



Monday, February 08, 2010

REQUEST NUMBER: 10-1665

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6010B		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
SW-846:6020		1	RE15-10-8234	W	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
SW-846:6850		1	RE15-10-8234	W	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
SW-846:8082		1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
SW-846:8321A_MOD		1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
SW-846:9012A		1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	

Monday, February 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1665

**LOS ALAMOS**

REQUEST NUMBER: 10-1665

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/10/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

## LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8175	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8175	1	POLY	H3	Ice	R
RE15-10-8175	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8174	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8174	1	POLY	H3	Ice	R
RE15-10-8174	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8176	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8176	1	POLY	H3	Ice	R
RE15-10-8176	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8178	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8178	1	POLY	H3	Ice	R
RE15-10-8178	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8177	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8177	1	POLY	H3	Ice	R
RE15-10-8177	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8225	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8225	1	POLY	H3	Ice	R
RE15-10-8225	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8234	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8234	1	POLY	SW-846:6850	Ice	W
RE15-10-8234	1	POLY	TCN	Sodium Hydroxide	W

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: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8174

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/04/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		13:45		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610816			FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	3.5 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	5.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	YES			BOREHOLE DECLINATION:	-90°		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice		
1		Metals+CIO4+CN	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Pinkish gray, moderately indurate, nonwelded, dehydrified, ash flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

7C-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  33 dpm  
Beta/Gamma  $\leq$  1740 dpm

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

HE Spot Test Negative

COLLECTED BY (PRINT)

J. MARIN

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/5/10 07:11 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature)	Date/Time 2/5/10 0711
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8175

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/04/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		14:28	SUB-MEDIA:	TUFF 1	OK
PRS ID:	15-007(c)	OK	SAMPLE TECH CODE:	HA	CBS
LOCATION ID:	15-610816		FIELD QC TYPE:	NA	OR
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	17.5 ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	0	20.0 ft	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	OK	EXCAVATED: YES	NO/NA	
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
BOREHOLE:	YES/NO/NA		BOREHOLE DECLINATION:	-20°	
			BOREHOLE DIRECTION:	NA	
			WATER FLOWING: YES/NO/NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice		
1		Metals+ClO4+CN	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light pinkish gray partially indurated and welded, devitrified, dy, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC:

7c-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  33 dpmBeta/Gamma  $\leq$  2120 dpmPID  $\frac{\text{Ambient Reading}}{0} = 0$  ppm

COLLECTED BY (PRINT)

J. MARIN

REVIEWED BY (PRINT)

TLMcFarlane

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>E. Lujan</i>	Date/Time 2/5/10 07:11AM	RECEIVED BY (Printed Name) <i>Sherrif Sherwood</i> (Signature) <i>Sherrif Sherwood</i>	Date/Time 2/5/10 0711
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8176

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/04/2010	MEDIA:	QBT3		OK	
TIME COLLECTED (HH:MM)		14:55	SUB-MEDIA:	TUFF.1		OK	
PRS ID:	15-007(c)	OK	SAMPLE TECH CODE:	HA		CBS	
LOCATION ID:	15-610816		FIELD QC TYPE:	NA		OK	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA			
TOP DEPTH:	0	34 ft	SAMPLE USAGE:	INV			
BOTTOM DEPTH:	0	35 ft	SCREEN/PORT DESC:	NA			
FIELD MATRIX:	R	OK	EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice		
1		Metals+ClO4+CN	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

## SAMPLE DESC:

Light brownish gray, moderately indurated, partially welded, devitrified, dry, ark flow tu ff

## SAMPLE COMMENTS:

## LOCATION DESC:

7c-1

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 dpm

Beta/Gamma ≤ 1935 dpm

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

## COLLECTED BY (PRINT)

J. MARIN

## REVIEWED BY (PRINT)

Nikolas Gallegos

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>E Lujan</i>	Date/Time 2/5/11 07:12 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>Sherri Sherwood</i>	Date/Time 2/5/11 0712
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8177

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/04/2010	MEDIA:	QBT3		OK	
TIME COLLECTED (HH:MM)		15:25	SUB-MEDIA:	TUFF 1		OK	
PRS ID:	15-007(c)	OK	SAMPLE TECH CODE:	HA		CBS	
LOCATION ID:	15-610816		FIELD QC TYPE:	NA		OK	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA			
TOP DEPTH:	0	49.0 ft	SAMPLE USAGE:	INV			
BOTTOM DEPTH:	0	50.0 ft	SCREEN/PORT DESC:	NA			
FIELD MATRIX:	R	OK	EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice		
1		Metals+CIO4+CN	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Brownish gray, moderately indurated, partially welded, devitrified dry, ash flow tuff

SAMPLE COMMENTS:

Local iron oxide stain from fracture in sample

LOCATION DESC:

7c-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 16 dpm

Beta/Gamma = 1783 dpm

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

COLLECTED BY (PRINT)

J. MARIN

REVIEWED BY (PRINT)

Riley Wood

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>[Signature]</i>	Date/Time 2/5/10 07:12 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>[Signature]</i>	Date/Time 2/5/10 07:12
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8178

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/04/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		15:50		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610816			FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	65 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	66 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90°		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light pinkish gray, non indurated, non welded, devitrified  
dry, ark & low tuff

SAMPLE COMMENTS:

LOCATION DESC:

7c-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 5 dpm  
Beta/Gamma = 1755 dpm

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

COLLECTED BY (PRINT)

JON MARIN

REVIEWED BY (PRINT)

Riley Wons

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) E. Lujan	Date/Time 2/5/10 07:13 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 2/5/10 0713
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8225

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/04/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		14:28	SUB-MEDIA:	TUFF 1	OK
PRS ID:	15-007(c)	OK	SAMPLE TECH CODE:	HA	CBS
LOCATION ID:	UNK	15-610816	FIELD QC TYPE:	ED	OK
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	0	17.5 ft	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	20.0 ft	SCREEN/PORT DESC:		N/A
FIELD MATRIX:	R	OK	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	N/A		COMPOSITE TIME INTERVAL:	N/A	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	-90°	
			BOREHOLE DIRECTION:	N/A	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice		
1		Metals+ClO4+CN	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC: QC Sample of RE15-10-B175

## SAMPLE COMMENTS:

Light pinkish gray partially indurated and welded, dehydrified  
LOCATION DESC: ash flow tuff  
7c-1

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq 33$  dpm  
Beta/Gamma  $\leq 2120$  dpm

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

COLLECTED BY (PRINT)

J. MARIN

REVIEWED BY (PRINT)

TLM cFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>E. Lujan</i>	Date/Time 2/5/10 07:13 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>Sherri Sherwood</i>	Date/Time 2/5/10 07:13
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8234

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/04/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		15:45		SUB-MEDIA:	OTHER		
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610816		FIELD QC TYPE:	FR		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			N/A
FIELD MATRIX:	W			EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION:	-90°	BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of

RE15-10-8177

SAMPLE COMMENTS:

LOCATION DESC:

7c-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =        dpmBeta/Gamma =        dpmgpm  
2/4/10PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ gpm  
2/4/10

COLLECTED BY (PRINT)

R. Evans

REVIEWED BY (PRINT)

D. Byers

RELINQUISHED BY (Printed Name) <u>Estevan Lujan</u> (Signature) <u>[Signature]</u>	Date/Time <u>2/5/10</u> <u>07:40 AM</u>	RECEIVED BY (Printed Name) <u>Sherri Sherwood</u> (Signature) <u>[Signature]</u>	Date/Time <u>2/5/10</u> <u>0740</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00049

Client Sample ID: RS15-10-8174

Sample Collection Date: 02/04/10 13:45

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00049-001

Date Received: 02/05/10 00:00

Report Date: 02/08/10 10:39

Analysis Description	Analysis Results	Analysis Error +/- 2 s	HOC	TPU	Quc	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	8.45	17.02	32.34	17.03		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	20.56	12.80	18.36	13.04		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	25.44	9.83	2.14	9.86		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	14.02	0.14	14.02		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
FR-134	0.19	0.20	0.10	0.20		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.04	0.11	0.09	0.11		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	14.88	0.16	14.88		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.78	0.61	0.14	0.61		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	1.21	0.78	0.37	0.78		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	1.31	1.28	0.22	1.28		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	4.48	3.56	1.47	3.71		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.19	0.21	0.07	0.21		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.63

*Matthew J. Edley*  
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: ARS2-10-00049

Request or PO Number:

Client Sample ID: RE15-10-8175

ARS Sample ID: ARS2-10-00049-002

Sample Collection Date: 02/04/10 14:28

Date Received: 02/05/10 00:00

Sample Matrix: SnI/Solid

Report Date: 02/08/10 10:39

Analysis Description	Analysis Result	Analysis Error +/- 2 s	NDC	TSU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	1.25	13.21	33.18	13.21		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	24.96	13.20	18.35	13.55		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.17	0.24	0.14	0.24		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	30.01	10.82	2.22	10.86		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CD-80	0.08	0.18	0.15	0.18		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.20	0.18	0.11	0.18		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	-0.01	19.00	0.09	19.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	15.10	0.17	15.10		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.86	0.69	0.22	0.69		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	3.19	1.17	0.30	1.17		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	3.03	1.30	0.43	1.30		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	3.21	4.88	2.09	4.93		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.24	0.44	0.21	0.44		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.13

  
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: ARS2-10-00049

Request or PO Number:

Client Sample ID: RE15-10-8176

ARS Sample ID: ARS2-10-00049-003

Sample Collection Date: 02/04/10 14:55

Date Received: 02/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/08/10 10:39

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	9.39	16.56	29.88	16.60		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	21.67	13.25	18.65	13.52		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	-0.17	-7.95	4.30	-7.95		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.19	0.27	0.16	0.27		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.01	0.00	0.10	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	0.00	0.18	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
Pb-212	1.55	0.61	0.17	0.62		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	1.34	1.09	0.41	1.09		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	0.44	0.75	0.39	0.75		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	-0.15	-2.69	1.37	-2.69		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	-0.01	32.33	0.07	32.33		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.77

*[Signature]*  
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: ARS2-10-00049  
 Client Sample ID: RE19-10-8177  
 Sample Collection Date: 02/04/10 15:25  
 Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00049-004

Date Received: 02/05/10 00:00

Report Date: 02/08/10 10:39

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	16.09	30.34	31.83	20.45		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	30.09	14.13	18.29	14.60		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.09	0.17	0.14	0.17		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	-2.19	-35.10	4.86	-35.10		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	14.59	0.15	14.59		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.16	0.16	0.11	0.16		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	0.10	0.16	0.09	0.16		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	19.34	0.17	19.18		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.60	0.63	0.21	0.63		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	1.47	0.90	0.39	0.90		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	3.40	1.63	0.43	1.64		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	3.86	4.05	1.85	4.13		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	-0.01	59.25	0.13	55.94		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.40

*[Signature]*  
 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: ARS2-10-00049

Request or PO Number:

Client Sample ID: RE15-10-8178

ARS Sample ID: ARS2-10-00049-005

Sample Collection Date: 02/04/10 15:50

Date Received: 02/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/08/10 10:39

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.44	19.67	32.50	19.74		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	22.54	13.04	19.18	13.33		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
RA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	0.00	11.29	5.76	11.29		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CR-60	0.00	15.33	0.16	15.33		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	-0.01	20.05	0.10	20.05		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.00	15.94	0.18	15.94		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.99	0.69	0.19	0.70		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	1.07	0.85	0.48	0.86		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	2.33	1.31	0.36	1.31		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	1.90	3.13	1.06	3.13		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.62	0.46	0.15	0.46		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTES: % Moisture: 0.30

*Mattie L. Edley*  
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: ARS2-10-00049

Request or PO Number:

Client Sample ID: RE15-10-0225

ARS Sample ID: ARS2-10-00049-006

Sample Collection Date: 02/04/10 14:28

Date Received: 02/05/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/08/10 10:39

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	YEU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	1.23	18.22	33.19	13.23		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
GROSS BETA	39.04	14.95	18.51	15.59		pCi/g	EPA 900.0M	2/5/2010	NP	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
K-40	1.46	3.20	1.94	3.20		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CO-60	0.00	13.72	0.13	13.72		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-134	0.16	0.20	0.10	0.20		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
CS-137	-0.01	16.64	0.08	16.64		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
EU-152	0.39	0.36	0.15	0.36		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
PB-212	1.47	0.63	0.23	0.63		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
RA-228	2.28	0.99	0.34	0.99		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-235	-0.08	113.42	0.25	113.42		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
U-238	3.23	3.97	1.47	3.49		pCi/g	EPA 901.1M	2/5/2010	NP	N/A
AM-241	0.85	0.41	0.10	0.41		pCi/g	EPA 901.1M	2/5/2010	NP	N/A

NOTE5: % Moisture: 0.15

*Matthew J. 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

## Rad Screening Data Release Form

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

REIS-10-8363

" "8174

" "8176

" "8175

" "8177

" "8178

" "8225

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

.....

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

REIS-10-8234

Reason: *Field Rinsate*

.....


Print Last Name Lujan

Signature



Date

2/5/10

DATA VALIDATION COVER SHEET	
5121-1	Records Use only
Data Validation Cover Sheet	
	

**Section I.**

REQUEST NUMBER: 10-1665 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

- The soil MS/MSD calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 µg/kg should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The %Rs were within the laboratory acceptance limits when calculated correctly. It should also be noted that the soil and aqueous MS/MSD analyses were performed on LANL samples from other RNs, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.


Reviewed by: Mary Donovan

Level: I


Date: 03/23/10

VALIDATOR'S SIGNATURE: 

DATE: 03/22/10


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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is ≤ 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 ≤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	
<b>5121-2</b> <b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b>	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. 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	
<b>5121-2</b> <b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b>	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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8175

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 99.15

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.504	2.02	0.838	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate Isotope Ratio			3.32			1	03-MAR-10 16:20	per0303015a
14797-73-0	Perchlorate-101	.504	2.02	0.797	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate-O(18)			5.09	ug/kg		1	03-MAR-10 16:20	per0303015a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8174

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554002

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 92.9

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	538	2.15	0.576	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate Isotope Ratio			3.37			1	03-MAR-10 16:28	per0303016a
14797-73-0	Perchlorate-101	538	2.15	0.541	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate-O(18)			5.54	ug/kg		1	03-MAR-10 16:28	per0303016a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

## Perchlorate Analysis Data Sheet

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

Client Sample No.

RE15-10-8176Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSDate Received: 09-FEB-10Method: SW846 6850 ModifiedGEL Job No (SDG): 10-1665Matrix: SOILGEL Sample ID: 246554003Extraction Batch ID: 252831Date Filtered: 25-FEB-10Extraction Type: Solid PrepInjection Volume (uL): 20Sample Volume/Weight: 2.00 g%Solids: 94Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	4.62	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate Isotope Ratio			3.08			1	03-MAR-10 16:36	per0303017a
14797-73-0	Perchlorate-101	.532	2.13	4.74	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate-O(18)			5.27	ug/kg		1	03-MAR-10 16:36	per0303017a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 <sup>1</sup> %Solids  
Aliquot

MLD  
03/22/10

# P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 252831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8178

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554004

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 97.5

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.513	2.05	0.587	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate Isotope Ratio			3.38			1	03-MAR-10 16:44	per0303018a
14797-73-0	Perchlorate-101	.513	2.05	0.549	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 16:44	per0303018a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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  $\frac{1}{\% \text{Solids}}$

MLD  
03/22/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8177

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554005

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 96.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	1.41	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate Isotope Ratio			3.07			1	03-MAR-10 16:52	per0303019a
14797-73-0	Perchlorate-101	.517	2.07	1.45	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate-O(18)			5.29	ug/kg		1	03-MAR-10 16:52	per0303019a

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

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 252831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8225

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554006

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 98.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	1.05	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate Isotope Ratio			3.27			1	03-MAR-10 17:00	per0303020a
14797-73-0	Perchlorate-101	.507	2.03	1.02	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate-O(18)			5.21	ug/kg		1	03-MAR-10 17:00	per0303020a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: WATER

Extraction Batch ID: 952834

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8234

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665-1

GEL Sample ID: 246555001

Date Filtered: 13-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate Isotope Ratio						1	14-FEB-10 09:15	per0213082a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate-O(18)			0.484	ug/L		1	14-FEB-10 09:15	per0213082a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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 <sup>1</sup>  
Aliquot %Solids

MLD  
03/22/10



## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1665 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## Section II. Completeness Check

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

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

1. The CCV %D was >20% with a positive bias for PETN. The associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate RT criteria could not be evaluated. No sample data were qualified as a result.
3. The 3,4-dinitrotoluene surrogate %R was > the laboratory UAL in the secondary analysis of the MB. Since the surrogate outlier occurred in a QC sample, no sample data were qualified as a result.
4. The MS %R was > the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified. The MS/MSD RPD was > the laboratory acceptance limit for TATB. The associated sample results were NDs and, thus, were qualified UJ,HE12g.

Reviewed by: Mary Donovan

Level: I

Date: 03/23/10

VALIDATOR'S SIGNATURE: *Monica Dymerski*

DATE: 03/22/10



**LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**


5122-2

**LC/MS/MS High Explosive 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 IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
<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, HE0b	R, HE0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method-specific windows.	R, HE1a	J, HE1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count for the quantitating IS is <70% but >25% of the average of that obtained from the calibration standards.	UJ, HE1b	J+, HE1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count for the quantitating IS is >130% of the average of that obtained from the calibration standards.	UJ, HE1c	J-, HE1c
<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, HE1d	R, HE1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.	UJ, HE3c	J, HE3c

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5122-2</b>  <b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b>	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"/>	11. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE3d	R, HE3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is $\leq 5$ times the concentration of the related analyte in the method blank.	U, HE4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5x$ .	N/A	J, HE4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. The sample result is $\leq 5$ times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, HE4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE4e	R, HE4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, HE7	J, HE7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less $< 0.99$ .	UJ, R, HE7a	J, HE7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The affected analytes were analyzed with a RRF of $< 0.05$ in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, HE7f	R, HE7f

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5122-2</b>  <b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b>	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"/>	23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE8a	R, HE8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE12c	R, HE12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. 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, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5122-2</b>  <b>LC/MS/MS High Explosive Analytical Data Validation Checklist</b>	Records Use only  

Yes   No   N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, HE19	J, R, HE19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216044a

Date Analyzed: 17-FEB-10 14:23

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160041.wiff

Date Analyzed: 16-FEB-10 22:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216047a

Date Analyzed: 17-FEB-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160044.wiff

Date Analyzed: 16-FEB-10 23:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216048a

Date Analyzed: 17-FEB-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160045.wiff

Date Analyzed: 16-FEB-10 23:45

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216049a

Date Analyzed: 17-FEB-10 16:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument X Concentrated Extract Volume X Dilution  
Value Sample Amount Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160046.wiff

Date Analyzed: 17-FEB-10 00:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216050a

Date Analyzed: 17-FEB-10 17:20

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160047.wiff

Date Analyzed: 17-FEB-10 00:16

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216051a

Date Analyzed: 17-FEB-10 17:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160048.wiff

Date Analyzed: 17-FEB-10 00:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1665 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski 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 checked="" type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY      | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS               |
| <input type="checkbox"/> OTHER (DESCRIBE): PCBs |  |   |  |

## Section II. Completeness Check

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

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

1. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data were not included in the data package. No sample data were qualified as a result.

Reviewed by: Mary Donovan Level: I Date: 03/23/10

VALIDATOR'S SIGNATURE: Monica Dymerski

DATE: 03/22/10

# **ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

## **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) 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, P9	J-, P9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
<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, P7	J, P7
<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, P7a	J, P7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
<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, P7d	J, P7d
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

# **ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

## **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) 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"/>	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, P4	N/A
<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 greater than $5X$ .	N/A	J, P4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The surrogate is $<10\%R$ . Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

# **ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

## **Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) 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"/>	21. The surrogate is < the Lower Acceptance Level (LAL) but $\geq 10\%R$ . Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
<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, P12	J-, P12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
<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+, P12b
<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.	R, P12c	R, P12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

**ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB)  
ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

**Organochlorine Pesticide (PEST) and Polychlorinated  
Biphenyl (PCB) 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"/>	32. The affected analytes have elevated detection limits and may not meet project DQOs 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, P15	R, P15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. 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"/>	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

SDG Number:	10-1665	Date Collected:	02/04/2010 12:00	Matrix:	R
Lab Sample ID:	246554002	Date Received:	02/09/2010 10:00	% Moisture:	7.1
Client ID:	RE15-10-8174	Client:	LANL010	Project:	LANL01004
Batch ID:	953412	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/17/2010 14:50	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/16/2010 10:40	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	042f4201.d	Allquot:	30 g	Final Volume:	1 mL
	042b4201.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.20	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.20	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.20	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.20	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.20	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.20	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.20	3.59	1



## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1665  
Lab Sample ID: 246554001Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: .9  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.36	ug/kg	1.12	3.36	1
11104-28-2	Aroclor-1221	U	3.36	ug/kg	1.12	3.36	1
11141-16-5	Aroclor-1232	U	3.36	ug/kg	1.12	3.36	1
53469-21-9	Aroclor-1242	U	3.36	ug/kg	1.12	3.36	1
12672-29-6	Aroclor-1248	U	3.36	ug/kg	1.12	3.36	1
11097-69-1	Aroclor-1254	U	3.36	ug/kg	1.12	3.36	1
11096-82-5	Aroclor-1260	U	3.36	ug/kg	1.12	3.36	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1665  
Lab Sample ID: 246554003Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 6  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

SDG Number: 10-1665	Date Collected: 02/04/2010 12:00	Matrix: R
Lab Sample ID: 246554005	Date Received: 02/09/2010 10:00	%Moisture: 3.3
Client ID: RE15-10-8177	Client: LANL010	Project: LANL01004
Batch ID: 953412	Method: SW846 8082	SOP Ref: GL-OA-E-040
Run Date: 02/17/2010 15:28	Inst: ECD1A.I	Dilution: 1
Prep Date: 02/16/2010 10:40	Analyst: YS1	Inj. Vol: 1 uL
Data File: 045f4501.d	Aliquot: 30.01 g	Final Volume: 1 mL
045b4501.d	Column: 1 CLP1	Level: LOW
	2 CLP2	

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.45	ug/kg	1.15	3.45	1
11104-28-2	Aroclor-1221	U	3.45	ug/kg	1.15	3.45	1
11141-16-5	Aroclor-1232	U	3.45	ug/kg	1.15	3.45	1
53469-21-9	Aroclor-1242	U	3.45	ug/kg	1.15	3.45	1
12672-29-6	Aroclor-1248	U	3.45	ug/kg	1.15	3.45	1
11097-69-1	Aroclor-1254	U	3.45	ug/kg	1.15	3.45	1
11096-82-5	Aroclor-1260	U	3.45	ug/kg	1.15	3.45	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample Summary

SDG Number:	10-1665	Date Collected:	02/04/2010 12:00	Matrix:	R
Lab Sample ID:	246554004	Date Received:	02/09/2010 10:00	%Moisture:	2.5
Client ID:	RE15-10-8178	Client:	LANL010	Project:	LANL01004
Batch ID:	953412	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/17/2010 15:16	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/16/2010 10:40	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	044f4401.d	Aliquot:	30 g	Final Volume:	1 mL
	044b4401.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.42	ug/kg	1.14	3.42	1
11104-28-2	Aroclor-1221	U	3.42	ug/kg	1.14	3.42	1
11141-16-5	Aroclor-1232	U	3.42	ug/kg	1.14	3.42	1
53469-21-9	Aroclor-1242	U	3.42	ug/kg	1.14	3.42	1
12672-29-6	Aroclor-1248	U	3.42	ug/kg	1.14	3.42	1
11097-69-1	Aroclor-1254	U	3.42	ug/kg	1.14	3.42	1
11096-82-5	Aroclor-1260	U	3.42	ug/kg	1.14	3.42	1

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1665  
Lab Sample ID: 246554006

Client ID: RE15-10-8225  
Batch ID: 953412  
Run Date: 02/17/2010 15:41  
Prep Date: 02/16/2010 10:40  
Data File: 046f4601.d  
046b4601.d

Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 1.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.13	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.13	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.13	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.13	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.13	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.13	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.13	3.38	1

**DATA VALIDATION COVER SHEET****5118-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1665 VALIDATION DATE: 03/22/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

**Section II. Completeness Check**

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

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

- Target analyte Sb was detected in the soil ICB/CCBs. All associated sample results were NDs and, thus, were not qualified. Target analytes Mg and K were detected in the aqueous ICB/CCBs. The associated K sample result was a detect  $\leq 5X$  the greatest ICB/CCB concentration and, thus, was qualified U,I4b. The associated Mg sample result was an ND and, thus, was not qualified.
- Target analytes Ca, Na, and Tl were detected in FR blank sample RE15-10-8234, which was associated with all soil samples in the RN. The Tl result for sample -8174 was a detect  $\leq 5X$  the FR blank concentration and, thus, was qualified U,I4d. The remaining associated sample results were either NDs or were detects  $> 5X$  the FR blank concentrations and, thus, were not qualified.
- The %D was  $> 10\%$  for Mg in a CCV bracketing the aqueous sample. The associated sample result was an ND and, thus, was qualified UJ,I7c.
- The soil LCS %R was  $<$  the laboratory LAL but  $\geq 10\%$  for Sb. The associated sample results were NDs and, thus, were qualified, UJ,I12a.
- The soil MS %Rs were  $>$  the laboratory UAL for Al, Ba, K, Na, and Mg. The associated Al, Ba, K, and Na sample results were detects and, thus, were qualified J+,I6b. The Mg parent sample concentration was  $> 4X$  the spike concentration; thus, the Mg sample results were not qualified, based on professional judgment.
- The soil sample duplicate RPD was  $> 35\%$ , and the sample and duplicate concentrations were  $\geq 5X$  the PQL for Ba and Cr. The associated Ba and Cr sample results were detects and, thus, were qualified J,I10a.
- It should be noted that the matrix QC analyses were performed on a LANL sample from another RN for aqueous ICP-MS and CVAA, and aqueous ICP-MS parent sample raw data were not included in the data package. No sample data were qualified as a result.

## DATA VALIDATION COVER SHEET

**5118-1**

## Data Validation Cover Sheet

Records Use only



Reviewed by: Mary Donovan

Level: I

Date: 03/23/10

**VALIDATOR'S SIGNATURE:**


James D. Smith

DATE: 03/22/10

Form 5118-1, Revision 0.0


LOS ALAMOS

## Environmental Restoration Project


METALS ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5118-2</b>  <b>Metals Analytical Data Validation Checklist</b>	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 checked="" type="checkbox"/>	<input 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	
<b>5118-2</b>  <b>Metals Analytical Data Validation Checklist</b>	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$ .	N/A	J, I4a
<input 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 $<$ 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 $>$ the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

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

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

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

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

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554001

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8175

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 99.15

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	652000	ug/kg	*N	6750	19900	19900	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-36-0	Antimony UJ,112a	993	ug/kg	U	328	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-38-2	Arsenic	302	ug/kg	J	195	977	977	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-39-3	Barium J+,16b	17200	ug/kg	*EN	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-41-7	Beryllium	213	ug/kg		19.5	97.7	97.7	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-43-9	Cadmium	266	ug/kg	J	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-70-2	Calcium	318000	ug/kg	*	7940	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-47-3	Chromium J,110a	5020	ug/kg	*	149	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-48-4	Cobalt	481	ug/kg	J	149	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-50-8	Copper	1950	ug/kg		298	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-89-6	Iron	8310000	ug/kg	*	7940	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-92-1	Lead	2430	ug/kg		248	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-95-4	Magnesium	180000	ug/kg	*	8440	29800	29800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-96-5	Manganese	256000	ug/kg	*	199	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-97-6	Mercury	11.1	ug/kg	U	3.77	11.1	11.1	1	AV	JXL1	02/22/10 10:51	022210S1-4	951617
7440-02-0	Nickel	1120	ug/kg		97.7	391	391	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-09-7	Potassium J+,16b	274000	ug/kg	*N	6350	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7782-49-2	Selenium	977	ug/kg	U	489	977	977	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-22-4	Silver	211	ug/kg	J	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-23-5	Sodium J+,16b	229000	ug/kg	*N	6950	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-28-0	Thallium	195	ug/kg	U	58.6	195	195	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-62-2	Vanadium	2960	ug/kg	*	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-66-6	Zinc	49800	ug/kg	*	328	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.508	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.516	g	50	mL	02/21/10	BCD1

MLD  
03/22/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554002

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8174

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 92.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	6720000	ug/kg	*N	7170	21100	21100	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-36-0	Antimony UJ,I12a	1050	ug/kg	U	348	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-38-2	Arsenic	1850	ug/kg		207	1030	1030	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-39-3	Barium J+,I6b	1730000	ug/kg	*EN	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-41-7	Beryllium	776	ug/kg		20.7	103	103	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-43-9	Cadmium	367	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-70-2	Calcium	2930000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-47-3	Chromium J,I10a	7140	ug/kg	*	158	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-48-4	Cobalt	4720	ug/kg		158	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-50-8	Copper	5260	ug/kg		316	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-89-6	Iron	11500000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-92-1	Lead	11600	ug/kg		263	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-95-4	Magnesium	1480000	ug/kg	*	8960	31600	31600	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-96-5	Manganese	614000	ug/kg	*	211	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-97-6	Mercury	10.9	ug/kg	J	4.35	12.8	12.8	1	AV	JXL1	02/22/10 11:05	022210S1-4	951617
7440-02-0	Nickel	5920	ug/kg		103	413	413	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-09-7	Potassium J+,I6b	1050000	ug/kg	*N	6740	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7782-49-2	Selenium	1030	ug/kg	U	517	1030	1030	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-22-4	Silver	308	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-23-5	Sodium J+,I6b	273000	ug/kg	*N	7380	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-28-0	Thallium U,I4d	132	ug/kg	J	62	207	207	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-62-2	Vanadium	12200	ug/kg	*	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-66-6	Zinc	43000	ug/kg	*	348	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.505	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.511	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.521	g	50	mL	02/21/10	BCD1

MLD  
03/22/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554003

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8176

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	5060000	ug/kg	*N	7170	21100	21100	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-36-0	Antimony UJ,112a	1050	ug/kg	U	348	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-38-2	Arsenic	1140	ug/kg		210	1050	1050	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-39-3	Barium J+,16b	35300	ug/kg	*EN	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-41-7	Beryllium	1370	ug/kg		21	105	105	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-43-9	Cadmium	305	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-70-2	Calcium	1120000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-47-3	Chromium J,110a	6110	ug/kg	*	158	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-48-4	Cobalt	924	ug/kg		158	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-50-8	Copper	3520	ug/kg		316	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-89-6	Iron	8750000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-92-1	Lead	4120	ug/kg		263	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-95-4	Magnesium	695000	ug/kg	*	8960	31600	31600	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-96-5	Manganese	236000	ug/kg	*	211	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-97-6	Mercury	5.07	ug/kg	J	4.04	11.9	11.9	1	AV	JXL1	02/22/10 11:07	022210S1-4	951617
7440-02-0	Nickel	4490	ug/kg		105	420	420	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-09-7	Potassium J+,16b	525000	ug/kg	*N	6740	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7782-49-2	Selenium	1050	ug/kg	U	525	1050	1050	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-22-4	Silver	192	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-23-5	Sodium J+,16b	124000	ug/kg	*N	7380	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-28-0	Thallium	210	ug/kg	U	63	210	210	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-62-2	Vanadium	6670	ug/kg	*	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-66-6	Zinc	42100	ug/kg	*	348	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.538	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.505	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.507	g	50	mL	02/21/10	BCD1

MLD  
03/22/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554004

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8178

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 97.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	835000	ug/kg	*N	6630	19500	19500	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-36-0	Antimony UJ,I12a	4870	ug/kg	U	1610	4870	4870	5	P	HSC	03/05/10 14:22	030510B-2	951752
7440-38-2	Arsenic	249	ug/kg	J	195	975	975	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-39-3	Barium J+,I6b	15900	ug/kg	*EN	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-41-7	Beryllium	457	ug/kg		19.5	97.5	97.5	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-43-9	Cadmium	229	ug/kg	J	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-70-2	Calcium	523000	ug/kg	*	7800	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-47-3	Chromium J,I10a	1560	ug/kg	*	146	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-48-4	Cobalt	486	ug/kg	J	146	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-50-8	Copper	1860	ug/kg		292	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-89-6	Iron	6690000	ug/kg	*	7800	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-92-1	Lead	4420	ug/kg		244	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-95-4	Magnesium	287000	ug/kg	*	8280	29200	29200	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-96-5	Manganese	207000	ug/kg	*	195	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-97-6	Mercury	10.7	ug/kg	U	3.64	10.7	10.7	1	AV	JXL	02/22/10 11:09	022210S1-4	951617
7440-02-0	Nickel	668	ug/kg		97.5	390	390	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-09-7	Potassium J+,I6b	247000	ug/kg	*N	6240	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7782-49-2	Selenium	975	ug/kg	U	487	975	975	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-22-4	Silver	487	ug/kg	U	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-23-5	Sodium J+,I6b	99500	ug/kg	*N	6820	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-28-0	Thallium	195	ug/kg	U	58.5	195	195	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-62-2	Vanadium	2710	ug/kg	*	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-66-6	Zinc	40800	ug/kg	*	322	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.575	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.526	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.526	g	50	mL	02/21/10	BCD1

MLD  
03/22/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554005

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8177

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	3060000	ug/kg	*N	6800	20000	20000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-36-0	Antimony UJ,112a	5000	ug/kg	U	1650	5000	5000	5	P	HSC	03/05/10 14:25	030510B-2	951752
7440-38-2	Arsenic	1090	ug/kg		187	933	933	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-39-3	Barium J+,16b	18900	ug/kg	*EN	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-41-7	Beryllium	1360	ug/kg		18.7	93.3	93.3	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-43-9	Cadmium	250	ug/kg	J	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-70-2	Calcium	779000	ug/kg	*	8000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-47-3	Chromium J,110a	2290	ug/kg	*	150	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-48-4	Cobalt	709	ug/kg		150	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-50-8	Copper	3070	ug/kg		300	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-89-6	Iron	8400000	ug/kg	*	8000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-92-1	Lead	2960	ug/kg		250	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-95-4	Magnesium	529000	ug/kg	*	8500	30000	30000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-96-5	Manganese	223000	ug/kg	*	200	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-97-6	Mercury	11.4	ug/kg	U	3.86	11.4	11.4	1	AV	JXL1	02/22/10 11:11	022210S1-4	951617
7440-02-0	Nickel	1740	ug/kg		93.3	373	373	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-09-7	Potassium J+,16b	377000	ug/kg	*N	6400	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7782-49-2	Selenium	933	ug/kg	U	467	933	933	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-22-4	Silver	192	ug/kg	J	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-23-5	Sodium J+,16b	68800	ug/kg	*N	7000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-28-0	Thallium	187	ug/kg	U	56	187	187	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-62-2	Vanadium	5110	ug/kg	*	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-66-6	Zinc	42600	ug/kg	*	330	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.517	g	50	mL	02/18/10	LYHI
952553	952552	SW846 3050B	0.554	g	50	mL	02/21/10	BCD1

MLD  
03/22/10



**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554006

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8225

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	510000	ug/kg	*N	6840	20100	20100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-36-0	Antimony UJ,I12a	5030	ug/kg	U	1660	5030	5030	5	P	HSC	03/05/10 14:29	030510B-2	951752
7440-38-2	Arsenic	331	ug/kg	J	190	951	951	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-39-3	Barium J+,I6b	10500	ug/kg	*EN	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-41-7	Beryllium	206	ug/kg		19	95.1	95.1	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-43-9	Cadmium	185	ug/kg	J	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-70-2	Calcium	275000	ug/kg	*	8040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-47-3	Chromium J,I10a	7390	ug/kg	*	151	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-48-4	Cobalt	434	ug/kg	J	151	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-50-8	Copper	1570	ug/kg		302	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-89-6	Iron	6890000	ug/kg	*	8040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-92-1	Lead	2060	ug/kg		251	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-95-4	Magnesium	136000	ug/kg	*	8550	30200	30200	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-96-5	Manganese	220000	ug/kg	*	201	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-97-6	Mercury	10.8	ug/kg	U	3.67	10.8	10.8	1	AV	JXL1	02/22/10 11:13	022210S1-4	951617
7440-02-0	Nickel	1060	ug/kg		95.1	380	380	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-09-7	Potassium J+,I6b	208000	ug/kg	*N	6440	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7782-49-2	Selenium	951	ug/kg	U	475	951	951	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-22-4	Silver	183	ug/kg	J	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-23-5	Sodium J+,I6b	166000	ug/kg	*N	7040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-28-0	Thallium	190	ug/kg	U	57.1	190	190	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-62-2	Vanadium	2680	ug/kg	*	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-66-6	Zinc	40300	ug/kg	*	332	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.563	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.504	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.533	g	50	mL	02/21/10	BCD1

MLD  
03/22/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246555001

BASIS: As Received

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8234

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/07/10 15:09	100307-11	952556
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-70-2	Calcium	68.9	ug/L	J	50	200	200	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7439-95-4	Magnesium UJ,17c	300	ug/L	U	85	300	300	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/07/10 15:09	100307-11	952556
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLI	02/17/10 11:20	021710W2-12	951627
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-09-7	Potassium U,14b	207	ug/L		50	150	150	1	P	HSC	02/26/10 02:06	022510-1	951818
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 16:23	022610-2	951818
7440-23-5	Sodium	102	ug/L	J	100	300	300	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-28-0	Thallium	0.354	ug/L	J	0.3	1	1	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/26/10 02:06	022510-1	951818

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951627	951624	SW846 7470A Prep	20	mL	20	mL	02/16/10	TXB3
951818	951817	SW846 3005A	50	mL	50	mL	02/21/10	BCD1
952556	952554	SW846 3005A	50	mL	50	mL	02/17/10	FGA

MLD  
03/22/10

## DATA VALIDATION COVER SHEET

5120-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1665 VALIDATION DATE: 03/22/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Monica Dymerski ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## Section II. Completeness Check

- | YES                                 | NO                       | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 6. RAWBSS 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):

- It should be noted that the matrix QC analyses were performed on LANL samples from other RNs for the aqueous sample, and the batch associated with all soil samples except RE15-10-8177 and -8225. No sample data were qualified as a result.

Reviewed by: Mary DonovanLevel: IDate: 03/23/10VALIDATOR'S SIGNATURE: *Monica Dymerski*DATE: 03/22/10

## GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST


5120-2

## General Chemistry Analytical Data Validation Checklist


Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input 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	
<b>5120-2</b>  <b>General Chemistry Analytical Data Validation Checklist</b>	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

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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: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8175  
Sample ID: 246554001  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: .851%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	60.2	221	ug/kg	1	AXC2	02/18/10	1022	951942	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8174  
Sample ID: 246554002  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 7.15%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.6	245	ug/kg	1	AXC2	02/18/10	1023	951942	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	



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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8176  
Sample ID: 246554003  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 6.04%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.0	246	ug/kg	1	AXC2	02/18/10	1024	951942	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8178  
Sample ID: 246554004  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 2.48%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2	02/18/10	1025	951942	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8177  
Sample ID: 246554005  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 3.3%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	62.8	231	ug/kg	1	AXC2	02/16/10	1232	951948	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1543	951943

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8225  
Sample ID: 246554006  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 1.34%

Project: LANL01004  
Client ID: LANL010

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

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2	02/16/10	1236	951948	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1543	951943

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 20, 2010

Client SDG: 10-1665-1

Client Sample ID: RE15-10-8234  
Sample ID: 246555001  
Matrix: W  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010


Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/17/10	1140	951961	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/16/10	1527	951960

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

DATA VALIDATION COVER SHEET	
<b>5119-1</b>  <p style="text-align: center;"><b>Data Validation Cover Sheet</b></p>	Records Use only  

**Section I.**

REQUEST NUMBER: 10-1665      VALIDATION DATE: 03/22/10      LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Monica Dymerski      ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☐ OTHER (DESCRIBE): Tritium

**Section II.      Completeness Check**

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

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

1. An MS was not performed for the batch associated with samples RE15-10-8174, -8176, -8178, and -8177. An LCS analysis was performed and met laboratory acceptance criteria. No sample data were qualified as a result.
2. It should be noted that the sample duplicate analysis was performed on a LANL sample from another RN for the batch associated with samples -8174, -8176, -8178, and -8177. No sample data were qualified as a result.


Reviewed by: Mary Donovan

Level: I


Date: 03/23/10

VALIDATOR'S SIGNATURE: 

DATE: 03/22/10


RAD ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5119-2</b>  <b>Rad Analytical Data Validation Checklist</b>	<b>Records Use only</b>  

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, R9	J-, R9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	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, R4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	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, R4e	R, R4e
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2	Records Use only _____
Rad Analytical Data Validation Checklist	
	

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The tracer is < the Lower Acceptance Level (LAL) but $\geq 10\%R$ . Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. 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.	R, R6	R, R6



RAD ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5119-2</b>  <b>Rad Analytical Data Validation Checklist</b>	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"/>	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. 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. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. 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, R19	J, R, R19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. Quantification 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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8175  
Sample ID: 246554001  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: .851%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
LSC, Tritium Dist, Solid "As Received"												
Tritium	U	2.23	4.38	+/-1.35	6.00	pCi/g		KXK2	03/04/10	1401	958199	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	EPA 906.0 Modified

### Notes:

TPU is calculated at the 67% confidence level (1-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.

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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 5, 2010

Client Sample ID: RE15-10-8174  
Sample ID: 246554002  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 7.15%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
H3 "As Received"												
Tritium		18600	155	+/-1330	250	pCi/L		KXK2	02/27/10	1217	953105	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

TPU is calculated at the 67% confidence level (1-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

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8176  
Sample ID: 246554003  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 6.04%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
H3 "As Received"												
Tritium		5.89E+05	529	+/-41400	250	pCi/L		KXK2	02/27/10	1255	953105	2

### The following Analytical Methods were performed

Method	Description
--------	-------------

1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

#### Notes:

TPU is calculated at the 67% confidence level (1-sigma).

The Qualifiers in this report are defined as follows :

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  - < 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

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8178  
Sample ID: 246554004  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 2.48%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>H3 "As Received"</i>												
Tritium		2.10E+06	1260	+/-1.48E+05	250	pCi/L		KXK2	02/27/10	1300	953105	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

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  - 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

## GEL LABORATORIES LLC

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

### Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8177  
Sample ID: 246554005  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 3.3%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
H3 "As Received"												
Tritium		3.89E+06	1980	+/-2.73E+05	250	pCi/L		KXK2	02/27/10	1303	953105	2

#### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

#### Notes:

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  - 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

# GEL LABORATORIES LLC

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8225  
Sample ID: 246554006  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 1.34%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
LSC, Tritium Dist, Solid "As Received"												
Tritium	U	1.07	4.69	+/-1.38	6.00	pCi/g		KXK2	03/04/10	1448	958199	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	EPA 906.0 Modified

### Notes:

TPU is calculated at the 67% confidence level (1-sigma).

The Qualifiers in this report are defined as follows :

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- 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

Monday, February 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1665

LOS ALAMOS

REQUEST NUMBER: 10-1665

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/10/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

246554, 246555 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8175	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8175	1	POLY	H3	Ice	R
RE15-10-8175	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8174	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8174	1	POLY	H3	Ice	R
RE15-10-8174	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8176	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8176	1	POLY	H3	Ice	R
RE15-10-8176	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8178	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8178	1	POLY	H3	Ice	R
RE15-10-8178	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8177	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8177	1	POLY	H3	Ice	R
RE15-10-8177	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8225	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8225	1	POLY	H3	Ice	R
RE15-10-8225	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8234	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8234	1	POLY	SW-846:6850	Ice	W
RE15-10-8234	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature



Monday, February 08, 2010  
**LOS ALAMOS**  
 NATIONAL LABORATORY

Page 1 of 2  
 REQUEST NUMBER: 10-1665

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

These Samples are on:  
 LANL Request Number: 10-1665  
 Per Agreement Number: 126310011  
 Project Cost Code: MR3A05529E00

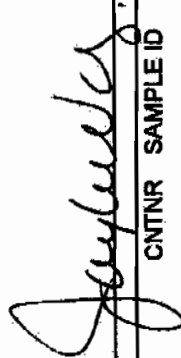
Please analyse the enclosed samples  
 according to the schedule indicated:

SHIP DATE: 2/8/2010  
 TURNAROUND/REPORT DUE: 3/10/2010  
 TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required  
 LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-908.0	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
	SW-846:6010B					

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
	SW-846:6020	1	RE15-10-8234	W	2/4/2010	
	SW-846:6850	1	RE15-10-8234	W	2/4/2010	
	SW-846:8082	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
	SW-846:8321A_MOD	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
	SW-846:8012A	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	

Final Page of REQUEST NUMBER 10-1665



February 15, 2010

www.gel.com

Ms. Joylene Valdez  
Los Alamos National Laboratory  
PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm 111  
Los Alamos, New Mexico 87545

Re: LANL ER Project  
Work Orders: 246554 246555  
SDG: 10-1665

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 09, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. 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: 10-1665  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 246554 and 246555**  
**SDG: 10-1665**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 246554 and 246555  
SDG #: 10-1665**

**February 15, 2010**

**Laboratory Identification:**

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

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 09, 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. Please see attached e-mail for discrepancies. 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>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
246555001	RE15-10-8234

**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: Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

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 15 February 2010**

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

# **Chain of Custody and Supporting Documentation**

Monday, February 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1665

LOS ALAMOS

REQUEST NUMBER: 10-1665

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/10/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

246554, 246555 %

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8175	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8175	1	POLY	H3	Ice	R
RE15-10-8175	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8174	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8174	1	POLY	H3	Ice	R
RE15-10-8174	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8176	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8176	1	POLY	H3	Ice	R
RE15-10-8176	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8178	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8178	1	POLY	H3	Ice	R
RE15-10-8178	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8177	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8177	1	POLY	H3	Ice	R
RE15-10-8177	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8225	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8225	1	POLY	H3	Ice	R
RE15-10-8225	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8234	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8234	1	POLY	SW-846.6850	Ice	W
RE15-10-8234	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, February 08, 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: 10-1665

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/8/2010**

**TURNAROUND/REPORT DUE: 3/10/2010**

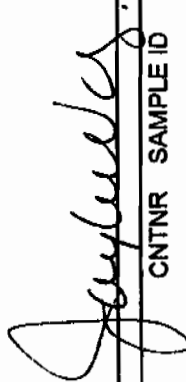
**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Not Required**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-906.0	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
	SW-846:6010B					

Monday, February 08, 2010 Page 2 of 2  
 REQUEST NUMBER: 10-1665

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	
	SW-846:6020	1	RE15-10-8234	W	2/4/2010	
	SW-846:6850	1	RE15-10-8234	W	2/4/2010	
	SW-846:8062	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
	SW-846:8321A_MOD	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
	SW-846:9012A	1	RE15-10-8174	R	2/4/2010	
		1	RE15-10-8175	R	2/4/2010	
		1	RE15-10-8176	R	2/4/2010	
		1	RE15-10-8177	R	2/4/2010	
		1	RE15-10-8178	R	2/4/2010	
		1	RE15-10-8225	R	2/4/2010	
		1	RE15-10-8234	W	2/4/2010	

Final Page of REQUEST NUMBER 10-1665

**SAMPLE RECEIPT & REVIEW FORM**

Client: LANL			SDG/ARCOC/Work Order: 10-1665		
Received By: Patricia Dover-Dent			Date Received: February 9, 2009		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 40 CPM		
Classified Radioactive II by RSO?		X			
COC/Samples marked containing PCBs?		X			
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:		
Samples identified as Foreign Soil?		X			

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 0-6 10,12C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?			X	Sample ID's affected: RE15-10-8234 for SW-846:6850 chain indicates (1-250ml Poly, not received in lab.
12 COC form is properly signed in relinquished/received sections?	X			

**Comments: FEDEX#S**

7209 7849 9466 0C      7209 7849 9514 4C  
 7209 7849 9444 0C      7209 7849 9503 3C  
 7209 7849 9488 1C      7209 7849 9455 6C  
 7209 7849 9477 1C      7209 7849 9385 10C  
 7209 7849 9396 1C      7209 7849 9363 12C  
 7209 7849 9525 2C      7209 7849 9374 12C  
 7209 7849 9547 2C  
 7209 7849 9499 2C

PM (or PMA) review: Initials

*[Signature]*

Date 2-10-10

**Subject:** Re: Sample Receipt for 2/9/10

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

**Date:** Wed, 10 Feb 2010 13:19:58 -0500

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

The missing coolers were rec'd 2/10/10. The lab rec'd missing containers listed below.

Thanks,  
Dionne

Dionne Francis wrote:

Keith,

The lab did not receive (2) coolers, both were in transit (Memphis TN). The following sample containers were not received:

RN 10-1699: Metals for sample RE16-10-3722

RN 10-1701: 8260B for samples RE16-10-1156 and 1157

RN 10-1668: 8260B for sample WST16-10-12212

RN 10-1666: 8260B and Metals for sample RE15-10-8363

RN 10-1665: Perchlorate for sample RE15-10-8234

RN10-1688: 8260B for sample RE16-10-3163 and 8270C for sample RE16-10-3162

RN 10-1702: 8260B for samples RE16-10-1246, 1268, 1274 and TCN, NO3NO2, ClO4+Anions

RN 10-1696: Metals, NH3+NO3NO2+PO4 for sample CASA-10-9490 and Gross A/B, CN for sample CASA-10-489

RN 10-1687: AM241+ISOPU+ISOU for sample RE16-10-3866

RN 10-1685: 8260B for sample RE16-10-3872, 3868, 3866, 3869

RN 10-1686: ClO4+Anions for sample RE16-10-3873, 3872, 3868, 3866, Metals for 3869 and NO3NO2 for 3873

RN 10-1672: did not receive any 8260B containers

RN 10-1675: 8260B for samples WST15-10-1626, 11625, and 8081A+8151A,

8260B+THP-GRO, 8270C+8082+TPH-DRO, NMED Exp, Perchlorate+CN+NO3+pH, TCLP Met/ TAL Met for samples WST15-10-11621, 11620

RN10-1694: TKN+TOC for sample CASA-10-9489 and 8260B for CASA-10-9491

RN10-1685: the lab rec'd (1) 40ml vial 8260B container for sample GW52-10-11183 instead of (2) as indicated on the COC.

RN10-1687: the lab rec'd a AM241+ISOPU+ISOU container for sample RE16-10-3864 not listed on the COC. Would you like us to add the analysis?

RN10-1678: the lab rec'd (2) 1L amber glass HEXP containers for sample CASA-10-9452 instead of (3) as indicated on the COC.

RN10-1702: the lab rec'd a 1L poly Metals container for sample RE16-10-1271 not listed on the COC. Would you like us to add the analysis?

RN10-1694: the lab rec'd (1) 1L amber PEST container instead of (3), (1) 40ml vial 8260B instead of (2), (2) 1L amber HEXP instead of (3) for sample CASA-10-9489.

RN10-1670: the Gross A/B container was preserved prior to analysis.

Thanks,  
Dionne

--  
Dionne Francis  
Project Manager Assistant  
GEL Laboratories, LLC

2040 Savage Road  
Charleston, SC (USA) 29407  
Direct: 843.769.7376 Ext. 4432  
Main: 843.556.8171  
Fax: 843.766.1178  
E-mail: [daf@gel.com](mailto:daf@gel.com)  
Web: [www.gel.com](http://www.gel.com)

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



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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 09FEB10  
ACTMGT: 51.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

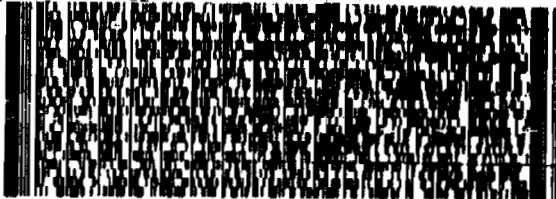
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

156148-434 NRIT V3 03-09



FedEx  
Express



1 of 2  
TRKH 7209 7849 9466  
0201  
NN MASTER NN

TUE - 09FEB A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 09FEB10  
ACTMGT: 54.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

156148-434 NRIT V3 03-09



FedEx  
Express



TRKH 7209 7849 9488  
0201

TUE - 09FEB A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



156148-434 NRIT V3 03-09

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

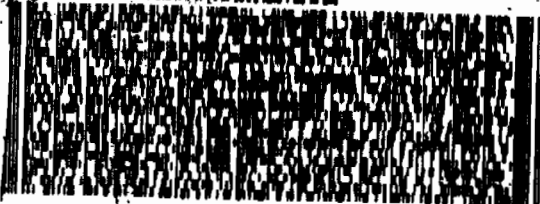
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

156148-434 NRIT V3 03-09



FedEx  
Express



1 of 2  
TRKH 7209 7849 9444  
0201  
NN MASTER NN

TUE - 09FEB A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

XX CHSA



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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 09FEB10  
ACTMGT: 54.0 LB MAN  
CAD: 0014176/CAFE2449

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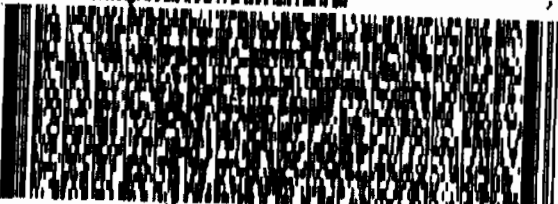
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

156148-434 NRIT V3 03-09



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0201

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PRIORITY OVERNIGHT

MatrN 7209 7849 9466 0201

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ORIGIN ID: SAFA (586) 666-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 08FEB10  
ACTWGT: 51.0 LB MAN  
CAD: 0014176/CAPE2449

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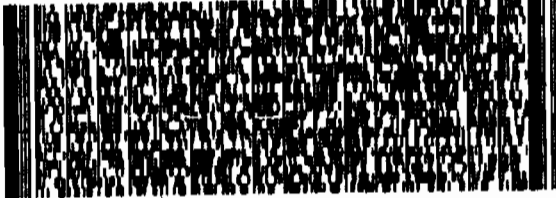
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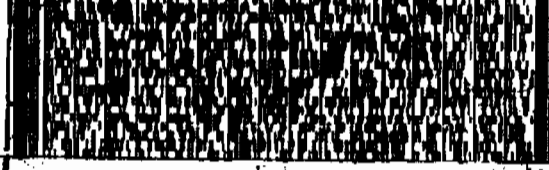
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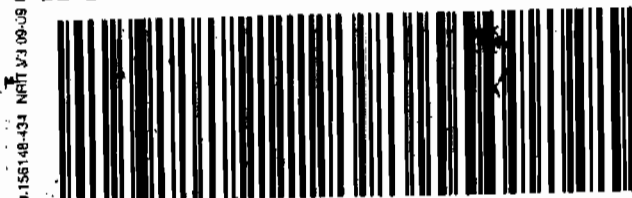
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Part # 156148-434 NRTT 23 09-09

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LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES-US

SHIP DATE: 08FEB10  
ACTWGT: 51.0 LB MAN  
CAD: 0014176/CAPE2449

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GENERAL ENGINEERING LAB  
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ORIGIN ID: SAFA (586) 666-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 08FEB10  
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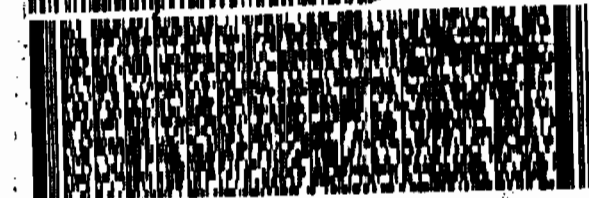
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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87548  
UNITED STATES US

ACTWGT: 87.0 LB MAN  
CAD: 0014176/CAFE2449

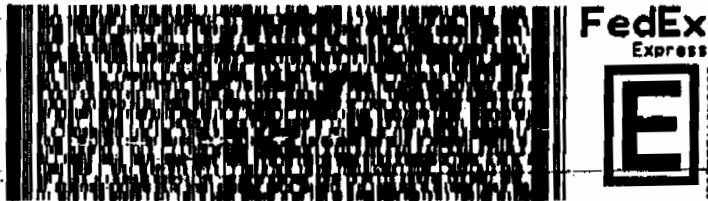
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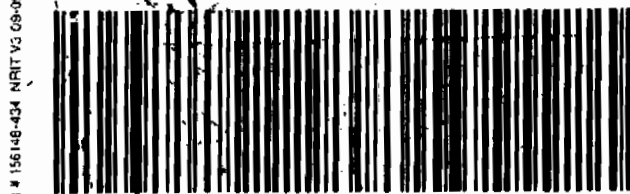


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29407  
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ORIGIN ID: (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87548  
UNITED STATES US

SHIP DATE: 09FEB10  
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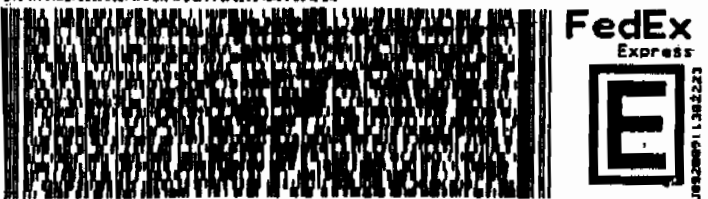
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87548  
UNITED STATES US

SHIP DATE: 09FEB10  
ACTWGT: 88.0 LB MAN  
CAD: 0014176/CAFE2449

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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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

LOS ALAMOS, NM 87548  
UNITED STATES US

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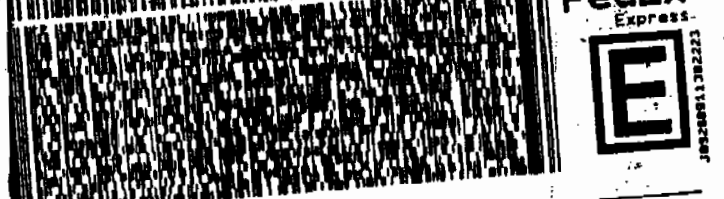
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PRIORITY OVERNIGHT

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

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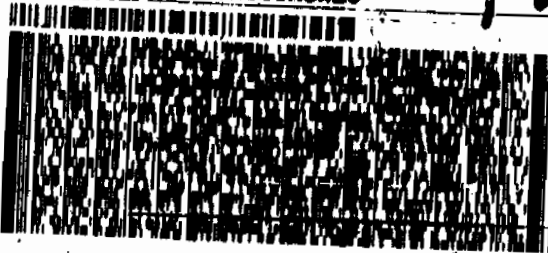
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ORIGIN ID: SFA0 (505) 565-9968  
JOYLENE VALDEZ  
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TA00 BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 08FEB10  
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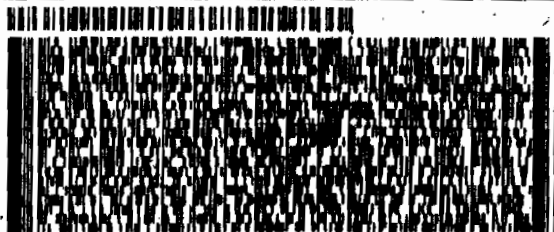
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# **Data Review Qualifier Flag Definition Sheet**

## 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 10-1665**

**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: 952832

Prep Batch Number: 952831

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202042250	Interference Check Sample (ICS)
1202042246	Method Blank (MB)
1202042247	Laboratory Control Sample (LCS)
1202042248	246566002(RE46-10-11495) Matrix Spike (MS)
1202042249	246566002(RE46-10-11495) Matrix Spike Duplicate (MSD)

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

10-1665-PERLCMS

Page 1 of 4



### **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**

Client sample 246566002 (RE46-10-11495) from SDG 10-1673 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

#### **Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

#### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries were within the established acceptance limits.

#### **MS/MSD Relative Percent Difference (RPD) Statement**

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

#### **Retention Time Standard Area Acceptance**

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

10-1665-PERLCMS

Page 2 of 4

### **Retention Time**

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

### **Technical Information**

#### **Holding Time Specifications**

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

#### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

#### **Sample Re-extraction/Re-analysis**

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

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

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

#### **Manual Integrations**

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

#### **Method Comments**

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

#### **Additional Comments**

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

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

### **Perchlorate Isotope Ratio**

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

### **System Configuration**

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

### **Chromatographic Columns**

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

Dionex: IonPac AG-16 2 x 50 mm.

### **Certification Statement**

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

### **Review Validation:**

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

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

Reviewer: Rebecca Mauer Date: 03/07/10

10-1665-PERLCMS

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# SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8175

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 99.15

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.504	2.02	0.838	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate Isotope Ratio			3.32			1	03-MAR-10 16:20	per0303015a
14797-73-0	Perchlorate-101	.504	2.02	0.797	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate-O(18)			5.09	ug/kg		1	03-MAR-10 16:20	per0303015a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8174

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554002

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 92.9

CAS No.	Analyte <sup>A</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.576	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate Isotope Ratio			3.37			1	03-MAR-10 16:28	per0303016a
14797-73-0	Perchlorate-101	.538	2.15	0.541	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate-O(18)			5.54	ug/kg		1	03-MAR-10 16:28	per0303016a

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

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8176

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554003

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 94

CAS No.	Analyte <sup>a</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	4.62	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate Isotope Ratio			3.08			1	03-MAR-10 16:36	per0303017a
14797-73-0	Perchlorate-101	.532	2.13	4.74	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate-O(18)			5.27	ug/kg		1	03-MAR-10 16:36	per0303017a

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

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Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8178

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554004

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 97.5

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.513	2.05	0.587	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate Isotope Ratio			3.38			1	03-MAR-10 16:44	per0303018a
14797-73-0	Perchlorate-101	.513	2.05	0.549	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 16:44	per0303018a

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

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 252831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8177

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554005

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 96.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	1.41	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate Isotope Ratio			3.07			1	03-MAR-10 16:52	per0303019a
14797-73-0	Perchlorate-101	.517	2.07	1.45	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate-O(18)			5.29	ug/kg		1	03-MAR-10 16:52	per0303019a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8225

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554006

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 98.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	1.05	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate Isotope Ratio			3.27			1	03-MAR-10 17:00	per0303020a
14797-73-0	Perchlorate-101	.507	2.03	1.02	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate-O(18)			5.21	ug/kg		1	03-MAR-10 17:00	per0303020a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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): 10-1665

Extract Batch Code: 952831 Date Filtered: 25-FEB-10

Matrix: SOIL Sample ID: 1202042247

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.32	ug/kg	116		70 - 130
Perchlorate Isotope Ratio		3.15				-
Perchlorate-101	2.00	2.33	ug/kg	117		70 - 130
Perchlorate-O(18)		5.04	ug/kg			-

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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): 10-1665

Extract Batch Code: 952831

Date Filtered: 25-FEB-10

Matrix: SOIL

Sample ID: 1202042250

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.2	ug/kg	110		70 - 130
Perchlorate Isotope Ratio		3.05				
Perchlorate-101	2.00	2.28	ug/kg	114		70 - 130
Perchlorate-O(18)		4.99	ug/kg			

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

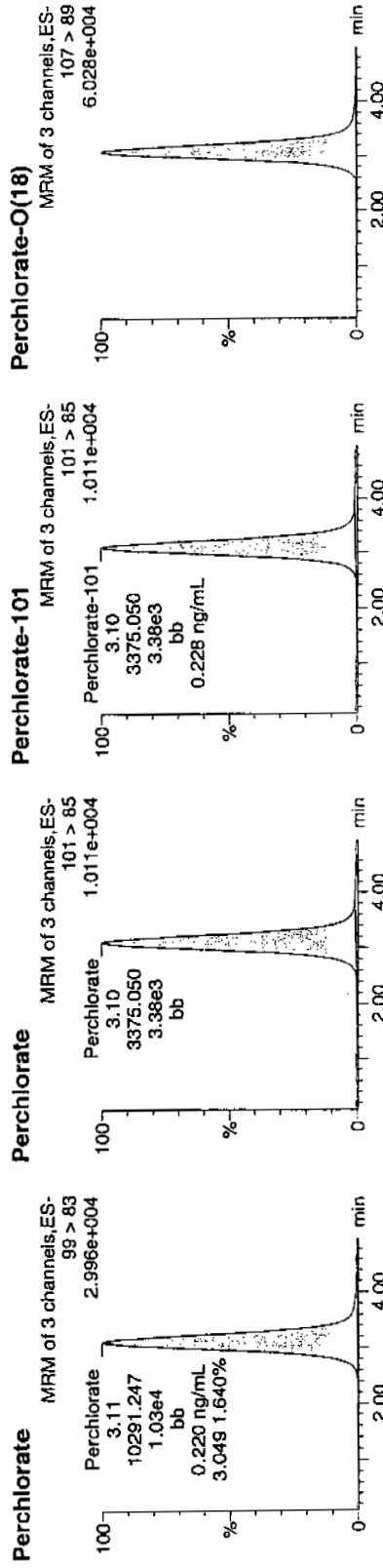
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303014a  
Date: 03-Mar-2010  
Time: 16:12:09  
ID: 1202042250  
Vial: 1:3,C

1202042250 | 952832 | 5020 | 105 | 11

0304-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042250	Perchlorate	99 > 83	3.11	10291.247	10291.247	bb			0.2198	109.92	9.92	535.589	3.05
1202042250	Perchlorate-101	101 > 85	3.10	3375.050	3375.050	bb			0.2278	113.91	13.91	654.455	
1202042250	Perchlorate-O(18)	107 > 89	3.09	20254.064	20254.064	bb			0.4991	99.83	-0.17	964.231	

10/11  
3/4/10

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 952831

GEL Job No (SDG): 10-1665

Date Extracted: 25-FEB-10

GEL MS/PS ID: 1202042248

Client ID: RE46-10-11495

GEL MSD/PSD ID: 1202042249

QC Type: MS

Compound <sup>^</sup>	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.10	0.127	ug/kg	2.36	106	2.32	104	1.69		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.11		3.16		0			-
Perchlorate-101	2.10	0.125	ug/kg	2.40	108	2.31	104	3.58		30	75 - 125
Perchlorate-O(18)	0	5.13	ug/kg	5.16		5.04		2.39			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1665

Lab Name: General Engineering Laboratories

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	03-MAR-10	per0303001a	IPB001
Perchlorate-101	0.00	0	NA	03-MAR-10	per0303001a	IPB001
Perchlorate	0.00	0	NA	03-MAR-10	per0303002a	IPB001
Perchlorate-101	0.00	0	NA	03-MAR-10	per0303002a	IPB001



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

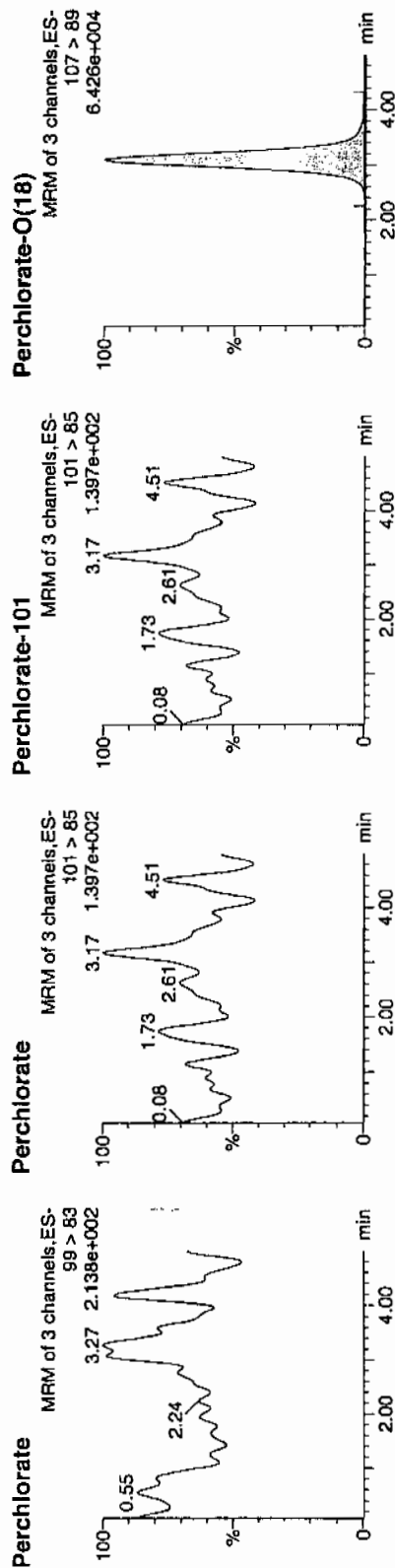
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
 Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030310a.mdb 04 Mar 2010 07:52:42  
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030310a.cdb 04 Mar 2010 07:53:00

Name: per0303001a  
 Date: 03-Mar-2010  
 Time: 14:27:09  
 ID: IPB001  
 Vial: 1:1,A

07-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85	3.09	22060.434	22060.434	bb			0.5437	108.73	8.73	4121.5...	
IPB001	Perchlorate-O(18)	107 > 89											

with  
3/4/10

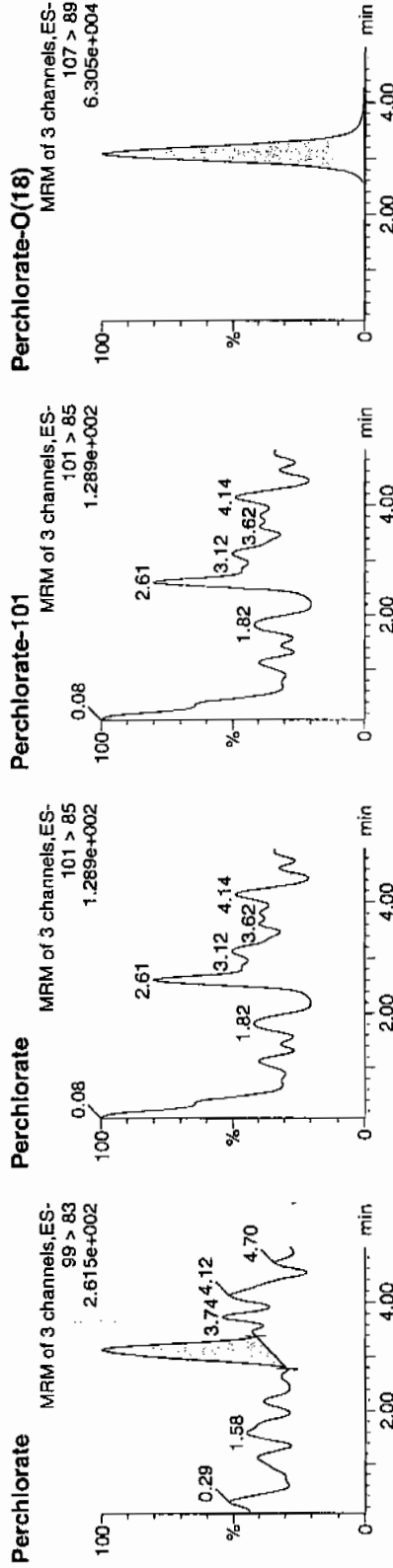
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303002a  
Date: 03-Mar-2010  
Time: 14:35:29  
ID: IPB001  
Vial: 1:1,A

07-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	3.15	51.984	51.984	bb			0.0011			6.075	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.09	21720.617	21720.617	bb			0.5353	107.06	7.06	9006.0...	

1077  
3/4/10

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1665

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	03-MAR-10	per0303008a	IPB002
Perchlorate-101	0.00	0	NA	03-MAR-10	per0303008a	IPB002
Perchlorate	0.00	0	NA	03-MAR-10	per0303010a	IPB003
Perchlorate-101	0.00	0	NA	03-MAR-10	per0303010a	IPB003
Perchlorate	0.00	0	NA	03-MAR-10	per0303023a	IPB004
Perchlorate-101	0.00	0	NA	03-MAR-10	per0303023a	IPB004

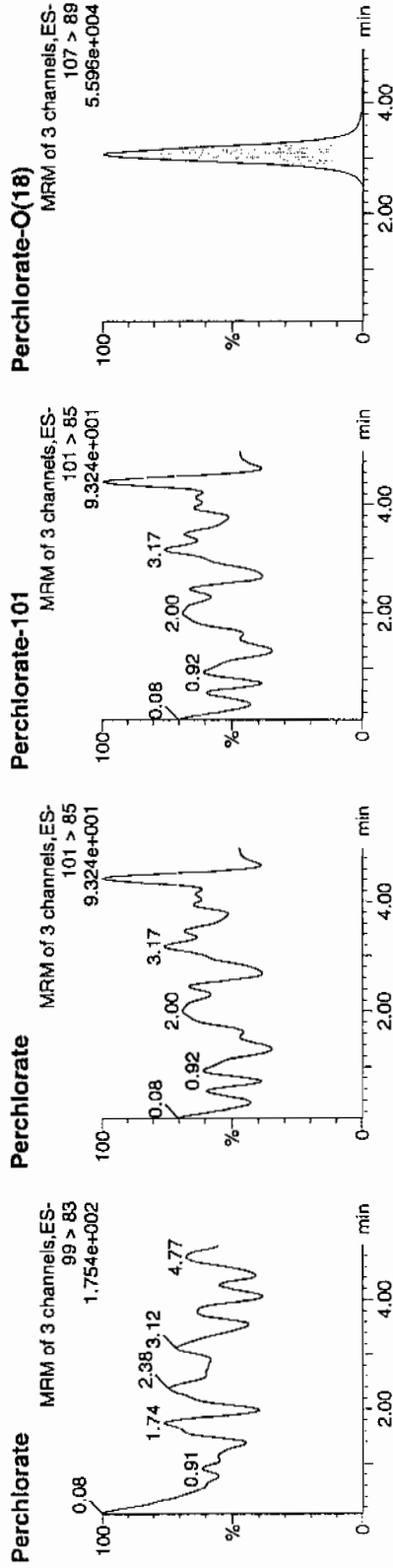
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

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Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303008a  
Date: 03-Mar-2010  
Time: 15:23:53  
ID: IPB002  
Vial: 1:1,A

03-04-10



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	3.07	19629.613	19629.613	bb			0.4837	96.75	-3.25	3318.1...	
IPB002	Perchlorate-O(18)	107 > 89											

107 > 89  
3410

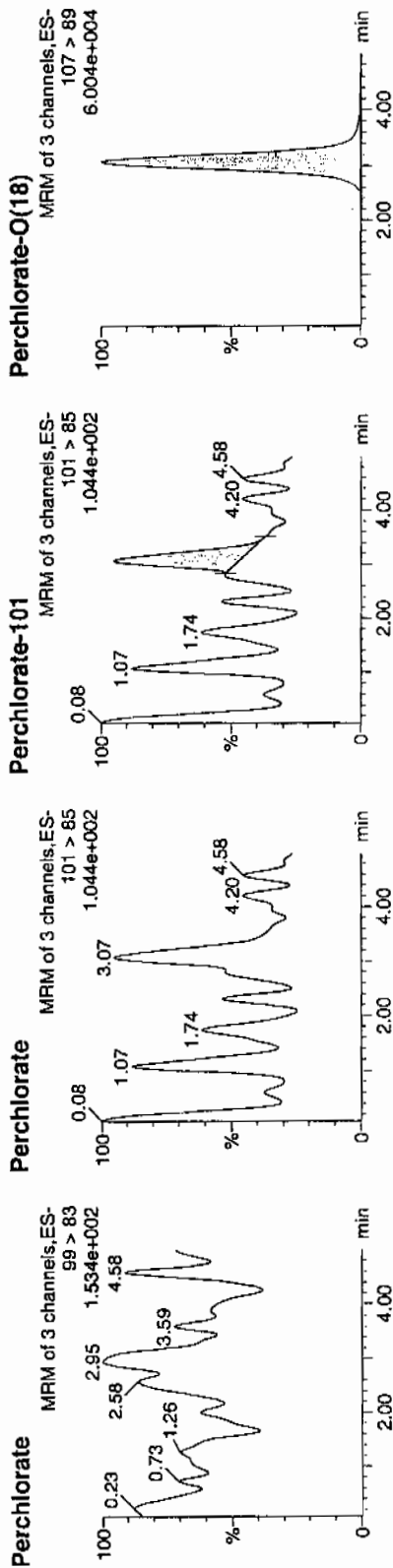
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

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Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

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Date: 03-Mar-2010  
Time: 15:39:57  
ID: IPB003  
Vial: 1:1,A

03-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											
IPB003	Perchlorate-101	101 > 85	3.07	14.466	14.466	bb			0.0010	100.93	0.93	5.030	
IPB003	Perchlorate-O(18)	107 > 89	3.07	20478.729	20478.729	bb			0.5047	100.93	0.93	3765.8...	

107  
3/4/10

**Quantify Sample Report MassLynx 4.0 SP4**

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

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Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303023a

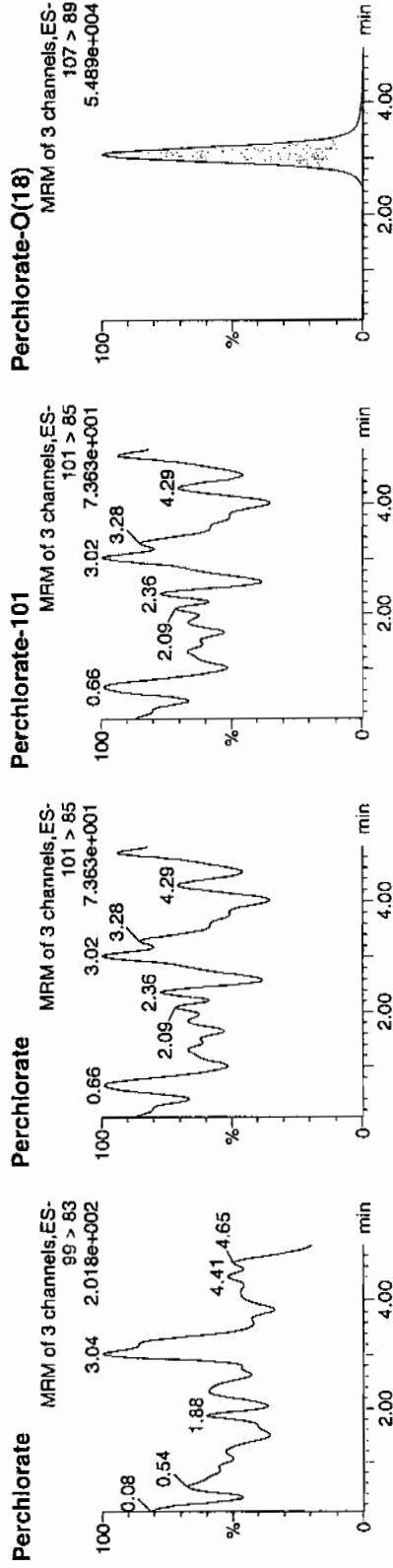
Date: 03-Mar-2010

Time: 17:24:30

ID: IPB004

Vial: 1:1,A

03-out-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	3.06	19073.689	19073.689	bb			0.4700	94.01	-5.99	2220.5...	

4.41  
5/4/10

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
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; 3770.3457	100
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QUANTO ULTIMA: nairb 01-08-08.cal

Calibration Report - MS1 Static

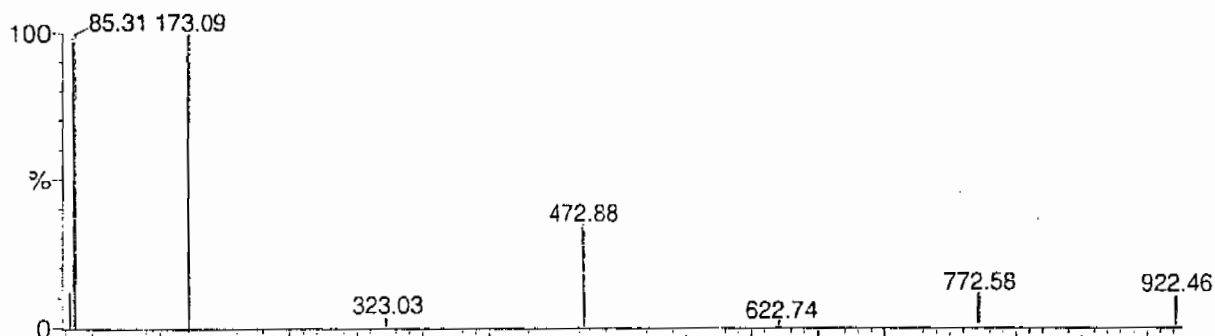
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

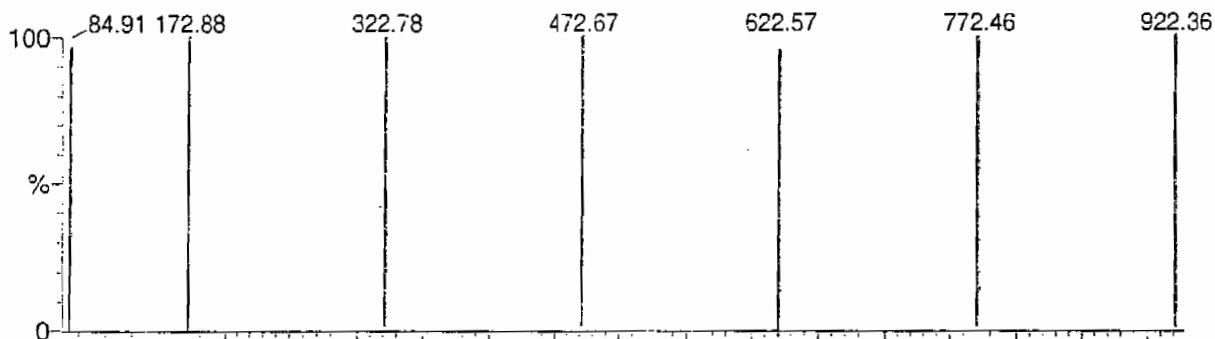
POINTS HIGHLIGHTED BY CURVED 01-07-08

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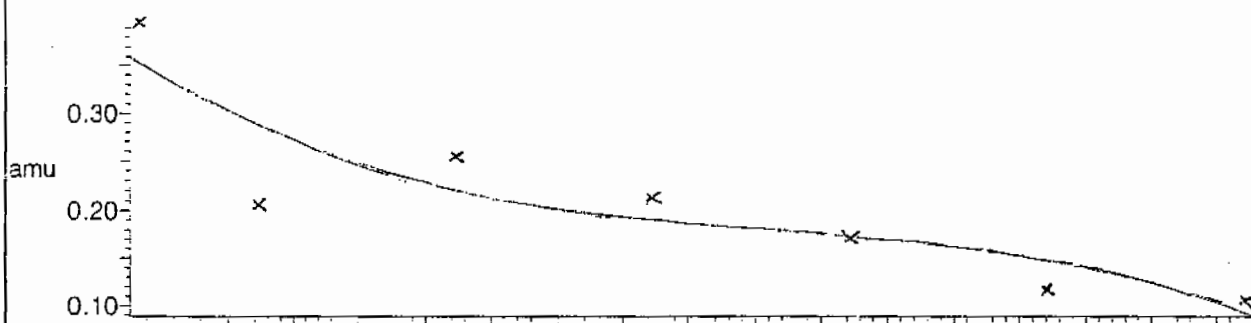
7 matches of 7 tested references



Reference file: Nairb

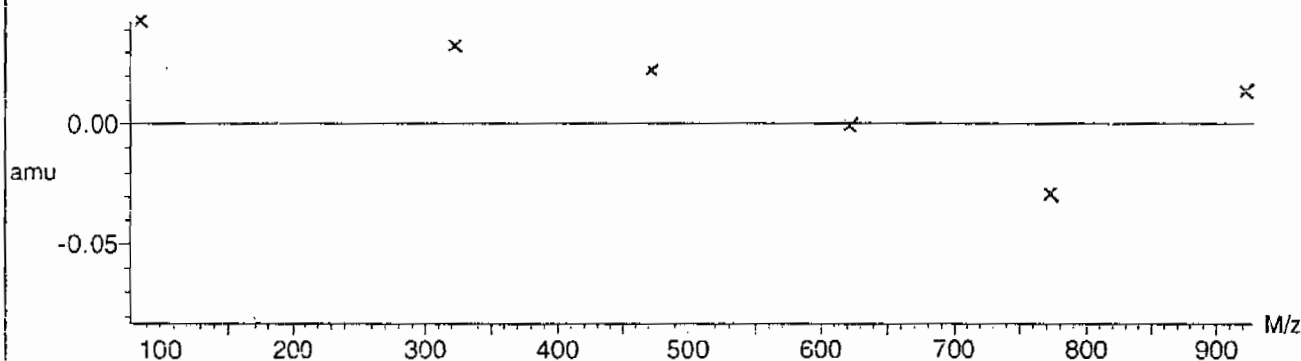


Mass difference (Raw - Ref mass)



Residuals

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

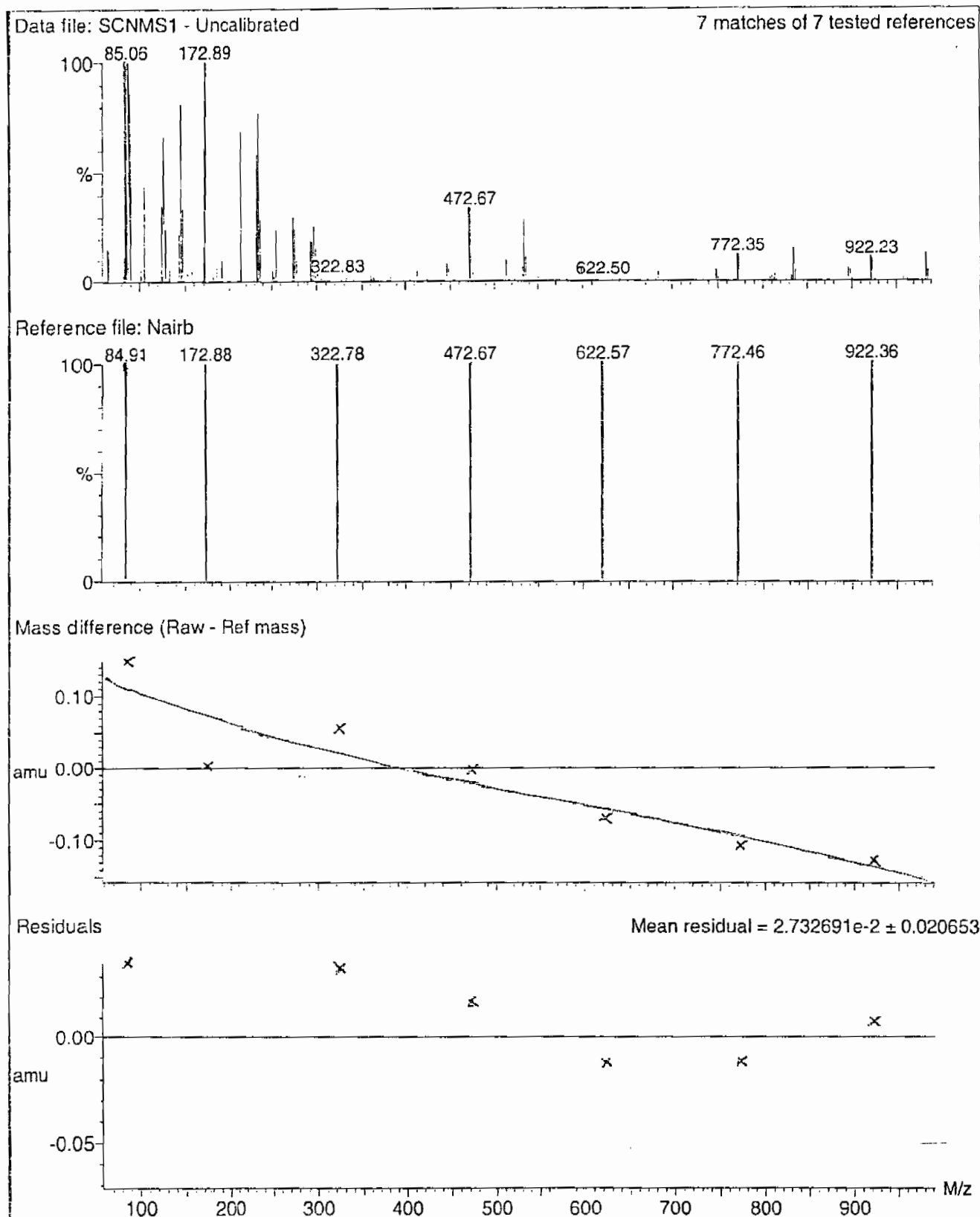




Calibration Report - MS1 Scanning

Page 1 of 1

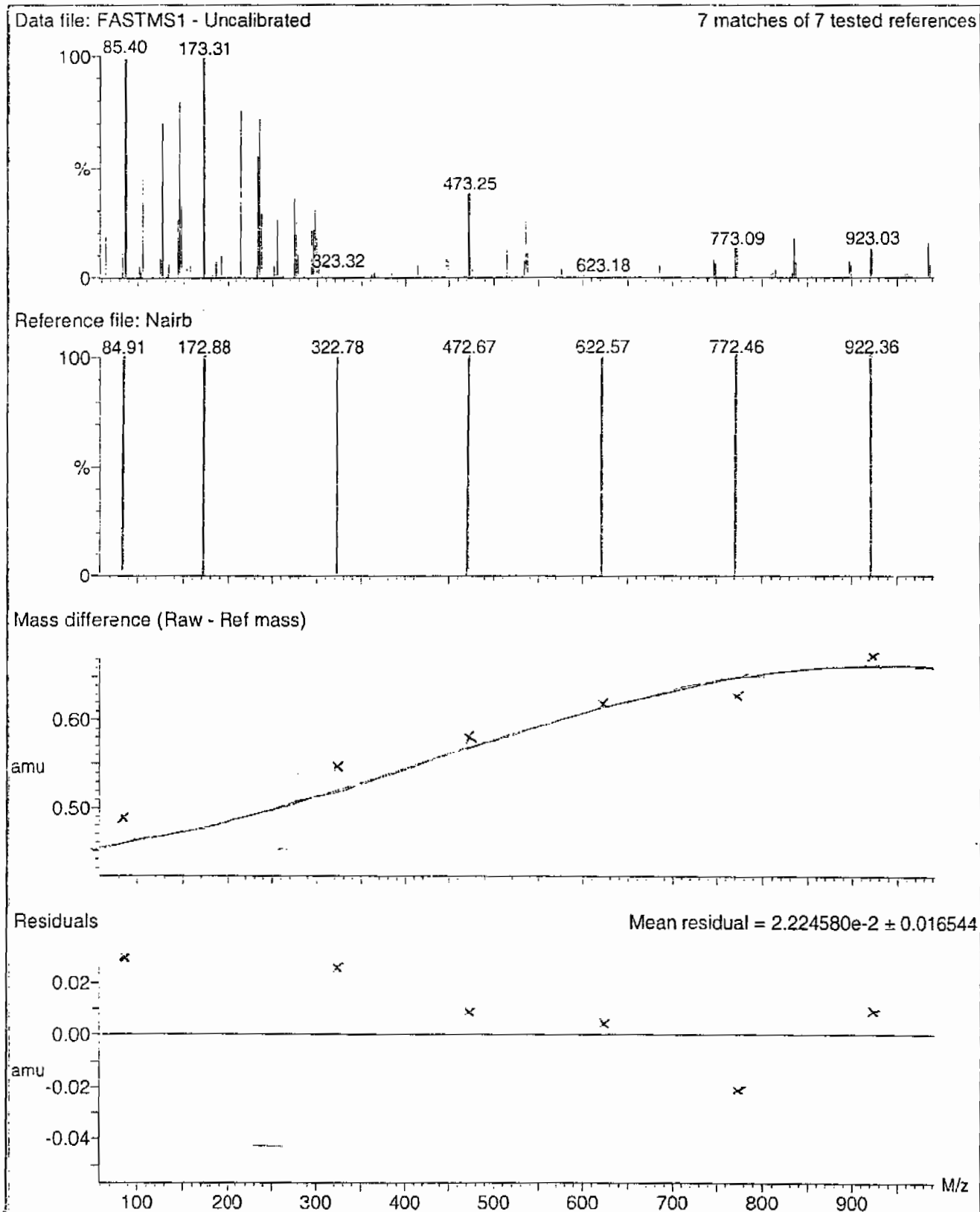
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

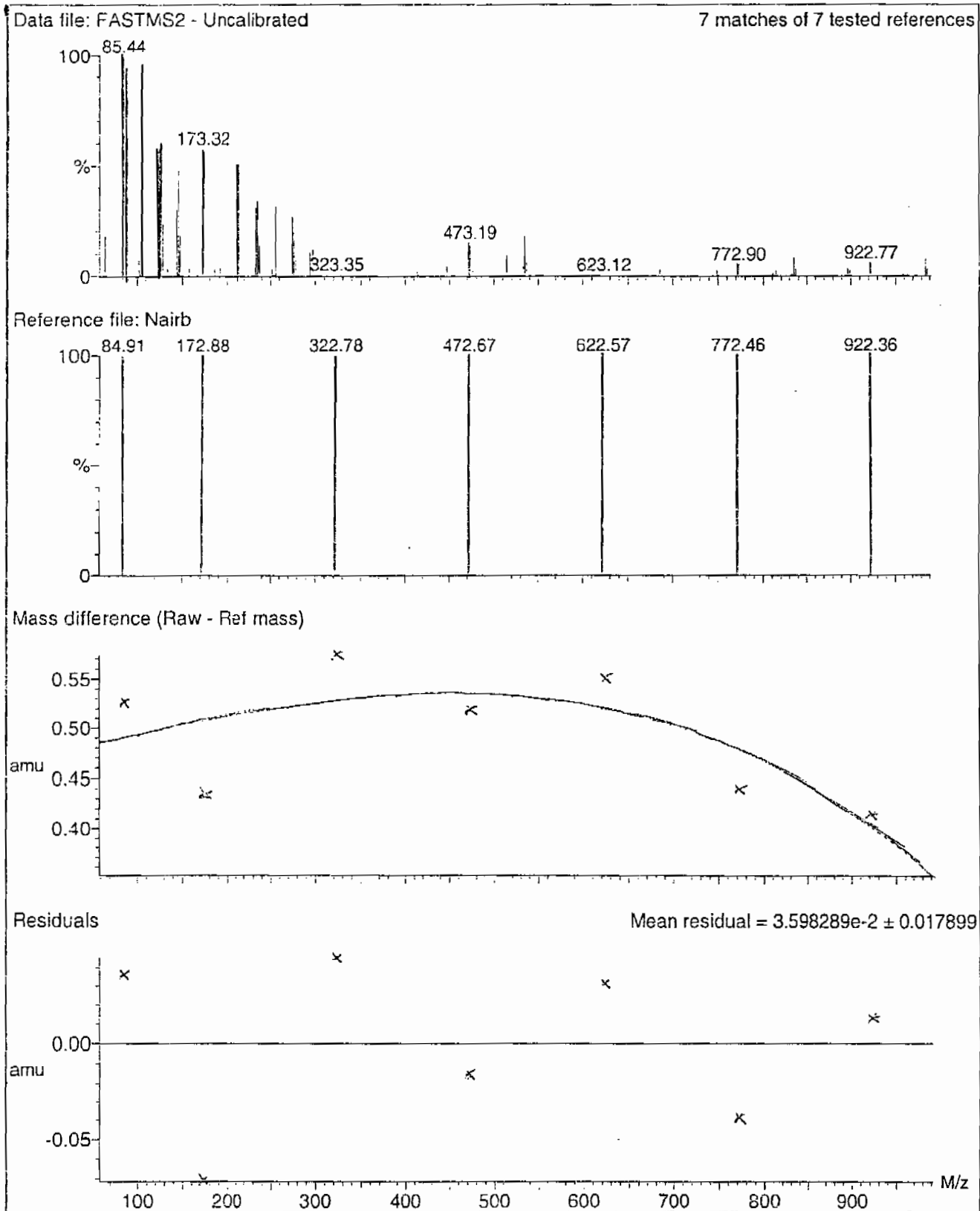
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

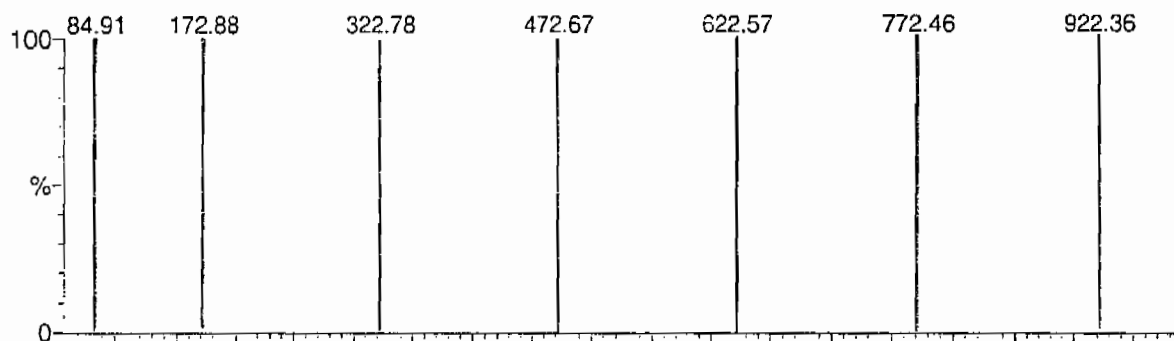
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Data file: SCNMS2 - Uncalibrated

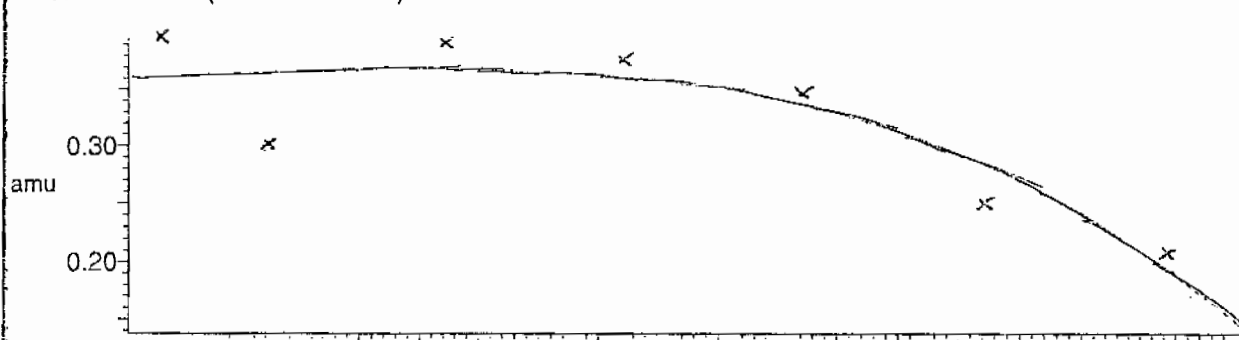
7 matches of 7 tested references



Reference file: Nairb

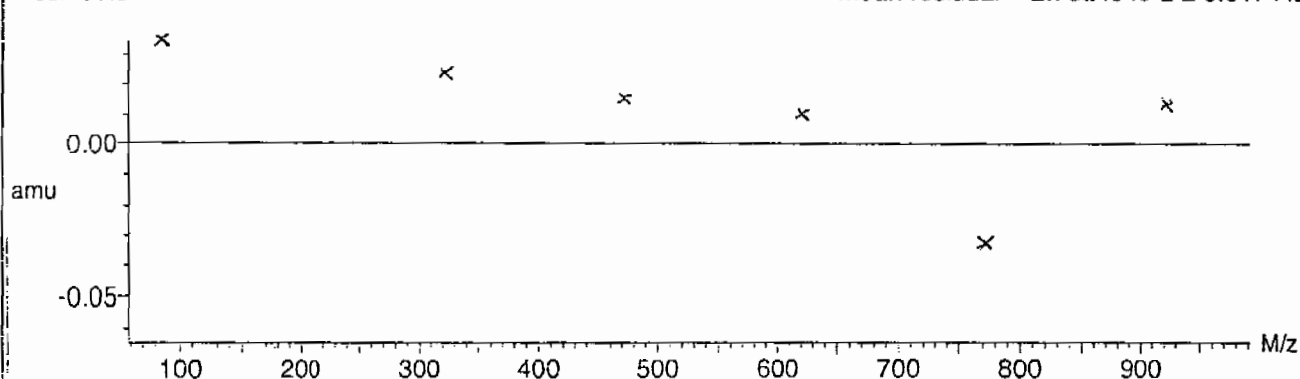


Mass difference (Raw - Ref mass)



Residuals

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

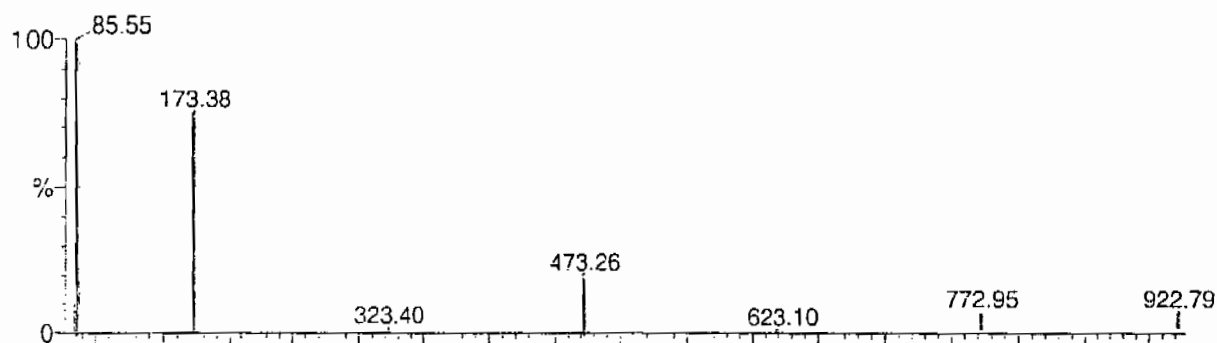


Calibration Report - MS2 Static

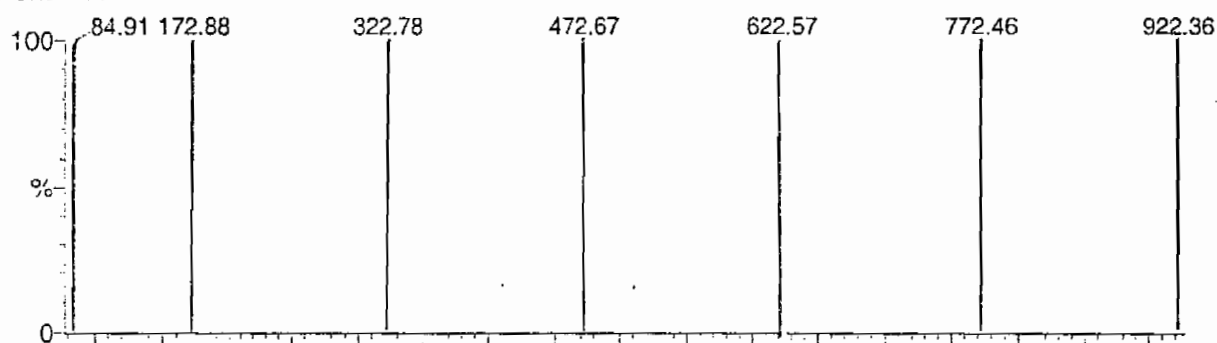
Page 1 of 1

Printed: Tue Jan 08 12:21:59 2008

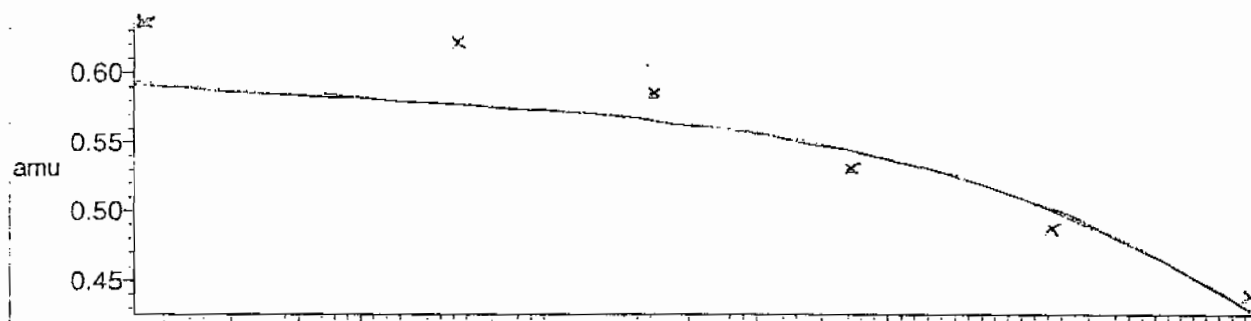
Data file: STATMS2 - Uncalibrated 7 matches of 7 tested references



Reference file: Nairb

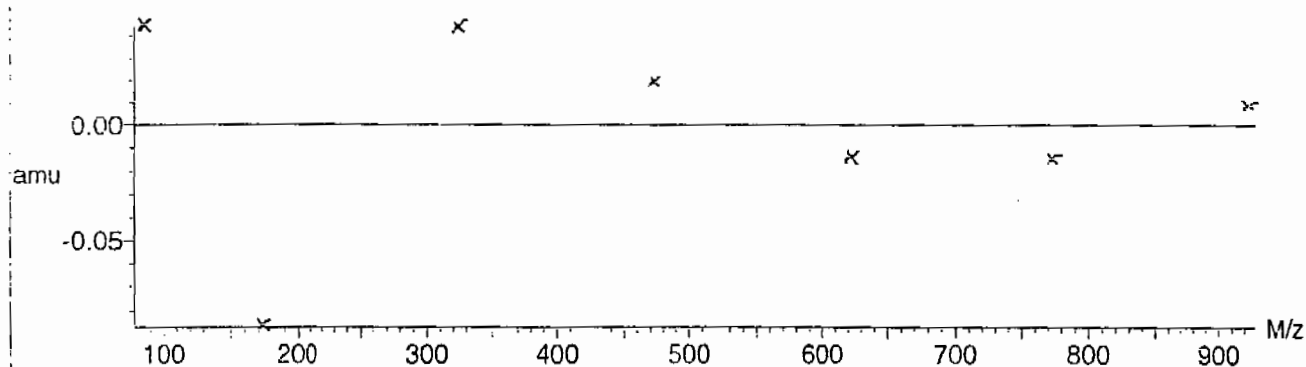


Mass difference (Raw - Ref mass)



Residuals

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



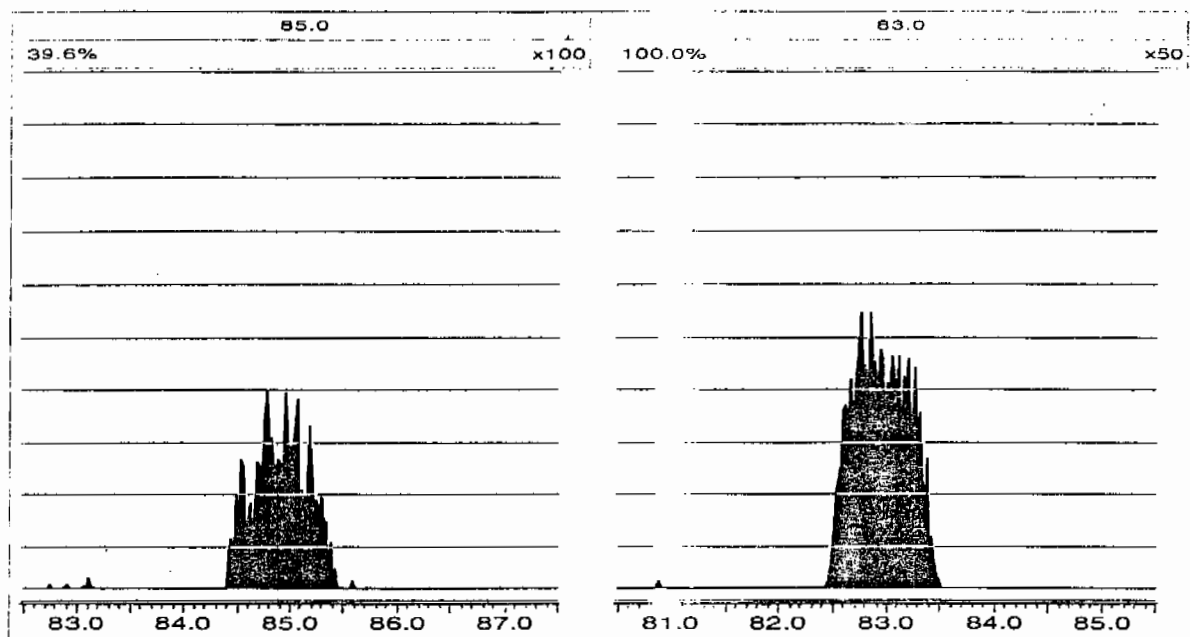
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Wednesday, March 03, 2010 11:48:06 Eastern Standard Time



## Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665Lab Code: GELInstrument ID: LCMSMSHPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0303006a	03-MAR-10	20176.3				
Lower Area Limit			10088.15				
Upper Area Limit			40352.6				
1202042246	per0303012a	03-MAR-10 15:56	20104.5	3.07	3.09773	1.009	
1202042247	per0303013a	03-MAR-10 16:04	20440.3	3.07	3.09775	1.009	
1202042250	per0303014a	03-MAR-10 16:12	20254.1	3.09	3.11007	1.006	
246554001	per0303015a	03-MAR-10 16:20	20473.1	3.07	3.08532	1.005	
246554002	per0303016a	03-MAR-10 16:28	20875.8	3.06	3.0853	1.008	
246554003	per0303017a	03-MAR-10 16:36	20111.1	3.05	3.0728	1.007	
246554004	per0303018a	03-MAR-10 16:44	20062.5	3.06	3.07282	1.004	
246554005	per0303019a	03-MAR-10 16:52	20742.1	3.06	3.08528	1.008	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665

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	per0303006a	03-MAR-10	20176.3				
Lower Area Limit			10088.15				
Upper Area Limit			40352.6				
246554006	per0303020a	03-MAR-10 17:00	20862.5	3.06	3.07282	1.004	



# 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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8175

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 99.15

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.504	2.02	0.838	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate Isotope Ratio			3.32			1	03-MAR-10 16:20	per0303015a
14797-73-0	Perchlorate-101	.504	2.02	0.797	ug/kg	J	1	03-MAR-10 16:20	per0303015a
	Perchlorate-O(18)			5.09	ug/kg		1	03-MAR-10 16:20	per0303015a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303015a

Date: 03-Mar-2010

Time: 16:20:11

ID: 246554001

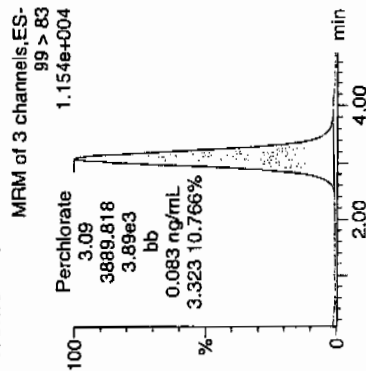
Vial: 1:3,D

107  
3/5/10

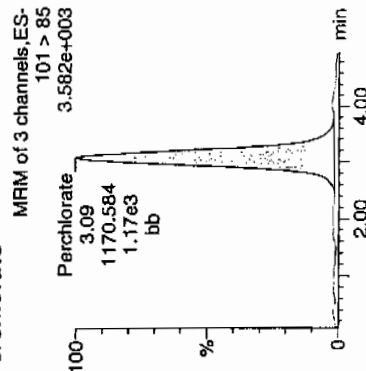
107  
03-05-10

LAU 952832 / Souza / 11

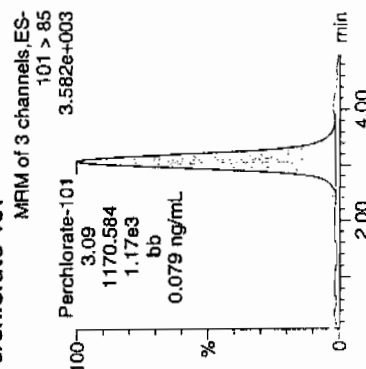
### Perchlorate



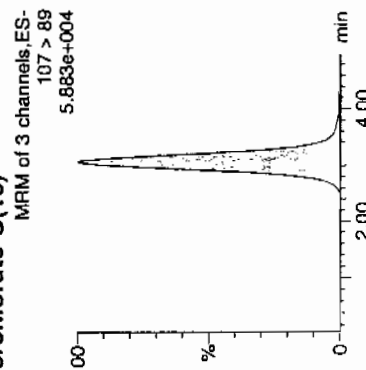
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	ModDate	ModTime	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246554001	Perchlorate	99 > 83	3.09	3889.818	3889.818	bb			0.0831			330.949	3.32
246554001	Perchlorate-101	101 > 85	3.09	1170.584	1170.584	bb			0.0790			211.584	
246554001	Perchlorate-O(18)	107 > 89	3.07	20473.107	20473.107	bb			0.5045	100.91	0.91	3660.8...	

$$\frac{3889.818}{46211.5} \times 100 = 0.832$$

107  
3/5/10

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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8174

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554002

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 92.9

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.576	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate Isotope Ratio			3.37			1	03-MAR-10 16:28	per0303016a
14797-73-0	Perchlorate-101	.538	2.15	0.541	ug/kg	J	1	03-MAR-10 16:28	per0303016a
	Perchlorate-O(18)			5.54	ug/kg		1	03-MAR-10 16:28	per0303016a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

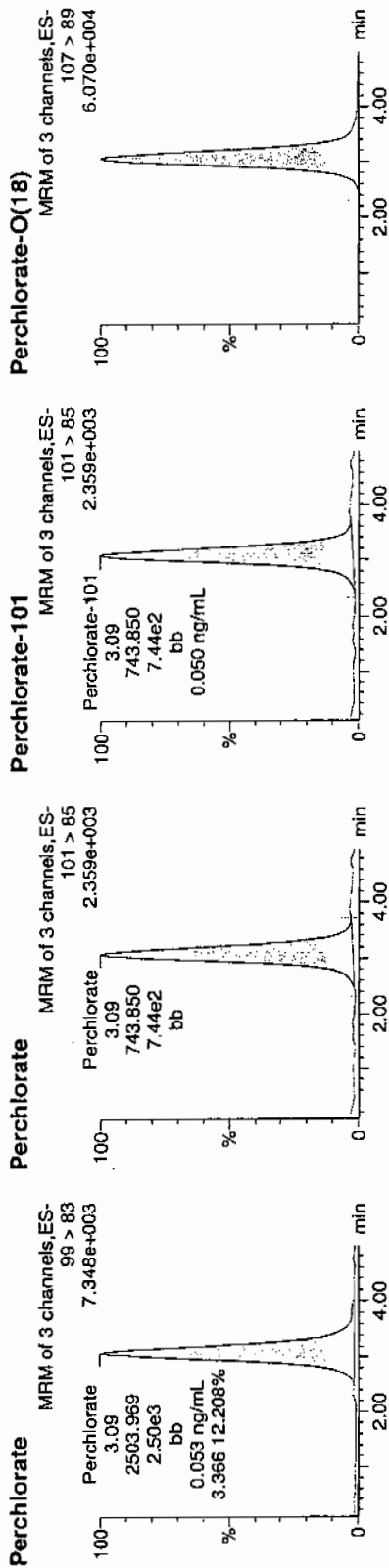
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Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303016a  
Date: 03-Mar-2010  
Time: 16:28:13  
ID: 246554002  
Vial: 1:3,E

03-04-10

1522 | 952832 | 5020 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246554002	Perchlorate	99 > 83	3.09	2503.969	2503.969	bb			0.0535			584.768	3.37
246554002	Perchlorate-101	101 > 85	3.09	743.850	743.850	bb			0.0502			26.737	
246554002	Perchlorate-O(18)	107 > 89	3.06	20875.809	20875.809	bb			0.5145	102.89	2.89	2068.2...	

1.477  
3/5/10

## Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8176

Lab Code: GEL

Instrument: LCMSMS Date Received: 09-FEB-10

Method: SW846 6850 Modified GEL Job No (SDG): 10-1665

Matrix: SOIL GEL Sample ID: 246554003

Extraction Batch ID: 252831 Date Filtered: 25-FEB-10

Extraction Type: Solid Prep Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g %Solids: 24

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	4.62	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate Isotope Ratio			3.08			1	03-MAR-10 16:36	per0303017a
14797-73-0	Perchlorate-101	.532	2.13	4.74	ug/kg		1	03-MAR-10 16:36	per0303017a
	Perchlorate-O(18)			5.27	ug/kg		1	03-MAR-10 16:36	per0303017a

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

\*Concentration =

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

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

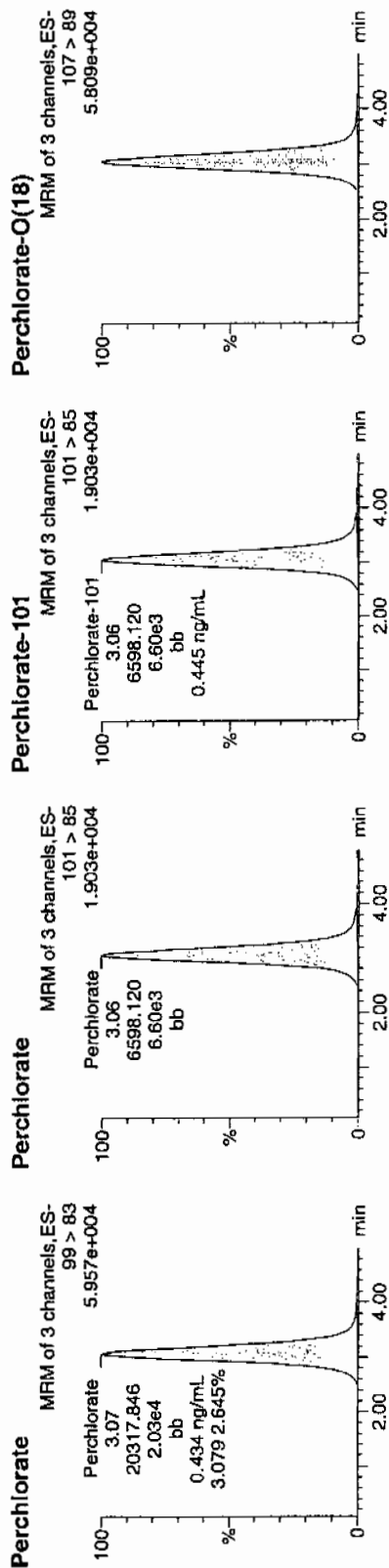
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qid

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303017a  
Date: 03-Mar-2010  
Time: 16:36:15  
ID: 246554003  
Vial: 1:3,F

600  
03-04-10

19200 | 952232 | 5020 | 1 | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	pg/mL	%Rec	%Dev	S/N	Ion Ratio
246554003	Perchlorate	99 > 83	3.07	20317.846	20317.846	bb			0.4340			5953.3...	3.08
246554003	Perchlorate-101	101 > 85	3.06	6598.120	6598.120	bb			0.4454			1483.1...	
246554003	Perchlorate-O(18)	107 > 89	3.05	20111.146	20111.146	bb			0.4956	99.12	-0.88	3308.3...	

$$\frac{20317.846}{46511.5} = 0.4340$$

not  
3/5/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8178

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554004

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 97.5

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.513	2.05	0.587	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate Isotope Ratio			3.38			1	03-MAR-10 16:44	per0303018a
14797-73-0	Perchlorate-101	.513	2.05	0.549	ug/kg	J	1	03-MAR-10 16:44	per0303018a
	Perchlorate-O(18)			5.07	ug/kg		1	03-MAR-10 16:44	per0303018a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

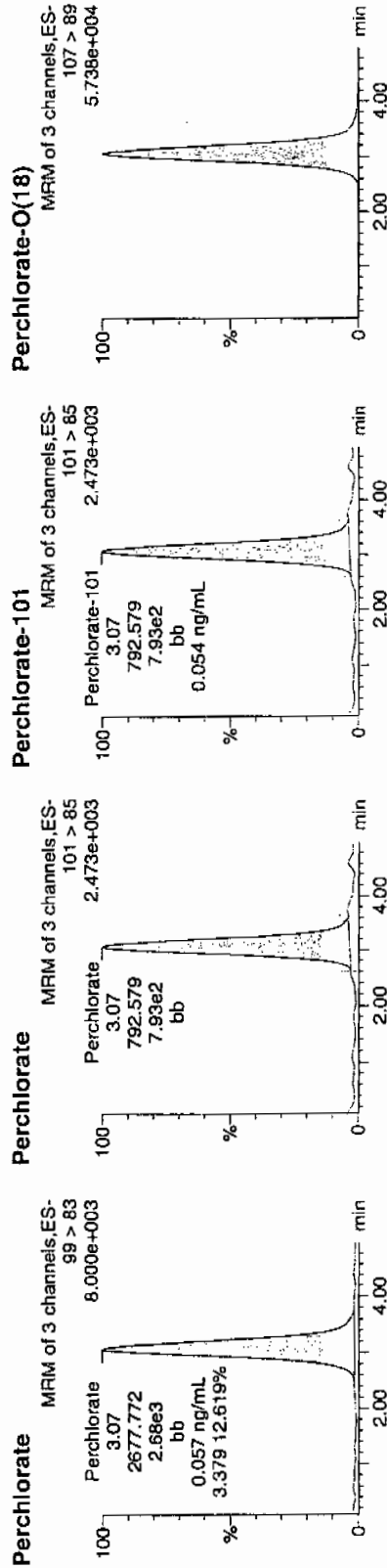
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Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303018a  
Date: 03-Mar-2010  
Time: 16:44:16  
ID: 246554004  
Vial: 1:4,A

03-04-10

LAN-1952832 | 5000 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246554004	Perchlorate	99 > 83	3.07	2677.772	2677.772	bb			0.0572			242.076	3.38
246554004	Perchlorate-101	101 > 85	3.07	792.579	792.579	bb			0.0535			386.376	
246554004	Perchlorate-O(18)	107 > 89	3.06	20062.494	20062.494	bb			0.4944	98.88	-1.12	3248.9...	

Auth  
3/5/10

## Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 952831Extraction Type: Solid Prep

Client Sample No.

RE15-10-8177Date Received: 09-FEB-10GEL Job No (SDG): 10-1665GEL Sample ID: 246554005Date Filtered: 25-FEB-10Injection Volume (uL): 20%Solids: 96.7Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	1.41	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate Isotope Ratio			3.07			1	03-MAR-10 16:52	per0303019a
14797-73-0	Perchlorate-101	.517	2.07	1.45	ug/kg	J	1	03-MAR-10 16:52	per0303019a
	Perchlorate-O(18)			5.29	ug/kg		1	03-MAR-10 16:52	per0303019a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

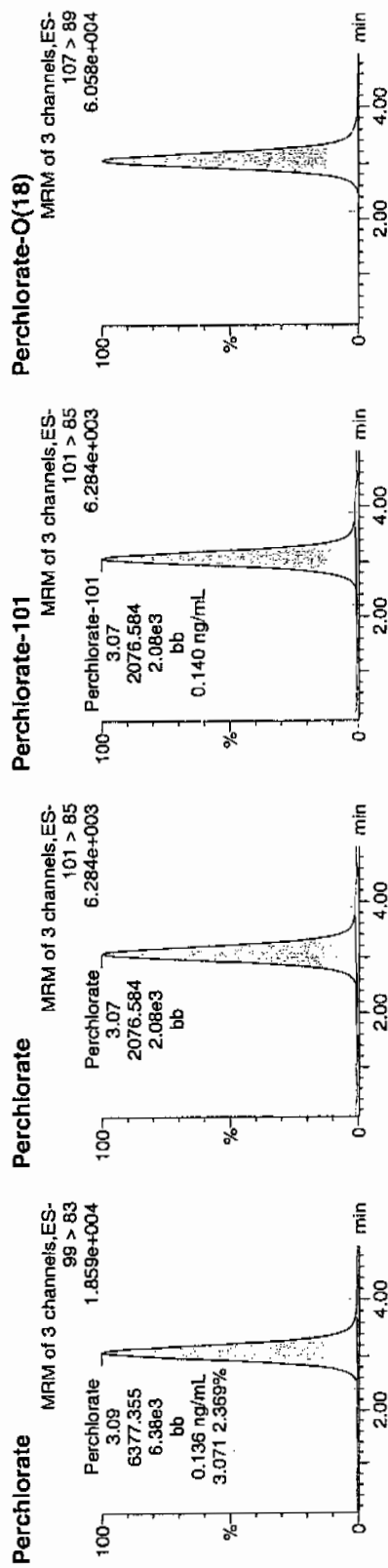
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303019a  
Date: 03-Mar-2010  
Time: 16:52:19  
ID: 246554005  
Vial: 1:4,B

0324-10

1522332 | 5075 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246554005	Perchlorate	99 > 83	3.09	6377.355	6377.355	bb			0.1362			543.604	3.07
246554005	Perchlorate-101	101 > 85	3.07	2076.584	2076.584	bb			0.1402			715.165	
246554005	Perchlorate-O(18)	107 > 89	3.06	20742.135	20742.135	bb			0.5112	102.23	2.23	7665.6...	

3/5/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-8225

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 252831

Extraction Type: Solid Prep

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 246554006

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 98.7

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	1.05	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate Isotope Ratio			3.27			1	03-MAR-10 17:00	per0303020a
14797-73-0	Perchlorate-101	.507	2.03	1.02	ug/kg	J	1	03-MAR-10 17:00	per0303020a
	Perchlorate-O(18)			5.21	ug/kg		1	03-MAR-10 17:00	per0303020a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

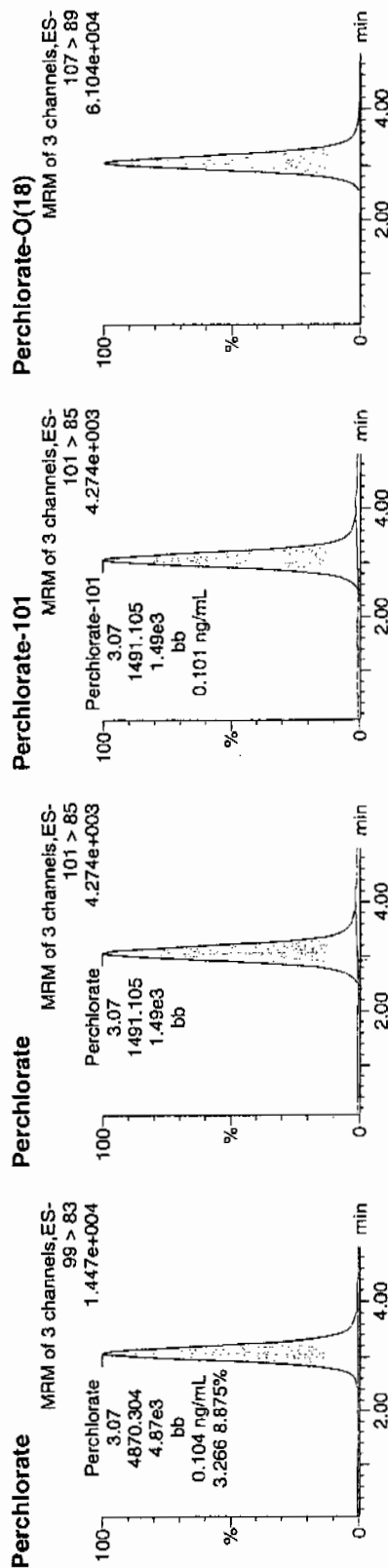
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

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Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303020a  
Date: 03-Mar-2010  
Time: 17:00:22  
ID: 246554006  
Vial: 1:4,C

149105 | 952832 | 3020 | 1 |

33-3410



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246554006	Perchlorate	99 > 83	3.07	4870.304	4870.304	bb			0.1040			740.475	3.27
246554006	Perchlorate-101	101 > 85	3.07	1491.105	1491.105	bb			0.1007			140.931	
246554006	Perchlorate-O(18)	107 > 89	3.06	20862.467	20862.467	bb			0.5141	102.83	2.83	4866.7...	

3/5/10

# STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 03-MAR-10

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

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

Perchlorate

Coefficient of Determination:

Calibration Curve: 46811.52

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 03-MAR-10

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

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

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14814.28

Response Type: External Standard

Curve Type: RF



Quantify Calibration Report MassLynx 4.0 SP4

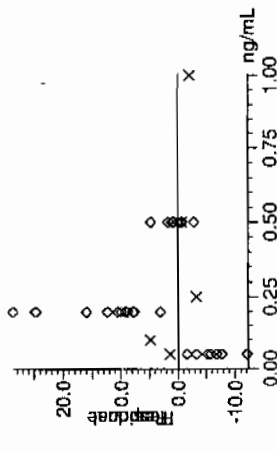
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qid

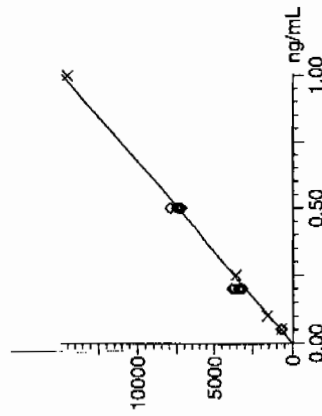
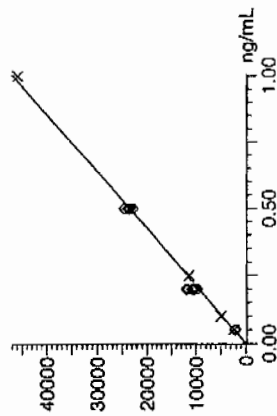
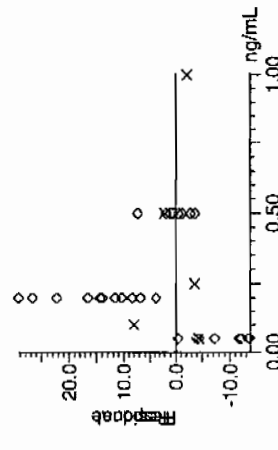
Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030310a.mdb 04 Mar 2010 07:52:42  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030310a.cdb 04 Mar 2010 07:53:00

Compound name: Perchlorate ✓  
Response Factor: 46811.5  
RRF SD: 1507.65, % Relative SD: 3.22068  
Response type: External Std, Area  
Curve type: RF ✓



Compound name: Perchlorate-101 ✓  
Response Factor: 14814.3  
RRF SD: 760.441, % Relative SD: 5.13316  
Response type: External Std, Area  
Curve type: RF ✓



03-04-10

2017  
3/4/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

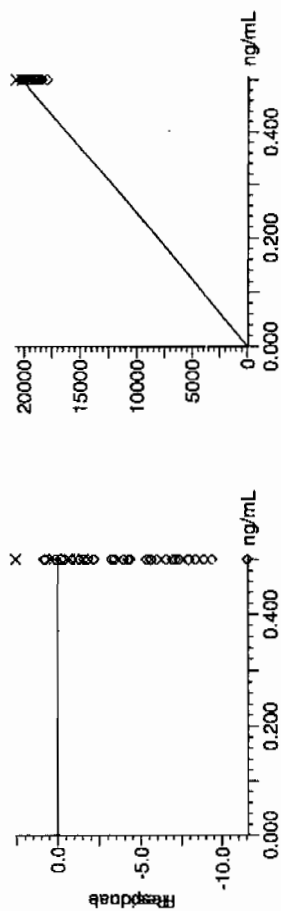
Compound name: Perchlorate-O(18)

Response Factor: 40578.3

RRF SD: 639.485, % Relative SD: 1.57593

Response type: External Std, Area

Curve type: RF ✓



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	104.82	03-MAR-10 15:31	per0303009a
Perchlorate Isotope Ratio		3.09		03-MAR-10 15:31	per0303009a
Perchlorate-101	.5	.54	107.29	03-MAR-10 15:31	per0303009a

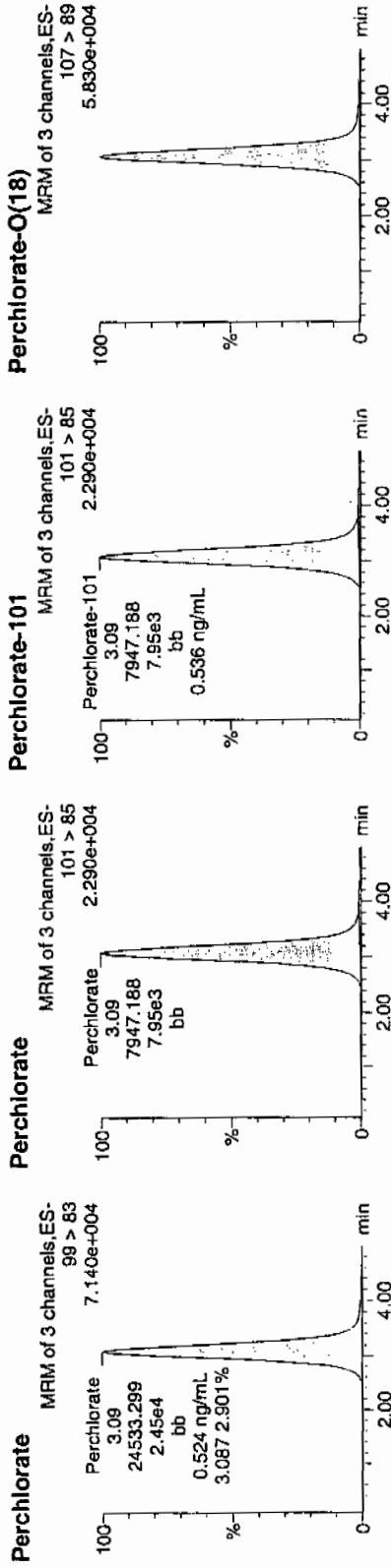
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303009a  
Date: 03-Mar-2010  
Time: 15:31:55  
ID: WCL100227-06ICV  
Vial: 1:2,A

Pure  
03-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	3.09	24533.299	24533.299	bb			0.5241	104.82	4.82	2862.5...	3.09
WCL100227-06ICV	Perchlorate-101	101 > 85	3.09	7947.188	7947.188	bb			0.5365	107.29	7.29	128.844	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	3.07	20118.193	20118.193	bb			0.4958	99.16	-0.84	1441.5...	

$$\frac{24533.299}{46811.5} = 0.5241$$

107  
3/4/10

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1665

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.68	03-MAR-10 17:16	per0303022a
Perchlorate Isotope Ratio		3.19		03-MAR-10 17:16	per0303022a
Perchlorate-101	.5	.5	100.85	03-MAR-10 17:16	per0303022a

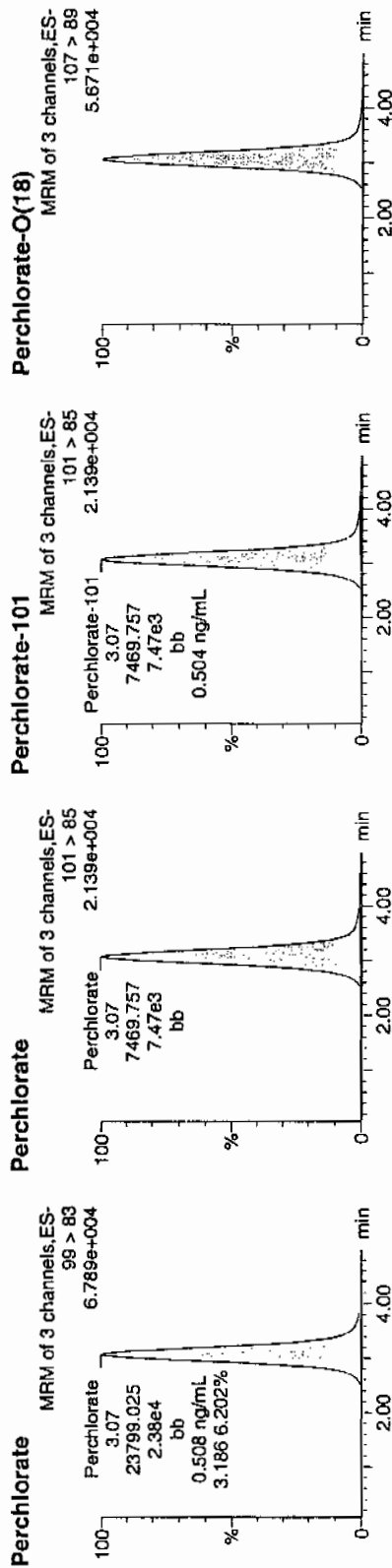
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

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Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303022a  
Date: 03-Mar-2010  
Time: 17:16:27  
ID: WCL100227-06CCV  
Vial: 1:2.A

*Per*  
*WCL*  
*03-04-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.07	23799.025	23799.025	bb			0.5084	101.88	1.68	2429.8...	3.19
WCL100227-06CCV	Perchlorate-101	101 > 85	3.07	7469.757	7469.757	bb			0.5042	100.85	0.85	608.500	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.06	18926.561	18926.561	bb			0.4911	98.21	-1.79	3103.8...	

*not*  
*3/4/10*

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1665

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	98.39	03-MAR-10 15:48	per0303011a
Perchlorate Isotope Ratio		3.12		03-MAR-10 15:48	per0303011a
Perchlorate-101	.05	.05	99.55	03-MAR-10 15:48	per0303011a
Perchlorate	.05	.04	88.03	03-MAR-10 17:32	per0303024a
Perchlorate Isotope Ratio		2.91		03-MAR-10 17:32	per0303024a
Perchlorate-101	.05	.05	95.64	03-MAR-10 17:32	per0303024a

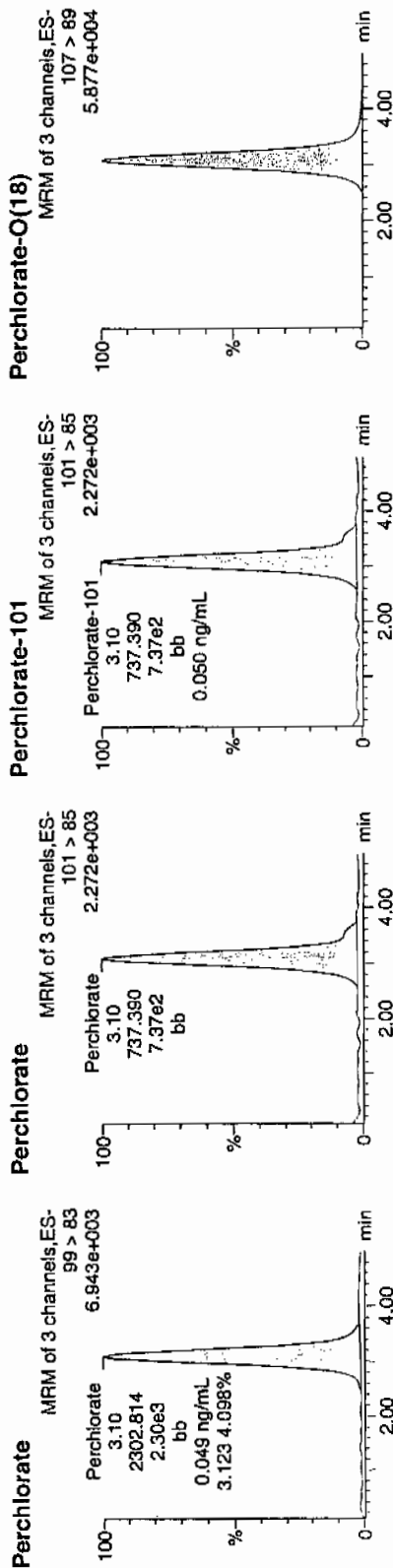
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303011a  
Date: 03-Mar-2010  
Time: 15:48:00  
ID: WCL100227-07CRI  
Vial: 1:2,B

Pass  
and  
03-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.10	2302.814	2302.814	bb			0.0492	96.39	-1.61	342.879	3.12
WCL100227-07CRI	Perchlorate-101	101 > 85	3.10	737.390	737.390	bb			0.0498	99.55	-0.45	477.425	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.07	20464.764	20464.764	bb			0.5043	100.87	0.87	7109.2...	

$$\frac{2302.814}{46811.5} = 0.0492$$

not  
3/4/10



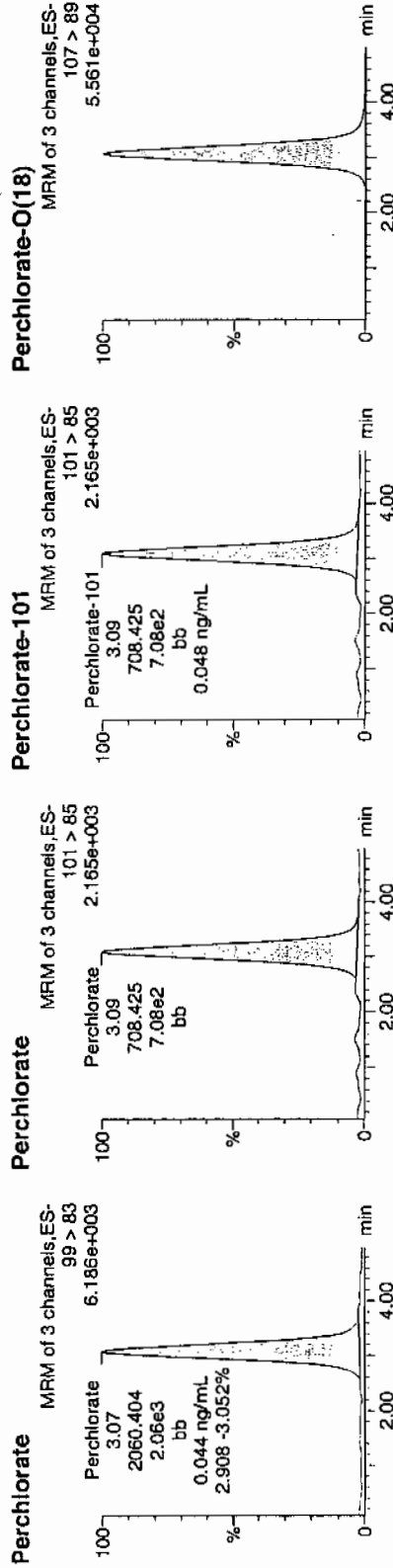
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303024a  
Date: 03-Mar-2010  
Time: 17:32:32  
ID: WCL100227-07CRI  
Vial: 1;2,B

*Per*  
*and*  
*03-24-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.07	2060.404	2060.404	bb			0.0440	88.03	-11.97	638.752	2.91
WCL100227-07CRI	Perchlorate-101	101 > 85	3.09	708.425	708.425	bb			0.0478	95.64	-4.36	162.366	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.06	19208.881	19208.881	bb			0.4734	94.68	-5.32	2971.0...	

$$\frac{2060.404}{708.425} = 2.9084$$

*not*  
*3/4/10*

# 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: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 25-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 1202042246

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	03-MAR-10 15:56	per0303012a
	Perchlorate Isotope Ratio						1	03-MAR-10 15:56	per0303012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	03-MAR-10 15:56	per0303012a
	Perchlorate-O(18)			4.95	ug/kg		1	03-MAR-10 15:56	per0303012a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

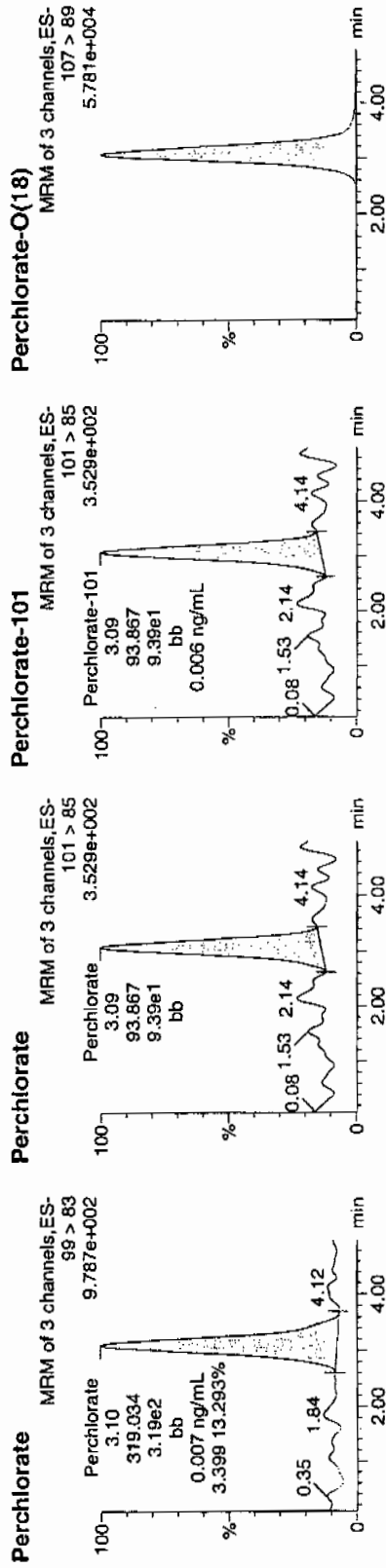
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qid

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303012a  
Date: 03-Mar-2010  
Time: 15:56:04  
ID: 1202042246  
Vial: 1:3,A

603  
03-04-10

1202042246 | 952832 | 5000 | 11 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042246	Perchlorate	99 > 83	3.10	319.034	319.034	bb			0.0068				3.40
1202042246	Perchlorate-101	101 > 85	3.09	93.867	93.867	bb			0.0063				
1202042246	Perchlorate-O(18)	107 > 89	3.07	20104.477	20104.477	bb			0.4954	99.09	-0.91		

1077  
3/4/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952831

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 25-FEB-10

GEL Job No (SDG): 10-1665

GEL Sample ID: 1202042247

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte <sup>a</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.32	ug/kg		1	03-MAR-10 16:04	per0303013a
	Perchlorate Isotope Ratio			3.15			1	03-MAR-10 16:04	per0303013a
14797-73-0	Perchlorate-101	.5	2	2.33	ug/kg		1	03-MAR-10 16:04	per0303013a
	Perchlorate-O(18)			5.04	ug/kg		1	03-MAR-10 16:04	per0303013a

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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  
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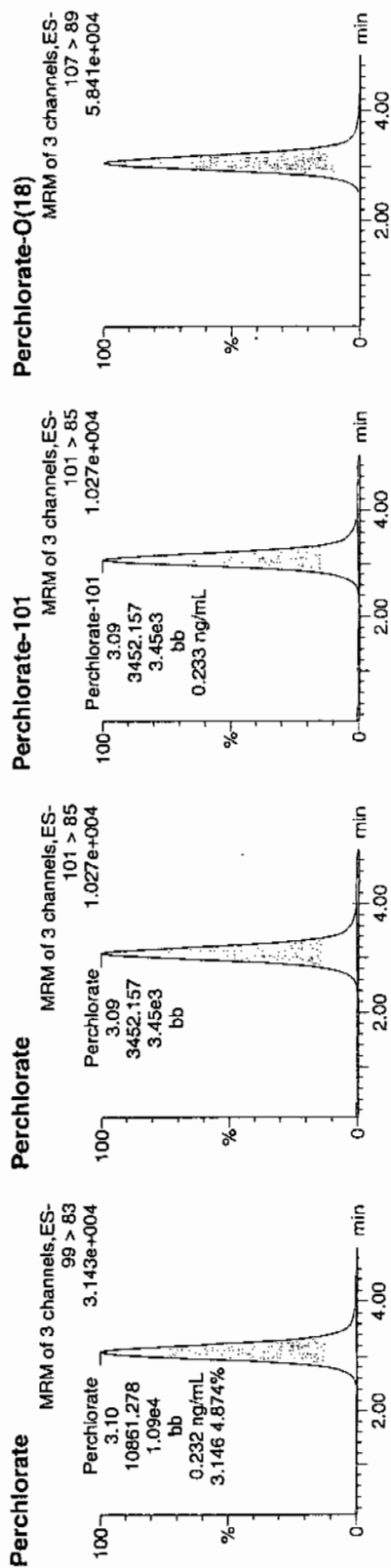
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qld

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303013a  
Date: 03-Mar-2010  
Time: 16:04:07  
ID: 1202042247  
Vial: 1:3,B

03-04-10

1202042247 | 5020 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042247	Perchlorate	99 > 83	3.10	10861.278	10861.278	bb			0.2320	116.01	16.01	1500.0...	3.15
1202042247	Perchlorate-101	101 > 85	3.09	3452.157	3452.157	bb			0.2330	116.51	16.51	818.275	
1202042247	Perchlorate-O(18)	107 > 89	3.07	20440.275	20440.275	bb			0.5037	100.74	0.74	6177.5...	

$$\frac{10861.278}{46811.5} = 0.2320$$

not  
3/4/10

# MISCELLANEOUS DATA

# Prep Logbook

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

Batch ID: 952831 Verified by: Michael Penny  
 Analyst: SW846 6850 Modified  
 Method: 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)
1202042246 MB	25-FEB-2010 14:14:00	2	20	10
1202042247 LCS	25-FEB-2010 14:14:00	2	20	10
246554001	25-FEB-2010 14:14:00	2	20	10
246554002	25-FEB-2010 14:14:00	2	20	10
246554003	25-FEB-2010 14:14:00	2	20	10
246554004	25-FEB-2010 14:14:00	2	20	10
246554005	25-FEB-2010 14:14:00	2	20	10
246554006	25-FEB-2010 14:14:00	2	20	10
246557001	25-FEB-2010 14:14:00	2	20	10
246566001	25-FEB-2010 14:14:00	2	20	10
246566002	25-FEB-2010 14:14:00	2	20	10
1202042248 MS (2465660012)	25-FEB-2010 14:14:00	2	20	10
1202042249 MS1 (2465660012)	25-FEB-2010 14:14:00	2	20	10
246566003	25-FEB-2010 14:14:00	2	20	10
246566004	25-FEB-2010 14:14:00	2	20	10
246566005	25-FEB-2010 14:14:00	2	20	10
246566006	25-FEB-2010 14:14:00	2	20	10
246566007	25-FEB-2010 14:14:00	2	20	10
246566008	25-FEB-2010 14:14:00	2	20	10
246566009	25-FEB-2010 14:14:00	2	20	10
246566010	25-FEB-2010 14:14:00	2	20	10
246566011	25-FEB-2010 14:14:00	2	20	10
1202042250 LCS	25-FEB-2010 14:14:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202042250	10 ug/L ICVA CVV Second Source	UCL100210-02.1	.4	mL	De-Salting Cartridge Lot# B30003K0402& B30003K0412
LCS	1202042247	10 ug/L ICVA CVV Second Source	UCL100210-02.1	.4	mL	
MS	1202042248	10 ug/L ICVA CVV Second Source	UCL100210-02.1	.4	mL	
MSD	1202042249	10 ug/L ICVA CVV Second Source	UCL100210-02.1	.4	mL	



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/03/10

Extr. Injection Volume: 20uL

Sequence Number: per030310a

Initial Calibration Date: 03/03/10

Method: EPA 6850-Modified

Int. Std.: UCL100126-01

Mobile Phase Lot#: 1269535, 1271949

Standard-Samp Reagent Lot#: 1271949

Reviewed BY: MM

Date: 3/5/10

SOP: GL-OA-E-067 Rev.6

Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0303001a	IPB001	CWW	3/3/2010 14:27			1		USE	B
per0303002a	IPB001	CWW	3/3/2010 14:35			1		USE	B
per0303003a	WCLICAL-01	CWW	3/3/2010 14:43			1		USE	I
per0303004a	WCLICAL-02	CWW	3/3/2010 14:51			1		USE	I
per0303005a	WCLICAL-03	CWW	3/3/2010 14:59			1		USE	I
per0303006a	WCLICAL-04	CWW	3/3/2010 15:07			1		USE	I
per0303007a	WCLICAL-05	CWW	3/3/2010 15:15			1		USE	I
per0303008a	IPB002	CWW	3/3/2010 15:23			1		USE	B
per0303009a	WCLICV	CWW	3/3/2010 15:31			1		USE	C
per0303010a	IPB003	CWW	3/3/2010 15:39			1		USE	B
per0303011a	WCLCRI	CWW	3/3/2010 15:48			1		USE	C
per0303012a	1202042246	CWW	3/3/2010 15:56	952832	VARIOUS	1	LANL	USE	S
per0303013a	1202042247	CWW	3/3/2010 16:04	952832	VARIOUS	1	LANL	USE	S
per0303014a	1202042250	CWW	3/3/2010 16:12	952832	VARIOUS	1	LANL	USE	S
per0303015a	246554001	CWW	3/3/2010 16:20	952832	10-1665	1	LANL	USE	S
per0303016a	246554002	CWW	3/3/2010 16:28	952832	10-1665	1	LANL	USE	S
per0303017a	246554003	CWW	3/3/2010 16:36	952832	10-1665	1	LANL	USE	S
per0303018a	246554004	CWW	3/3/2010 16:44	952832	10-1665	1	LANL	USE	S
per0303019a	246554005	CWW	3/3/2010 16:52	952832	10-1665	1	LANL	USE	S
per0303020a	246554006	CWW	3/3/2010 17:00	952832	10-1665	1	LANL	USE	S
per0303021a	246557001	CWW	3/3/2010 17:08	952832	10-1666	1	LANL	USE	S
per0303022a	WCLCCV	CWW	3/3/2010 17:16			1		USE	C
per0303023a	IPB004	CWW	3/3/2010 17:24			1		USE	B
per0303024a	WCLCRI	CWW	3/3/2010 17:32			1		USE	C
per0303025a	246566001	CWW	3/3/2010 17:40	952832	10-1673	1	LANL	USE	S
per0303026a	246566002	CWW	3/3/2010 17:48	952832	10-1673	1	LANL	USE	S
per0303027a	1202042248	CWW	3/3/2010 17:56	952832	10-1673	1	LANL	USE	S
per0303028a	1202042249	CWW	3/3/2010 18:04	952832	10-1673	1	LANL	USE	S
per0303029a	246566003	CWW	3/3/2010 18:12	952832	10-1673	1	LANL	USE	S

per0303030a	246566004	CWW	3/3/2010 18:20	952832	10-1673	1	LANL	USE	S
per0303031a	246566005	CWW	3/3/2010 18:29	952832	10-1673	1	LANL	USE	S
per0303032a	246566006	CWW	3/3/2010 18:37	952832	10-1673	1	LANL	USE	S
per0303033a	246566007	CWW	3/3/2010 18:45	952832	10-1673	1	LANL	USE	S
per0303034a	246566008	CWW	3/3/2010 18:53	952832	10-1673	1	LANL	USE	S
per0303035a	WCLCCV	CWW	3/3/2010 19:01			1		USE	C
per0303036a	IPB005	CWW	3/3/2010 19:09			1		USE	B
per0303037a	WCLCRI	CWW	3/3/2010 19:17			1		USE	C
per0303038a	246566009	CWW	3/3/2010 19:25	952832	10-1673	1	LANL	USE	S
per0303039a	246566010	CWW	3/3/2010 19:33	952832	10-1673	1	LANL	USE	S
per0303040a	246566011	CWW	3/3/2010 19:41	952832	10-1673	1	LANL	USE	S
per0303041a	IPB006	CWW	3/3/2010 19:49			1		USE	B
per0303042a	1202049008	CWW	3/3/2010 19:57	955694	VARIOUS	1	LANL	USE	S
per0303043a	1202049009	CWW	3/3/2010 20:05	955694	VARIOUS	1	LANL	USE	S
per0303044a	1202049012	CWW	3/3/2010 20:13	955694	VARIOUS	1	LANL	USE	S
per0303045a	247040001	CWW	3/3/2010 20:22	955694	10-1819-1	1	LANL	USE	S
per0303046a	247040002	CWW	3/3/2010 20:30	955694	10-1819-1	1	LANL	USE	S
per0303047a	WCLCCV	CWW	3/3/2010 20:38			1		USE	C
per0303048a	IPB007	CWW	3/3/2010 20:46			1		USE	B
per0303049a	WCLCRI	CWW	3/3/2010 20:54			1		USE	C
per0303050a	1202049010	CWW	3/3/2010 21:02	955694	10-1819-1	1	LANL	USE	S
per0303051a	1202049011	CWW	3/3/2010 21:10	955694	10-1819-1	1	LANL	USE	S
per0303052a	247040003	CWW	3/3/2010 21:18	955694	10-1819-1	1	LANL	USE	S
per0303053a	247040004	CWW	3/3/2010 21:26	955694	10-1819-1	1	LANL	USE	S
per0303054a	247040005	CWW	3/3/2010 21:34	955694	10-1819-1	1	LANL	USE	S
per0303055a	247040006	CWW	3/3/2010 21:42	955694	10-1819-1	1	LANL	USE	S
per0303056a	247040007	CWW	3/3/2010 21:50	955694	10-1819-1	1	LANL	USE	S
per0303057a	247040008	CWW	3/3/2010 21:58	955694	10-1819-1	1	LANL	USE	S
per0303058a	247040009	CWW	3/3/2010 22:06	955694	10-1819-1	1	LANL	USE	S
per0303059a	247040010	CWW	3/3/2010 22:14	955694	10-1819-1	1	LANL	USE	S
per0303060a	WCLCCV	CWW	3/3/2010 22:22			1		USE	C
per0303061a	IPB008	CWW	3/3/2010 22:31			1		USE	B
per0303062a	WCLCRI	CWW	3/3/2010 22:39			1		USE	C
per0303063a	247040011	CWW	3/3/2010 22:47	955694	10-1819-1	1	LANL	USE	S
per0303064a	247040012	CWW	3/3/2010 22:55	955694	10-1819-1	1	LANL	USE	S
per0303065a	247040013	CWW	3/3/2010 23:03	955694	10-1819-1	1	LANL	USE	S
per0303066a	247040014	CWW	3/3/2010 23:11	955694	10-1819-1	1	LANL	USE	S

per0303067a	247040015	CWW	3/3/2010 23:19	955694	10-1819-1	1	LANL	USE	S
per0303068a	247040016	CWW	3/3/2010 23:27	955694	10-1819-1	1	LANL	USE	S
per0303069a	247083001	CWW	3/3/2010 23:35	955694	10-1827	1	LANL	USE	S
per0303070a	247083002	CWW	3/3/2010 23:43	955694	10-1827	1	LANL	USE	S
per0303071a	247083003	CWW	3/3/2010 23:51	955694	10-1827	1	LANL	USE	S
per0303072a	247083004	CWW	3/3/2010 23:59	955694	10-1827	1	LANL	USE	S
per0303073a	WCLCCV	CWW	3/4/2010 0:07			1		USE	C
per0303074a	IPB009	CWW	3/4/2010 0:16			1		USE	B
per0303075a	WCLCRI	CWW	3/4/2010 0:24			1		USE	C
per0303076a	1202049015	CWW	3/4/2010 0:32	955697	VARIOUS	1	LANL	USE	S
per0303077a	1202049016	CWW	3/4/2010 0:40	955697	VARIOUS	1	LANL	USE	S
per0303078a	1202049019	CWW	3/4/2010 0:48	955697	VARIOUS	1	LANL	USE	S
per0303079a	247084001	CWW	3/4/2010 0:56	955697	10-1828	1	LANL	USE	S
per0303080a	247084002	CWW	3/4/2010 1:04	955697	10-1828	1	LANL	USE	S
per0303081a	247086001	CWW	3/4/2010 1:12	955697	10-1829	1	LANL	USE	S
per0303082a	247088001	CWW	3/4/2010 1:20	955697	10-1830	1	LANL	USE	S
per0303083a	247088002	CWW	3/4/2010 1:28	955697	10-1830	1	LANL	USE	S
per0303084a	247088003	CWW	3/4/2010 1:36	955697	10-1830	1	LANL	USE	S
per0303085a	247091001	CWW	3/4/2010 1:44	955697	10-1831	1	LANL	USE	S
per0303086a	WCLCCV	CWW	3/4/2010 1:52			1		USE	C
per0303087a	IPB010	CWW	3/4/2010 2:01			1		USE	B
per0303088a	WCLCRI	CWW	3/4/2010 2:09			1		USE	C
per0303089a	247091002	CWW	3/4/2010 2:17	955697	10-1831	1	LANL	USE	S
per0303090a	247094001	CWW	3/4/2010 2:25	955697	10-1832	1	LANL	USE	S
per0303091a	247094002	CWW	3/4/2010 2:33	955697	10-1832	1	LANL	USE	S
per0303092a	247097001	CWW	3/4/2010 2:42	955697	10-1833	1	LANL	USE	S
per0303093a	1202049017	CWW	3/4/2010 2:50	955697	10-1833	1	LANL	USE	S
per0303094a	1202049018	CWW	3/4/2010 2:58	955697	10-1833	1	LANL	USE	S
per0303095a	247097002	CWW	3/4/2010 3:06	955697	10-1833	1	LANL	USE	S
per0303096a	247097003	CWW	3/4/2010 3:14	955697	10-1833	1	LANL	USE	S
per0303097a	247097004	CWW	3/4/2010 3:22	955697	10-1833	1	LANL	USE	S
per0303098a	247097005	CWW	3/4/2010 3:30	955697	10-1833	1	LANL	USE	S
per0303099a	WCLCCV	CWW	3/4/2010 3:38			1		USE	C
per0303100a	IPB011	CWW	3/4/2010 3:47			1		USE	B
per0303101a	WCLCRI	CWW	3/4/2010 3:55			1		USE	C
per0303102a	247097006	CWW	3/4/2010 4:03	955697	10-1833	1	LANL	USE	S
per0303103a	247097007	CWW	3/4/2010 4:11	955697	10-1833	1	LANL	USE	S

per0303104a	247097008	CWW	3/4/2010 4:19	955697	10-1833	1	LANL	USE	S
per0303105a	247097009	CWW	3/4/2010 4:27	955697	10-1833	1	LANL	USE	S
per0303106a	WCLCCV	CWW	3/4/2010 4:35			1		USE	C
per0303107a	IPB012	CWW	3/4/2010 4:43			1		USE	B
per0303108a	WCLCRI	CWW	3/4/2010 4:51			1		USE	C

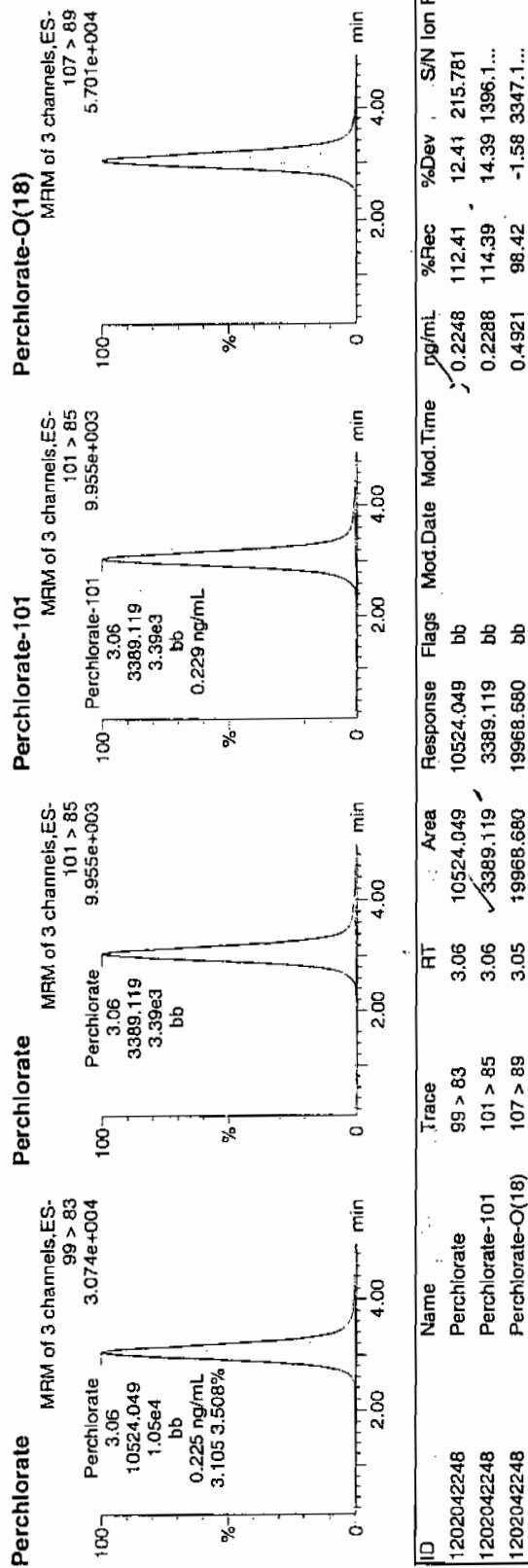
Dataset: C:\MassLynx\Perchlorate.PRO\per030310a.qid

Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303027a  
Date: 03-Mar-2010  
Time: 17:56:46  
ID: 1202042248  
Vial: 1:5,A

624  
3/3/10

LANC | 952232 | 5000 | ms | 1 |



10524  
3/5/10

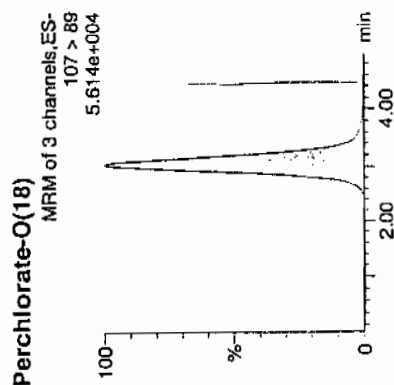
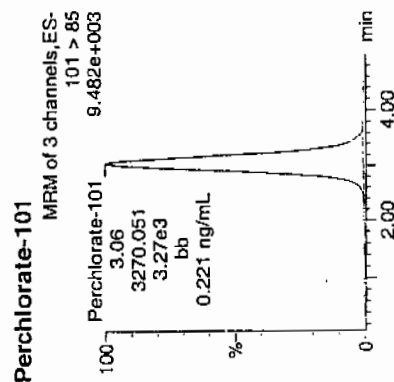
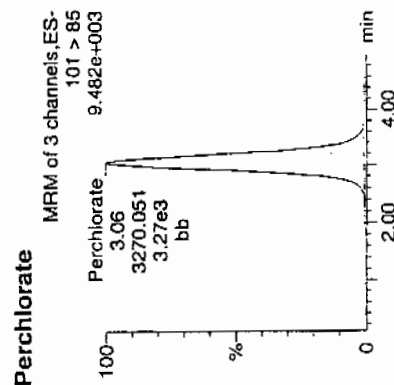
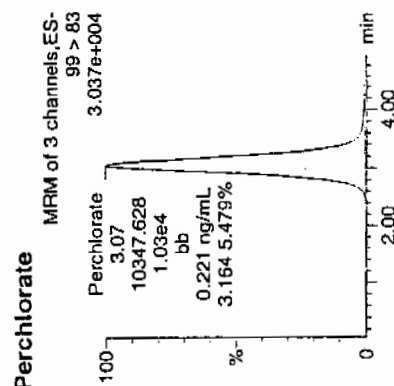
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Last Altered: Thursday, March 04, 2010 7:53:01 AM Eastern Standard Time  
Printed: Thursday, March 04, 2010 8:11:28 AM Eastern Standard Time

Name: per0303028a  
Date: 03-Mar-2010  
Time: 18:04:50  
ID: 1202042249  
Vial: 1:5,B

6673  
03-04-10

1202042249 | 952832 | 5000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec.	%Dev	S/N	Ion Ratio
1202042249	Perchlorate	99 > 83	3.07	10347.628	10347.628	bb			0.2210	110.52	10.52	2255.3...	3.16
1202042249	Perchlorate-101	101 > 85	3.06	3270.051	3270.051	bb			0.2207	110.37	10.37	328.947	
1202042249	Perchlorate-O(18)	107 > 89	3.05	19496.334	19496.334	bb			0.4805	96.09	-3.91	2093.3...	

$$\frac{10347.628}{3270.051} = 3.1644$$

6673  
3/5/10

### Isotope Ratio Criteria

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

2.31-3.85

### Tune Criteria

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

# LC/MS/MS PERCHLORATE ANALYSIS



**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1665-1**

**Method/Analysis Information**

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

**Analytical Method:** SW846 6850 Modified

**Prep Method:** SW846 6850 Modified

**Analytical Batch Number:** 952836

**Prep Batch Number:** 952834

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246555001	RE15-10-8234
1202042256	Interference Check Sample (ICS)
1202042252	Method Blank (MB)
1202042253	Laboratory Control Sample (LCS)
1202042254	246571001(RE46-10-11505) Matrix Spike (MS)
1202042255	246571001(RE46-10-11505) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

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

**Calibration Information**

**Initial Calibration**

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

10-1665-1-PERLCMS

Page 1 of 4

**CCV Requirements**

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

**CCB Requirements**

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

**CCV Requirements**

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

**Low Level Standard (CRI) Requirements**

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

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

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

**Interference Check Sample (ICS)**

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

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Client sample 246571001 (RE46-10-11505) from SDG 10-1673-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD 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.

10-1665-1-PERLCMS

Page 2 of 4

### **Technical Information**

#### **Holding Time Specifications**

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

#### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

#### **Sample Re-extraction/Re-analysis**

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

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

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

#### **Manual Integrations**

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

#### **Method Comments**

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

#### **Additional Comments**

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

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

#### **Perchlorate Isotope Ratio**

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

### System Configuration

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

### Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

### Certification Statement

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

### Review Validation:

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

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

Reviewer: Herbert M. Mauer Date: 02/19/10

# SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 952834

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8234

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665-1

GEL Sample ID: 246555001

Date Filtered: 13-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate Isotope Ratio						1	14-FEB-10 09:15	per0213082a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate-O(18)			0.484	ug/L		1	14-FEB-10 09:15	per0213082a

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

\*Concentration =

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

# QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1665-1

Extract Batch Code: 952834

Date Filtered: 13-FEB-10

Matrix: WATER

Sample ID: 1202042253

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.214	ug/L	107		85 - 115
Perchlorate Isotope Ratio		3.36				-
Perchlorate-101	0.200	.199	ug/L	99.4		85 - 115
Perchlorate-O(18)		.491	ug/L			-

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



Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1665-1

Extract Batch Code: 952834

Date Filtered: 13-FEB-10

Matrix: WATER

Sample ID: 1202042256

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.202	ug/L	101		70 - 130
Perchlorate Isotope Ratio		3.11				
Perchlorate-101	0.200	.203	ug/L	101		70 - 130
Perchlorate-O(18)		.467	ug/L			

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

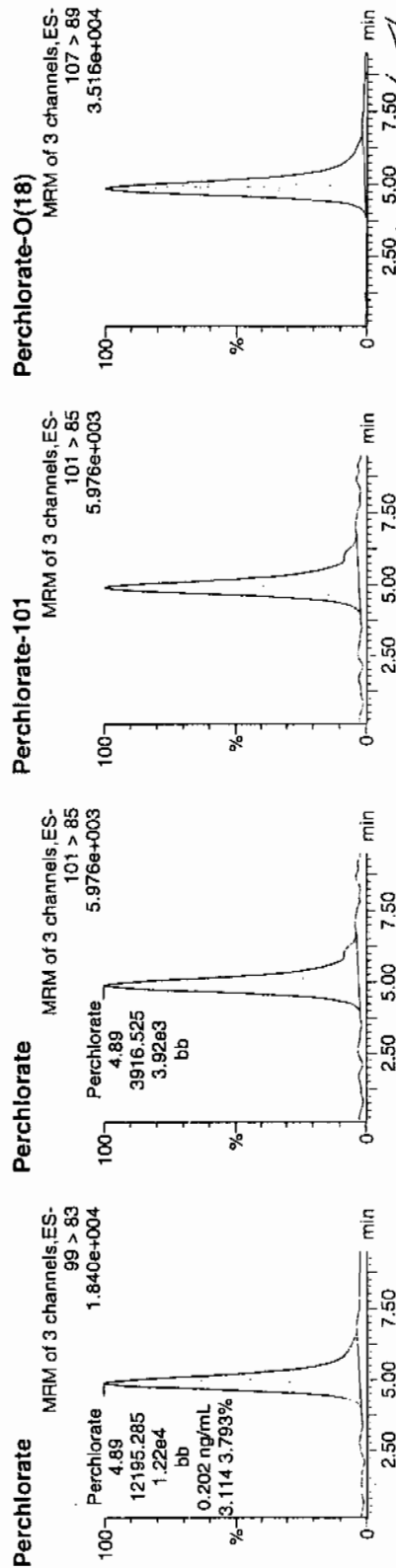
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

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Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213081a  
Date: 14-Feb-2010  
Time: 09:03:11  
ID: 1202042256  
Vial: 3:1,C

12-15-10  
12-15-10  
12-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042256	Perchlorate	99 > 83	4.89	12195.285	12195.285	bb			0.2016	100.80	0.80	451.544	3.11
1202042256	Perchlorate-101	101 > 85	4.89	3916.525	3916.525	bb			0.2026	101.30	1.30	273.262	
1202042256	Perchlorate-O(18)	107 > 89	4.86	24066.906	24066.906	bb			0.4669	93.38	-6.62	1238.1...	

# Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1665-1

Extract Batch Code: 952834

Date Extracted: 13-FEB-10

GEL MS/PS ID: 1202042254

Client ID: RE46-10-11505

GEL MSD/PSD ID: 1202042255

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00	ug/L	0.198	99.1		.191	95.4		3.76		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.23			3.3			0			-
Perchlorate-101	0.200	0.00	ug/L	0.192	95.9		.181	90.5		5.83		30	75 - 125
Perchlorate-O(18)	0	0.456	ug/L	0.455			.453			.394			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	13-FEB-10	per0213001a	IPB001
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213001a	IPB001
Perchlorate	0.00	0	NA	13-FEB-10	per0213002a	IPB001
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213002a	IPB001

**Quantify Sample Report** MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

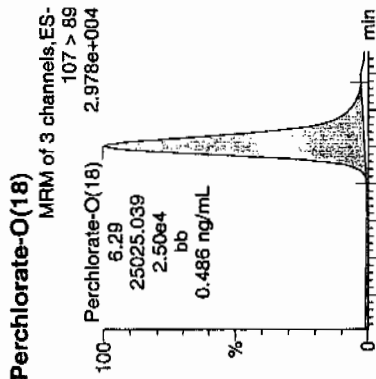
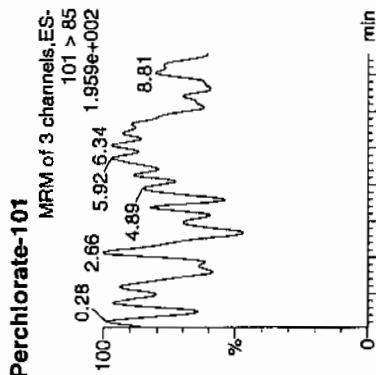
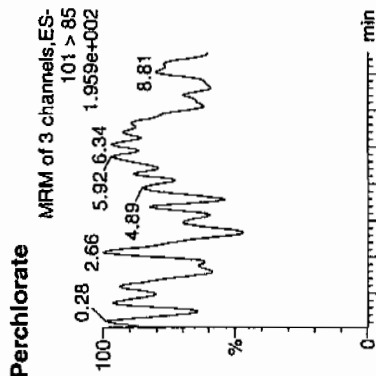
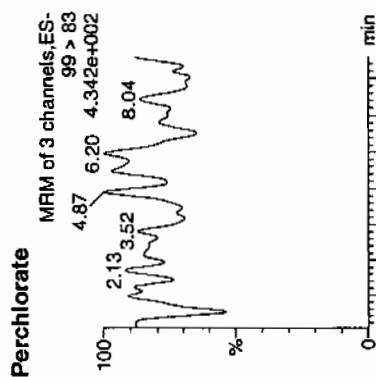
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Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021310a.mdb 14 Feb 2010 16:01:32  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021310a.cdb 14 Feb 2010 16:01:52

Name: per0213001a  
Date: 13-Feb-2010  
Time: 16:18:45  
ID: IPB001  
Vial: 1:1,A

02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	IonRatio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	6.29	25025.039	25025.039	bb			0.4855	97.10	-2.90	473.044	0.00

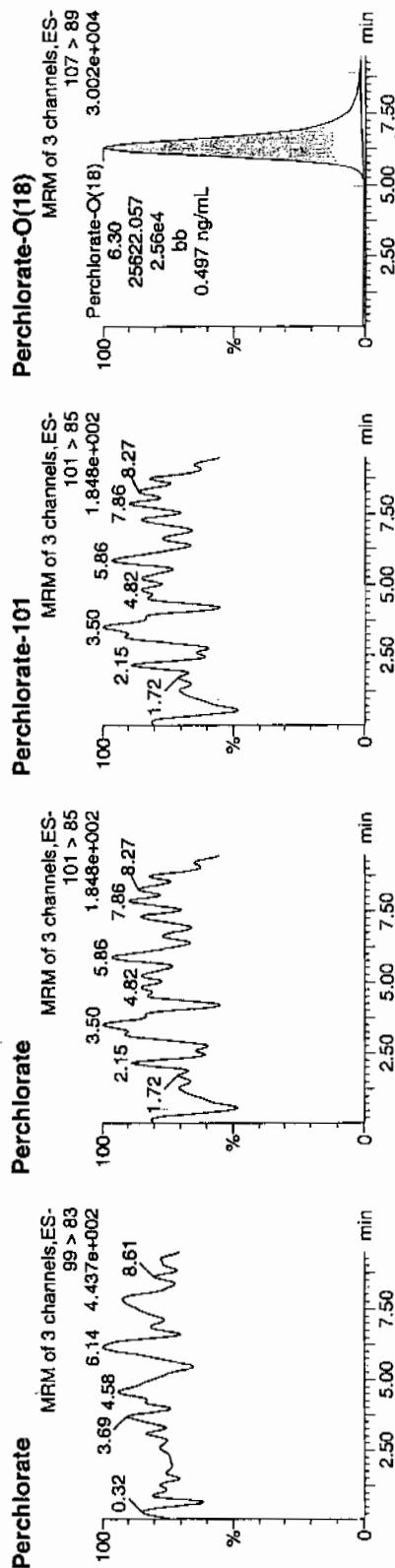
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

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Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213002a  
Date: 13-Feb-2010  
Time: 16:31:17  
ID: IPB001  
Vial: 1:1,A

OL-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	6.30	25622.057	25622.057	bb			0.4971	99.42	-0.58	1156.9...	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	13-FEB-10	per0213008a	IPB002
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213008a	IPB002
Perchlorate	0.00	0	NA	13-FEB-10	per0213010a	IPB003
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213010a	IPB003
Perchlorate	0.00	0	NA	13-FEB-10	per0213022a	IPB004
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213022a	IPB004
Perchlorate	0.00	0	NA	13-FEB-10	per0213033a	IPB005
Perchlorate-101	0.00	0	NA	13-FEB-10	per0213033a	IPB005
Perchlorate	0.00	0	NA	14-FEB-10	per0213044a	IPB006
Perchlorate-101	0.00	0	NA	14-FEB-10	per0213044a	IPB006
Perchlorate	0.00	0	NA	14-FEB-10	per0213055a	IPB007
Perchlorate-101	0.00	0	NA	14-FEB-10	per0213055a	IPB007
Perchlorate	0.00	0	NA	14-FEB-10	per0213066a	IPB008

## Perchlorate Continuing Calibration Blank

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	14-FEB-10	per0213066a	IPB008
Perchlorate	0.00	0	NA	14-FEB-10	per0213077a	IPB009
Perchlorate-101	0.00	0	NA	14-FEB-10	per0213077a	IPB009
Perchlorate	0.00	0	NA	14-FEB-10	per0213089a	IPB010
Perchlorate-101	0.00	0	NA	14-FEB-10	per0213089a	IPB010



**Quantify Sample Report** MassLynx 4.0 SP4

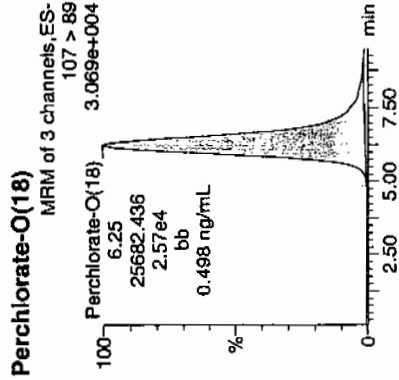
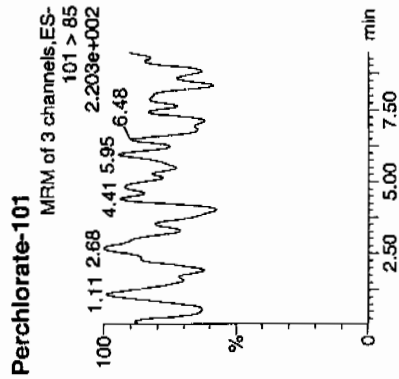
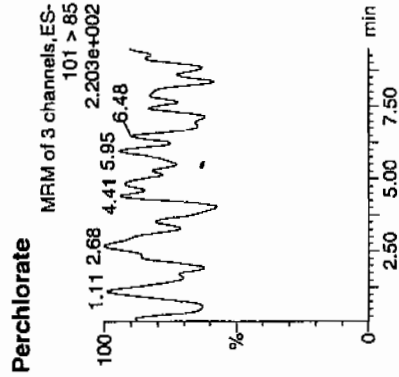
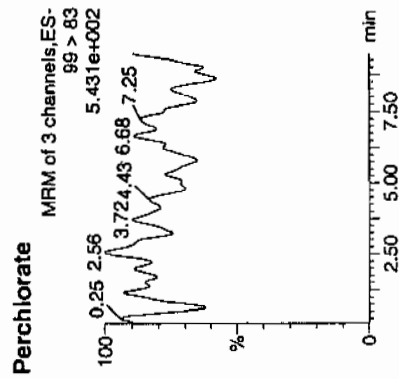
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

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Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

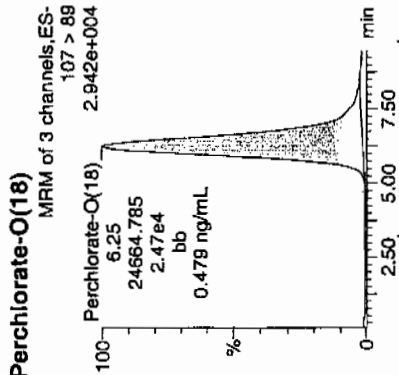
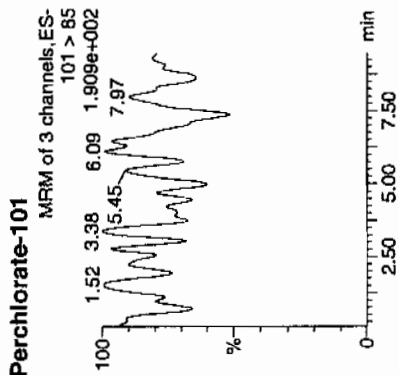
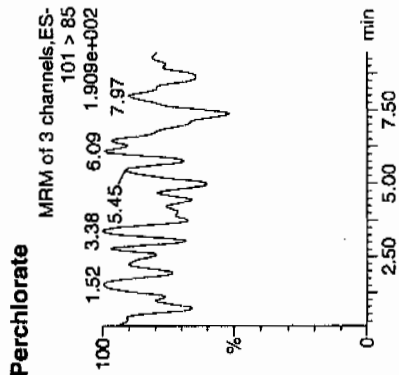
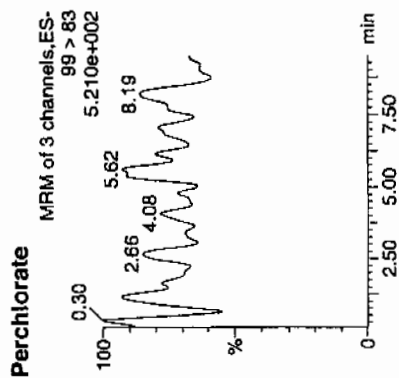
Name: per0213008a  
Date: 13-Feb-2010  
Time: 17:46:24  
ID: IPB002  
Vial: 1:1,A

02-13-10



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	6.25	25682.436	25682.436	bb			0.4983	99.65	-0.35	232.669	

02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	6.25	24664.785	24664.785	bb			0.4785	95.70	-4.30	699.730	

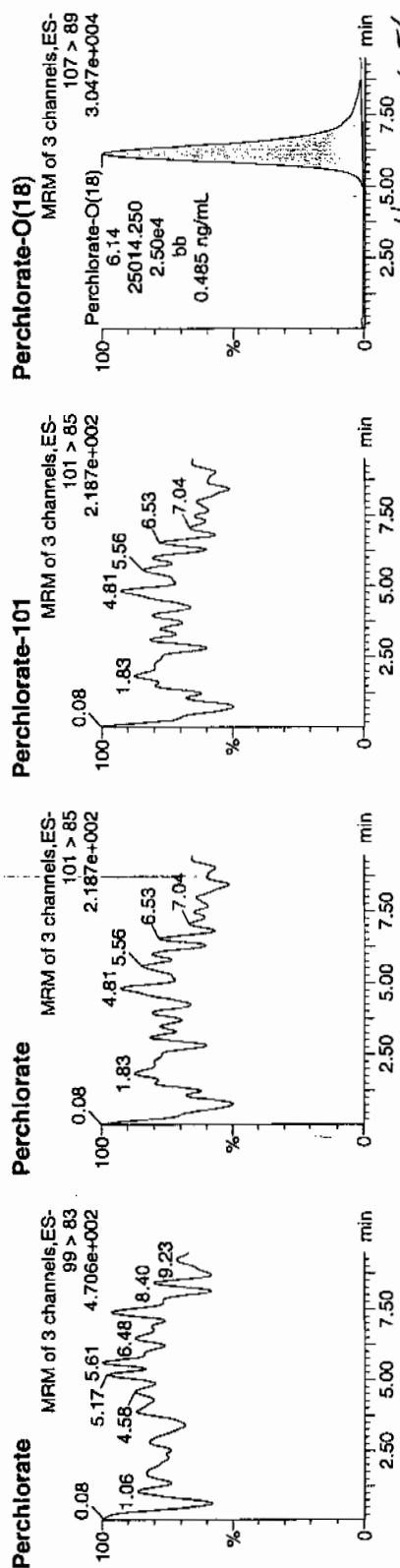
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213022a  
Date: 13-Feb-2010  
Time: 20:41:57  
ID: IPB004  
Vial: 1:1A

OL-5-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83											
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	6.14	25014.250	25014.250	bb			0.4853	97.06	-2.94	569.335	0.00

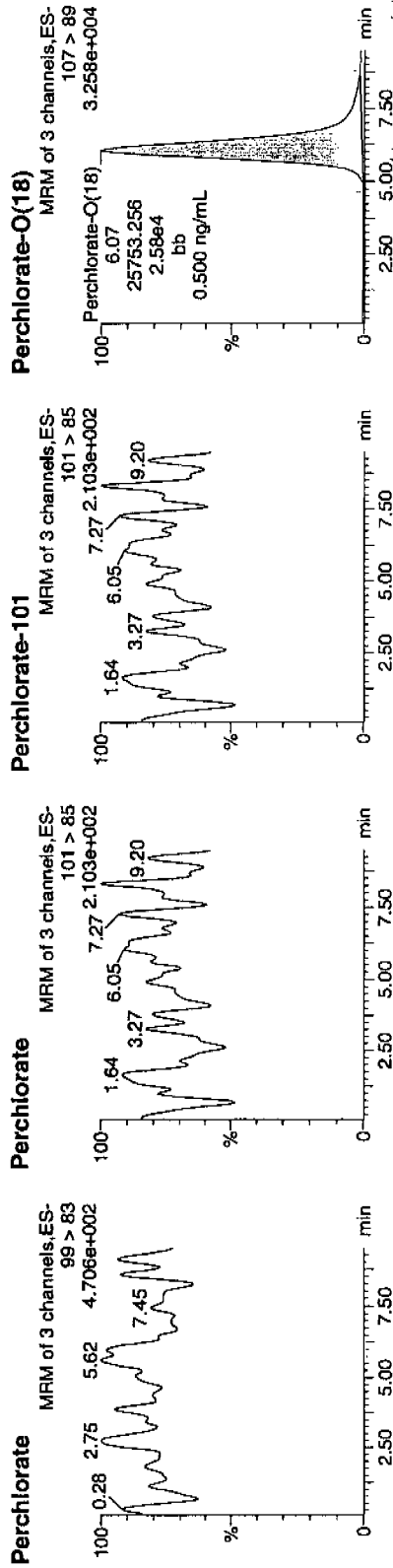
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213033a  
Date: 13-Feb-2010  
Time: 22:59:55  
ID: IPB005  
Vial: 1:1,A

02-10-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	6.07	25753.256	25753.256	bb			0.4996	99.93	-0.07	1685.6...	

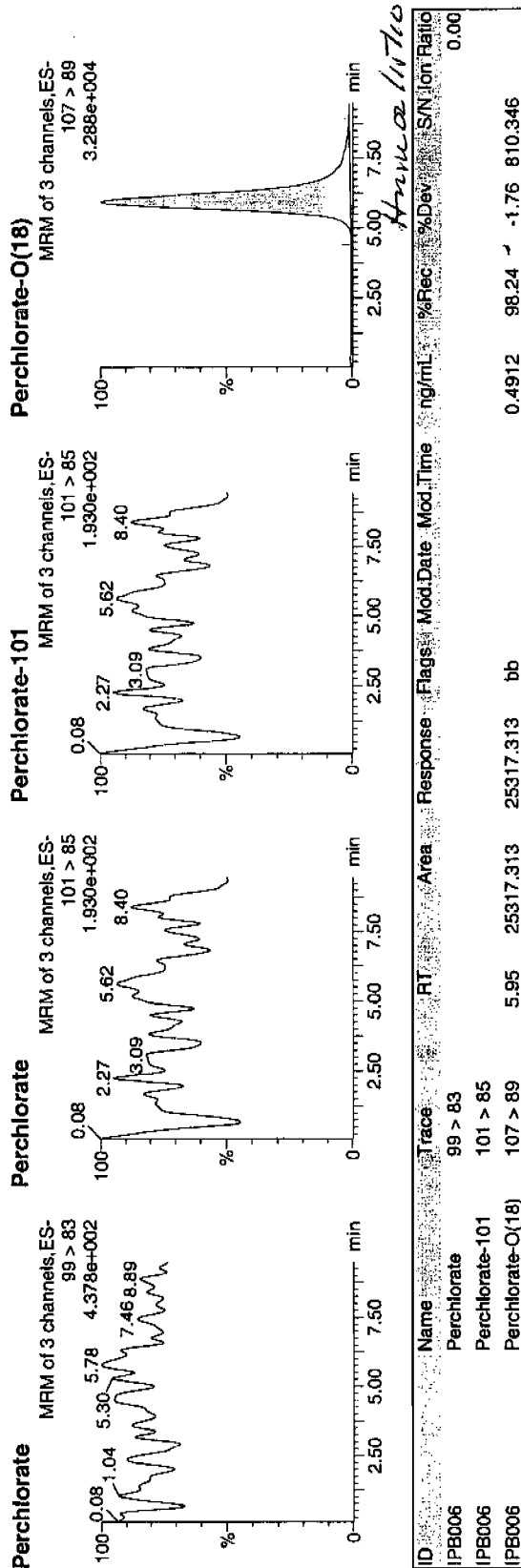
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213044a  
Date: 14-Feb-2010  
Time: 01:17:56  
ID: IPB006  
Vial: 1:1,A

02-15-10



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213055a

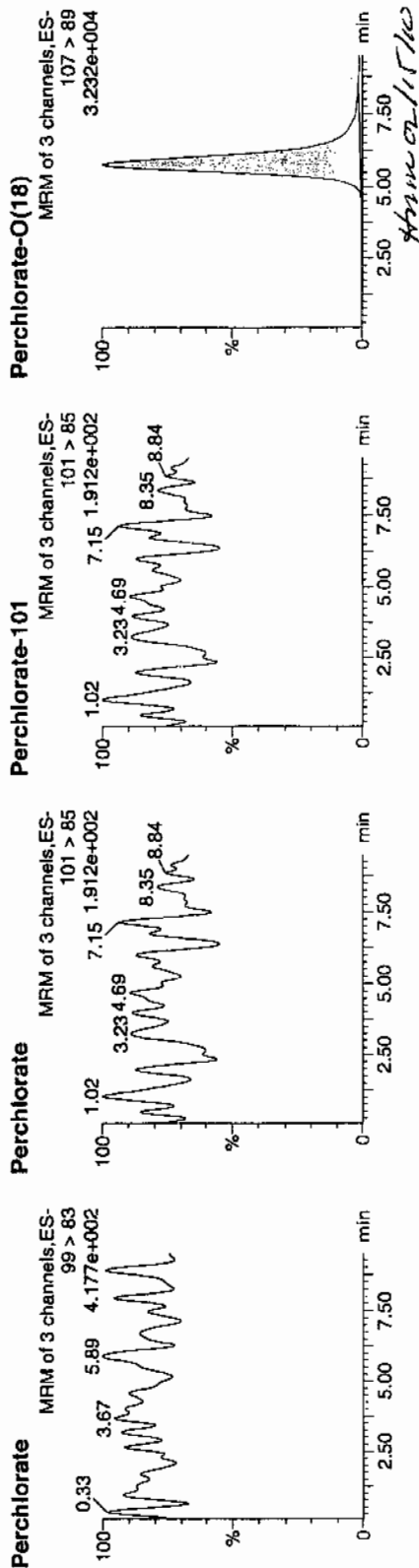
Date: 14-Feb-2010

Time: 03:36:11

ID: IPB007

Vial: 1:1,A

02-13-10



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	5.77	24244.982	24244.982	bb			0.4704	94.07	-5.93	2034.3...	

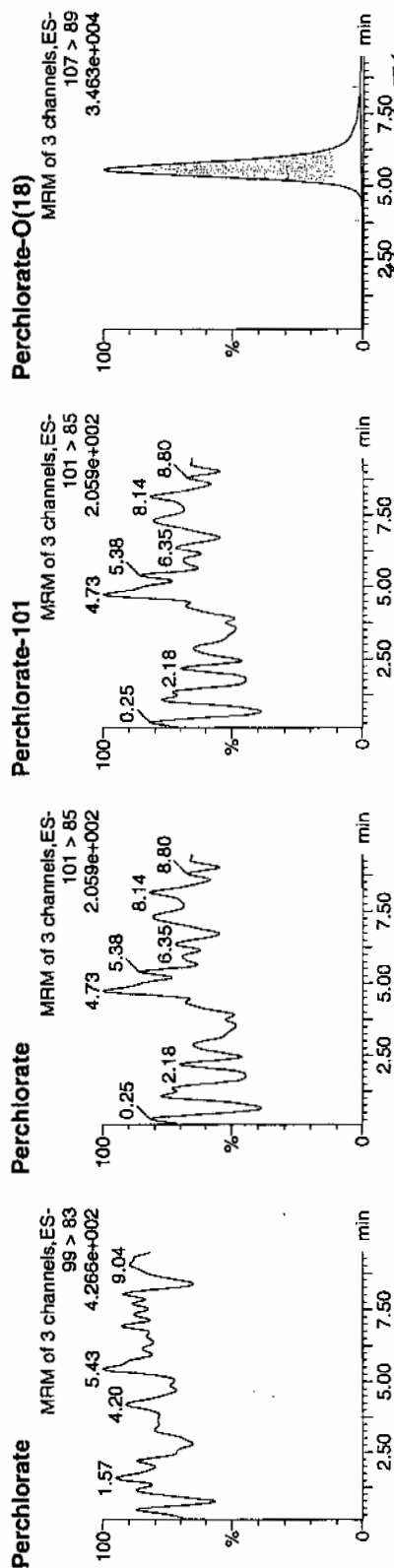
# Quantify Sample Report MassLynx 4.0 SP4 The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213066a  
Date: 14-Feb-2010  
Time: 05:54:30  
ID: IPB008  
Vial: 1:1,A

02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83											0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	5.57	24954.354	24954.354	bb			0.4841	96.83	-3.17	1617.8...	

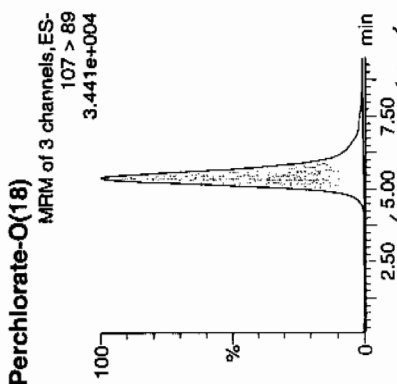
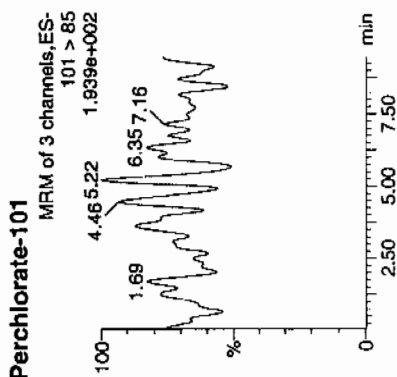
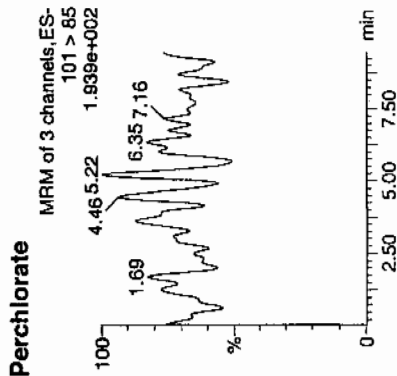
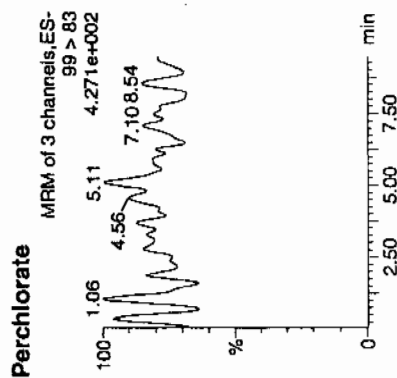
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213077a  
Date: 14-Feb-2010  
Time: 08:12:51  
ID: IPB009  
Vial: 1:1,A

02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83											0.00
IPB009	Perchlorate-101	101 > 85	5.40	24315.143	24315.143	bb			0.4717	94.35	-5.65	599.312	
IPB009	Perchlorate-O(18)	107 > 89											



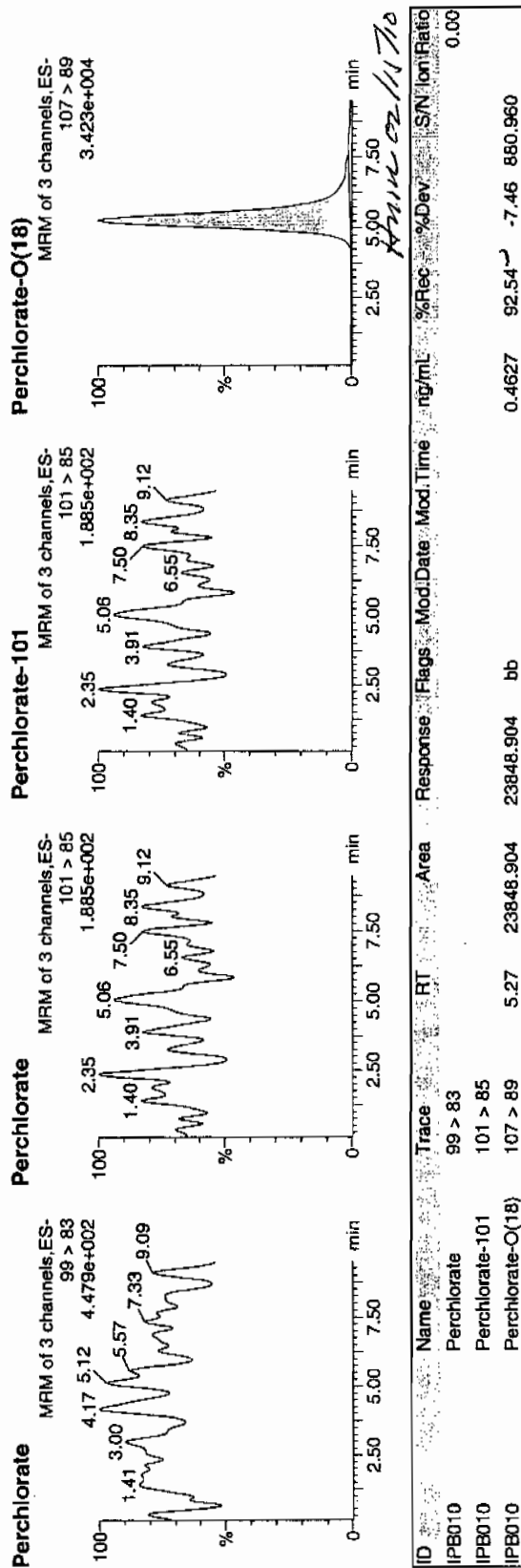
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213089a  
Date: 14-Feb-2010  
Time: 10:43:39  
ID: IPB010  
Vial: 1:1,A

02-15-10



Nairb.ref

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

Updated 20 April '95

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

QUANTO ULTIMA: nairb\_01\_08\_08.cal

Calibration Report - MS1 Static

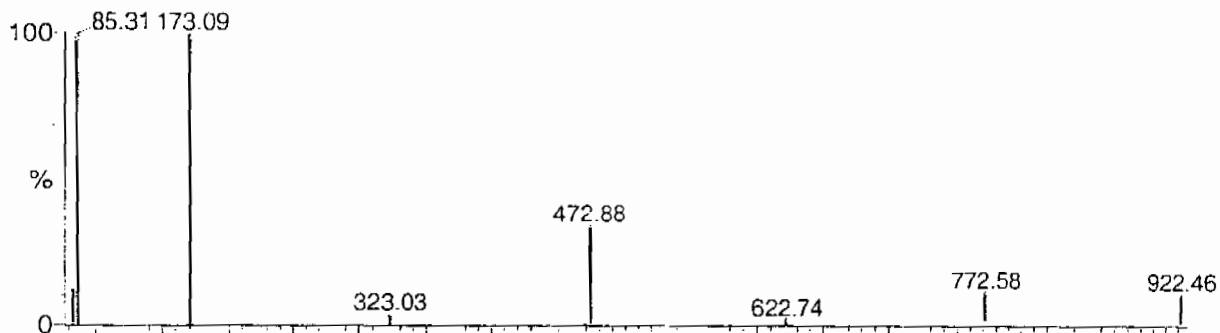
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

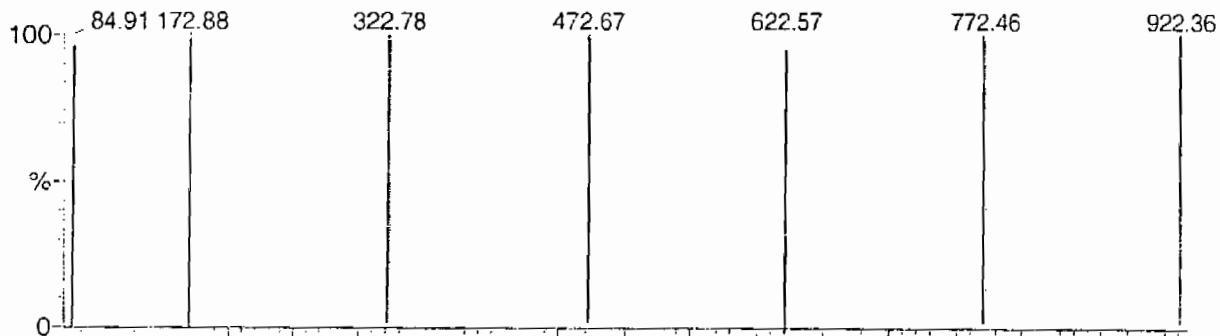
DATA HIGHLIGHTED BY GEL 01-07-08

Data file: STATMS1 - Uncalibrated

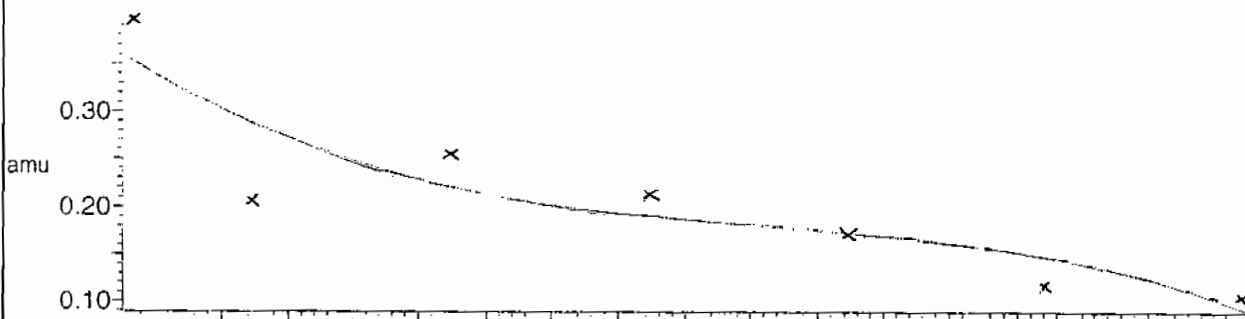
7 matches of 7 tested references



Reference file: Nairb

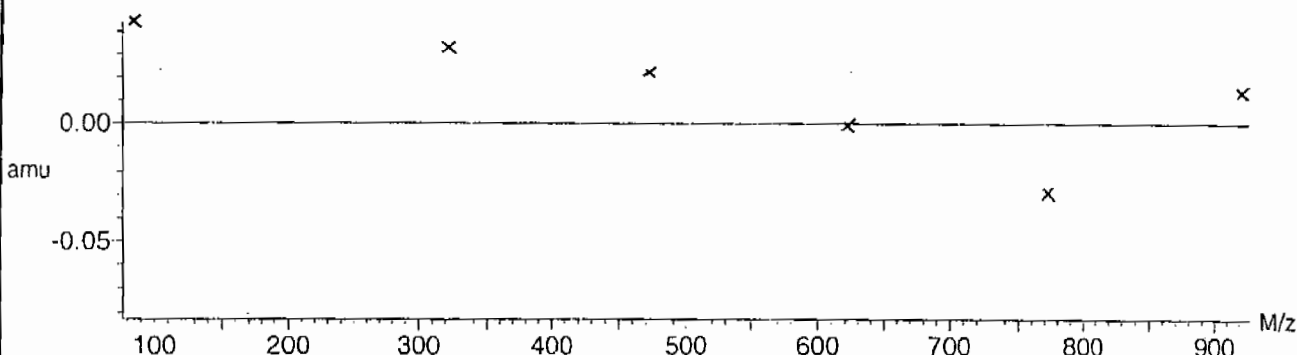


Mass difference (Raw - Ref mass)



Residuals

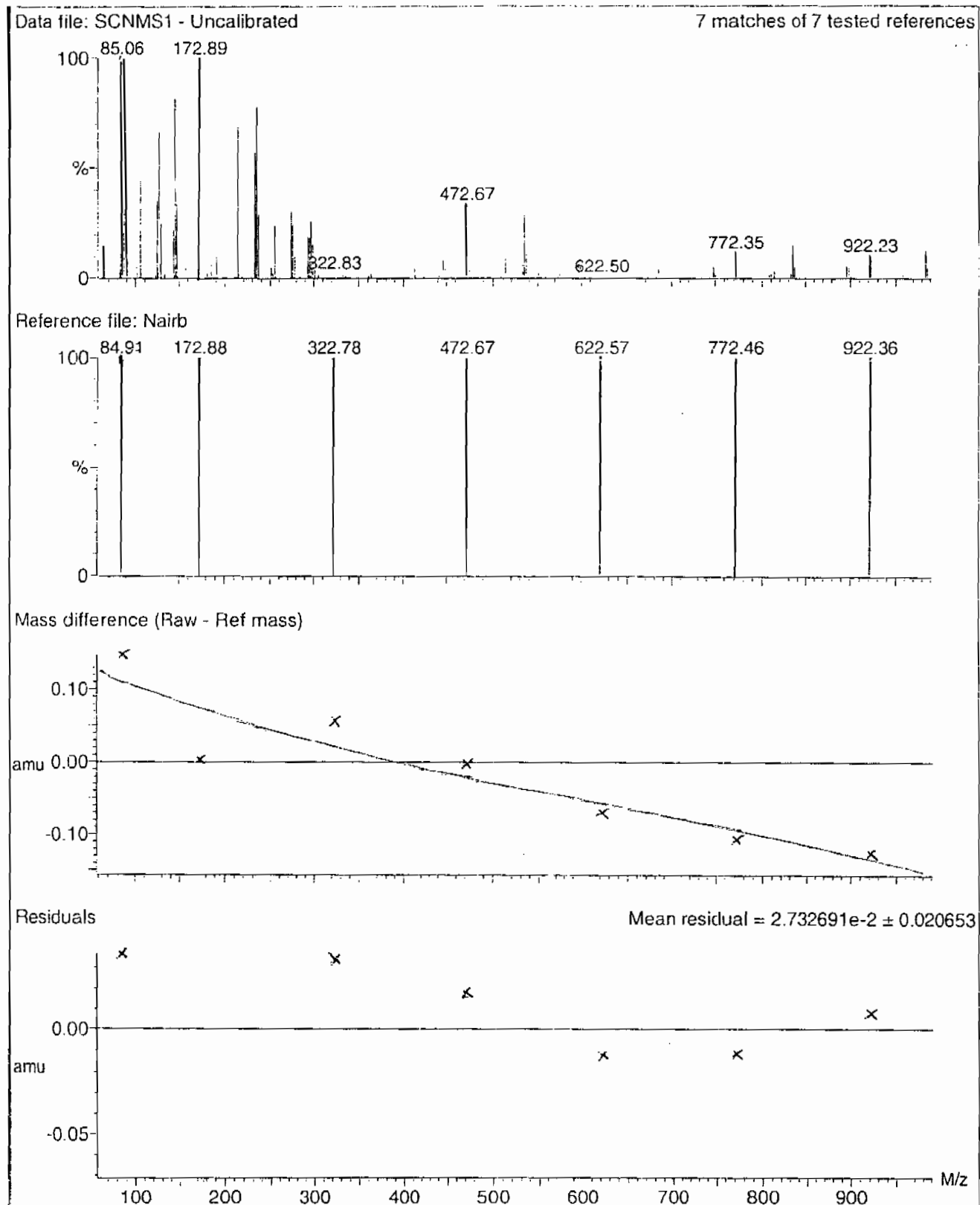
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

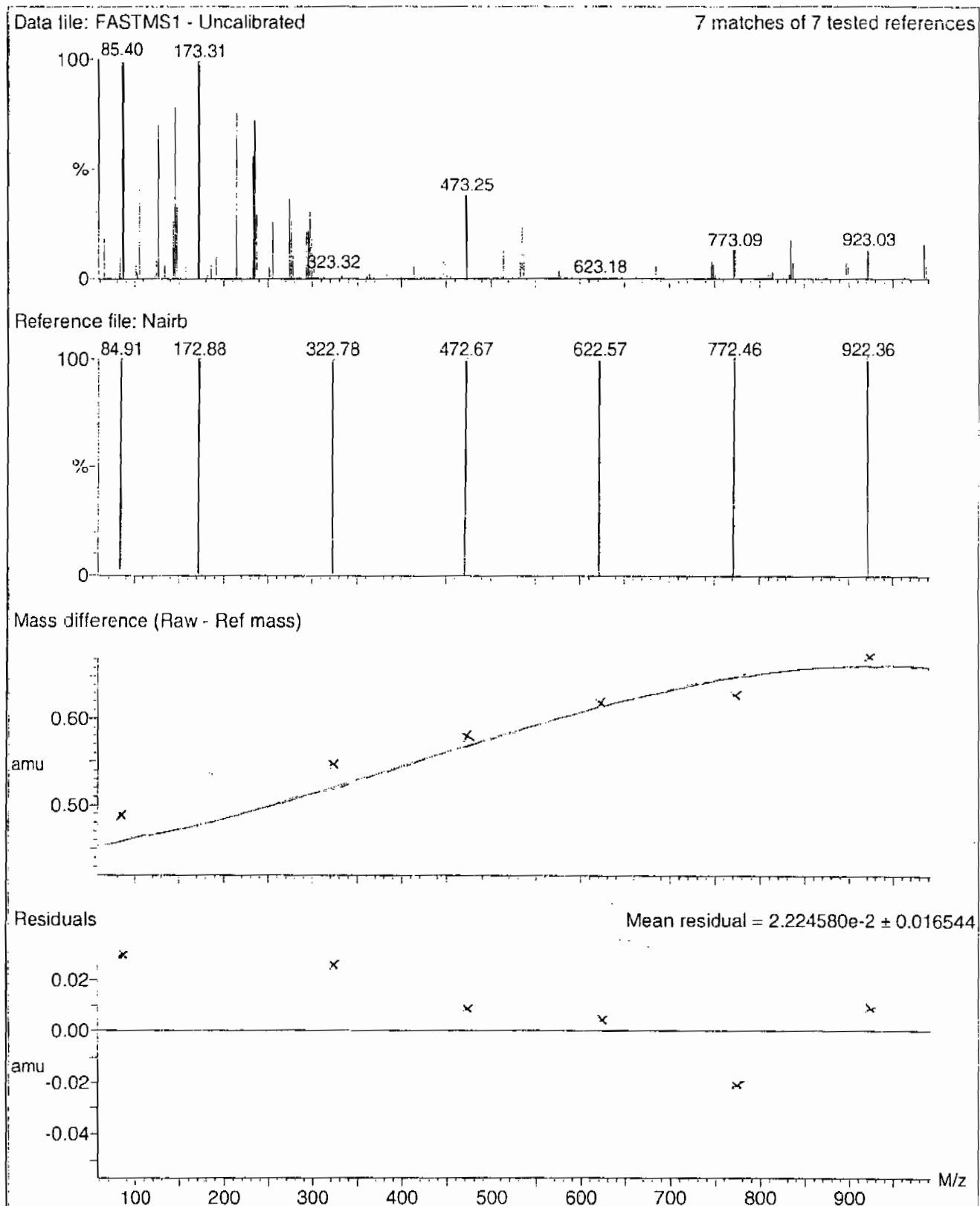
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



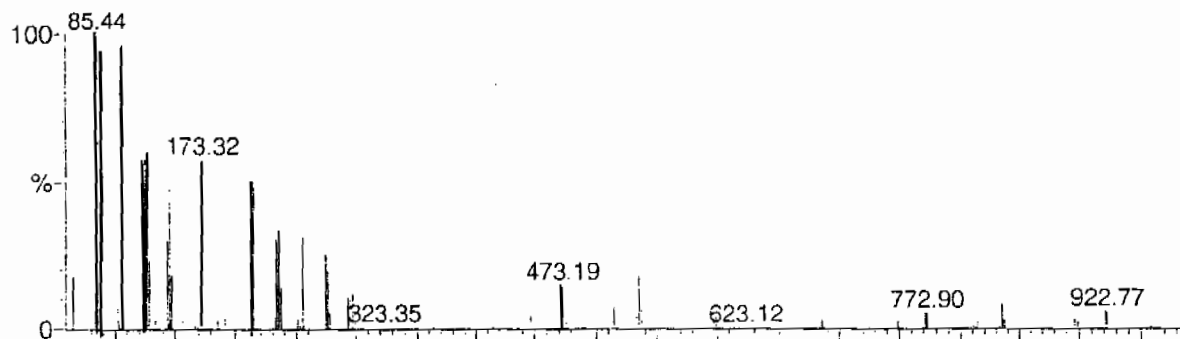
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

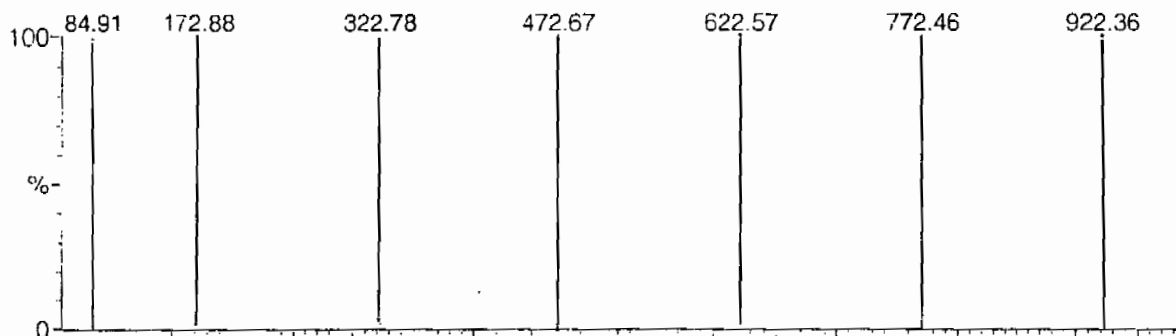
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

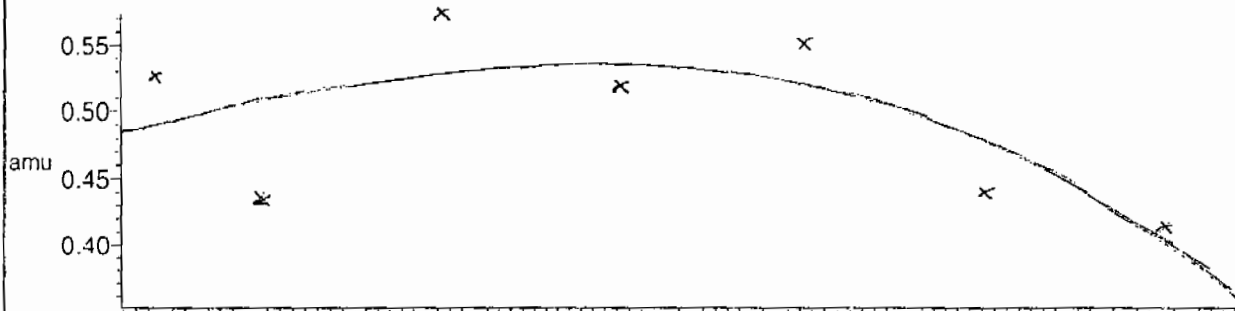
7 matches of 7 tested references



Reference file: Nairb

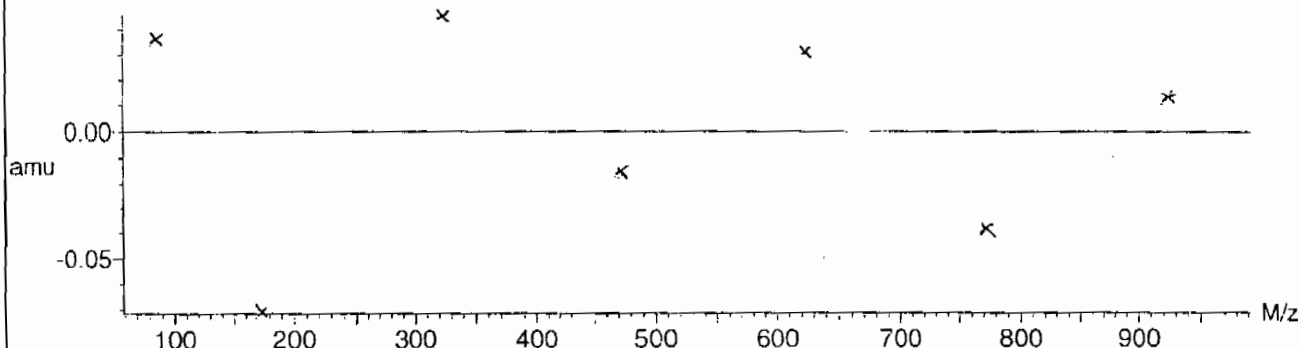


Mass difference (Raw - Ref mass)



Residuals

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



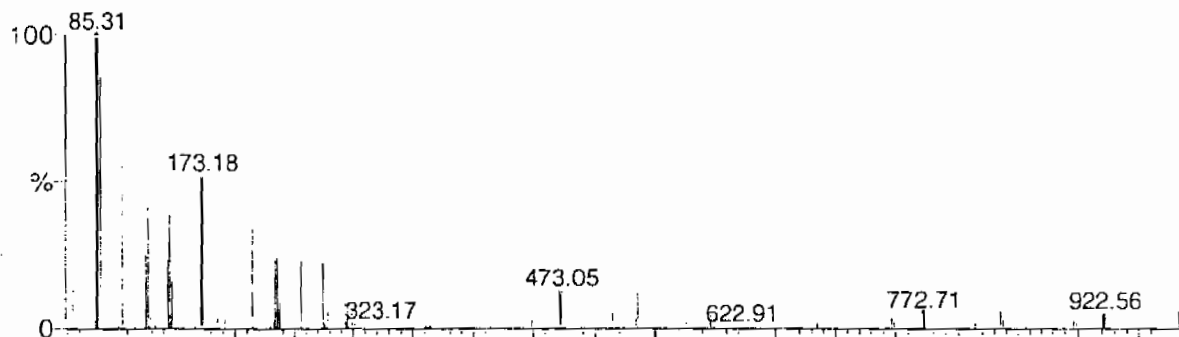
Calibration Report - MS2 Scanning

Page 1 of 1

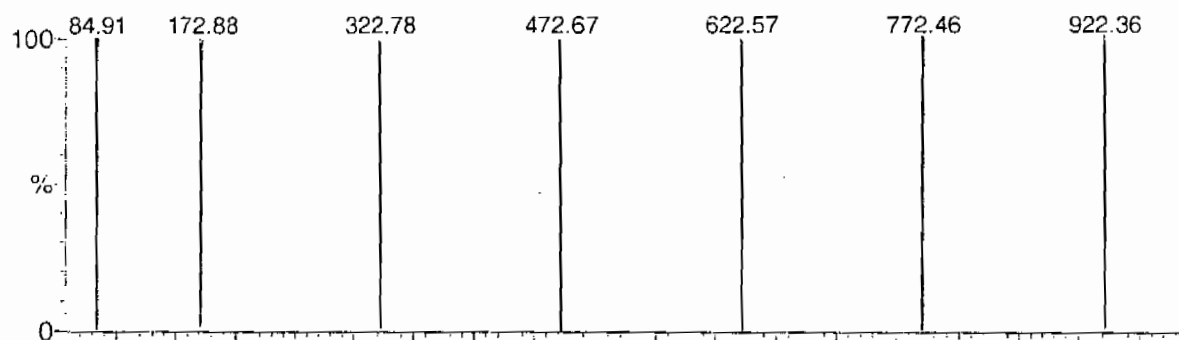
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

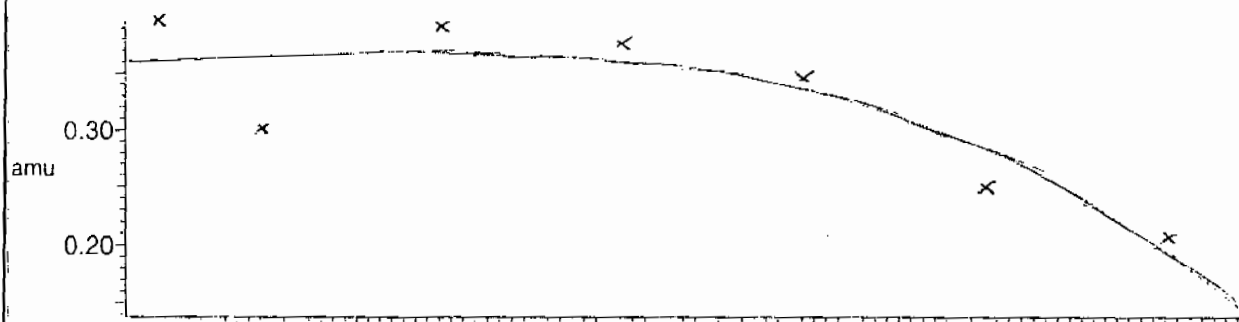
7 matches of 7 tested references



Reference file: Nairb

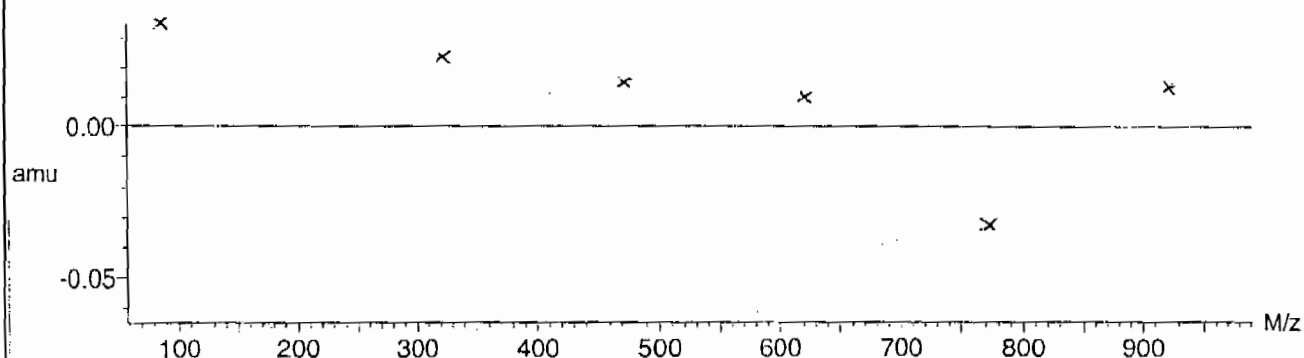


Mass difference (Raw - Ref mass)



Residuals

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



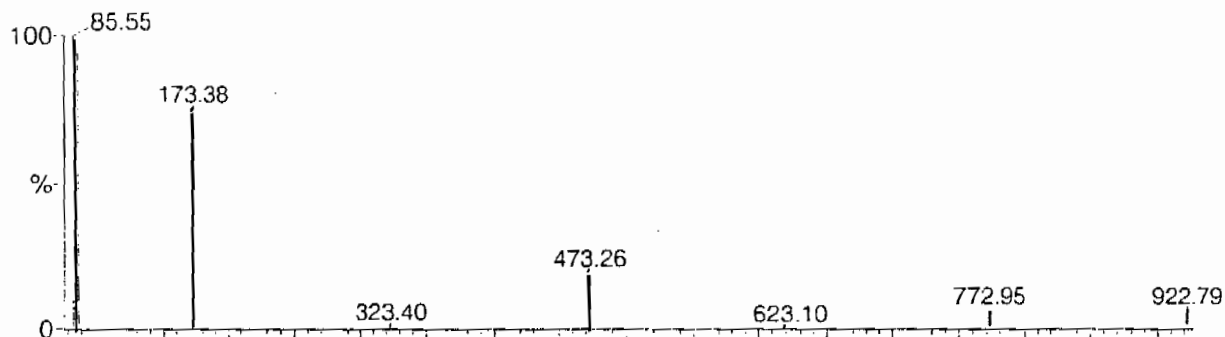
Calibration Report - MS2 Static

Page 1 of 1

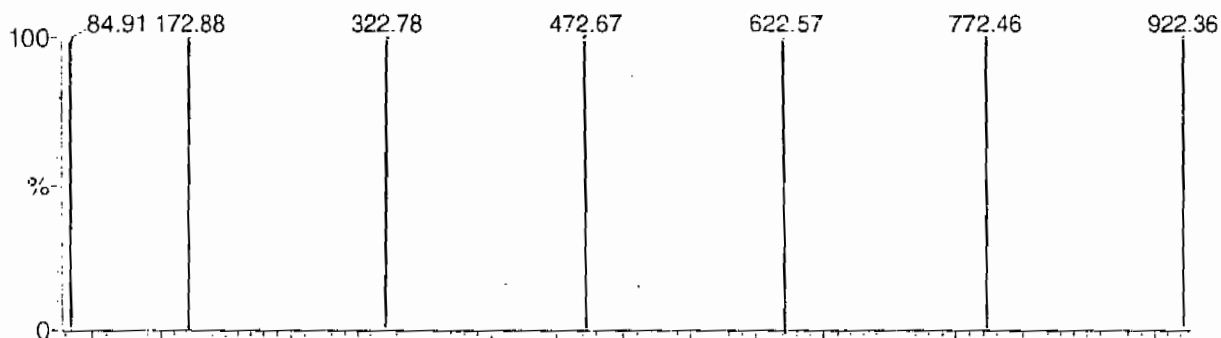
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

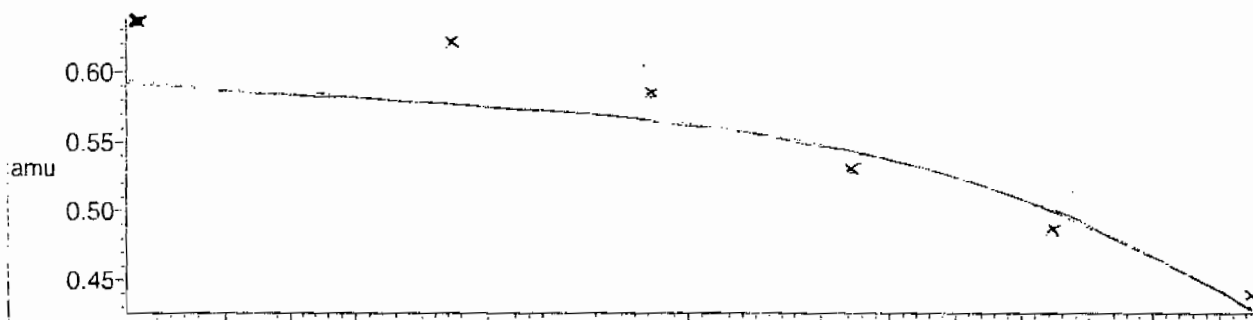
7 matches of 7 tested references



Reference file: Nairb

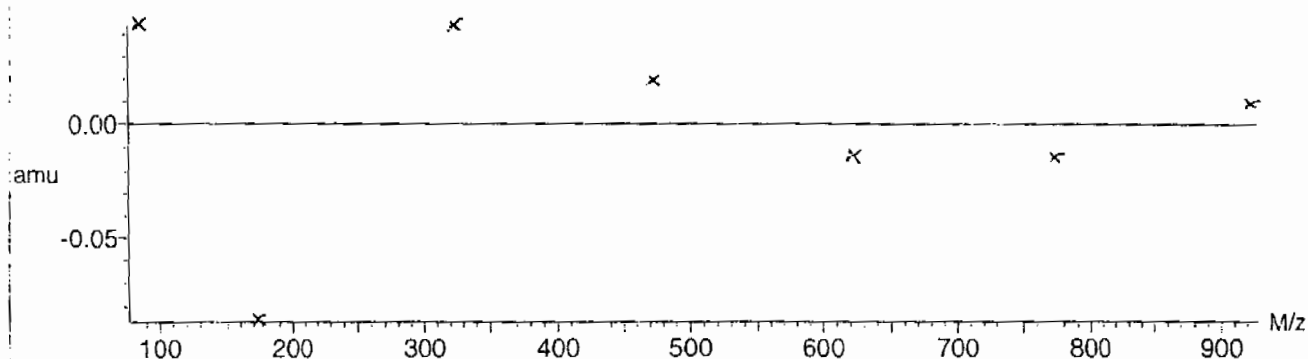


Mass difference (Raw - Ref mass)



Residuals

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





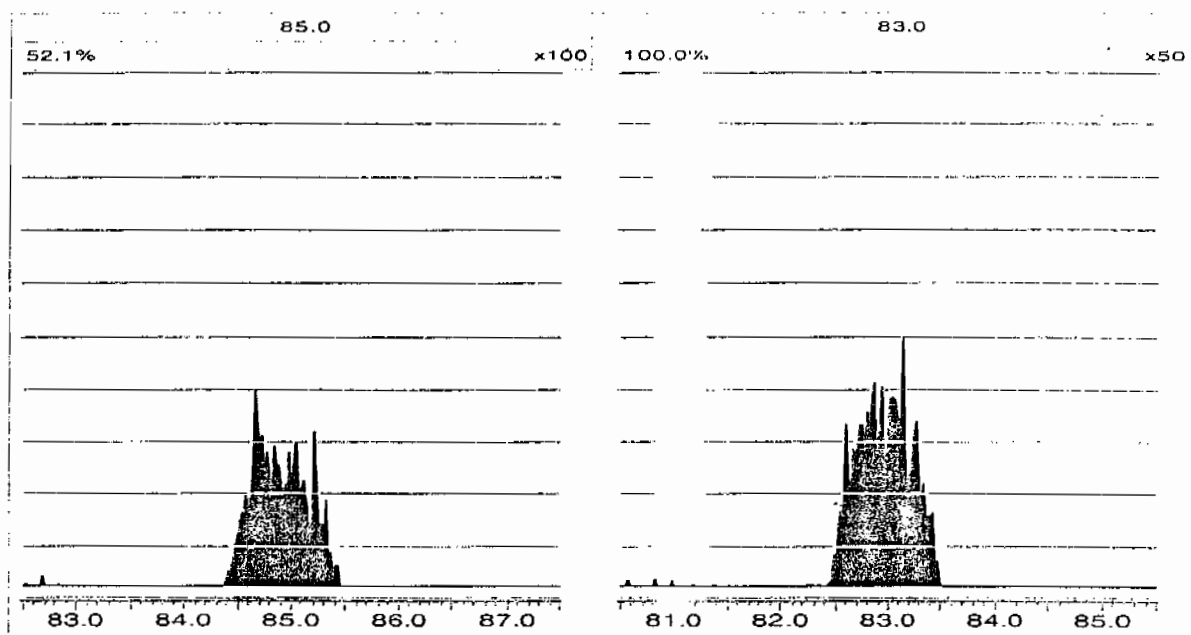
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Saturday, February 13, 2010 11:59:50 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1665-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0213006a	13-FEB-10	25889.1				
Lower Area Limit			12944.55				
Upper Area Limit			51778.2				
1202042252	per0213079a	14-FEB-10 08:37	22627.7	5.4			
1202042253	per0213080a	14-FEB-10 08:50	25313	5.38	5.4083	1.005	
1202042256	per0213081a	14-FEB-10 09:03	24066.9	4.86	4.88657	1.005	
246555001	per0213082a	14-FEB-10 09:15	24968.5	5.31			

# SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 952834

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8234

Date Received: 09-FEB-10

GEL Job No (SDG): 10-1665-1

GEL Sample ID: 246555001

Date Filtered: 13-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate Isotope Ratio						1	14-FEB-10 09:15	per0213082a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	14-FEB-10 09:15	per0213082a
	Perchlorate-O(18)			0.484	ug/L		1	14-FEB-10 09:15	per0213082a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213082a

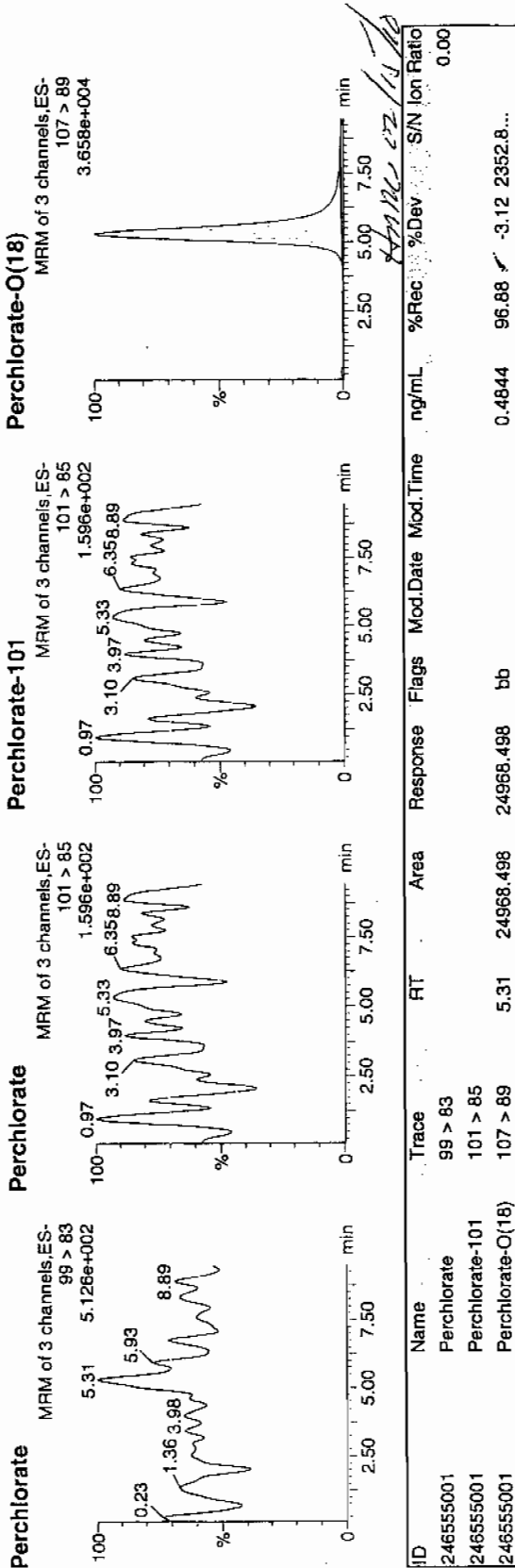
Date: 14-Feb-2010

Time: 09:15:43

ID: 246555001

Vial: 3:1,D

LANC | 952836 | L22 | 11 | 02-15-10



# STANDARDS DATA

## Perchlorate Initial Calibration

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

GEL Job No.(SDG): 10-1665-1Lab Name: General Engineering LaboratoriesLab Code: GELInstrument ID: LCMSMS Date Analyzed: 13-FEB-10HPLC 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: 60490.38Response Type: External StandardCurve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 13-FEB-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: 19330.44

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\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time

Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021310a.mdb 14 Feb 2010 16:01:32  
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021310a.cdb 14 Feb 2010 16:01:52

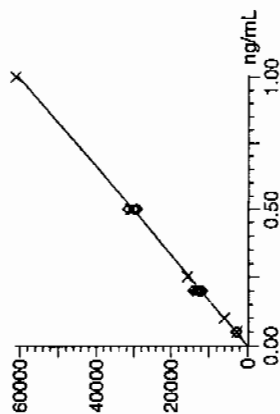
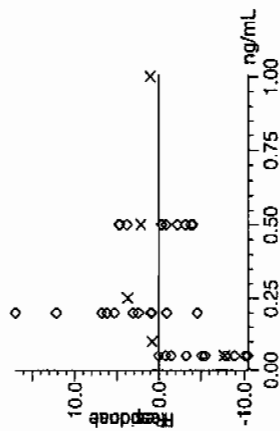
Compound name: Perchlorate

Response Factor: 60490.4

RRF SD: 2704.22, % Relative SD: 4.47049

Response type: External Std, Area

Curve type: RF



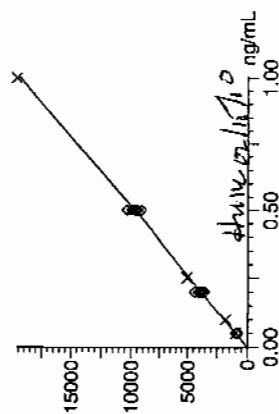
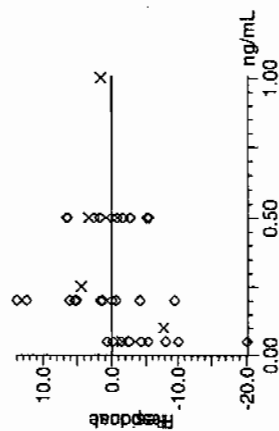
Compound name: Perchlorate-101

Response Factor: 19330.5

RRF SD: 951.058, % Relative SD: 4.92

Response type: External Std, Area

Curve type: RF



# Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time

Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

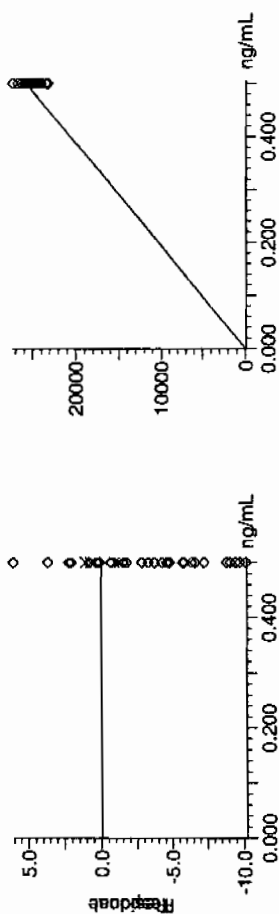
Compound name: Perchlorate-O(18)

Response Factor: 51544.1

RRF SD: 533.442, % Relative SD: 1.03492

Response type: External Std, Area

Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.85	13-FEB-10 17:58	per0213009a
Perchlorate Isotope Ratio		3.17		13-FEB-10 17:58	per0213009a
Perchlorate-101	.5	.51	102.55	13-FEB-10 17:58	per0213009a

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
 Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213009a

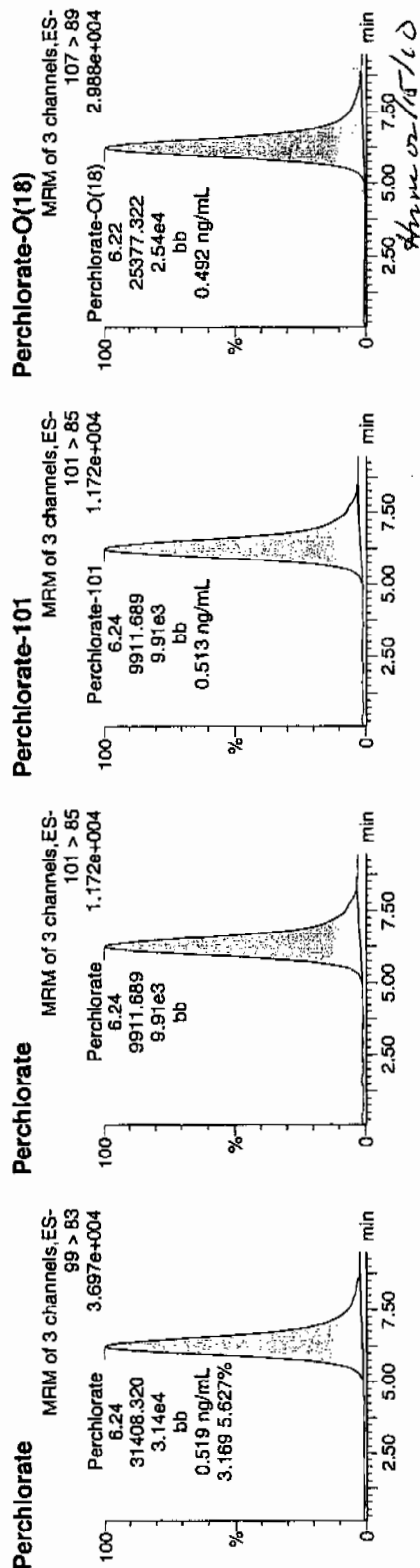
Date: 13-Feb-2010

Time: 17:58:56

ID: WCL100211-06ICV

Vial: 1:2,A

Pure  
 02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06ICV	Perchlorate	99 > 83	6.24	31408.320	31408.320	bb			0.5192	103.85	3.85	1064.5...	3.17
WCL100211-06ICV	Perchlorate-101	101 > 85	6.24	9911.689	9911.689	bb			0.5128	102.55	2.55	468.706	
WCL100211-06ICV	Perchlorate-O(18)	107 > 89	6.22	25377.322	25377.322	bb			0.4923	98.47	-1.53	420.313	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.12	13-FEB-10 20:29	per0213021a
Perchlorate Isotope Ratio		3.13		13-FEB-10 20:29	per0213021a
Perchlorate-101	.5	.5	99.24	13-FEB-10 20:29	per0213021a
Perchlorate	.5	.52	104.82	13-FEB-10 22:47	per0213032a
Perchlorate Isotope Ratio		3.08		13-FEB-10 22:47	per0213032a
Perchlorate-101	.5	.53	106.61	13-FEB-10 22:47	per0213032a
Perchlorate	.5	.52	104.65	14-FEB-10 01:05	per0213043a
Perchlorate Isotope Ratio		3.08		14-FEB-10 01:05	per0213043a
Perchlorate-101	.5	.53	106.37	14-FEB-10 01:05	per0213043a
Perchlorate	.5	.48	96.83	14-FEB-10 03:23	per0213054a
Perchlorate Isotope Ratio		3.2		14-FEB-10 03:23	per0213054a
Perchlorate-101	.5	.47	94.56	14-FEB-10 03:23	per0213054a
Perchlorate	.5	.48	96.17	14-FEB-10 05:41	per0213065a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.01		14-FEB-10 05:41	per0213065a
Perchlorate-101	.5	.5	100	14-FEB-10 05:41	per0213065a
Perchlorate	.5	.5	99.72	14-FEB-10 08:00	per0213076a
Perchlorate Isotope Ratio		3.07		14-FEB-10 08:00	per0213076a
Perchlorate-101	.5	.51	101.72	14-FEB-10 08:00	per0213076a
Perchlorate	.5	.48	95.91	14-FEB-10 10:30	per0213088a
Perchlorate Isotope Ratio		3.16		14-FEB-10 10:30	per0213088a
Perchlorate-101	.5	.47	94.9	14-FEB-10 10:30	per0213088a

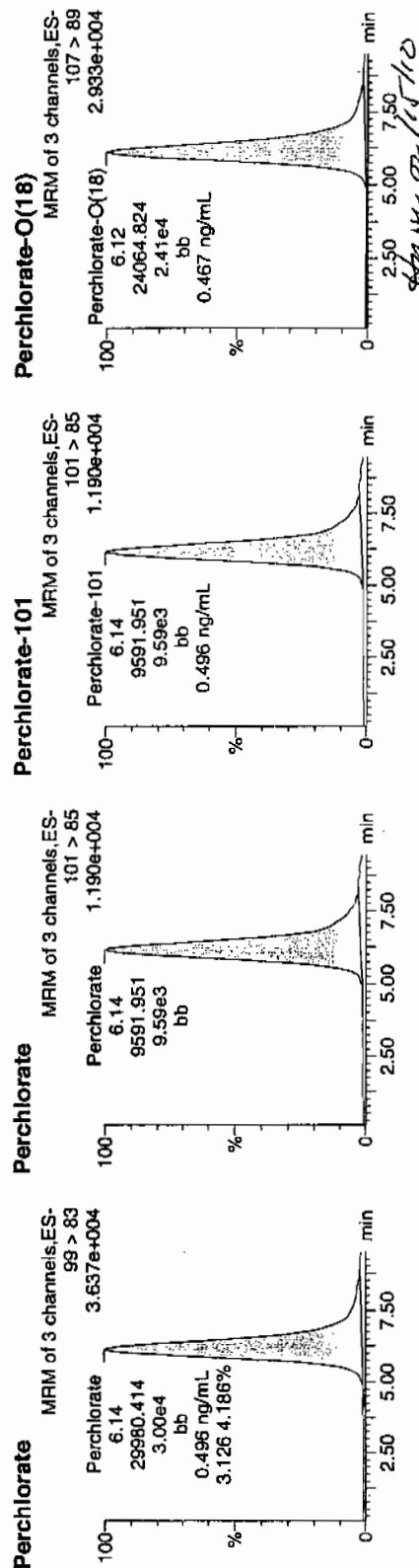
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213021a  
Date: 13-Feb-2010  
Time: 20:29:24  
ID: WCL100211-06CCV  
Vial: 1:2,A

*per*  
*ans*  
*02-13-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	6.14	29980.414	29980.414	bb			0.4956	99.12	-0.88	438.945	3.13
WCL100211-06CCV	Perchlorate-101	101 > 85	6.14	9591.951	9591.951	bb			0.4962	99.24	-0.76	241.470	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	6.12	24064.824	24064.824	bb			0.4669	93.38	-6.62	1904.6...	

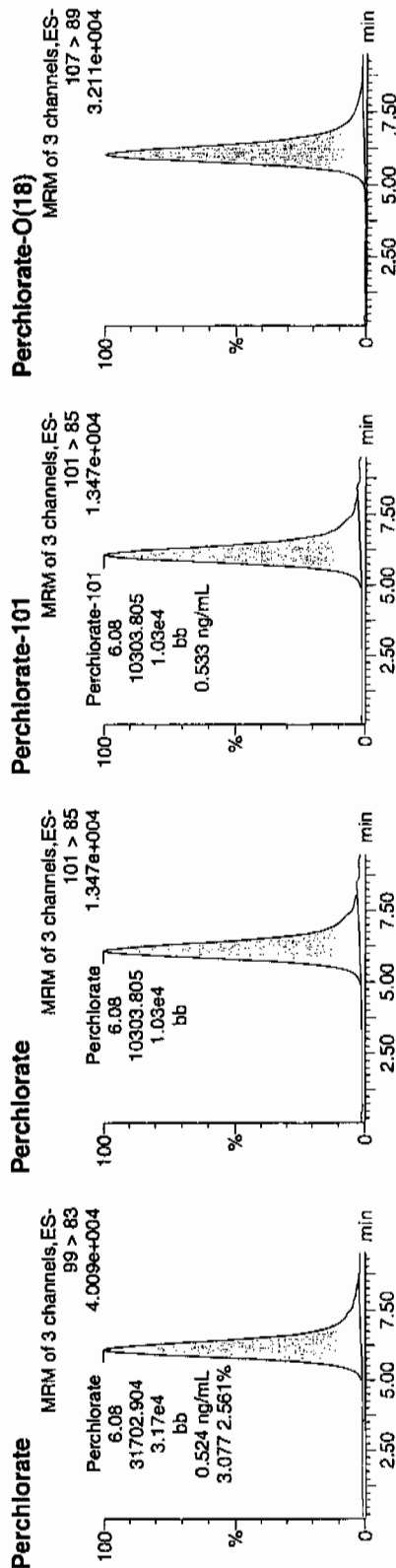
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213032a  
Date: 13-Feb-2010  
Time: 22:47:22  
ID: WCL100211-06CCV  
Vial: 1:2,A

*Run*  
*02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	6.08	31702.904	31702.904	bb			0.5241	104.82	4.82	1503.6...	3.08
WCL100211-06CCV	Perchlorate-101	101 > 85	6.08	10303.805	10303.805	bb			0.5330	106.61	6.61	391.742	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	6.05	25865.992	25865.992	bb			0.5018	100.36	0.36	1893.1...	



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

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213043a

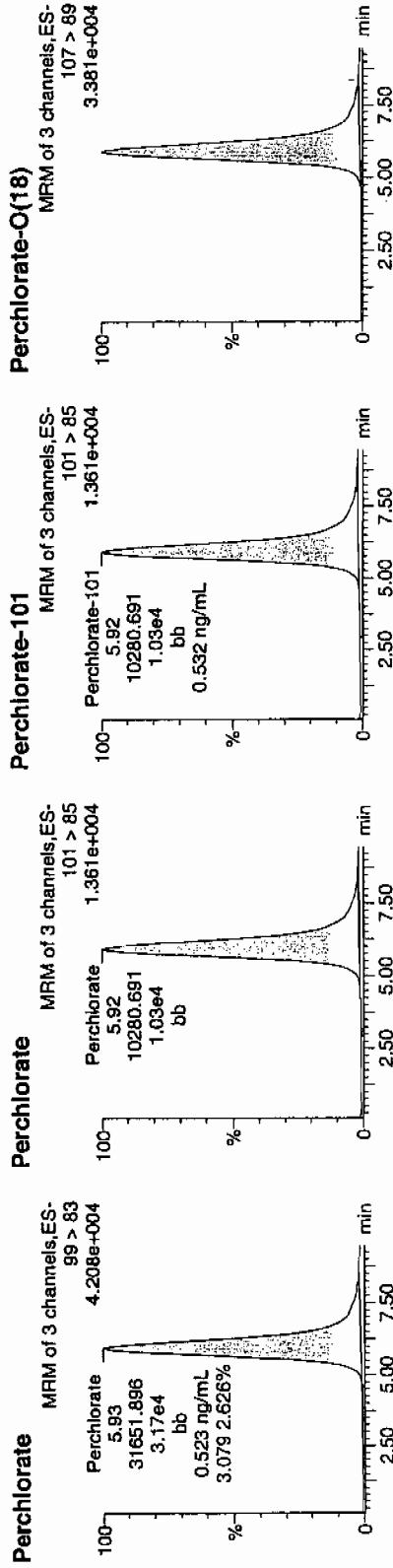
Date: 14-Feb-2010

Time: 01:05:24

ID: WCL100211-06CCV

Vial: 1:2, A

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*and*  
*02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	5.93	31651.896	31651.896	bb			0.5233	104.65	4.65	1450.3...	3.08
WCL100211-06CCV	Perchlorate-101	101 > 85	5.92	10280.691	10280.691	bb			0.5318	106.37	6.37	361.590	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	5.91	25794.512	25794.512	bb			0.5004	100.09	0.09	654.069	

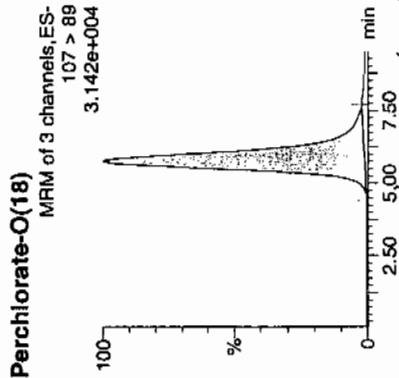
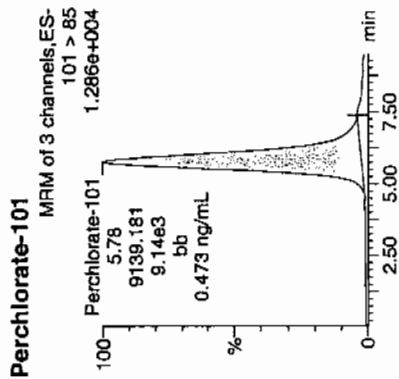
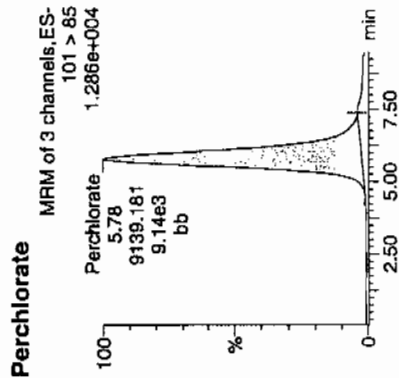
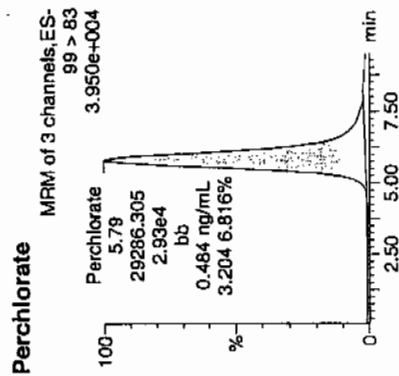
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213054a  
Date: 14-Feb-2010  
Time: 03:23:25  
ID: WCL100211-06CCV  
Vial: 1:2,A

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and  
02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	5.79	29286.305	29286.305	bb			0.4841	96.83	-3.17	783.374	3.20
WCL100211-06CCV	Perchlorate-101	101 > 85	5.78	9139.181	9139.181	bb			0.4728	94.56	-5.44	312.149	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	5.76	23152.023	23152.023	bb			0.4492	89.83	-10.17	1414.4...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213065a

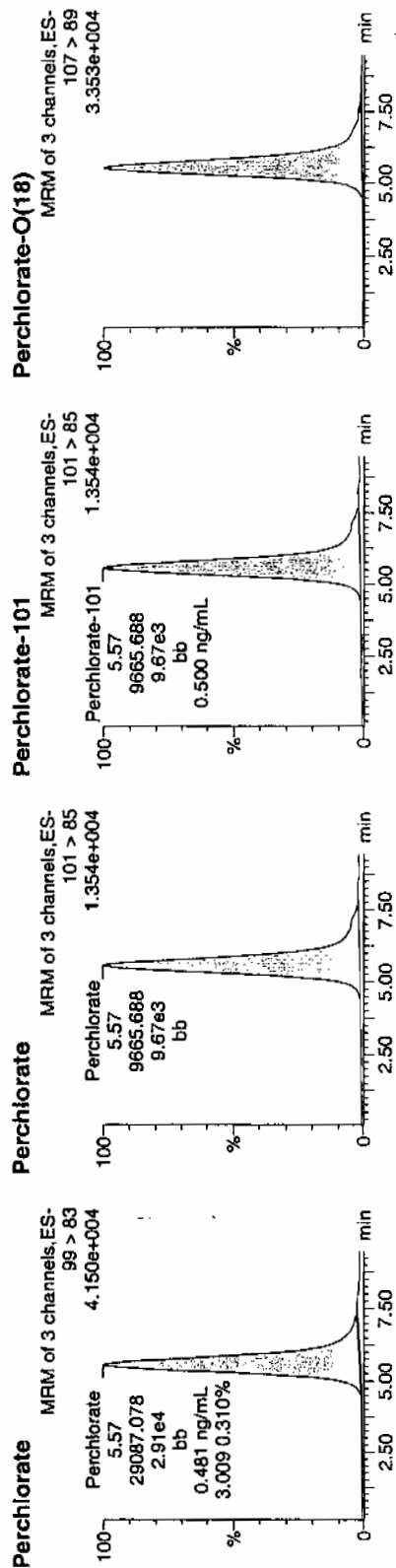
Date: 14-Feb-2010

Time: 05:41:43

ID: WCL100211-06CCV

Vial: 1:2,A

*Per*  
*02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	ModTime	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	5.57	29087.078	29087.078	bb		0.4809	96.17	-3.83	836.811	3.01
WCL100211-06CCV	Perchlorate-101	101 > 85	5.57	9665.688	9665.688	bb		0.5000	100.00	0.00	258.819	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	5.53	24259.629	24259.629	bb		0.4707	94.13	-5.87	986.644	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
 Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213076a

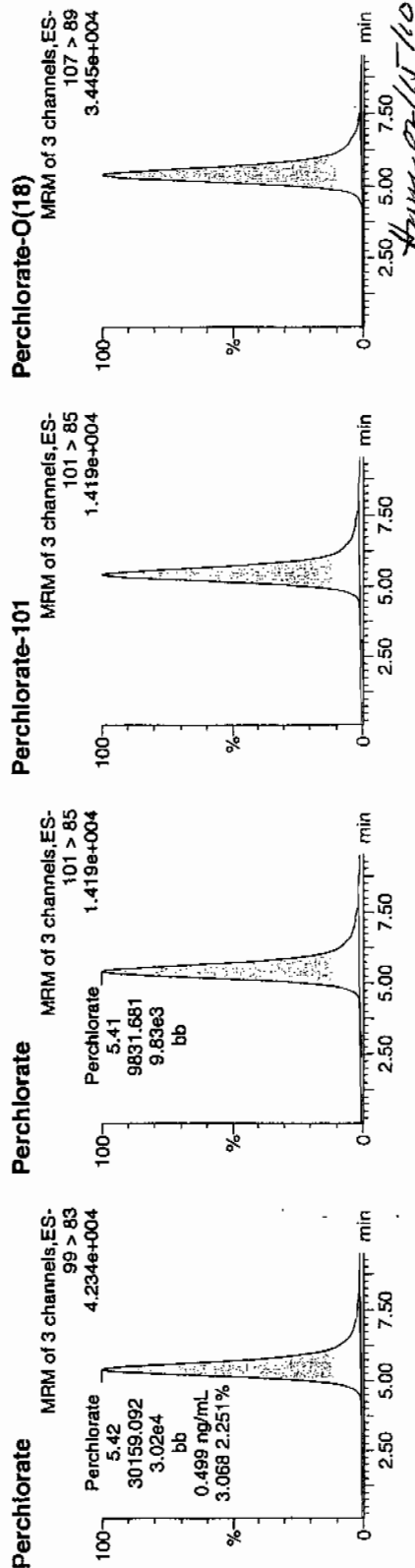
Date: 14-Feb-2010

Time: 08:00:04

ID: WCL100211-06CCV

Vial: 1:2,A

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 WCL  
 02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	5.42	30159.092	30159.092	bb			0.4986	99.72	-0.28	396.939	3.07
WCL100211-06CCV	Perchlorate-101	101 > 85	5.41	9831.681	9831.681	bb			0.5086	101.72	1.72	1216.7	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	5.40	24294.014	24294.014	bb			0.4713	94.26	-5.74	1174.6	

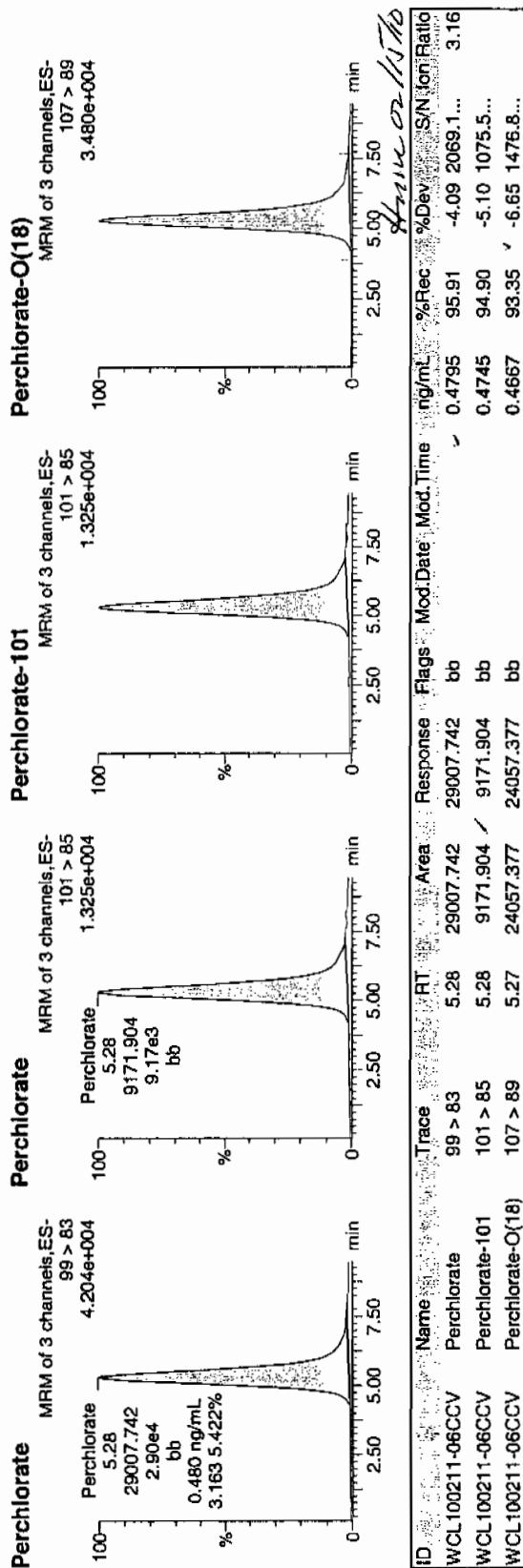
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213088a  
Date: 14-Feb-2010  
Time: 10:30:53  
ID: WCL100211-06CCV  
Vial: 1:2,A

*Per*  
*02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	5.28	29007.742	29007.742	bb			0.4795	95.91	-4.09	2069.1...	3.16
WCL100211-06CCV	Perchlorate-101	101 > 85	5.28	9171.904	9171.904	bb			0.4745	94.90	-5.10	1075.5...	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	5.27	24057.377	24057.377	bb			0.4667	93.35	-6.65	1476.8...	

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	94.49	13-FEB-10 18:24	per0213011a
Perchlorate Isotope Ratio		3		13-FEB-10 18:24	per0213011a
Perchlorate-101	.05	.05	98.59	13-FEB-10 18:24	per0213011a
Perchlorate	.05	.05	96.73	13-FEB-10 20:54	per0213023a
Perchlorate Isotope Ratio		3.79		13-FEB-10 20:54	per0213023a
Perchlorate-101	.05	.04	79.9	13-FEB-10 20:54	per0213023a
Perchlorate	.05	.05	94.87	13-FEB-10 23:12	per0213034a
Perchlorate Isotope Ratio		2.97		13-FEB-10 23:12	per0213034a
Perchlorate-101	.05	.05	99.84	13-FEB-10 23:12	per0213034a
Perchlorate	.05	.05	98.54	14-FEB-10 01:30	per0213045a
Perchlorate Isotope Ratio		3.16		14-FEB-10 01:30	per0213045a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	97.58	14-FEB-10 01:30	per0213045a
Perchlorate	.05	.05	92.17	14-FEB-10 03:48	per0213056a
Perchlorate Isotope Ratio		2.96		14-FEB-10 03:48	per0213056a
Perchlorate-101	.05	.05	97.35	14-FEB-10 03:48	per0213056a
Perchlorate	.05	.04	89.59	14-FEB-10 06:07	per0213067a
Perchlorate Isotope Ratio		3.12		14-FEB-10 06:07	per0213067a
Perchlorate-101	.05	.04	89.95	14-FEB-10 06:07	per0213067a
Perchlorate	.05	.04	89.89	14-FEB-10 08:25	per0213078a
Perchlorate Isotope Ratio		2.94		14-FEB-10 08:25	per0213078a
Perchlorate-101	.05	.05	95.73	14-FEB-10 08:25	per0213078a
Perchlorate	.05	.05	100.01	14-FEB-10 10:56	per0213090a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1665-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.41		14-FEB-10 10:56	per0213090a
Perchlorate-101	.05	.05	91.86	14-FEB-10 10:56	per0213090a



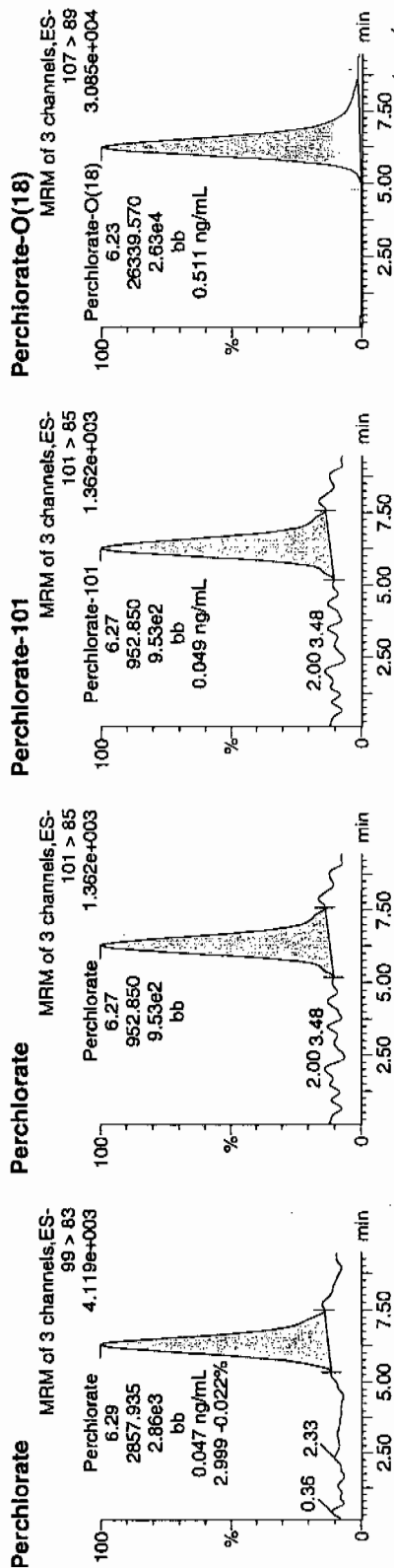
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213011a  
Date: 13-Feb-2010  
Time: 18:24:01  
ID: WCL100211-07CRI  
Vial: 1:2,B

Pure  
02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	6.29	2857.935	2857.935	bb			0.0472	94.49	-5.51	54.125	3.00
WCL100211-07CRI	Perchlorate-101	101 > 85	6.27	952.850	952.850	bb			0.0493	98.59	-1.41	47.770	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	6.23	26339.570	26339.570	bb			0.5110	102.20	2.20	751.876	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
 Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213023a

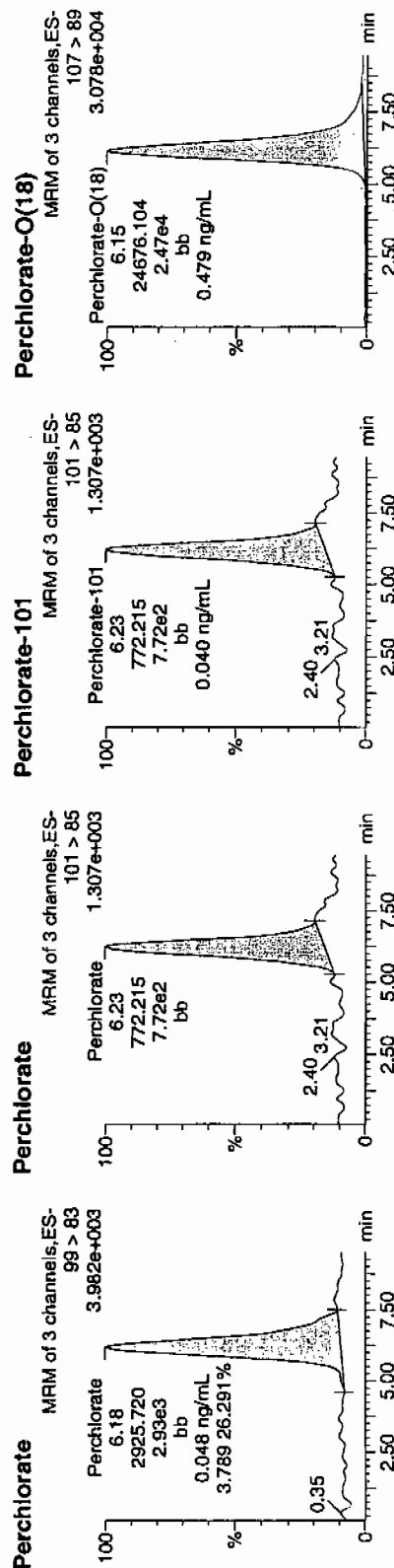
Date: 13-Feb-2010

Time: 20:54:29

ID: WCL100211-07CRI

Vial: 1:2,B

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 02-13-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	6.18	2925.720	2925.720	bb			0.0484	96.73	-3.27	118.674	3.79
WCL100211-07CRI	Perchlorate-101	101 > 85	6.23	772.215	772.215	bb			0.0399	79.90	-20.10	51.675	
WCL100211-07CRI	Perchlorate-Q(18)	107 > 89	6.15	24676.104	24676.104	bb			0.4787	95.75	-4.25	515.797	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213034a

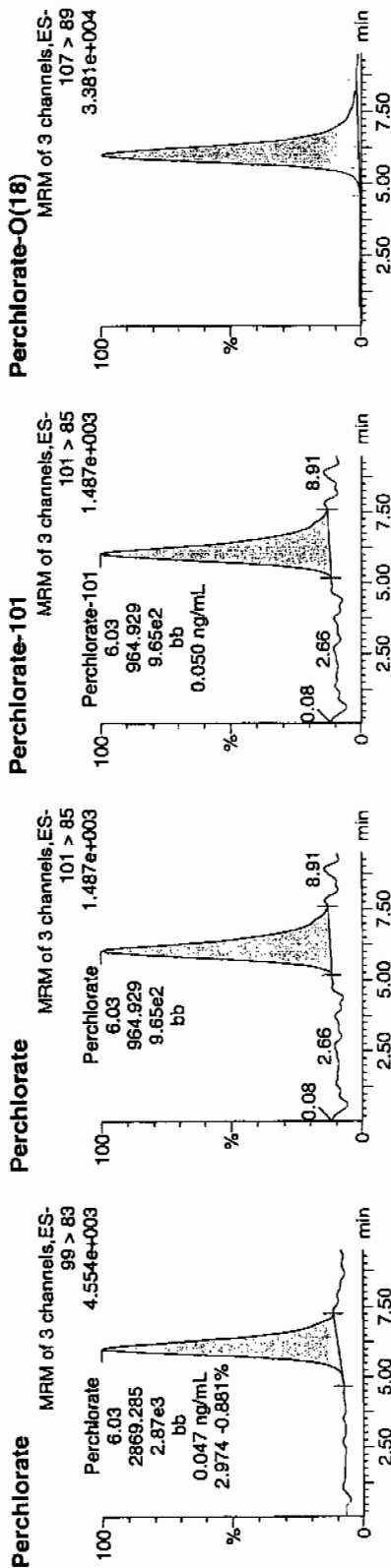
Date: 13-Feb-2010

Time: 23:12:27

ID: WCL100211-07CRI

Vial: 1:2,B

Per  
02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	6.03	2869.285	2869.285	bb			0.0474	94.87	-5.13	281.934	2.97
WCL100211-07CRI	Perchlorate-101	101 > 85	6.03	964.929	964.929	bb			0.0499	99.84	-0.16	64.904	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	6.02	26300.902	26300.902	bb			0.5103	102.05	2.05	708.505	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
 Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213045a

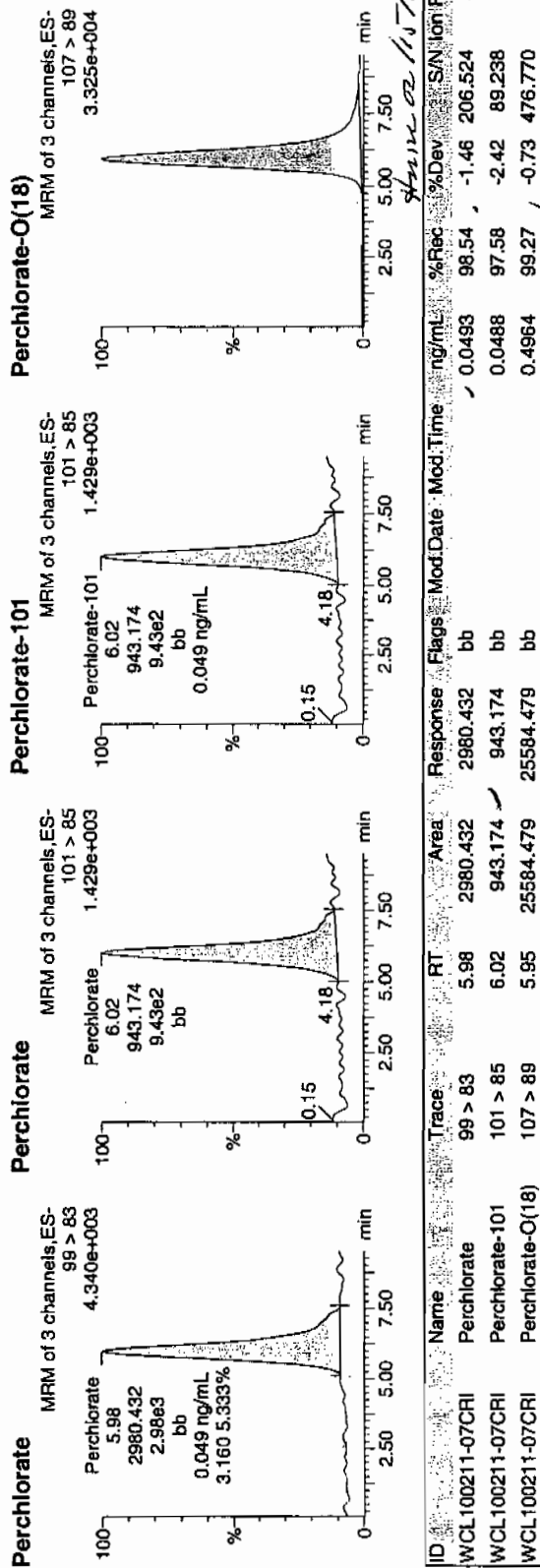
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Time: 01:30:28

ID: WCL100211-07CRI

Vial: 1:2,B

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 and  
 02-15-10



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213056a

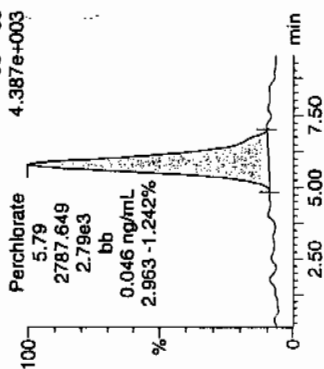
Date: 14-Feb-2010

Time: 03:48:42

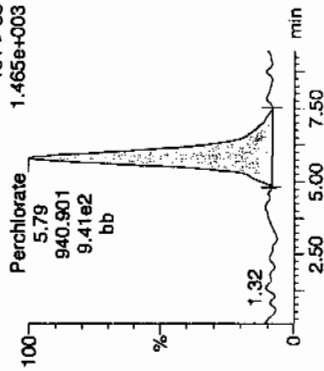
ID: WCL100211-07CRI

Vial: 1:2,B

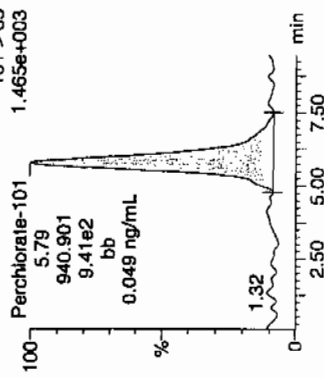
**Perchlorate**  
MRM of 3 channels, ES-  
99 > 83



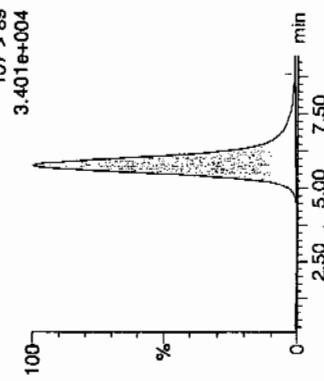
**Perchlorate**  
MRM of 3 channels, ES-  
101 > 85



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

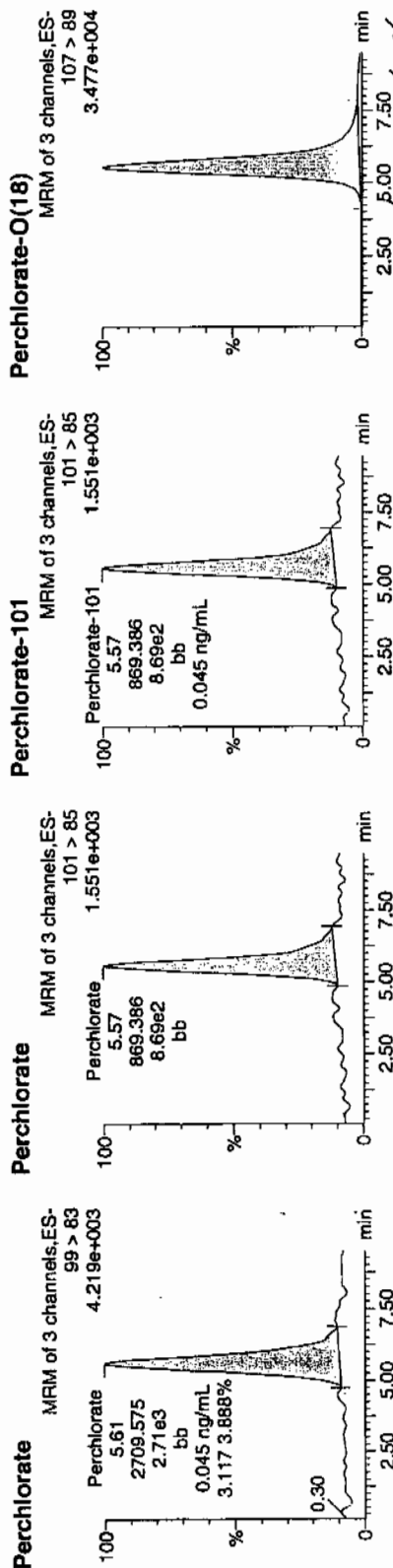


**Perchlorate-Q(18)**  
MRM of 3 channels, ES-  
107 > 89



ID	Name	Trace	RT	Area	Response	Flags	Mod. Time	Mod. Date	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	5.79	2787.649	2787.649	bb			0.0461	92.17	-7.83	75.971	2.96
WCL100211-07CRI	Perchlorate-101	101 > 85	5.79	940.901	940.901	bb			0.0487	97.35	-2.65	143.711	
WCL100211-07CRI	Perchlorate-Q(18)	107 > 89	5.76	25598.033	25598.033	bb			0.4966	99.32	-0.68	2095.1...	

Per  
 and  
 22-5-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	5.61	2709.575	2709.575	bb			0.0448	89.59	-10.41	98.621	3.12
WCL100211-07CRI	Perchlorate-101	101 > 85	5.57	869.386	869.386	bb			0.0450	89.95	-10.05	111.124	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	5.56	24921.221	24921.221	bb			0.4835	96.70	-3.30	2105.1...	

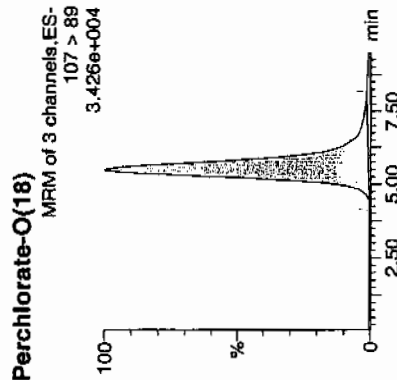
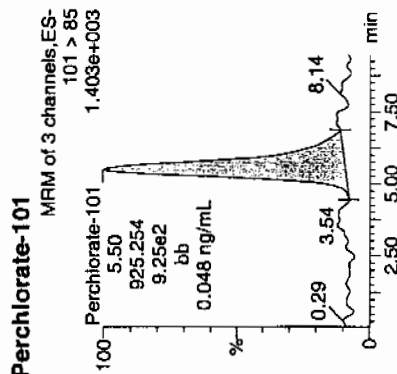
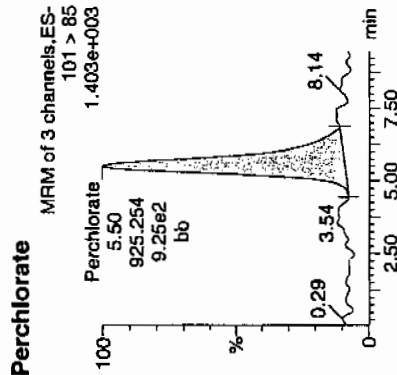
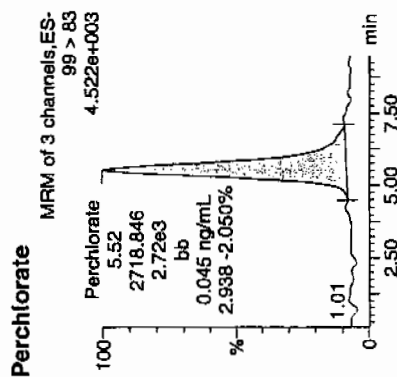
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213078a  
Date: 14-Feb-2010  
Time: 08:25:23  
ID: WCL100211-07CRI  
Vial: 1:2,B

*Pure and 02-15-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
WCL100211-07CRI	Perchlorate	99 > 83	5.52	2718.846	2718.846	bb				0.0449	89.89	-10.11	183.472	2.94	
WCL100211-07CRI	Perchlorate-101	101 > 85	5.50	925.254	925.254	bb				0.0478	95.73	-4.27	36.201		
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	5.50	24528.357	24528.357	bb				0.4759	95.17	-4.83	2714.0...		

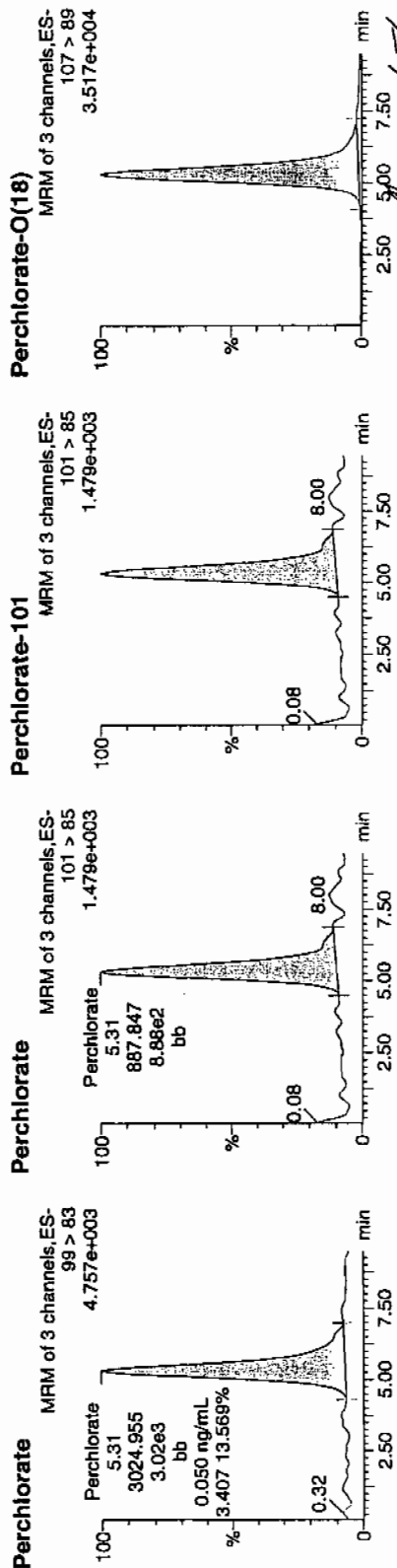
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213090a  
Date: 14-Feb-2010  
Time: 10:56:10  
ID: WCL100211-07CRI  
Vial: 1:2,B

*per  
and  
02-13-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	5.31	3024.955	3024.955	bb			0.0500	100.01	0.01	274.970	3.41
WCL100211-07CRI	Perchlorate-101	101 > 85	5.31	887.847	887.847	bb			0.0459	91.86	-8.14	42.943	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	5.28	23897.891	23897.891	bb			0.4636	92.73	-7.27	2182.5...	



# QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 252834

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 13-FEB-10

GEL Job No (SDG): 10-1665-1

GEL Sample ID: 1202042252

Date Filtered: 13-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	14-FEB-10 08:37	per0213079a
	Perchlorate Isotope Ratio						1	14-FEB-10 08:37	per0213079a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	14-FEB-10 08:37	per0213079a
	Perchlorate-O(18)			0.439	ug/L		1	14-FEB-10 08:37	per0213079a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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

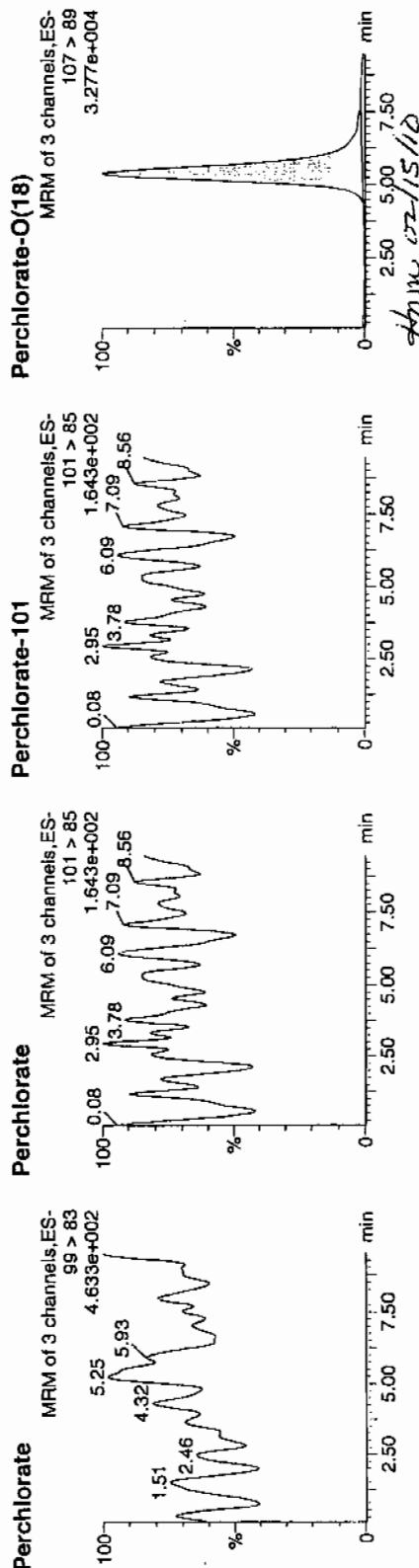
Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213079a  
Date: 14-Feb-2010  
Time: 08:37:55  
ID: 1202042252  
Vial: 3:1,A

02-15-10

157001952234 | UTA | MB | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042252	Perchlorate	99 > 83											0.00
1202042252	Perchlorate-101	101 > 85											
1202042252	Perchlorate-O(18)	107 > 89	5.40	22627.660	22627.660	bb			0.4390	87.80	-12.20	1966.2...	

## Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: WATER  
 Extraction Batch ID: 952834  
 Extraction Type: Filter/DAI  
 Sample Volume/Weight: 10.0 mL  
 Concentrated Extract Volume: 10.0  
 Client Sample No. LCS  
 Date Received: 13-FEB-10  
 GEL Job No (SDG): 10-1665-1  
 GEL Sample ID: 1202042253  
 Date Filtered: 13-FEB-10  
 Injection Volume (uL): 20

## %Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.214	ug/L		1	14-FEB-10 08:50	per0213080a
	Perchlorate Isotope Ratio			3.36			1	14-FEB-10 08:50	per0213080a
14797-73-0	Perchlorate-101	.05	.2	0.199	ug/L	J	1	14-FEB-10 08:50	per0213080a
	Perchlorate-O(18)			0.491	ug/L		1	14-FEB-10 08:50	per0213080a

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The 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\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213080a

Date: 14-Feb-2010

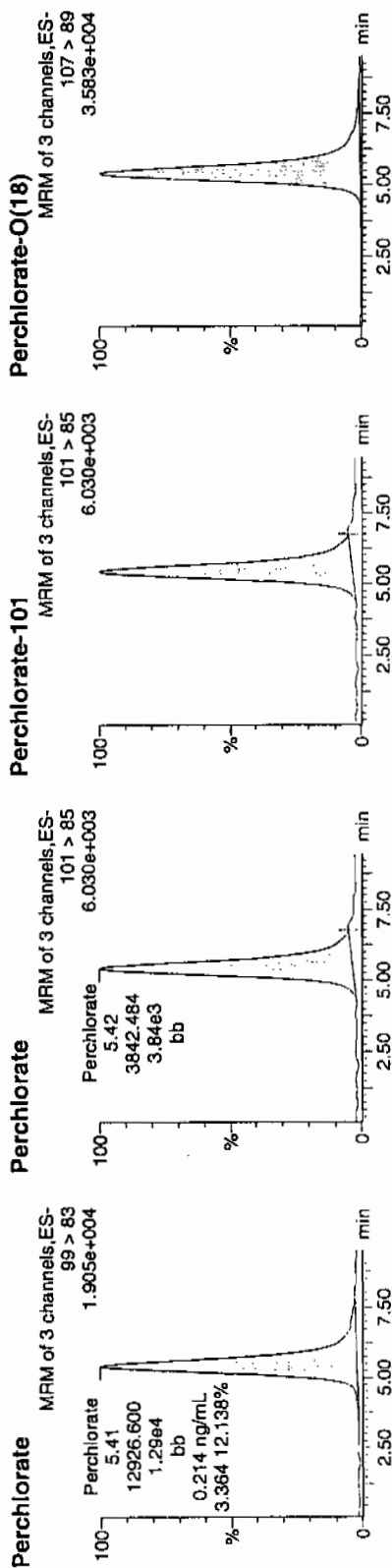
Time: 08:50:40

ID: 1202042253

Vial: 3:1,B

02-15-10

1202042253 1202042253



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042253	Perchlorate	99 > 83	5.41	12926.600	12926.600	bb			0.2137	106.85	6.85	880.475	3.36
1202042253	Perchlorate-101	101 > 85	5.42	3842.484	3842.484	bb			0.1988	99.39	-0.61	328.344	
1202042253	Perchlorate-O(18)	107 > 89	5.38	25312.988	25312.988	bb			0.4911	98.22	-1.78	2234.6...	

$$\frac{12926.600}{60490.4} = 0.2137$$

02/15/10

# MISCELLANEOUS DATA

# Prep Logbook

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

Batch ID: 952834  
 Analyst: Jareth Shirley  
 Method: SW846 6850 Modified  
 Lab SOP: GL-OA-E-067 REV# 6  
 Instrument: MicroMass Quattro Ultima

Verified by:

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202042252 MB	13-FEB-2010 12:31:00	10	10	1
1202042253 LCS	13-FEB-2010 12:31:00	10	10	1
246553001	13-FEB-2010 12:31:00	10	10	1
246560001	13-FEB-2010 12:31:00	10	10	1
246571001	13-FEB-2010 12:31:00	10	10	1
1202042254 MS (246571001)	13-FEB-2010 12:31:00	10	10	1
1202042255 MSD (246571001)	13-FEB-2010 12:31:00	10	10	1
246571002	13-FEB-2010 12:31:00	10	10	1
246590001	13-FEB-2010 12:31:00	10	10	1
246591001	13-FEB-2010 12:31:00	10	10	1
246600001	13-FEB-2010 12:31:00	10	10	1
246613001	13-FEB-2010 12:31:00	10	10	1
246724001	13-FEB-2010 12:31:00	10	10	1
246724002	13-FEB-2010 12:31:00	10	10	1
246730001	13-FEB-2010 12:31:00	10	10	1
246742001	13-FEB-2010 12:31:00	10	10	1
246742002	13-FEB-2010 12:31:00	10	10	1
246753001	13-FEB-2010 12:31:00	10	10	1
246753002	13-FEB-2010 12:31:00	10	10	1
246766001	13-FEB-2010 12:31:00	10	10	1
246838001	13-FEB-2010 12:31:00	10	10	1
246842001	13-FEB-2010 12:31:00	10	10	1
246844001	13-FEB-2010 12:31:00	10	10	1
1202042256 LCS	13-FEB-2010 12:31:00	10	10	1

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LC	1202042256	10 ug/L KCVCCV Second Source	UCL100210402.2	2	mL	Desalting cartridges used: BJ01/02/1609 & BJ0003/1609
LC	1202042253	10 ug/L KCVCCV Second Source	UCL100210402.2	2	mL	
MS	1202042254	10 ug/L KCVCCV Second Source	UCL100210402.2	2	mL	
MSD	1202042255	10 ug/L KCVCCV Second Source	UCL100210402.2	2	mL	
RGNT	AM	Q251 HPLC Grade Water	1261217	40	mL	
RGNT	AM	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	40	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Method: EPA 6850-Modified  
Int. Std.: UCL100122-01  
Mobile Phase Lot#: 1269535, 1261217  
Standard-Samp Reagent Lot#: 1261217

Date: 02/13/10  
Extr. Injection Volume: 20uL  
Sequence Number: per021310a  
Initial Calibration Date: 02/13/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0213001a	IPB001	CWW	2/13/2010 16:18			1		USE	B
per0213002a	IPB001	CWW	2/13/2010 16:31			1		USE	B
per0213003a	WCLICAL-01	CWW	2/13/2010 16:43			1		USE	I
per0213004a	WCLICAL-02	CWW	2/13/2010 16:56			1		USE	I
per0213005a	WCLICAL-03	CWW	2/13/2010 17:08			1		USE	I
per0213006a	WCLICAL-04	CWW	2/13/2010 17:21			1		USE	I
per0213007a	WCLICAL-05	CWW	2/13/2010 17:33			1		USE	I
per0213008a	IPB002	CWW	2/13/2010 17:46			1		USE	B
per0213009a	WCLICV	CWW	2/13/2010 17:58			1		USE	C
per0213010a	IPB003	CWW	2/13/2010 18:11			1		USE	B
per0213011a	WCLCRI	CWW	2/13/2010 18:24			1		USE	C
per0213012a	1202035626	CWW	2/13/2010 18:36	950051	VARIOUS	1	LANL	USE	S
per0213013a	1202035627	CWW	2/13/2010 18:49	950051	VARIOUS	1	LANL	USE	S
per0213014a	1202035630	CWW	2/13/2010 19:01	950051	VARIOUS	1	LANL	USE	S
per0213015a	245915001	CWW	2/13/2010 19:14	950051	10-1491	1	LANL	USE	S
per0213016a	245915002	CWW	2/13/2010 19:26	950051	10-1491	1	LANL	USE	S
per0213017a	245915003	CWW	2/13/2010 19:39	950051	10-1491	1	LANL	USE	S
per0213018a	245915004	CWW	2/13/2010 19:51	950051	10-1491	1	LANL	USE	S
per0213019a	245915005	CWW	2/13/2010 20:04	950051	10-1491	1	LANL	USE	S
per0213020a	245915006	CWW	2/13/2010 20:16	950051	10-1491	1	LANL	USE	S
per0213021a	WCLCCV	CWW	2/13/2010 20:29			1		USE	C
per0213022a	IPB004	CWW	2/13/2010 20:41			1		USE	B
per0213023a	WCLCRI	CWW	2/13/2010 20:54			1		USE	C
per0213024a	245921001	CWW	2/13/2010 21:07	950051	10-1493	1	LANL	USE	S
per0213025a	245921002	CWW	2/13/2010 21:19	950051	10-1493	1	LANL	USE	S
per0213026a	245921003	CWW	2/13/2010 21:32	950051	10-1493	1	LANL	USE	S
per0213027a	245921004	CWW	2/13/2010 21:44	950051	10-1493	1	LANL	USE	S
per0213028a	245921005	CWW	2/13/2010 21:57	950051	10-1493	1	LANL	USE	S
per0213029a	245950001	CWW	2/13/2010 22:09	950051	10-1508	1	LANL	USE	S



per0213030a	1202035628	CWW	2/13/2010 22:22	950051	10-1508	1	LANL	USE	S
per0213031a	1202035629	CWW	2/13/2010 22:34	950051	10-1508	1	LANL	USE	S
per0213032a	WCLCCV	CWW	2/13/2010 22:47			1		USE	C
per0213033a	IPB005	CWW	2/13/2010 22:59			1		USE	B
per0213034a	WCLCRI	CWW	2/13/2010 23:12			1		USE	C
per0213035a	245950002	CWW	2/13/2010 23:24	950051	10-1508	1	LANL	USE	S
per0213036a	245950003	CWW	2/13/2010 23:37	950051	10-1508	1	LANL	USE	S
per0213037a	245950004	CWW	2/13/2010 23:50	950051	10-1508	1	LANL	USE	S
per0213038a	245950005	CWW	2/14/2010 0:02	950051	10-1508	1	LANL	USE	S
per0213039a	245950006	CWW	2/14/2010 0:15	950051	10-1508	1	LANL	USE	S
per0213040a	245950007	CWW	2/14/2010 0:27	950051	10-1508	1	LANL	USE	S
per0213041a	245950008	CWW	2/14/2010 0:40	950051	10-1508	1	LANL	USE	S
per0213042a	245950009	CWW	2/14/2010 0:52	950051	10-1508	1	LANL	USE	S
per0213043a	WCLCCV	CWW	2/14/2010 1:05			1		USE	C
per0213044a	IPB006	CWW	2/14/2010 1:17			1		USE	B
per0213045a	WCLCRI	CWW	2/14/2010 1:30			1		USE	C
per0213046a	1202041297	CWW	2/14/2010 1:43	952420	VARIOUS	1	LANL	USE	S
per0213047a	1202041298	CWW	2/14/2010 1:55	952420	VARIOUS	1	LANL	USE	S
per0213048a	1202041301	CWW	2/14/2010 2:08	952420	VARIOUS	1	LANL	USE	S
per0213049a	246270002	CWW	2/14/2010 2:20	952420	10-1574	1	LANL	USE	S
per0213050a	246270003	CWW	2/14/2010 2:33	952420	10-1574	1	LANL	USE	S
per0213051a	246270004	CWW	2/14/2010 2:45	952420	10-1574	1	LANL	USE	S
per0213052a	246270005	CWW	2/14/2010 2:58	952420	10-1574	1	LANL	USE	S
per0213053a	246300001	CWW	2/14/2010 3:10	952420	10-1557-1	1	LANL	USE	S
per0213054a	WCLCCV	CWW	2/14/2010 3:23			1		USE	C
per0213055a	IPB007	CWW	2/14/2010 3:36			1		USE	B
per0213056a	WCLCRI	CWW	2/14/2010 3:48			1		USE	C
per0213057a	246300002	CWW	2/14/2010 4:01	952420	10-1557-1	1	LANL	USE	S
per0213058a	1202041299	CWW	2/14/2010 4:13	952420	10-1557-1	1	LANL	USE	S
per0213059a	1202041300	CWW	2/14/2010 4:26	952420	10-1557-1	1	LANL	USE	S
per0213060a	246300003	CWW	2/14/2010 4:39	952420	10-1557-1	1	LANL	USE	S
per0213061a	246305001	CWW	2/14/2010 4:51	952420	10-1559	1	LANL	USE	S
per0213062a	246305002	CWW	2/14/2010 5:04	952420	10-1559	1	LANL	USE	S
per0213063a	246305003	CWW	2/14/2010 5:16	952420	10-1559	1	LANL	USE	S
per0213064a	246305004	CWW	2/14/2010 5:29	952420	10-1559	1	LANL	USE	S
per0213065a	WCLCCV	CWW	2/14/2010 5:41			1		USE	C
per0213066a	IPB008	CWW	2/14/2010 5:54			1		USE	B

per0213067a	WCLCRI	CWW	2/14/2010 6:07		1	USE
per0213068a	246312001	CWW	2/14/2010 6:19	10-1561	1	LANL
per0213069a	246317001	CWW	2/14/2010 6:32	952420	1	LANL
per0213070a	246317002	CWW	2/14/2010 6:44	952420	1	LANL
per0213071a	246317003	CWW	2/14/2010 6:57	952420	1	LANL
per0213072a	246317004	CWW	2/14/2010 7:09	952420	1	LANL
per0213073a	246317005	CWW	2/14/2010 7:22	952420	1	LANL
per0213074a	246575003	CWW	2/14/2010 7:35	952420	1	LANL
per0213075a	246575004	CWW	2/14/2010 7:47	952420	1	LANL
per0213076a	WCLCCV	CWW	2/14/2010 8:00		1	USE
per0213077a	IPB009	CWW	2/14/2010 8:12		1	USE
per0213078a	WCLCRI	CWW	2/14/2010 8:25		1	USE
per0213079a	1202042252	CWW	2/14/2010 8:37	VARIOUS	1	LANL
per0213080a	1202042253	CWW	2/14/2010 8:50	VARIOUS	1	LANL
per0213081a	1202042256	CWW	2/14/2010 9:03	VARIOUS	1	LANL
per0213082a	246555001	CWW	2/14/2010 9:15	952836	1	LANL
per0213083a	246560001	CWW	2/14/2010 9:28	952836	1	LANL
per0213084a	246571001	CWW	2/14/2010 9:40	952836	1	LANL
per0213085a	1202042254	CWW	2/14/2010 9:53	952836	1	LANL
per0213086a	1202042255	CWW	2/14/2010 10:05	952836	1	LANL
per0213087a	246571002	CWW	2/14/2010 10:18	952836	1	LANL
per0213088a	WCLCCV	CWW	2/14/2010 10:30		1	USE
per0213089a	IPB010	CWW	2/14/2010 10:43		1	USE
per0213090a	WCLCRI	CWW	2/14/2010 10:56		1	USE
per0213091a	246590001	CWW	2/14/2010 11:08	952836	1	LANL
per0213092a	246591001	CWW	2/14/2010 11:21	952836	1	LANL
per0213093a	246606001	CWW	2/14/2010 11:33	952836	1	LANL
per0213094a	246613001	CWW	2/14/2010 11:46	952836	1	LANL
per0213095a	246724001	CWW	2/14/2010 11:59	952836	1	LANL
per0213096a	246724002	CWW	2/14/2010 12:11	952836	1	LANL
per0213097a	246730001	CWW	2/14/2010 12:24	952836	1	LANL
per0213098a	246742001	CWW	2/14/2010 12:36	952836	1	LANL
per0213099a	WCLCCV	CWW	2/14/2010 12:49		1	USE
per0213100a	IPB011	CWW	2/14/2010 13:01		1	USE
per0213101a	WCLCRI	CWW	2/14/2010 13:14		1	USE
per0213102a	246742002	CWW	2/14/2010 13:26	952836	1	LANL
per0213103a	246753001	CWW	2/14/2010 13:39	952836	1	LANL

per0213104a	246755001	CWW	2/14/2010 13:52	952836	10-1714-1	1	LANL	USE	S
per0213105a	246755002	CWW	2/14/2010 14:04	952836	10-1714-1	1	LANL	USE	S
per0213106a	246766001	CWW	2/14/2010 14:17	952836	10-1734	1	LANL	USE	S
per0213107a	246838001	CWW	2/14/2010 14:29	952836	10-1747-1	1	LANL	USE	S
per0213108a	246842001	CWW	2/14/2010 14:42	952836	10-1748-1	1	LANL	USE	S
per0213109a	246844001	CWW	2/14/2010 14:54	952836	10-1749-1	1	LANL	USE	S
per0213110a	WCLCCV	CWW	2/14/2010 15:07			1		USE	C
per0213111a	IPB012	CWW	2/14/2010 15:20			1		USE	B
per0213112a	WCLCRI	CWW	2/14/2010 15:32			1		USE	C

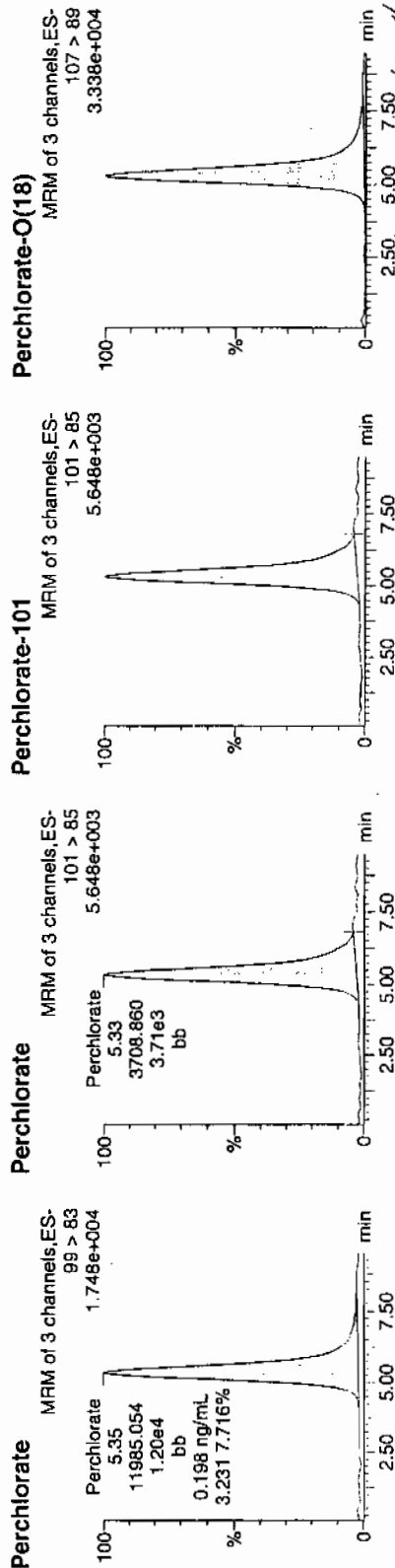
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213085a  
Date: 14-Feb-2010  
Time: 09:53:16  
ID: 1202042254  
Vial: 3:2A

15720 1952836 1220 175 111  
02-15-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202042254	Perchlorate	99 > 83	5.35	11985.054	11985.054	bb			0.1981	99.07	-0.93	292.116	3.23
1202042254	Perchlorate-101	101 > 85	5.33	3708.860	3708.860	bb			0.1919	95.93	-4.07	83.595	
1202042254	Perchlorate-O(18)	107 > 89	5.31	23427.600	23427.600	bb			0.4545	90.90	-9.10	2388.6...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021310a.qld

Last Altered: Sunday, February 14, 2010 4:01:53 PM Eastern Standard Time  
Printed: Sunday, February 14, 2010 4:10:06 PM Eastern Standard Time

Name: per0213086a

Date: 14-Feb-2010

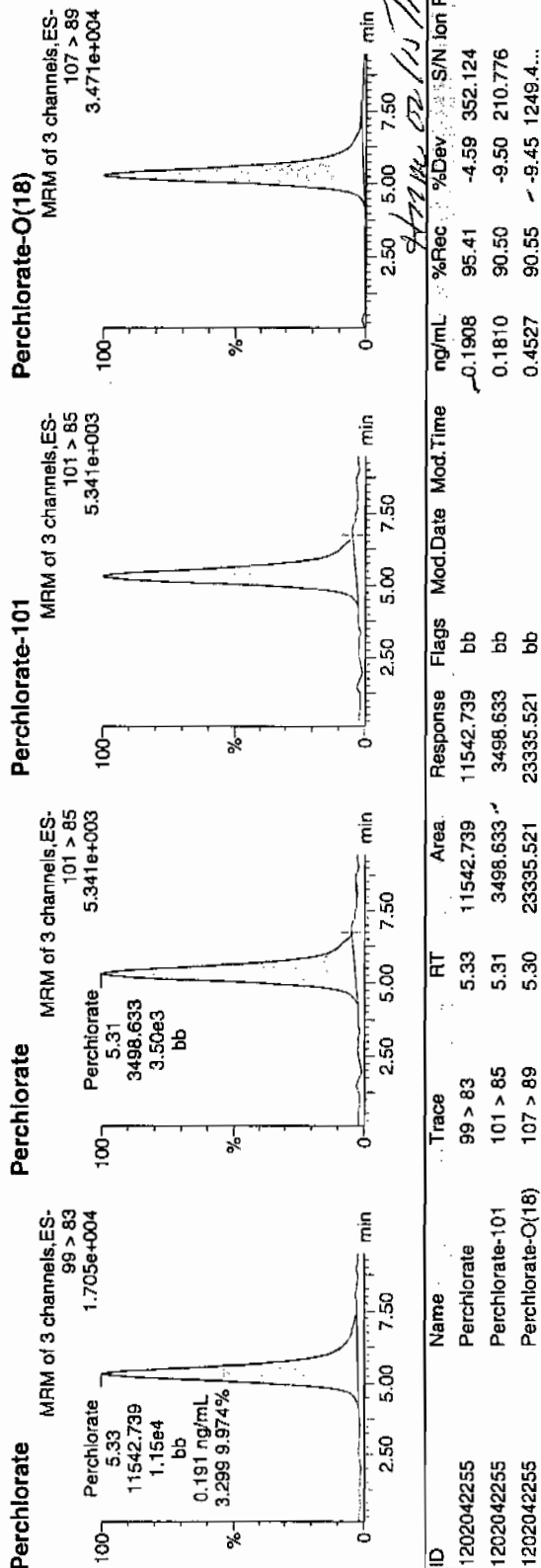
Time: 10:05:49

ID: 1202042255

Vial: 3:2,B

62-15-13

16721952334 | 1722 | MSD | 11



## Isotope Ratio Criteria

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

2.31-3.85

## Tune Criteria

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

# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665**

**Method/Analysis Information**

**Procedure:** **Definitive Low Level Analysis of Nitroaromatic Explosives Utilizing Liquid Chromatography / Mass Spectrometry / Mass Spectrometry (LC/MS/MS) by SW-846 Method 8321 Modified (8321M)**

**Analytical Method:** SW846 8321A Modified

**Prep Method:** SW846 8330 PREP

**Analytical Batch Number:** 951349

**Prep Batch Number:** 951347

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202038769	Method Blank (MB)
1202038770	Laboratory Control Sample (LCS)
1202038771	246554001(RE15-10-8175) Matrix Spike (MS)
1202038772	246554001(RE15-10-8175) Matrix Spike Duplicate (MSD)

**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-056 REV# 12.

**Primary Analyte Analysis**

**Calibration Information**

**Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

**Calibration Verification Standard Requirements**

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

10-1665-EXPLCMS

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#### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

#### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

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

##### **Surrogate Recoveries**

The following samples did not meet Surrogate recovery limits for the Secondary explosive analysis: 1202038769(MB) at 148%, 246575003 at 145% and 246582008 at 146%. The recovery limits are 70-144%. Since there were no target analytes detected in the associated samples, and the surrogate passed in the Primary explosive analysis, the data are reported with the appropriate DER. 1202038769 (MB).

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

##### **QC Sample Designation**

Sample 246554001 (RE15-10-8175) was chosen for matrix spike and matrix spike duplicate analysis.

##### **Matrix Spike (MS) Recovery Statement**

The MS spike recoveries were within the established acceptance limits.

##### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD spike 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.

##### **Internal Standard (ISTD) Acceptance**

The internal standard responses were within the required acceptance criteria for all samples and QC.

#### **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**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

#### **Sample Re-extraction/Re-analysis**

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

#### **Secondary Analyte Analysis**

#### **Calibration Information**

##### **Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

##### **Calibration Verification Standard Requirements**

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

##### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

##### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

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

##### **Surrogate Recoveries**

Sample 1202038769 (MB) did not meet Surrogate recovery limits for the Secondary analyte analysis. Since there were no target analytes detected in the associated samples, and the surrogate passed in the Primary analyte analysis, the data are reported. Please see data exception report 792626.

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries were within the established acceptance limits.

##### **QC Sample Designation**

Sample 246554001 (RE15-10-8175) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

##### **Matrix Spike (MS) Recovery Statement**

The MS recovered TATB at 370%. The recovery limits are 29-155%. Since the LCS and MSD both met acceptance limits for TATB, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 792626.

##### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD spike recoveries were within the established acceptance limits.

##### **MS/MSD Relative Percent Difference (RPD) Statement**

The MS/MSD RPD for TATB was 90.5%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 792626.

10-1665-EXPLCMS

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#### **Internal Standard (ISTD) Acceptance**

The internal standards were not added to the secondary analyte extracts.

#### **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**

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

##### **Sample Re-extraction/Re-analysis**

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

#### **Miscellaneous Information**

##### **Data Exception (DER) Documentation**

Data exception report 792626 was generated for this SDG.

Sample 1202038769 (MB) did not meet Surrogate recovery limits for the Secondary analyte analysis. Since there were no target analytes detected in the associated samples, and the surrogate passed in the Primary analyte analysis, the data are reported.

The MS recovered TATB at 370%. The recovery limits are 29-155%. Since the LCS and MSD both met acceptance limits for TATB, the noted exception is attributed to vagaries in the extraction process. The data are reported.

The MS/MSD RPD for TATB was 90.5%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported.

##### **Manual Integrations**

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

##### **Flagging Convention**

The samples were not originally analyzed using SW-846 Method 8330.

#### **Additional Comments**

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

#### **System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte 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 APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

#### **Chromatographic Columns**

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

#### **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: Nesha K. Maier Date: 02/25/10

# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216044a

Date Analyzed: 17-FEB-10 14:23

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160041.wiff

Date Analyzed: 16-FEB-10 22:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216047a

Date Analyzed: 17-FEB-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160044.wiff

Date Analyzed: 16-FEB-10 23:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216048a

Date Analyzed: 17-FEB-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160045.wiff

Date Analyzed: 16-FEB-10 23:45

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216049a

Date Analyzed: 17-FEB-10 16:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160046.wiff

Date Analyzed: 17-FEB-10 00:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216050a

Date Analyzed: 17-FEB-10 17:20

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160047.wiff

Date Analyzed: 17-FEB-10 00:16

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216051a

Date Analyzed: 17-FEB-10 17:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160048.wiff

Date Analyzed: 17-FEB-10 00:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
246554001	RE15-10-8175	99.6	70 - 144	
246554001	RE15-10-8175	136	70 - 144	
246554002	RE15-10-8174	112	70 - 144	
246554002	RE15-10-8174	133	70 - 144	
246554003	RE15-10-8176	111	70 - 144	
246554003	RE15-10-8176	128	70 - 144	
246554004	RE15-10-8178	112	70 - 144	
246554004	RE15-10-8178	132	70 - 144	
246554005	RE15-10-8177	113	70 - 144	
246554005	RE15-10-8177	133	70 - 144	
246554006	RE15-10-8225	113	70 - 144	
246554006	RE15-10-8225	139	70 - 144	
1202038769	MB for batch 951347	121	70 - 144	
1202038769	MB for batch 951347	148	70 - 144	*
1202038770	LCS for batch 951347	112	70 - 144	
1202038770	LCS for batch 951347	126	70 - 144	
1202038771	RE15-10-8175(246554001MS)	119	70 - 144	
1202038771	RE15-10-8175(246554001MS)	132	70 - 144	
1202038772	RE15-10-8175(246554001MSD)	116	70 - 144	
1202038772	RE15-10-8175(246554001MSD)	130	70 - 144	

DNT = 3,4-Dinitrotoluene

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1665

Extract Batch Code: 951347

Date Extracted: 15-FEB-10

GEL LCS ID: 1202038770

GEL LCSDUP ID:

Analysis Date/Time: 17-FEB-10 13:53

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	3620	72.5					69 - 126
2,4,6-Trinitrotoluene	5000	4290	85.8					73 - 149
2,4-Dinitrotoluene	5000	4960	99.2					87 - 137
2,6-Dinitrotoluene	5000	4950	98.9					89 - 120
2-Amino-4,6-dinitrotoluene	5000	4560	91.2					90 - 130
4-Amino-2,6-dinitrotoluene	5000	4240	84.8					84 - 130
HMX	5000	3980	79.7					58 - 138
Nitrobenzene	5000	4650	93					71 - 122
PETN	5000	4380	87.6					64 - 137
RDX	5000	4270	85.3					81 - 137
Tetryl	5000	2830	56.6					51 - 112
m-Dinitrobenzene	5000	4910	98.3					83 - 122
m-Nitrotoluene	5000	4810	96.2					73 - 118
o-Nitrotoluene	5000	4710	94.3					72 - 119
p-Nitrotoluene	5000	4750	94.9					67 - 131

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1665

Extract Batch Code: 951347

Date Extracted: 15-FEB-10

GEL LCS ID: 1202038770

GEL LCSDUP ID:

Analysis Date/Time: 16-FEB-10 22:26

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
tris(o-cresyl) phosphate	5000	5310	106					84 - 119
2,4-Diamino-6-nitrotoluene	5000	5170	103					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5350	107					64 - 122
TATB	5000	5660	113					28 - 162
3,5-Dinitroaniline	5000	5270	105					70 - 127

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Extract Batch Code: 951347

Date Extracted: 15-FEB-10

GEL Spike ID: 1202038771

GEL SpikeDup ID: 1202038772

Analysis Date/Time: 17-FEB-10 14:52

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
o-Nitrotoluene	5000	0	4870	97.3	4810	96.3	1.05	30	69 - 123
2-Amino-4,6-dinitrotoluene	5000	0	6000	120	5360	107	11.3	30	85 - 137
HMX	5000	0	4650	93	4480	89.7	3.61	30	51 - 144
PETN	5000	0	5130	103	5070	101	1.28	30	60 - 140
m-Nitrotoluene	5000	0	4970	99.4	4840	96.9	2.6	30	70 - 120
m-Dinitrobenzene	5000	0	5020	100	5010	100	.186	30	85 - 118
Tetryl	5000	0	4340	86.9	3900	77.9	10.8	30	36 - 124
RDX	5000	0	5020	100	5170	103	2.99	30	59 - 152
Nitrobenzene	5000	0	4980	99.7	4540	90.8	9.27	30	70 - 122
4-Amino-2,6-dinitrotoluene	5000	0	5300	106	5020	100	5.38	30	72 - 143
2,6-Dinitrotoluene	5000	0	4990	99.7	5130	103	2.78	30	90 - 118
1,3,5-Trinitrobenzene	5000	0	4890	97.8	4690	93.9	4.07	30	50 - 140
2,4,6-Trinitrotoluene	5000	0	5420	108	5260	105	3.04	30	76 - 144
2,4-Dinitrotoluene	5000	0	5180	104	5360	107	3.34	30	86 - 135
p-Nitrotoluene	5000	0	4890	97.8	4690	93.9	4.16	30	65 - 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Extract Batch Code: 951347

Date Extracted: 15-FEB-10

GEL Spike ID: 1202038771

GEL SpikeDup ID: 1202038772

Analysis Date/Time: 16-FEB-10 22:58

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	5000	0	4140	82.8	5230	105	23.3	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5620	112	4770	95.4	16.4	30	55 - 130
3,5-Dinitroaniline	5000	0	5920	118	5790	116	2.22	30	73 - 129
TATB	5000	0	18500	370 *	6970	139	90.5 *	30	29 - 155
tris(o-cresyl) phosphate	5000	0	5590	112	5580	112	.179	30	72 - 127

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 17:07

GEL Data File: EXP0216001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	509.816
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	531.163



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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\021610expa.mdb, Time: Wed Feb 17 09:19:04 2010

Calibration: Untitled, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216001a

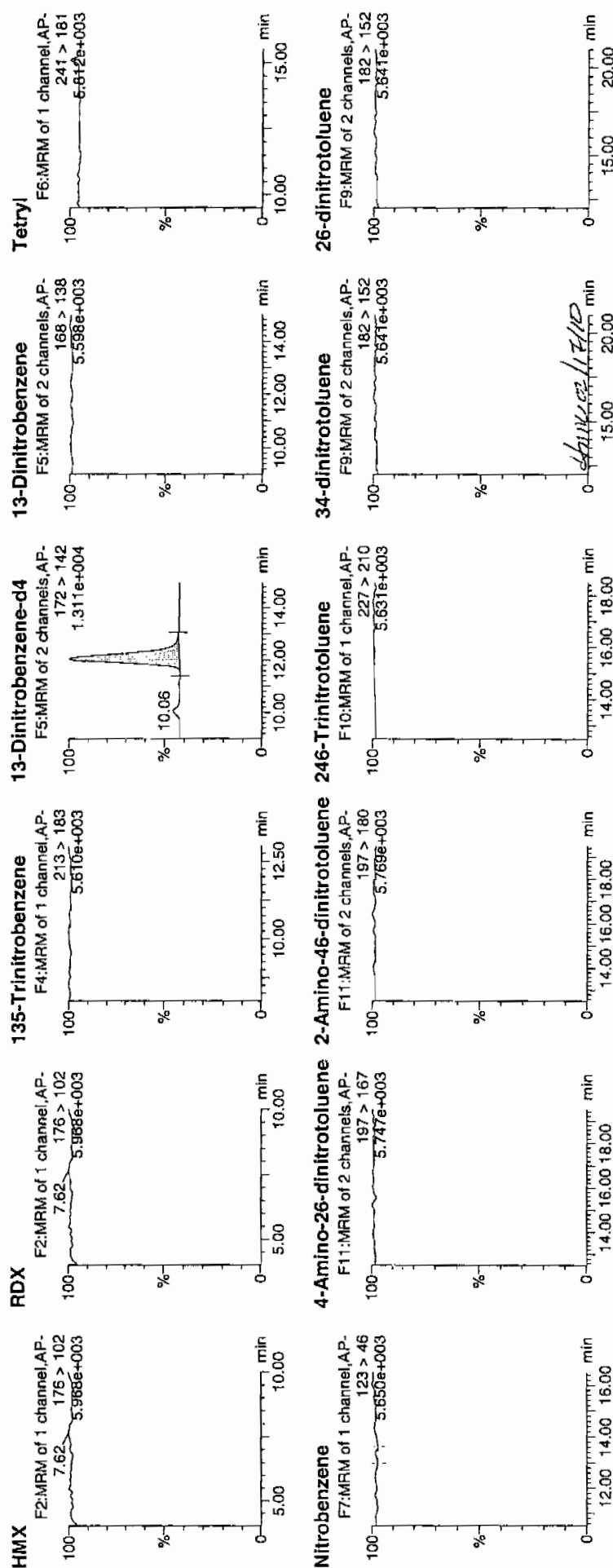
Date: 16-Feb-2010

Time: 17:07:38

ID: XIBLK01

Vial: 1:1,A

MTT  
1/1/10

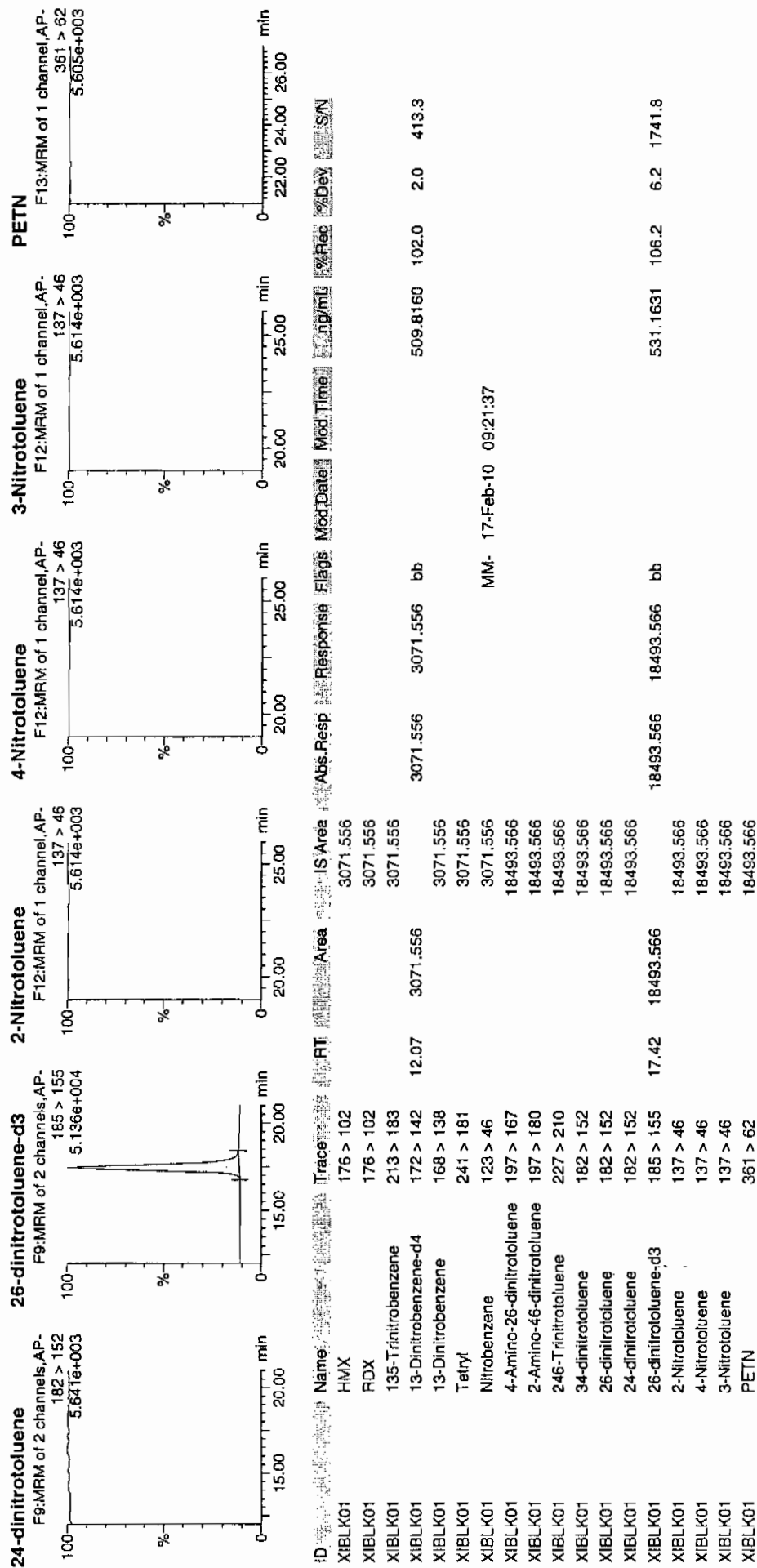


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 2 of 59

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 17:37

GEL Data File: EXP0216002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	540.968
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	530.887
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216002a

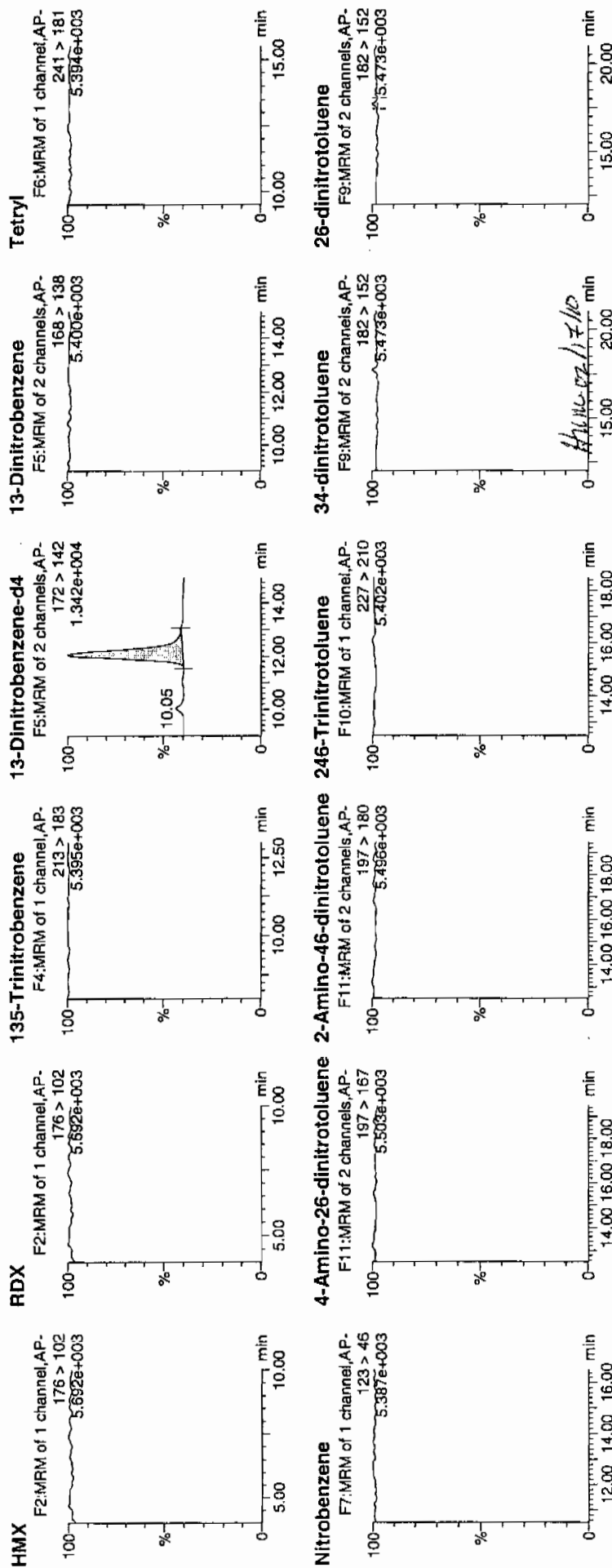
Date: 16-Feb-2010

Time: 17:37:26

ID: XIBLK01

Vial: 1:1,A

1.342e+004  
1.342e+004



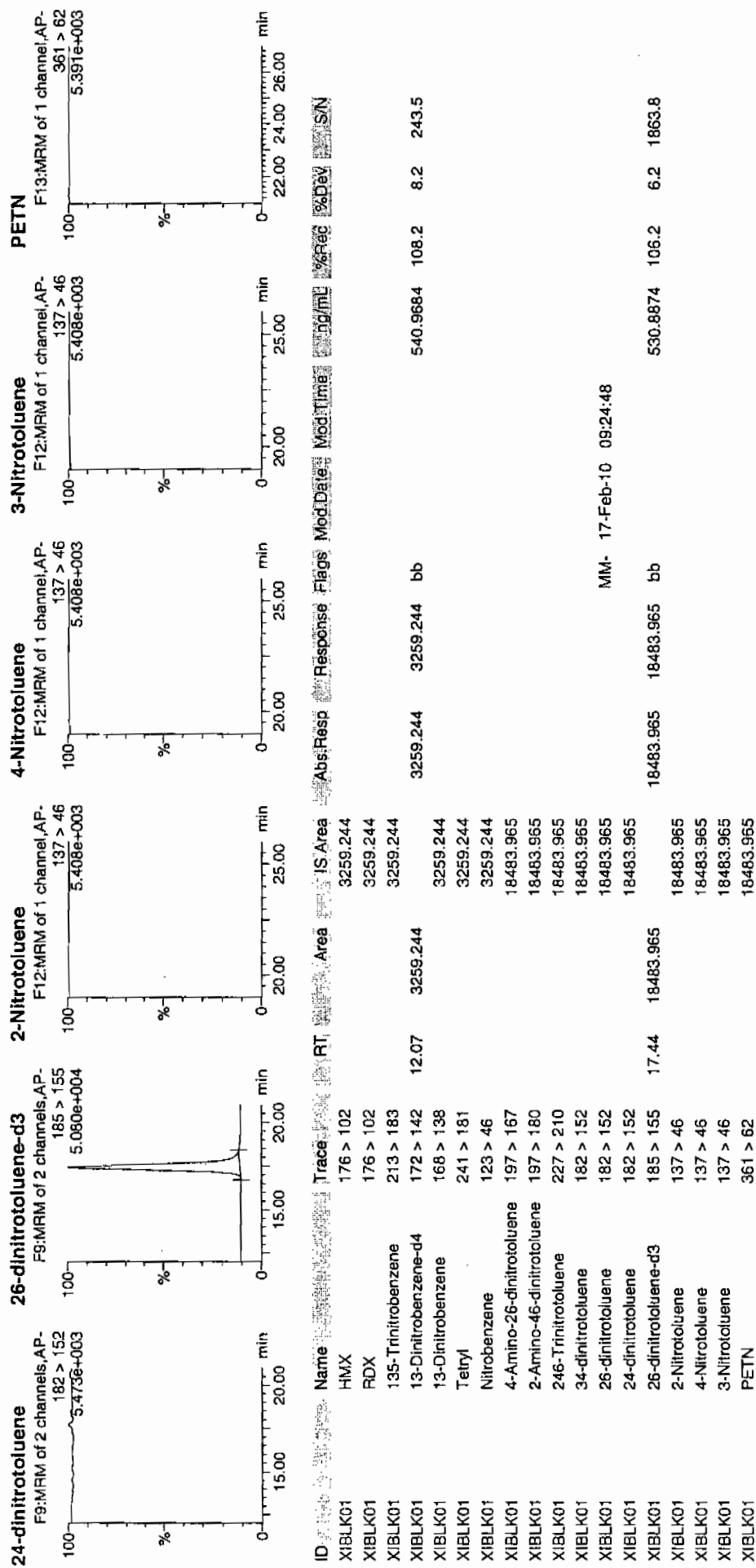
## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 4 of 59

Dataset: C:\MASSLYN\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

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GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 12:13

GEL Data File: EXS02160001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

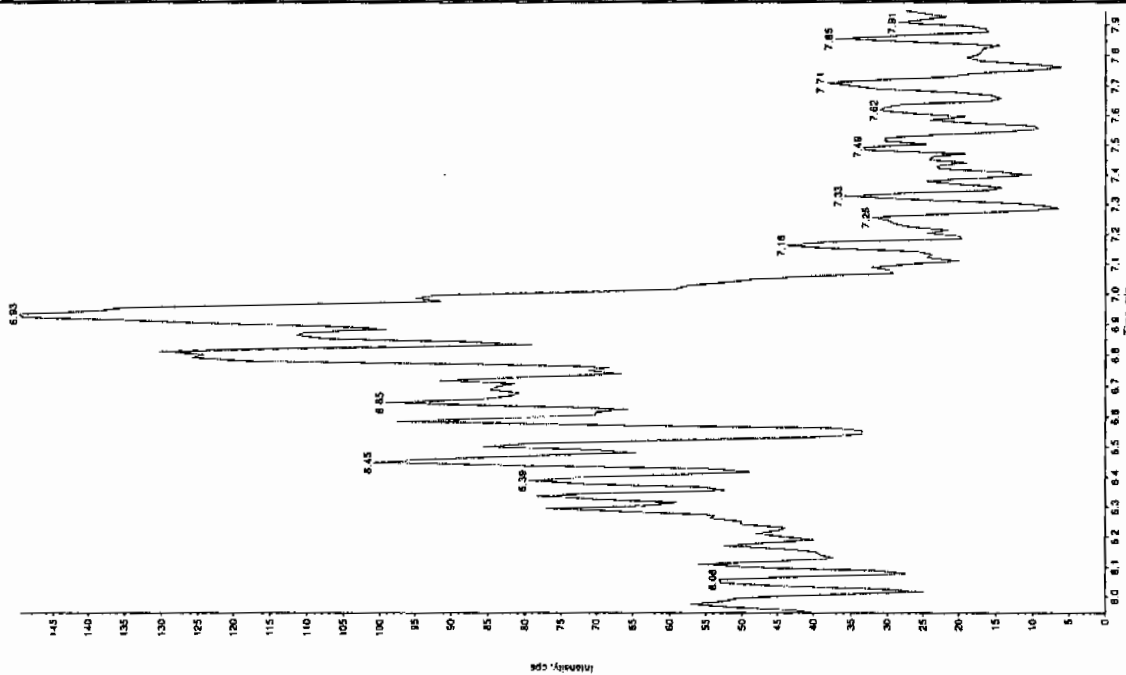
for 2/17/10

Sample Name: "XBLK01" Sample ID: "TILER" File: "EXS02160001.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.046 0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/16/2010  
 Acq. Date: 12/13/08 PM  
 Acq. Time: 12:13:08 PM  
 Modified: No



Sample Name: "XBLK01" Sample ID: "TILER" File: "EXS02160001.wif"

Peak Name: "TATB" Mass(es): "257.2204 9 amu"

Comment: "LCMSEXP\_B" Annotation: "

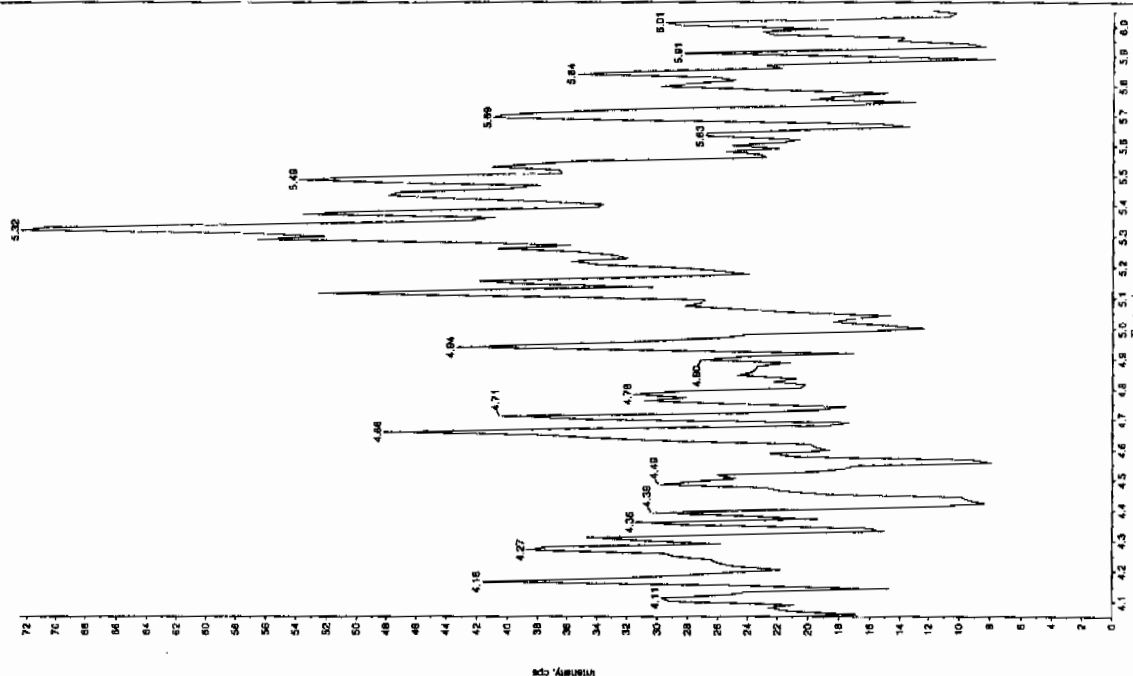
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/16/2010  
 Acq. Date: 12/13/08 PM  
 Acq. Time: 12:13:08 PM  
 Modified: No



for 2/17/10

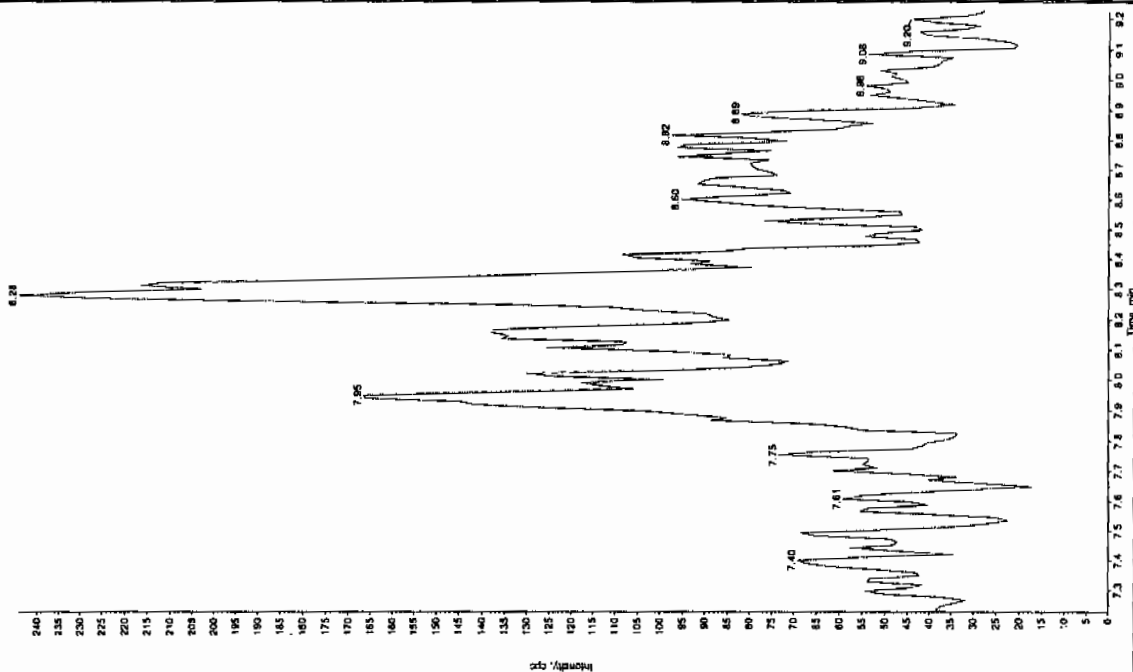
Sample Name: "XBLK01" Sample ID: "11111" File: "EX502160001.wif"  
 Peak Name: "25-Dinitro-4-nitrofluorene" Mass(es): "185.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Time: 12:13:08 PM  
 Modified: NO



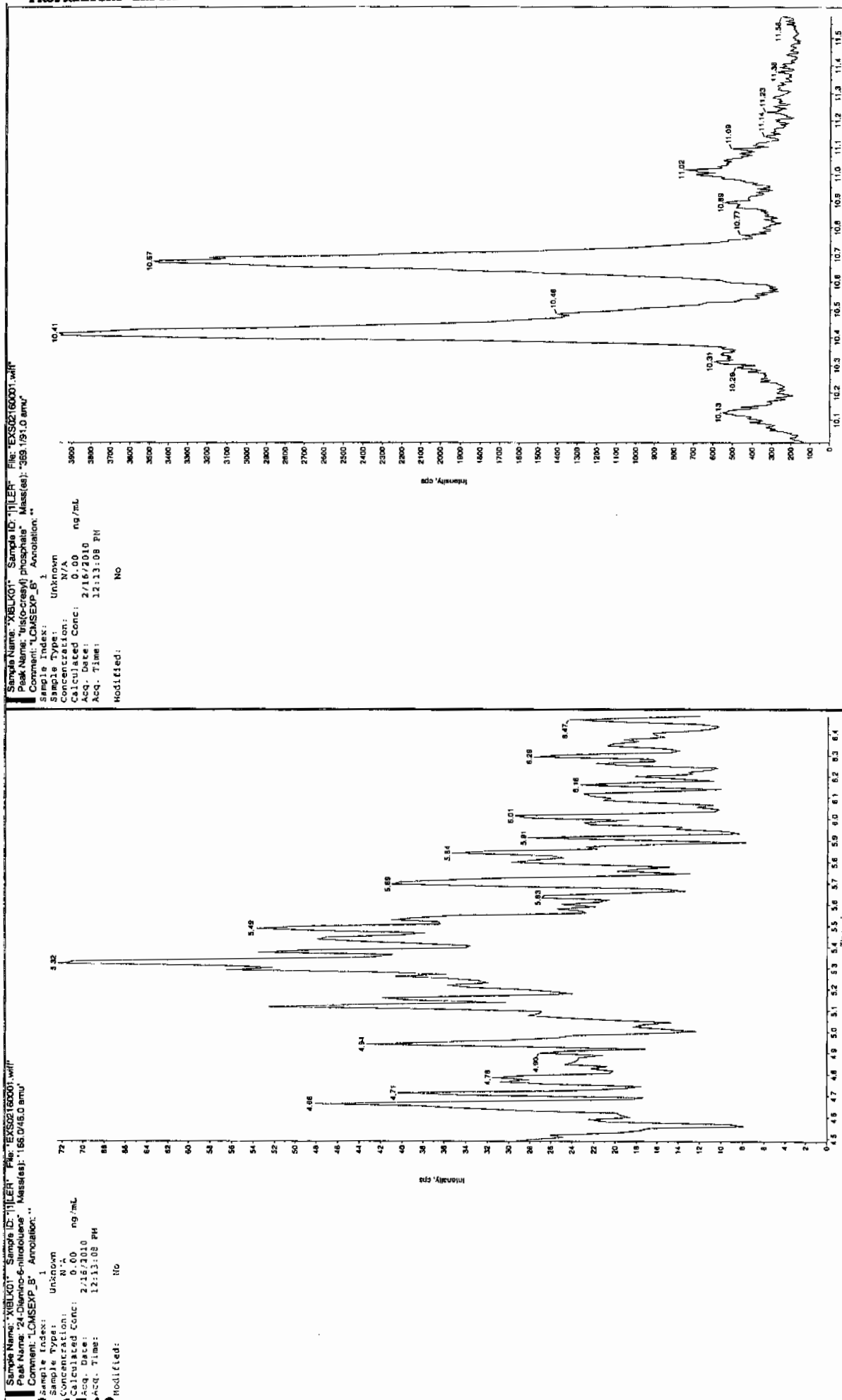
Sample Name: "XBLK01" Sample ID: "11111" File: "EX502160001.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Time: 12:13:08 PM  
 Modified: NO



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 16-FEB-10 12:29

GEL Data File: EXS02160002.wiff

Instrument ID: LCMSMS

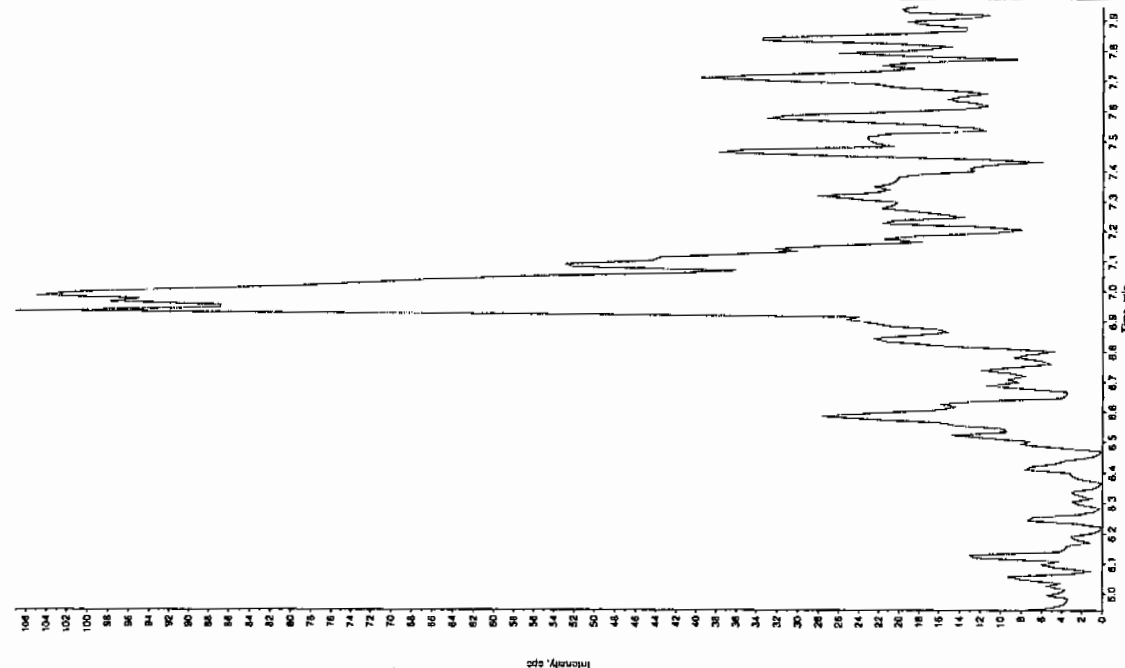
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

2/17/10  
Lan

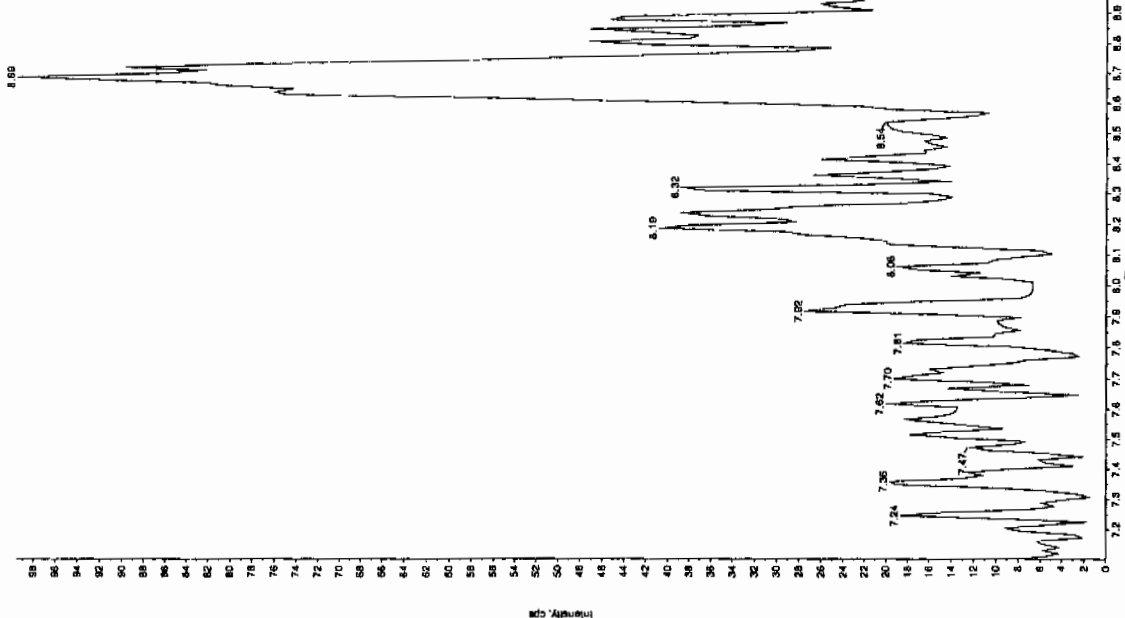
Sample Name: "XIBLX01" Sample ID: "TILER" File: "EX02160002.wif"  
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 2/16/2010  
Acq. Time: 12:29:00 PM  
Modified: No



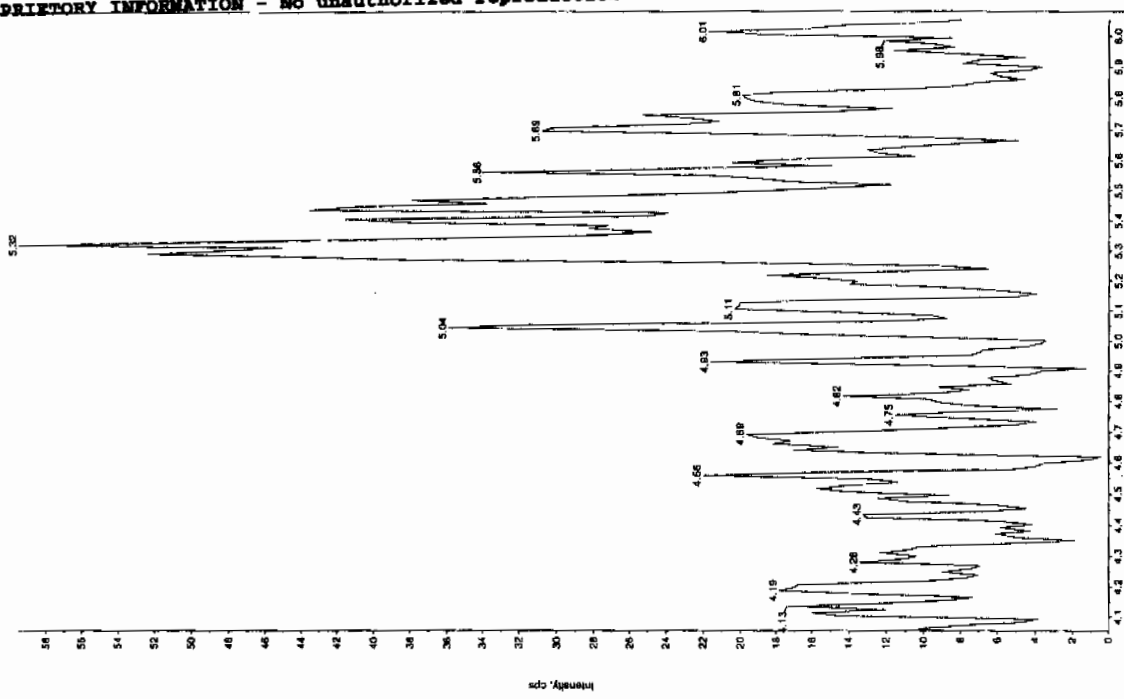
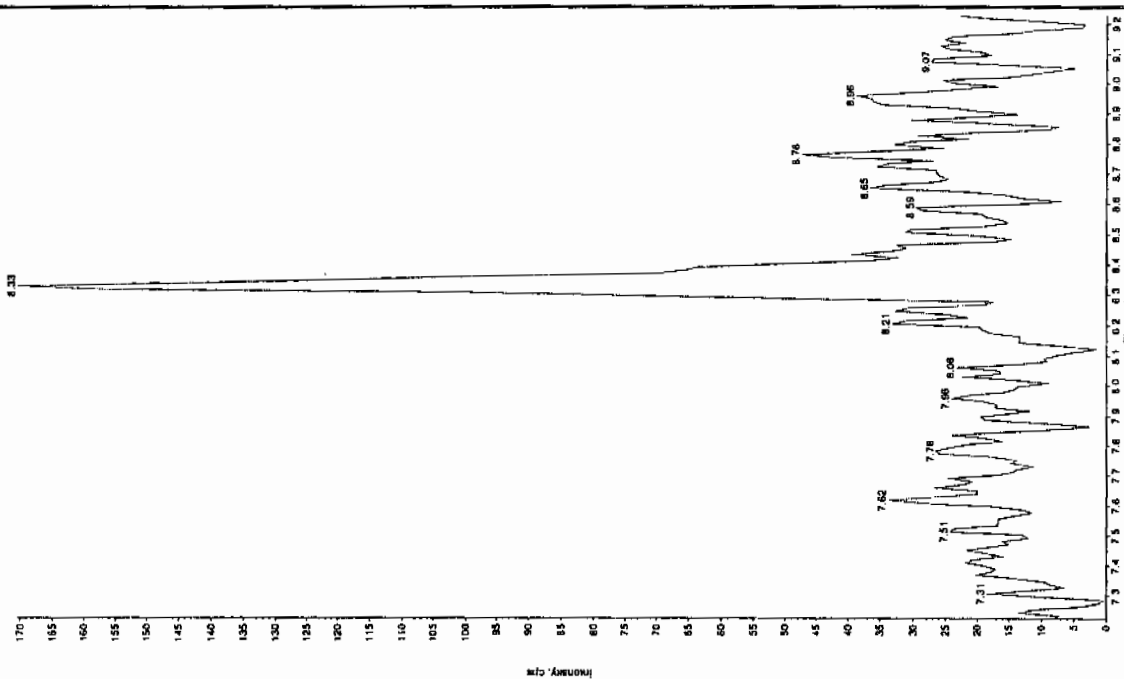
Sample Name: "XIBLX01" Sample ID: "TILER" File: "EX02160002.wif"  
Peak Name: "TATB" Mass(es): "257.22049 amu"  
Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 2.14-2310 ng/mL  
Acq. Date: 2/16/2010  
Acq. Time: 12:29:00 PM  
Modified: No



