36
7	19.52	O-Phosphate-P	1.0000	0.9993		0.25849	12.21
8	21.97	Sulfate	2.0000	2.0534		0.42575	20.11
Total:				7.5529	0.000	2.117	100.00

8 AUTOCAL3

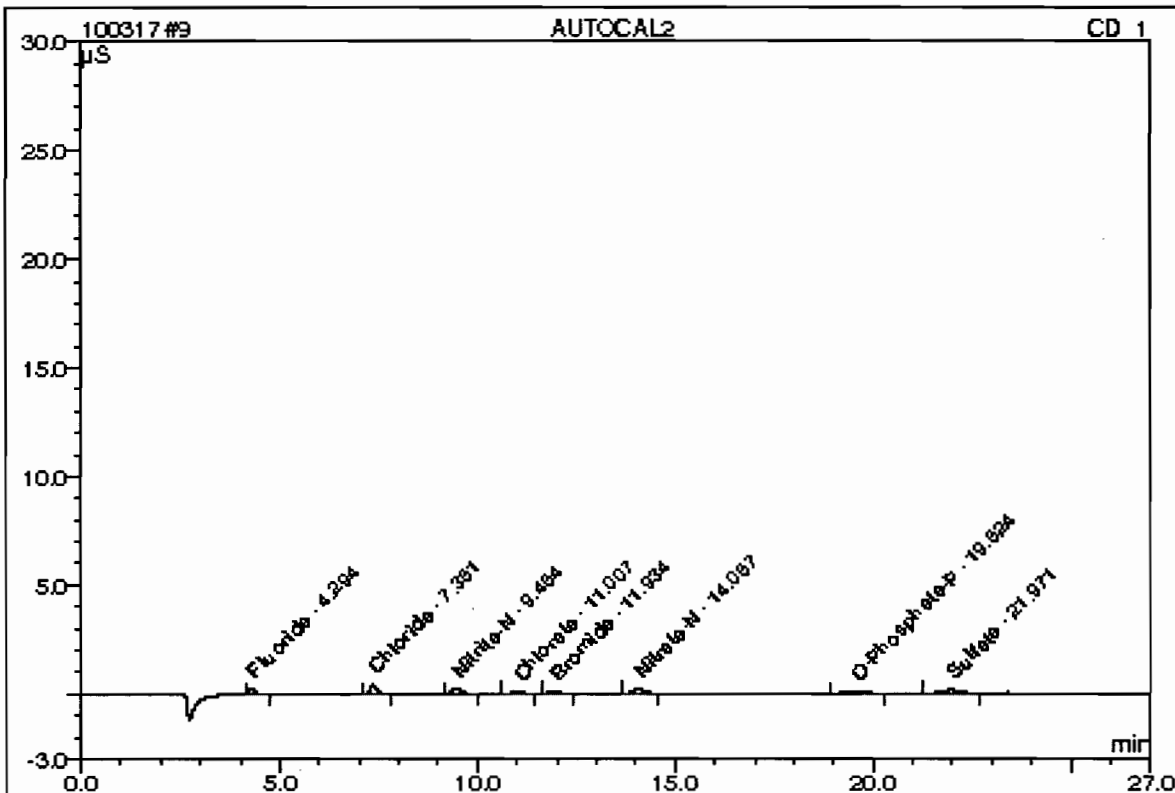
Sample Name:	AUTOCAL3	Injection Volume:	50.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 11:15	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	0.2500	0.2772		0.10808	9.31
2	7.35	Chloride	0.5000	0.6486		0.16371	14.36
3	9.46	Nitrite-N	0.2500	0.3510		0.21980	19.28
4	11.00	Chlorate	0.5000	0.6270		0.07382	6.48
5	11.94	Bromide	0.5000	0.5232		0.06434	5.64
6	14.06	Nitrate-N	0.2500	0.3124		0.17066	14.97
7	19.52	O-Phosphate-P	0.5000	0.5128		0.13076	11.47
8	21.96	Sulfate	1.0000	1.2128		0.21096	18.51
Total:				4.4648	0.000	1.140	100.00

9 AUTOCAL2

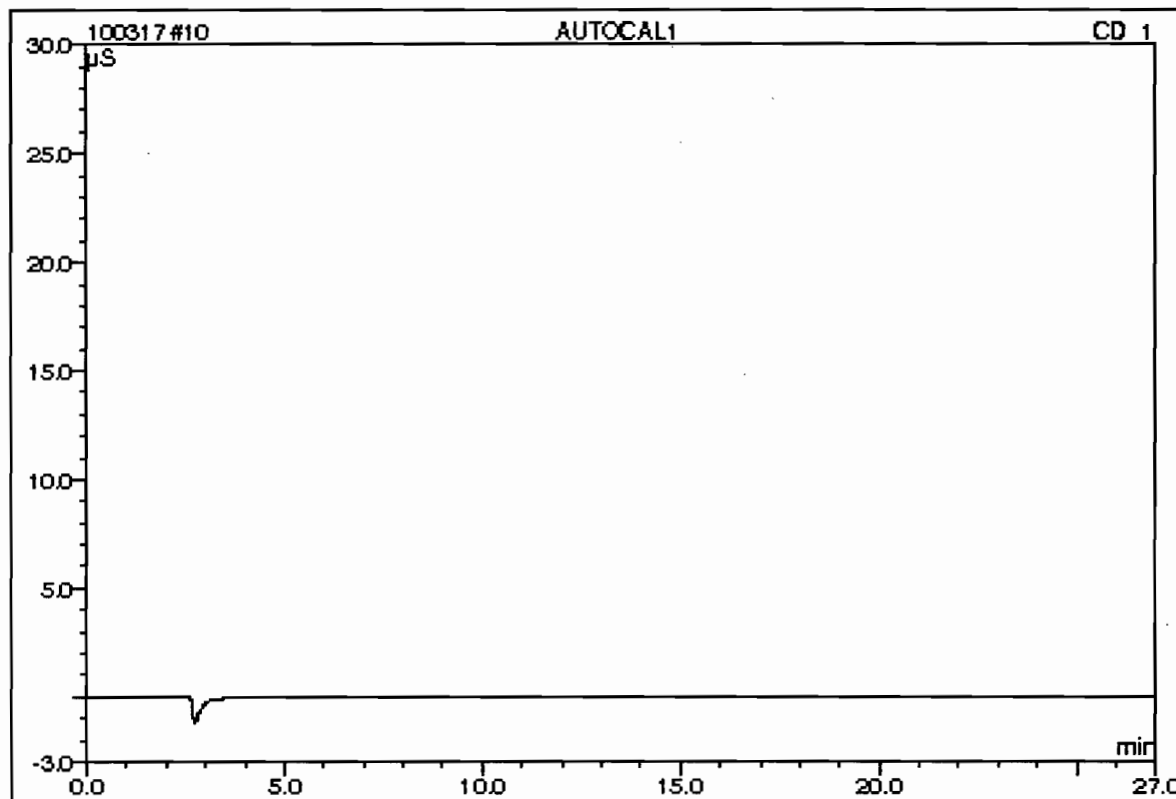
Sample Name:	AUTOCAL2	Injection Volume:	50.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 11:45	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	0.1000	0.1392		0.04186	9.37
2	7.35	Chloride	0.2000	0.3749		0.07965	17.83
3	9.48	Nitrite-N	0.1000	0.1279		0.06080	13.61
4	11.01	Chlorate	0.2000	0.1981		0.02196	4.92
5	11.93	Bromide	0.2000	0.2157		0.02531	5.67
6	14.07	Nitrate-N	0.1000	0.1723		0.06679	14.95
7	19.52	O-Phosphate-P	0.2000	0.2351		0.06039	13.52
8	21.97	Sulfate	0.4000	0.6629		0.08998	20.14
Total:				2.1261	0.000	0.447	100.00

10 AUTOCAL1

Sample Name:	AUTOCAL1	Injection Volume:	50.0
Vial Number:	10	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 13:14	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086;300;9056



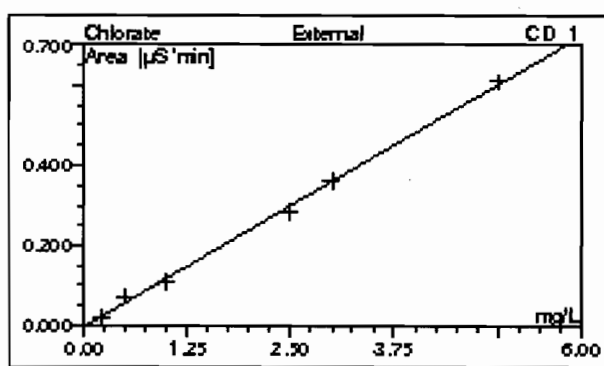
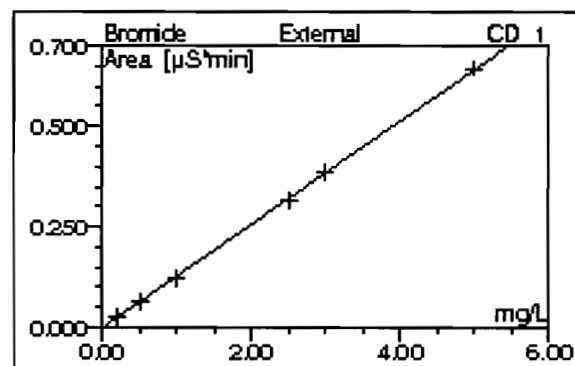
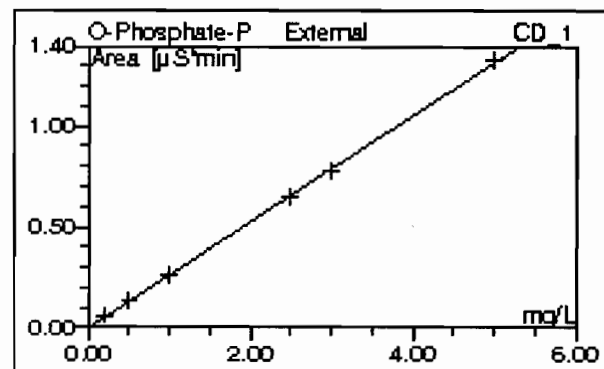
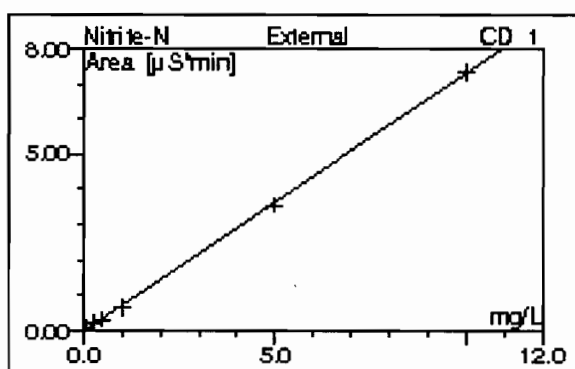
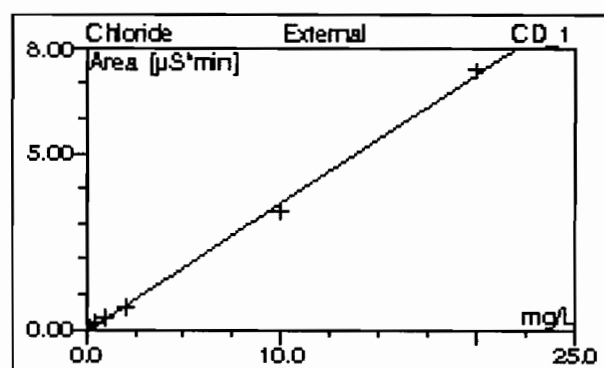
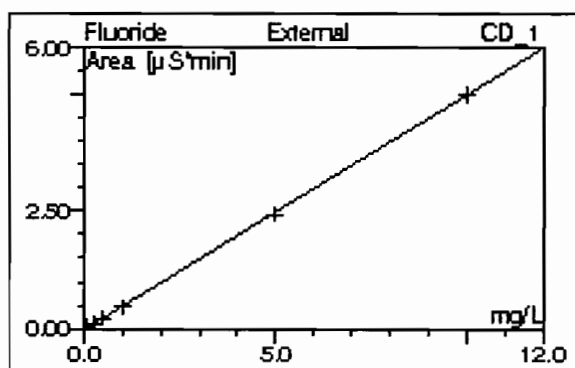
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

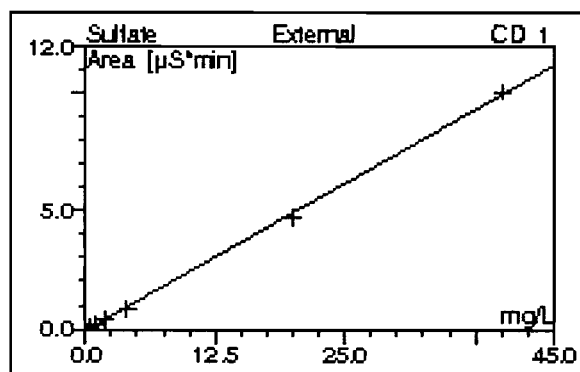
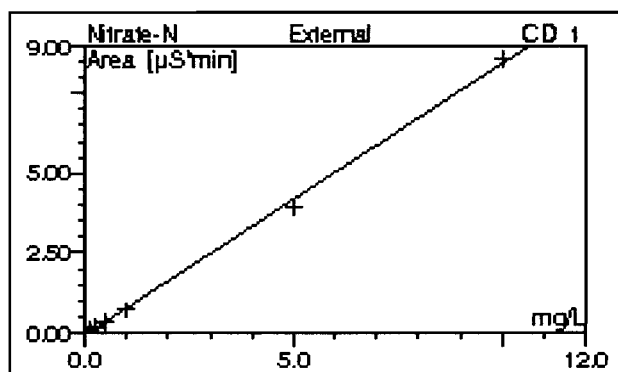
10 AUTOCAL1

Sample Name: AUTOCAL1
Vial Number: 10
Sample Type: standard
Control Program: AS23
Quantif. Method: 100317an
Recording Time: 3/17/2010 13:14
Run Time (min): 27.00

Injection Volume: 50.0
Channel: CD_1
Dilution Factor: 1.0000
Sample Weight: 1.0000
Sample Amount: 1.0000
Analyst: GXM3

Column: AS23-002714; GLGC086; 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	OLOH	99.9751	-0.0280	0.5015	0.0000
n.a.	n.a.	Chloride	OLOH	99.8150	-0.0574	0.3656	0.0000
n.a.	n.a.	Nitrite-N	OLOH	99.9510	-0.0332	0.7348	0.0000
n.a.	n.a.	Chlorate	OLOH	99.7338	-0.0020	0.1208	0.0000
n.a.	n.a.	Bromide	OLOH	99.9700	-0.0025	0.1290	0.0000
n.a.	n.a.	Nitrate-N	OLOH	99.8613	-0.0800	0.8518	0.0000
n.a.	n.a.	O-Phosphate-P	OLOH	99.9667	-0.0017	0.2641	0.0000
n.a.	n.a.	Sulfate	OLOH	99.8983	-0.0758	0.2500	0.0000
Average:				99.8964	-0.0351	0.4022	0.0000

This is runlog for Sequence 100317.seq for IC7

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/17/10 08:45		1	100317	GXM3
ICAL-07	03/17/10 09:15		1	100317	GXM3
ICAL-06	03/17/10 09:45		1	100317	GXM3
ICAL-05	03/17/10 10:15		1	100317	GXM3
ICAL-04	03/17/10 10:45		1	100317	GXM3
ICAL-03	03/17/10 11:15		1	100317	GXM3
ICAL-02	03/17/10 11:45		1	100317	GXM3
ICAL-01	03/17/10 13:14		1	100317	GXM3
ICV	03/17/10 13:43		1	100317	GXM3
ICB	03/17/10 14:12		1	100317	GXM3
1202066399	03/17/10 14:42	963224	1	100317	GXM3
1202066402	03/17/10 15:11	963224	1	100317	GXM3
247261004	03/17/10 15:41	963224	1	100317	GXM3
1202066400	03/17/10 16:11	963224	1	100317	GXM3
1202066401	03/17/10 16:41	963224	1	100317	GXM3
247431002	03/17/10 17:10	963224	1	100317	GXM3
247817001	03/17/10 17:40	963224	1	100317	GXM3
247829001	03/17/10 18:10	963224	1	100317	GXM3
248024002	03/17/10 18:40	963224	1	100317	GXM3
248024004	03/17/10 19:10	963224	1	100317	GXM3
CVH	03/17/10 19:40		1	100317	GXM3
CCB	03/17/10 20:10		1	100317	GXM3
1202063619	03/17/10 20:39	962082	1	100317	GXM3
1202063626	03/17/10 21:09	962082	1	100317	GXM3
248666001	03/17/10 21:39	962082	1	100317	GXM3
1202063620	03/17/10 22:09	962082	1	100317	GXM3
1202063622	03/17/10 22:39	962082	1	100317	GXM3
1202063624	03/17/10 23:09	962082	1	100317	GXM3

248666002

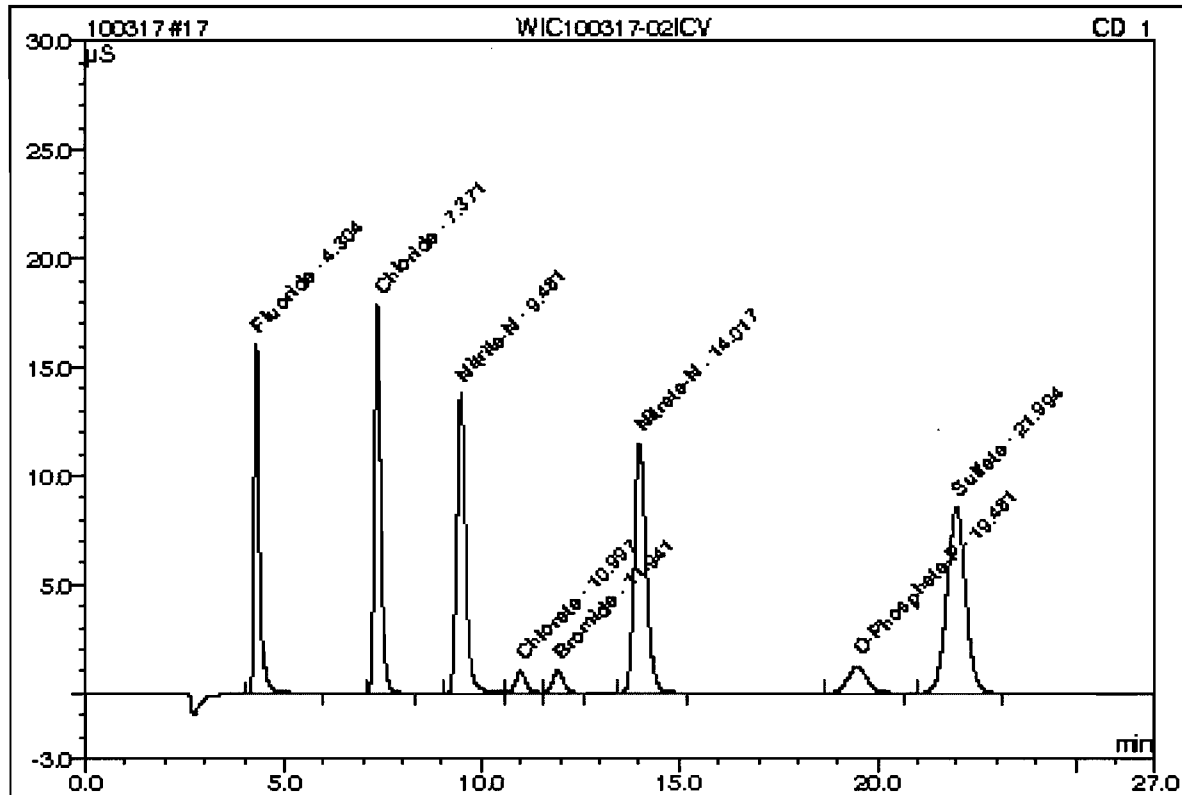
03/17/10 23:39 962082 1

100317

GXM3

17 WIC100317-02ICV

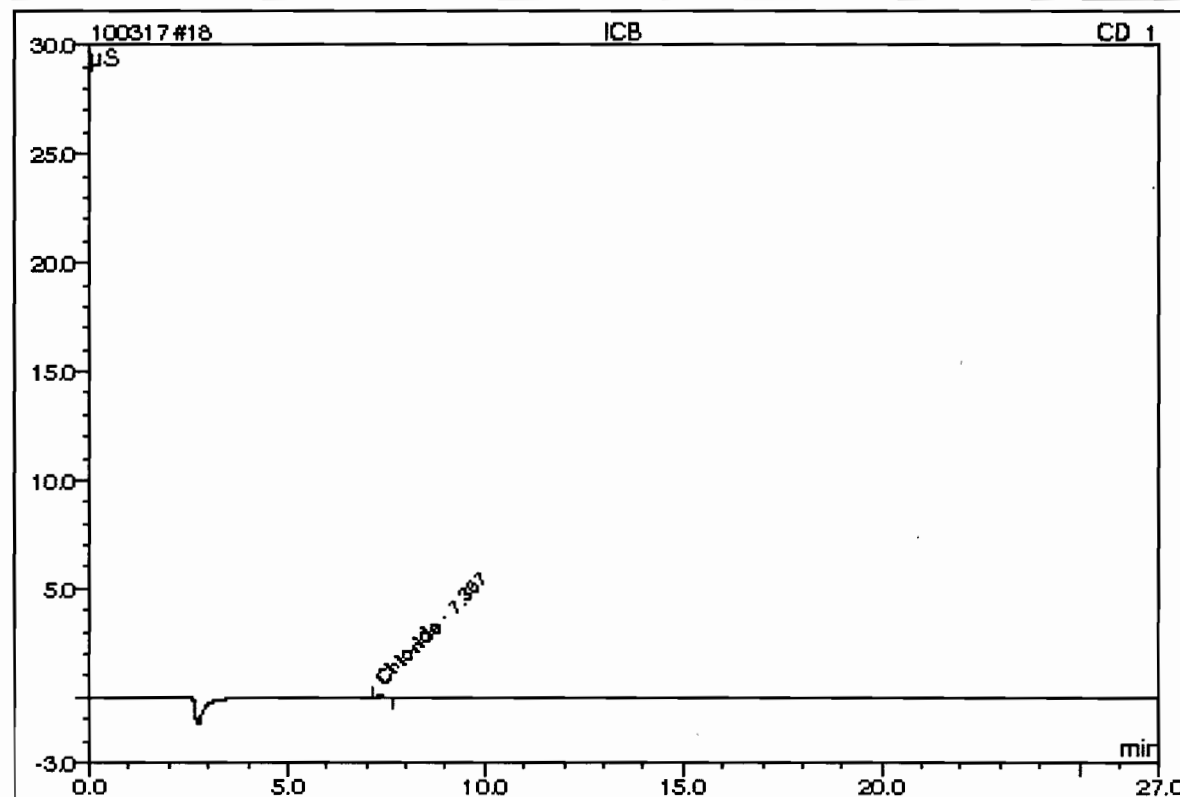
Sample Name:	WIC100317-02ICV	Injection Volume:	50.0
Vial Number:	11	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantit. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 13:43	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;8056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	4.9617		2.46032	12.79
2	7.37	Chloride	n.a.	9.3464		3.35930	17.46
3	9.48	Nitrite-N	n.a.	4.8136		3.50372	18.21
4	11.00	Chlorate	n.a.	2.4909		0.29883	1.55
5	11.94	Bromide	n.a.	2.4926		0.31900	1.66
6	14.02	Nitrate-N	n.a.	4.7581		3.97314	20.65
7	19.48	O-Phosphate-P	n.a.	2.5072		0.66041	3.43
8	21.99	Sulfate	n.a.	18.9805		4.66474	24.25
Total:				50.3309	0.000	19.239	100.00