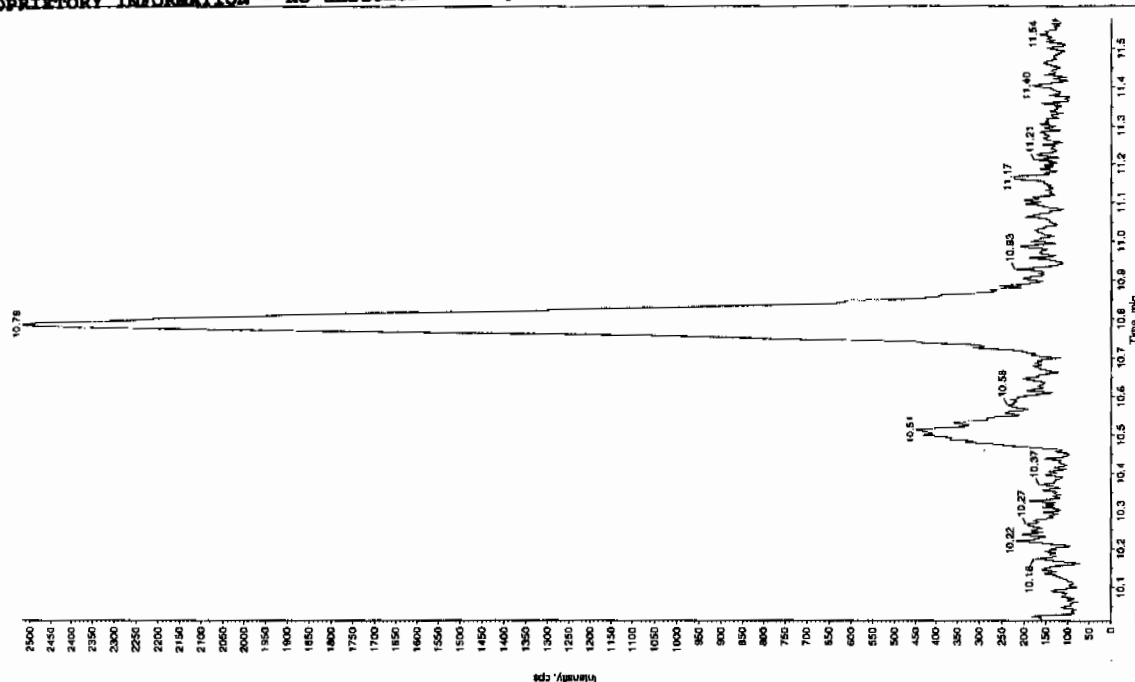
2/17/10

Sample Name: "VIBL001" Sample ID: "HILF" File: "EX502160002.wif"  
 Peak Name: "24,0-Dioxin-4-methoxy" Mass(es): "182.0480 amu"  
 Concentration: "0.00 ng/mL"  
 Sample Index: "1"  
 Sample Type: "Unknown"  
 Concentration: "0.00 ng/mL"  
 Calculated Conc: "2/16/2010"  
 Acq. Date: "12:29:00 PM"  
 Acq. Time: "12:29:00 PM"  
 Modified: "No"



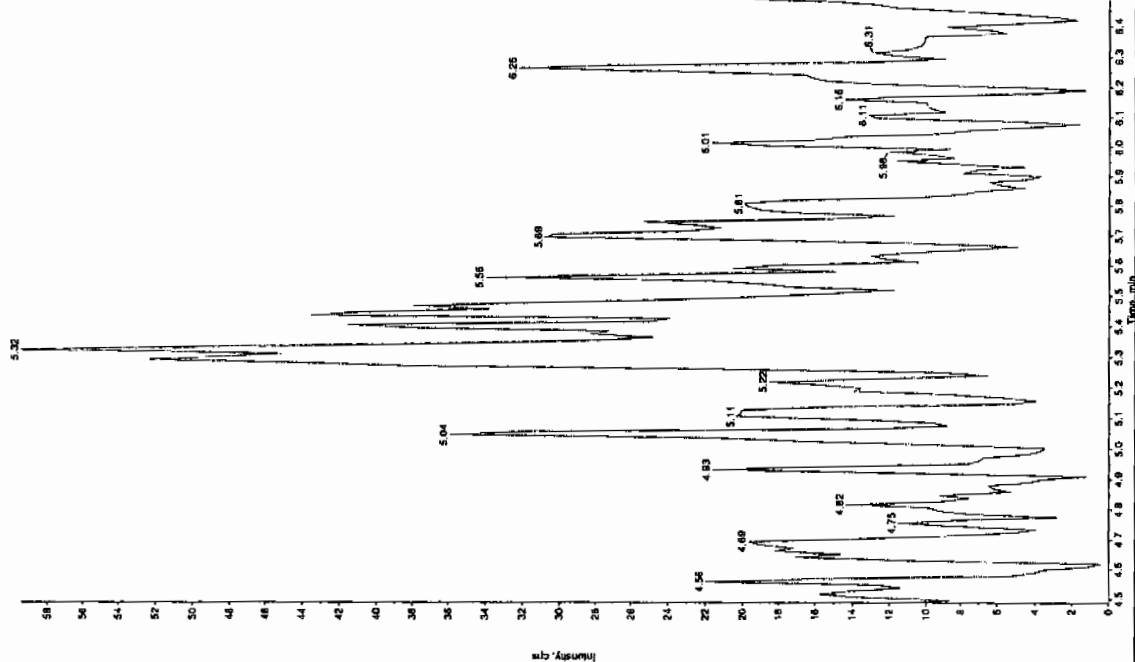
Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS02160002.will"  
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 12:29:00 PM  
 Modified: No



Sample Name: "XIBLK01" Sample ID: "111ER" File: "EXS02160002.will"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "156.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 12:29:00 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 16-FEB-10 21:04

GEL Data File: EXP0216009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene-d3	500	494.232
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	570.463
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0

Printed: Wed Feb 17 10:00:54 2010, Page 17 of 59

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0216009a

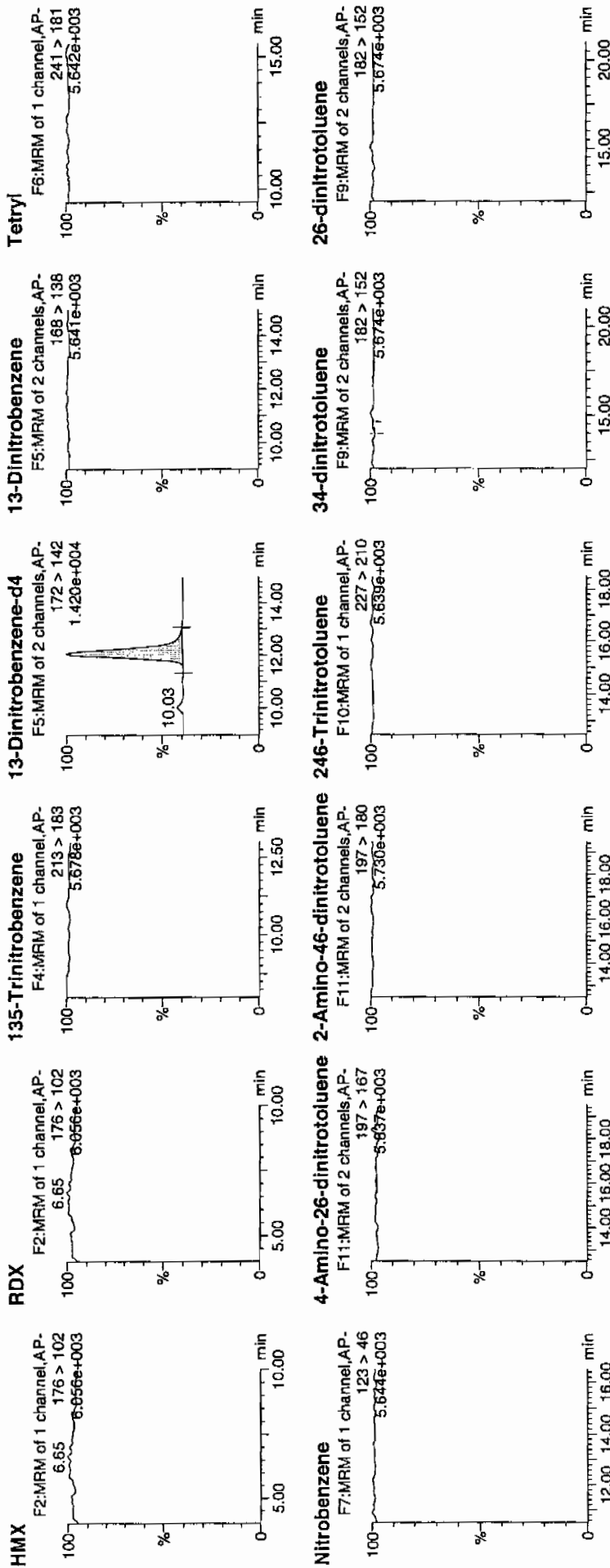
Date: 16-Feb-2010

Time: 21:04:59

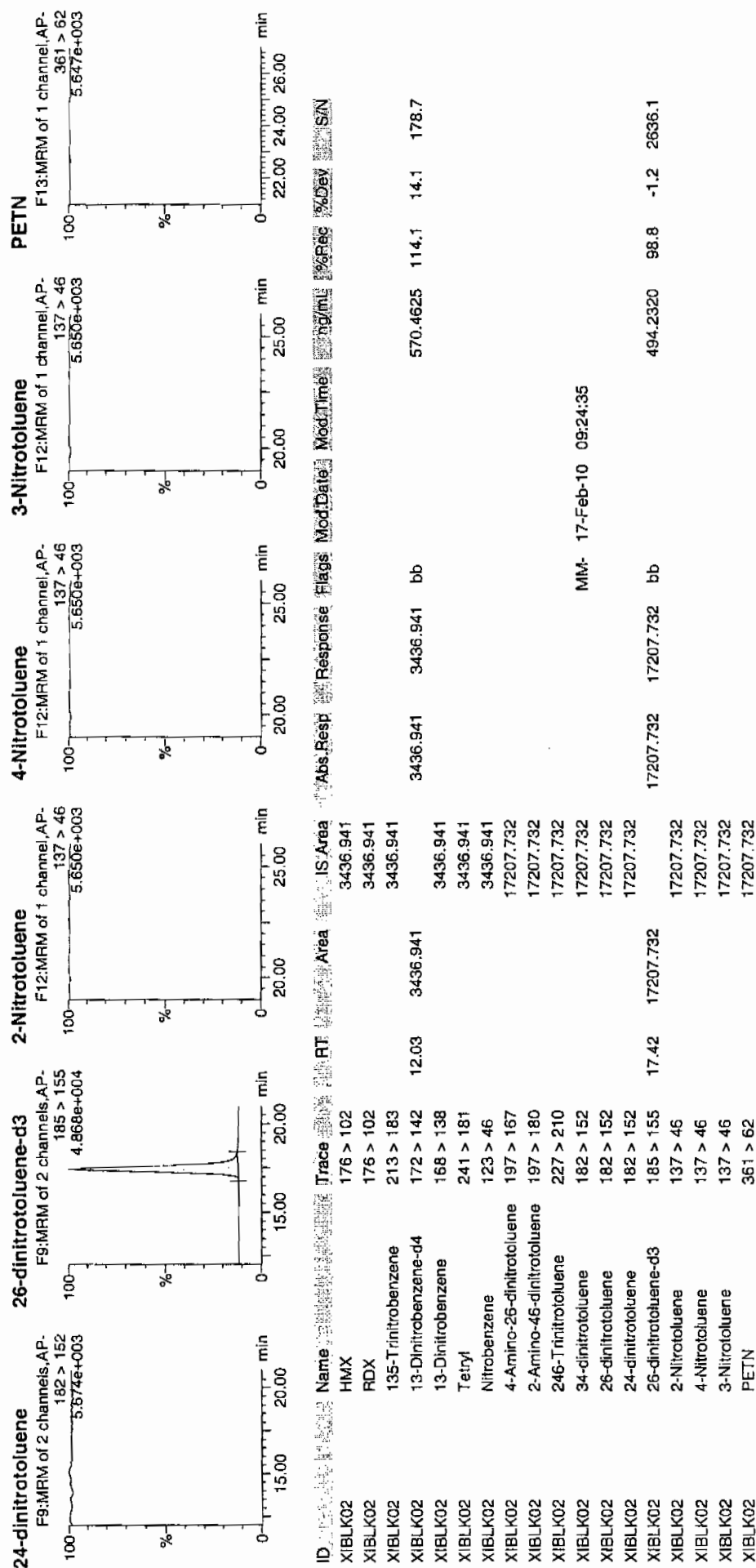
ID: XIBLK02

Vial: 1:1,A

WAT  
2/17/10



Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA.qid, Time: Wed Feb 17 10:00:06 2010





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 16-FEB-10 22:04

GEL Data File: EXP0216011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	445.165
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	575.243
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantity Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qid, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216011a

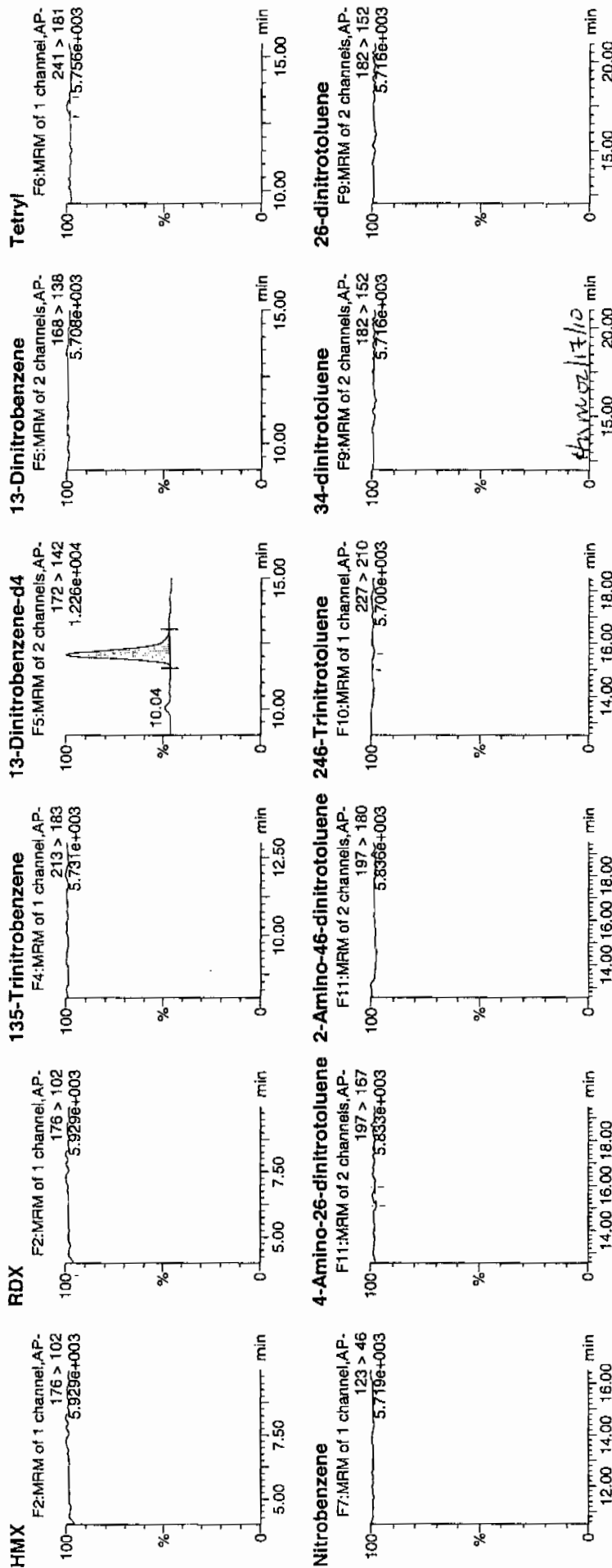
Date: 16-Feb-2010

Time: 22:04:12

ID: XIBLK03

Vial: 1:1,A

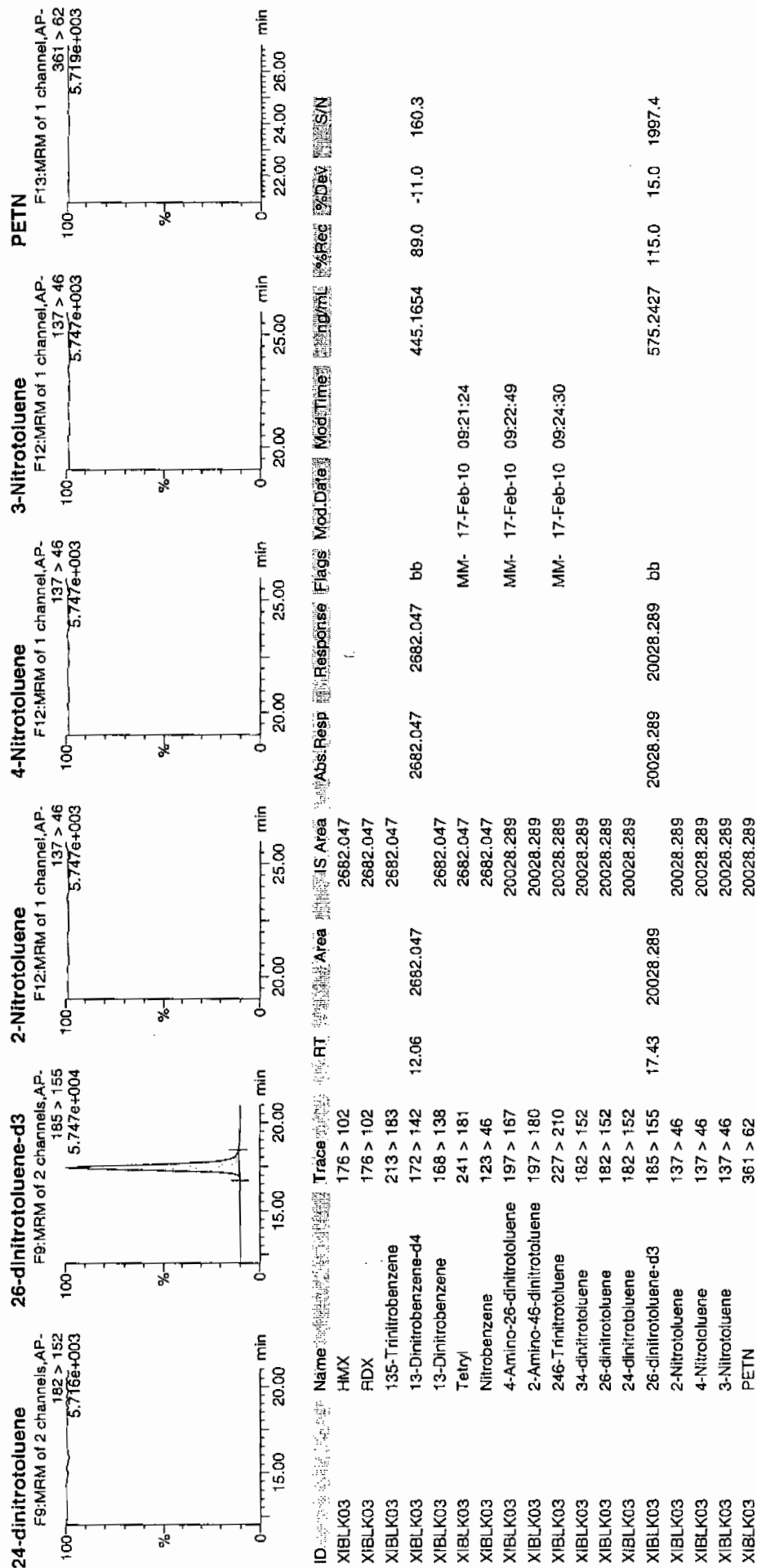
MIT  
6/17/10



Printed: Wed Feb 17 10:00:54 2010, Page 22 of 59

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 17-FEB-10 03:30

GEL Data File: EXP0216022a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	468.456
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	470.843
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0

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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0216022a

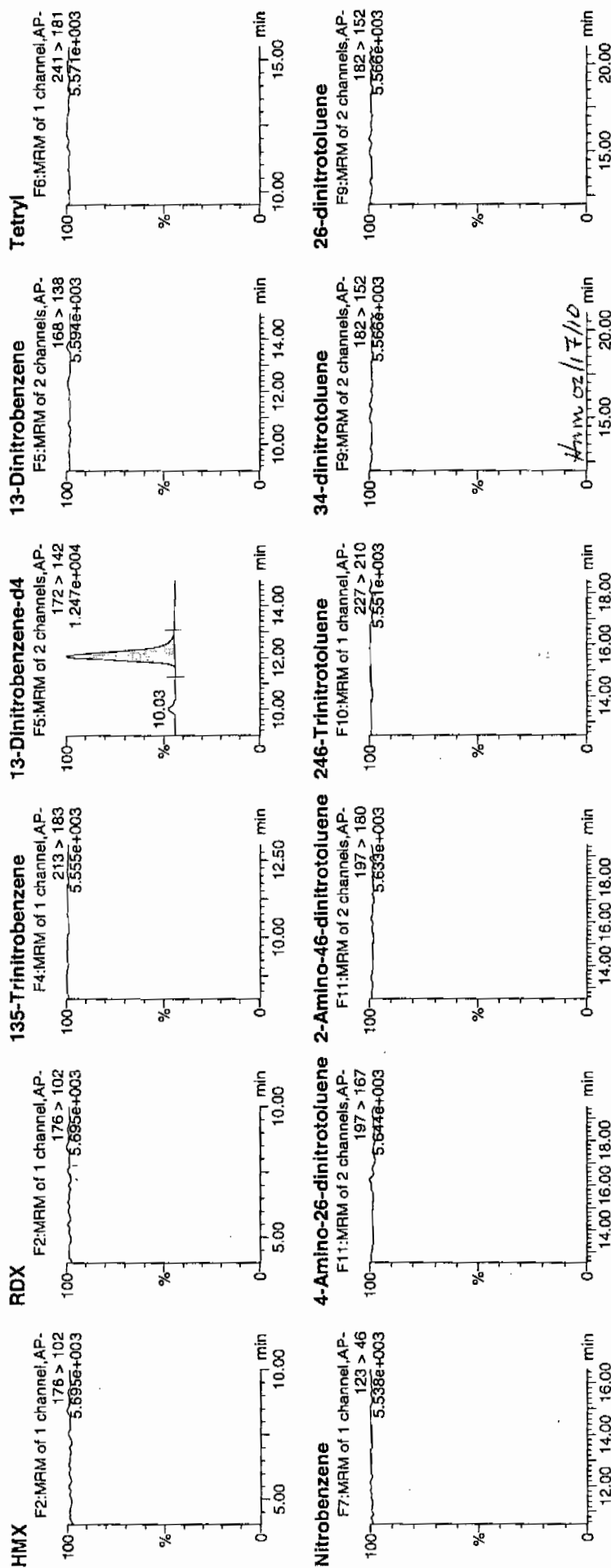
Date: 17-Feb-2010

Time: 03:30:28

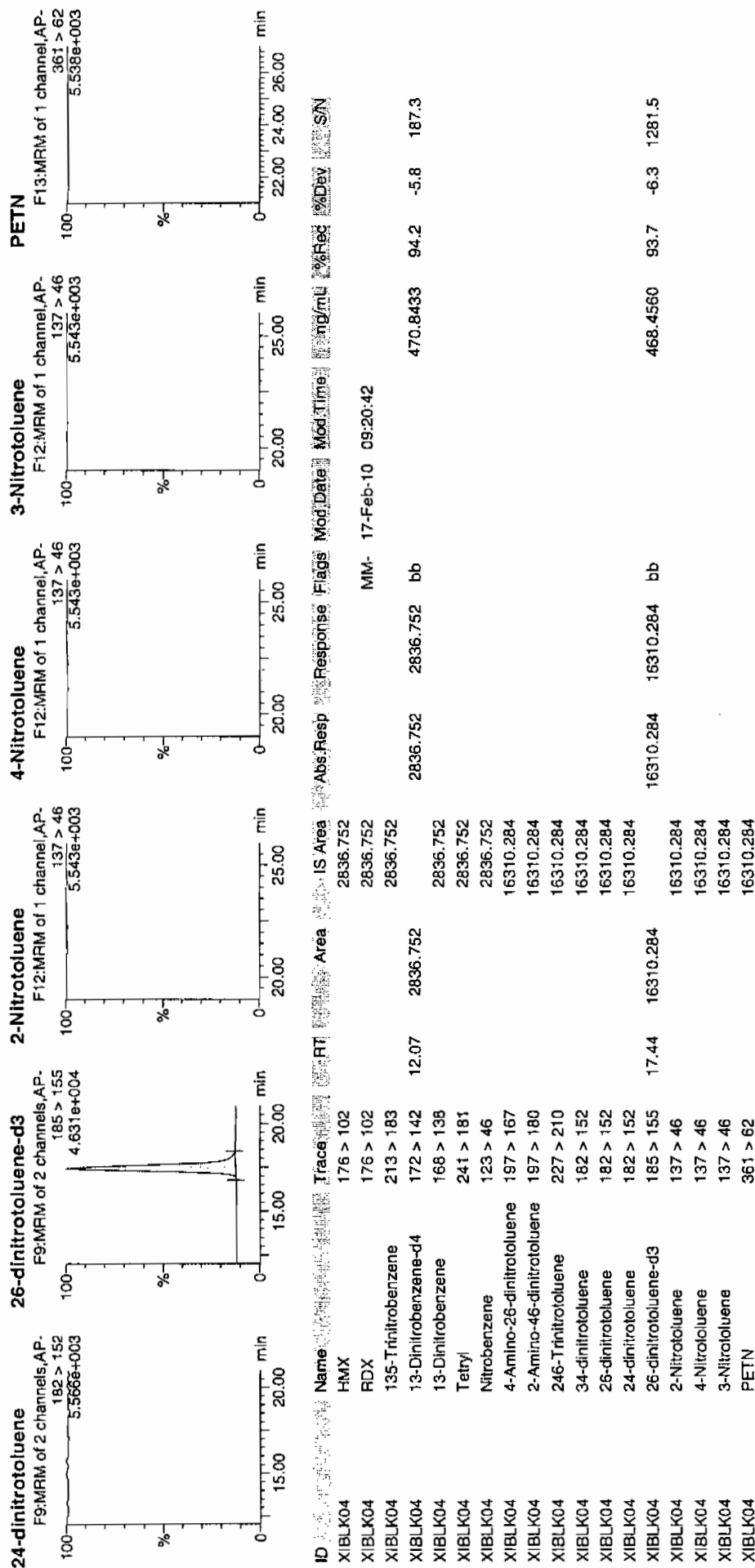
ID: XIBLK04

Vial: 1:1,A

1/17/10



Dataset: C:\MASSLYN\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 17-FEB-10 06:28

GEL Data File: EXP0216028a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	443.214
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	440.83
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216028a

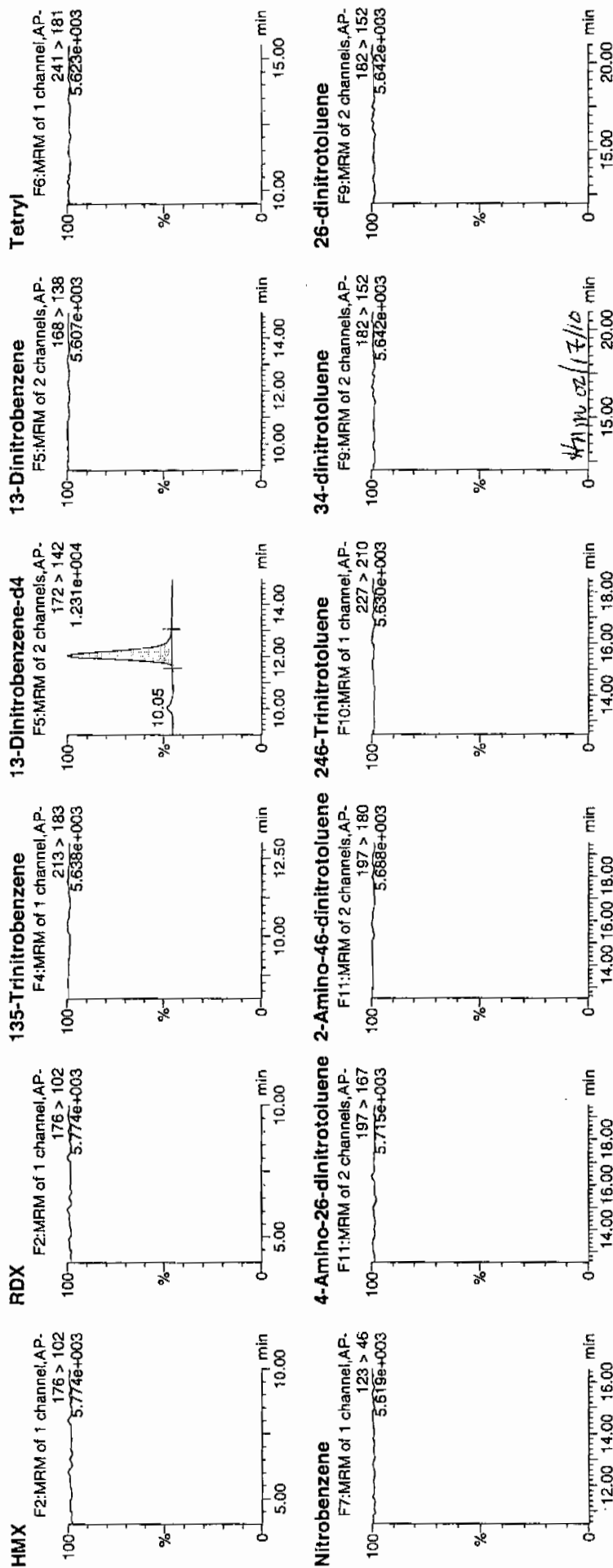
Date: 17-Feb-2010

Time: 06:28:06

ID: XIBLK05

Vial: 1:1,A

2/17/10  
MJP

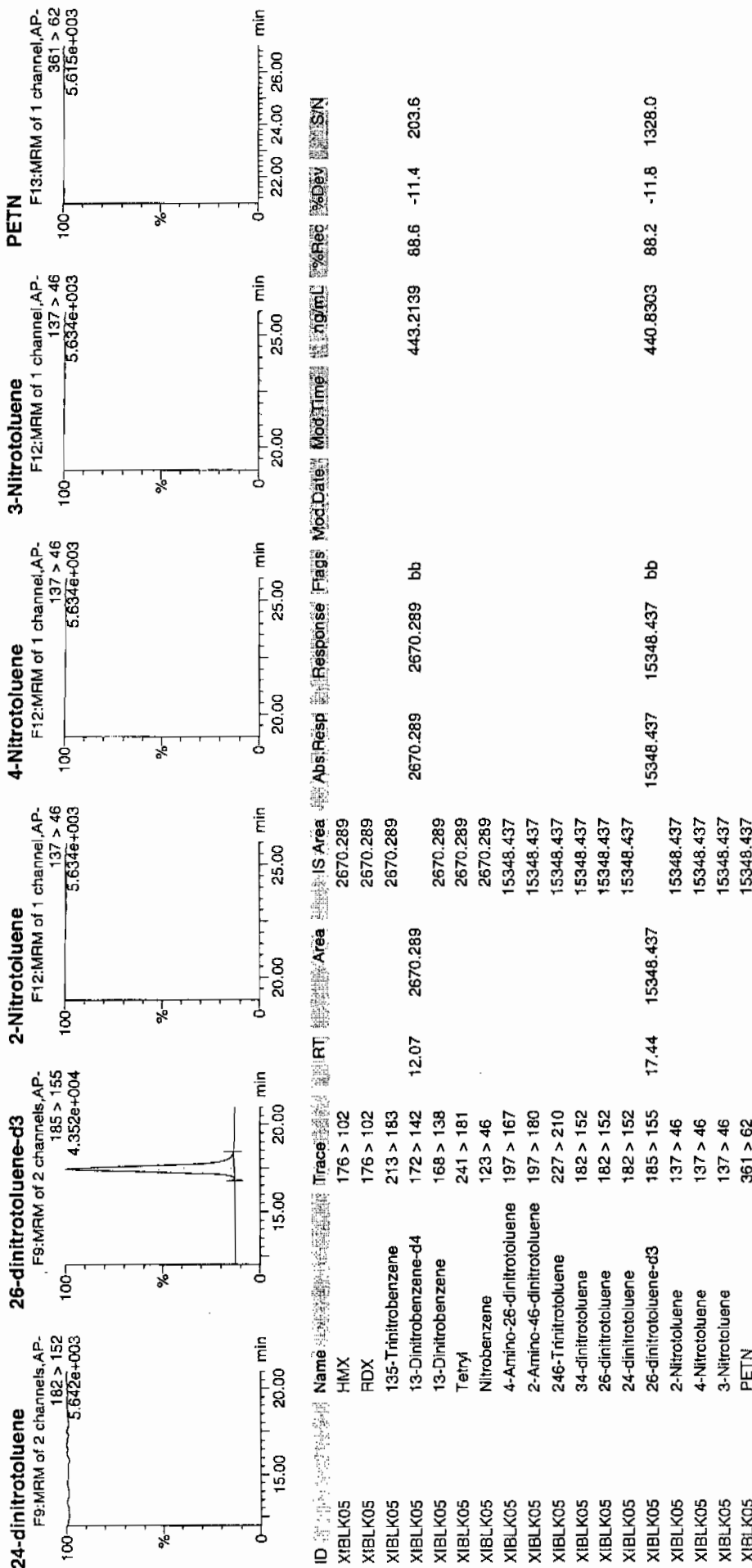




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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA.qtd, Time: Wed Feb 17 10:00:06 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 17-FEB-10 12:24

GEL Data File: EXP0216040a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	431.007
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	413.713
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0216040a

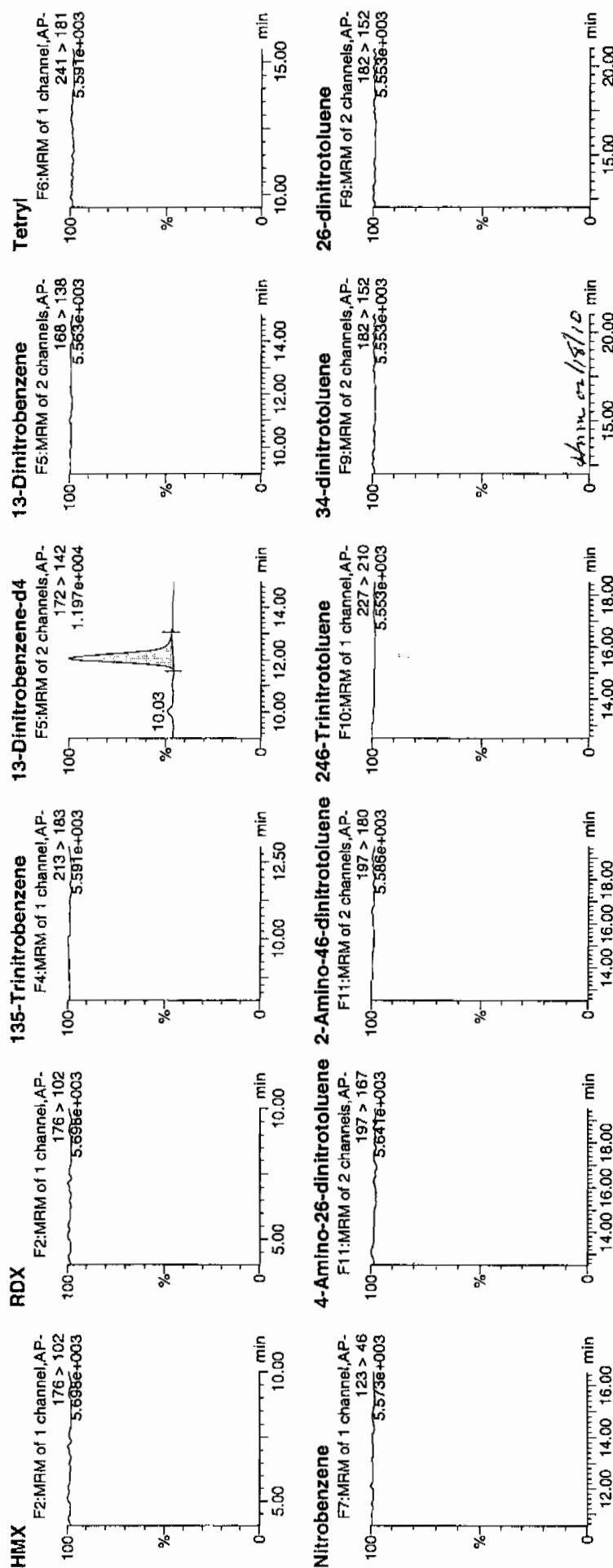
Date: 17-Feb-2010

Time: 12:24:42

ID: XIBLK06

Vial: 1:1A

4/8/10

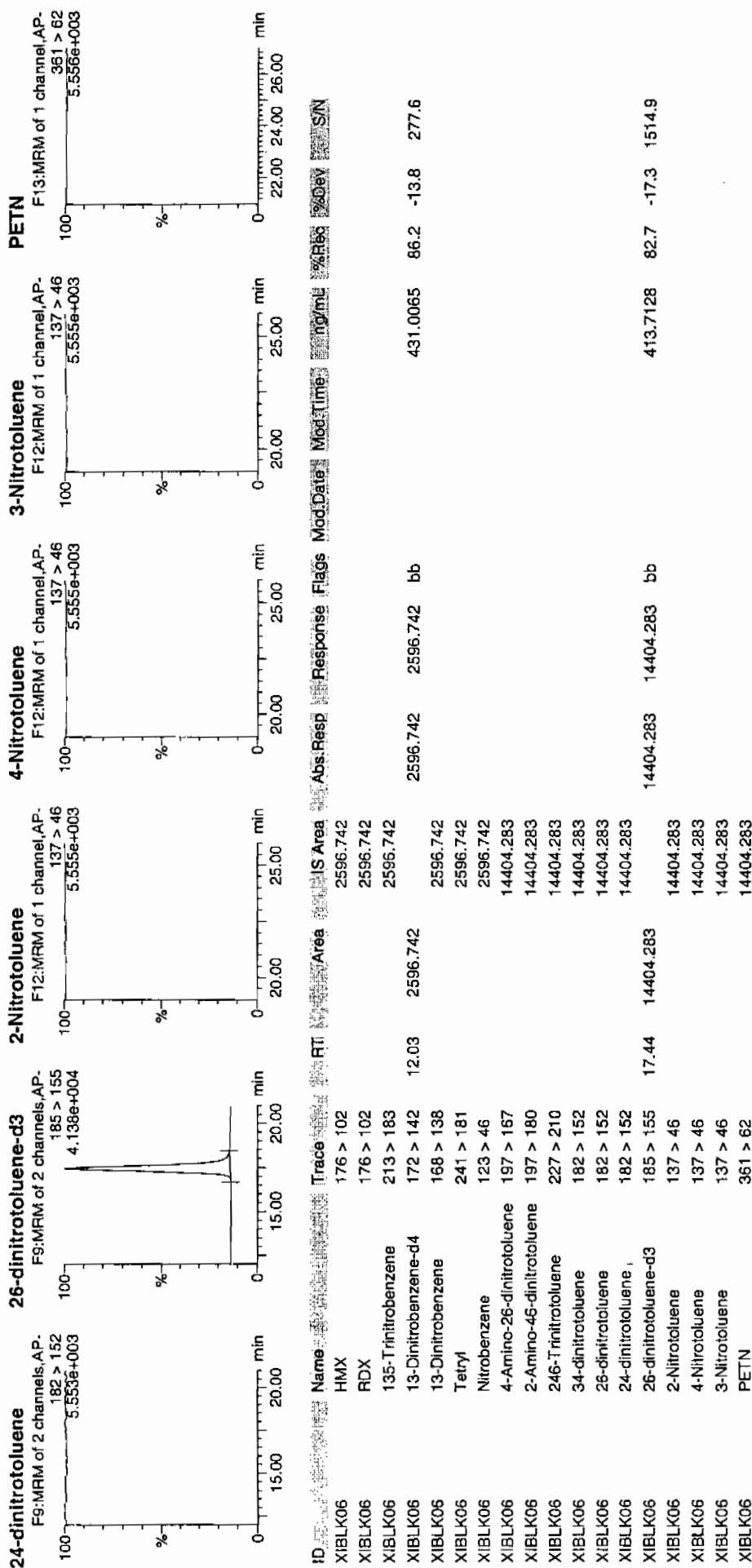


# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New\_Exp\PRO1021610expA1.qid, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 17-FEB-10 18:50

GEL Data File: EXP0216053a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	517.203
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	500.527
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 47 of 103

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0216053a

Date: 17-Feb-2010

Time: 18:50:03

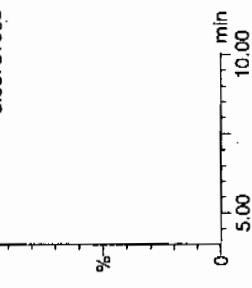
ID: XIBLK07

Vial: 1:1,A

MM  
2/18/10

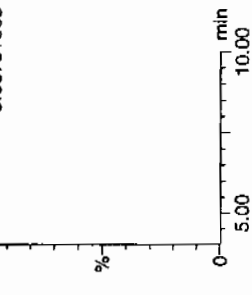
HMIX

F2:MRM of 1 channel,AP-  
176 > 102  
5.567e+003



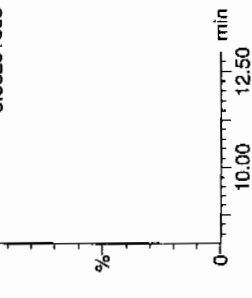
RDX

F2:MRM of 1 channel,AP-  
176 > 102  
5.567e+003



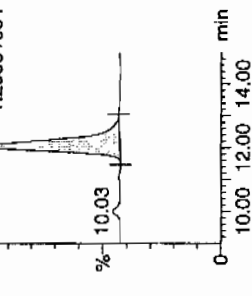
135-Trinitrobenzene

F4:MRM of 1 channel,AP-  
213 > 183  
5.582e+003



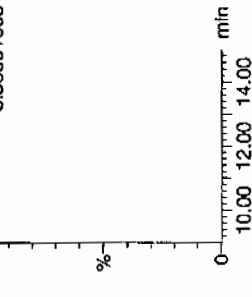
13-Dinitrobenzene-d4

F5:MRM of 2 channels,AP-  
172 > 142  
1.296e+004



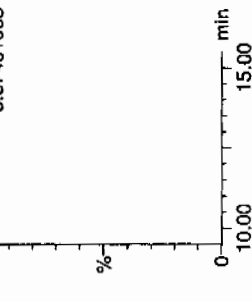
13-Dinitrobenzene

F5:MRM of 2 channels,AP-  
168 > 138  
5.566e+003



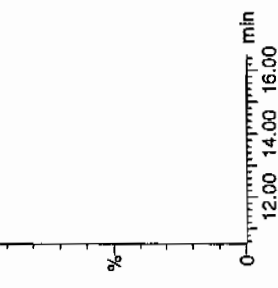
Tetryl

F6:MRM of 1 channel,AP-  
241 > 181  
5.574e+003



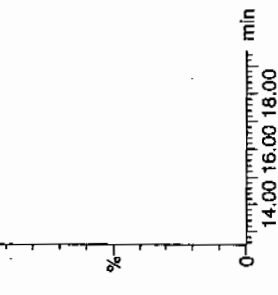
Nitrobenzene

F7:MRM of 1 channel,AP-  
123 > 46  
5.569e+003



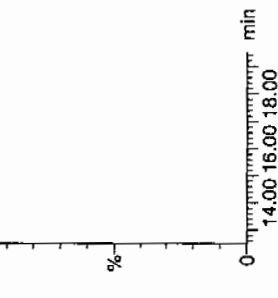
4-Amino-26-dinitrotoluene

F11:MRM of 2 channels,AP-  
197 > 167  
5.629e+003



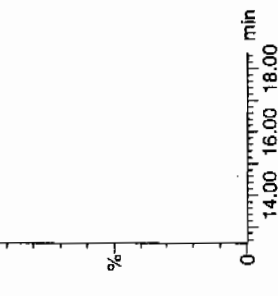
2-Amino-46-dinitrotoluene

F11:MRM of 2 channels,AP-  
197 > 180  
5.615e+003



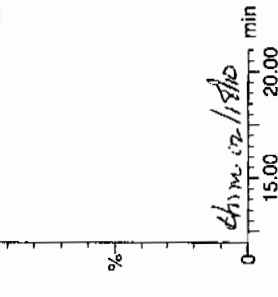
246-Trinitrotoluene

F10:MRM of 1 channel,AP-  
227 > 210  
5.567e+003



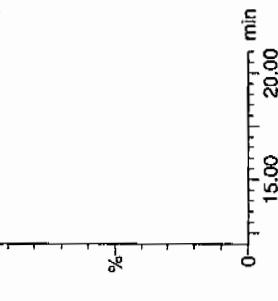
34-dinitrotoluene

F9:MRM of 2 channels,AP-  
182 > 152  
5.613e+003



26-dinitrotoluene

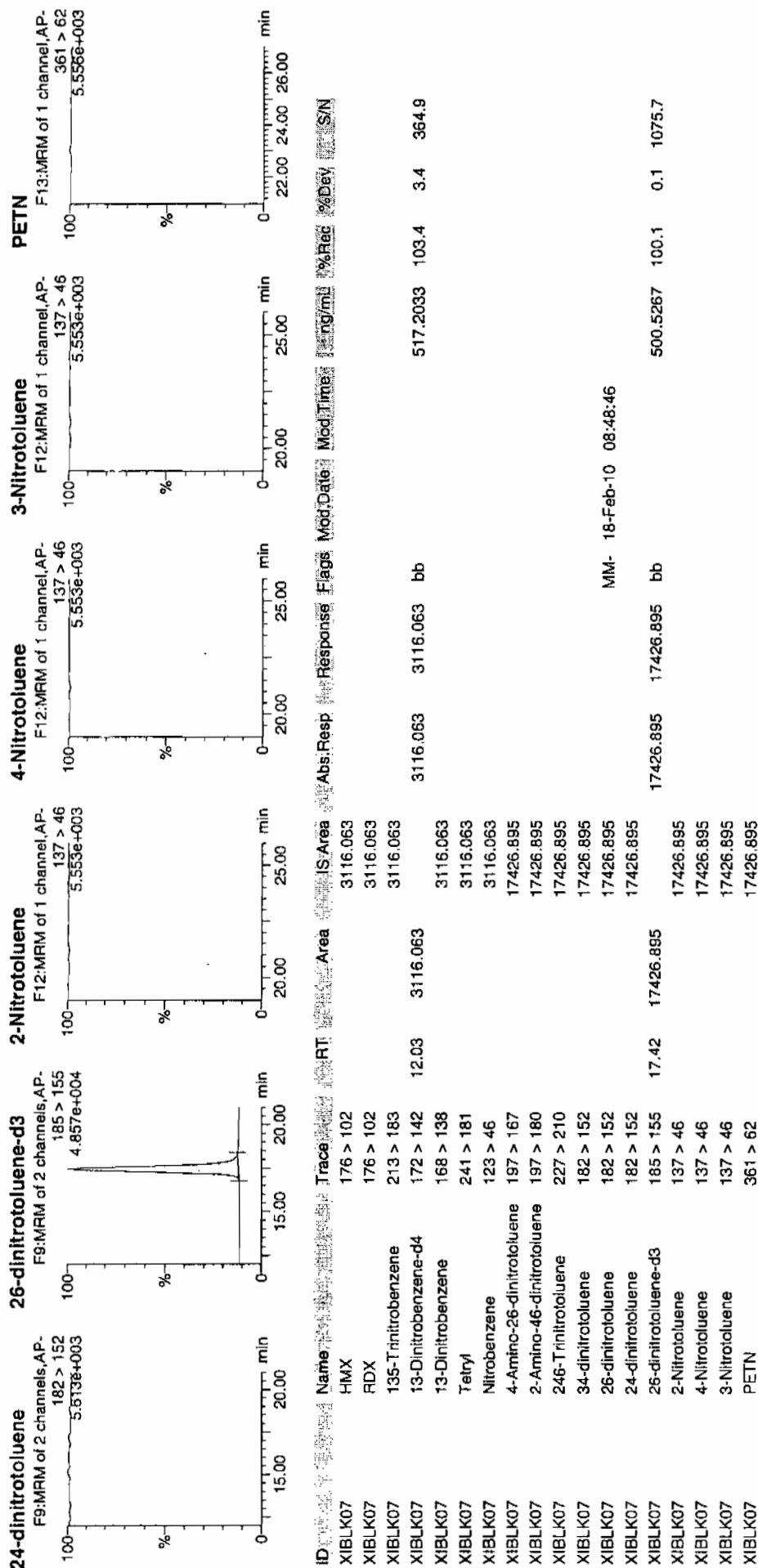
F9:MRM of 2 channels,AP-  
182 > 152  
5.613e+003



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Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 16-FEB-10 14:34

GEL Data File: EXS02160010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.67
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



Jan 2/17/10

Sample Name: "XIBLK02" Sample ID: "JILLER" File: "EX502160010.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "162.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/16/2010

Acq. Time: 2:34:34 PM

Modified: No

Sample Name: "XIBLK02" Sample ID: "JILLER" File: "EX502160010.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

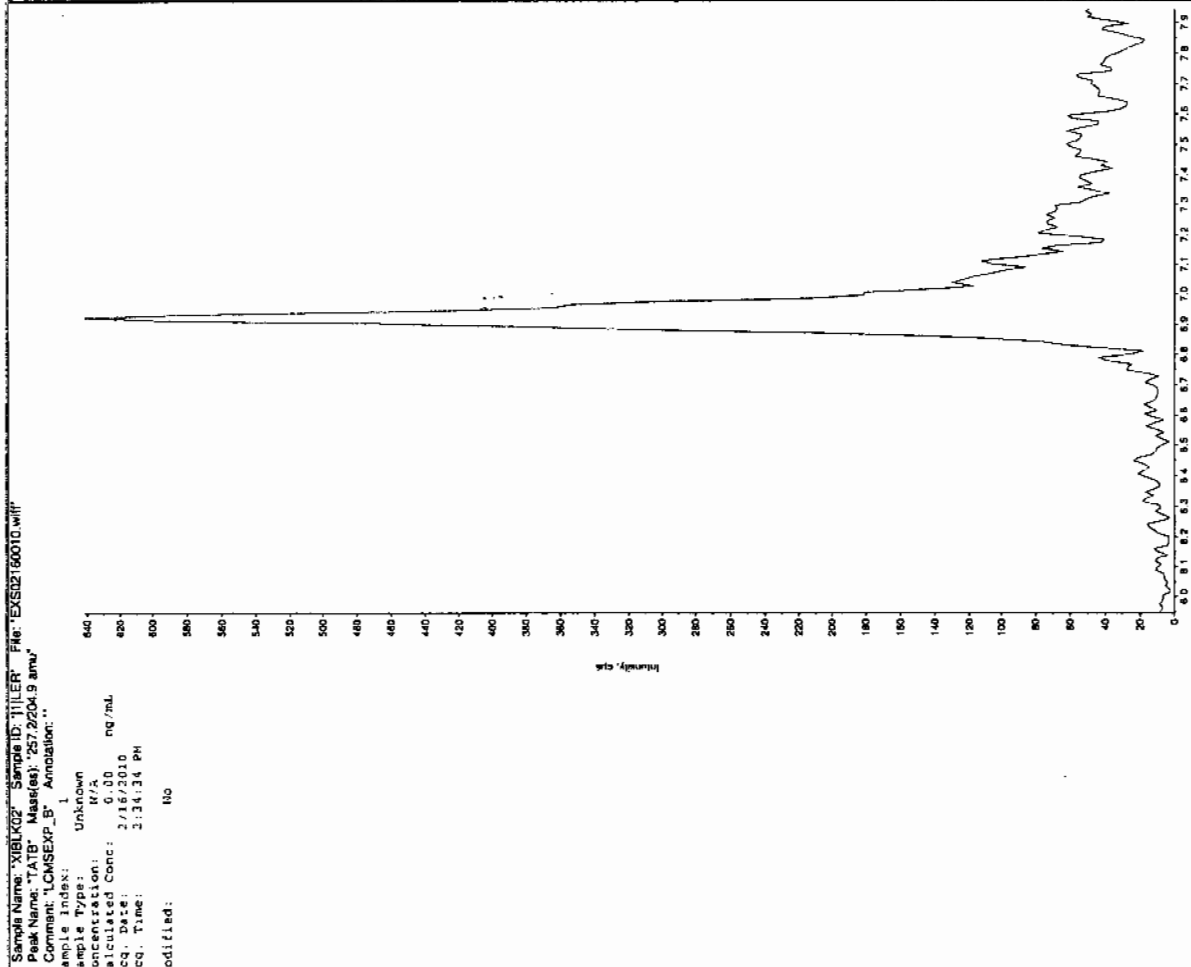
Concentration: N/A

Calculated Conc: 0.00 ng/mL

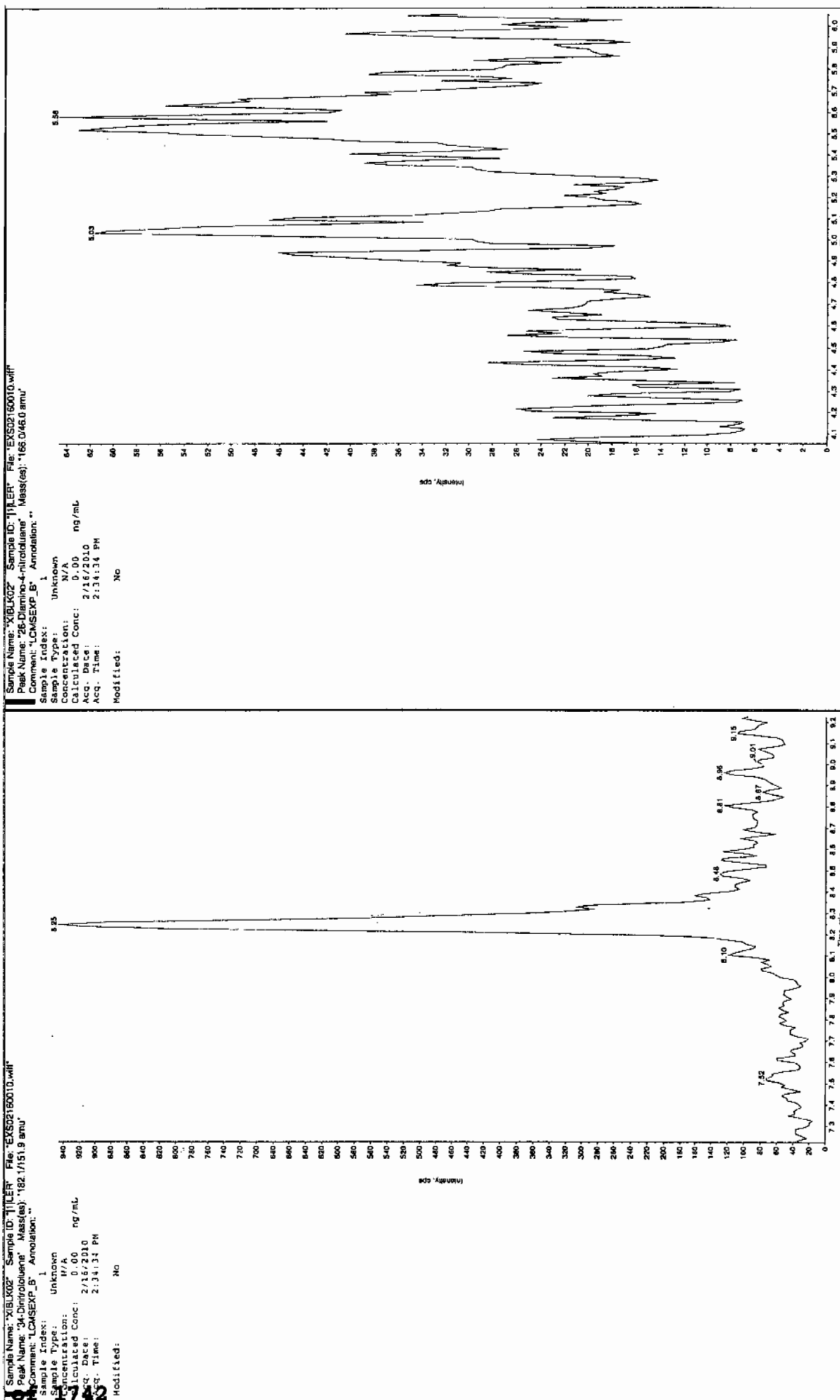
Acq. Date: 2/16/2010

Acq. Time: 2:34:34 PM

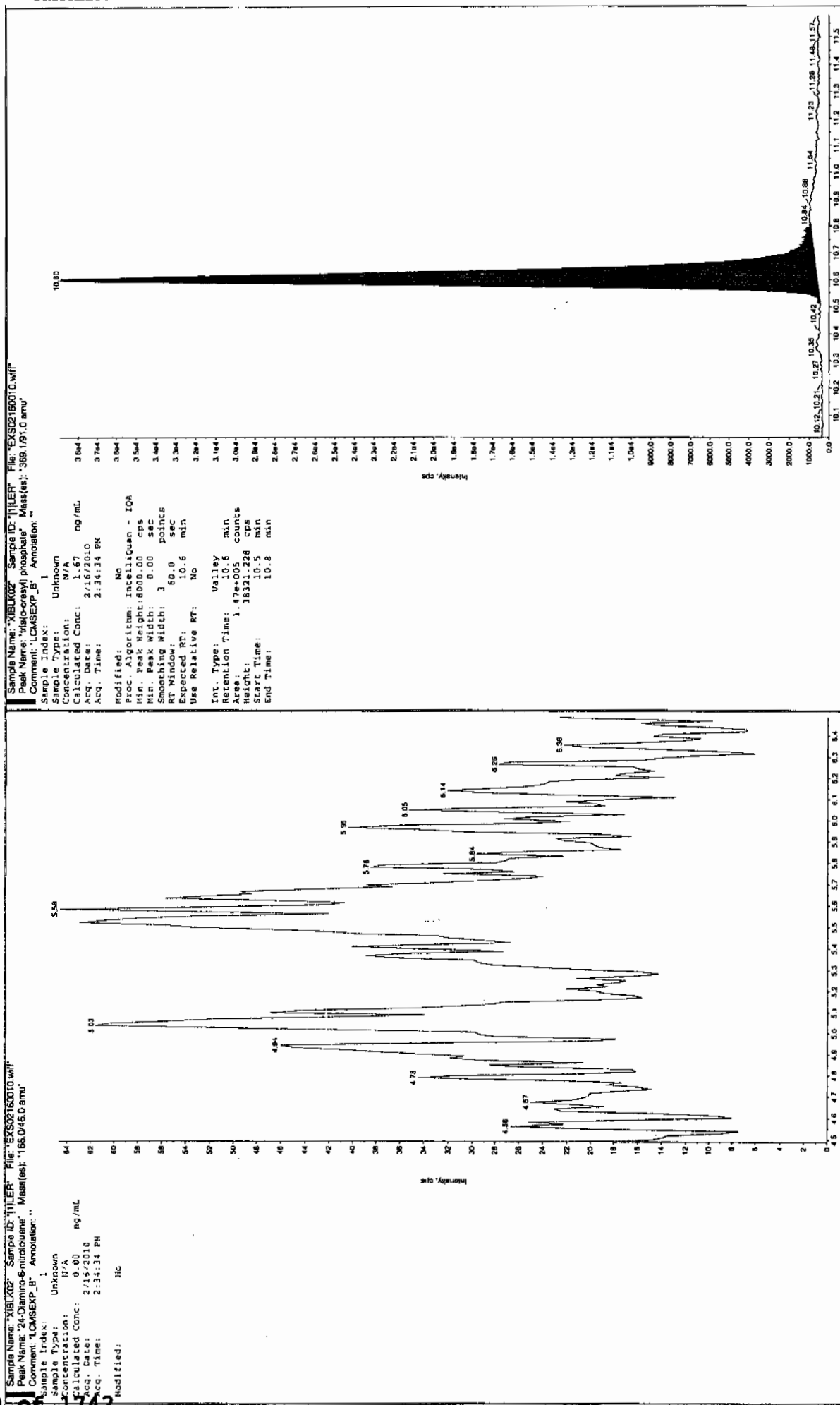
Modified: No



Jan 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 16-FEB-10 15:05

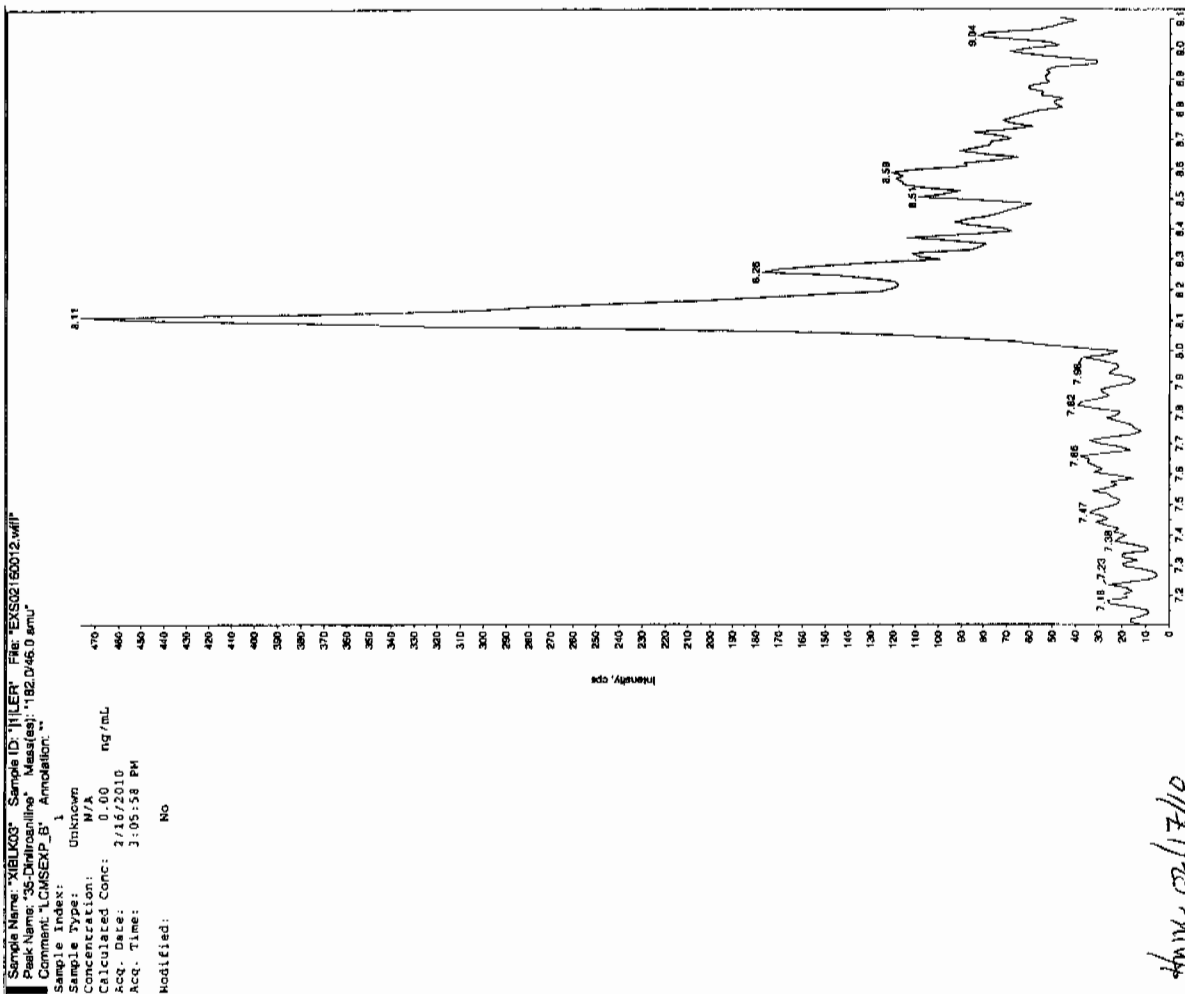
GEL Data File: EXS02160012.wiff

Instrument ID: LCMSMS

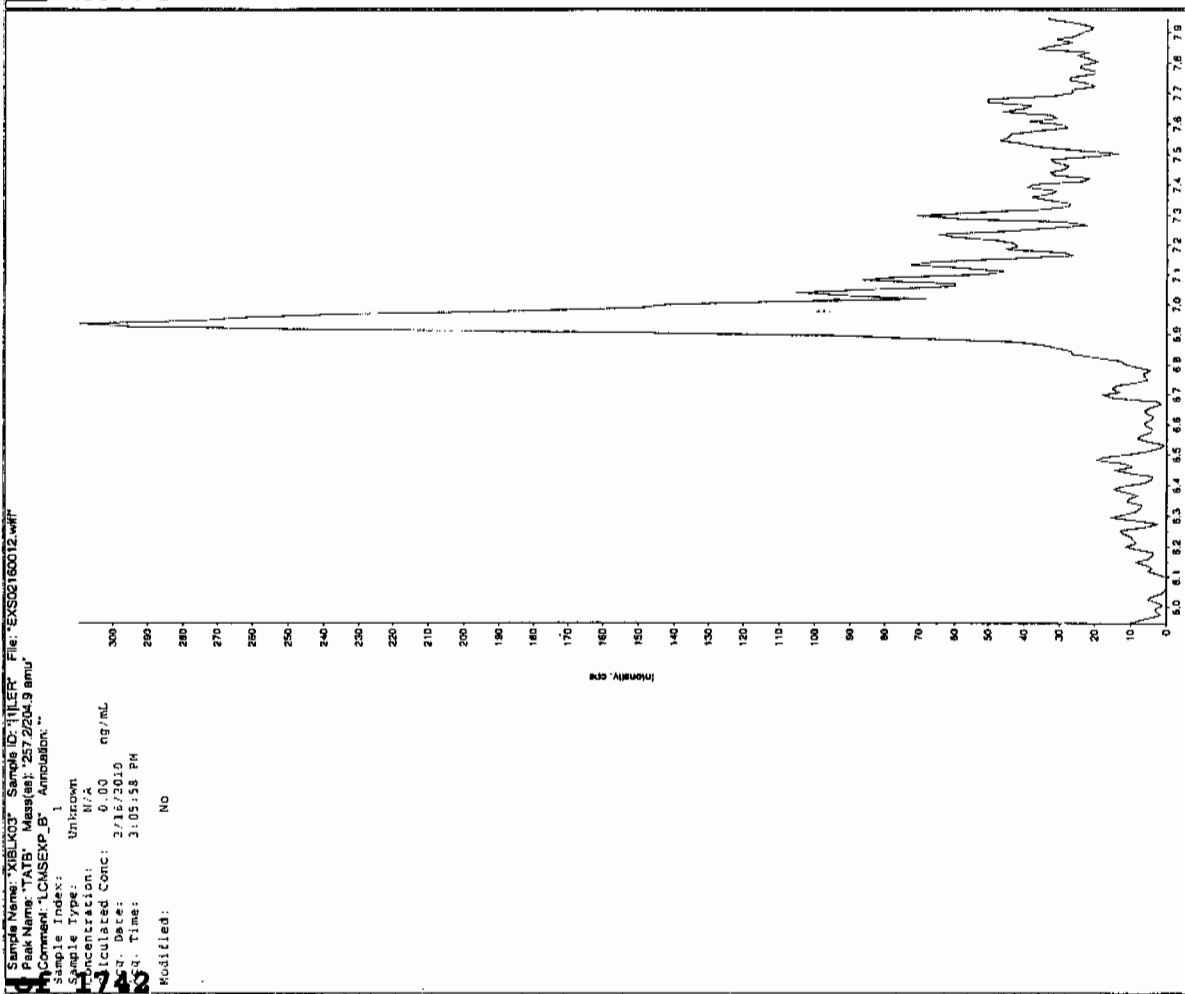
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

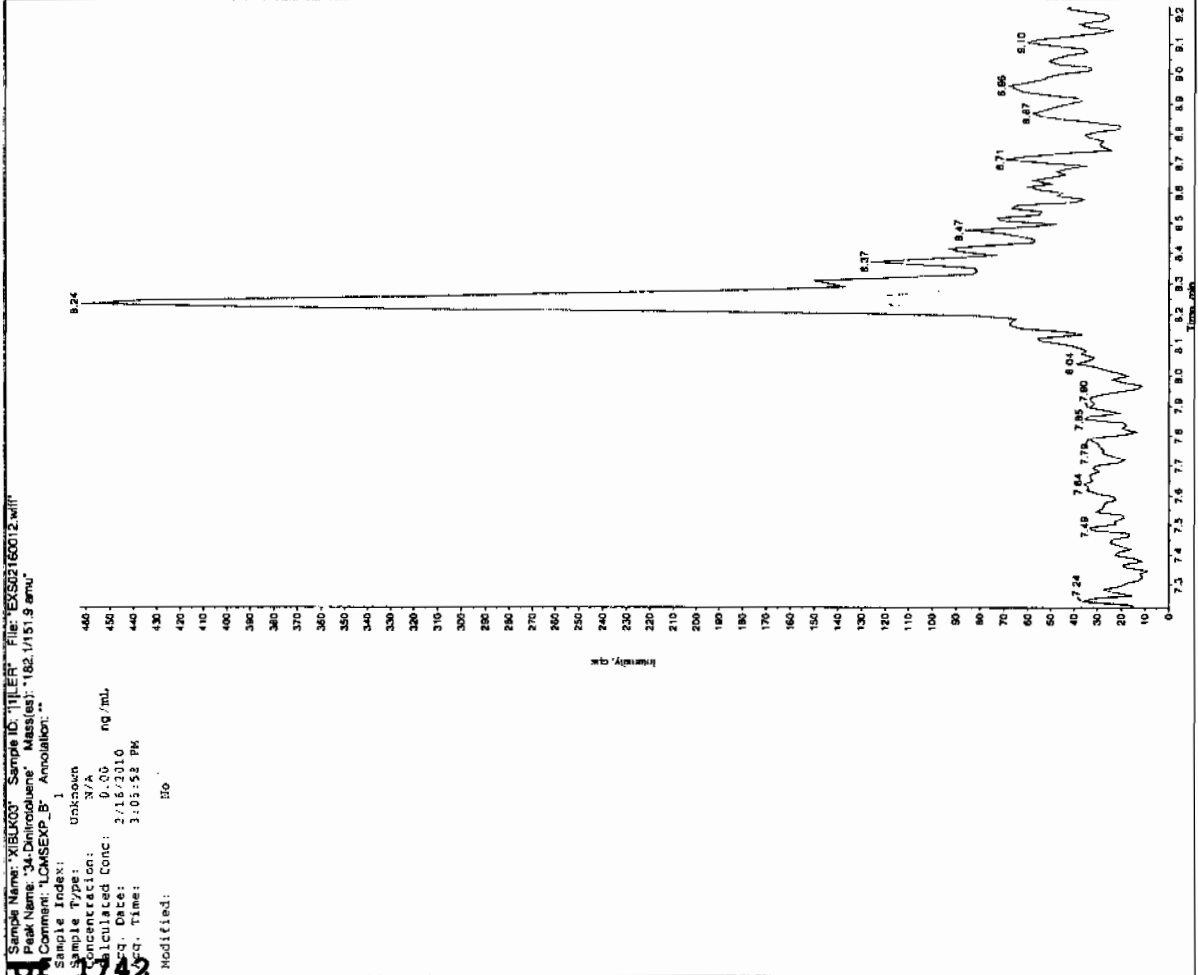
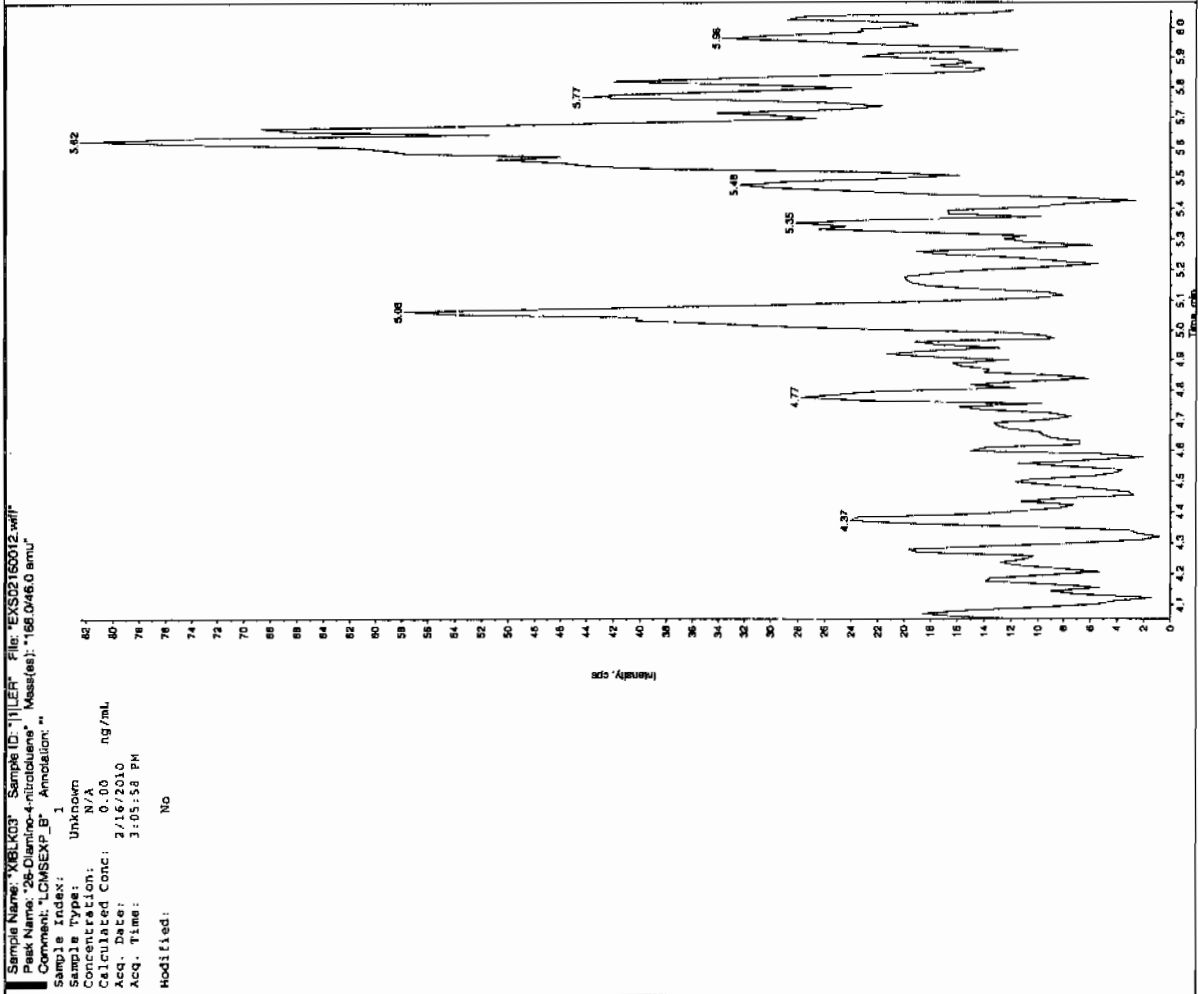
for 2/17/10



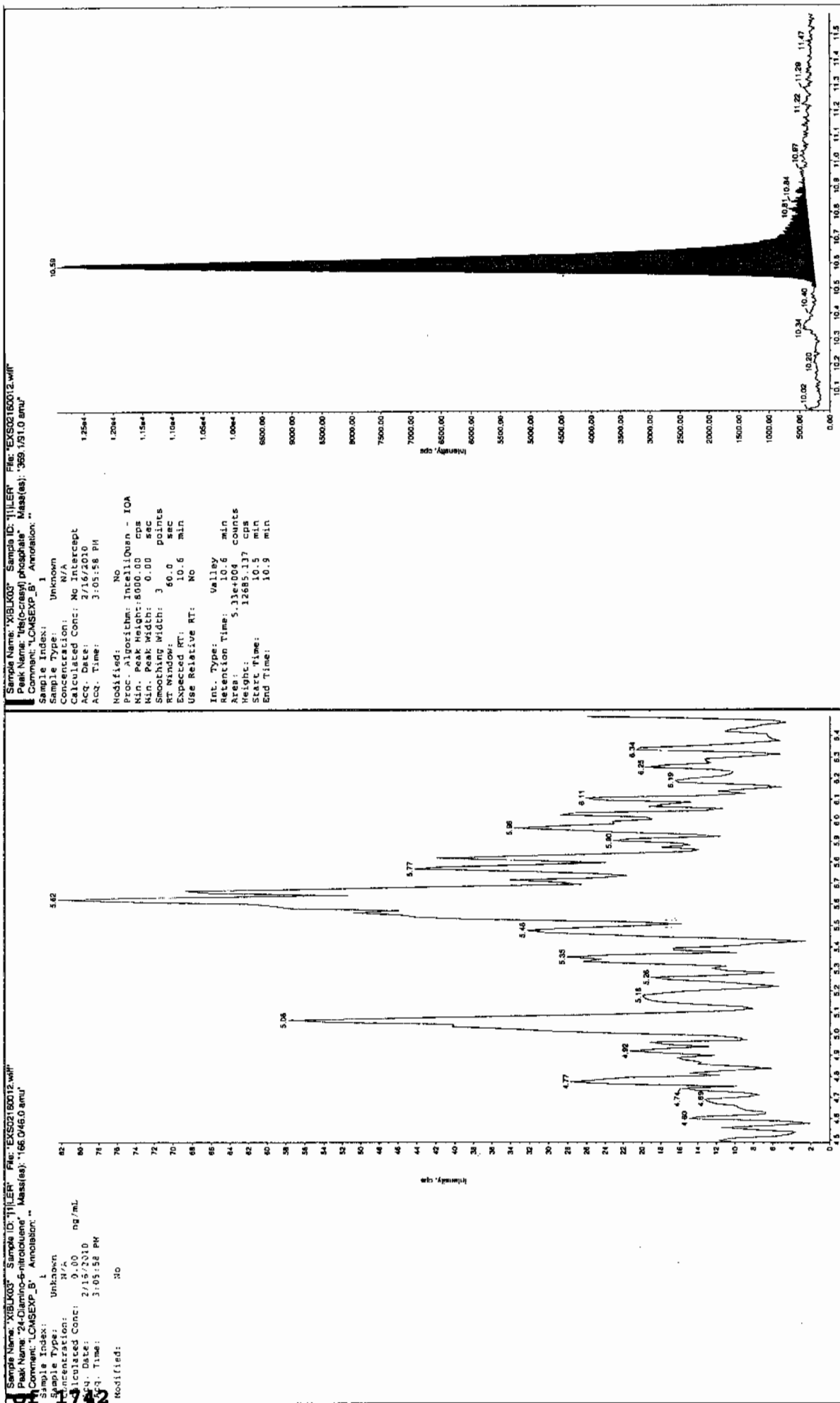
for 02/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 16-FEB-10 18:30

GEL Data File: EXS02160025.wiff

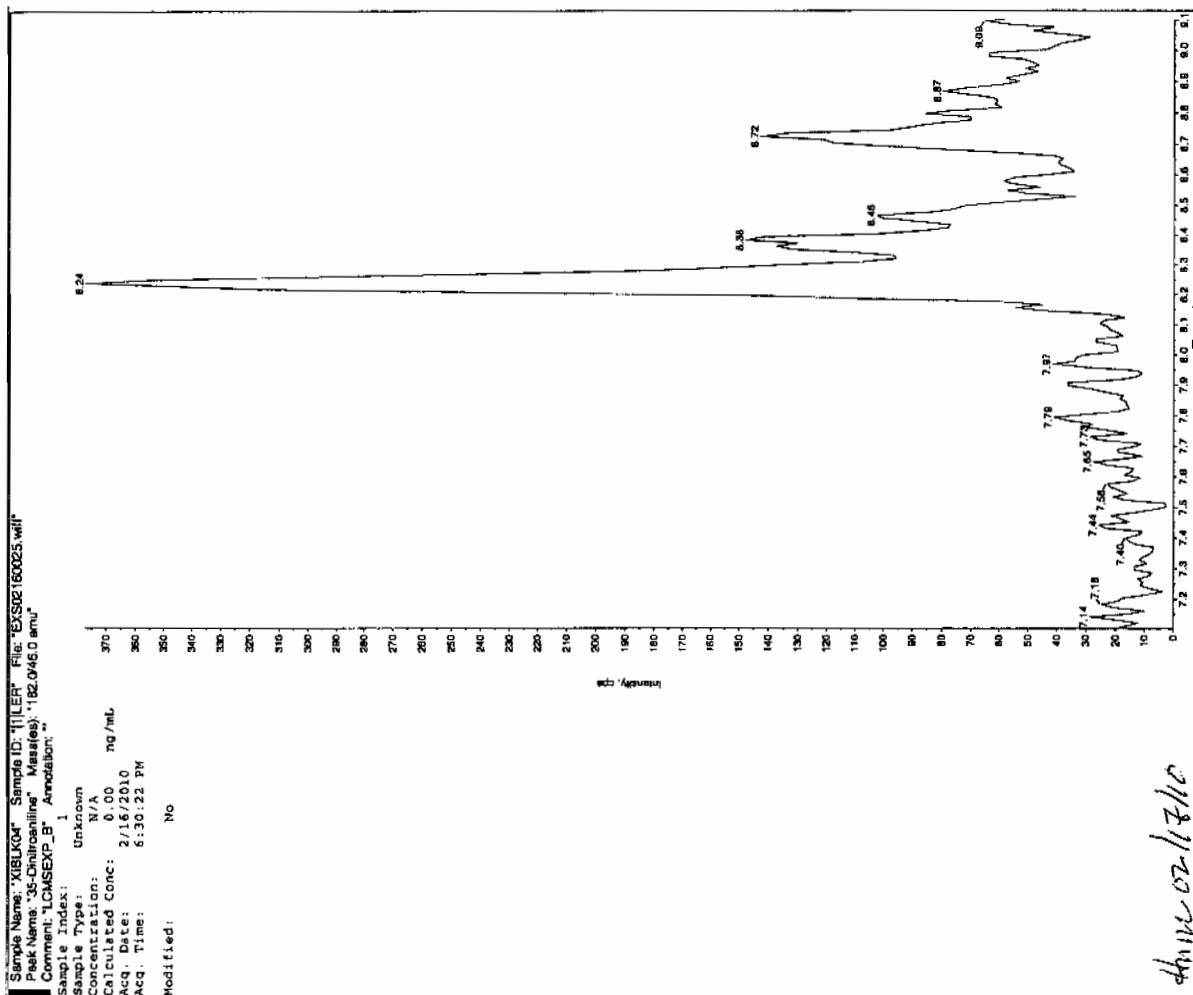
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

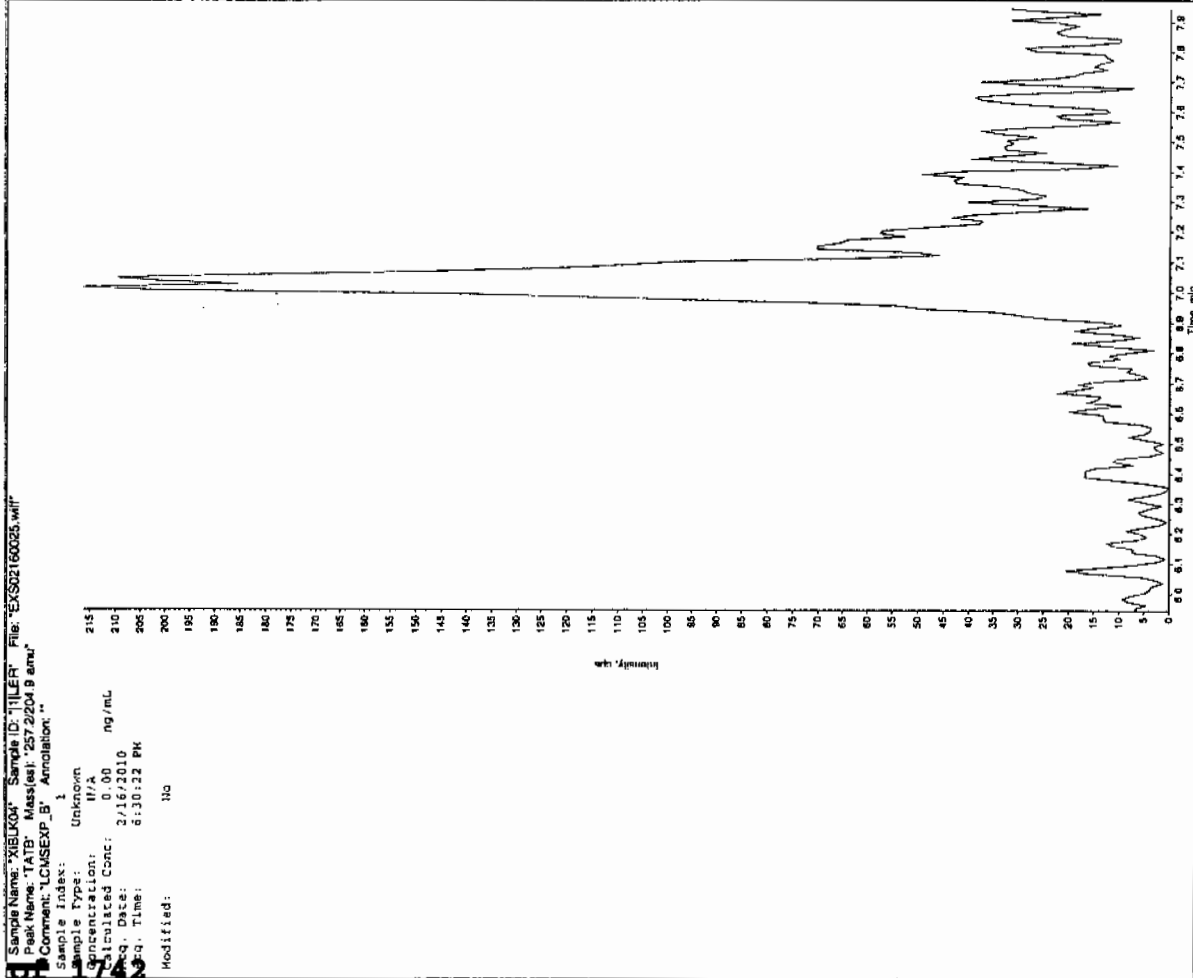
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



See 2/17/10



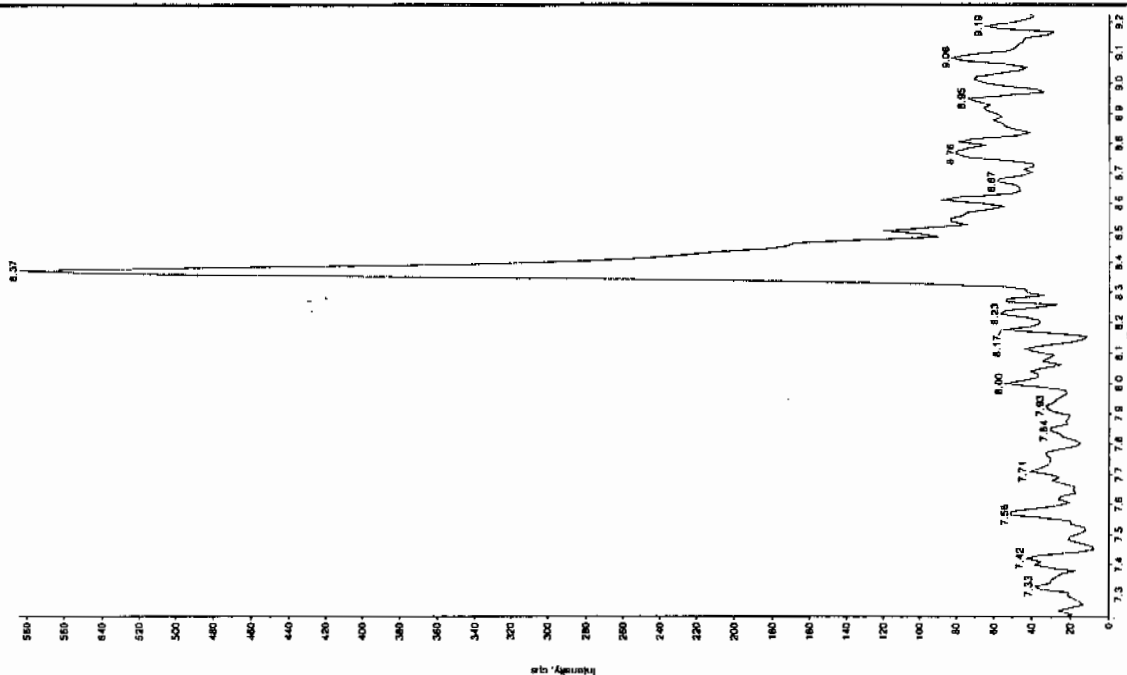
4/11/10 02/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

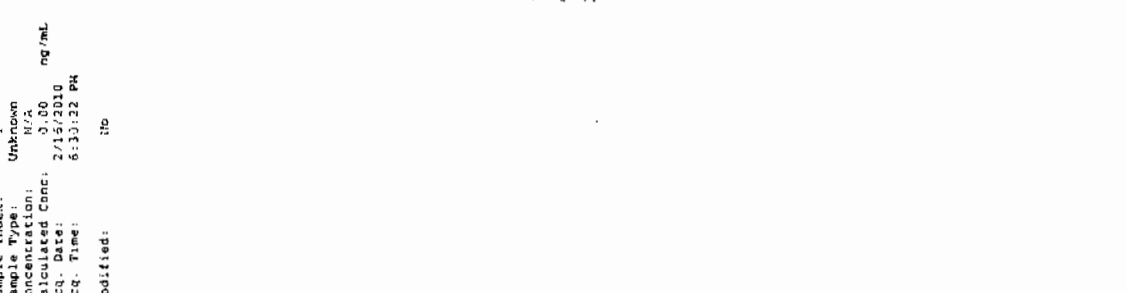
Sample Name: "XBL1004" Sample ID: "111ER" File: "EX502150025.wif"  
 Peak Name: "26-Diamino-4-phenylthiopyran" Mass(es): "168.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 6:30:22 PM  
 Modified: No

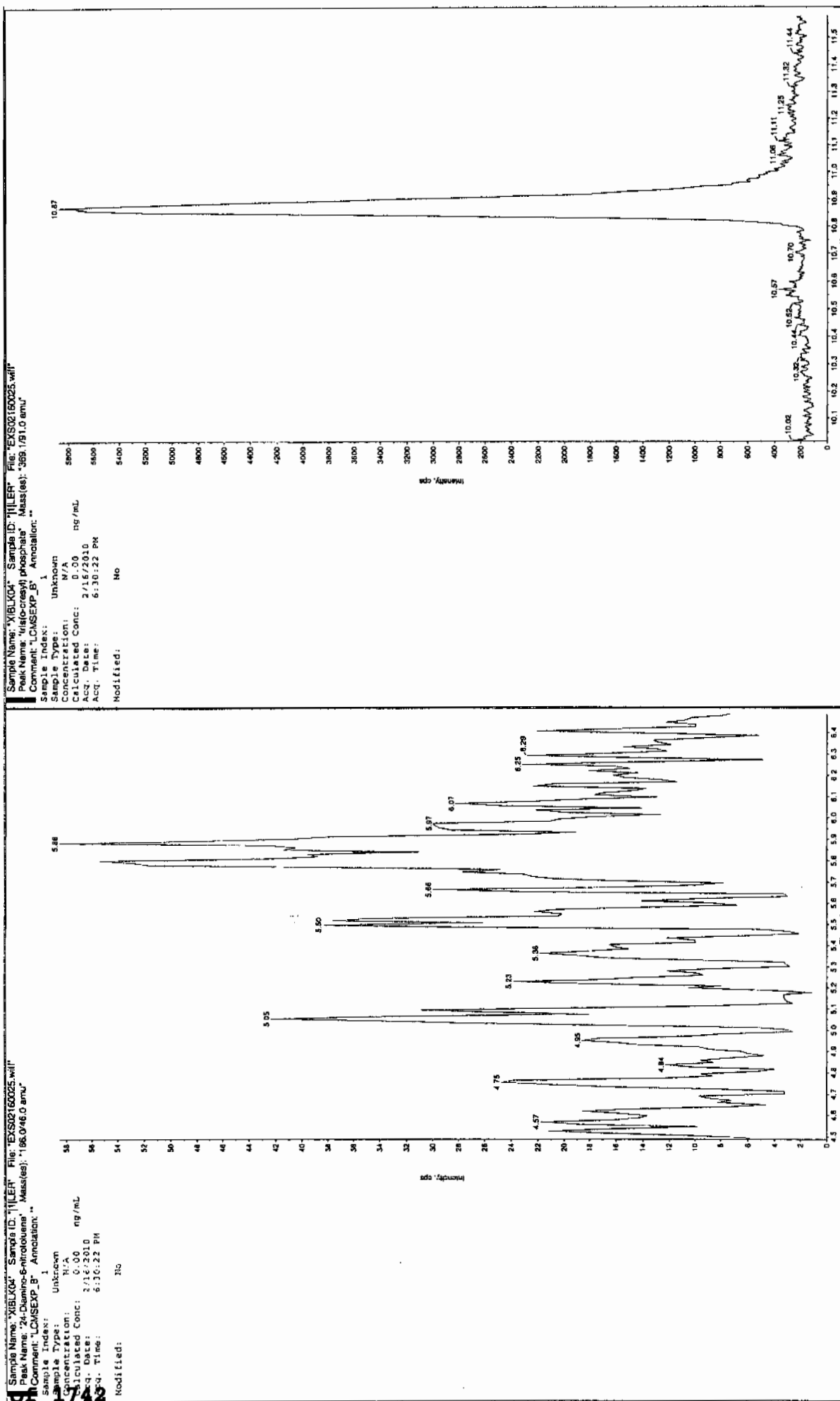


Sample Name: "XBL1004" Sample ID: "111ER" File: "EX502150025.wif"  
 Peak Name: "14-Dihydrothiopyran" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/15/2010  
 Acq. Time: 6:33:22 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 16-FEB-10 19:33

GEL Data File: EXS02160029.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

for 2/17/10

Sample Name: "XBLK03" Sample ID: "TILER" File: "EXS02160029.wif"

Peak Name: "35-Ornitroline" Mass(es): "182.046.0 amu"

Comment: "LCMS-EXP\_3" Annotation: "

Sample Index: 1

Sample Type: Unknown

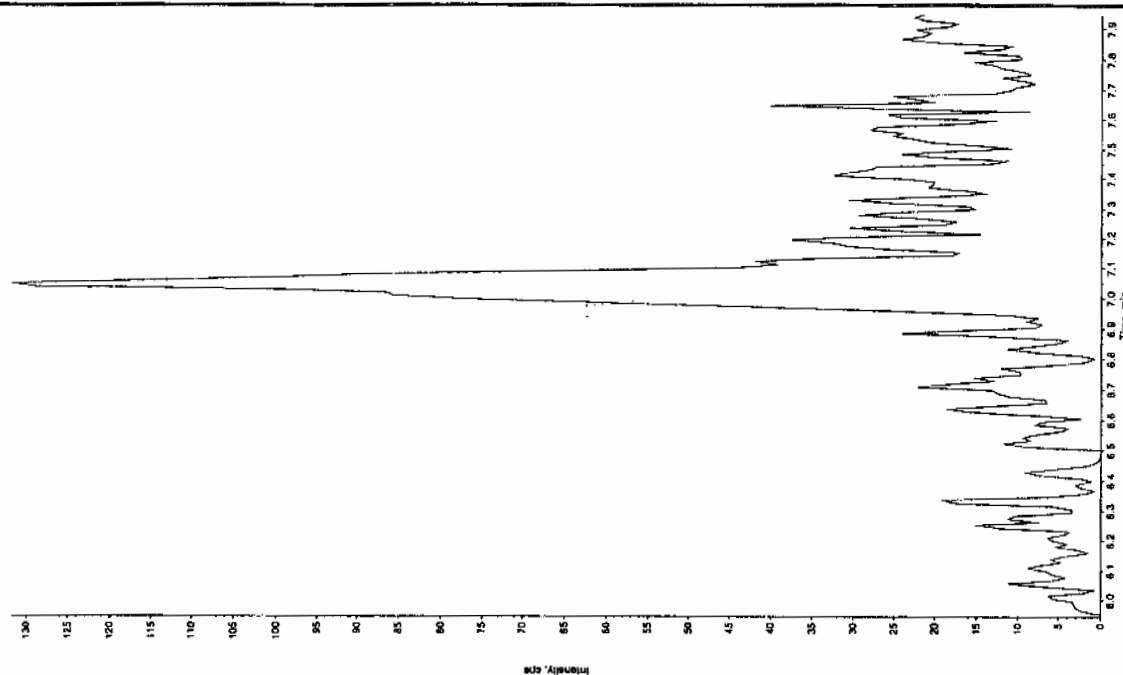
Concentration: 0.00 ng/mL

Calculated Conc: 2/16/2010

Acq. Date: 7:33:20 PM

Acq. Time: 7:33:20 PM

Modified: No



Sample Name: "XBLK03" Sample ID: "TILER" File: "EXS02160029.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMS-EXP\_3" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 2/16/2010

Acq. Date: 7:33:20 PM

Acq. Time: 7:33:20 PM

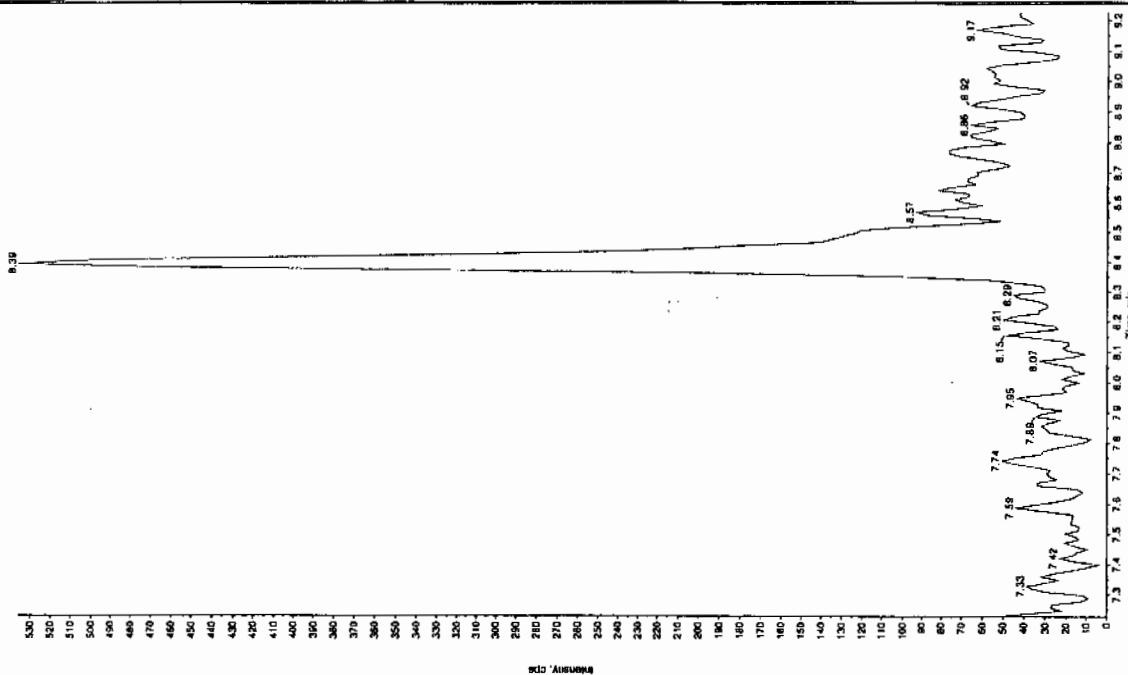
Modified: No



4/11/02-17/10

Sample Name: "XIBLUG5" Sample ID: "11LER" File: "EXS02160029.wiff"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 7:33:20 PM  
 Modified: No

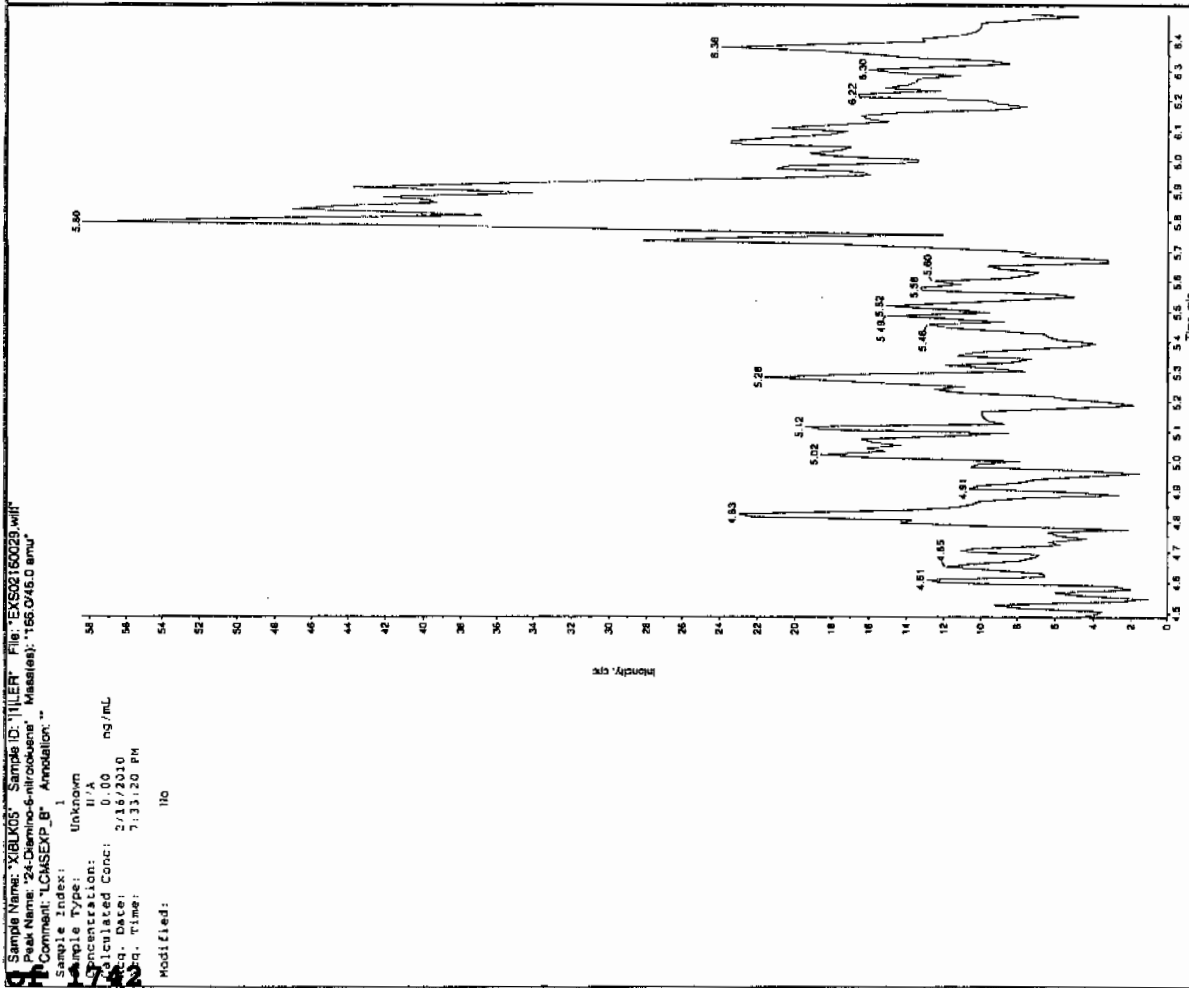
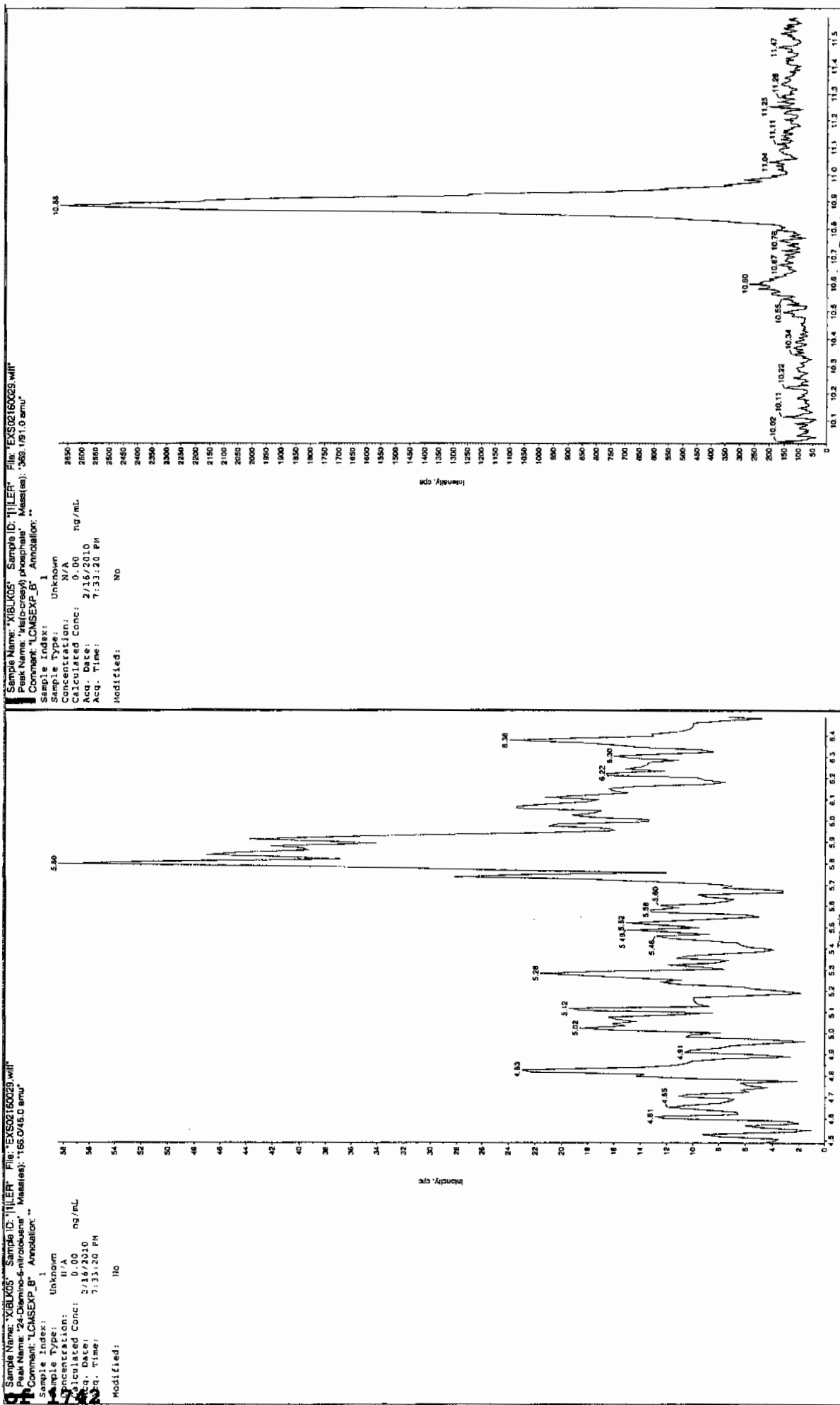


Sample Name: "XIBLUG5" Sample ID: "11LER" File: "EXS02160029.wiff"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 7:33:20 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 16-FEB-10 21:39

GEL Data File: EXS02160037.wiff

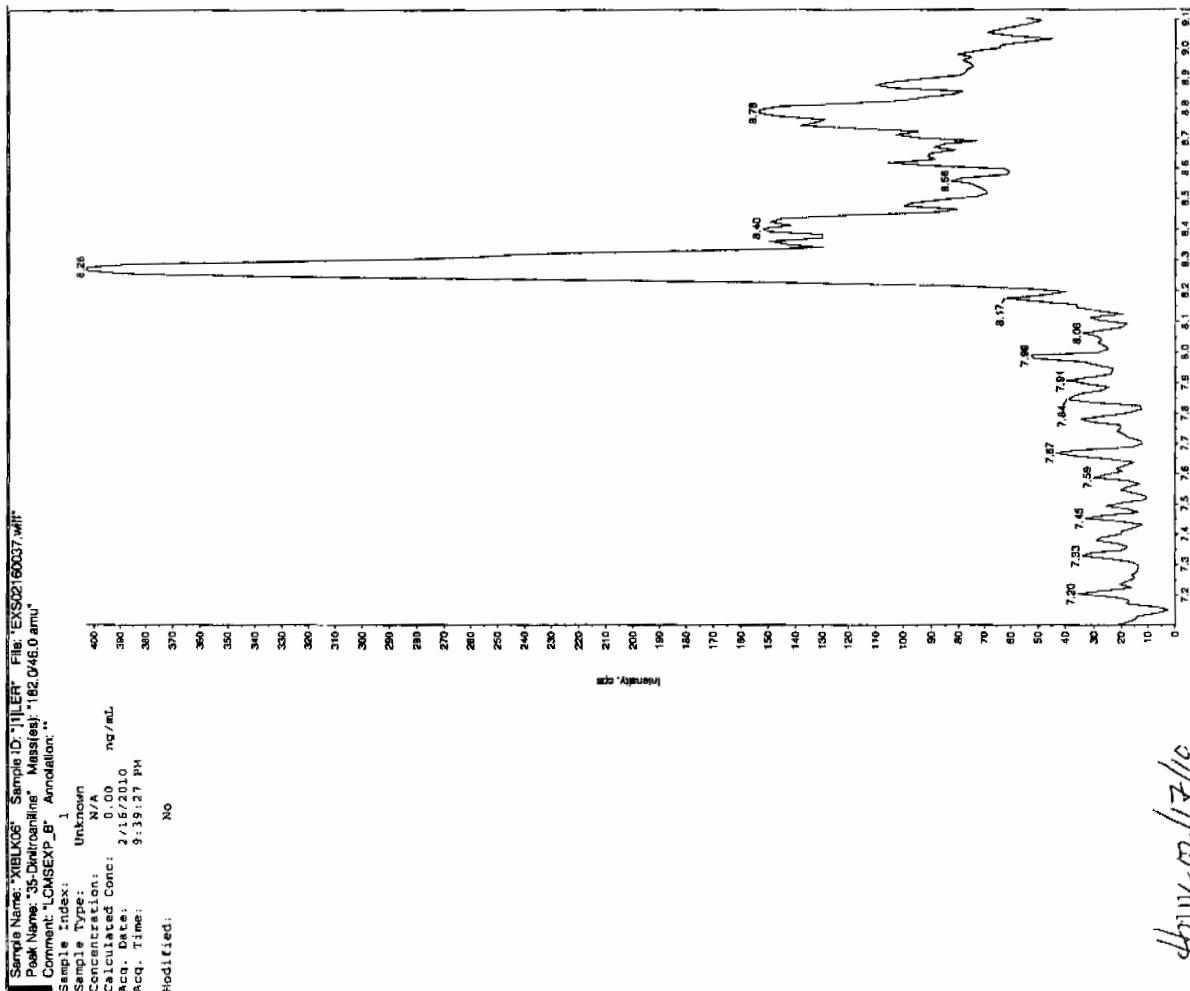
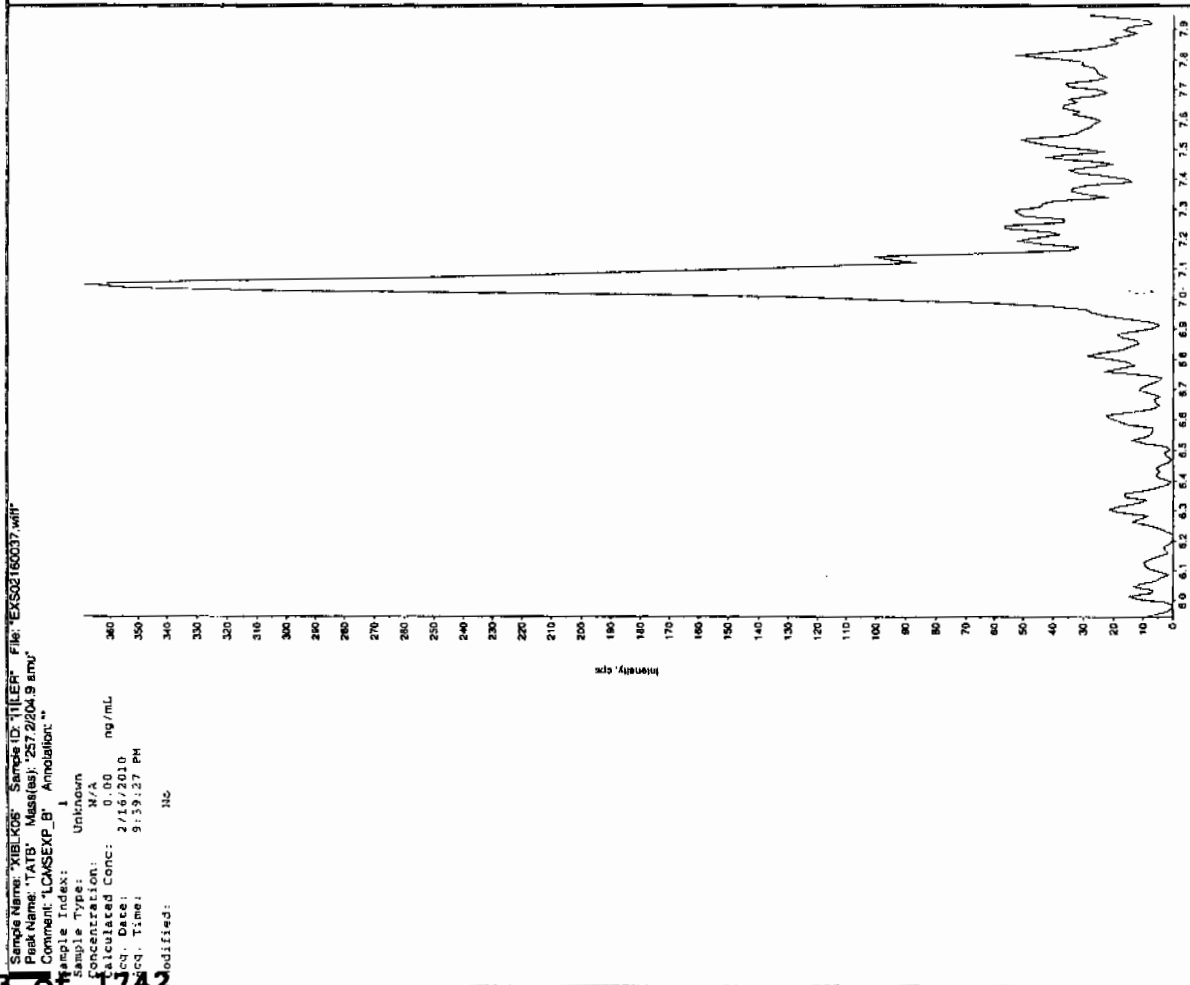
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

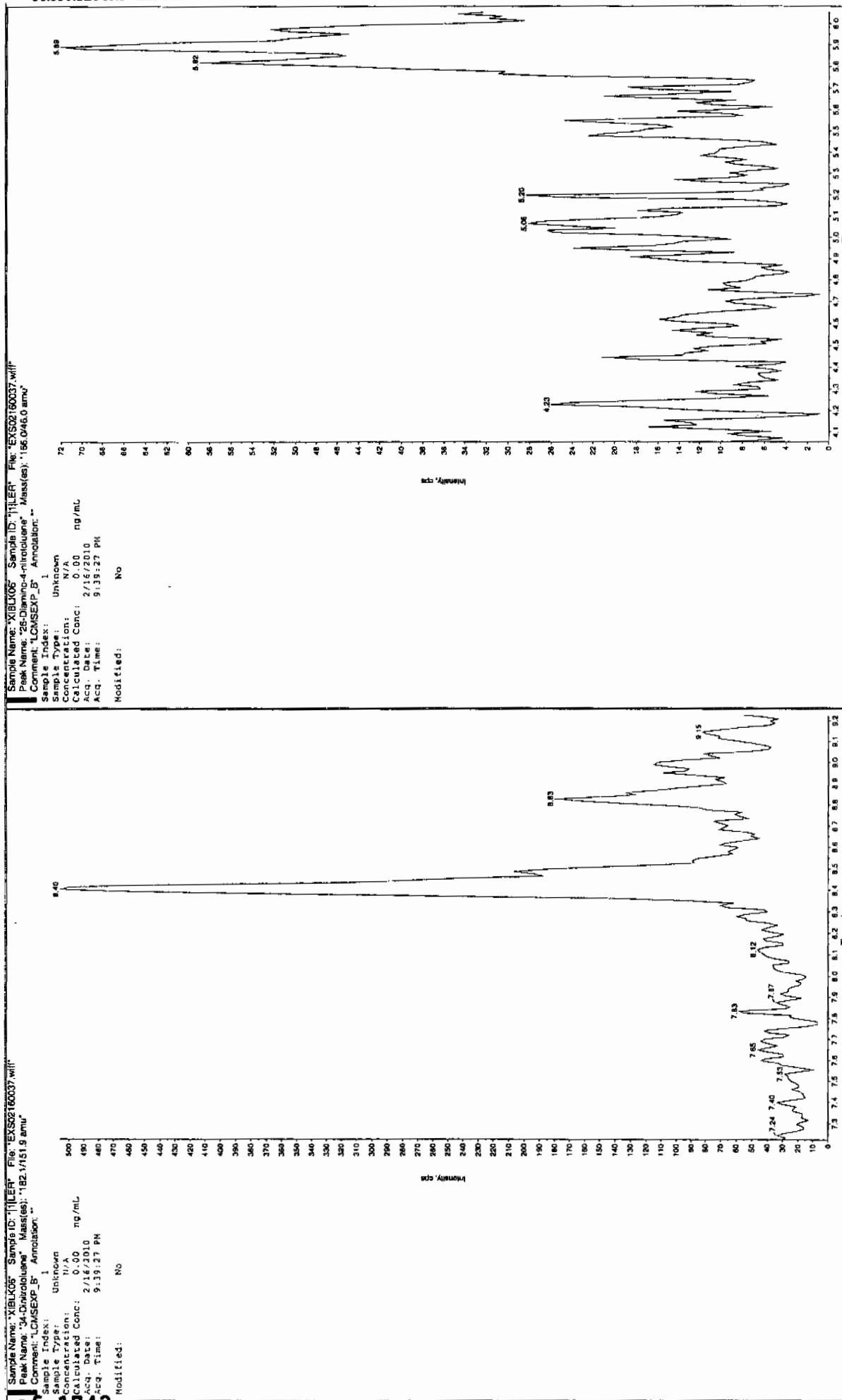
Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0



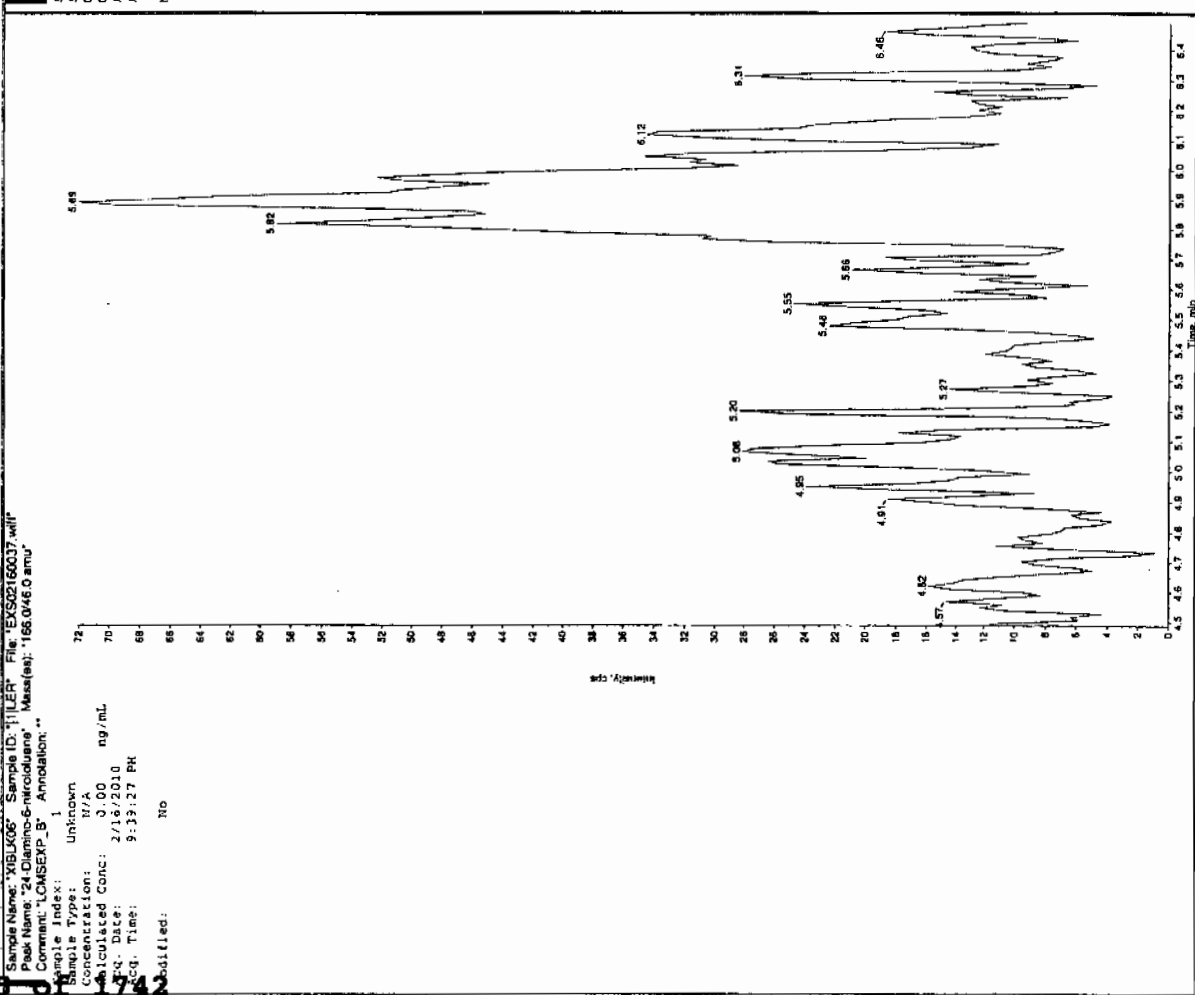
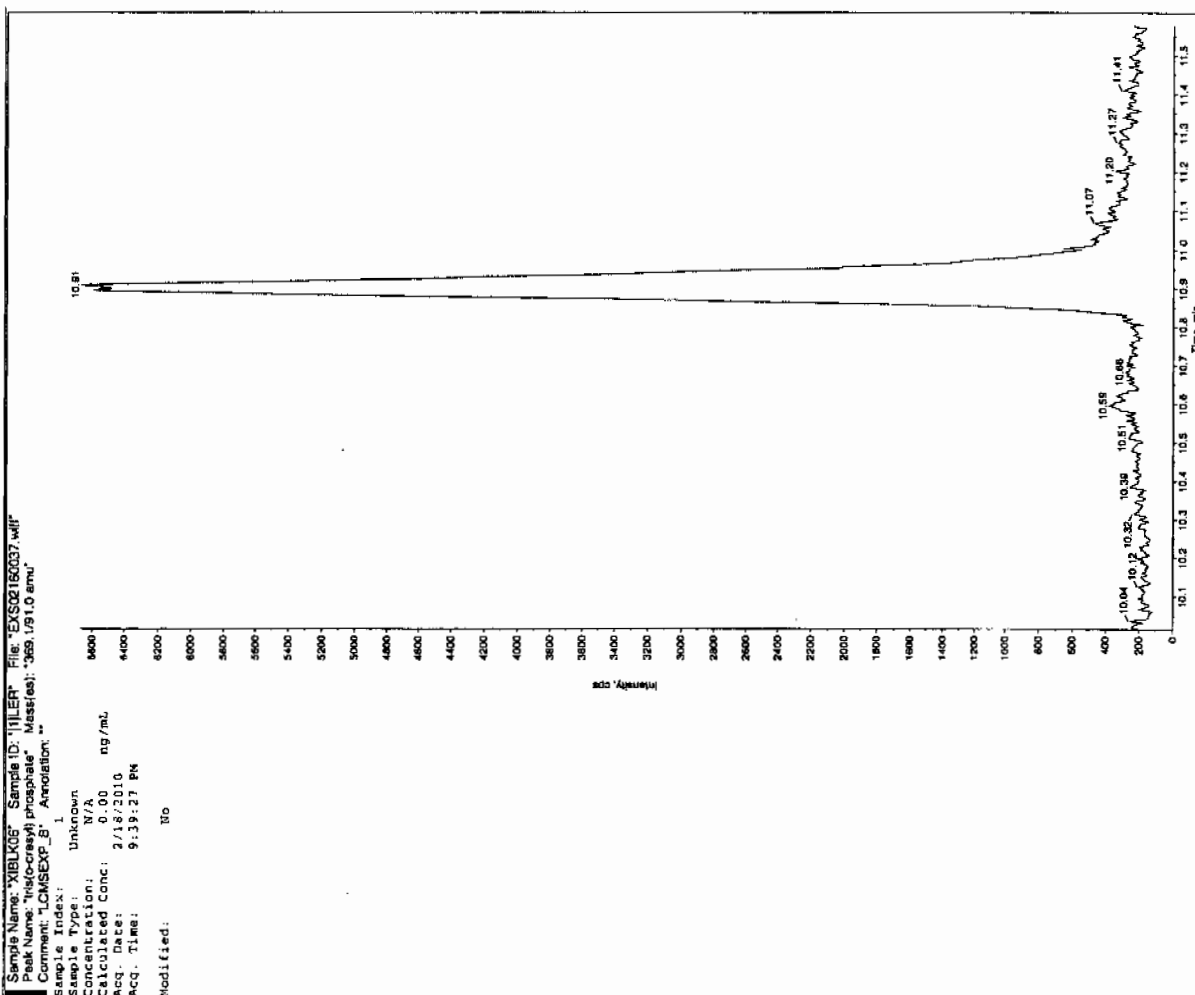
kan 2/17/10



kan 02/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1665

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 17-FEB-10 01:03

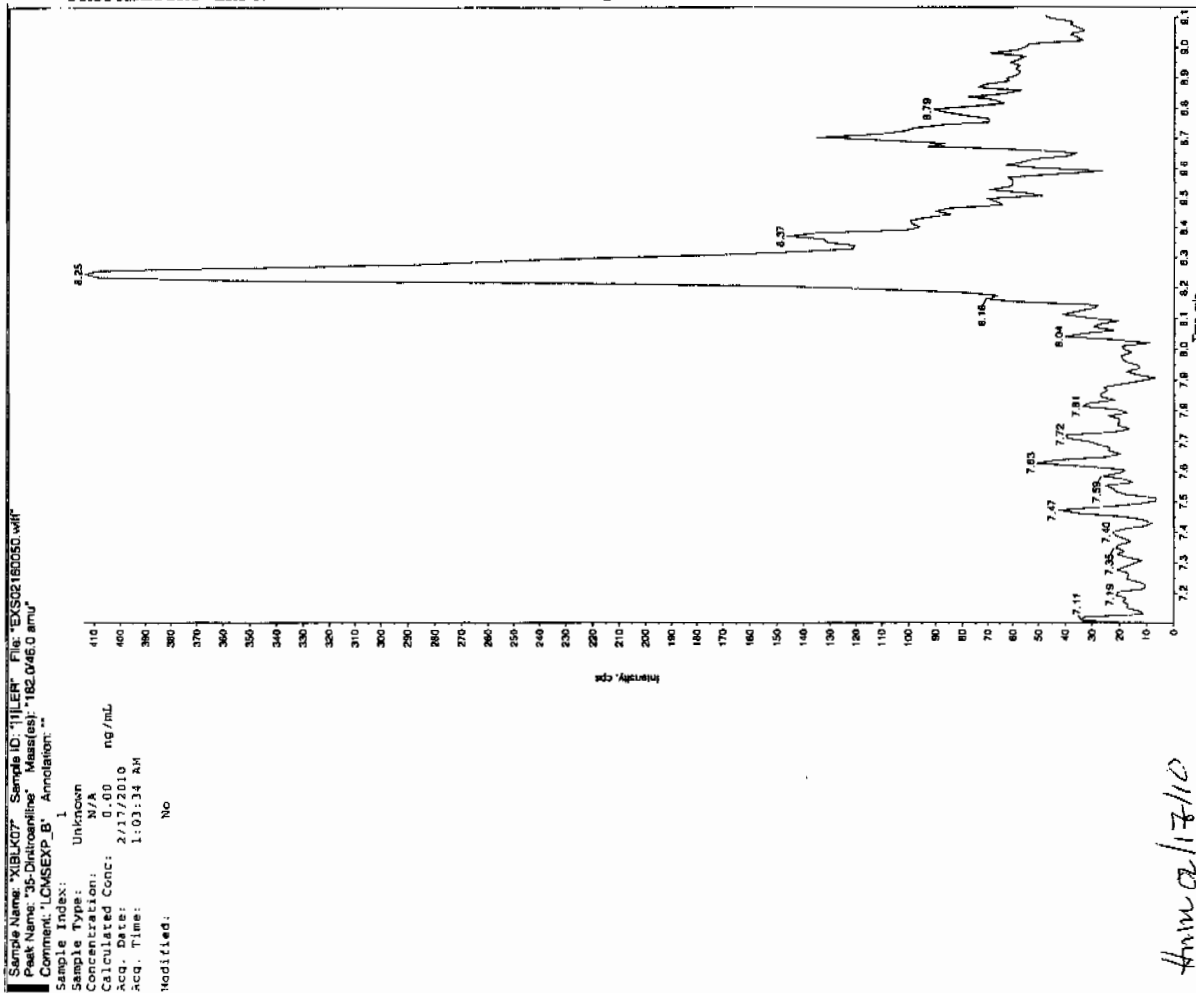
GEL Data File: EXS02160050.wiff

Instrument ID: LCMSMS

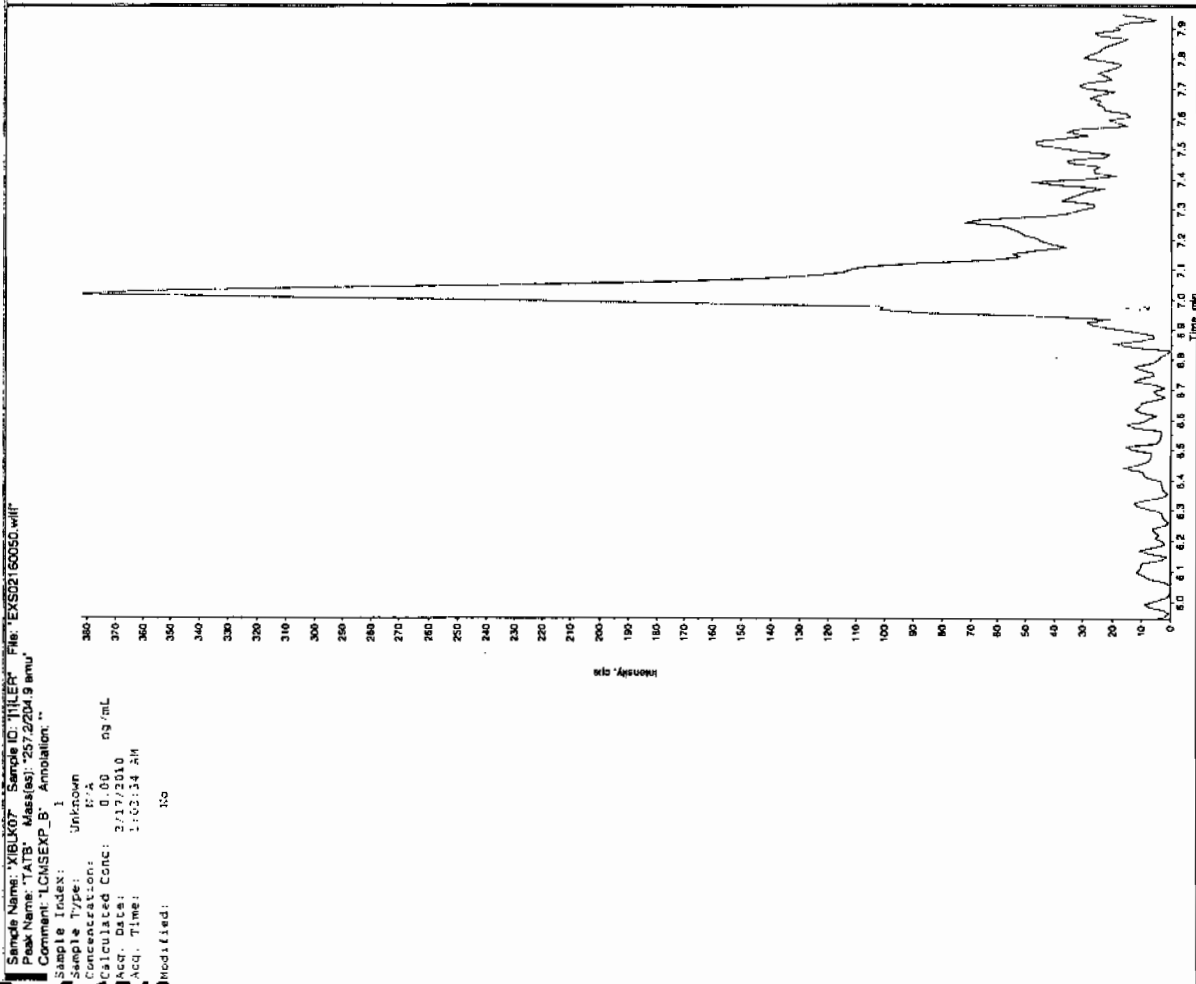
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

8/20/11  
Jelle



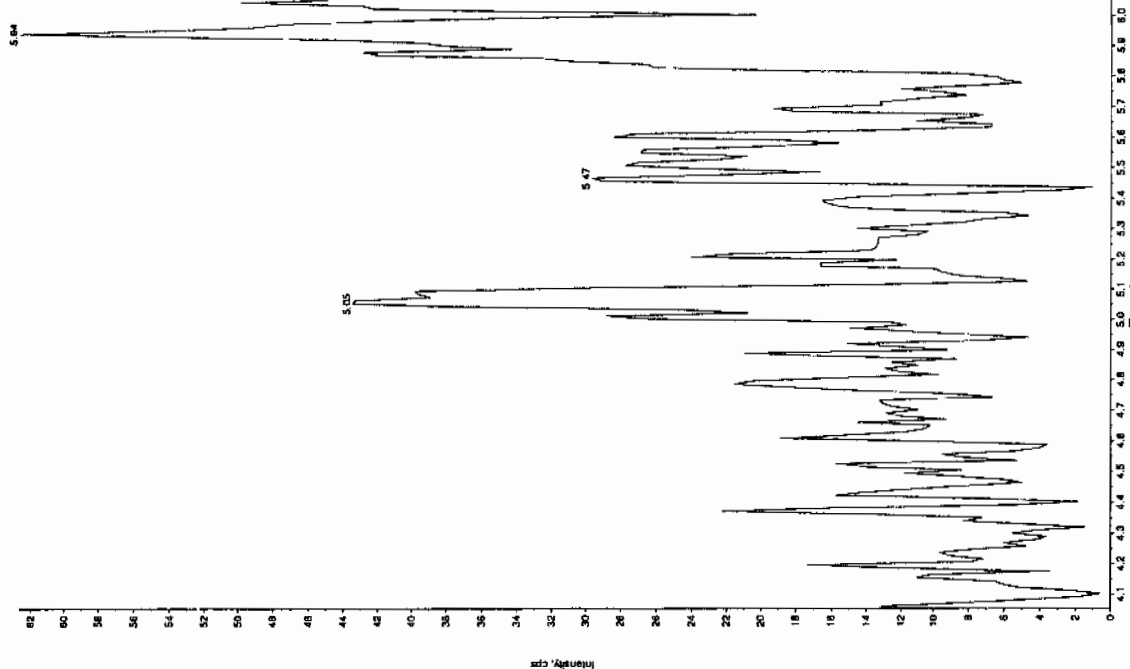
Amc 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

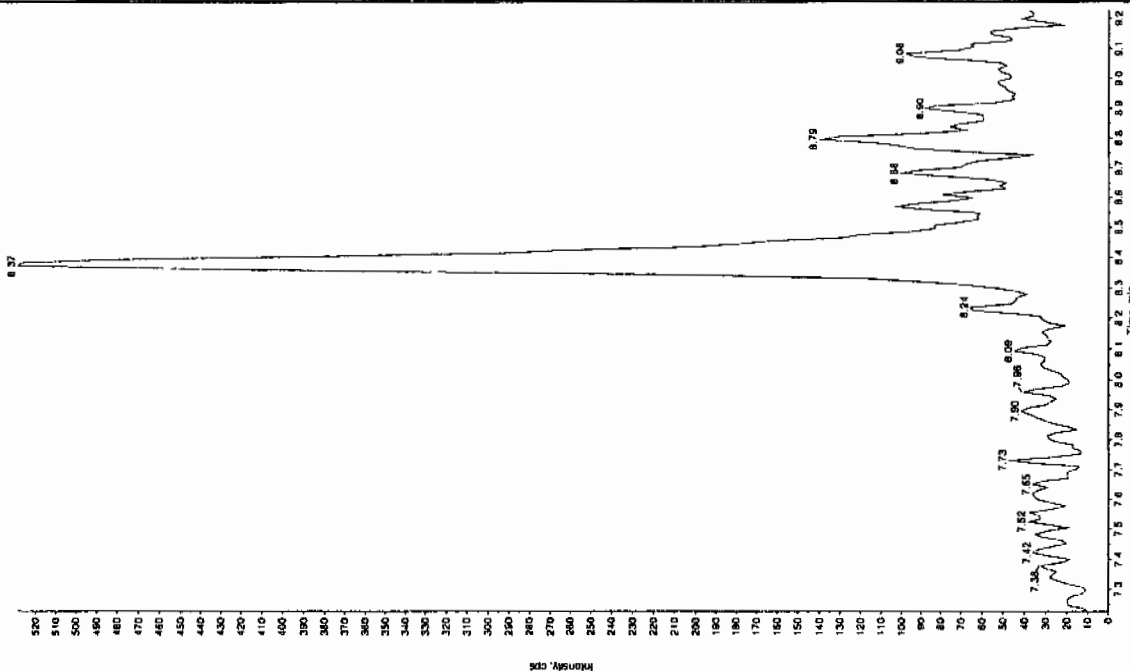
Sample Name: \*XBLK07 Sample ID: \*JLLEF File: \*EX50216050.wit  
 Peak Name: 2S-Diethyl-4-nitrobenzene Mass(es): 166.046.0 amu  
 Comment: \*LONSEXP\_B, Annotation: \*

Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/17/2010  
 Acq. Date: 1:03:34 AM  
 Acq. Time: No  
 Modified:



Sample Name: \*XBLK07 Sample ID: \*JLLEF File: \*EX50216050.wit  
 Peak Name: 2S-Diethyl-4-nitrobenzene Mass(es): 162.1131.9 amu  
 Comment: \*LONSEXP\_B, Annotation: \*

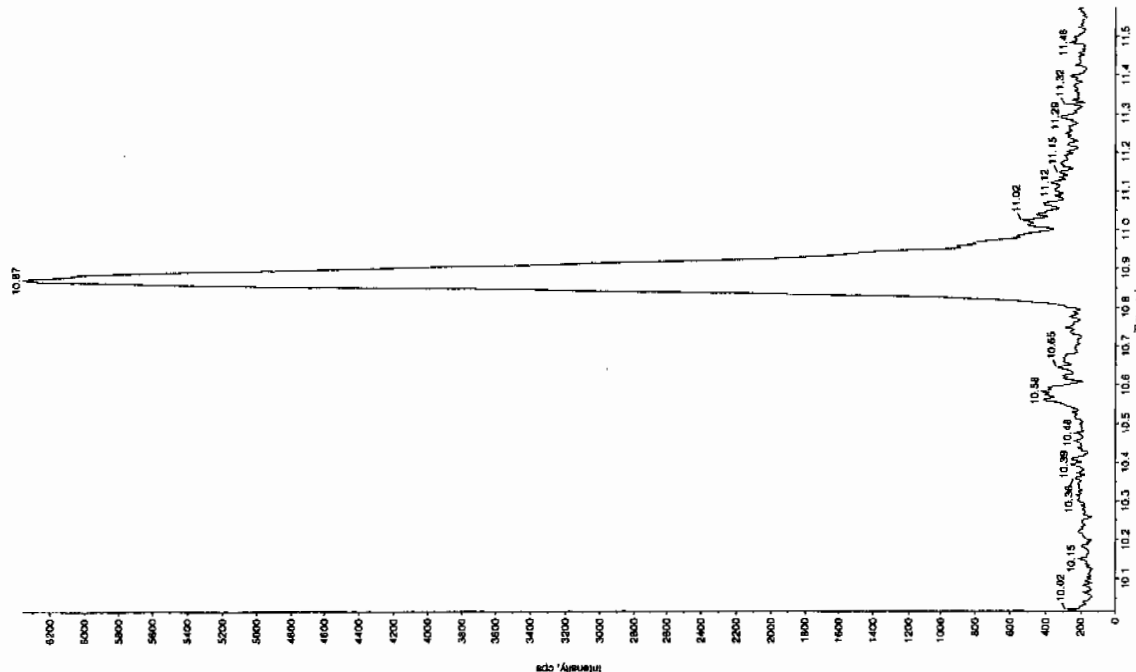
Sample Index: Unknown  
 Sample Type: N/A  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/17/2010  
 Acq. Date: 1:03:34 AM  
 Acq. Time: No  
 Modified:



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

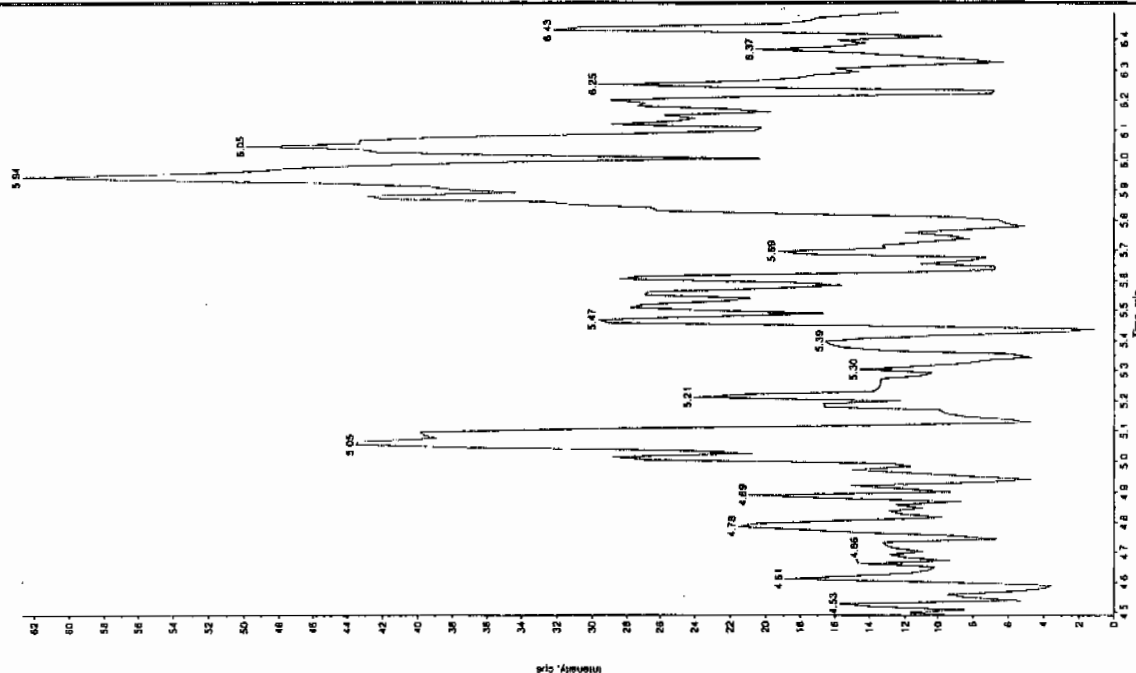
Sample Name: "XIBLK07" Sample ID: "TILER" File: "EXS02160050.will"  
 Peak Name: "Nitrocrystall phosphate" Mass(es): 385.191.0 amu  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 1:03:34 AM  
 Modified: No



Sample Name: "XIBLK07" Sample ID: "TILER" File: "EXS02160050.will"  
 Peak Name: "24-Dinitro-6-nitrobenzene" Mass(es): 166.045.0 amu  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 1:03:34 AM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H<sub>2</sub>O.  
 ;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



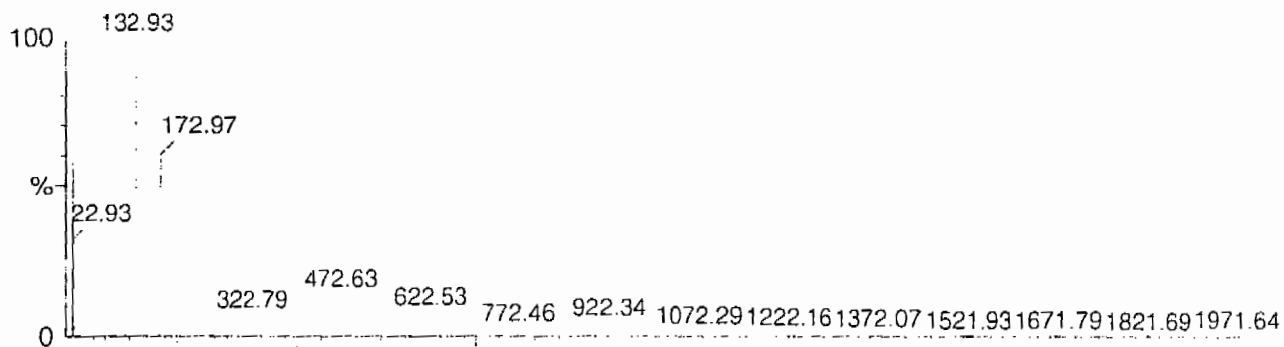
Calibration Report - MS1 Static

Page 1 of 1

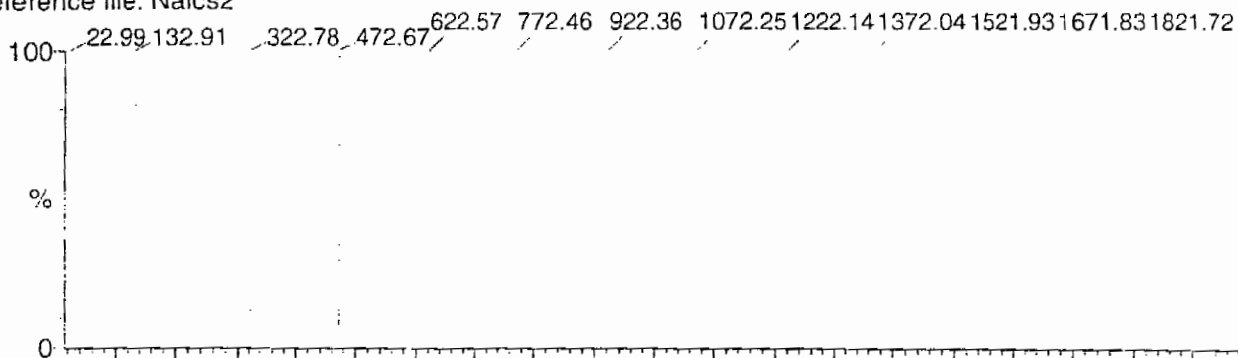
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

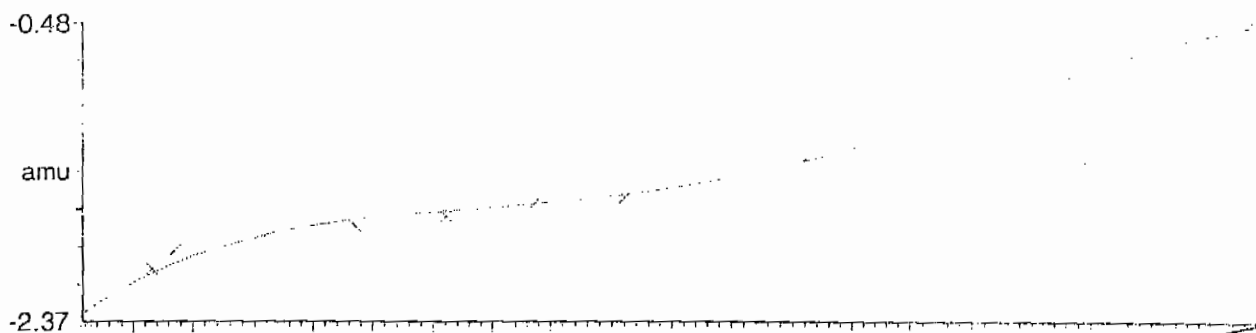
15 matches of 15 tested references



Reference file: Naics2

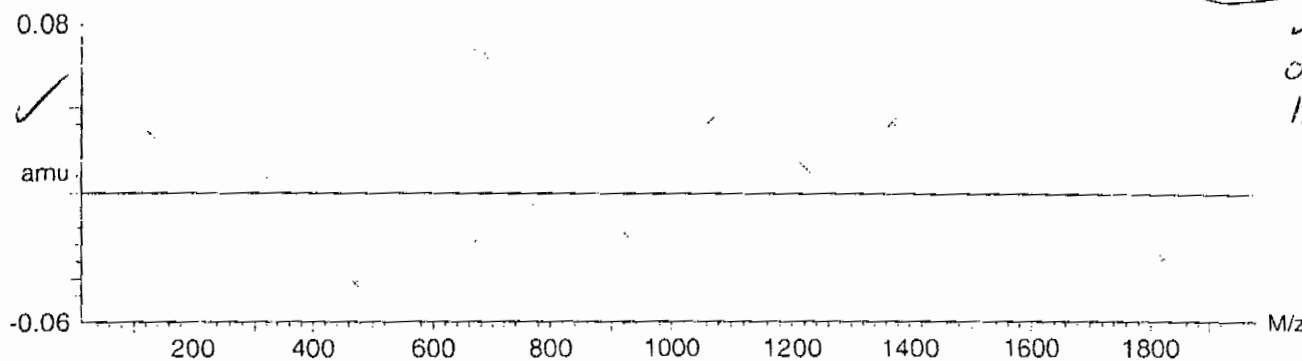


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



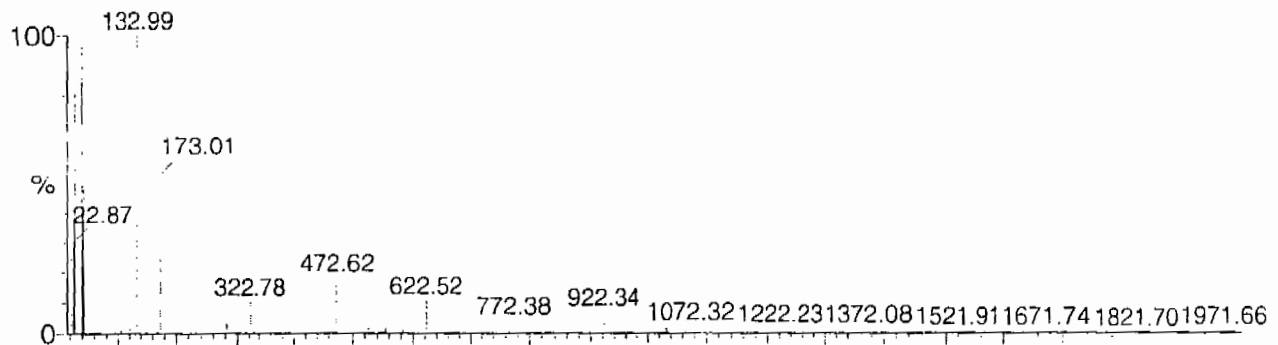
Calibration Report - MS1 Scanning

Page 1 of 1

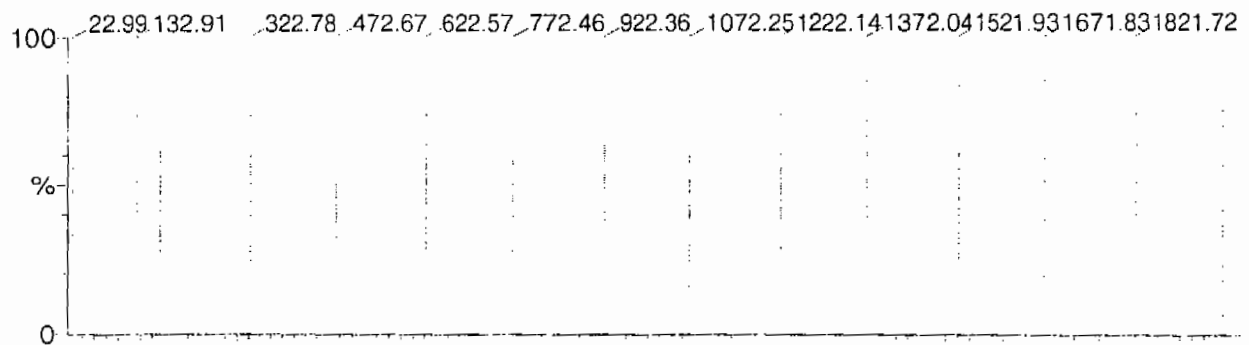
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

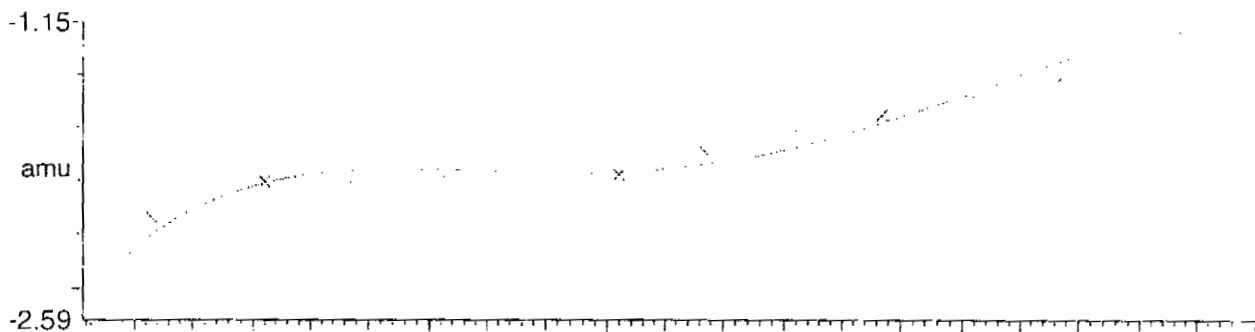
15 matches of 15 tested references.