18 ICB

Sample Name:	ICB	Injection Volume:	50.0
Vial Number:	12	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantit. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/17/2010 14:12	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086;300;9056



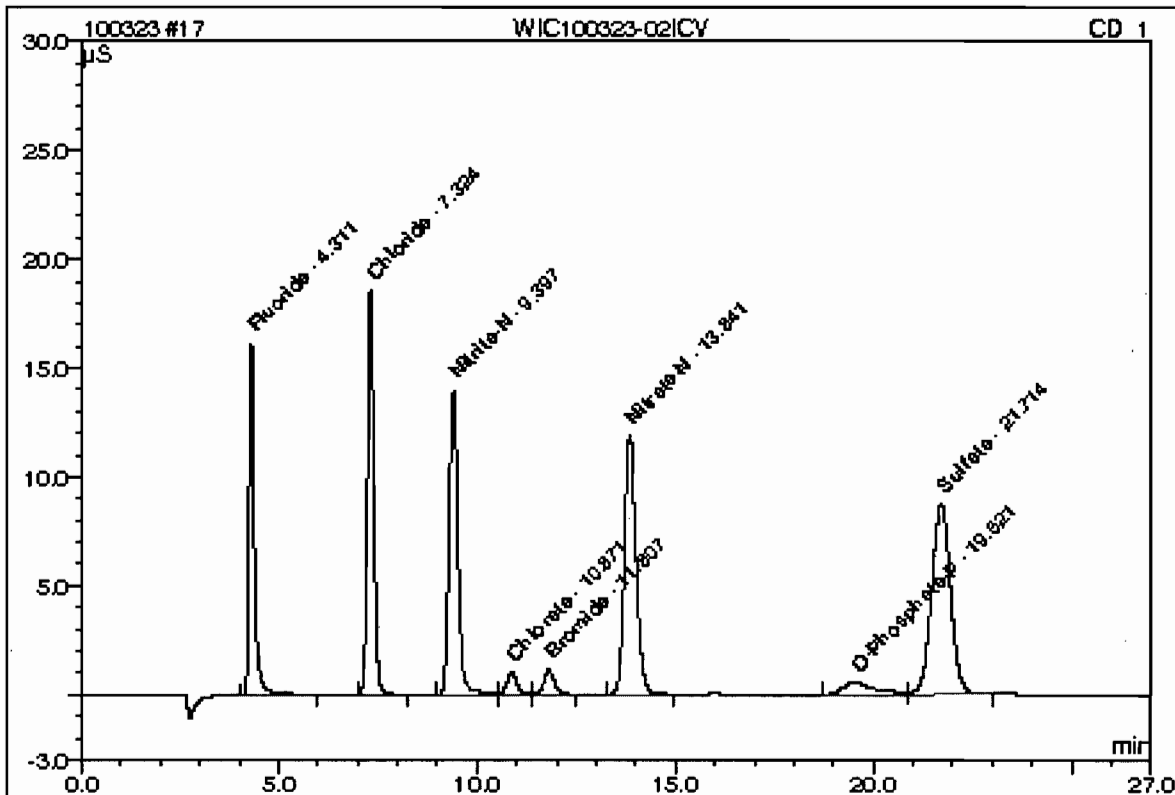
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.36	Chloride	n.a.	0.1862		0.01068	100.00
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.1862	0.000	0.011	100.00

This is runlog for Sequence 100323.seq for IC7

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/23/10 12:35	1		100323	GXM3
BLK	03/23/10 13:05	1		100323	GXM3
BLK	03/23/10 14:05	1		100323	GXM3
ICV	03/23/10 14:34	1		100323	GXM3
ICB	03/23/10 15:04	1		100323	GXM3
1202076091	03/23/10 15:34	967295	1	100323	GXM3
1202076092	03/23/10 16:04	967295	1	100323	GXM3
247966010	03/23/10 16:34	967295	100	100323	GXM3
248103002	03/23/10 17:03	967295	100	100323	GXM3
248109001	03/23/10 17:33	967295	100	100323	GXM3
248686003	03/23/10 18:03	967295	1	100323	GXM3
1202076093	03/23/10 18:33	967295	1	100323	GXM3
1202076094	03/23/10 19:03	967295	1	100323	GXM3
CVH	03/23/10 19:33	1		100323	GXM3
CCB	03/23/10 20:03	1		100323	GXM3
1202073477	03/23/10 20:33	966200	1	100323	GXM3
1202073479	03/23/10 21:03	966200	1	100323	GXM3
247966010	03/23/10 21:32	967295	20000	100323	GXM3
248103002	03/23/10 22:02	967295	20000	100323	GXM3
248109001	03/23/10 22:32	967295	20000	100323	GXM3
CCV	03/23/10 23:02	1		100323	GXM3
CCB	03/23/10 23:32	1		100323	GXM3

17 WIC100323-02ICV

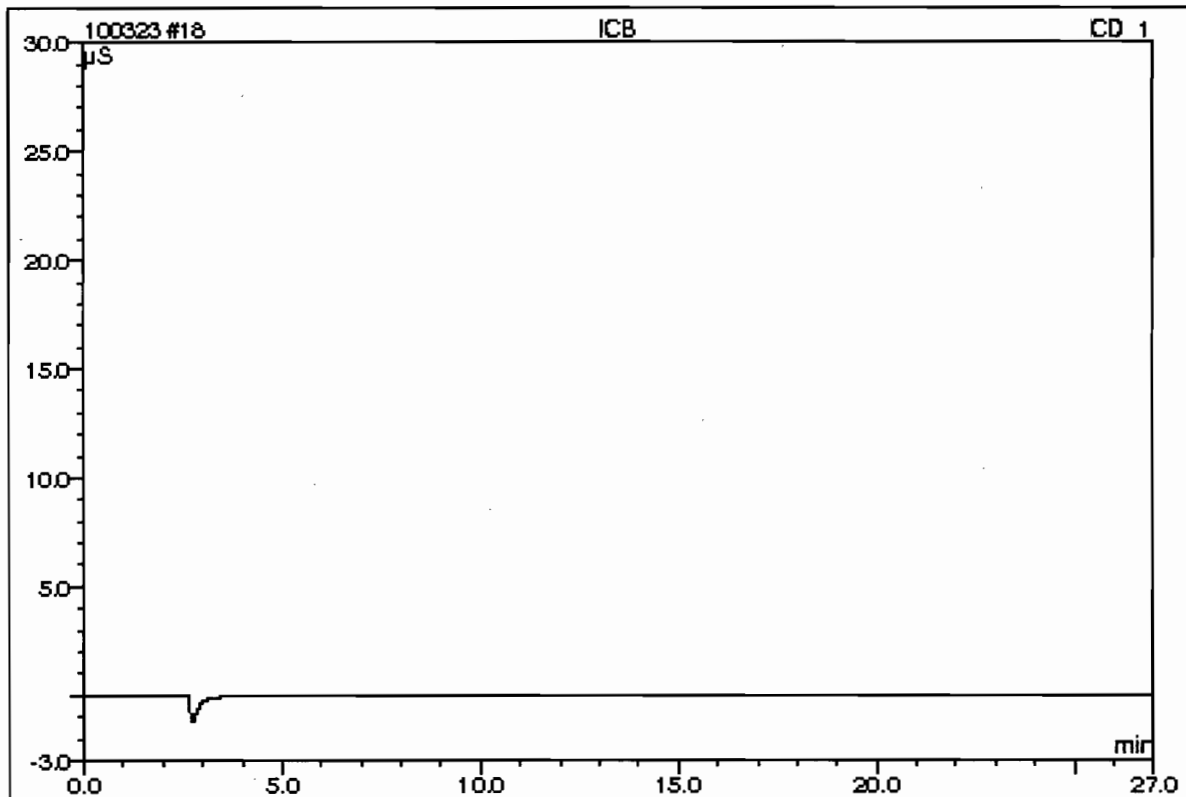
Sample Name:	WIC100323-02ICV	Injection Volume:	50.0
Vial Number:	3	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/23/2010 14:34	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.31	Fluoride	n.a.	5.0037		2.48141	12.80
2	7.32	Chloride	n.a.	9.4899		3.41175	17.60
3	9.40	Nitrite-N	n.a.	4.8165		3.50591	18.08
4	10.87	Chlorate	n.a.	2.5705		0.30844	1.59
5	11.81	Bromide	n.a.	2.5425		0.32545	1.68
6	13.84	Nitrate-N	n.a.	4.8331		4.03704	20.82
7	19.52	O-Phosphate-P	n.a.	1.9495		0.51313	2.65
8	21.71	Sulfate	n.a.	19.5300		4.80714	24.79
Total:				50.7358	0.000	19.390	100.00

18 ICB

Sample Name:	ICB	Injection Volume:	50.0
Vial Number:	4	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/23/2010 15:04	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

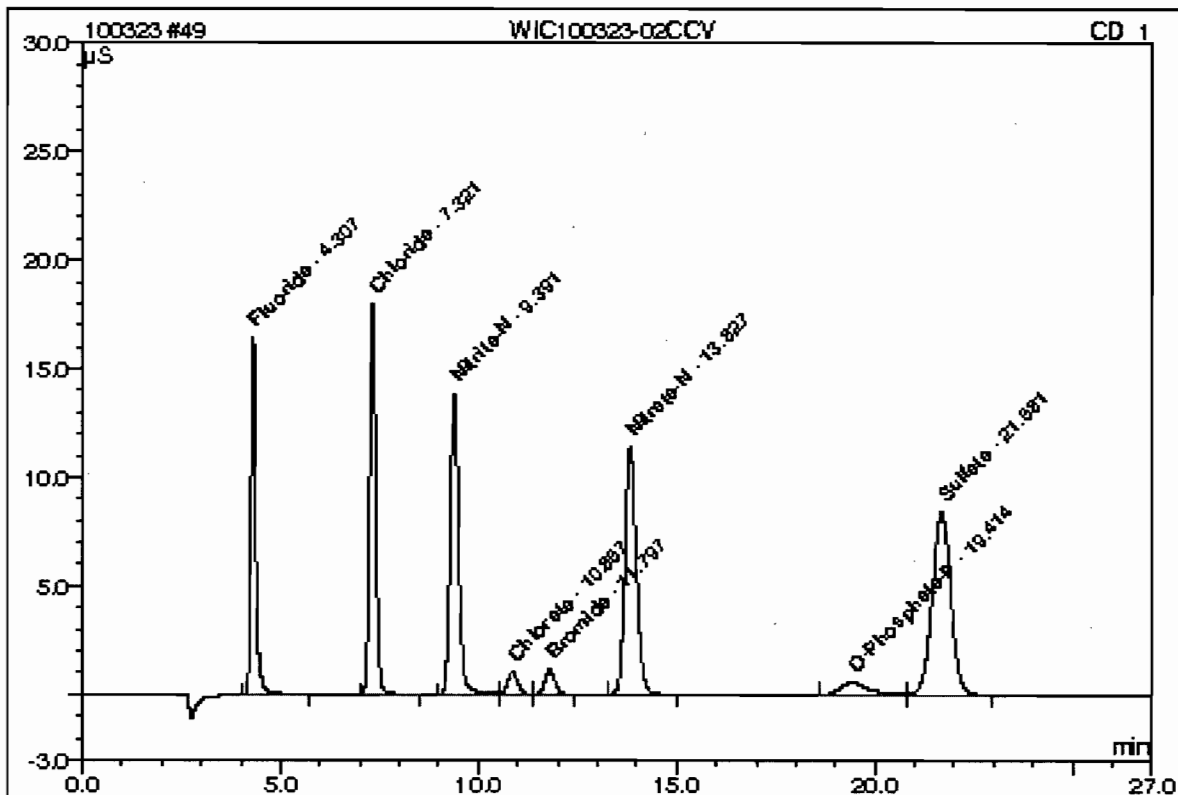
This is runlog for Sequence 100323.seq for IC7

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
1202078659	03/24/10 00:02	962075	1	100323	GXM3
1202078660	03/24/10 00:32	962075	1	100323	GXM3
248045016	03/24/10 01:02	962075	1	100323	GXM3
248045017	03/24/10 01:32	962075	1	100323	GXM3
248045018	03/24/10 02:02	962075	1	100323	GXM3
1202063600	03/24/10 02:32	962075	1	100323	GXM3
1202063602	03/24/10 03:01	962075	1	100323	GXM3
1202063604	03/24/10 03:31	962075	1	100323	GXM3
CVH	03/24/10 04:01		1	100323	GXM3
CCB	03/24/10 04:31		1	100323	GXM3
249328001	03/24/10 05:01	967294	2	100323	GXM3
1202076085	03/24/10 05:31	967294	2	100323	GXM3
1202076086	03/24/10 06:01	967294	2	100323	GXM3
CCV	03/24/10 06:31		1	100323	GXM3
CCB	03/24/10 07:01		1	100323	GXM3
1202075413	03/24/10 07:31	967018	1	100323	GXM3
1202075420	03/24/10 08:01	967018	1	100323	GXM3
248371001	03/24/10 08:30	967018	1	100323	GXM3
1202075414	03/24/10 09:00	967018	1	100323	GXM3
1202075416	03/24/10 09:30	967018	1	100323	GXM3
1202075418	03/24/10 10:00	967018	1	100323	GXM3
248371002	03/24/10 10:30	967018	1	100323	GXM3
248371003	03/24/10 11:00	967018	1	100323	GXM3
248371004	03/24/10 11:30	967018	1	100323	GXM3
248371005	03/24/10 12:00	967018	1	100323	GXM3
CVH	03/24/10 12:30		1	100323	GXM3
CCB	03/24/10 13:00		1	100323	GXM3
248371006	03/24/10 13:29	967018	1	100323	GXM3

248371007	03/24/10 13:59 967018 1	100323	GXM3
248371008	03/24/10 14:29 967018 1	100323	GXM3
248371009	03/24/10 14:59 967018 1	100323	GXM3
248371010	03/24/10 15:29 967018 1	100323	GXM3
248371011	03/24/10 15:58 967018 1	100323	GXM3
248371012	03/24/10 16:28 967018 1	100323	GXM3
248371013	03/24/10 16:58 967018 1	100323	GXM3
248371014	03/24/10 17:28 967018 1	100323	GXM3
248371015	03/24/10 17:58 967018 1	100323	GXM3
CCV	03/24/10 18:27 1	100323	GXM3
CCB	03/24/10 18:57 1	100323	GXM3
248371016	03/24/10 19:27 967018 1	100323	GXM3
248371017	03/24/10 19:57 967018 1	100323	GXM3
248371018	03/24/10 20:27 967018 1	100323	GXM3
248371019	03/24/10 20:57 967018 1	100323	GXM3
248371020	03/24/10 21:27 967018 1	100323	GXM3
1202075415	03/24/10 21:57 967018 1	100323	GXM3
1202075417	03/24/10 22:27 967018 1	100323	GXM3
1202075419	03/24/10 22:57 967018 1	100323	GXM3
CVH	03/24/10 23:26 1	100323	GXM3
CCB	03/24/10 23:56 1	100323	GXM3

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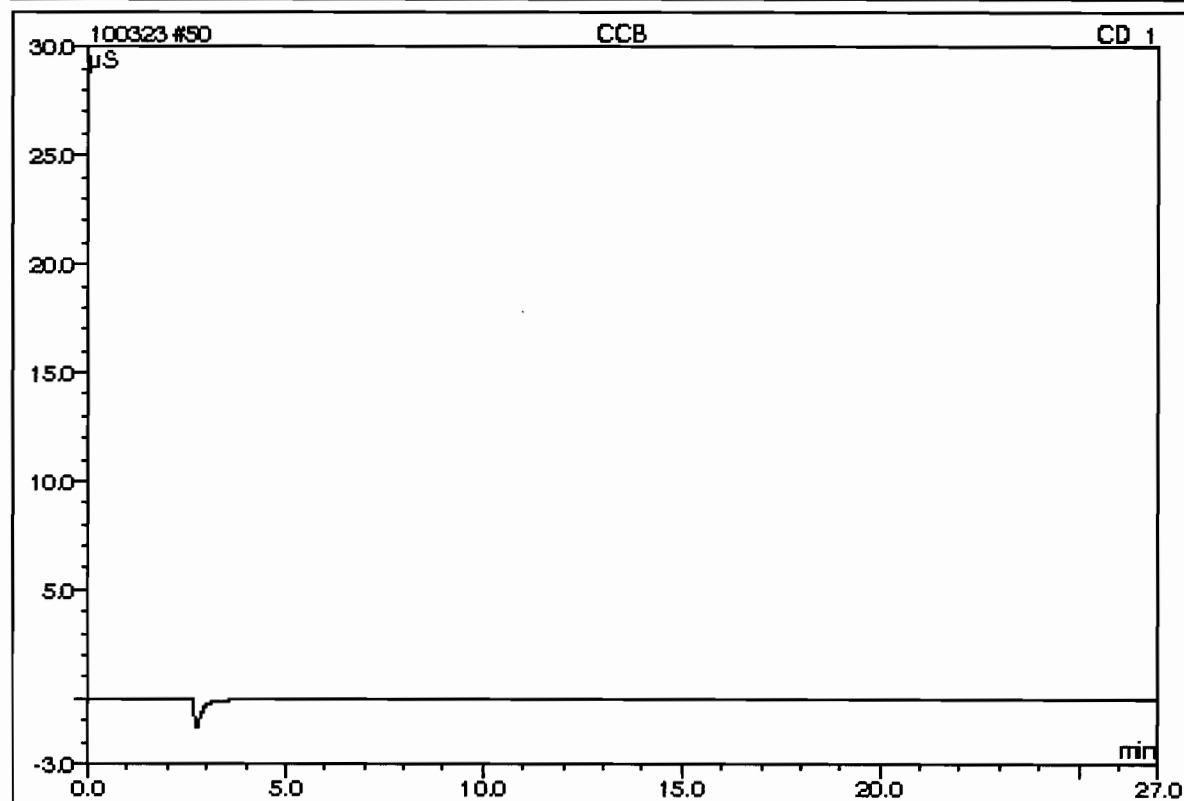
Sample Name:	WIC100323-02CCV	Injection Volume:	50.0
Vial Number:	35	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 6:31	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.31	Fluoride	n.a.	4.8264		2.39250	12.88
2	7.32	Chloride	n.a.	9.1008		3.26948	17.60
3	9.39	Nitrite-N	n.a.	4.6856		3.40974	18.36
4	10.86	Chlorate	n.a.	2.5659		0.30788	1.66
5	11.80	Bromide	n.a.	2.5412		0.32527	1.75
6	13.83	Nitrate-N	n.a.	4.5868		3.82727	20.61
7	19.41	O-Phosphate-P	n.a.	1.7388		0.45750	2.46
8	21.68	Sulfate	n.a.	18.6317		4.58253	24.67
Total:				48.6772	0.000	18.572	100.00