Reference file: Naics2

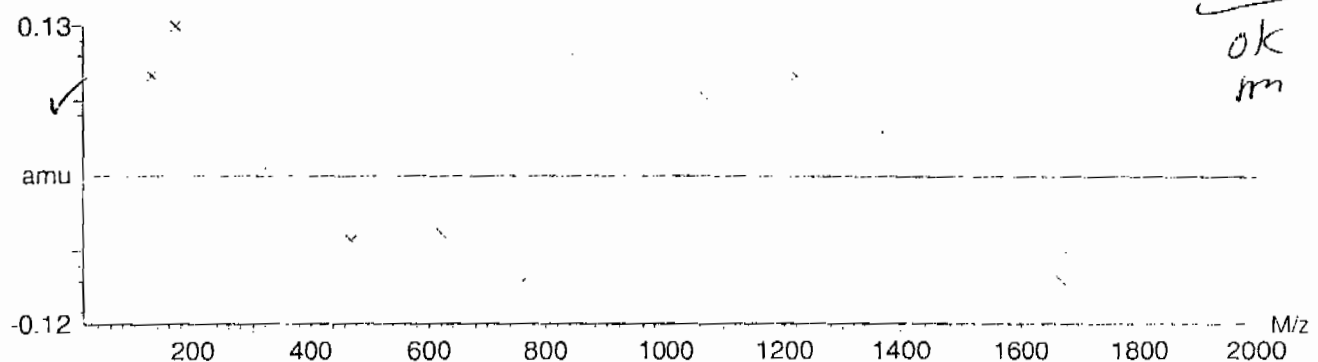


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715e-9 \pm 0.069858$



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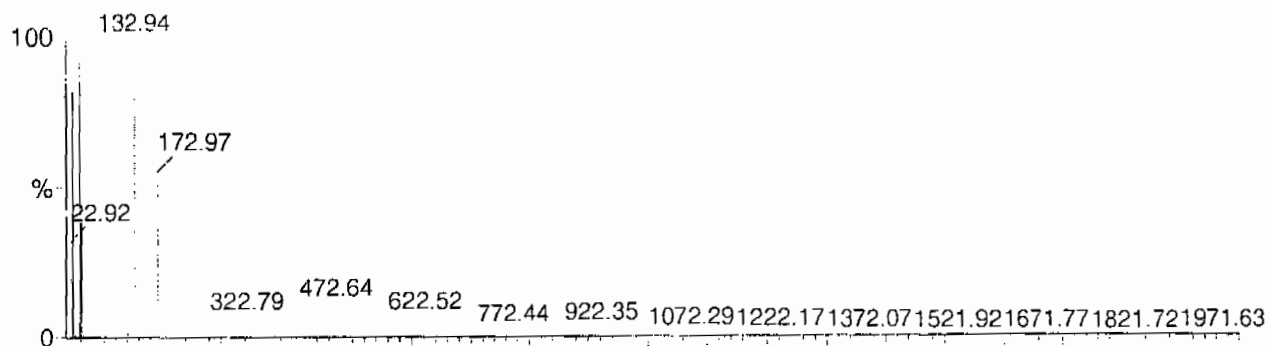
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

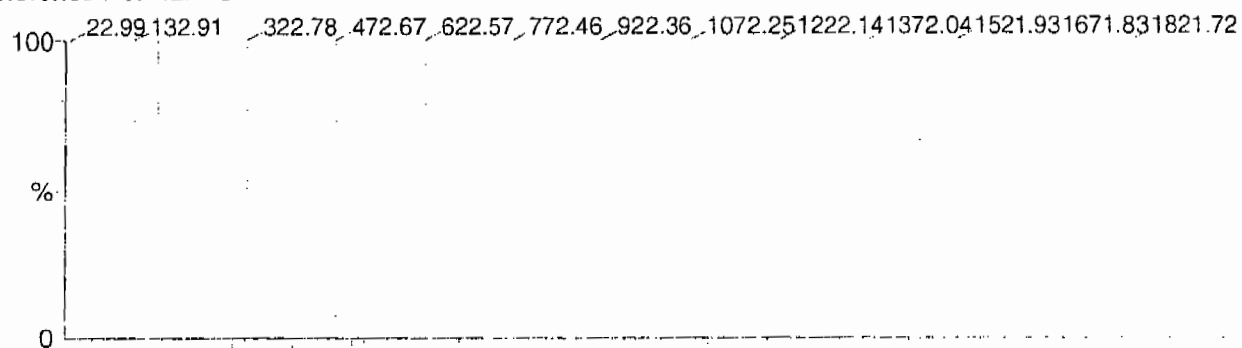
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

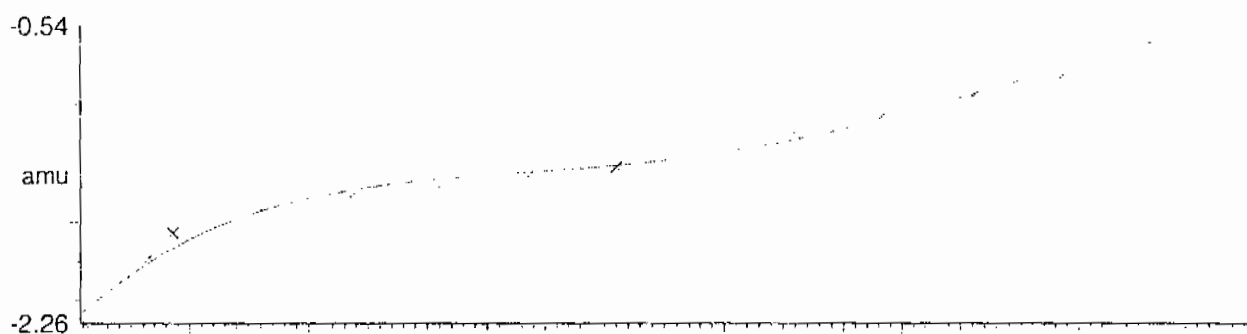
15 matches of 15 tested references



Reference file: Naics2

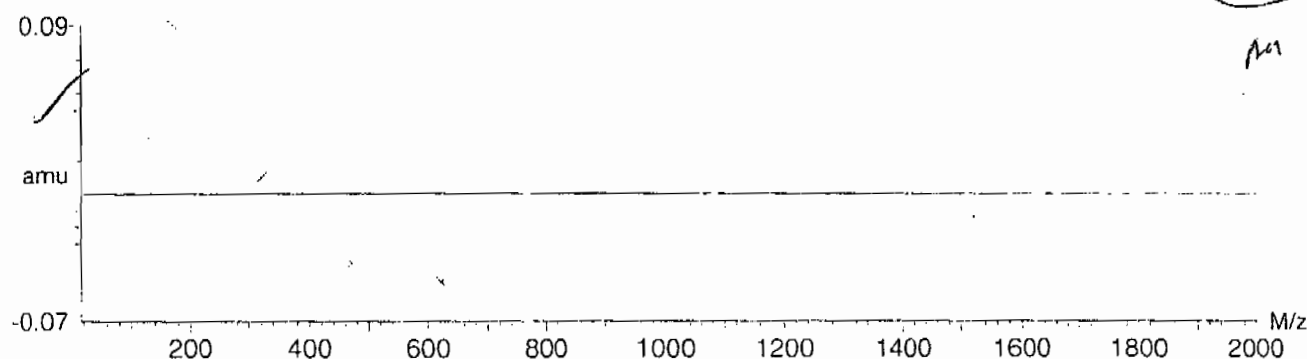


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639e-9 \pm 0.040487$



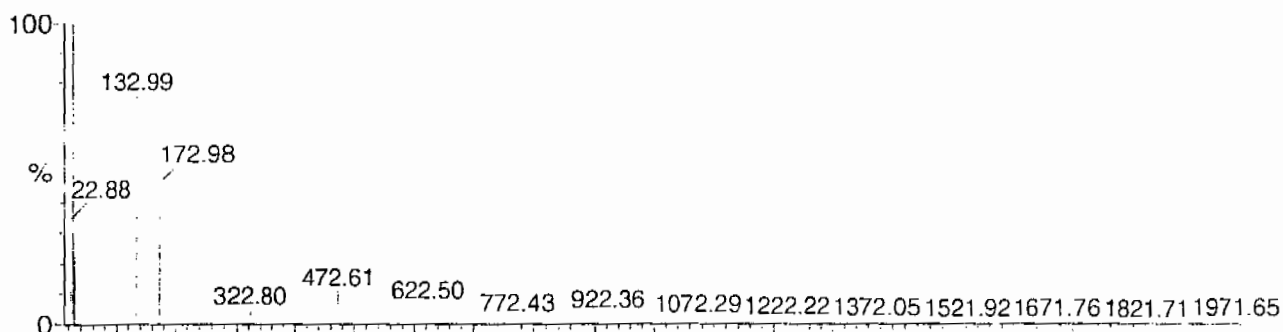
Calibration Report - MS2 Static

Page 1 of 1

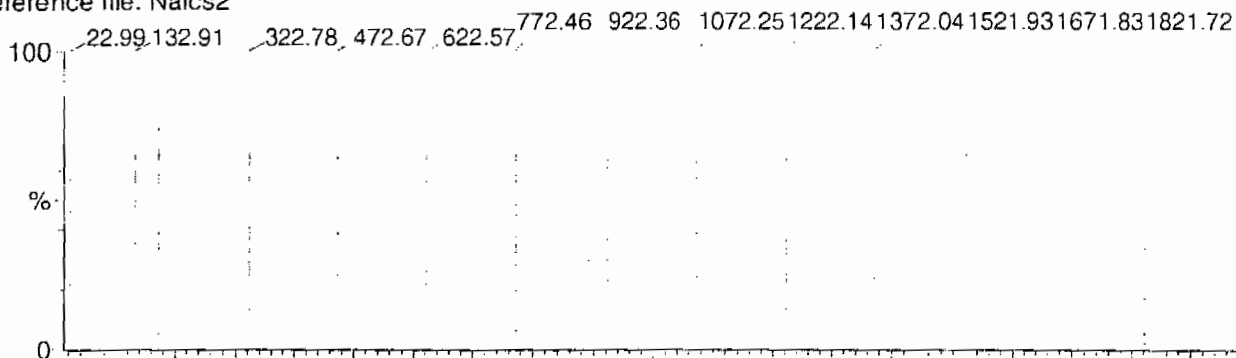
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

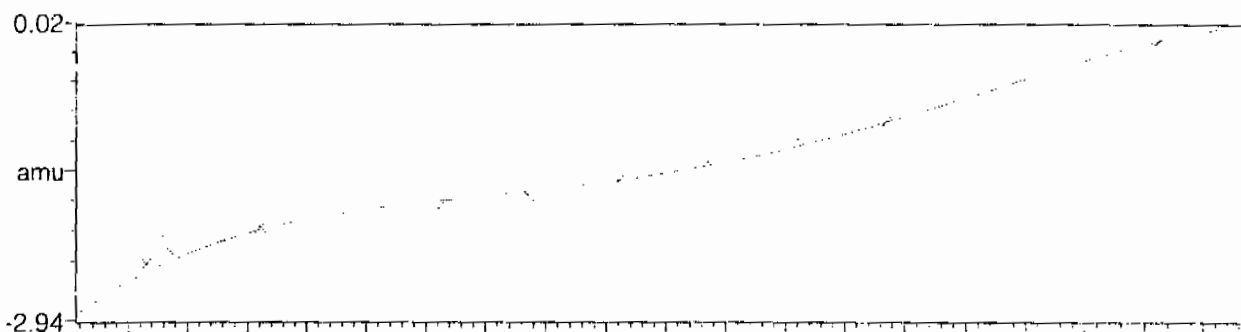
15 matches of 15 tested references



Reference file: Naics2

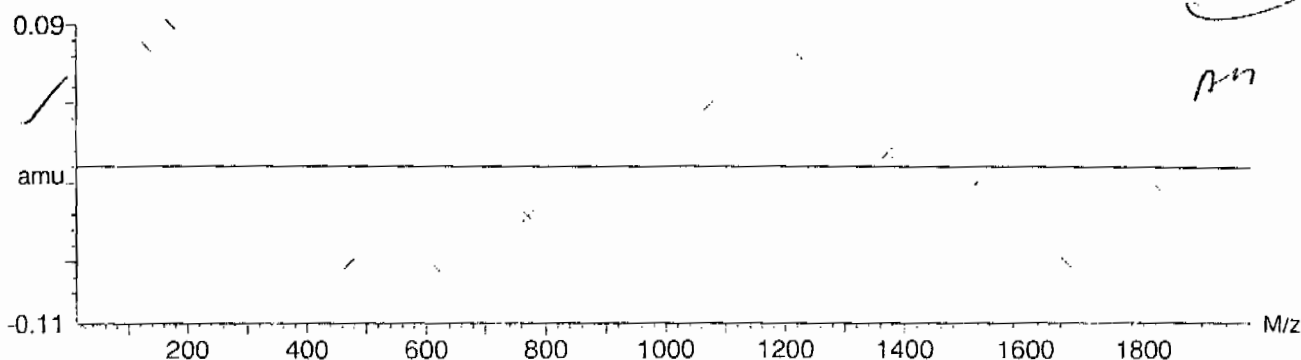


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



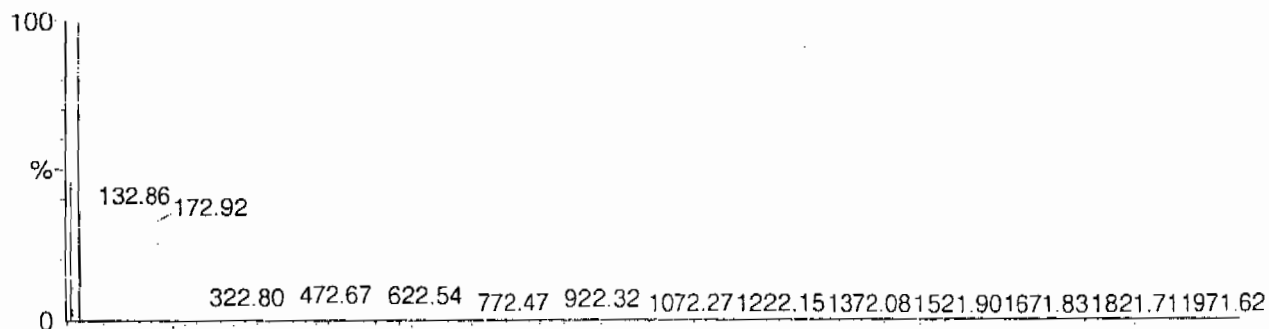
Calibration Report - MS2 Scanning

Page 1 of 1

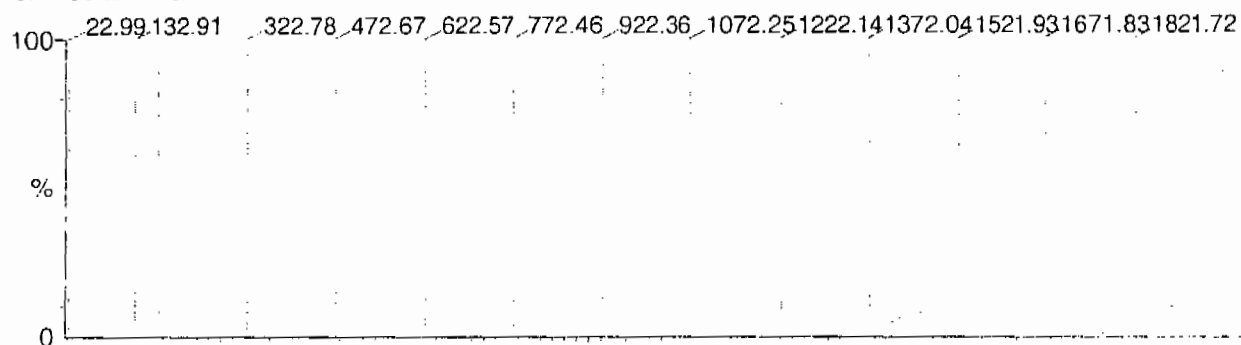
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

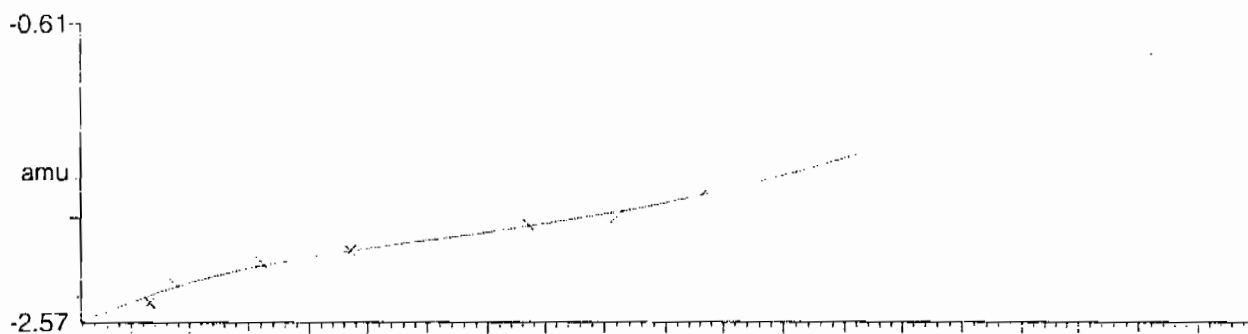
14 matches of 15 tested references



Reference file: Naics2

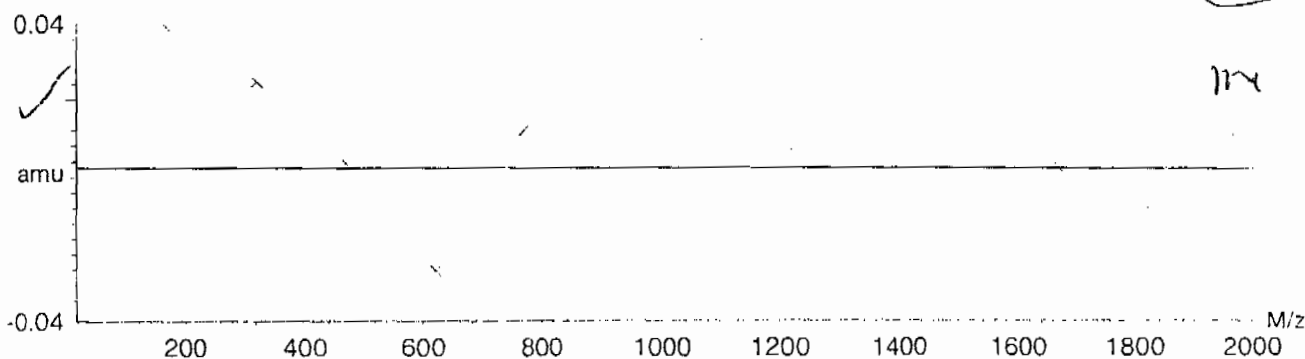


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$



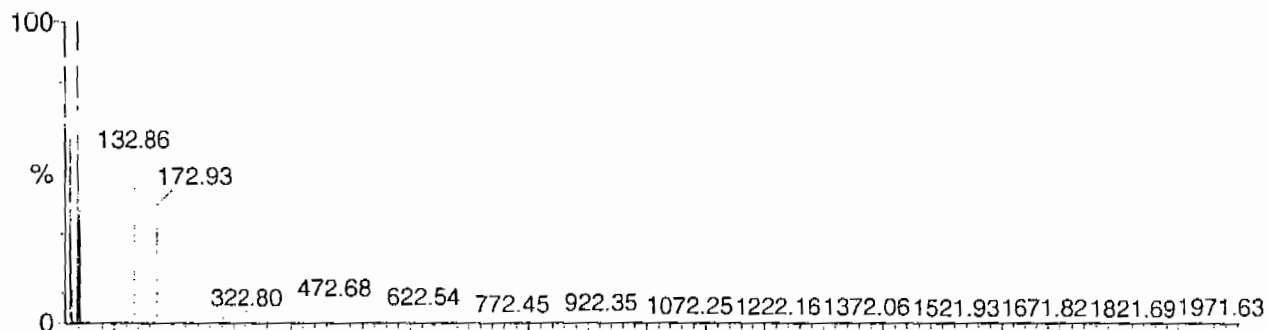
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

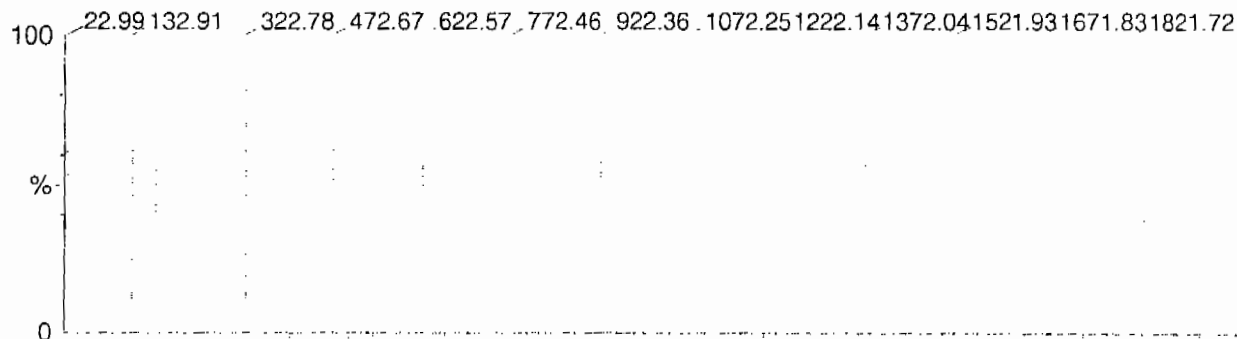
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

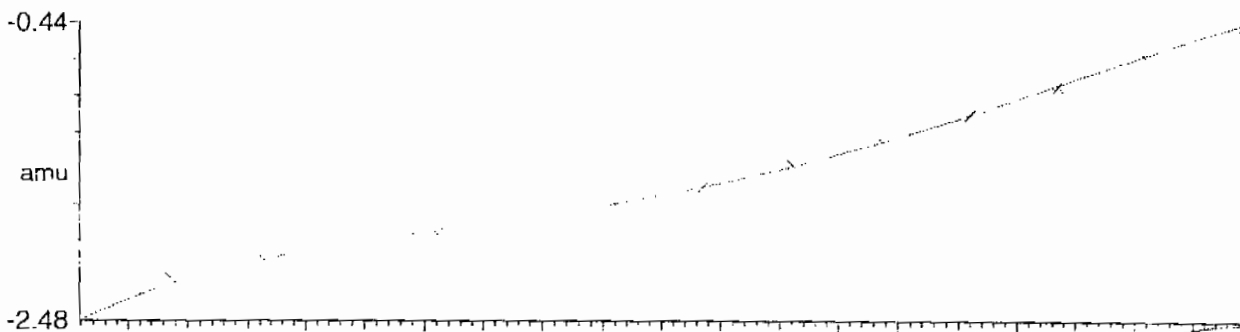
14 matches of 15 tested references



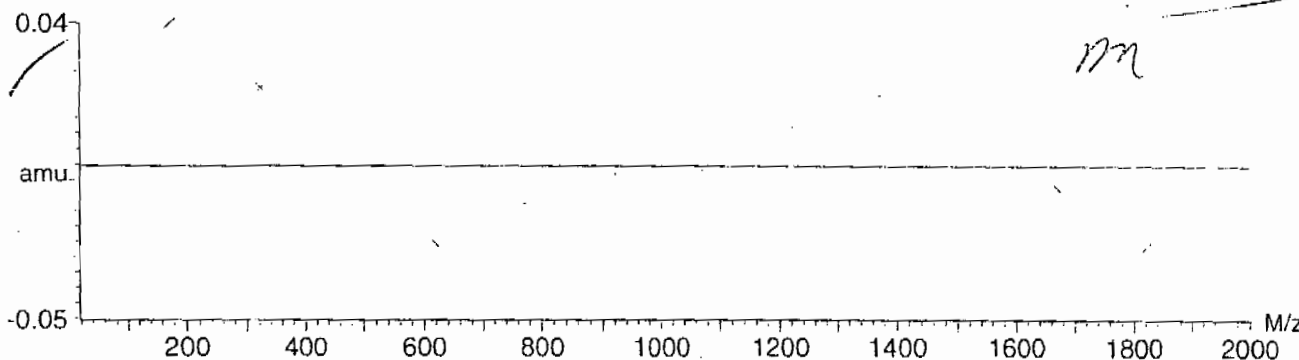
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



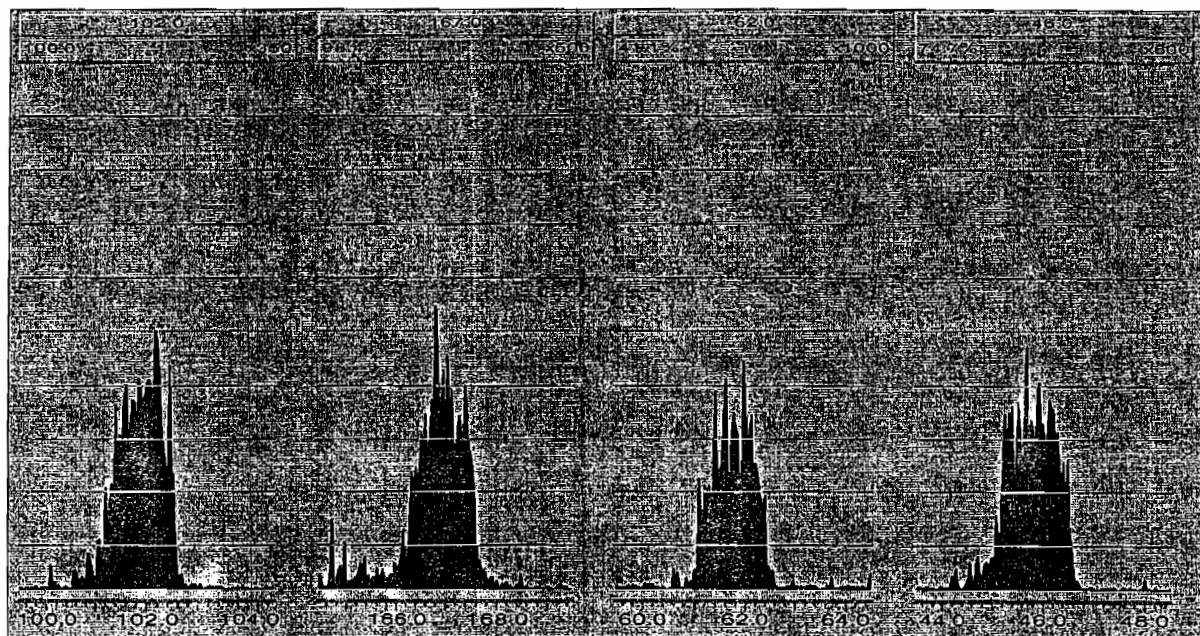
Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNXNEW\_EXP.PROVACQADB\explosives04.IPR

Printed : Tue Feb 16 13:37:41 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Instrument ID: LCMSMS

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			3012.417	12.049	17408.567	17.428
Upper Limit			3916.1421	12.549	22631.1371	17.928
Lower Limit			2108.6919	11.549	12185.9969	16.928
MB for batch 951347	17-feb-10 13:23	EXP0216042a	3060.29	12.064	16752.3	17.433
LCS for batch 951347	17-feb-10 13:53	EXP0216043a	3323.39	12.067	19281.1	17.422
RE15-10-8175	17-feb-10 14:23	EXP0216044a	3042.36	12.065	16979.3	17.433
RE15-10-8175(246554001MS)	17-feb-10 14:52	EXP0216045a	3054.86	12.068	18005	17.441
RE15-10-8175(246554001MSD)	17-feb-10 15:22	EXP0216046a	3166.84	12.068	17880.1	17.441
RE15-10-8174	17-feb-10 15:52	EXP0216047a	2915.81	12.032	16123.3	17.422
RE15-10-8176	17-feb-10 16:21	EXP0216048a	3150.22	12.067	16965	17.444
RE15-10-8178	17-feb-10 16:51	EXP0216049a	3291.59	12.067	18565.7	17.422
RE15-10-8177	17-feb-10 17:20	EXP0216050a	3023.48	12.067	16673	17.422
RE15-10-8225	17-feb-10 17:50	EXP0216051a	3097.27	12.032	17531.3	17.422

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

# Column used to flag values outside QC limits with an asterisk

\* Values outside of QC limits



# SAMPLE DATA

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216044a

Date Analyzed: 17-FEB-10 14:23

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0216044a

Date: 17-Feb-2010

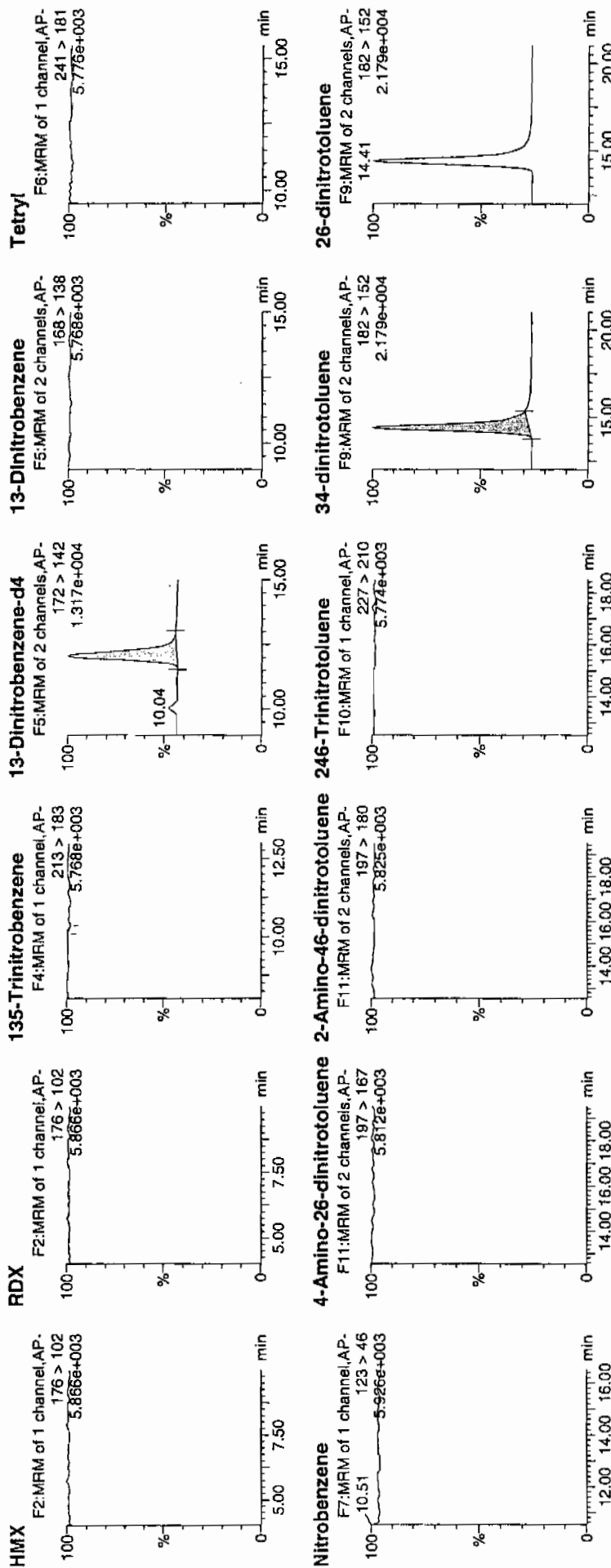
Time: 14:23:12

ID: 246554001

Vial: 2:1,C

1071  
2/18/10

Law 95349 / 21

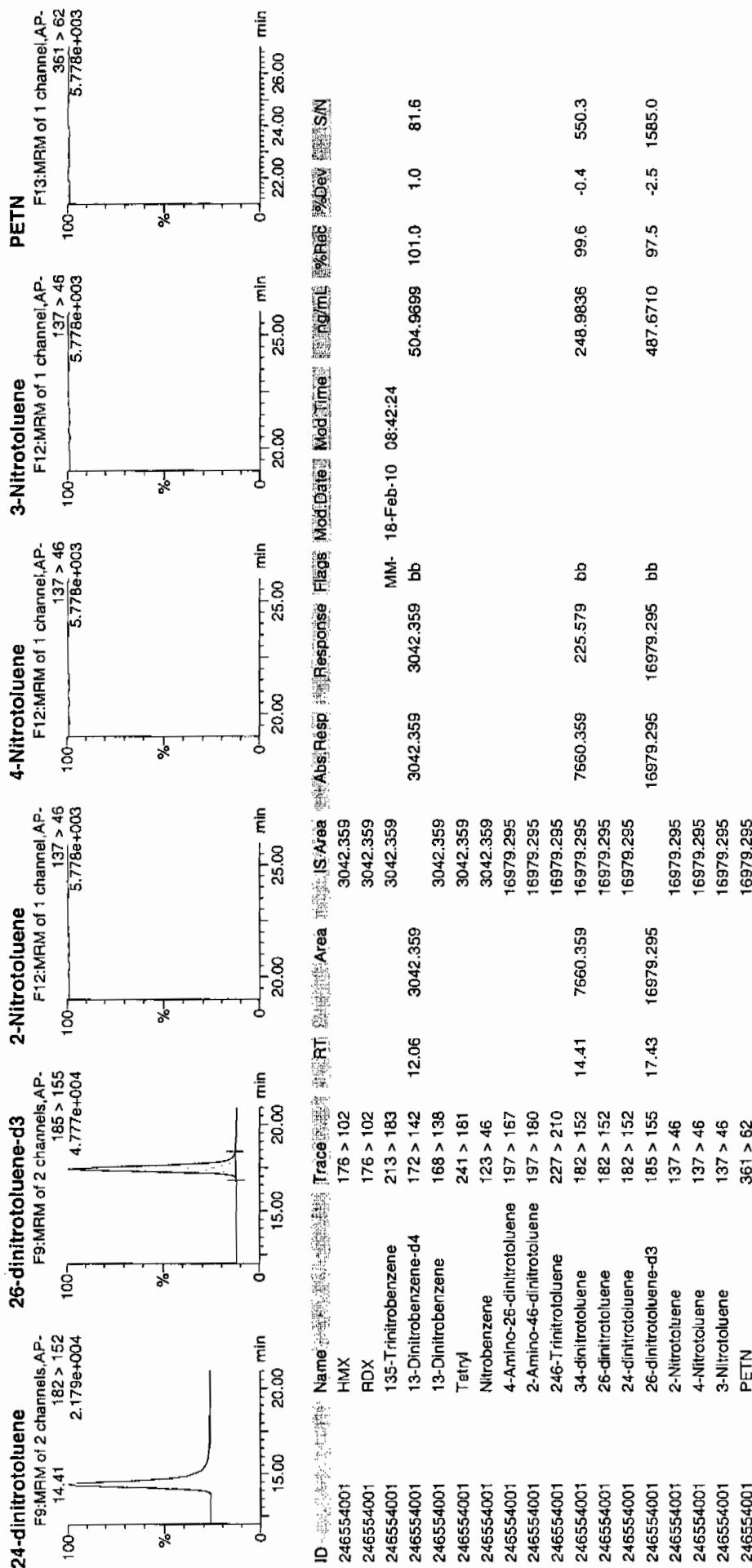


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Printed: Thu Feb 18 08:53:51 2010, Page 30 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qid, Time: Thu Feb 18 08:53:07 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554001

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160041.wiff

Date Analyzed: 16-FEB-10 22:42

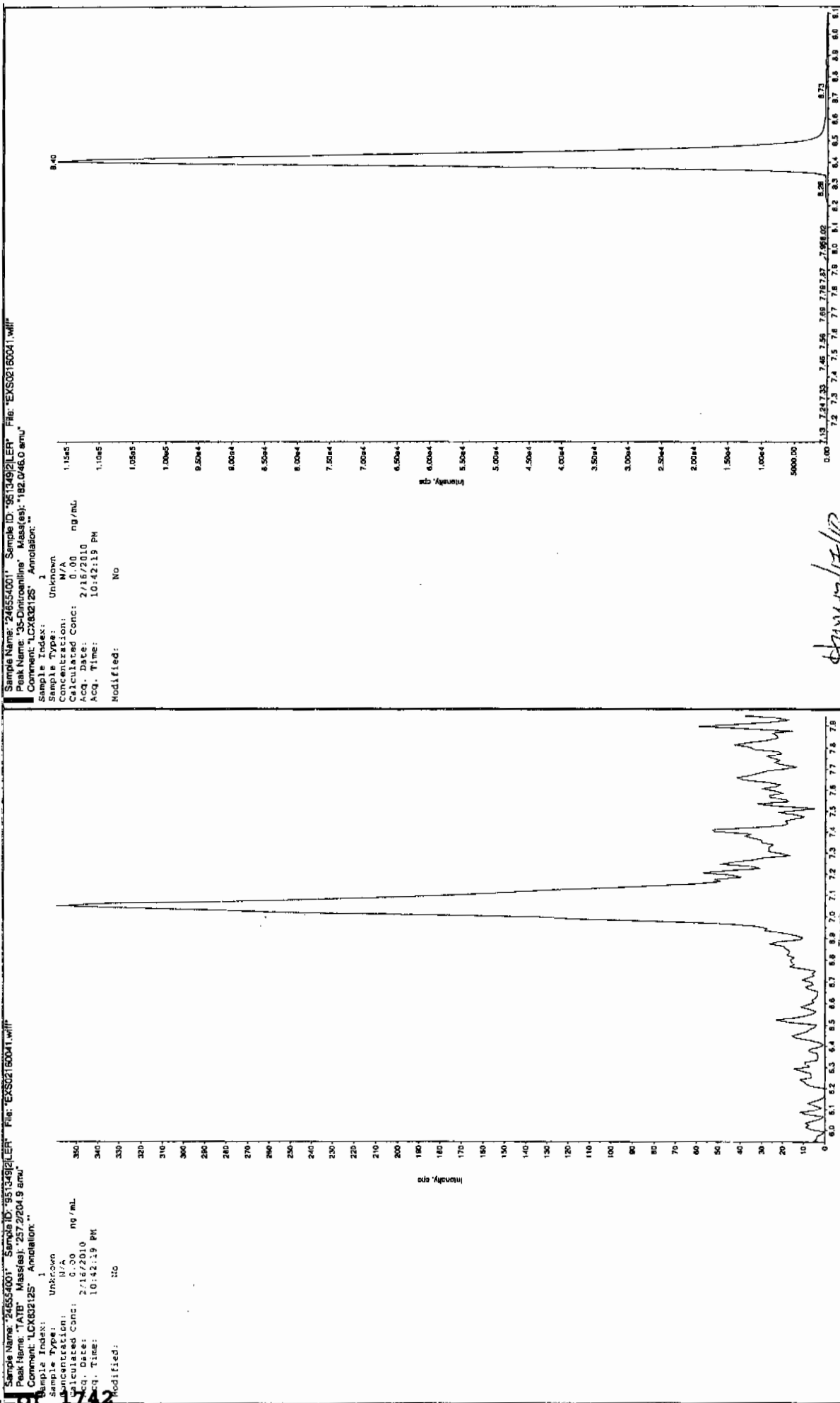
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

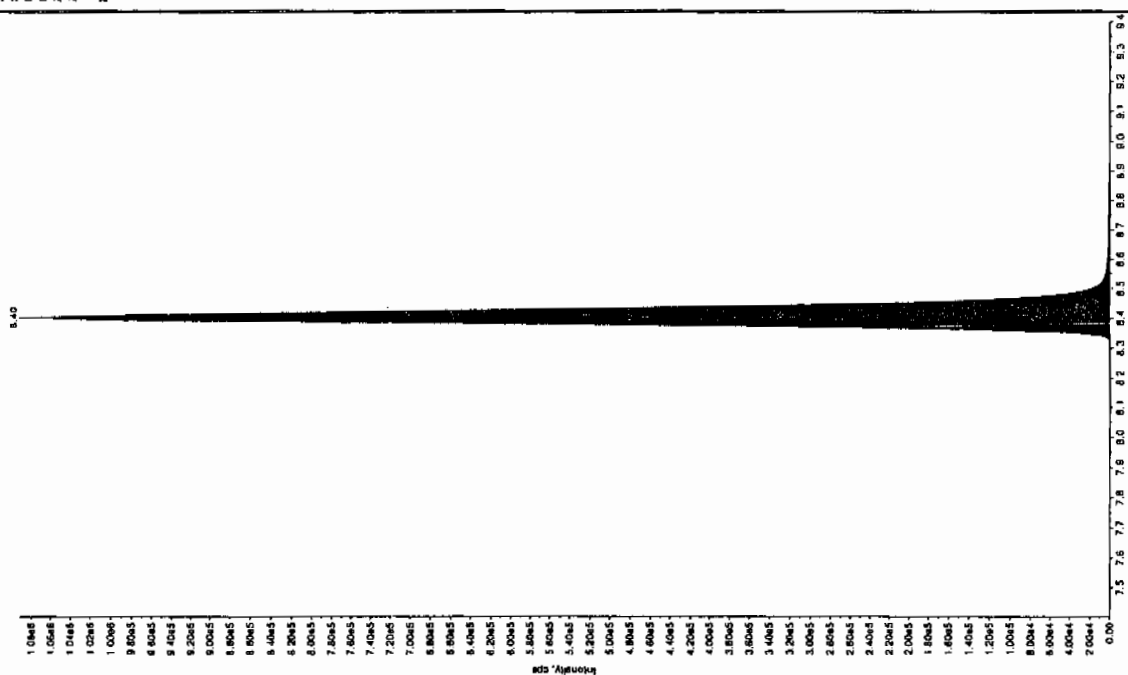
Don 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

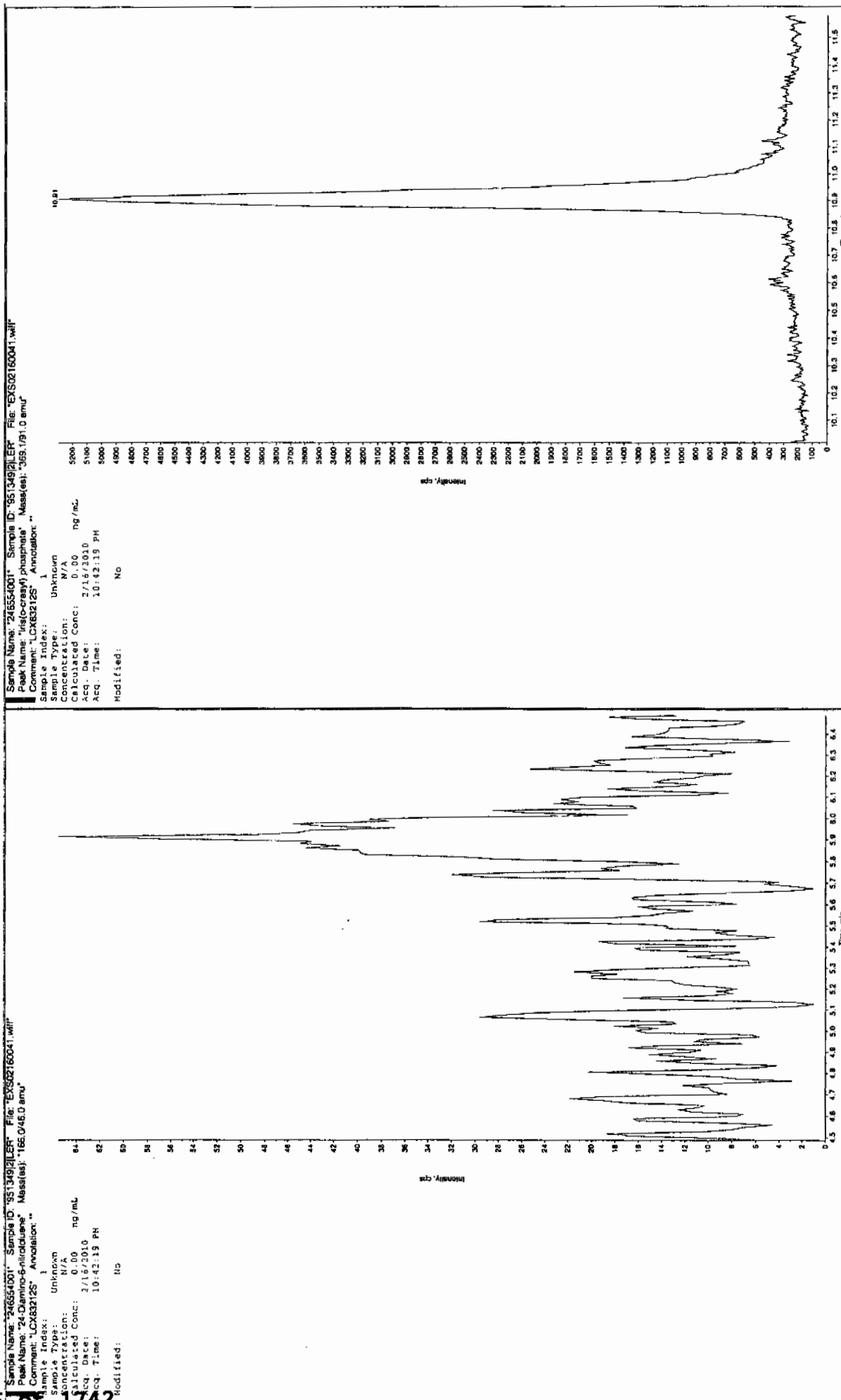
Sample Name: 24554001 Sample ID: 95134921 ER File: EX502160041.wif  
 Peak Name: 24-Olefinic-nitrobenzene Mass(es): 156.0463 amu  
 Comment: LCM832125 Annotation: 1

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 10:42:19 PM  
 Modified: No



Proc. Algorithm: IntelliQuan - TOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.40 min  
 Area: 4.06e+006 counts  
 Height: 1092430.185 cps  
 Start Time: 8.29 min  
 End Time: 8.73 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216047a

Date Analyzed: 17-FEB-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Printed: Thu Feb 18 08:53:51 2010, Page 35 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0216047a

Date: 17-Feb-2010

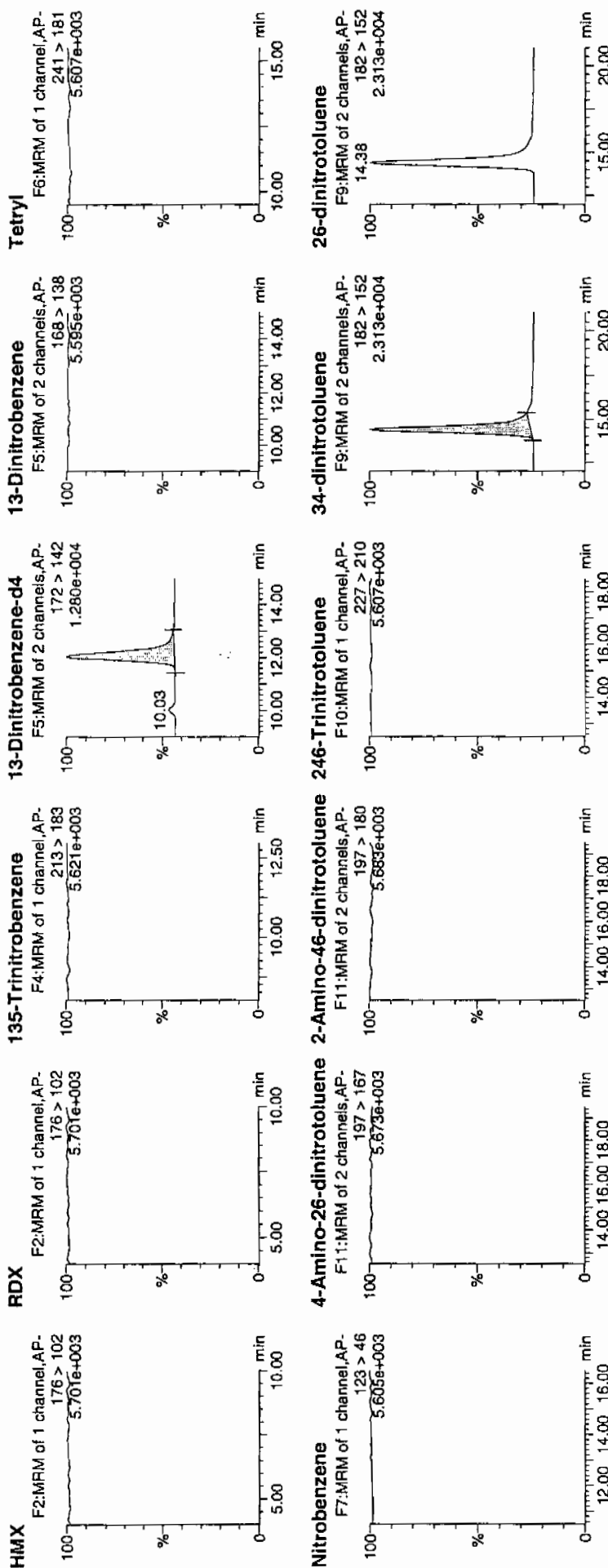
Time: 15:52:04

ID: 246554002

Vial: 2:1 F

1677  
2/18/10

LAJL 957349 / 2 / 2

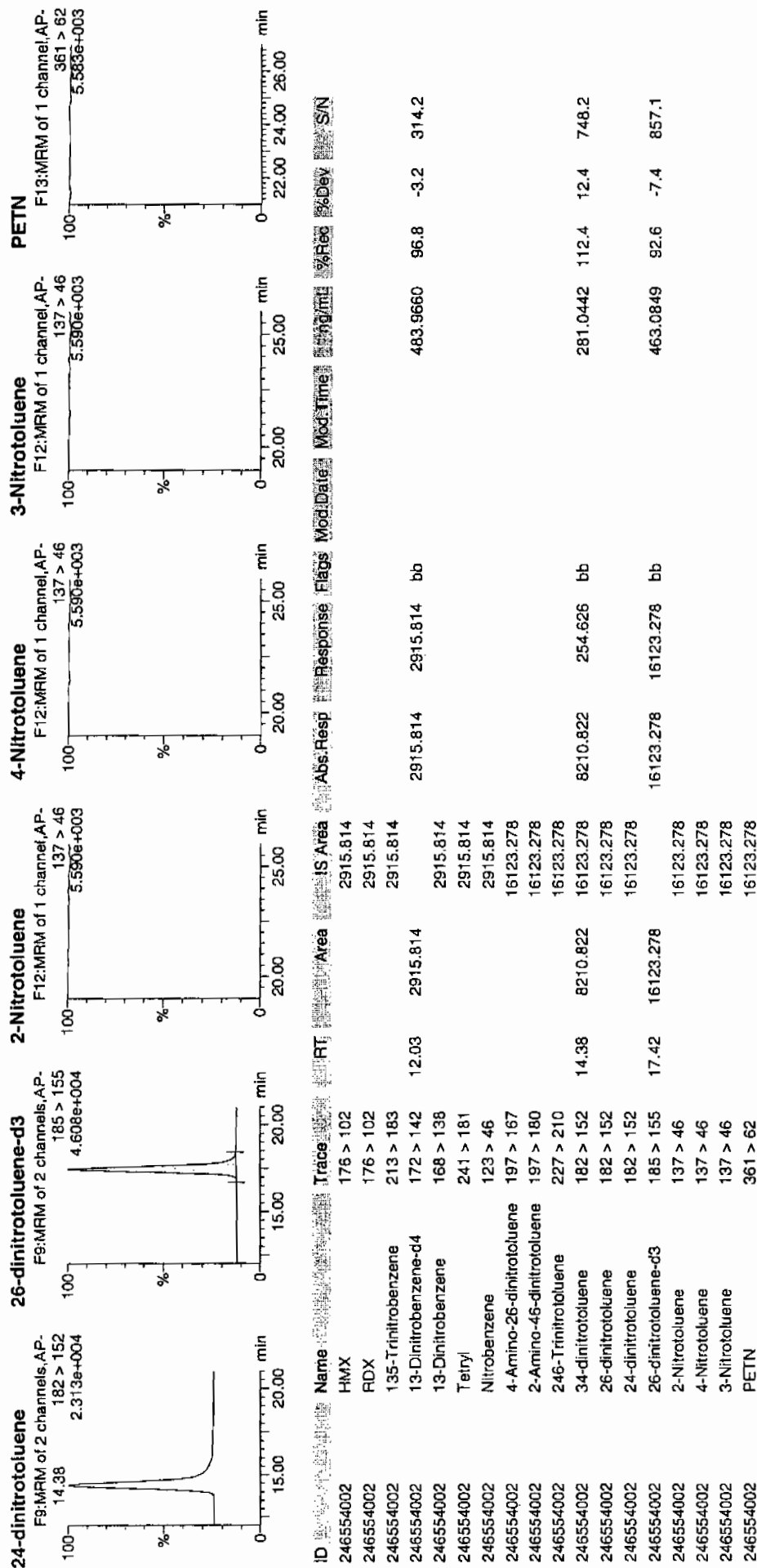


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 36 of 103

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8174

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554002

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160044.wiff

Date Analyzed: 16-FEB-10 23:29

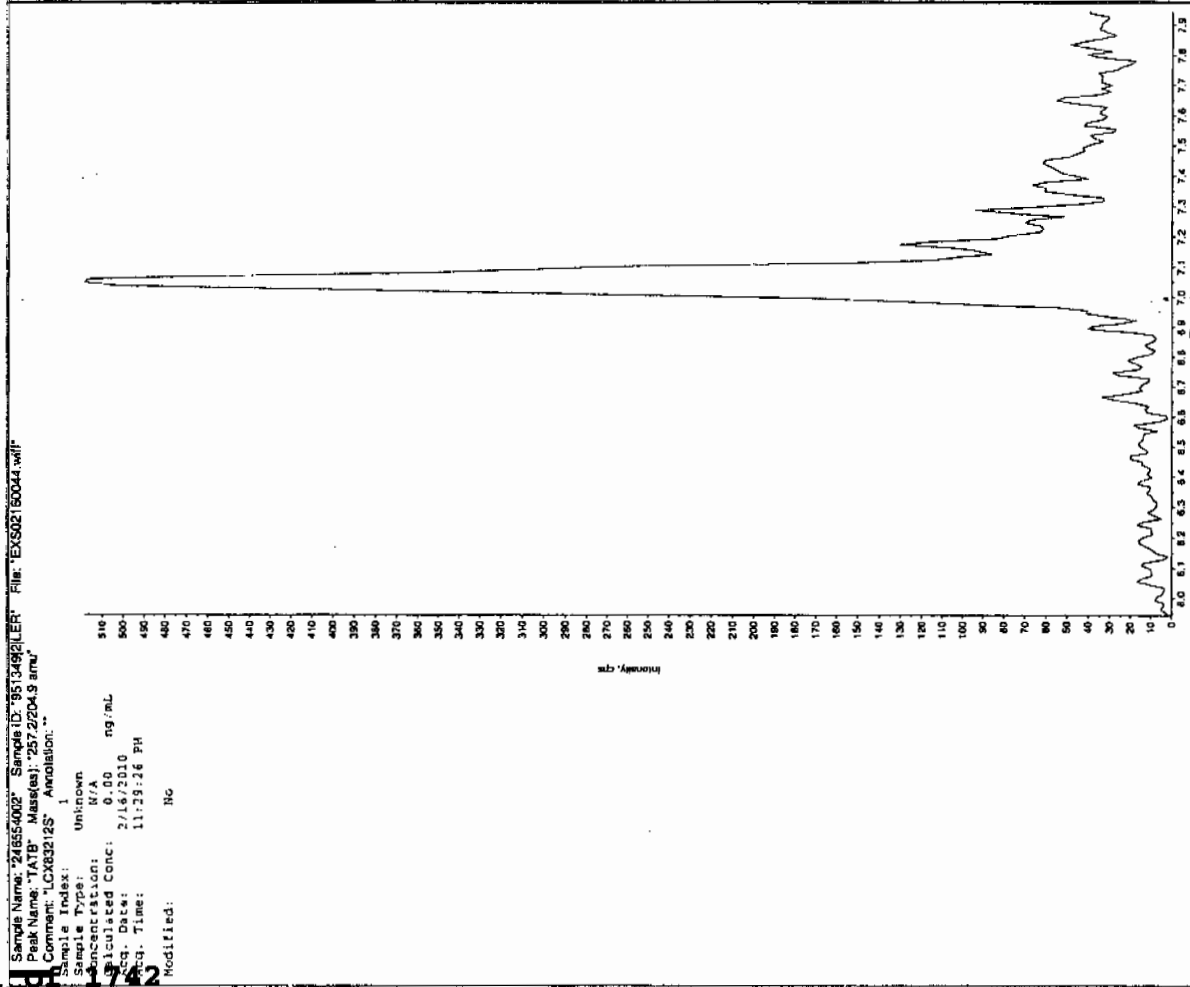
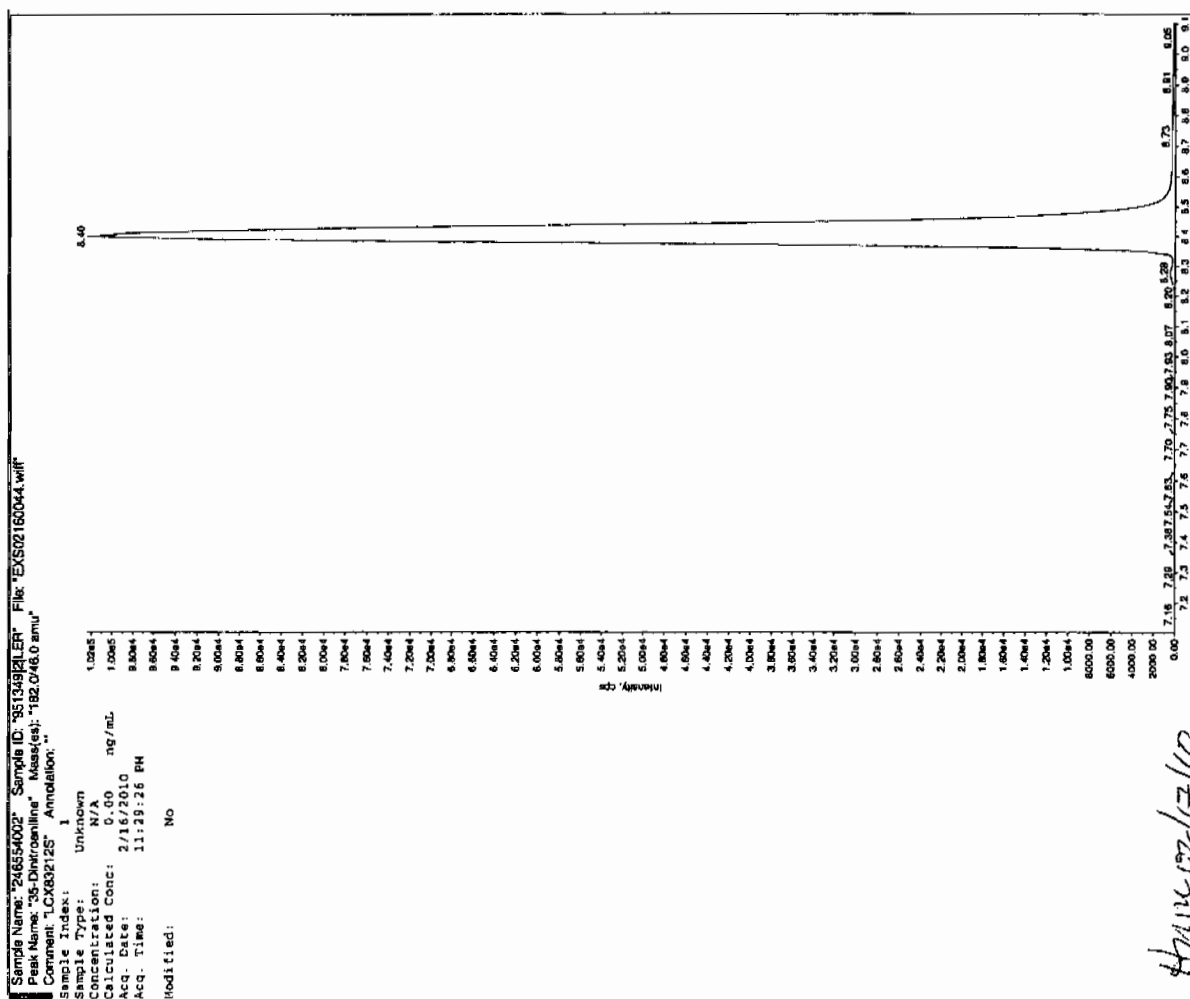
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

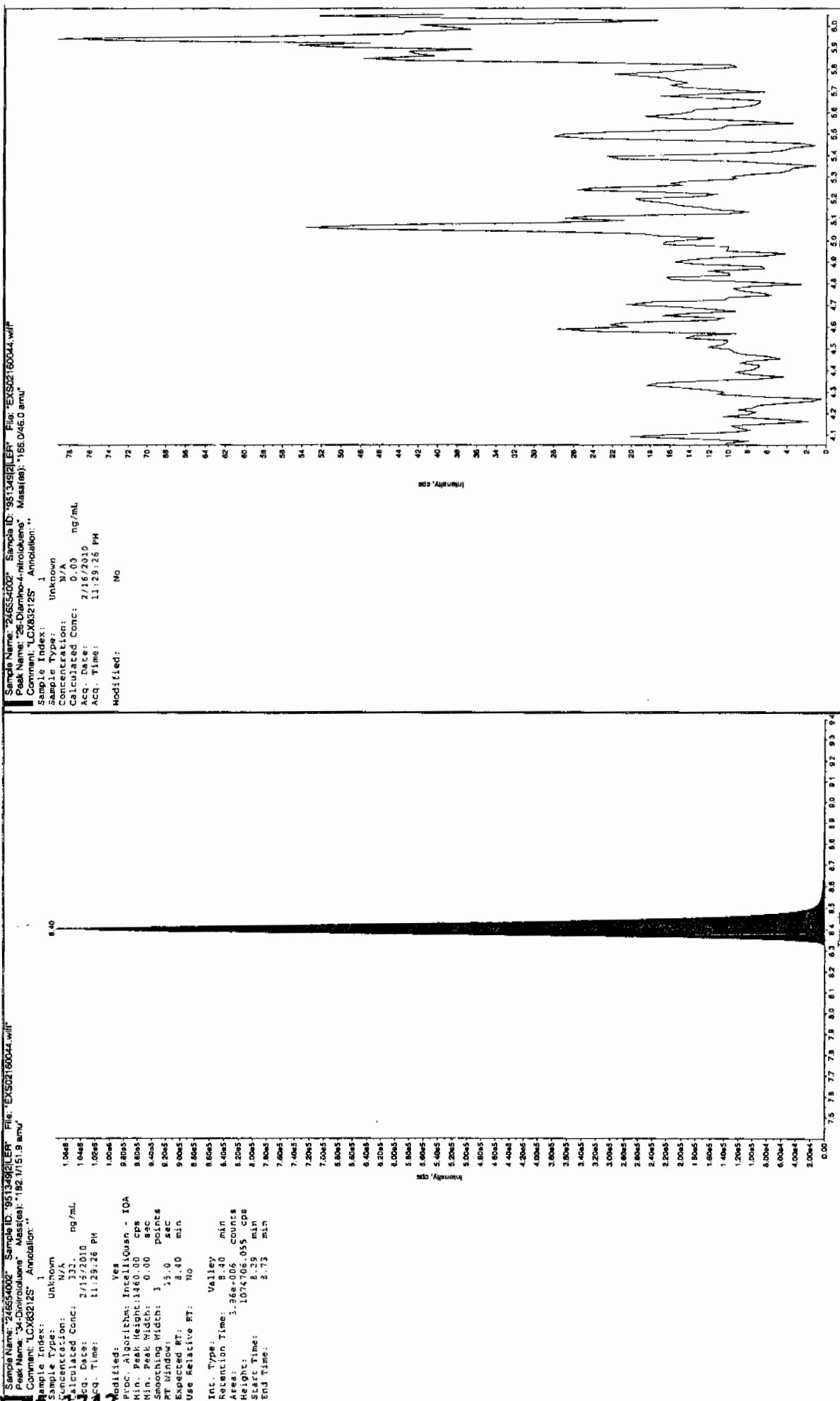
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

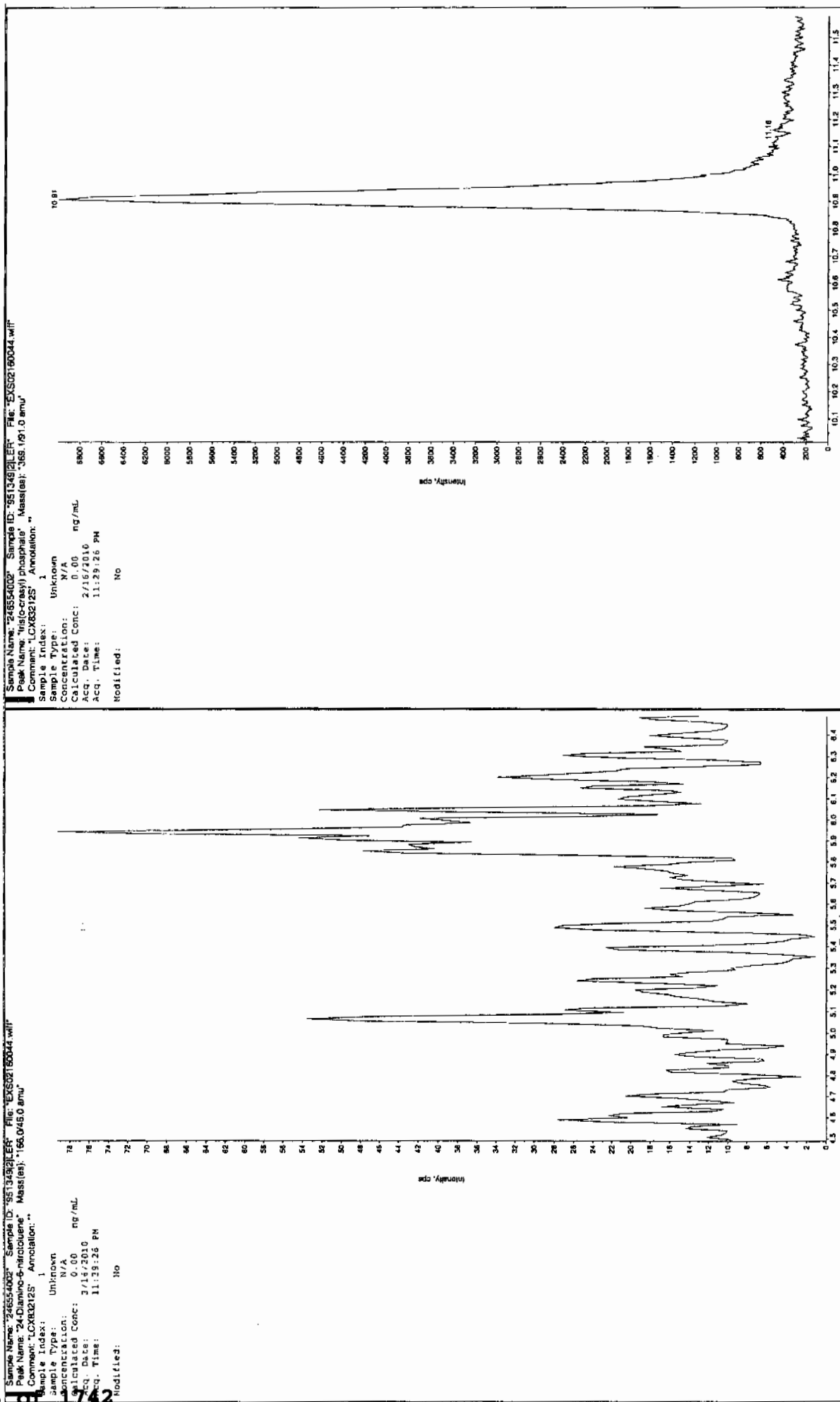
01/11/10  
gund



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216048a

Date Analyzed: 17-FEB-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 37 of 103

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216048a

Date: 17-Feb-2010

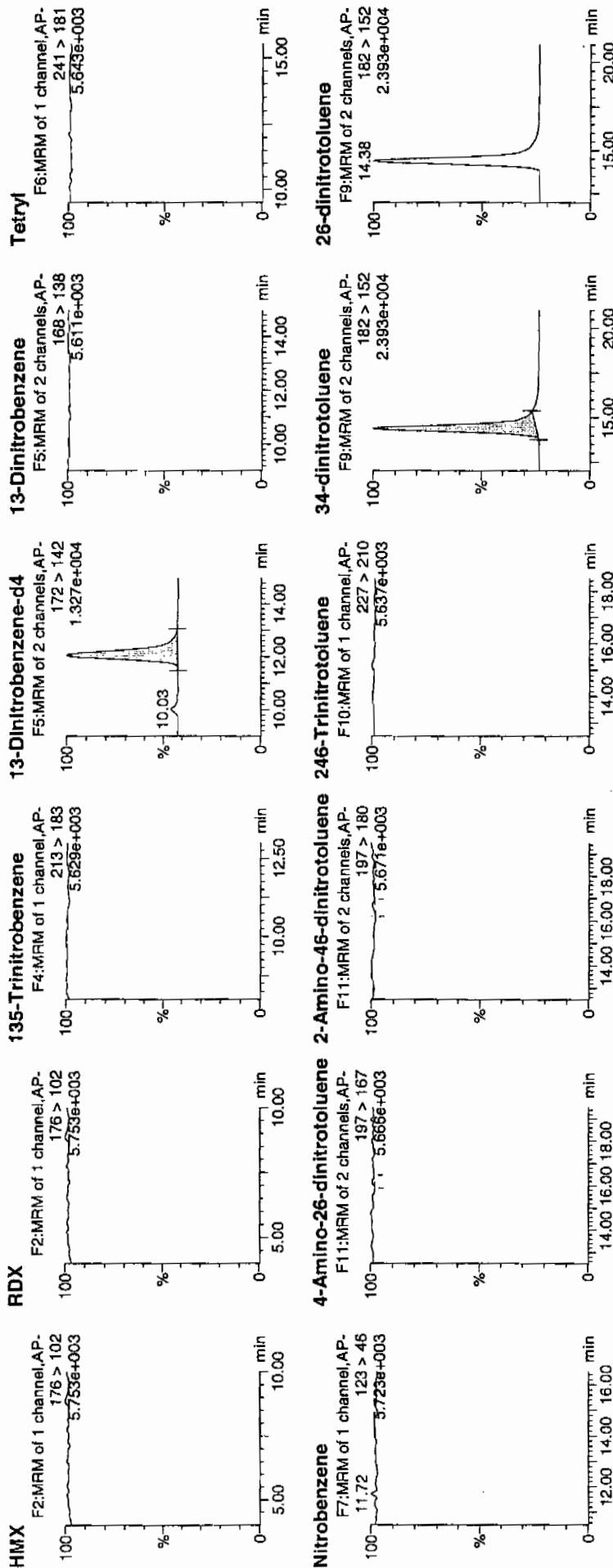
Time: 16:21:31

ID: 246554003

Vial: 2:2,A

11/17  
2/18/10

1957349 / 8025 / 21

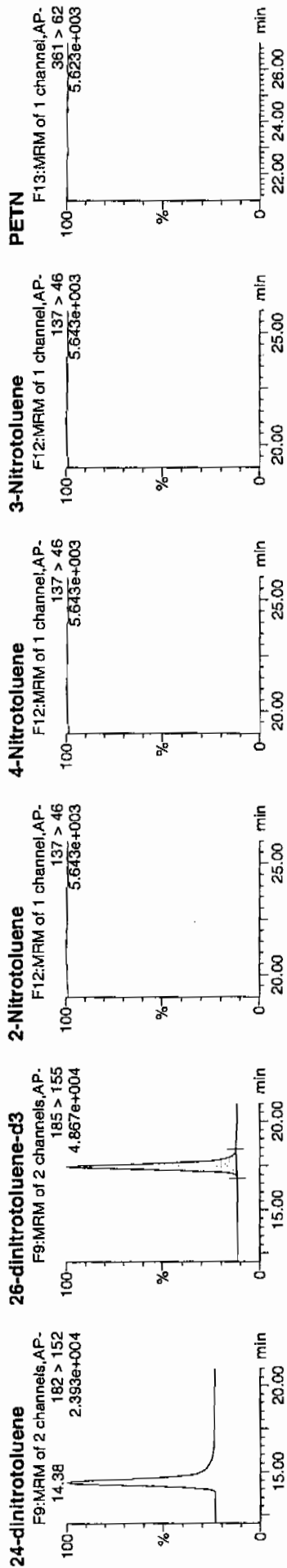


477118/102

Printed: Thu Feb 18 08:53:51 2010, Page 38 of 103

# Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO021610expA1.qtd, Time: Thu Feb 18 08:53:07 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc/mL	%Rec	%Dev	S/N
246554003	HMX	176 > 102		3150.219										
246554003	RDX	176 > 102		3150.219										
246554003	135-Trinitrobenzene	213 > 183		3150.219										
246554003	13-Dinitrobenzene-d4	172 > 142	12.07	3150.219										
246554003	13-Dinitrobenzene	168 > 138		3150.219										
246554003	Tetryl	241 > 181		3150.219										
246554003	Nitrobenzene	123 > 46		3150.219										
246554003	4-Amino-26-dinitrotoluene	197 > 167		16964.996					18-Feb-10	08:45:19				
246554003	2-Amino-46-dinitrotoluene	197 > 180		16964.996					18-Feb-10	08:46:33				
246554003	246-Trinitrotoluene	227 > 210		16964.996										
246554003	34-dinitrotoluene	182 > 152	14.38	8532.366	16964.996		251.470	bb			277.5601	111.0	11.0	592.9
246554003	26-dinitrotoluene	182 > 152		16964.996										
246554003	24-dinitrotoluene	182 > 152		16964.996										
246554003	26-dinitrotoluene-d3	185 > 155	17.44	16964.996							487.2603	97.5	-2.5	1949.9
246554003	2-Nitrotoluene	137 > 46		16964.996										
246554003	4-Nitrotoluene	137 > 46		16964.996										
246554003	3-Nitrotoluene	137 > 46		16964.996										
246554003	PETN	361 > 62		16964.996										

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8176

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554003

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160045.wiff

Date Analyzed: 16-FEB-10 23:45

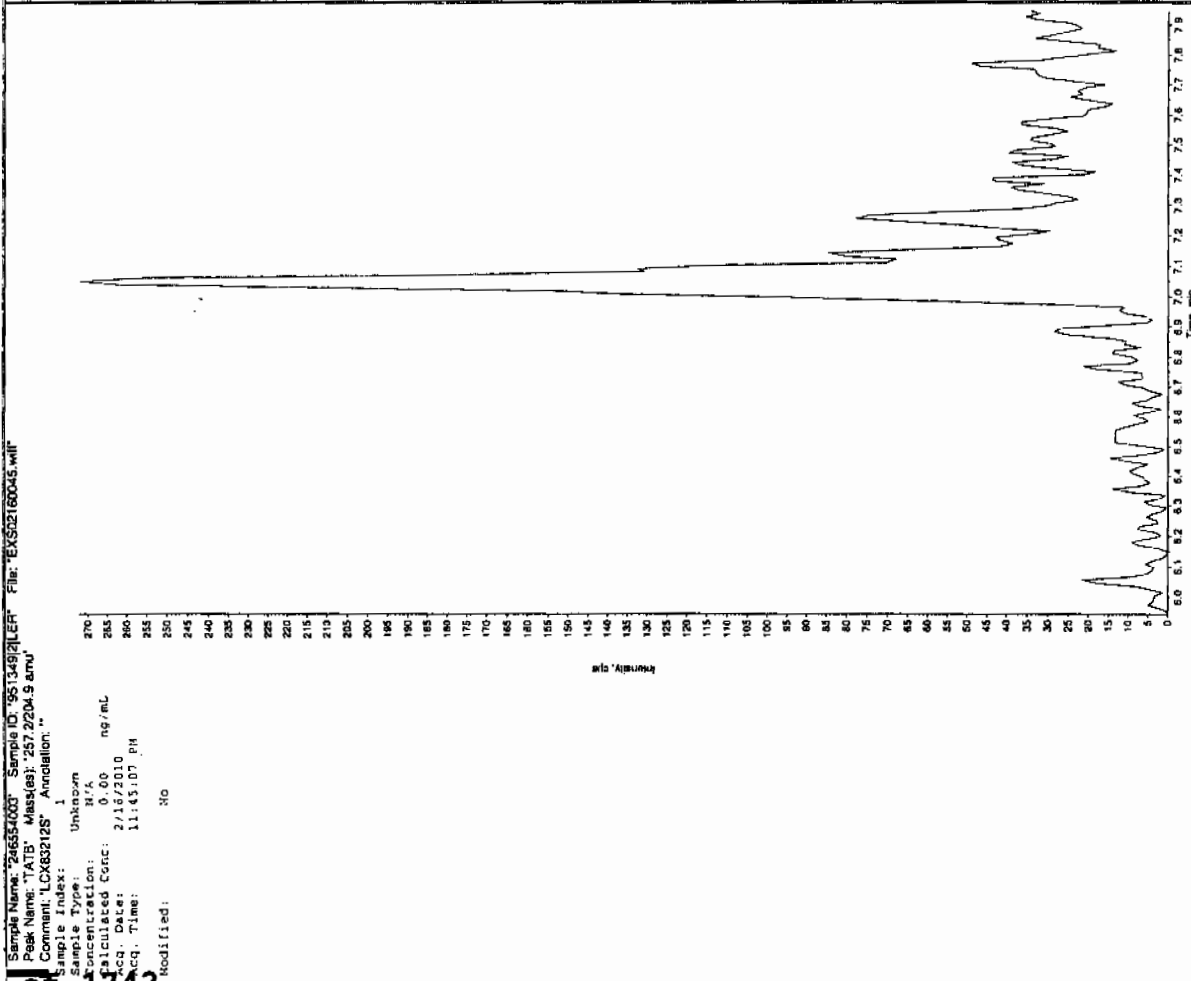
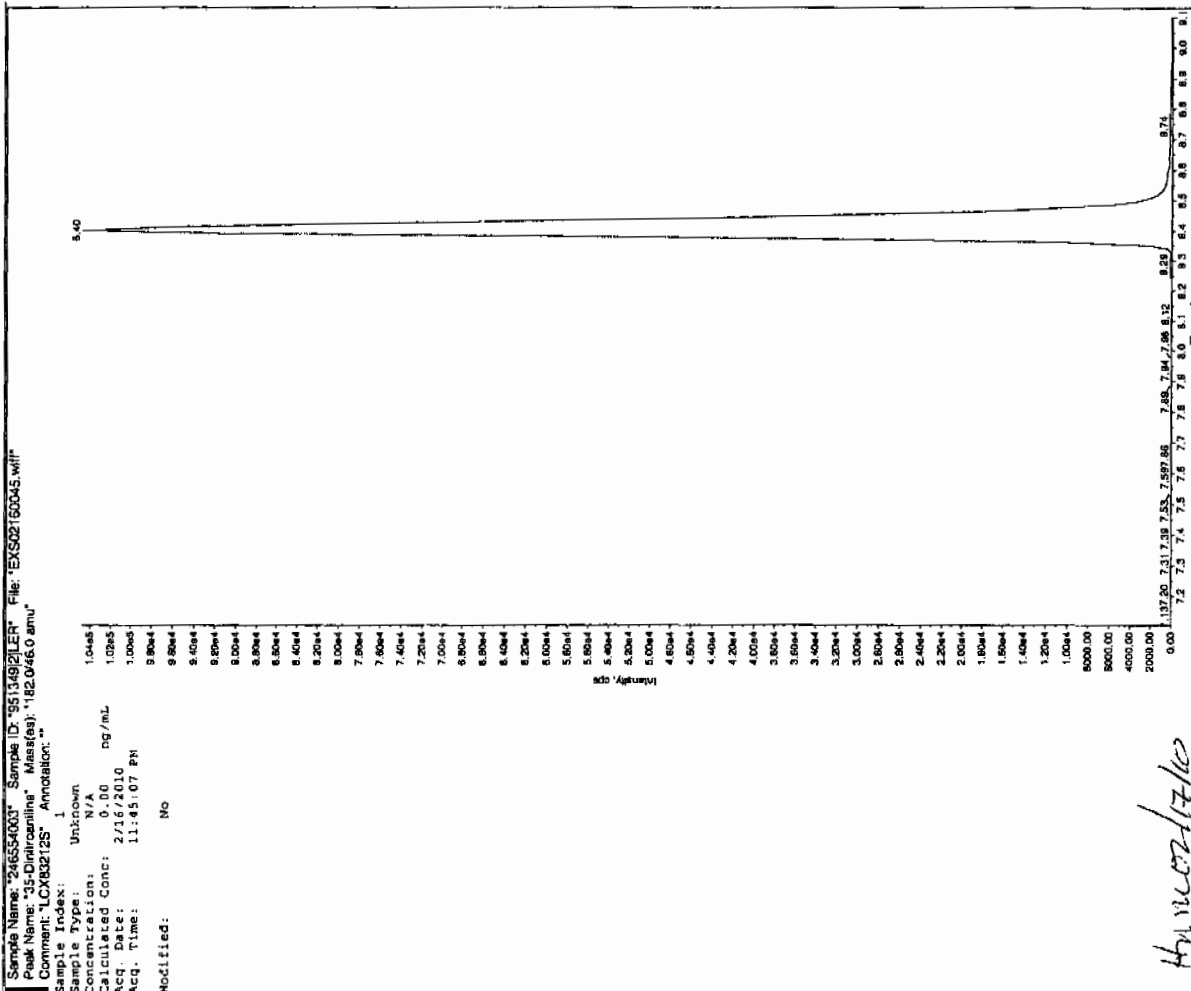
Units: ug/kg

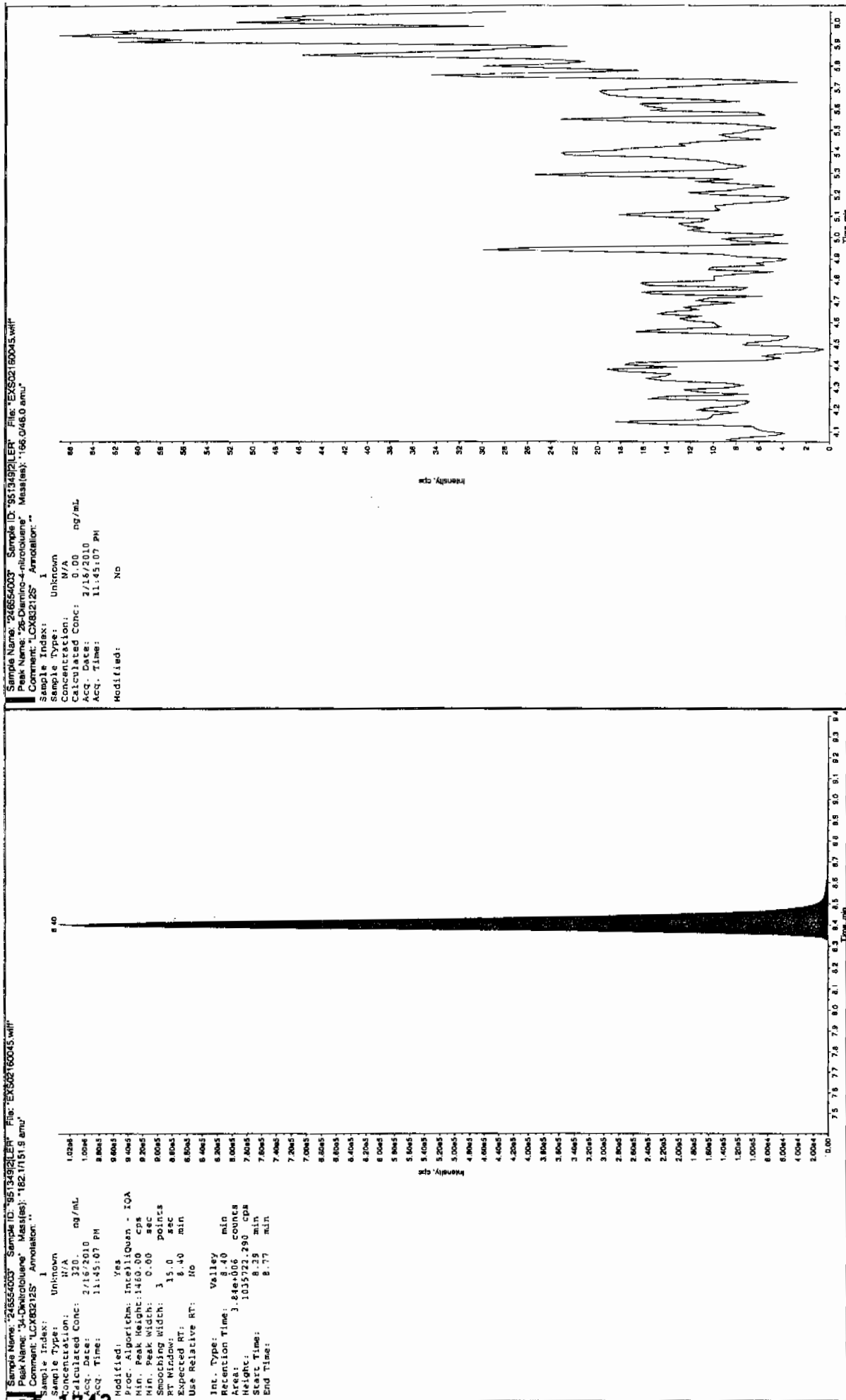
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

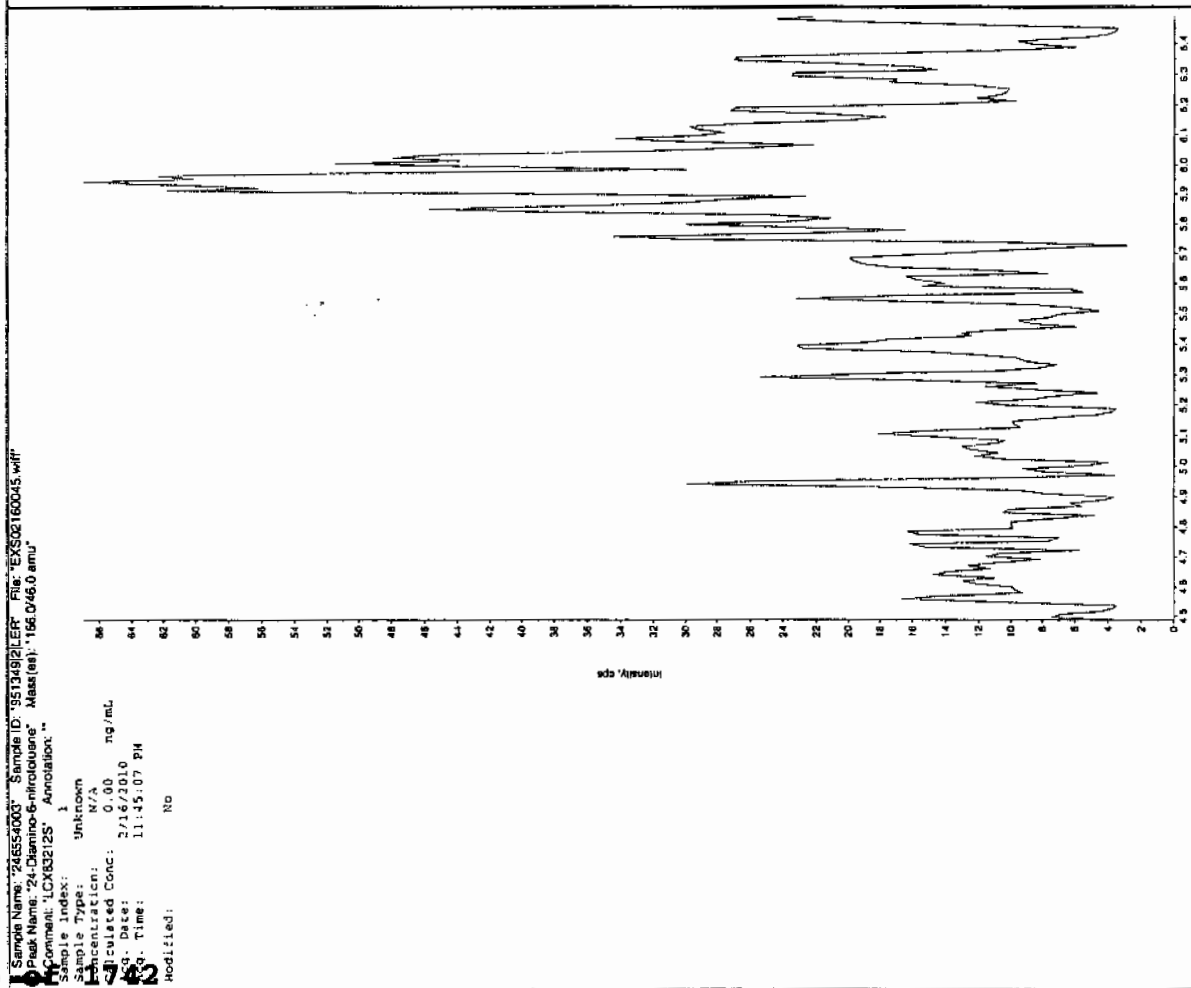
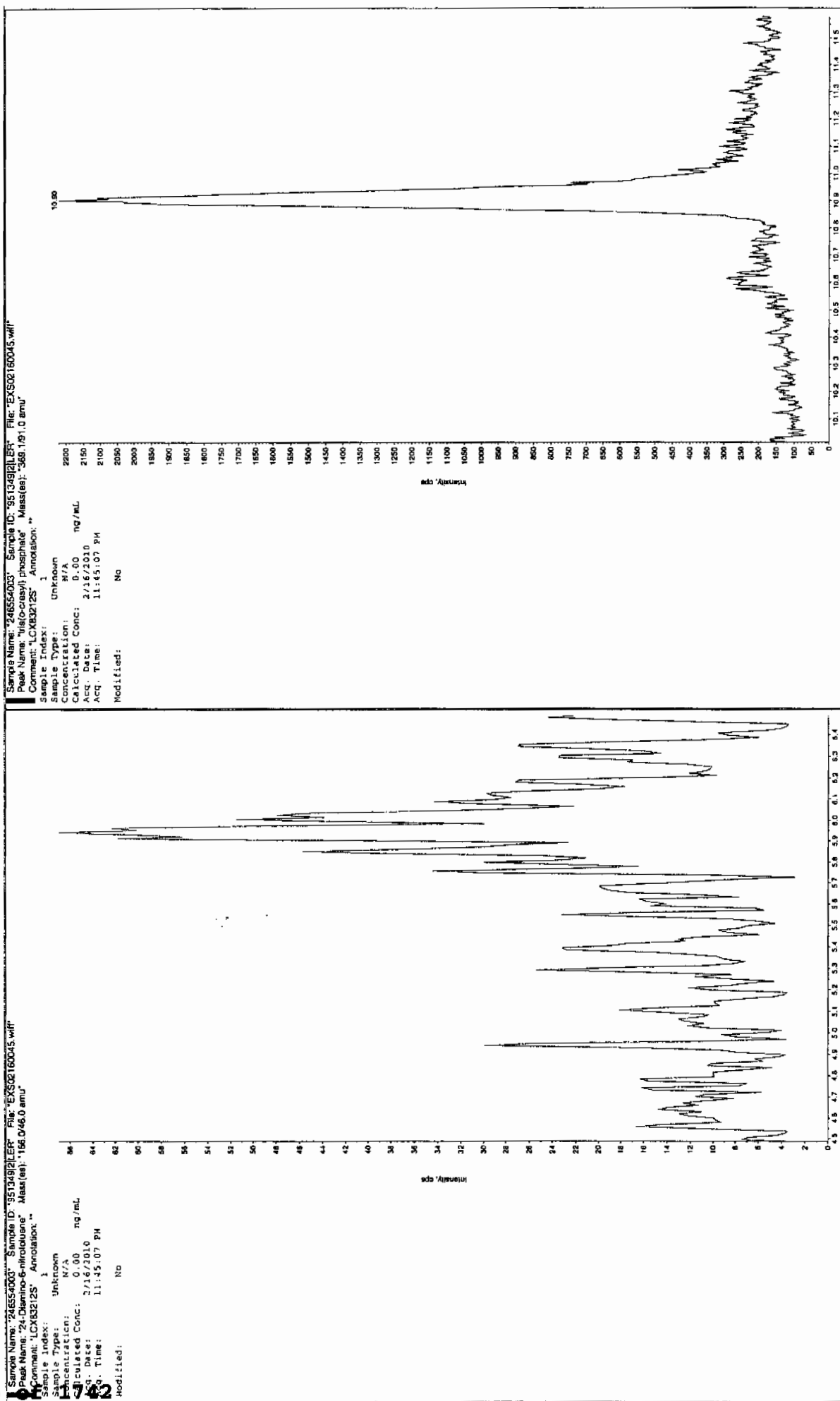
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

01/11/12  
Jury





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216049a

Date Analyzed: 17-FEB-10 16:51

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		<u>Sample Amount</u>		

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Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216049a

Date: 17-Feb-2010

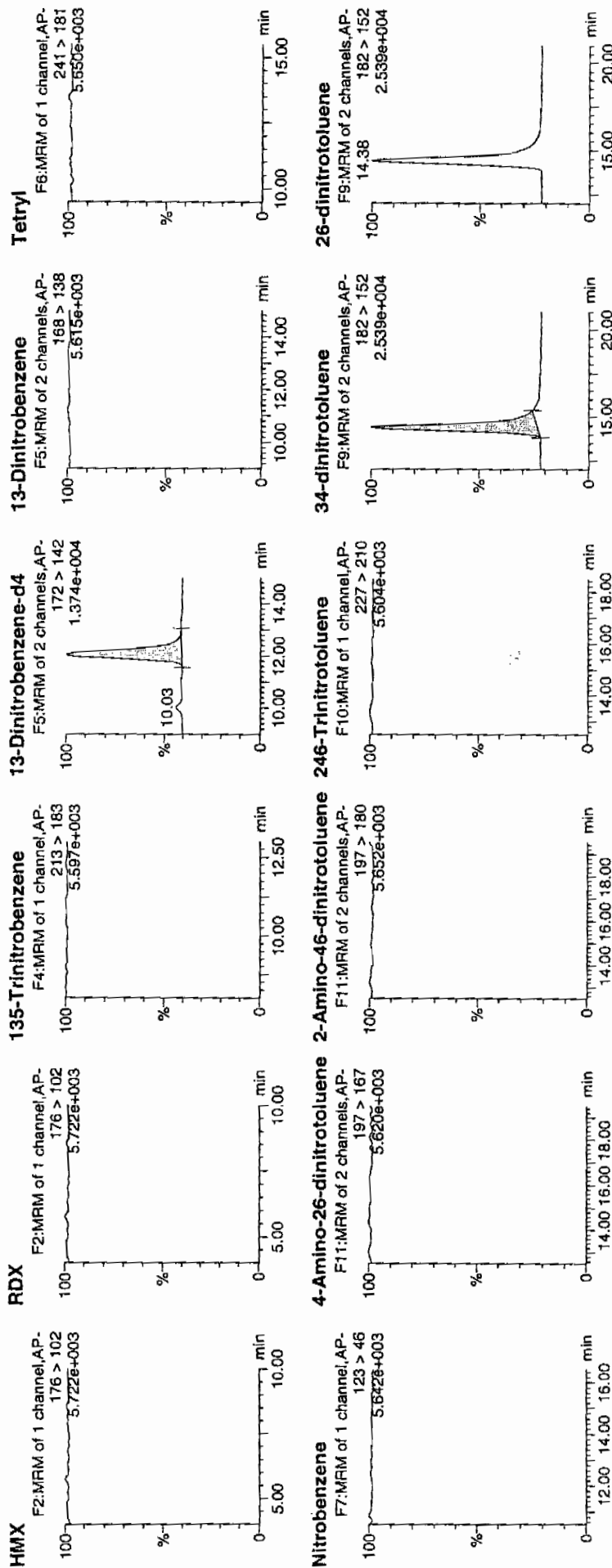
Time: 16:51:15

ID: 246554004

Vial: 2:2,B

10/17  
2/15/10

LAUV 957349 / SOLA 21



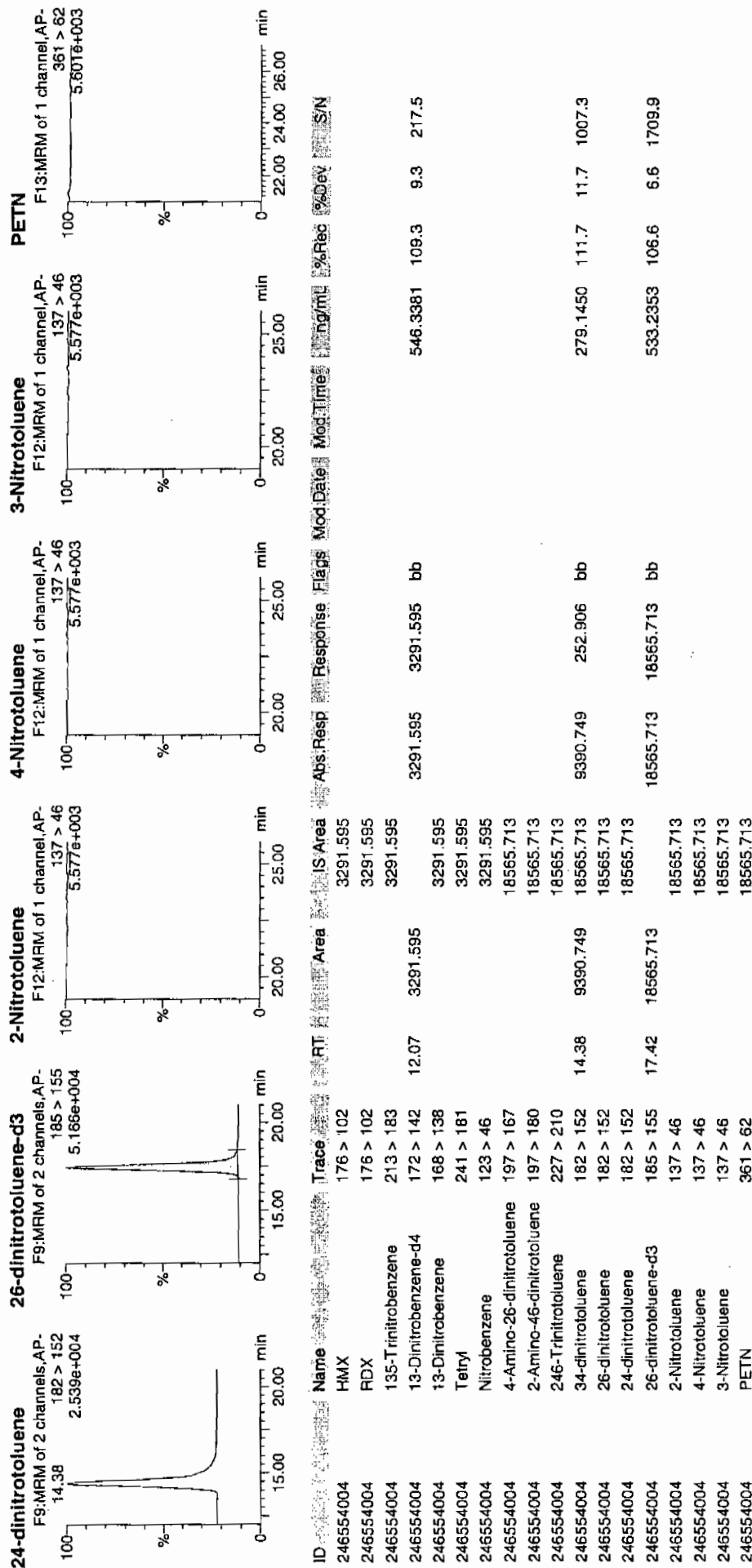
Handwritten signature: HANE 2/18/10



Printed: Thu Feb 18 08:53:51 2010, Page 40 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qid, Time: Thu Feb 18 08:53:07 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8178

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554004

Sample Amount 2

Moisture: 2.5

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160046.wiff

Date Analyzed: 17-FEB-10 00:00

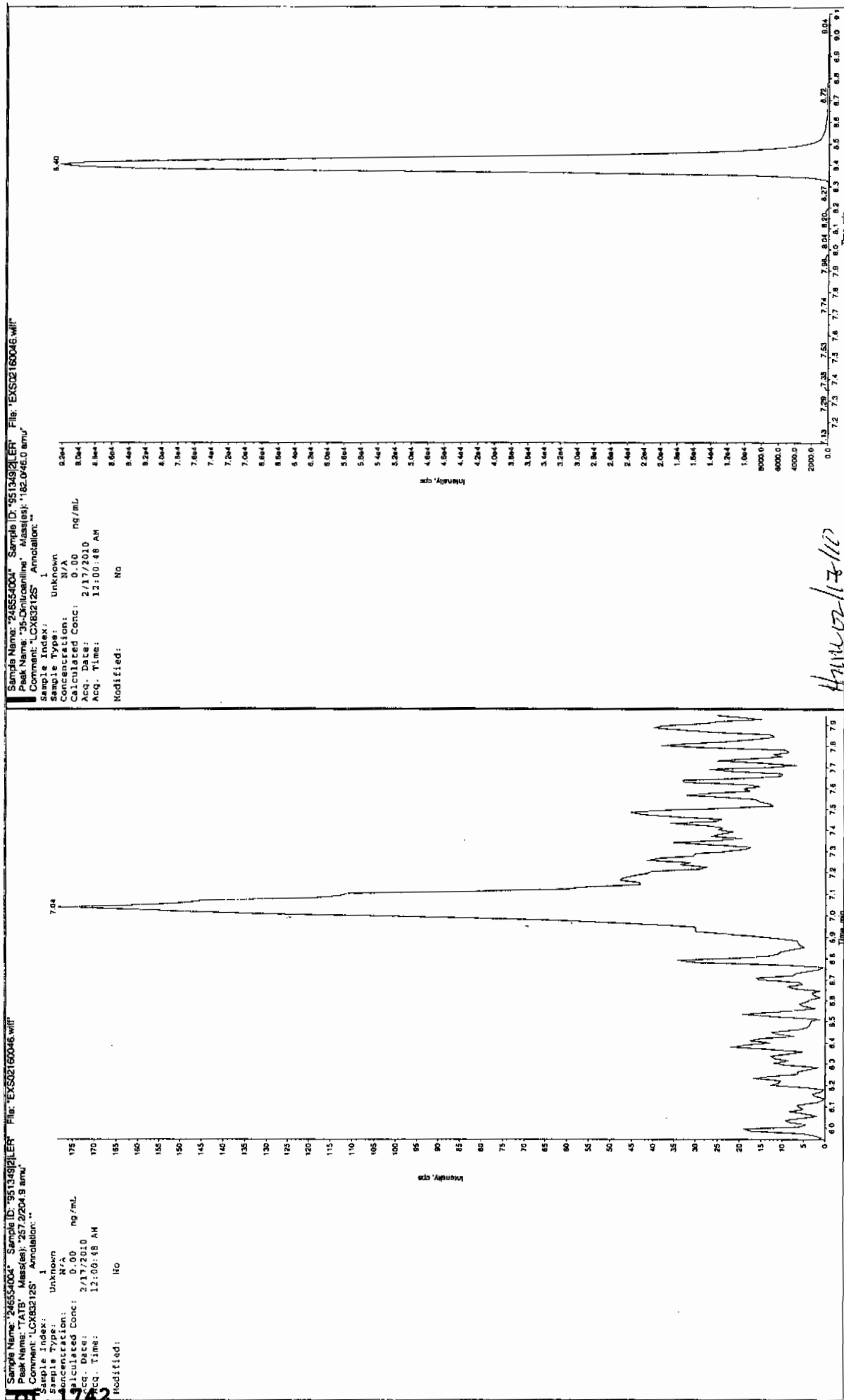
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

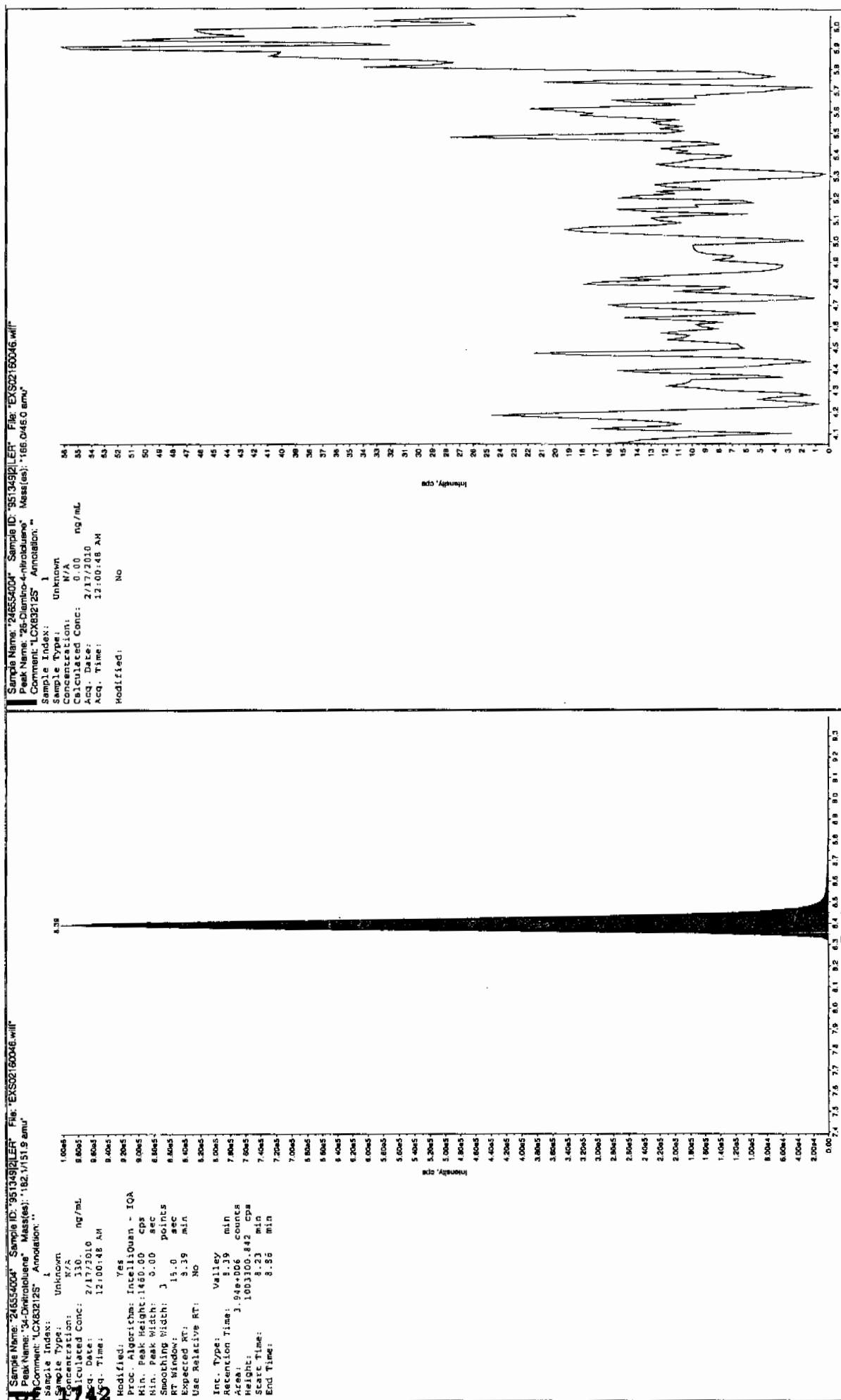
\*Concentration =

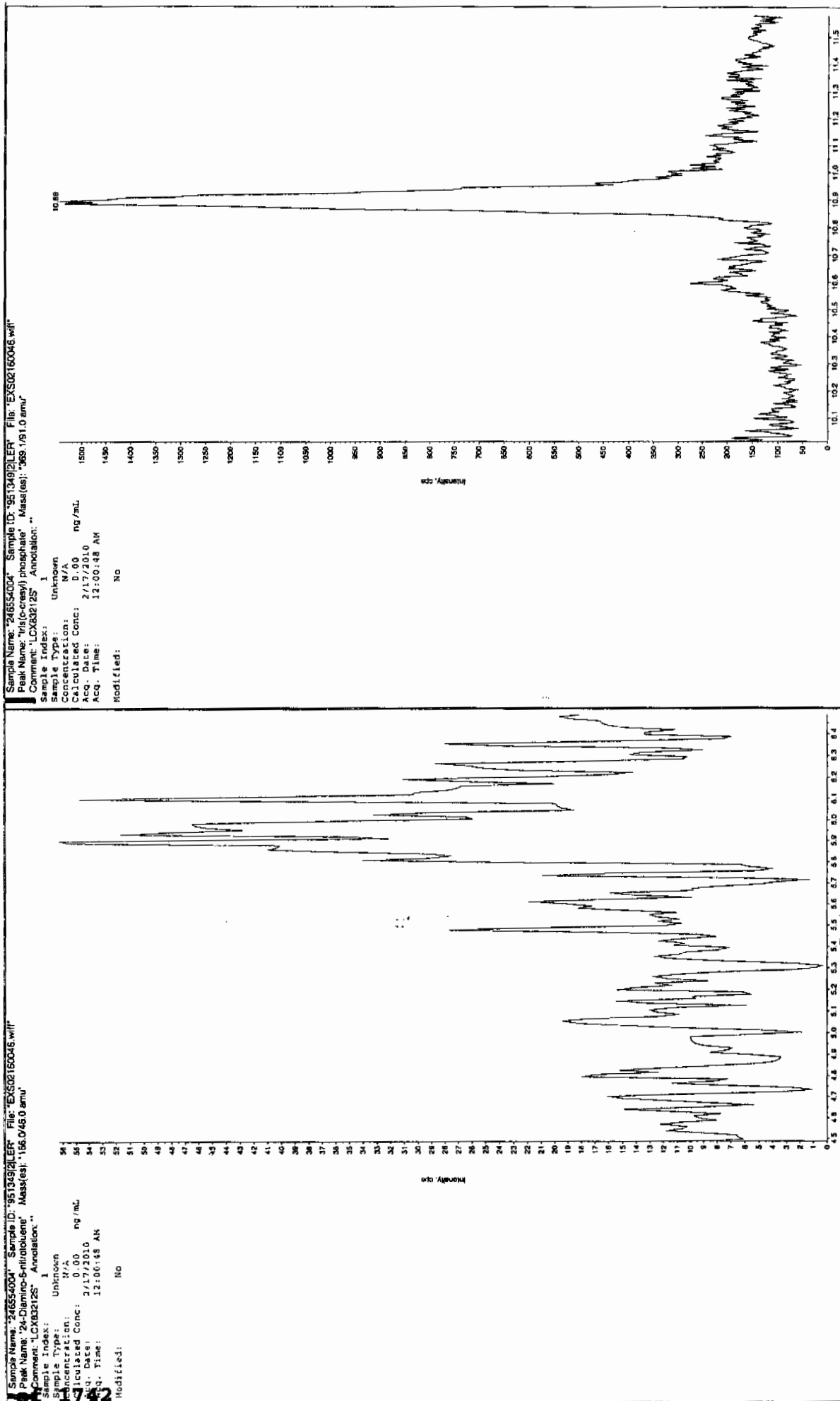
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Sample



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216050a

Date Analyzed: 17-FEB-10 17:20

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		<u>Sample Amount</u>		

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216050a

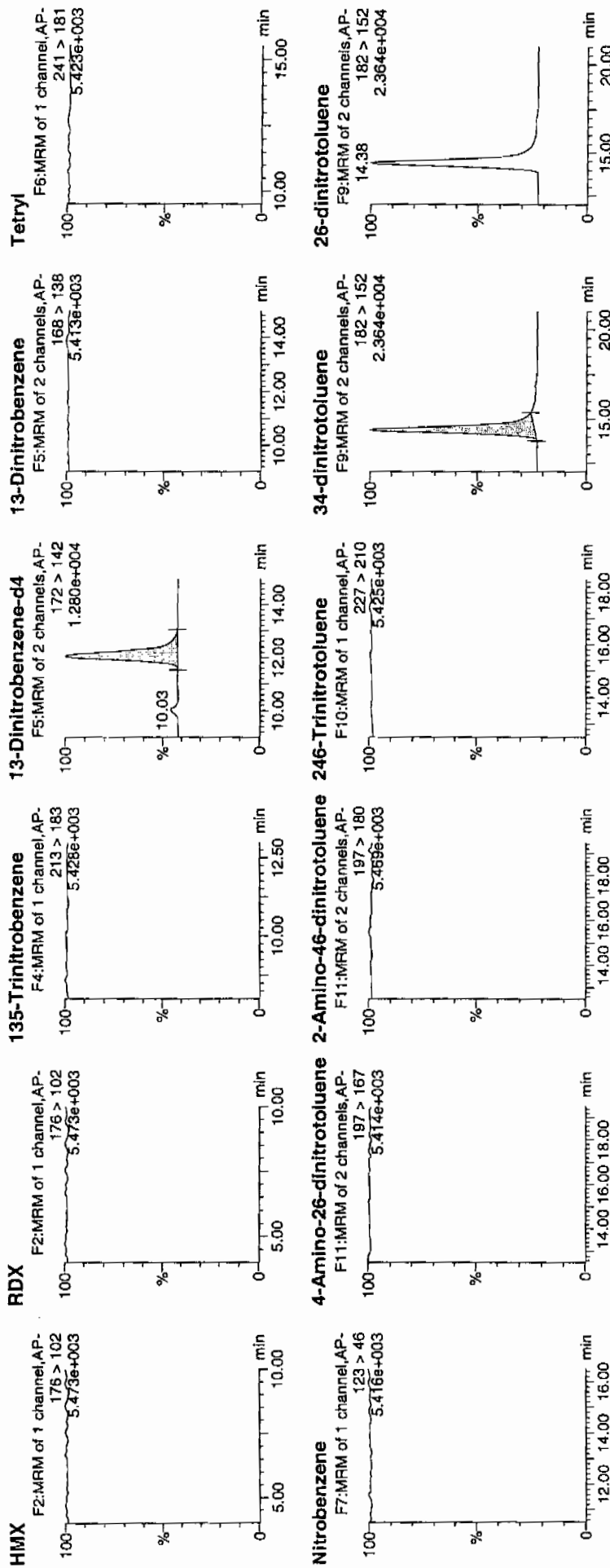
Date: 17-Feb-2010

Time: 17:20:44

ID: 246554005

Vial: 2:2,C

LAU/957349 / SOUT / 2 / 2/18/10

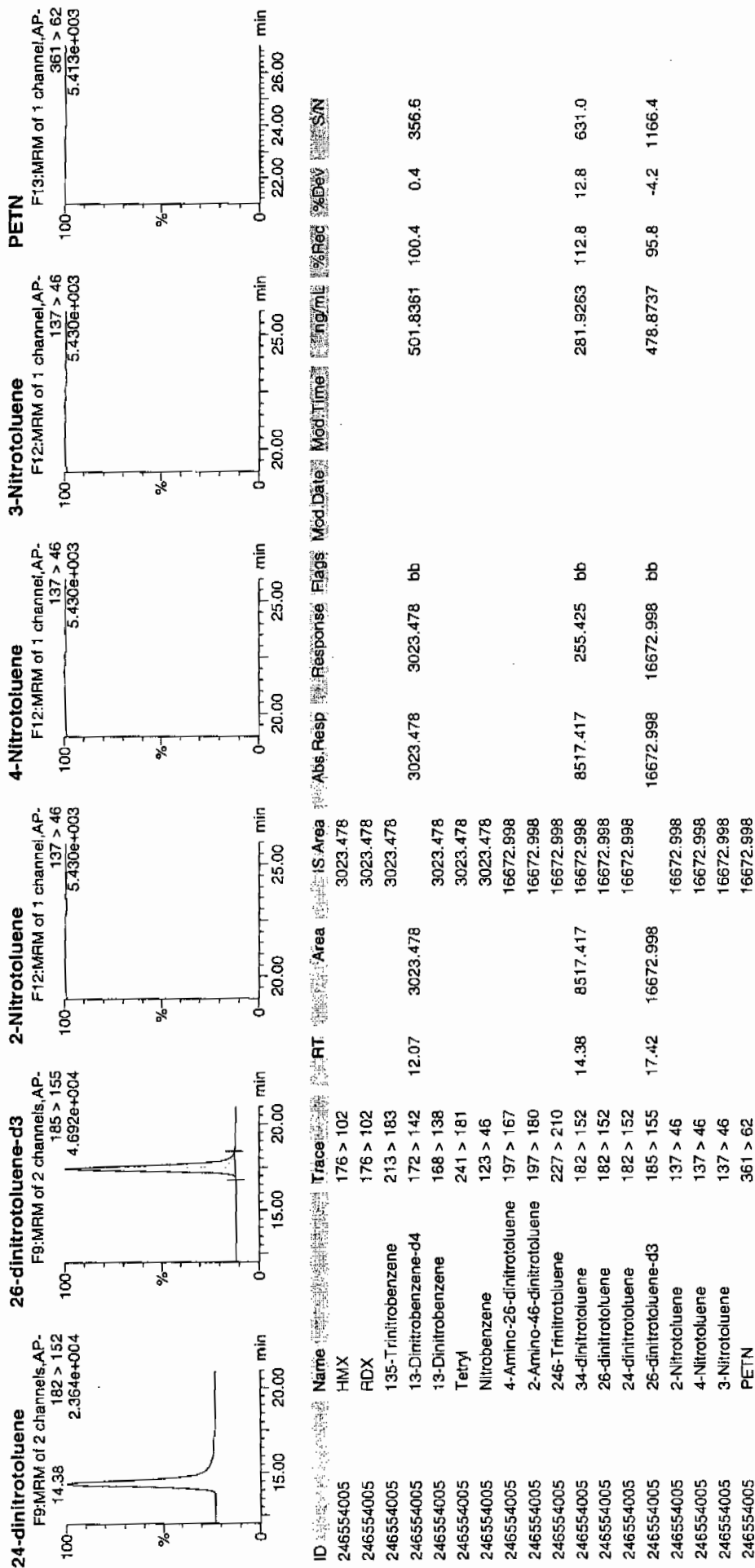


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Printed: Thu Feb 18 08:53:51 2010, Page 42 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8177

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554005

Sample Amount 2

Moisture: 3.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160047.wiff

Date Analyzed: 17-FEB-10 00:16

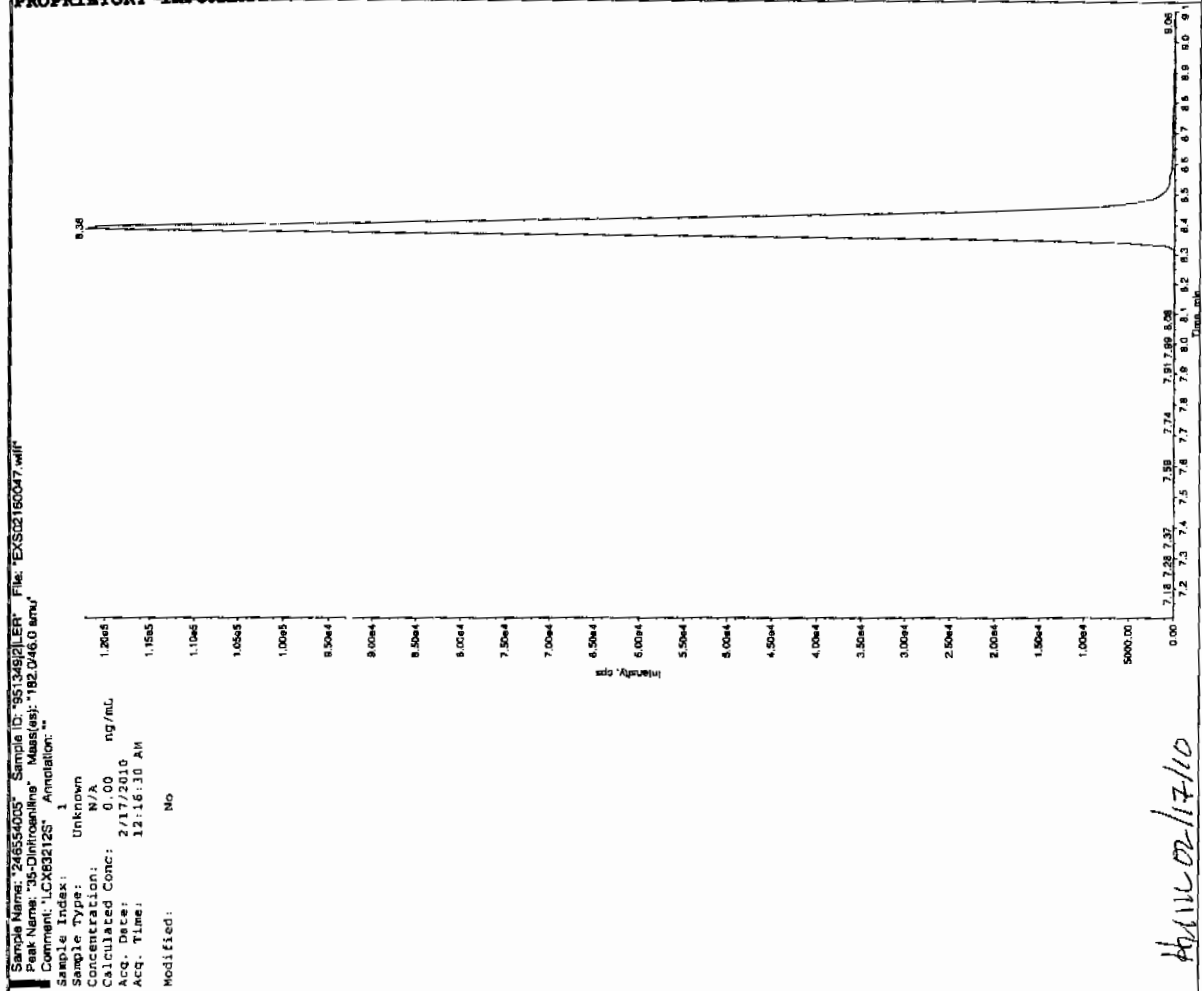
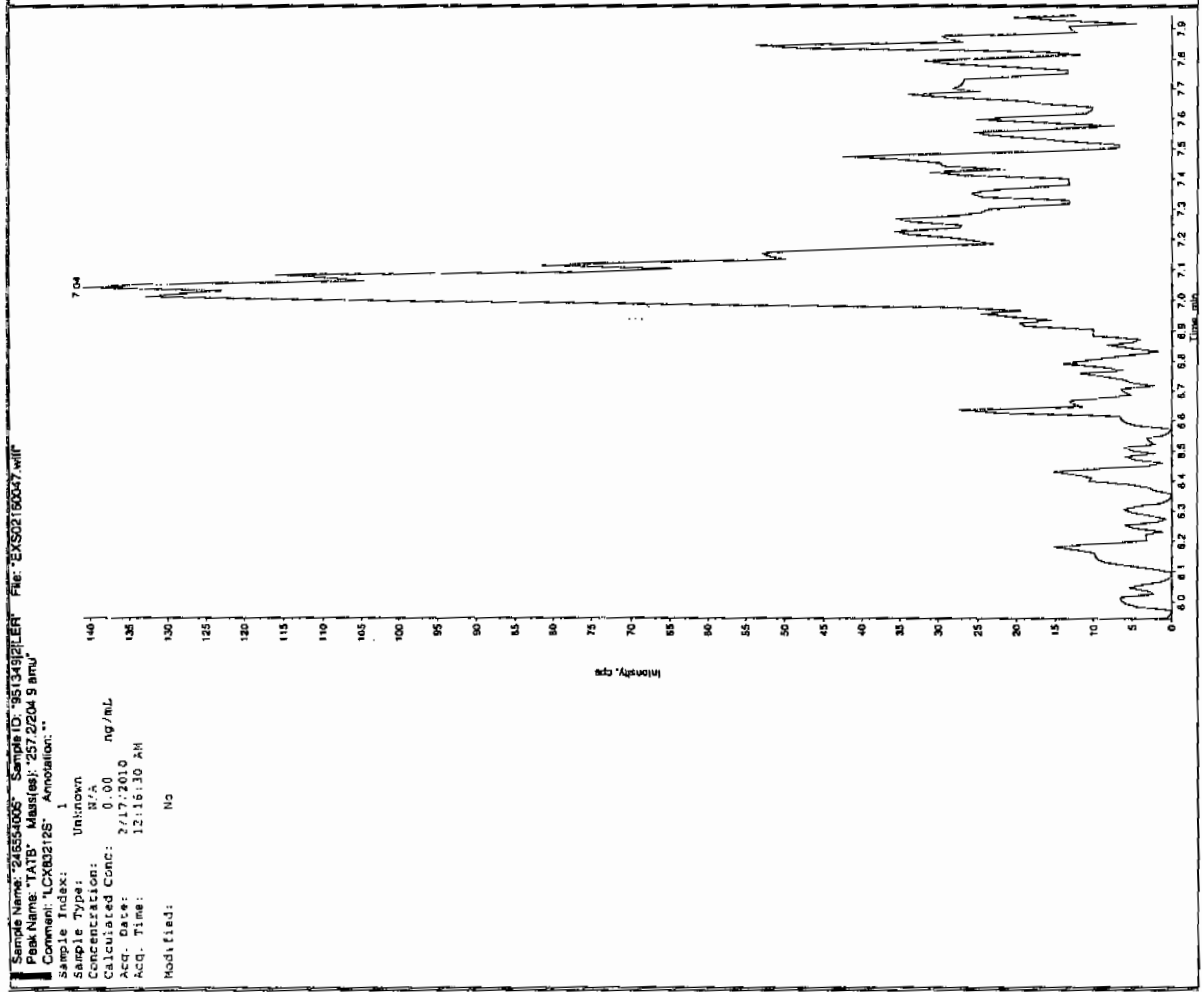
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

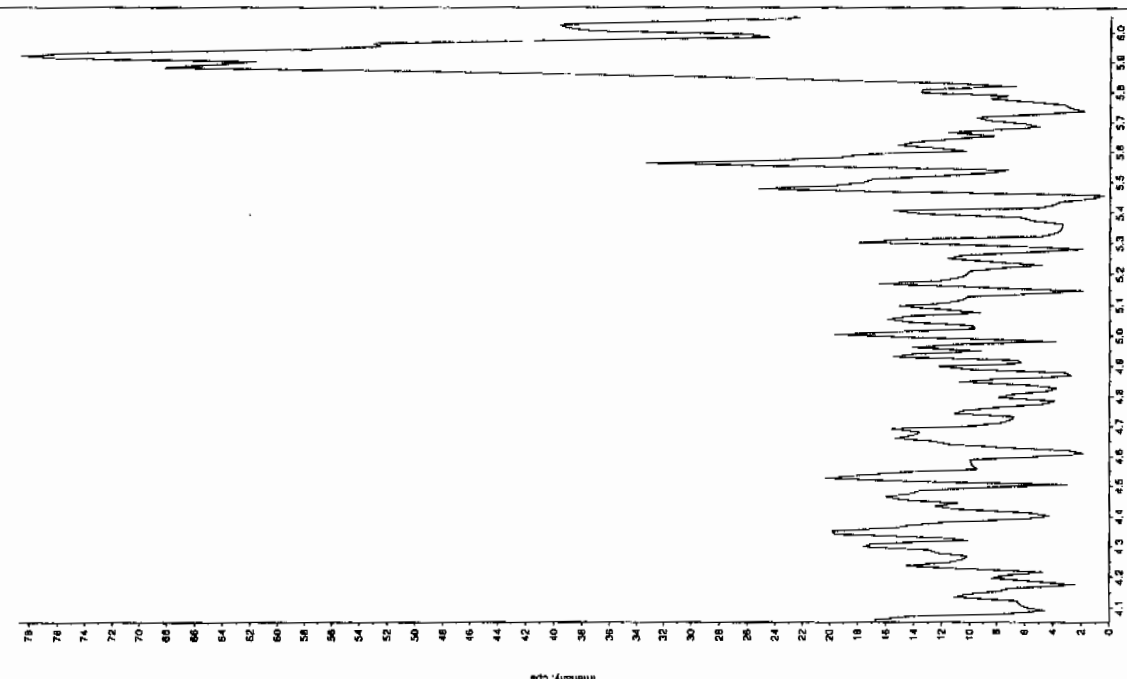
01/11/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

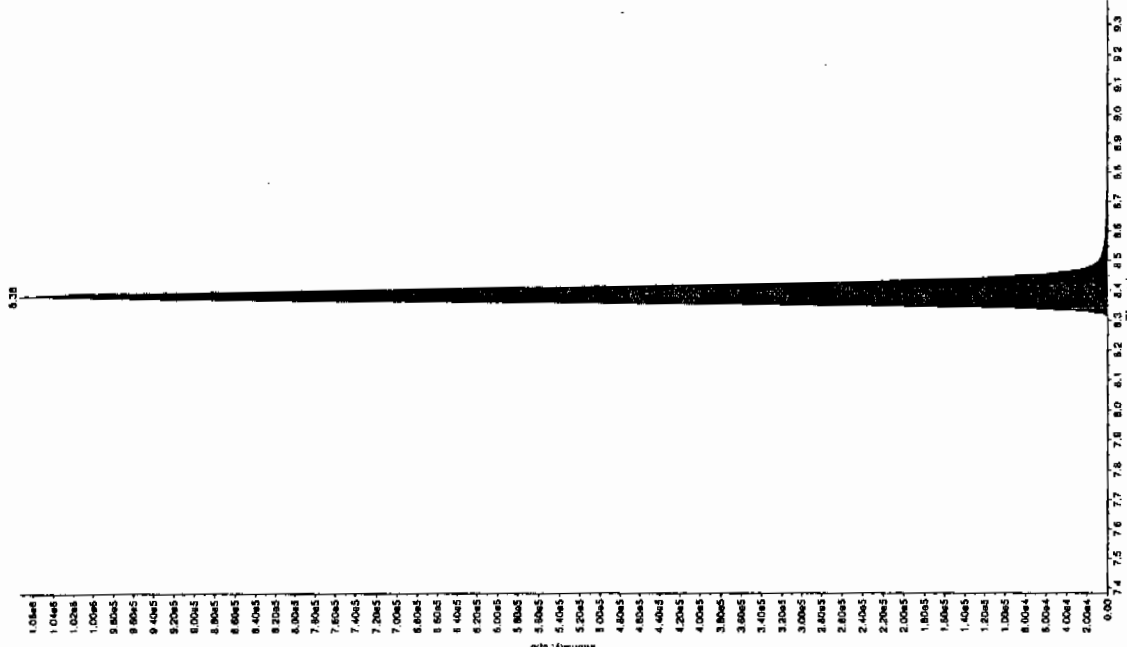
Sample Name: "24655405" Sample ID: "95134921ER" File: "EXS02160047.wif"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: "

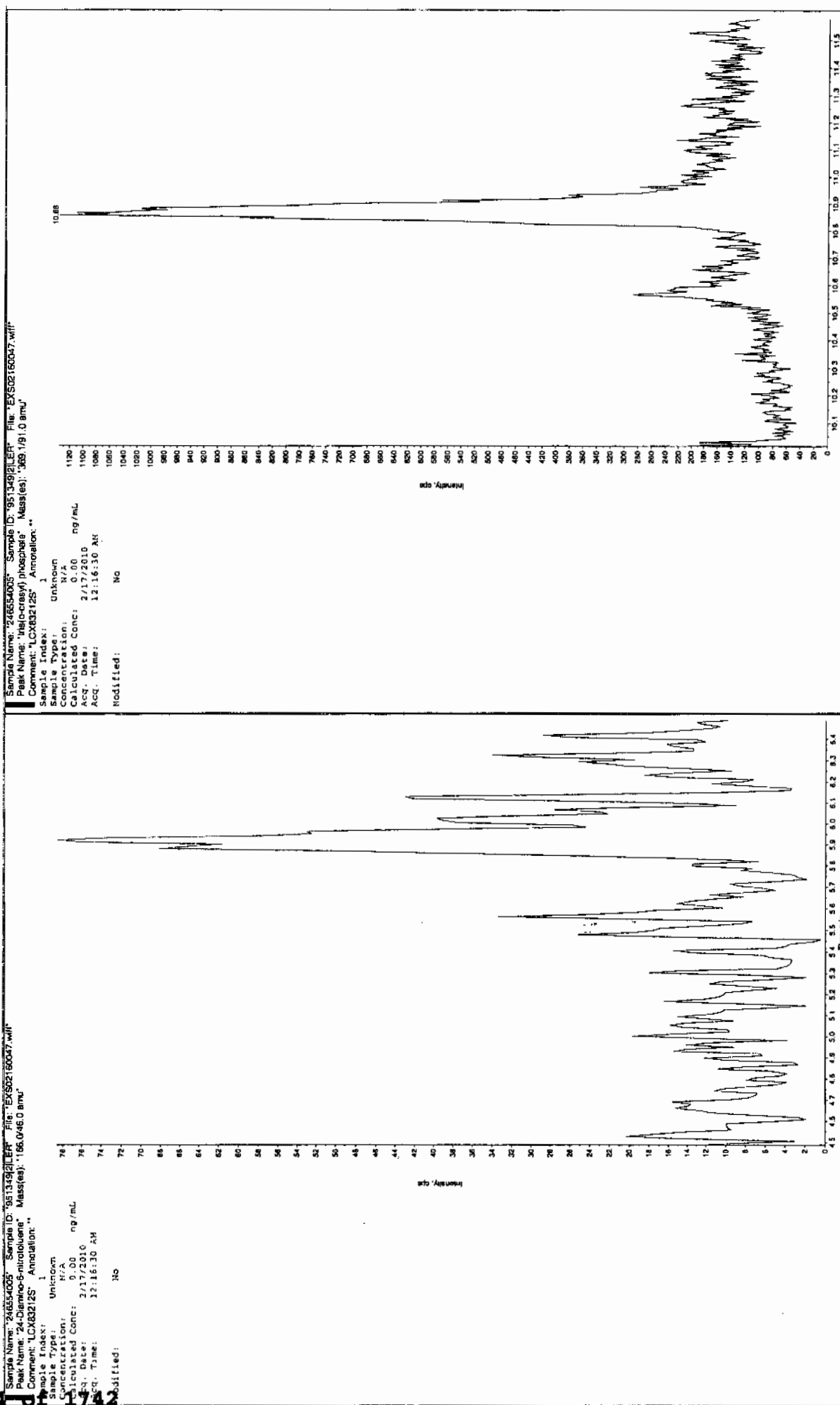
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 12:16:30 AM  
 Modified: No



Sample Name: "24655405" Sample ID: "95134921ER" File: "EXS02160047.wif"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "182.151.9 amu"  
 Comment: "LCX83212S" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 333. ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 12:16:30 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOL  
 Min. Peak Height: 1500 cps  
 Min. Peak Width: 3.00 peaks  
 Search Width: 15.0 sec  
 Expected RT: 8.38 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.38 min  
 Area: 3.95e+006 counts  
 Height: 107365.092 cps  
 Start Time: 2.29 min  
 End Time: 8.78 min





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216051a

Date Analyzed: 17-FEB-10 17:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Printed: Thu Feb 18 08:53:51 2010, Page 43 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP\PROData\EXP0216051a

Date: 17-Feb-2010

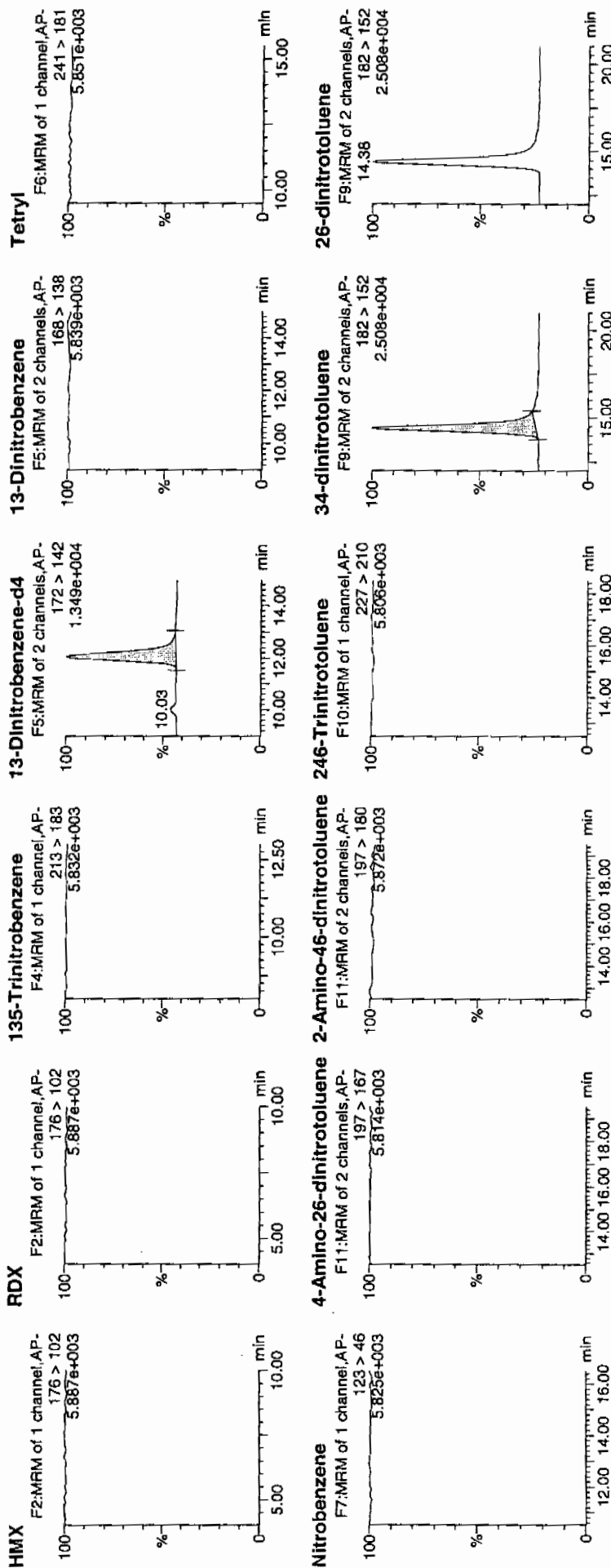
Time: 17:50:28

ID: 246554006

Vial: 2:2,D

957349 / SOLID / 2 /

μg  
2/18/10

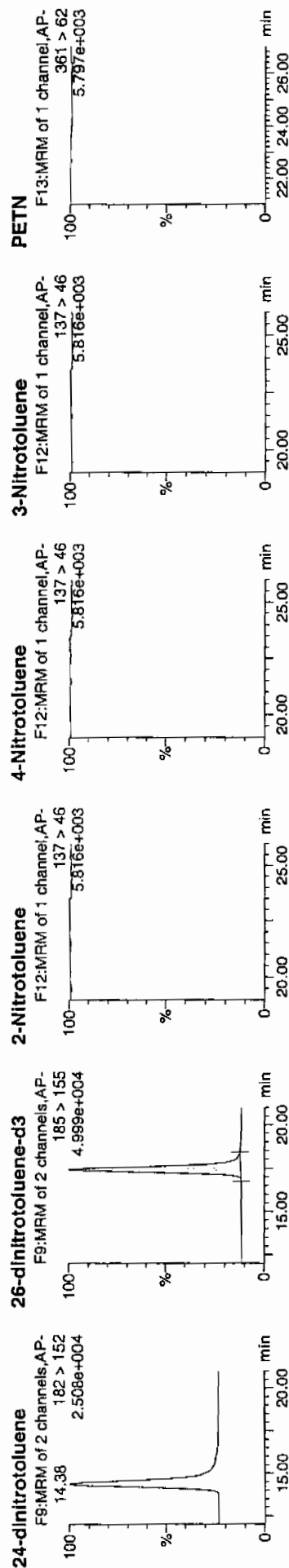


Handwritten signature: Anne 2/18/10

Printed: Thu Feb 18 08:53:51 2010, Page 44 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



ID	Name	Trace	RT	Area	S Area	Abs:Resp	Response	Flags	Mod:Time	Mod:Date	%Rec	%Dev	S/N
246554006	HM-X	176 > 102			3097.270								
246554006	RDX	176 > 102			3097.270								
246554006	135-Trinitrobenzene	213 > 183			3097.270								
246554006	13-Dinitrobenzene-d4	172 > 142	12.03	3097.270		3097.270	3097.270	bb			514.0840	102.8	2.8
246554006	13-Dinitrobenzene	168 > 138			3097.270								
246554006	Tetryl	241 > 181			3097.270								
246554006	Nitrobenzene	123 > 46			3097.270								
246554006	4-Amino-26-dinitrotoluene	197 > 167			17531.326								
246554006	2-Amino-46-dinitrotoluene	197 > 180			17531.326								
246554006	246-Trinitrotoluene	227 > 210			17531.326								
246554006	34-dinitrotoluene	182 > 152	14.38	9000.606		9000.606	256.701	bb			283.3337	113.3	13.3
246554006	26-dinitrotoluene	182 > 152			17531.326								
246554006	24-dinitrotoluene	182 > 152			17531.326								
246554006	26-dinitrotoluene-d3	185 > 155	17.42	17531.326		17531.326	17531.326	bb			503.5262	100.7	0.7
246554006	2-Nitrotoluene	137 > 46			17531.326								
246554006	4-Nitrotoluene	137 > 46			17531.326								
246554006	3-Nitrotoluene	137 > 46			17531.326								
246554006	PETN	361 > 62			17531.326								

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8225

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 246554006

Sample Amount 2

Moisture: 1.3

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160048.wiff

Date Analyzed: 17-FEB-10 00:32

Units: ug/kg

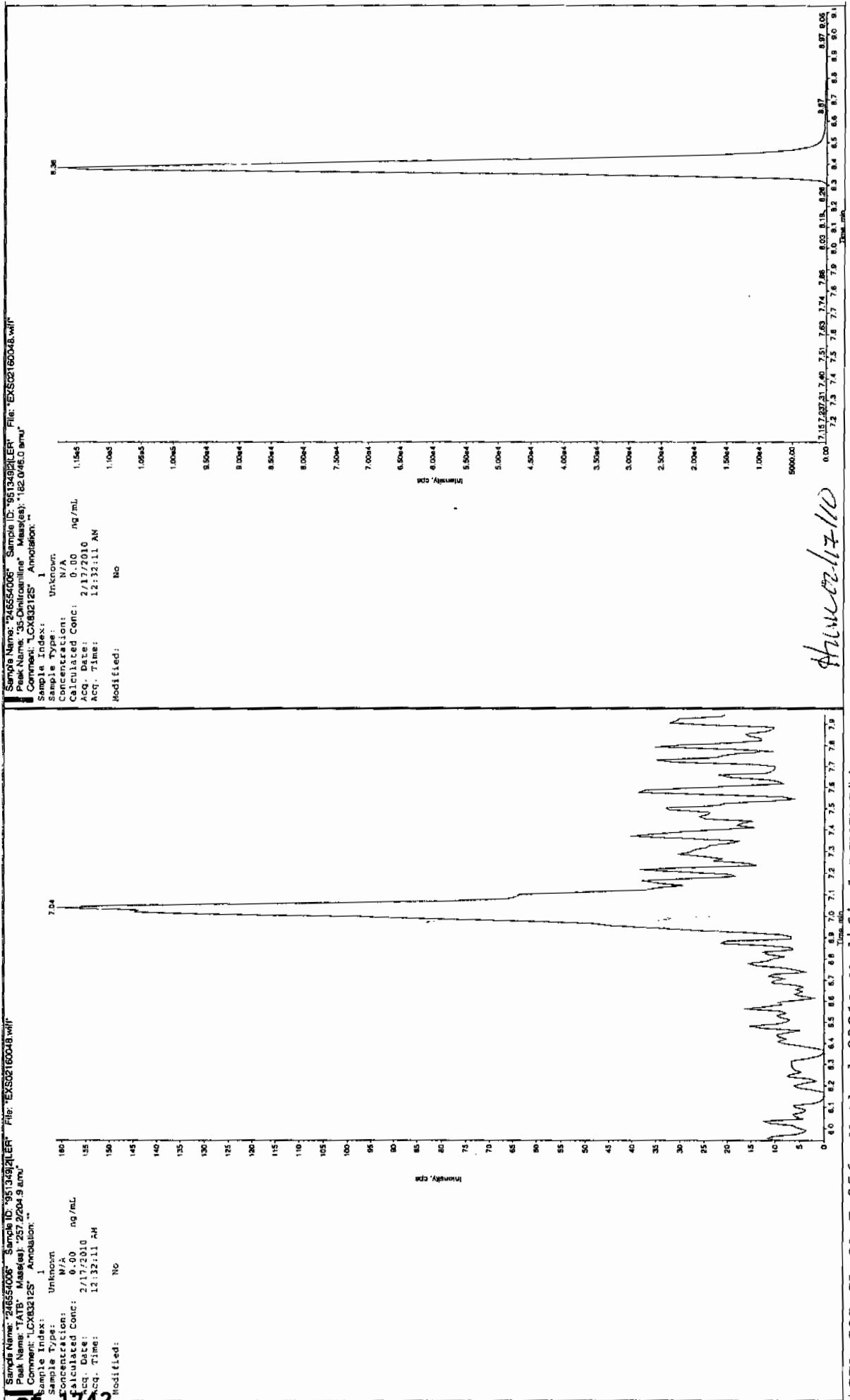
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

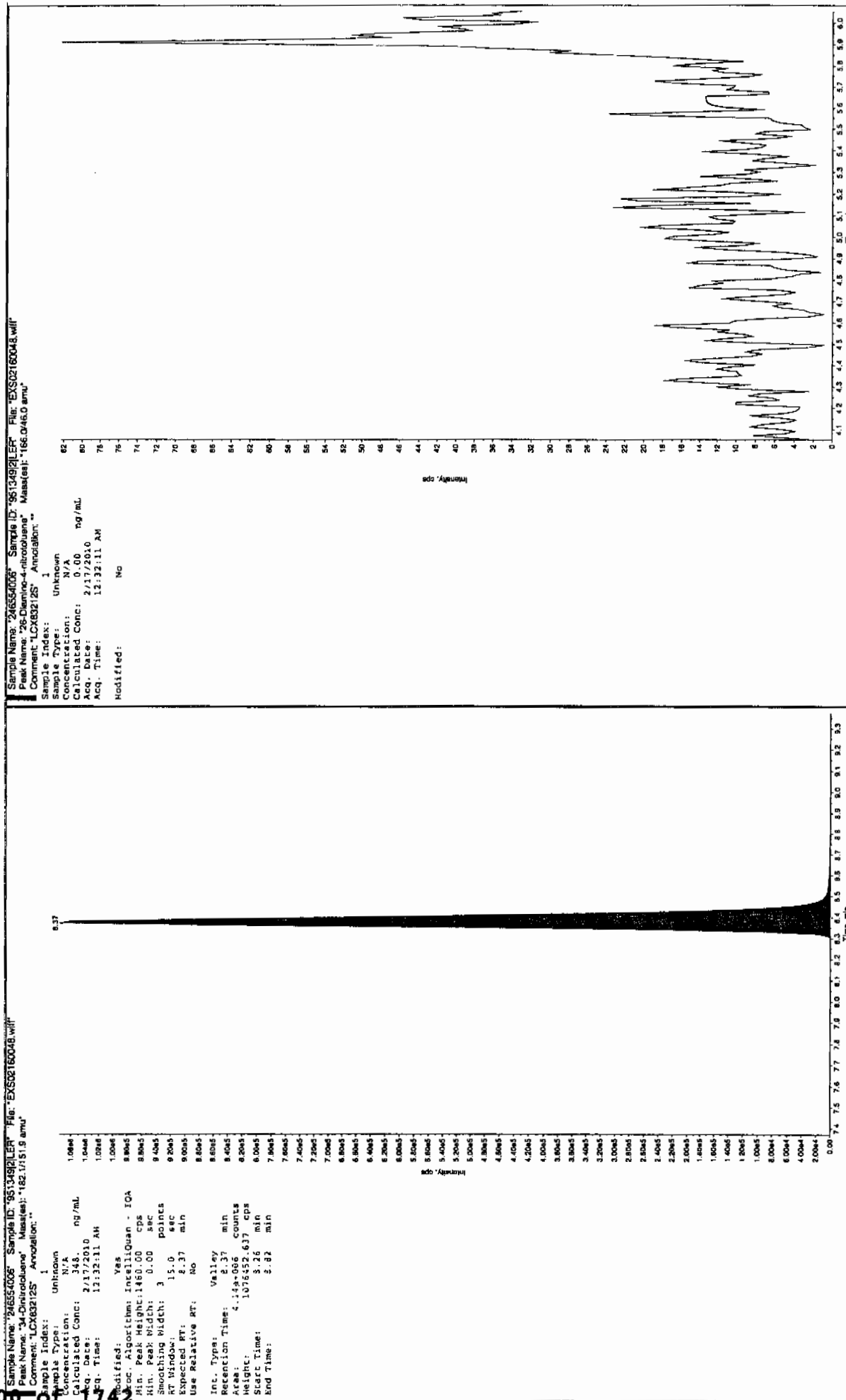
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



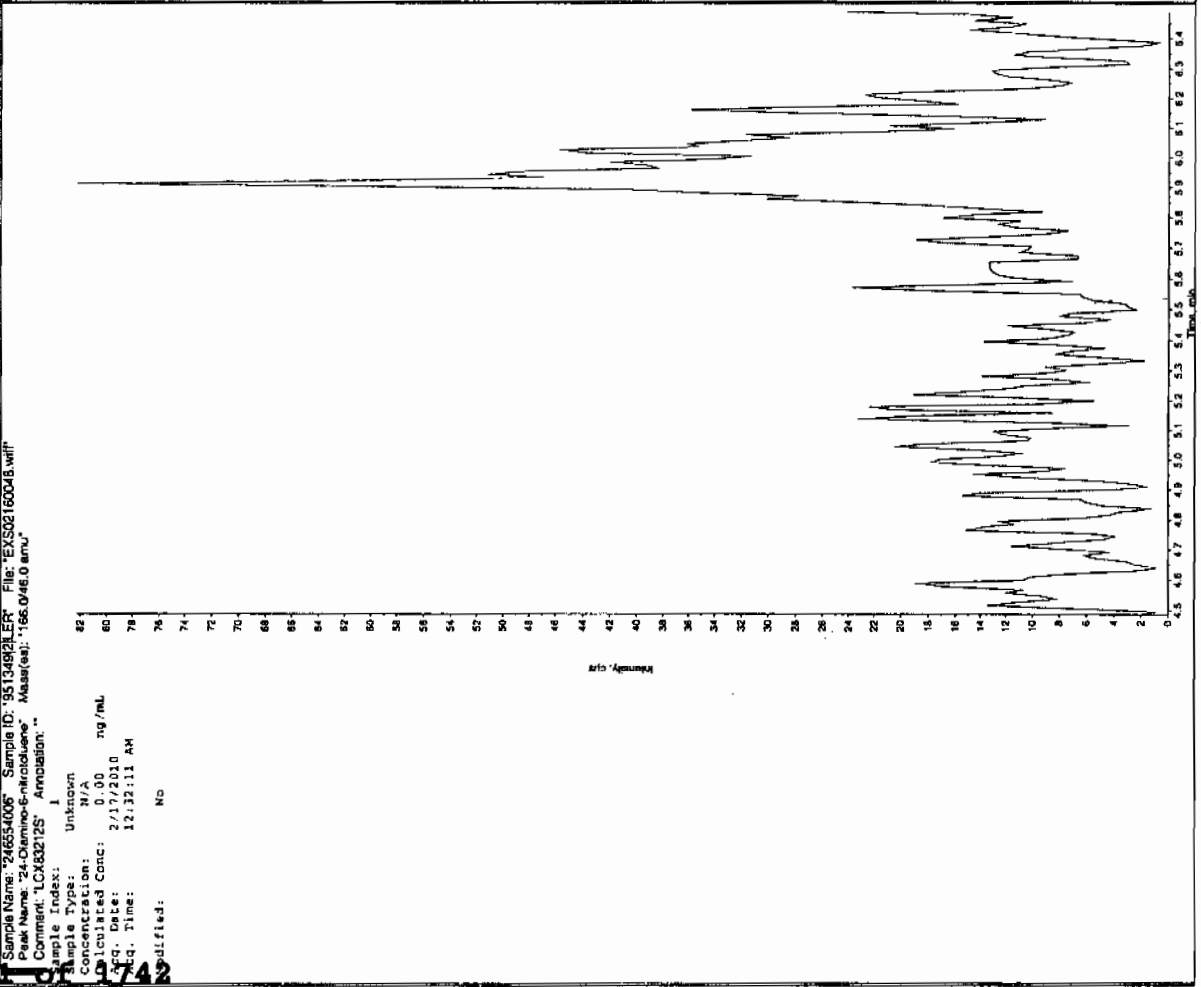
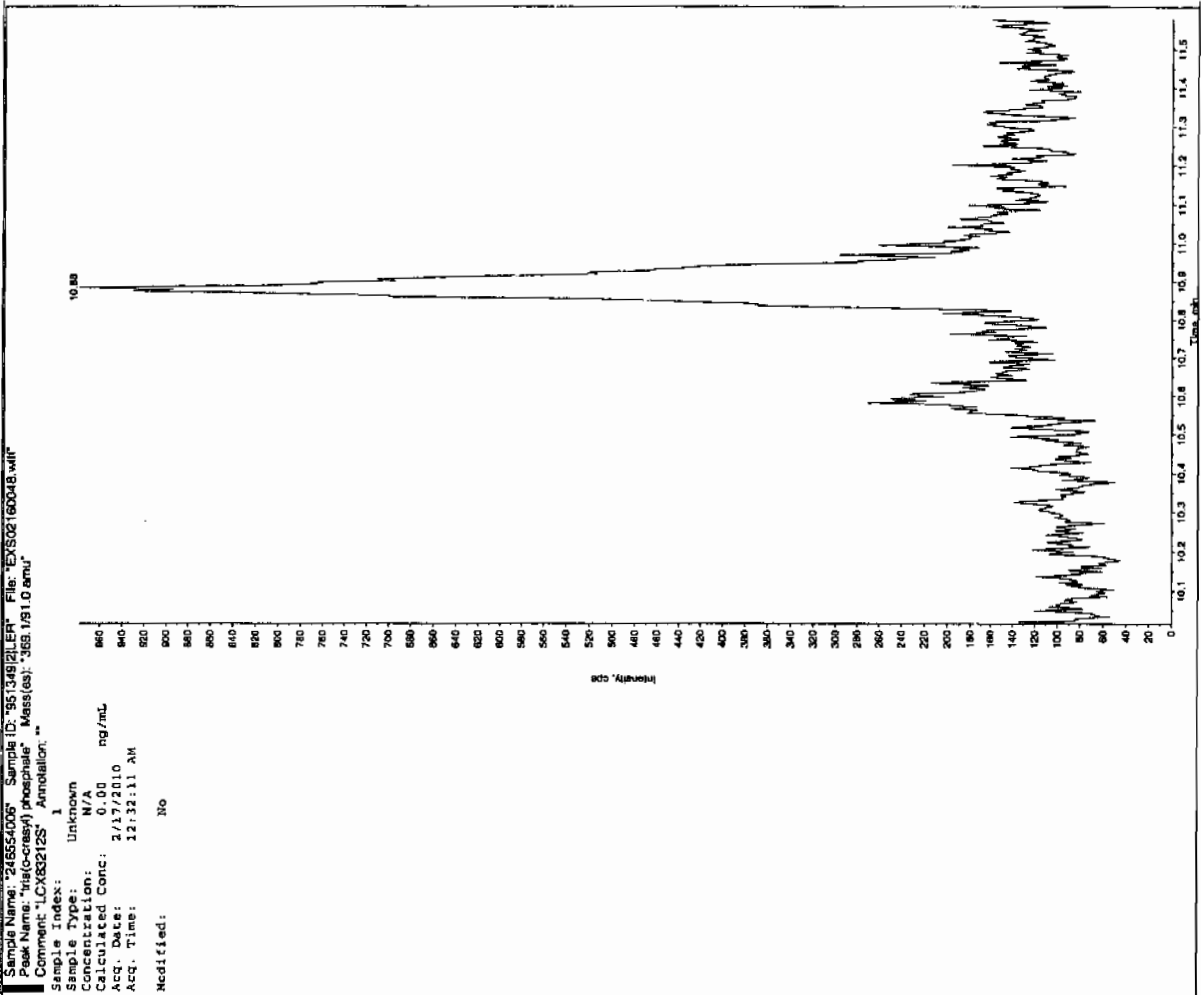
01/16/10  
2/17/10



2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# STANDARDS DATA

SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1665

Lab Code: GEL

Run Date: 16-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parname	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0216003a	EXP0216004a	EXP0216005a	EXP0216006a	EXP0216007a	EXP0216008a			
1,3,5-Trinitrobenzene	3.974	4.275	3.998	3.443	3.801	3.743	3.872	7.253	
1,3-Dinitrobenzene-d4	6.479	6.269	6.407	6.397	5.489	5.109	6.025	9.613	
2,4,6-Trinitrotoluene	.311	.331	.325	.38	.335	.329	0.335	7.003	
2,4-Dinitrotoluene	.22	.247	.233	.258	.258	.262	0.246	6.788	
2,6-Dinitrotoluene	.926	1.085	1.036	1.071	1.113	1.126	1.060	6.868	
2,6-Dinitrotoluene-d3	37.517	35.811	37.549	35.639	32.457	29.93	34.817	8.699	
2-Amino-4,6-dinitrotoluene	.4	.452	.421	.427	.458	.435	0.432	4.923	
3,4-Dinitrotoluene	.812	.944	.904	1.008	.893	.876	0.906	7.276	
4-Amino-2,6-dinitrotoluene	.35	.323	.285	.352	.298	.312	0.320	8.491	
HMX	3.59	3.564	3.729	3.903	4.47	3.894	3.858	8.619	
Nitrobenzene	.831	.943	.785	.911	.849	.831	0.858	6.765	
RDX	2.28	2.16	2.79	2.593	3.02	2.717	2.593	12.46	
Tetryl	1.117	1.386	1.084	1.014	.989	.952	1.090	14.415	
m-Dinitrobenzene	.991	1.315	1.169	1.17	1.25	1.236	1.189	9.364	
m-Nitrotoluene	.078	.09	.083	.1	.095	.091	0.090	8.99	
o-Nitrotoluene	.139	.156	.146	.153	.159	.159	0.152	5.121	
p-Nitrotoluene	.072	.072	.076	.082	.083	.076	0.077	6.293	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1665

Lab Code: GEL

Run Date: 16-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0216003a	EXP0216004a	EXP0216005a	EXP0216006a	EXP0216007a	EXP0216008a					
Parname:											
PETN	2110.32	4458.8	14532.6	25000.7	38622.3	42985.8	1.84	-0004443	26.645	.9992	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

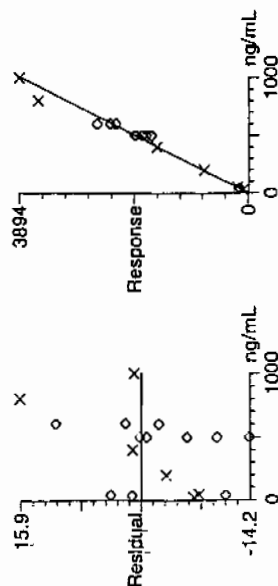
# Quantify Calibration Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

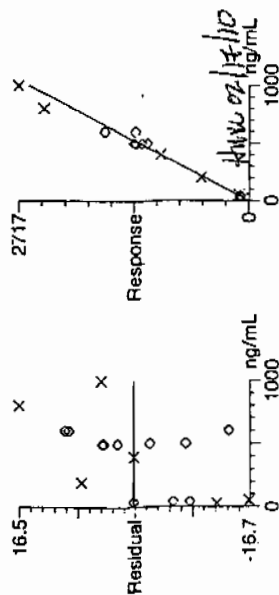
Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\021610expa.mdb, Time: Wed Feb 17 09:19:04 2010  
Calibration: Untitled, Time: Wed Feb 17 10:00:06 2010

Compound name: HMX  
Response Factor: 3.85837  
RRF SD: 0.33256, % Relative SD: 8.61918  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: RDX  
Response Factor: 2.59344  
RRF SD: 0.323138, % Relative SD: 12.4598  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

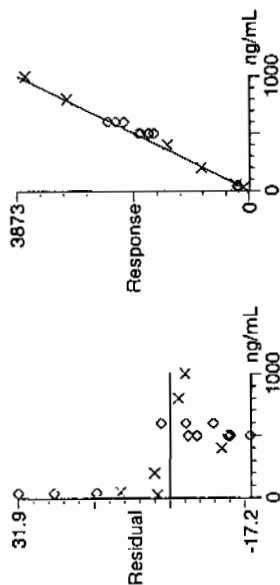




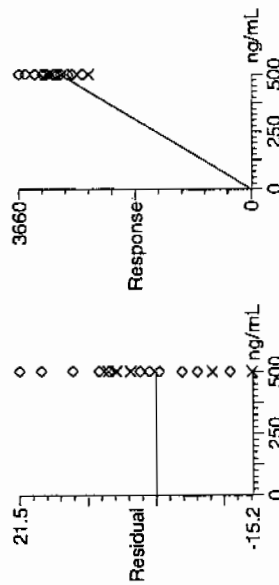
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

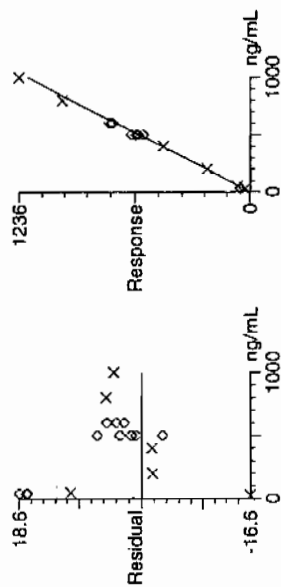
Compound name: 135-Trinitrobenzene  
Response Factor: 3.87255  
RRF SD: 0.280856, % Relative SD: 7.2525  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



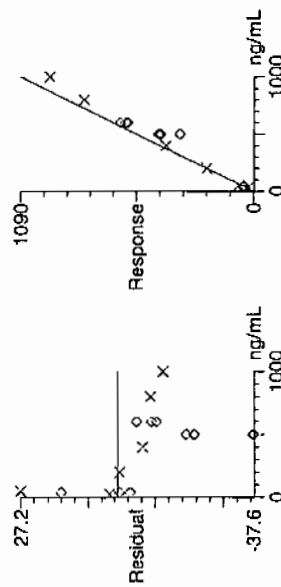
Compound name: 13-Dinitrobenzene-d4  
Response Factor: 6.02483  
RRF SD: 0.579171, % Relative SD: 9.61306  
Response type: External Std, Area  
Curve type: RF



Compound name: 13-Dinitrobenzene  
 Response Factor: 1.18852  
 RRF SD: 0.111292, % Relative SD: 9.36391  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



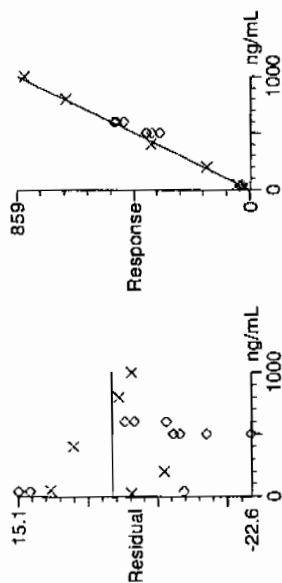
Compound name: Tetraol  
 Response Factor: 1.09023  
 RRF SD: 0.157158, % Relative SD: 14.4151  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



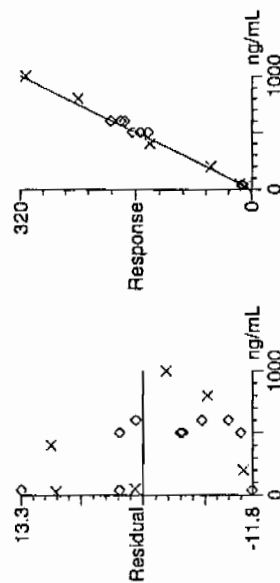
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: Nitrobenzene  
 Response Factor: 0.858509  
 RRF SD: 0.0580797, % Relative SD: 6.76517  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



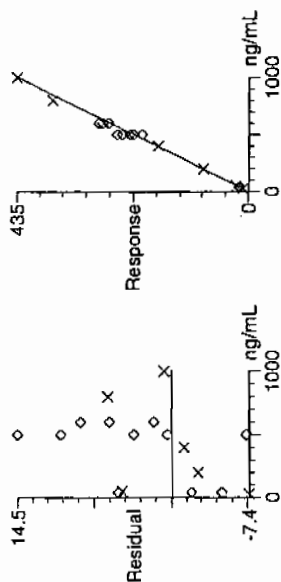
Compound name: 4-Amino-26-dinitrotoluene  
 Response Factor: 0.320217  
 RRF SD: 0.0271885, % Relative SD: 8.49063  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



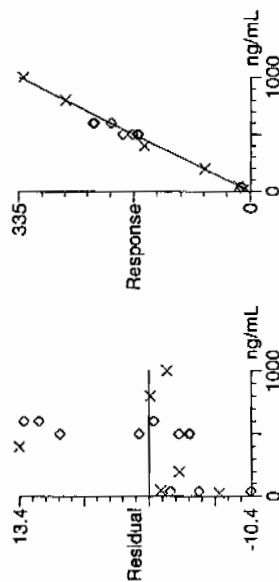
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.432055  
RRF SD: 0.0212718, % Relative SD: 4.9234  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



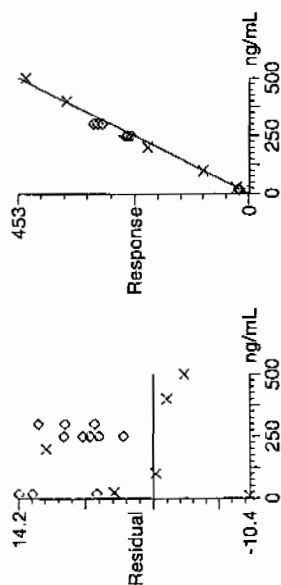
Compound name: 245-Trinitrotoluene  
Response Factor: 0.335255  
RRF SD: 0.0234791, % Relative SD: 7.00337  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



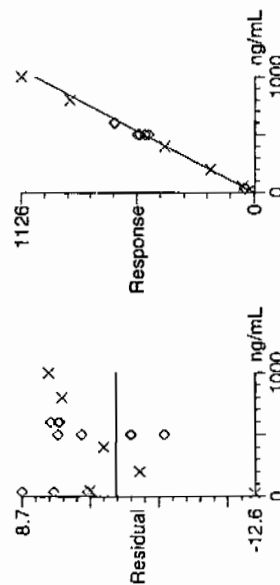
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 34-dinitrotoluene  
 Response Factor: 0.906001  
 RRF SD: 0.0659248, % Relative SD: 7.27646  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

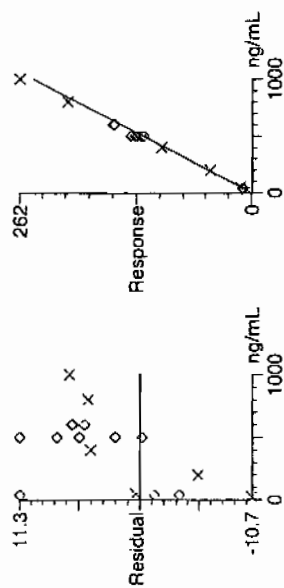


Compound name: 26-dinitrotoluene  
 Response Factor: 1.05944  
 RRF SD: 0.0727574, % Relative SD: 6.86754  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

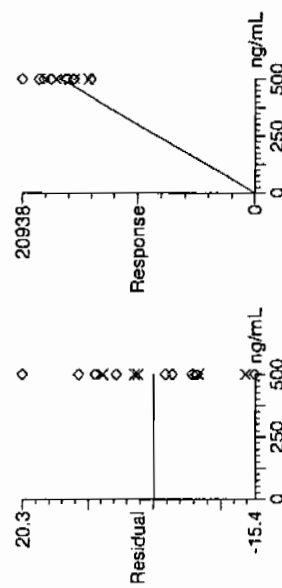


Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.24651  
RRF SD: 0.0167341, % Relative SD: 6.78841  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



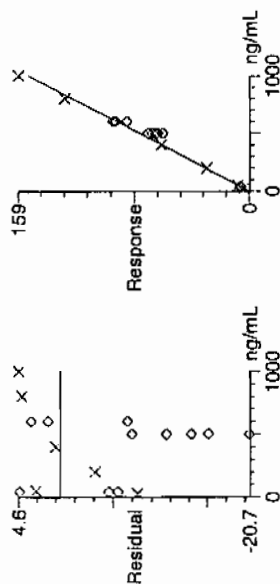
Compound name: 26-dinitrotoluene-d3  
Response Factor: 34.8171  
RRF SD: 3.02888, % Relative SD: 8.6994  
Response type: External Std, Area  
Curve type: RF



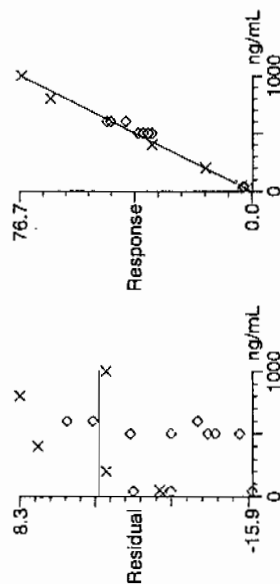
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 2-Nitrotoluene  
Response Factor: 0.152194  
RRF SD: 0.0077939, % Relative SD: 5.12103  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



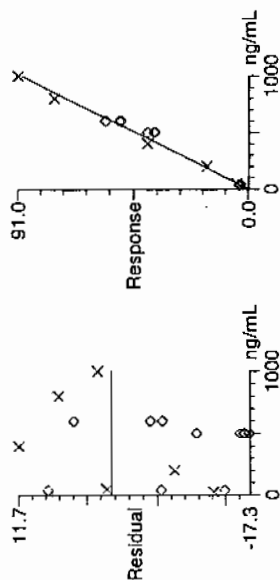
Compound name: 4-Nitrotoluene  
Response Factor: 0.0766512  
RRF SD: 0.00482394, % Relative SD: 6.29336  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



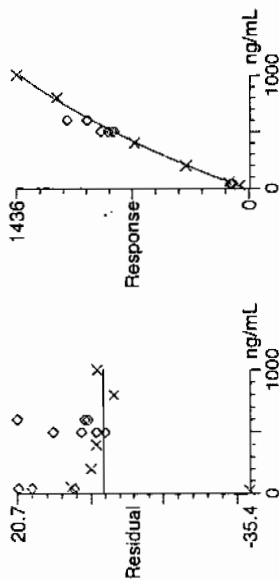
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Compound name: 3-Nitrotoluene  
Response Factor: 0.0894891  
RRF SD: 0.0080453, % Relative SD: 8.99027  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: PETN  
Coefficient of Determination: 0.999195  
Calibration curve:  $-0.000444334 \cdot x^2 + 1.84022 \cdot x + 26.6447$   
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None





Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0216010a

Analysis Date: 16-FEB-10 21:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	600	517.279	86	
Tetryl	600	535.085	89	
m-Dinitrobenzene	600	615.667	103	
m-Nitrotoluene	600	571.306	95	
o-Nitrotoluene	600	619.132	103	
p-Nitrotoluene	600	620.215	103	
1,3,5-Trinitrobenzene	600	544.138	91	
1,3-Dinitrobenzene-d4	500	505.15	101	
2,4,6-Trinitrotoluene	600	596.996	99	
2,4-Dinitrotoluene	600	637.037	106	
2,6-Dinitrotoluene	600	631.497	105	
2,6-Dinitrotoluene-d3	500	470.813	94	
2-Amino-4,6-dinitrotoluene	600	609.733	102	
3,4-Dinitrotoluene	300	318.405	106	
4-Amino-2,6-dinitrotoluene	600	544.592	91	
HMX	600	667.211	111	
Nitrobenzene	600	546.753	91	
PETN	600	622.003	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Wed Feb 17 10:00:54 2010, Page 19 of 59

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216010a

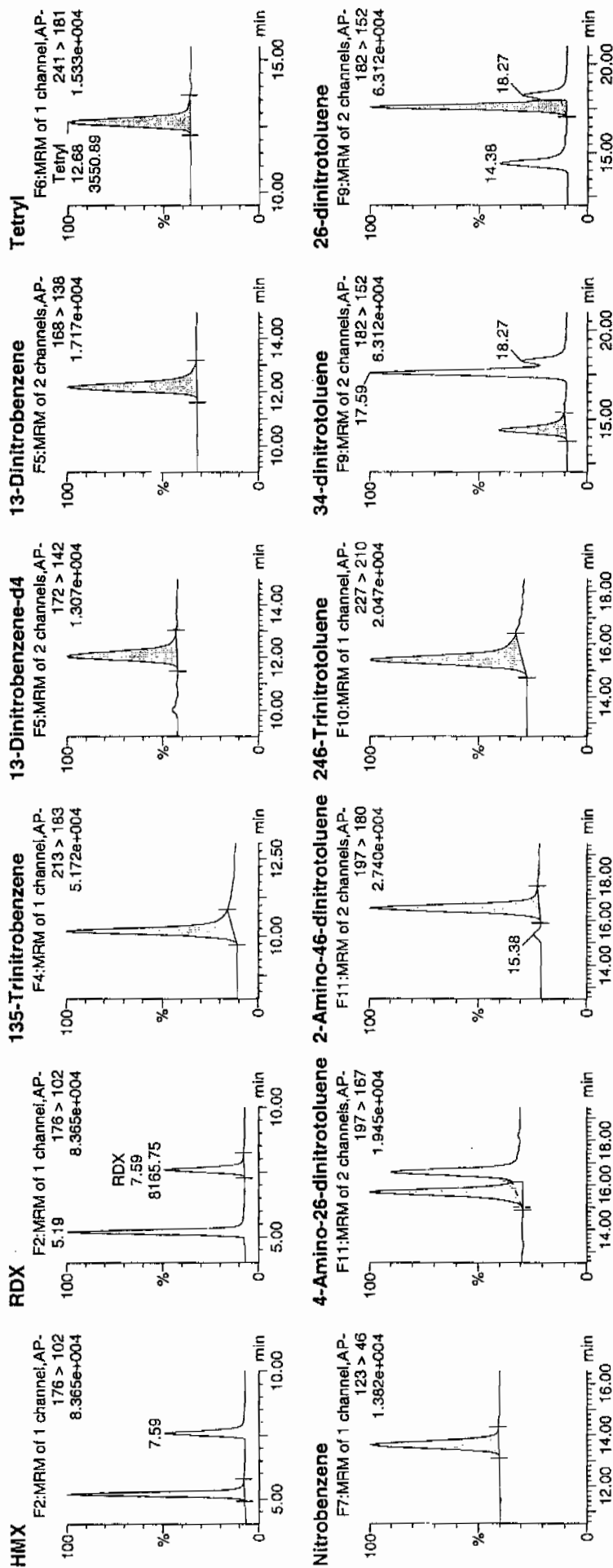
Date: 16-Feb-2010

Time: 21:34:44

ID: WXX100216-071CV

Vial: 1:1,B

u/s 10

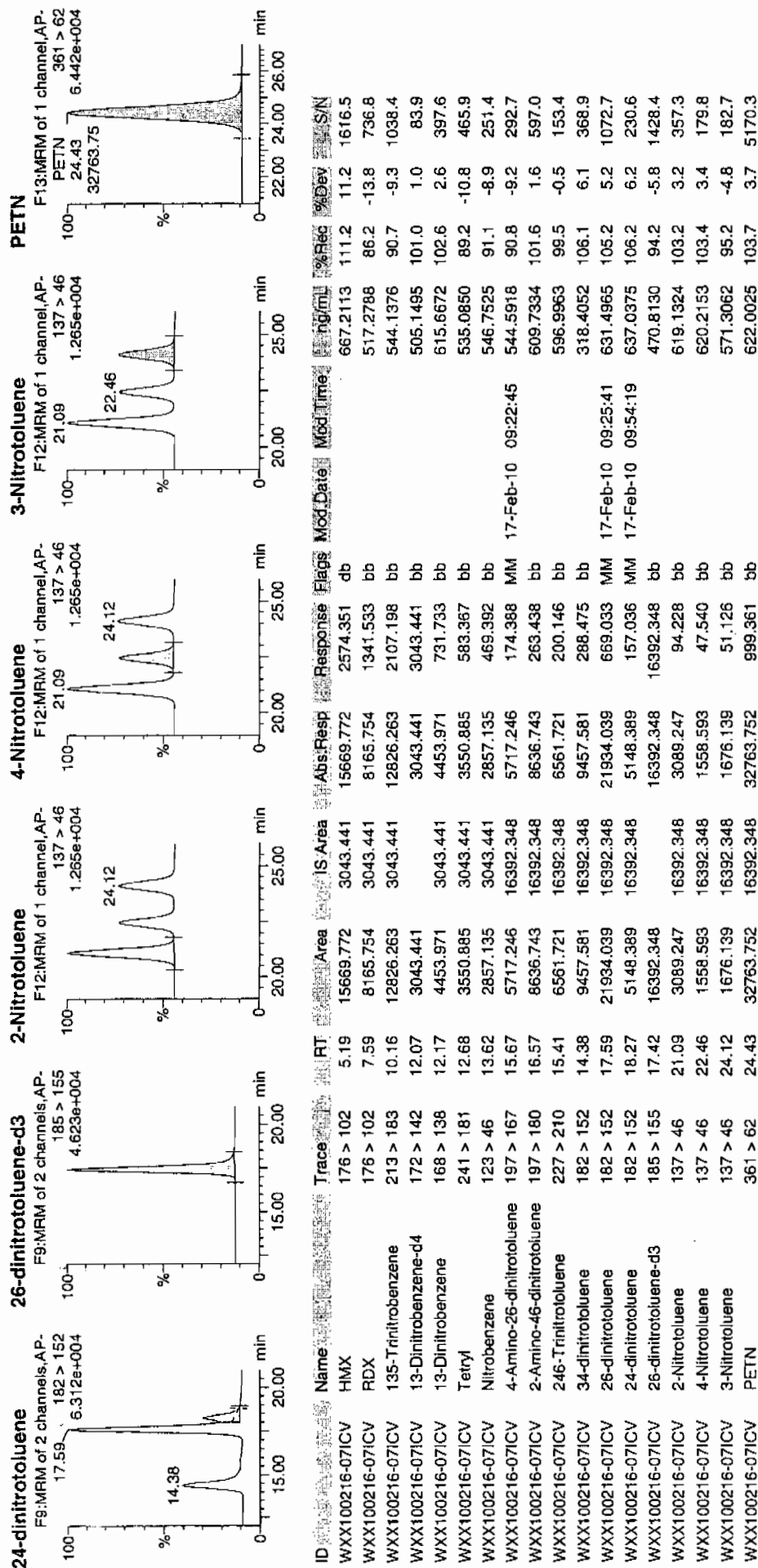


Handwritten signature

Printed: Wed Feb 17 10:00:54 2010, Page 20 of 59

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/16/10  
 Time of Injection: 2134  
 Standard Number: WXX100216-07ICV  
 Data File: EXP0216010a

HMX	111.2
RDX	86.2
135-TNB	90.7
13-DNB	102.6
Tetryl	89.2
Nitrobenzene	91.1
4A-26-DNT	90.8
2A-46-DNT	101.6
246-TNT	99.5
34-DNT(surr)	106.1
26-DNT	105.2
24-DNT	106.2
2-NT	103.2
4-NT	103.4
3-NT	95.2
PETN	103.7

*WXX  
2/17/10*

Total 1585.9

Average

99.1

*WXX 02/17/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1665

Lab Code: GEL

Run Date: 16-FEB-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS02160003.wiff	EXS02160004.wiff	EXS02160005.wiff	EXS02160006.wiff	EXS02160007.wiff	EXS02160008.wiff	EXS02160009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	74100	160000	360000	688000	856000	1300000	2470000	34100	1220	-.001	.9984	
2,6-Diamino-4-nitrotoluene	91400	237000	581000	1070000	1520000	1900000	3610000	33500	2060	-.14	.9995	
3,4-Dinitrotoluene	301000	564000	1450000	2960000	4270000	5500000	9890000	-56500	13200	-3.28	.9984	
3,5-Dinitroaniline	358000	647000	1660000	2900000	5020000	5920000	10300000	-42300	6960	-.898	.9985	
TATB	66400	127000	332000	659000	1000000	1340000	2350000	-22600	1490	-.149	.9998	
tris(o-cresyl) phosphate	1150000	2250000	5360000	9900000	14100000	18200000	28900000	111000	21500	-3.56	1	

Quadratic Fit:  $y = Ax^2 + Bx + C$

where X^2 column above is coefficient A

X column above is coefficient B

intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

021610ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-2.26e+004			
a1	1.49e+003			
a2	-0.149			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 35-Dinitroaniline  
No Internal Standard  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-4.23e+004			
a1	6.96e+003			
a2	-0.898			
Correlation coefficient 0.9985				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-5.65e+004			
a1	1.32e+004			
a2	-3.28			
Correlation coefficient 0.9984				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	weighting	None	Iterate No
a0	3.35e+004			
a1	2.06e+003			
a2	-0.14			
Correlation coefficient 0.9995				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

*2011/12/10*

*2011/12/10*

021610ICAL

Iterate No

None

weighting

Fit Quadratic  
a0 3.41e+004  
a1 1.22e+003  
a2 -0.000561  
Correlation coefficient 0.9984  
Use Area

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

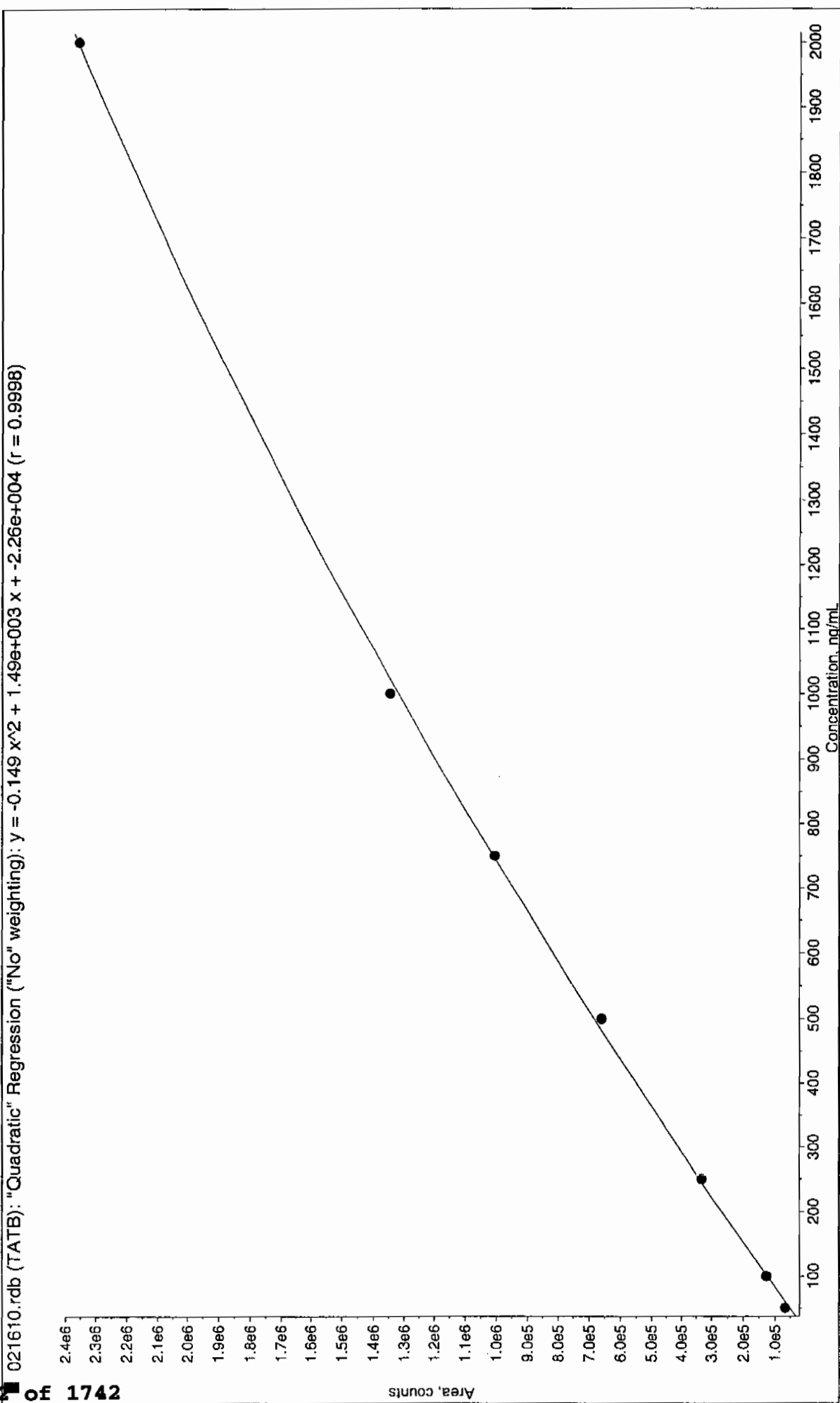
Iterate No

None

weighting

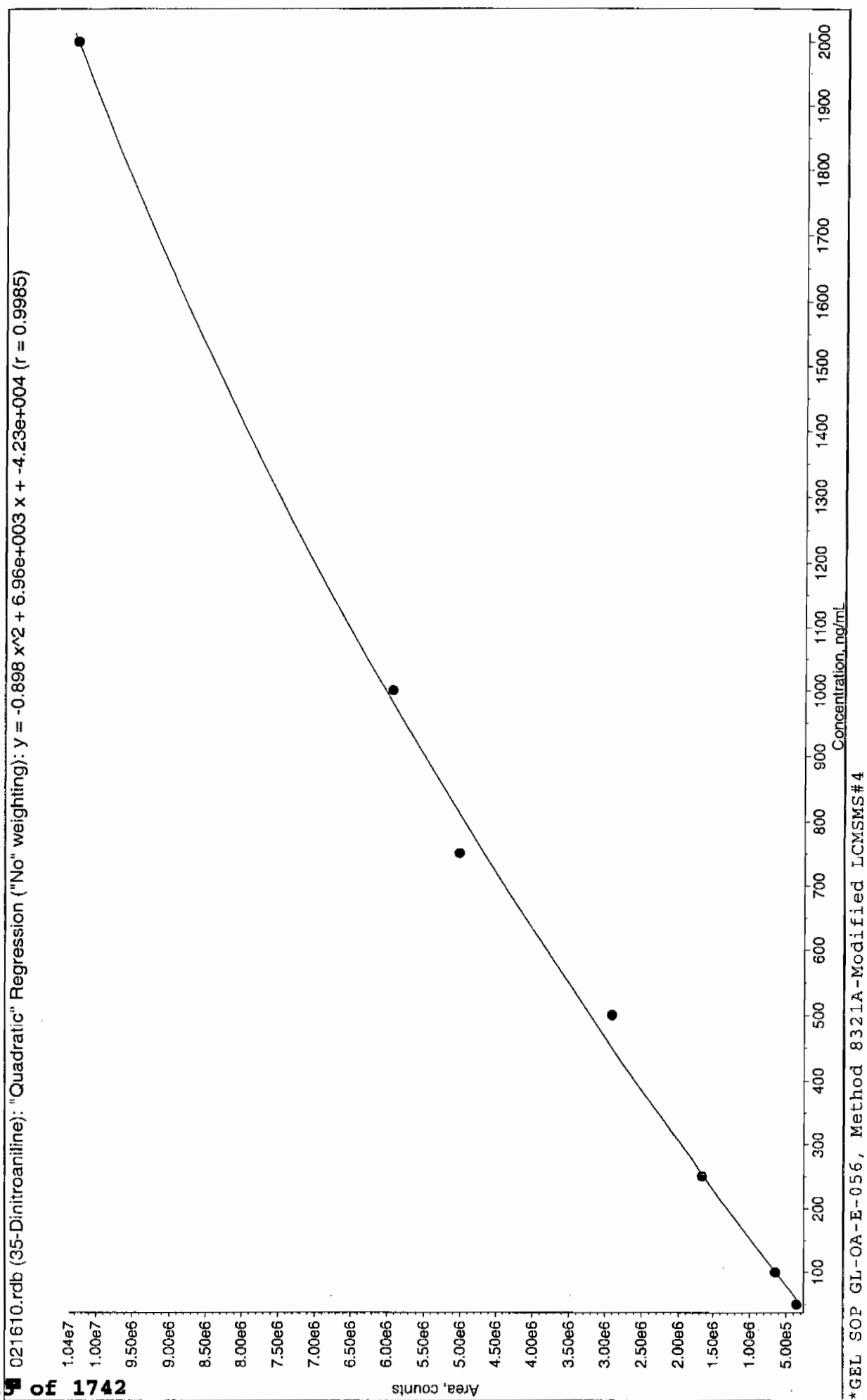
Fit Quadratic  
a0 1.11e+005  
a1 2.15e+004  
a2 -3.56  
Correlation coefficient 1.0000  
Use Area

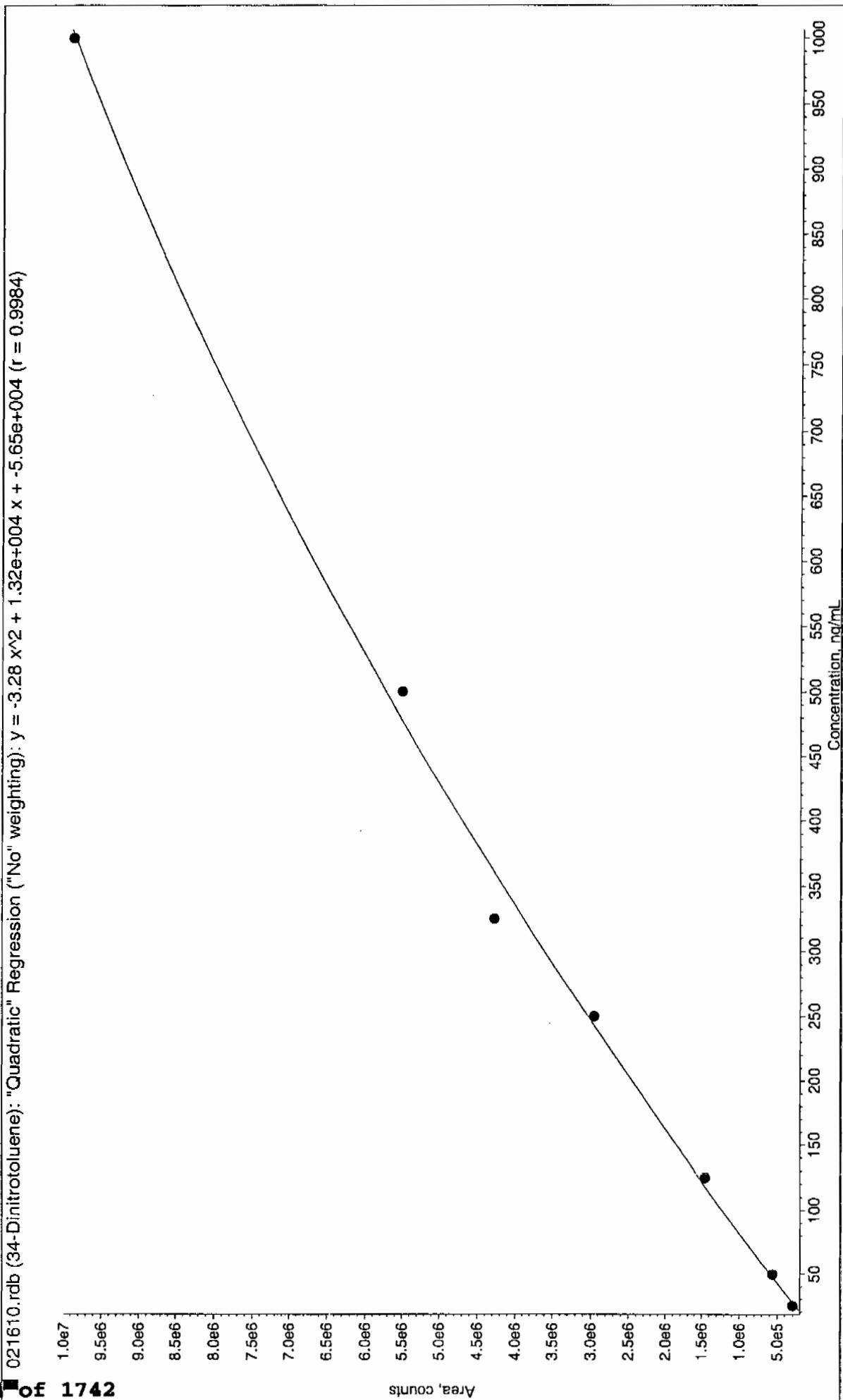
021610.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.149x^2 + 1.49e+003x + -2.26e+004$  ( $r = 0.9998$ )



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

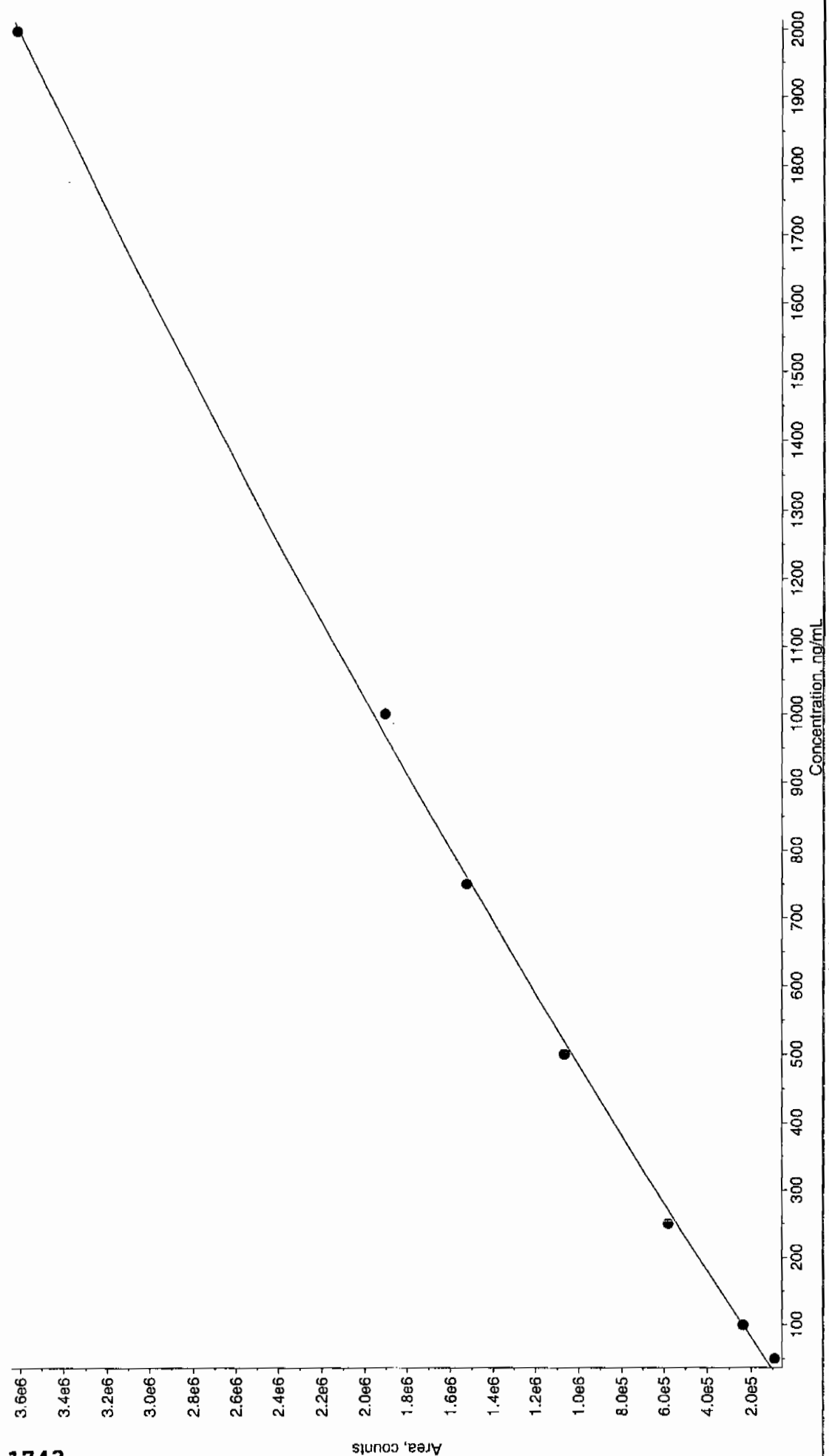






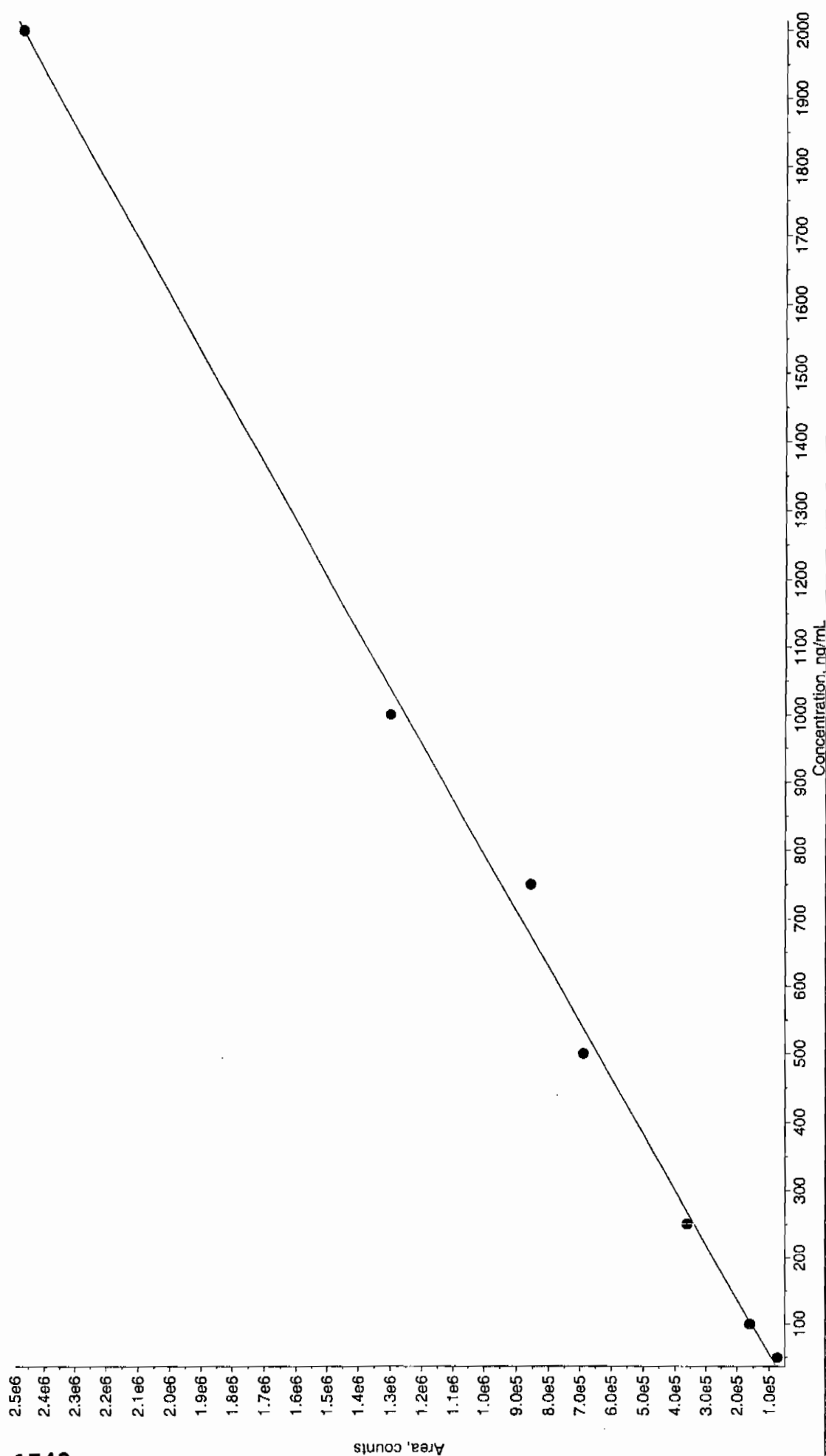
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021610.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.14 x^2 + 2.06e+003 x + 3.35e+004$  ( $r = 0.9995$ )

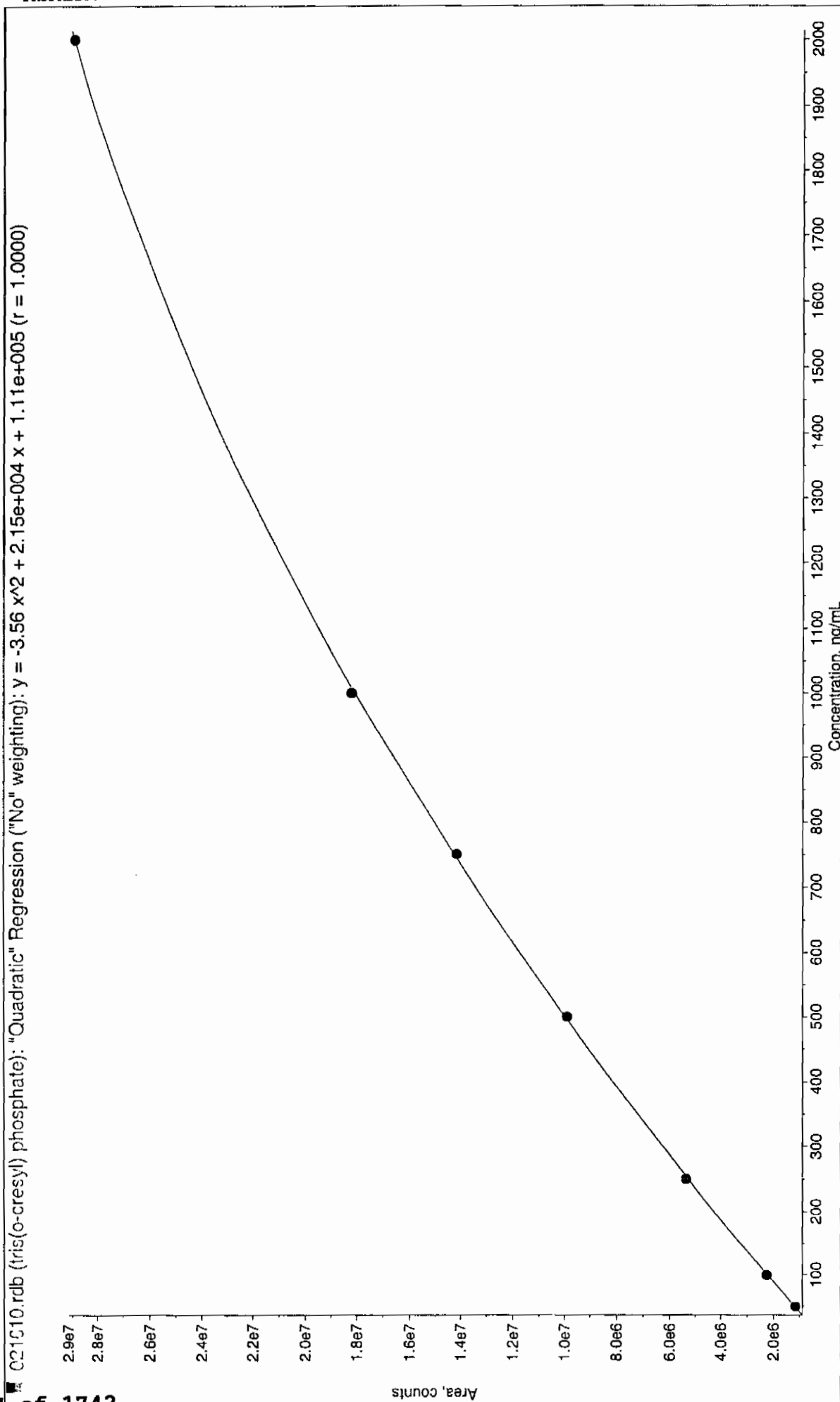


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

021010.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.000561 x^2 + 1.22e+003 x + 3.41e+004$  ( $r = 0.9984$ )