50 CCB

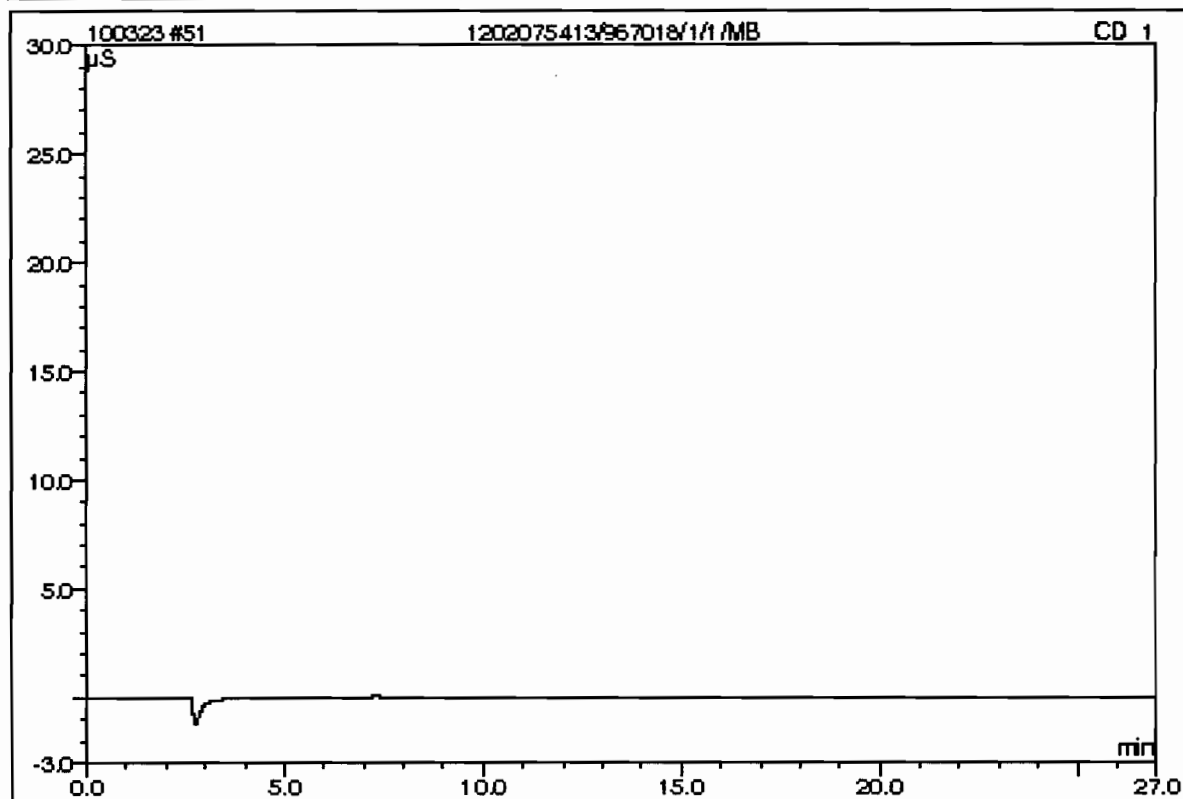
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	36	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 7:01	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

51 1202075413/967018/1/1/MB

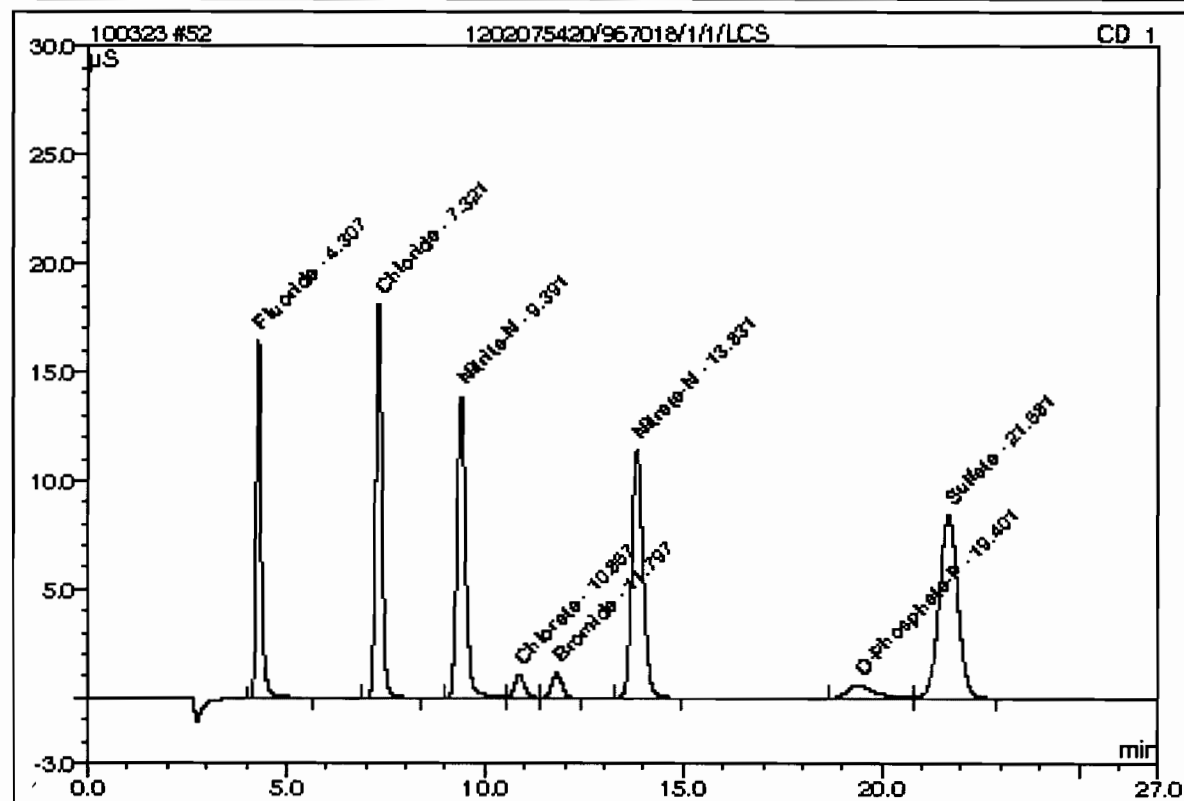
Sample Name:	1202075413/967018/1/1/MB	Injection Volume:	50.0
Vial Number:	37	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 7:31	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
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

52 1202075420/967018/1/1/LCS

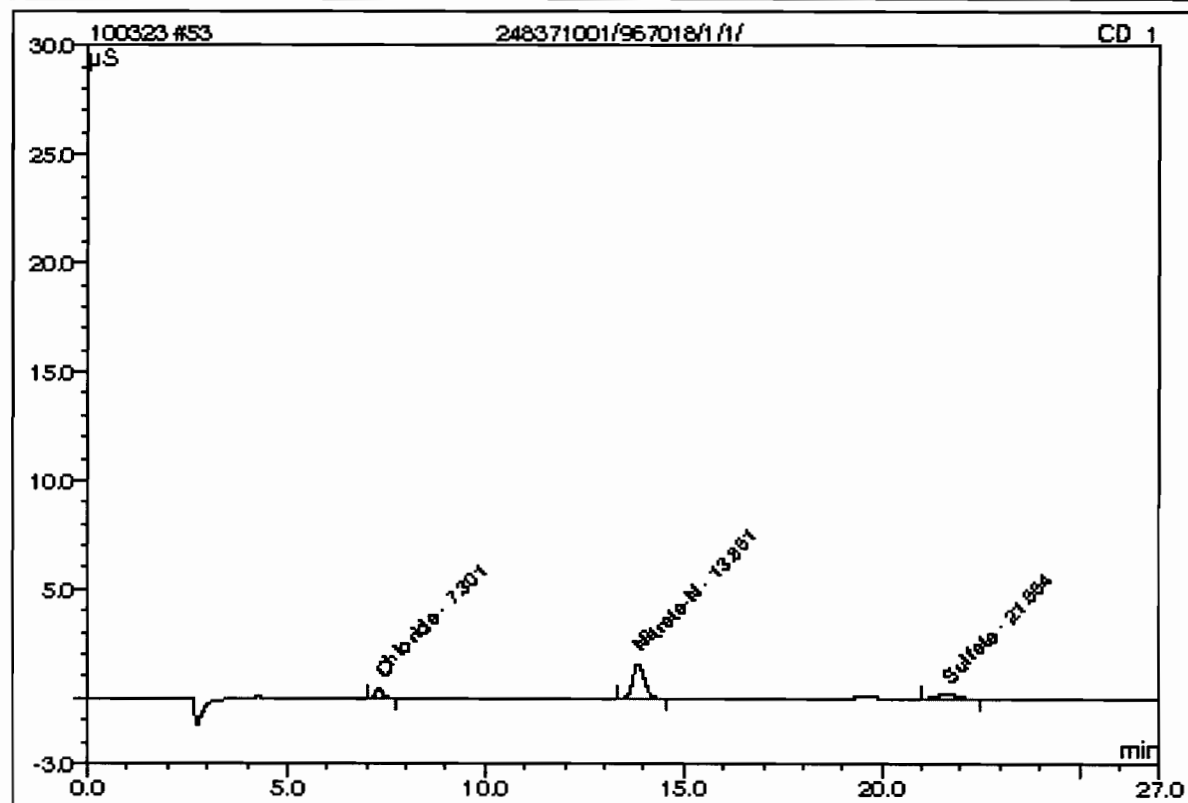
Sample Name:	1202075420/967018/1/1/LCS	Injection Volume:	50.0
Vial Number:	38	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 8:01	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.31	Fluoride	n.a.	4.8239		2.39122	12.84
2	7.32	Chloride	n.a.	9.1839		3.29987	17.73
3	9.39	Nitrite-N	n.a.	4.6858		3.40985	18.32
4	10.86	Chlorate	n.a.	2.5361		0.30429	1.63
5	11.80	Bromide	n.a.	2.5187		0.32237	1.73
6	13.83	Nitrate-N	n.a.	4.5898		3.82976	20.57
7	19.40	O-Phosphate-P	n.a.	1.8124		0.47694	2.56
8	21.68	Sulfate	n.a.	18.6288		4.58182	24.61
Total:				48.7794	0.000	18.616	100.00

53 248371001/967018/1/1/

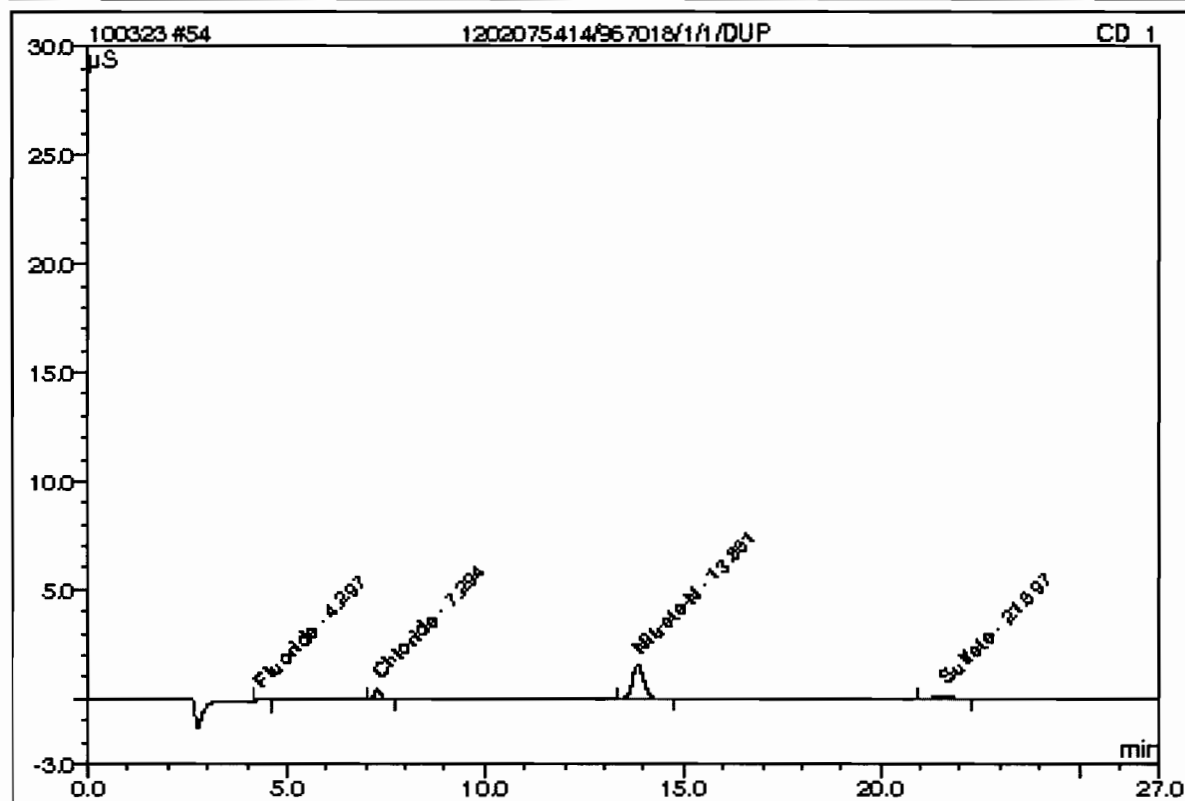
Sample Name:	248371001/967018/1/1/	Injection Volume:	50.0
Vial Number:	39	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 8:30	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.30	Chloride	n.a.	0.3985	n.a.	0.08830	11.94
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	13.86	Nitrate-N	n.a.	0.7253	n.a.	0.53788	72.73
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	21.85	Sulfate	n.a.	0.7564	n.a.	0.11334	15.33
Total:				1.8802	0.000	0.740	100.00

54 1202075414/967018/1/1/DUP

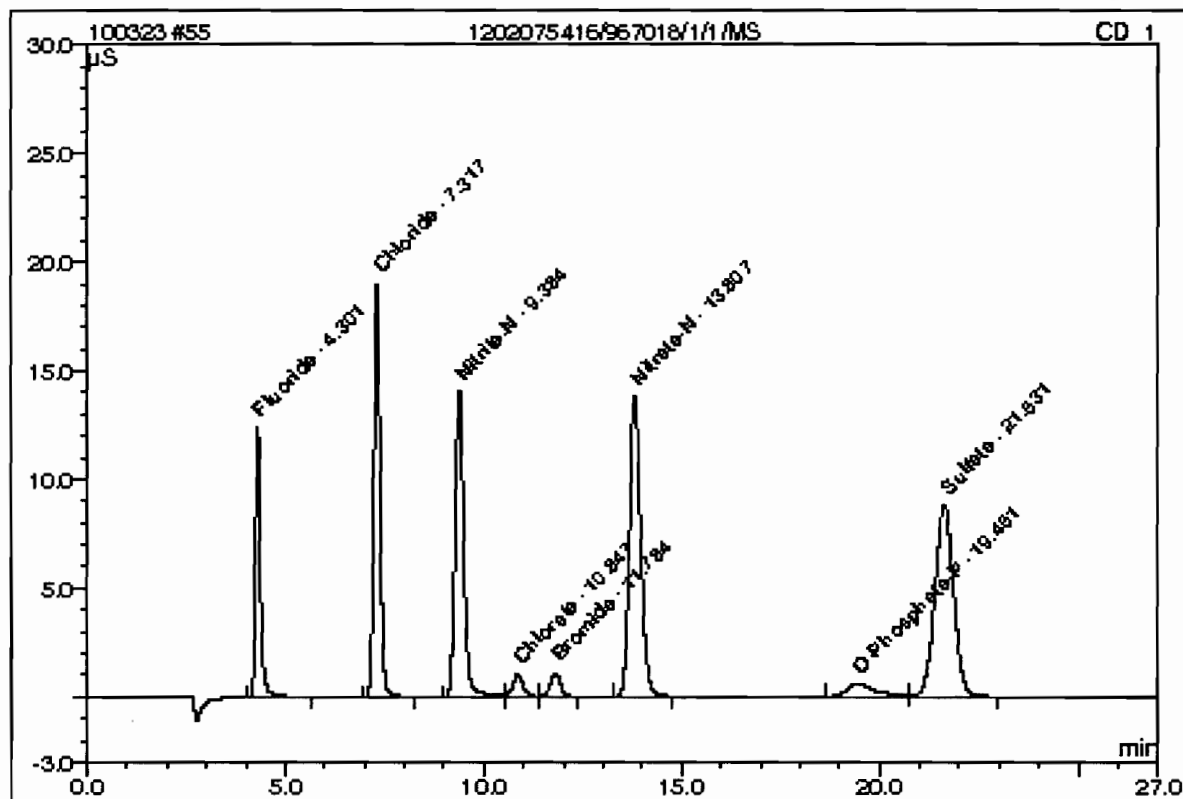
Sample Name:	1202075414/967018/1/1/DUP	Injection Volume:	50.0
Vial Number:	40	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 9:00	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	0.0777		0.01098	1.44
2	7.29	Chloride	n.a.	0.3998		0.08875	11.62
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	13.85	Nitrate-N	n.a.	0.7491		0.55809	73.05
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.60	Sulfate	n.a.	0.7278		0.10620	13.90
Total:				1.9543	0.000	0.764	100.00

55 1202075416/967018/1/1/MS

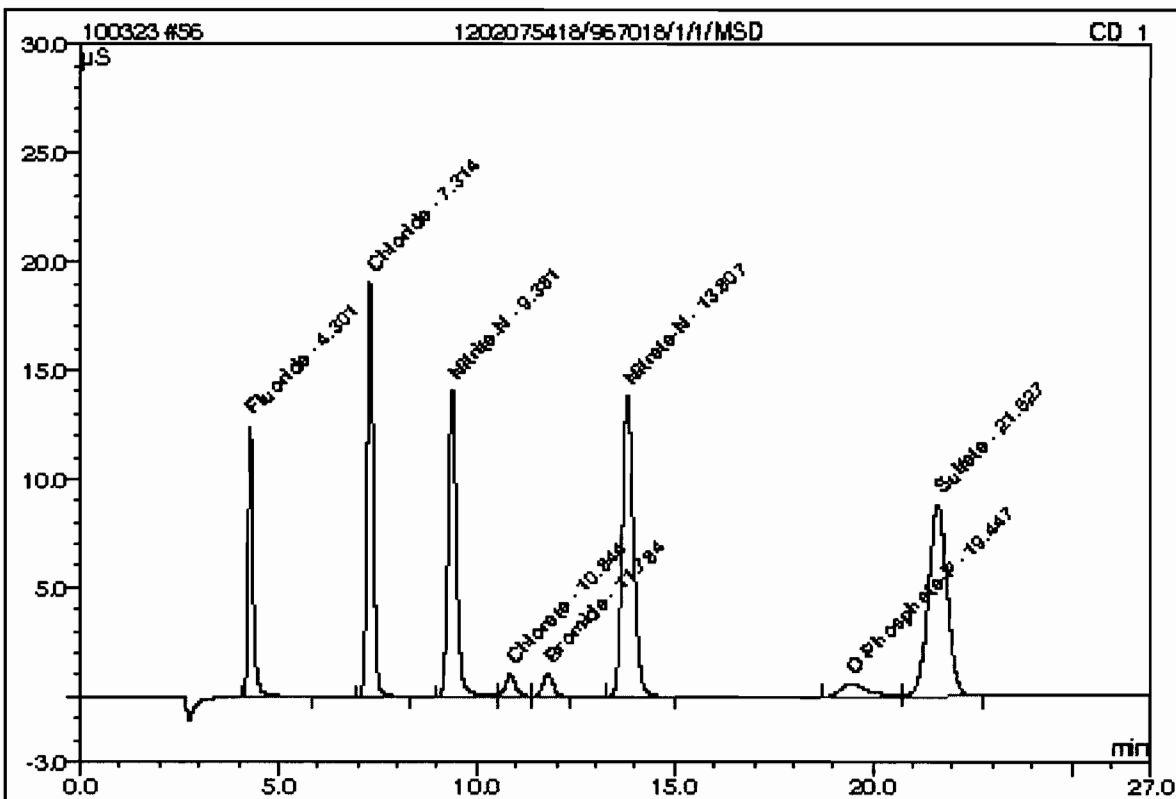
Sample Name:	1202075416/967018/1/1/MS	Injection Volume:	50.0
Vial Number:	41	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 9:30	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	3.6835		1.81929	9.45
2	7.32	Chloride	n.a.	9.5606		3.43758	17.85
3	9.38	Nitrite-N	n.a.	4.7636		3.46702	18.01
4	10.85	Chlorate	n.a.	2.5202		0.30236	1.57
5	11.78	Bromide	n.a.	2.4635		0.31525	1.64
6	13.81	Nitrate-N	n.a.	5.5313		4.63180	24.06
7	19.45	O-Phosphate-P	n.a.	1.8357		0.48308	2.51
8	21.63	Sulfate	n.a.	19.4889		4.79685	24.91
Total:				49.8472	0.000	19.253	100.00

56 1202075418/967018/1/1/MSD

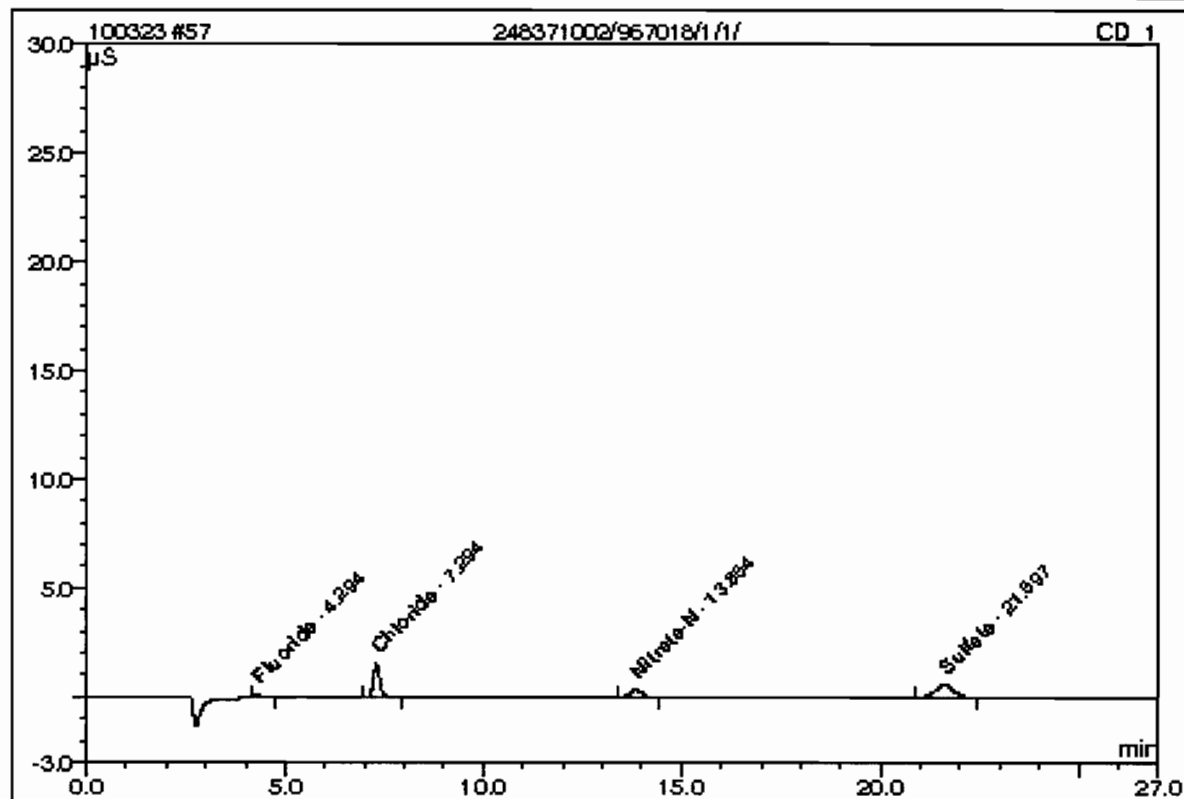
Sample Name:	1202075418/967018/1/1/MSD	Injection Volume:	50.0
Vial Number:	42	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 10:00	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area $\mu\text{S} \cdot \text{min}$	Rel.Area %
1	4.30	Fluoride	n.a.	3.6882		1.82165	9.47
2	7.31	Chloride	n.a.	9.5744		3.44264	17.90
3	9.38	Nitrite-N	n.a.	4.7486		3.45599	17.97
4	10.84	Chlorate	n.a.	2.4728		0.29665	1.54
5	11.78	Bromide	n.a.	2.4397		0.31218	1.62
6	13.81	Nitrate-N	n.a.	5.5403		4.63948	24.13
7	19.45	O-Phosphate-P	n.a.	1.8160		0.47788	2.49
8	21.63	Sulfate	n.a.	19.4261		4.78114	24.87
Total:				49.7060	0.000	19.228	100.00

57 248371002/967018/1/1/

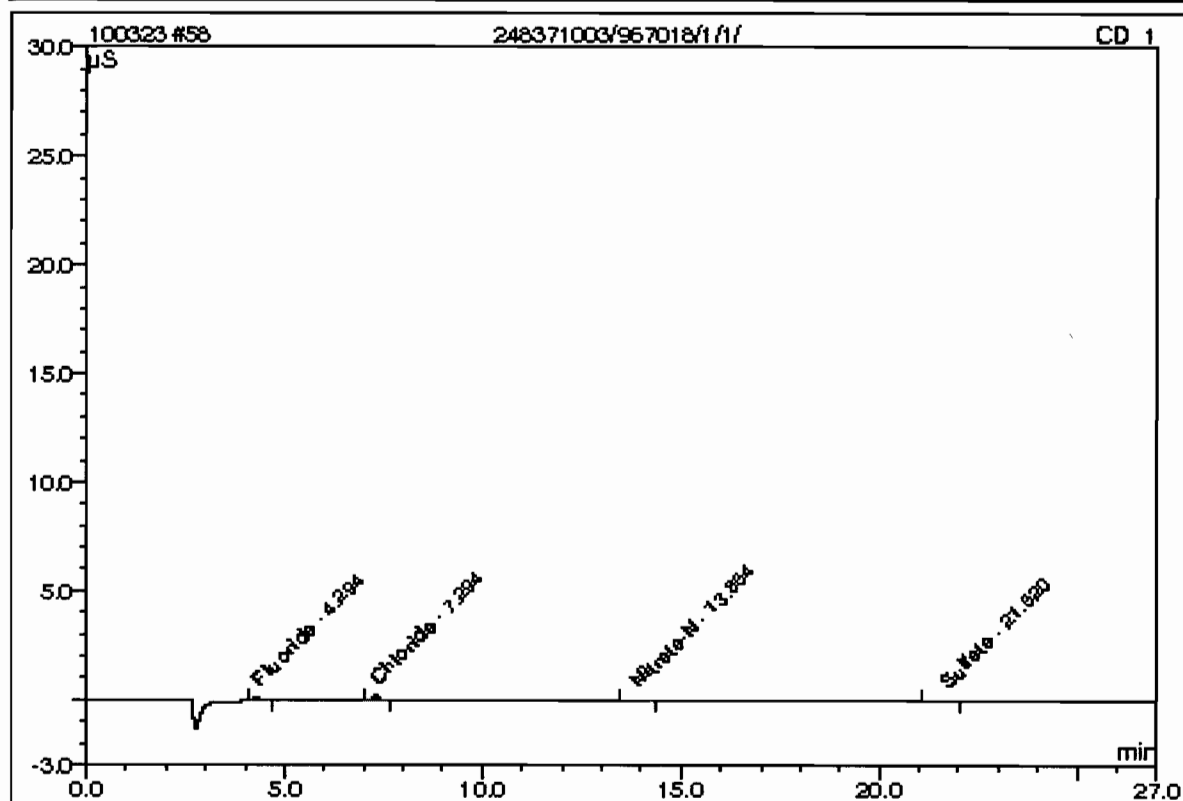
Sample Name:	248371002/967018/1/1/	Injection Volume:	50.0
Vial Number:	43	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 10:30	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1094		0.02690	3.48
2	7.29	Chloride	n.a.	0.9550		0.29171	37.70
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	13.85	Nitrate-N	n.a.	0.2525		0.13510	17.46
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.60	Sulfate	n.a.	1.5830		0.32002	41.36
Total:				2.8999	0.000	0.774	100.00

58 248371003/967018/1/1/

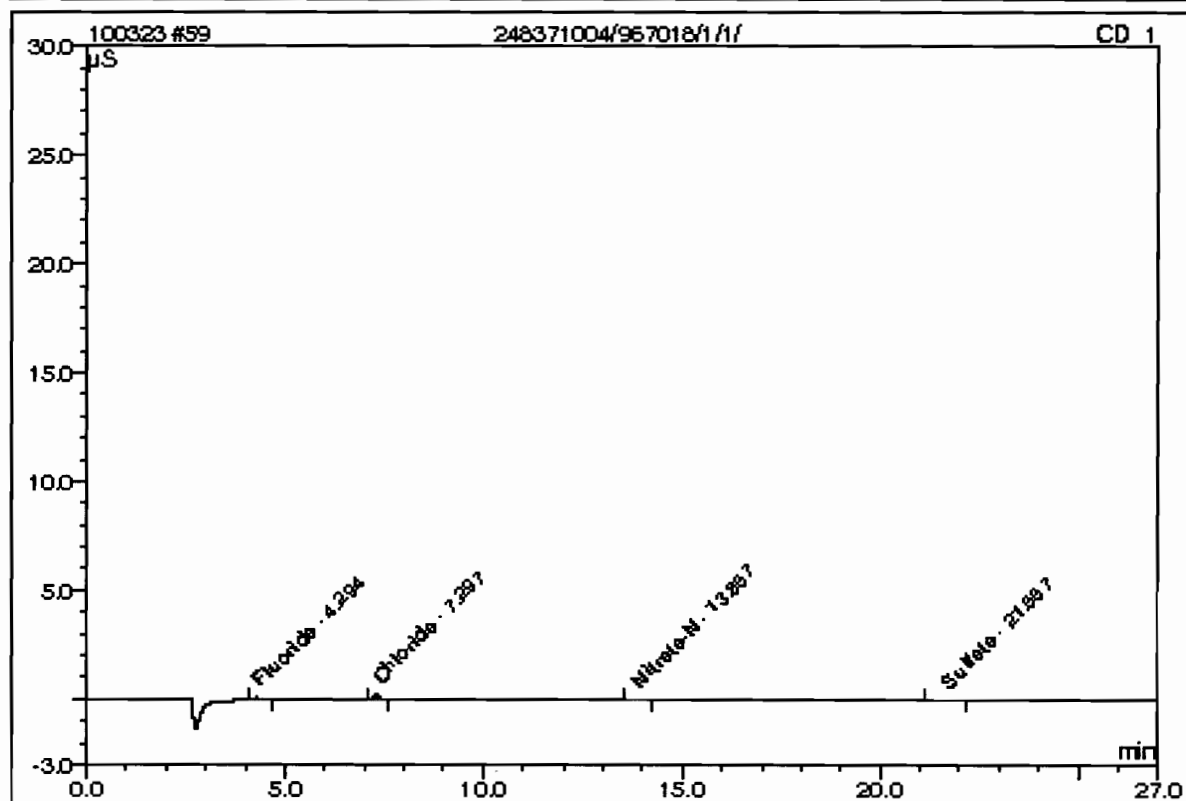
Sample Name:	248371003/967018/1/1/	Injection Volume:	50.0
Vial Number:	44	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 11:00	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1073		0.02587	23.73
2	7.29	Chloride	n.a.	0.2760		0.04349	39.90
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	13.85	Nitrate-N	n.a.	0.1213		0.02338	21.44
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.62	Sulfate	n.a.	0.3681		0.01628	14.93
Total:				0.8728	0.000	0.109	100.00

59 248371004/967018/1/1/

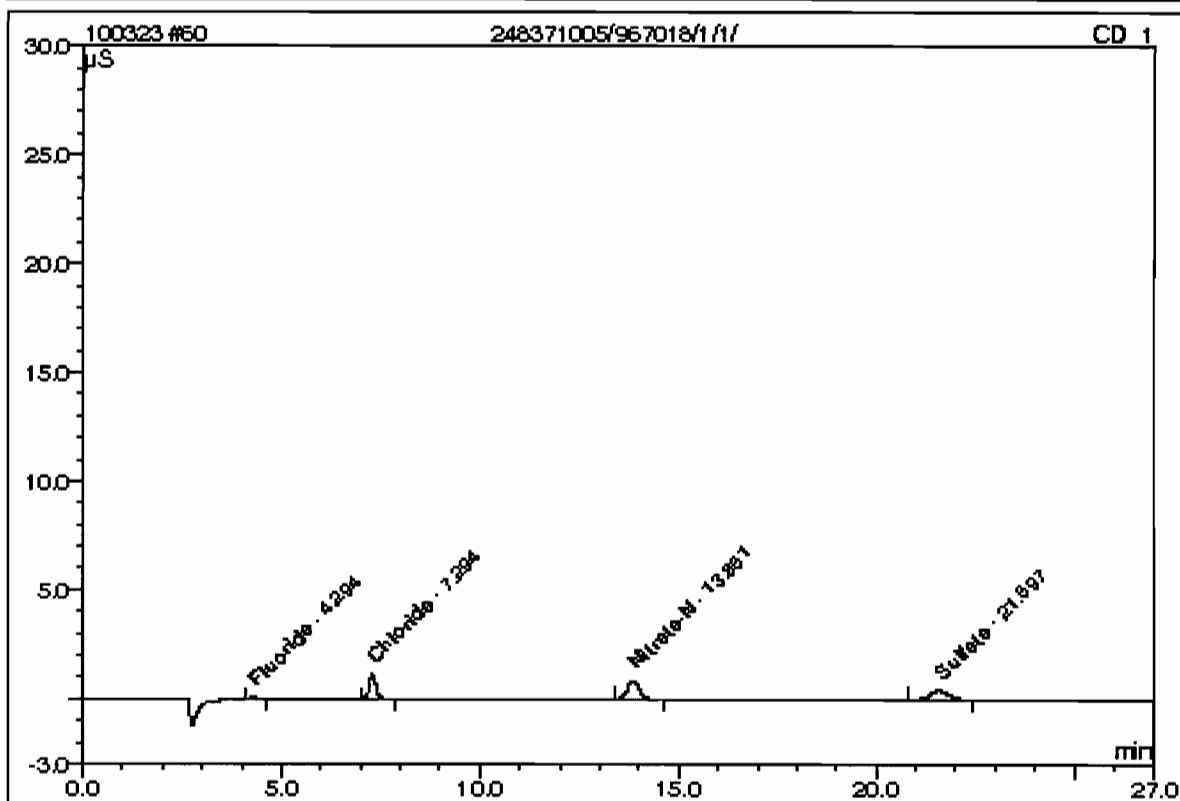
Sample Name:	248371004/967018/1/1/	Injection Volume:	50.0
Vial Number:	45	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 11:30	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.0841		0.01422	18.16
2	7.30	Chloride	n.a.	0.2803		0.03777	48.24
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.86	Nitrate-N	n.a.	0.1080		0.01203	15.37
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.67	Sulfate	n.a.	0.3601		0.01427	18.22
Total:				0.8126	0.000	0.078	100.00

60 248371005/967018/1/1/

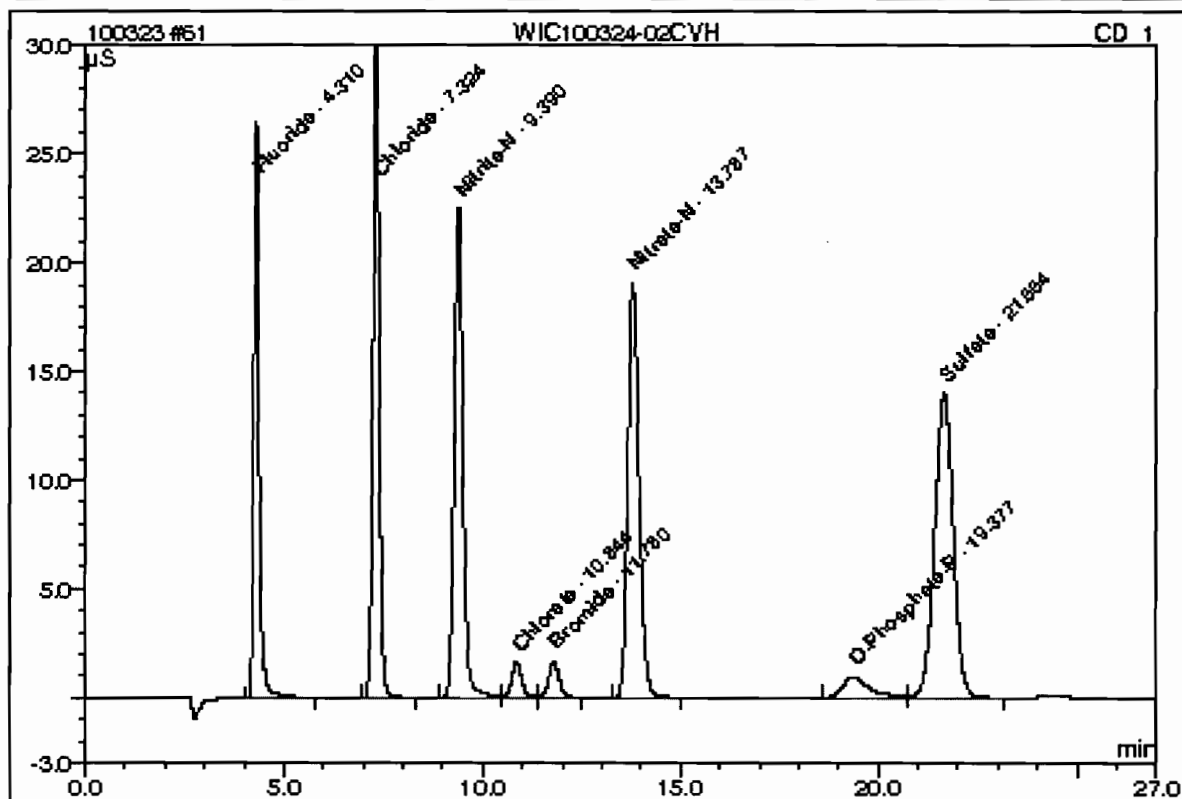
Sample Name:	248371005/967018/1/1/	Injection Volume:	50.0
Vial Number:	46	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 12:00	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.0859		0.01511	2.00
2	7.29	Chloride	n.a.	0.7575		0.21951	29.08
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	13.85	Nitrate-N	n.a.	0.4408		0.29551	39.15
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.60	Sulfate	n.a.	1.2017		0.22468	29.77
Total:				2.4858	0.000	0.755	100.00

61 WIC100324-02CVH

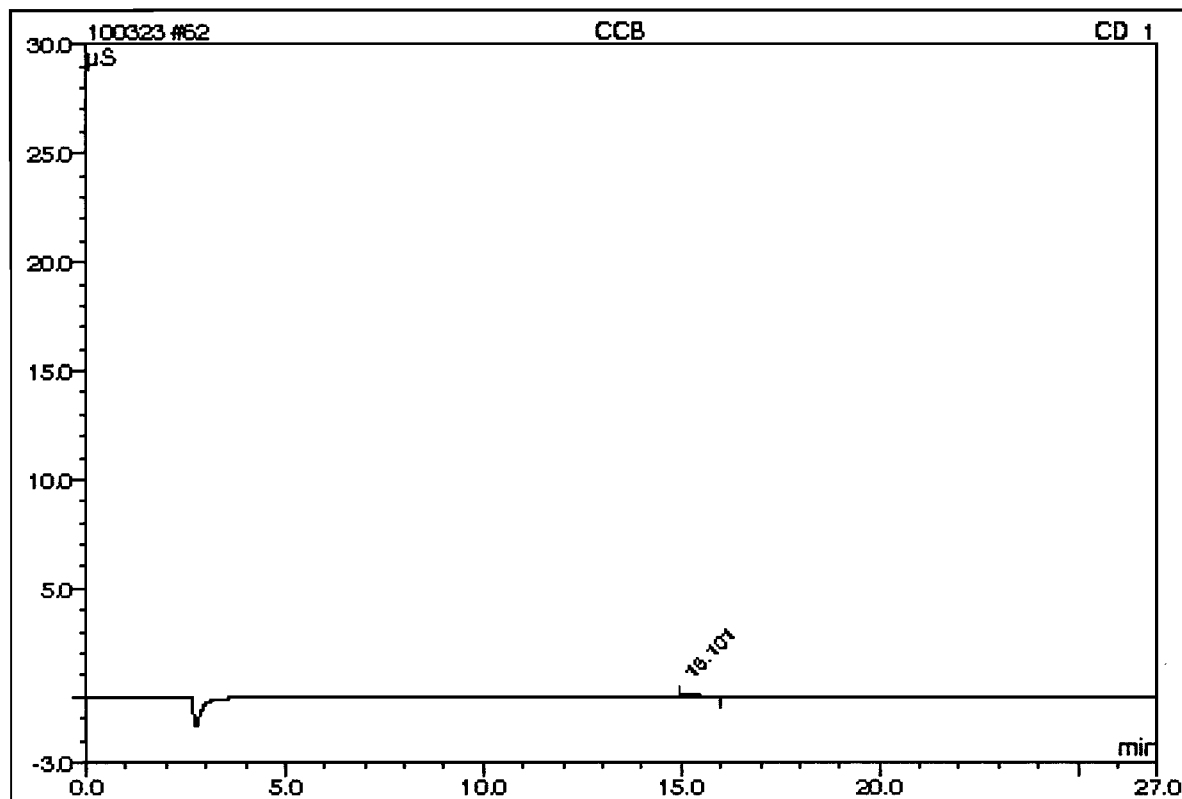
Sample Name:	WIC100324-02CVH	Injection Volume:	50.0
Vial Number:	47	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantit. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 12:30	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.31	Fluoride	n.a.	7.8009		3.88416	12.71
2	7.32	Chloride	n.a.	15.1555		5.48285	17.94
3	9.39	Nitrite-N	n.a.	7.5937		5.54652	18.15
4	10.84	Chlorate	n.a.	3.9080		0.46971	1.54
5	11.78	Bromide	n.a.	3.8666		0.49622	1.62
6	13.79	Nitrate-N	n.a.	7.5961		6.39071	20.92
7	19.38	O-Phosphate-P	n.a.	2.8169		0.74220	2.43
8	21.65	Sulfate	n.a.	30.4703		7.54241	24.68
Total:				79.2059	0.000	30.555	100.00

62 CCB

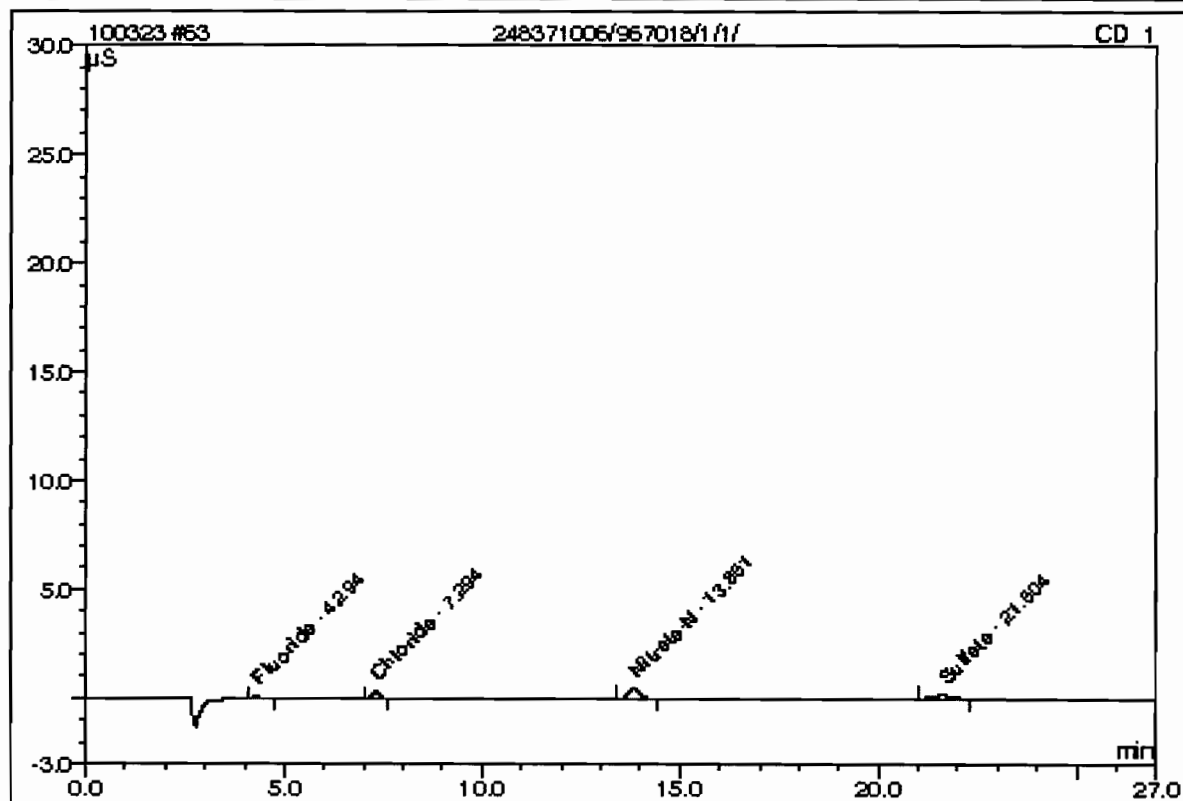
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	48	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 13:00	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