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02160011.wiff

Analysis Date: 16-FEB-10 14:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	495	99	
2,6-Diamino-4-nitrotoluene	500	472	94	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	452	90	
TATB	500	448	90	
tris(o-cresyl) phosphate	500	494	99	

## Recovery Limits:

3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

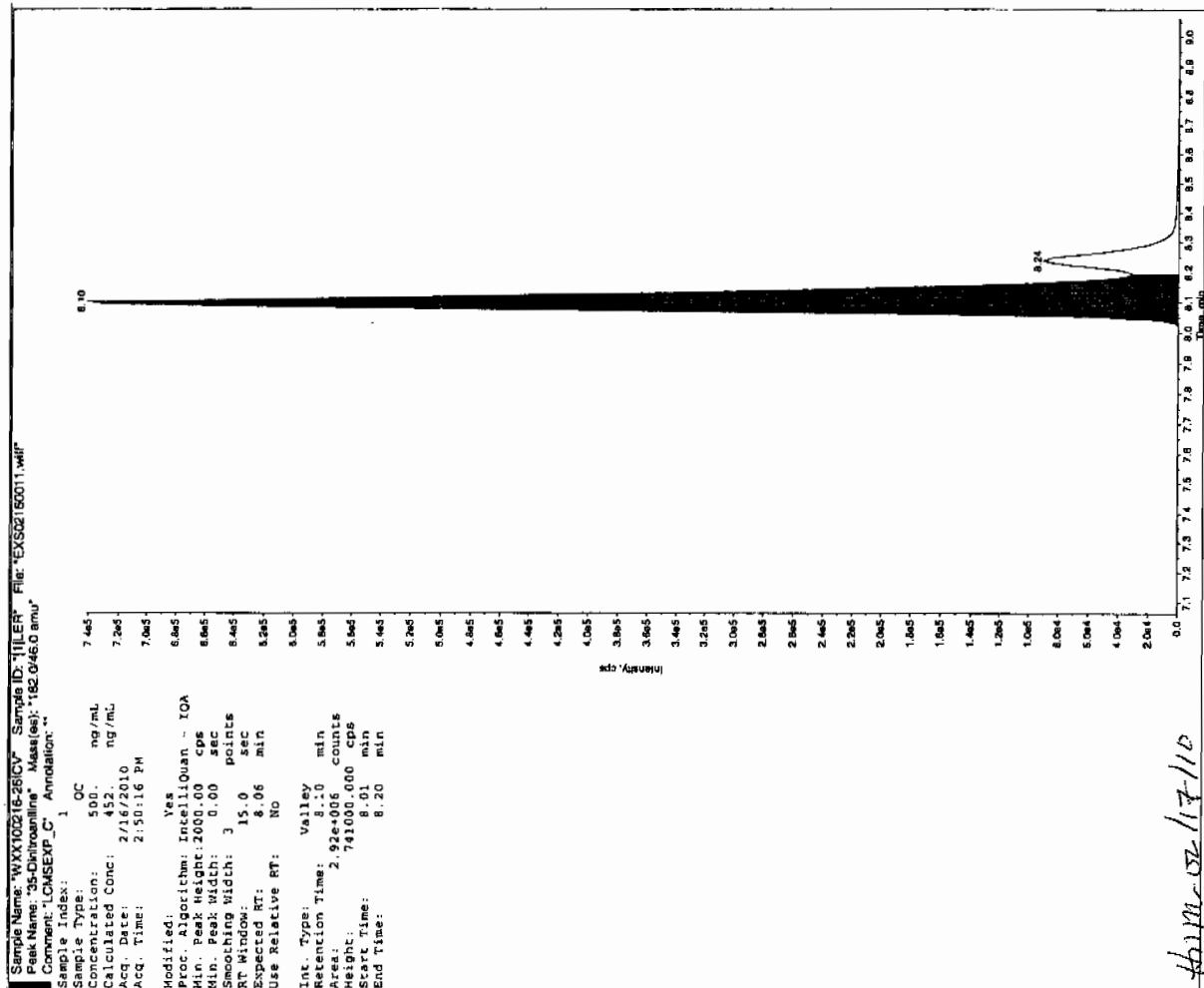
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

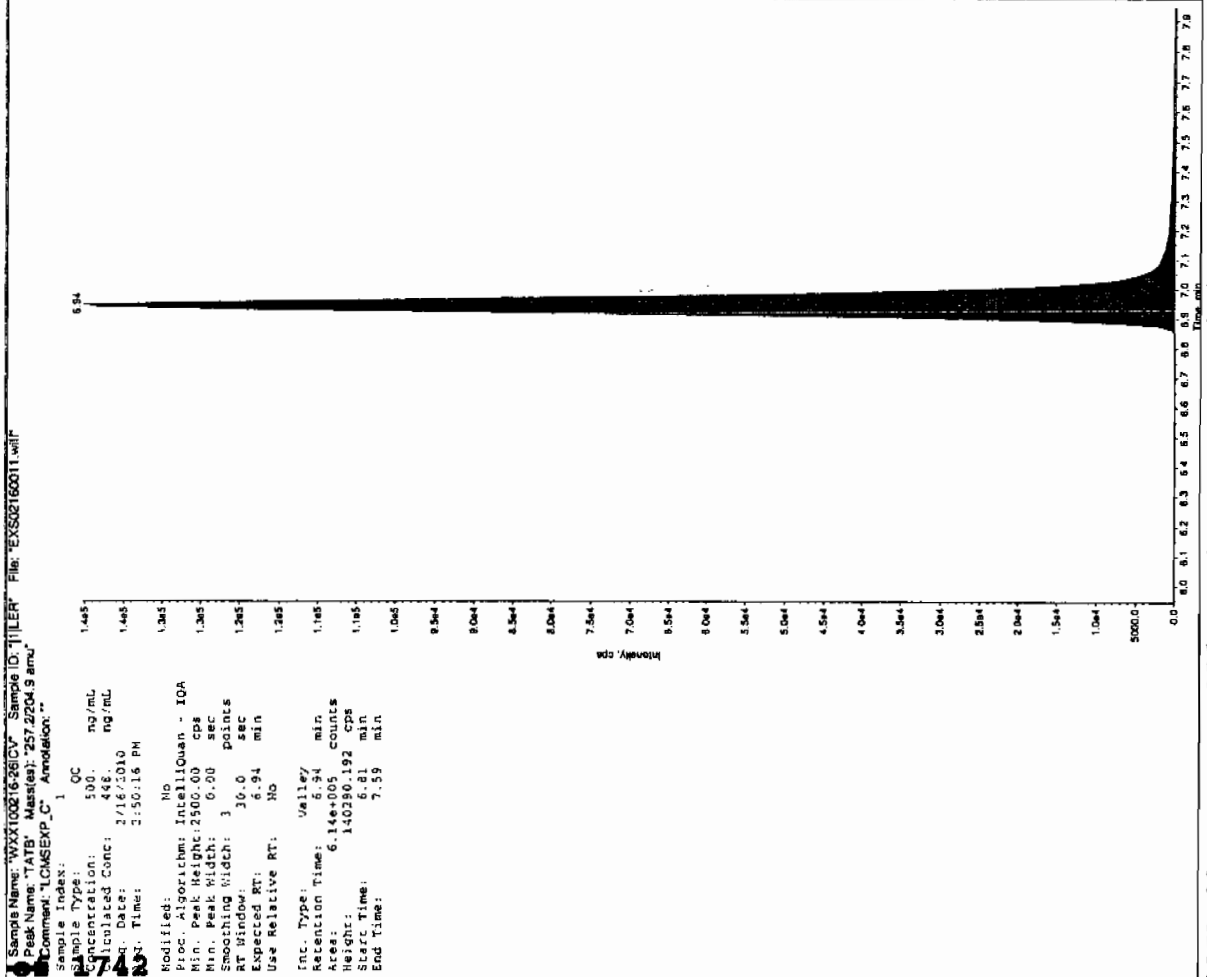
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

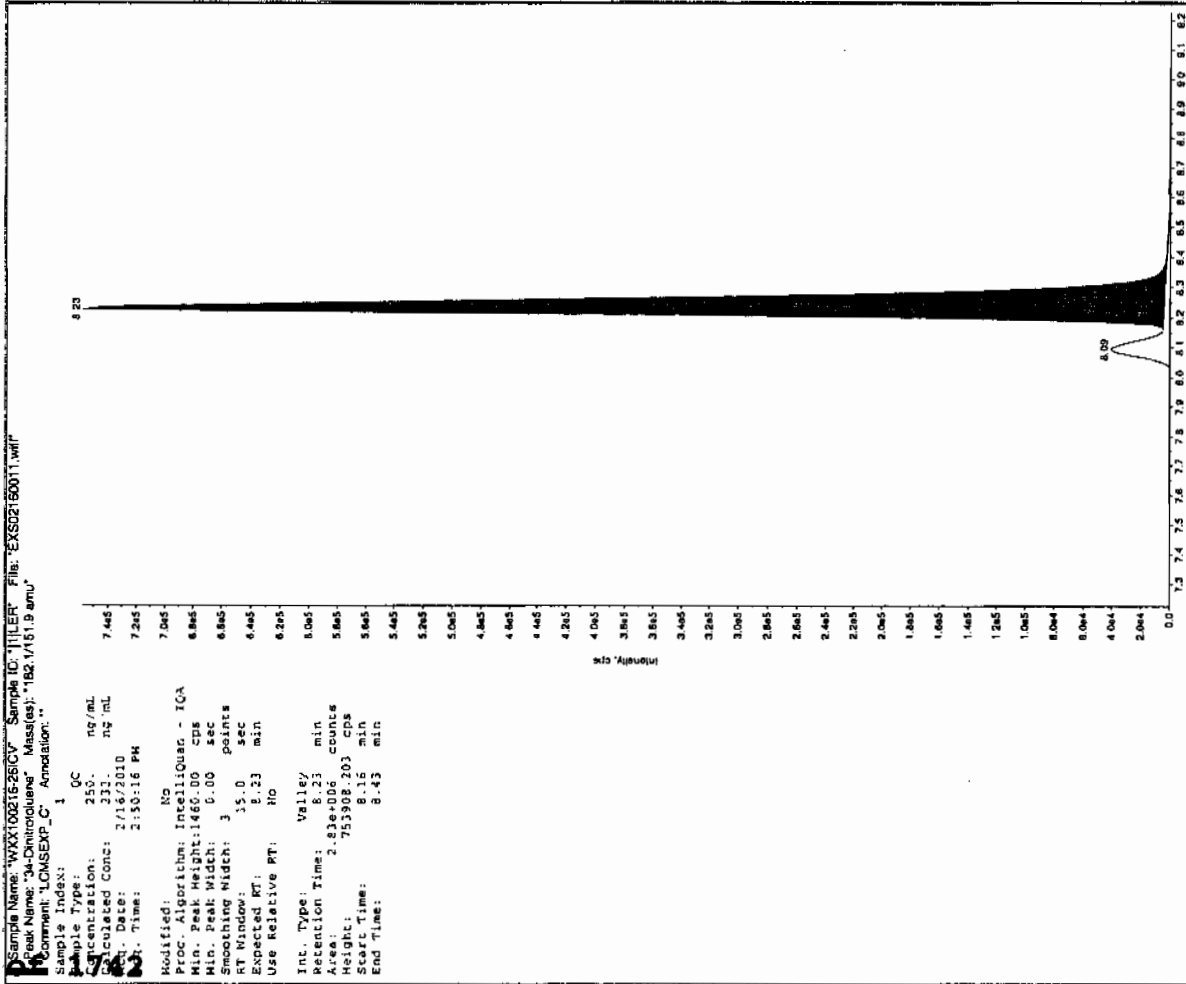
Jan 2/17/10



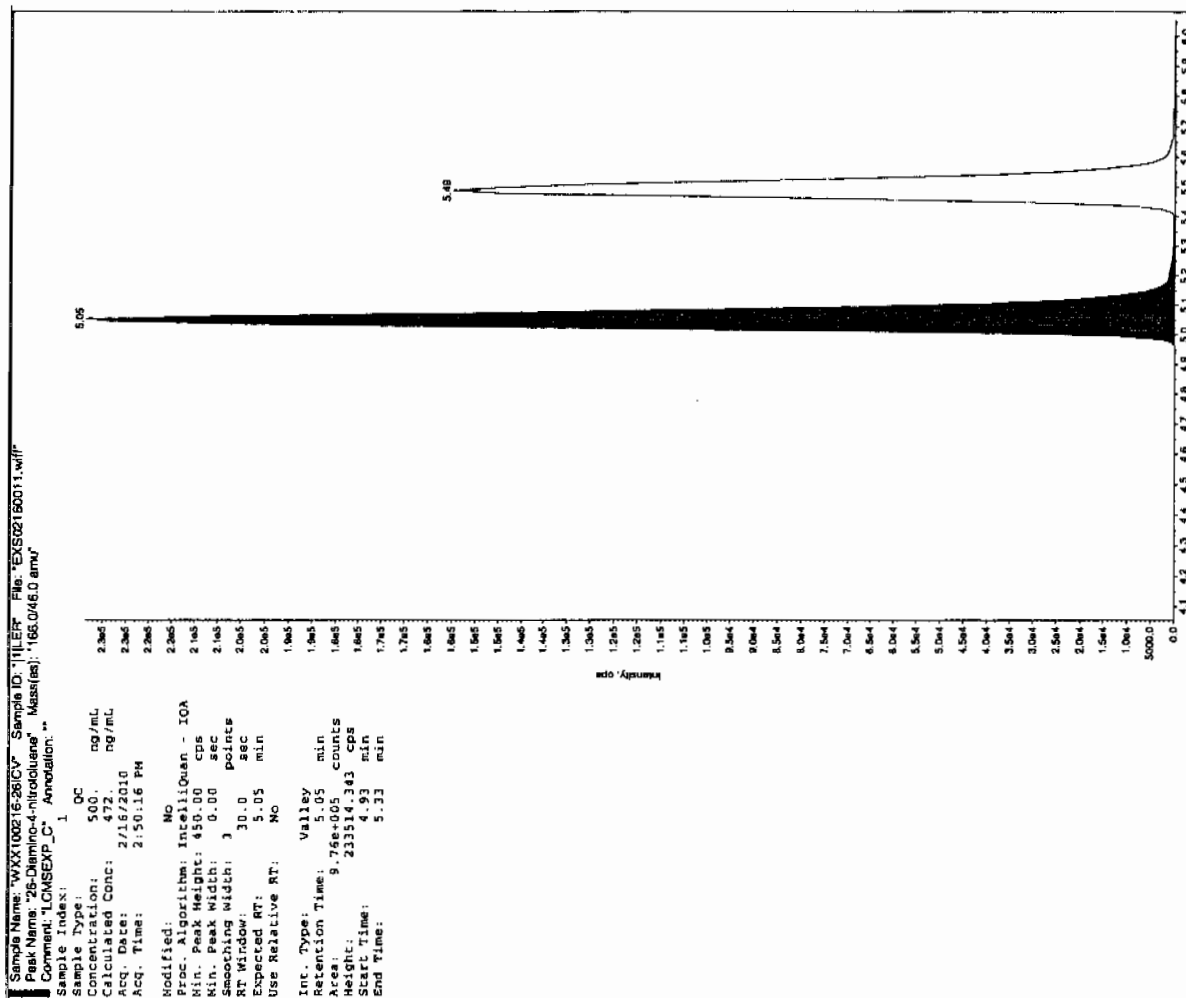
Jan 2/17/10



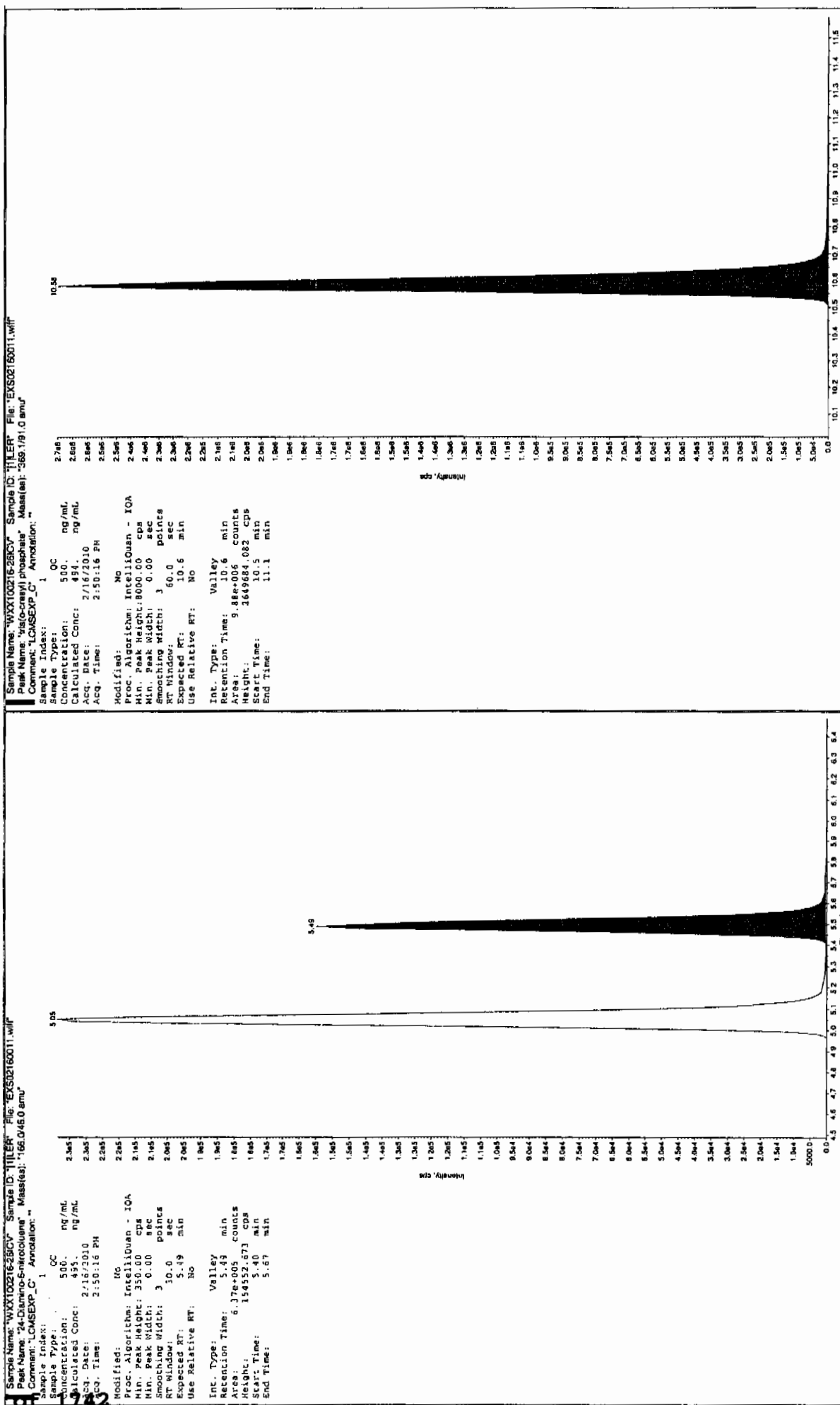
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216012a

Analysis Date: 16-FEB-10 22:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	45.259	113	
PETN	40	42.843	107	
RDX	40	36.749	92	
Tetryl	40	39.776	99	
m-Dinitrobenzene	40	46.913	117	
m-Nitrotoluene	40	43.185	108	
o-Nitrotoluene	40	41.818	105	
p-Nitrotoluene	40	36.985	92	
1,3,5-Trinitrobenzene	40	52.773	132	*
1,3-Dinitrobenzene-d4	500	467.275	93	
2,4,6-Trinitrotoluene	40	39.143	98	
2,4-Dinitrotoluene	40	38.529	96	
2,6-Dinitrotoluene	40	43.494	109	
2,6-Dinitrotoluene-d3	500	466.982	93	
2-Amino-4,6-dinitrotoluene	40	39.227	98	
3,4-Dinitrotoluene	20	22.552	113	
4-Amino-2,6-dinitrotoluene	40	41.012	103	
HMX	40	41.651	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qtd, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216012a

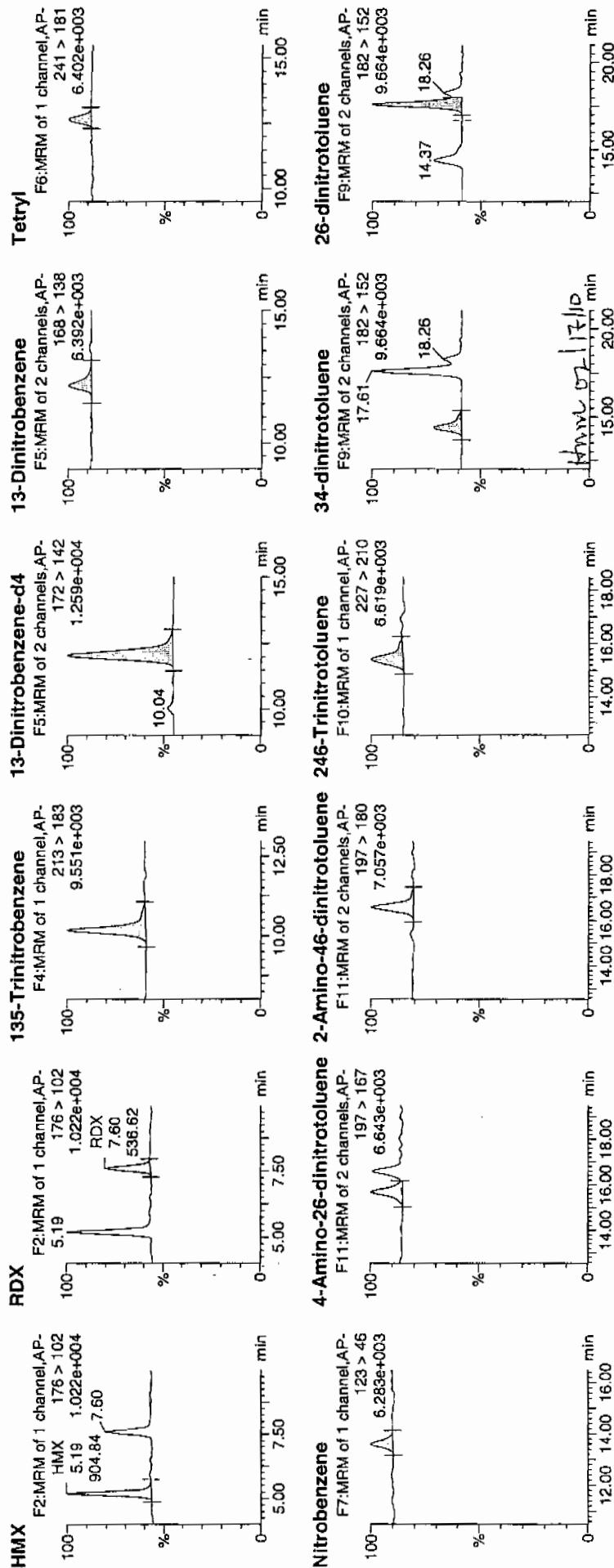
Date: 16-Feb-2010

Time: 22:33:56

ID: WXX100216-08CRI

Vial: 1:1,C

17/10

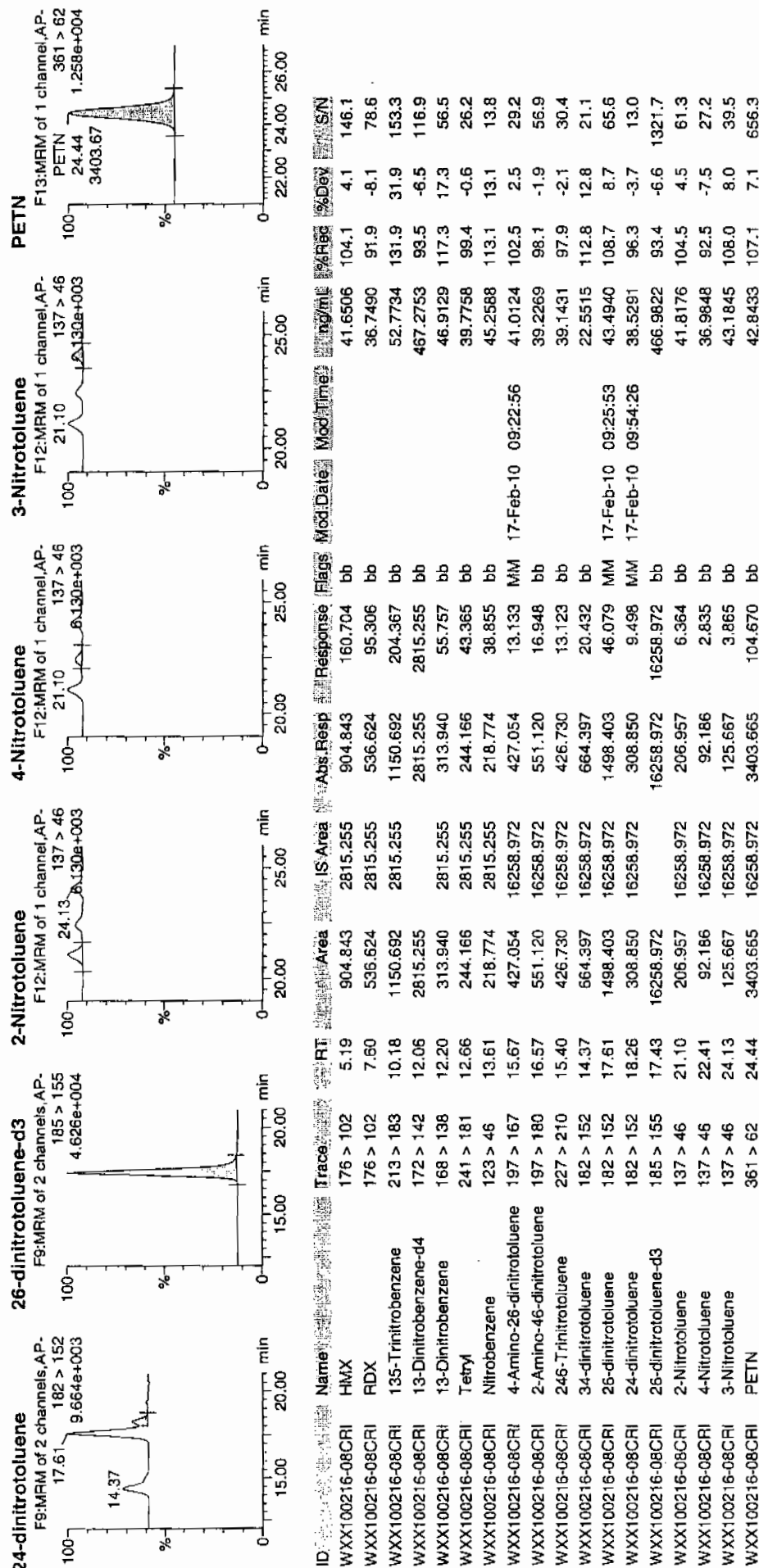


## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 24 of 59

Dataset: C:\MASSLYNX\New\_Exp\PRO1021610expA.qld, Time: Wed Feb 17 10:00:06 2010



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# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/16/10  
 Time of Injection 2233  
 Standard Number WXX100216-08CRI  
 Data File EXP0216012a

HMX	104.1
RDX	91.9
135-TNB	131.9
13-DNB	117.3
Tetryl	99.4
Nitrobenzene	113.1
4A-26-DNT	102.5
2A-46-DNT	98.1
246-TNT	97.9
34-DNT(surr)	112.8
26-DNT	108.7
24-DNT	96.3
2-NT	104.5
4-NT	92.5
3-NT	108.0
PETN	107.1

100%  
2/17/10

Total 1686.1

Average 105.4

Sum = 1686.1 / 17 = 105.4

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216021a

Analysis Date: 17-FEB-10 03:00

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	562.285	94	
o-Nitrotoluene	600	556.59	93	
p-Nitrotoluene	600	538.033	90	
1,3,5-Trinitrobenzene	600	579.243	97	
1,3-Dinitrobenzene-d4	500	497.509	100	
2,4,6-Trinitrotoluene	600	668.453	111	
2,4-Dinitrotoluene	600	630.739	105	
2,6-Dinitrotoluene	600	632.433	105	
2,6-Dinitrotoluene-d3	500	485.976	97	
2-Amino-4,6-dinitrotoluene	600	634.785	106	
3,4-Dinitrotoluene	300	327.796	109	
4-Amino-2,6-dinitrotoluene	600	562.441	94	
HMX	600	585.906	98	
Nitrobenzene	600	587.781	98	
PETN	600	627.186	105	
RDX	600	656.37	109	
Tetryl	600	543.324	91	
m-Dinitrobenzene	600	630.615	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0216021a

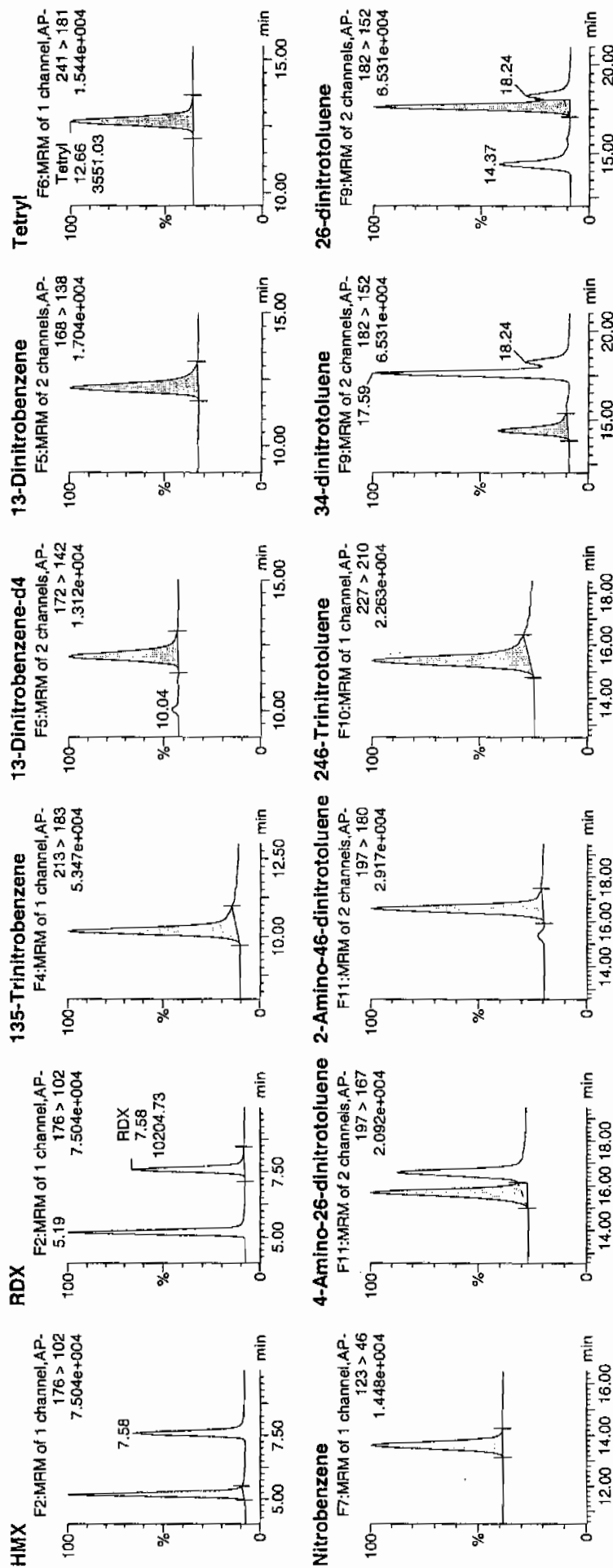
Date: 17-Feb-2010

Time: 03:00:59

ID: WXX100216-07CCV

Vial: 1:1,B

17/2/10



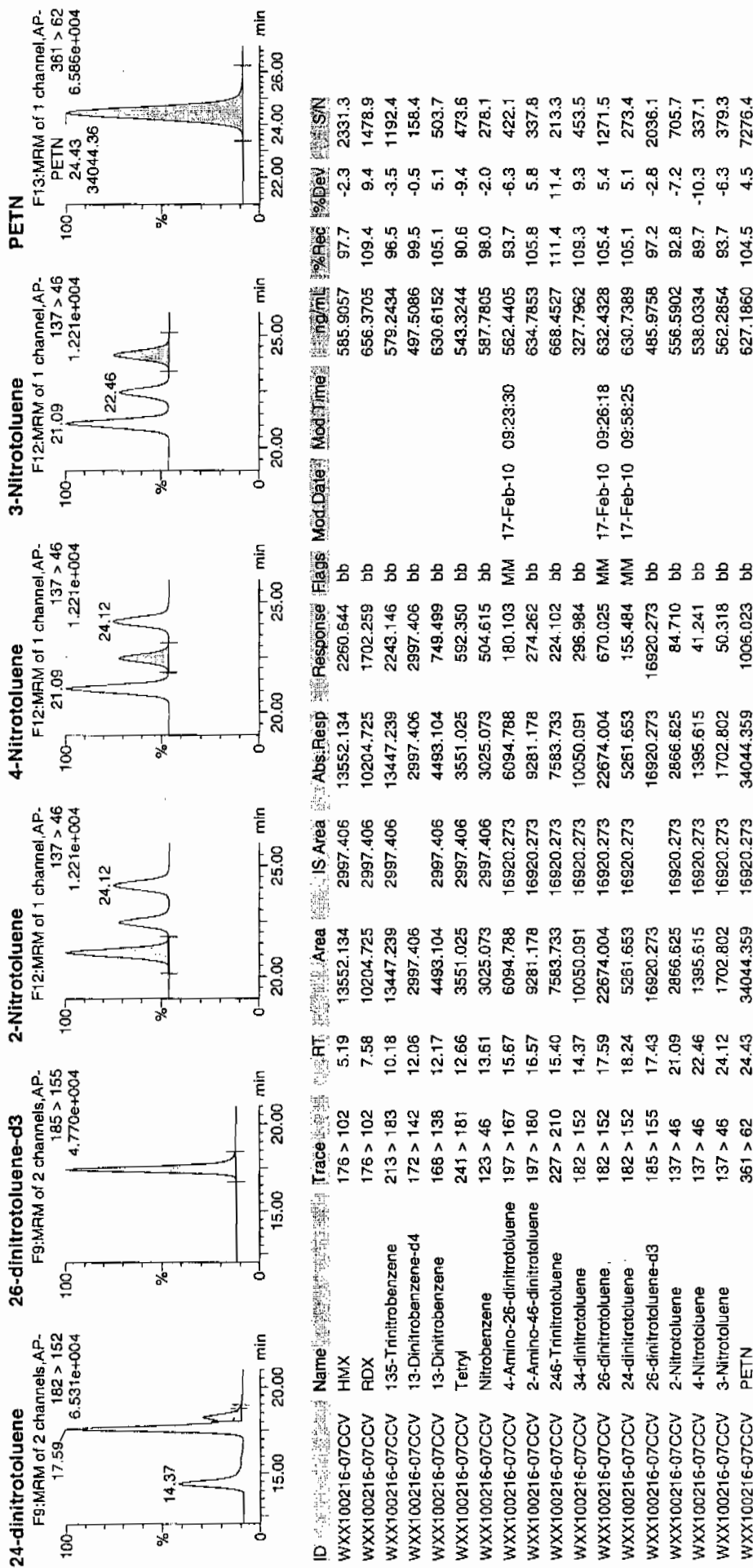
Handwritten note: 17/2/10

## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 42 of 59

Dataset: C:\MASSLYNX\New\_Exp\PRO021610expA.qld, Time: Wed Feb 17 10:00:06 2010





GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/17/10  
 Time of Injection: 0300  
 Standard Number: WXX100216-07CCV  
 Data File: EXP0216021a

HMX	97.7
RDX	109.4
135-TNB	96.5
13-DNB	105.1
Tetryl	90.6
Nitrobenzene	98.0
4A-26-DNT	93.7
2A-46-DNT	105.8
246-TNT	111.4
34-DNT(surr)	109.3
26-DNT	105.4
24-DNT	105.1
2-NT	92.8
4-NT	89.7
3-NT	93.7
PETN	104.5

*Handwritten:* 2/17/10

Total 1608.7

Average 100.5

*Handwritten:* #77X-02/17/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216023a

Analysis Date: 17-FEB-10 03:59

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.744	124	
1,3-Dinitrobenzene-d4	500	479.66	96	
2,4,6-Trinitrotoluene	40	35.851	90	
2,4-Dinitrotoluene	40	39.455	99	
2,6-Dinitrotoluene	40	41.064	103	
2,6-Dinitrotoluene-d3	500	491.1	98	
2-Amino-4,6-dinitrotoluene	40	38.066	95	
3,4-Dinitrotoluene	20	21.18	106	
4-Amino-2,6-dinitrotoluene	40	45.31	113	
HMX	40	40.495	101	
Nitrobenzene	40	46.027	115	
PETN	40	46.88	117	
RDX	40	40.003	100	
Tetryl	40	46.382	116	
m-Dinitrobenzene	40	47.022	118	
m-Nitrotoluene	40	34.333	86	
o-Nitrotoluene	40	37.918	95	
p-Nitrotoluene	40	33.624	84	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qtd, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216023a

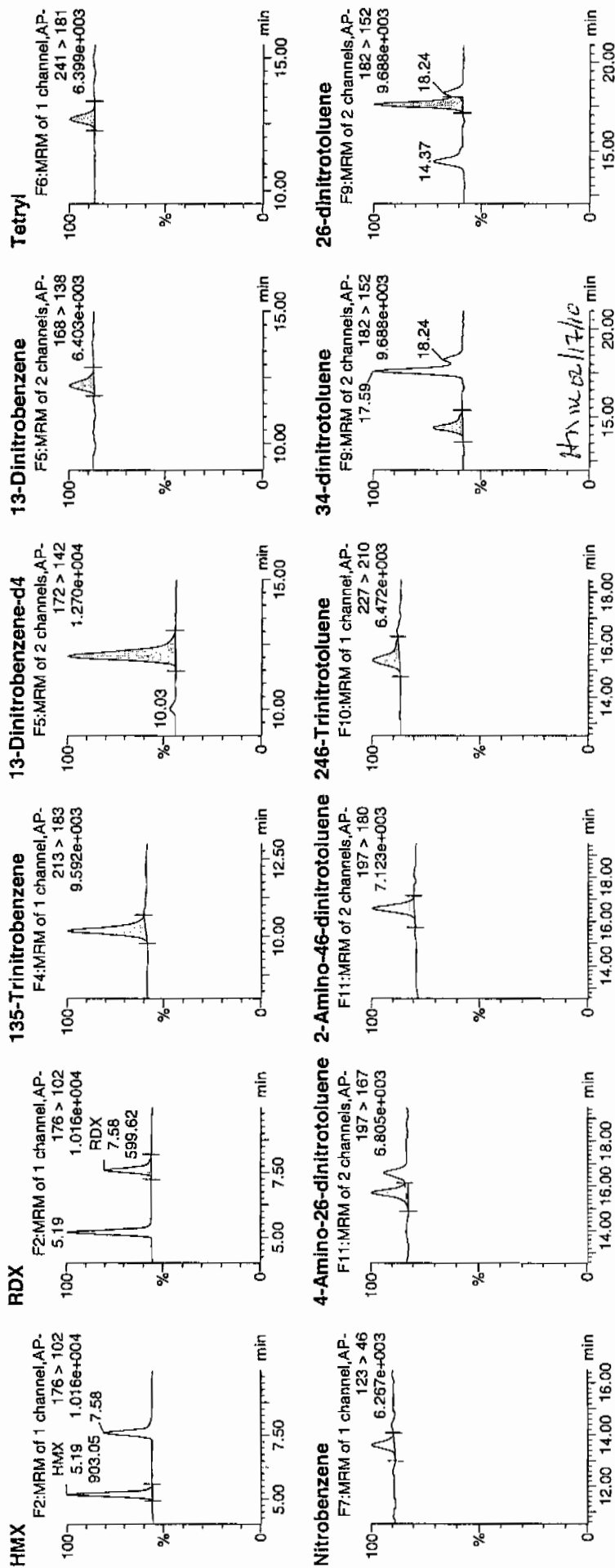
Date: 17-Feb-2010

Time: 03:59:56

ID: WXX100216-08CRI

Vial: 1:1,C

17/2/10



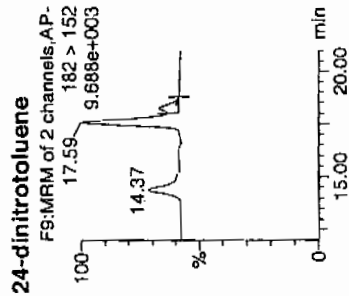
# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

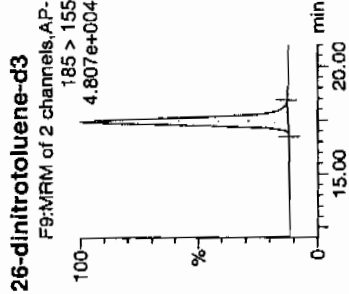
Printed: Wed Feb 17 10:00:54 2010, Page 46 of 59

Dataset: C:\MASSLYNX\New\_Exp\PROV021610expA.qld, Time: Wed Feb 17 10:00:06 2010

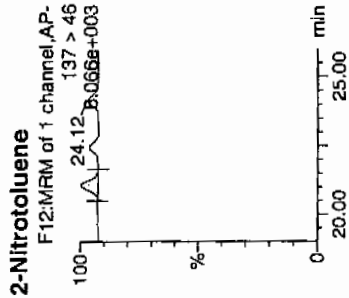
## 24-dinitrotoluene



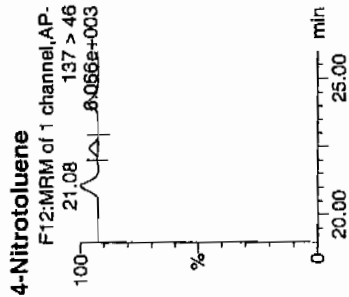
## 26-dinitrotoluene-d3



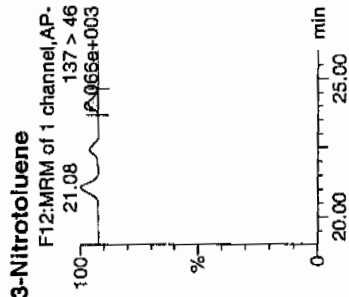
## 2-Nitrotoluene



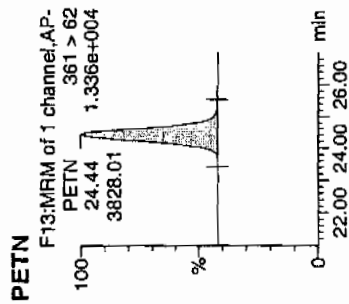
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	%Rec	%Dev	SN	
WXX100216-08CRI	HMX	176 > 102	5.19	903.051	2889.872	903.051	156.244	bb			40.4948	101.2	1.2	129.0
WXX100216-08CRI	RDX	176 > 102	7.58	599.618	2889.872	599.618	103.745	bb			40.0027	100.0	0.0	71.5
WXX100216-08CRI	135-Trinitrobenzene	213 > 183	10.18	1113.391	2889.872	1113.391	192.637	bb			49.7442	124.4	24.4	149.0
WXX100216-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	2889.872		2889.872	2889.872	bb			479.6602	95.9	-4.1	417.1
WXX100216-08CRI	13-Dinitrobenzene	168 > 138	12.20	323.009	2689.872	323.009	55.886	bb			47.0218	117.6	17.6	49.9
WXX100216-08CRI	Tetryl	241 > 181	12.66	292.267	2889.872	292.267	50.567	bb			46.3823	116.0	16.0	23.4
WXX100216-08CRI	Nitrobenzene	123 > 46	13.61	228.386	2889.872	228.386	39.515	bb			46.0273	115.1	15.1	23.5
WXX100216-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.70	496.172	17098.684	496.172	14.509	MM	17-Feb-10	09:23:37	45.3101	113.3	13.3	43.7
WXX100216-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.57	562.424	17098.684	562.424	16.446	bb			38.0656	95.2	-4.8	54.4
WXX100216-08CRI	246-Trinitrotoluene	227 > 210	15.37	411.028	17098.684	411.028	12.019	bb			35.8512	89.6	-10.4	34.7
WXX100216-08CRI	34-dinitrotoluene	182 > 152	14.37	656.211	17098.684	656.211	19.189	bb			21.1798	105.9	5.9	25.2
WXX100216-08CRI	26-dinitrotoluene	182 > 152	17.59	1487.743	17098.684	1487.743	43.505	MM	17-Feb-10	09:26:28	41.0638	102.7	2.7	76.0
WXX100216-08CRI	24-dinitrotoluene	182 > 152	18.24	332.609	17098.684	332.609	9.726	MM	17-Feb-10	09:58:34	39.4554	98.6	-1.4	15.9
WXX100216-08CRI	26-dinitrotoluene-d3	185 > 155	17.43	17098.684		17098.684	17098.684	bb			491.1000	98.2	-1.8	1844.2
WXX100216-08CRI	2-Nitrotoluene	137 > 46	21.08	197.351	17098.684	197.351	5.771	bb			37.9183	94.8	-5.2	50.3
WXX100216-08CRI	4-Nitrotoluene	137 > 46	22.44	88.137	17098.684	88.137	2.577	bb			33.6238	84.1	-15.9	24.1
WXX100216-08CRI	3-Nitrotoluene	137 > 46	24.12	105.069	17098.684	105.069	3.072	bb			34.3330	85.8	-14.2	27.3
WXX100216-08CRI	PETN	361 > 62	24.44	3828.005	17098.684	3828.005	111.939	bb			46.8804	117.2	17.2	698.1

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/17/10  
 Time of Injection 0359  
 Standard Number WXX100216-08CRI  
 Data File EXP0216023a

HMX	101.2
RDX	100.0
135-TNB	124.4
13-DNB	117.6
Tetryl	116.0
Nitrobenzene	115.1
4A-26-DNT	113.3
2A-46-DNT	95.2
246-TNT	89.6
34-DNT(surr)	105.9
26-DNT	102.7
24-DNT	98.6
2-NT	94.8
4-NT	84.1
3-NT	85.8
PETN	117.2

*Handwritten:* HMP 2/17/10

Total 1661.5

Average 103.8

*Handwritten:* HMP 02/17/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216027a

Analysis Date: 17-FEB-10 05:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	611.171	102	
1,3-Dinitrobenzene-d4	500	441.467	88	
2,4,6-Trinitrotoluene	600	677.667	113	
2,4-Dinitrotoluene	600	637.719	106	
2,6-Dinitrotoluene	600	636.41	106	
2,6-Dinitrotoluene-d3	500	422.753	85	
2-Amino-4,6-dinitrotoluene	600	651.036	109	
3,4-Dinitrotoluene	300	336.279	112	
4-Amino-2,6-dinitrotoluene	600	604.644	101	
HMX	600	612.626	102	
Nitrobenzene	600	578.267	96	
PETN	600	723.944	121	*
RDX	600	659.537	110	
Tetryl	600	567.895	95	
m-Dinitrobenzene	600	622.089	104	
m-Nitrotoluene	600	628.032	105	
o-Nitrotoluene	600	608.219	101	
p-Nitrotoluene	600	603.723	101	

Recovery Limits:

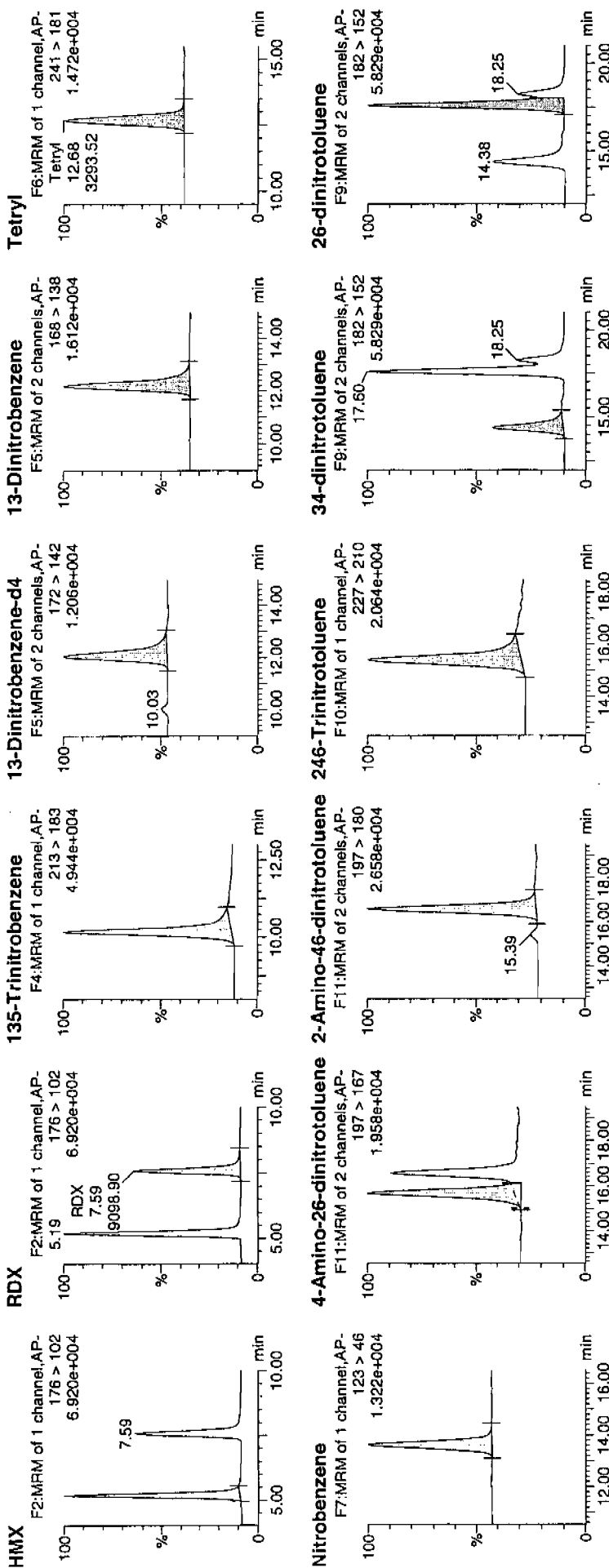
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

not  
2/17/10



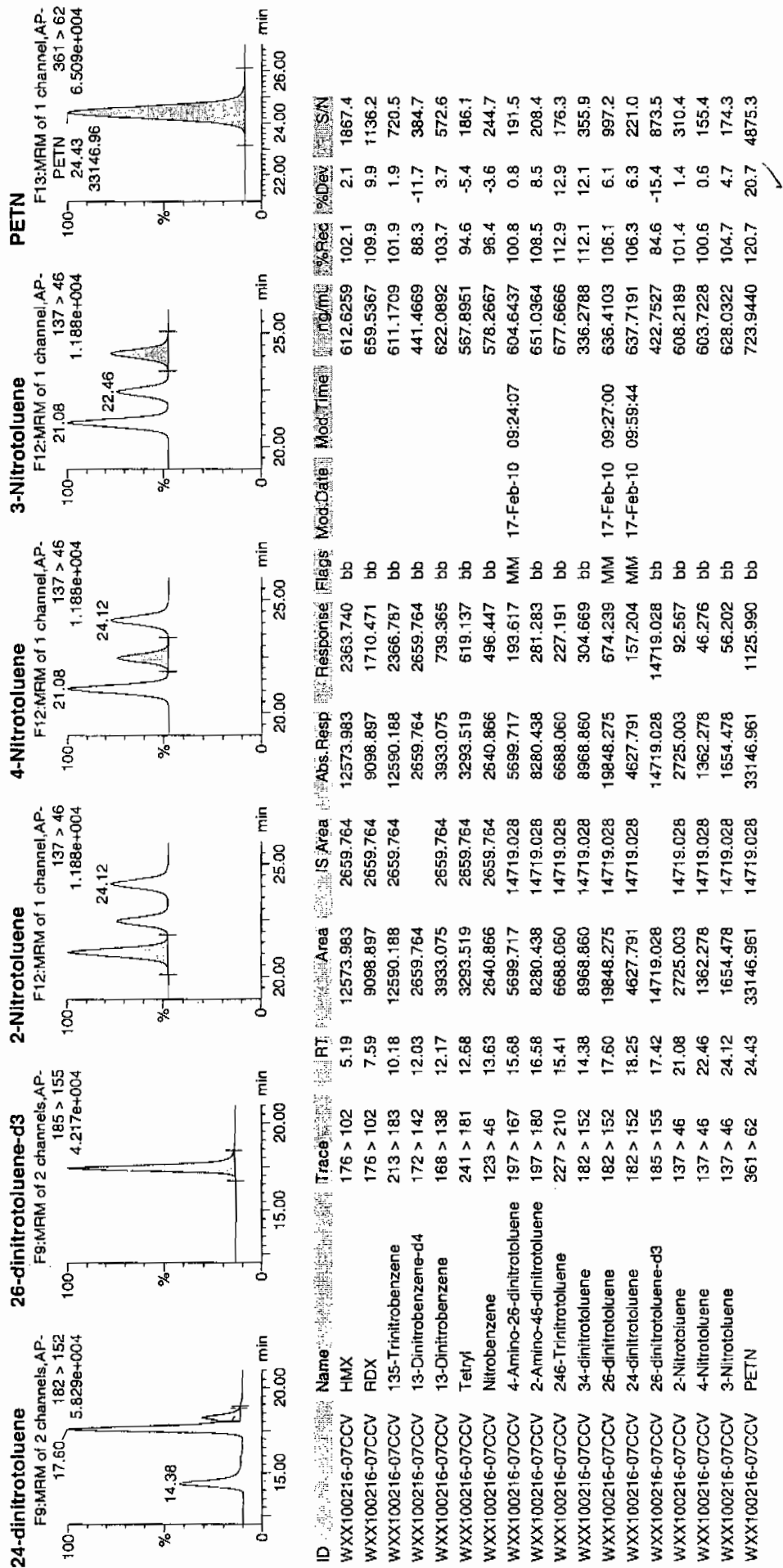
Am 102 117/110

## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Feb 17 10:00:54 2010, Page 54 of 59

Dataset: C:\MASSLYNX\New\_Exp\PROV021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/17/10  
 Time of Injection: 0558  
 Standard Number: WXX100216-07CCV  
 Data File: EXP0216027a

HMX	102.1
RDX	109.9
135-TNB	101.9
13-DNB	103.7
Tetryl	94.6
Nitrobenzene	96.4
4A-26-DNT	100.8
2A-46-DNT	108.5
246-TNT	112.9
34-DNT(surr)	112.1
26-DNT	106.1
24-DNT	106.3
2-NT	101.4
4-NT	100.6
3-NT	104.7
PETN	120.7

*Handwritten:* 105.2  
2/17/10

Total 1682.7

Average 105.2

*Handwritten:* 105.2

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216029a

Analysis Date: 17-FEB-10 06:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	44.51	111	
2,6-Dinitrotoluene	40	42.325	106	
2,6-Dinitrotoluene-d3	500	468.417	94	
2-Amino-4,6-dinitrotoluene	40	42.003	105	
3,4-Dinitrotoluene	20	22.85	114	
4-Amino-2,6-dinitrotoluene	40	35.28	88	
HMX	40	35.563	89	
Nitrobenzene	40	35.31	88	
PETN	40	48.188	120	
RDX	40	37.715	94	
Tetryl	40	38.583	96	
m-Dinitrobenzene	40	47.424	119	
m-Nitrotoluene	40	37.561	94	
o-Nitrotoluene	40	37.519	94	
p-Nitrotoluene	40	38.529	96	
1,3,5-Trinitrobenzene	40	46.171	115	
1,3-Dinitrobenzene-d4	500	512.607	103	
2,4,6-Trinitrotoluene	40	37.982	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA.qld, Time: Wed Feb 17 10:00:06 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216029a

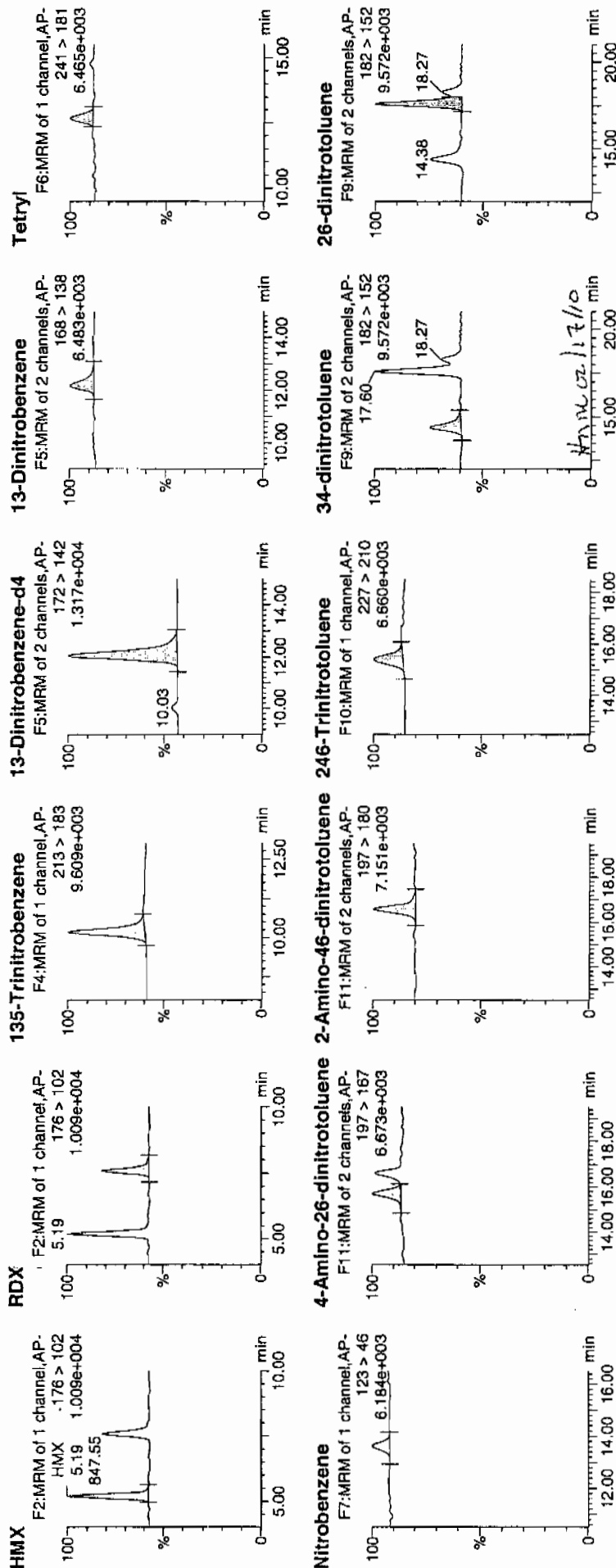
Date: 17-Feb-2010

Time: 06:57:50

ID: WXX100216-08CRI

Vial: 1:1,C

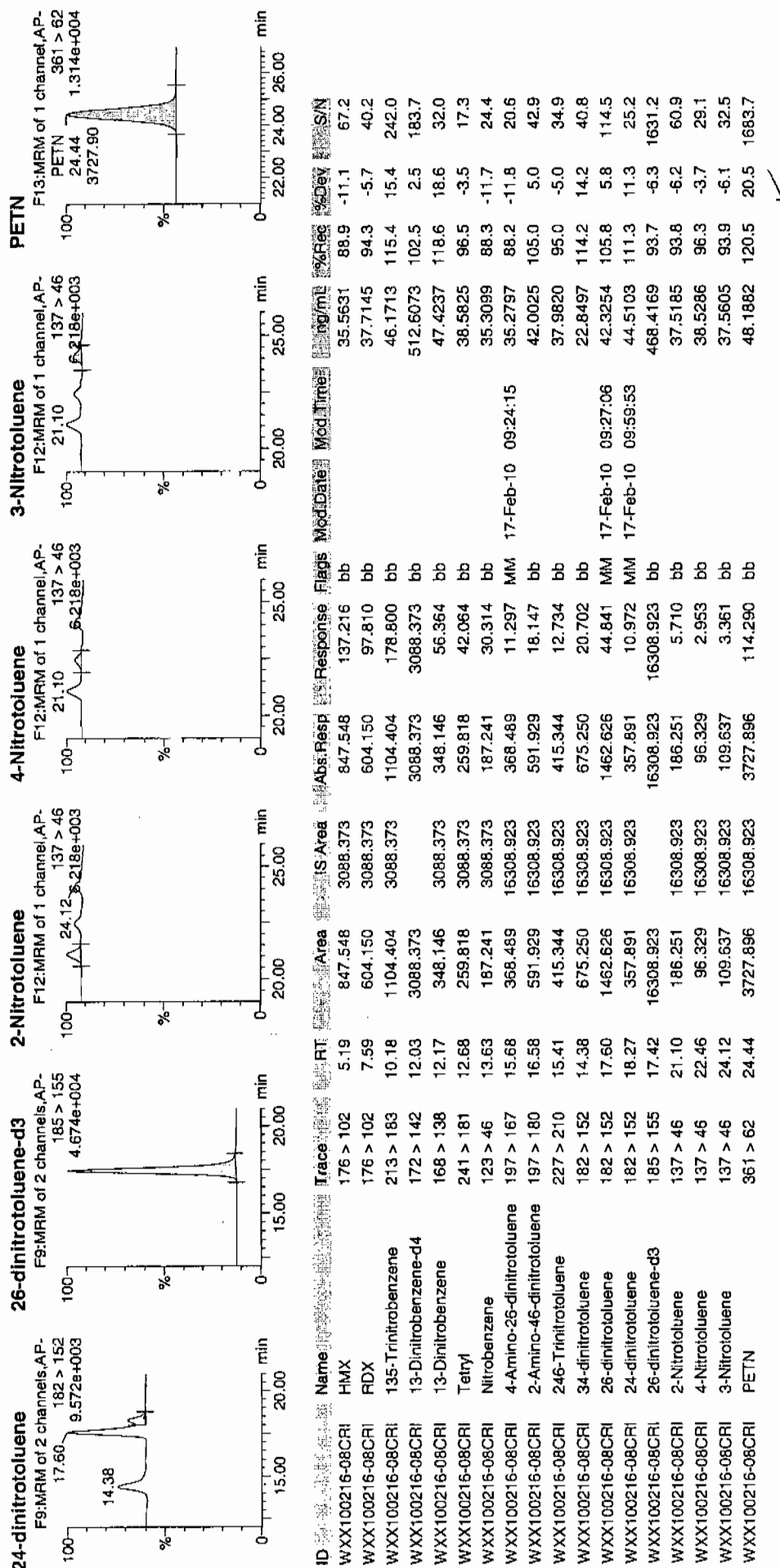
MR  
1/17/10



Printed: Wed Feb 17 10:00:54 2010, Page 58 of 59

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp\PROV021610expA.qld, Time: Wed Feb 17 10:00:06 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/17/10  
 Time of Injection 0657  
 Standard Number WXX100216-08CRI  
 Data File EXP0216029a

HMX	88.9
RDX	94.3
135-TNB	115.4
13-DNB	118.6
Tetryl	96.5
Nitrobenzene	88.3
4A-26-DNT	88.2
2A-46-DNT	105.0
246-TNT	95.0
34-DNT(surr)	114.2
26-DNT	105.8
24-DNT	111.3
2-NT	93.8
4-NT	96.3
3-NT	93.9
PETN	120.5

*4/17/10*

Total 1626.0

*4/17/10*

Average 101.6

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216039a

Analysis Date: 17-FEB-10 11:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	651.214	109	
1,3,5-Trinitrobenzene	600	585.479	98	
1,3-Dinitrobenzene-d4	500	387.961	78	*
2,4,6-Trinitrotoluene	600	707.346	118	
2,4-Dinitrotoluene	600	645.209	108	
2,6-Dinitrotoluene	600	613.479	102	
2,6-Dinitrotoluene-d3	500	403.474	81	
2-Amino-4,6-dinitrotoluene	600	628.06	105	
3,4-Dinitrotoluene	300	337.542	113	
4-Amino-2,6-dinitrotoluene	600	652.842	109	
HMX	600	593.956	99	
Nitrobenzene	600	632.339	105	
PETN	600	805.557	134	*
RDX	600	659.382	110	
Tetryl	600	551.825	92	
m-Dinitrobenzene	600	625.313	104	
m-Nitrotoluene	600	627.48	105	
o-Nitrotoluene	600	662.654	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qid, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216039a

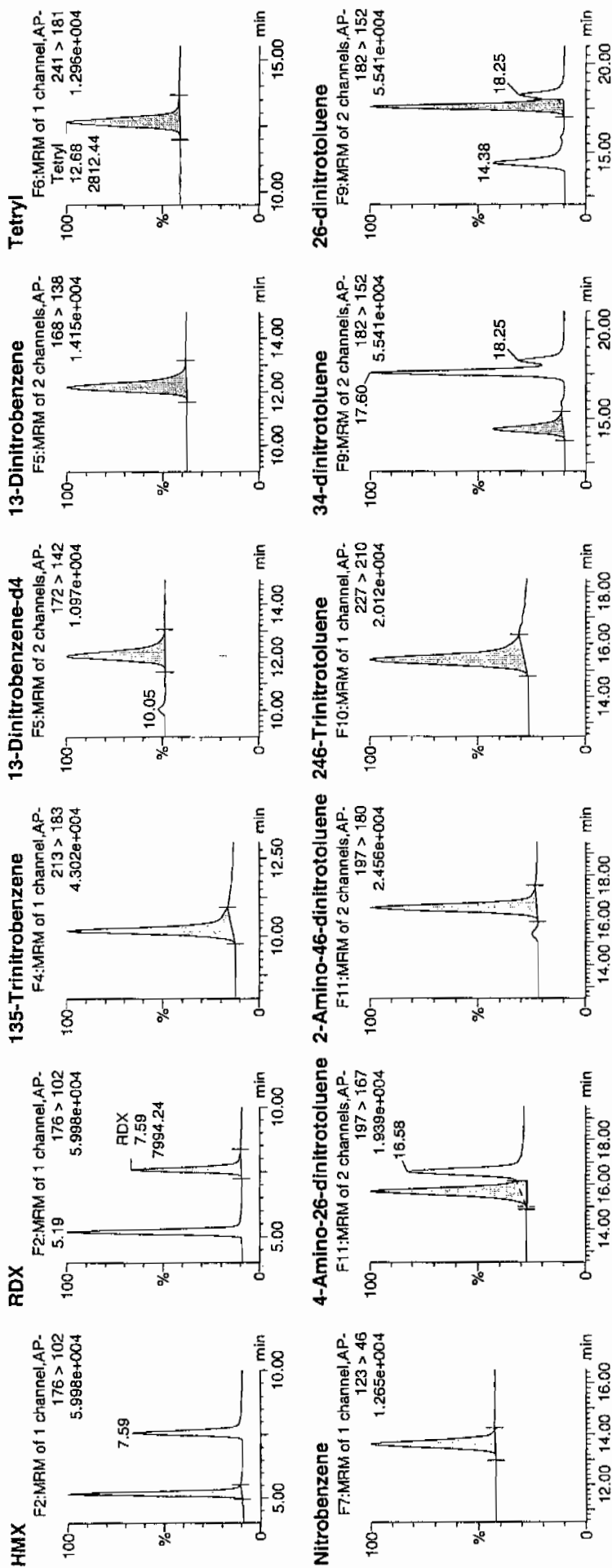
Date: 17-Feb-2010

Time: 11:55:13

ID: WXX100216-07CCV

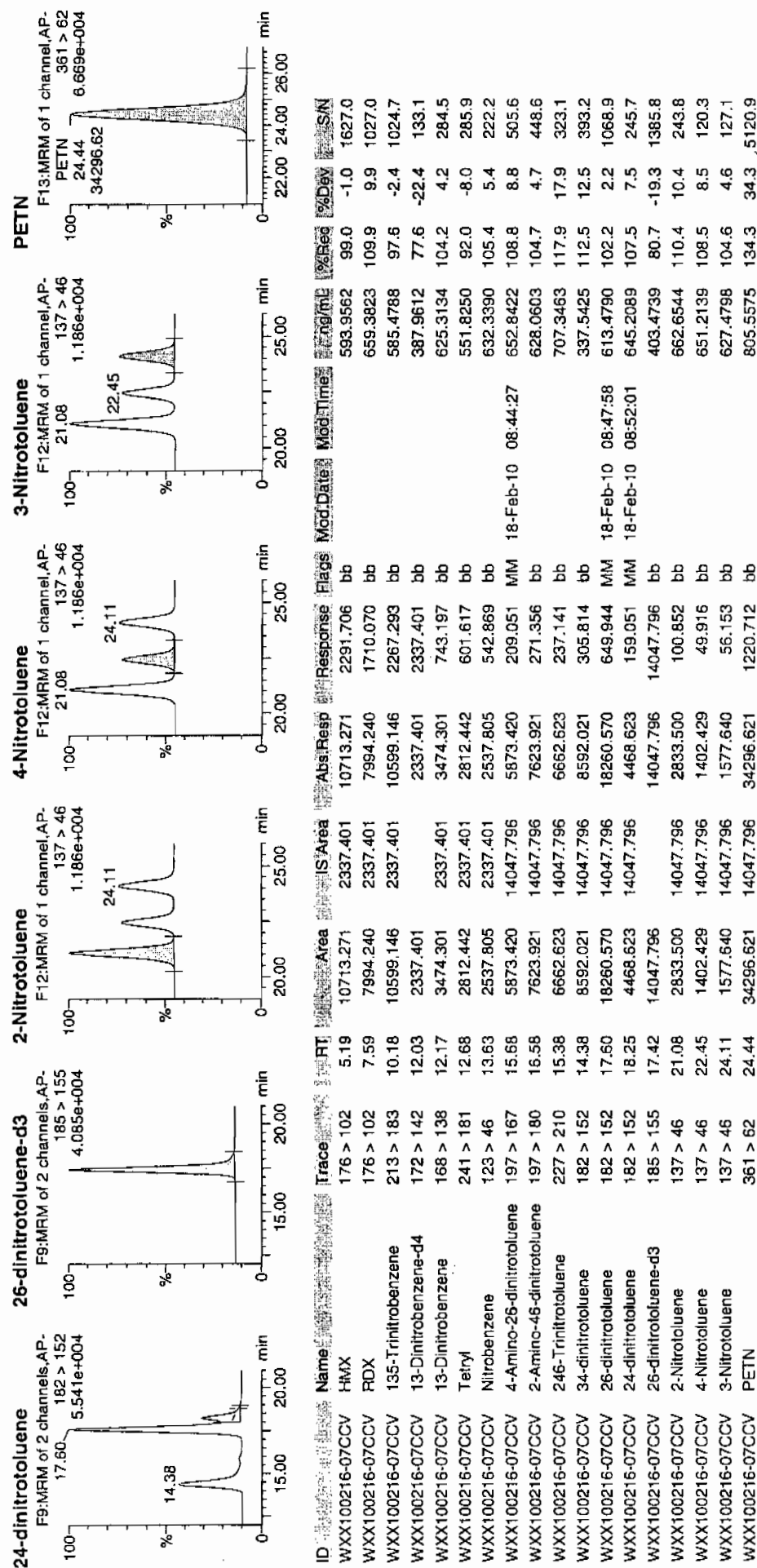
Vial: 1:1,B

4/13/10



4/15/10

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qtd, Time: Thu Feb 18 08:53:07 2010





# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/17/10  
 Time of Injection: 1155  
 Standard Number: WXX100216-07CCV  
 Data File: EXP0216039a

HMX	99.0	✓
RDX	109.9	✓
135-TNB	97.6	✓
13-DNB	104.2	
Tetryl	92.0	
Nitrobenzene	105.4	
4A-26-DNT	108.8	
2A-46-DNT	104.7	
246-TNT	117.9	
34-DNT(surr)	112.5	
26-DNT	102.2	
24-DNT	107.5	
2-NT	110.4	
4-NT	108.5	
3-NT	104.6	
PETN	134.3	

107.5  
2/18/10

Total 1719.5

Average 107.5

107.5 02/18/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216041a

Analysis Date: 17-FEB-10 12:54

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	49.958	125	
1,3-Dinitrobenzene-d4	500	436.567	87	
2,4,6-Trinitrotoluene	40	33.868	85	
2,4-Dinitrotoluene	40	48.789	122	
2,6-Dinitrotoluene	40	42.876	107	
2,6-Dinitrotoluene-d3	500	442.639	89	
2-Amino-4,6-dinitrotoluene	40	38.248	96	
3,4-Dinitrotoluene	20	20.64	103	
4-Amino-2,6-dinitrotoluene	40	36.085	90	
HMX	40	43.087	108	
Nitrobenzene	40	41.223	103	
PETN	40	49.973	125	
RDX	40	39.872	100	
Tetryl	40	51.62	129	
m-Dinitrobenzene	40	47.407	119	
m-Nitrotoluene	40	45.574	114	
o-Nitrotoluene	40	37.868	95	
p-Nitrotoluene	40	46.625	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216041a

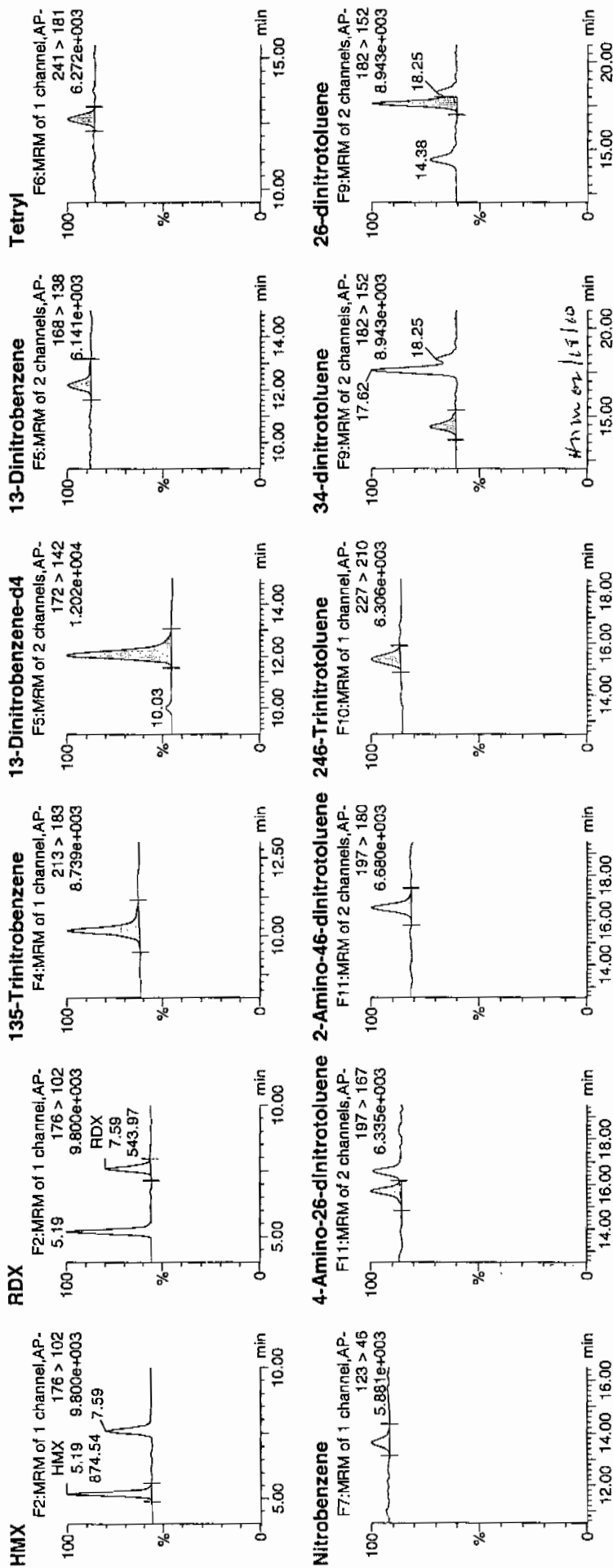
Date: 17-Feb-2010

Time: 12:54:26

ID: WXX100216-08CRI

Vial: 1:1,C

1/13/10

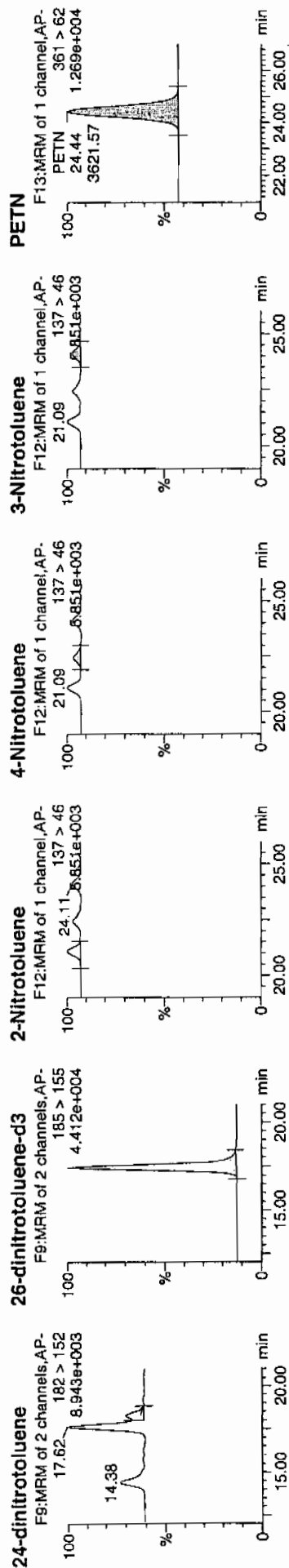


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 24 of 103

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Norm	%Req	%Dev	SN
WXX100216-08CRI	HMX	176 > 102	5.19	874.541	2630.245	874.541	166.247	bb			43.0873	107.7	7.7	143.8
WXX100216-08CRI	RDX	176 > 102	7.59	543.971	2630.245	543.971	103.407	bb			39.8724	99.7	-0.3	77.7
WXX100216-08CRI	135-Trinitrobenzene	213 > 183	10.18	1017.727	2630.245	1017.727	193.466	bb			49.9584	124.9	24.9	42.9
WXX100216-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	2630.245	2630.245	2630.245	2630.245	bb			436.5674	87.3	-12.7	269.0
WXX100216-08CRI	13-Dinitrobenzene	168 > 138	12.20	296.395	2630.245	296.395	56.344	bb			47.4065	118.5	18.5	27.0
WXX100216-08CRI	Tetryl	241 > 181	12.68	296.048	2630.245	296.048	56.278	bb			51.6199	129.0	29.0	24.9
WXX100216-08CRI	Nitrobenzene	123 > 46	13.63	186.169	2630.245	186.169	35.390	bb			41.2227	103.1	3.1	18.2
WXX100216-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	356.159	15411.399	356.159	11.555	MM	18-Feb-10	08:44:35	36.0850	90.2	-9.8	23.5
WXX100216-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	509.352	15411.399	509.352	16.525	bb			38.2479	95.6	-4.4	62.5
WXX100216-08CRI	246-Trinitrotoluene	227 > 210	15.38	349.977	15411.399	349.977	11.354	bb			33.8682	84.7	-15.3	59.5
WXX100216-08CRI	34-dinitrotoluene	182 > 152	14.38	576.394	15411.399	576.394	18.700	bb			20.6404	103.2	3.2	14.6
WXX100216-08CRI	26-dinitrotoluene	182 > 152	17.62	1400.108	15411.399	1400.108	45.424	MM	18-Feb-10	08:48:09	42.8759	107.2	7.2	47.1
WXX100216-08CRI	24-dinitrotoluene	182 > 152	18.25	370.708	15411.399	370.708	12.027	MM	18-Feb-10	08:51:46	48.7893	122.0	22.0	10.9
WXX100216-08CRI	26-dinitrotoluene-d3	185 > 155	17.42	15411.399	15411.399	15411.399	15411.399	bb			442.6386	88.5	-11.5	1346.2
WXX100216-08CRI	2-Nitrotoluene	137 > 46	21.09	177.640	15411.399	177.640	5.763	bb			37.8679	94.7	-5.3	32.4
WXX100216-08CRI	4-Nitrotoluene	137 > 46	22.44	110.157	15411.399	110.157	3.574	bb			46.6252	116.6	16.6	18.9
WXX100216-08CRI	3-Nitrotoluene	137 > 46	24.11	125.706	15411.399	125.706	4.078	bb			45.5737	113.9	13.9	20.0
WXX100216-08CRI	PETN	361 > 62	24.44	3621.569	15411.399	3621.569	117.496	bb			49.9729	124.9	24.9	470.4

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/17/10  
 Time of Injection 1254  
 Standard Number WXX100216-08CRI  
 Data File EXP0216041a

HMX	107.7
RDX	99.7
135-TNB	124.9
13-DNB	118.5
Tetryl	129.0
Nitrobenzene	103.1
4A-26-DNT	90.2
2A-46-DNT	95.6
246-TNT	84.7
34-DNT(surr)	103.2
26-DNT	107.2
24-DNT	122.0
2-NT	94.7
4-NT	116.6
3-NT	113.9
PETN	124.9
Total	1735.9

*WXX  
2/18/10*

Average

108.5

*from 02/18/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0216052a

Analysis Date: 17-FEB-10 18:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	322.55	108	
4-Amino-2,6-dinitrotoluene	600	558.036	93	
HMX	600	526.292	88	
Nitrobenzene	600	561.562	94	
PETN	600	685.593	114	
RDX	600	615.154	103	
Tetryl	600	581.072	97	
m-Dinitrobenzene	600	614.714	102	
m-Nitrotoluene	600	522.1	87	
o-Nitrotoluene	600	521.805	87	
p-Nitrotoluene	600	528.568	88	
1,3,5-Trinitrobenzene	600	586.393	98	
1,3-Dinitrobenzene-d4	500	469.603	94	
2,4,6-Trinitrotoluene	600	667.732	111	
2,4-Dinitrotoluene	600	640.278	107	
2,6-Dinitrotoluene	600	617.89	103	
2,6-Dinitrotoluene-d3	500	472.936	95	
2-Amino-4,6-dinitrotoluene	600	700.294	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Thu Feb 18 08:53:51 2010, Page 45 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYN\NEW\_EXP.PRO\Data\EXP0216052a

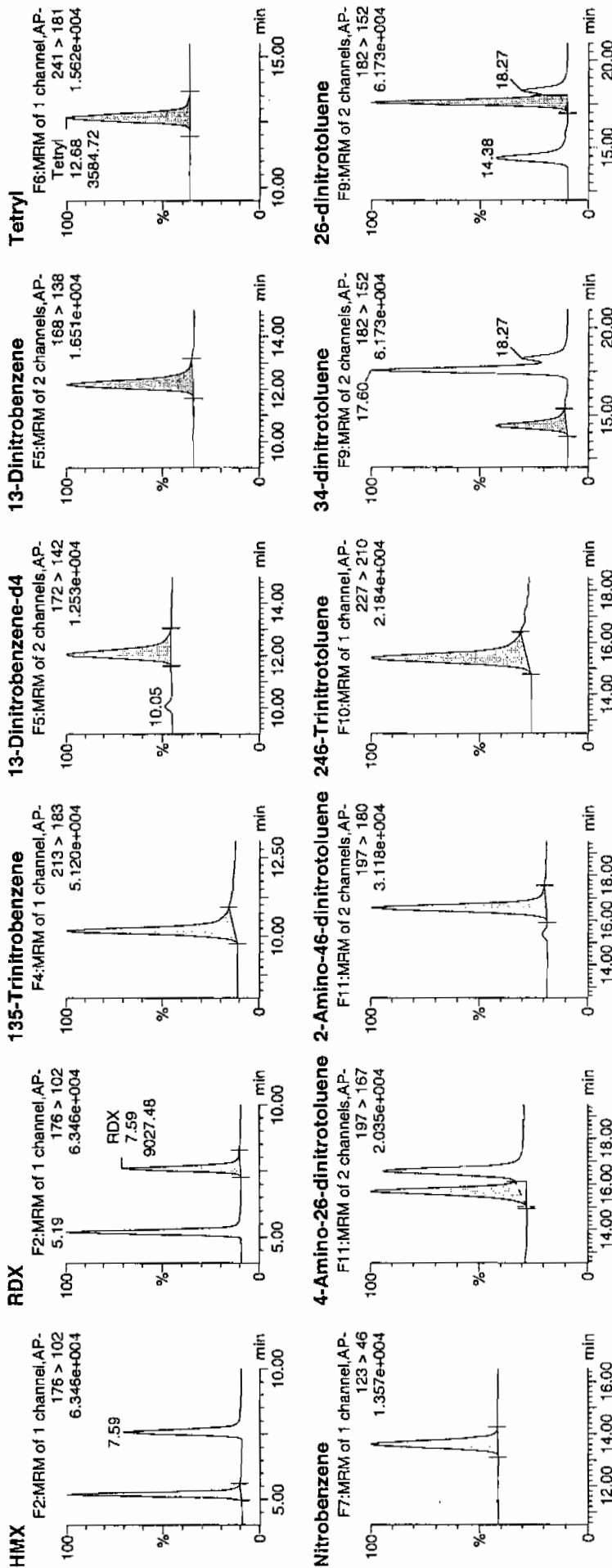
Date: 17-Feb-2010

Time: 18:20:28

ID: WXX100216-07CCV

Vial: 1:1,B

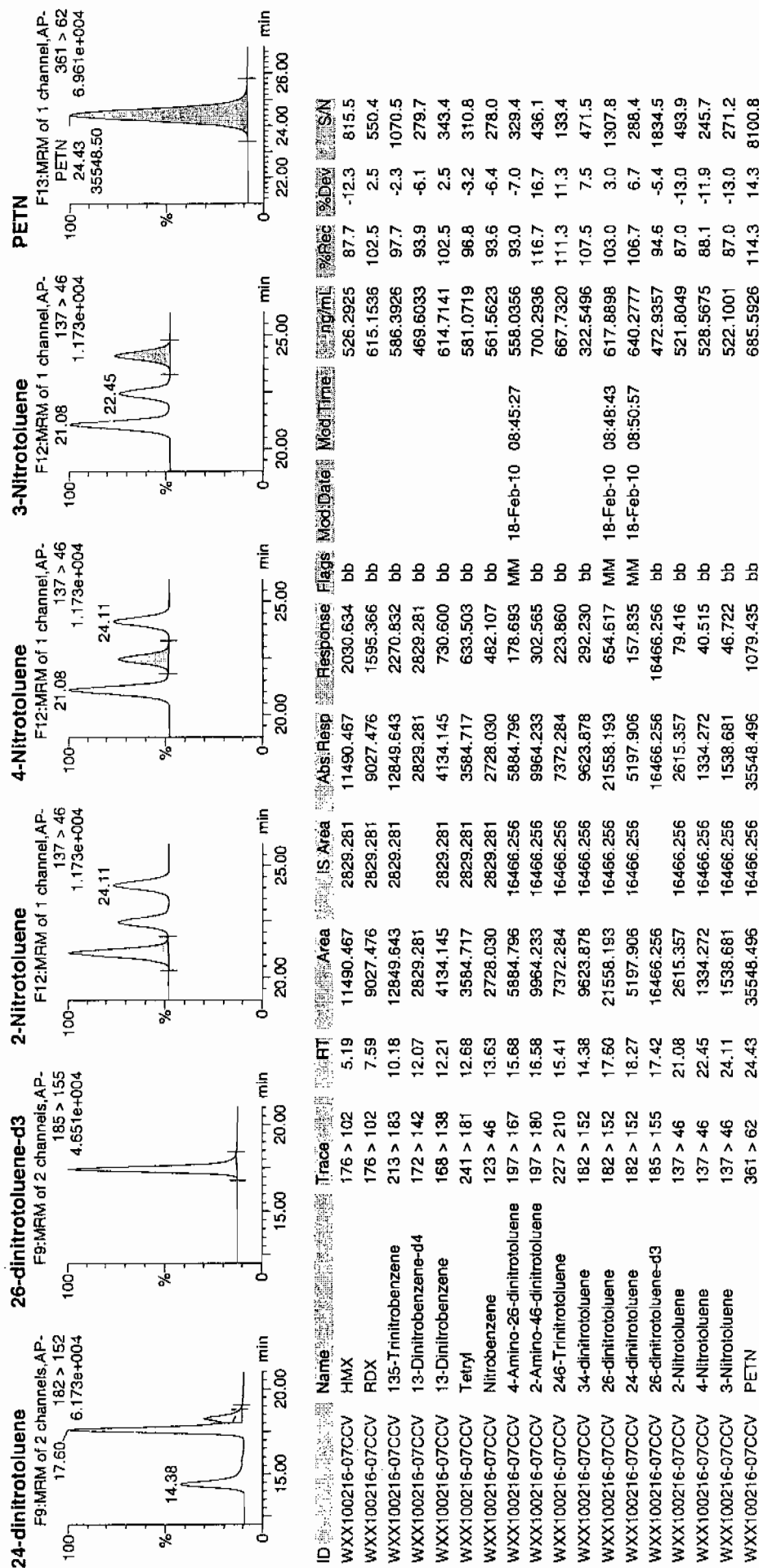
1/18/10  
1/18/10



1/18/10

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010





GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 02/17/10  
 Time of Injection: 1820  
 Standard Number: WXX100216-07CCV  
 Data File: EXP0216052a

HMX	87.7
RDX	102.5
135-TNB	97.7
13-DNB	102.5
Tetryl	96.8
Nitrobenzene	93.6
4A-26-DNT	93.0
2A-46-DNT	116.7
246-TNT	111.3
34-DNT(surr)	107.5
26-DNT	103.0
24-DNT	106.7
2-NT	87.0
4-NT	88.1
3-NT	87.0
PETN	114.3

1677  
2/18/10

Total 1595.4

Average 99.7

477.00 2/18/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0216054a

Analysis Date: 17-FEB-10 19:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	45.215	113	
2,4-Dinitrotoluene	40	38.588	96	
2,6-Dinitrotoluene	40	43.371	108	
2,6-Dinitrotoluene-d3	500	482.623	97	
2-Amino-4,6-dinitrotoluene	40	45.806	115	
3,4-Dinitrotoluene	20	22.123	111	
4-Amino-2,6-dinitrotoluene	40	49.639	124	
HMX	40	43.201	108	
Nitrobenzene	40	41.456	104	
PETN	40	47.927	120	
RDX	40	45.793	114	
Tetryl	40	38.525	96	
m-Dinitrobenzene	40	46.393	116	
m-Nitrotoluene	40	35.588	89	
o-Nitrotoluene	40	43.751	109	
p-Nitrotoluene	40	34.462	86	
1,3,5-Trinitrobenzene	40	49.067	123	
1,3-Dinitrobenzene-d4	500	526.622	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Thu Feb 18 08:53:51 2010, Page 49 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216054a

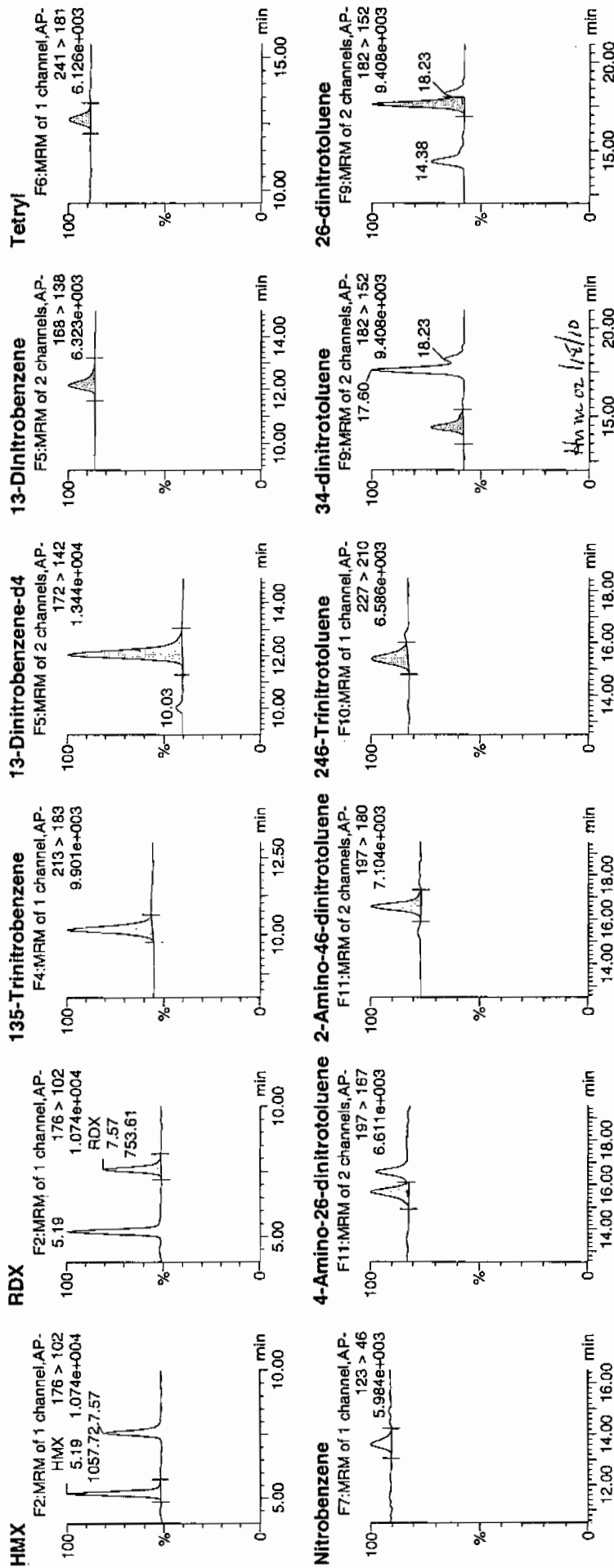
Date: 17-Feb-2010

Time: 19:19:47

ID: WXX100216-08CRI

Vial: 1:1,C

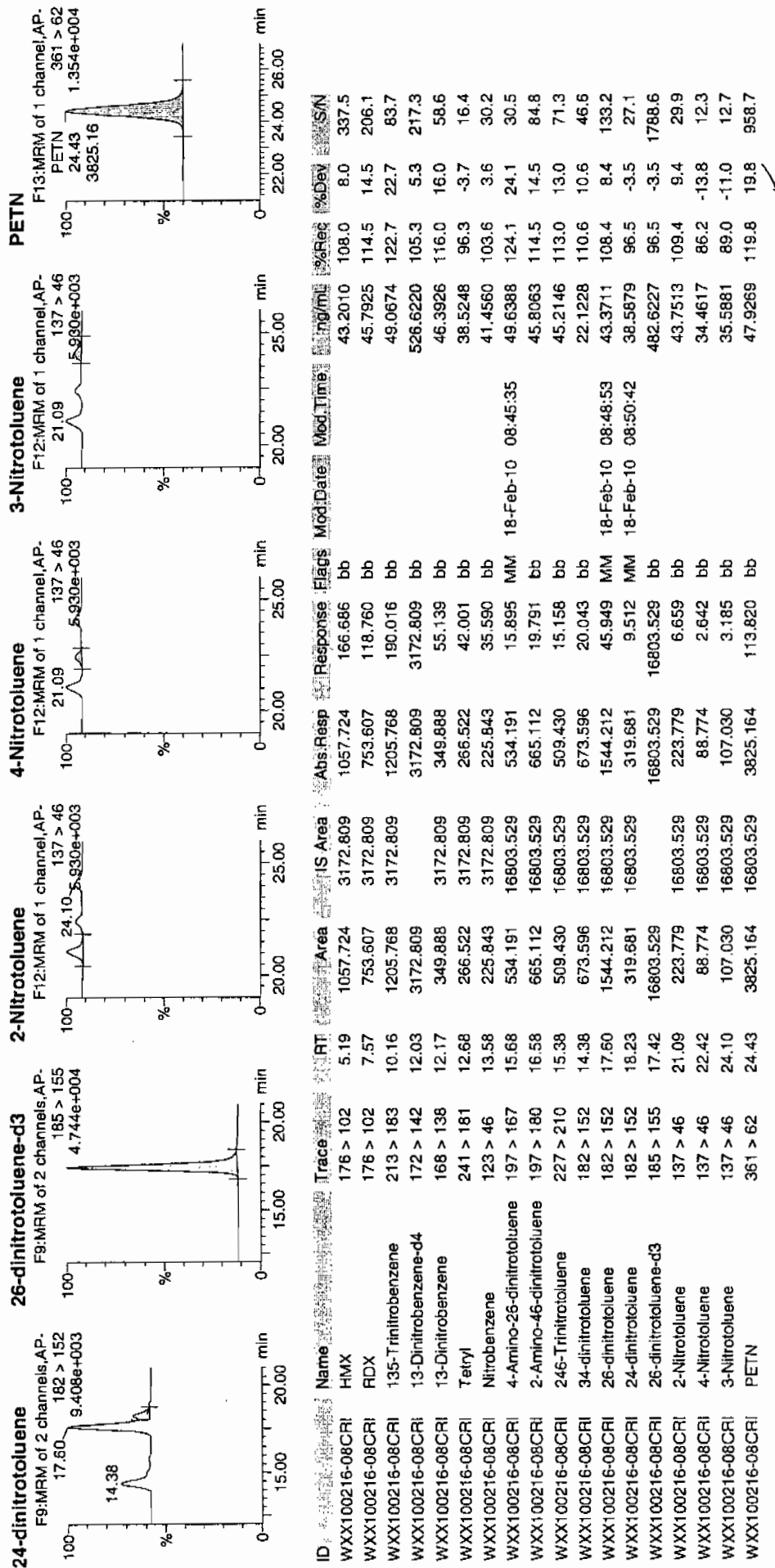
WXX  
2/18/10



Printed: Thu Feb 18 08:53:51 2010, Page 50 of 103

# Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 02/17/10  
 Time of Injection 1919  
 Standard Number WXX100216-08CRI  
 Data File EXP0216054a

HMX	108.0
RDX	114.5
135-TNB	122.7
13-DNB	116.0
Tetryl	96.3
Nitrobenzene	103.6
4A-26-DNT	124.1
2A-46-DNT	114.5
246-TNT	113.0
34-DNT(surr)	110.6
26-DNT	108.4
24-DNT	96.5
2-NT	109.4
4-NT	86.2
3-NT	89.0
PETN	119.8

*Handwritten:* 1077  
2/18/10

Total 1732.6

*Handwritten:* 4/11/10 02/18/10

Average 108.3

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02160013.wiff

Analysis Date: 16-FEB-10 15:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	69.9	70	
2,6-Diamino-4-nitrotoluene	100	67.7	68	
3,4-Dinitrotoluene	50	47.1	94	
3,5-Dinitroaniline	100	92.2	92	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

don 2/17/10

Sample Name: "WXX100216-27CBI" Sample ID: "JILIF" File: "EX502160013.wif"

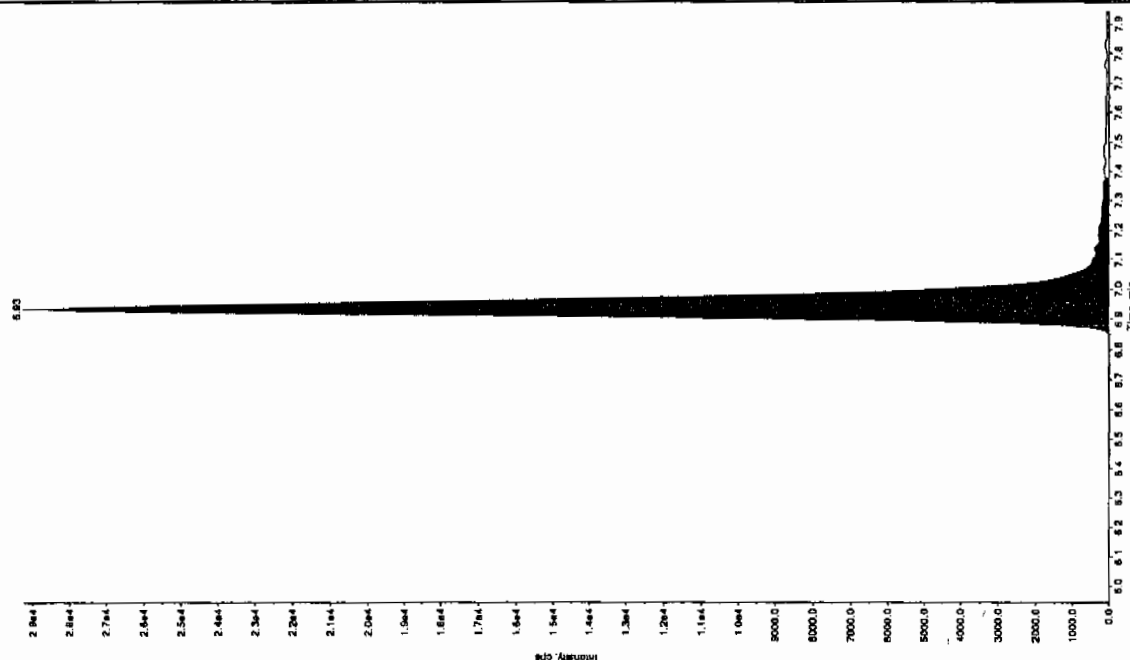
Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 92.2 ng/mL  
Acq. Date: 2/16/2010  
Acq. Time: 3:21:41 PM

Modified: Yes  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 15.0 sec  
Expected RT: 8.07 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 8.10 min  
Area: 5.92e+005 counts  
Height: 146657.471 CPS  
Start Time: 8.01 min  
End Time: 8.20 min



don 2/17/10

Sample Name: "WXX100216-27CBI" Sample ID: "JILIF" File: "EX502160013.wif"

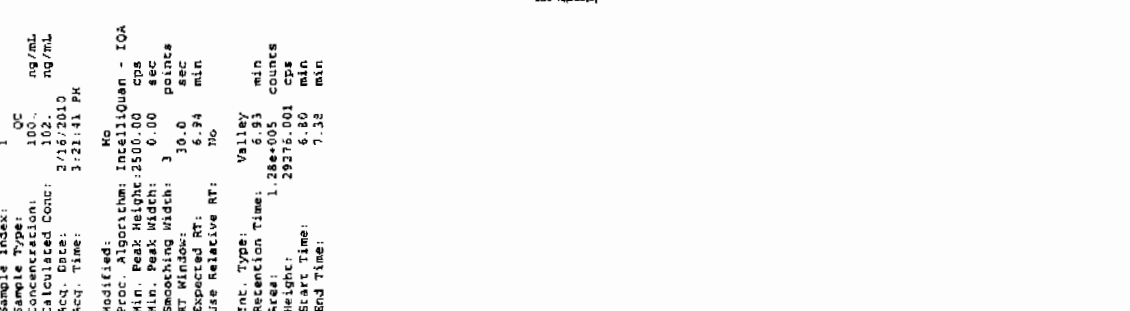
Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: "

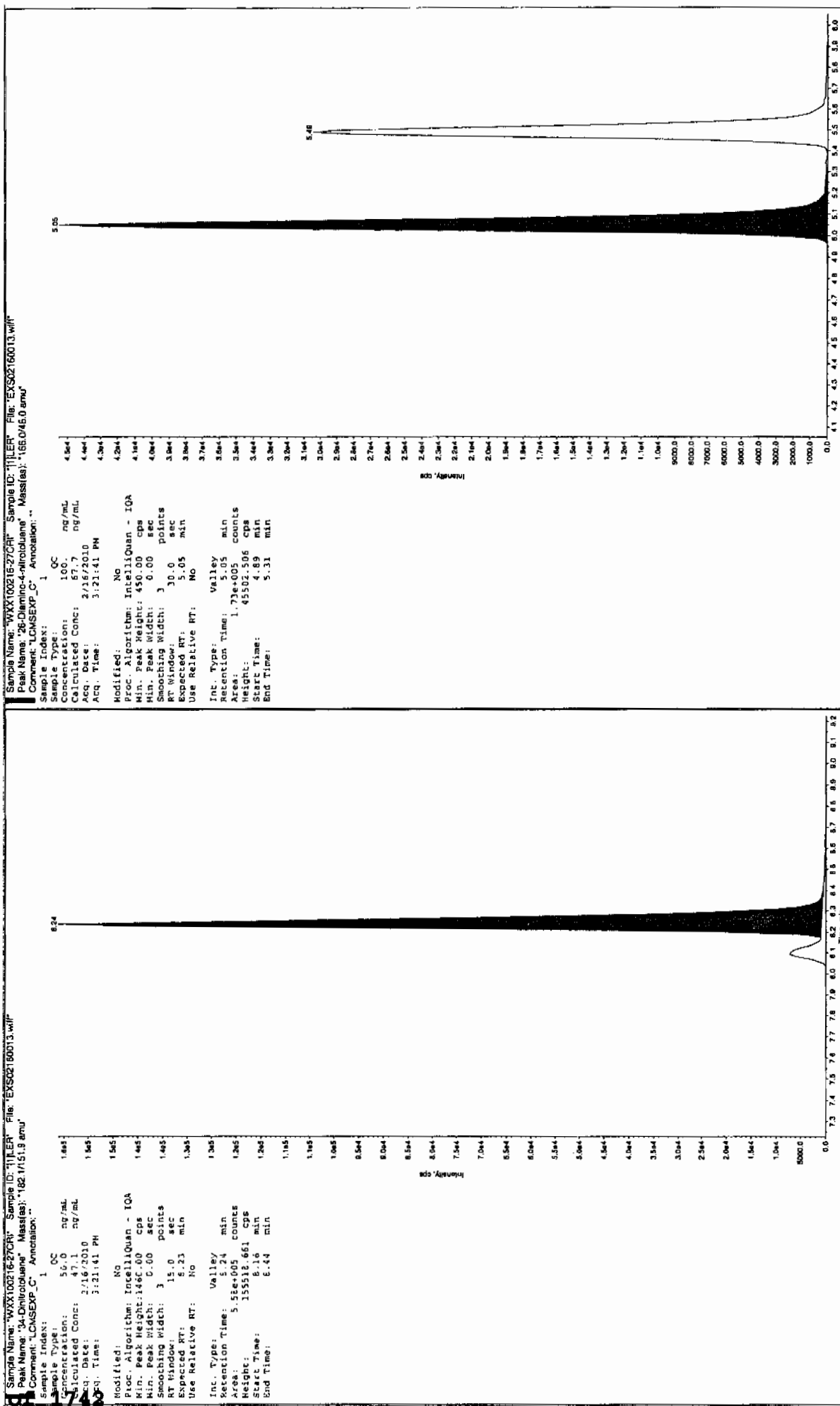
Sample Index: 1  
Sample Type: OC  
Concentration: 100. ng/mL  
Calculated Conc: 102. ng/mL  
Acq. Date: 2/16/2010  
Acq. Time: 3:21:41 PM

Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 2500.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
RT Window: 30.0 sec  
Expected RT: 6.94 min  
Use Relative RT: No

Int. Type: Valley  
Retention Time: 6.94 min  
Area: 1.28e+005 counts  
Height: 29975.001 CPS  
Start Time: 6.80 min  
End Time: 7.08 min

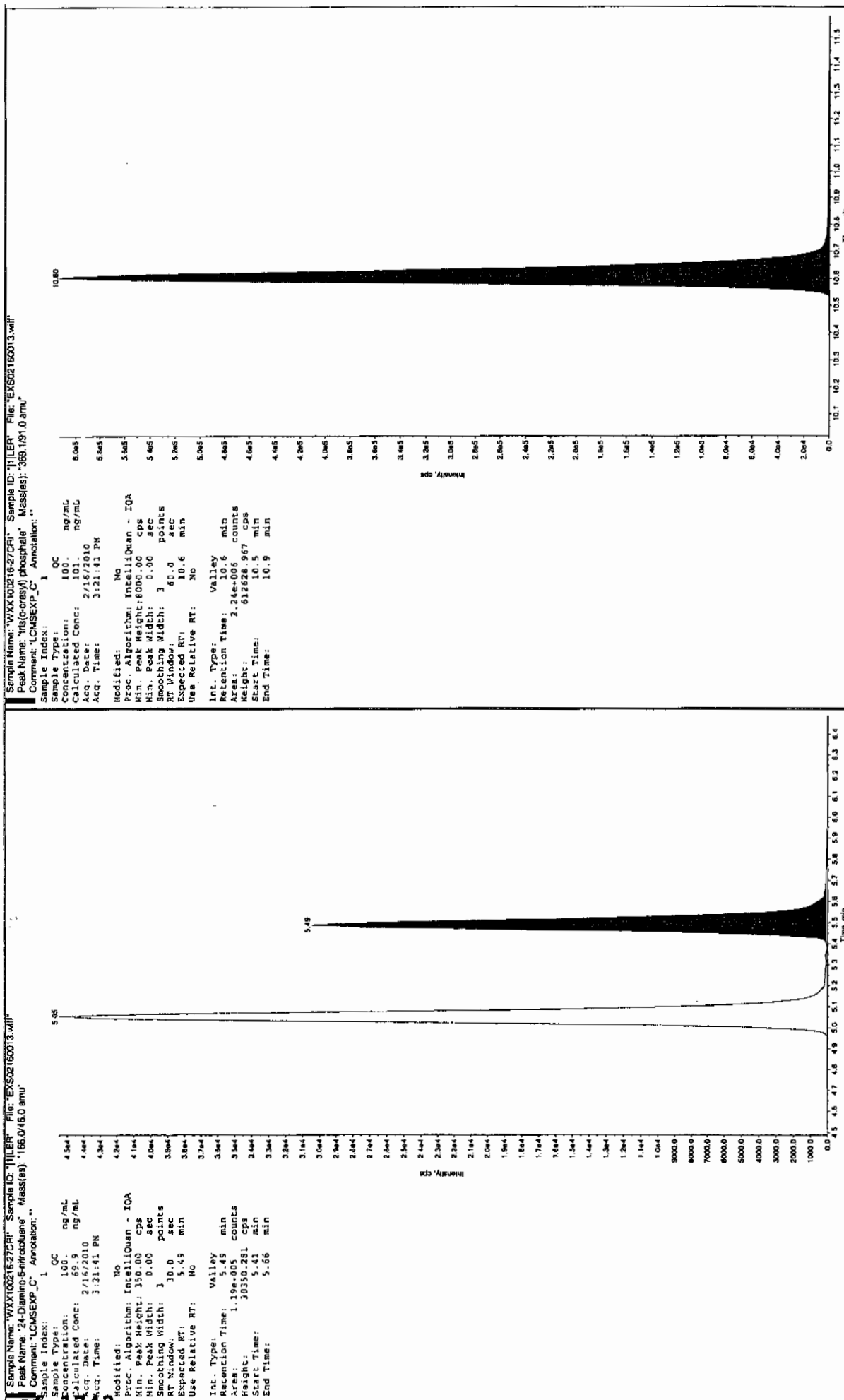


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02160024.wiff

Analysis Date: 16-FEB-10 18:14

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	479	96	
2,6-Diamino-4-nitrotoluene	500	578	116	
3,4-Dinitrotoluene	250	249	99	
3,5-Dinitroaniline	500	525	105	
TATB	500	502	100	
tris(o-cresyl) phosphate	500	507	101	

Recovery Limits:

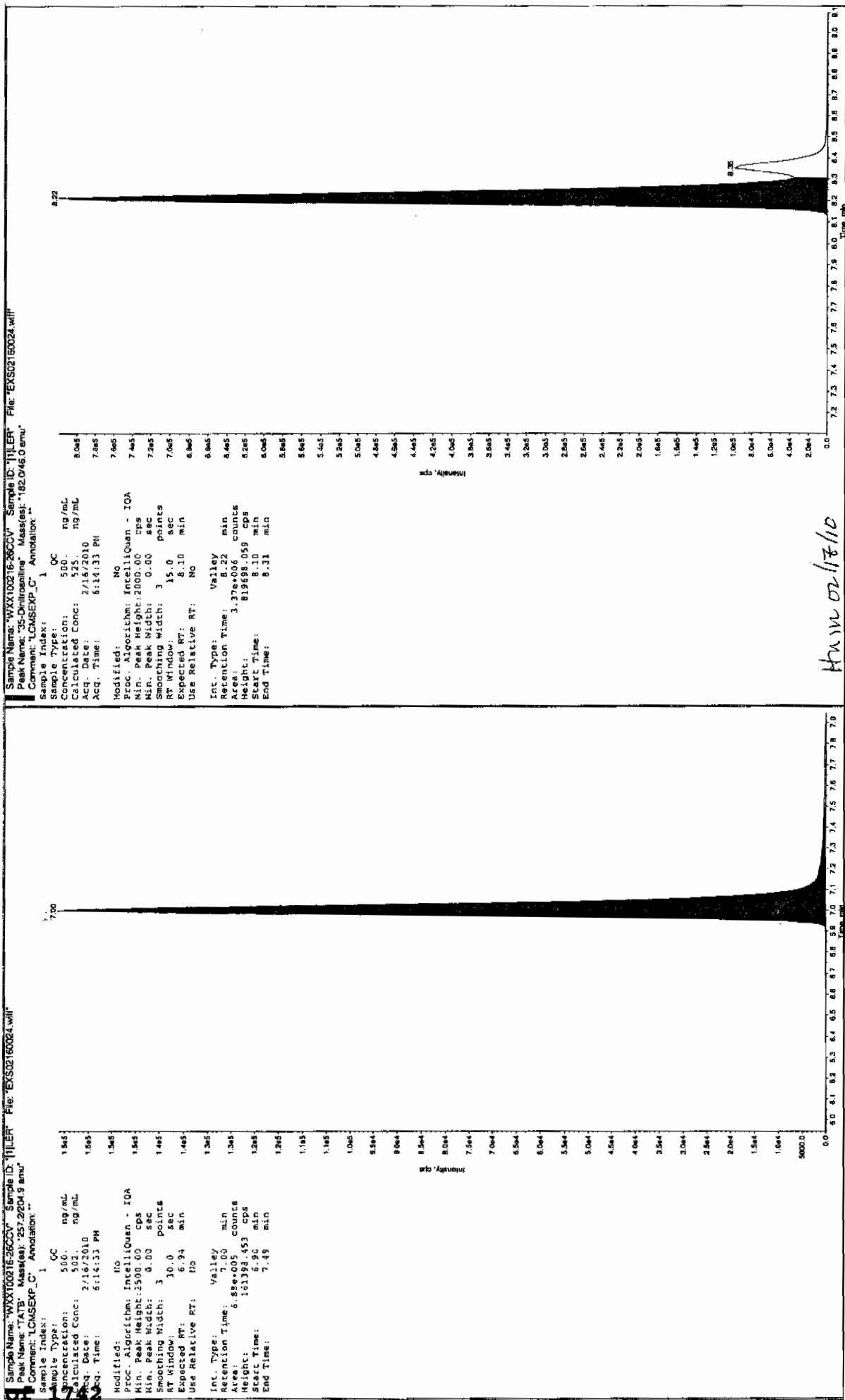
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

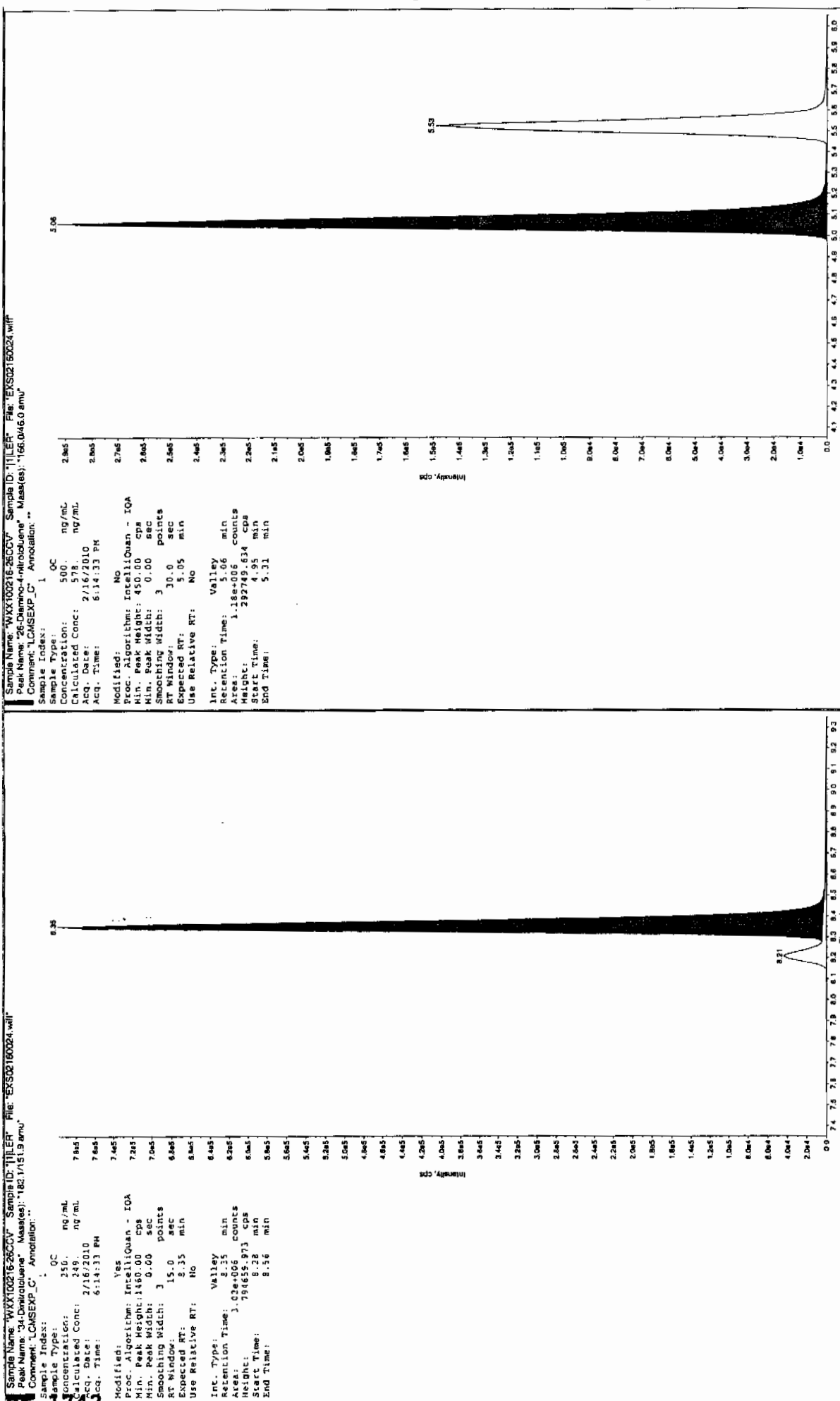
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

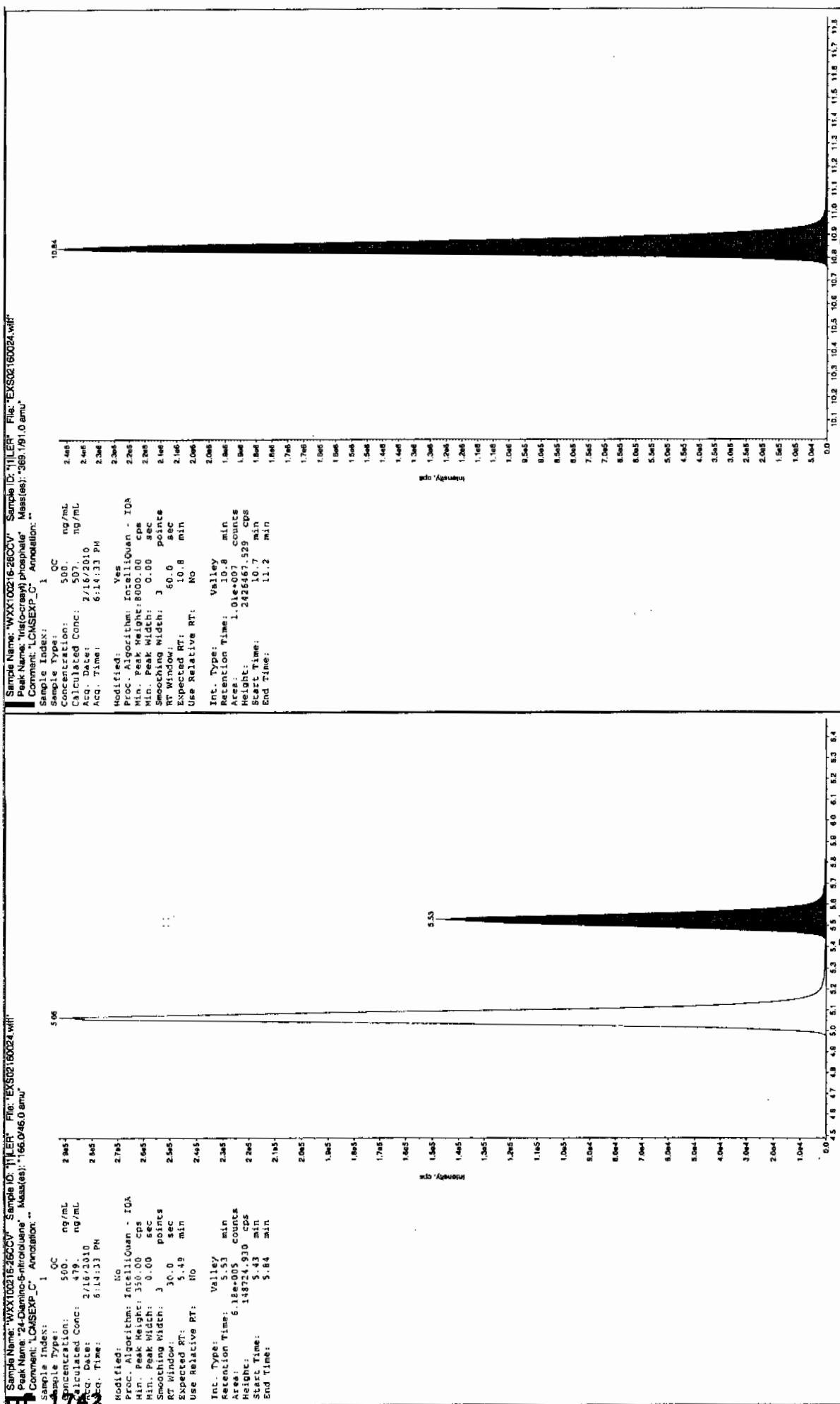
Jan 2/17/10



Jan 02/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02160026.wiff

Analysis Date: 16-FEB-10 18:46

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	76	76	
2,6-Diamino-4-nitrotoluene	100	92.6	93	
3,4-Dinitrotoluene	50	53.1	106	
3,5-Dinitroaniline	100	100	100	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

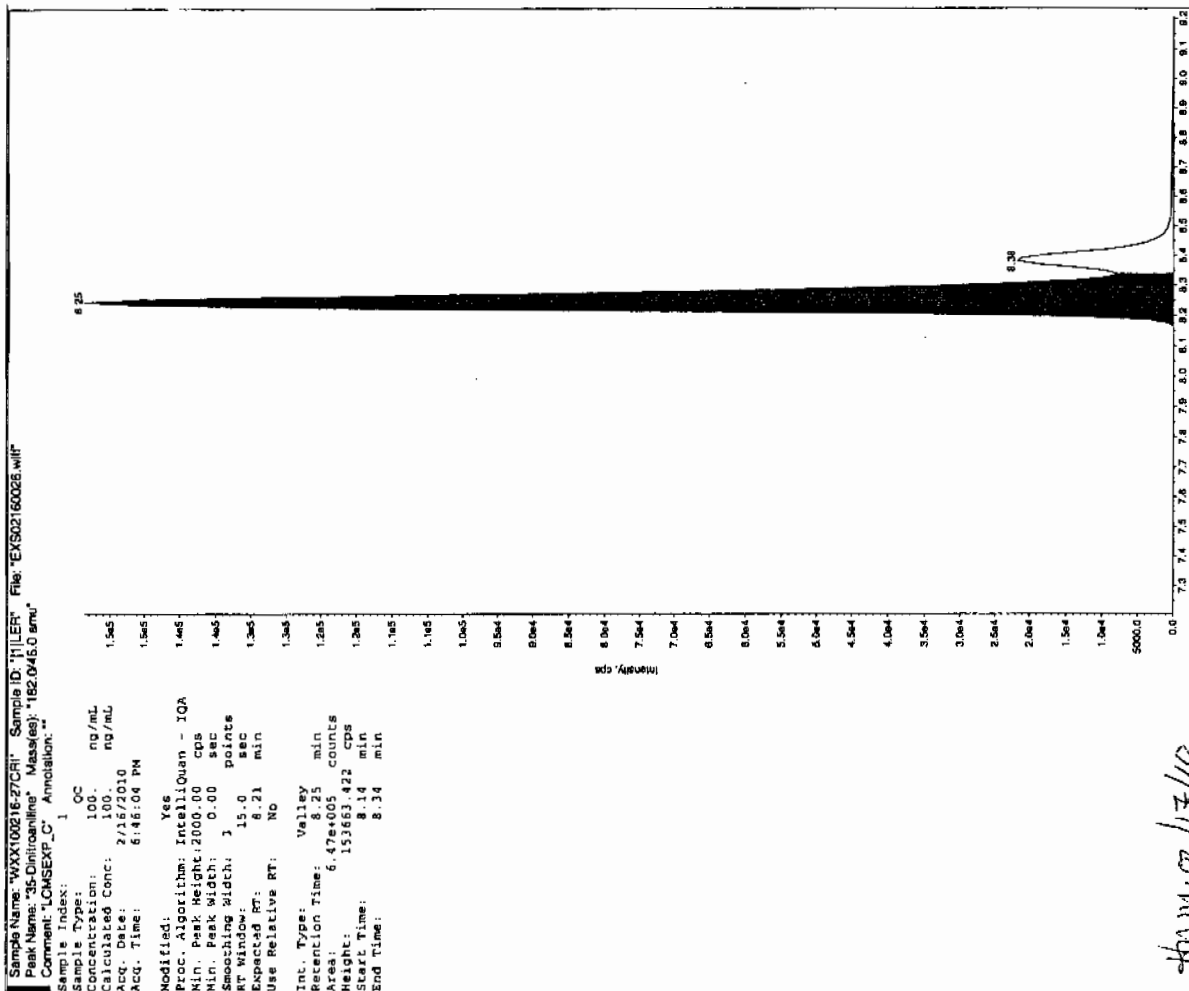
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

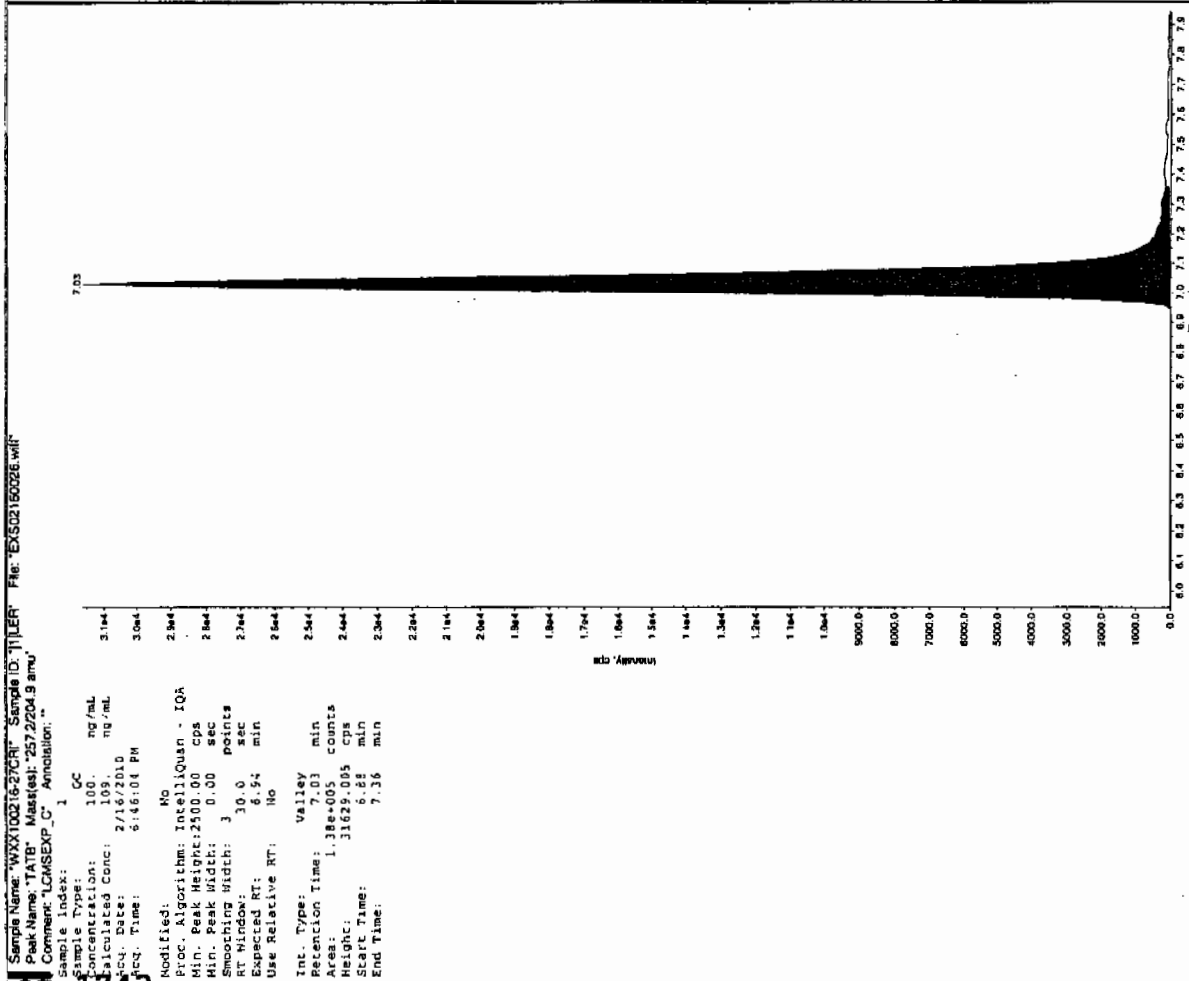
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

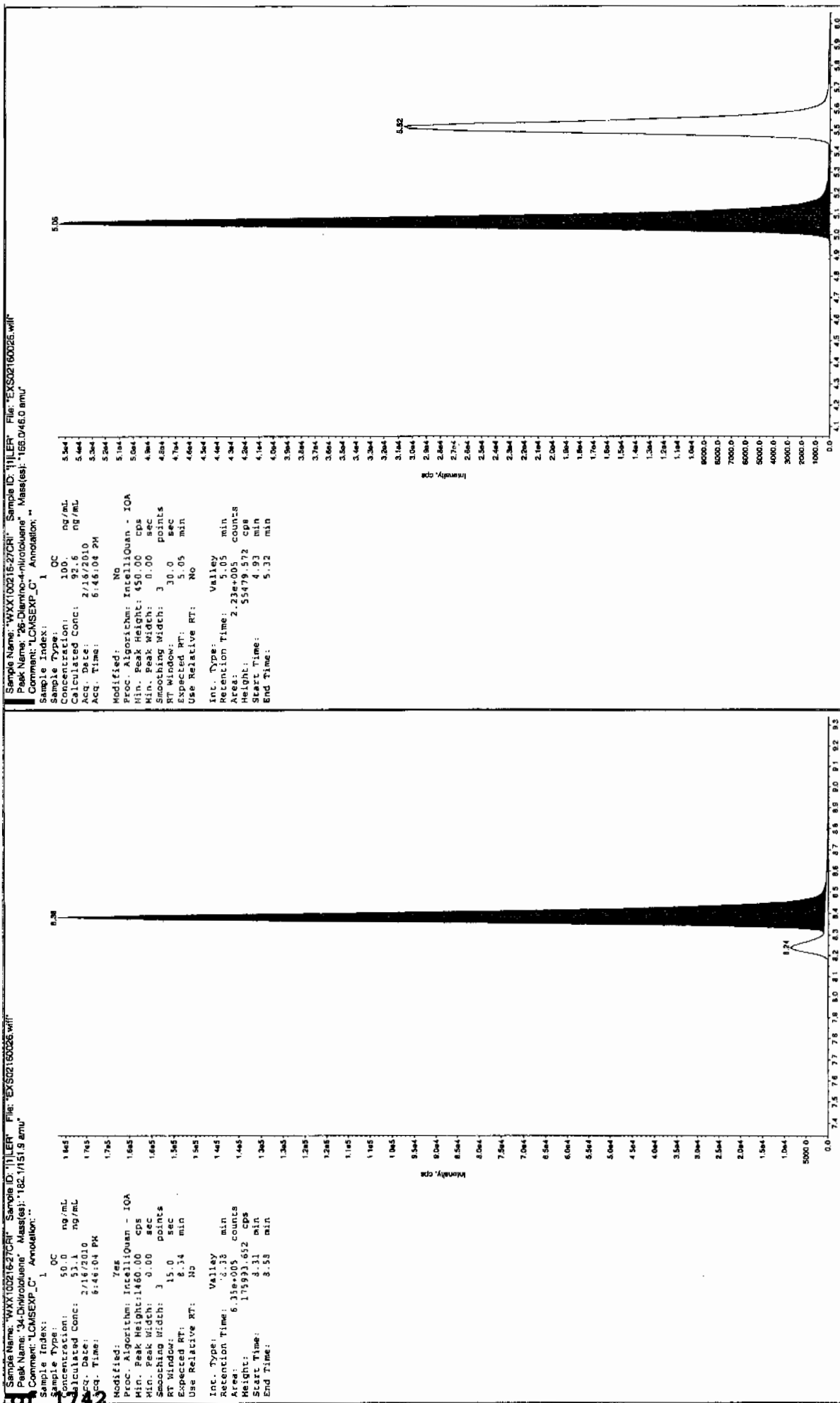
Jan 2/17/10



Jan 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4



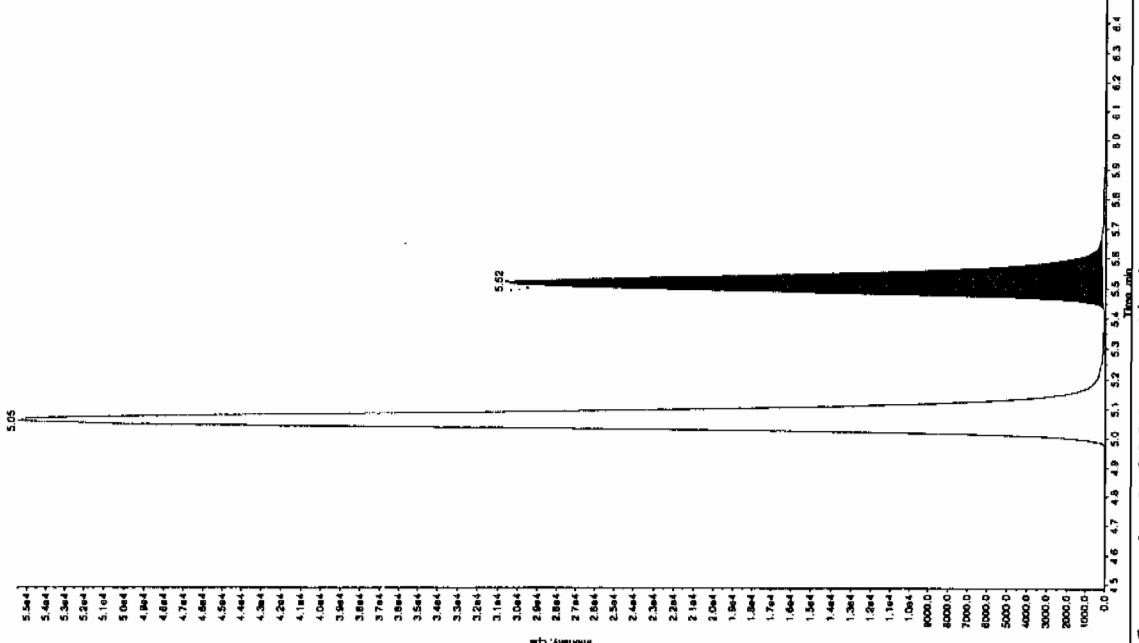
Sample Name: "WXX10015-27CR" Sample ID: "111ER" File: "EXS02150026.wit"  
 Peak Name: "24-Diamino-6-nitrobenzoic acid" Mass(es): 365.1791.0 amu  
 Comment: "LCMSERP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 6:46:04 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 2.39e+006 counts  
 Height: 564574.890 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "WXX10015-27CR" Sample ID: "111ER" File: "EXS02150026.wit"  
 Peak Name: "24-Diamino-6-nitrobenzoic acid" Mass(es): 365.1791.0 amu  
 Comment: "LCMSERP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 76.0 ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 6:46:04 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.52 min  
 Area: 1.27e+005 counts  
 Height: 30474.638 cps  
 Start Time: 5.44 min  
 End Time: 5.66 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02160036.wiff

Analysis Date: 16-FEB-10 21:23

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	535	107	
2,6-Diamino-4-nitrotoluene	500	536	107	
3,4-Dinitrotoluene	250	263	105	
3,5-Dinitroaniline	500	553	111	
TATB	500	553	111	
tris(o-cresyl) phosphate	500	544	109	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

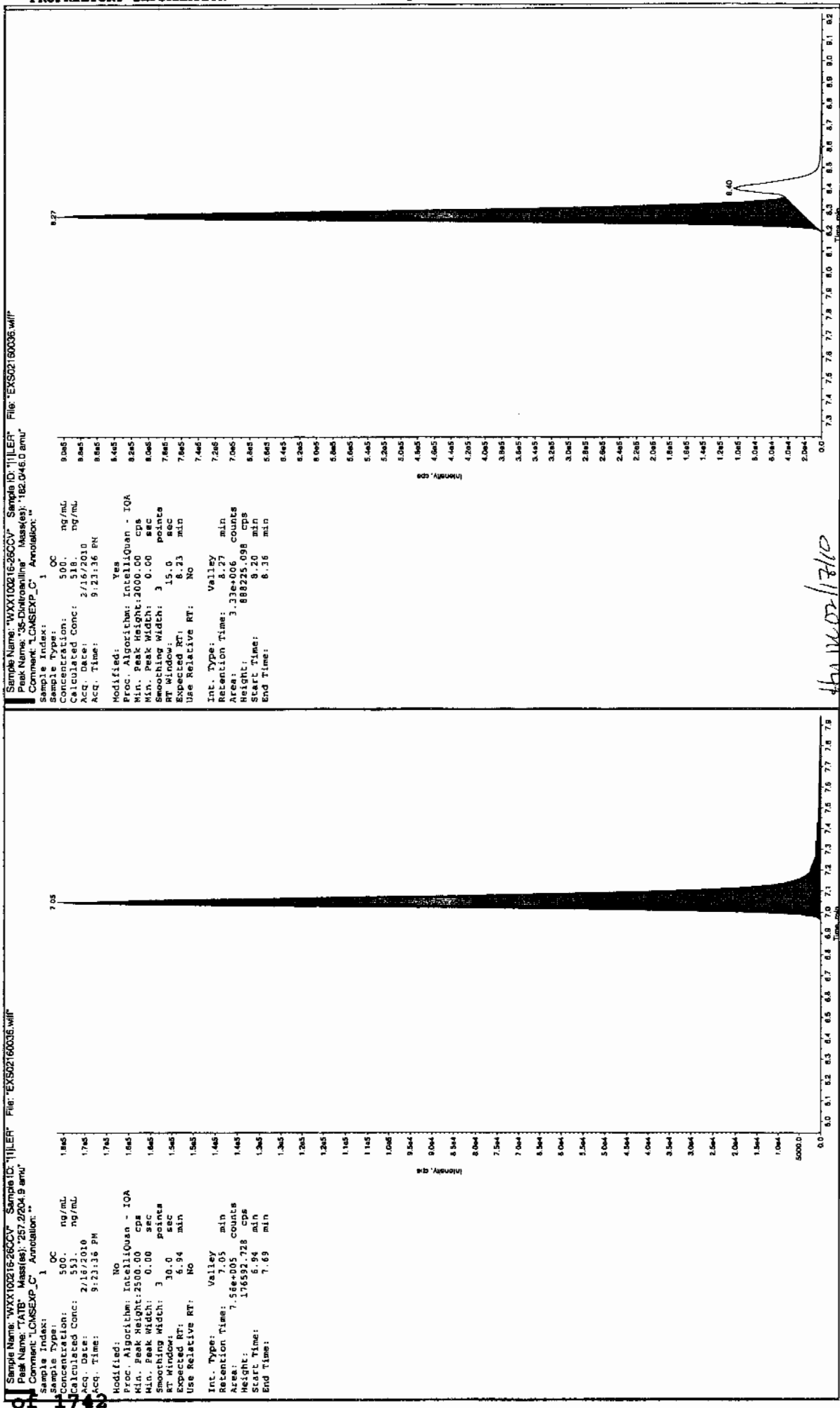
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

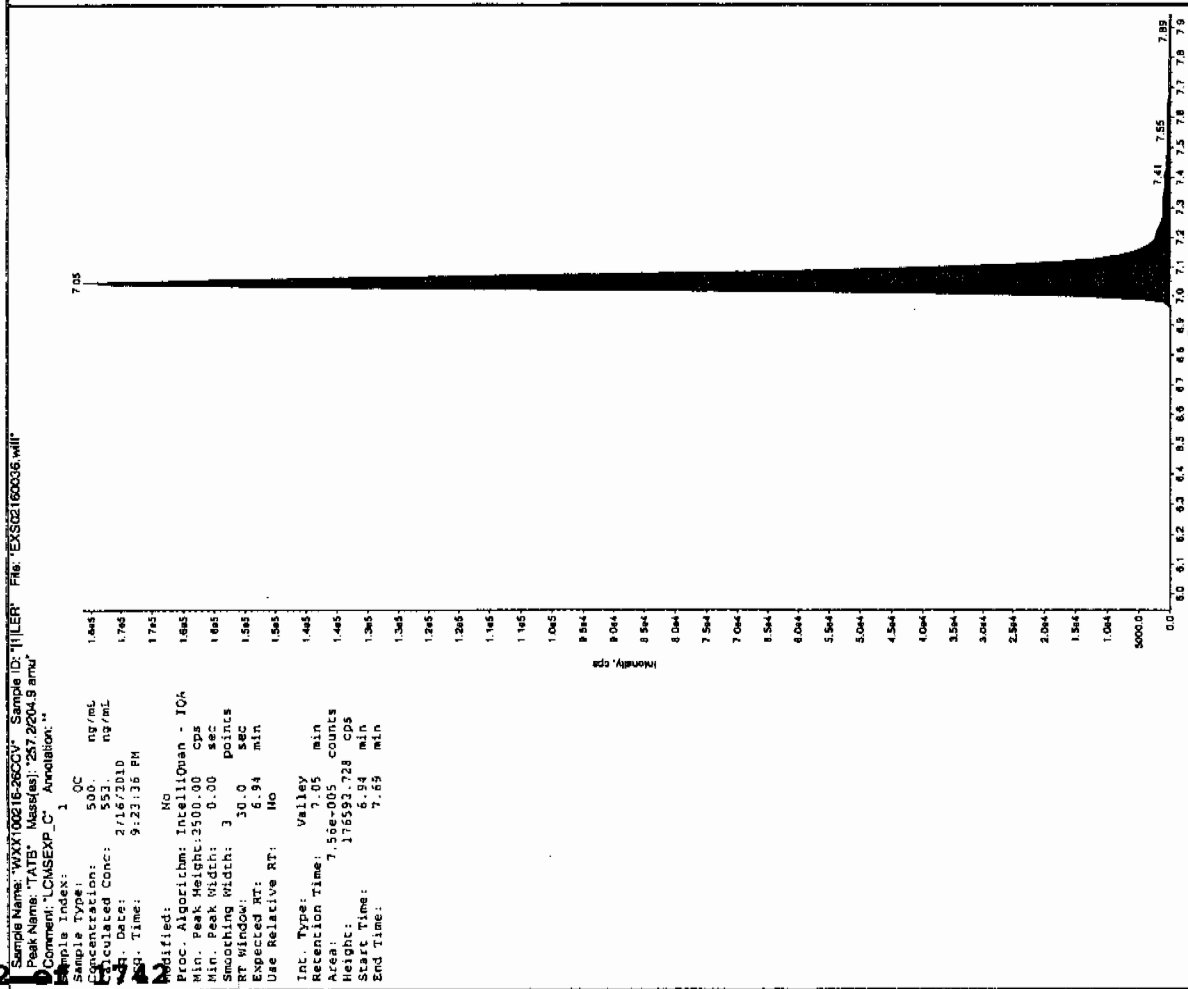
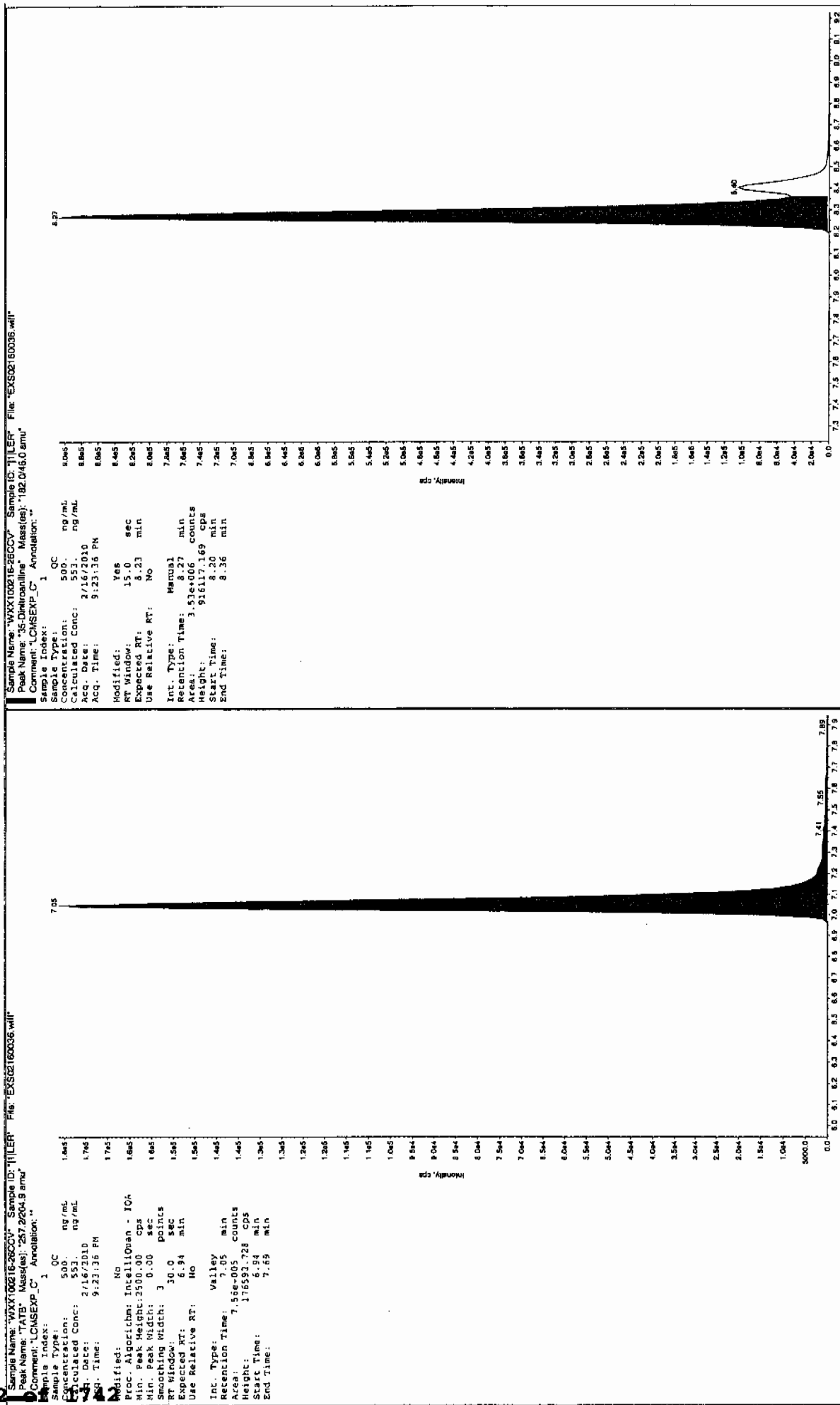
\* Value outside of Recovery Limits

Before Jan 21/10

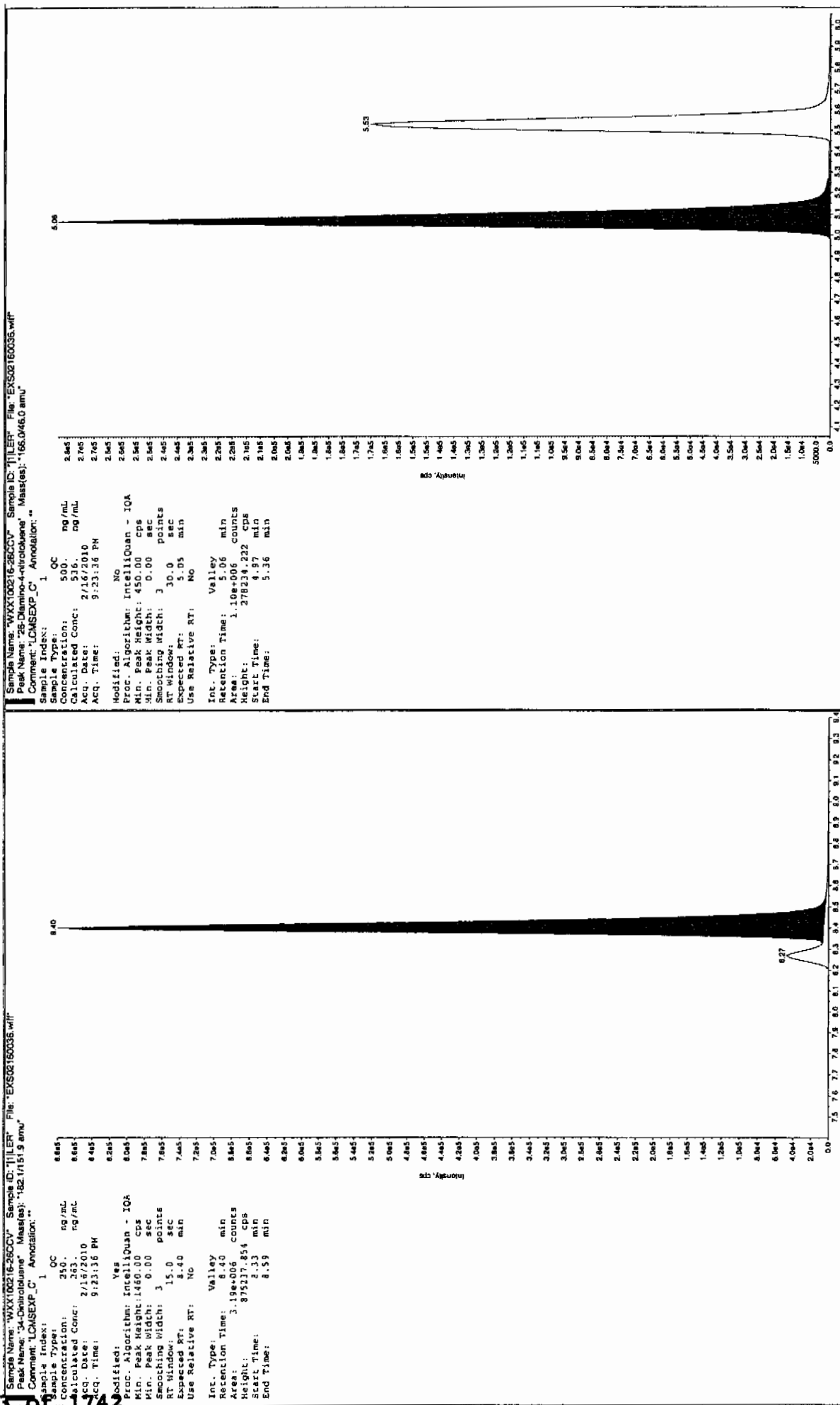


After Jan 21/10

after Jan 2/17/10

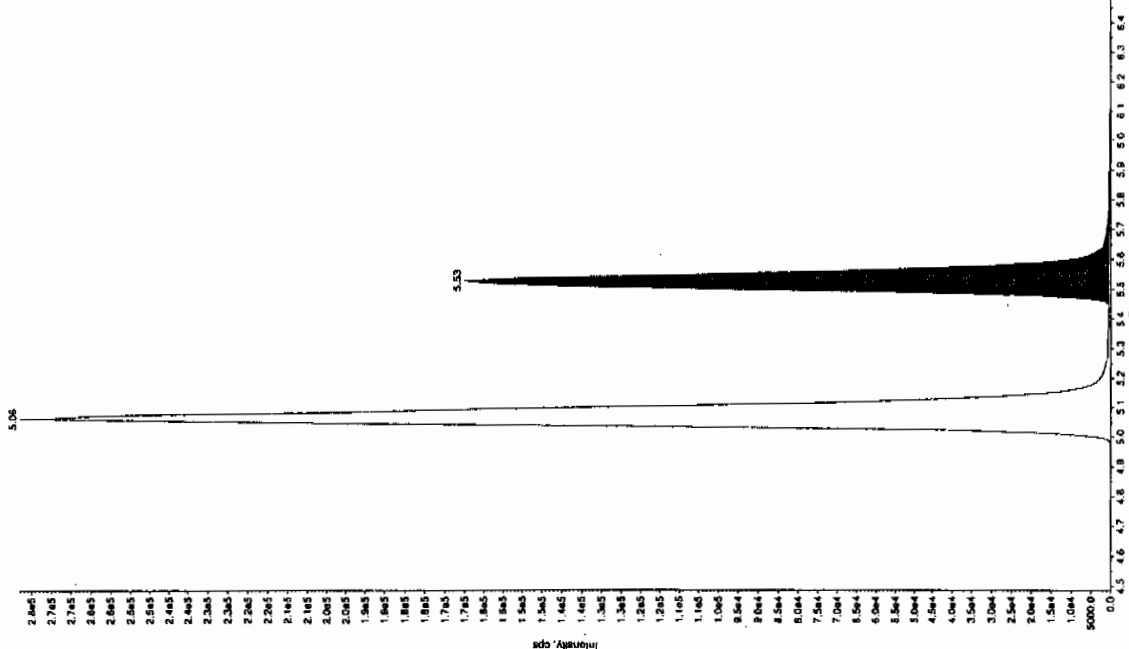


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "WXX10216-280CV" Sample ID: "111EP" File: "EVS02160036.wif"  
 Peak Name: "166.046.0 amu" Mass(es): "166.046.0 amu"  
 Comment: "CONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 544. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 9:23:36 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Acq. Counts: 1.08e+007 counts  
 Height: 2528285.645 CPS  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "WXX10216-280CV" Sample ID: "111EP" File: "EVS02160036.wif"  
 Peak Name: "166.046.0 amu" Mass(es): "166.046.0 amu"  
 Comment: "CONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 535. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 9:23:36 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.45 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.45 min  
 Acq. Counts: 8.87e+005 counts  
 Height: 164672.363 CPS  
 Start Time: 5.45 min  
 End Time: 5.85 min

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02160038.wiff

Analysis Date: 16-FEB-10 21:55

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	110	110	
TATB	100	120	120	
tris(o-cresyl) phosphate	100	108	108	
2,4-Diamino-6-nitrotoluene	100	69.8	70	
2,6-Diamino-4-nitrotoluene	100	91.6	92	
3,4-Dinitrotoluene	50	52	104	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

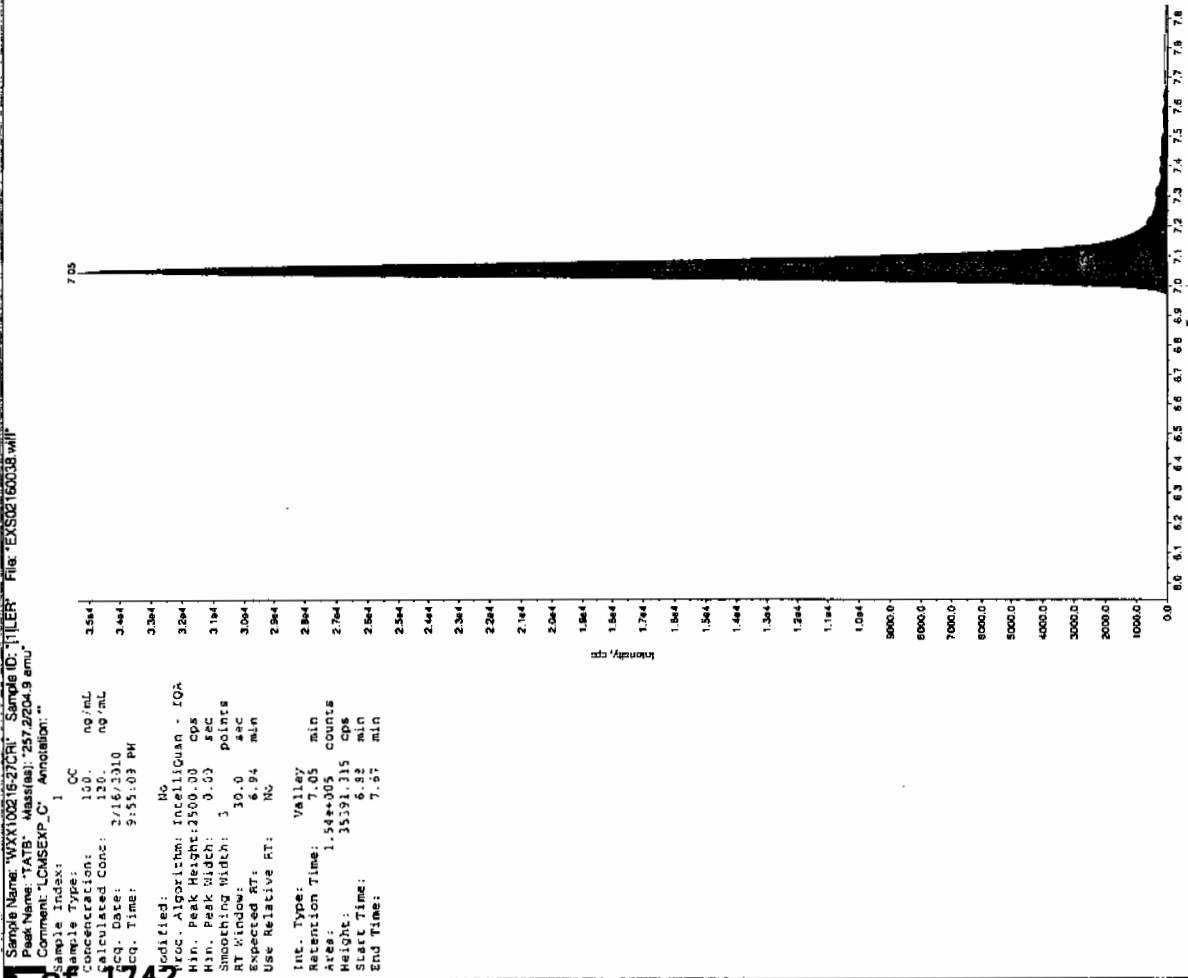
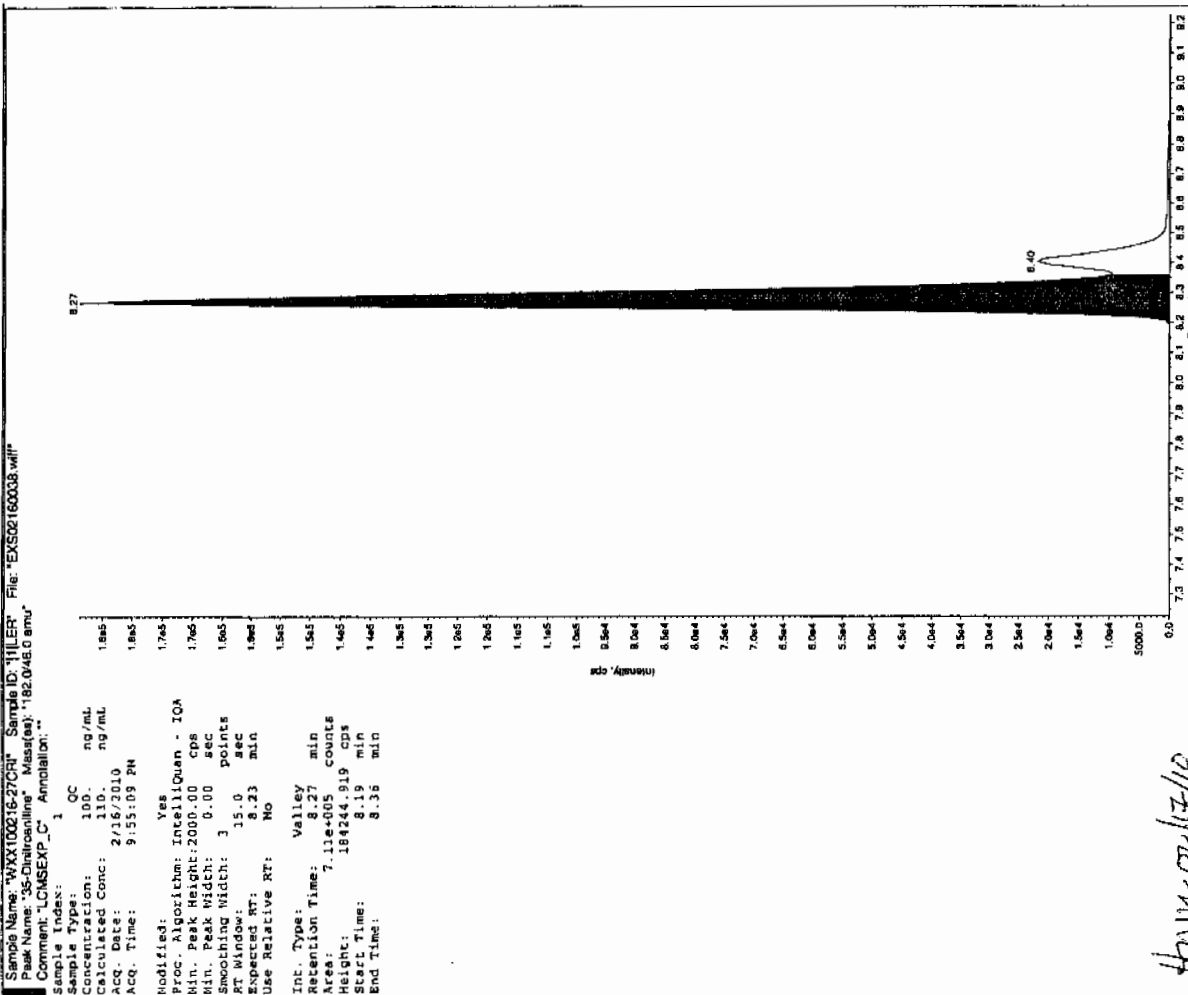
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

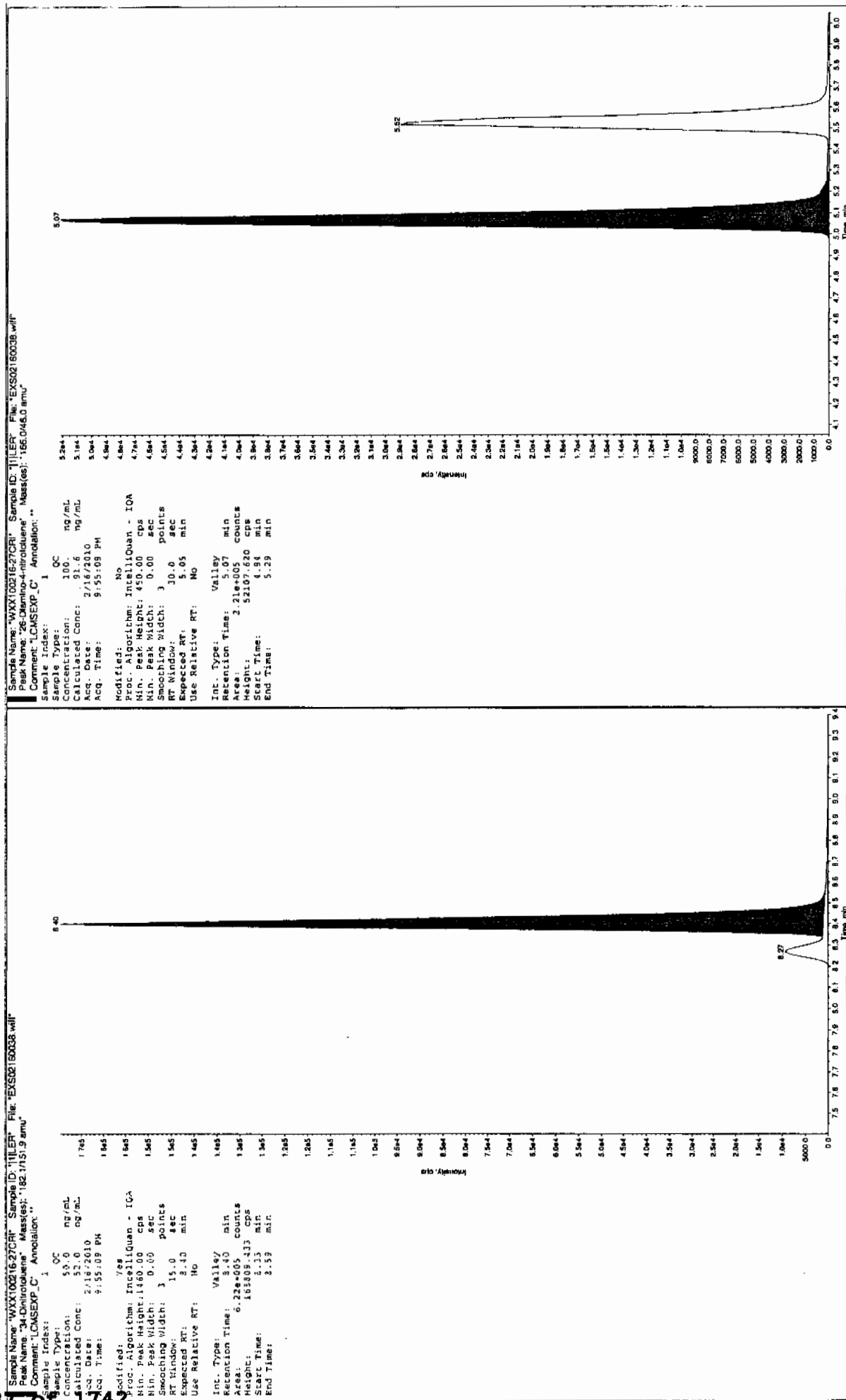
\* Value outside of Recovery Limits

Jan 21/7/10

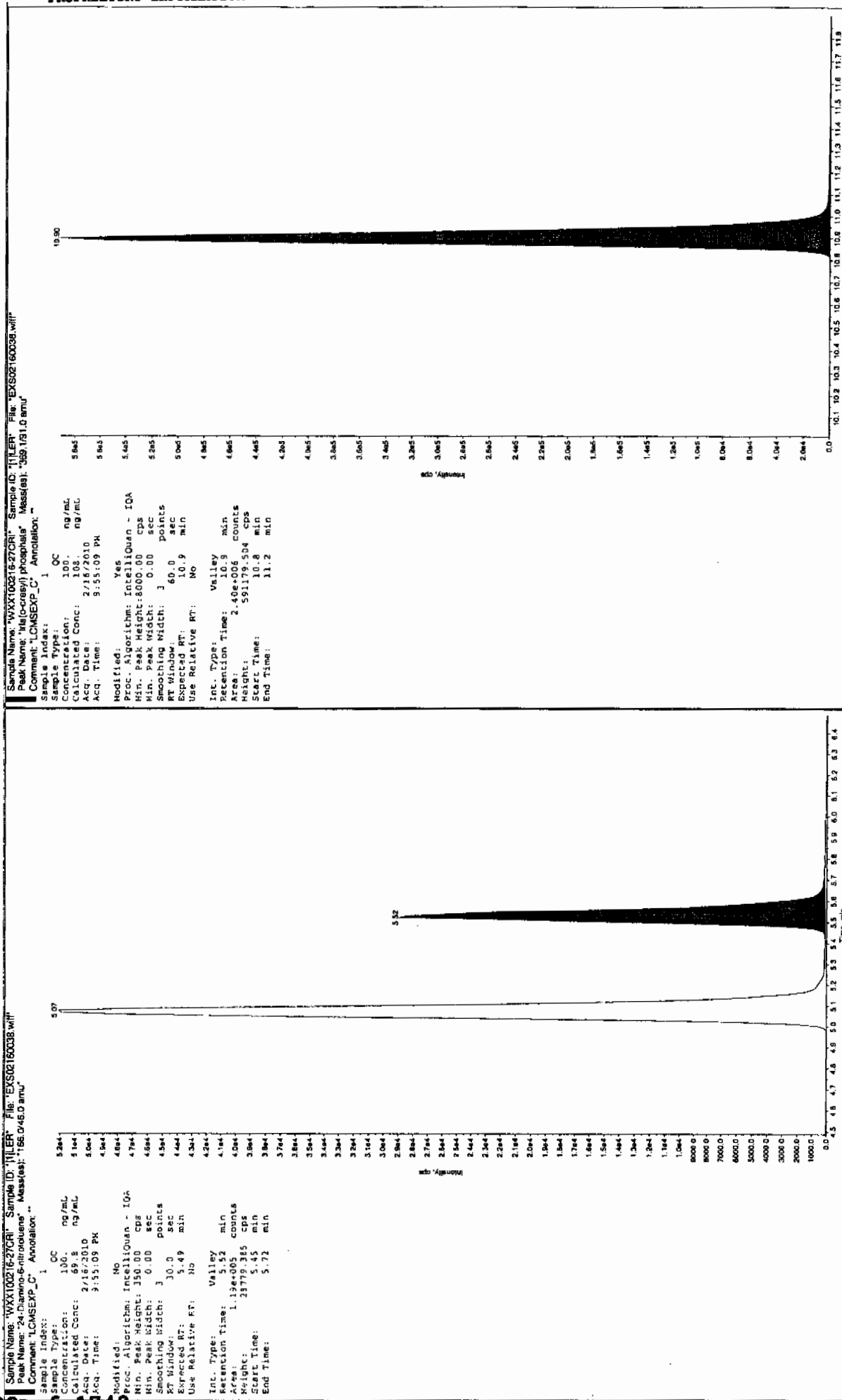


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSENS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02160049.wiff

Analysis Date: 17-FEB-10 00:47

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	434	87	
2,6-Diamino-4-nitrotoluene	500	557	111	
3,4-Dinitrotoluene	250	263	105	
3,5-Dinitroaniline	500	517	103	
TATB	500	573	115	
tris(o-cresyl) phosphate	500	552	110	

Recovery Limits:

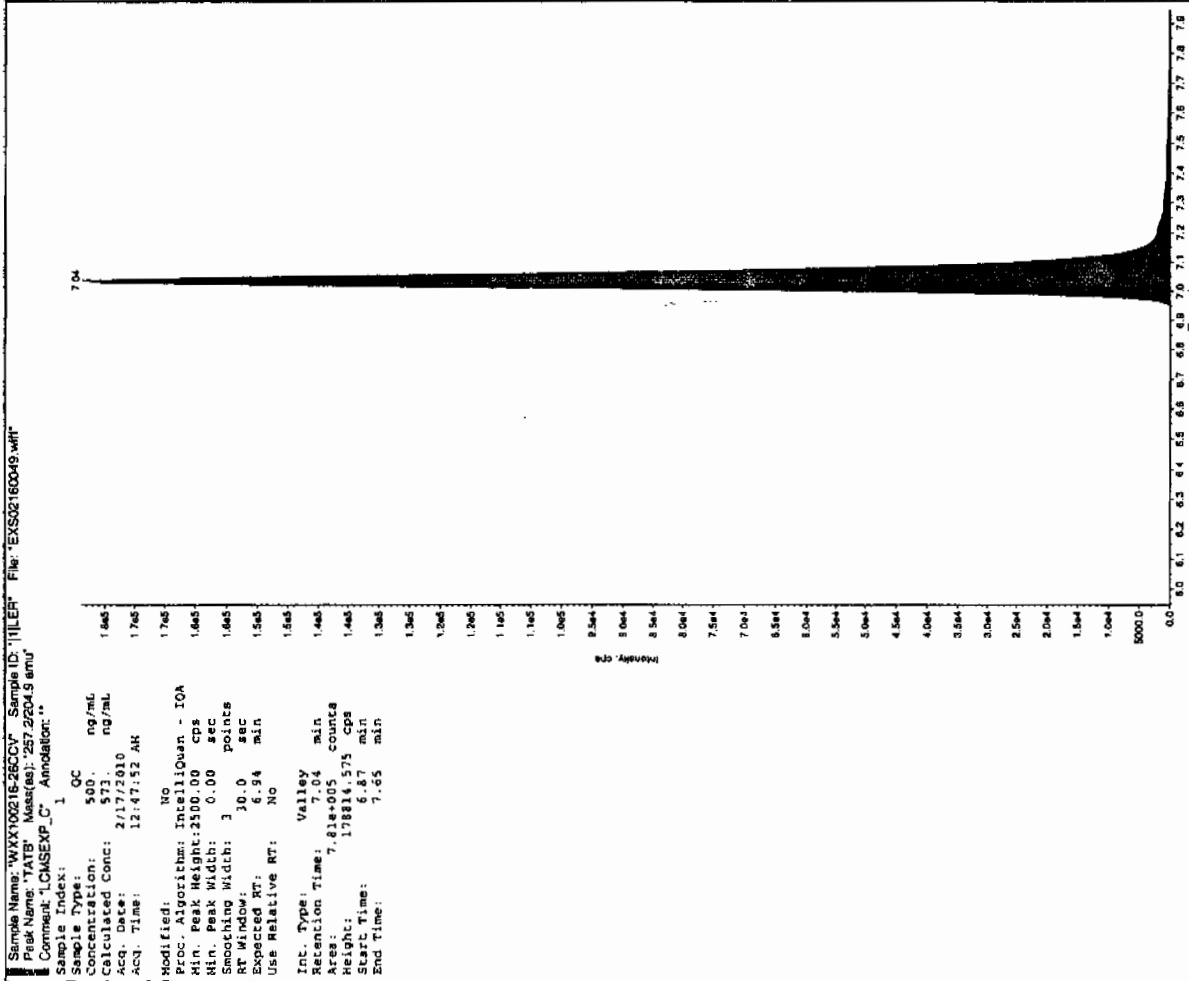
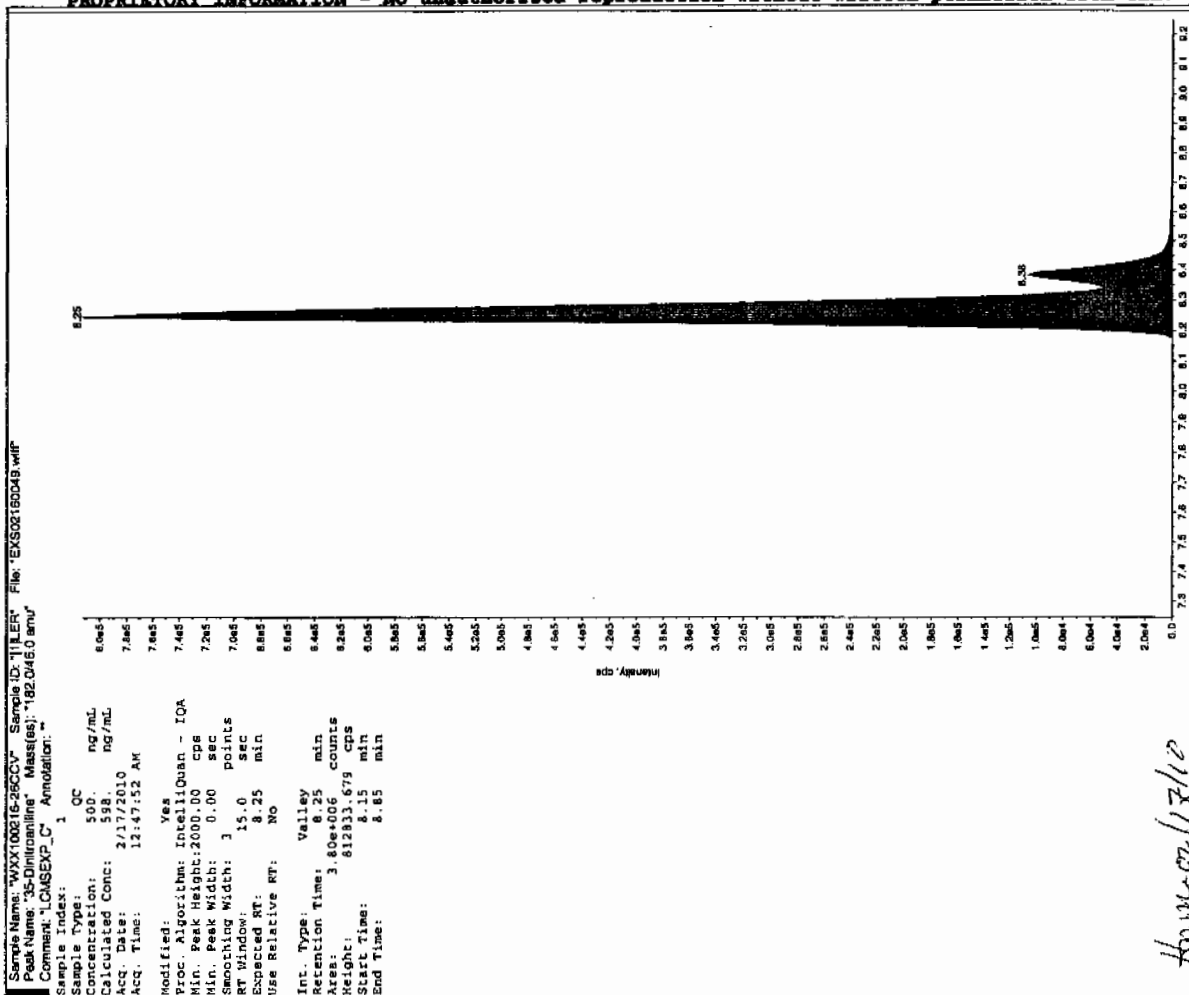
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

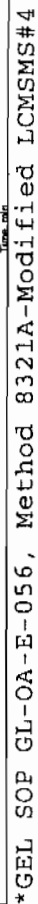
# Column used to flag Recovery outside of Limits

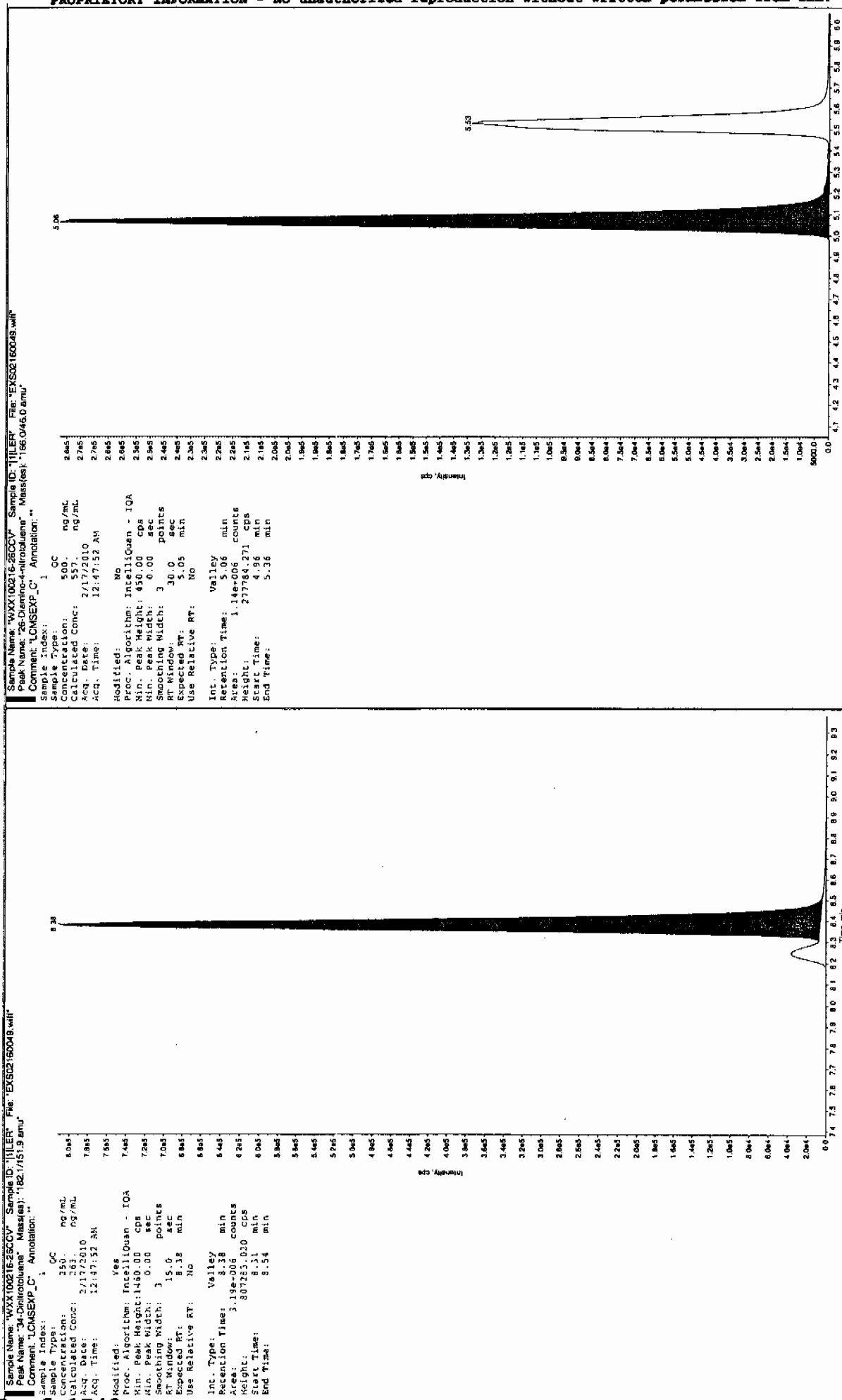
\* Value outside of Recovery Limits

Before Jan 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

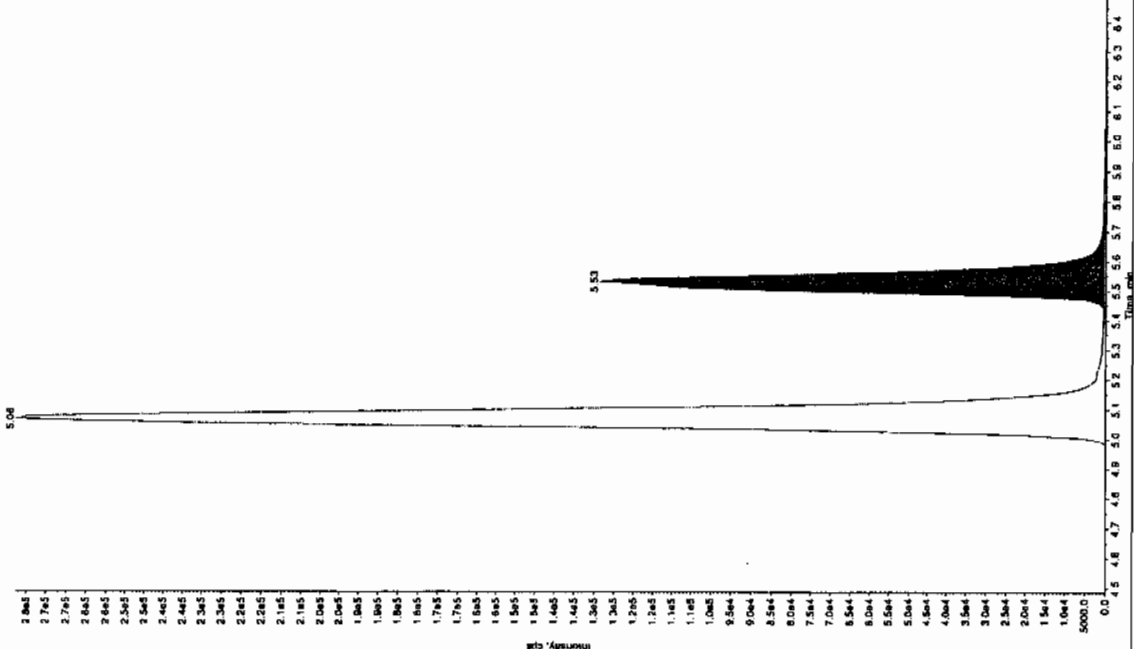




\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: WXX10216-2600V Sample ID: 111ER File: EXS02160049.wif  
 Peak Name: Tris(2-chlorophenyl) phosphite<sup>1</sup> Mass(es): 365.191.0 amu  
 Comment: LONSEXP\_C Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 552 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 12:47:52 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.09e+007 counts  
 Height: 2545280.275 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



Sample Name: WXX10216-2600V Sample ID: 111ER File: EXS02160049.wif  
 Peak Name: 24-Diamino-5-norbornene<sup>1</sup> Mass(es): 158.046.0 amu  
 Comment: LONSEXP\_C Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 434 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 12:47:52 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.53 min  
 Area: 5.43e+005 counts  
 Height: 128093.499 cps  
 Start Time: 5.43 min  
 End Time: 5.80 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1665

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02160051.wiff

Analysis Date: 17-FEB-10 01:19

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	63.3	63	
2,6-Diamino-4-nitrotoluene	100	82	82	
3,4-Dinitrotoluene	50	54.8	110	
3,5-Dinitroaniline	100	99	99	
TATB	100	116	116	
tris(o-cresyl) phosphate	100	110	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

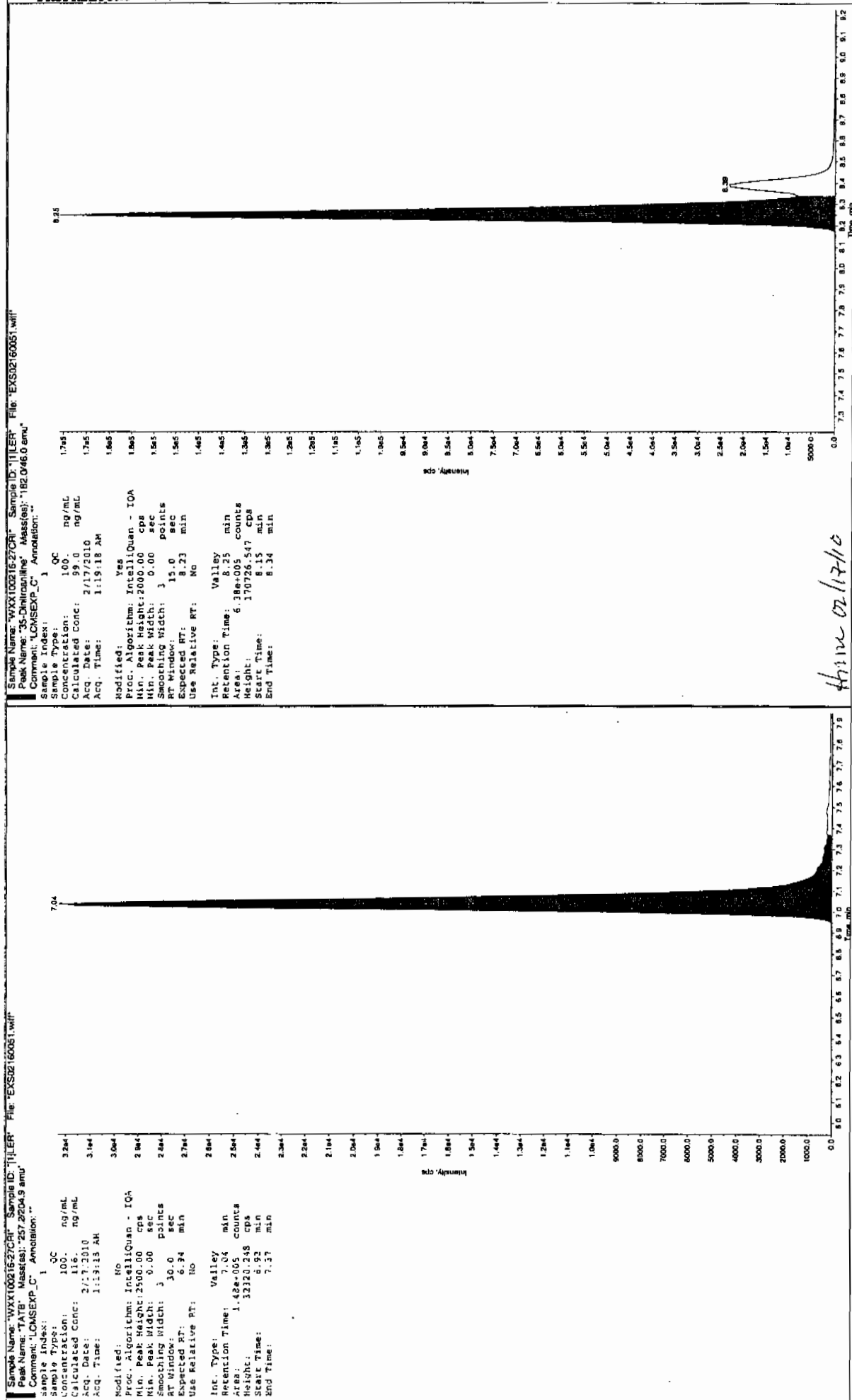
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

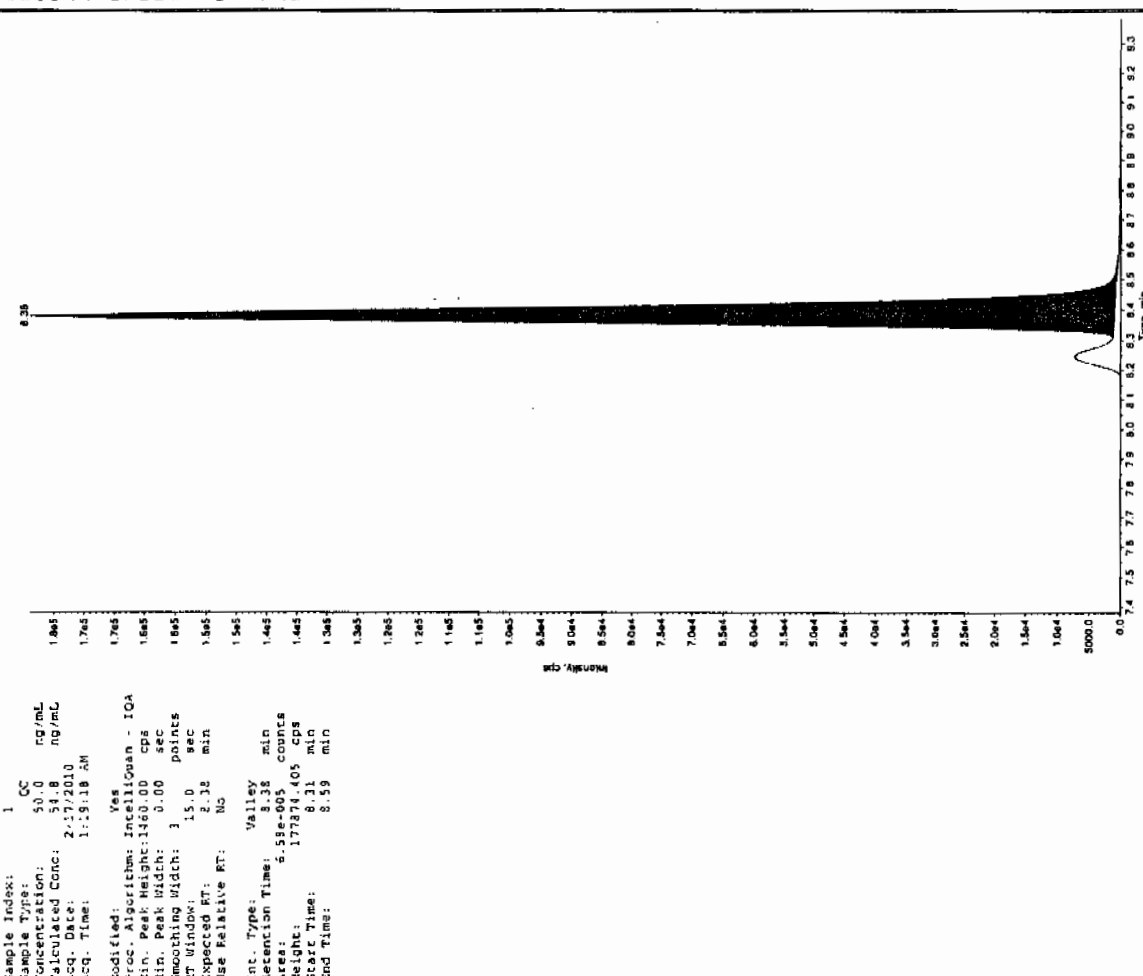
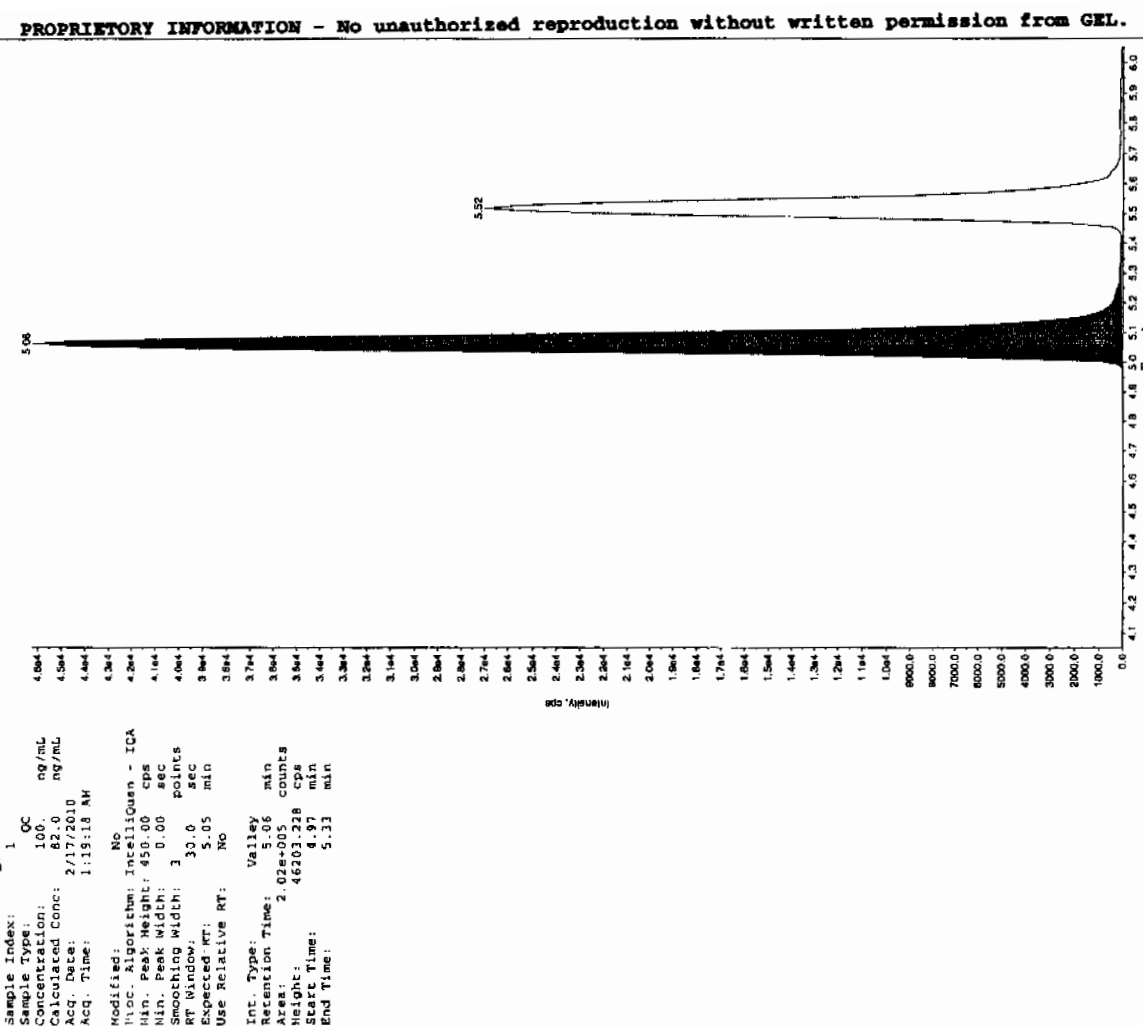


01/11/10  
Jung



Time 02/17/10

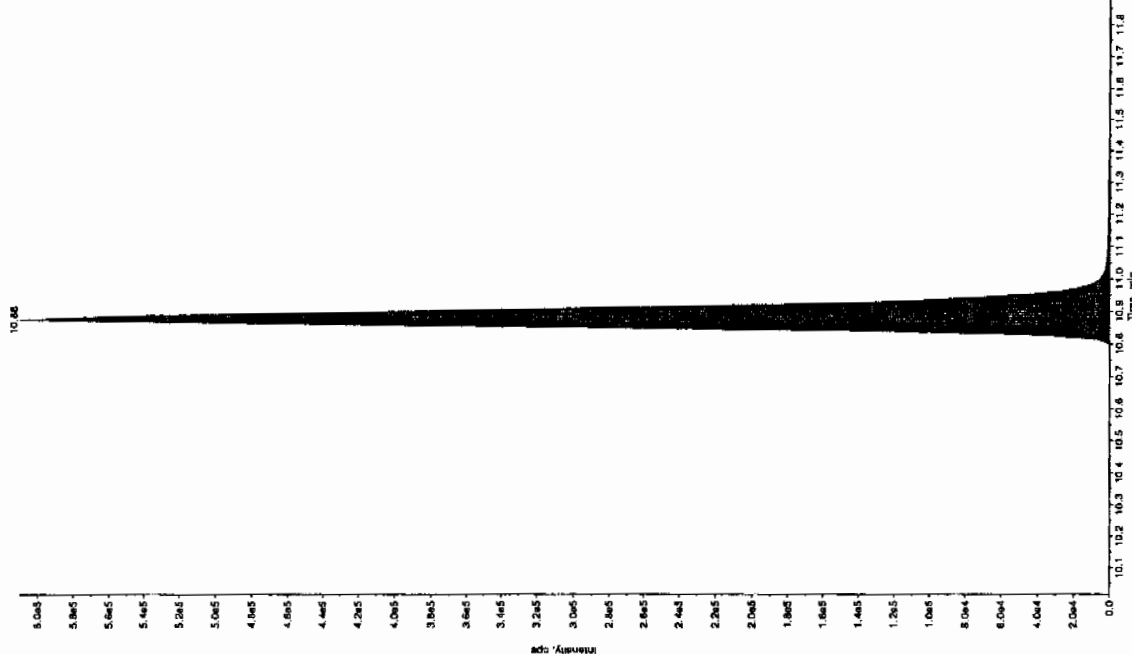
Sample Name: "WXX1021627091" Sample ID: "111ER" File: "EXS02160051.wif"  
 Peak Name: "34-Dechlorobenzene" Mass(es): "182.146.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "



Sample Name: "WXX1021627091" Sample ID: "111ER" File: "EXS02160051.wif"  
 Peak Name: "34-Dechlorobenzene" Mass(es): "182.146.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

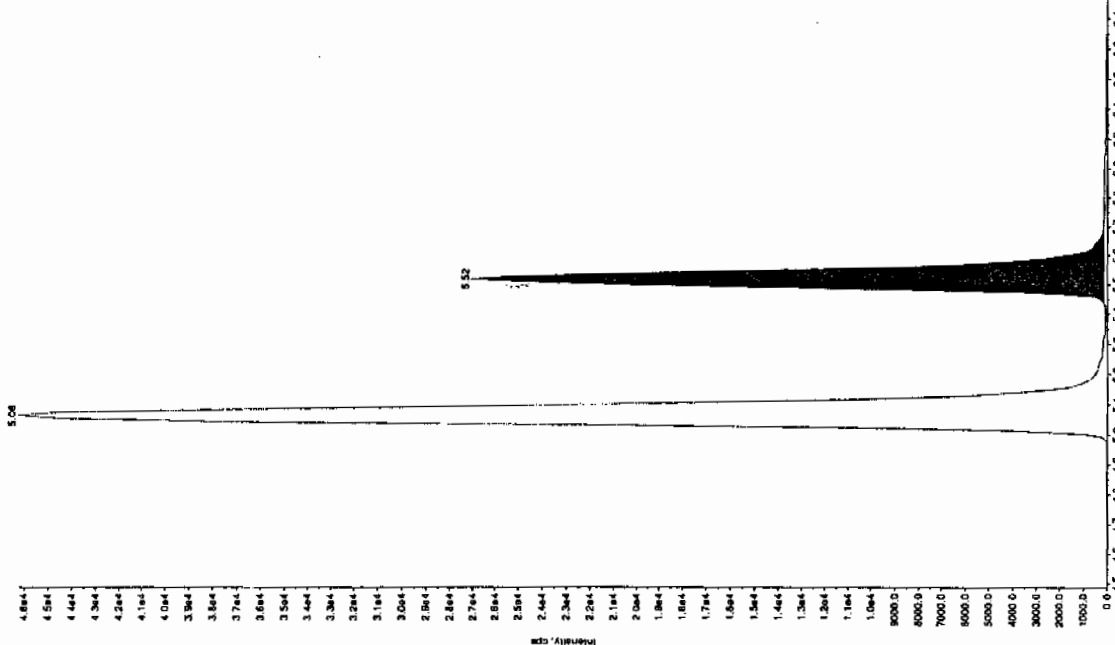
Sample Name: WXX100216-27CRP Sample ID: TILER File: EX502160051.wif  
 Peak Name: "radio-cresyl phosphate" Mass(es): 369.1791.0 amu  
 Comment: LCMSEXP\_C Annotated:

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 110 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 1:19:18 AM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 2.42e+006 counts  
 Height: 609750.183 cps  
 Start Time: 10.5 min  
 End Time: 11.2 min



Sample Name: WXX100216-27CRP Sample ID: TILER File: EX502160051.wif  
 Peak Name: "24-Chloro-6-methoxy" Mass(es): 166.046.0 amu  
 Comment: LCMSEXP\_C Annotated:

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 61.3 ng/mL  
 Acq. Date: 2/17/2010  
 Acq. Time: 1:19:12 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.32 min  
 Area: 1.11e+005 counts  
 Height: 3893.461 cps  
 Start Time: 5.26 min  
 End Time: 5.69 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

# QUALITY CONTROL DATA

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 951347

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038769

Sample Amount 2

Moisture:

Amount Units g

Date Received: 10-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216042a

Date Analyzed: 17-FEB-10 13:23

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216042a

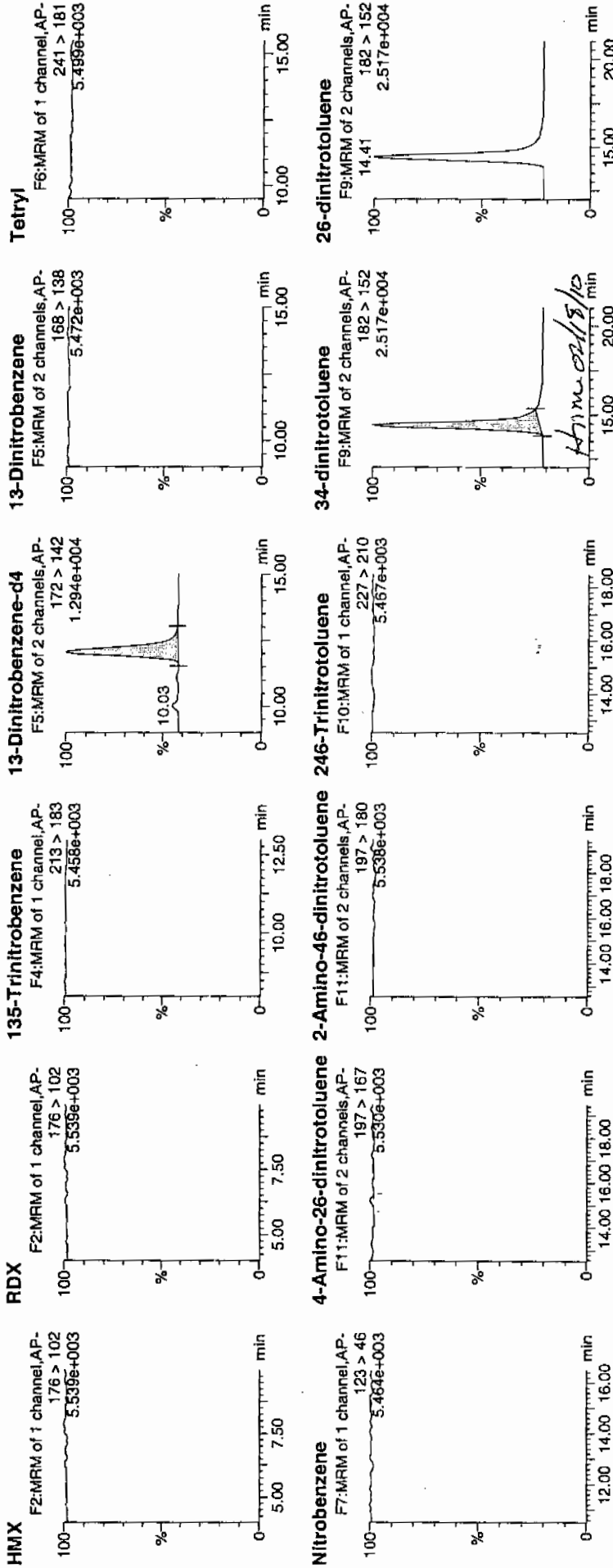
Date: 17-Feb-2010

Time: 13:23:57

ID: 1202038769

Vial: 2:1,A

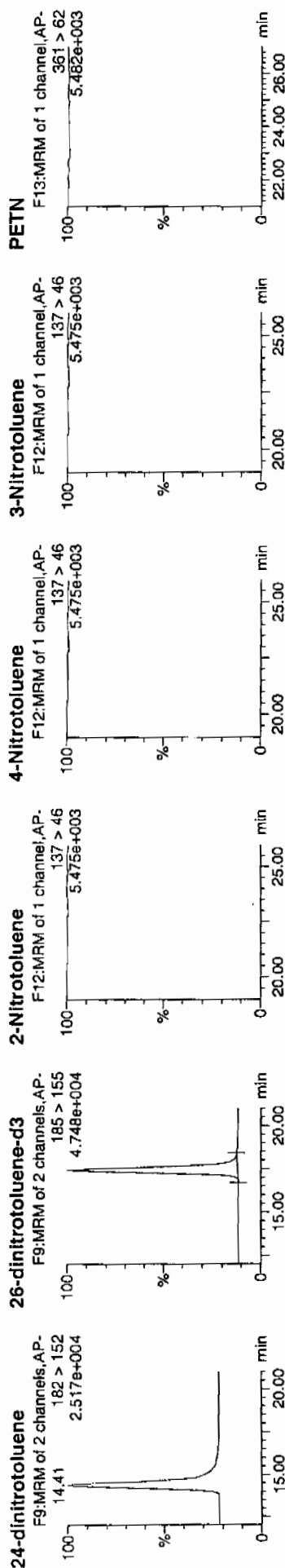
2/18/10  
1213/21  
951349



Printed: Thu Feb 18 08:53:51 2010, Page 26 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	SSN
1202038769	HMX	176 > 102		3060.293									
1202038769	RDX	176 > 102		3060.293									
1202038769	135-Trinitrobenzene	213 > 183		3060.293									
1202038769	13-Dinitrobenzene-d4	172 > 142	12.06	3060.293		3060.293	3060.293	bb		507.9466	101.6	1.6	211.0
1202038769	13-Dinitrobenzene	168 > 138		3060.293									
1202038769	Tetryl	241 > 181		3060.293									
1202038769	Nitrobenzene	123 > 46		3060.293									
1202038769	4-Amino-26-dinitrotoluene	197 > 167		16752.256					MM- 18-Feb-10 08:44:38				
1202038769	2-Amino-46-dinitrotoluene	197 > 180		16752.256									
1202038769	246-Trinitrotoluene	227 > 210		16752.256									
1202038769	34-dinitrotoluene	182 > 152	14.41	9193.856	16752.256	9193.856	274.407	bb		302.8766	121.2	21.2	480.7
1202038769	26-dinitrotoluene	182 > 152		16752.256									
1202038769	24-dinitrotoluene	182 > 152		16752.256									
1202038769	26-dinitrotoluene-d3	185 > 155	17.43	16752.256	16752.256	16752.256	16752.256	bb		481.1501	96.2	-3.8	1970.8
1202038769	2-Nitrotoluene	137 > 46		16752.256									
1202038769	4-Nitrotoluene	137 > 46		16752.256									
1202038769	3-Nitrotoluene	137 > 46		16752.256									
1202038769	PETN	361 > 62		16752.256									

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 951347

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038769

Sample Amount 2

Moisture:

Amount Units g

Date Received: 10-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160039.wiff

Date Analyzed: 16-FEB-10 22:10

Units: ug/kg

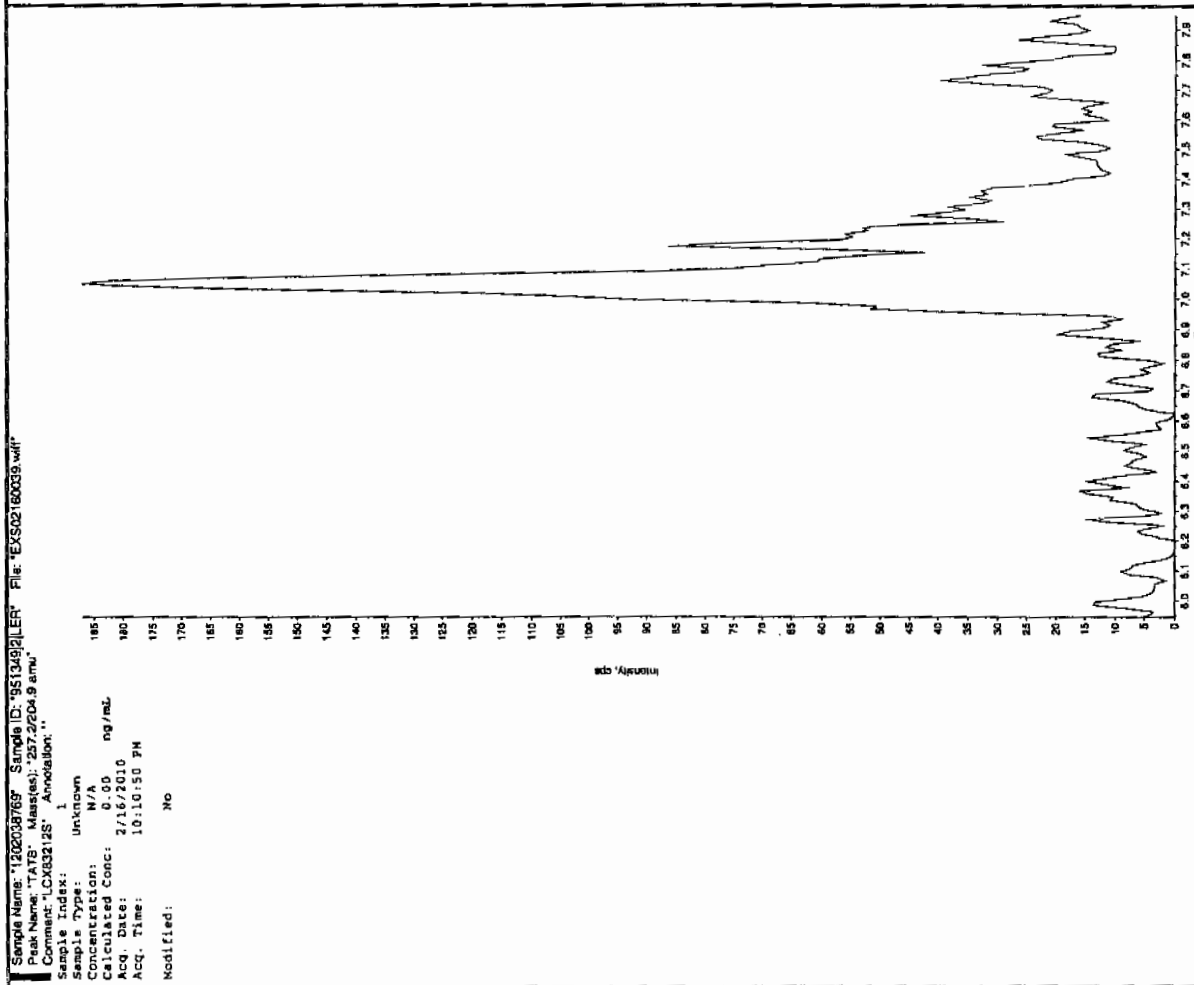
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

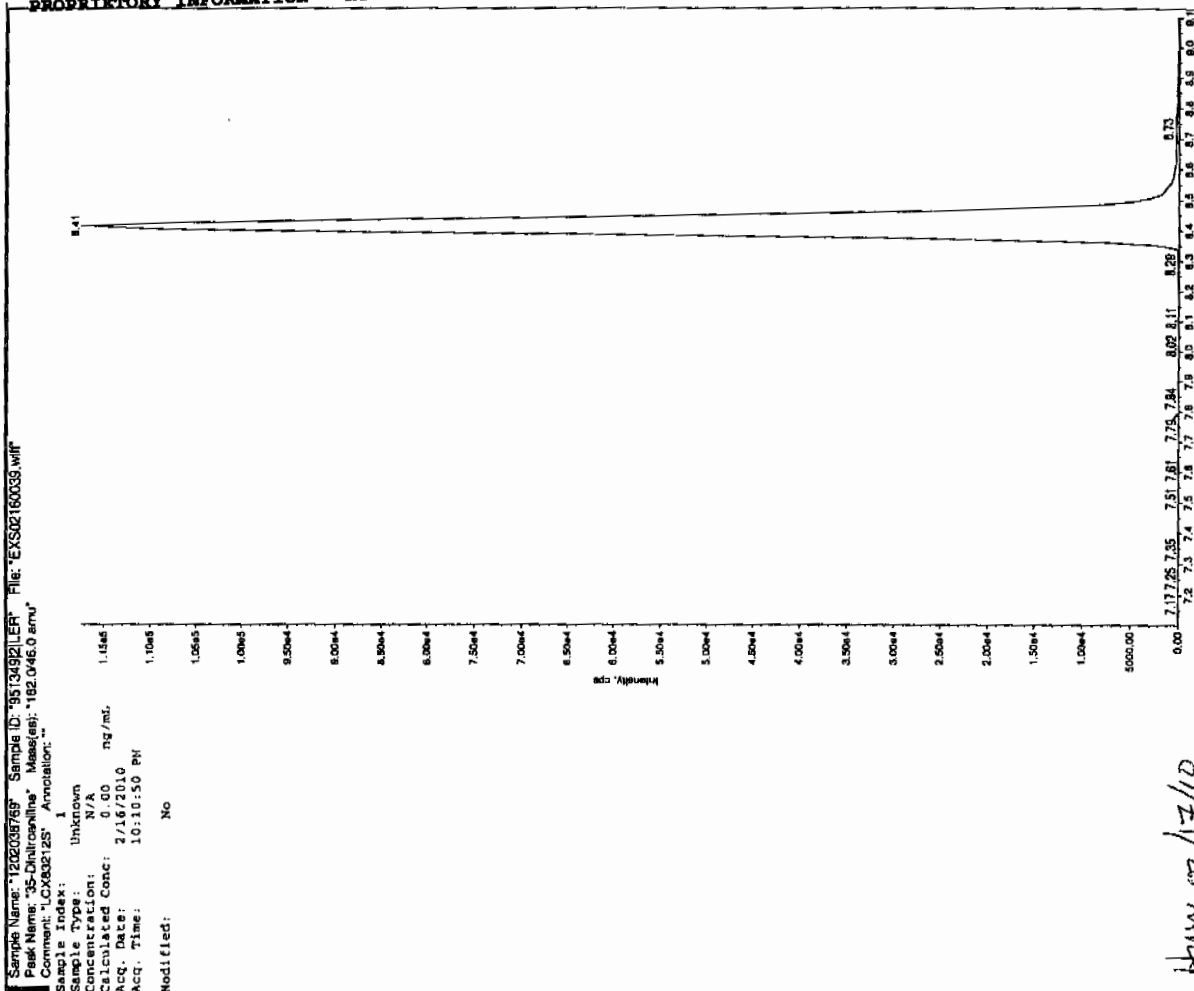
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor



for 2/17/10



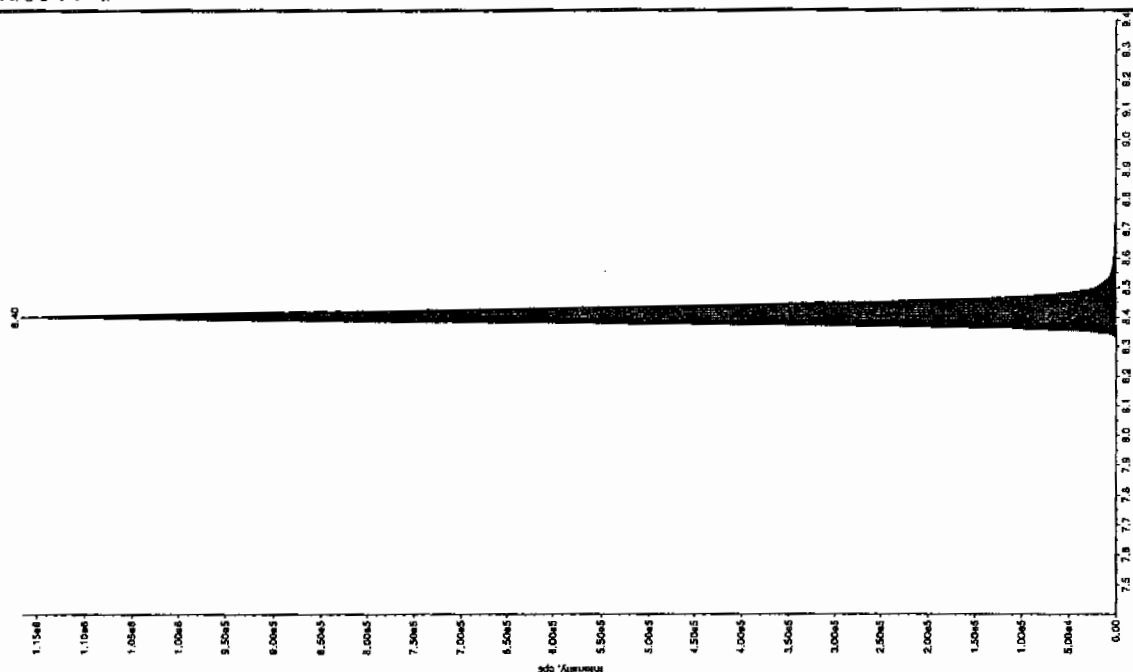
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



for 2/17/10

Sample Name: "1202039763" Sample ID: "55134921ER" File: "EX502160039.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "186.046.0 amu"  
 Comment: "LCX832125" Annotation: "1"

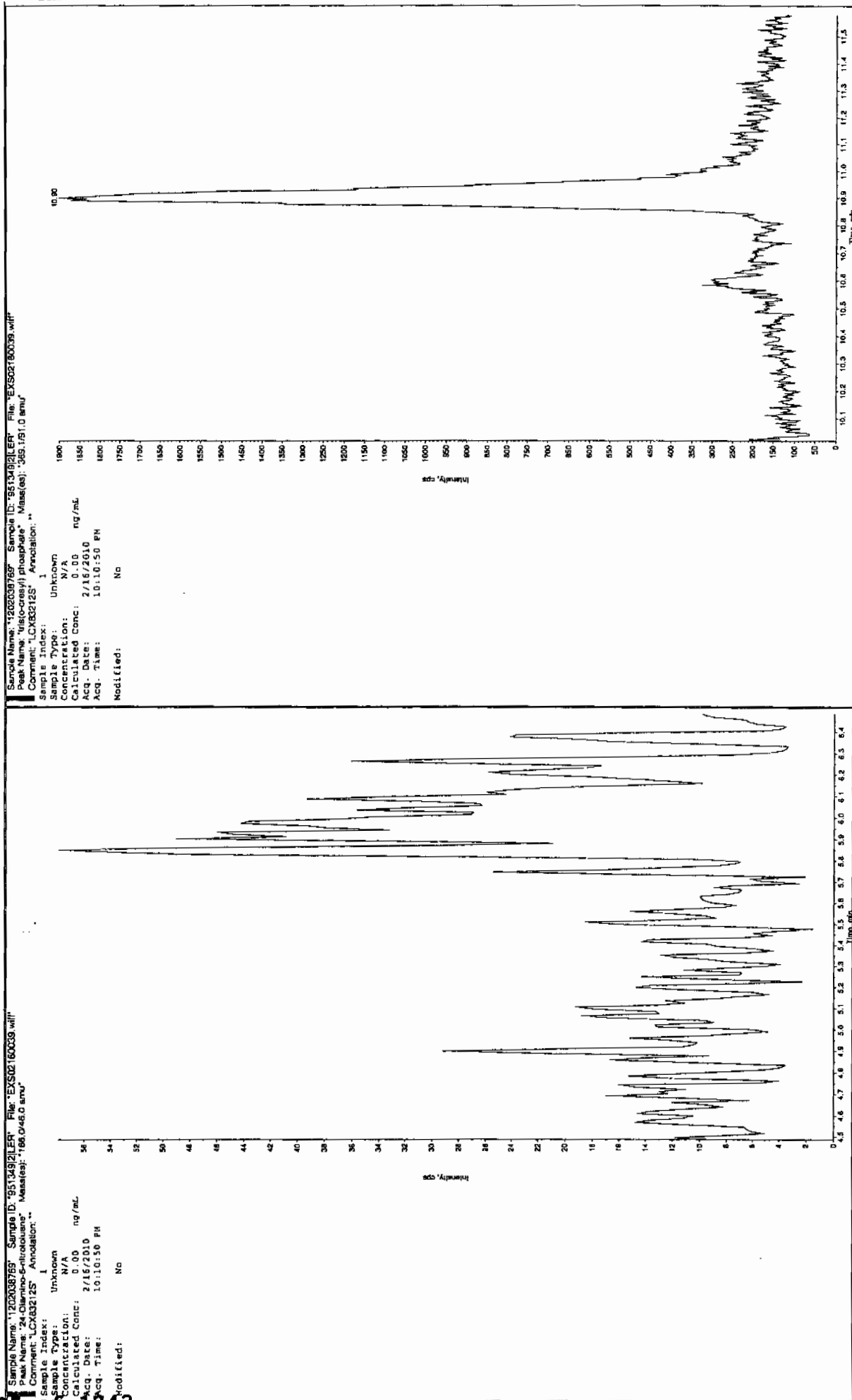
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/16/2010  
 Acq. Date: 10:10:50 PM  
 Acq. Time: 10:10:50 PM  
 Modified: No



Sample Name: "1202039763" Sample ID: "55134921ER" File: "EX502160039.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"  
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 371.  
 Acq. Date: 2/16/2010  
 Acq. Time: 10:10:50 PM  
 Modified: Yes  
 Loc. Algorithm: InterQuan - IQA  
 Min. Peak Height: 1460 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 ST Window: 15.0 sec  
 Expected RT: 8.40 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.40 min  
 Area: 4.39e+006 counts  
 Height: 1165722.168 cps  
 Start Time: 8.31 min  
 End Time: 8.88 min

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 951347

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038770

Sample Amount 2

Moisture:

Amount Units g

Date Received: 10-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216043a

Date Analyzed: 17-FEB-10 13:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4290	
121-14-2	2,4-Dinitrotoluene	4960	
121-82-4	RDX	4270	
19406-51-0	4-Amino-2,6-dinitrotoluene	4240	
2691-41-0	HMX	3980	
35572-78-2	2-Amino-4,6-dinitrotoluene	4560	
479-45-8	Tetryl	2830	
606-20-2	2,6-Dinitrotoluene	4950	
78-11-5	PETN	4380	
88-72-2	o-Nitrotoluene	4710	
98-95-3	Nitrobenzene	4650	
99-08-1	m-Nitrotoluene	4810	
99-35-4	1,3,5-Trinitrobenzene	3620	
99-65-0	m-Dinitrobenzene	4910	
99-99-0	p-Nitrotoluene	4750	

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Printed: Thu Feb 18 08:53:51 2010, Page 27 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216043a

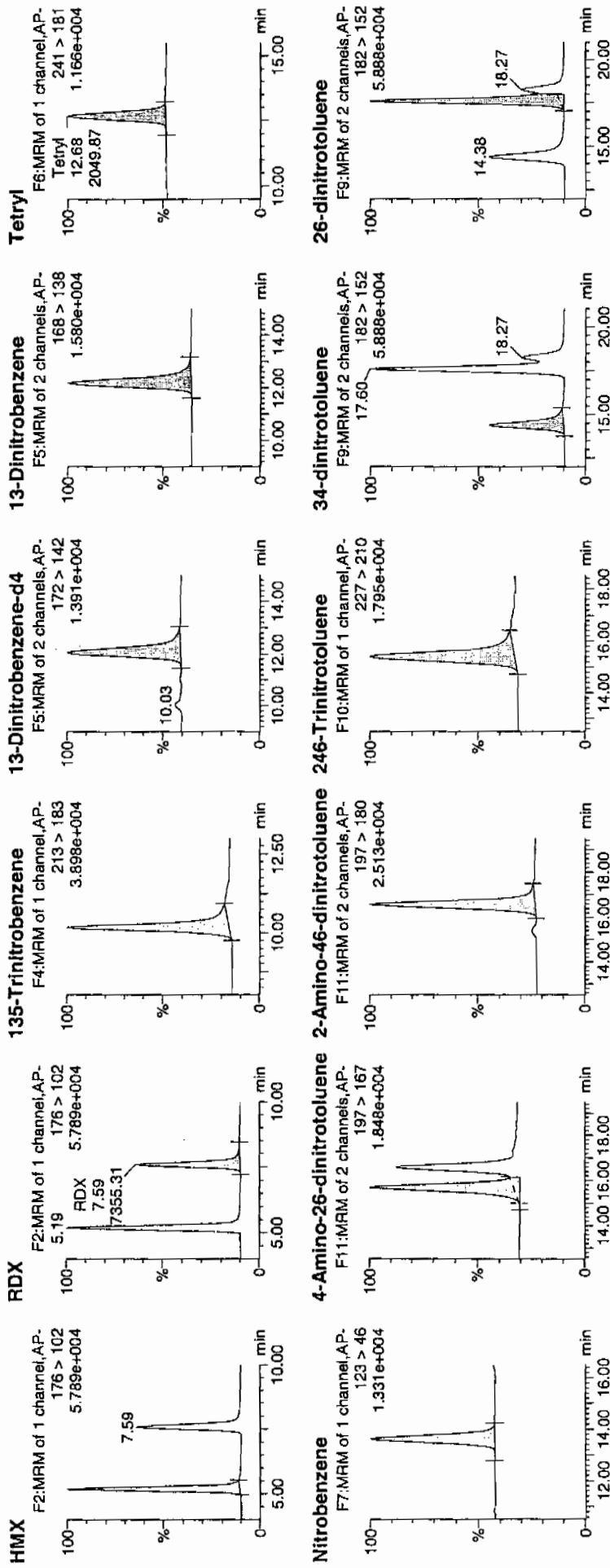
Date: 17-Feb-2010

Time: 13:53:30

ID: 1202038770

Vial: 2:1,B

1077  
6/18/10  
100-951349 / 80022 / 108 / 21



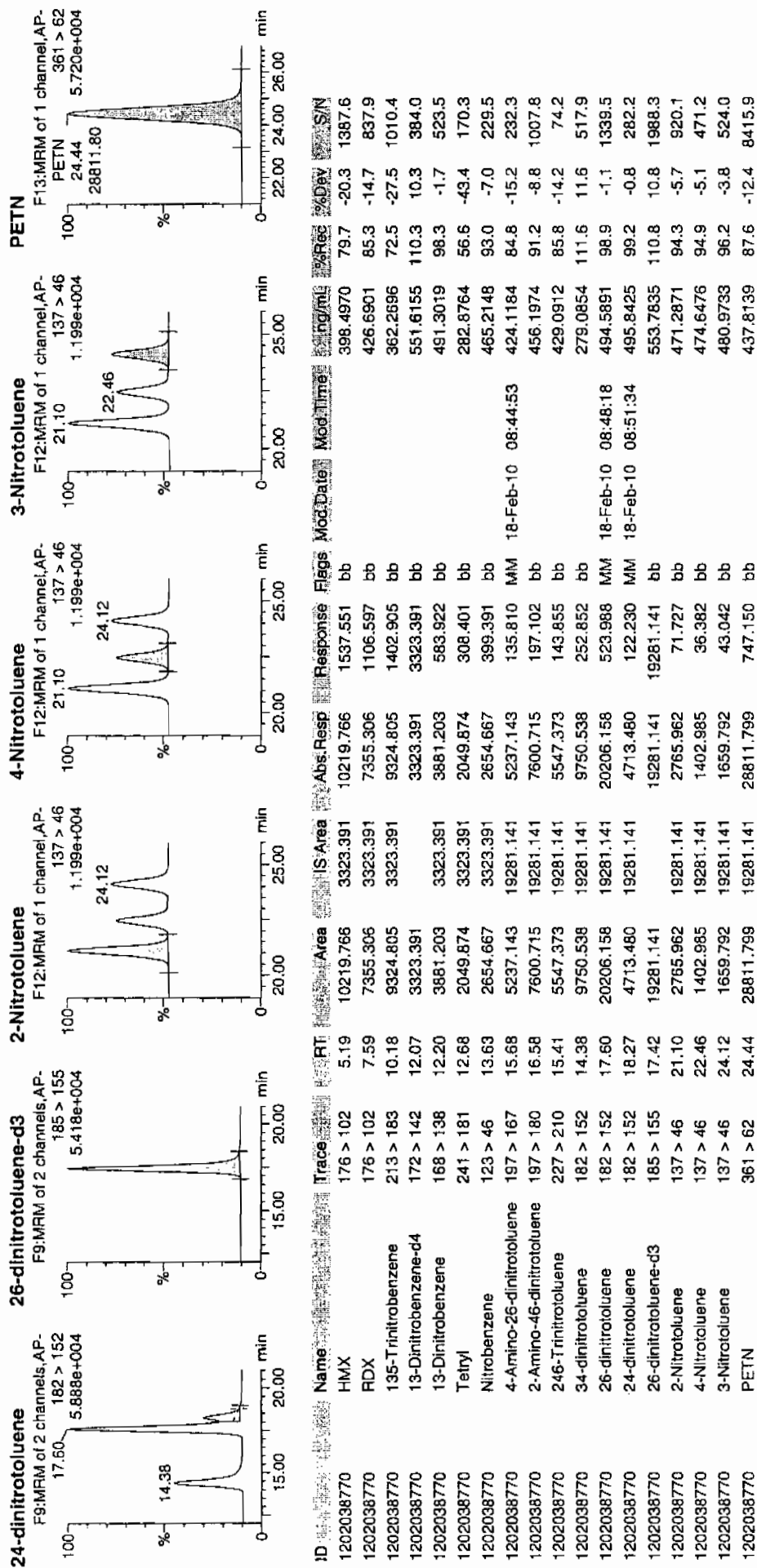
Handwritten signature/initials.

## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 28 of 103

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qid, Time: Thu Feb 18 08:53:07 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 951347

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038770

Sample Amount 2

Moisture:

Amount Units g

Date Received: 10-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160040.wiff

Date Analyzed: 16-FEB-10 22:26

Units: ug/kg

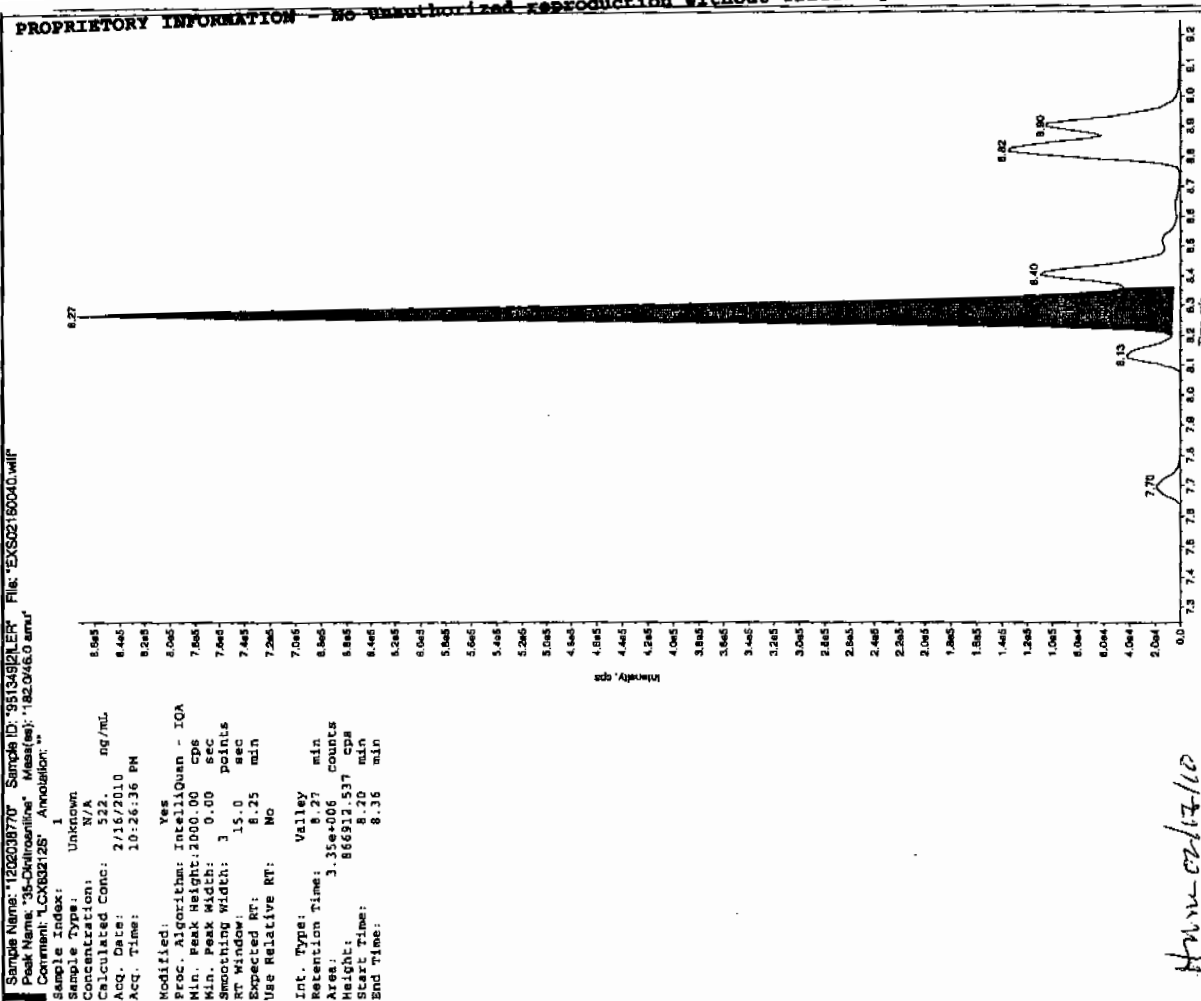
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5660	
59229-75-3	2,6-Diamino-4-nitrotoluene	5350	
618-87-1	3,5-Dinitroaniline	5270	
6629-29-4	2,4-Diamino-6-nitrotoluene	5170	
78-30-8	tris(o-cresyl) phosphate	5310	

\*Concentration =

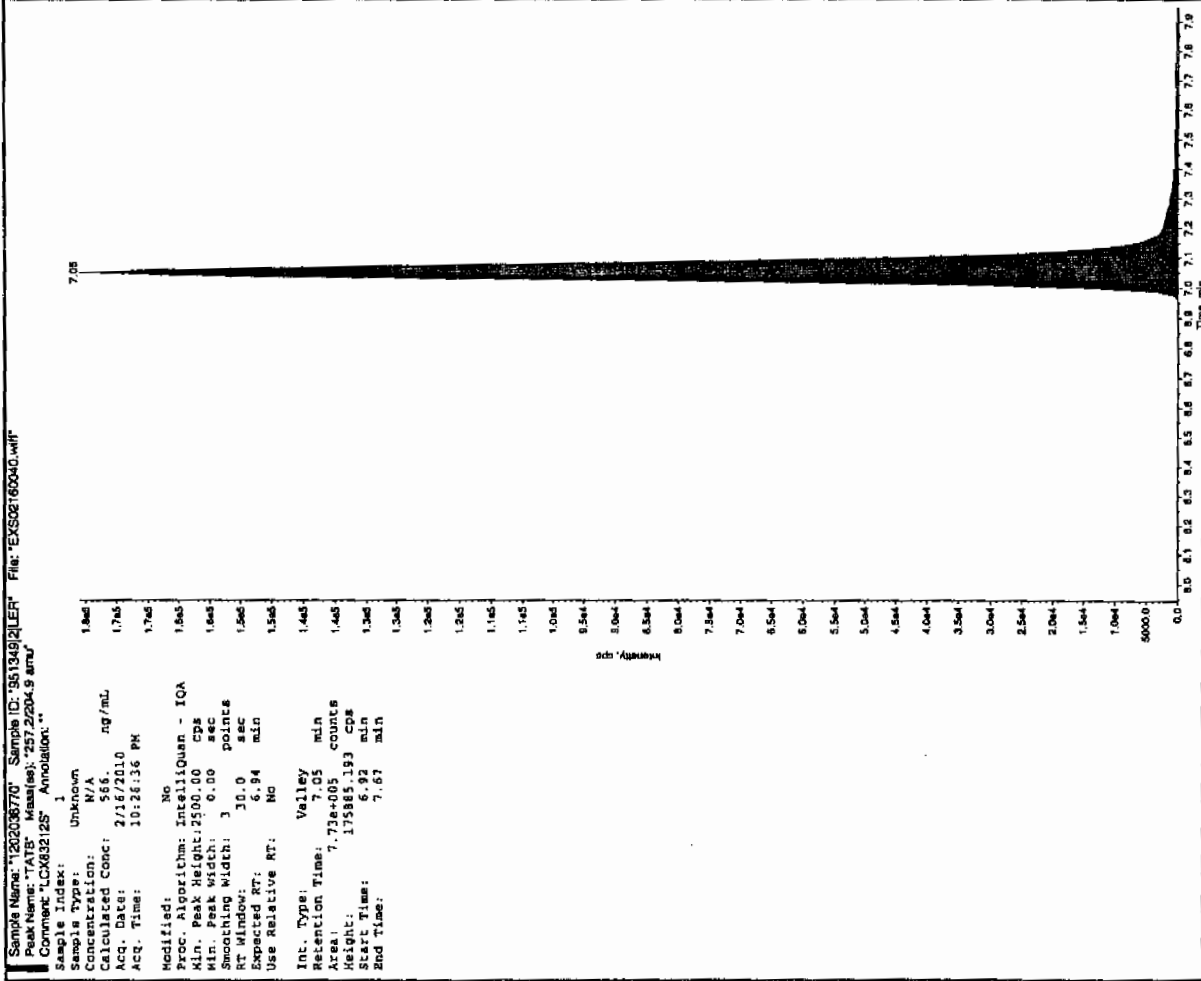
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Before Jan 21/10

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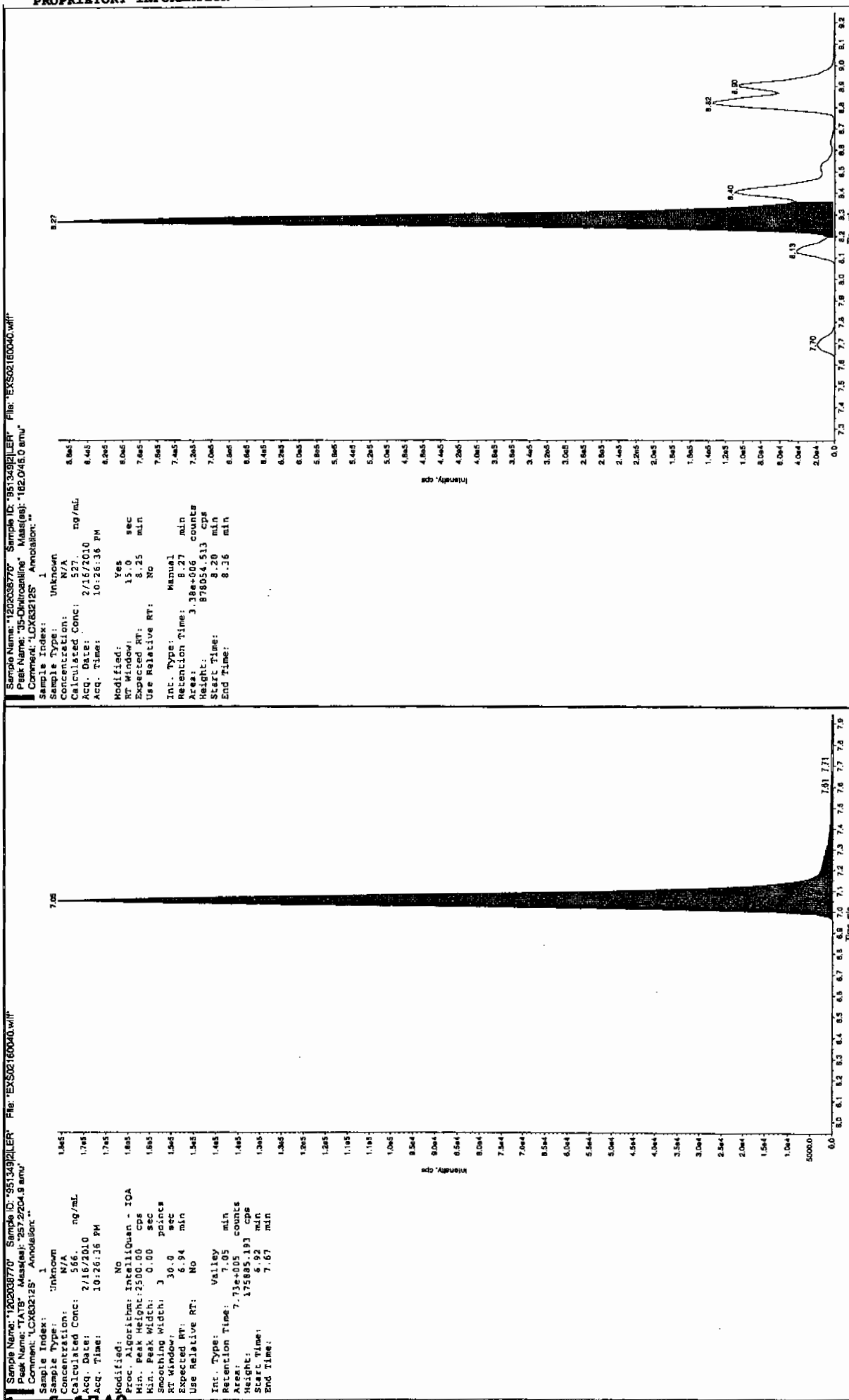


After Jan 21/10

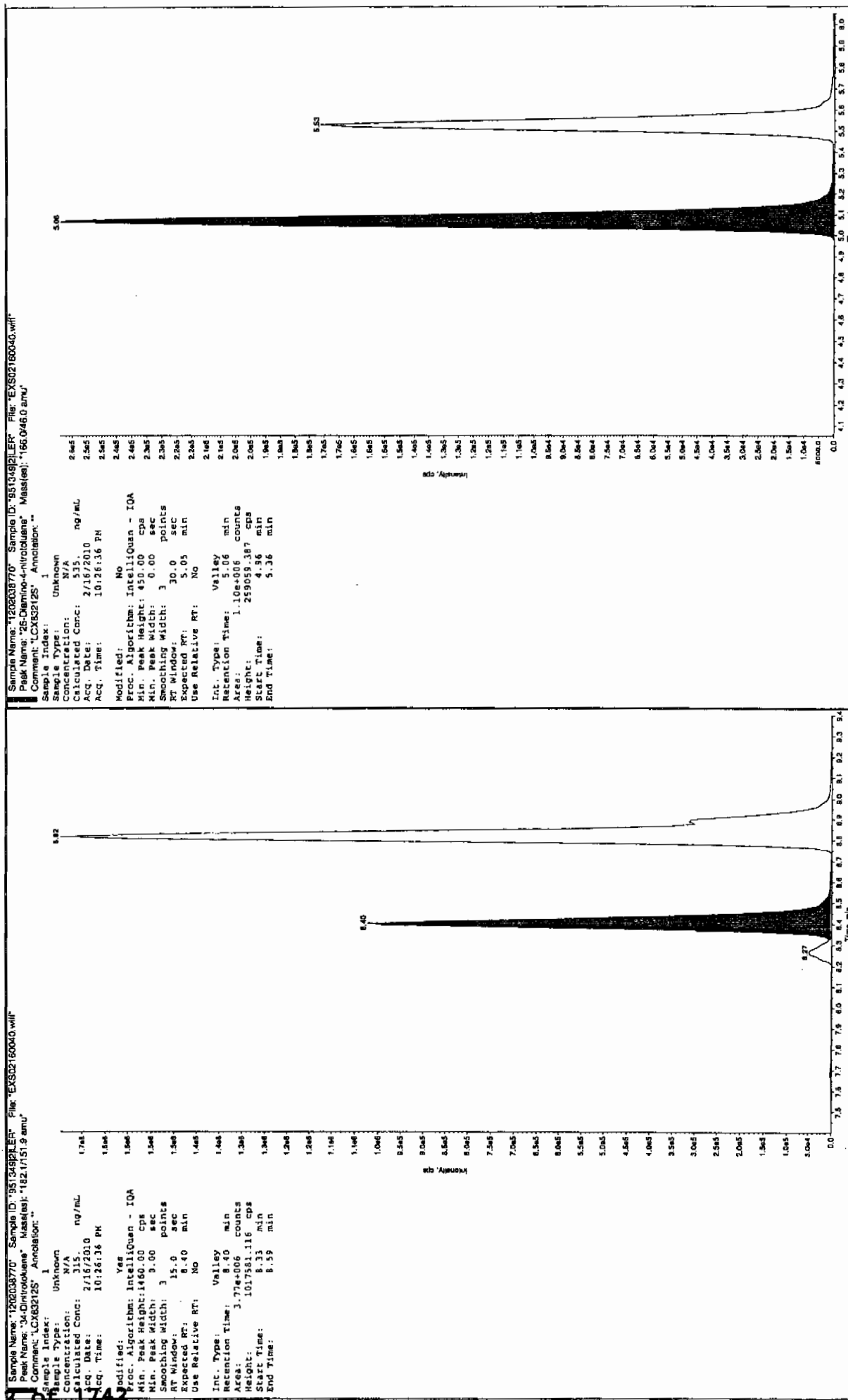




after Jan 2/17/10



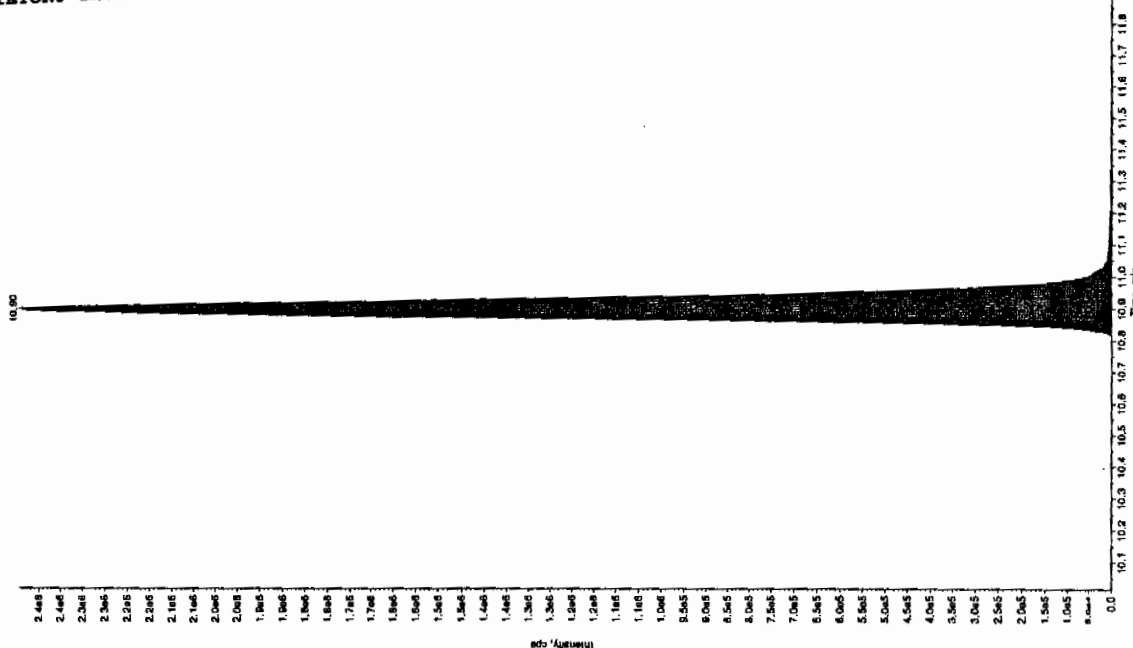
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

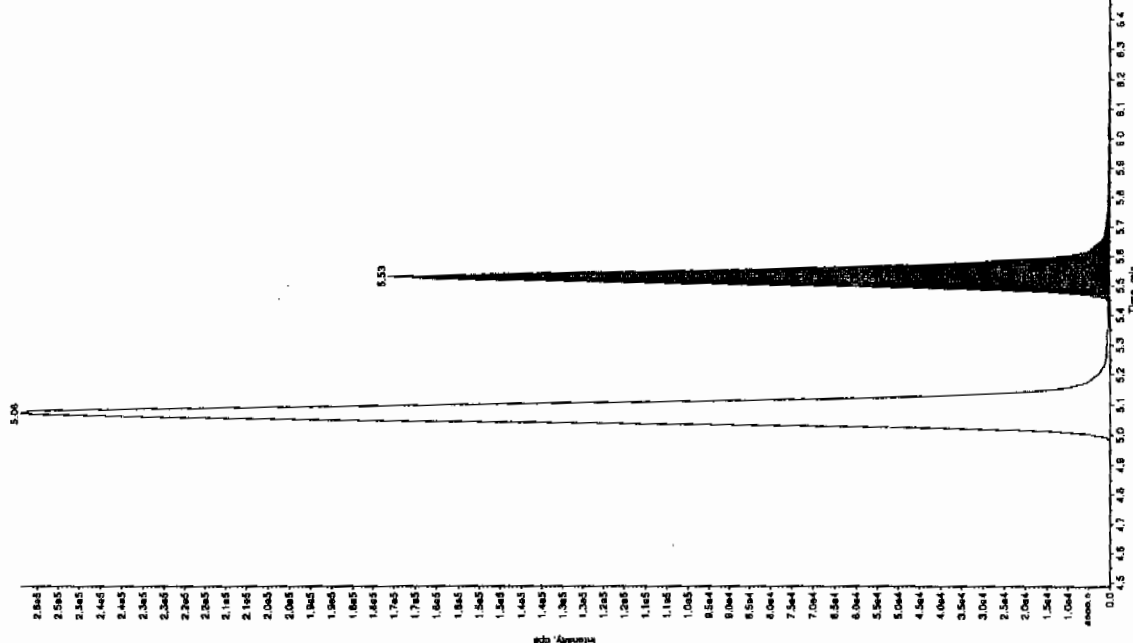
Sample Name: "1202038770" Sample ID: "9513492LEP" File: "EXS02160040.wif"  
 Peak Name: "Vialo-cresyl phosphate" Mass(es): "359.191.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 531. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 10:26:36 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 points  
 Smoothing Width: 3  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.05e+007 counts  
 Height: 2445670.654 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "1202038770" Sample ID: "9513492LEP" File: "EXS02160040.wif"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "156.045.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 517. ng/mL  
 Acq. Date: 2/16/2010  
 Acq. Time: 10:26:36 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.51 min  
 Area: 6.64e+005 counts  
 Height: 171030.716 cps  
 Start Time: 5.43 min  
 End Time: 5.94 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175(246554001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038771

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216045a

Date Analyzed: 17-FEB-10 14:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5420	
121-14-2	2,4-Dinitrotoluene	5180	
121-82-4	RDX	5020	
19406-51-0	4-Amino-2,6-dinitrotoluene	5300	
2691-41-0	HMX	4650	
35572-78-2	2-Amino-4,6-dinitrotoluene	6000	
479-45-8	Tetryl	4340	
606-20-2	2,6-Dinitrotoluene	4990	
78-11-5	PETN	5130	
88-72-2	o-Nitrotoluene	4870	
98-95-3	Nitrobenzene	4980	
99-08-1	m-Nitrotoluene	4970	
99-35-4	1,3,5-Trinitrobenzene	4890	
99-65-0	m-Dinitrobenzene	5020	
99-99-0	p-Nitrotoluene	4890	

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0216045a

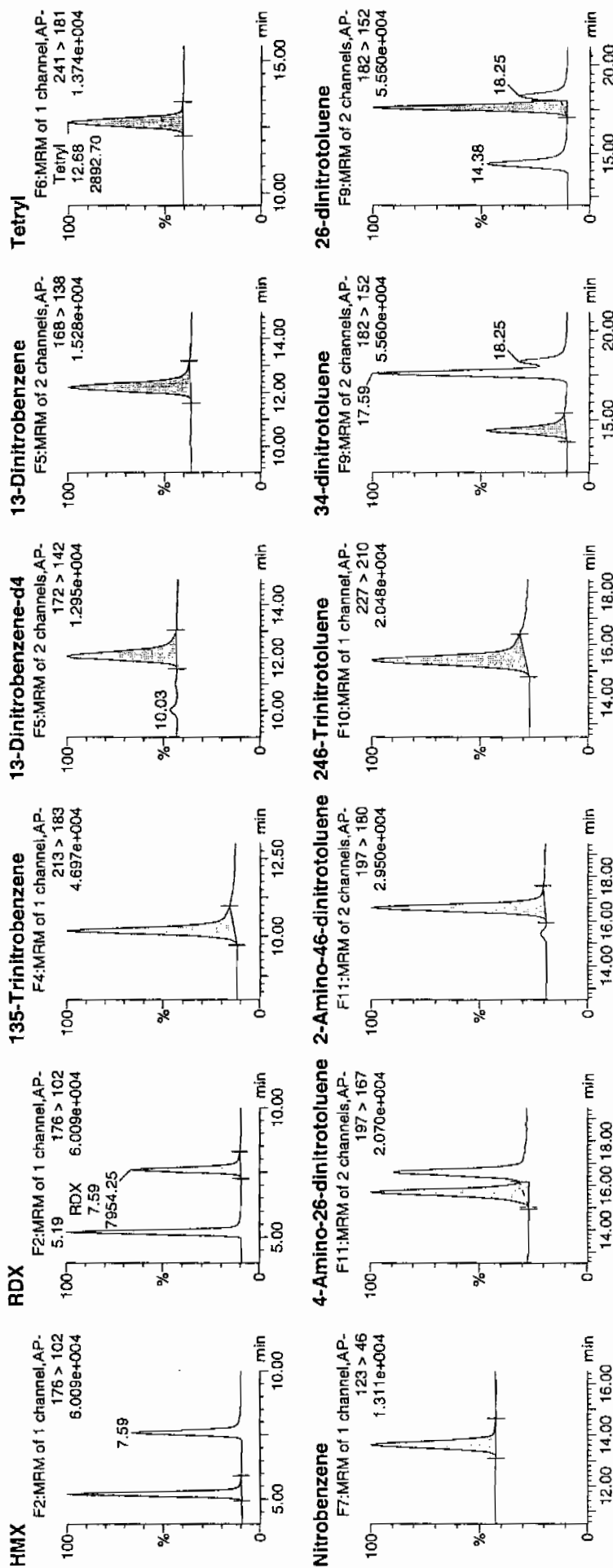
Date: 17-Feb-2010

Time: 14:52:55

ID: 1202038771

Vial: 2:1,D

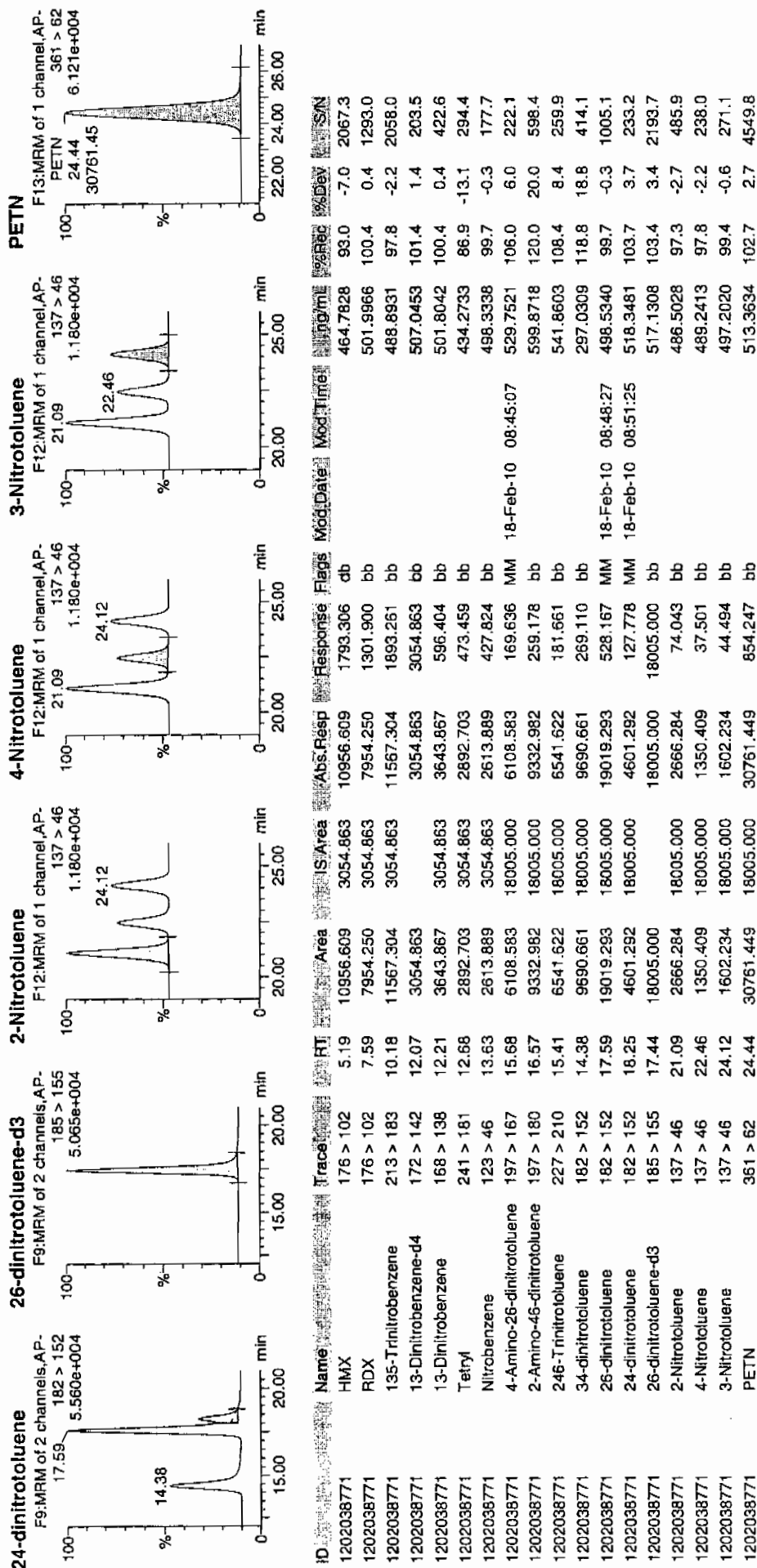
WAV 957349 / 80522 / 24655400128 / 2-1  
14/7  
2/18/10



Printed: Thu Feb 18 08:53:51 2010, Page 32 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175(246554001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038771

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160042.wiff

Date Analyzed: 16-FEB-10 22:58

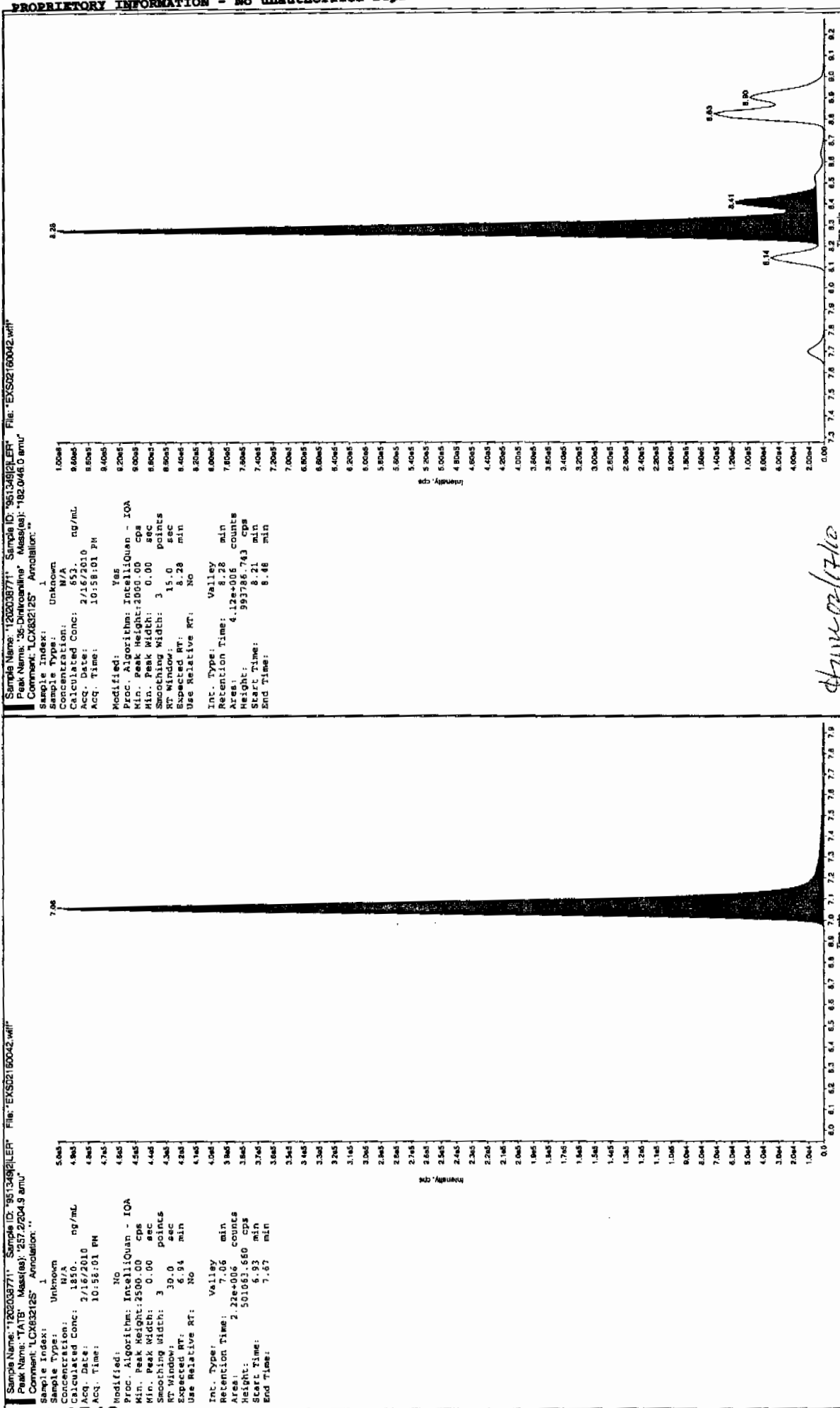
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	18500	
59229-75-3	2,6-Diamino-4-nitrotoluene	5620	
618-87-1	3,5-Dinitroaniline	5920	
6629-29-4	2,4-Diamino-6-nitrotoluene	4140	
78-30-8	tris(o-cresyl) phosphate	5590	

\*Concentration =

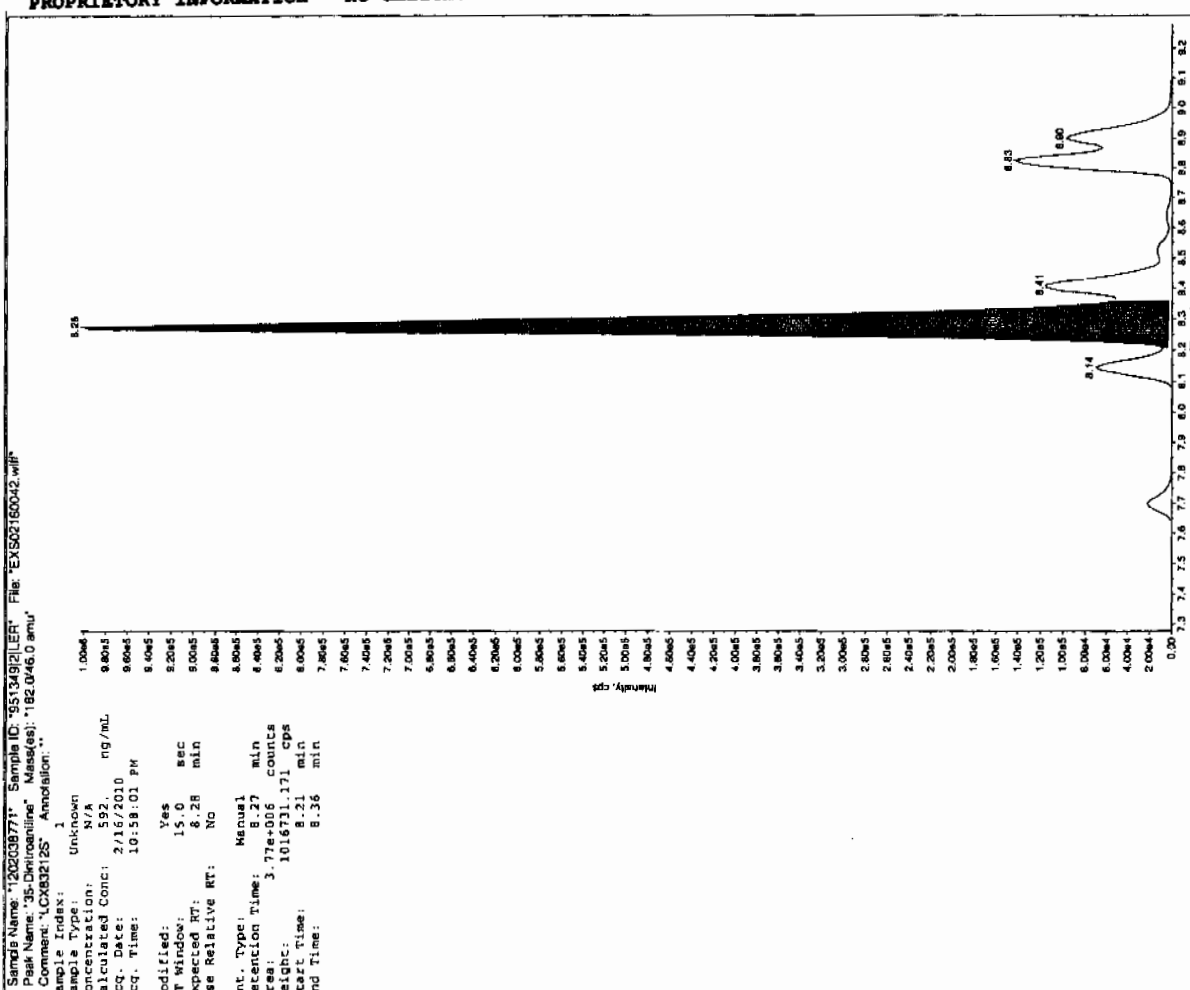
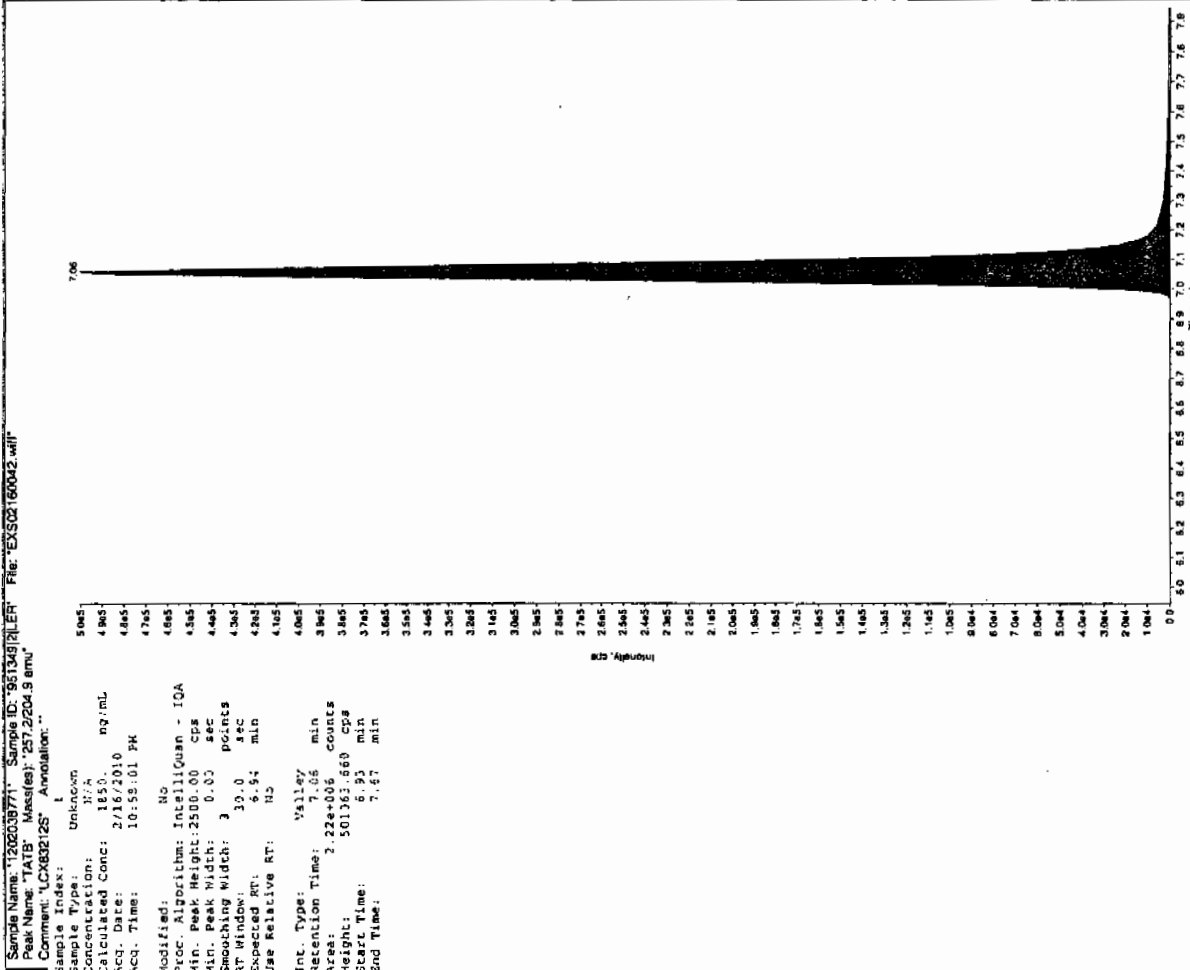
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

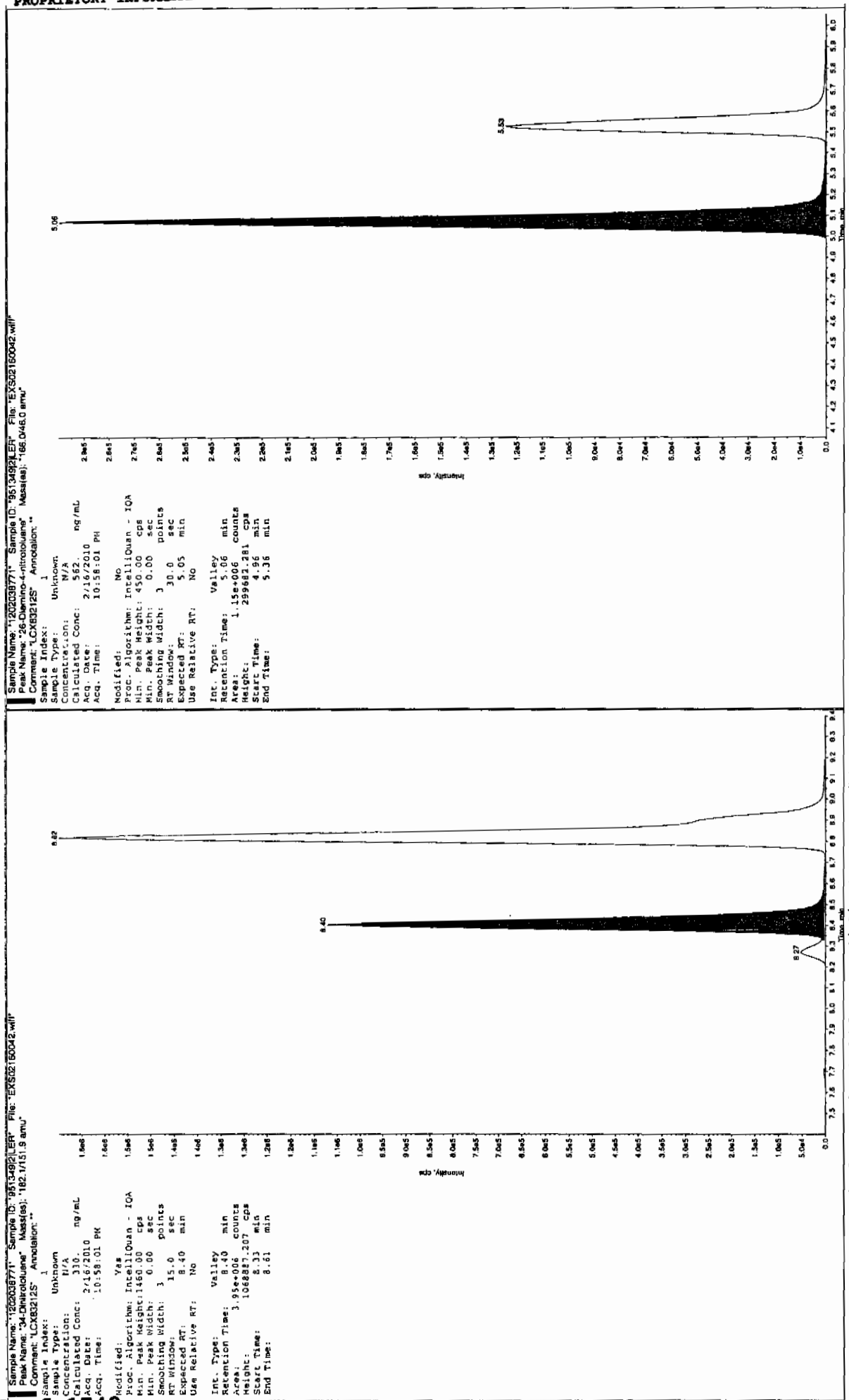
Before Jan 21/10

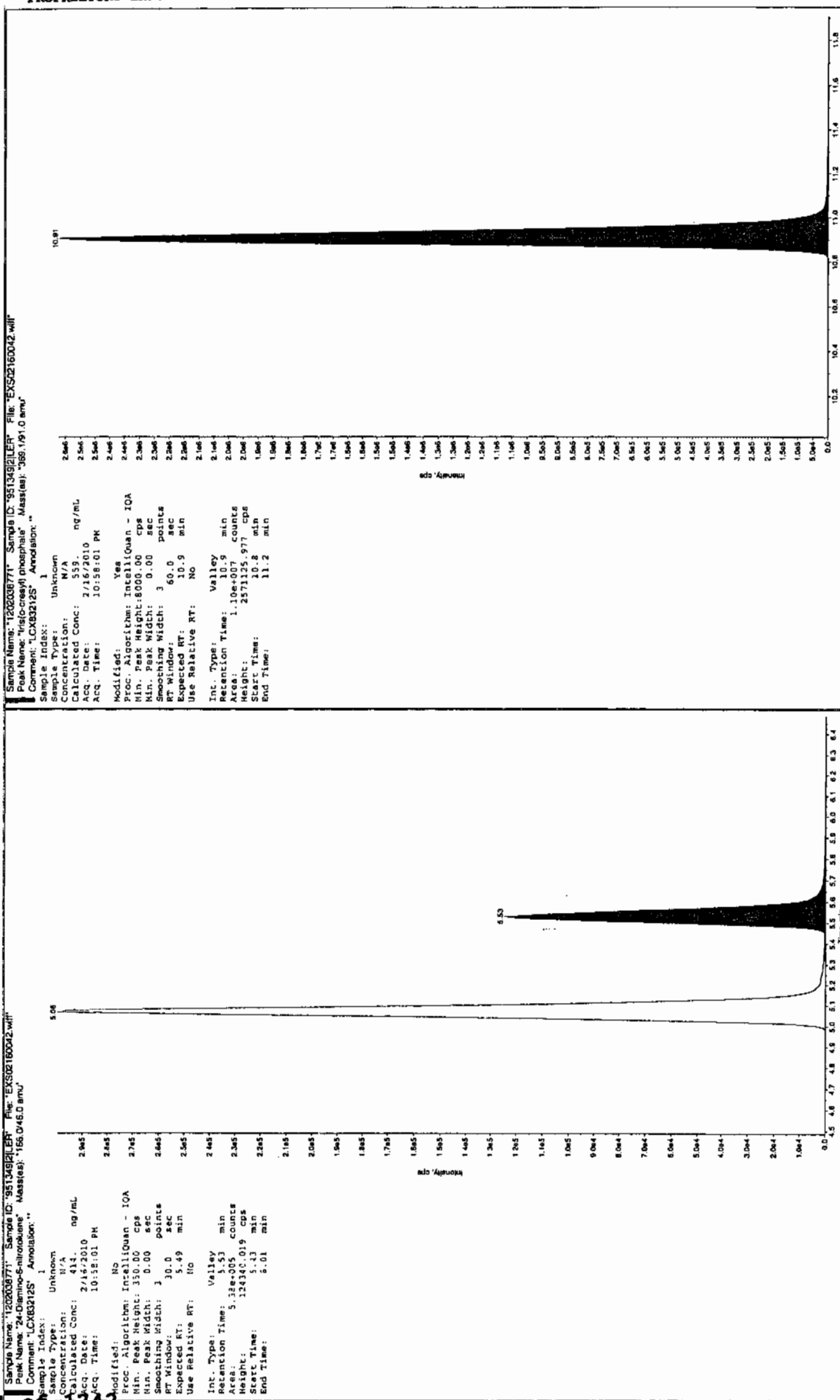




offgun 10/11/10







\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175(246554001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038772

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0216046a

Date Analyzed: 17-FEB-10 15:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5260	
121-14-2	2,4-Dinitrotoluene	5360	
121-82-4	RDX	5170	
19406-51-0	4-Amino-2,6-dinitrotoluene	5020	
2691-41-0	HMX	4480	
35572-78-2	2-Amino-4,6-dinitrotoluene	5360	
479-45-8	Tetryl	3900	
606-20-2	2,6-Dinitrotoluene	5130	
78-11-5	PETN	5070	
88-72-2	o-Nitrotoluene	4810	
98-95-3	Nitrobenzene	4540	
99-08-1	m-Nitrotoluene	4840	
99-35-4	1,3,5-Trinitrobenzene	4690	
99-65-0	m-Dinitrobenzene	5010	
99-99-0	p-Nitrotoluene	4690	

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0216046a

Date: 17-Feb-2010

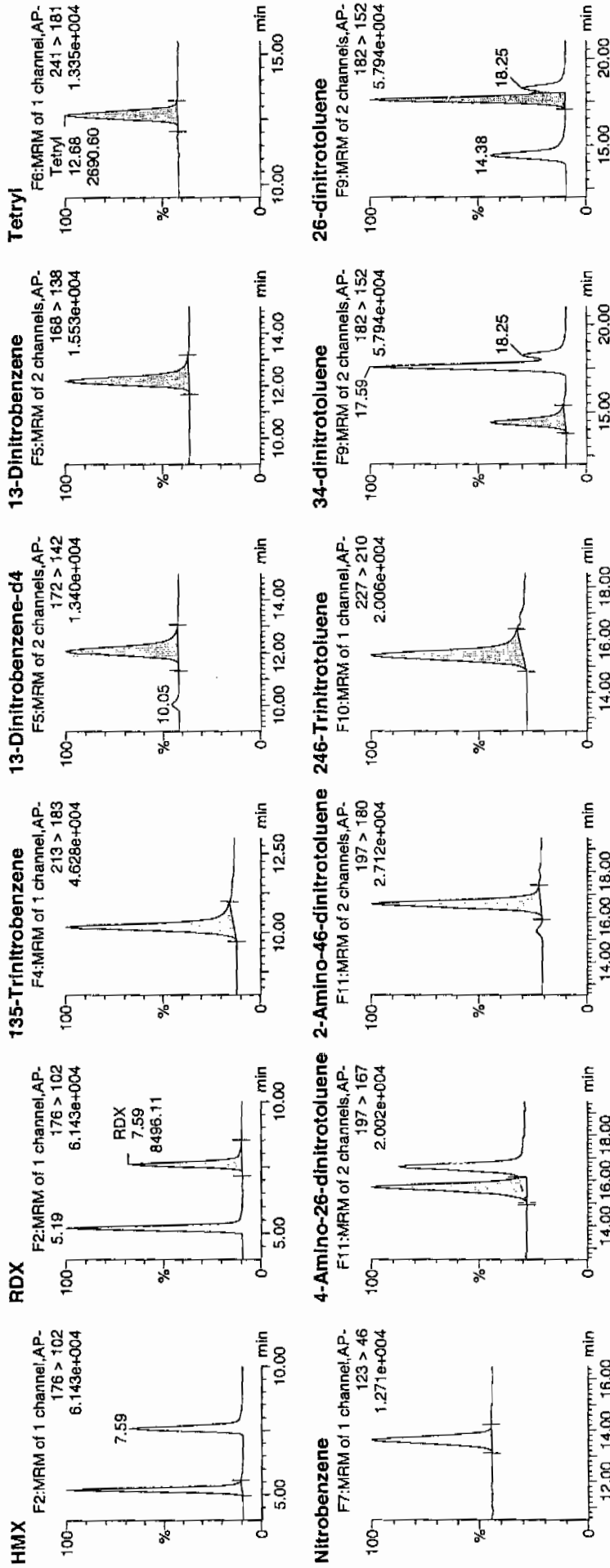
Time: 15:22:22

ID: 1202038772

Vial: 2:1,E

4477  
4/10/10

LAU-957349 / SOLID / 246554001 WSD / 21



Amc 2/18/10

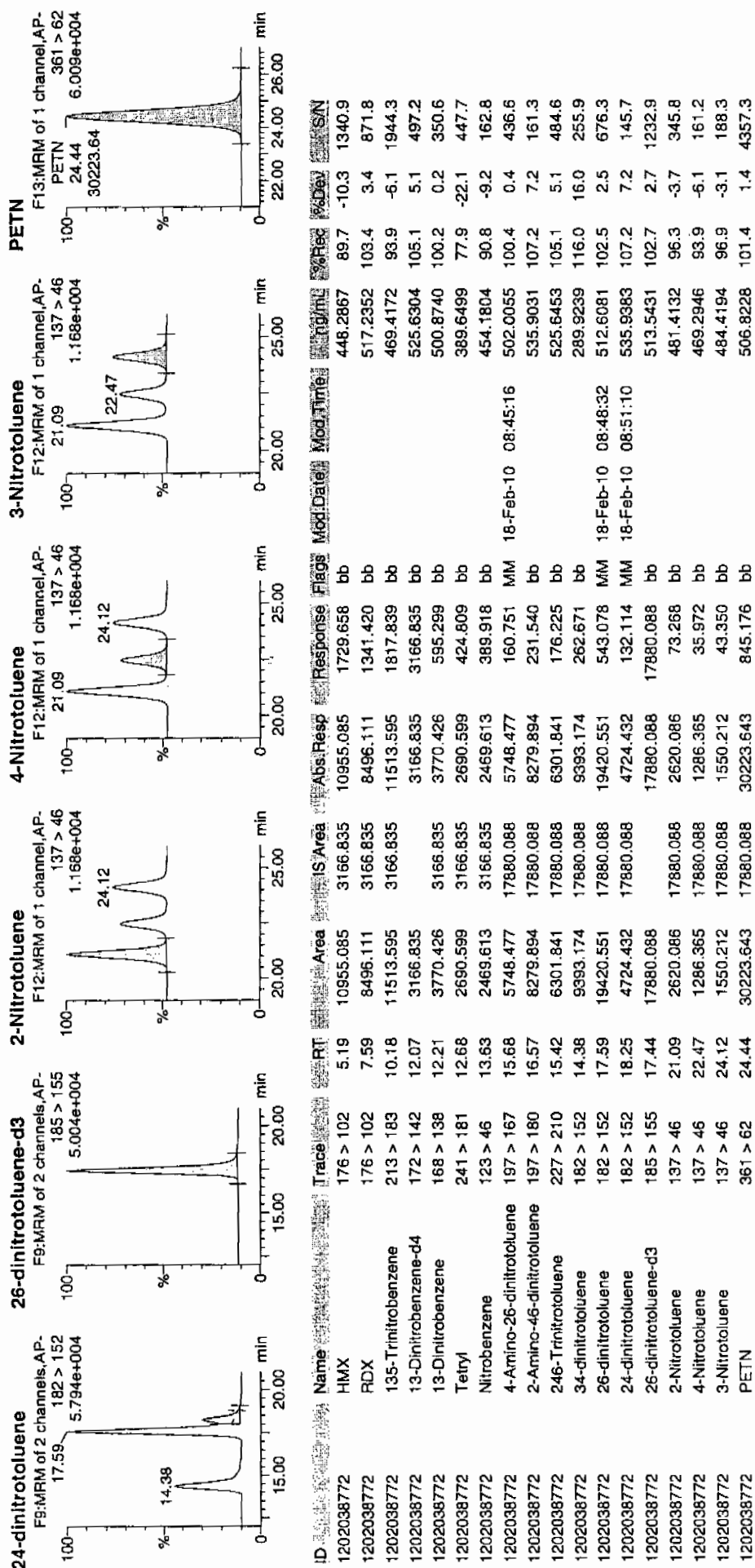
## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 18 08:53:51 2010, Page 34 of 103

Dataset: C:\MASSLYNX\New\_Exp\PRO\021610expA1.qld, Time: Thu Feb 18 08:53:07 2010

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GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8175(246554001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1665

Matrix: SOIL

GEL Sample ID: 1202038772

Sample Amount 2

Moisture: .9

Amount Units g

Date Received: 09-FEB-10

Extraction Type Sonication

Extraction Batch ID: 951347

Concentrated Extract Volume (mL) 10

Date Extracted: 15-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02160043.wiff

Date Analyzed: 16-FEB-10 23:13

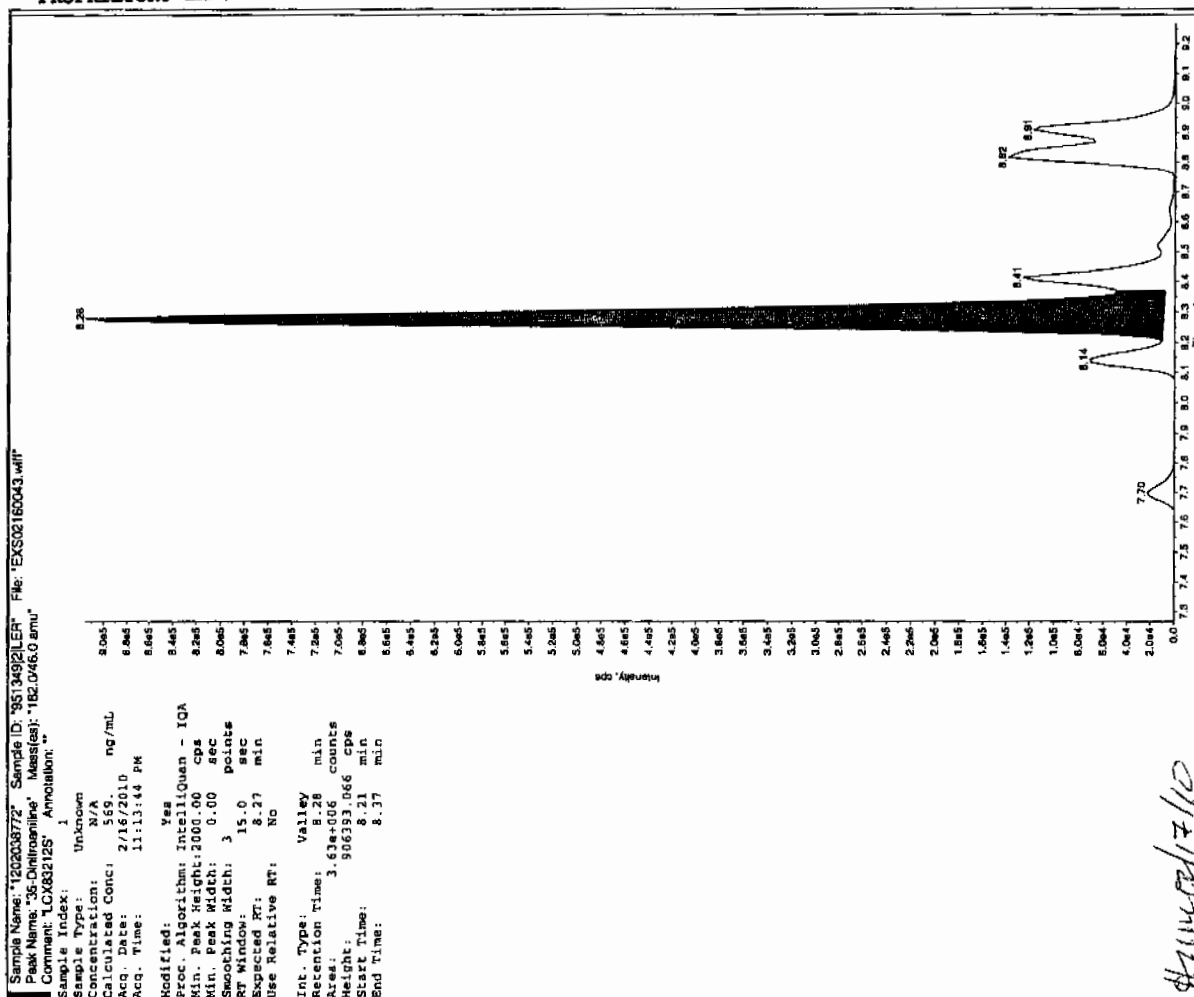
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6970	
59229-75-3	2,6-Diamino-4-nitrotoluene	4770	
618-87-1	3,5-Dinitroaniline	5790	
6629-29-4	2,4-Diamino-6-nitrotoluene	5230	
78-30-8	tris(o-cresyl) phosphate	5580	

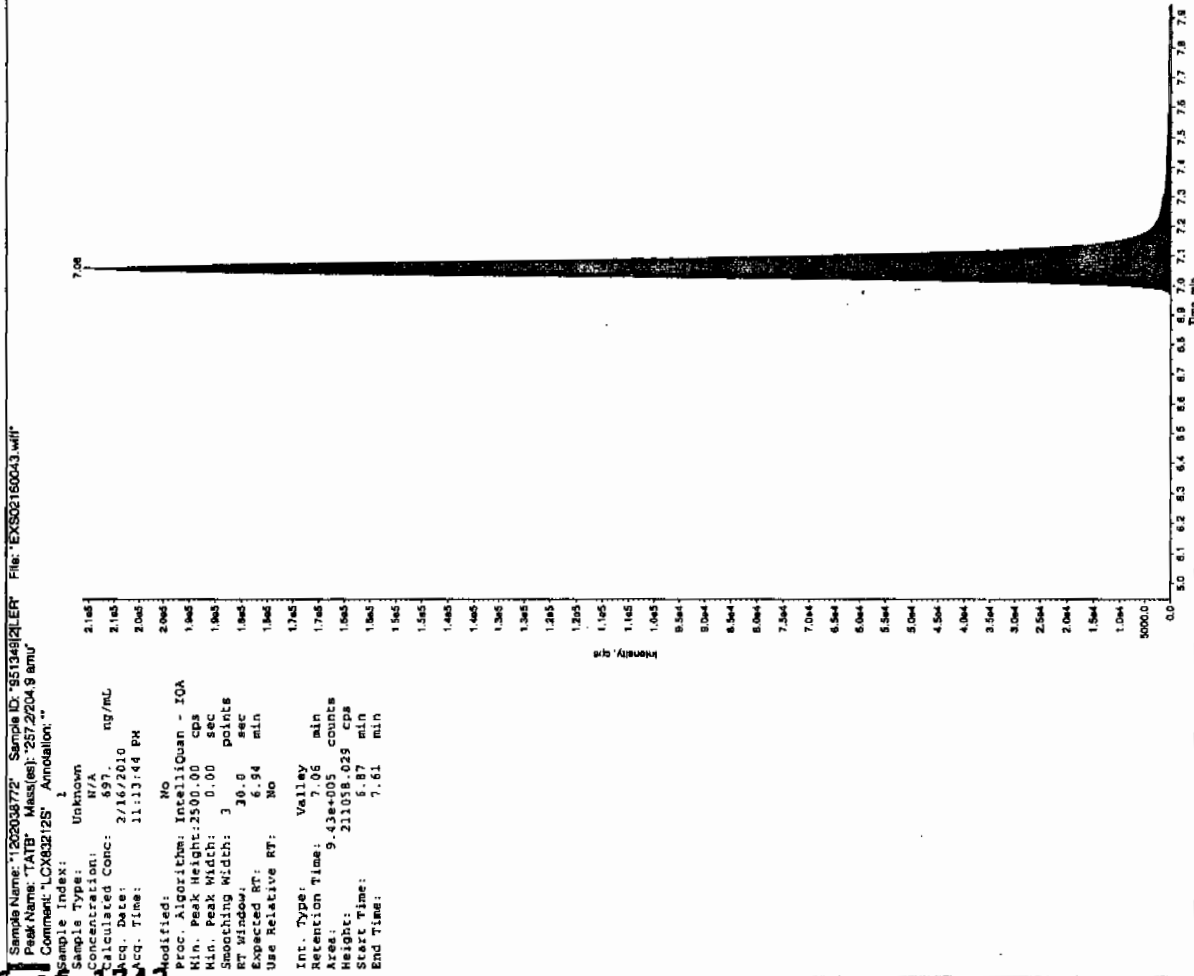
\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Before Jan 2/17/10



After Jan 2/17/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "120203772" Sample ID: "95134921ER" File: "EXS02160043.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 579. ng/ml

Acq. Date: 2/16/2010

Acq. Time: 11:13:44 PM

Modified: Yes

RT Window: 15.0 sec

Expected RT: 8.27 min

Use Relative RT: No

Int. Type: Manual

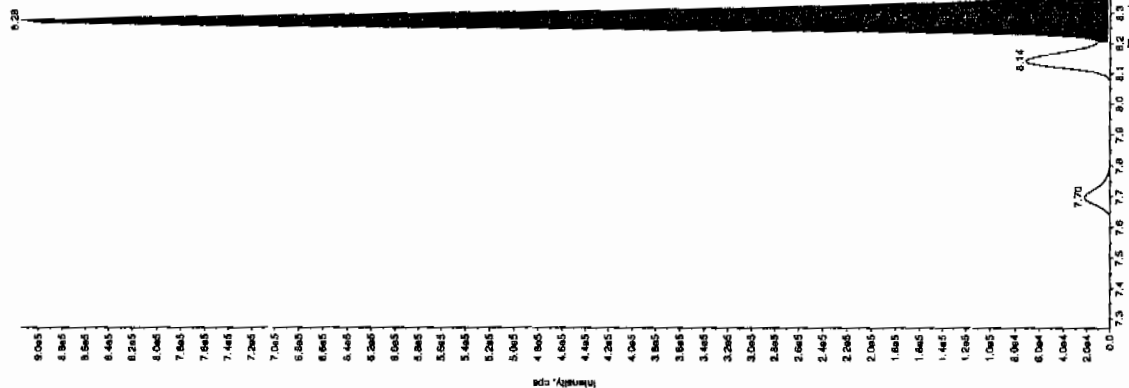
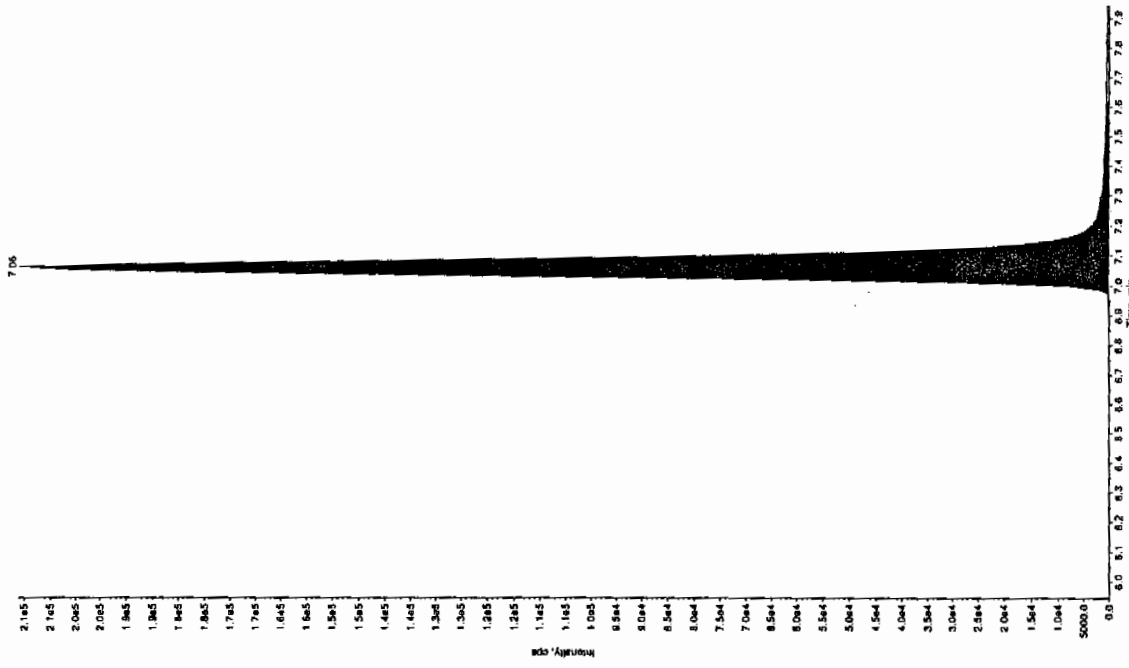
Retention Time: 8.27 min

Area: 3.69e+005 counts

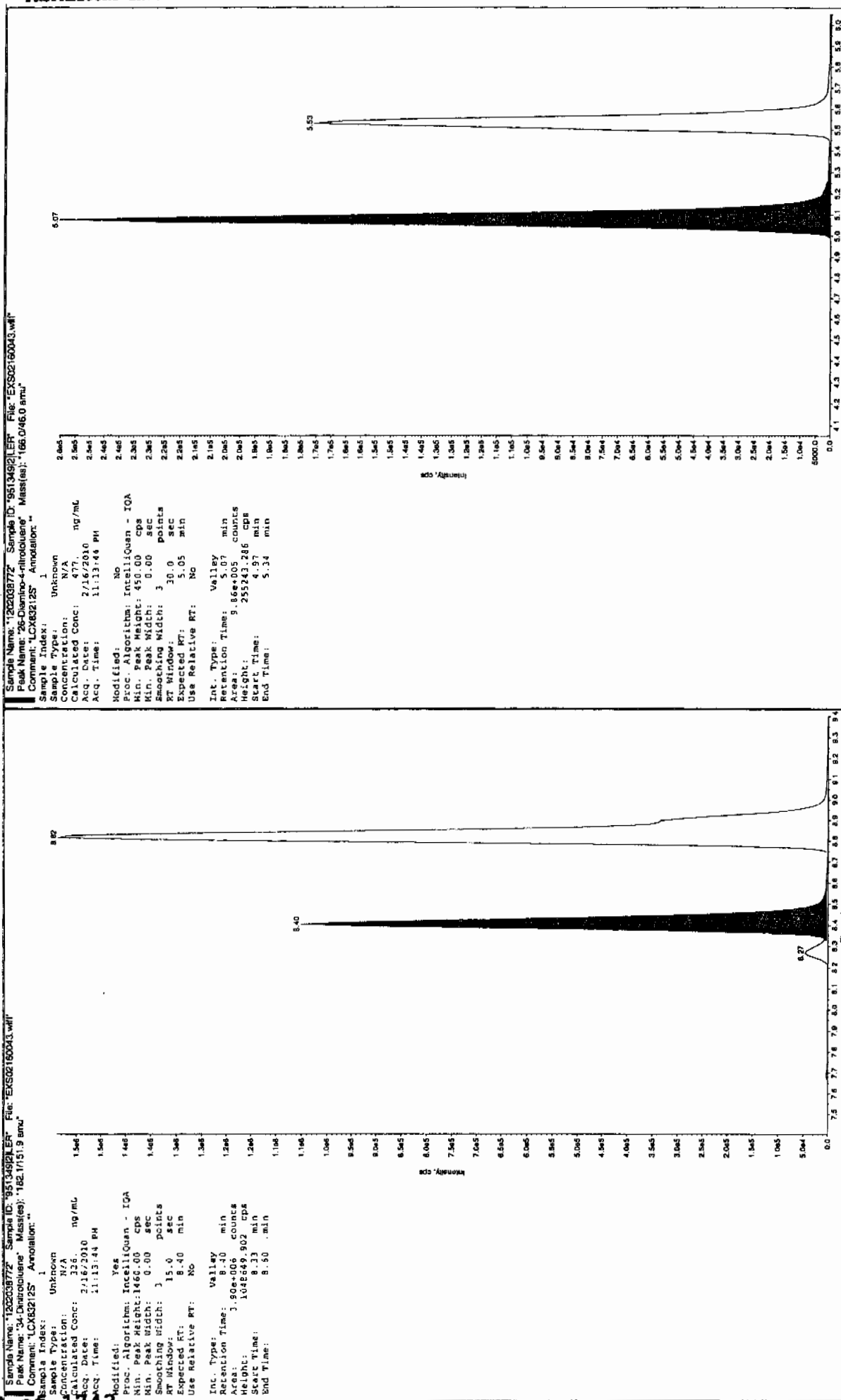
Height: 920892.183 cps

Start Time: 8.21 min

End Time: 8.37 min



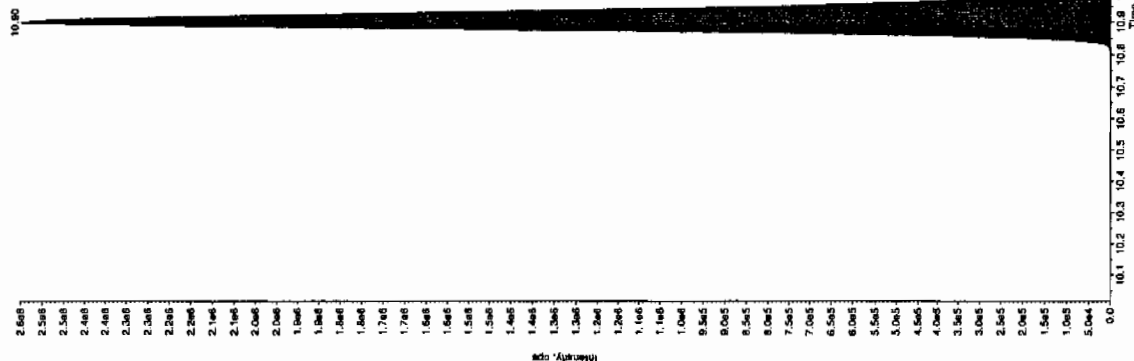
\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

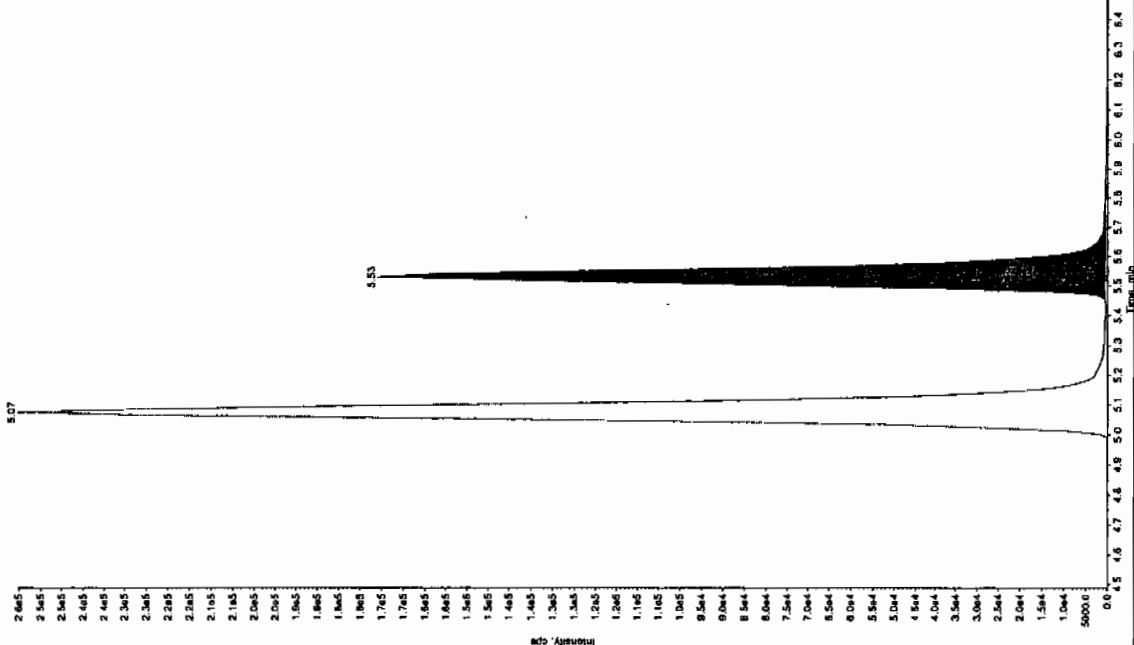
Sample Name: "1202038772" Sample ID: "95134921LER" File: "EXS02160043.wif"  
 Peak Name: "Ins(0-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 558. ng/mL  
 Acq. Date: 7/16/2010  
 Acq. Time: 11:13:44 PM  
 Modified: Yes  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 60.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.10e+007 counts  
 Height: 2550793.457 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "1202038772" Sample ID: "95134921LER" File: "EXS02160043.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 573. ng/mL  
 Acq. Date: 7/16/2010  
 Acq. Time: 11:13:44 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.49 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.53 min  
 Area: 6.72e+005 counts  
 Height: 170422.379 cps  
 Start Time: 5.45 min  
 End Time: 5.53 min



# MISCELLANEOUS DATA

# Prep Logbook

## Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 951347 Verified by: \_\_\_\_\_  
 Analyst: Sirena White  
 Method: SW846 8330 PREP  
 Lab SOP: GL-OA-E-033 REV# 17  
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202038769 MB	15-FEB-2010 15:17:00	2	10	5
1202038770 LCS	15-FEB-2010 15:17:00	2	10	5
246554001	15-FEB-2010 15:17:00	2	10	5
1202038771 MS (246554001)	15-FEB-2010 15:17:00	2	10	5
1202038772 MSD (246554001)	15-FEB-2010 15:17:00	2	10	5
246554002	15-FEB-2010 15:17:00	2	10	5
246554003	15-FEB-2010 15:17:00	2	10	5
246554004	15-FEB-2010 15:17:00	2	10	5
246554005	15-FEB-2010 15:17:00	2	10	5
246554006	15-FEB-2010 15:17:00	2	10	5
246557001	15-FEB-2010 15:17:00	2	10	5
246575003	15-FEB-2010 15:17:00	2	10	5
246575004	15-FEB-2010 15:17:00	2	10	5
246582002	15-FEB-2010 15:17:00	2	10	5
246582003	15-FEB-2010 15:17:00	2	10	5
246582004	15-FEB-2010 15:17:00	2	10	5
246582005	15-FEB-2010 15:17:00	2	10	5
246582006	15-FEB-2010 15:17:00	2	10	5
246582007	15-FEB-2010 15:17:00	2	10	5
246582008	15-FEB-2010 15:17:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202038770	8321 Explosives LCS	DXX100208-03	.1	mL	Final Solvent: ACN
LCS	1202038770	8321 LANL Explosives Mix 10mg/L	UXXX100210-02.1	1	mL	
MS	1202038771	8321 Explosives LCS	DXX100208-03	.1	mL	
MS	1202038771	8321 LANL Explosives Mix 10mg/L	UXXX100210-02.1	1	mL	
MSD	1202038772	8321 Explosives LCS	DXX100208-03	.1	mL	
MSD	1202038772	8321 LANL Explosives Mix 10mg/L	UXXX100210-02.1	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100210-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 02/16/10  
 Extr. Injection Volume: 50uL  
 Sequence Number: 021610expA  
 Initial Calibration Date: 02/16/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX100128-01.3  
 Mobile Phase Lot#: 1269631, 1263794  
 Standard-Samp Reagent Lot#: 1260901, 1261217  
 Reviewed BY: *Ann*  
 Date: *02/18/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100216-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0216001a	XIBLK01	MAP	2/16/10 17:07			1		USE	B
EXP0216002a	XIBLK01	MAP	2/16/10 17:37			1		USE	B
EXP0216003a	WXXICAL-01	MAP	2/16/10 18:07			1		USE	I
EXP0216004a	WXXICAL-02	MAP	2/16/10 18:36			1		USE	I
EXP0216005a	WXXICAL-03	MAP	2/16/10 19:06			1		USE	I
EXP0216006a	WXXICAL-04	MAP	2/16/10 19:35			1		USE	I
EXP0216007a	WXXICAL-05	MAP	2/16/10 20:05			1		USE	I
EXP0216008a	WXXICAL-06	MAP	2/16/10 20:35			1		USE	I
EXP0216009a	XIBLK02	MAP	2/16/10 21:04			1		USE	B
EXP0216010a	WXXICV	MAP	2/16/10 21:34			1		USE	C
EXP0216011a	XIBLK03	MAP	2/16/10 22:04			1		USE	B
EXP0216012a	WXXCRI	MAP	2/16/10 22:33			1		USE	C
EXP0216013a	1202038759	MAP	2/16/10 23:03	951342	Various	2	LANL	USE	S
EXP0216014a	1202038760	MAP	2/16/10 23:33	951342	Various	2	LANL	USE	S
EXP0216015a	246569007	MAP	2/17/10 0:02	951342	10-1669	2	LANL	USE	S
EXP0216016a	1202038761	MAP	2/17/10 0:32	951342	10-1669	2	LANL	USE	S
EXP0216017a	1202038762	MAP	2/17/10 1:02	951342	10-1669	2	LANL	USE	S
EXP0216018a	246572005	MAP	2/17/10 1:32	951342	10-1678	2	LANL	USE	S
EXP0216019a	246580002	MAP	2/17/10 2:01	951342	10-1683	2	LANL	USE	S
EXP0216020a	246580003	MAP	2/17/10 2:31	951342	10-1683	2	LANL	USE	S
EXP0216021a	WXXCCV	MAP	2/17/10 3:00			1		USE	C
EXP0216022a	XIBLK04	MAP	2/17/10 3:30			1		USE	B
EXP0216023a	WXXCRI	MAP	2/17/10 3:59			1		USE	C
EXP0216024a	246595004	MAP	2/17/10 4:29	951342	10-1694	2	LANL	USE	S
EXP0216025a	1202038763	MAP	2/17/10 4:58	951342	10-1694	2	LANL	USE	S
EXP0216026a	1202038764	MAP	2/17/10 5:28	951342	10-1694	2	LANL	USE	S
EXP0216027a	WXXCCV	MAP	2/17/10 5:58			1		USE	C
EXP0216028a	XIBLK05	MAP	2/17/10 6:28			1		USE	B
EXP0216029a	WXXCRI	MAP	2/17/10 6:57			1		USE	C

EXP0216030a	1202030577	MAP	2/17/10 7:27	947919	Various	2	LANL	USE	S
EXP0216031a	1202030578	MAP	2/17/10 7:57	947919	Various	2	LANL	USE	S
EXP0216032a	245908001	MAP	2/17/10 8:27	947919	10-1486	2	LANL	USE	S
EXP0216033a	1202030579	MAP	2/17/10 8:56	947919	10-1486	2	LANL	USE	S
EXP0216034a	1202030580	MAP	2/17/10 9:26	947919	10-1486	2	LANL	USE	S
EXP0216035a	245908002	MAP	2/17/10 9:56	947919	10-1486	2	LANL	USE	S
EXP0216036a	245908005	MAP	2/17/10 10:25	947919	10-1486	2	LANL	USE	S
EXP0216037a	245908006	MAP	2/17/10 10:55	947919	10-1486	2	LANL	USE	S
EXP0216038a	245912003	MAP	2/17/10 11:25	947919	10-1488	2	LANL	USE	S
EXP0216039a	WXXCCV	MAP	2/17/10 11:55			1		USE	C
EXP0216040a	XIBLK06	MAP	2/17/10 12:24			1		USE	B
EXP0216041a	WXXCRI	MAP	2/17/10 12:54			1		USE	C
EXP0216042a	1202038769	MAP	2/17/10 13:23	951349	Various	2	LANL	USE	S
EXP0216043a	1202038770	MAP	2/17/10 13:53	951349	Various	2	LANL	USE	S
EXP0216044a	246554001	MAP	2/17/10 14:23	951349	10-1665	2	LANL	USE	S
EXP0216045a	1202038771	MAP	2/17/10 14:52	951349	10-1665	2	LANL	USE	S
EXP0216046a	1202038772	MAP	2/17/10 15:22	951349	10-1665	2	LANL	USE	S
EXP0216047a	246554002	MAP	2/17/10 15:52	951349	10-1665	2	LANL	USE	S
EXP0216048a	246554003	MAP	2/17/10 16:21	951349	10-1665	2	LANL	USE	S
EXP0216049a	246554004	MAP	2/17/10 16:51	951349	10-1665	2	LANL	USE	S
EXP0216050a	246554005	MAP	2/17/10 17:20	951349	10-1665	2	LANL	USE	S
EXP0216051a	246554006	MAP	2/17/10 17:50	951349	10-1665	2	LANL	USE	S
EXP0216052a	WXXCCV	MAP	2/17/10 18:20			1		USE	C
EXP0216053a	XIBLK07	MAP	2/17/10 18:50			1		USE	B
EXP0216054a	WXXCRI	MAP	2/17/10 19:19			1		USE	C
EXP0216055a	246557001	MAP	2/17/10 19:49	951349	10-1666	2	LANL	USE	S
EXP0216056a	246562001	MAP	2/17/10 20:19	951349	10-1668	2	LANL	USE	S
EXP0216057a	246575003	MAP	2/17/10 20:49	951349	10-1675	2	LANL	USE	S
EXP0216058a	246575004	MAP	2/17/10 21:18	951349	10-1675	2	LANL	USE	S
EXP0216059a	246582002	MAP	2/17/10 21:48	951349	10-1685	2	LANL	USE	S
EXP0216060a	246582003	MAP	2/17/10 22:17	951349	10-1685	2	LANL	USE	S
EXP0216061a	246582004	MAP	2/17/10 22:47	951349	10-1685	2	LANL	USE	S
EXP0216062a	246582005	MAP	2/17/10 23:16	951349	10-1685	2	LANL	USE	S
EXP0216063a	246582006	MAP	2/17/10 23:46	951349	10-1685	2	LANL	USE	S
EXP0216064a	246582007	MAP	2/18/10 0:15	951349	10-1685	2	LANL	USE	S
EXP0216065a	WXXCCV	MAP	2/18/10 0:45			1		USE	C
EXP0216066a	XIBLK08	MAP	2/18/10 1:14			1		USE	B

EXP0216067a	WXXCRI	MAP	2/18/10 1:44	951349	10-1685	1	LANL	USE	C
EXP0216068a	246582008	MAP	2/18/10 2:14			2		USE	S
EXP0216069a	XIBLK09	MAP	2/18/10 2:43			1		USE	B
EXP0216070a	1202032097	MAP	2/18/10 3:13	948572	Various	2	LANL	DUSE	S
EXP0216071a	1202032098	MAP	2/18/10 3:43	948572	Various	2	LANL	DUSE	S
EXP0216072a	245955001	MAP	2/18/10 4:12	948572	10-1509	2	LANL	DUSE	S
EXP0216073a	245955002	MAP	2/18/10 4:42	948572	10-1509	2	LANL	DUSE	S
EXP0216074a	245959001	MAP	2/18/10 5:12	948572	10-1510	2	LANL	DUSE	S
EXP0216075a	1202032099	MAP	2/18/10 5:42	948572	10-1510	2	LANL	DUSE	S
EXP0216076a	1202032100	MAP	2/18/10 6:11	948572	10-1510	2	LANL	DUSE	S
EXP0216077a	245959002	MAP	2/18/10 6:41	948572	10-1510	2	LANL	DUSE	S
EXP0216078a	WXXCCV	MAP	2/18/10 7:10	948572	10-1510	2	LANL	DUSE	S
EXP0216079a	XIBLK10	MAP	2/18/10 7:40			1		USE	C
EXP0216080a	WXXCRI	MAP	2/18/10 8:10			1		USE	B
						1		USE	C



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 02/16/10

Extr. Injection Volume: 10uL

Sequence Number: 021610exs

Initial Calibration Date: 021610 Standard-Samp Reagent Lot#: 1260901, 1261217

Method: 8321A-Modified

Int. Std.: N/A

Mobile Phase Lot#: 1263794, 1258141

Reviewed By: *hnm*

Date: 02/17/10

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100216-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02160001.wiff	XIBLK01	LER	2/16/2010 12:13			1		USE	B
EXS02160002.wiff	XIBLK01	LER	2/16/2010 12:29			1		USE	B
EXS02160003.wiff	WXXICAL-19	LER	2/16/2010 12:44			1		USE	I
EXS02160004.wiff	WXXICAL-20	LER	2/16/2010 13:00			1		USE	I
EXS02160005.wiff	WXXICAL-21	LER	2/16/2010 13:16			1		USE	I
EXS02160006.wiff	WXXICAL-22	LER	2/16/2010 13:31			1		USE	I
EXS02160007.wiff	WXXICAL-23	LER	2/16/2010 13:47			1		USE	I
EXS02160008.wiff	WXXICAL-24	LER	2/16/2010 14:03			1		USE	I
EXS02160009.wiff	WXXICAL-25	LER	2/16/2010 14:18			1		USE	I
EXS02160010.wiff	XIBLK02	LER	2/16/2010 14:34			1		USE	B
EXS02160011.wiff	WXXICV	LER	2/16/2010 14:50			1		USE	C
EXS02160012.wiff	XIBLK03	LER	2/16/2010 15:05			1		USE	B
EXS02160013.wiff	WXXCRI	LER	2/16/2010 15:21			1		USE	C
EXS02160014.wiff	245994009	LER	2/16/2010 15:37	948579	10-1516	2	LANL	USE	S
EXS02160015.wiff	246006001	LER	2/16/2010 15:53	948579	10-1520	2	LANL	USE	S
EXS02160016.wiff	1202032115	LER	2/16/2010 16:08	948579	10-1520	2	LANL	USE	S
EXS02160017.wiff	1202032116	LER	2/16/2010 16:24	948579	10-1520	2	LANL	USE	S
EXS02160018.wiff	246006002	LER	2/16/2010 16:40	948579	10-1520	2	LANL	USE	S
EXS02160019.wiff	246006003	LER	2/16/2010 16:56	948579	10-1520	2	LANL	USE	S
EXS02160020.wiff	246006004	LER	2/16/2010 17:11	948579	10-1520	2	LANL	USE	S
EXS02160021.wiff	246006005	LER	2/16/2010 17:27	948579	10-1520	2	LANL	USE	S
EXS02160022.wiff	246006006	LER	2/16/2010 17:43	948579	10-1520	2	LANL	USE	S
EXS02160023.wiff	246006007	LER	2/16/2010 17:58	948579	10-1520	2	LANL	USE	S
EXS02160024.wiff	WXXCCV	LER	2/16/2010 18:14			1		USE	C
EXS02160025.wiff	XIBLK04	LER	2/16/2010 18:30			1		USE	B
EXS02160026.wiff	WXXCRI	LER	2/16/2010 18:46			1		USE	C
EXS02160027.wiff	246006008	LER	2/16/2010 19:01	948579	10-1520	2	LANL	USE	S
EXS02160028.wiff	246006009	LER	2/16/2010 19:17	948579	10-1520	2	LANL	USE	S
EXS02160029.wiff	XIBLK05	LER	2/16/2010 19:33			1		USE	S
EXS02160030.wiff	1202040417	LER	2/16/2010 19:49	952030	VARIOUS	2	LANL	USE	S

EXS02160031.wiff	1202040418	LER	2/16/2010 20:05	952030	VARIOUS	2	LANL	USE	S
EXS02160032.wiff	246707005	LER	2/16/2010 20:20	952030	10-1726	2	LANL	USE	S
EXS02160033.wiff	1202040419	LER	2/16/2010 20:36	952030	10-1726	2	LANL	USE	S
EXS02160034.wiff	1202040420	LER	2/16/2010 20:52	952030	10-1726	2	LANL	USE	S
EXS02160035.wiff	246764004	LER	2/16/2010 21:07	952030	10-1721	2	LANL	USE	S
EXS02160036.wiff	WXXCCV	LER	2/16/2010 21:23			1		USE	C
EXS02160037.wiff	XIBLK06	LER	2/16/2010 21:39			1		USE	B
EXS02160038.wiff	WXXCRI	LER	2/16/2010 21:55			1		USE	C
EXS02160039.wiff	1202038769	LER	2/16/2010 22:10	951349	VARIOUS	2	LANL	USE	S
EXS02160040.wiff	1202038770	LER	2/16/2010 22:26	951349	VARIOUS	2	LANL	USE	S
EXS02160041.wiff	246554001	LER	2/16/2010 22:42	951349	10-1665	2	LANL	USE	S
EXS02160042.wiff	1202038771	LER	2/16/2010 22:58	951349	10-1665	2	LANL	USE	S
EXS02160043.wiff	1202038772	LER	2/16/2010 23:13	951349	10-1665	2	LANL	USE	S
EXS02160044.wiff	246554002	LER	2/16/2010 23:29	951349	10-1665	2	LANL	USE	S
EXS02160045.wiff	246554003	LER	2/16/2010 23:45	951349	10-1665	2	LANL	USE	S
EXS02160046.wiff	246554004	LER	2/17/2010 0:00	951349	10-1665	2	LANL	USE	S
EXS02160047.wiff	246554005	LER	2/17/2010 0:16	951349	10-1665	2	LANL	USE	S
EXS02160048.wiff	246554006	LER	2/17/2010 0:32	951349	10-1665	2	LANL	USE	S
EXS02160049.wiff	WXXCCV	LER	2/17/2010 0:47			1		USE	C
EXS02160050.wiff	XIBLK07	LER	2/17/2010 1:03			1		USE	B
EXS02160051.wiff	WXXCRI	LER	2/17/2010 1:19			1		USE	C
EXS02160052.wiff	246557001	LER	2/17/2010 1:35	951349	10-1666	2	LANL	USE	S
EXS02160053.wiff	246562001	LER	2/17/2010 1:50	951349	10-1668	2	LANL	USE	S
EXS02160054.wiff	246575003	LER	2/17/2010 2:06	951349	10-1675	2	LANL	USE	S
EXS02160055.wiff	246575004	LER	2/17/2010 2:22	951349	10-1675	2	LANL	USE	S
EXS02160056.wiff	246582002	LER	2/17/2010 2:37	951349	10-1685	2	LANL	USE	S
EXS02160057.wiff	246582003	LER	2/17/2010 2:53	951349	10-1685	2	LANL	USE	S
EXS02160058.wiff	246582004	LER	2/17/2010 3:09	951349	10-1685	2	LANL	USE	S
EXS02160059.wiff	246582005	LER	2/17/2010 3:24	951349	10-1685	2	LANL	USE	S
EXS02160060.wiff	246582006	LER	2/17/2010 3:40	951349	10-1685	2	LANL	USE	S
EXS02160061.wiff	246582007	LER	2/17/2010 3:56	951349	10-1685	2	LANL	USE	S
EXS02160062.wiff	WXXCCV	LER	2/17/2010 4:12			1		USE	C
EXS02160063.wiff	XIBLK08	LER	2/17/2010 4:27			1		USE	B
EXS02160064.wiff	WXXCRI	LER	2/17/2010 4:43			1		USE	C
EXS02160065.wiff	246582008	LER	2/17/2010 4:59	951349	10-1685	2	LANL	USE	S
EXS02160066.wiff	XIBLK09	LER	2/17/2010 5:14			1		USE	B
EXS02160067.wiff	1202028657	LER	2/17/2010 5:30	947074	VARIOUS	2	LANL	USE	S

EXS02160068.wiff	1202028658	LER	2/17/2010 5:46	947074	VARIOUS	2	LANL	USE	S
EXS02160069.wiff	245789005	LER	2/17/2010 6:02	947074	10-1466	2	LANL	USE	S
EXS02160070.wiff	245789009	LER	2/17/2010 6:17	947074	10-1466	2	LANL	USE	S
EXS02160071.wiff	245789013	LER	2/17/2010 6:33	947074	10-1466	2	LANL	USE	S
EXS02160072.wiff	245789017	LER	2/17/2010 6:49	947074	10-1466	2	LANL	USE	S
EXS02160073.wiff	WXXCCV	LER	2/17/2010 7:04			1		USE	C
EXS02160074.wiff	XIBLK10	LER	2/17/2010 7:20			1		USE	B
EXS02160075.wiff	WXXCRI	LER	2/17/2010 7:36			1		USE	C
EXS02160076.wiff	245809001	LER	2/17/2010 7:52	947074	10-1480	2	LANL	USE	S
EXS02160077.wiff	1202028659	LER	2/17/2010 8:07	947074	10-1480	2	LANL	USE	S
EXS02160078.wiff	1202028660	LER	2/17/2010 8:23	947074	10-1480	2	LANL	USE	S
EXS02160079.wiff	WXXCCV	LER	2/17/2010 8:39			1		USE	C
EXS02160080.wiff	XIBLK11	LER	2/17/2010 8:54			1		USE	B
EXS02160081.wiff	WXXCRI	LER	2/17/2010 9:10			1		USE	C

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 792626  
Revision No.:

# DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 18-FEB-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 8321A Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 951349	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 246554(10-1665),246557(10-1666),246562(10-1668),246575(10-1675),246582(10-1685) <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for Surrogate or Tracer			
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>	
1. The following samples did not meet Surrogate recovery limits for the Secondary analyte analysis: 1202038769(MB) at 148%, 246575003 at 145% and 246582008 at 146%. The recovery limits are 70-144%.  2. The Matrix Spike (1202038771) did not meet spike recovery limits for TATB at 370%. The recovery limits are 29-155%.  3. The MS/MSD pair (1202038771/2) did not meet RPD acceptance limits for TATB at 90.5%. The acceptance limits are 0-30%.		1. Since there were no target analytes detected in the associated samples, and the surrogate passed in the Primary analyte analysis, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative.  2. Since the Laboratory Control Sample and Matrix Spike duplicate both met acceptance limits for TATB, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative.  3. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative.	

**Originator's Name:**  
Michael Penny 18-FEB-10

**Data Validator/Group Leader:**  
Herbert Maler 18-FEB-10

GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 953412  
**Prep Batch Number:** 953411

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8082:

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202043869	Method Blank (MB)
1202043870	Laboratory Control Sample (LCS)
1202043871	246558001(RE46-10-11496) Matrix Spike (MS)
1202043872	246558001(RE46-10-11496) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 15.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

**Calibration Information**

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

**Initial Calibration**

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

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the

concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

**Continuing Calibration Verification (CCV) Requirements**

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

**Quality Control (QC) Information**

**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

**Surrogate Recoveries**

All surrogate recoveries were within the established acceptance criteria for this SDG.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

A LANL sample of similar matrix associated with another SDG (#10-1672) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

**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 between the MS and MSD met the acceptance limits.

**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.

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**

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

**Miscellaneous Information**

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually 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. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

#### **Data Exception (DER) Documentation**

Data exception reports (DERs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

#### **Manual Integrations**

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

#### **Additional Comments**

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

#### **System Configuration**

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
ECD1A.J_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.J_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

#### **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: \_\_\_\_\_ *Jimi Coo* \_\_\_\_\_

Date: \_\_\_\_\_ *3/8/10* \_\_\_\_\_

## Roadmap for LANL 10-1665 PCB

This roadmap was analyzed by yip00818 on 02-18-2010, 11:21.

This roadmap was reviewed by rob01090 on 02-19-2010, 15:43.

This roadmap was packaged by yml on 03-06-2010, 07:43.

This roadmap was validated by jim01140 on 03-08-2010, 11:02.