63 248371006/967018/1/1/

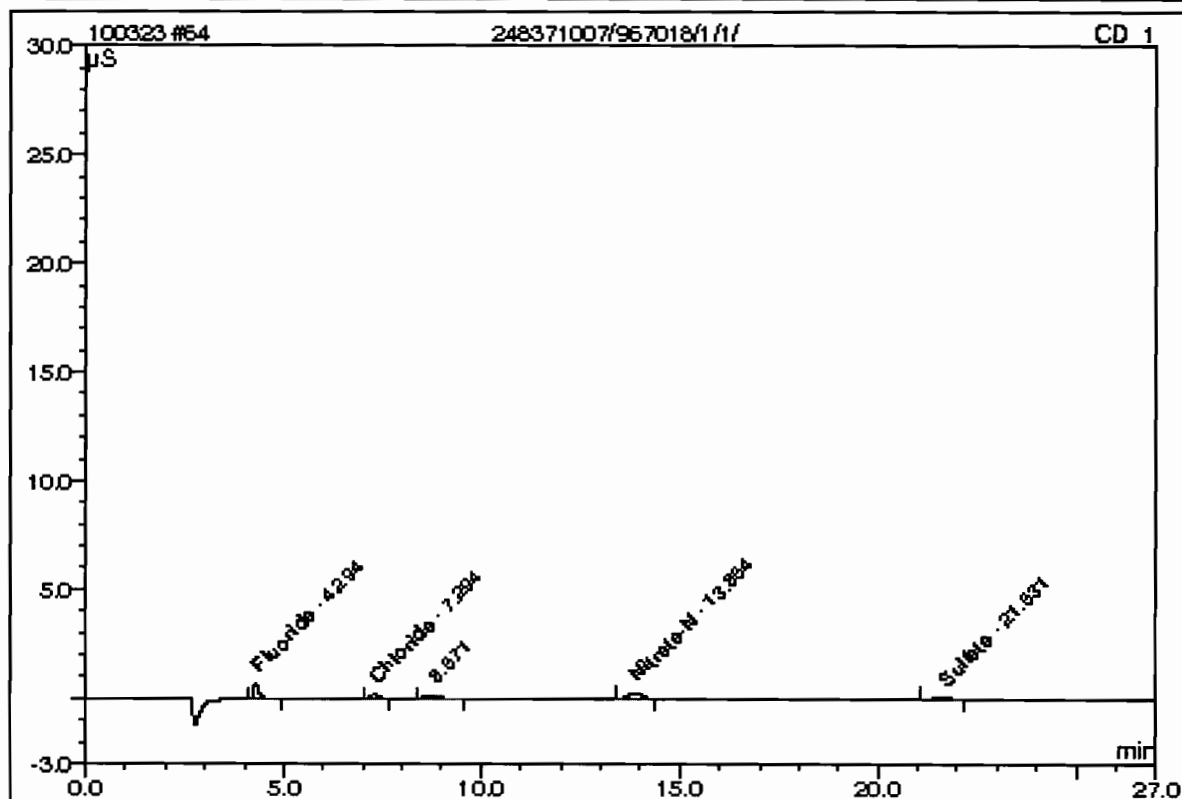
Sample Name:	248371006/967018/1/1/	Injection Volume:	50.0
Vial Number:	49	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 13:29	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.0960		0.02020	6.41
2	7.29	Chloride	n.a.	0.3128		0.05694	18.06
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	13.85	Nitrate-N	n.a.	0.2689		0.14912	47.29
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.80	Sulfate	n.a.	0.6594		0.08910	28.25
Total:				1.3372	0.000	0.315	100.00

64 248371007/967018/1/1/

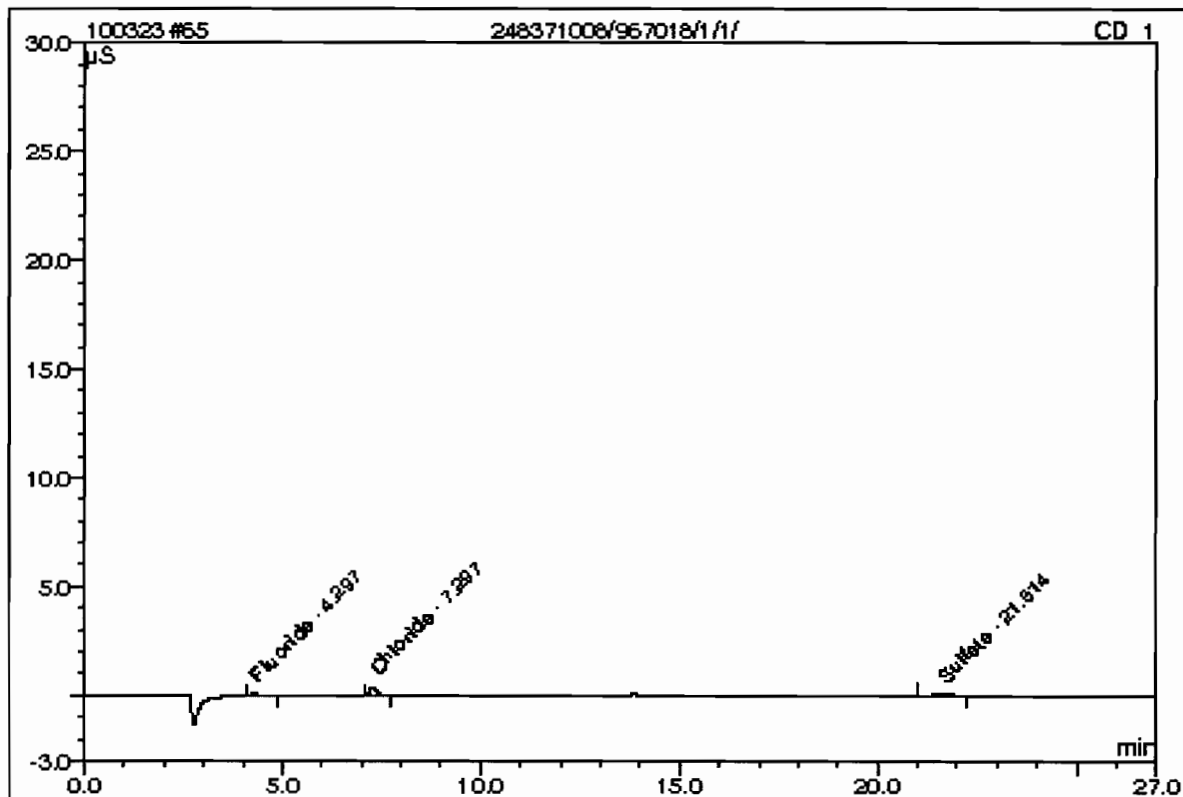
Sample Name:	248371007/967018/1/1/	Injection Volume:	50.0
Vial Number:	50	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 13:59	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;8056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.2713		0.10807	36.32
2	7.29	Chloride	n.a.	0.2553		0.03595	12.08
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	13.85	Nitrate-N	n.a.	0.2028		0.09274	31.17
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
5	21.63	Sulfate	n.a.	0.4290		0.03149	10.58
Total:				1.1583	0.000	0.268	90.15

65 248371008/967018/1/1/

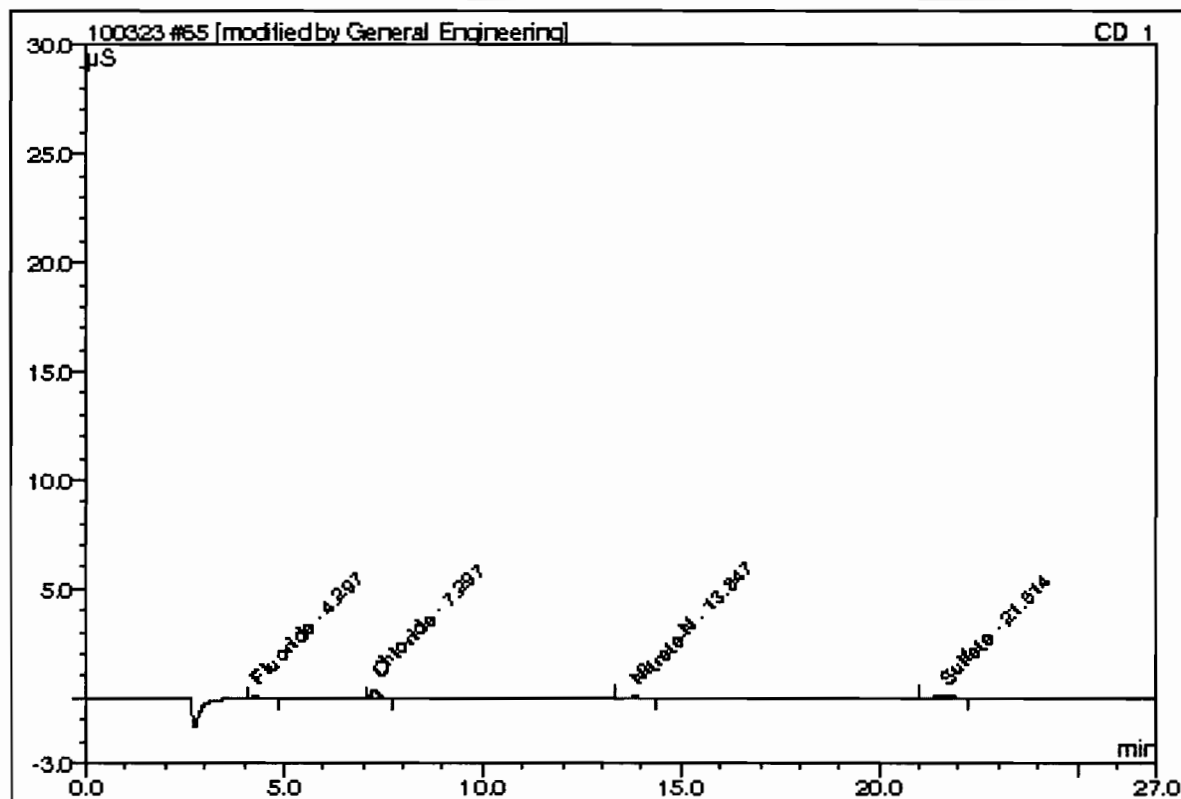
Sample Name:	248371008/967018/1/1/	Injection Volume:	50.0
Vial Number:	1	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 14:29	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	0.1081		0.02625	20.06
2	7.30	Chloride	n.a.	0.3620		0.07492	57.25
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	21.61	Sulfate	n.a.	0.4218		0.02969	22.69
Total:				0.8919	0.000	0.131	100.00

65 248371008/967018/1/1/

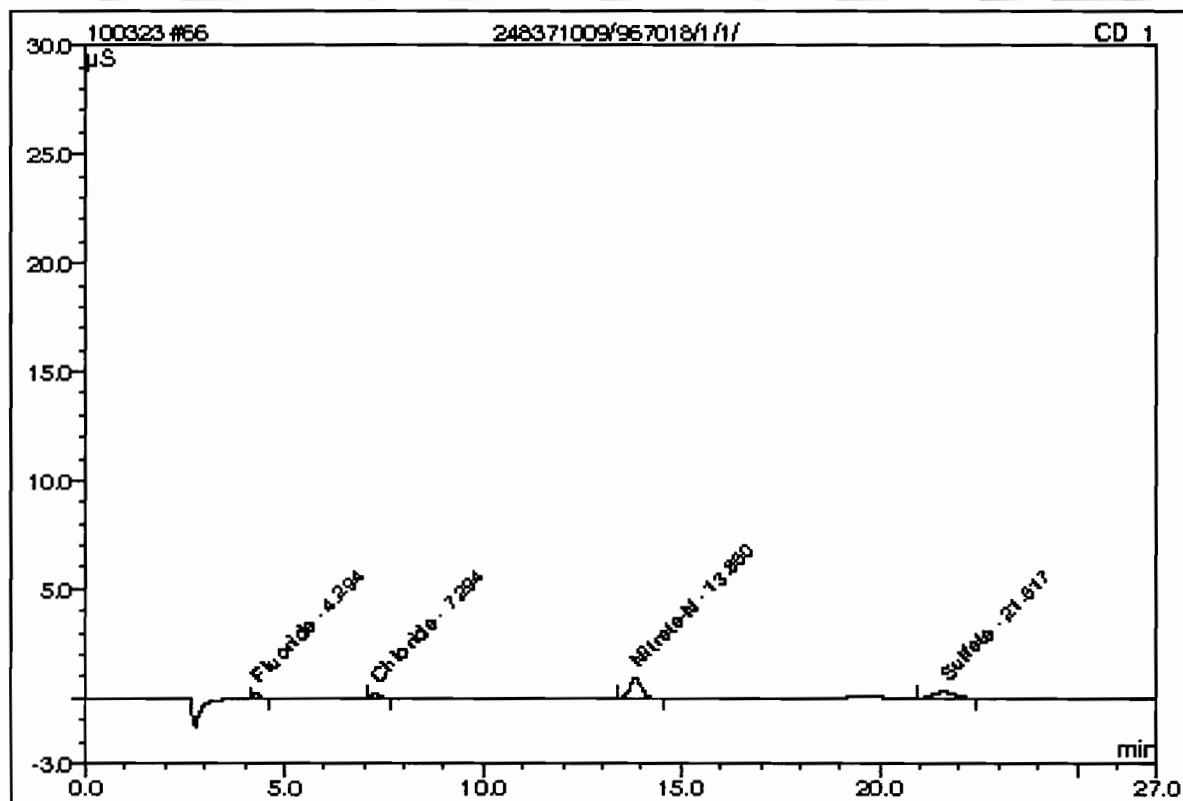
Sample Name:	248371008/967018/1/1/	Injection Volume:	50.0
Vial Number:	1	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 14:29	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	0.1081		0.02625	18.41
2	7.30	Chloride	n.a.	0.3620		0.07492	52.54
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.85	Nitrate-N	n.a.	0.1076		0.01172	8.22
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.61	Sulfate	n.a.	0.4218		0.02969	20.83
Total:				0.9995	0.000	0.143	100.00

66 248371009/967018/1/1/

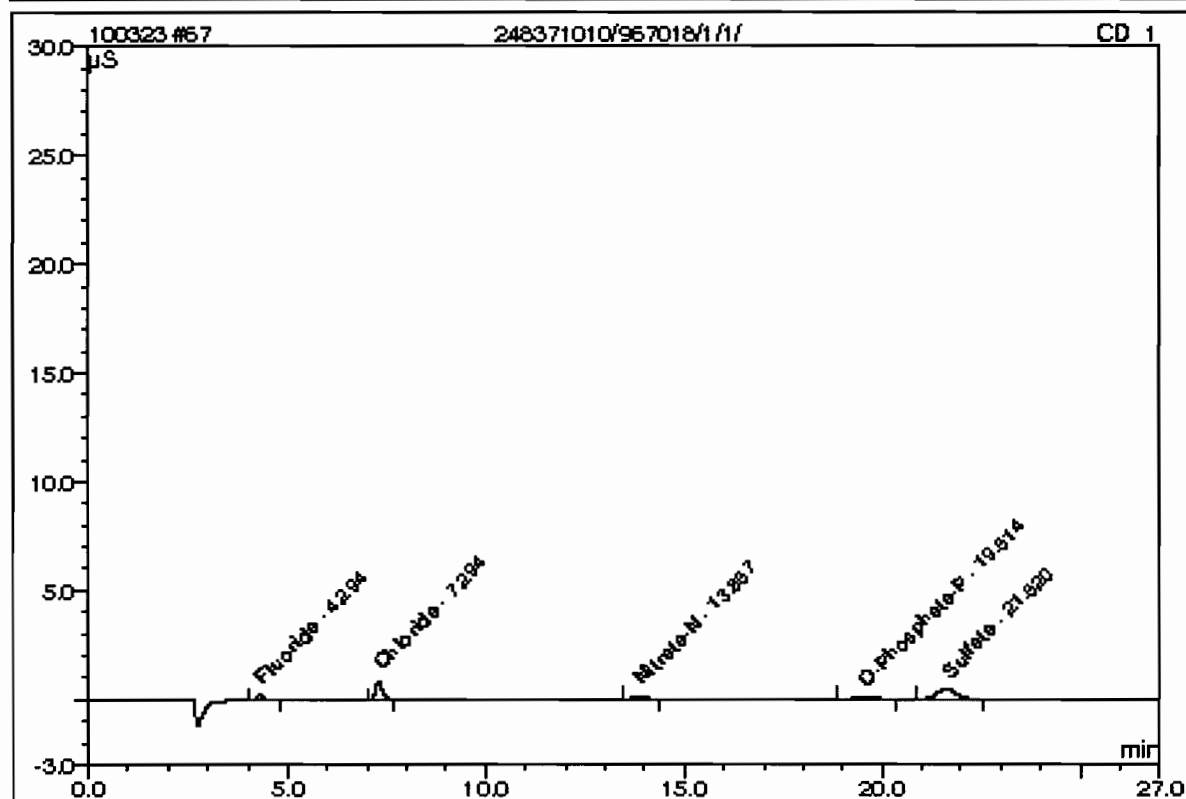
Sample Name:	248371009/967018/1/1/	Injection Volume:	50.0
Vial Number:	2	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 14:59	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1315		0.03798	6.78
2	7.29	Chloride	n.a.	0.2745		0.04295	7.67
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.85	Nitrate-N	n.a.	0.4638		0.31509	56.24
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.62	Sulfate	n.a.	0.9598		0.16420	29.31
Total:				1.8296	0.000	0.560	100.00

67 248371010/967018/1/1/

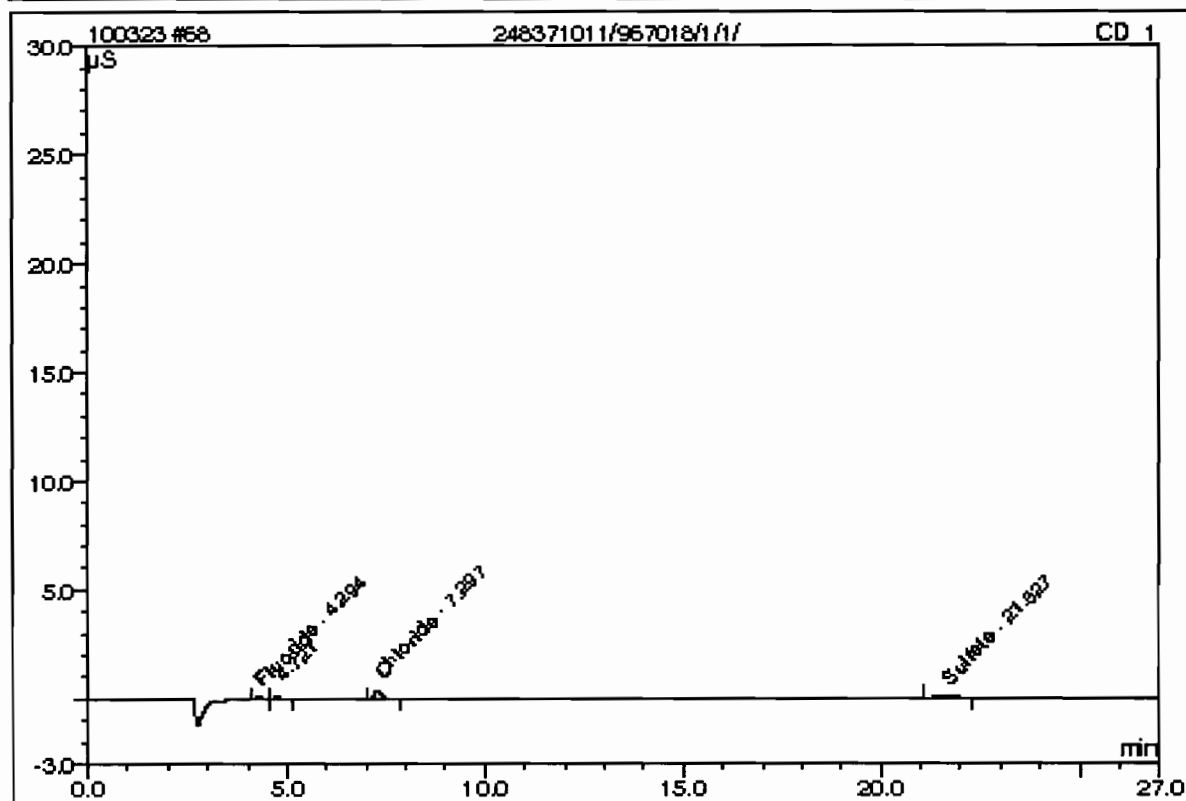
Sample Name:	248371010/967018/1/1/	Injection Volume:	50.0
Vial Number:	3	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 15:29	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	n.a.	0.1272		0.03581	6.63
2	7.29	Chloride	n.a.	0.5940		0.15975	29.58
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	13.86	Nitrate-N	n.a.	0.1489		0.04685	8.68
4	19.51	O-Phosphate-P	n.a.	0.1479		0.03738	6.92
5	21.62	Sulfate	n.a.	1.3438		0.26021	48.19
Total:				2.3618	0.000	0.540	100.00

68 248371011/967018/1/1/

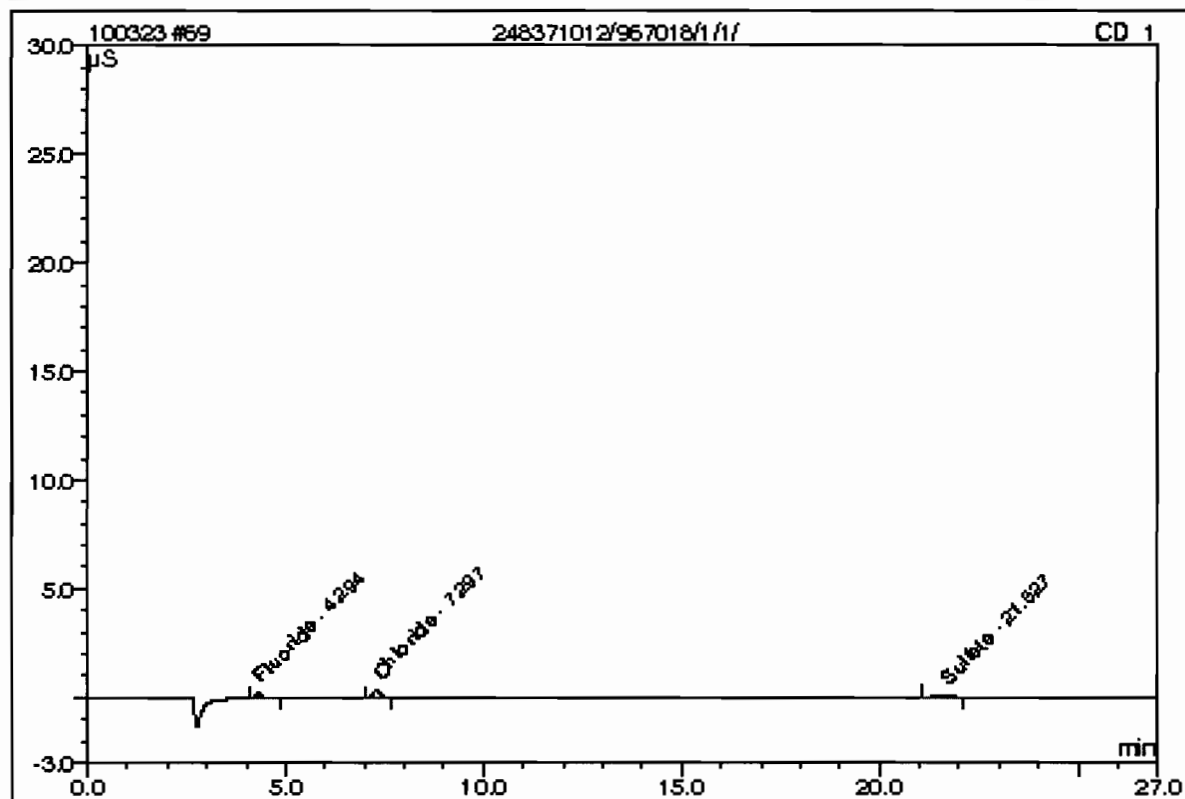
Sample Name:	248371011/967018/1/1/	Injection Volume:	50.0
Vial Number:	4	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 15:58	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	n.a.	0.0865		0.01543	9.63
3	7.30	Chloride	n.a.	0.3656		0.07625	47.59
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.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.63	Sulfate	n.a.	0.5082		0.05129	32.01
Total:				0.9603	0.000	0.143	89.24

69 248371012/967018/1/1/

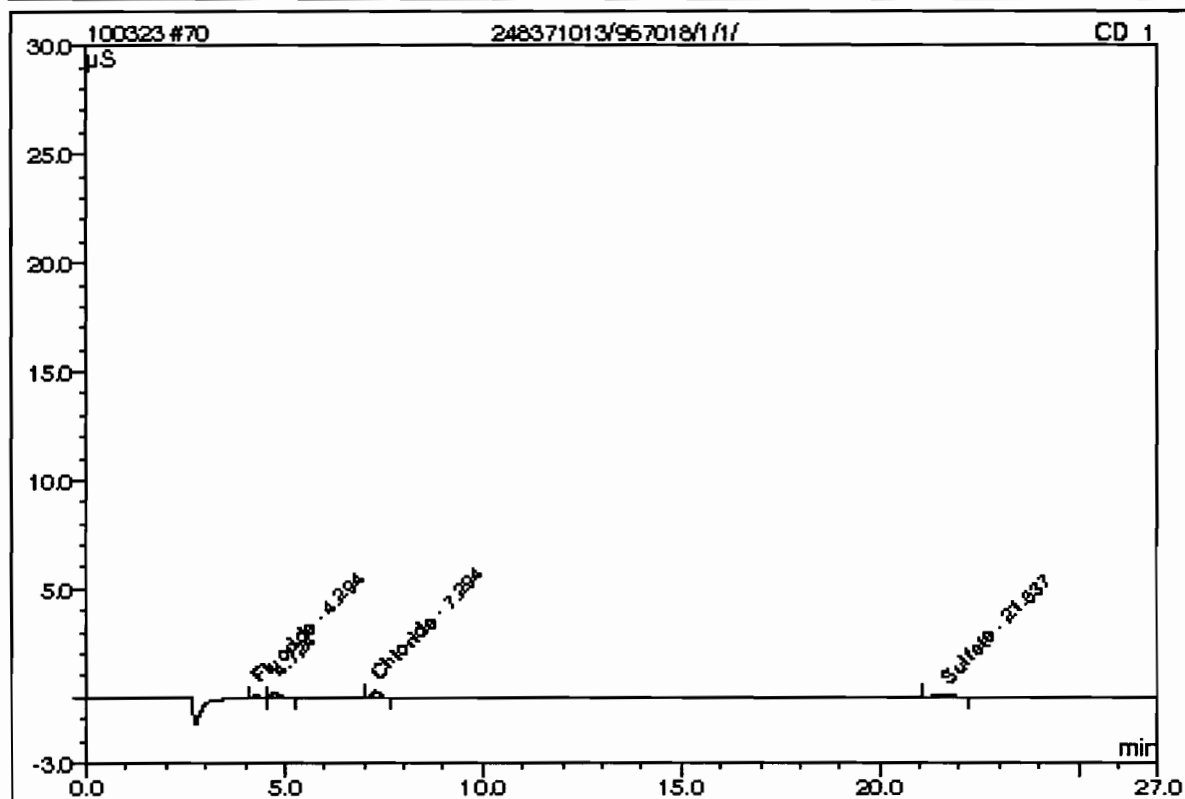
Sample Name:	248371012/967018/1/1/	Injection Volume:	50.0
Vial Number:	5	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 16:28	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1299		0.03720	27.71
2	7.30	Chloride	n.a.	0.3453		0.06883	51.28
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	21.63	Sulfate	n.a.	0.4158		0.02821	21.01
Total:				0.8911	0.000	0.134	100.00

70 248371013/967018/1/1/

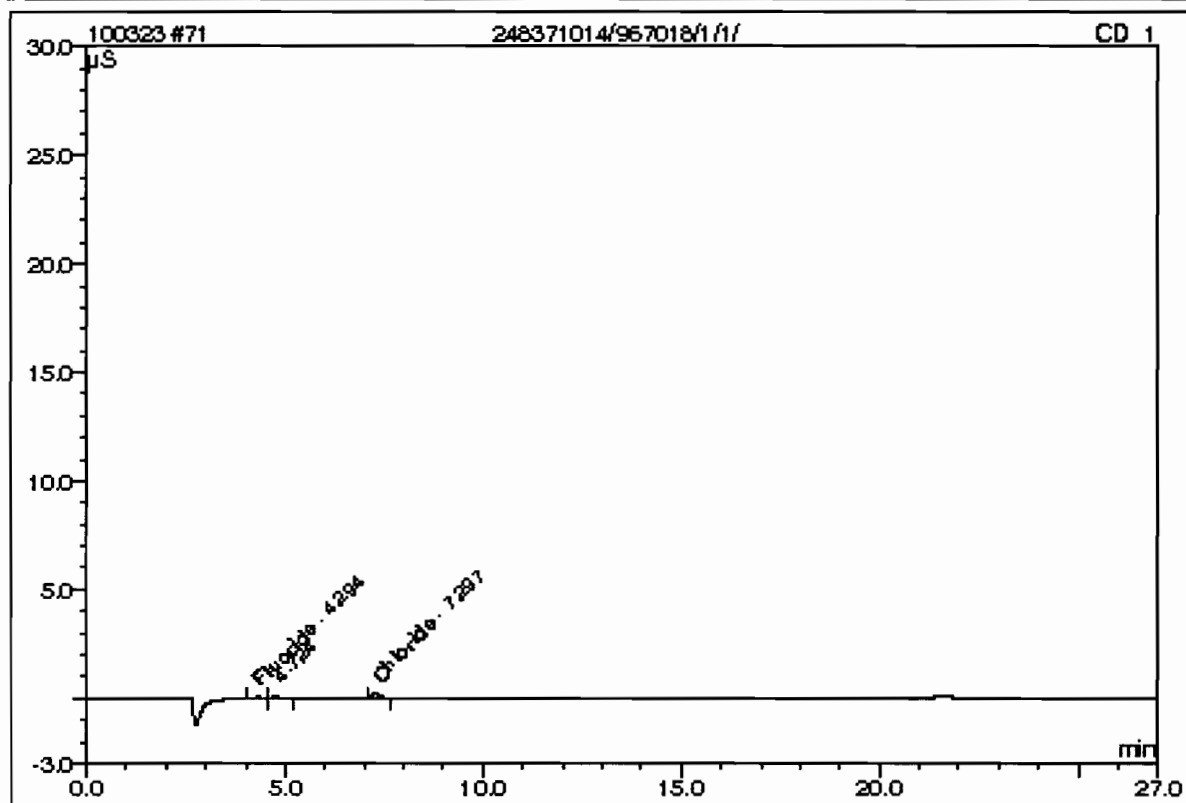
Sample Name:	248371013/967018/1/1/	Injection Volume:	50.0
Vial Number:	6	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 16:58	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	n.a.	0.1070		0.02570	14.16
3	7.29	Chloride	n.a.	0.3025		0.05321	29.31
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.64	Sulfate	n.a.	0.4783		0.04383	24.14
Total:				0.8879	0.000	0.123	67.61

71 248371014/967018/1/1/

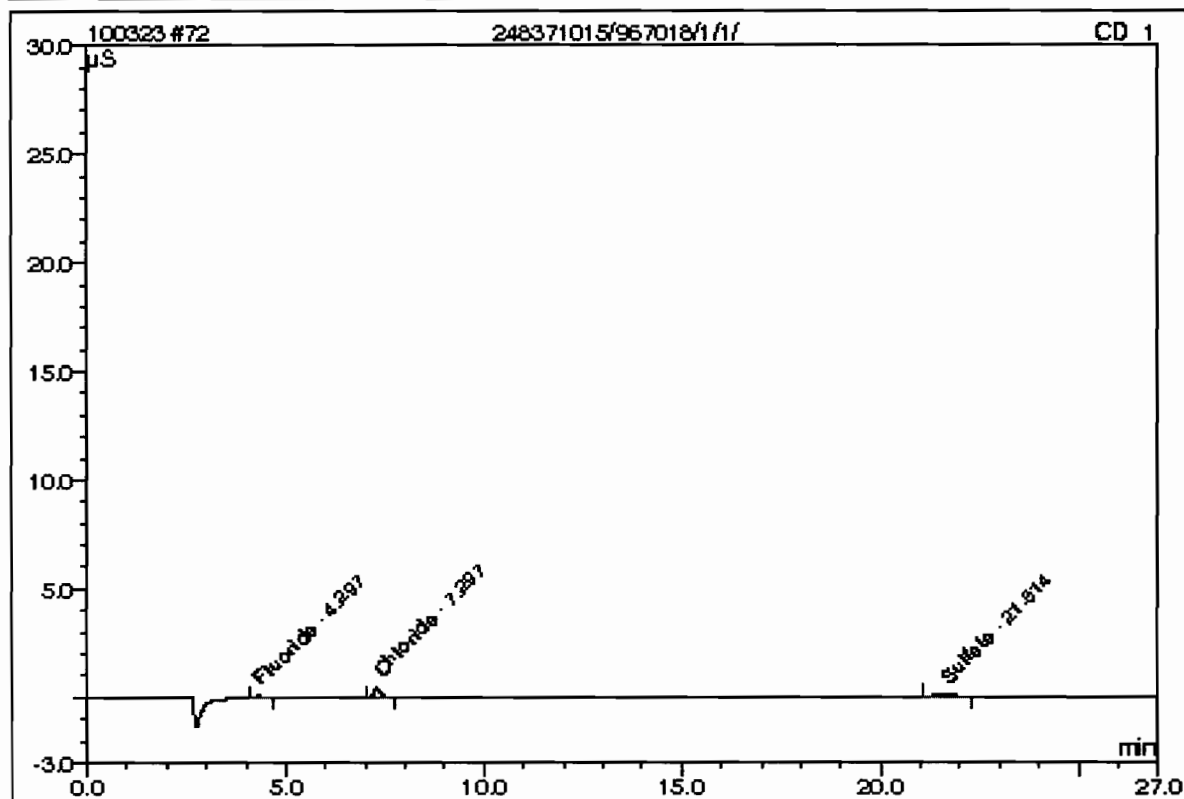
Sample Name:	248371014/967018/1/1/	Injection Volume:	50.0
Vial Number:	7	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 17:28	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC E086; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	n.a.	0.0859		0.01510	19.94
3	7.30	Chloride	n.a.	0.2736		0.04262	56.27
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.
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:				0.3595	0.000	0.058	76.21

72 248371015/967018/1/1/

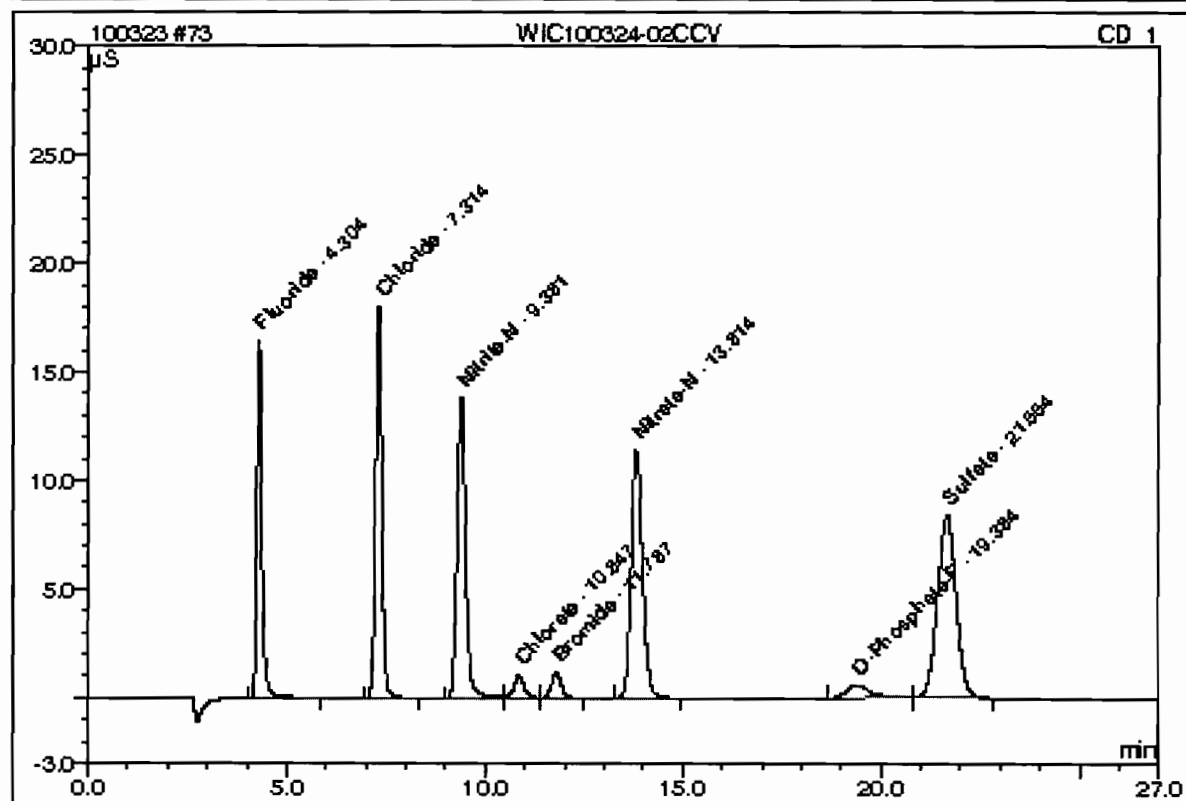
Sample Name:	248371015/967018/1/1/	Injection Volume:	50.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 17:58	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	0.0799		0.01209	9.26
2	7.30	Chloride	n.a.	0.3638		0.07559	57.95
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	21.61	Sulfate	n.a.	0.4741		0.04278	32.79
Total:				0.9178	0.000	0.130	100.00

73 WIC100324-02CCV

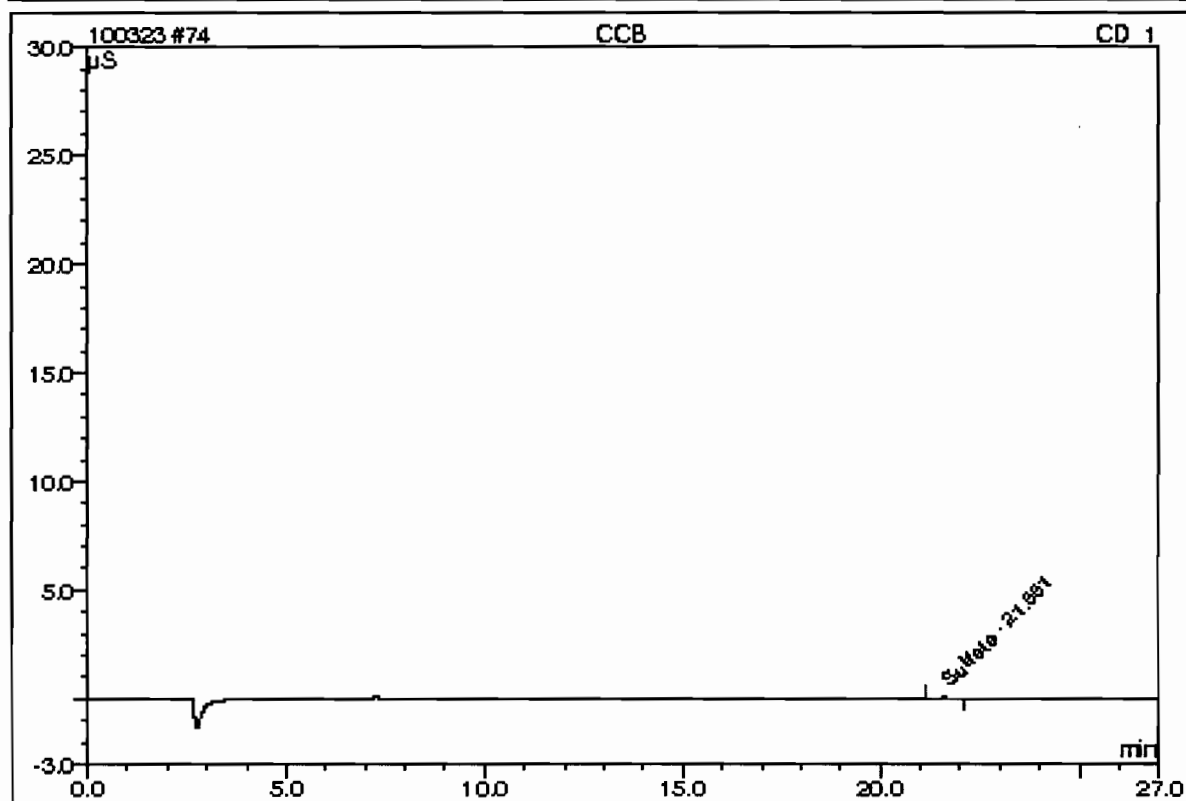
Sample Name:	WIC100324-02CCV	Injection Volume:	50.0
Vial Number:	9	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 18:27	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;8056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	4.8440		2.40128	12.98
2	7.31	Chloride	n.a.	9.1074		3.27190	17.69
3	9.38	Nitrite-N	n.a.	4.6745		3.40154	18.39
4	10.85	Chlorate	n.a.	2.5591		0.30706	1.66
5	11.79	Bromide	n.a.	2.5517		0.32663	1.77
6	13.81	Nitrate-N	n.a.	4.5896		3.82983	20.71
7	19.38	O-Phosphate-P	n.a.	1.5790		0.41529	2.25
8	21.65	Sulfate	n.a.	18.4690		4.54186	24.56
Total:				48.3742	0.000	18.495	100.00