Front Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtme	sublst	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/041f4101.d	246554001	sample	17-FEB-2010	14:38	10-1665.sub	RE15-10-8175	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/042f4201.d	246554002	sample	17-FEB-2010	14:50	10-1665.sub	RE15-10-8174	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/043f4301.d	246554003	sample	17-FEB-2010	15:03	10-1665.sub	RE15-10-8176	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/044f4401.d	246554004	sample	17-FEB-2010	15:16	10-1665.sub	RE15-10-8178	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/045f4501.d	246554005	sample	17-FEB-2010	15:28	10-1665.sub	RE15-10-8177	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/046f4601.d	246554006	sample	17-FEB-2010	15:41	10-1665.sub	RE15-10-8225	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtme	sublst	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/041b4101.d	246554001	sample	17-FEB-2010	14:38	10-1665.sub	RE15-10-8175	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/042b4201.d	246554002	sample	17-FEB-2010	14:50	10-1665.sub	RE15-10-8174	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/043b4301.d	246554003	sample	17-FEB-2010	15:03	10-1665.sub	RE15-10-8176	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/044b4401.d	246554004	sample	17-FEB-2010	15:16	10-1665.sub	RE15-10-8178	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/045b4501.d	246554005	sample	17-FEB-2010	15:28	10-1665.sub	RE15-10-8177	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/046b4601.d	246554006	sample	17-FEB-2010	15:41	10-1665.sub	RE15-10-8225	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtme	sublst	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/039f3901-1.d	1202043869	mb	17-FEB-2010	14:12	10-1665.sub	PBLK01	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/040f4001-1.d	1202043870	lcs	17-FEB-2010	14:25	10-1665.sub	PBLK01LCS	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smplid	sampletype	injdte	injtme	sublst	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/039b3901-1.d	1202043869	mb	17-FEB-2010	14:12	10-1665.sub	PBLK01	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/021710.b/040b4001-1.d	1202043870	lcs	17-FEB-2010	14:25	10-1665.sub	PBLK01LCS	1.00000	953412	UPLOAD BOTH COLUMNS, USE HIGHER

# SAMPLE DATA SUMMARY

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number: 10-1665

Lab Sample ID: 246554002

Client ID: RE15-10-8174

Batch ID: 953412

Run Date: 02/17/2010 14:50

Prep Date: 02/16/2010 10:40

Data File: 042f4201.d

042b4201.d

Date Collected: 02/04/2010 12:00

Date Received: 02/09/2010 10:00

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YSI

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 7.1

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.20	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.20	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.20	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.20	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.20	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.20	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.20	3.59	1

## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-1665  
Lab Sample ID: 246554001

Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00

Matrix: R  
%Moisture: .9  
Project: LANL01004  
SOP Ref: GL-OA-E-040

Client ID: RE15-10-8175  
Batch ID: 953412  
Run Date: 02/17/2010 14:38  
Prep Date: 02/16/2010 10:40  
Data File: 041f4101.d  
041b4101.d

Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.1  
Analyst: YS1  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.36	ug/kg	1.12	3.36	1
11104-28-2	Aroclor-1221	U	3.36	ug/kg	1.12	3.36	1
11141-16-5	Aroclor-1232	U	3.36	ug/kg	1.12	3.36	1
53469-21-9	Aroclor-1242	U	3.36	ug/kg	1.12	3.36	1
12672-29-6	Aroclor-1248	U	3.36	ug/kg	1.12	3.36	1
11097-69-1	Aroclor-1254	U	3.36	ug/kg	1.12	3.36	1
11096-82-5	Aroclor-1260	U	3.36	ug/kg	1.12	3.36	1

## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-1665  
Lab Sample ID: 246554003

Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00

Matrix: R  
%Moisture: 6  
Project: LANL01004  
SOP Ref: GL-OA-E-040

Client ID: RE15-10-8176  
Batch ID: 953412  
Run Date: 02/17/2010 15:03  
Prep Date: 02/16/2010 10:40  
Data File: 043f4301.d  
043b4301.d

Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2

Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1665  
Lab Sample ID: 246554005Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00Matrix: R  
%Moisture: 3.3Client ID: RE15-10-8177  
Batch ID: 953412  
Run Date: 02/17/2010 15:28  
Prep Date: 02/16/2010 10:40  
Data File: 045f4501.d  
045b4501.dClient: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30.01 g  
Column: 1 CLP1  
2 CLP2Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.45	ug/kg	1.15	3.45	1
11104-28-2	Aroclor-1221	U	3.45	ug/kg	1.15	3.45	1
11141-16-5	Aroclor-1232	U	3.45	ug/kg	1.15	3.45	1
53469-21-9	Aroclor-1242	U	3.45	ug/kg	1.15	3.45	1
12672-29-6	Aroclor-1248	U	3.45	ug/kg	1.15	3.45	1
11097-69-1	Aroclor-1254	U	3.45	ug/kg	1.15	3.45	1
11096-82-5	Aroclor-1260	U	3.45	ug/kg	1.15	3.45	1

## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1665  
Lab Sample ID: 246554004Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 2.5  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.42	ug/kg	1.14	3.42	1
11104-28-2	Aroclor-1221	U	3.42	ug/kg	1.14	3.42	1
11141-16-5	Aroclor-1232	U	3.42	ug/kg	1.14	3.42	1
53469-21-9	Aroclor-1242	U	3.42	ug/kg	1.14	3.42	1
12672-29-6	Aroclor-1248	U	3.42	ug/kg	1.14	3.42	1
11097-69-1	Aroclor-1254	U	3.42	ug/kg	1.14	3.42	1
11096-82-5	Aroclor-1260	U	3.42	ug/kg	1.14	3.42	1



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

SDG Number: 10-1665  
Lab Sample ID: 246554006

Client ID: RE15-10-8225  
Batch ID: 953412  
Run Date: 02/17/2010 15:41  
Prep Date: 02/16/2010 10:40  
Data File: 046f4601.d  
046b4601.d

Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YSJ  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
%Moisture: 1.3  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.13	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.13	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.13	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.13	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.13	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.13	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.13	3.38	1

# QUALITY CONTROL SUMMARY

PCB  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1665

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202043869	MB for batch 953411	64	63	68	68
1202043870	LCS for batch 953411	61	60	65	65
246554001	RE15-10-8175	50	50	44	54
246554002	RE15-10-8174	46	45	49	50
246554003	RE15-10-8176	52	51	48	59
246554004	RE15-10-8178	49	49	47	54
246554005	RE15-10-8177	51	50	53	53
246554006	RE15-10-8225	47	47	49	53

## Surrogate

## Acceptance Limits

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

PCB

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**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-1665

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 953411

Matrix: SOIL

Lab Sample ID:1202043870

Instrument: ECD1A.I

Analysis Date: 02/17/2010 14:25

Dilution: 1

Analyst: YS1

Prep Batch ID: 953411

Inj. Vol: 1 uL

Batch ID: 953412

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	20.4	61	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	23.7	71	45-118

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1672

Client ID: RE46-10-11496MS

Lab Sample ID:1202043871

Instrument: ECD1A.J

Analyst: YS1

Inj. Vol: 1 uL

Sample Type: Matrix Spike

Matrix: S

%Moisture: 3

Analysis Date: 02/17/2010 16:27

Dilution: 1

Prep Batch ID: 953411

Batch ID: 953412

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	34.4	0.00 U	16.3	47	23-119
11096-82-5	MS Aroclor-1260	34.4	0.00 U	19.6	57	28-124

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1672

Sample Type: Matrix Spike Duplicate

Client ID: RE46-10-11496MSD

Matrix: S

Lab Sample ID:1202043872

%Moisture: 3

Instrument: ECD1A.I

Analysis Date: 02/17/2010 16:40

Dilution: 1

Analyst: YS1

Prep Batch #: 953411

Inj. Vol: 1 uL

Batch ID: 953412

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	34.4	0.00	U 19.0	55	23-119	15	0-28
11096-82-5	MSD Aroclor-1260	34.4	0.00	U 22.0	64	28-124	12	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1665	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 953411	Instrument ID:	ECD1A.I_2	Data File:	039b3901-1.d
Lab Sample ID:	1202043869		ECD1A.I_1		039f3901-1.d
Column:	CLP2	Prep Date:	02/16/2010 10:40	Analyzed:	02/17/10 14:12
	CLP1	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 953411	1202043870	040f4001-1.d 040b4001-1.d	02/17/10	1425
02 RE15-10-8175	246554001	041f4101.d 041b4101.d	02/17/10	1438
03 RE15-10-8174	246554002	042f4201.d 042b4201.d	02/17/10	1450
04 RE15-10-8176	246554003	043f4301.d 043b4301.d	02/17/10	1503
05 RE15-10-8178	246554004	044f4401.d 044b4401.d	02/17/10	1516
06 RE15-10-8177	246554005	045f4501.d 045b4501.d	02/17/10	1528
07 RE15-10-8225	246554006	046f4601.d 046b4601.d	02/17/10	1541

# SAMPLE DATA



## PCB

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Certificate of Analysis  
Sample SummarySDG Number: 10-1665  
Lab Sample ID: 246554002Date Collected: 02/04/2010 12:00  
Date Received: 02/09/2010 10:00  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.J  
Analyst: YS1  
Aliquot: 30 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
% Moisture: 7.1  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.59	ug/kg	1.20	3.59	1
11104-28-2	Aroclor-1221	U	3.59	ug/kg	1.20	3.59	1
11141-16-5	Aroclor-1232	U	3.59	ug/kg	1.20	3.59	1
53469-21-9	Aroclor-1242	U	3.59	ug/kg	1.20	3.59	1
12672-29-6	Aroclor-1248	U	3.59	ug/kg	1.20	3.59	1
11097-69-1	Aroclor-1254	U	3.59	ug/kg	1.20	3.59	1
11096-82-5	Aroclor-1260	U	3.59	ug/kg	1.20	3.59	1

Data File: /chem/ecdl1a.i/021710.b/042f4201.d  
Report Date: 17-Feb-2010 15:38

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/021710.b/042f4201.d  
Lab Smp Id: 246554002 Client Smp ID: RE15-10-8174  
Inj Date : 17-FEB-2010 14:50  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |246554002|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8174|||  
Comment :  
Method : /chem/ecdl1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 42  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	7.14860	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
-----							
\$ 11 4cmx					CAS #: 877-09-8		
1.960	1.961	-0.001	40178218 91.9052	3.3	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.272	5.275	-0.003	32599327 97.7344	3.5	80.00- 120.00	100.00	
-----							

Data File: /chem/ecdl1.i/021710.b/042f4201.d

Date: 17-FEB-2010 14:50

Client ID: RE15-10-8174

Sample Info: 12465400211

Volume Injected (uL): 1.0

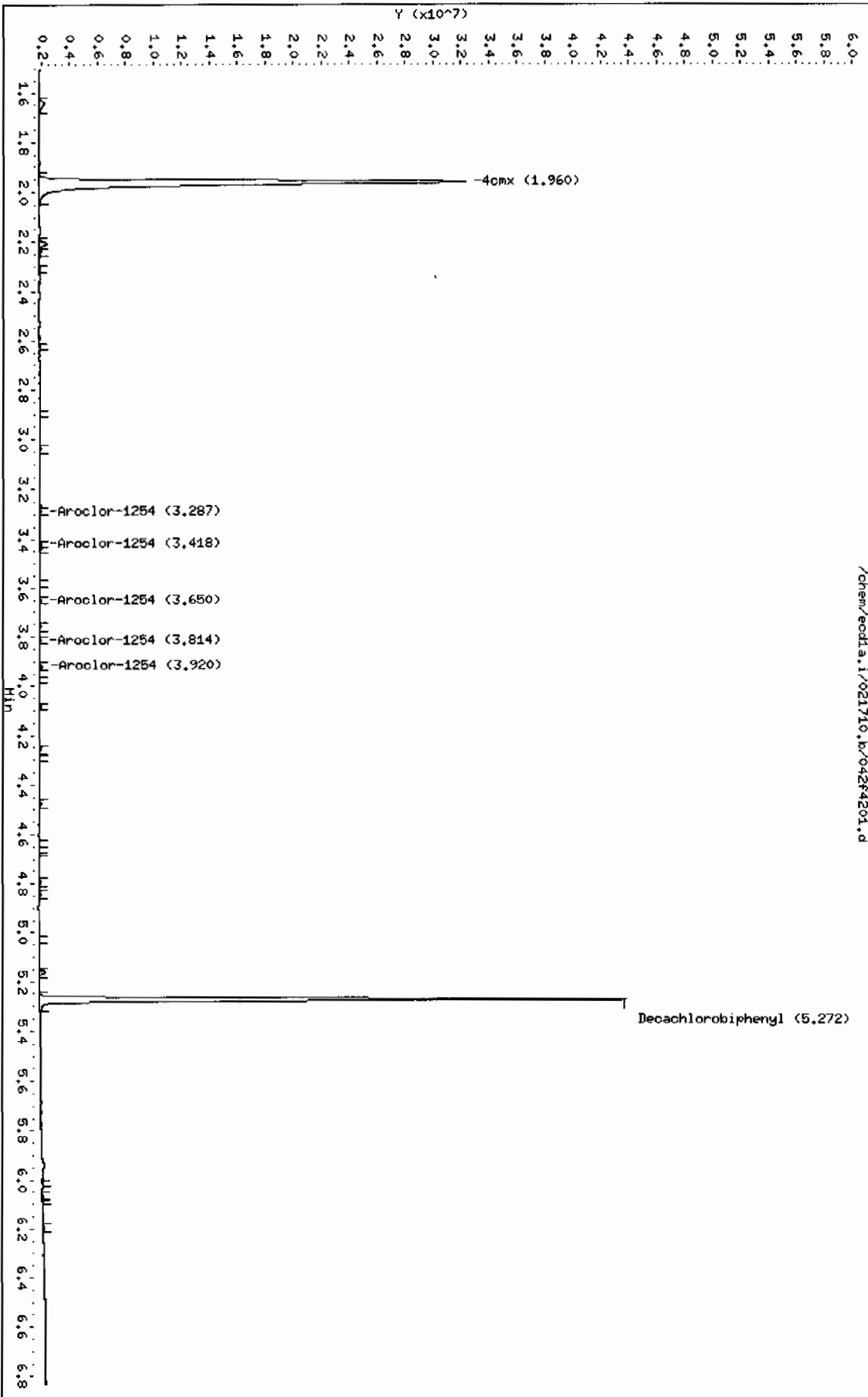
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/021710.b/042b4201.d  
Report Date: 17-Feb-2010 15:38

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/021710.b/042b4201.d  
Lab Smp Id: 246554002 Client Smp ID: RE15-10-8174  
Inj Date : 17-FEB-2010 14:50  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |246554002|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8174|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 42  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	7.14860	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.292	2.294	-0.002	26036709 90.7482	3.2	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.939	5.941	-0.002	21375229 99.3760	3.6	80.00- 120.00	100.00
-----						

Data File: /chem/ecod1a.i/021710.b/042b4201.d

Date: 17-FEB-2010 14:50

Client ID: RE15-10-8174

Sample Info: 1246564002111

Volume Injected (uL): 1.0

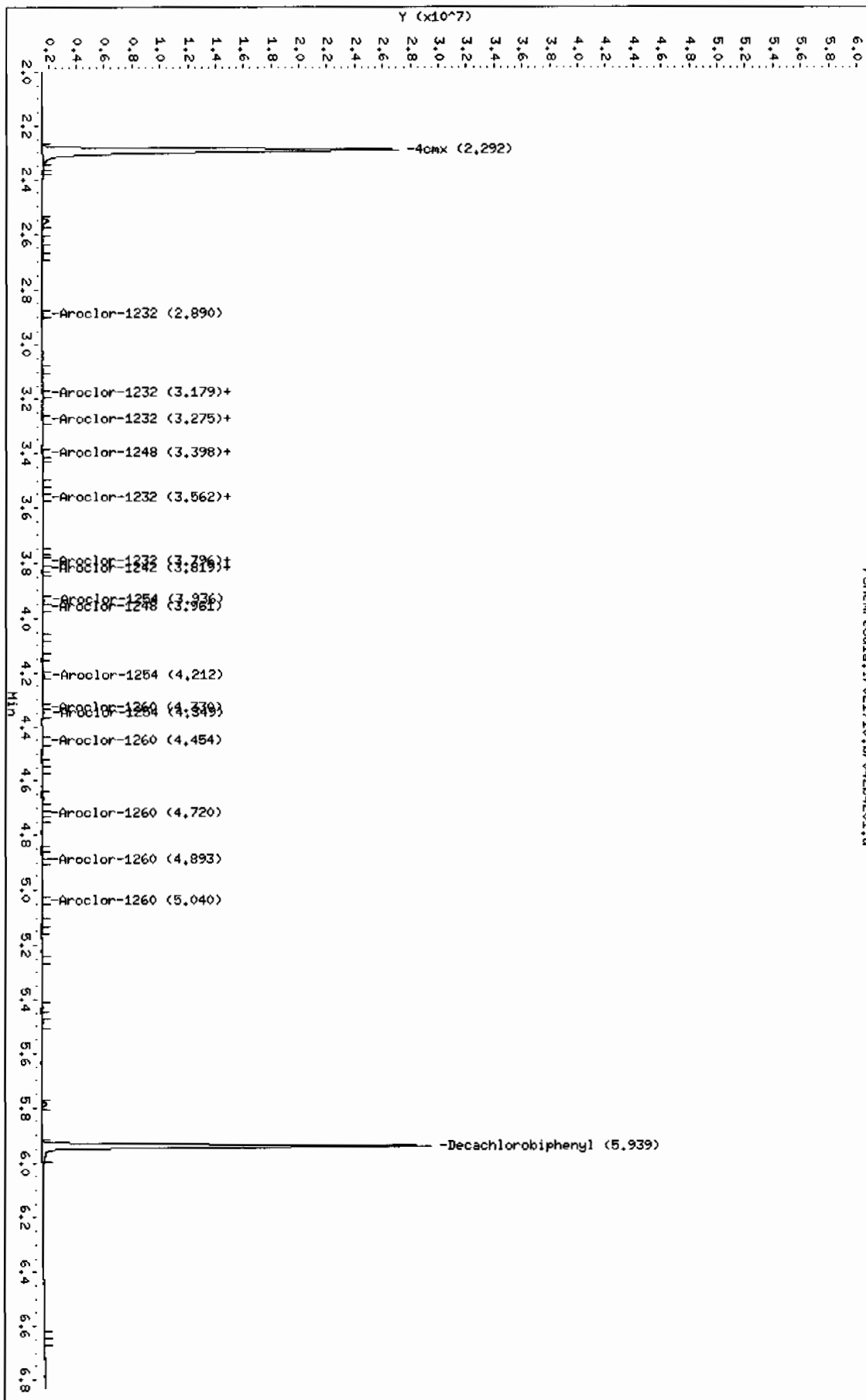
Column phase: CLP2

Instrument: ecod1a.i

Operator: YSI

Column diameter: 0.25

/chem/ecod1a.i/021710.b/042b4201.d



## PCB

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Certificate of Analysis  
Sample Summary

SDG Number:	10-1665	Date Collected:	02/04/2010 12:00	Matrix:	R
Lab Sample ID:	246554001	Date Received:	02/09/2010 10:00	%Moisture:	.9
Client ID:	RE15-10-8175	Client:	LANL010	Project:	LANL01004
Batch ID:	953412	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/17/2010 14:38	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/16/2010 10:40	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	041f4101.d	Aliquot:	30 g	Final Volume:	1 mL
	041b4101.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.36	ug/kg	1.12	3.36	1
11104-28-2	Aroclor-1221	U	3.36	ug/kg	1.12	3.36	1
11141-16-5	Aroclor-1232	U	3.36	ug/kg	1.12	3.36	1
53469-21-9	Aroclor-1242	U	3.36	ug/kg	1.12	3.36	1
12672-29-6	Aroclor-1248	U	3.36	ug/kg	1.12	3.36	1
11097-69-1	Aroclor-1254	U	3.36	ug/kg	1.12	3.36	1
11096-82-5	Aroclor-1260	U	3.36	ug/kg	1.12	3.36	1

Data File: /chem/ecdla.i/021710.b/041f4101.d  
Report Date: 17-Feb-2010 15:28

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/041f4101.d

Lab Smp Id: 246554001

Client Smp ID: RE15-10-8175

Inj Date : 17-FEB-2010 14:38

Operator : YSl

Inst ID: ecdla.i

Smp Info : |246554001|1|

Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8175|

Comment :

Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m

Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 41

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1665.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.85080	% Moisture

Cpnd Variable

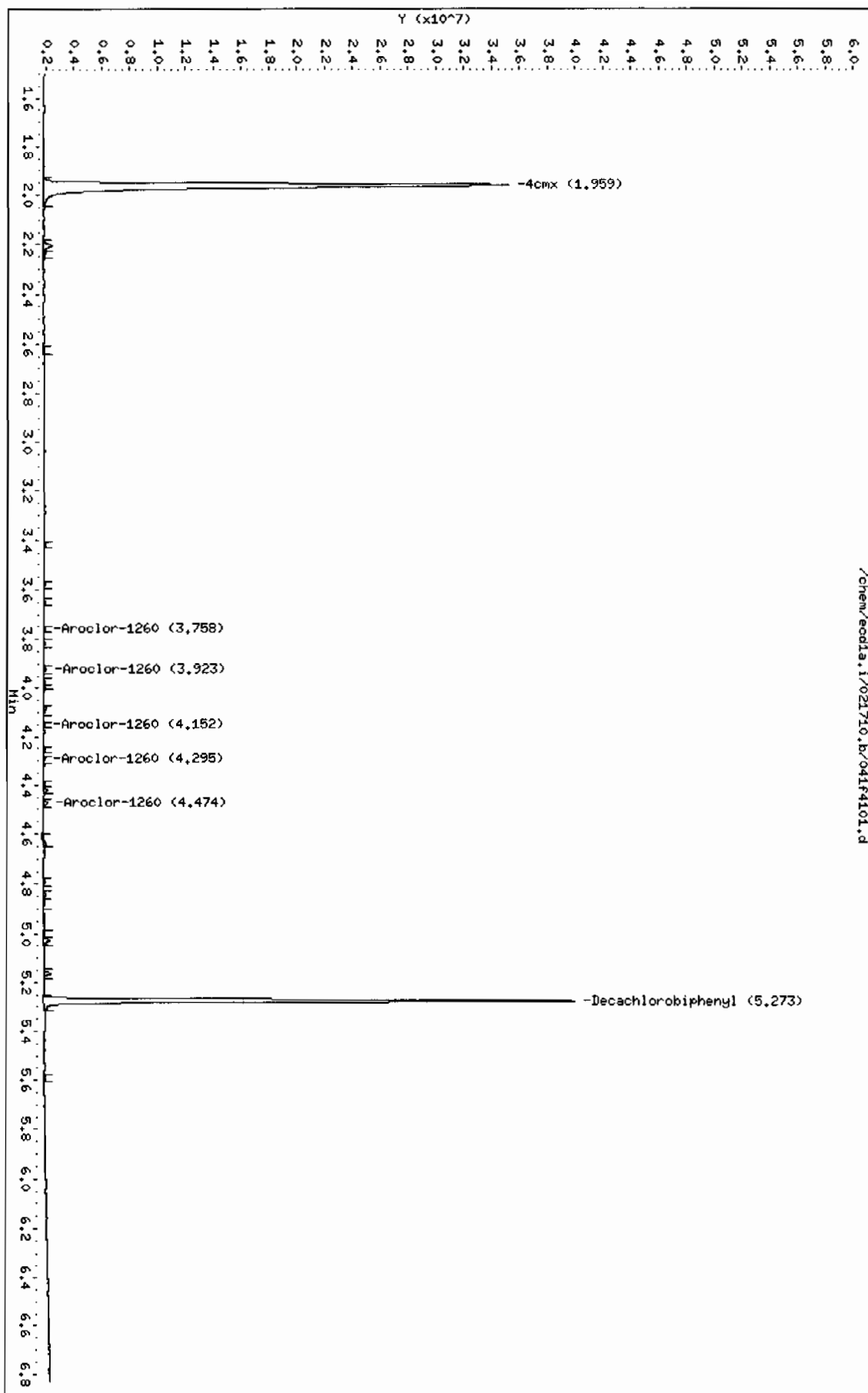
Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	4cmx						
1.959	1.961	-0.002	43856370	100.319	3.4	80.00- 120.00	100.00
12	Decachlorobiphenyl						
5.273	5.275	-0.002	29198441	87.5384	2.9	80.00- 120.00	100.00

Data File: /chem/ecdl1a.i/021710.b/041f4101.d  
Date : 17-FEB-2010 14:38  
Client ID: RE15-10-8175  
Sample Info: 124655400111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl1a.i  
Operator: YSL  
Column diameter: 0.25





Data File: /chem/ecd1a.i/021710.b/041b4101.d  
 Report Date: 17-Feb-2010 15:28

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd1a.i/021710.b/041b4101.d  
 Lab Smp Id: 246554001 Client Smp ID: RE15-10-8175  
 Inj Date : 17-FEB-2010 14:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |246554001|1|  
 Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8175|||  
 Comment :  
 Method : /chem/ecd1a.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 41  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1665.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1pl

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.85080	% Moisture

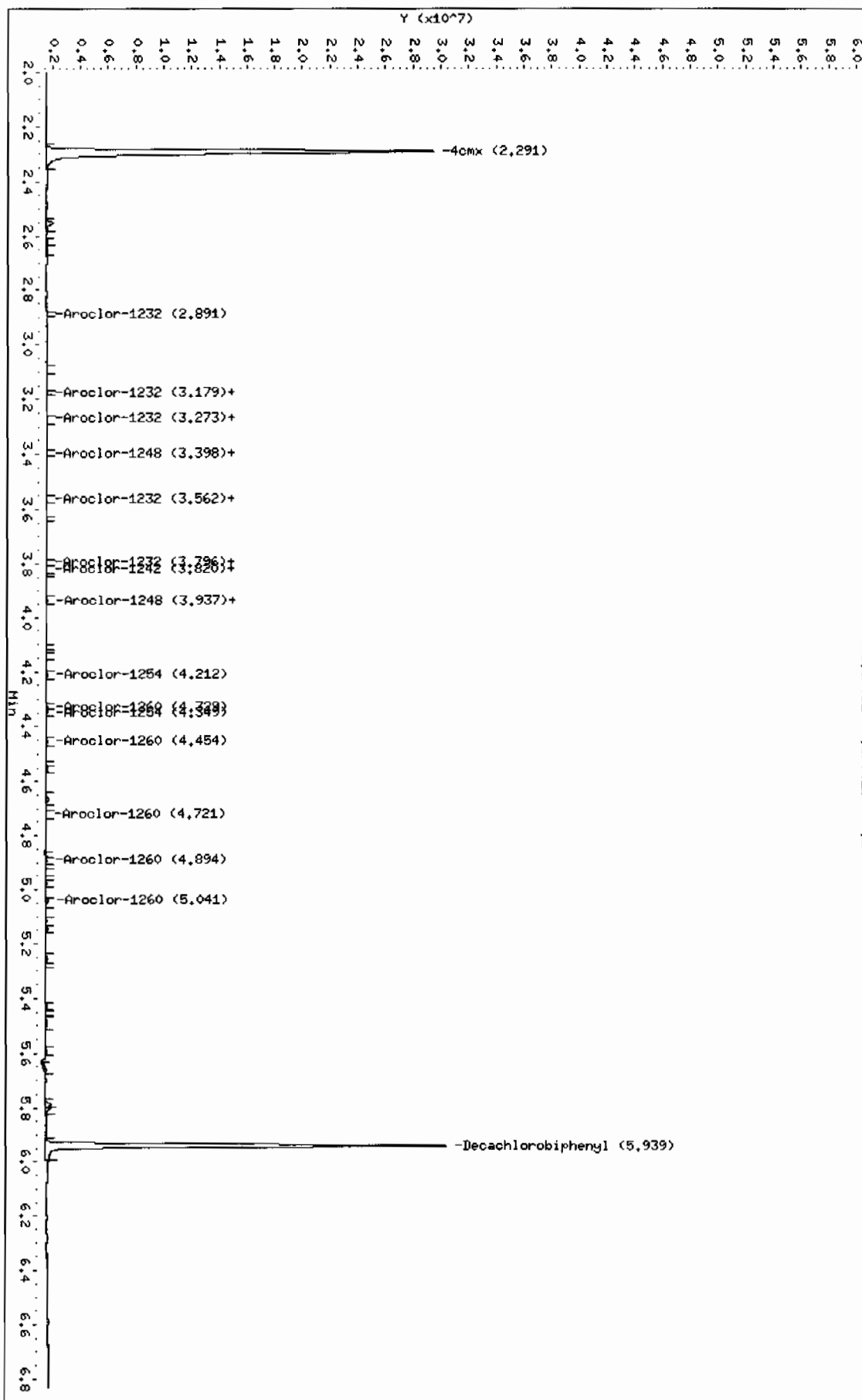
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====		=====	=====	=====	=====
S 11 4cmx CAS #: 877-09-8						
2.291	2.294	-0.003	28503878 99.3473	3.3	80.00- 120.00	100.00
-----						
S 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	23280600 108.234	3.6	80.00- 120.00	100.00
-----						

Data File: /chem/ecda.i/021710.b/041b4101.d  
Date: 17-FEB-2010 14:38  
Client ID: RE15-10-8175  
Sample Info: 1246554001.L  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecda.i/021710.b/041b4101.d



## PCB

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Certificate of Analysis  
Sample Summary

SDG Number: 10-1665

Lab Sample ID: 246554003

Client ID: RE15-10-8176

Batch ID: 953412

Run Date: 02/17/2010 15:03

Prep Date: 02/16/2010 10:40

Data File: 043f4301.d

043b4301.d

Date Collected: 02/04/2010 12:00

Date Received: 02/09/2010 10:00

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.01 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 6

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

Data File: /chem/ecd1a.i/021710.b/043f4301.d  
Report Date: 17-Feb-2010 15:38

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/043f4301.d  
Lab Smp Id: 246554003 Client Smp ID: RE15-10-8176  
Inj Date : 17-FEB-2010 15:03  
Operator : YSl Inst ID: ecd1a.i  
Smp Info : |246554003|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8176|||  
Comment :  
Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	6.04030	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
-----							
\$ 11 4cmx					CAS #: 877-09-8		
1.960	1.961	-0.001	45158558 103.297	3.7	80.00~ 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.273	5.275	-0.002	31781497 95.2825	3.4	80.00~ 120.00	100.00	
-----							

Data File: /chem/eod1a.i/021710.b/043fa301.d

Date: 17-FEB-2010 15:03

Client ID: RE15-10-8176

Sample Info: 124655490311

Volume Injected (uL): 1.0

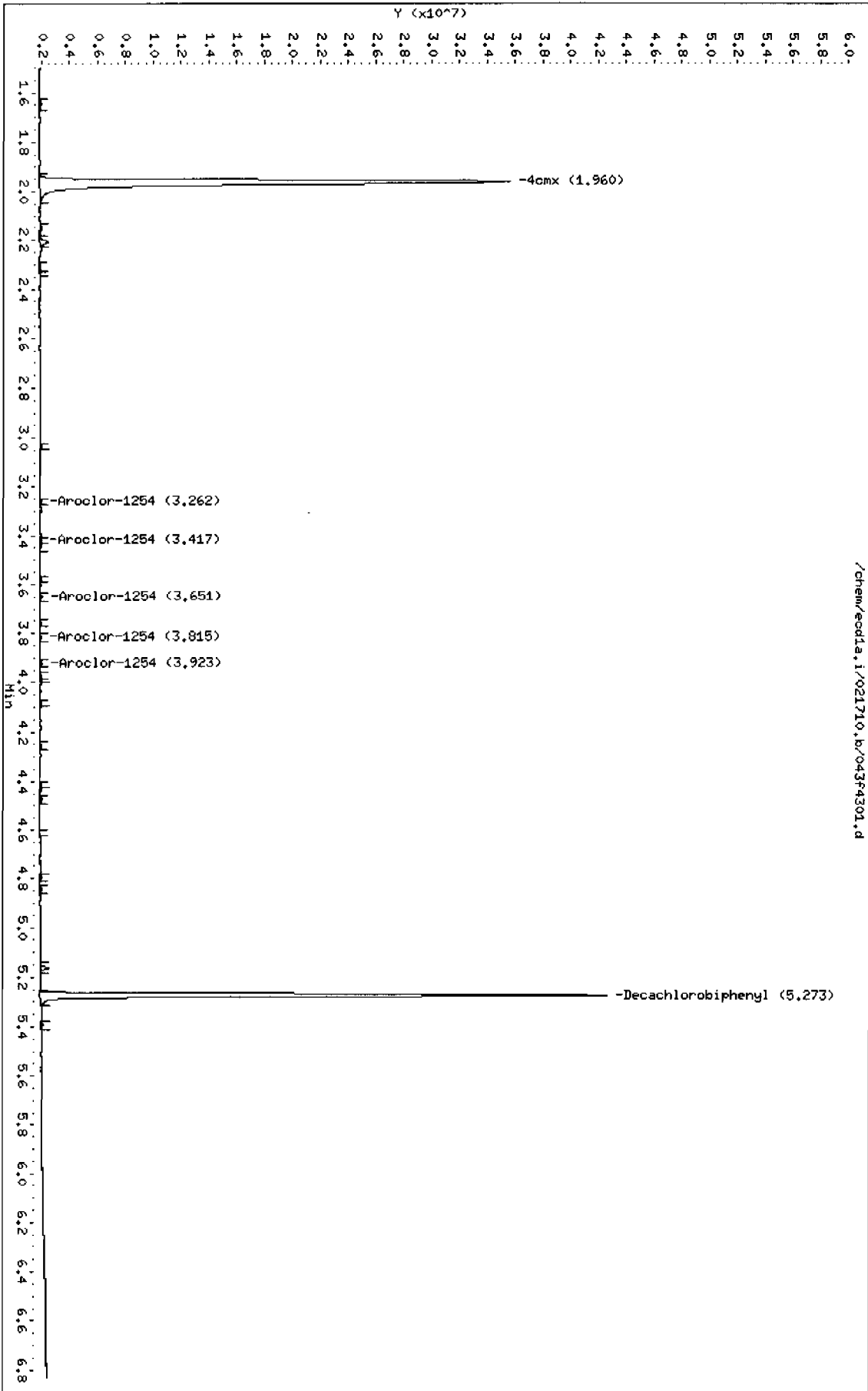
Column phase: CLP1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/021710.b/043b4301.d  
Report Date: 17-Feb-2010 15:38

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdl1a.i/021710.b/043b4301.d  
Lab Smp Id: 246554003 Client Smp ID: RE15-10-8176  
Inj Date : 17-FEB-2010 15:03  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |246554003|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8176|||  
Comment :  
Method : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	6.04030	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE ( ug/L)	(ug/Kg)		
			=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.292	2.294	-0.002	29397571	102.462	3.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	25238149	117.335	4.2 80.00- 120.00	100.00
-----						

Data File: /chem/ecdla.i/021710.b/043b4301.d

Date: 17-FEB-2010 15:03

Client ID: RE15-10-8126

Sample Info: 1246554003111

Volume Injected (uL): 1.0

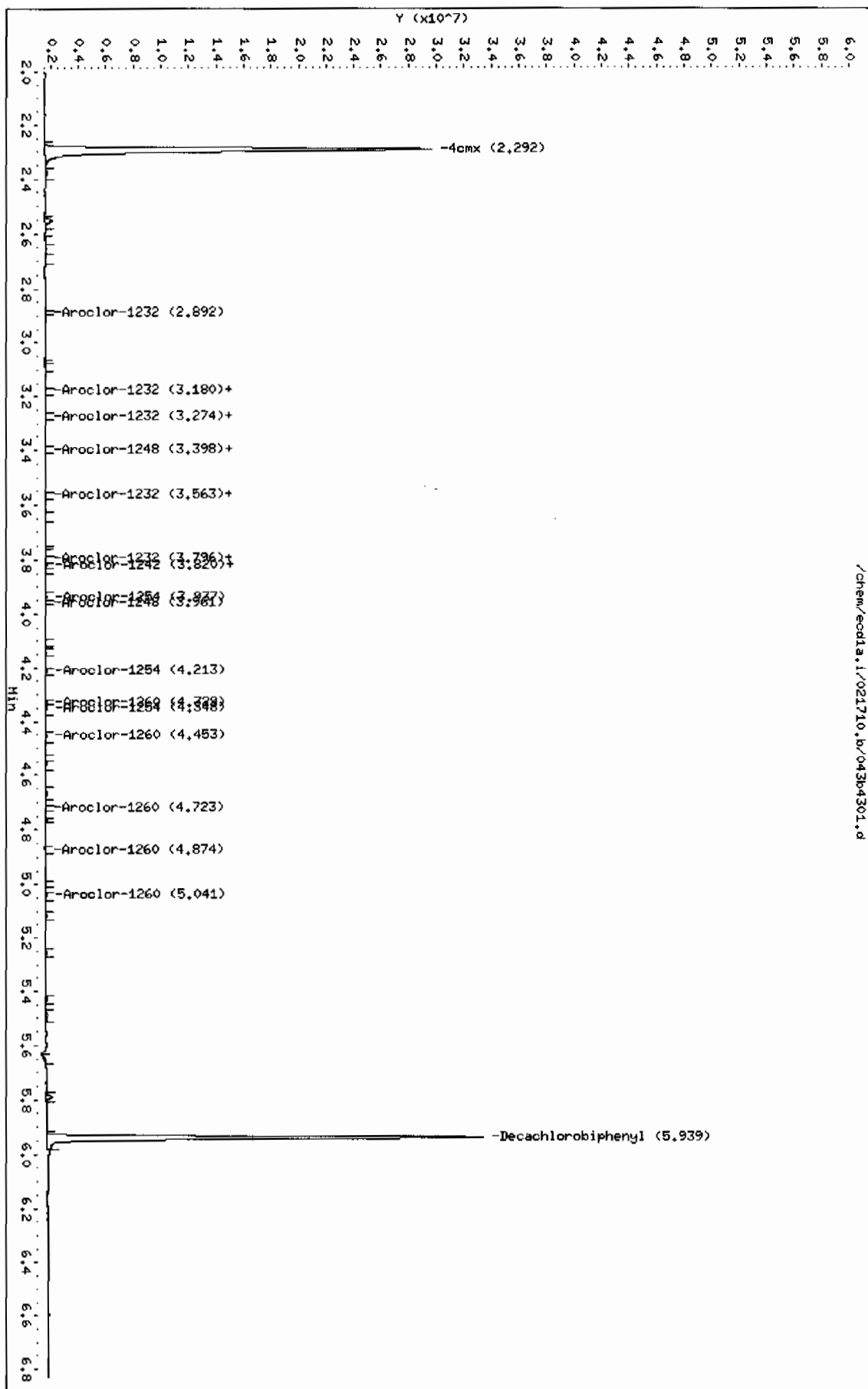
Column phase: CLP2

Instrument: ecdla.i

Operator: YSI

Column diameter: 0.25

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## PCB

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Certificate of Analysis  
Sample Summary

SDG Number: 10-1665

Lab Sample ID: 246554005

Client ID: RE15-10-8177

Batch ID: 953412

Run Date: 02/17/2010 15:28

Prep Date: 02/16/2010 10:40

Data File: 045f4501.d

045b4501.d

Date Collected: 02/04/2010 12:00

Date Received: 02/09/2010 10:00

Client: LANL010

Method: SW846 8082

Inst: ECD1A.1

Analyst: YSJ

Aliquot: 30.01 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 3.3

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.45	ug/kg	1.15	3.45	1
11104-28-2	Aroclor-1221	U	3.45	ug/kg	1.15	3.45	1
11141-16-5	Aroclor-1232	U	3.45	ug/kg	1.15	3.45	1
53469-21-9	Aroclor-1242	U	3.45	ug/kg	1.15	3.45	1
12672-29-6	Aroclor-1248	U	3.45	ug/kg	1.15	3.45	1
11097-69-1	Aroclor-1254	U	3.45	ug/kg	1.15	3.45	1
11096-82-5	Aroclor-1260	U	3.45	ug/kg	1.15	3.45	1



Data File: /chem/ecdla.i/021710.b/045f4501.d  
Report Date: 18-Feb-2010 07:22

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/045f4501.d  
Lab Smp Id: 246554005 Client Smp ID: RE15-10-8177  
Inj Date : 17-FEB-2010 15:28  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |246554005|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8177|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 18-Feb-2010 06:48 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 45  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	3.29930	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
1.958	1.961	-0.003	44485863	101.759	3.5 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.273	5.275	-0.002	35444609	106.265	3.7 80.00- 120.00	100.00
-----						

Data File: /chem/eodla.i/021710.b/045f4501.d

Date: 17-FEB-2010 15:28

Client ID: REIS-10-8177

Sample Info: 12455400511

Volume Injected (uL): 1.0

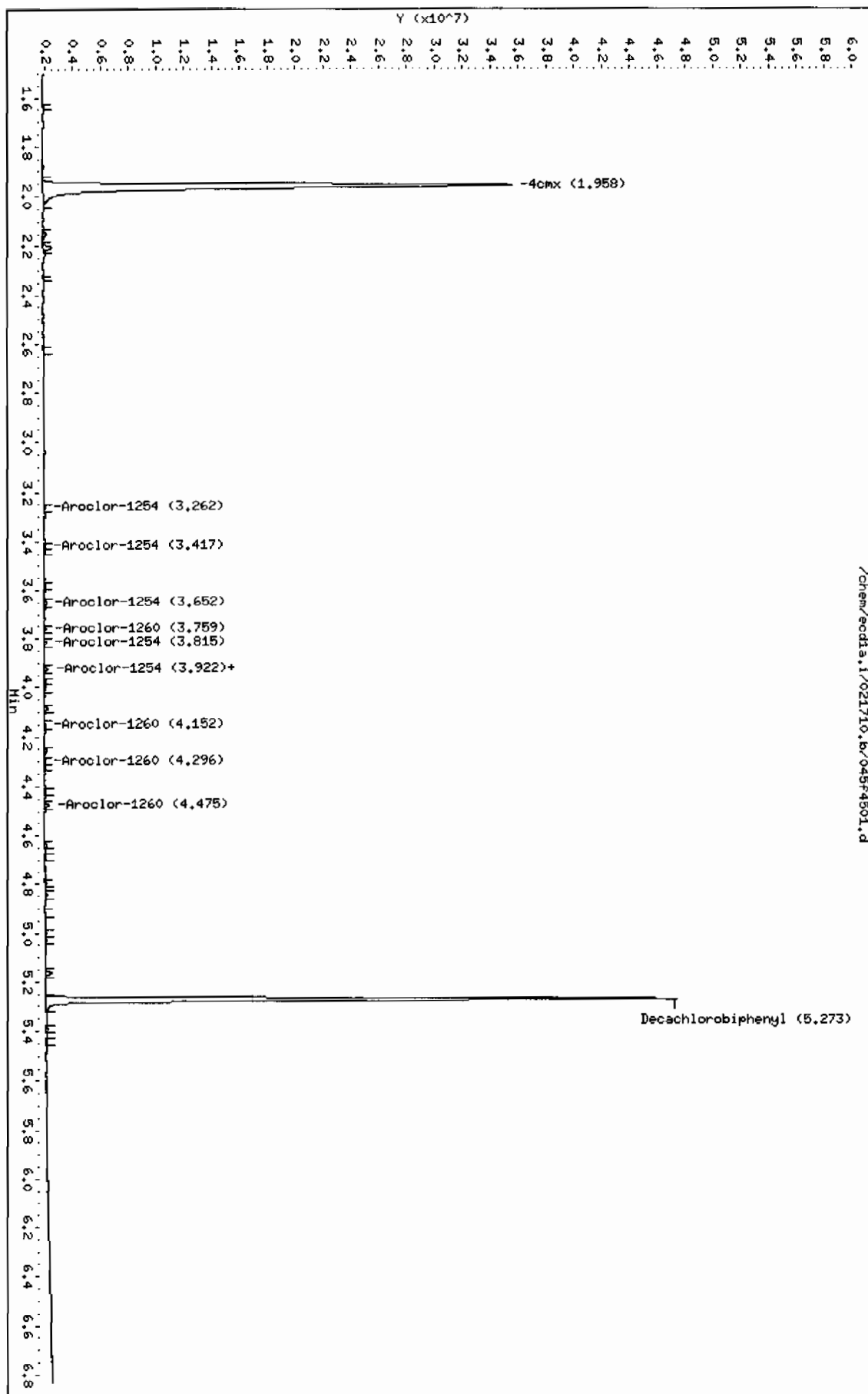
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecd1a.i/021710.b/045b4501.d  
Report Date: 18-Feb-2010 07:22

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 1NJ VOL

Data file : /chem/ecd1a.i/021710.b/045b4501.d

Lab Smp Id: 246554005

Client Smp ID: RE15-10-8177

Inj Date : 17-FEB-2010 15:28

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |246554005|1|

Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8177|

Comment :

Method : /chem/ecd1a.i/021710.b/ECD1-B-8082-021110.m

Meth Date : 18-Feb-2010 06:51 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 45

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1665.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	3.29930	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	==	=====	=====	=====	=====
§ 11 4cmx						
			CAS #: 877-09-8			
2.291	2.294	-0.003	28916918	100.787	3.5 80.00- 120.00	100.00
-----						
§ 12 Decachlorobiphenyl						
			CAS #: 2051-24-3			
5.940	5.941	-0.001	22913413	106.527	3.7 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl1a.i/021710.b/045b4501.d

Date: 17-FEB-2010 15:28

Client ID: RE15-10-8177

Sample Info: 124656400511

Volume Injected (uL): 1.0

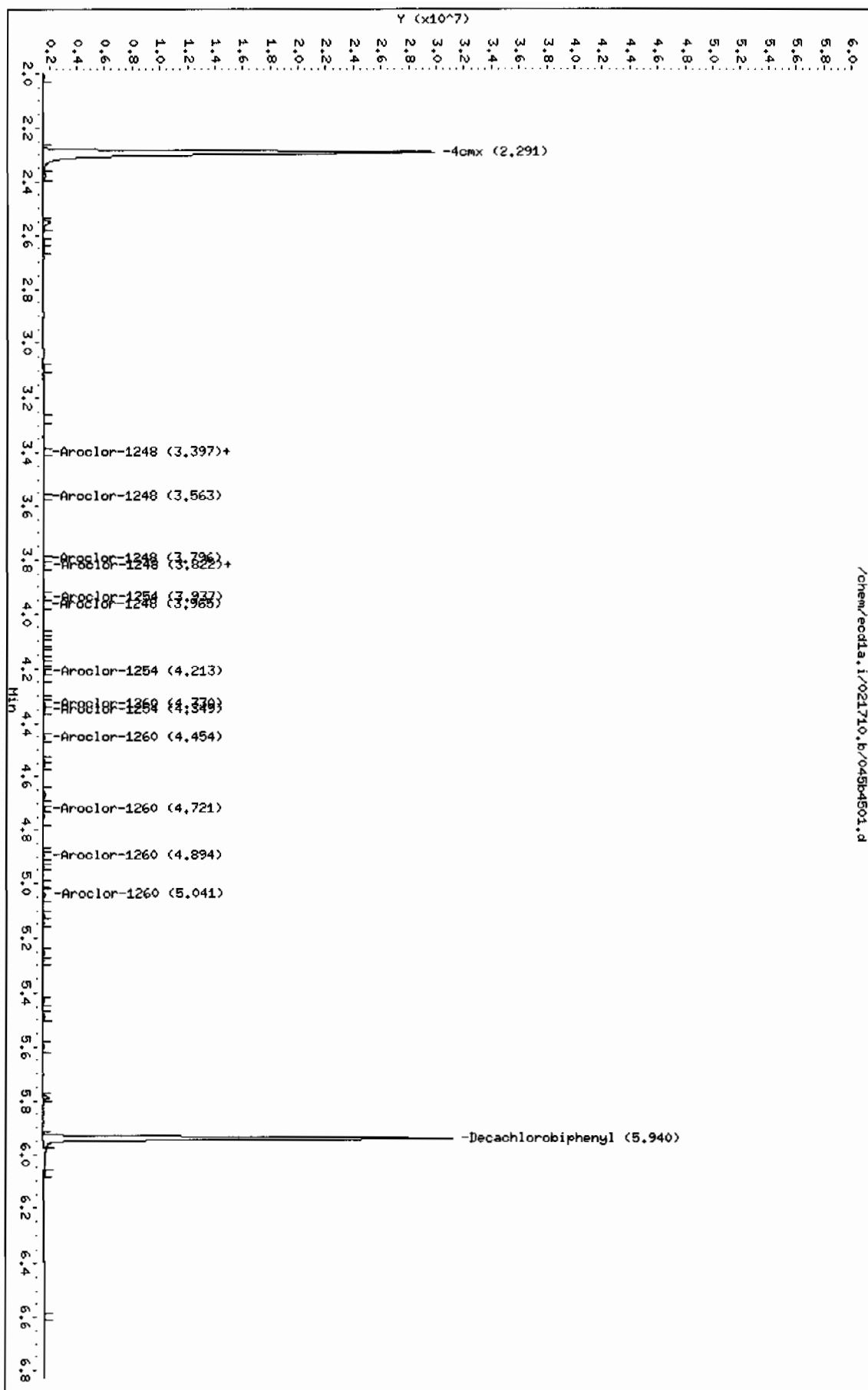
Column phase: CLP2

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/021710.b/045b4501.d



**PCB**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 10-1665  
**Lab Sample ID:** 246554004

**Client ID:** RE15-10-8178  
**Batch ID:** 953412  
**Run Date:** 02/17/2010 15:16  
**Prep Date:** 02/16/2010 10:40  
**Data File:** 044f4401.d  
044b4401.d

**Date Collected:** 02/04/2010 12:00  
**Date Received:** 02/09/2010 10:00  
**Client:** LANL010  
**Method:** SW846 8082  
**Inst:** ECD1A.I  
**Analyst:** YS1  
**Aliquot:** 30 g  
**Column:** 1 CLP1  
2 CLP2

**Matrix:** R  
**%Moisture:** 2.5  
**Project:** LANL01004  
**SOP Ref:** GL-OA-E-040  
**Dilution:** 1  
**Inj. Vol:** 1 uL  
**Final Volume:** 1 mL  
**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.42	ug/kg	1.14	3.42	1
11104-28-2	Aroclor-1221	U	3.42	ug/kg	1.14	3.42	1
11141-16-5	Aroclor-1232	U	3.42	ug/kg	1.14	3.42	1
53469-21-9	Aroclor-1242	U	3.42	ug/kg	1.14	3.42	1
12672-29-6	Aroclor-1248	U	3.42	ug/kg	1.14	3.42	1
11097-69-1	Aroclor-1254	U	3.42	ug/kg	1.14	3.42	1
11096-82-5	Aroclor-1260	U	3.42	ug/kg	1.14	3.42	1

Data File: /chem/ecdla.i/021710.b/044f4401.d  
Report Date: 18-Feb-2010 07:36

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/044f4401.d  
Lab Smp Id: 246554004 Client Smp ID: RE15-10-8178  
Inj Date : 17-FEB-2010 15:16  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |246554004|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8178|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 18-Feb-2010 07:28 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 44  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1pl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.47510	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx							CAS #: 877-09-8	
1.961	1.961	0.000	42806321	97.9168	3.3	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl							CAS #: 2051-24-3	
5.272	5.275	-0.003	31167777	93.4425	3.2	80.00- 120.00	100.00	

Data File: /chem/ecdda.i/021710.b/044f4401.d

Date : 17-FEB-2010 15:16

Client ID: RE15-10-8178

Sample Info: 124655400411

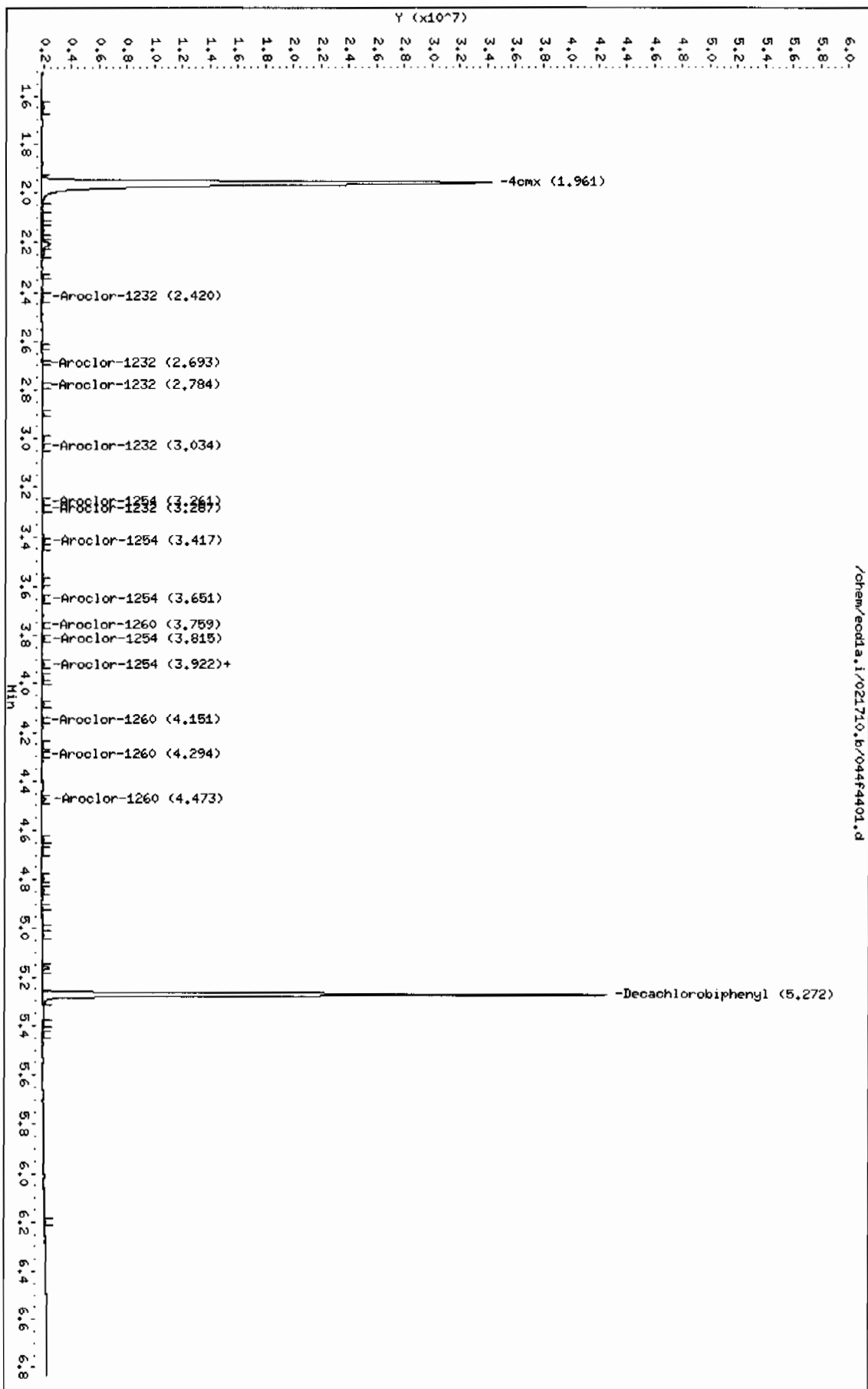
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecdda.i

Operator: YSI

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdla.i/021710.b/044b4401.d  
 Lab Smp Id: 246554004 Client Smp ID: RE15-10-8178  
 Inj Date : 17-FEB-2010 15:16  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |246554004|1|  
 Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8178|||  
 Comment :  
 Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 18-Feb-2010 06:51 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 44  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1665.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpclpl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.47510	% Moisture

Cpnd Variable Local Compound Variable

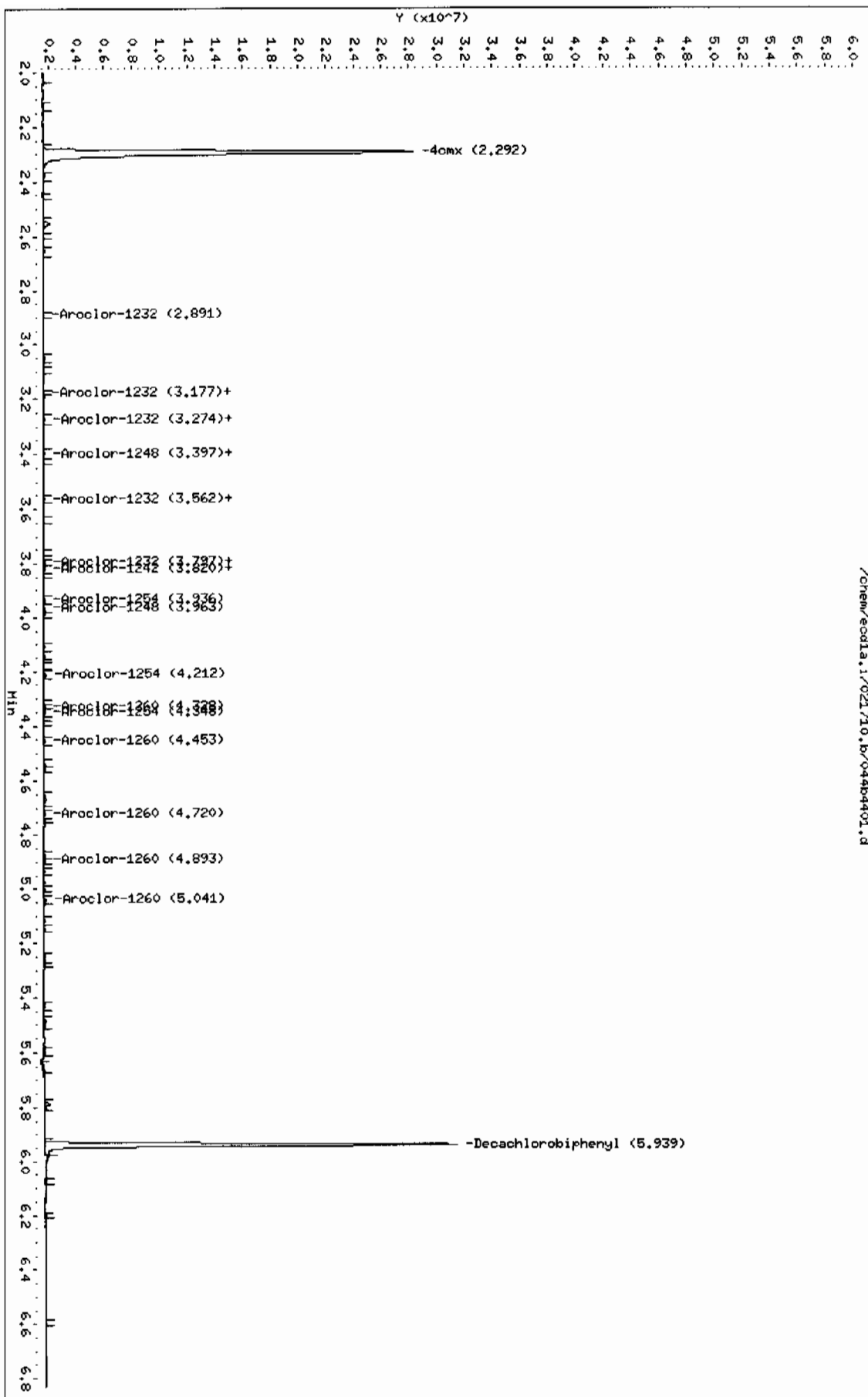
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.292	2.294	-0.002	27917185 97.3024	3.3	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	23236198 108.028	3.7	80.00- 120.00	100.00
-----						



Data File: /chem/ecdt.a.i/021710.b/044b4401.d  
Date: 17-FEB-2010 15:16  
Client ID: RE15-10-8178  
Sample Info: 12455400411  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdt.a.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdt.a.i/021710.b/044b4401.d



## PCB

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Certificate of Analysis  
Sample Summary

SDG Number:	10-1665	Date Collected:	02/04/2010 12:00	Matrix:	R
Lab Sample ID:	246554006	Date Received:	02/09/2010 10:00	%Moisture:	1.3
Client ID:	RE15-10-8225	Client:	LANL010	Project:	LANL01004
Batch ID:	953412	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/17/2010 15:41	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/16/2010 10:40	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	046f4601.d	Aliquot:	30 g	Final Volume:	1 mL
	046b4601.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.38	ug/kg	1.13	3.38	1
11104-28-2	Aroclor-1221	U	3.38	ug/kg	1.13	3.38	1
11141-16-5	Aroclor-1232	U	3.38	ug/kg	1.13	3.38	1
53469-21-9	Aroclor-1242	U	3.38	ug/kg	1.13	3.38	1
12672-29-6	Aroclor-1248	U	3.38	ug/kg	1.13	3.38	1
11097-69-1	Aroclor-1254	U	3.38	ug/kg	1.13	3.38	1
11096-82-5	Aroclor-1260	U	3.38	ug/kg	1.13	3.38	1

Data File: /chem/ecdla.i/021710.b/046f4601.d  
Report Date: 18-Feb-2010 07:22

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/046f4601.d  
Lab Smp Id: 246554006 Client Smp ID: RE15-10-8225  
Inj Date : 17-FEB-2010 15:41  
Operator : YSl Inst ID: ecdla.i  
Smp Info : |246554006|1|  
Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8225|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 18-Feb-2010 06:48 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 46  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	1.34270	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.961	1.961	0.000	41516021	94.9653	3.2 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.273	5.275	-0.002	32897922	98.6296	3.3 80.00- 120.00	100.00	
-----							

Data File: /chem/ecdda.i/021710.b/046f4601.d

Date: 17-FEB-2010 15:41

Client ID: RE15-10-8225

Sample Info: 1246554006/L1

Volume Injected (uL): 1.0

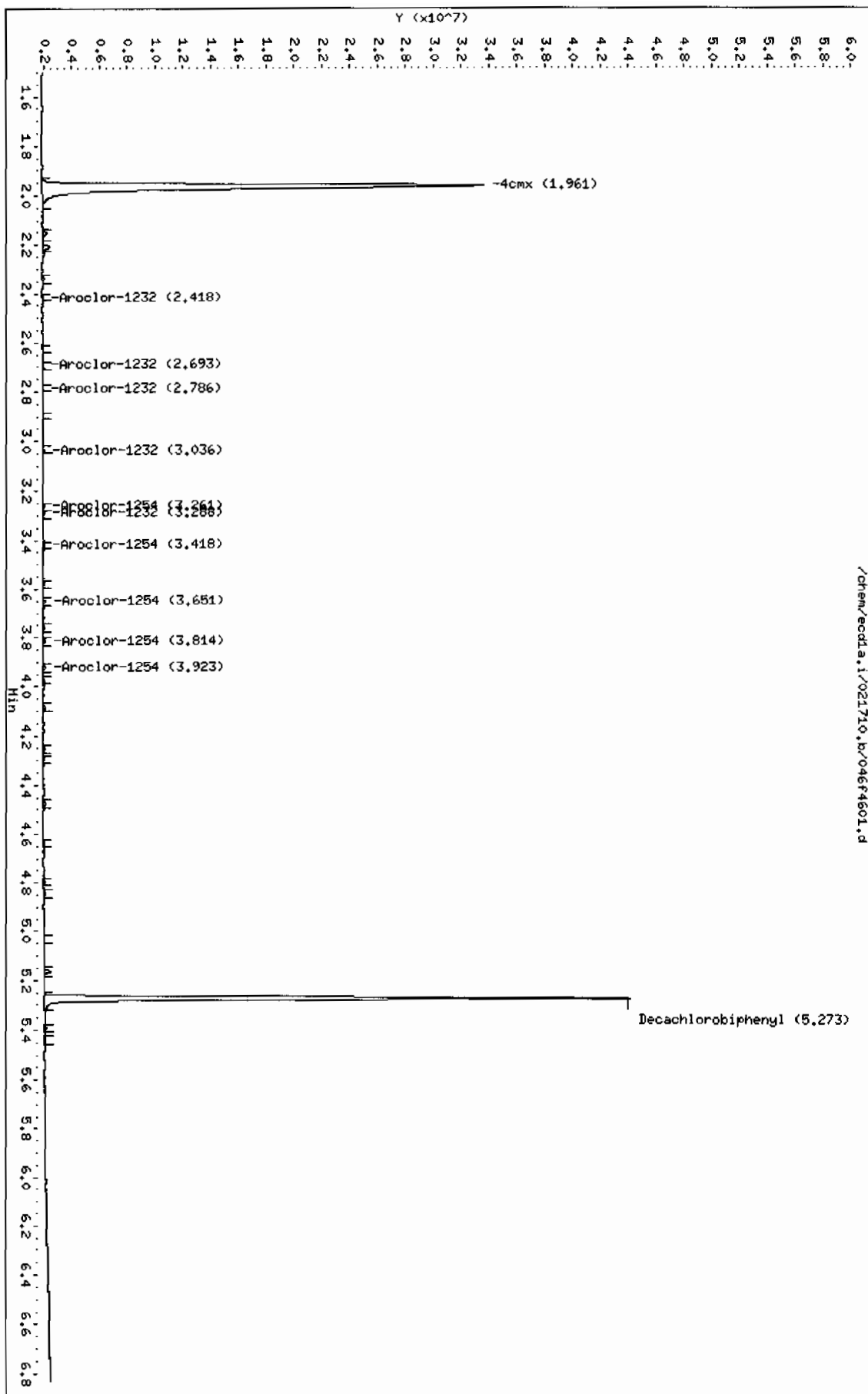
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/021710.b/046b4601.d  
Report Date: 18-Feb-2010 07:22

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021710.b/046b4601.d

Lab Smp Id: 246554006

Client Smp ID: RE15-10-8225

Inj Date : 17-FEB-2010 15:41

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |246554006|1|

Misc Info : |ECD82P\_1S|953412|SVA|LANL|SOIL|RE15-10-8225|1|

Comment :

Method : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m

Meth Date : 18-Feb-2010 06:51 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 46

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1665.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	1.34270	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.293	2.294	-0.001	27024375	94.1906	3.2 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	22904038	106.484	3.6 80.00- 120.00	100.00
-----						

Data File: /chem/ecdl.a.i/021710.b/046b4601.d

Date: 17-FEB-2010 15:41

Client ID: RE15-10-8225

Sample Info: 124654006/11

Volume Injected (uL): 1.0

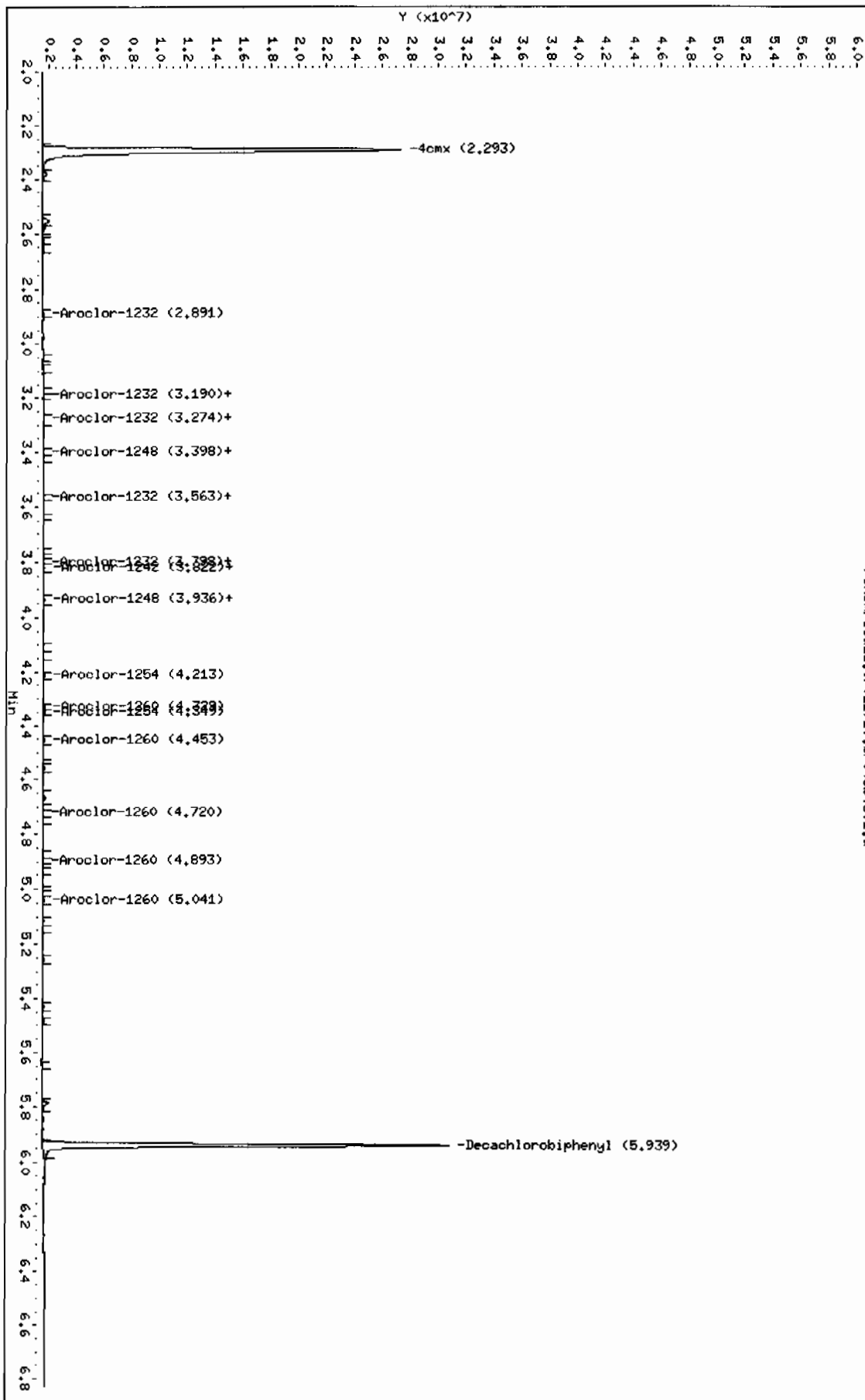
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/021710.b/046b4601.d



# STANDARDS DATA

Report Date: 18-Feb-2010 11:50

### Calibration History

Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Start Cal Date: 14-DEC-2009 05:36  
End Cal Date : 11-FEB-2010 08:54

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006f0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdla.i/012810a.b/018f1801.d
11-FEB-2010 08:12	AR1248	/chem/ecdla.i/021110.b/011f1101.d
10-FEB-2010 22:01	AR1242	/chem/ecdla.i/021010c.b/008f0801.d
09-FEB-2010 08:36	AR1254	/chem/ecdla.i/020910.b/011f1101.d
10-FEB-2010 20:58	AR1660	/chem/ecdla.i/021010c.b/002f0201.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014f1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007f0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdla.i/012810a.b/019f1901.d
11-FEB-2010 08:22	AR1248	/chem/ecdla.i/021110.b/012f1201.d
10-FEB-2010 22:12	AR1242	/chem/ecdla.i/021010c.b/009f0901.d
09-FEB-2010 08:47	AR1254	/chem/ecdla.i/020910.b/012f1201.d
10-FEB-2010 21:09	AR1660	/chem/ecdla.i/021010c.b/003f0301.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015f1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008f0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdla.i/012810a.b/020f2001.d
11-FEB-2010 08:33	AR1248	/chem/ecdla.i/021110.b/013f1301.d
10-FEB-2010 22:22	AR1242	/chem/ecdla.i/021010c.b/010f1001.d
09-FEB-2010 08:57	AR1254	/chem/ecdla.i/020910.b/013f1301.d
10-FEB-2010 21:19	AR1660	/chem/ecdla.i/021010c.b/004f0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046f4601.d
11-FEB-2010 08:44	AR1248	/chem/ecdla.i/021110.b/014f1401.d
10-FEB-2010 22:33	AR1242	/chem/ecdla.i/021010c.b/011f1101.d
09-FEB-2010 09:08	AR1254	/chem/ecdla.i/020910.b/014f1401.d
10-FEB-2010 21:30	AR1660	/chem/ecdla.i/021010c.b/005f0501.d
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021f2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016f1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007f0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
---------------------------------------	--	--



22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017f1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010f1001.d
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022f2201.d
11-FEB-2010 08:54	AR1248	/chem/ecdla.i/021110.b/015f1501.d
10-FEB-2010 22:43	AR1242	/chem/ecdla.i/021010c.b/012f1201.d
09-FEB-2010 09:18	AR1254	/chem/ecdla.i/020910.b/015f1501.d
10-FEB-2010 21:40	AR1660	/chem/ecdla.i/021010c.b/006f0601.d

# Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 19:20	AR1660	/chem/ecdla.i/021710.b/064f6401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 21:06	AR1660	/chem/ecdla.i/021710.b/074f7401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 18:21	AR1660	/chem/ecdla.i/021710.b/059f5901.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 15:53	AR1660	/chem/ecdla.i/021710.b/047f4701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 13:51	AR1660	/chem/ecdla.i/021710.b/037f3701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 12:07	AR1660	/chem/ecdla.i/021710.b/029f2901.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 09:35	AR1660	/chem/ecdla.i/021710.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:50	AR1221	/chem/ecdla.i/021710.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:39	AR1232	/chem/ecdla.i/021710.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:29	AR1268	/chem/ecdla.i/021710.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:18	AR1248	/chem/ecdla.i/021710.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:08	AR1242	/chem/ecdla.i/021710.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 06:57	AR1254	/chem/ecdla.i/021710.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 06:47	AR1660	/chem/ecdla.i/021710.b/002f0201.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 08:11	DDTANALOGSTD	/chem/ecdla.i/021710.b/010f1001.d

Ccal Level: 4 , Ccal Amount: 1000	
+=====+	
17-FEB-2010 08:00  AR1262	/chem/ecdla.i/021710.b/009f0901.d
+-----+	+-----+

Report Date: 18-Feb-2010 11:50

### Calibration History

Method : /chem/ecd1a.i/021710.b/ECD1-B-8082-021110.m  
Start Cal Date: 11-DEC-2009 10:17  
End Cal Date : 11-FEB-2010 08:54

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecd1a.i/012210.b/013b1301.d
22-JAN-2010 06:48	AR1232	/chem/ecd1a.i/012210.b/006b0601.d
28-JAN-2010 12:18	AR1268	/chem/ecd1a.i/012810a.b/018b1801.d
11-FEB-2010 08:12	AR1248	/chem/ecd1a.i/021110.b/011b1101.d
10-FEB-2010 22:01	AR1242	/chem/ecd1a.i/021010c.b/008b0801.d
09-FEB-2010 08:36	AR1254	/chem/ecd1a.i/020910.b/011b1101.d
10-FEB-2010 20:58	AR1660	/chem/ecd1a.i/021010c.b/002b0201.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecd1a.i/012210.b/014b1401.d
22-JAN-2010 06:58	AR1232	/chem/ecd1a.i/012210.b/007b0701.d
28-JAN-2010 12:29	AR1268	/chem/ecd1a.i/012810a.b/019b1901.d
11-FEB-2010 08:22	AR1248	/chem/ecd1a.i/021110.b/012b1201.d
10-FEB-2010 22:12	AR1242	/chem/ecd1a.i/021010c.b/009b0901.d
09-FEB-2010 08:47	AR1254	/chem/ecd1a.i/020910.b/012b1201.d
10-FEB-2010 21:09	AR1660	/chem/ecd1a.i/021010c.b/003b0301.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecd1a.i/012210.b/015b1501.d
22-JAN-2010 07:09	AR1232	/chem/ecd1a.i/012210.b/008b0801.d
28-JAN-2010 12:39	AR1268	/chem/ecd1a.i/012810a.b/020b2001.d
11-FEB-2010 08:33	AR1248	/chem/ecd1a.i/021110.b/013b1301.d
10-FEB-2010 22:22	AR1242	/chem/ecd1a.i/021010c.b/010b1001.d
09-FEB-2010 08:57	AR1254	/chem/ecd1a.i/020910.b/013b1301.d
10-FEB-2010 21:19	AR1660	/chem/ecd1a.i/021010c.b/004b0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecd1a.i/121409.b/046b4601.d
28-JAN-2010 12:50	AR1268	/chem/ecd1a.i/012810a.b/021b2101.d
22-JAN-2010 08:36	AR1262	/chem/ecd1a.i/012210.b/016b1601.d
14-DEC-2009 05:47	AR1221	/chem/ecd1a.i/121409.b/007b0701.d
22-JAN-2010 07:19	AR1232	/chem/ecd1a.i/012210.b/009b0901.d
11-FEB-2010 08:44	AR1248	/chem/ecd1a.i/021110.b/014b1401.d
10-FEB-2010 22:33	AR1242	/chem/ecd1a.i/021010c.b/011b1101.d
09-FEB-2010 09:08	AR1254	/chem/ecd1a.i/020910.b/014b1401.d
10-FEB-2010 21:30	AR1660	/chem/ecd1a.i/021010c.b/005b0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-JAN-2010 08:47	AR1262	/chem/ecd1a.i/012210.b/017b1701.d
22-JAN-2010 07:30	AR1232	/chem/ecd1a.i/012210.b/010b1001.d
28-JAN-2010 13:00	AR1268	/chem/ecd1a.i/012810a.b/022b2201.d
11-FEB-2010 08:54	AR1248	/chem/ecd1a.i/021110.b/015b1501.d
10-FEB-2010 22:43	AR1242	/chem/ecd1a.i/021010c.b/012b1201.d

09-FEB-2010 09:18	AR1254	/chem/ecd1a.i/020910.b/015b1501.d
10-FEB-2010 21:40	AR1660	/chem/ecd1a.i/021010c.b/006b0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 19:20	AR1660	/chem/ecd1a.i/021710.b/064b6401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 18:21	AR1660	/chem/ecd1a.i/021710.b/059b5901.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 15:53	AR1660	/chem/ecd1a.i/021710.b/047b4701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 21:06	AR1660	/chem/ecd1a.i/021710.b/074b7401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 13:51	AR1660	/chem/ecd1a.i/021710.b/037b3701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 12:07	AR1660	/chem/ecd1a.i/021710.b/029b2901.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 09:35	AR1660	/chem/ecd1a.i/021710.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 06:47	AR1660	/chem/ecd1a.i/021710.b/002b0201.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 08:11	DDTANALOGSTD	/chem/ecd1a.i/021710.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:39	AR1232	/chem/ecd1a.i/021710.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:29	AR1268	/chem/ecd1a.i/021710.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:18	AR1248	/chem/ecd1a.i/021710.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:08	AR1242	/chem/ecd1a.i/021710.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 06:57	AR1254	/chem/ecd1a.i/021710.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 08:00	AR1262	/chem/ecd1a.i/021710.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
17-FEB-2010 07:50	AR1221	/chem/ecd1a.i/021710.b/008b0801.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/021710.b/ECD1-F-8082-021110.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 18-Feb-2010 07:45 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

-----  
Initial:Start Threshold 12031.000000  
Initial:End Threshold 6015.500000  
Initial:Area Threshold 15489.000000  
Initial:P-P Resolution 1.000000  
Initial:Bunch Factor 2.000000  
Initial:Negative Peaks OFF  
Initial:Tension 0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.416	2.386-2.446	1.611e+04
	2.705	2.675-2.735	1.978e+04
	2.785	2.755-2.815	1.303e+04
	2.823	2.793-2.853	7.781e+03
	3.034	3.004-3.064	1.002e+04
63 4,4-DDD	3.941	3.921-3.961	3.938e+05
64 4,4-DDE	3.591	3.571-3.611	4.795e+05
62 4,4-DDT	4.105	4.085-4.125	3.238e+05
2 Aroclor-1221	2.075	2.045-2.105	4.301e+03
	2.168	2.138-2.198	2.440e+03
	2.194	2.164-2.224	1.027e+04
3 Aroclor-1232	2.417	2.387-2.447	6.849e+03
	2.705	2.675-2.735	8.426e+03
	2.786	2.756-2.816	5.627e+03
	3.035	3.005-3.065	3.983e+03
4 Aroclor-1242	3.289	3.259-3.319	3.858e+03
	2.418	2.388-2.448	1.423e+04
	2.706	2.676-2.736	1.725e+04
	2.824	2.794-2.854	6.715e+03
	3.035	3.005-3.065	8.866e+03
	3.288	3.258-3.318	8.594e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/021710.b/ECD1-F-8082-021110.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.087	3.057-3.116	9.450e+03
	3.238	3.208-3.268	8.270e+03
	3.289	3.259-3.319	1.593e+04
	3.421	3.391-3.451	1.308e+04
	3.654	3.624-3.684	8.823e+03
6 Aroclor-1254	3.264	3.234-3.294	1.578e+04
	3.419	3.389-3.449	2.135e+04
	3.653	3.623-3.683	2.726e+04
	3.816	3.786-3.846	2.062e+04
	3.925	3.895-3.955	1.959e+04
7 Aroclor-1260	3.760	3.730-3.790	1.903e+04
	3.923	3.893-3.953	2.835e+04
	4.153	4.123-4.183	1.704e+04
	4.296	4.266-4.326	1.789e+04
	4.476	4.446-4.506	3.885e+04
8 Aroclor-1262	3.762	3.732-3.792	1.500e+04
	3.924	3.894-3.954	2.038e+04
	4.154	4.124-4.184	2.520e+04
	4.297	4.267-4.327	2.299e+04
	4.477	4.447-4.507	4.717e+04
9 Aroclor-1268	4.661	4.631-4.691	5.248e+04
	4.684	4.654-4.714	4.812e+04
	4.797	4.767-4.827	3.703e+04
	5.000	4.970-5.030	1.629e+04
	5.166	5.136-5.196	1.083e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.961	1.931-1.991	4.372e+05
\$ 12 Decachlorobiphenyl	5.275	5.245-5.305	3.336e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 18-Feb-2010 07:45 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon  
Chromat Events

## Values

-----  
Initial:Start Threshold 7222.000000  
Initial:End Threshold 3611.000000  
Initial:Area Threshold 6833.000000  
Initial:P-P Resolution 0.000000  
Initial:Bunch Factor 2.000000  
Initial:Negative Peaks OFF  
Initial:Tension 0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.190	3.160-3.220	1.243e+04
	3.273	3.243-3.303	8.521e+03
	3.336	3.306-3.366	5.254e+03
	3.564	3.534-3.594	6.732e+03
	3.639	3.609-3.669	6.324e+03
62 4,4-DDT	4.670	4.650-4.690	2.436e+05
63 4,4-DDE	4.139	4.119-4.159	3.580e+05
64 4,4-DDD	4.483	4.463-4.503	2.893e+05
2 Aroclor-1221	2.490	2.460-2.520	3.640e+03
	2.585	2.555-2.615	2.329e+03
	2.625	2.595-2.655	8.119e+03
3 Aroclor-1232	2.892	2.862-2.922	5.892e+03
	3.190	3.160-3.220	6.222e+03
	3.274	3.244-3.304	4.345e+03
	3.565	3.535-3.595	3.111e+03
4 Aroclor-1242	3.799	3.769-3.829	3.193e+03
	3.190	3.160-3.220	1.075e+04
	3.273	3.243-3.303	7.486e+03
	3.563	3.533-3.593	5.934e+03
	3.798	3.768-3.828	5.957e+03
	3.826	3.796-3.856	6.667e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.399	3.369-3.429	7.671e+03
	3.565	3.535-3.595	9.454e+03
	3.798	3.768-3.828	1.075e+04
	3.826	3.796-3.856	1.201e+04
	3.963	3.933-3.993	1.157e+04
6 Aroclor-1254	3.399	3.369-3.429	6.631e+03
	3.821	3.791-3.851	1.170e+04
	3.938	3.908-3.968	1.289e+04
	4.214	4.184-4.244	1.768e+04
	4.351	4.321-4.381	1.318e+04
7 Aroclor-1260	4.330	4.300-4.360	1.259e+04
	4.455	4.425-4.485	1.507e+04
	4.721	4.691-4.751	1.162e+04
	4.895	4.865-4.925	1.203e+04
	5.041	5.011-5.071	2.582e+04
8 Aroclor-1262	4.456	4.426-4.486	1.356e+04
	4.722	4.692-4.752	1.889e+04
	4.896	4.866-4.926	1.747e+04
	5.043	5.013-5.073	3.453e+04
	5.256	5.226-5.286	2.487e+04
9 Aroclor-1268	5.254	5.224-5.284	3.626e+04
	5.282	5.252-5.312	3.358e+04
	5.431	5.401-5.461	2.598e+04
	5.596	5.566-5.626	1.135e+04
	5.790	5.760-5.820	6.708e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.294	2.264-2.324	2.869e+05
\$ 12 Decachlorobiphenyl	5.941	5.911-5.971	2.151e+05



GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
 End Cal Date : 11-FEB-2010 08:54  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
 Cal Date : 18-Feb-2010 07:45 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013f1301.d  
 Level 2: /chem/ecdla.i/012210.b/014f1401.d  
 Level 3: /chem/ecdla.i/012210.b/015f1501.d  
 Level 4: /chem/ecdla.i/121409.b/046f4601.d  
 Level 5: /chem/ecdla.i/012210.b/017f1701.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	19326	17292	16249	14619	13058	16109	14.981
(2)	22153	20229	20057	18657	17817	19783	8.392
(3)	15191	13813	12984	11880	11259	13025	11.981
(4)	8766	8210	7786	7162	6984	7781	9.470
(5)	11843	10436	9856	9117	8861	10022	11.892
63 4,4-DDD	++++	++++	++++	393799	++++	393799	0.000
64 4,4-DDE	++++	++++	++++	479509	++++	479509	0.000
62 4,4-DDT	++++	++++	++++	323817	++++	323817	0.000
2 Aroclor-1221(1)	++++	++++	++++	4301	++++	4301	0.000
(2)	++++	++++	++++	2440	++++	2440	0.000
(3)	++++	++++	++++	10272	++++	10272	0.000
3 Aroclor-1232(1)	8031	7459	6765	6313	5679	6849	13.524
(2)	9246	8871	8229	8095	7686	8426	7.427
(3)	6376	6076	5599	5256	4827	5627	11.031
(4)	4642	4328	3905	3655	3384	3983	12.710
(5)	4445	4061	3757	3587	3443	3858	10.378
4 Aroclor-1242(1)	17196	15480	14031	13205	11219	14226	15.919
(2)	19366	18107	17235	16522	15038	17254	9.451
(3)	7556	7133	6646	6336	5902	6715	9.682
(4)	10515	9349	8647	8192	7629	8866	12.591
(5)	9978	8943	8379	8018	7652	8594	10.575
5 Aroclor-1248(1)	10726	9846	9290	8975	8413	9450	9.334
(2)	9327	8548	8186	7843	7446	8270	8.680
(3)	17521	16821	15652	15280	14383	15931	7.826
(4)	14862	13498	12885	12502	11648	13079	9.187
(5)	10025	9201	8633	8291	7765	8823	9.799

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36  
End Cal Date : 11-FEB-2010 08:54  
Quant Method : ESTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : Falcon  
Method file : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Cal Date : 18-Feb-2010 07:45 yip00818  
Curve Type : Average

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5		
6 Aroclor-1254(1)	18218	16468	15766	15064	13404	15784	11.233
(2)	24302	22248	21155	20648	18377	21346	10.182
(3)	29883	28006	27625	26757	24011	27256	7.865
(4)	22385	20901	20953	20353	18513	20621	6.778
(5)	21764	19914	20167	19029	17098	19594	8.725
7 Aroclor-1260(1)	21642	19935	19107	17723	16744	19030	10.032
(2)	32138	29342	28391	26620	25276	28353	9.293
(3)	19407	17671	16915	15834	15397	17045	9.355
(4)	20180	18339	17702	16653	16586	17892	8.248
(5)	42057	39974	39147	37071	36004	38851	6.158
8 Aroclor-1262(1)	16796	15375	14585	14470	13775	15000	7.687
(2)	22563	20964	19865	19587	18936	20383	6.975
(3)	27641	25661	24522	24605	23554	25197	6.179
(4)	25041	23378	22465	22352	21708	22989	5.624
(5)	49563	47861	46825	46728	44852	47166	3.655
9 Aroclor-1268(1)	55111	53385	52967	52495	48466	52485	4.676
(2)	51014	48609	47960	48222	44786	48118	4.620
(3)	39244	37391	36973	36968	34562	37028	4.505
(4)	17802	16531	16072	16029	15038	16294	6.158
(5)	113064	109648	108755	109096	100824	108277	4.162
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	463524	446573	443497	419634	412623	437170	4.761
12 Decachlorobiphenyl	376792	343805	329903	311587	305664	333550	8.544

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 11-FEB-2010 08:54  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd1a.i/021710.b/ECD1-B-8082-021110.m  
 Cal Date : 18-Feb-2010 07:45 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd1a.i/012210.b/013b1301.d  
 Level 2: /chem/ecd1a.i/012210.b/014b1401.d  
 Level 3: /chem/ecd1a.i/012210.b/015b1501.d  
 Level 4: /chem/ecd1a.i/121409.b/046b4601.d  
 Level 5: /chem/ecd1a.i/012210.b/017b1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14591	12913	12188	11398	11060	12430	11.307
(2)	10470	9150	8372	7586	7028	8521	15.876
(3)	6450	5571	5116	4655	4476	5254	15.089
(4)	8237	7137	6558	5942	5787	6732	14.811
(5)	7728	6741	6161	5527	5464	6324	14.885
62 4,4-DDT	++++	++++	++++	243613	++++	243613	0.000
63 4,4-DDE	++++	++++	++++	357996	++++	357996	0.000
64 4,4-DDD	++++	++++	++++	289343	++++	289343	0.000
2 Aroclor-1221(1)	++++	++++	++++	3640	++++	3640	0.000
(2)	++++	++++	++++	2329	++++	2329	0.000
(3)	++++	++++	++++	8119	++++	8119	0.000
3 Aroclor-1232(1)	7405	6518	5773	5260	4504	5892	19.017
(2)	7294	6687	6058	5769	5299	6222	12.576
(3)	5336	4800	4249	3912	3427	4345	17.180
(4)	3854	3418	3039	2783	2462	3111	17.466
(5)	3940	3492	3102	2870	2562	3193	16.853
4 Aroclor-1242(1)	12868	11152	10610	10007	9095	10746	13.125
(2)	9289	8079	7275	6770	6015	7486	16.798
(3)	7189	6322	5719	5508	4930	5934	14.498
(4)	7095	6343	5815	5502	5032	5957	13.341
(5)	7801	7111	6544	6217	5664	6667	12.341
5 Aroclor-1248(1)	9444	8118	7508	7032	6252	7671	15.686
(2)	11407	9946	9274	8769	7875	9454	14.042
(3)	12626	11184	10575	10134	9235	10751	11.776
(4)	13986	12612	11847	11369	10240	12011	11.653
(5)	13621	12052	11294	10873	9986	11565	11.846

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17  
 End Cal Date : 11-FEB-2010 08:54  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m  
 Cal Date : 18-Feb-2010 07:45 yip00818  
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	8119	7134	6511	6102	5288	6631	16.115
(2)	13835	12411	11575	10994	9701	11703	13.219
(3)	15198	13631	12780	12111	10729	12890	12.960
(4)	20285	18437	17626	16945	15125	17683	10.740
(5)	15441	13882	13241	12228	11123	13183	12.432
7 Aroclor-1260(1)	15081	13204	12414	11388	10875	12592	13.167
(2)	17861	15711	14887	13769	13107	15067	12.319
(3)	13915	12197	11404	10497	10076	11618	13.121
(4)	14295	12571	11824	10912	10548	12030	12.409
(5)	29523	26703	25717	24048	23128	25824	9.659
8 Aroclor-1262(1)	15849	14211	13033	12748	11945	13557	11.192
(2)	21776	19630	18382	17939	16725	18890	10.157
(3)	20222	18124	16968	16542	15497	17471	10.323
(4)	38743	35618	34053	33297	30946	34532	8.384
(5)	28740	25266	23755	23937	22633	24866	9.485
9 Aroclor-1268(1)	40076	37508	36193	35765	31736	36256	8.369
(2)	36699	34342	33454	33223	30195	33583	6.968
(3)	29294	26633	25688	25340	22957	25982	8.826
(4)	12990	11609	11161	10996	9978	11347	9.656
(5)	67306	67058	67598	69416	64002	67076	2.911
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	319320	296105	286786	270335	262011	286912	7.851
\$ 12 Decachlorobiphenyl	252618	222970	211940	195273	192671	215094	11.330

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 0647  
 Lab File ID: 002F0201 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	13761.794	0.01	-14.6	15.0
(2)	19782.624	18449.879	0.01	-6.7	15.0
(3)	13025.402	11587.574	0.01	-11.0	15.0
(4)	7781.493	7003.378	0.01	-10.0	15.0
(5)	10022.454	9050.992	0.01	-9.7	15.0
Aroclor-1260	19030.240	18784.363	0.01	-1.3	15.0
(2)	28353.443	28246.821	0.01	-0.4	15.0
(3)	17044.603	16894.049	0.01	-0.9	15.0
(4)	17892.160	17753.072	0.01	-0.8	15.0
(5)	38850.548	39870.635	0.01	2.6	15.0
4cmx	437170.47	413425.74	0.01	-5.4	15.0
Decachlorobiphenyl	333550.18	301001.70	0.01	-9.8	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 0647  
 Lab File ID: 002B0201 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	11495.699	0.01	-7.5	15.0
(2)	8521.037	7454.792	0.01	-12.5	15.0
(3)	5253.747	4598.832	0.01	-12.5	15.0
(4)	6732.031	5859.539	0.01	-13.0	15.0
(5)	6324.172	5505.058	0.01	-13.0	15.0
Aroclor-1260	12592.453	12155.143	0.01	-3.5	15.0
(2)	15067.065	14805.039	0.01	-1.7	15.0
(3)	11617.964	11230.893	0.01	-3.3	15.0
(4)	12030.051	11619.539	0.01	-3.4	15.0
(5)	25823.849	25751.744	0.01	-0.3	15.0
4cmx	286911.58	268511.43	0.01	-6.4	15.0
Decachlorobiphenyl	215094.49	185857.97	0.01	-13.6	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 1351  
 Lab File ID: 037F3701 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	16108.588	14518.058	0.01	-9.9	15.0
(2)	19782.624	18920.458	0.01	-4.4	15.0
(3)	13025.402	11826.191	0.01	-9.2	15.0
(4)	7781.493	7102.293	0.01	-8.7	15.0
(5)	10022.454	9084.358	0.01	-9.4	15.0
Aroclor-1260	19030.240	18962.202	0.01	-0.4	15.0
(2)	28353.443	28518.495	0.01	0.6	15.0
(3)	17044.603	17001.329	0.01	-0.2	15.0
(4)	17892.160	18239.326	0.01	1.9	15.0
(5)	38850.548	39877.952	0.01	2.6	15.0
=====	=====	=====	=====	=====	=====
4cmx	437170.47	419856.72	0.01	-4.0	15.0
Decachlorobiphenyl	333550.18	310607.74	0.01	-6.9	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 1351  
 Lab File ID: 037B3701 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1016	12430.231	11525.705	0.01	-7.3	15.0
(2)	8521.037	7517.489	0.01	-11.8	15.0
(3)	5253.747	4630.958	0.01	-11.8	15.0
(4)	6732.031	5946.182	0.01	-11.7	15.0
(5)	6324.172	5518.235	0.01	-12.7	15.0
Aroclor-1260	12592.453	12233.299	0.01	-2.8	15.0
(2)	15067.065	14866.487	0.01	-1.3	15.0
(3)	11617.964	11298.207	0.01	-2.8	15.0
(4)	12030.051	11725.166	0.01	-2.5	15.0
(5)	25823.849	25999.373	0.01	0.7	15.0
=====	=====	=====	=====	=====	=====
4cmx	286911.58	271721.28	0.01	-5.3	15.0
Decachlorobiphenyl	215094.49	196250.40	0.01	-8.8	15.0

FORM VII PEST



FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 1553  
 Lab File ID: 047F4701 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	14724.747	0.01	-8.6	15.0
(2)	19782.624	18601.230	0.01	-6.0	15.0
(3)	13025.402	11991.168	0.01	-7.9	15.0
(4)	7781.493	7232.272	0.01	-7.0	15.0
(5)	10022.454	9356.616	0.01	-6.6	15.0
Aroclor-1260	19030.240	19346.609	0.01	1.7	15.0
(2)	28353.443	28924.589	0.01	2.0	15.0
(3)	17044.603	17377.240	0.01	2.0	15.0
(4)	17892.160	18564.204	0.01	3.8	15.0
(5)	38850.548	40617.846	0.01	4.5	15.0
4cmx	437170.47	427261.10	0.01	-2.3	15.0
Decachlorobiphenyl	333550.18	315922.41	0.01	-5.3	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 Instrument ID: ECD1A Calibration Date: 02/17/10 Time: 1553  
 Lab File ID: 047B4701 Init. Calib. Date(s): 02/10/10 02/10/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	11906.263	0.01	-4.2	15.0
(2)	8521.037	7643.868	0.01	-10.3	15.0
(3)	5253.747	4722.694	0.01	-10.1	15.0
(4)	6732.031	6015.607	0.01	-10.6	15.0
(5)	6324.172	5700.825	0.01	-9.8	15.0
Aroclor-1260	12592.453	12407.822	0.01	-1.5	15.0
(2)	15067.065	15059.508	0.01	-0.0	15.0
(3)	11617.964	11454.351	0.01	-1.4	15.0
(4)	12030.051	11820.878	0.01	-1.7	15.0
(5)	25823.849	26317.801	0.01	1.9	15.0
4cmx	286911.58	275011.79	0.01	-4.1	15.0
Decachlorobiphenyl	215094.49	200041.60	0.01	-7.0	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021710.b/002f0201.d

Lab Smp Id: WAR100203-60 01

Client Smp ID: AR166001

Inj Date : 17-FEB-2010 06:47

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021710.b/ECD1-F-8082-021110.m

Meth Date : 17-Feb-2010 10:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE		RATIO
1.961	1.961	0.000	41342574	100.000	94.6	80.00- 120.00		100.00
					CAS #: 877-09-8			
					CAS #: 2051-24-3			
					CAS #: 12674-11-2			
					CAS #: 11096-82-5			
Average of Peak Amounts -					999			

Data File: /chem/ecdda.i/021710.b/002f0201.d

Date: 17-FEB-2010 06:47

Client ID: AR166001

Sample Info: WARI00203-60 01

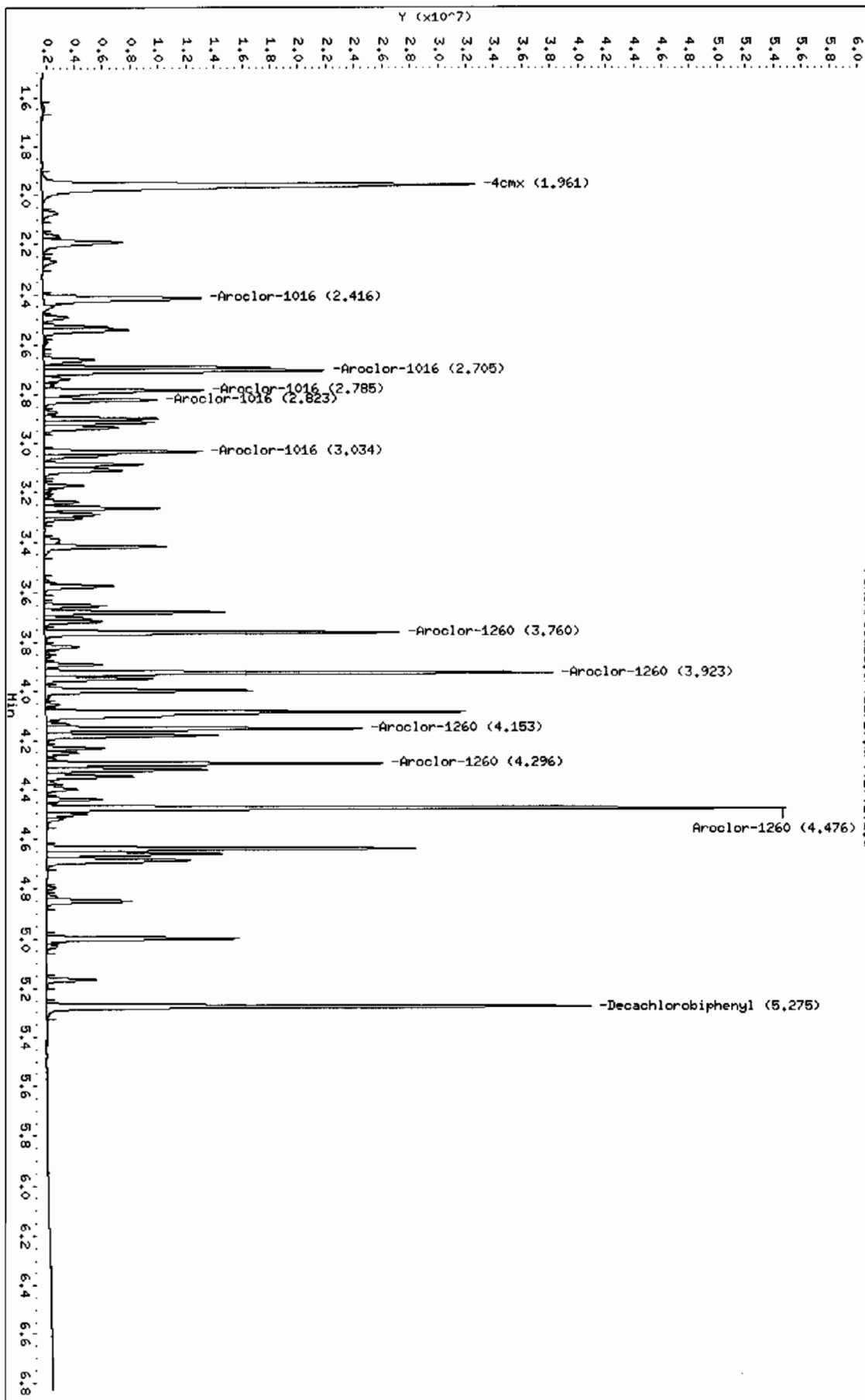
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/021710.b/002f0201.d



Data File: /chem/ecdla.i/021710.b/002b0201.d  
 Report Date: 17-Feb-2010 11:20

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/002b0201.d  
 Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001  
 Inj Date : 17-FEB-2010 06:47  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |WAR100203-60 01  
 Misc Info :  
 Comment :  
 Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 17-Feb-2010 10:07 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1pl

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
-----							
\$ 11 4cmx					CAS #: 877-09-8		
2.294	2.294	0.000	26851143	100.000	93.6	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.941	5.941	0.000	18585797	100.000	86.4	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.190	3.190	0.000	11495699	1000.00	925	80.00- 120.00	100.00 (M)
3.273	3.273	0.000	7454792	1000.00	875	44.85- 84.85	64.85
3.336	3.336	0.000	4598832	1000.00	875	20.00- 60.00	40.00
3.564	3.564	0.000	5859539	1000.00	870	30.97- 70.97	50.97
3.639	3.639	0.000	5505058	1000.00	870	37.29- 77.29	57.29
Average of Peak Amounts =					883		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.330	4.330	0.000	12155143	1000.00	965	80.00- 120.00	100.00
4.455	4.455	0.000	14805039	1000.00	983	101.80- 141.80	121.80
4.721	4.721	0.000	11230893	1000.00	967	72.40- 112.40	92.40
4.895	4.895	0.000	11619539	1000.00	966	75.59- 115.59	95.59
5.041	5.041	0.000	25751744	1000.00	997	191.86- 231.86	211.86
Average of Peak Amounts =					976		
-----							

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/021710.b/002b0201.d

Date: 17-FEB-2010 06:47

Client ID: AR166001

Sample Info: INMR100203-60 01

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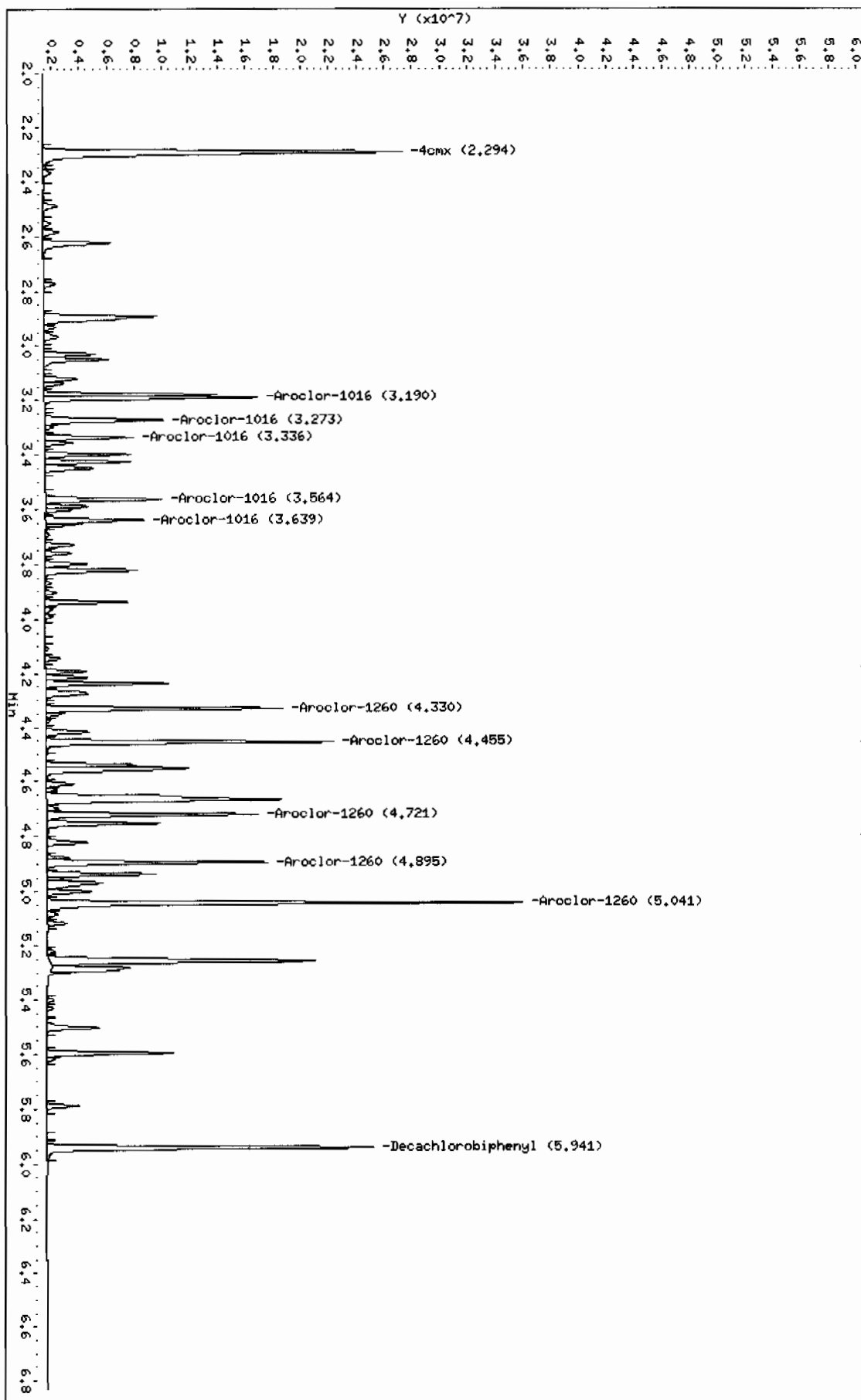
Column phase: CLP2

Instrument: ecdda.i

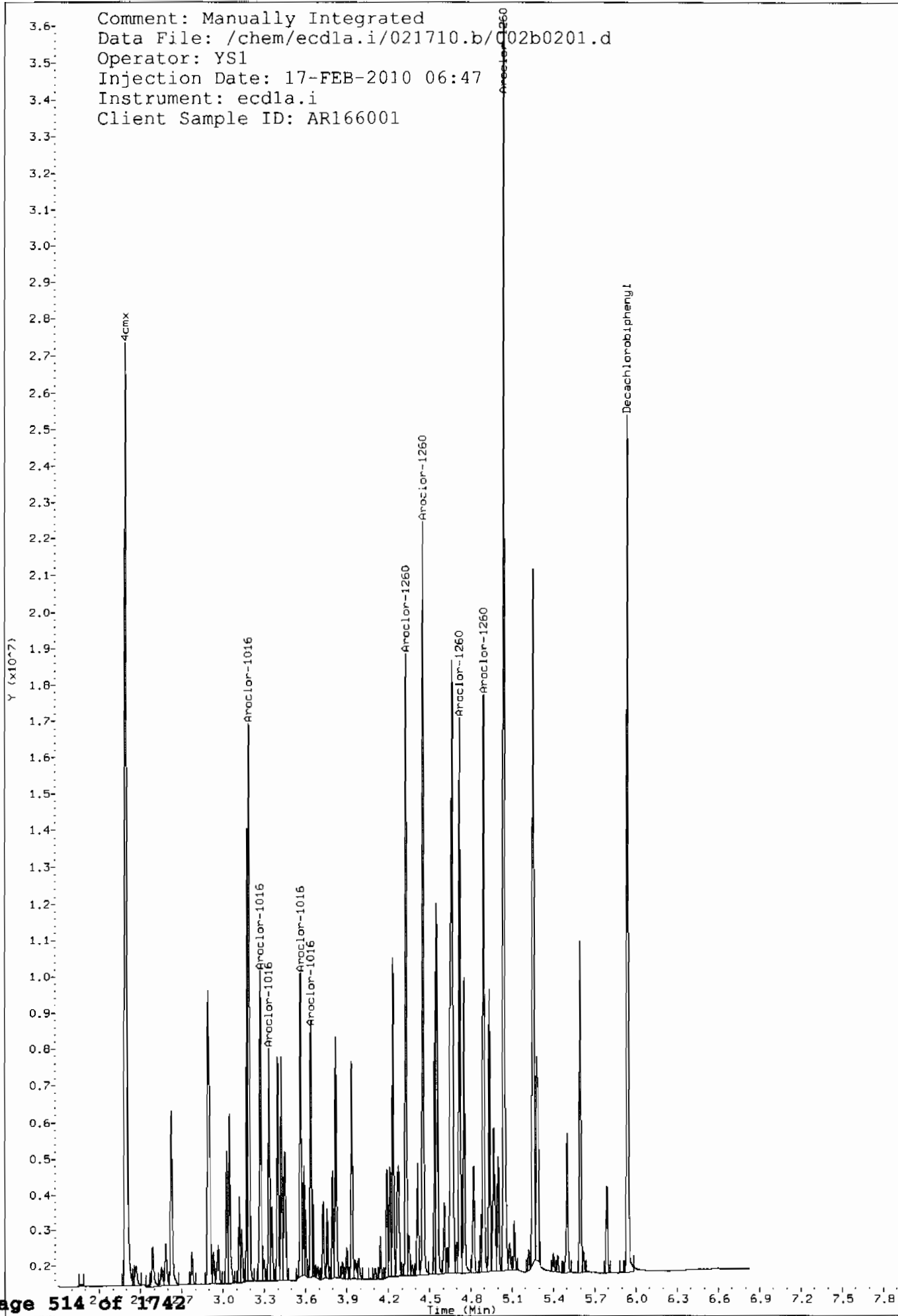
Operator: YSI

Column diameter: 0.25

/chem/ecdda.i/021710.b/002b0201.d

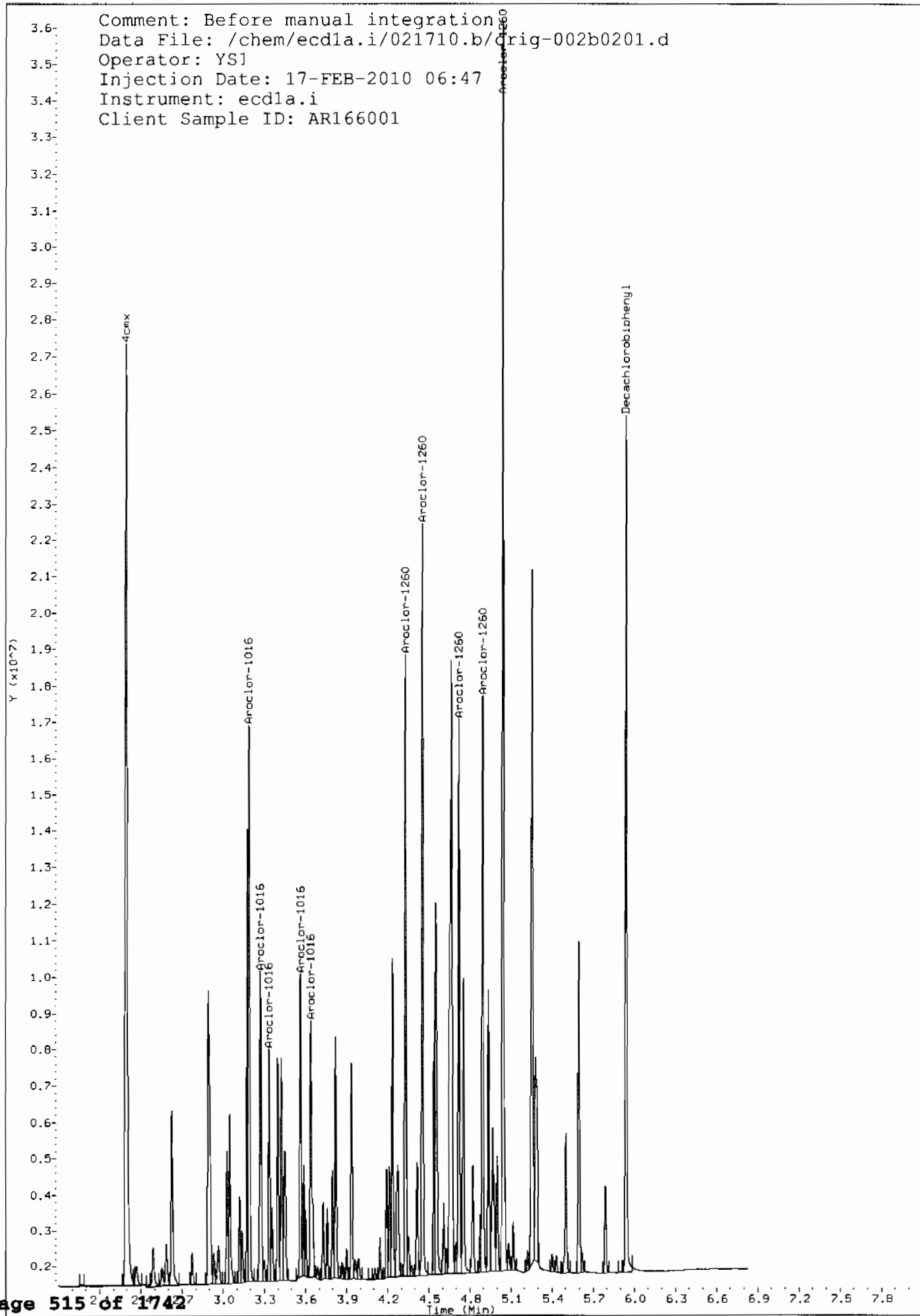


Comment: Manually Integrated  
Data File: /chem/ecdla.i/021710.b/002b0201.d  
Operator: YS1  
Injection Date: 17-FEB-2010 06:47  
Instrument: ecdla.i  
Client Sample ID: AR166001





Comment: Before manual integration  
Data File: /chem/ecdl1.i/021710.b/Orig-002b0201.d  
Operator: YSJ  
Injection Date: 17-FEB-2010 06:47  
Instrument: ecd1a.i  
Client Sample ID: AR166001



Data File: /chem/ecd1a.i/021710.b/003f0301.d  
Report Date: 17-Feb-2010 10:06

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 17-FEB-2010 06:57

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m

Meth Date : 17-Feb-2010 10:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT	ON-COL	RESPONSE ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====

6 Aroclor-1254

CAS #: 11097-69-1

3.264	3.264	0.000	14713301	1000.00	932	80.00- 120.00	100.00
3.419	3.419	0.000	19921674	1000.00	933	115.40- 155.40	135.40
3.653	3.653	0.000	26078240	1000.00	957	157.24- 197.24	177.24
3.816	3.816	0.000	19722221	1000.00	956	114.04- 154.04	134.04
3.925	3.925	0.000	19057332	1000.00	973	109.52- 149.52	129.52

Average of Peak Amounts =

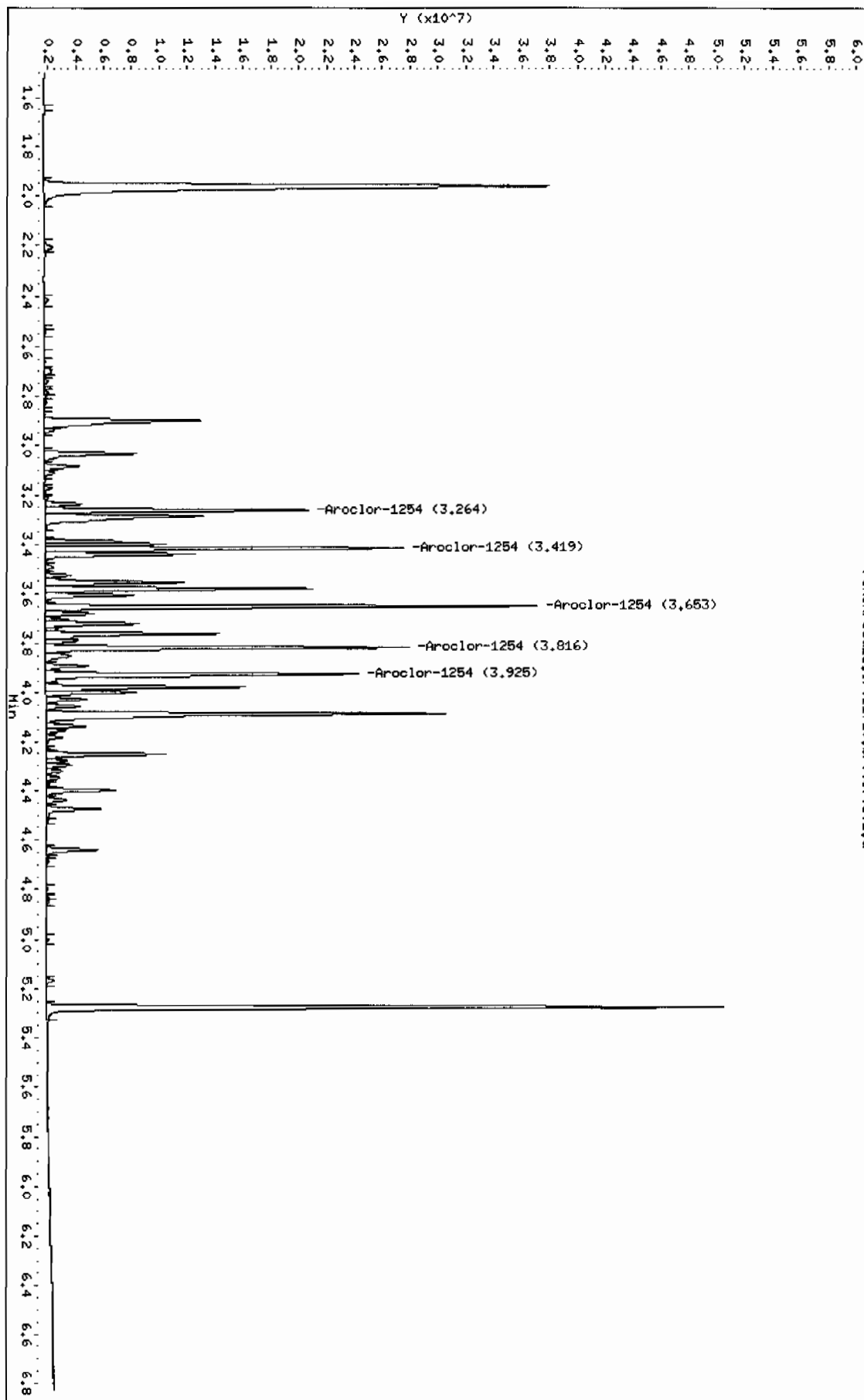
950

Data File: /chem/ecdl1.i/021710.b/003f0301.d  
Date: 17-FEB-2010 06:57  
Client ID: MR125401  
Sample Info: 1MAR091216-B4

Column phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl1.i/021710.b/003f0301.d



Data File: /chem/ecdla.i/021710.b/003b0301.d  
Report Date: 17-Feb-2010 10:06

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/003b0301.d  
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401  
Inj Date : 17-FEB-2010 06:57  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091216-54  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 10:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 3 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1254.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.399	3.399	0.000	6110246 1000.00	922	80.00- 120.00	100.00
3.821	3.821	0.000	11092865 1000.00	948	161.55- 201.55	181.55
3.938	3.938	0.000	12147938 1000.00	942	178.81- 218.81	198.81
4.214	4.214	0.000	16935159 1000.00	958	257.16- 297.16	277.16
4.351	4.351	0.000	12160922 1000.00	922	179.03- 219.03	199.03
Average of Peak Amounts =				938		

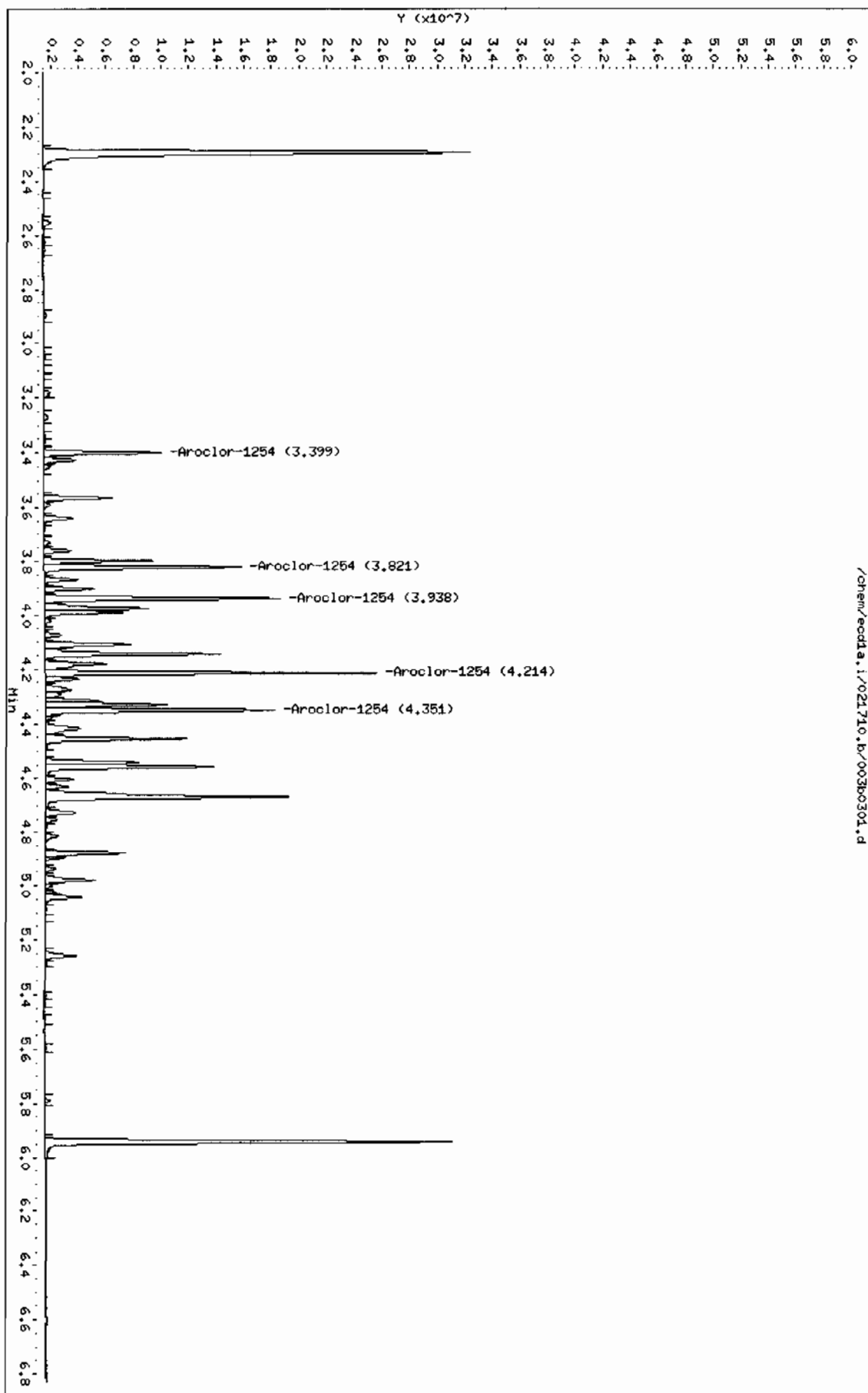
Data File: /chem/ecdda.i/021710.b/003b0301.d  
Date: 17-FEB-2010 06:57  
Client ID: AR125401  
Sample Info: 1MAR091216-54

Page 1

Column phase: CLP2

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25

/chem/ecdda.i/021710.b/003b0301.d



Data File: /chem/ecdla.i/021710.b/004f0401.d  
Report Date: 17-Feb-2010 10:06

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 17-FEB-2010 07:08

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m

Meth Date : 17-Feb-2010 10:06 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	CAL-AMT ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.418	2.418	0.000	12889682	1000.00	906	80.00- 120.00	100.00
2.706	2.706	0.000	16286915	1000.00	944	106.36- 146.36	126.36
2.824	2.824	0.000	6198713	1000.00	923	28.09- 68.09	48.09
3.035	3.035	0.000	8169032	1000.00	921	43.38- 83.38	63.38
3.288	3.288	0.000	7859556	1000.00	914	40.98- 80.98	60.98
Average of Peak Amounts					922		

CAS #: 53469-21-9

Data File: /chem/ecdl3.i/021710.b/004f0401.d

Date : 17-FEB-2010 07:08

Client ID: AR124201

Sample Info: 14AR091217-42

Column phase: CLP1

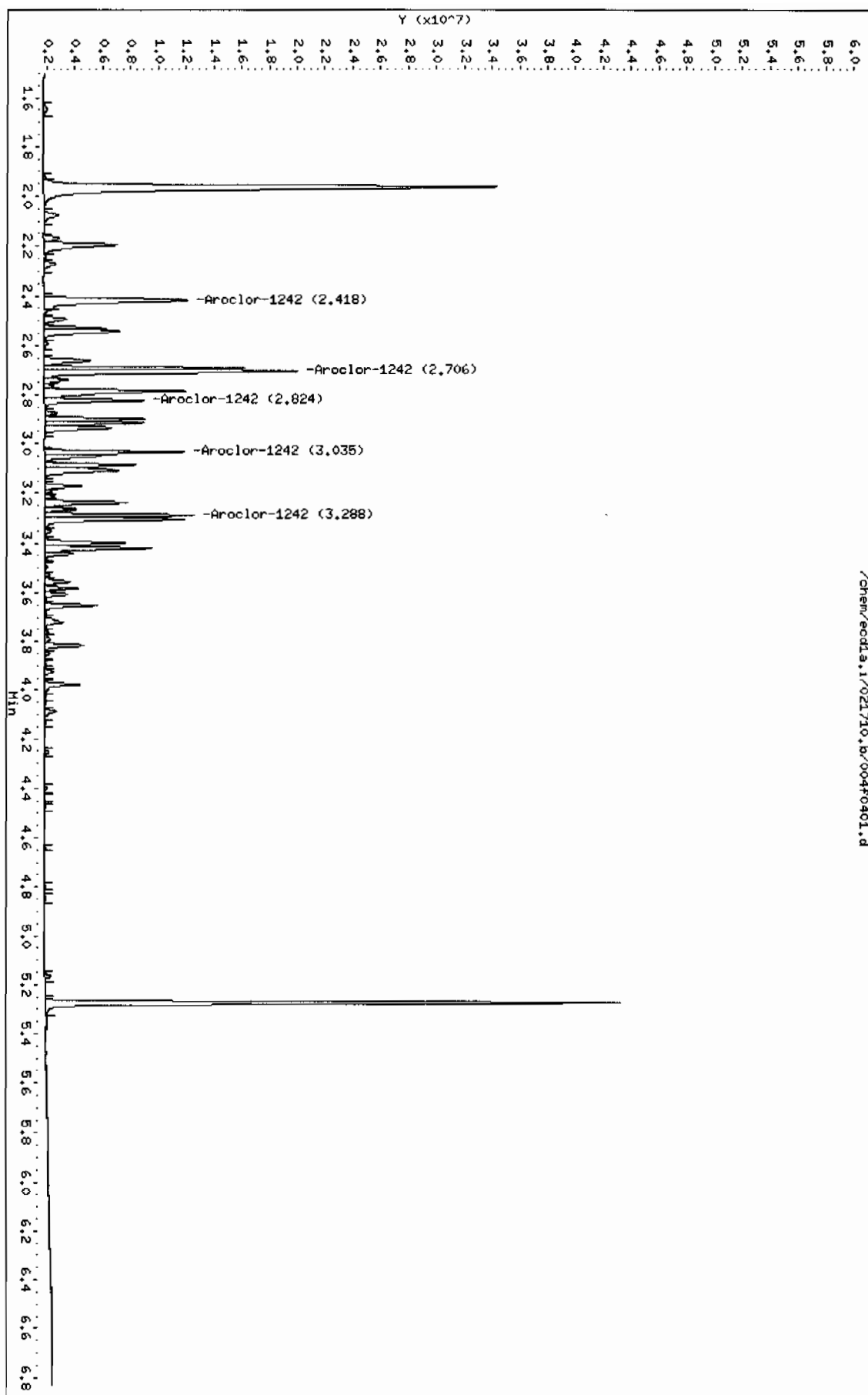
Instrument: ecdl3.i

Operator: YSL

Column diameter: 0.25

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/chem/ecdl3.i/021710.b/004f0401.d



Data File: /chem/ecdla.i/021710.b/004b0401.d  
Report Date: 17-Feb-2010 10:06

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/004b0401.d  
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201  
Inj Date : 17-FEB-2010 07:08  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR091217-42  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 10:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1242.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9	
3.190	3.190	0.000	10164497 1000.00	946	80.00- 120.00	100.00
3.273	3.273	0.000	6609519 1000.00	883	45.03- 85.03	65.03
3.563	3.563	0.000	5258310 1000.00	886	31.73- 71.73	51.73
3.798	3.798	0.000	5391236 1000.00	905	33.04- 73.04	53.04
3.826	3.826	0.000	6045455 1000.00	907	39.48- 79.48	59.48
Average of Peak Amounts =				905		



Data File: /chem/eodla.i/021710.b/004b0401.d

Date : 17-FEB-2010 07:08

Client ID: AR124201

Sample Info: 148091217-42

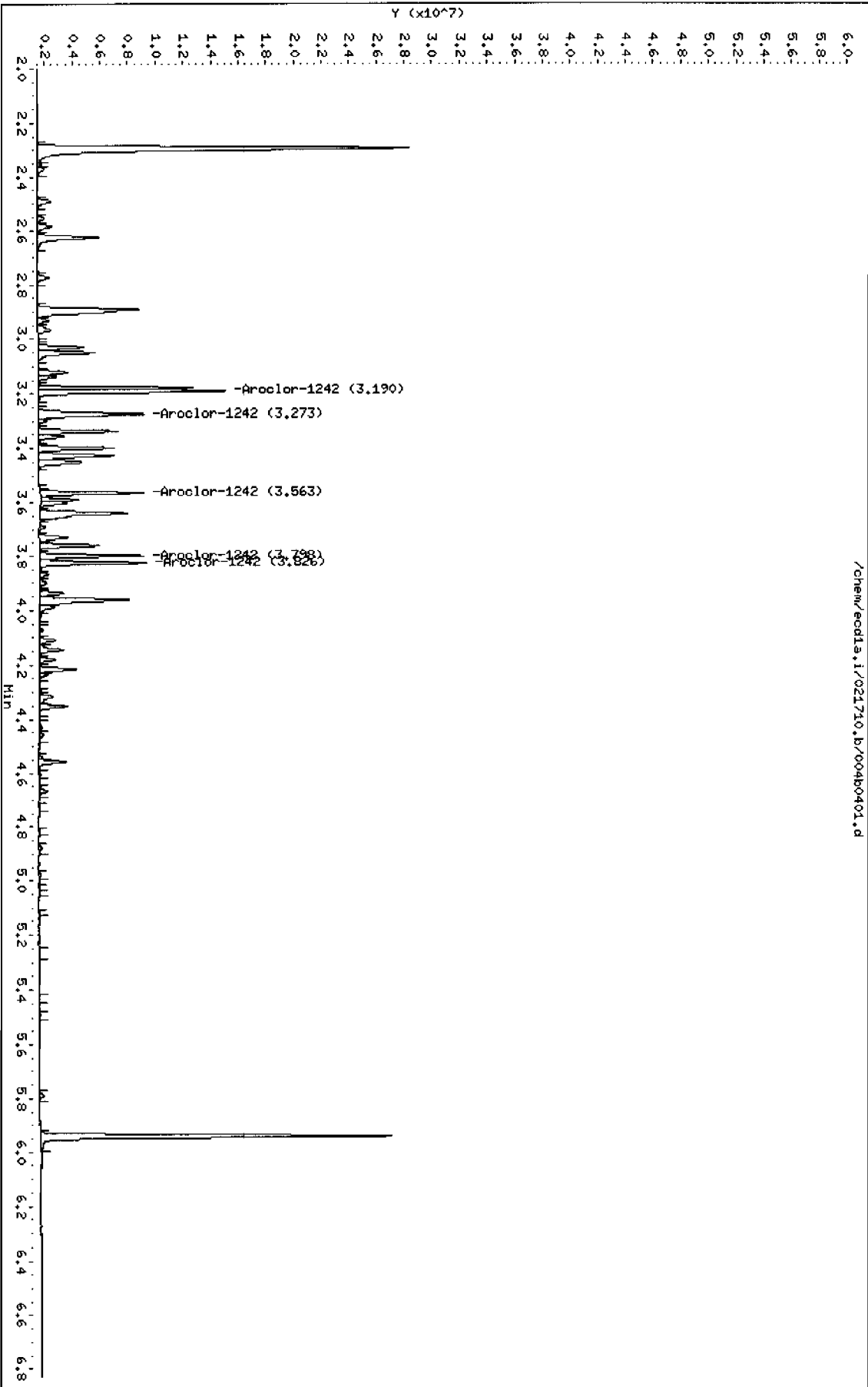
Column phase: CLP2

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecd1a.i/021710.b/005f0501.d  
 Report Date: 17-Feb-2010 10:07

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/005f0501.d  
 Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
 Inj Date : 17-FEB-2010 07:18  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR091217-48  
 Misc Info :  
 Comment :  
 Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m  
 Meth Date : 17-Feb-2010 10:07 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
 Als bottle: 5 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1248.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	CAL-AMT ( ug/L)	ON-COL	TARGET RANGE	RATIO
5							
				CAS #: 12672-29-6			
3.087	3.087	0.000	8559646 1000.00	906	80.00-	120.00	100.00
3.238	3.238	0.000	7317394 1000.00	885	65.49-	105.49	85.49
3.289	3.289	0.000	14514845 1000.00	911	149.57-	189.57	169.57
3.421	3.421	0.000	11496428 1000.00	879	114.31-	154.31	134.31
3.654	3.654	0.000	7301188 1000.00	828	65.30-	105.30	85.30
Average of Peak Amounts -				882			

Data File: /chem/ecdl1.1/021710.b/005f0501.d

Date: 17-FEB-2010 07:18

Client ID: AR124801

Sample Info: 11AR091217-48

Column phase: CLP1

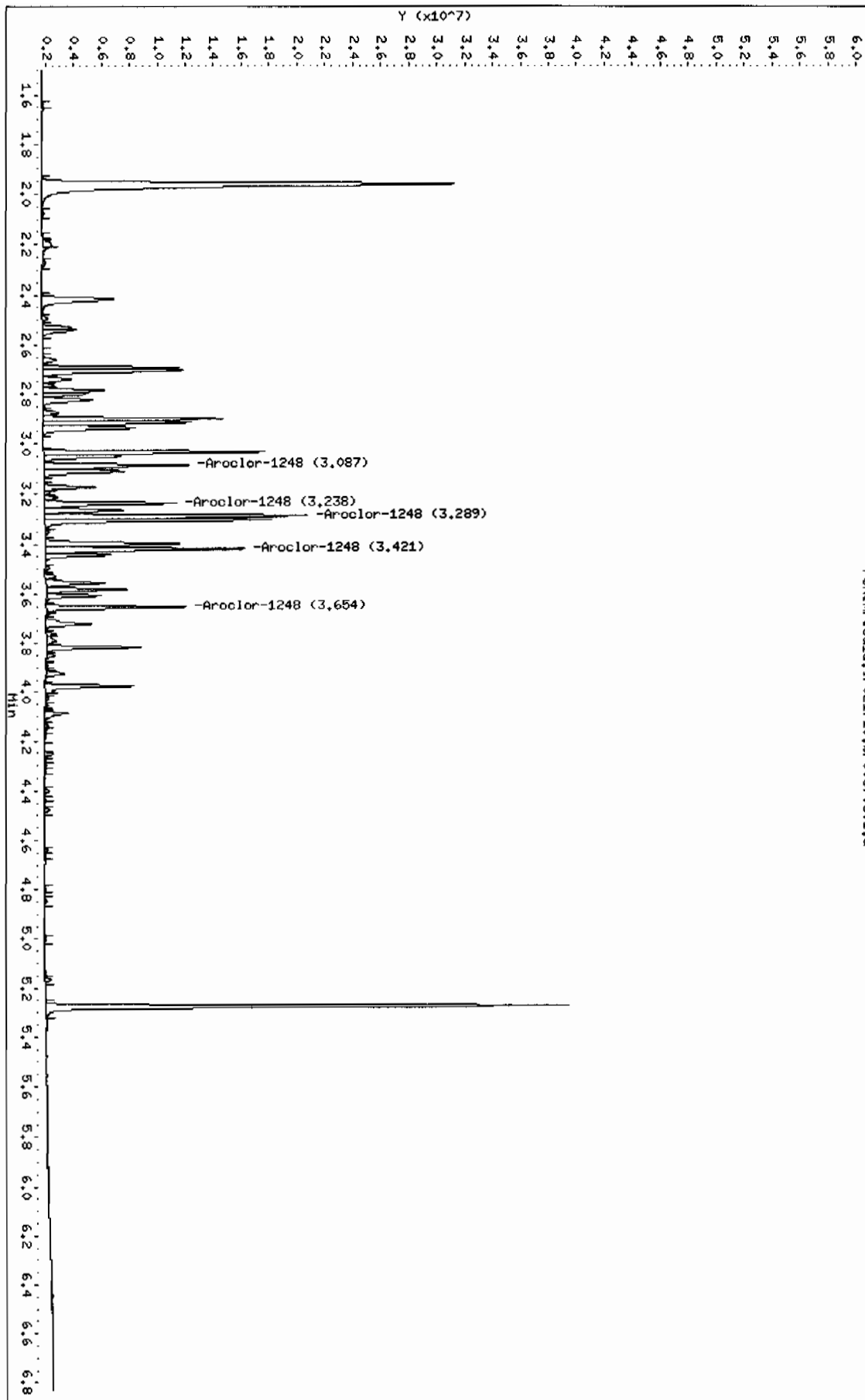
Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

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/chem/ecdl1.1/021710.b/005f0501.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/005b0501.d  
 Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
 Inj Date : 17-FEB-2010 07:18  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR091217-48  
 Misc Info :  
 Comment :  
 Method : /chem/ecd1a.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 17-Feb-2010 10:06 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 5 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1248.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.399	3.399	0.000	6778416 1000.00	884	80.00- 120.00	100.00
3.565	3.565	0.000	8443206 1000.00	893	104.56- 144.56	124.56
3.798	3.798	0.000	9510610 1000.00	885	120.31- 160.31	140.31
3.826	3.826	0.000	10741992 1000.00	894	138.47- 178.47	158.47
3.963	3.963	0.000	10200742 1000.00	882	130.49- 170.49	150.49
Average of Peak Amounts				888		

CAS #: 12672-29-6

Data File: /chem/ecdl.a.i/021710.b/00B0501.d

Date: 17-FEB-2010 07:18

Client ID: AR124801

Sample Info: 1MAR091217-48

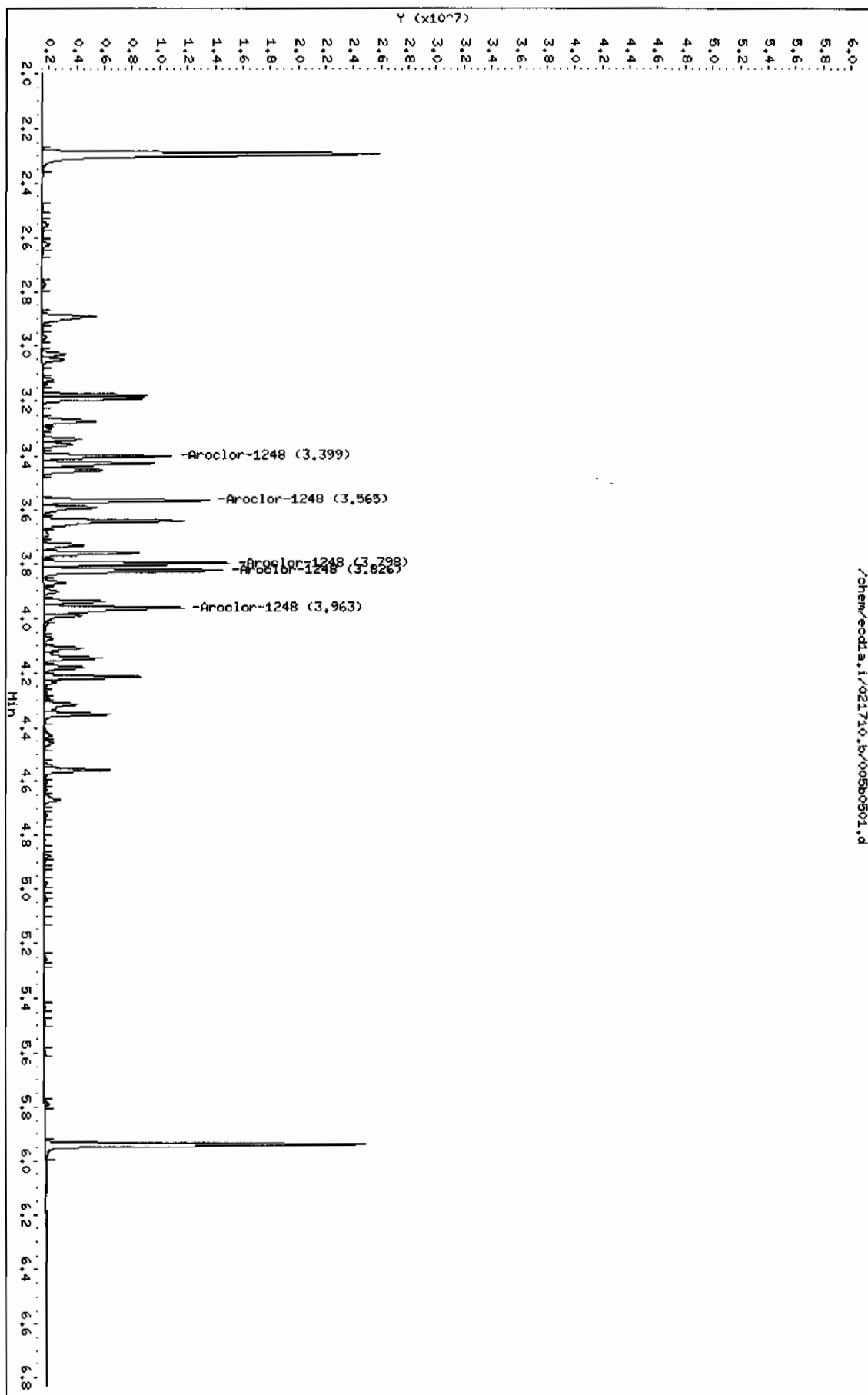
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSA

Column diameter: 0.25

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Data File: /chem/ecd1a.i/021710.b/007f0701.d  
Report Date: 17-Feb-2010 10:07

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/007f0701.d  
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201  
Inj Date : 17-FEB-2010 07:39  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-32  
Misc Info :  
Comment :  
Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 10:07 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 7 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1232.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5	
2.417	2.417	0.000	6603846 1000.00	964	80.00- 120.00	100.00
2.705	2.705	0.000	8680536 1000.00	1030	111.45- 151.45	131.45
2.786	2.786	0.000	5555701 1000.00	987	64.13- 104.13	84.13
3.035	3.035	0.000	4139028 1000.00	1040	42.68- 82.68	62.68
3.289	3.289	0.000	3734707 1000.00	968	36.55- 76.55	56.55
Average of Peak Amounts				998		

Data File: /chem/eodla.i/021710.b/007f0701.d

Date: 17-FEB-2010 07:39

Client ID: AR123201

Sample Info: 146R100104-32

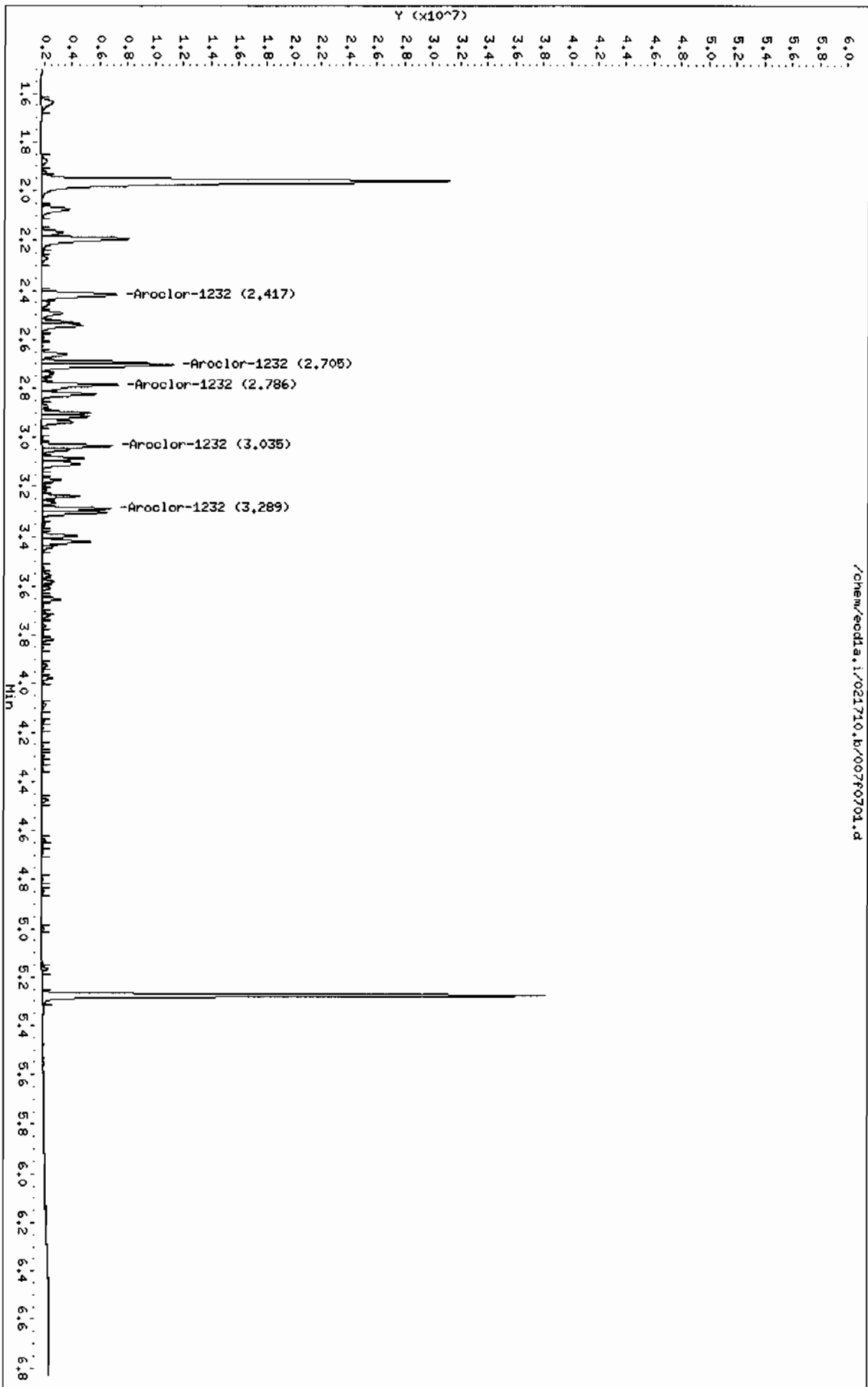
Page 1

Column phase: CLP1

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25



Data File: /chem/ecdl1a.i/021710.b/007b0701.d  
Report Date: 17-Feb-2010 10:07

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021710.b/007b0701.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 17-FEB-2010 07:39

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m

Meth Date : 17-Feb-2010 10:07 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

3 Aroclor-1232

CAS #: 11141-16-5

2.892	2.892	0.000	4837503	1000.00	821 80.00- 120.00	100.00
3.190	3.190	0.000	5451671	1000.00	876 92.70- 132.70	112.70
3.274	3.274	0.000	3637272	1000.00	837 55.19- 95.19	75.19
3.565	3.565	0.000	2815672	1000.00	905 38.21- 78.21	58.21
3.799	3.799	0.000	2676080	1000.00	838 35.32- 75.32	55.32

Average of Peak Amounts =

856



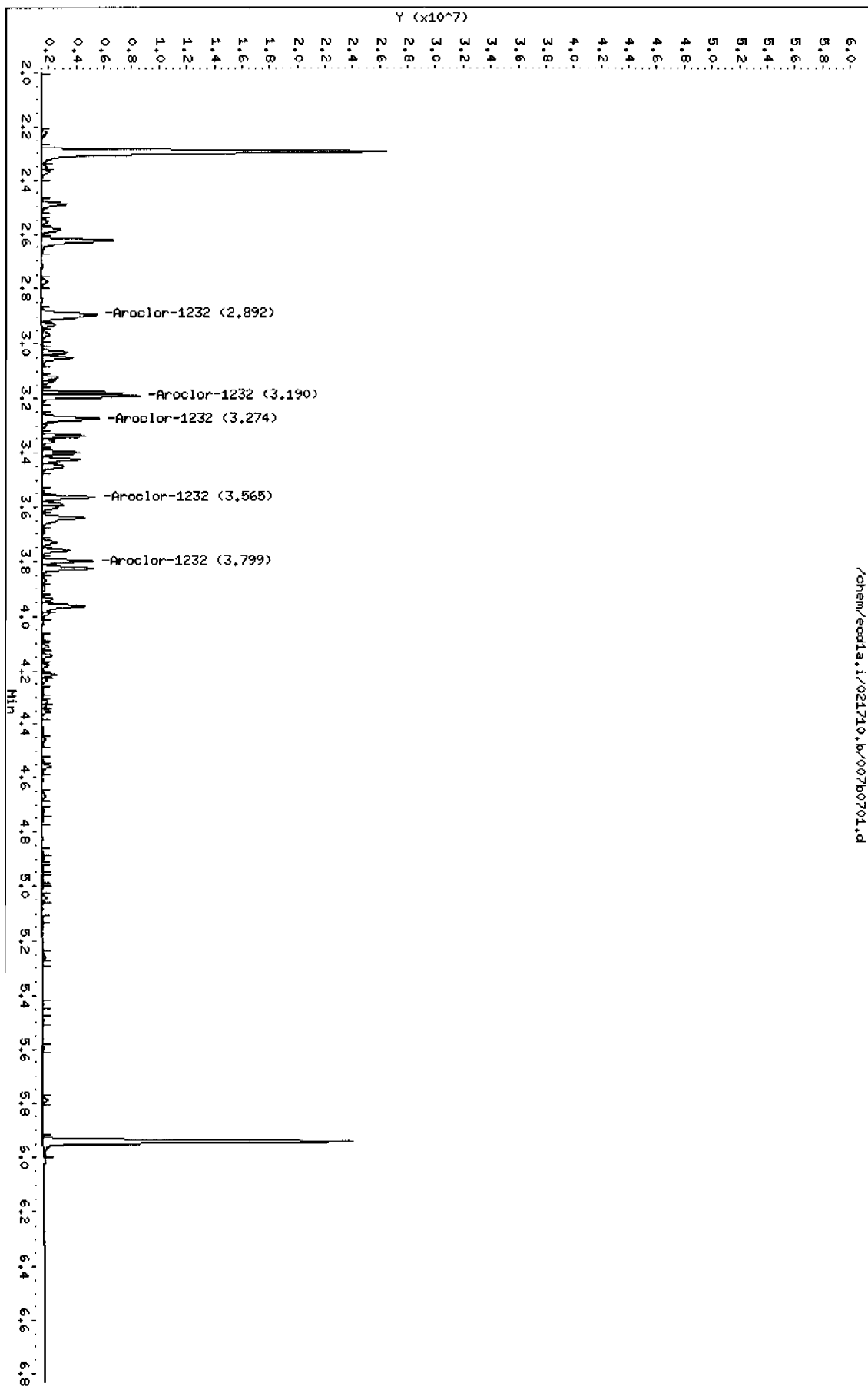
Data File: /chem/ecdda,i/021710,b/007b0701.d  
Date: 17-FEB-2010 07:39  
Client ID: AR123201  
Sample Info: 1MAR100104-32

Page 1

Column phase: CLP2

Instrument: ecdda,i  
Operator: YS1  
Column diameter: 0.25

/chem/ecdda,i/021710,b/007b0701.d



Data File: /chem/ecd1a.i/021710.b/008f0801.d  
Report Date: 17-Feb-2010 10:07

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/008f0801.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 17-FEB-2010 07:50  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 10:07 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 8 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.075	2.075	0.000	4728257 1000.00	1100	80.00- 120.00	100.00
2.168	2.168	0.000	2539636 1000.00	1040	33.71- 73.71	53.71
2.194	2.194	0.000	11364270 1000.00	1110	220.35- 260.35	240.35

Average of Peak Amounts = 1.08e+03

Data File: /chem/ecdda.i/021710.b/008f0801.d

Date : 17-FEB-2010 07:50

Client ID: 6R122101

Sample Info: 1MR100104-21

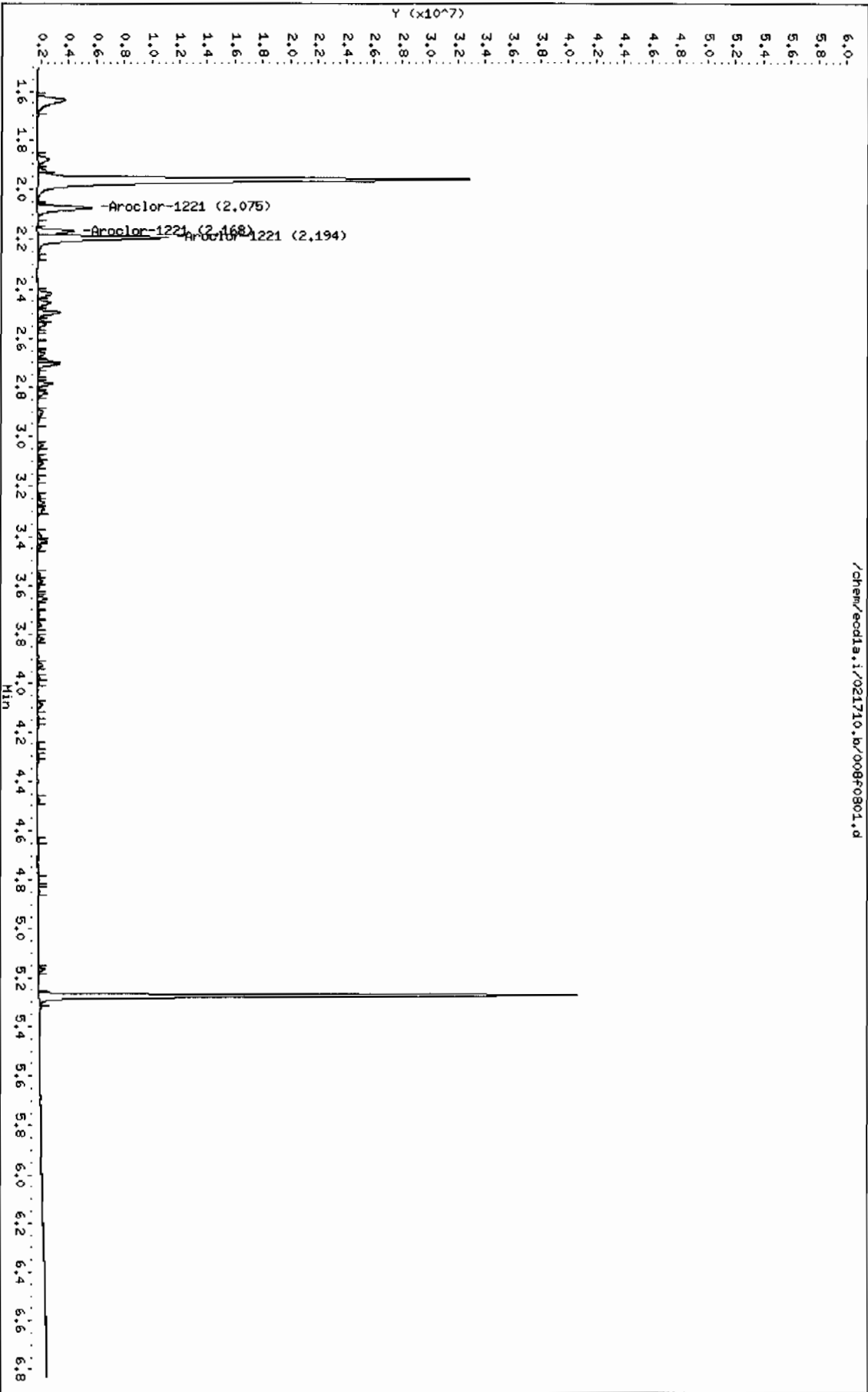
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/021710.b/008b0801.d  
Report Date: 17-Feb-2010 10:07

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/008b0801.d  
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101  
Inj Date : 17-FEB-2010 07:50  
Operator : YSl Inst ID: ecdla.i  
Smp Info : |WAR100104-21  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 10:07 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 8 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1221.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpclpl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.490	2.490	0.000	3352645	1000.00	921 80.00- 120.00	100.00
2.585	2.585	0.000	2128374	1000.00	914 43.48- 83.48	63.48
2.625	2.625	0.000	7221503	1000.00	889 195.40- 235.40	215.40
Average of Peak Amounts =				908		

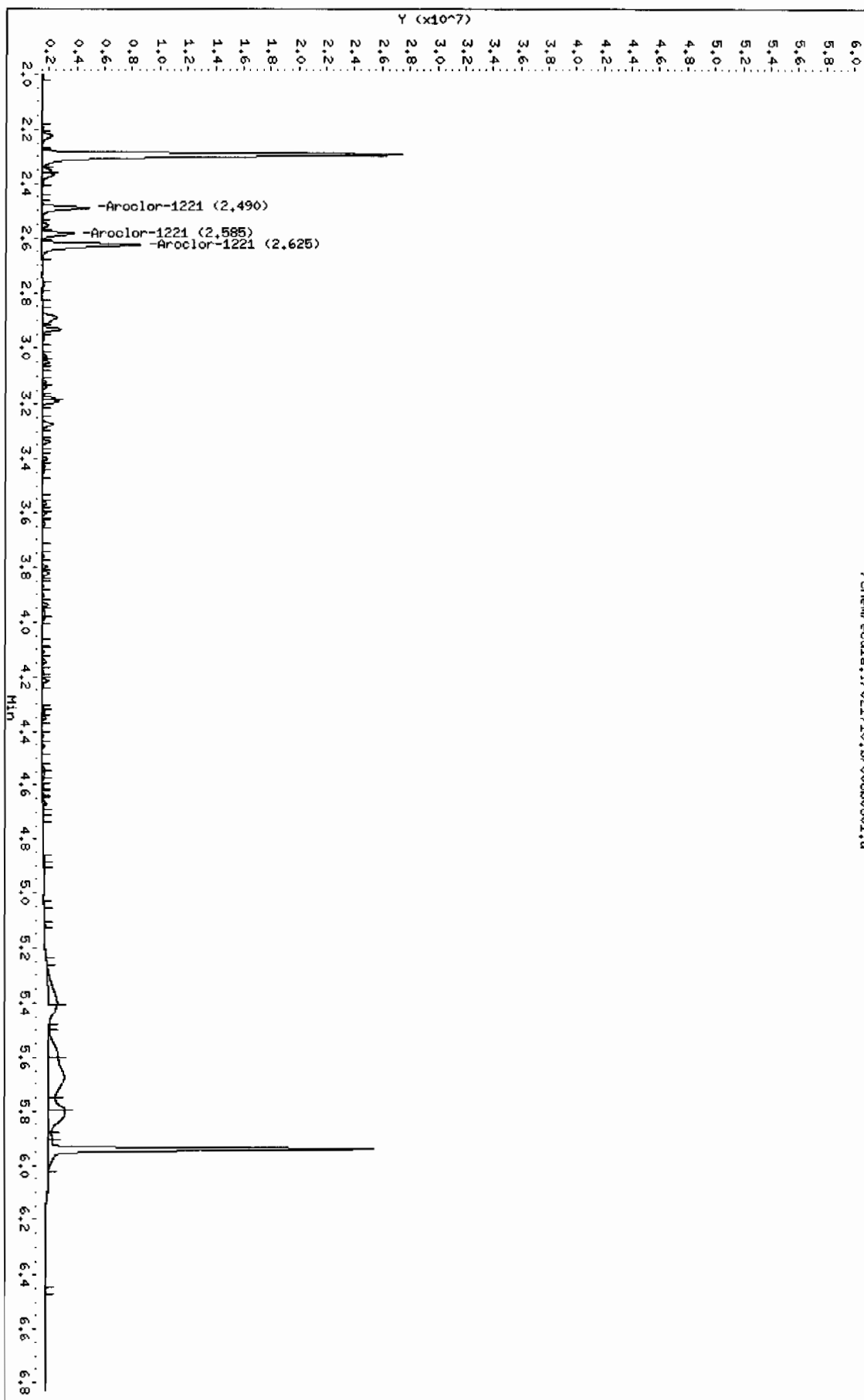
Data File: /chem/ecda.i/021710.b/0080801.d  
Date : 17-FEB-2010 07:50  
Client ID: AR122101  
Sample Info: IHR100104-21

Page 1

Column phase: CLP2

Instrument: ecda.i  
Operator: YSI  
Column diameter: 0.25

/chem/ecda.i/021710.b/0080801.d



Data File: /chem/ecdl1a.i/021710.b/037f3701.d  
Report Date: 17-Feb-2010 15:27

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

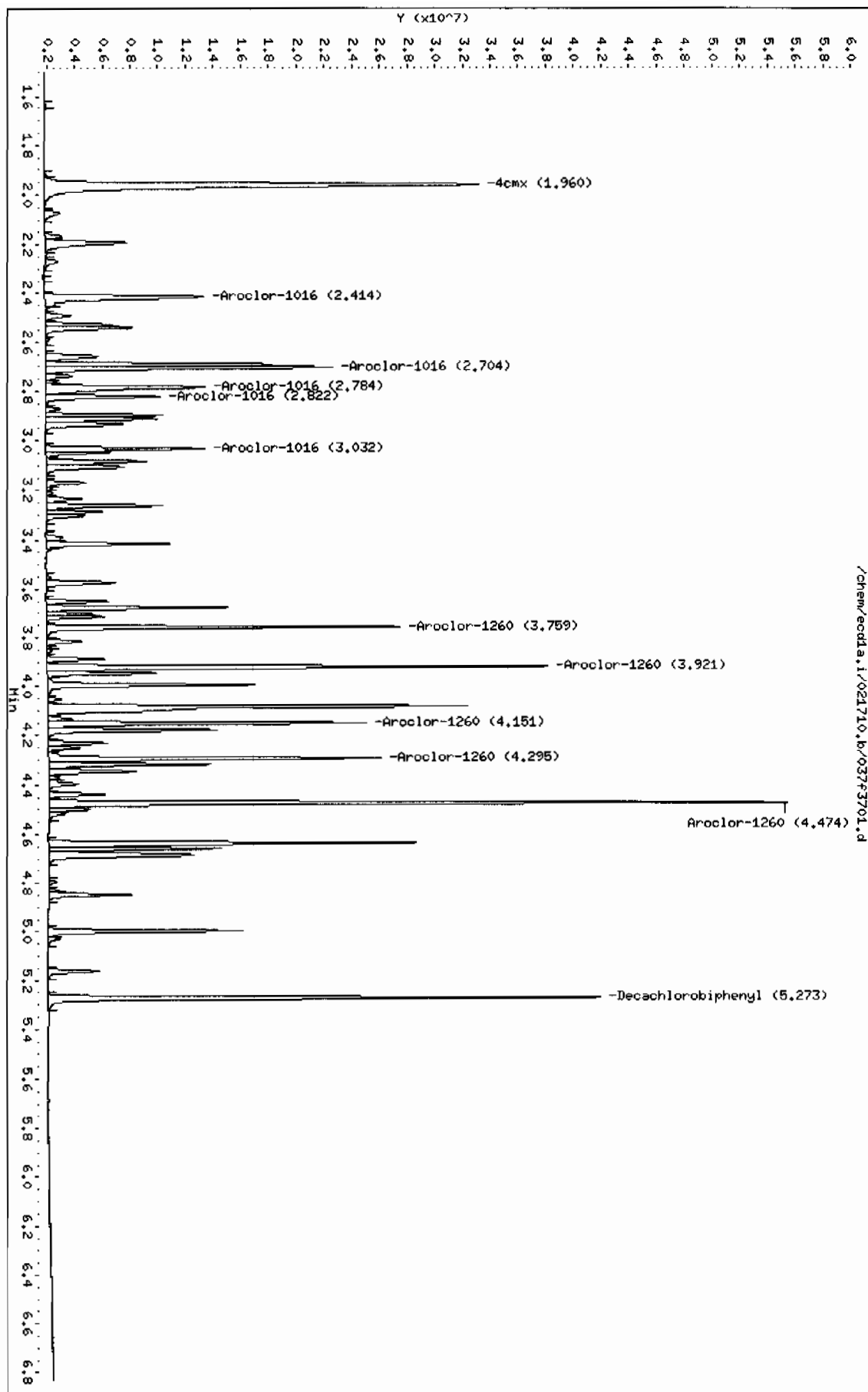
Data file : /chem/ecdl1a.i/021710.b/037f3701.d  
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004  
Inj Date : 17-FEB-2010 13:51  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100203-60 04  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 37 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.960	1.961	-0.001	41985672 100.000	96.0	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.273	5.275	-0.002	31060774 100.000	93.1	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.414	2.416	-0.002	14518057 1000.00	901	80.00- 120.00	100.00
2.704	2.705	-0.001	18920458 1000.00	956	110.32- 150.32	130.32
2.784	2.785	-0.001	11826191 1000.00	908	61.46- 101.46	81.46
2.822	2.823	-0.001	7102292 1000.00	913	28.92- 68.92	48.92
3.032	3.034	-0.002	9084358 1000.00	906	42.57- 82.57	62.57
Average of Peak Amounts -				917		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
3.759	3.760	-0.001	18962201 1000.00	996	80.00- 120.00	100.00
3.921	3.923	-0.002	28518495 1000.00	1000	130.40- 170.40	150.40
4.151	4.153	-0.002	17001329 1000.00	997	69.66- 109.66	89.66
4.295	4.296	-0.001	18239326 1000.00	1020	76.19- 116.19	96.19
4.474	4.476	-0.002	39877951 1000.00	1030	190.30- 230.30	210.30
Average of Peak Amounts =				1.01e+03		

Data File: /chem/ecdda.i/021710.b/037f3701.d  
Date: 17-FEB-2010 13:51  
Client ID: AR166004  
Sample Info: MAR100203-60 04

Column phase: CLP1

Instrument: ecdda.i  
Operator: YSI  
Column diameter: 0.25



Data File: /chem/ecdl1a.i/021710.b/037b3701.d  
 Report Date: 17-Feb-2010 15:23

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021710.b/037b3701.d  
 Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004  
 Inj Date : 17-FEB-2010 13:51  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |WAR100203-60 04  
 Misc Info :  
 Comment :  
 Method : /chem/ecdl1a.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 37 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.292	2.294	-0.002	27172128	100.000	94.7	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.939	5.941	-0.002	19625040	100.000	91.2	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.189	3.190	-0.001	11525705	1000.00	927	80.00-	120.00	100.00 (M)
3.272	3.273	-0.001	7517489	1000.00	882	45.22-	85.22	65.22
3.335	3.336	-0.001	4630958	1000.00	881	20.18-	60.18	40.18
3.562	3.564	-0.002	5946182	1000.00	883	31.59-	71.59	51.59
3.638	3.639	-0.001	5518235	1000.00	872	27.88-	67.88	47.88
Average of Peak Amounts =					889			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.329	4.330	-0.001	12233299	1000.00	971	80.00-	120.00	100.00
4.454	4.455	-0.001	14866487	1000.00	987	101.52-	141.52	121.52
4.720	4.721	-0.001	11298207	1000.00	972	72.36-	112.36	92.36
4.894	4.895	-0.001	11725166	1000.00	975	75.85-	115.85	95.85
5.041	5.041	0.000	25999373	1000.00	1010	192.53-	232.53	212.53
Average of Peak Amounts =					982			



QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/021710.b/037b3701.d

Date : 17-FEB-2010 13:51

Client ID: AR166004

Sample Info: 1MR100203-60 04

Column phase: CLP2

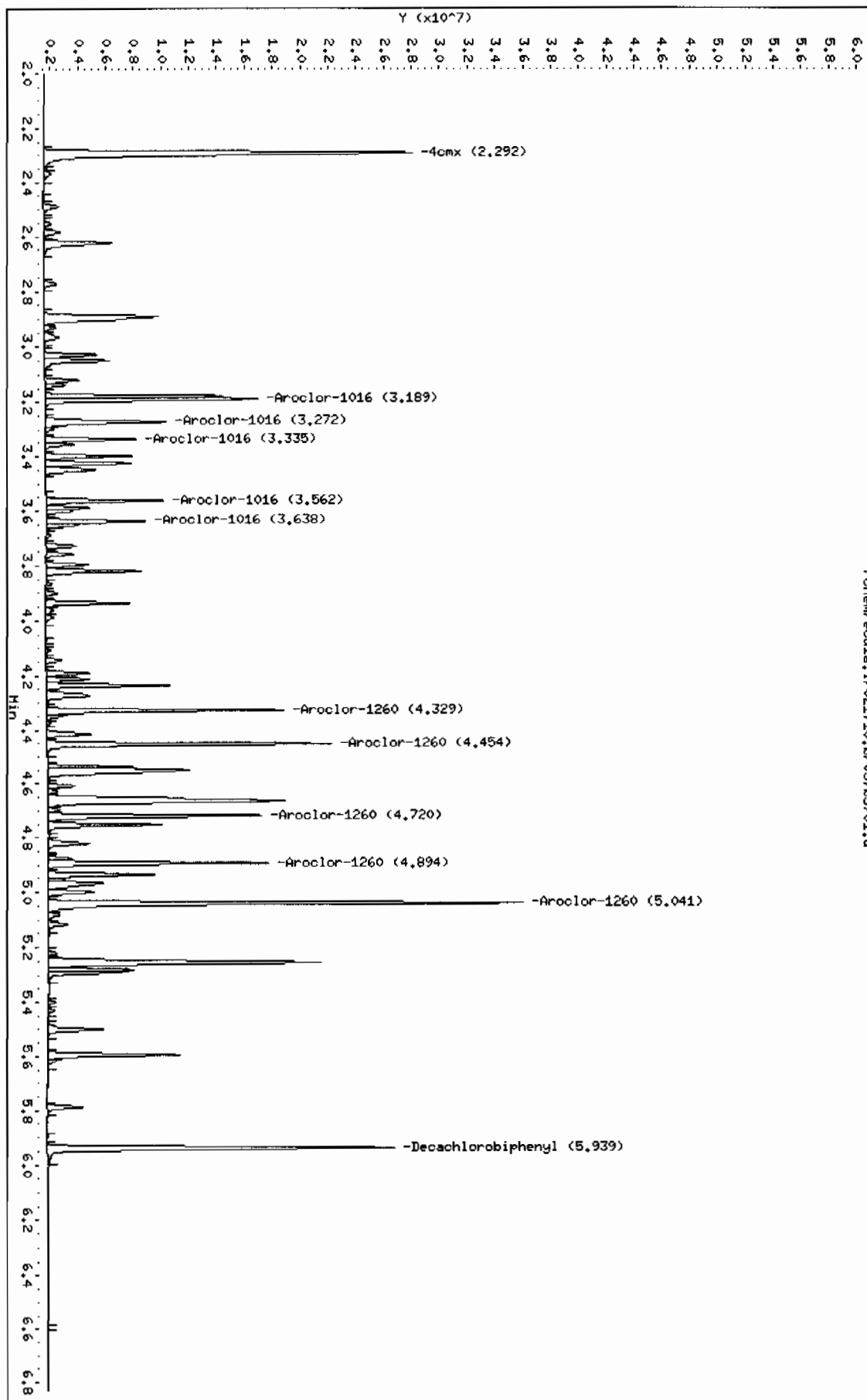
Instrument: eodla.i

Operator: YSL

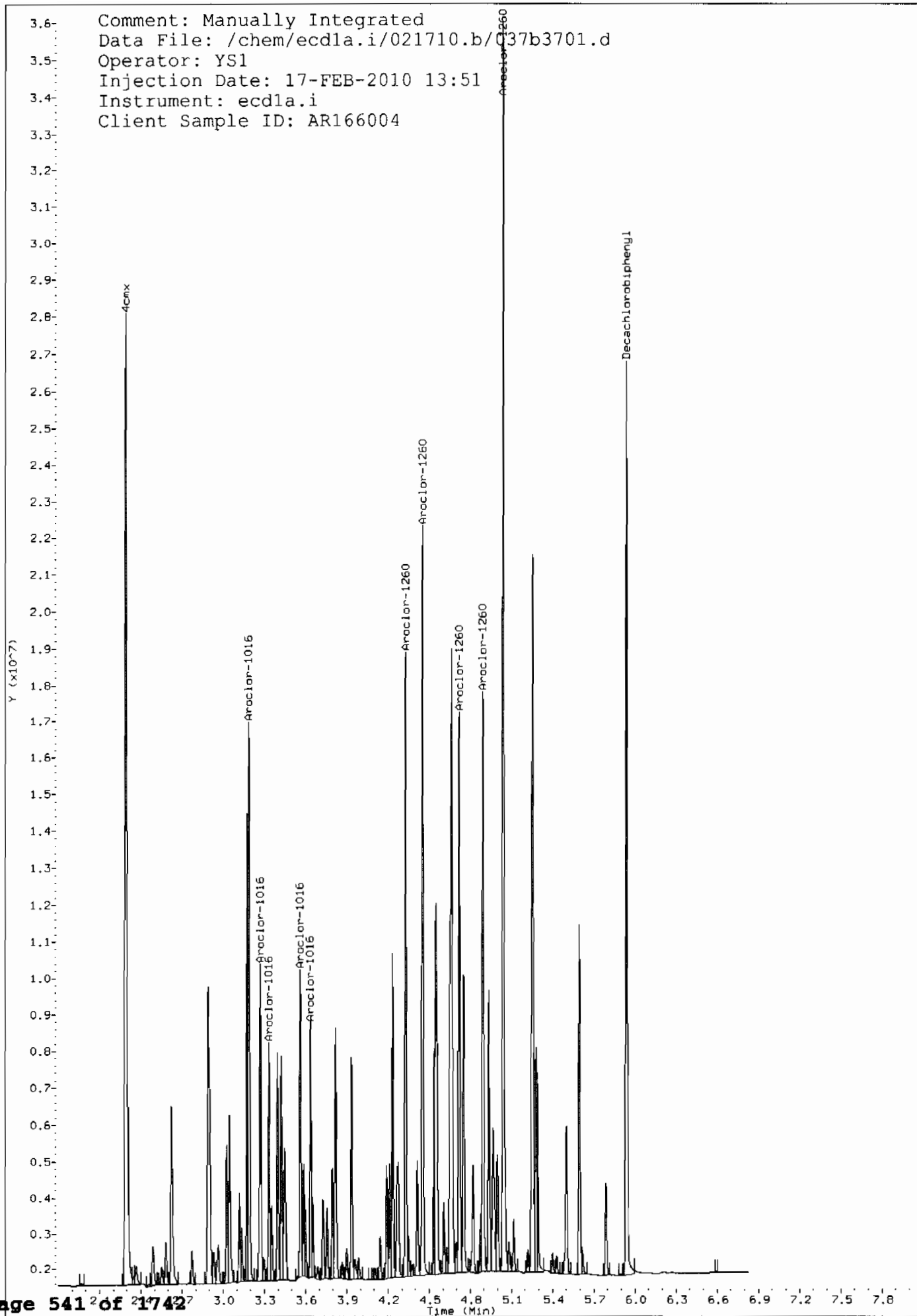
Column diameter: 0.25

/chem/eodla.i/021710.b/037b3701.d

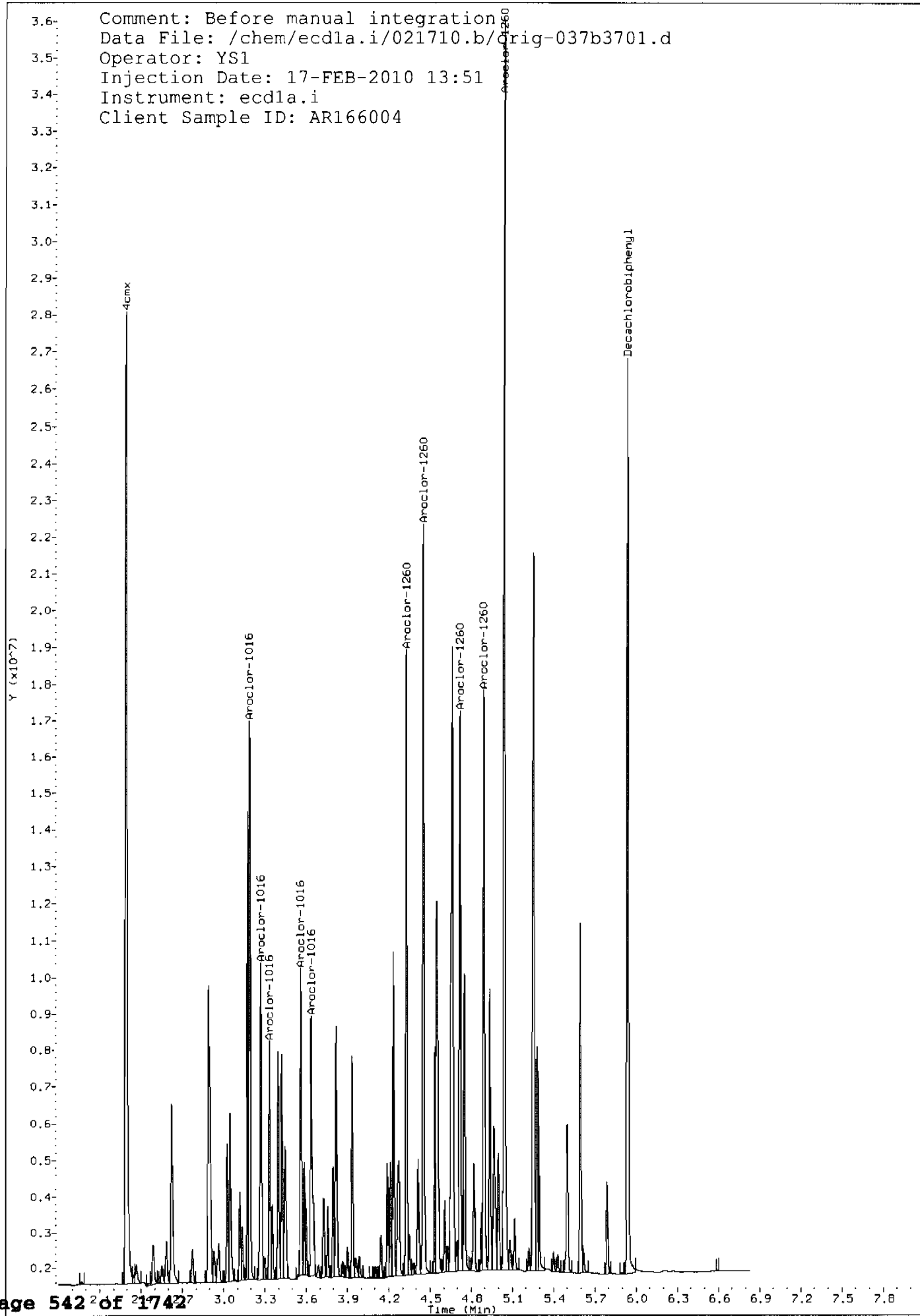
Page 1



Comment: Manually Integrated  
Data File: /chem/ecdla.i/021710.b/C37b3701.d  
Operator: YS1  
Injection Date: 17-FEB-2010 13:51  
Instrument: ecdla.i  
Client Sample ID: AR166004



Comment: Before manual integration  
Data File: /chem/ecdl1.i/021710.b/Orig-037b3701.d  
Operator: YS1  
Injection Date: 17-FEB-2010 13:51  
Instrument: ecd1a.i  
Client Sample ID: AR166004



Data File: /chem/ecdla.i/021710.b/047f4701.d  
 Report Date: 18-Feb-2010 07:22

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/047f4701.d

Lab Smp Id: WAR100203-60 05

Client Smp ID: AR166005

Inj Date : 17-FEB-2010 15:53

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100203-60 05

Misc Info :

Comment :

Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m

Meth Date : 18-Feb-2010 07:22 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 47

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclpl

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		( ug/L)	TARGET RANGE	RATIO	
==		=====	=====	=====	=====	=====	=====	
<hr/>								
\$ 11 4cmx					CAS #:	877-09-8		
1.960	1.961	-0.001	42726110	100.000	97.7	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #:	2051-24-3		
5.273	5.275	-0.002	31592241	100.000	94.7	80.00-	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #:	12674-11-2		
2.415	2.416	-0.001	14724746	1000.00	914	80.00-	120.00	100.00
2.704	2.705	-0.001	18601230	1000.00	940	106.33-	146.33	126.33
2.784	2.785	-0.001	11991168	1000.00	920	61.44-	101.44	81.44
2.822	2.823	-0.001	7232272	1000.00	929	29.12-	69.12	49.12
3.032	3.034	-0.002	9356615	1000.00	934	43.54-	83.54	63.54
Average of Peak Amounts =					928			
<hr/>								
7 Aroclor-1260					CAS #:	11096-82-5		
3.759	3.760	-0.001	19346608	1000.00	1020	80.00-	120.00	100.00
3.922	3.923	-0.001	28924588	1000.00	1020	129.51-	169.51	149.51
4.152	4.153	-0.001	17377240	1000.00	1020	69.82-	109.82	89.82
4.294	4.296	-0.002	18564204	1000.00	1040	75.96-	115.96	95.96
4.474	4.476	-0.002	40617845	1000.00	1040	189.95-	229.95	209.95
Average of Peak Amounts =					1.03e+03			
<hr/>								

Data File: /chem/ecda.i/021710.b/047f4701.d

Date: 17-FEB-2010 15:53

Client ID: RCL6005

Sample Info: IMR100203-60 05

Page 1

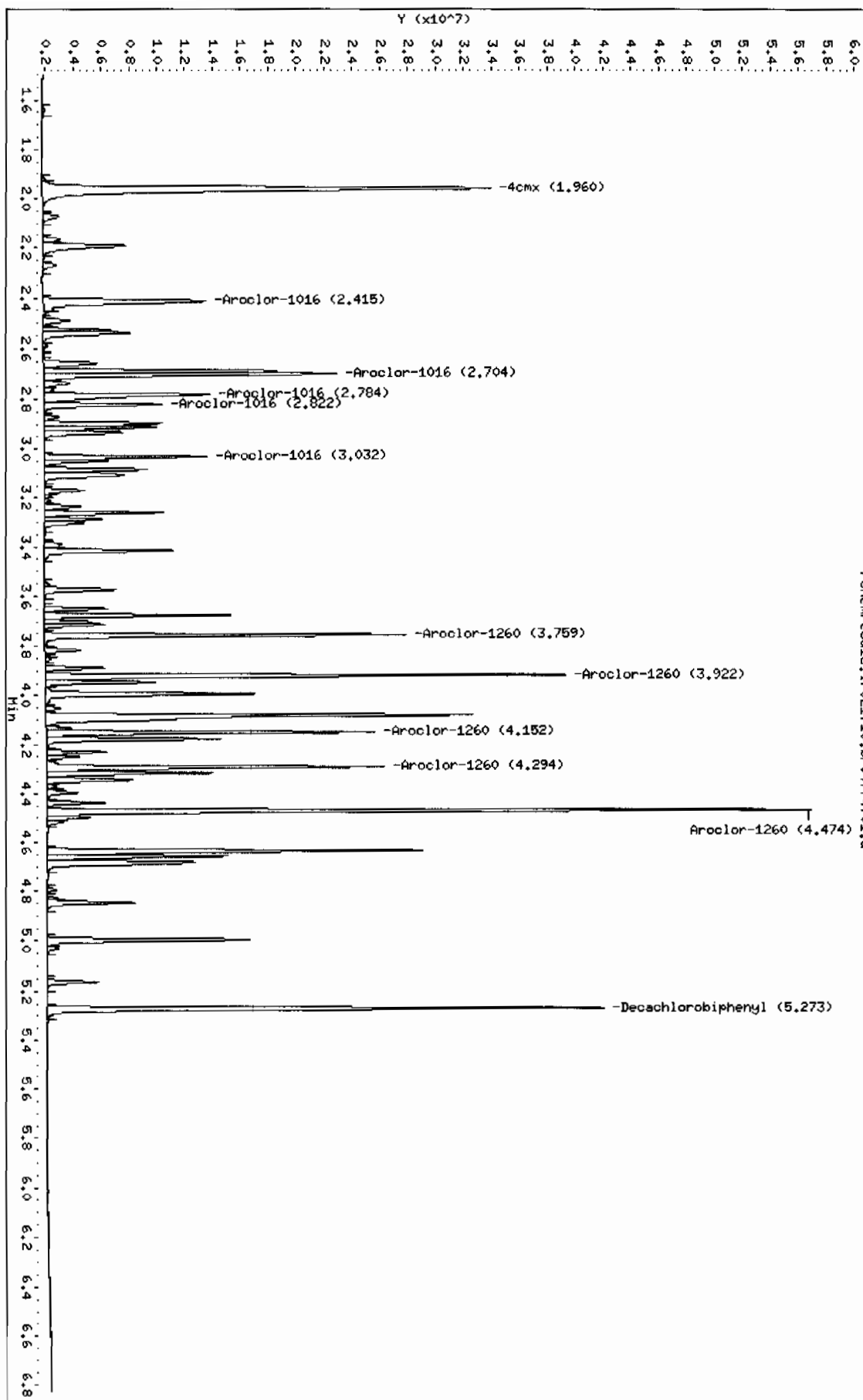
Instrument: ecda.i

Operator: YSI

Column diameter: 0.25

Column phase: CLP1

/chem/ecda.i/021710.b/047f4701.d



Data File: /chem/ecdla.i/021710.b/047b4701.d  
 Report Date: 18-Feb-2010 07:37

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/047b4701.d  
 Lab Smp Id: WAR100203-60 05 Client Smp ID: AR166005  
 Inj Date : 17-FEB-2010 15:53  
 Operator : YSl Inst ID: ecdla.i  
 Smp Info : |WAR100203-60 05  
 Misc Info :  
 Comment :  
 Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 18-Feb-2010 07:27 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 47 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
2.292	2.294	-0.002	27501179	100.000	95.8	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.939	5.941	-0.002	20004160	100.000	93.0	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
3.189	3.190	-0.001	11906263	1000.00	958	80.00- 120.00	100.00 (M)
3.272	3.273	-0.001	7643868	1000.00	897	46.49- 86.49	64.20
3.336	3.336	0.000	4722694	1000.00	899	20.93- 60.93	39.67
3.563	3.564	-0.001	6015607	1000.00	894	31.25- 71.25	50.52
3.639	3.639	0.000	5700825	1000.00	901	36.99- 76.99	56.83
Average of Peak Amounts =					910		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.329	4.330	-0.001	12407822	1000.00	985	80.00- 120.00	100.00
4.454	4.455	-0.001	15059508	1000.00	999	99.94- 139.94	121.37
4.719	4.721	-0.002	11454351	1000.00	986	69.44- 109.44	92.32
4.893	4.895	-0.002	11820878	1000.00	983	71.76- 111.76	95.27
5.040	5.041	-0.001	26317801	1000.00	1020	184.72- 224.72	212.11
Average of Peak Amounts =					994		

QC Flag Legend

M - Compound response manually integrated.