74 CCB

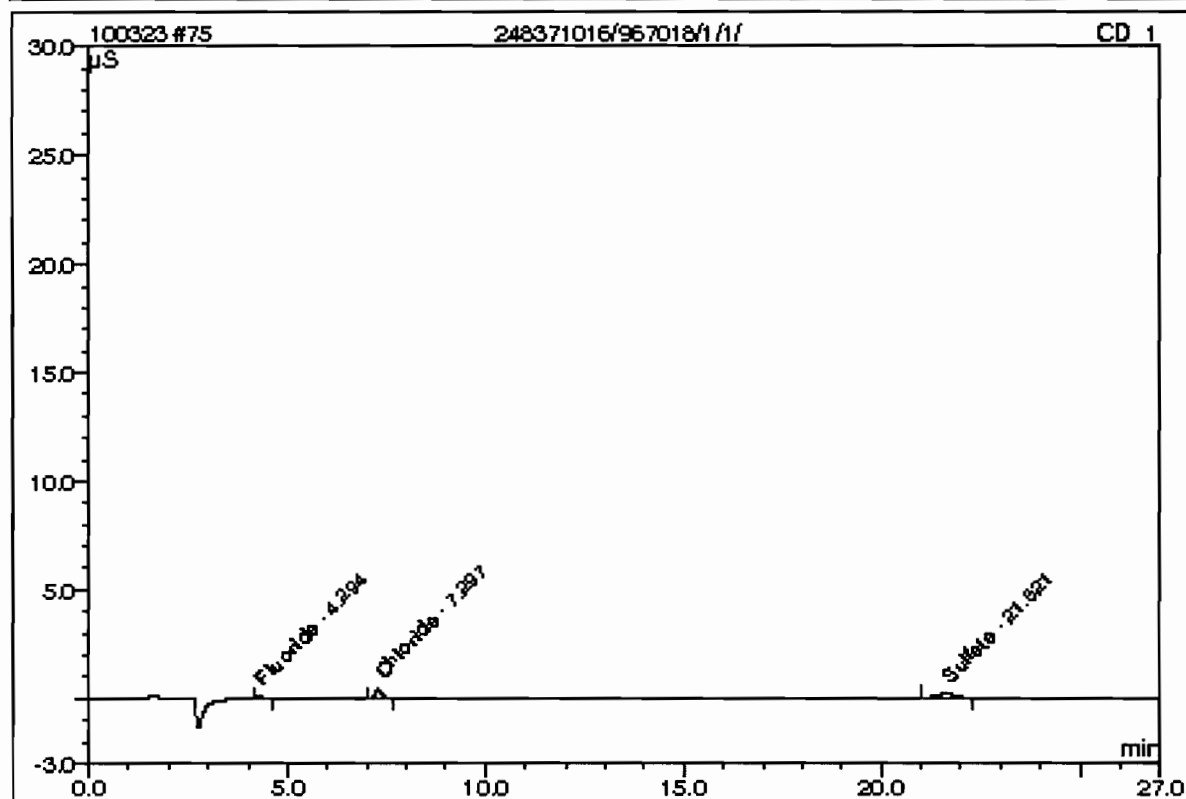
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 18:57	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86;300;8056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area uS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
1	21.85	Sulfate	n.a.	0.3498		0.01171	100.00
Total:				0.3498	0.000	0.012	100.00

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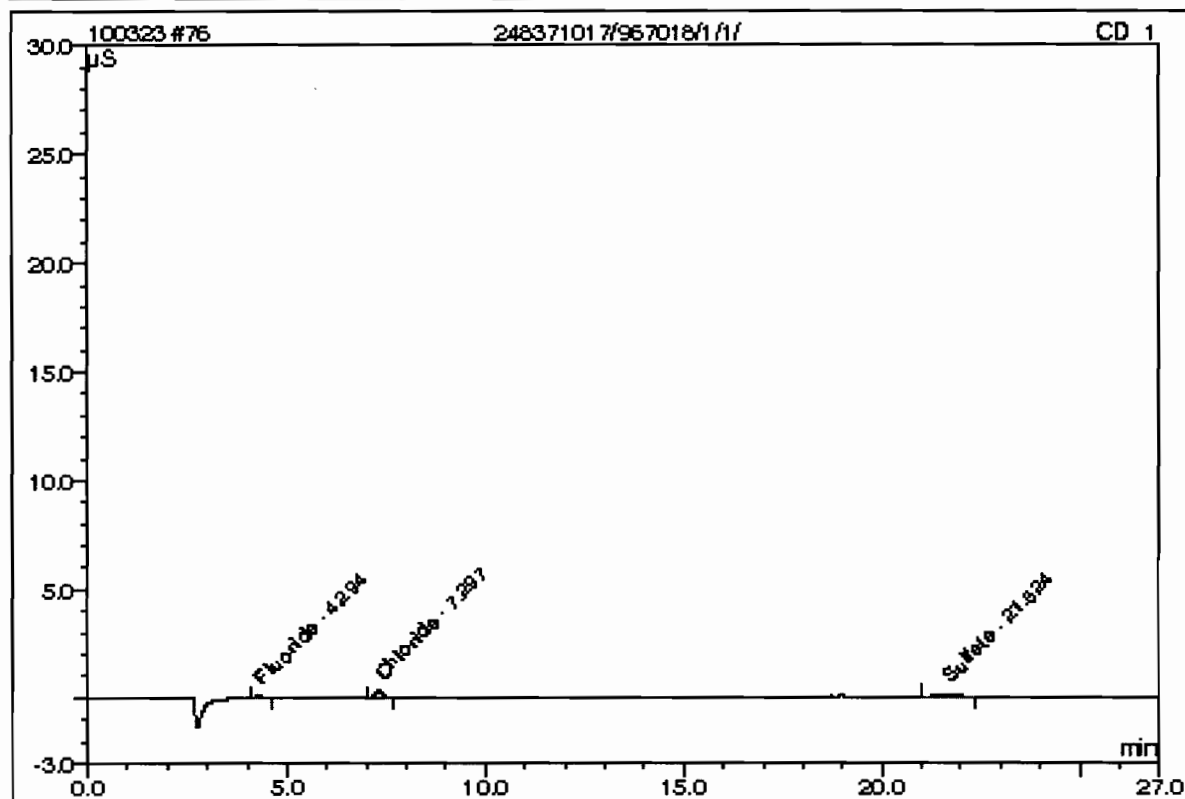
Sample Name:	248371016/967018/1/1/	Injection Volume:	50.0
Vial Number:	11	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 19:27	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1002		0.02231	11.20
2	7.30	Chloride	n.a.	0.3695		0.07767	38.98
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	21.62	Sulfate	n.a.	0.7001		0.09928	49.83
Total:				1.1698	0.000	0.199	100.00

76 248371017/967018/1/1/

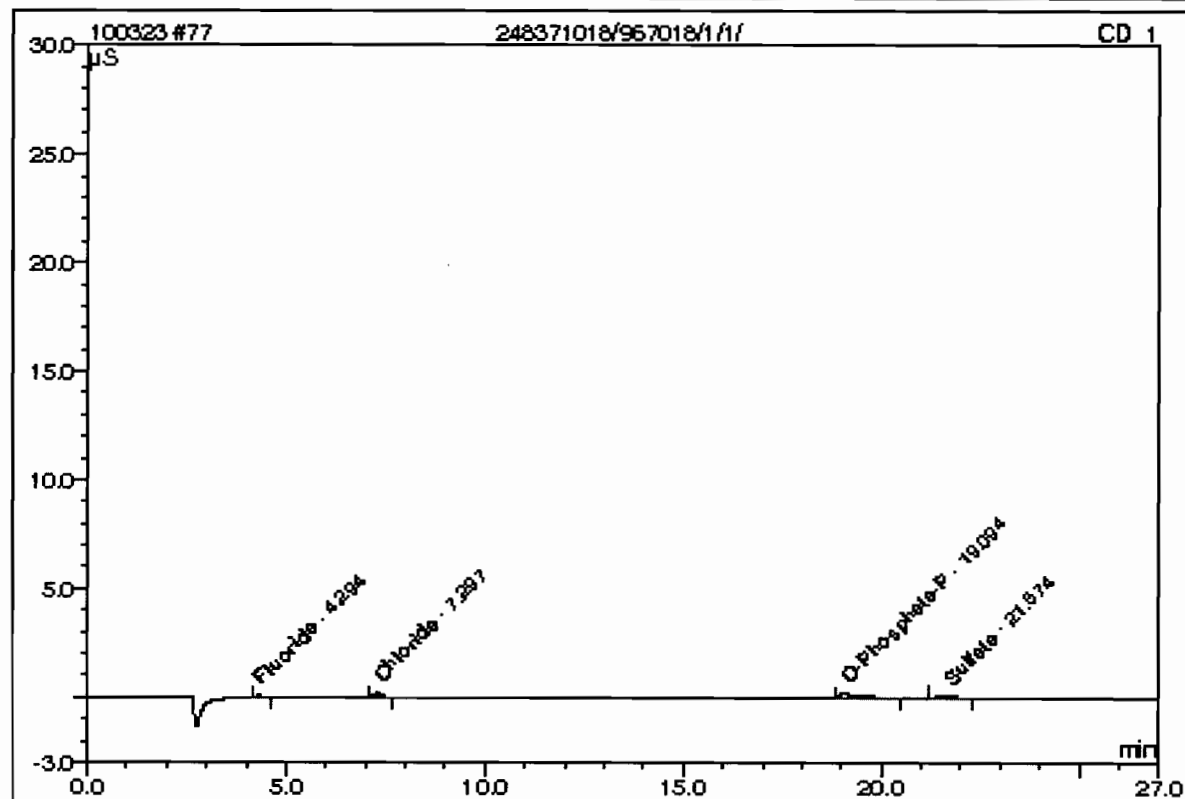
Sample Name:	248371017/967018/1/1/	Injection Volume:	50.0
Vial Number:	12	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 19:57	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.29	Fluoride	n.a.	0.0910		0.01768	12.08
2	7.30	Chloride	n.a.	0.3196		0.05943	40.60
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	21.62	Sulfate	n.a.	0.5801		0.06927	47.32
Total:				0.9906	0.000	0.146	100.00

77 248371018/967018/1/1/

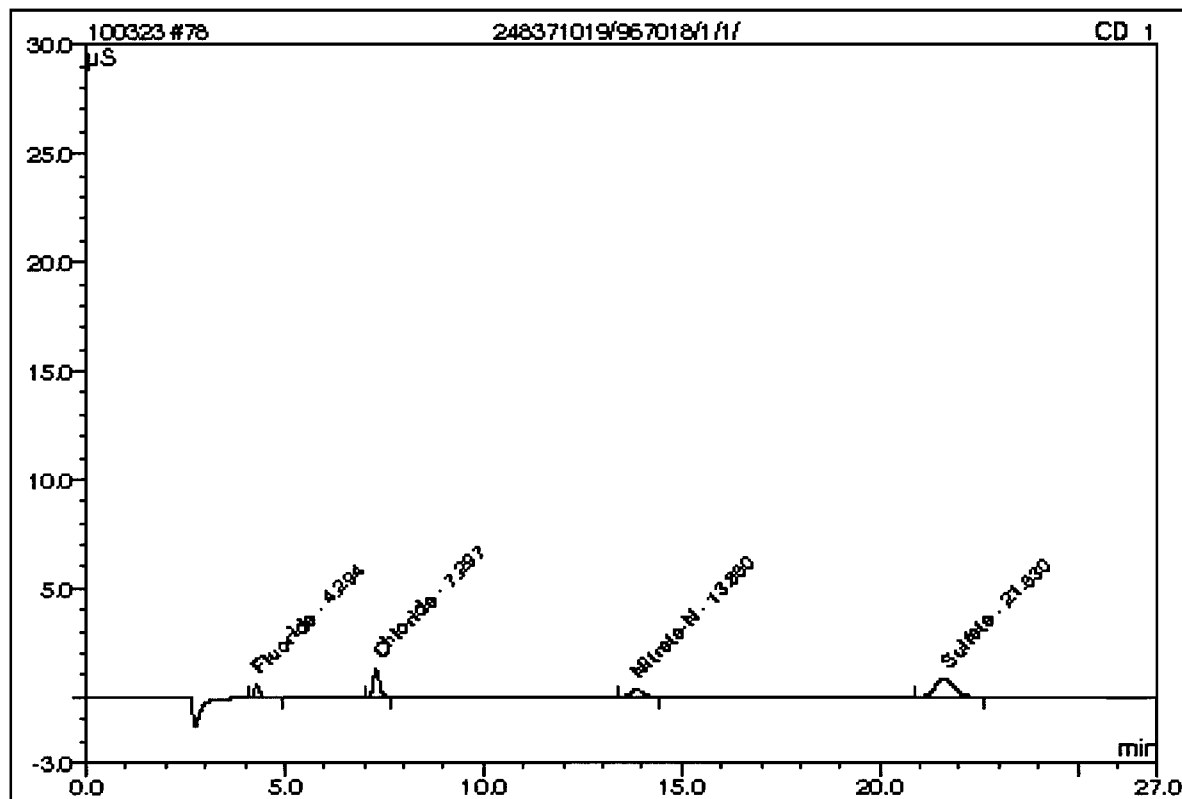
Sample Name:	248371018/967018/1/1/	Injection Volume:	50.0
Vial Number:	13	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 20:27	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.0783		0.01128	7.18
2	7.30	Chloride	n.a.	0.2480		0.03325	21.16
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
3	19.09	O-Phosphate-P	n.a.	0.3527		0.09145	58.20
4	21.67	Sulfate	n.a.	0.3876		0.02114	13.45
Total:				1.0665	0.000	0.157	100.00

78 248371019/967018/1/1/

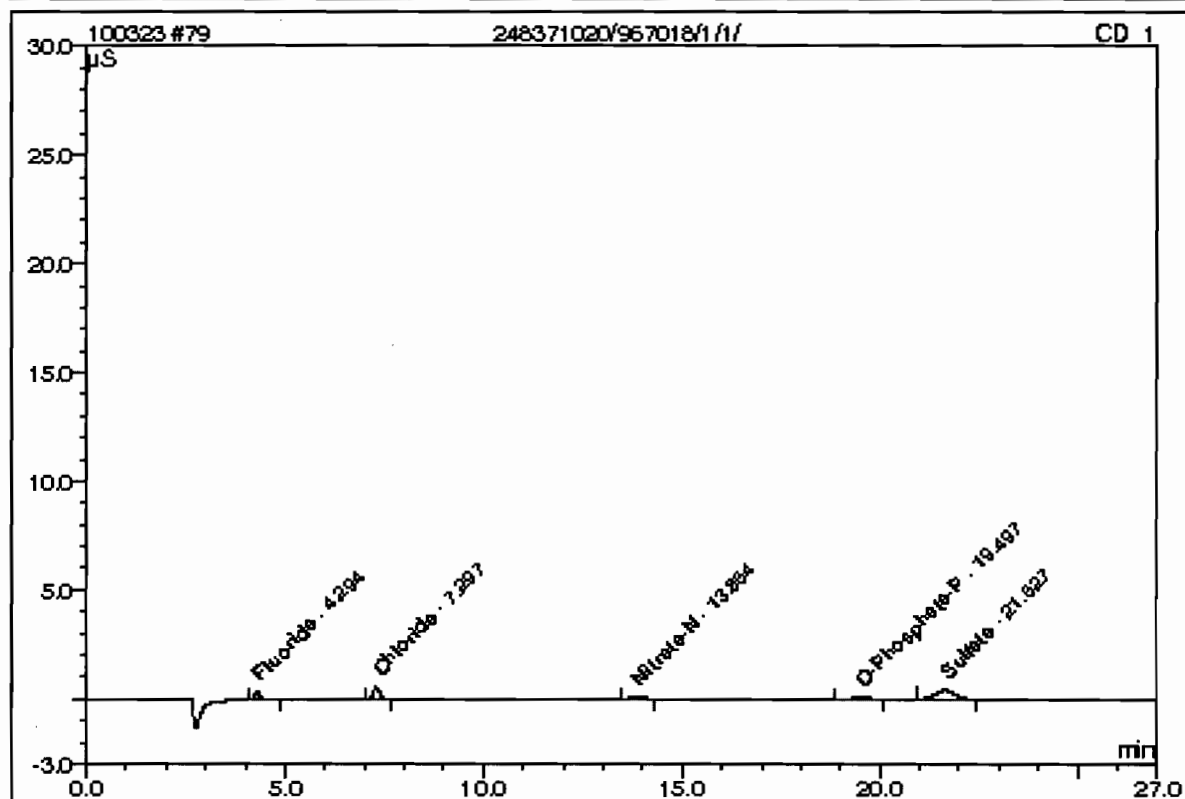
Sample Name:	248371019/967018/1/1/	Injection Volume:	50.0
Vial Number:	14	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 20:57	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.2287		0.08675	9.49
2	7.30	Chloride	n.a.	0.8146		0.24041	26.31
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	13.86	Nitrate-N	n.a.	0.2398		0.12426	13.60
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	21.63	Sulfate	n.a.	2.1516		0.46218	50.59
Total:				3.4348	0.000	0.914	100.00

79 248371020/967018/1/1/

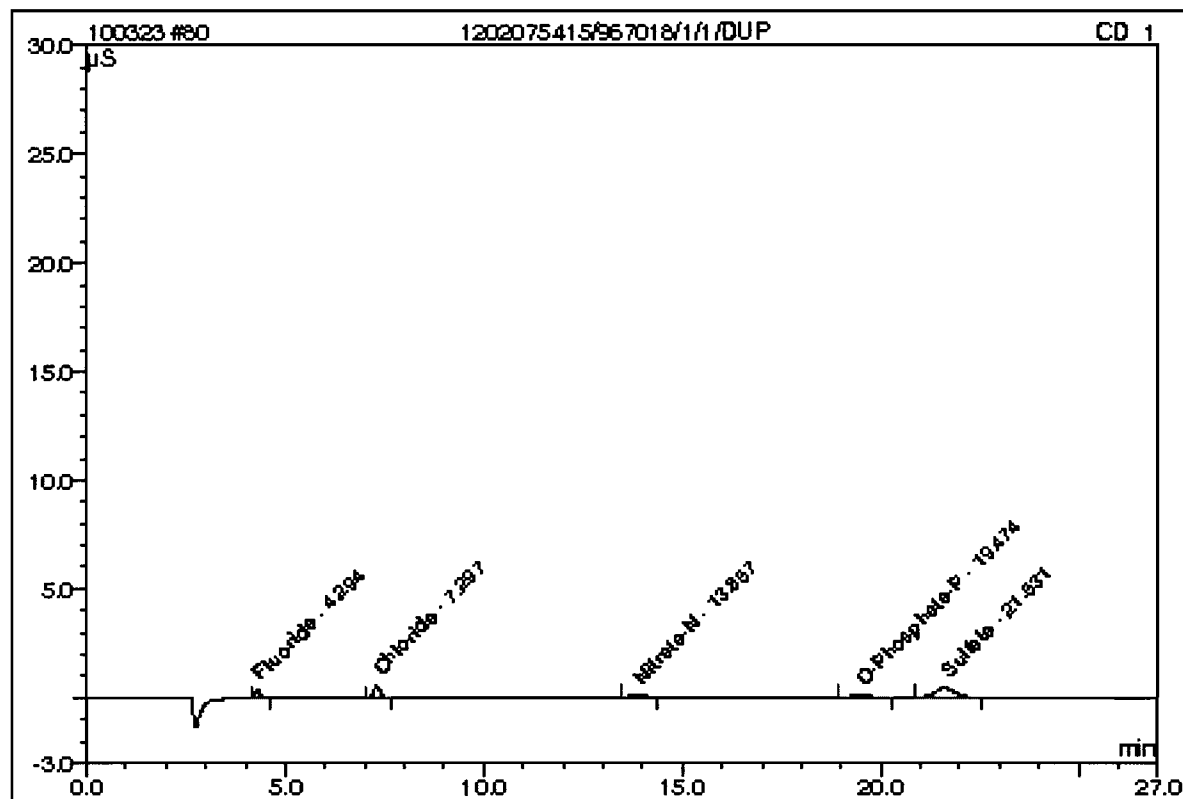
Sample Name:	248371020/967018/1/1/	Injection Volume:	50.0
Vial Number:	15	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 21:27	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1657		0.05513	12.28
2	7.30	Chloride	n.a.	0.4286		0.09930	22.11
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.86	Nitrate-N	n.a.	0.1415		0.04059	9.04
4	19.50	O-Phosphate-P	n.a.	0.1123		0.02796	6.23
5	21.63	Sulfate	n.a.	1.2071		0.22605	50.34
Total:				2.0553	0.000	0.449	100.00

80 1202075415/967018/1/1/DUP

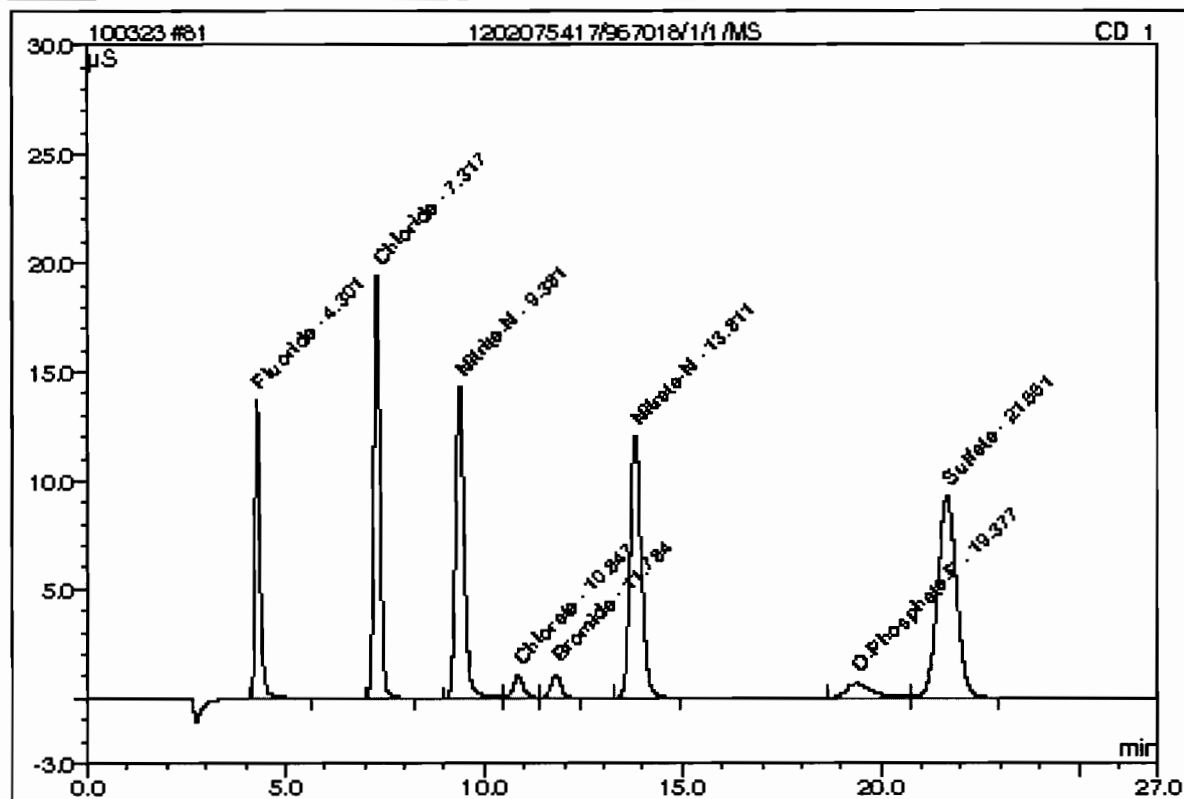
Sample Name:	1202075415/967018/1/1/DUP	Injection Volume:	50.0
Vial Number:	16	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 21:57	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.29	Fluoride	n.a.	0.1566		0.05054	10.90
2	7.30	Chloride	n.a.	0.4285		0.09925	21.40
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	13.87	Nitrate-N	n.a.	0.1442		0.04286	9.24
4	19.47	O-Phosphate-P	n.a.	0.1222		0.03059	6.59
5	21.63	Sulfate	n.a.	1.2652		0.24056	51.87
Total:				2.1167	0.000	0.484	100.00

81 1202075417/967018/1/1/MS

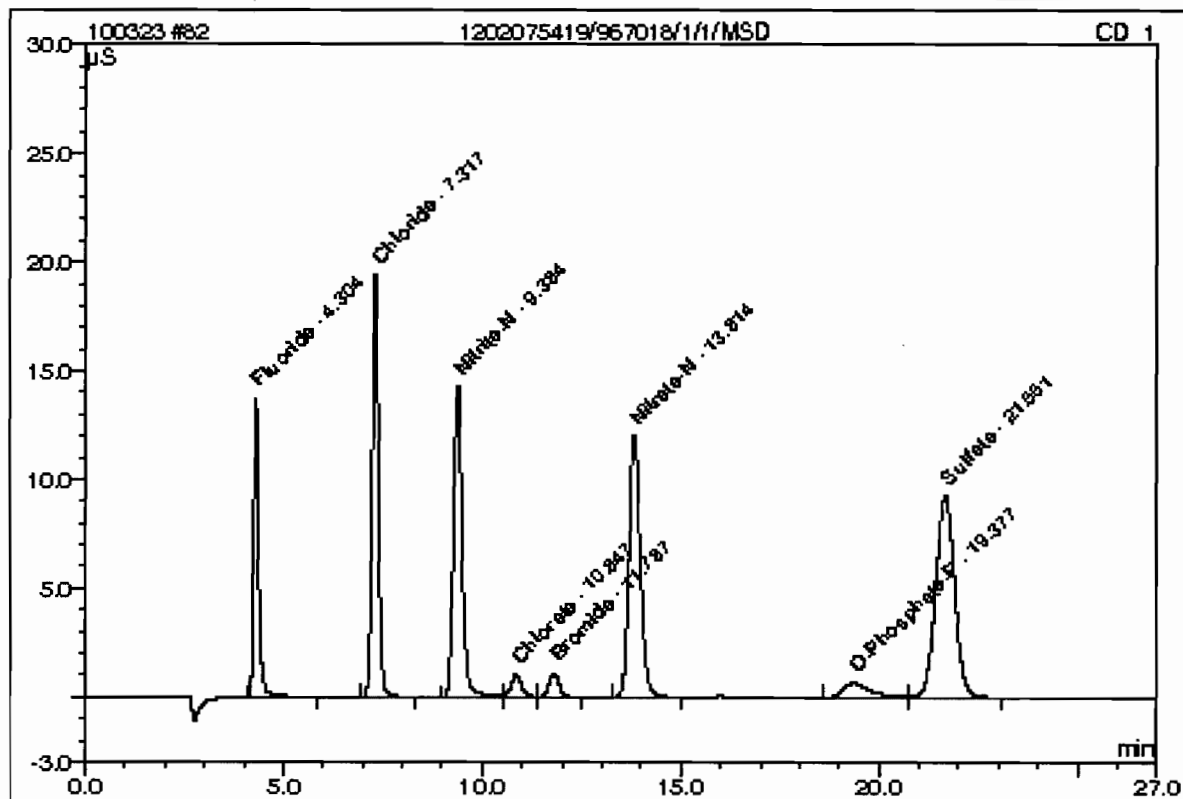
Sample Name:	1202075417/967018/1/1/MS	Injection Volume:	50.0
Vial Number:	17	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 22:27	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.30	Fluoride	n.a.	4.0622		2.00922	10.44
2	7.32	Chloride	n.a.	9.8045		3.52676	18.32
3	9.38	Nitrate-N	n.a.	4.8333		3.51821	18.28
4	10.85	Chlorate	n.a.	2.5339		0.30402	1.58
5	11.78	Bromide	n.a.	2.5115		0.32144	1.67
6	13.81	Nitrate-N	n.a.	4.8384		4.04154	21.00
7	19.38	O-Phosphate-P	n.a.	1.8403		0.48430	2.52
8	21.66	Sulfate	n.a.	20.4697		5.04207	26.20
Total:				50.8937	0.000	19.248	100.00

82 1202075419/967018/1/1/MSD

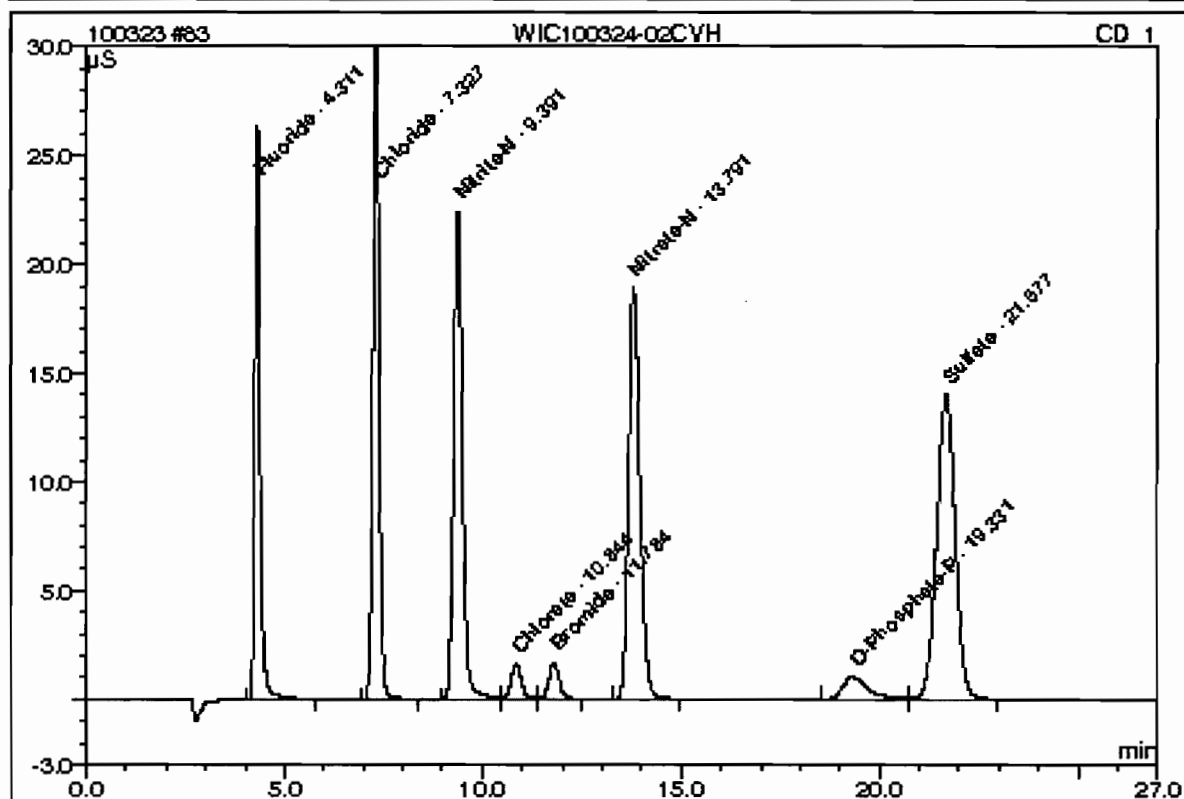
Sample Name:	1202075419/967018/1/1/MSD	Injection Volume:	50.0
Vial Number:	18	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 22:57	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.30	Fluoride	n.a.	4.0832		2.01974	10.47
2	7.32	Chloride	n.a.	9.8198		3.53235	18.31
3	9.38	Nitrite-N	n.a.	4.8371		3.52102	18.25
4	10.85	Chlorate	n.a.	2.5660		0.30789	1.60
5	11.79	Bromide	n.a.	2.5392		0.32501	1.68
6	13.81	Nitrate-N	n.a.	4.8436		4.04598	20.98
7	19.38	O-Phosphate-P	n.a.	1.8805		0.49493	2.57
8	21.66	Sulfate	n.a.	20.4710		5.04240	26.14
Total:				51.0404	0.000	19.289	100.00

83 WIC100324-02CVH

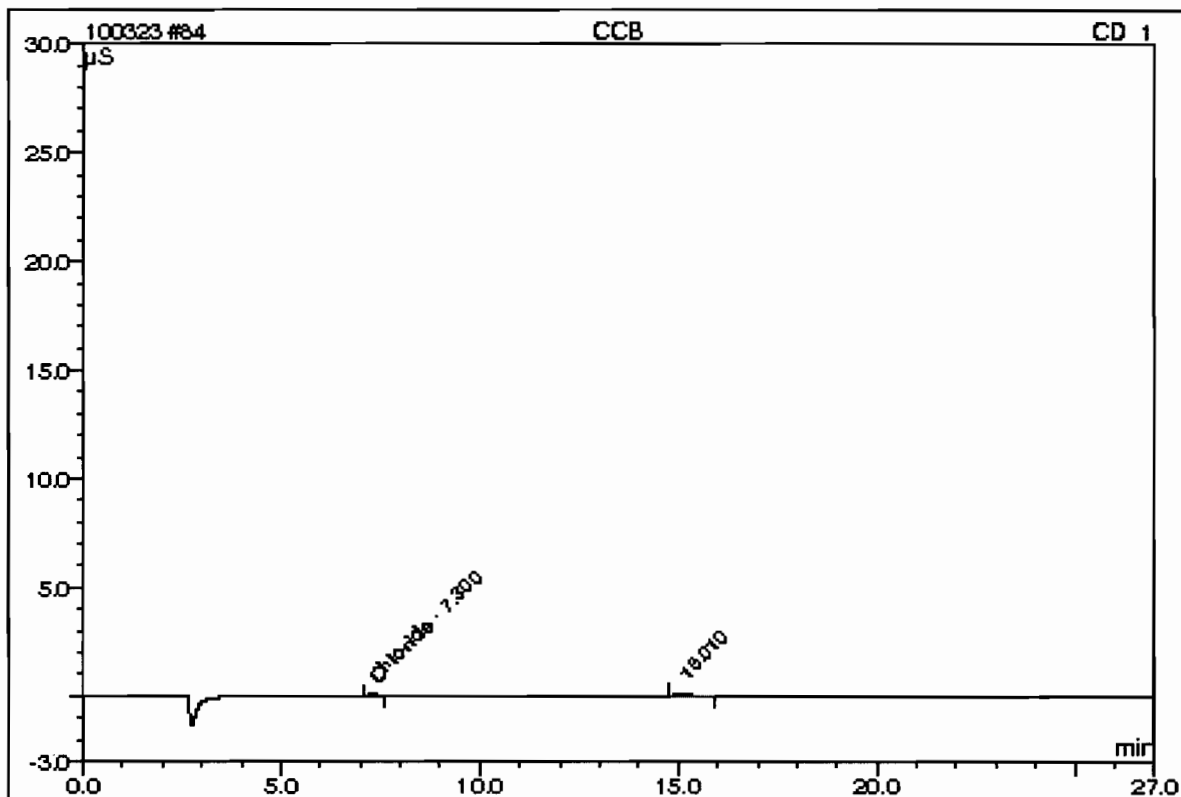
Sample Name:	WIC100324-02CVH	Injection Volume:	50.0
Vial Number:	19	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 23:26	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GC ED86; 300; 8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.31	Fluoride	n.a.	7.8072		3.88735	12.73
2	7.33	Chloride	n.a.	15.1933		5.49669	18.00
3	9.39	Nitrite-N	n.a.	7.5811		5.53727	18.14
4	10.84	Chlorate	n.a.	3.8854		0.46722	1.53
5	11.78	Bromide	n.a.	3.8298		0.49148	1.61
6	13.79	Nitrate-N	n.a.	7.5857		6.38180	20.90
7	19.33	O-Phosphate-P	n.a.	2.8288		0.74535	2.44
8	21.68	Sulfate	n.a.	30.3998		7.52480	24.65
Total:				79.1111	0.000	30.532	100.00

84 CCB

Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	20	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100317an	Sample Amount:	1.0000
Recording Time:	3/24/2010 23:56	Analyst:	GXM3
Run Time (min):	27.00	Column:	AS23-002407; GL GCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.30	Chloride	n.a.	0.1971		0.01464	30.96
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.1971	0.000	0.015	30.96

pH

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 960294
 Lab SOP: GL-GC-E-008 REV# 17
 Description: pH
 Method: SW846 9045C/9045D

Sample id	Parent Sample id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1202059778 LCS		Soil	11:00	11:05	03-MAR-10 14:28	pH 2	20	20	6.98	17.6°C	7	99.714	
1202059778 LCS		Soil	11:00	11:05	03-MAR-10 14:28	pH 2	20	20	6.98	17.6°C	7	99.714	
248371001		Soil	11:00	11:05	03-MAR-10 14:31	pH 2	20	20	6.65	19.4°C			
248371001		Soil	11:00	11:05	03-MAR-10 14:31	pH 2	20	20	6.65	19.4°C			
1202059776 DUP	248371001	Soil	11:00	11:05	03-MAR-10 14:34	pH 2	20	20	6.71	19.6°C			.898
1202059776 DUP	248371001	Soil	11:00	11:05	03-MAR-10 14:34	pH 2	20	20	6.72	19.6°C			1.047
248371002		Soil	11:00	11:05	03-MAR-10 14:36	pH 2	20	20	6.61	19.6°C			
248371002		Soil	11:00	11:05	03-MAR-10 14:36	pH 2	20	20	6.61	19.6°C			
248371003		Soil	11:00	11:05	03-MAR-10 14:38	pH 2	20	20	6.68	19.6°C			
248371003		Soil	11:00	11:05	03-MAR-10 14:38	pH 2	20	20	6.71	19.6°C			
CCV			11:00	11:05	03-MAR-10 14:41	pH 2	20	20	7.03	18.1°C	7	100.429	
CCV			11:00	11:05	03-MAR-10 14:41	pH 2	20	20	7.03	18.1°C	7	100.429	
248371004		Soil	11:00	11:05	03-MAR-10 14:43	pH 2	20	20	6.56	19.6°C			
248371004		Soil	11:00	11:05	03-MAR-10 14:43	pH 2	20	20	6.57	19.6°C			
248371005		Soil	11:00	11:05	03-MAR-10 14:45	pH 2	20	20	6.97	19.6°C			
248371005		Soil	11:00	11:05	03-MAR-10 14:45	pH 2	20	20	6.98	19.6°C			
248371006		Soil	11:00	11:05	03-MAR-10 14:47	pH 2	20	20	6.81	19.5°C			
248371006		Soil	11:00	11:05	03-MAR-10 14:47	pH 2	20	20	6.82	19.5°C			
248371007		Soil	11:00	11:05	03-MAR-10 14:49	pH 2	20	20	7.23	19.3°C			
248371007		Soil	11:00	11:05	03-MAR-10 14:49	pH 2	20	20	7.25	19.4°C			
248371008		Soil	11:00	11:05	03-MAR-10 14:51	pH 2	20	20	6.8	19.3°C			
248371008		Soil	11:00	11:05	03-MAR-10 14:51	pH 2	20	20	6.81	19.3°C			
CCV			11:00	11:05	03-MAR-10 14:52	pH 2	20	20	7.03	17.9°C	7	100.429	
CCV			11:00	11:05	03-MAR-10 14:52	pH 2	20	20	7.03	17.9°C	7	100.429	
248371009		Soil	11:00	11:05	03-MAR-10 14:54	pH 2	20	20	7.11	19.3°C			
248371009		Soil	11:00	11:05	03-MAR-10 14:54	pH 2	20	20	7.12	19.3°C			
248371010		Soil	11:00	11:05	03-MAR-10 14:57	pH 2	20	20	6.71	19.4°C			
248371010		Soil	11:00	11:05	03-MAR-10 14:57	pH 2	20	20	6.72	19.4°C			

GEL Laboratories LLC

Page# _____

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 960294
 Lab SOP: GL-GC-E-008 REV# 17
 Description: pH
 Method: SW/846 9045C/9045D

Type Sample Id Serial Number Description
 CCV 240 IMM091029-PH PH 7 BUFFER FOR PH
 LCS 1202059778 IMM100209-01 LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Recovery(%)	Nc(mg/L)	Rpd(%)
1202059777 DUP	248371010	Soil	11:00	11:05	03-MAR-10 14:58	pH	20	20	6.86	19.6°C			2.211
1202059777 DUP	248371010	Soil	11:00	11:05	03-MAR-10 14:58	pH 2	20	20	6.86	19.6°C			2.062
248371011		Soil	11:00	11:05	03-MAR-10 15:00	pH	20	20	6.57	19.7°C			
248371011		Soil	11:00	11:05	03-MAR-10 15:00	pH 2	20	20	6.58	19.7°C			
248371012		Soil	11:00	11:05	03-MAR-10 15:01	pH	20	20	6.33	19.5°C			
248371012		Soil	11:00	11:05	03-MAR-10 15:01	pH 2	20	20	6.34	19.5°C			
CCV			11:00	11:05	03-MAR-10 15:03	pH	20	20	7.01	17.9°C	100.143	7	
CCV			11:00	11:05	03-MAR-10 15:03	pH 2	20	20	7.01	17.9°C	100.143	7	
248371013		Soil	11:00	11:05	03-MAR-10 15:14	pH	20	20	7.1	18.9°C			
248371013		Soil	11:00	11:05	03-MAR-10 15:14	pH 2	20	20	7.11	18.9°C			
248371014		Soil	11:00	11:05	03-MAR-10 15:16	pH	20	20	6.78	18.9°C			
248371014		Soil	11:00	11:05	03-MAR-10 15:16	pH 2	20	20	6.78	18.9°C			
248371015		Soil	11:00	11:05	03-MAR-10 15:18	pH	20	20	6.48	18.7°C			
248371015		Soil	11:00	11:05	03-MAR-10 15:18	pH 2	20	20	6.49	18.8°C			
248371016		Soil	11:00	11:05	03-MAR-10 15:20	pH	20	20	6.47	18.6°C			
248371016		Soil	11:00	11:05	03-MAR-10 15:20	pH 2	20	20	6.48	18.7°C			
248371017		Soil	11:00	11:05	03-MAR-10 15:21	pH	20	20	6.24	18.7°C			
248371017		Soil	11:00	11:05	03-MAR-10 15:21	pH 2	20	20	6.24	18.7°C			
CCV			11:00	11:05	03-MAR-10 15:22	pH	20	20	7	17.5°C	100	7	
CCV			11:00	11:05	03-MAR-10 15:22	pH 2	20	20	7	17.5°C	100	7	
248371018		Soil	11:00	11:05	03-MAR-10 15:24	pH	20	20	6.49	18.7°C			
248371018		Soil	11:00	11:05	03-MAR-10 15:24	pH 2	20	20	6.5	18.7°C			
248371019		Soil	11:00	11:05	03-MAR-10 15:26	pH	20	20	6.92	18.7°C			
248371019		Soil	11:00	11:05	03-MAR-10 15:26	pH 2	20	20	6.92	18.7°C			
248371020		Soil	11:00	11:05	03-MAR-10 15:28	pH	20	20	6.72	18.7°C			
248371020		Soil	11:00	11:05	03-MAR-10 15:28	pH 2	20	20	6.72	18.7°C			
CCV			11:00	11:05	03-MAR-10 15:29	pH	20	20	6.99	17.5°C	99.857	7	
CCV			11:00	11:05	03-MAR-10 15:29	pH 2	20	20	6.99	17.5°C	99.857	7	

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Page#

pH / Corrosivity LogBook

Calibration Information:

Run Date: 03-MAR-10 12:16
Instrument: PHX370
Analyst: TXTI

Comments:

	Standard	Observed	Theoretical	C	%Recovery
12:16	IMM100303-PH1	4.02	4	19	100.5
12:16	IMM100303-PH2	7.02	7	19	100.29
12:16	UPH100303-PH3	10.01	10	19	100.1
12:16	UPH100303-PH4	2.08	2	19	104
12:16	UPH100303-PH5	11.99	12	19	99.917
12:16	IMM100303-PH6	7	7	19	100

Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr.
11-MAR-10

Division:
Industrial

Quality Criteria:
Specifications

Type:
Process

Instrument Type:
LACHAT Flow Injection Analyzer

Test / Method:
SW846 9012A

Matrix Type:
Solid

Client Code:
LANL

Batch ID:
960259

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 248371(10-2151),248408(10-2188-1),248418(10-2191)

Application Issues:
Failed RPD for DUP

**Specification and Requirements
Exception Description:**

DER Disposition:

1. Failed RPD for DUP:

QC 1202059678DUP

1. The Relative Percent Difference (RPD) between the sample and its duplicate falls outside of the normal acceptance limits for samples because of the heterogeneous matrix of the sample(soil sample).

Originator's Name:

Ashley Earl

11-MAR-10

Data Validator/Group Leader:

Elzbieta Szulc

22-MAR-10