Data File: /chem/eodla.i/021710.b/047b4701.d

Date: 17-FEB-2010 15:53

Client ID: AR16005

Sample Info: IWR100203-60 05

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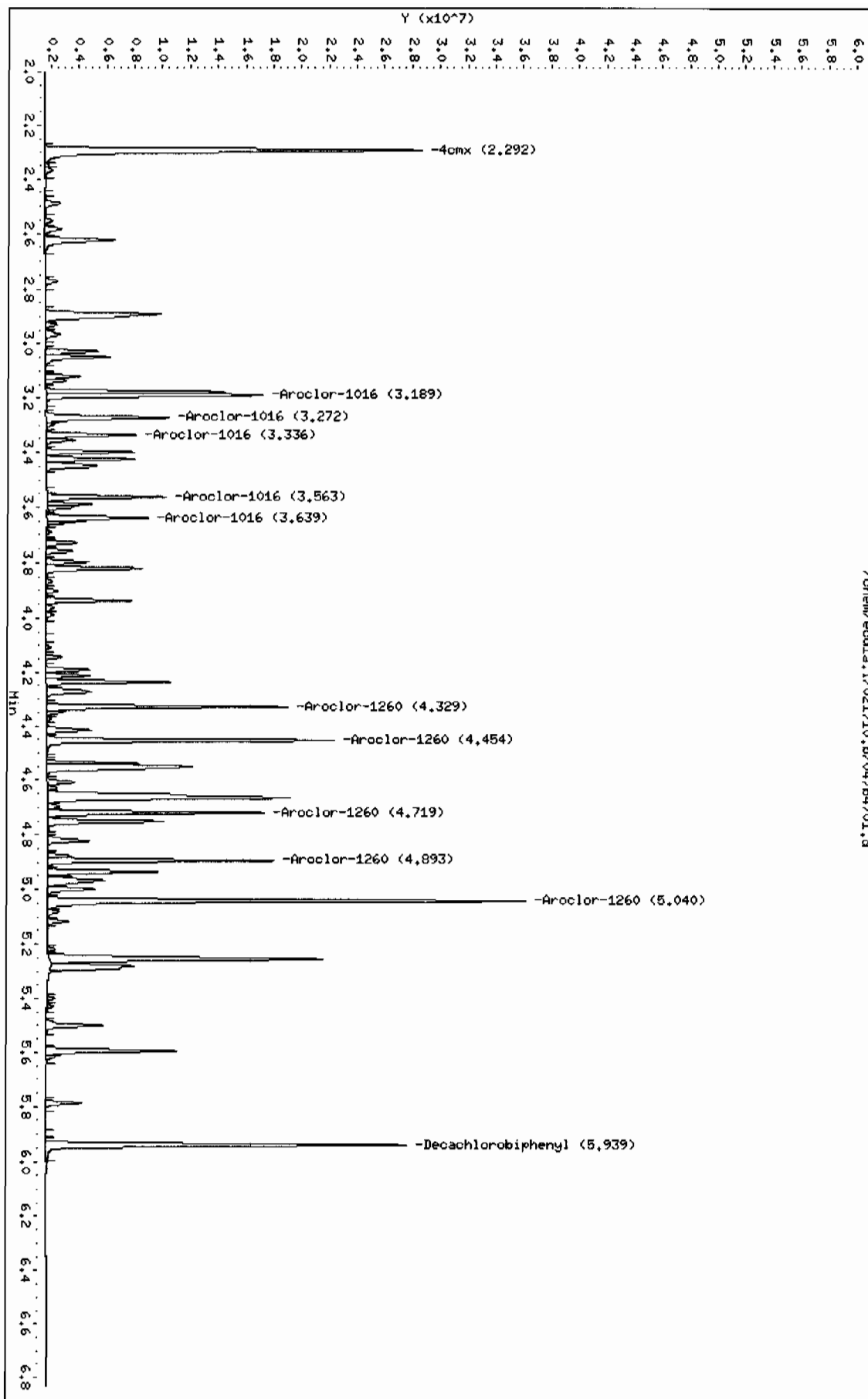
Instrument: eodla.i

Operator: YS1

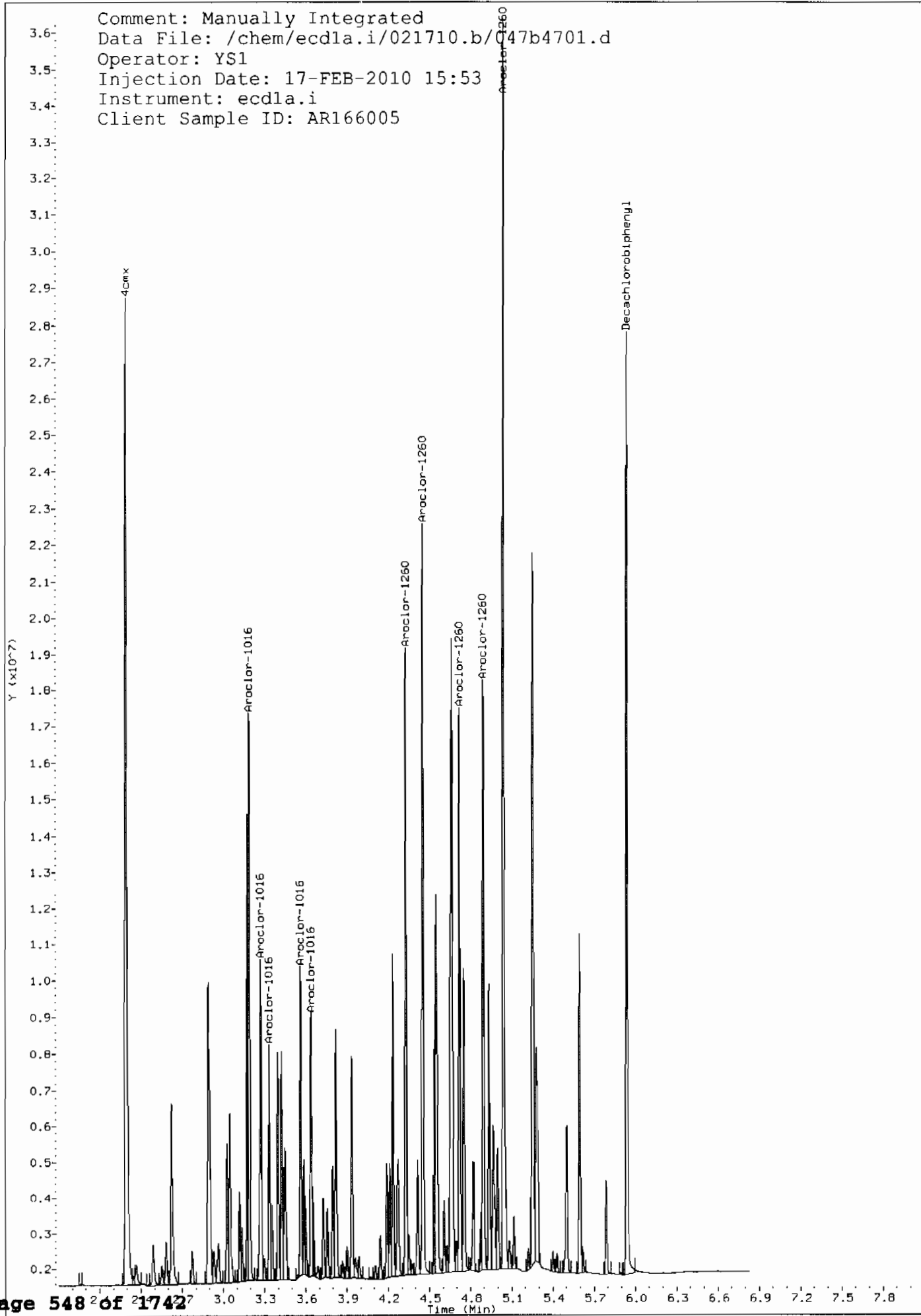
Column diameter: 0.25

Column phase: CLP2

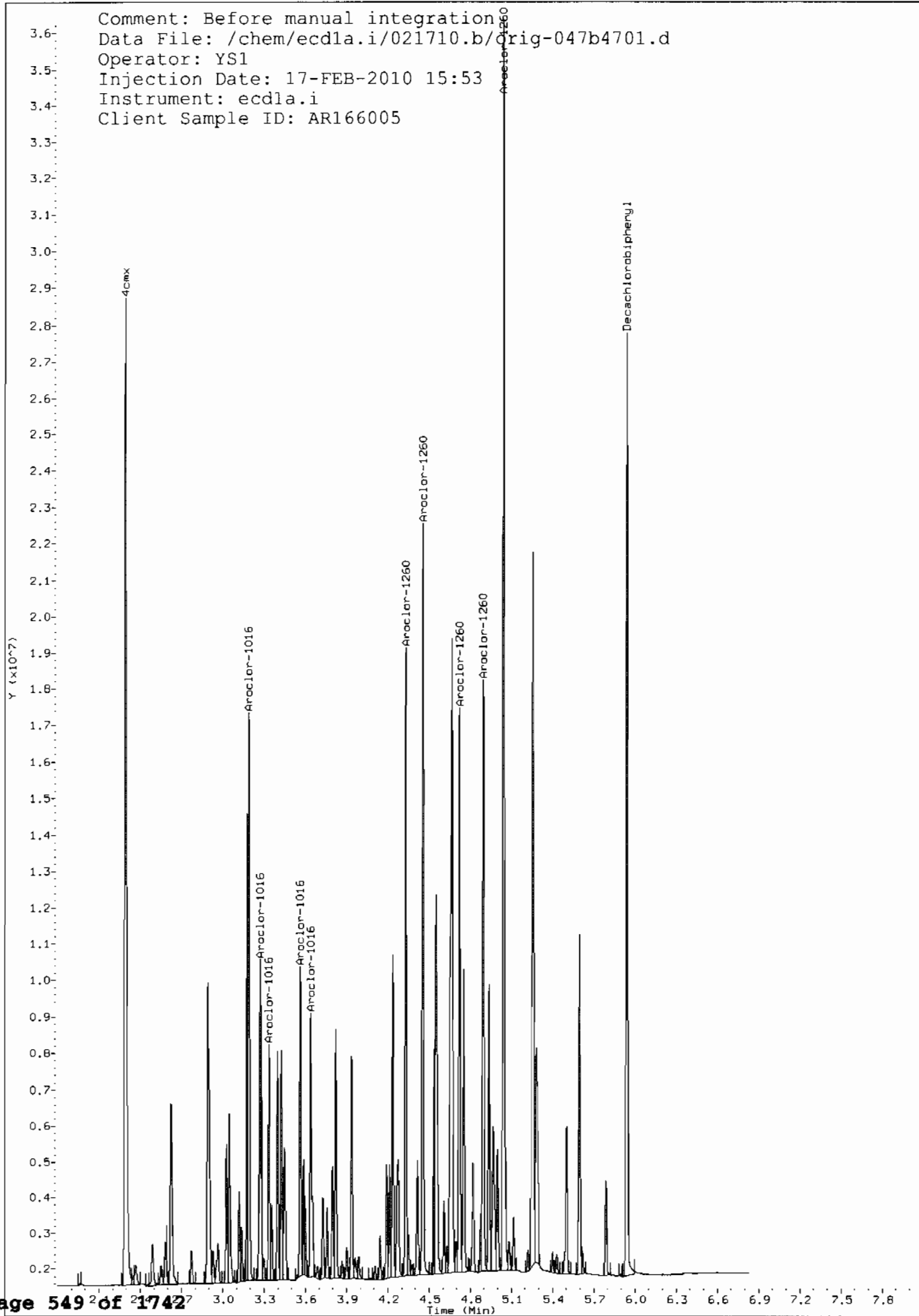
/chem/eodla.i/021710.b/047b4701.d



Comment: Manually Integrated  
Data File: /chem/ecdla.i/021710.b/C47b4701.d  
Operator: YS1  
Injection Date: 17-FEB-2010 15:53  
Instrument: ecdla.i  
Client Sample ID: AR166005



Comment: Before manual integration  
Data File: /chem/ecdla.i/021710.b/Orig-047b4701.d  
Operator: YS1  
Injection Date: 17-FEB-2010 15:53  
Instrument: ecdla.i  
Client Sample ID: AR166005



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.96				DCB: 5.28			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#	#
01	PIBLK01	WAR100105-99	02/10/10	2048	1.96	5.28	
02	AR166001	WAR100210-01	02/10/10	2058	1.96	5.28	
03	AR166002	WAR100210-02	02/10/10	2109	1.96	5.28	
04	AR166003	WAR100210-03	02/10/10	2119	1.96	5.28	
05	AR166004	WAR100210-04	02/10/10	2130	1.96	5.28	
06	AR166005	IAR100104-01	02/10/10	2140	1.96	5.28	
07	AR166001	WAR100203-60	02/10/10	2151	1.96	5.28	
08	AR124201	WAR100210-05	02/10/10	2201			
09	AR124202	WAR100210-06	02/10/10	2212			
10	AR124203	WAR100210-07	02/10/10	2222			
11	AR124204	WAR100210-08	02/10/10	2233			
12	AR124205	IAR091111-01	02/10/10	2243			
13	AR124201	WAR091217-42	02/10/10	2254			
14	AR124801	WAR100210-09	02/10/10	2304			
15	AR124802	WAR100210-10	02/10/10	2315			
16	AR124803	WAR100210-11	02/10/10	2325			
17	AR124804	WAR100210-12	02/10/10	2336			
18	AR124805	IAR091027-02	02/10/10	2346			
19	AR124801	WAR091217-48	02/10/10	2357			
20	PIBLK02	WAR100105-99	02/11/10	0007	1.96	5.28	
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

QC LIMITS  
S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665  
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10  
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29 DCB: 5.94						
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/10/10	2048	2.29	5.95
02	AR166001	WAR100210-01	02/10/10	2058	2.29	5.94
03	AR166002	WAR100210-02	02/10/10	2109	2.29	5.94
04	AR166003	WAR100210-03	02/10/10	2119	2.29	5.94
05	AR166004	WAR100210-04	02/10/10	2130	2.29	5.94
06	AR166005	IAR100104-01	02/10/10	2140	2.29	5.94
07	AR166001	WAR100203-60	02/10/10	2151	2.29	5.94
08	AR124201	WAR100210-05	02/10/10	2201		
09	AR124202	WAR100210-06	02/10/10	2212		
10	AR124203	WAR100210-07	02/10/10	2222		
11	AR124204	WAR100210-08	02/10/10	2233		
12	AR124205	IAR091111-01	02/10/10	2243		
13	AR124201	WAR091217-42	02/10/10	2254		
14	AR124801	WAR100210-09	02/10/10	2304		
15	AR124802	WAR100210-10	02/10/10	2315		
16	AR124803	WAR100210-11	02/10/10	2325		
17	AR124804	WAR100210-12	02/10/10	2336		
18	AR124805	IAR091027-02	02/10/10	2346		
19	AR124801	WAR091217-48	02/10/10	2357		
20	PIBLK02	WAR100105-99	02/11/10	0007	2.29	5.94
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)  
 DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.96			DCB: 5.27		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100105-99	02/17/10 0636	1.96	5.27
02	AR166001	WAR100203-60	02/17/10 0647	1.96	5.27
03	AR125401	WAR091216-54	02/17/10 0657		
04	AR124201	WAR091217-42	02/17/10 0708		
05	AR124801	WAR091217-48	02/17/10 0718		
06	AR126801	WAR100107-68	02/17/10 0729		
07	AR123201	WAR100104-32	02/17/10 0739		
08	AR122101	WAR100104-21	02/17/10 0750		
09	AR126201	WAR100104-62	02/17/10 0800		
10	DDTANALOGSTD	WAR091219-DD	02/17/10 0811		
11	PIBLK02	WAR100105-99	02/17/10 0821	1.96	5.28
12	ZZZZZ	ZZZZZ	02/17/10 0832	1.96	5.28
13	ZZZZZ	ZZZZZ	02/17/10 0845	1.96	5.27
14	ZZZZZ	ZZZZZ	02/17/10 0857	1.96	5.27
15	ZZZZZ	ZZZZZ	02/17/10 0910	1.96	5.27
16	ZZZZZ	ZZZZZ	02/17/10 0922	1.96	5.27
17	AR166002	WAR100203-60	02/17/10 0935	1.96	5.27
18	PIBLK03	WAR100105-99	02/17/10 0946	1.96	5.27
19	ZZZZZ	ZZZZZ	02/17/10 0956	1.96	5.27
20	ZZZZZ	ZZZZZ	02/17/10 1007	1.96	5.28
21	ZZZZZ	ZZZZZ	02/17/10 1017	1.96	5.28
22	ZZZZZ	ZZZZZ	02/17/10 1028	1.96	5.28
23	ZZZZZ	ZZZZZ	02/17/10 1041	1.94	5.27
24	ZZZZZ	ZZZZZ	02/17/10 1053	1.97	5.27
25	ZZZZZ	ZZZZZ	02/17/10 1106	1.96	5.27
26	ZZZZZ	ZZZZZ	02/17/10 1118	1.96	5.27
27	ZZZZZ	ZZZZZ	02/17/10 1131	1.96	5.27
28	ZZZZZ	ZZZZZ	02/17/10 1144	1.96	5.27
29	AR166003	WAR100203-60	02/17/10 1207	1.96	5.27
30	PIBLK04	WAR100105-99	02/17/10 1217	1.96	5.27
31	ZZZZZ	ZZZZZ	02/17/10 1228	1.96	5.27
32	ZZZZZ	ZZZZZ	02/17/10 1240	1.96	5.27

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.96			DCB: 5.27		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	02/17/10	1253	1.96	5.28
02	ZZZZZ	02/17/10	1305	1.95	5.27
03	ZZZZZ	02/17/10	1318	1.96	5.27
04	ZZZZZ	02/17/10	1337	1.94	5.28
05	AR166004	WAR100203-60	1351	1.96	5.27
06	PIBLK05	WAR100105-99	1402	1.96	5.27
07	PBLK01	1202043869	1412	1.96	5.27
08	PBLK01LCS	1202043870	1425	1.96	5.27
09	RE15-10-8175	246554001	1438	1.96	5.27
10	RE15-10-8174	246554002	1450	1.96	5.27
11	RE15-10-8176	246554003	1503	1.96	5.27
12	RE15-10-8178	246554004	1516	1.96	5.27
13	RE15-10-8177	246554005	1528	1.96	5.27
14	RE15-10-8225	246554006	1541	1.96	5.27
15	AR166005	WAR100203-60	1553	1.96	5.27
16	PIBLK06	WAR100105-99	1604	1.96	5.27
17	ZZZZZ	02/17/10	1615	1.96	5.28
18	ZZZZZ	02/17/10	1627	1.96	5.27
19	ZZZZZ	02/17/10	1640	1.96	5.27
20	ZZZZZ	02/17/10	1653	1.96	5.27
21	ZZZZZ	02/17/10	1705	1.96	5.27
22	ZZZZZ	02/17/10	1718	1.96	5.27
23	ZZZZZ	02/17/10	1731	1.96	5.27
24	ZZZZZ	02/17/10	1743	1.96	5.27
25	ZZZZZ	02/17/10	1756	1.96	5.27
26	ZZZZZ	02/17/10	1808	1.96	5.27
27	AR166006	WAR100203-60	1821	1.96	5.27
28	PIBLK07	WAR100105-99	1832	1.96	5.27
29	ZZZZZ	02/17/10	1842	1.96	5.27
30	ZZZZZ	02/17/10	1855	1.96	5.27
31	ZZZZZ	02/17/10	1907	1.96	5.27
32	AR166007	WAR100203-60	1920	1.96	5.27

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/17/10	0636	2.29	5.94
02	AR166001	WAR100203-60	02/17/10	0647	2.29	5.94
03	AR125401	WAR091216-54	02/17/10	0657		
04	AR124201	WAR091217-42	02/17/10	0708		
05	AR124801	WAR091217-48	02/17/10	0718		
06	AR126801	WAR100107-68	02/17/10	0729		
07	AR123201	WAR100104-32	02/17/10	0739		
08	AR122101	WAR100104-21	02/17/10	0750		
09	AR126201	WAR100104-62	02/17/10	0800		
10	DDTANALOGSTD	WAR091219-DD	02/17/10	0811		
11	PIBLK02	WAR100105-99	02/17/10	0821	2.29	5.94
12	ZZZZZ	ZZZZZ	02/17/10	0832	2.29	5.94
13	ZZZZZ	ZZZZZ	02/17/10	0845	2.29	5.94
14	ZZZZZ	ZZZZZ	02/17/10	0857	2.29	5.94
15	ZZZZZ	ZZZZZ	02/17/10	0910	2.29	5.94
16	ZZZZZ	ZZZZZ	02/17/10	0922	2.29	5.94
17	AR166002	WAR100203-60	02/17/10	0935	2.29	5.94
18	PIBLK03	WAR100105-99	02/17/10	0946	2.29	5.94
19	ZZZZZ	ZZZZZ	02/17/10	0956	2.29	5.94
20	ZZZZZ	ZZZZZ	02/17/10	1007	2.29	5.94
21	ZZZZZ	ZZZZZ	02/17/10	1017	2.29	5.94
22	ZZZZZ	ZZZZZ	02/17/10	1028	2.29	5.94
23	ZZZZZ	ZZZZZ	02/17/10	1041	2.29	5.94
24	ZZZZZ	ZZZZZ	02/17/10	1053	2.30	5.94
25	ZZZZZ	ZZZZZ	02/17/10	1106	2.30	5.94
26	ZZZZZ	ZZZZZ	02/17/10	1118	2.30	5.94
27	ZZZZZ	ZZZZZ	02/17/10	1131	2.29	5.94
28	ZZZZZ	ZZZZZ	02/17/10	1144	2.29	5.94
29	AR166003	WAR100203-60	02/17/10	1207	2.29	5.94
30	PIBLK04	WAR100105-99	02/17/10	1217	2.29	5.94
31	ZZZZZ	ZZZZZ	02/17/10	1228	2.29	5.94
32	ZZZZZ	ZZZZZ	02/17/10	1240	2.29	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1665

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.29			DCB: 5.94		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	02/17/10	1253	2.29	5.95
02	ZZZZZ	02/17/10	1305	2.29	5.94
03	ZZZZZ	02/17/10	1318	2.29	5.94
04	ZZZZZ	02/17/10	1337	2.29	5.94
05	AR166004	WAR100203-60	1351	2.29	5.94
06	PIBLK05	WAR100105-99	1402	2.29	5.94
07	PBLK01	1202043869	1412	2.29	5.94
08	PBLK01LCS	1202043870	1425	2.29	5.94
09	RE15-10-8175	246554001	1438	2.29	5.94
10	RE15-10-8174	246554002	1450	2.29	5.94
11	RE15-10-8176	246554003	1503	2.29	5.94
12	RE15-10-8178	246554004	1516	2.29	5.94
13	RE15-10-8177	246554005	1528	2.29	5.94
14	RE15-10-8225	246554006	1541	2.29	5.94
15	AR166005	WAR100203-60	1553	2.29	5.94
16	PIBLK06	WAR100105-99	1604	2.29	5.94
17	ZZZZZ	02/17/10	1615	2.29	5.94
18	ZZZZZ	02/17/10	1627	2.29	5.94
19	ZZZZZ	02/17/10	1640	2.29	5.94
20	ZZZZZ	02/17/10	1653	2.29	5.94
21	ZZZZZ	02/17/10	1705	2.29	5.94
22	ZZZZZ	02/17/10	1718	2.29	5.94
23	ZZZZZ	02/17/10	1731	2.29	5.94
24	ZZZZZ	02/17/10	1743	2.29	5.94
25	ZZZZZ	02/17/10	1756	2.29	5.94
26	ZZZZZ	02/17/10	1808	2.29	5.94
27	AR166006	WAR100203-60	1821	2.29	5.94
28	PIBLK07	WAR100105-99	1832	2.29	5.94
29	ZZZZZ	02/17/10	1842	2.29	5.94
30	ZZZZZ	02/17/10	1855	2.29	5.94
31	ZZZZZ	02/17/10	1907	2.29	5.94
32	AR166007	WAR100203-60	1920	2.29	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)  
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

## Identification Summary

Page 1 of 1

SDG Number: 10-1665

Client ID: LCS for batch 953411

Lab Sample ID: 1202043870

Data File: 040f4001.d

Data File: 040b4001.d

Inst: ECD1AJ\_1

Inst: ECD1AJ\_2

Column: CLP1

Column: CLP2

Analyzed: 17-FEB-10 14:25

Analyzed: 17-FEB-10 14:25

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							.293
Column 1	1	2.42	2.39 – 2.45	20.5		ug/kg	
	2	2.7	2.67 – 2.73	20.2		ug/kg	
	3	2.78	2.75 – 2.81	20.6		ug/kg	
	4	2.82	2.79 – 2.85	20.1		ug/kg	
	5	3.03	3 – 3.06	20.5		ug/kg	
					20.4		
Column 2	1	3.19	3.16 – 3.22	21.1		ug/kg	
	2	3.27	3.24 – 3.3	20.3		ug/kg	
	3	3.33	3.31 – 3.37	19.9		ug/kg	
	4	3.56	3.53 – 3.59	20.5		ug/kg	
	5	3.64	3.61 – 3.67	20.3		ug/kg	
					20.4		
Aroclor-1260							2.2
Column 1	1	3.76	3.73 – 3.79	23		ug/kg	
	2	3.92	3.89 – 3.95	23.2		ug/kg	
	3	4.15	4.12 – 4.18	23.3		ug/kg	
	4	4.29	4.27 – 4.33	24.2		ug/kg	
	5	4.47	4.45 – 4.51	24.6		ug/kg	
					23.7		
Column 2	1	4.33	4.3 – 4.36	22.5		ug/kg	
	2	4.45	4.42 – 4.48	23		ug/kg	
	3	4.72	4.69 – 4.75	23		ug/kg	
	4	4.89	4.86 – 4.92	23.2		ug/kg	
	5	5.04	5.01 – 5.07	24.1		ug/kg	
					23.2		

# QUALITY CONTROL DATA

**PCB**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 1

SDG Number: 10-1665

Matrix: SOIL

Lab Sample ID: 1202043869

Client Sample: QC for batch 953411

Client: LANL010

Project: QC

Client ID: MB for batch 953411

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 953412

Inst: ECD1A.I

Dilution: 1

Run Date: 02/17/2010 14:12

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 02/16/2010 10:40

Aliquot: 30 g

Final Volume: 1 mL

Data File: 039f3901-1.d

Column: 1 CLP1

Level: LOW

039b3901-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/021710.b/039f3901-1.d  
Report Date: 17-Feb-2010 15:36

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/039f3901-1.d  
Lab Smp Id: 1202043869 Client Smp ID: PBLK01  
Inj Date : 17-FEB-2010 14:12  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202043869|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 39 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
-----	-----	-----	-----	-----	-----	-----
\$ 11 4cmx CAS #: 877-09-8						
1.960	1.961	-0.001	55759725 127.547	4.2	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.275	5.275	0.000	45657016 136.882	4.6	80.00- 120.00	100.00
-----						

Data File: /chem/ecdl1a.i/021710.b/039f3901-1.d

Date: 17-FEB-2010 14:12

Client ID: PLK01

Sample Info: 1120204386911

Volume Injected (uL): 1.0

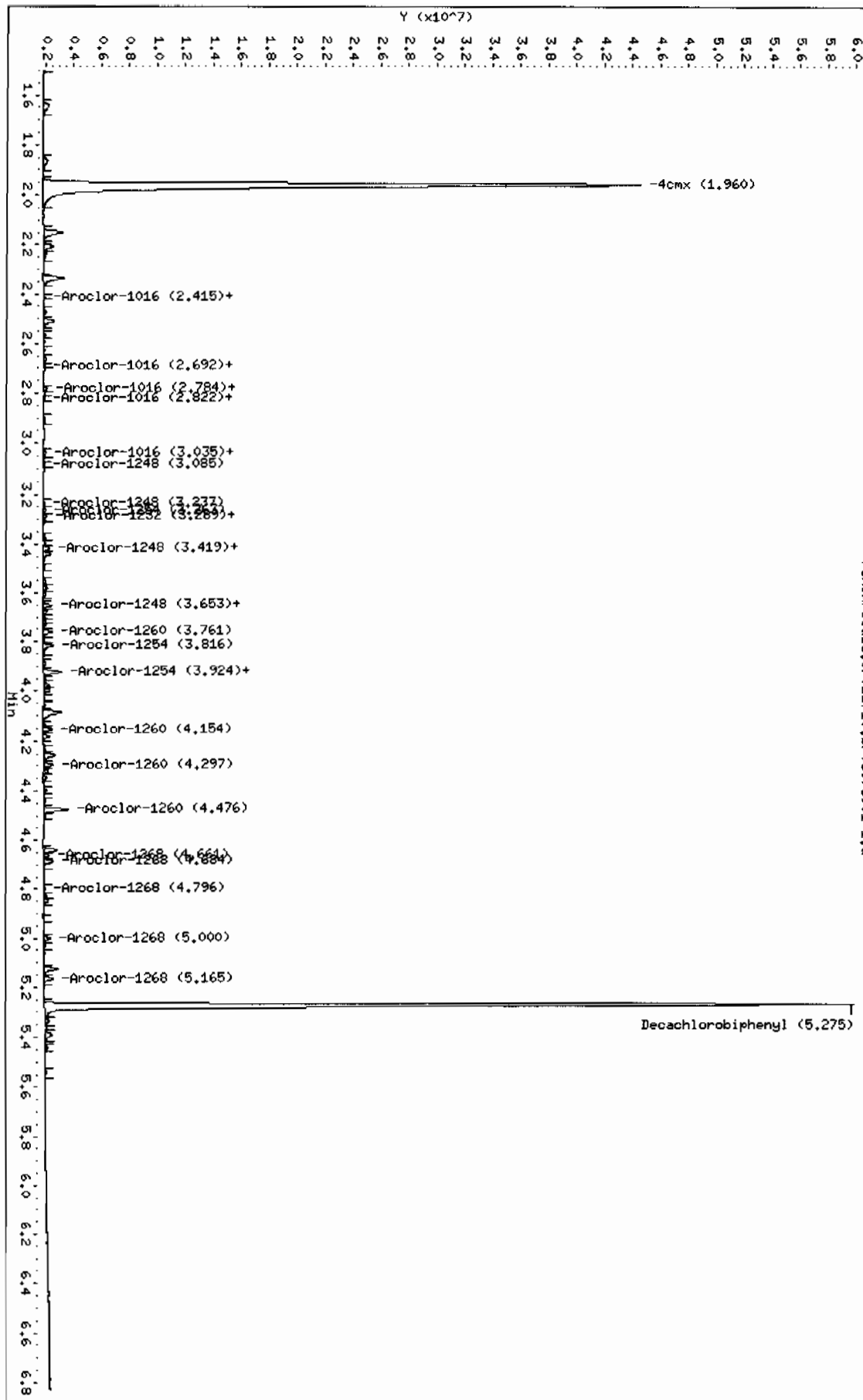
Column phase: CLP1

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1a.i/021710.b/039f3901-1.d



Data File: /chem/ecdla.i/021710.b/039b3901-1.d  
Report Date: 17-Feb-2010 15:36

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/021710.b/039b3901-1.d  
Lab Smp Id: 1202043869 Client Smp ID: PBLK01  
Inj Date : 17-FEB-2010 14:12  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202043869|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 39 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclpl

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
-----						
\$ 11 4cmx				CAS #: 877-09-8		
2.292	2.294	-0.002	36102727 125.832	4.2	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.940	5.941	-0.001	29288178 136.164	4.5	80.00- 120.00	100.00
-----						

Data File: /chem/ecdda.i/021710.b/03963901-1.d

Date: 17-FEB-2010 14:12

Client ID: PLK01

Sample Info: 1120204386911

Volume Injected (uL): 1.0

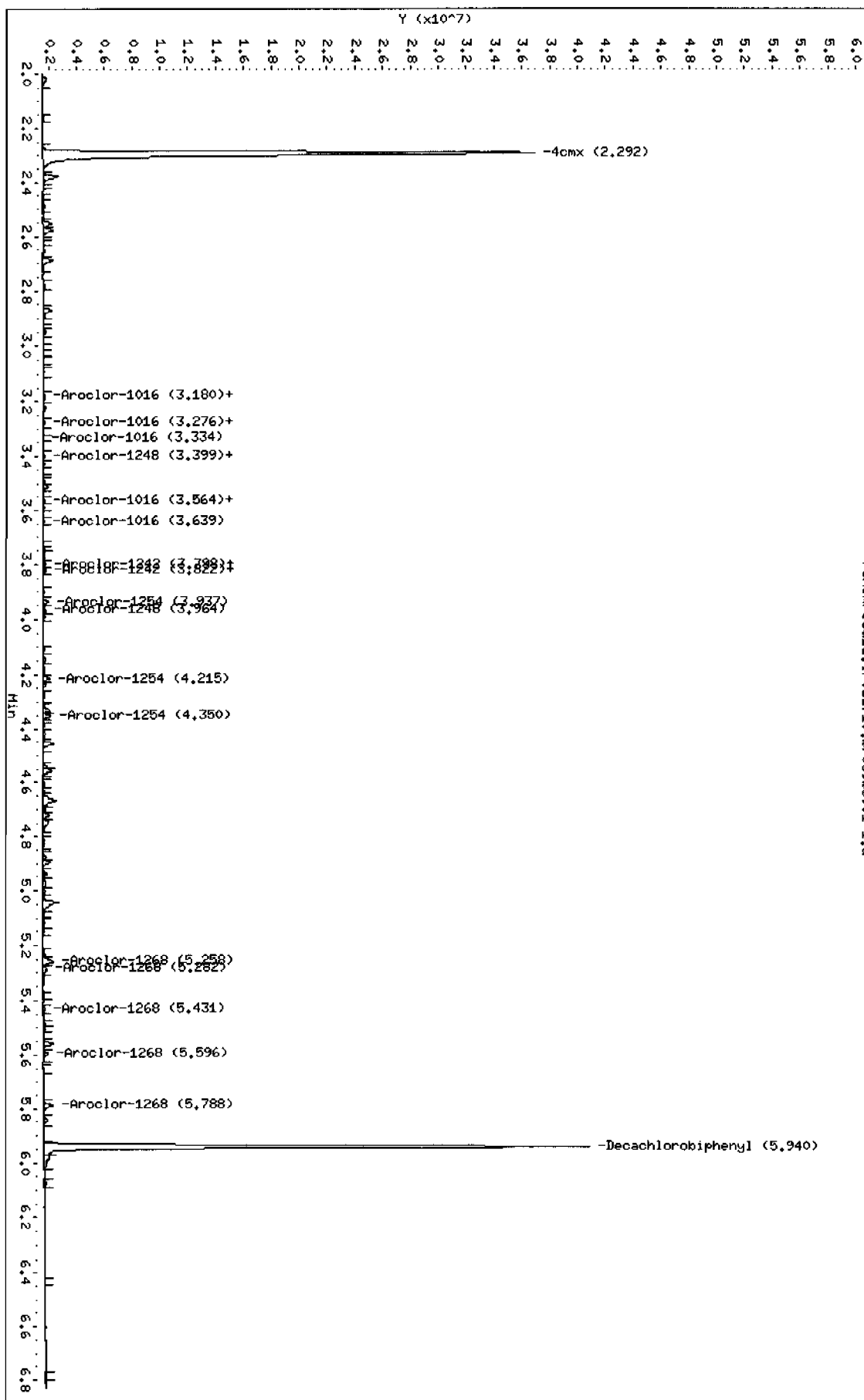
Column phase: CLP2

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

/chem/ecdda.i/021710.b/03963901-1.d





**PCB**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 1

SDG Number: 10-1665

Matrix: SOIL

Lab Sample ID: 1202043870

Client Sample: QC for batch 953411

Client: LANL010

Project: QC

Client ID: LCS for batch 953411

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 953412

Inst: ECD1A.I

Dilution: 1

Run Date: 02/17/2010 14:25

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 02/16/2010 10:40

Aliquot: 30 g

Final Volume: 1 mL

Data File: 040f4001-1.d

Column: 1 CLP1

Level: LOW

040b4001-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		20.4	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		23.7	ug/kg	1.11	3.33	1

Data File: /chem/ecd1a.i/021710.b/040f4001-1.d  
Report Date: 17-Feb-2010 15:37

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021710.b/040f4001-1.d  
Lab Smp Id: 1202043870 Client Smp ID: PBLK01LCS  
Inj Date : 17-FEB-2010 14:25  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202043870|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|LCS|||  
Comment :  
Method : /chem/ecd1a.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 17-Feb-2010 15:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 40 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8							
11.4cmx	1.960	1.961	-0.001	53675480	122.779	4.1 80.00- 120.00	100.00
CAS #: 2051-24-3							
12 Decachlorobiphenyl	5.273	5.275	-0.002	43071591	129.131	4.3 80.00- 120.00	100.00
CAS #: 12674-11-2							
1 Aroclor-1016	2.416	2.416	0.000	9890898	614.014	20.5 80.00- 120.00	100.00
	2.703	2.705	-0.002	12010572	607.127	20.2 110.32- 150.32	121.43
	2.784	2.785	-0.001	8035834	616.936	20.6 61.46- 101.46	81.24
	2.821	2.823	-0.002	4697367	603.659	20.1 28.92- 68.92	47.49

CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO	
			RESPONSE	( ug/L)	(ug/Kg)			
--	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.032	3.034	-0.002	6171833	615.801	20.5	42.57- 82.57	62.40	
Average of Peak Concentrations =					20.4			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.759	3.760	-0.001	13152389	691.131	23.0	80.00- 120.00	100.00	
3.922	3.923	-0.001	19771217	697.313	23.2	130.40- 170.40	150.32	
4.152	4.153	-0.001	11917636	699.203	23.3	69.66- 109.66	90.61	
4.295	4.296	-0.001	12970628	724.934	24.2	76.19- 116.19	98.62	
4.475	4.476	-0.001	28656608	737.611	24.6	190.30- 230.30	217.88	
Average of Peak Concentrations =					23.7			

Data File: /chem/eodla.i/021710.b/040f4001-1.d

Date: 17-FEB-2010 14:26

Client ID: PRLKOLCS

Sample Info: 1120204387011

Volume Injected (uL): 1.0

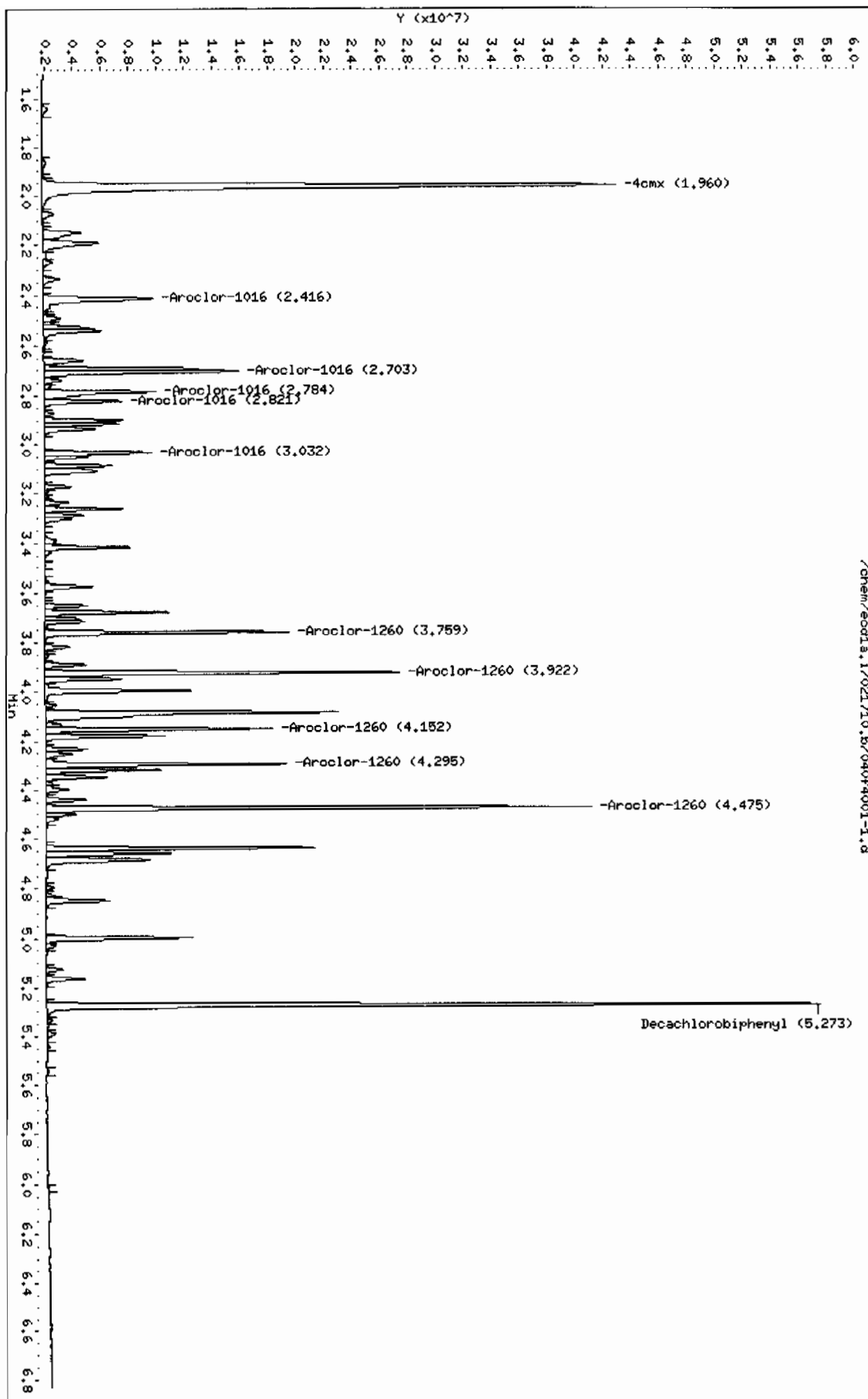
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/021710.b/040b4001-1.d  
Report Date: 17-Feb-2010 15:36

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/021710.b/040b4001-1.d  
Lab Smp Id: 1202043870 Client Smp ID: PBLK01LCS  
Inj Date : 17-FEB-2010 14:25  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202043870|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|LCS|  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 17-Feb-2010 14:06 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 40 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1665.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
S 11 4cmx CAS #: 877-09-8							
2.291	2.294	-0.003	34458521 120.102	4.0	80.00-	120.00	100.00
-----							
S 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.940	5.941	-0.001	27807368 129.280	4.3	80.00-	120.00	100.00
-----							
1 Aroclor-1016 CAS #: 12674-11-2							
3.189	3.190	-0.001	7869700 633.110	21.1	80.00-	120.00	100.00 (M)
3.271	3.273	-0.002	5200535 610.317	20.3	45.22-	85.22	66.08
3.335	3.336	-0.001	3142761 598.194	19.9	20.18-	60.18	39.93
3.562	3.564	-0.002	4149982 616.453	20.5	31.59-	71.59	52.73

CONCENTRATIONS							
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO
			RESPONSE ( ug/L)				
==	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)							
3.638	3.639	-0.001	3847843	608.434	20.3	27.88- 67.88	48.89
Average of Peak Concentrations =					20.4		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.329	4.330	-0.001	8499736	674.987	22.5	80.00- 120.00	100.00 (H)
4.454	4.455	-0.001	10393591	689.822	23.0	101.52- 141.52	122.28
4.720	4.721	-0.001	8012262	689.644	23.0	72.36- 112.36	94.26
4.894	4.895	-0.001	8378395	696.455	23.2	75.85- 115.85	98.57
5.040	5.041	-0.001	18647004	722.085	24.1	192.53- 232.53	219.38
Average of Peak Concentrations =					23.2		
-----							

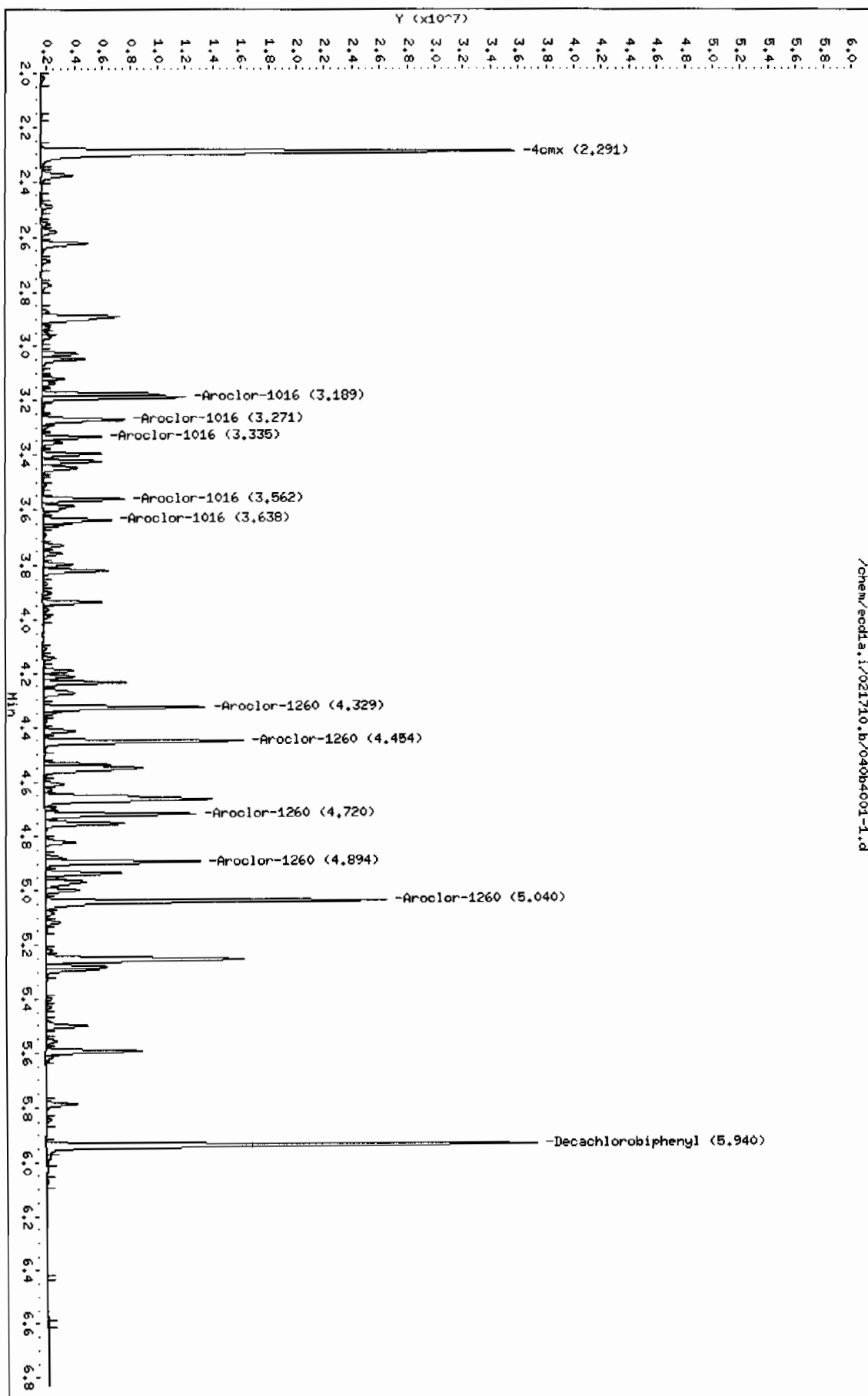
#### QC Flag Legend

M - Compound response manually integrated.  
 H - Operator selected an alternate compound hit.

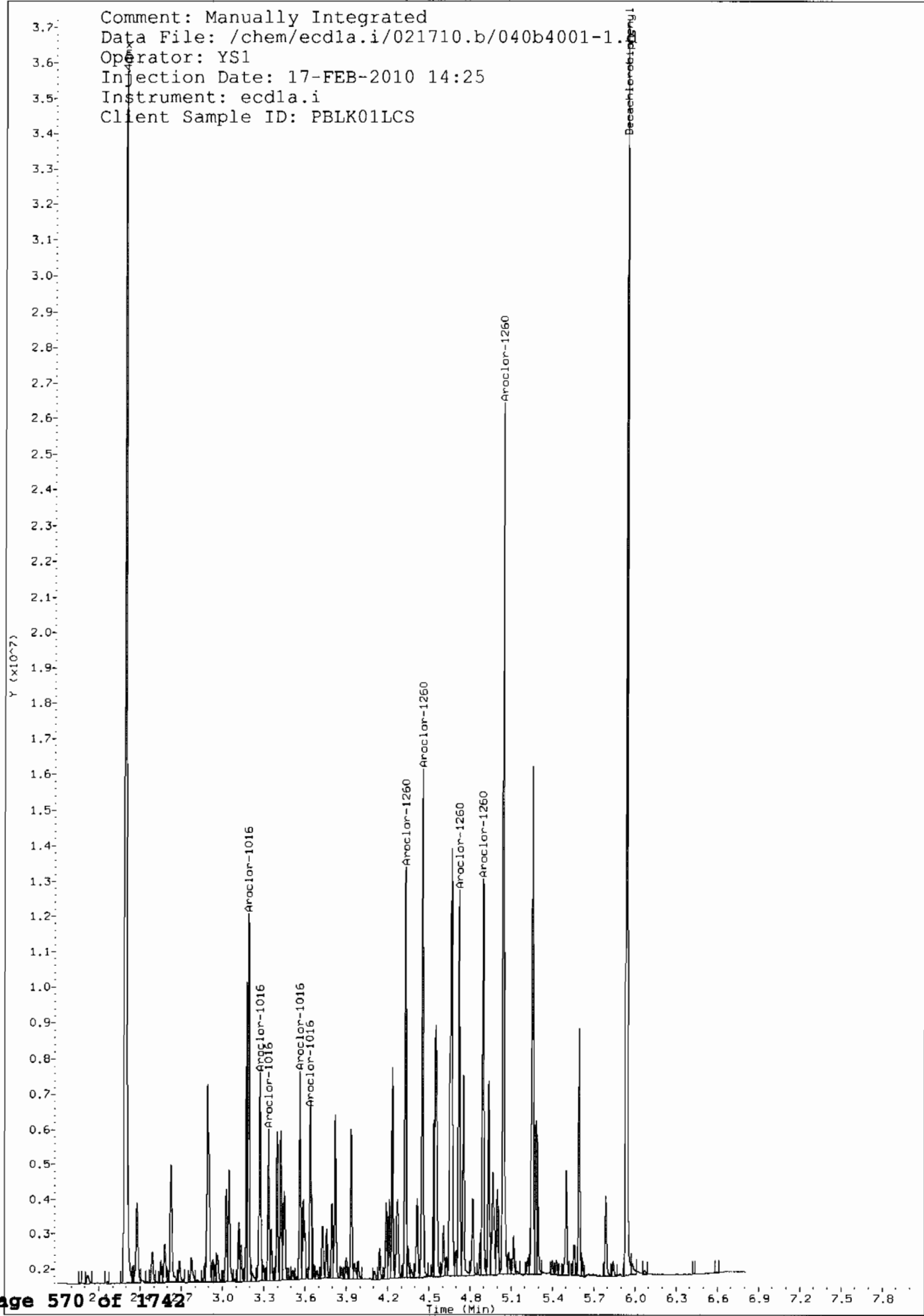
Data File: /chem/eod1a.i/021710.b/040b4001-1.d  
Date: 17-FEB-2010 14:25  
Client ID: PBLK01LCS  
Sample Info: 1120204387011  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25

/chem/eod1a.i/021710.b/040b4001-1.d

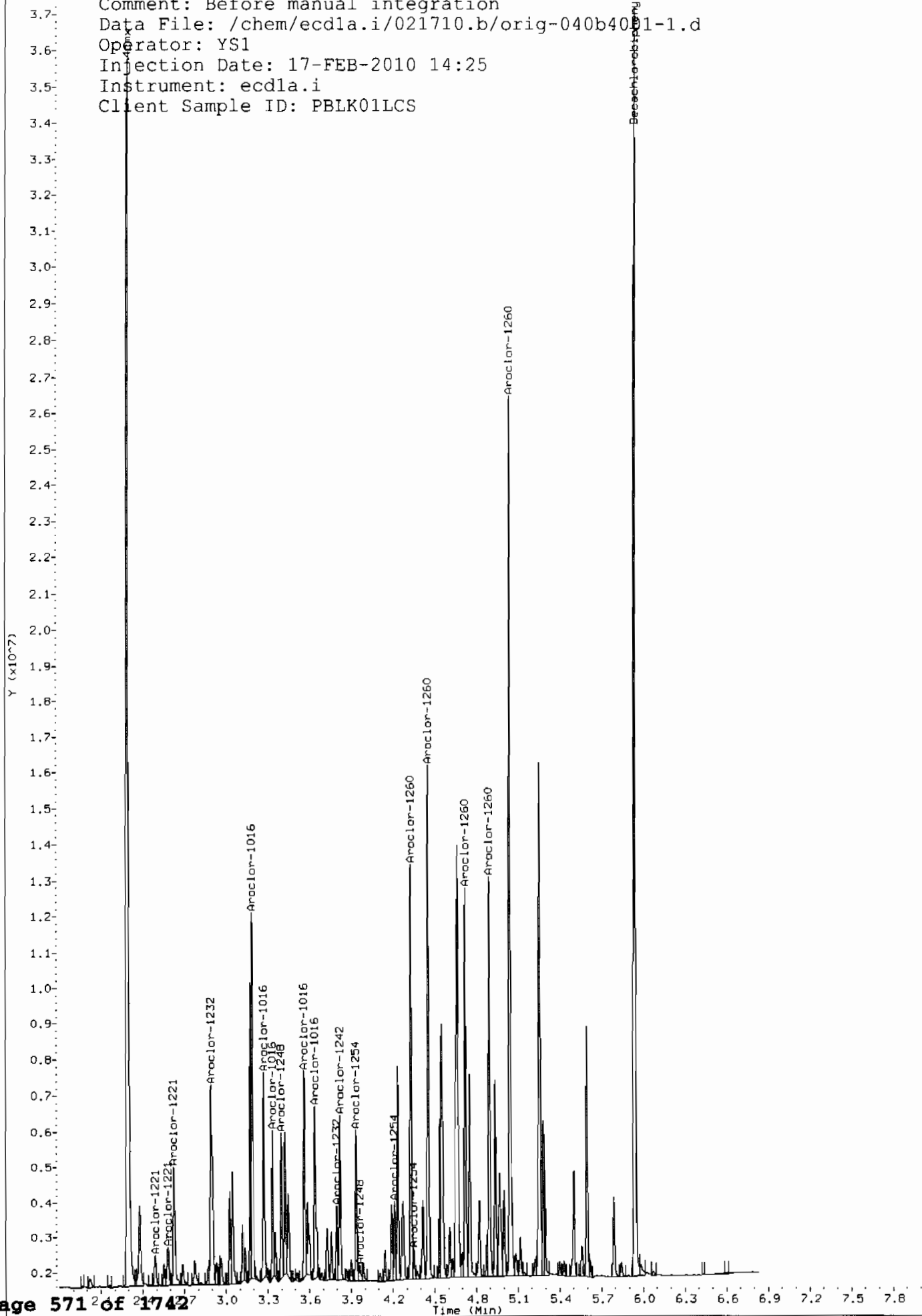


Comment: Manually Integrated  
Data File: /chem/ecdla.i/021710.b/040b4001-1.  
Operator: YS1  
Injection Date: 17-FEB-2010 14:25  
Instrument: ecdla.i  
Client Sample ID: PBLK01LCS





Comment: Before manual integration  
Data File: /chem/ecdl1.i/021710.b/orig-040b4001-1.d  
Operator: YS1  
Injection Date: 17-FEB-2010 14:25  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS



# MISCELLANEOUS DATA

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/11/2010 METHOD: ECD1-F-8082-021010C.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,

DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,

BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/021010C.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	YS1	10-FEB-2010 20:48		021010c	1.0:	CLEAN	
002f0201.d	WAR100210-01 60	YS1	10-FEB-2010 20:58		021010c	1.0:	ARI1660 I-CAL LEVEL 1	
003f0301.d	WAR100210-02 60	YS1	10-FEB-2010 21:09		021010c	1.0:	ARI1660 I-CAL LEVEL 2	
004f0401.d	WAR100210-03 60	YS1	10-FEB-2010 21:19		021010c	1.0:	ARI1660 I-CAL LEVEL 3	
005f0501.d	WAR100210-04 60	YS1	10-FEB-2010 21:30		021010c	1.0:	ARI1660 I-CAL LEVEL 4	
006f0601.d	ARI100104-01	YS1	10-FEB-2010 21:40		021010c	1.0:	ARI1660 I-CAL LEVEL 5	
007f0701.d	WAR100203-60 01	YS1	10-FEB-2010 21:51		021010c	1.0:	PASSED ON BOTH COLUMNS	
008f0801.d	WAR100210-05 42	YS1	10-FEB-2010 22:01		021010c	1.0:	ARI1242 I-CAL LEVEL 1	
009f0901.d	WAR100210-06 42	YS1	10-FEB-2010 22:12		021010c	1.0:	ARI1242 I-CAL LEVEL 2	
010f1001.d	WAR100210-07 42	YS1	10-FEB-2010 22:22		021010c	1.0:	ARI1242 I-CAL LEVEL 3	
011f1101.d	WAR100210-08 42	YS1	10-FEB-2010 22:33		021010c	1.0:	ARI1242 I-CAL LEVEL 4	
012f1201.d	ARI091111-C	YS1	10-FEB-2010 22:43		021010c	1.0:	ARI1242 I-CAL LEVEL 5	
013f1301.d	WAR091217-42	YS1	10-FEB-2010 22:54		021010c	1.0:	PASSED ON BOTH COLUMNS	
014f1401.d	WAR100210-09 48	YS1	10-FEB-2010 23:04		021010c	1.0:	DUSE	
015f1501.d	WAR100210-10 48	YS1	10-FEB-2010 23:15		021010c	1.0:	DUSE	

Instrument Batch: /chem/ecd1a.i/021010C.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR100210-11 48	YS1	10-FEB-2010 23:25		021010c		1.0	DUSE	
017f1701.d	WAR:00210-12 48	YS1	10-FEB-2010 23:36		021010c		1.0	DUSE	
018f1801.d	LIAR091027-02	YS1	10-FEB-2010 23:46		021010c		1.0	DUSE	
019f1901.d	WAR091217-48	YS1	10-FEB-2010 23:57		021010c		1.0	DUSE	
020f2001.d	WAR100105-99 02	YS1	11-FEB-2010 00:07		021010c		1.0	CLEAN	

Instrument Batch: /chem/ecdla.i/021010c.b

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## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/18/2010

METHOD: ECD1-F-8082-021110.m

OPERATOR:YS1

REVIEWED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,

DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,

BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/021710.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	YS1	17-FEB-2010 06:36	1	021710	1.01	CLEAN	
002f0201.d	WAR100203-60 01	YS1	17-FEB-2010 06:47	1	021710	1.01	PASSED ON BOTH COLUMNS	
003f0301.d	WAR091216-54	YS1	17-FEB-2010 06:57	1	021710	1.01	PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	17-FEB-2010 07:08	1	021710	1.01	PASSED ON BOTH COLUMNS	
005f0501.d	WAR091217-48	YS1	17-FEB-2010 07:18	1	021710	1.01	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100107-68	YS1	17-FEB-2010 07:29	1	021710	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-32	YS1	17-FEB-2010 07:39	1	021710	1.01	PATTERN ONLY	
008f0801.d	WAR100104-21	YS1	17-FEB-2010 07:50	1	021710	1.01	PATTERN ONLY	
009f0901.d	WAR100104-62	YS1	17-FEB-2010 08:00	1	021710	1.01	PATTERN ONLY	
010f1001.d	WAR091219-DDT	YS1	17-FEB-2010 08:11	1	021710	1.01	DDT ANALOG STANDARD	
011f1101.d	WAR100105-99 02	YS1	17-FEB-2010 08:21	1	021710	1.01	CLEAN	
012f1201.d	1202044726	YS1	17-FEB-2010 08:32	953772	110-1620	1.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	1202044727	YS1	17-FEB-2010 08:45	953772	110-1620	1.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1202044728	YS1	17-FEB-2010 08:57	953772	110-1620	1.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	246434010	YS1	17-FEB-2010 09:10	953772	110-1620	1.01	LANL	DUSE RE RESULT DID NOT MATCH WIDTH ORIGINAL

Instrument Batch: /chem/ecd1a.i/021710.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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1016f601.d	1246434012	YS1	17-FEB-2010 09:22	953772	110-1620	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1017f701.d	1246434012	YS1	17-FEB-2010 09:35	953772	1021710	1.0	LANL	PASSED ON BOTH COLUMNS
1018f801.d	1246434012	YS1	17-FEB-2010 09:46	953772	1021710	1.0	LANL	CLEAN
1019f901.d	1246434012	YS1	17-FEB-2010 09:56	953409	1021710	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1020f2001.d	1246434012	YS1	17-FEB-2010 10:07	953409	1021710	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1021f2101.d	1246434012	YS1	17-FEB-2010 10:17	953409	1021710	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1022f2201.d	1246412001	YS1	17-FEB-2010 10:28	953409	1246412	10.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1023f2301.d	1246415001	YS1	17-FEB-2010 10:41	953409	1246415	100.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1024f2401.d	1246504001	YS1	17-FEB-2010 10:53	953409	1246504	10.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1025f2501.d	1246504001	YS1	17-FEB-2010 11:06	953409	1021710	10.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1026f2601.d	1246504001	YS1	17-FEB-2010 11:18	953409	1021710	10.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
1027f2701.d	1246504002	YS1	17-FEB-2010 11:31	953409	1246504	1.0	MECP	USE RE
1028f2801.d	1246615001	YS1	17-FEB-2010 11:44	953409	1246615	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1029f2901.d	1246615001	YS1	17-FEB-2010 12:07	953409	1021710	1.0	LANL	PASSED ON BOTH COLUMNS
1030f3001.d	1246615001	YS1	17-FEB-2010 12:17	953409	1021710	1.0	LANL	CLEAN
1031f3101.d	1246904001	YS1	17-FEB-2010 12:28	953409	1246904	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1032f3201.d	1246906001	YS1	17-FEB-2010 12:40	953409	1246906	10.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1033f3301.d	1246911001	YS1	17-FEB-2010 12:53	953409	1246911	5.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1034f3401.d	1246909001	YS1	17-FEB-2010 13:05	953409	1246909	100.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1035f3501.d	1247025001	YS1	17-FEB-2010 13:18	953409	1247025	10.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT

Instrument Batch: /chem/ecdla.i/021710.b

1036f3601.d	1246909001	YS1	17-FEB-2010 13:37	953409	246909	20.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1037f3701.d	1246909001	YS1	17-FEB-2010 13:51	953409	1021710	1.0	LANL	PASSED ON BOTH COLUMNS
1038f3801.d	1246909001	YS1	17-FEB-2010 14:02	953409	1021710	1.0	LANL	CLEAN
1039f3901.d	1246909001	YS1	17-FEB-2010 14:12	953412	110-1665	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1040f4001.d	1246909001	YS1	17-FEB-2010 14:22	953412	110-1672	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

040f4001.d\1202043870	YS1	17-FEB-2010 14:25	953412	10-1665	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d\1202043870	YS1	17-FEB-2010 14:25	953412	10-1672	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4101.d\246554001	YS1	17-FEB-2010 14:38	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d\246554002	YS1	17-FEB-2010 14:50	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d\246554003	YS1	17-FEB-2010 15:03	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d\246554004	YS1	17-FEB-2010 15:16	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d\246554005	YS1	17-FEB-2010 15:28	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d\246554006	YS1	17-FEB-2010 15:41	953412	10-1665	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d\WAR100203-60 05	YS1	17-FEB-2010 15:53		021710	1.0		PASSED ON BOTH COLUMNS
048f4801.d\WAR100105-99 06	YS1	17-FEB-2010 16:04		021710	1.0		CLEAN
049f4901.d\246558001	YS1	17-FEB-2010 16:15	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d\1202043871	YS1	17-FEB-2010 16:27	953412	10-1672	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d\1202043872	YS1	17-FEB-2010 16:40	953412	10-1672	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/021710.b

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052f5201.d\246558002	YS1	17-FEB-2010 16:53	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d\246558003	YS1	17-FEB-2010 17:05	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d\246558004	YS1	17-FEB-2010 17:18	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d\246558005	YS1	17-FEB-2010 17:31	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
056f5601.d\246558006	YS1	17-FEB-2010 17:43	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d\246558007	YS1	17-FEB-2010 17:56	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d\246558008	YS1	17-FEB-2010 18:08	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d\WAR100203-60 06	YS1	17-FEB-2010 18:21		021710	1.0		PASSED ON BOTH COLUMNS
060f6001.d\WAR100105-99 07	YS1	17-FEB-2010 18:32		021710	1.0		CLEAN
061f6101.d\246558009	YS1	17-FEB-2010 18:42	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d\246558010	YS1	17-FEB-2010 18:55	953412	10-1672	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

063f6301.d	1246558011	YS1	17-FEB-2010 19:07	953412	10-1672	1.0	LANL	UNLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	WAR100203-60 07	YS1	17-FEB-2010 19:20		1021710	1.0		PASSED ON BOTH COLUMNS
065f6501.d	WAR100105-99 08	YS1	17-FEB-2010 19:31		1021710	1.0		CLEAN
066f6601.d	1202044910	YS1	17-FEB-2010 19:41	953880	247000	1.0	QC A	DOSE
067f6701.d	1202044911	YS1	17-FEB-2010 19:52	953880	247000	1.0	QC A	DOSE
068f6801.d	247000001	YS1	17-FEB-2010 20:02	953880	247000	5.0	EMSC	DOSE
069f6901.d	1202044912	YS1	17-FEB-2010 20:13	953880	247000	5.0	QC A	DOSE
070f7001.d	1202044913	YS1	17-FEB-2010 20:23	953880	247000	5.0	QC A	DOSE
071f7101.d	247000002	YS1	17-FEB-2010 20:34	953880	247000	20.0	EMSC	DOSE

Instrument Batch: /chem/ecdl1a.i/021710.b

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Data File	GL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
072f7201.d	247000003	YS1	17-FEB-2010 20:44	953880	247000	200.0	EMSC	DOSE
073f7301.d	247000004	YS1	17-FEB-2010 20:55	953880	247000	5.0	EMSC	DOSE
074f7401.d	WAR100203-60 08	YS1	17-FEB-2010 21:06		1021710	1.0		AR1263 LOW ON BACK RE-RUN THE BATCH
075f7501.d	WAR100105-99 09	YS1	17-FEB-2010 21:16		1021710	1.0		CLEAN





Data File: /chem/ecdla.i/021710.b/050b5001.d  
Report Date: 18-Feb-2010 07:38

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecdla.i/021710.b/050b5001.d  
Lab Smp Id: 1202043871 Client Smp ID: RE46-10-11496MS  
Inj Date : 17-FEB-2010 16:27  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202043871|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MS|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
Meth Date : 18-Feb-2010 07:27 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
Als bottle: 50 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1672.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.99620	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.292	2.294	-0.002	28041576	97.7360	3.4 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	22936059	106.632	3.7 80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.189	3.190	-0.001	5936037	477.548	16.4 80.00- 120.00	100.00 (M)
3.272	3.273	-0.001	4027166	472.615	16.2 44.20- 84.20	67.84
3.336	3.336	0.000	2412439	459.184	15.8 19.67- 59.67	40.64
3.562	3.564	-0.002	3198761	475.155	16.3 30.52- 70.52	53.89

CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO	
			RESPONSE ( ug/L)	( ug/Kg)				
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.638	3.639	-0.001	2996470	473.812	16.3	27.88- 67.88	60.42	
Average of Peak Concentrations =					16.2			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.329	4.330	-0.001	6989988	555.093	19.1	80.00- 120.00	100.00	
4.454	4.455	-0.001	8737470	579.905	19.9	101.37- 141.37	125.00	
4.720	4.721	-0.001	6682952	575.226	19.8	72.32- 112.32	95.61	
4.894	4.895	-0.001	6755686	561.568	19.3	75.27- 115.27	96.65	
5.041	5.041	0.000	15444022	598.053	20.6	192.11- 232.11	220.94	
Average of Peak Concentrations =					19.7			
-----								

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/021710.b/0505001.d

Date: 17-FEB-2010 16:27

Client ID: RE46-10-11496HS

Sample Info: 1120204387111

Volume Injected (uL): 1.0

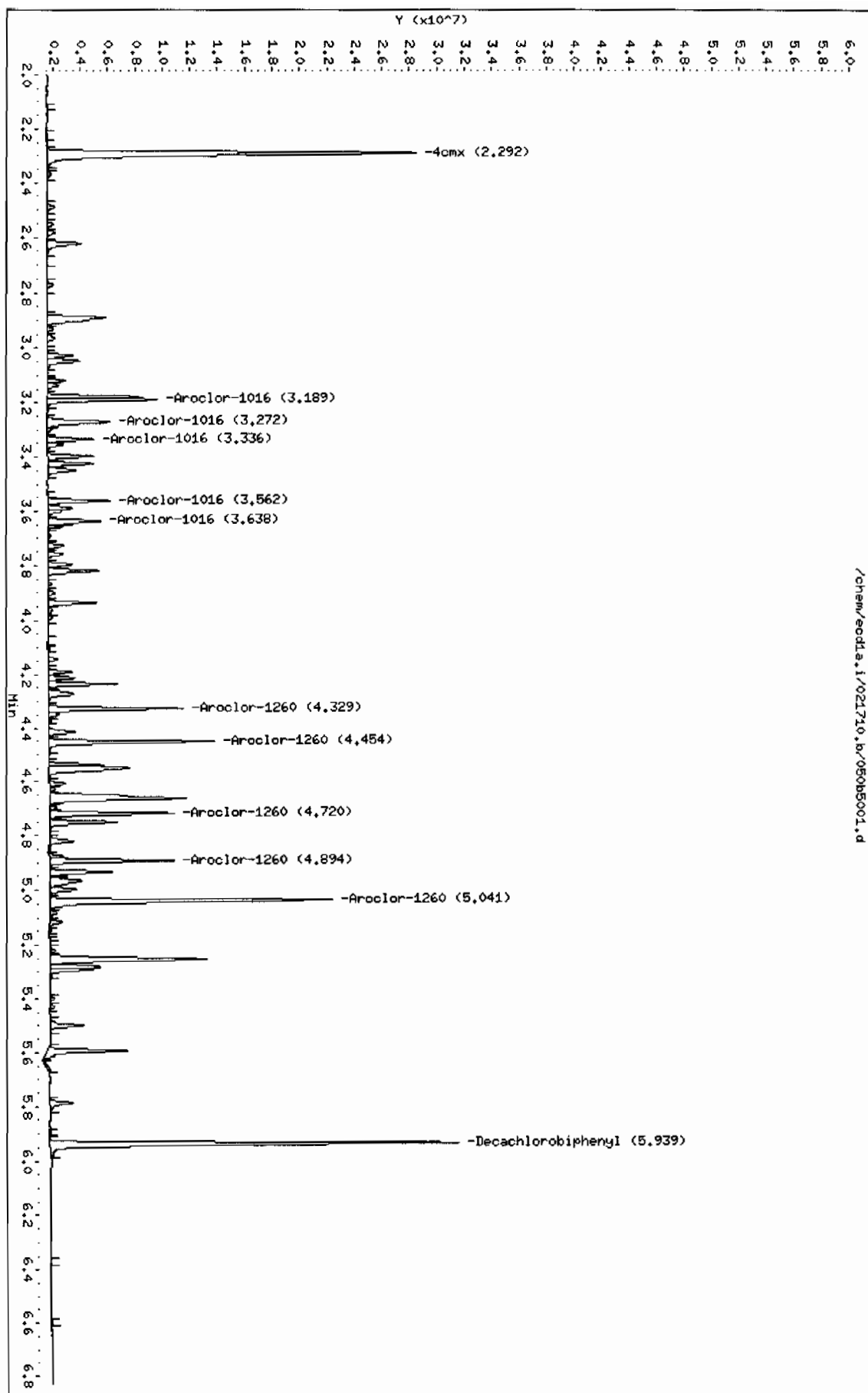
Column Phase: CLP2

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/050f5001.d  
Lab Smp Id: 1202043871 Client Smp ID: RE46-10-11496MS  
Inj Date : 17-FEB-2010 16:27  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202043871|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MS|||  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 18-Feb-2010 07:28 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 50 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1672.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpclp1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.99620	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL	FINAL				
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
AS	=====	=====		=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.960	1.961	-0.001		43825279	100.248	3.4 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.274	5.275	-0.001		25238232	75.6655	2.6 80.00- 120.00	100.00
1 Aroclor-1016				CAS #: 12674-11-2			
2.416	2.416	0.000		7331877	455.153	15.6 80.00- 120.00	100.00
2.704	2.705	-0.001		9562616	483.385	16.6 106.13- 146.13	130.43
2.784	2.785	-0.001		6227689	478.119	16.4 60.93- 100.93	84.94
2.822	2.823	-0.001		3703068	475.881	16.4 28.68- 68.68	50.51

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.032	3.034	-0.002	4870731	485.982	16.7	42.26-	82.26	66.43	
Average of Peak Concentrations =					16.3				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
3.759	3.760	-0.001	10723841	563.516	19.4	80.00-	120.00	100.00	
3.921	3.923	-0.002	15627761	551.177	18.9	129.85-	169.85	145.73	
4.151	4.153	-0.002	9760594	572.650	19.7	66.46-	106.46	91.02	
4.295	4.296	-0.001	9973314	557.413	19.2	71.36-	111.36	93.00	
4.474	4.476	-0.002	23282850	599.293	20.6	178.09-	218.09	217.11	
Average of Peak Concentrations =					19.6				

Data File: /chem/ecdl.a.i/021710.b/050f5001.d

Date: 17-FEB-2010 16:27

Client ID: RE46-10-11496HS

Sample Info: 1120204387111

Volume Injected (uL): 1.0

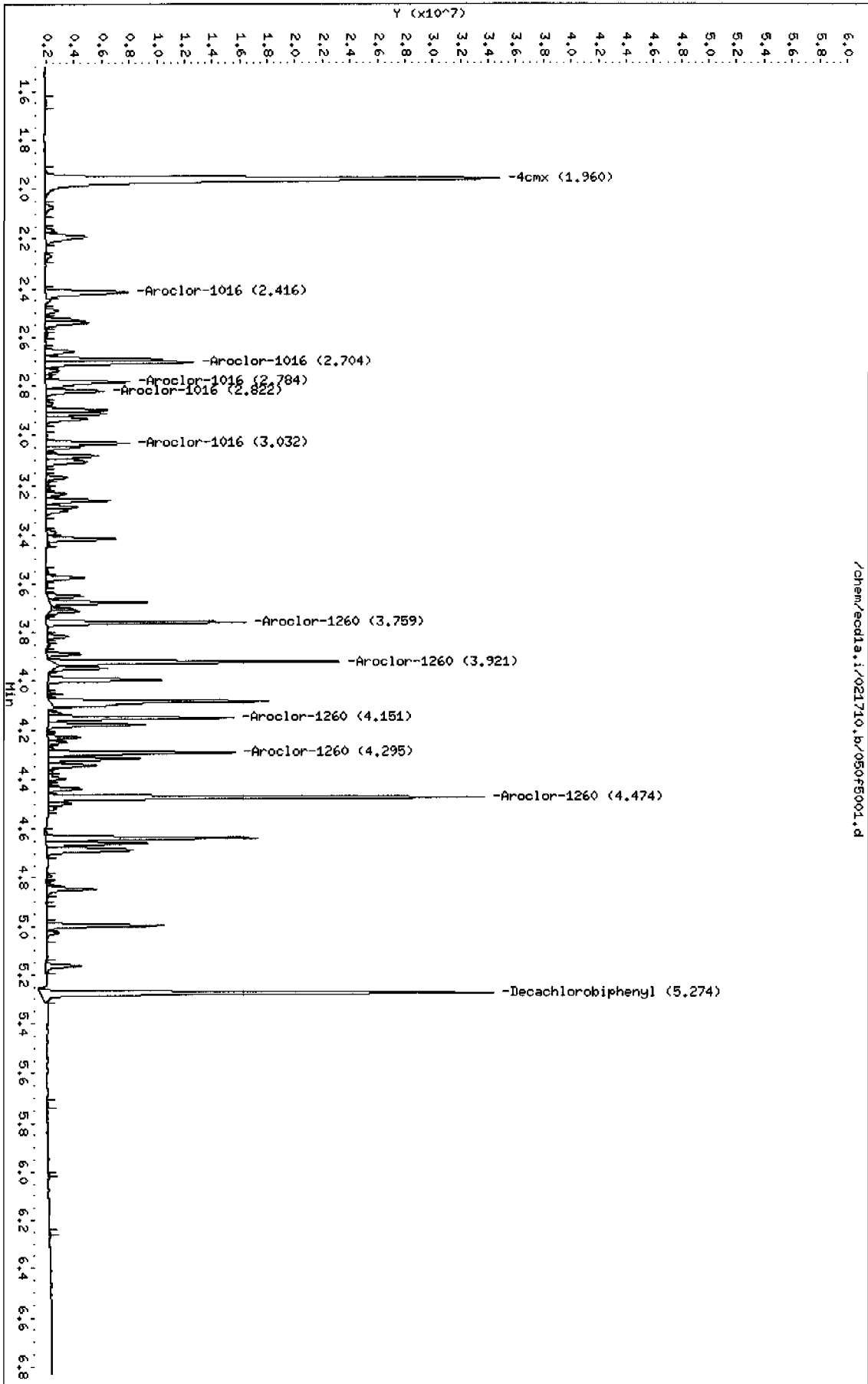
Column phase: CLP1

Page 1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/051b5101.d  
 Lab Smp Id: 1202043872 Client Smp ID: RE46-10-11496MSD  
 Inj Date : 17-FEB-2010 16:40  
 Operator : YS1 Inst ID: ecdla.i  
 Smp Info : |1202043872|1|  
 Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MSD|1|  
 Comment :  
 Method : /chem/ecdla.i/021710.b/ECD1-B-8082-021110.m  
 Meth Date : 18-Feb-2010 07:27 yip00818 Quant Type: ESTD  
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d  
 Als bottle: 51 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: i0-1672.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt / (Vi \* Ws \* (100 - M) / 100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.99620	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8	
2.292	2.294	-0.002	28079131	97.8668	3.4 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.939	5.941	-0.002	23460426	109.070	3.7 80.00- 120.00	100.00
-----						
1 Aroclor-1016					CAS #: 12674-11-2	
3.189	3.190	-0.001	6924729	557.088	19.1 80.00- 120.00	100.00(M)
3.272	3.273	-0.001	4615128	541.616	18.6 44.20- 84.20	66.65
3.336	3.336	0.000	2777262	528.625	18.2 19.67- 59.67	40.11
3.562	3.564	-0.002	3678943	546.483	18.8 30.52- 70.52	53.13



CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)							
3.638	3.639	-0.001	3415635	540.092	18.6	27.88- 67.88	59.09
Average of Peak Concentrations =					18.7		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
4.329	4.330	-0.001	7846612	623.120	21.4	80.00- 120.00	100.00
4.454	4.455	-0.001	9602360	637.308	21.9	101.37- 141.37	122.38
4.719	4.721	-0.002	7307725	629.002	21.6	72.32- 112.32	93.13
4.893	4.895	-0.002	7396174	614.808	21.1	75.27- 115.27	94.26
5.041	5.041	0.000	16685987	646.146	22.2	192.11- 232.11	212.65
Average of Peak Concentrations =					21.6		
-----							

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/021710.b/051b5101.d

Date: 17-FEB-2010 16:40

Client ID: RE46-10-11496MSD

Sample Info: 1120204387211

Volume Injected (ul): 1.0

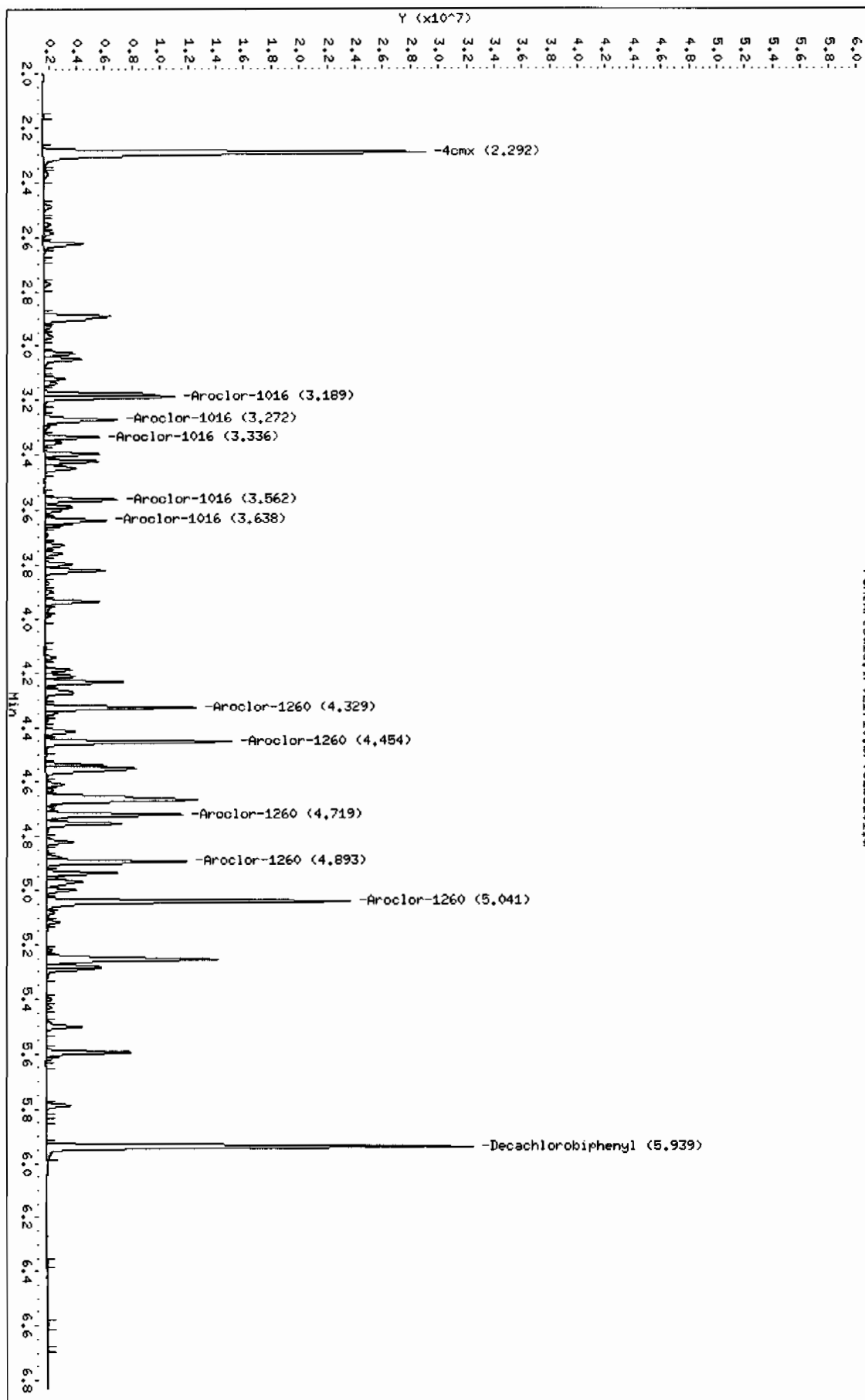
Column phase: CLP2

Instrument: eod1a.i

Operator: YS1

Column diameter: 0.25

/chem/eod1a.i/021710.b/051b5101.d



Data File: /chem/ecdla.i/021710.b/051f5101.d  
Report Date: 18-Feb-2010 07:40

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021710.b/051f5101.d  
Lab Smp Id: 1202043872 Client Smp ID: RE46-10-11496MSD  
Inj Date : 17-FEB-2010 16:40  
Operator : YSl Inst ID: ecdla.i  
Smp Info : |1202043872|1|  
Misc Info : |ECD82P\_1S|953412|SVA|QC A|SOIL|MSD|1|  
Comment :  
Method : /chem/ecdla.i/021710.b/ECD1-F-8082-021110.m  
Meth Date : 18-Feb-2010 07:28 yip00818 Quant Type: ESTD  
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d  
Als bottle: 51 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1672.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	2.99620	% Moisture

Cpnd Variable Local Compound Variable

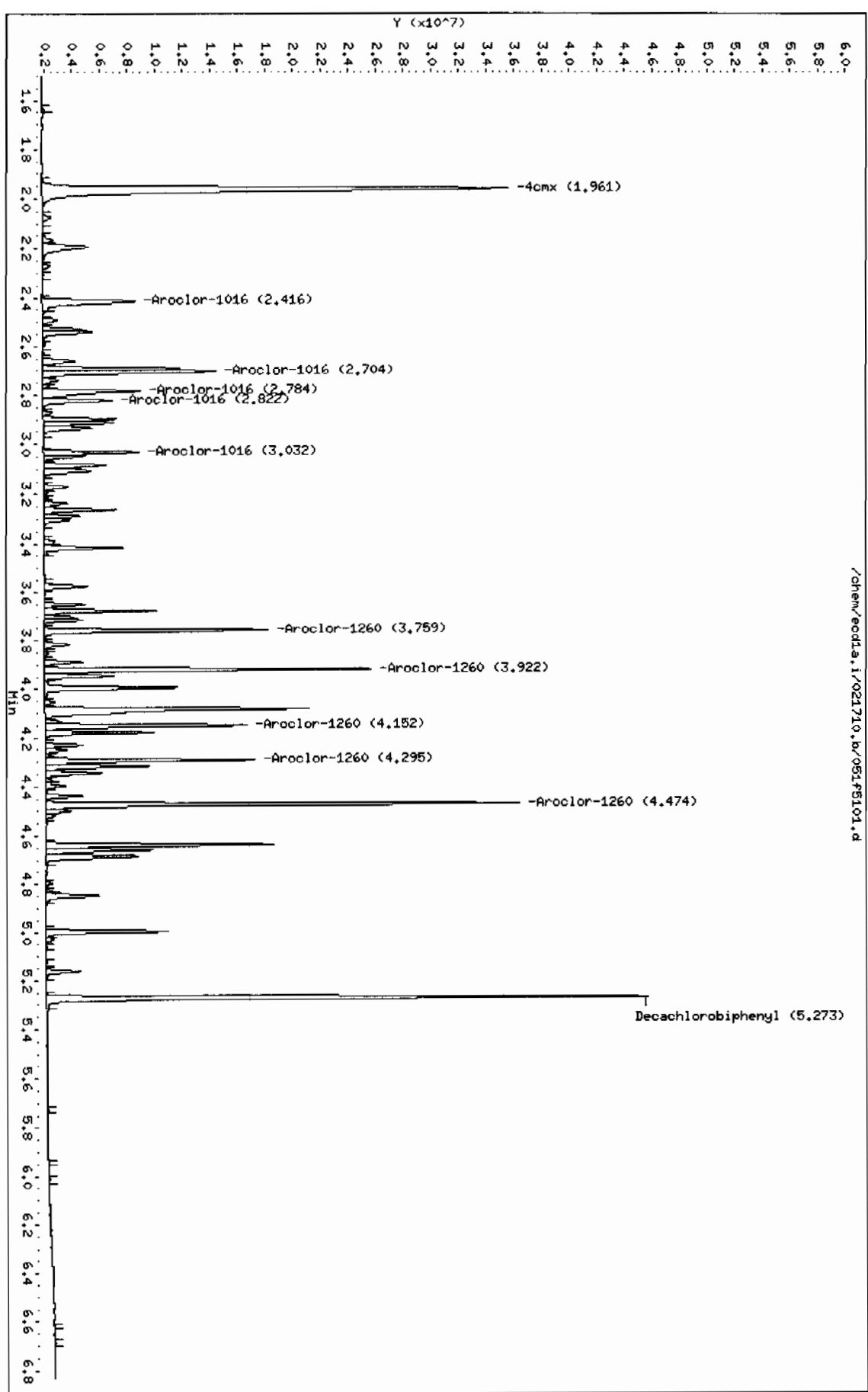
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
1.961	1.961	0.000	43867484	100.344	3.4	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.273	5.275	-0.002	33643722	100.866	3.5	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.416	2.416	0.000	8587842	533.122	18.3	80.00- 120.00	100.00
2.704	2.705	-0.001	11100959	561.147	19.3	106.13- 146.13	129.26
2.784	2.785	-0.001	7357069	564.825	19.4	60.93- 100.93	85.67
2.822	2.823	-0.001	4285881	550.779	18.9	28.68- 68.68	49.91

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====		=====	=====		=====
1 Aroclor-1016 (continued)								
3.032	3.034	-0.002	5602025	558.947	19.2	42.26-	82.26	65.23
Average of Peak Concentrations =					19.0			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.759	3.760	-0.001	12120114	636.887	21.9	80.00-	120.00	100.00
3.922	3.923	-0.001	18360613	647.562	22.2	129.85-	169.85	151.49
4.152	4.153	-0.001	10909116	640.033	22.0	66.46-	106.46	90.01
4.295	4.296	-0.001	11207861	626.412	21.5	71.36-	111.36	92.47
4.474	4.476	-0.002	25338875	652.214	22.4	178.09-	218.09	209.06
Average of Peak Concentrations =					22.0			
-----								

Data File: /chem/ecdda.i/021710.b/051f5101.d  
Date: 17-FEB-2010 16:40  
Client ID: RE46-10-11496MSD  
Sample Info: 11202043872111  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/021710.b/051f5101.d



# Prep Logbook

## Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 953411 Verified by: \_\_\_\_\_

Analyst: Joshua McCartney

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202043869 MB	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
1202043870 LCS	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246554001	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246554002	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246554003	16-FEB-2010 10:40:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
246554004	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246554005	16-FEB-2010 10:40:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
246554006	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558001	16-FEB-2010 10:40:00	30.01	H2SO4/KMnI	1	8	1	0.03332	
1202043871 MS (246558001)	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
1202043872 MSD (246558001)	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558002	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558003	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558004	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558005	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558006	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558007	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558008	16-FEB-2010 10:40:00	30	H2SO4/KMnI	1	8	1	0.03333	
246558009	16-FEB-2010 10:40:00	30.08	H2SO4/KMnI	1	8	1	0.03324	
246558010	16-FEB-2010 10:40:00	30.05	H2SO4/KMnI	1	8	1	0.03328	
246558011	16-FEB-2010 10:40:00	30.01	H2SO4/KMnI	1	8	1	0.03332	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202043870	PCB Laboratory Control	WE100210-07	1	mL	Clean up Date: 02/16/2010
MS	1202043871	PCB Laboratory Control	WE100210-07	1	mL	Clean up Initials: RWH
MSD	1202043872	PCB Laboratory Control	WE100210-07	1	mL	Verified By: JAM
SURR	All	PEST LOW LEVEL SURROGATE 200 UGL	UE100127-15	1	mL	Final Solvent: Hexane
REGNT	All	Acetone	100211-B1	150	mL	Clean Up SOP: GL-OA-E-037
REGNT	All	Hexane	1259672-B2	150	mL	
REGNT	All	1:1 sulfuric acid	1260695a	5	mL	
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL	
SOURC	All	SODIUM SULFATE	1269268	30	g	

# Metals Analysis

# Case Narrative



**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202039765	Method Blank (MB) <b>ICP</b>
1202039766	Laboratory Control Sample (LCS)
1202039769	246554001(RE15-10-8175L) Serial Dilution (SD)
1202039767	246554001(RE15-10-8175D) Sample Duplicate (DUP)
1202039768	246554001(RE15-10-8175S) Matrix Spike (MS)
1202039770	246554001(RE15-10-8175SD) Matrix Spike Duplicate (MSD)
1202041611	Method Blank (MB) <b>ICP-MS</b>
1202041616	Laboratory Control Sample (LCS)
1202041613	246554001(RE15-10-8175L) Serial Dilution (SD)
1202041612	246554001(RE15-10-8175D) Sample Duplicate (DUP)
1202041614	246554001(RE15-10-8175S) Matrix Spike (MS)
1202041615	246554001(RE15-10-8175SD) Matrix Spike Duplicate (MSD)
1202039421	Method Blank (MB) <b>CVAA</b>
1202039422	Laboratory Control Sample (LCS)

1202039425	246554001(RE15-10-8175L) Serial Dilution (SD)
1202039423	246554001(RE15-10-8175D) Sample Duplicate (DUP)
1202039424	246554001(RE15-10-8175S) Matrix Spike (MS)
1202039426	246554001(RE15-10-8175SD) Matrix Spike Duplicate (MSD)

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

#### **Method/Analysis Information**

<b>Analytical Batch:</b>	951752, 952553 and 951617
<b>Prep Batch :</b>	951751, 952552 and 951616
<b>Standard Operating Procedures:</b>	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
<b>Analytical Method:</b>	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
<b>Prep Method :</b>	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 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic

absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

### **Calibration Information**

#### **Instrument Calibration**

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

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

#### **ICSA/ICSAB Statement**

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

#### **Continuing Calibration Blank (CCB) Requirements**

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

#### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

### **Quality Control (QC) Information**

#### **Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

#### **Laboratory Control Sample (LCS) Recovery**

The laboratory control sample (LCS) met the recommended acceptance criteria for percent recovery (%R) for all elements of interest, with the following exception of antimony. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

#### **Quality Control (QC) Sample Statement**

The following sample was selected as the quality control (QC) sample for this SDG: 246554001 (RE15-10-8175).

#### **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 aluminum, barium, potassium and sodium, 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 aluminum, potassium and sodium, as indicated by the "N" qualifiers.

**MS/MSD Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of barium and manganese, as indicated by the "\*" qualifiers.

**Duplicate Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of aluminum, barium, calcium, chromium, iron, magnesium, potassium, sodium, vanadium and zinc, as indicated by the "\*" qualifiers.

**Serial Dilution % Difference Statement**

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

**Technical Information****Holding Time Specifications**

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

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instruments. Dilutions were required for 246554004 (RE15-10-8178), 246554005 (RE15-10-8177) and 246554006 (RE15-10-8225) in order to minimize antimony suppression due to matrix interferences. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

## **Miscellaneous Information**

### **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

### **Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 800209. A copy is included in the Miscellaneous Data section of this package.

### **Additional Comments**

Additional comments were not required for this SDG.

### **Certification Statement**

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

### **Review Validation:**

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

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

Reviewer: Kristen Farson Date: 3/8/10

# Sample Data Summary

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554001

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8175

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 99.15

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	652000	ug/kg	*N	6750	19900	19900	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-36-0	Antimony	993	ug/kg	U	328	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-38-2	Arsenic	302	ug/kg	J	195	977	977	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-39-3	Barium	17200	ug/kg	*EN	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-41-7	Beryllium	213	ug/kg		19.5	97.7	97.7	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-43-9	Cadmium	266	ug/kg	J	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-70-2	Calcium	318000	ug/kg	*	7940	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-47-3	Chromium	5020	ug/kg	*	149	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-48-4	Cobalt	481	ug/kg	J	149	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-50-8	Copper	1950	ug/kg		298	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-89-6	Iron	8310000	ug/kg	*	7940	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-92-1	Lead	2430	ug/kg		248	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-95-4	Magnesium	180000	ug/kg	*	8440	29800	29800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-96-5	Manganese	256000	ug/kg	*	199	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752
7439-97-6	Mercury	11.1	ug/kg	U	3.77	11.1	11.1	1	AV	JXLI	02/22/10 10:51	022210S1-4	951617
7440-02-0	Nickel	1120	ug/kg		97.7	391	391	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-09-7	Potassium	274000	ug/kg	*N	6350	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7782-49-2	Selenium	977	ug/kg	U	489	977	977	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-22-4	Silver	211	ug/kg	J	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-23-5	Sodium	229000	ug/kg	*N	6950	24800	24800	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-28-0	Thallium	195	ug/kg	U	58.6	195	195	2	MS	BAJ	03/06/10 18:40	100306-3	952553
7440-62-2	Vanadium	2960	ug/kg	*	99.3	496	496	1	P	HSC	02/26/10 18:02	022610D-1	951752
7440-66-6	Zinc	49800	ug/kg	*	328	993	993	1	P	HSC	02/26/10 18:02	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.508	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.516	g	50	mL	02/21/10	BCD1

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554002

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8174

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 92.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6720000	ug/kg	*N	7170	21100	21100	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-36-0	Antimony	1050	ug/kg	U	348	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-38-2	Arsenic	1850	ug/kg		207	1030	1030	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-39-3	Barium	173000	ug/kg	*EN	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-41-7	Beryllium	776	ug/kg		20.7	103	103	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-43-9	Cadmium	367	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-70-2	Calcium	2930000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-47-3	Chromium	7140	ug/kg	*	158	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-48-4	Cobalt	4720	ug/kg		158	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-50-8	Copper	5260	ug/kg		316	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-89-6	Iron	11500000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-92-1	Lead	11600	ug/kg		263	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-95-4	Magnesium	1480000	ug/kg	*	8960	31600	31600	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-96-5	Manganese	614000	ug/kg	*	211	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752
7439-97-6	Mercury	10.9	ug/kg	J	4.35	12.8	12.8	1	AV	JXL1	02/22/10 11:05	022210S1-4	951617
7440-02-0	Nickel	5920	ug/kg		103	413	413	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-09-7	Potassium	1050000	ug/kg	*N	6740	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7782-49-2	Selenium	1030	ug/kg	U	517	1030	1030	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-22-4	Silver	308	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-23-5	Sodium	273000	ug/kg	*N	7380	26300	26300	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-28-0	Thallium	132	ug/kg	J	62	207	207	2	MS	BAJ	03/06/10 19:05	100306-3	952553
7440-62-2	Vanadium	12200	ug/kg	*	105	527	527	1	P	HSC	02/26/10 18:28	022610D-1	951752
7440-66-6	Zinc	43000	ug/kg	*	348	1050	1050	1	P	HSC	02/26/10 18:28	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.505	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.511	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.521	g	50	mL	02/21/10	BCD1



**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554003

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8176

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5060000	ug/kg	*N	7170	21100	21100	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-36-0	Antimony	1050	ug/kg	U	348	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-38-2	Arsenic	1140	ug/kg		210	1050	1050	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-39-3	Barium	35300	ug/kg	*EN	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-41-7	Beryllium	1370	ug/kg		21	105	105	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-43-9	Cadmium	305	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-70-2	Calcium	1120000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-47-3	Chromium	6110	ug/kg	*	158	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-48-4	Cobalt	924	ug/kg		158	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-50-8	Copper	3520	ug/kg		316	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-89-6	Iron	8750000	ug/kg	*	8430	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-92-1	Lead	4120	ug/kg		263	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-95-4	Magnesium	695000	ug/kg	*	8960	31600	31600	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-96-5	Manganese	236000	ug/kg	*	211	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752
7439-97-6	Mercury	5.07	ug/kg	J	4.04	11.9	11.9	1	AV	JXL1	02/22/10 11:07	022210S1-4	951617
7440-02-0	Nickel	4490	ug/kg		105	420	420	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-09-7	Potassium	525000	ug/kg	*N	6740	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7782-49-2	Selenium	1050	ug/kg	U	525	1050	1050	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-22-4	Silver	192	ug/kg	J	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-23-5	Sodium	124000	ug/kg	*N	7380	26300	26300	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-28-0	Thallium	210	ug/kg	U	63	210	210	2	MS	BAJ	03/06/10 19:09	100306-3	952553
7440-62-2	Vanadium	6670	ug/kg	*	105	527	527	1	P	HSC	02/26/10 18:32	022610D-1	951752
7440-66-6	Zinc	42100	ug/kg	*	348	1050	1050	1	P	HSC	02/26/10 18:32	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.538	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.505	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.507	g	50	mL	02/21/10	BCD1

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554004

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8178

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 97.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	835000	ug/kg	*N	6630	19500	19500	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-36-0	Antimony	4870	ug/kg	U	1610	4870	4870	5	P	HSC	03/05/10 14:22	030510B-2	951752
7440-38-2	Arsenic	249	ug/kg	J	195	975	975	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-39-3	Barium	15900	ug/kg	*EN	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-41-7	Beryllium	457	ug/kg		19.5	97.5	97.5	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-43-9	Cadmium	229	ug/kg	J	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-70-2	Calcium	523000	ug/kg	*	7800	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-47-3	Chromium	1560	ug/kg	*	146	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-48-4	Cobalt	486	ug/kg	J	146	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-50-8	Copper	1860	ug/kg		292	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-89-6	Iron	6690000	ug/kg	*	7800	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-92-1	Lead	4420	ug/kg		244	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-95-4	Magnesium	287000	ug/kg	*	8280	29200	29200	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-96-5	Manganese	207000	ug/kg	*	195	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752
7439-97-6	Mercury	10.7	ug/kg	U	3.64	10.7	10.7	1	AV	JXL1	02/22/10 11:09	022210S1-4	951617
7440-02-0	Nickel	668	ug/kg		97.5	390	390	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-09-7	Potassium	247000	ug/kg	*N	6240	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7782-49-2	Selenium	975	ug/kg	U	487	975	975	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-22-4	Silver	487	ug/kg	U	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-23-5	Sodium	99500	ug/kg	*N	6820	24400	24400	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-28-0	Thallium	195	ug/kg	U	58.5	195	195	2	MS	BAJ	03/06/10 19:12	100306-3	952553
7440-62-2	Vanadium	2710	ug/kg	*	97.5	487	487	1	P	HSC	02/26/10 18:35	022610D-1	951752
7440-66-6	Zinc	40800	ug/kg	*	322	975	975	1	P	HSC	02/26/10 18:35	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.575	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.526	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.526	g	50	mL	02/21/10	BCD1

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554005

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8177

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3060000	ug/kg	*N	6800	20000	20000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-36-0	Antimony	5000	ug/kg	U	1650	5000	5000	5	P	HSC	03/05/10 14:25	030510B-2	951752
7440-38-2	Arsenic	1090	ug/kg		187	933	933	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-39-3	Barium	18900	ug/kg	*EN	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-41-7	Beryllium	1360	ug/kg		18.7	93.3	93.3	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-43-9	Cadmium	250	ug/kg	J	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-70-2	Calcium	779000	ug/kg	*	8000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-47-3	Chromium	2290	ug/kg	*	150	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-48-4	Cobalt	709	ug/kg		150	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-50-8	Copper	3070	ug/kg		300	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-89-6	Iron	8400000	ug/kg	*	8000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-92-1	Lead	2960	ug/kg		250	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-95-4	Magnesium	529000	ug/kg	*	8500	30000	30000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-96-5	Manganese	223000	ug/kg	*	200	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7439-97-6	Mercury	11.4	ug/kg	U	3.86	11.4	11.4	1	AV	JXL1	02/22/10 11:11	022210S1-4	951617
7440-02-0	Nickel	1740	ug/kg		93.3	373	373	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-09-7	Potassium	377000	ug/kg	*N	6400	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7782-49-2	Selenium	933	ug/kg	U	467	933	933	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-22-4	Silver	192	ug/kg	J	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-23-5	Sodium	68800	ug/kg	*N	7000	25000	25000	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-28-0	Thallium	187	ug/kg	U	56	187	187	2	MS	BAJ	03/06/10 19:16	100306-3	952553
7440-62-2	Vanadium	5110	ug/kg	*	100	500	500	1	P	HSC	02/26/10 18:39	022610D-1	951752
7440-66-6	Zinc	42600	ug/kg	*	330	1000	1000	1	P	HSC	02/26/10 18:39	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.517	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.554	g	50	mL	02/21/10	BCD1

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246554006

BASIS: Dry Weight

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8225

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	510000	ug/kg	*N	6840	20100	20100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-36-0	Antimony	5030	ug/kg	U	1660	5030	5030	5	P	HSC	03/05/10 14:29	030510B-2	951752
7440-38-2	Arsenic	331	ug/kg	J	190	951	951	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-39-3	Barium	10500	ug/kg	*EN	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-41-7	Beryllium	206	ug/kg		19	95.1	95.1	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-43-9	Cadmium	185	ug/kg	J	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-70-2	Calcium	275000	ug/kg	*	8040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-47-3	Chromium	7390	ug/kg	*	151	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-48-4	Cobalt	434	ug/kg	J	151	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-50-8	Copper	1570	ug/kg		302	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-89-6	Iron	6890000	ug/kg	*	8040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-92-1	Lead	2060	ug/kg		251	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-95-4	Magnesium	136000	ug/kg	*	8550	30200	30200	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-96-5	Manganese	220000	ug/kg	*	201	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752
7439-97-6	Mercury	10.8	ug/kg	U	3.67	10.8	10.8	1	AV	JXL1	02/22/10 11:13	022210S1-4	951617
7440-02-0	Nickel	1060	ug/kg		95.1	380	380	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-09-7	Potassium	208000	ug/kg	*N	6440	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7782-49-2	Selenium	951	ug/kg	U	475	951	951	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-22-4	Silver	183	ug/kg	J	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-23-5	Sodium	166000	ug/kg	*N	7040	25100	25100	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-28-0	Thallium	190	ug/kg	U	57.1	190	190	2	MS	BAJ	03/06/10 19:20	100306-3	952553
7440-62-2	Vanadium	2680	ug/kg	*	101	503	503	1	P	HSC	02/26/10 18:43	022610D-1	951752
7440-66-6	Zinc	40300	ug/kg	*	332	1010	1010	1	P	HSC	02/26/10 18:43	022610D-1	951752

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951617	951616	SW846 7471A Prep	0.563	g	30	mL	02/19/10	TXB3
951752	951751	SW846 3050B	0.504	g	50	mL	02/18/10	LYH1
952553	952552	SW846 3050B	0.533	g	50	mL	02/21/10	BCD1

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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	5.22	ug/L	5	ug/L	104.4	90.0 - 110.0	AV	22-FEB-10 10:05	022210S1-4
	Aluminum	4800	ug/L	5000	ug/L	95.9	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Antimony	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Barium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Calcium	4790	ug/L	5000	ug/L	95.8	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Chromium	481	ug/L	500	ug/L	96.1	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Cobalt	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Copper	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Iron	4850	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Lead	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Manganese	515	ug/L	500	ug/L	103	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Potassium	2420	ug/L	2500	ug/L	96.7	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Silver	257	ug/L	250	ug/L	102.9	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Sodium	2300	ug/L	2500	ug/L	92.2	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	26-FEB-10 13:09	022610D-1
	Antimony	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	05-MAR-10 03:31	030510B-2
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 - 110.0	MS	06-MAR-10 18:07	100306-3
	Beryllium	51.6	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	06-MAR-10 18:07	100306-3
	Nickel	51.6	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	06-MAR-10 18:07	100306-3
	Selenium	50.9	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	06-MAR-10 18:07	100306-3
	Thallium	54.1	ug/L	50	ug/L	108.1	90.0 - 110.0	MS	06-MAR-10 18:07	100306-3
CCV01										
	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 - 120.0	AV	22-FEB-10 10:11	022210S1-4
	Aluminum	4550	ug/L	5000	ug/L	91	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Antimony	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Barium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Cadmium	470	ug/L	500	ug/L	94	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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	4530	ug/L	5000	ug/L	90.6	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Chromium	470	ug/L	500	ug/L	94	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Cobalt	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Copper	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Iron	4610	ug/L	5000	ug/L	92.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Lead	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Magnesium	4700	ug/L	5000	ug/L	94.1	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Manganese	470	ug/L	500	ug/L	94	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Silver	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Sodium	9160	ug/L	10000	ug/L	91.6	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Vanadium	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Zinc	475	ug/L	500	ug/L	95	90.0 - 110.0	P	26-FEB-10 13:32	022610D-1
	Antimony	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	05-MAR-10 03:54	030510B-2
	Arsenic	47.9	ug/L	50	ug/L	95.8	90.0 - 110.0	MS	06-MAR-10 18:25	100306-3
	Beryllium	51.6	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	06-MAR-10 18:25	100306-3
	Nickel	51.4	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	06-MAR-10 18:25	100306-3
	Selenium	49.3	ug/L	50	ug/L	98.6	90.0 - 110.0	MS	06-MAR-10 18:25	100306-3
	Thallium	53.7	ug/L	50	ug/L	107.4	90.0 - 110.0	MS	06-MAR-10 18:25	100306-3
CCV02	Mercury	5.05	ug/L	5	ug/L	101	80.0 - 120.0	AV	22-FEB-10 10:35	022210S1-4
	Aluminum	4610	ug/L	5000	ug/L	92.2	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Antimony	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Barium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Cadmium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Calcium	4700	ug/L	5000	ug/L	93.9	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Chromium	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Cobalt	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Iron	4640	ug/L	5000	ug/L	92.7	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Magnesium	4700	ug/L	5000	ug/L	94	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Manganese	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Potassium	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Silver	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Sodium	9220	ug/L	10000	ug/L	92.2	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Vanadium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	26-FEB-10 13:52	022610D-1
	Antimony	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	05-MAR-10 04:32	030510B-2
	Arsenic	48.3	ug/L	50	ug/L	96.6	90.0 - 110.0	MS	06-MAR-10 18:58	100306-3
	Beryllium	50.6	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	06-MAR-10 18:58	100306-3
	Nickel	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	06-MAR-10 18:58	100306-3
	Selenium	50.1	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	06-MAR-10 18:58	100306-3
	Thallium	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	06-MAR-10 18:58	100306-3
CCV03	Mercury	5	ug/L	5	ug/L	100.1	80.0 - 120.0	AV	22-FEB-10 10:59	022210S1-4
	Aluminum	4810	ug/L	5000	ug/L	96.1	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Antimony	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Barium	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Cadmium	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Calcium	4830	ug/L	5000	ug/L	96.6	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Chromium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Copper	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Iron	4810	ug/L	5000	ug/L	96.1	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Lead	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Magnesium	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Potassium	4960	ug/L	5000	ug/L	99.2	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Silver	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1



**METALS**  
-2a-  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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	9550	ug/L	10000	ug/L	95.5	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Vanadium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	26-FEB-10 14:36	022610D-1
	Antimony	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	05-MAR-10 05:14	030510B-2
	Arsenic	47.3	ug/L	50	ug/L	94.5	90.0 - 110.0	MS	06-MAR-10 19:23	100306-3
	Beryllium	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	06-MAR-10 19:23	100306-3
	Nickel	52.3	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	06-MAR-10 19:23	100306-3
	Selenium	49.6	ug/L	50	ug/L	99.2	90.0 - 110.0	MS	06-MAR-10 19:23	100306-3
	Thallium	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	06-MAR-10 19:23	100306-3
CCV04										
	Mercury	5.06	ug/L	5	ug/L	101.3	80.0 - 120.0	AV	22-FEB-10 11:23	022210S1-4
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Antimony	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Cadmium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Chromium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Iron	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Lead	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Magnesium	4930	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Manganese	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Sodium	9660	ug/L	10000	ug/L	96.6	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Zinc	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	26-FEB-10 15:17	022610D-1
	Antimony	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	05-MAR-10 05:54	030510B-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05										
	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Antimony	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Barium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Cadmium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Chromium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Iron	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Lead	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Magnesium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Potassium	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Silver	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	26-FEB-10 16:04	022610D-1
	Antimony	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	05-MAR-10 06:35	030510B-2
CCV06										
	Aluminum	4730	ug/L	5000	ug/L	94.7	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Antimony	480	ug/L	500	ug/L	96	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Barium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Cadmium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Calcium	4780	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Iron	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Lead	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1
	Magnesium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	26-FEB-10 16:19	022610D-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Potassium	4860	ug/L	5000	ug/L	97.2	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Silver	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Sodium	9730	ug/L	10000	ug/L	97.3	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Zinc	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	26-FEB-10 16:19	022610D-1
	Antimony	477	ug/L	500	ug/L	95.5	90.0 - 110.0	P	05-MAR-10 07:04	030510B-2
CCV07										
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Antimony	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Barium	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Cadmium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Calcium	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Copper	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Iron	4850	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Lead	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Magnesium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Manganese	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Potassium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Vanadium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	26-FEB-10 17:21	022610D-1
	Antimony	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	05-MAR-10 07:33	030510B-2
CCV08										
	Aluminum	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Antimony	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Barium	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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>
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Copper	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Iron	4930	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Lead	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Manganese	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Potassium	5090	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Silver	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Vanadium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	26-FEB-10 17:48	022610D-1
	Antimony	541	ug/L	500	ug/L	108.2	90.0 - 110.0	P	05-MAR-10 08:04	030510B-2
CCV09	Aluminum	4730	ug/L	5000	ug/L	94.7	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Antimony	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Barium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Calcium	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Chromium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Cobalt	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Copper	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Iron	4740	ug/L	5000	ug/L	94.8	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Lead	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Magnesium	4860	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Manganese	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Potassium	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	26-FEB-10 18:21	022610D-1

SW846

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV10	Sodium	9200	ug/L	10000	ug/L	92	90.0 – 110.0	P	26-FEB-10 18:21	022610D-1
	Vanadium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	26-FEB-10 18:21	022610D-1
	Zinc	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	26-FEB-10 18:21	022610D-1
	Antimony	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	05-MAR-10 08:38	030510B-2
CCV10	Aluminum	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Antimony	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Barium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Cadmium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Calcium	4870	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Cobalt	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Copper	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Iron	4720	ug/L	5000	ug/L	94.3	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Lead	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Magnesium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Manganese	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Silver	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Sodium	9020	ug/L	10000	ug/L	90.2	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Vanadium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-FEB-10 18:46	022610D-1
	Antimony	520	ug/L	500	ug/L	104	90.0 – 110.0	P	05-MAR-10 09:15	030510B-2
CCV11	Antimony	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	05-MAR-10 09:46	030510B-2
CCV12	Antimony	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	05-MAR-10 10:32	030510B-2
CCV13	Antimony	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	05-MAR-10 11:11	030510B-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

<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>
CCV14	Antimony	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	05-MAR-10 12:04	030510B-2
CCV15	Antimony	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	05-MAR-10 12:14	030510B-2
CCV16	Antimony	490	ug/L	500	ug/L	98	90.0 - 110.0	P	05-MAR-10 12:30	030510B-2
CCV17	Antimony	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	05-MAR-10 13:02	030510B-2
CCV18	Antimony	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	05-MAR-10 13:48	030510B-2
CCV19	Antimony	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	05-MAR-10 14:02	030510B-2
CCV20	Antimony	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	05-MAR-10 14:14	030510B-2
CCV21	Antimony	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	05-MAR-10 14:32	030510B-2

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: JCPMS5,MER536,OPTIMA1

<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	.254	ug/L	.2	ug/L	127.2	70.0 – 130.0	AV	22-FEB-10 10:09	022210S1-4
	Nickel	2.11	ug/L	2	ug/L	105.4	70.0 – 130.0	MS	06-MAR-10 18:14	100306-3
	Thallium	1.27	ug/L	1	ug/L	127.2	70.0 – 130.0	MS	06-MAR-10 18:14	100306-3
	Arsenic	5.42	ug/L	5	ug/L	108.4	70.0 – 130.0	MS	06-MAR-10 18:14	100306-3
	Selenium	5.57	ug/L	5	ug/L	111.4	70.0 – 130.0	MS	06-MAR-10 18:14	100306-3
	Beryllium	.542	ug/L	.5	ug/L	108.4	70.0 – 130.0	MS	06-MAR-10 18:14	100306-3
PQL01										
	Cobalt	4.4	ug/L	5	ug/L	88	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Calcium	194	ug/L	200	ug/L	97	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Copper	10.1	ug/L	10	ug/L	101.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Vanadium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Silver	5.26	ug/L	5	ug/L	105.2	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Potassium	167	ug/L	150	ug/L	111.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Manganese	9.87	ug/L	10	ug/L	98.7	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Magnesium	304	ug/L	300	ug/L	101.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Lead	8.47	ug/L	10	ug/L	84.7	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Iron	91.4	ug/L	100	ug/L	91.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Aluminum	191	ug/L	200	ug/L	95.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Chromium	4.08	ug/L	5	ug/L	81.5	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Zinc	8.74	ug/L	10	ug/L	87.4	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Cadmium	4.8	ug/L	5	ug/L	96	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Barium	4.8	ug/L	5	ug/L	96	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Antimony	7.4	ug/L	10	ug/L	74	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Sodium	292	ug/L	300	ug/L	97.2	70.0 – 130.0	P	26-FEB-10 13:16	022610D-1
	Antimony	9.5	ug/L	10	ug/L	95	70.0 – 130.0	P	05-MAR-10 03:38	030510B-2
PQL02										
	Aluminum	203	ug/L	200	ug/L	101.5	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Lead	11.9	ug/L	10	ug/L	118.6	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Manganese	10	ug/L	10	ug/L	100	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Silver	5.23	ug/L	5	ug/L	104.7	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: JCPMS5,MER536,OPTIMA1

<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>
	Antimony	13.2	ug/L	10	ug/L	131.7	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Cadmium	5.01	ug/L	5	ug/L	100.2	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Cobalt	4.33	ug/L	5	ug/L	86.6	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Calcium	192	ug/L	200	ug/L	95.9	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Zinc	8.71	ug/L	10	ug/L	87.1	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Vanadium	5.25	ug/L	5	ug/L	105	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Copper	10.4	ug/L	10	ug/L	103.8	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Chromium	4.52	ug/L	5	ug/L	90.4	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Barium	4.74	ug/L	5	ug/L	94.8	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Sodium	365	ug/L	300	ug/L	121.8	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Potassium	177	ug/L	150	ug/L	117.8	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Magnesium	306	ug/L	300	ug/L	101.9	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Iron	93.1	ug/L	100	ug/L	93.1	70.0 – 130.0	P	26-FEB-10 16:08	022610D-1
	Antimony	11.2	ug/L	10	ug/L	111.6	70.0 – 130.0	P	05-MAR-10 08:07	030510B-2
PQL03	Antimony	11	ug/L	10	ug/L	110	70.0 – 130.0	P	05-MAR-10 08:42	030510B-2
PQL04	Antimony	15.3	ug/L	10	ug/L	152.5	70.0 – 130.0	P	05-MAR-10 13:51	030510B-2



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	22-FEB-10 10:07	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 13:13	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 13:13	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:13	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 13:13	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:13	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 13:13	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 13:13	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 13:13	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 13:13	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 13:13	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:13	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 13:13	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 03:35	030510B-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	06-MAR-10 18:11	100306-3
	Beryllium	0.1	+/- .5	U	0.1	0.5	SOL	MS	06-MAR-10 18:11	100306-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-MAR-10 18:11	100306-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	06-MAR-10 18:11	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	06-MAR-10 18:11	100306-3
CCB01	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	22-FEB-10 10:13	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 13:35	022610D-1
	Antimony	4.29	+/-10	J	3.3	10.0	SOL	P	26-FEB-10 13:35	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:35	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:35	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:35	022610D-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665

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	26-FEB-10 13:35	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 13:35	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 13:35	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:35	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 13:35	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 13:35	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 13:35	022610D-1
	Potassium	119.3	+/-250	J	64.0	250	SOL	P	26-FEB-10 13:35	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:35	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 13:35	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:35	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 13:35	022610D-1
	Antimony	5.29	+/-10	J	3.3	10.0	SOL	P	05-MAR-10 03:58	030510B-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	06-MAR-10 18:29	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	06-MAR-10 18:29	100306-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-MAR-10 18:29	100306-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	06-MAR-10 18:29	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	06-MAR-10 18:29	100306-3
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 10:37	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 13:56	022610D-1
	Antimony	4.24	+/-10	J	3.3	10.0	SOL	P	26-FEB-10 13:56	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:56	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 13:56	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 13:56	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 13:56	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 13:56	022610D-1

SW846

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665

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	26-FEB-10 13:56	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 13:56	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 13:56	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 13:56	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 13:56	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 04:36	030510B-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	06-MAR-10 19:02	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	06-MAR-10 19:02	100306-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-MAR-10 19:02	100306-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	06-MAR-10 19:02	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	06-MAR-10 19:02	100306-3
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 11:01	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 14:40	022610D-1
	Antimony	4.22	+/-10	J	3.3	10.0	SOL	P	26-FEB-10 14:40	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 14:40	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 14:40	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 14:40	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 14:40	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 14:40	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 14:40	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 14:40	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 14:40	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 14:40	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 14:40	022610D-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665

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>
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 05:18	030510B-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	06-MAR-10 19:27	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	06-MAR-10 19:27	100306-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	06-MAR-10 19:27	100306-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	06-MAR-10 19:27	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	06-MAR-10 19:27	100306-3
<b>CCB04</b>	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 11:25	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 15:20	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 15:20	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 15:20	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 15:20	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 15:20	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 15:20	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 15:20	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 15:20	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 15:20	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 15:20	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 15:20	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 15:20	022610D-1
	Antimony	5.35	+/-10	J	3.3	10.0	SOL	P	05-MAR-10 05:58	030510B-2
<b>CCB05</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 16:11	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 16:11	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:11	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:11	022610D-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 16:11	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 16:11	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 16:11	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 16:11	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 16:11	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 16:11	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 16:11	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 16:11	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 16:11	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:11	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 16:11	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:11	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 16:11	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 06:39	030510B-2
<b>CCB06</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 16:22	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 16:22	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:22	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:22	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 16:22	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 16:22	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 16:22	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 16:22	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 16:22	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 16:22	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 16:22	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 16:22	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 16:22	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:22	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 16:22	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 16:22	022610D-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB07	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 16:22	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 07:08	030510B-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 17:25	022610D-1
	Antimony	4.63	+/-10	J	3.3	10.0	SOL	P	26-FEB-10 17:25	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 17:25	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 17:25	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 17:25	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 17:25	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 17:25	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 17:25	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 17:25	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 17:25	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:25	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 17:25	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 07:37	030510B-2
CCB08	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 17:52	022610D-1
	Antimony	4.4	+/-10	J	3.3	10.0	SOL	P	26-FEB-10 17:52	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 17:52	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 17:52	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 17:52	022610D-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665

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>
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 17:52	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 17:52	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 17:52	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 17:52	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 17:52	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 17:52	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 17:52	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 08:11	030510B-2
<b>CCB09</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 18:24	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 18:24	022610D-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 18:24	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 18:24	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 18:24	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 18:24	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 18:24	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 18:24	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 18:24	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 18:24	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:24	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 18:24	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 08:45	030510B-2
<b>CCB10</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-FEB-10 18:50	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 18:50	022610D-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 18:50	022610D-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-FEB-10 18:50	022610D-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-FEB-10 18:50	022610D-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-FEB-10 18:50	022610D-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-FEB-10 18:50	022610D-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-FEB-10 18:50	022610D-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-FEB-10 18:50	022610D-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-FEB-10 18:50	022610D-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-FEB-10 18:50	022610D-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-FEB-10 18:50	022610D-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 09:18	030510B-2
CCB11	Antimony	5.95	+/-10	J	3.3	10.0	SOL	P	05-MAR-10 09:50	030510B-2
CCB12	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 10:35	030510B-2
CCB13	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 11:15	030510B-2
CCB14	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 12:07	030510B-2
CCB15	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 12:18	030510B-2
CCB16	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 12:33	030510B-2
CCB17	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 13:06	030510B-2



Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665

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>
CCB18	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 13:55	030510B-2
CCB19	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 14:05	030510B-2
CCB20	Antimony	3.87	+/-10	J	3.3	10.0	SOL	P	05-MAR-10 14:18	030510B-2
CCB21	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	05-MAR-10 14:36	030510B-2

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1665  
**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>
1202039421	Mercury	3.62	ug/kg	+/-10.6	U	AV	3.62	10.6
1202039765	Aluminum	6790	ug/kg	+/-20000	U	P	6790	20000
	Antimony	329	ug/kg	+/-998	U	P	329	998
	Barium	99.8	ug/kg	+/-499	U	P	99.8	499
	Cadmium	99.8	ug/kg	+/-499	U	P	99.8	499
	Calcium	7980	ug/kg	+/-25000	U	P	7980	25000
	Chromium	150	ug/kg	+/-499	U	P	150	499
	Cobalt	150	ug/kg	+/-499	U	P	150	499
	Copper	299	ug/kg	+/-998	U	P	299	998
	Iron	7980	ug/kg	+/-25000	U	P	7980	25000
	Lead	250	ug/kg	+/-998	U	P	250	998
	Magnesium	8480	ug/kg	+/-29900	U	P	8480	29900
	Manganese	200	ug/kg	+/-998	U	P	200	998
	Potassium	6390	ug/kg	+/-25000	U	P	6390	25000
	Silver	99.8	ug/kg	+/-499	U	P	99.8	499
	Sodium	6990	ug/kg	+/-25000	U	P	6990	25000
	Vanadium	99.8	ug/kg	+/-499	U	P	99.8	499
	Zinc	329	ug/kg	+/-998	U	P	329	998
1202041611	Arsenic	187	ug/kg	+/-935	U	MS	187	935
	Beryllium	18.7	ug/kg	+/-93.5	U	MS	18.7	93.5
	Nickel	93.5	ug/kg	+/-374	U	MS	93.5	374
	Selenium	467	ug/kg	+/-935	U	MS	467	935
	Thallium	56.1	ug/kg	+/-187	U	MS	56.1	187

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<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>
<b>ICSA01</b>									
	Aluminum	502000	ug/L	500000	ug/L	100	80.0 – 120.0	26-FEB-10 13:20	022610D-1
	Antimony	-6.75	ug/L					26-FEB-10 13:20	022610D-1
	Barium	7.45	ug/L					26-FEB-10 13:20	022610D-1
	Cadmium	6.84	ug/L					26-FEB-10 13:20	022610D-1
	Calcium	470000	ug/L	500000	ug/L	94.1	80.0 – 120.0	26-FEB-10 13:20	022610D-1
	Chromium	-2.56	ug/L					26-FEB-10 13:20	022610D-1
	Cobalt	3.0	ug/L					26-FEB-10 13:20	022610D-1
	Copper	-0.582	ug/L					26-FEB-10 13:20	022610D-1
	Iron	182000	ug/L	200000	ug/L	90.8	80.0 – 120.0	26-FEB-10 13:20	022610D-1
	Lead	-18.9	ug/L					26-FEB-10 13:20	022610D-1
	Magnesium	478000	ug/L	500000	ug/L	95.7	80.0 – 120.0	26-FEB-10 13:20	022610D-1
	Manganese	0.372	ug/L					26-FEB-10 13:20	022610D-1
	Potassium	-27.3	ug/L					26-FEB-10 13:20	022610D-1
	Silver	-0.163	ug/L					26-FEB-10 13:20	022610D-1
	Sodium	-3.9	ug/L					26-FEB-10 13:20	022610D-1
	Vanadium	1.97	ug/L					26-FEB-10 13:20	022610D-1
	Zinc	0.813	ug/L					26-FEB-10 13:20	022610D-1
<b>ICSAB01</b>									
	Aluminum	498000	ug/L	500000	ug/L	99.6	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Antimony	497	ug/L	500	ug/L	99.5	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Barium	481	ug/L	500	ug/L	96.3	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Cadmium	456	ug/L	500	ug/L	91.1	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Calcium	467000	ug/L	500000	ug/L	93.4	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Chromium	466	ug/L	500	ug/L	93.3	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Cobalt	431	ug/L	500	ug/L	86.1	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Copper	537	ug/L	500	ug/L	107	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Iron	180000	ug/L	200000	ug/L	90	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Lead	449	ug/L	500	ug/L	89.7	80.0 – 120.0	26-FEB-10 13:23	022610D-1
	Magnesium	474000	ug/L	500000	ug/L	94.8	80.0 – 120.0	26-FEB-10 13:23	022610D-1

METALS  
-4-  
Interference Check Sample

SDG No: 10-1665

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	467	ug/L	500	ug/L	93.4	80.0 - 120.0	26-FEB-10 13:23	022610D-1
	Potassium	5250	ug/L	5000	ug/L	105	80.0 - 120.0	26-FEB-10 13:23	022610D-1
	Silver	259	ug/L	250	ug/L	104	80.0 - 120.0	26-FEB-10 13:23	022610D-1
	Sodium	4980	ug/L	5000	ug/L	99.6	80.0 - 120.0	26-FEB-10 13:23	022610D-1
	Vanadium	501	ug/L	500	ug/L	100	80.0 - 120.0	26-FEB-10 13:23	022610D-1
	Zinc	456	ug/L	500	ug/L	91.2	80.0 - 120.0	26-FEB-10 13:23	022610D-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	-6.66	ug/L					05-MAR-10 03:42	030510B-2
ICSAB01	Antimony	515	ug/L	500	ug/L	103	80.0 - 120.0	05-MAR-10 03:45	030510B-2

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1665

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
<b>ICSA01</b>									
	Arsenic	0.028	ug/L					06-MAR-10 18:18	100306-3
	Beryllium	0.094	ug/L					06-MAR-10 18:18	100306-3
	Nickel	3.24	ug/L					06-MAR-10 18:18	100306-3
	Selenium	-1.66	ug/L					06-MAR-10 18:18	100306-3
	Thallium	0.002	ug/L					06-MAR-10 18:18	100306-3
<b>ICSAB01</b>									
	Arsenic	20.5	ug/L	20	ug/L	102	80.0 - 120.0	06-MAR-10 18:22	100306-3
	Beryllium	19.2	ug/L	20	ug/L	96	80.0 - 120.0	06-MAR-10 18:22	100306-3
	Nickel	22.8	ug/L	23.31	ug/L	97.9	80.0 - 120.0	06-MAR-10 18:22	100306-3
	Selenium	19.2	ug/L	20	ug/L	95.8	80.0 - 120.0	06-MAR-10 18:22	100306-3
	Thallium	21.7	ug/L	20	ug/L	108	80.0 - 120.0	06-MAR-10 18:22	100306-3

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665 Client ID RE15-10-8175S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202039424

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	103		3.77	U	102	101		AV

## METALS

-5a-

## Matrix Spike Duplicate Summary

**SDG NO.** 10-1665 **Client ID** RE15-10-8175SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 99.15**Sample ID:** 246554001 **Spike ID:** 1202039426

<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	116		3.77	U	116	99.5		AV



## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665 Client ID RE15-10-8175S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202039768

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75-125	1850000		652000		504000	238	N	P
Antimony	ug/kg	75-125	47700		328	U	50400	94.5		P
Barium	ug/kg	75-125	85400		17200		50400	135	N	P
Cadmium	ug/kg	75-125	52800		266	J	50400	104		P
Calcium	ug/kg	75-125	924000		318000		504000	120		P
Chromium	ug/kg	75-125	55700		5020		50400	100		P
Cobalt	ug/kg	75-125	50200		481	J	50400	98.6		P
Copper	ug/kg	75-125	55600		1950		50400	106		P
Iron	ug/kg		8740000		8310000		504000	86.5	N/A	P
Lead	ug/kg	75-125	56400		2430		50400	107		P
Magnesium	ug/kg	75-125	702000		180000		504000	104		P
Manganese	ug/kg		363000		256000		50400	212	N/A	P
Potassium	ug/kg	75-125	1110000		274000		504000	166	N	P
Silver	ug/kg	75-125	51600		211	J	50400	102		P
Sodium	ug/kg	75-125	1080000		229000		504000	169	N	P
Vanadium	ug/kg	75-125	54100		2960		50400	102		P
Zinc	ug/kg	75-125	103000		49800		50400	105		P

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1665 Client ID RE15-10-8175SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202039770

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Manganese	ug/kg		259000		256000		49200	6.2	N/A	P
Potassium	ug/kg	75-125	1030000		274000		492000	153	N	P
Silver	ug/kg	75-125	48300		211	J	49200	97.6		P
Sodium	ug/kg	75-125	1010000		229000		492000	158	N	P
Vanadium	ug/kg	75-125	50100		2960		49200	95.8		P
Zinc	ug/kg	75-125	92400		49800		49200	86.5		P
Aluminum	ug/kg	75-125	1660000		652000		492000	205	N	P
Antimony	ug/kg	75-125	44600		328	U	49200	90.7		P
Barium	ug/kg	75-125	60500		17200		49200	87.8		P
Cadmium	ug/kg	75-125	49700		266	J	49200	100		P
Calcium	ug/kg	75-125	819000		318000		492000	102		P
Chromium	ug/kg	75-125	55200		5020		49200	102		P
Cobalt	ug/kg	75-125	48600		481	J	49200	97.7		P
Copper	ug/kg	75-125	51600		1950		49200	101		P
Iron	ug/kg		7750000		8310000		492000	-113	N/A	P
Lead	ug/kg	75-125	52100		2430		49200	101		P
Magnesium	ug/kg	75-125	661000		180000		492000	97.7		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665 Client ID RE15-10-8175S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202041614

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	ug/kg	75-125	7440		302	J	7630	93.6		MS
Beryllium	ug/kg	75-125	4720		213		4770	94.5		MS
Nickel	ug/kg	75-125	5640		1120		4770	94.8		MS
Selenium	ug/kg	75-125	1820		489	U	1910	93.2		MS
Thallium	ug/kg	75-125	9320		58.6	U	9530	97.7		MS

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1665 Client ID RE15-10-8175SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202041615

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	ug/kg	75-125	7160		302	J	7700	89.1		MS
Beryllium	ug/kg	75-125	4550		213		4810	90.1		MS
Nickel	ug/kg	75-125	5350		1120		4810	87.8		MS
Selenium	ug/kg	75-125	1710		489	U	1920	86.3		MS
Thallium	ug/kg	75-125	9370		58.6	U	9620	97.3		MS

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175D

Sample ID: 246554001

Duplicate ID: 1202039423

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.77 U		4.12 U				AV

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175SD

Sample ID: 1202039424

Duplicate ID: 1202039426

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	103		116		11.4		AV

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175D

Sample ID: 246554001

Duplicate ID: 1202039767

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20%	652000		522000		22.1	*	P
Antimony	ug/kg		328 U		326 U				P
Barium	ug/kg	+/-20%	17200		33300		63.7	*	P
Cadmium	ug/kg	+/-494	266 J		222 J		18.4		P
Calcium	ug/kg	+/-20%	318000		241000		27.4	*	P
Chromium	ug/kg	+/-20%	5020		2950		52	*	P
Cobalt	ug/kg	+/-494	481 J		366 J		27.1		P
Copper	ug/kg	+/-989	1950		1600		20		P
Iron	ug/kg	+/-20%	8310000		6340000		26.9	*	P
Lead	ug/kg	+/-989	2430		2070		16.1		P
Magnesium	ug/kg	+/-29700	180000		141000		24.4	*	P
Manganese	ug/kg	+/-20%	256000		218000		15.9		P
Potassium	ug/kg	+/-20%	274000		221000		21.6	*	P
Silver	ug/kg	+/-494	211 J		131 J		46.4		P
Sodium	ug/kg	+/-20%	229000		180000		24.3	*	P
Vanadium	ug/kg	+/-494	2960		2330		23.8	*	P
Zinc	ug/kg	+/-20%	49800		38000		26.9	*	P

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175SD

Sample ID: 1202039768

Duplicate ID: 1202039770

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20	1850000		1660000		10.7		P
Antimony	ug/kg	+/-20	47700		44600		6.53		P
Barium	ug/kg	+/-20	85400		60500		34.2	*	P
Cadmium	ug/kg	+/-20	52800		49700		6.02		P
Calcium	ug/kg	+/-20	924000		819000		12		P
Chromium	ug/kg	+/-20	55700		55200		.74		P
Cobalt	ug/kg	+/-20	50200		48600		3.21		P
Copper	ug/kg	+/-20	55600		51600		7.44		P
Iron	ug/kg	+/-20	8740000		7750000		12		P
Lead	ug/kg	+/-20	56400		52100		7.95		P
Magnesium	ug/kg	+/-20	702000		661000		6.04		P
Manganese	ug/kg	+/-20	363000		259000		33.5	*	P
Potassium	ug/kg	+/-20	1110000		1030000		8.08		P
Silver	ug/kg	+/-20	51600		48300		6.57		P
Sodium	ug/kg	+/-20	1080000		1010000		6.92		P
Vanadium	ug/kg	+/-20	54100		50100		7.68		P
Zinc	ug/kg	+/-20	103000		92400		10.8		P



**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175D

Sample ID: 246554001

Duplicate ID: 1202041612

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-995	302 J		351 J		15.2		MS
Beryllium	ug/kg	+/-99.5	213		229		7.12		MS
Nickel	ug/kg	+/-398	1120		1010		10		MS
Selenium	ug/kg		489 U		497 U				MS
Thallium	ug/kg		58.6 U		59.7 U				MS

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175SD

Sample ID: 1202041614

Duplicate ID: 1202041615

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-20	7440		7160		3.82		MS
Beryllium	ug/kg	+/-20	4720		4550		3.58		MS
Nickel	ug/kg	+/-20	5640		5350		5.34		MS
Selenium	ug/kg	+/-20	1820		1710		6.58		MS
Thallium	ug/kg	+/-20	9320		9370		.521		MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665

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>
1202039422	Mercury	ug/kg	5150	5750		112	71.6-128.3	AV

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665

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>
1202039766								
	Aluminum	ug/kg	10100000	9330000		92.2	56-144	P
	Antimony	ug/kg	167000	110000		65.8	71-130	P
	Barium	ug/kg	191000	204000		107	80-120	P
	Cadmium	ug/kg	58500	60300		103	81-120	P
	Calcium	ug/kg	9510000	9870000		104	83-117	P
	Chromium	ug/kg	227000	241000		106	80-120	P
	Cobalt	ug/kg	87900	92200		105	81-120	P
	Copper	ug/kg	168000	189000		113	81-118	P
	Iron	ug/kg	17300000	19200000		111	51-149	P
	Lead	ug/kg	82900	85900		104	79-121	P
	Magnesium	ug/kg	3850000	3790000		98.3	79-122	P
	Manganese	ug/kg	538000	551000		103	81-119	P
	Potassium	ug/kg	4140000	4250000		103	74-127	P
	Silver	ug/kg	29000	32300		112	66-134	P
	Sodium	ug/kg	983000	982000		99.9	74-127	P
	Vanadium	ug/kg	111000	128000		115	79-121	P
	Zinc	ug/kg	572000	614000		107	80-121	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

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<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>
1202041616								
	Arsenic	ug/kg	104000	107000		103	78-123	MS
	Beryllium	ug/kg	77600	79800		103	84-116	MS
	Nickel	ug/kg	134000	141000		105	78-123	MS
	Selenium	ug/kg	286000	290000		101	77-123	MS
	Thallium	ug/kg	121000	143000		118	78-122	MS

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## METALS

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## Serial Dilution Sample Summary

**SDG NO.** 10-1665 **Client ID** RE15-10-8175L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 246554001 **Serial Dilution ID:** 1202039425

<b>Analyte</b>	<b>Initial Value ug/L</b>	<b>C</b>	<b>Serial Value ug/L</b>	<b>C</b>	<b>% Difference</b>	<b>Qual</b>	<b>Acceptance Limit</b>	<b>M</b>
Mercury	.068	U	.34	U				AV

## METALS

-9-

## Serial Dilution Sample Summary

**SDG NO.** 10-1665 **Client ID** RE15-10-8175L

**Contract:** LANL01004

**Matrix:** SOLID **Level:** Low

**Sample ID:** 246554001 **Serial Dilution ID:** 1202039769

<u>Analyte</u>	<u>Initial Value</u> ug/L	<u>C</u>	<u>Serial Value</u> ug/L	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Aluminum	6570		6150		6.39		10	P
Antimony	3.3	U	16.5	U				P
Barium	174		155		10.9	E	10	P
Cadmium	2.68	J	5	U	100			P
Calcium	3200		2950		7.97			P
Chromium	50.6		43.4		14.3			P
Cobalt	4.84	J	7.5	U	100			P
Copper	19.7		16.9	J	14.5			P
Iron	83700		78000		6.81		10	P
Lead	24.5		24.8	J	1.22			P
Magnesium	1810		1660		8.29			P
Manganese	2580		2390		7.56		10	P
Potassium	2760		2590		6.34			P
Silver	2.12	J	5	U	100			P
Sodium	2310		2130		7.79			P
Vanadium	29.8		28.6		4.03			P
Zinc	502		454		9.56		10	P

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1665 Client ID RE15-10-8175L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246554001 Serial Dilution ID: 1202041613

<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	1.54	J	5	U	100			MS
Beryllium	1.09		1.01	J	7.8			MS
Nickel	5.73		5.8	J	1.22			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.3	U	1.5	U				MS



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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1665

Method Type: P

Contract: LANL01004

Lab Code: GEL

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<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	951751						
1202039765	MB for batch 951751	MB	S	18-FEB-10	.501g	50mL	
1202039766	LCS for batch 951751	LCS	S	18-FEB-10	.52g	50mL	
1202039768	RE15-10-8175S	MS	S	18-FEB-10	.5g	50mL	
1202039770	RE15-10-8175SD	MSD	S	18-FEB-10	.512g	50mL	
1202039767	RE15-10-8175D	DUP	S	18-FEB-10	.51g	50mL	
246554001	RE15-10-8175	SAMPLE	S	18-FEB-10	.508g	50mL	
246554002	RE15-10-8174	SAMPLE	S	18-FEB-10	.511g	50mL	
246554003	RE15-10-8176	SAMPLE	S	18-FEB-10	.505g	50mL	
246554004	RE15-10-8178	SAMPLE	S	18-FEB-10	.526g	50mL	
246554005	RE15-10-8177	SAMPLE	S	18-FEB-10	.517g	50mL	
246554006	RE15-10-8225	SAMPLE	S	18-FEB-10	.504g	50mL	

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SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1665

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	952552						
1202041611	MB for batch 952552	MB	S	21-FEB-10	.535g	50mL	
1202041616	LCS for batch 952552	LCS	S	21-FEB-10	.505g	50mL	
1202041614	RE15-10-8175S	MS	S	21-FEB-10	.529g	50mL	
1202041615	RE15-10-8175SD	MSD	S	21-FEB-10	.524g	50mL	
1202041612	RE15-10-8175D	DUP	S	21-FEB-10	.507g	50mL	
246554001	RE15-10-8175	SAMPLE	S	21-FEB-10	.516g	50mL	
246554002	RE15-10-8174	SAMPLE	S	21-FEB-10	.521g	50mL	
246554003	RE15-10-8176	SAMPLE	S	21-FEB-10	.507g	50mL	
246554004	RE15-10-8178	SAMPLE	S	21-FEB-10	.526g	50mL	
246554005	RE15-10-8177	SAMPLE	S	21-FEB-10	.554g	50mL	
246554006	RE15-10-8225	SAMPLE	S	21-FEB-10	.533g	50mL	

SW846

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1665

Method Type: AV

Contract: LANL01004

Lab Code: GEL

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<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 951616							
1202039421	MB for batch 951616	MB	S	19-FEB-10	.564g	30mL	
1202039422	LCS for batch 951616	LCS	S	19-FEB-10	.209g	30mL	
1202039424	RE15-10-8175S	MS	S	19-FEB-10	.595g	30mL	
1202039426	RE15-10-8175SD	MSD	S	19-FEB-10	.521g	30mL	
1202039423	RE15-10-8175D	DUP	S	19-FEB-10	.5g	30mL	
246554001	RE15-10-8175	SAMPLE	S	19-FEB-10	.546g	30mL	
246554002	RE15-10-8174	SAMPLE	S	19-FEB-10	.505g	30mL	
246554003	RE15-10-8176	SAMPLE	S	19-FEB-10	.538g	30mL	
246554004	RE15-10-8178	SAMPLE	S	19-FEB-10	.575g	30mL	
246554005	RE15-10-8177	SAMPLE	S	19-FEB-10	.546g	30mL	
246554006	RE15-10-8225	SAMPLE	S	19-FEB-10	.563g	30mL	

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SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 06-MAR-10

End Date: 06-MAR-10

Client Sdg: 10-1665

Method: MS

Data File: 100306-3

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	V	Zn
S0.0	1	17:56			X		X											X	X			X			
S10	1	18:00			X		X											X	X			X			
S100	1	18:04			X		X											X	X			X			
ICV01	1	18:07			X		X											X	X			X			
ICB01	1	18:11			X		X											X	X			X			
CRDL01	1	18:14			X		X											X	X			X			
ICSA01	1	18:18			X		X											X	X			X			
ICSAB01	1	18:22			X		X											X	X			X			
CCV01	1	18:25			X		X											X	X			X			
CCB01	1	18:29			X		X											X	X			X			
1202041611	2	18:33			X		X											X	X			X			
1202041616	40	18:36			X		X											X	X			X			
246554001	2	18:40			X		X											X	X			X			
1202041612	2	18:43			X		X											X	X			X			
1202041614	2	18:47			X		X											X	X			X			
1202041615	2	18:51			X		X											X	X			X			
1202041613	10	18:54			X		X											X	X			X			
CCV02	1	18:58			X		X											X	X			X			
CCB02	1	19:02			X		X											X	X			X			
246554002	2	19:05			X		X											X	X			X			
246554003	2	19:09			X		X											X	X			X			
246554004	2	19:12			X		X											X	X			X			
246554005	2	19:16			X		X											X	X			X			
246554006	2	19:20			X		X											X	X			X			
CCV03	1	19:23			X		X											X	X			X			
CCB03	1	19:27			X		X											X	X			X			

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 22-FEB-10

End Date: 22-FEB-10

Client Sdg: 10-1665

Method: AV

Data File: 022210S1-4

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	V	Zn
S0.0	1	09:53															X								
S0.2	1	09:55															X								
S0.5	1	09:57															X								
S2.0	1	09:59															X								
S5.0	1	10:01															X								
S10	1	10:03															X								
ICV01	1	10:05															X								
ICB01	1	10:07															X								
CRDL01	1	10:09															X								
CCV01	1	10:11															X								
CCB01	1	10:13															X								
I202039421	1	10:15															X								
I202039422	10	10:17															X								
ZZZZZZ	1	10:19																							
ZZZZZZ	1	10:21																							
ZZZZZZ	1	10:23																							
ZZZZZZ	1	10:25																							
ZZZZZZ	1	10:27																							
ZZZZZZ	1	10:29																							
ZZZZZZ	1	10:31																							
ZZZZZZ	1	10:33																							
CCV02	1	10:35															X								
CCB02	1	10:37															X								
ZZZZZZ	1	10:39																							
ZZZZZZ	1	10:41																							
ZZZZZZ	1	10:43																							
ZZZZZZ	1	10:45																							
ZZZZZZ	1	10:47																							
ZZZZZZ	1	10:49																							
246554001	1	10:51															X								
I202039423	1	10:53															X								
I202039424	1	10:55															X								
I202039426	1	10:57															X								
CCV03	1	10:59															X								
CCB03	1	11:01															X								
I202039425	5	11:03															X								
246554002	1	11:05															X								
246554003	1	11:07															X								
246554004	1	11:09															X								
246554005	1	11:11															X								

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time
246554006	1	11:13
<del>ZZZZZZ</del>	1	11:15
<del>ZZZZZZ</del>	10	11:17
<del>ZZZZZZ</del>	1	11:19
<del>ZZZZZZ</del>	1	11:21
CCV04	1	11:23
CCB04	1	11:25

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 26-FEB-10

End Date: 26-FEB-10

Client Sdg: 10-1665

Method: P

Data File: 022610D-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	V	Zn
S0.0	1	12:53	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S0.1	1	12:57		X		X		X		X	X	X		X		X			X		X			X	X
S0.5	1	13:00	X	X		X		X	X	X	X	X		X	X	X			X		X			X	X
SCAL	1	13:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S10	1	13:07	X					X					X		X							X			
ICV01	1	13:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICB01	1	13:13	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
PQL01	1	13:16	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSA01	1	13:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSAB01	1	13:23	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR01	1	13:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR02	1	13:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV01	1	13:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB01	1	13:35	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR03	1	13:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR04	1	13:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV02	1	13:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB02	1	13:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	14:08																							
ZZZZZZ	1	14:11																							
ZZZZZZ	1	14:14																							
ZZZZZZ	1	14:18																							
ZZZZZZ	1	14:22																							
ZZZZZZ	1	14:25																							
ZZZZZZ	5	14:29																							
ZZZZZZ	1	14:33																							
CCV03	1	14:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB03	1	14:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	14:44																							
ZZZZZZ	1	14:47																							
ZZZZZZ	1	14:51																							
ZZZZZZ	1	14:55																							
ZZZZZZ	1	14:58																							
ZZZZZZ	1	15:02																							
ZZZZZZ	1	15:06																							
ZZZZZZ	1	15:09																							
ZZZZZZ	1	15:13																							
CCV04	1	15:17	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB04	1	15:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	15:24																							

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time																		
ZZZZZZ	1	15:28																		
ZZZZZZ	1	15:32																		
ZZZZZZ	1	15:36																		
ZZZZZZ	1	15:40																		
ZZZZZZ	1	15:44																		
ZZZZZZ	5	15:49																		
ZZZZZZ	1	15:56																		
ZZZZZZ	5	16:00																		
CCV05	1	16:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PQL02	1	16:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB05	1	16:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	16:15																		
CCV06	1	16:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB06	1	16:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	16:56																		
ZZZZZZ	1	16:59																		
ZZZZZZ	1	17:03																		
ZZZZZZ	1	17:07																		
ZZZZZZ	1	17:10																		
ZZZZZZ	5	17:14																		
ZZZZZZ	1	17:18																		
CCV07	1	17:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB07	1	17:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	10	17:30																		
ZZZZZZ	10	17:34																		
ZZZZZZ	10	17:37																		
ZZZZZZ	50	17:41																		
ZZZZZZ	10	17:45																		
CCV08	1	17:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB08	1	17:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039765	1	17:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039766	1	17:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
246554001	1	18:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039767	1	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039768	1	18:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039770	1	18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1202039769	5	18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV09	1	18:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB09	1	18:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
246554002	1	18:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X



**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
246554003	1	18:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
246554004	1	18:35	X			X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
246554005	1	18:39	X			X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
246554006	1	18:43	X			X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV10	1	18:46	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB10	1	18:50	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 05-MAR-10

End Date: 05-MAR-10

Client Sdg: 10-1665

Method: P

Data File: 030510B-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	03:15		X																					
S0.1	1	03:19		X																					
S0.5	1	03:21		X																					
SCAL	1	03:25		X																					
S10	1	03:29																							
ICV01	1	03:31		X																					
ICB01	1	03:35		X																					
PQL01	1	03:38		X																					
ICSA01	1	03:42		X																					
ICSAB01	1	03:45		X																					
LR01	1	03:47		X																					
LR02	1	03:50		X																					
CCV01	1	03:54		X																					
CCB01	1	03:58		X																					
ZZZZZZ	1	04:01																							
ZZZZZZ	1	04:05																							
ZZZZZZ	1	04:09																							
ZZZZZZ	1	04:12																							
ZZZZZZ	1	04:15																							
ZZZZZZ	1	04:18																							
ZZZZZZ	5	04:21																							
ZZZZZZ	1	04:25																							
ZZZZZZ	1	04:28																							
CCV02	1	04:32		X																					
CCB02	1	04:36		X																					
ZZZZZZ	1	04:39																							
ZZZZZZ	1	04:43																							
ZZZZZZ	1	04:46																							
ZZZZZZ	1	04:50																							
ZZZZZZ	1	04:53																							
ZZZZZZ	1	04:56																							
ZZZZZZ	5	05:00																							
ZZZZZZ	1	05:04																							
ZZZZZZ	1	05:07																							
ZZZZZZ	1	05:10																							
CCV03	1	05:14		X																					
CCB03	1	05:18		X																					
ZZZZZZ	1	05:21																							
ZZZZZZ	1	05:25																							
ZZZZZZ	1	05:29																							

[illegible]

**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	V	Zn
ZZZZZZ	10	07:56																							
ZZZZZZ	50	08:00																							
CCV08	1	08:04		X																					
PQL02	1	08:07		X																					
CCB08	1	08:11		X																					
ZZZZZZ	10	08:14																							
ZZZZZZ	10	08:19																							
ZZZZZZ	10	08:23																							
ZZZZZZ	10	08:27																							
ZZZZZZ	50	08:31																							
ZZZZZZ	10	08:34																							
CCV09	1	08:38		X																					
PQL03	1	08:42		X																					
CCB09	1	08:45		X																					
ZZZZZZ	1	09:01																							
ZZZZZZ	1	09:04																							
ZZZZZZ	1	09:08																							
ZZZZZZ	1	09:11																							
CCV10	1	09:15		X																					
CCB10	1	09:18		X																					
ZZZZZZ	1	09:24																							
ZZZZZZ	1	09:28																							
ZZZZZZ	500	09:31																							
ZZZZZZ	500	09:35																							
ZZZZZZ	500	09:39																							
ZZZZZZ	2500	09:42																							
CCV11	1	09:46		X																					
CCB11	1	09:50		X																					
ZZZZZZ	1	09:58																							
ZZZZZZ	1	10:02																							
ZZZZZZ	1	10:05																							
ZZZZZZ	1	10:09																							
ZZZZZZ	5	10:12																							
ZZZZZZ	200	10:16																							
ZZZZZZ	1000	10:19																							
ZZZZZZ	20	10:23																							
ZZZZZZ	100	10:28																							
CCV12	1	10:32		X																					
CCB12	1	10:35		X																					
ZZZZZZ	10	10:41																							

Samp No.	D/F	Run Time
ZZZZZZ	10	10:44
ZZZZZZ	10	10:48
ZZZZZZ	50	10:52
ZZZZZZ	200	10:56
ZZZZZZ	200	11:00
ZZZZZZ	200	11:04
ZZZZZZ	1000	11:08
CCV13	1	11:11
CCB13	1	11:15
ZZZZZZ	1	11:20
ZZZZZZ	1	11:24
ZZZZZZ	5	11:27
ZZZZZZ	5	11:31
ZZZZZZ	5	11:34
ZZZZZZ	25	11:37
ZZZZZZ	20	11:41
ZZZZZZ	20	11:44
ZZZZZZ	20	11:48
ZZZZZZ	20	11:51
ZZZZZZ	20	11:55
ZZZZZZ	1	11:58
ZZZZZZ	1	12:01
CCV14	1	12:04
CCB14	1	12:07
ZZZZZZ	200	12:11
CCV15	1	12:14
CCB15	1	12:18
ZZZZZZ	200	12:26
CCV16	1	12:30
CCB16	1	12:33
ZZZZZZ	1	12:42
ZZZZZZ	1	12:45
ZZZZZZ	1	12:49
ZZZZZZ	1	12:52
ZZZZZZ	5	12:56
ZZZZZZ	1	12:59
CCV17	1	13:02
CCB17	1	13:06
ZZZZZZ	1	13:20
ZZZZZZ	1	13:23

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	V	Zn
ZZZZZZ	1	13:27																							
ZZZZZZ	1	13:30																							
ZZZZZZ	1	13:34																							
ZZZZZZ	1	13:37																							
ZZZZZZ	1	13:41																							
ZZZZZZ	5	13:44																							
CCV18	1	13:48		X																					
PQL04	1	13:51		X																					
CCB18	1	13:55		X																					
ZZZZZZ	500	13:58																							
CCV19	1	14:02		X																					
CCB19	1	14:05		X																					
ZZZZZZ	1	14:11																							
CCV20	1	14:14		X																					
CCB20	1	14:18		X																					
246554004	5	14:22		X																					
246554005	5	14:25		X																					
246554006	5	14:29		X																					
CCV21	1	14:32		X																					
CCB21	1	14:36		X																					

# Standards

METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1665

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
	Vanadium		2.0	10
	Zinc		2.0	10



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**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1665

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 15-JUN-09

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	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
SOLID	Mercury		0.068	.2

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1665

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1665**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
<b>Parmname</b>	<b>Wavelength</b>					
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	-0.05500	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	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	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: **10-1665**Contract: LANL01004Instrument: OPTIMA1Effective 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	11.3250	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	-1.59900	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	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
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	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	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	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1665**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
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	0.13300	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	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1665**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
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	-0.99900	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
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
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	4.41600	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
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	0.38100	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	2.08700	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	1.04000
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	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
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	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000



**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1665

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-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
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1665

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA1

<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
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

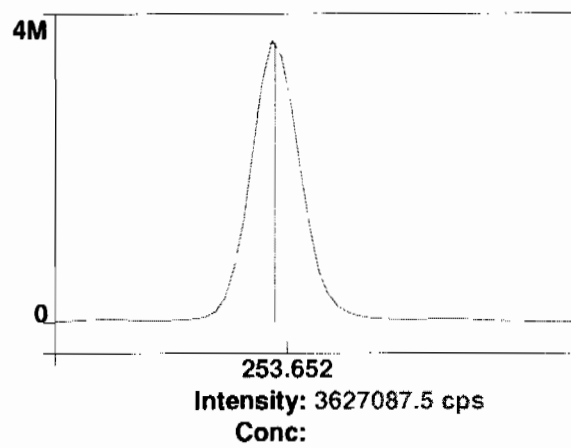
# Raw Data

Method: Hg\_ReAlign  
Result: 030810

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

=====  
Analysis Begun

Start Time: 2/26/2010 12:53:49

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022610B.sif

Batch ID:

Results Data Set: 022610D

Results Library: c:\pe\optimal\Results\Results.mdb  
=====

## Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 2/26/2010 03:41:55

IEC File: 011510.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	No
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	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/26/2010 12:53:52

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	109054.7	109054.7	99.9 %	12:54:26
1	Al 396.153Radial†	-178.1	-178.3	[0.00] µg/L	12:54:26
1	Ca 317.933Radial†	379.6	380.1	[0.00] µg/L	12:54:46
1	Fe 238.204 Radial†	31.2	31.2	[0.00] µg/L	12:54:46

1	K 766.490 Radial†	164.7	165.0	[0.00]	µg/L	12:54:26
1	Mg 279.077 IEC†	10.0	10.0	[0.00]	µg/L	12:54:46
1	Na 589.592 Radial†	245.2	245.6	[0.00]	µg/L	12:54:26
1	Sr 421.552†	159.9	160.1	[0.00]	µg/L	12:54:26
1	Sc 361.383	1683748.1	1683748.1	100.06	%	12:55:48
1	Y 371.029	936203.6	936203.6	100.01	%	12:55:48
1	Ag 328.068†	-582.4	-582.0	[0.00]	µg/L	12:55:54
1	As 188.979†	-4.5	-4.5	[0.00]	µg/L	12:56:14
1	B 249.677†	169.1	169.0	[0.00]	µg/L	12:56:14
1	Ba 233.527†	-19.7	-19.7	[0.00]	µg/L	12:56:14
1	Be 313.107†	-1974.8	-1973.5	[0.00]	µg/L	12:55:54
1	Cd 226.502†	-143.8	-143.7	[0.00]	µg/L	12:56:14
1	Co 228.616†	26.0	26.0	[0.00]	µg/L	12:56:14
1	Cr 267.716†	89.0	88.9	[0.00]	µg/L	12:56:14
1	Cu 324.752†	2643.0	2641.3	[0.00]	µg/L	12:55:54
1	Mn 257.610†	-530.9	-530.5	[0.00]	µg/L	12:56:14
1	Mo 202.031†	6.9	6.9	[0.00]	µg/L	12:56:14
1	Ni 231.604†	305.7	305.5	[0.00]	µg/L	12:56:14
1	P 214.914†	237.6	237.5	[0.00]	µg/L	12:56:14
1	Pb 220.353†	39.1	39.0	[0.00]	µg/L	12:56:14
1	S 181.975 Axial†	18.4	18.4	[0.00]	µg/L	12:56:14
1	Sb 206.836†	19.7	19.7	[0.00]	µg/L	12:56:14
1	Se 196.026†	13.6	13.6	[0.00]	µg/L	12:56:14
1	SiO2†	1368.3	1367.4	[0.00]	µg/L	12:55:54
1	Si 251.611†	349.0	348.7	[0.00]	µg/L	12:56:14
1	Sn 189.927†	4.3	4.3	[0.00]	µg/L	12:56:14
1	Ti 334.940†	-30.6	-30.6	[0.00]	µg/L	12:55:54
1	Tl 190.801†	-26.0	-25.9	[0.00]	µg/L	12:56:14
1	U 409.014†	127.5	127.4	[0.00]	µg/L	12:55:54
1	V 292.402†	-130.0	-130.0	[0.00]	µg/L	12:55:54
1	Zn 213.857†	588.1	587.7	[0.00]	µg/L	12:56:14
2	Sc RADIAL	109276.2	109276.2	100	%	12:54:51
2	Al 396.153Radial†	-172.9	-172.7	[0.00]	µg/L	12:54:51
2	Ca 317.933Radial†	386.8	386.6	[0.00]	µg/L	12:55:12
2	Fe 238.204 Radial†	30.3	30.2	[0.00]	µg/L	12:55:12
2	K 766.490 Radial†	239.2	239.0	[0.00]	µg/L	12:54:51
2	Mg 279.077 IEC†	9.0	9.0	[0.00]	µg/L	12:55:12
2	Na 589.592 Radial†	234.8	234.6	[0.00]	µg/L	12:54:51
2	Sr 421.552†	148.3	148.2	[0.00]	µg/L	12:54:51
2	Sc 361.383	1680544.4	1680544.4	99.874	%	12:56:20
2	Y 371.029	934924.8	934924.8	99.872	%	12:56:20
2	Ag 328.068†	-552.0	-552.7	[0.00]	µg/L	12:56:26
2	As 188.979†	-3.1	-3.1	[0.00]	µg/L	12:56:46
2	B 249.677†	152.7	152.9	[0.00]	µg/L	12:56:46
2	Ba 233.527†	-17.2	-17.3	[0.00]	µg/L	12:56:46
2	Be 313.107†	-1934.5	-1936.9	[0.00]	µg/L	12:56:26
2	Cd 226.502†	-145.0	-145.1	[0.00]	µg/L	12:56:46
2	Co 228.616†	25.2	25.3	[0.00]	µg/L	12:56:46
2	Cr 267.716†	93.5	93.6	[0.00]	µg/L	12:56:46
2	Cu 324.752†	2617.9	2621.2	[0.00]	µg/L	12:56:26
2	Mn 257.610†	-538.6	-539.3	[0.00]	µg/L	12:56:46
2	Mo 202.031†	3.9	3.9	[0.00]	µg/L	12:56:46
2	Ni 231.604†	298.2	298.6	[0.00]	µg/L	12:56:46
2	P 214.914†	240.4	240.7	[0.00]	µg/L	12:56:46
2	Pb 220.353†	48.2	48.3	[0.00]	µg/L	12:56:46
2	S 181.975 Axial†	17.4	17.4	[0.00]	µg/L	12:56:46
2	Sb 206.836†	23.4	23.5	[0.00]	µg/L	12:56:46
2	Se 196.026†	7.1	7.1	[0.00]	µg/L	12:56:46
2	SiO2†	1385.2	1386.9	[0.00]	µg/L	12:56:26
2	Si 251.611†	360.7	361.2	[0.00]	µg/L	12:56:46
2	Sn 189.927†	2.4	2.4	[0.00]	µg/L	12:56:46
2	Ti 334.940†	-12.1	-12.1	[0.00]	µg/L	12:56:26
2	Tl 190.801†	-26.5	-26.6	[0.00]	µg/L	12:56:46
2	U 409.014†	130.3	130.4	[0.00]	µg/L	12:56:26
2	V 292.402†	-177.6	-177.8	[0.00]	µg/L	12:56:26
2	Zn 213.857†	579.3	580.1	[0.00]	µg/L	12:56:46
3	Sc RADIAL	109270.9	109270.9	100	%	12:55:17
3	Al 396.153Radial†	-173.8	-173.7	[0.00]	µg/L	12:55:17
3	Ca 317.933Radial†	384.2	383.9	[0.00]	µg/L	12:55:38
3	Fe 238.204 Radial†	32.4	32.4	[0.00]	µg/L	12:55:38
3	K 766.490 Radial†	288.5	288.3	[0.00]	µg/L	12:55:17

3	Mg 279.077 IEC†	7.3	7.3	[0.00]	µg/L	12:55:38
3	Na 589.592 Radial†	225.8	225.6	[0.00]	µg/L	12:55:17
3	Sr 421.552†	156.7	156.6	[0.00]	µg/L	12:55:17
3	Sc 361.383	1683718.1	1683718.1	100.06	%	12:56:52
3	Y 371.029	937235.9	937235.9	100.12	%	12:56:52
3	Ag 328.068†	-563.4	-563.0	[0.00]	µg/L	12:56:58
3	As 188.979†	-3.9	-3.9	[0.00]	µg/L	12:57:18
3	B 249.677†	154.1	154.0	[0.00]	µg/L	12:57:18
3	Ba 233.527†	-16.8	-16.8	[0.00]	µg/L	12:57:18
3	Be 313.107†	-1928.2	-1927.0	[0.00]	µg/L	12:56:58
3	Cd 226.502†	-143.9	-143.8	[0.00]	µg/L	12:57:18
3	Co 228.616†	15.5	15.4	[0.00]	µg/L	12:57:18
3	Cr 267.716†	88.0	88.0	[0.00]	µg/L	12:57:18
3	Cu 324.752†	2608.3	2606.7	[0.00]	µg/L	12:56:58
3	Mn 257.610†	-563.3	-562.9	[0.00]	µg/L	12:57:18
3	Mo 202.031†	2.3	2.3	[0.00]	µg/L	12:57:18
3	Ni 231.604†	292.1	291.9	[0.00]	µg/L	12:57:18
3	P 214.914†	246.5	246.3	[0.00]	µg/L	12:57:18
3	Pb 220.353†	41.3	41.2	[0.00]	µg/L	12:57:18
3	S 181.975 Axial†	26.3	26.3	[0.00]	µg/L	12:57:18
3	Sb 206.836†	19.9	19.9	[0.00]	µg/L	12:57:18
3	Se 196.026†	19.3	19.2	[0.00]	µg/L	12:57:18
3	SiO2†	1396.1	1395.2	[0.00]	µg/L	12:56:58
3	Si 251.611†	382.4	382.1	[0.00]	µg/L	12:57:18
3	Sn 189.927†	7.0	7.0	[0.00]	µg/L	12:57:18
3	Ti 334.940†	18.3	18.2	[0.00]	µg/L	12:56:58
3	Tl 190.801†	-24.3	-24.2	[0.00]	µg/L	12:57:18
3	U 409.014†	194.8	194.7	[0.00]	µg/L	12:56:58
3	V 292.402†	-148.1	-148.0	[0.00]	µg/L	12:56:58
3	Zn 213.857†	573.4	573.0	[0.00]	µg/L	12:57:18

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Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1682670.2	1841.02	0.11%	100.00 %
Sc RADIAL	109200.6	126.40	0.12%	100 %
Y 371.029	936121.4	1157.78	0.12%	100.00 %
Ag 328.068†	-565.9	14.85	2.62%	[0.00] µg/L
Al 396.153Radial†	-174.9	2.97	1.70%	[0.00] µg/L
As 188.979†	-3.9	0.67	17.41%	[0.00] µg/L
B 249.677†	158.6	8.96	5.65%	[0.00] µg/L
Ba 233.527†	-17.9	1.58	8.79%	[0.00] µg/L
Be 313.107†	-1945.8	24.51	1.26%	[0.00] µg/L
Ca 317.933Radial†	383.6	3.23	0.84%	[0.00] µg/L
Cd 226.502†	-144.2	0.80	0.55%	[0.00] µg/L
Co 228.616†	22.2	5.90	26.52%	[0.00] µg/L
Cr 267.716†	90.2	3.03	3.36%	[0.00] µg/L
Cu 324.752†	2623.1	17.36	0.66%	[0.00] µg/L
Fe 238.204 Radial†	31.3	1.09	3.49%	[0.00] µg/L
K 766.490 Radial†	230.7	62.07	26.90%	[0.00] µg/L
Mg 279.077 IEC†	8.8	1.35	15.36%	[0.00] µg/L
Mn 257.610†	-544.2	16.75	3.08%	[0.00] µg/L
Mo 202.031†	4.4	2.32	53.29%	[0.00] µg/L
Na 589.592 Radial†	235.3	10.00	4.25%	[0.00] µg/L
Ni 231.604†	298.7	6.78	2.27%	[0.00] µg/L
P 214.914†	241.5	4.50	1.86%	[0.00] µg/L
Pb 220.353†	42.8	4.81	11.24%	[0.00] µg/L
S 181.975 Axial†	20.7	4.90	23.71%	[0.00] µg/L
Sb 206.836†	21.0	2.13	10.13%	[0.00] µg/L
Se 196.026†	13.3	6.08	45.67%	[0.00] µg/L
SiO2†	1383.2	14.27	1.03%	[0.00] µg/L
Si 251.611†	364.0	16.87	4.64%	[0.00] µg/L
Sn 189.927†	4.6	2.31	50.64%	[0.00] µg/L
Sr 421.552†	155.0	6.15	3.97%	[0.00] µg/L
Ti 334.940†	-8.1	24.65	302.54%	[0.00] µg/L
Tl 190.801†	-25.6	1.21	4.73%	[0.00] µg/L
U 409.014†	150.8	38.00	25.19%	[0.00] µg/L
V 292.402†	-151.9	24.17	15.91%	[0.00] µg/L
Zn 213.857†	580.3	7.35	1.27%	[0.00] µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/26/2010 12:57:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	109052.5	109052.5	99.9 %	12:58:02
1	K 766.490 Radial†	1981.2	1753.1	[1000] µg/L	12:58:02
1	Sr 421.552†	22418.8	22294.3	[100] µg/L	12:58:02
1	Sc 361.383	1656988.3	1656988.3	98.474 %	12:58:24
1	Y 371.029	919316.6	919316.6	98.205 %	12:58:24
1	Ag 328.068†	10888.3	11623.0	[100] µg/L	12:58:29
1	As 188.979†	51.1	55.8	[100] µg/L	12:58:50
1	B 249.677†	2071.5	1944.9	[100] µg/L	12:58:29
1	Ba 233.527†	3985.1	4064.8	[100] µg/L	12:58:29
1	Be 313.107†	141240.9	145375.8	[100] µg/L	12:58:24
1	Cd 226.502†	3469.4	3667.4	[100] µg/L	12:58:29
1	Co 228.616†	2012.6	2021.5	[100] µg/L	12:58:50
1	Cr 267.716†	4137.6	4111.5	[100] µg/L	12:58:29
1	Cu 324.752†	17264.6	14909.1	[100] µg/L	12:58:29
1	Mn 257.610†	28188.0	29169.1	[100] µg/L	12:58:29
1	Mo 202.031†	927.7	937.7	[100] µg/L	12:58:50
1	Ni 231.604†	1843.8	1573.7	[100] µg/L	12:58:50
1	P 214.914†	489.6	255.7	[500] µg/L	12:58:50
1	Pb 220.353†	376.6	339.6	[100] µg/L	12:58:50
1	S 181.975 Axial†	77.1	57.6	[200] µg/L	12:58:50
1	Sb 206.836†	121.9	102.8	[100] µg/L	12:58:50
1	Se 196.026†	101.0	89.2	[100] µg/L	12:58:50
1	SiO2†	6318.4	5033.1	[1069.5] µg/L	12:58:29
1	Si 251.611†	6515.2	6252.1	[500] µg/L	12:58:29
1	Sn 189.927†	225.3	224.2	[100] µg/L	12:58:50
1	Ti 334.940†	37594.1	38184.9	[100] µg/L	12:58:29
1	Tl 190.801†	68.3	94.9	[100] µg/L	12:58:50
1	U 409.014†	1120.0	986.5	[100] µg/L	12:58:29
1	V 292.402†	7994.9	8270.8	[100] µg/L	12:58:29
1	Zn 213.857†	4590.5	4081.4	[100] µg/L	12:58:29
2	Sc RADIAL	109415.4	109415.4	100 %	12:58:08
2	K 766.490 Radial†	2036.3	1801.5	[1000] µg/L	12:58:08
2	Sr 421.552†	22495.0	22295.8	[100] µg/L	12:58:08
2	Sc 361.383	1651631.7	1651631.7	98.155 %	12:58:56
2	Y 371.029	915346.7	915346.7	97.781 %	12:58:56
2	Ag 328.068†	10902.0	11672.8	[100] µg/L	12:59:01
2	As 188.979†	47.2	52.0	[100] µg/L	12:59:22
2	B 249.677†	2035.9	1915.5	[100] µg/L	12:59:01
2	Ba 233.527†	3980.8	4073.5	[100] µg/L	12:59:01
2	Be 313.107†	141710.6	146319.6	[100] µg/L	12:58:56
2	Cd 226.502†	3449.6	3658.6	[100] µg/L	12:59:01
2	Co 228.616†	2014.3	2029.9	[100] µg/L	12:59:22
2	Cr 267.716†	4130.3	4117.7	[100] µg/L	12:59:01
2	Cu 324.752†	17287.0	14988.8	[100] µg/L	12:59:01
2	Mn 257.610†	28271.2	29346.7	[100] µg/L	12:59:01
2	Mo 202.031†	934.7	947.9	[100] µg/L	12:59:22
2	Ni 231.604†	1845.6	1581.6	[100] µg/L	12:59:22
2	P 214.914†	486.0	253.7	[500] µg/L	12:59:22
2	Pb 220.353†	377.7	342.0	[100] µg/L	12:59:22
2	S 181.975 Axial†	76.4	57.2	[200] µg/L	12:59:22
2	Sb 206.836†	122.3	103.6	[100] µg/L	12:59:22
2	Se 196.026†	94.4	82.9	[100] µg/L	12:59:22
2	SiO2†	6325.8	5061.5	[1069.5] µg/L	12:59:01
2	Si 251.611†	6529.5	6288.2	[500] µg/L	12:59:01
2	Sn 189.927†	236.9	236.8	[100] µg/L	12:59:22
2	Ti 334.940†	37548.6	38262.4	[100] µg/L	12:59:01
2	Tl 190.801†	64.5	91.3	[100] µg/L	12:59:22
2	U 409.014†	1008.4	876.5	[100] µg/L	12:59:01
2	V 292.402†	8059.5	8362.9	[100] µg/L	12:59:01



2	Zn 213.857†	4596.6	4102.7	[100] µg/L	12:59:01
3	Sc RADIAL	109443.9	109443.9	100 %	12:58:13
3	K 766.490 Radial†	2122.1	1886.6	[1000] µg/L	12:58:13
3	Sr 421.552†	22589.4	22384.2	[100] µg/L	12:58:13
3	Sc 361.383	1646735.2	1646735.2	97.864 %	12:59:27
3	Y 371.029	915869.2	915869.2	97.837 %	12:59:27
3	Ag 328.068†	10866.4	11669.5	[100] µg/L	12:59:33
3	As 188.979†	53.2	58.2	[100] µg/L	12:59:54
3	B 249.677†	2062.8	1949.2	[100] µg/L	12:59:33
3	Ba 233.527†	4009.2	4114.6	[100] µg/L	12:59:33
3	Be 313.107†	141581.8	146617.2	[100] µg/L	12:59:27
3	Cd 226.502†	3447.1	3666.5	[100] µg/L	12:59:33
3	Co 228.616†	2033.3	2055.4	[100] µg/L	12:59:54
3	Cr 267.716†	4158.7	4159.3	[100] µg/L	12:59:33
3	Cu 324.752†	17369.9	15125.9	[100] µg/L	12:59:33
3	Mn 257.610†	28472.8	29638.3	[100] µg/L	12:59:33
3	Mo 202.031†	932.3	948.3	[100] µg/L	12:59:54
3	Ni 231.604†	1857.4	1599.3	[100] µg/L	12:59:54
3	P 214.914†	493.9	263.2	[500] µg/L	12:59:54
3	Pb 220.353†	374.9	340.2	[100] µg/L	12:59:54
3	S 181.975 Axial†	77.5	58.5	[200] µg/L	12:59:54
3	Sb 206.836†	119.9	101.5	[100] µg/L	12:59:54
3	Se 196.026†	98.2	87.0	[100] µg/L	12:59:54
3	SiO2†	6383.6	5139.7	[1069.5] µg/L	12:59:33
3	Si 251.611†	6615.3	6395.6	[500] µg/L	12:59:33
3	Sn 189.927†	232.4	232.9	[100] µg/L	12:59:54
3	Ti 334.940†	37856.7	38691.0	[100] µg/L	12:59:33
3	Tl 190.801†	65.2	92.2	[100] µg/L	12:59:54
3	U 409.014†	996.4	867.3	[100] µg/L	12:59:33
3	V 292.402†	8004.4	8331.0	[100] µg/L	12:59:33
3	Zn 213.857†	4622.6	4143.2	[100] µg/L	12:59:33

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Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1651785.1	5128.27	0.31%	98.165 %	
Sc RADIAL	109303.9	218.22	0.20%	100 %	
Y 371.029	916844.2	2157.03	0.24%	97.941 %	
Ag 328.068†	11655.1	27.85	0.24%	[100] µg/L	
As 188.979†	55.3	3.14	5.67%	[100] µg/L	
B 249.677†	1936.6	18.35	0.95%	[100] µg/L	
Ba 233.527†	4084.3	26.62	0.65%	[100] µg/L	
Be 313.107†	146104.2	648.12	0.44%	[100] µg/L	
Cd 226.502†	3664.2	4.85	0.13%	[100] µg/L	
Co 228.616†	2035.6	17.68	0.87%	[100] µg/L	
Cr 267.716†	4129.5	25.98	0.63%	[100] µg/L	
Cu 324.752†	15008.0	109.66	0.73%	[100] µg/L	
K 766.490 Radial†	1813.8	67.58	3.73%	[1000] µg/L	
Mn 257.610†	29384.7	236.90	0.81%	[100] µg/L	
Mo 202.031†	944.7	6.02	0.64%	[100] µg/L	
Ni 231.604†	1584.9	13.09	0.83%	[100] µg/L	
P 214.914†	257.5	5.04	1.96%	[500] µg/L	
Pb 220.353†	340.6	1.22	0.36%	[100] µg/L	
S 181.975 Axial†	57.8	0.64	1.12%	[200] µg/L	
Sb 206.836†	102.6	1.05	1.03%	[100] µg/L	
Se 196.026†	86.4	3.23	3.73%	[100] µg/L	
SiO2†	5078.1	55.20	1.09%	[1069.5] µg/L	
Si 251.611†	6312.0	74.64	1.18%	[500] µg/L	
Sn 189.927†	231.3	6.43	2.78%	[100] µg/L	
Sr 421.552†	22324.8	51.49	0.23%	[100] µg/L	
Ti 334.940†	38379.4	272.55	0.71%	[100] µg/L	
Tl 190.801†	92.8	1.90	2.05%	[100] µg/L	
U 409.014†	910.1	66.35	7.29%	[100] µg/L	
V 292.402†	8321.6	46.77	0.56%	[100] µg/L	
Zn 213.857†	4109.1	31.39	0.76%	[100] µg/L	

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 2/26/2010 13:00:02  
 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	110260.3	110260.3	101 %		13:00:35
1	Al 396.153Radial†	9843.2	9923.5	[5000] µg/L		13:00:35
1	Ca 317.933Radial†	15220.4	14690.6	[5000] µg/L		13:00:55
1	K 766.490 Radial†	8949.1	8632.3	[5000] µg/L		13:00:35
1	Mg 279.077 IEC†	507.0	493.4	[5000] µg/L		13:00:55
1	Sr 421.552†	109452.4	108245.5	[500] µg/L		13:00:35
1	Sc 361.383	1683963.2	1683963.2	100.08 %		13:01:59
1	Y 371.029	931583.8	931583.8	99.515 %		13:01:59
1	Ag 328.068†	54423.2	54947.4	[500] µg/L		13:02:05
1	As 188.979†	275.3	278.9	[500] µg/L		13:02:25
1	B 249.677†	9399.7	9233.8	[500] µg/L		13:02:05
1	Ba 233.527†	19192.8	19196.0	[500] µg/L		13:02:05
1	Be 313.107†	694060.4	695473.3	[500] µg/L		13:01:59
1	Cd 226.502†	16817.8	16949.1	[500] µg/L		13:02:05
1	Co 228.616†	9613.8	9584.1	[500] µg/L		13:02:05
1	Cr 267.716†	19370.7	19265.6	[500] µg/L		13:02:05
1	Cu 324.752†	71892.9	69214.6	[500] µg/L		13:02:05
1	Mn 257.610†	136306.7	136746.2	[500] µg/L		13:02:05
1	Mo 202.031†	4508.7	4500.9	[500] µg/L		13:02:25
1	Ni 231.604†	7730.8	7426.2	[500] µg/L		13:02:05
1	P 214.914†	1419.1	1176.5	[2500] µg/L		13:02:25
1	Pb 220.353†	1658.7	1614.6	[500] µg/L		13:02:25
1	S 181.975 Axial†	284.7	263.8	[1000] µg/L		13:02:25
1	Sb 206.836†	488.1	466.7	[500] µg/L		13:02:25
1	Se 196.026†	427.1	413.4	[500] µg/L		13:02:25
1	SiO2†	25641.0	24238.1	[5347.5] µg/L		13:02:05
1	Si 251.611†	30610.3	30222.7	[2500] µg/L		13:02:05
1	Sn 189.927†	1107.4	1102.0	[500] µg/L		13:02:25
1	Ti 334.940†	187413.5	187277.7	[500] µg/L		13:01:59
1	Tl 190.801†	406.7	431.9	[500] µg/L		13:02:25
1	U 409.014†	5150.0	4995.2	[500] µg/L		13:02:05
1	V 292.402†	39009.3	39131.3	[500] µg/L		13:02:05
1	Zn 213.857†	19310.7	18715.6	[500] µg/L		13:02:05
2	Sc RADIAL	109643.4	109643.4	100 %		13:01:01
2	Al 396.153Radial†	9870.1	10005.1	[5000] µg/L		13:01:01
2	Ca 317.933Radial†	15208.1	14763.1	[5000] µg/L		13:01:22
2	K 766.490 Radial†	8929.0	8662.2	[5000] µg/L		13:01:01
2	Mg 279.077 IEC†	502.2	491.4	[5000] µg/L		13:01:22
2	Sr 421.552†	109615.8	109018.1	[500] µg/L		13:01:01
2	Sc 361.383	1666060.3	1666060.3	99.013 %		13:02:32
2	Y 371.029	918687.8	918687.8	98.138 %		13:02:32
2	Ag 328.068†	54768.4	55880.3	[500] µg/L		13:02:37
2	As 188.979†	267.4	273.9	[500] µg/L		13:02:58
2	B 249.677†	9478.2	9414.0	[500] µg/L		13:02:37
2	Ba 233.527†	19321.4	19531.9	[500] µg/L		13:02:37
2	Be 313.107†	688641.3	697452.6	[500] µg/L		13:02:32
2	Cd 226.502†	16934.6	17247.7	[500] µg/L		13:02:37
2	Co 228.616†	9721.2	9795.9	[500] µg/L		13:02:37
2	Cr 267.716†	19490.9	19595.1	[500] µg/L		13:02:37
2	Cu 324.752†	72272.6	70370.1	[500] µg/L		13:02:37
2	Mn 257.610†	136818.5	138726.8	[500] µg/L		13:02:37
2	Mo 202.031†	4477.4	4517.7	[500] µg/L		13:02:58
2	Ni 231.604†	7750.1	7528.7	[500] µg/L		13:02:37
2	P 214.914†	1411.0	1183.6	[2500] µg/L		13:02:58
2	Pb 220.353†	1651.9	1625.5	[500] µg/L		13:02:58
2	S 181.975 Axial†	285.7	267.8	[1000] µg/L		13:02:58
2	Sb 206.836†	494.1	478.0	[500] µg/L		13:02:58
2	Se 196.026†	424.0	414.9	[500] µg/L		13:02:58
2	SiO2†	25816.6	24690.8	[5347.5] µg/L		13:02:37

2	Si 251.611†	30894.5	30838.5	[2500] µg/L	13:02:37
2	Sn 189.927†	1094.0	1100.4	[500] µg/L	13:02:58
2	Ti 334.940†	185982.4	187844.7	[500] µg/L	13:02:32
2	Tl 190.801†	408.9	438.5	[500] µg/L	13:02:58
2	U 409.014†	5080.2	4980.0	[500] µg/L	13:02:37
2	V 292.402†	39235.6	39778.7	[500] µg/L	13:02:37
2	Zn 213.857†	19461.1	19074.8	[500] µg/L	13:02:37
3	Sc RADIAL	109827.5	109827.5	101 %	13:01:27
3	Al 396.153Radial†	9886.9	10005.4	[5000] µg/L	13:01:27
3	Ca 317.933Radial†	15184.9	14714.7	[5000] µg/L	13:01:47
3	K 766.490 Radial†	9013.4	8731.2	[5000] µg/L	13:01:27
3	Mg 279.077 IEC†	499.0	487.4	[5000] µg/L	13:01:47
3	Sr 421.552†	110506.4	109720.6	[500] µg/L	13:01:27
3	Sc 361.383	1680383.1	1680383.1	99.864 %	13:03:05
3	Y 371.029	932881.6	932881.6	99.654 %	13:03:05
3	Ag 328.068†	52984.6	53622.6	[500] µg/L	13:03:10
3	As 188.979†	237.2	241.4	[500] µg/L	13:03:31
3	B 249.677†	9131.4	8985.2	[500] µg/L	13:03:10
3	Ba 233.527†	18390.9	18433.8	[500] µg/L	13:03:10
3	Be 313.107†	670890.0	673748.9	[500] µg/L	13:03:05
3	Cd 226.502†	16032.5	16198.5	[500] µg/L	13:03:10
3	Co 228.616†	9160.4	9150.6	[500] µg/L	13:03:10
3	Cr 267.716†	18072.8	18007.2	[500] µg/L	13:03:10
3	Cu 324.752†	68384.0	65854.1	[500] µg/L	13:03:10
3	Mn 257.610†	129307.5	130027.7	[500] µg/L	13:03:10
3	Mo 202.031†	3933.8	3934.8	[500] µg/L	13:03:31
3	Ni 231.604†	7324.2	7035.5	[500] µg/L	13:03:10
3	P 214.914†	1297.4	1057.7	[2500] µg/L	13:03:31
3	Pb 220.353†	1494.4	1453.6	[500] µg/L	13:03:31
3	S 181.975 Axial†	262.5	242.1	[1000] µg/L	13:03:31
3	Sb 206.836†	439.9	419.5	[500] µg/L	13:03:31
3	Se 196.026†	391.9	379.1	[500] µg/L	13:03:31
3	SiO2†	24755.3	23405.8	[5347.5] µg/L	13:03:10
3	Si 251.611†	29589.2	29265.5	[2500] µg/L	13:03:10
3	Sn 189.927†	945.9	942.7	[500] µg/L	13:03:31
3	Ti 334.940†	180042.1	180295.3	[500] µg/L	13:03:05
3	Tl 190.801†	380.5	406.6	[500] µg/L	13:03:31
3	U 409.014†	4846.7	4702.5	[500] µg/L	13:03:10
3	V 292.402†	36784.1	36986.1	[500] µg/L	13:03:10
3	Zn 213.857†	18390.8	17835.6	[500] µg/L	13:03:10

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1676802.2	9473.39	0.56%	99.651 %	
Sc RADIAL	109910.4	316.67	0.29%	101 %	
Y 371.029	927717.7	7847.03	0.85%	99.102 %	
Ag 328.068†	54816.8	1134.50	2.07%	[500] µg/L	
Al 396.153Radial†	9978.0	47.21	0.47%	[5000] µg/L	
As 188.979†	264.7	20.39	7.70%	[500] µg/L	
B 249.677†	9211.0	215.33	2.34%	[500] µg/L	
Ba 233.527†	19053.9	562.69	2.95%	[500] µg/L	
Be 313.107†	688891.6	13151.24	1.91%	[500] µg/L	
Ca 317.933Radial†	14722.8	36.96	0.25%	[5000] µg/L	
Cd 226.502†	16798.4	540.55	3.22%	[500] µg/L	
Co 228.616†	9510.2	328.92	3.46%	[500] µg/L	
Cr 267.716†	18956.0	837.98	4.42%	[500] µg/L	
Cu 324.752†	68479.6	2346.03	3.43%	[500] µg/L	
K 766.490 Radial†	8675.2	50.71	0.58%	[5000] µg/L	
Mg 279.077 IEC†	490.7	3.05	0.62%	[5000] µg/L	
Mn 257.610†	135166.9	4559.51	3.37%	[500] µg/L	
Mo 202.031†	4317.8	331.75	7.68%	[500] µg/L	
Ni 231.604†	7330.1	260.25	3.55%	[500] µg/L	
P 214.914†	1139.3	70.74	6.21%	[2500] µg/L	
Pb 220.353†	1564.6	96.27	6.15%	[500] µg/L	
S 181.975 Axial†	257.9	13.82	5.36%	[1000] µg/L	
Sb 206.836†	454.7	31.03	6.82%	[500] µg/L	
Se 196.026†	402.5	20.24	5.03%	[500] µg/L	
SiO2†	24111.6	651.76	2.70%	[5347.5] µg/L	
Si 251.611†	30108.9	792.67	2.63%	[2500] µg/L	

Sn 189.927†	1048.3	91.53	8.73%	[500] µg/L
Sr 421.552†	108994.8	737.85	0.68%	[500] µg/L
Ti 334.940†	185139.2	4204.56	2.27%	[500] µg/L
Tl 190.801†	425.7	16.85	3.96%	[500] µg/L
U 409.014†	4892.6	164.78	3.37%	[500] µg/L
V 292.402†	38632.0	1461.71	3.78%	[500] µg/L
Zn 213.857†	18542.0	637.59	3.44%	[500] µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/26/2010 13:03:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	111155.2	111155.2	102 %		13:04:14
1	Al 396.153Radial†	20654.3	20466.0	[10000] µg/L		13:04:14
1	Ca 317.933Radial†	31510.3	30572.6	[10000] µg/L		13:04:14
1	Fe 238.204 Radial†	1373.7	1318.2	[10000] µg/L		13:04:34
1	K 766.490 Radial†	18303.6	17751.0	[10000] µg/L		13:04:14
1	Mg 279.077 IEC†	1026.8	1000.0	[10000] µg/L		13:04:34
1	Na 589.592 Radial†	29316.7	28565.9	[10000] µg/L		13:04:14
1	Sr 421.552†	225800.5	221674.9	[1000] µg/L		13:04:14
1	Sc 361.383	1686890.1	1686890.1	100.25 %		13:05:38
1	Y 371.029	931602.9	931602.9	99.517 %		13:05:38
1	Ag 328.068†	113517.0	113799.0	[1000] µg/L		13:05:44
1	As 188.979†	563.9	566.4	[1000] µg/L		13:06:05
1	B 249.677†	19398.4	19191.2	[1000] µg/L		13:05:44
1	Ba 233.527†	39694.8	39613.4	[1000] µg/L		13:05:44
1	Be 313.107†	1415590.9	1413995.4	[1000] µg/L		13:05:38
1	Cd 226.502†	34883.5	34940.4	[1000] µg/L		13:05:44
1	Co 228.616†	19832.2	19760.4	[1000] µg/L		13:05:44
1	Cr 267.716†	40181.8	39991.1	[1000] µg/L		13:05:44
1	Cu 324.752†	145952.5	142964.3	[1000] µg/L		13:05:44
1	Mn 257.610†	280817.8	280659.5	[1000] µg/L		13:05:44
1	Mo 202.031†	9216.6	9189.2	[1000] µg/L		13:06:05
1	Ni 231.604†	15370.7	15033.6	[1000] µg/L		13:06:05
1	P 214.914†	2675.0	2426.9	[5000] µg/L		13:06:05
1	Pb 220.353†	3356.1	3304.9	[1000] µg/L		13:06:05
1	S 181.975 Axial†	561.0	538.9	[2000] µg/L		13:06:05
1	Sb 206.836†	1005.8	982.2	[1000] µg/L		13:06:05
1	Se 196.026†	858.1	842.6	[1000] µg/L		13:06:05
1	SiO2†	51290.4	49778.9	[10695] µg/L		13:05:44
1	Si 251.611†	62580.7	62060.1	[5000] µg/L		13:05:44
1	Sn 189.927†	2258.9	2248.7	[1000] µg/L		13:06:05
1	Ti 334.940†	381107.7	380162.4	[1000] µg/L		13:05:38
1	Tl 190.801†	859.6	883.0	[1000] µg/L		13:06:05
1	U 409.014†	10748.9	10571.1	[1000] µg/L		13:05:44
1	V 292.402†	81287.7	81236.3	[1000] µg/L		13:05:44
1	Zn 213.857†	38662.9	37985.9	[1000] µg/L		13:05:44
2	Sc RADIAL	112184.6	112184.6	103 %		13:04:40
2	Al 396.153Radial†	20740.6	20363.8	[10000] µg/L		13:04:40
2	Ca 317.933Radial†	31704.0	30477.1	[10000] µg/L		13:04:40
2	Fe 238.204 Radial†	1370.1	1302.4	[10000] µg/L		13:05:00
2	K 766.490 Radial†	18372.0	17652.6	[10000] µg/L		13:04:40
2	Mg 279.077 IEC†	1028.6	992.4	[10000] µg/L		13:05:00
2	Na 589.592 Radial†	29463.2	28444.3	[10000] µg/L		13:04:40
2	Sr 421.552†	227444.7	221240.0	[1000] µg/L		13:04:40
2	Sc 361.383	1697004.2	1697004.2	100.85 %		13:06:11
2	Y 371.029	941128.4	941128.4	100.53 %		13:06:11
2	Ag 328.068†	113311.2	112920.0	[1000] µg/L		13:06:17
2	As 188.979†	569.1	568.1	[1000] µg/L		13:06:38
2	B 249.677†	19429.2	19106.4	[1000] µg/L		13:06:17
2	Ba 233.527†	39834.7	39516.1	[1000] µg/L		13:06:17
2	Be 313.107†	1425387.9	1415293.9	[1000] µg/L		13:06:11
2	Cd 226.502†	34865.9	34715.7	[1000] µg/L		13:06:17
2	Co 228.616†	19839.5	19649.7	[1000] µg/L		13:06:17
2	Cr 267.716†	40127.7	39698.6	[1000] µg/L		13:06:17
2	Cu 324.752†	146038.1	142181.5	[1000] µg/L		13:06:17
2	Mn 257.610†	281191.8	279360.9	[1000] µg/L		13:06:17
2	Mo 202.031†	9223.6	9141.3	[1000] µg/L		13:06:38
2	Ni 231.604†	15369.3	14940.9	[1000] µg/L		13:06:38
2	P 214.914†	2672.1	2408.1	[5000] µg/L		13:06:38
2	Pb 220.353†	3356.3	3285.1	[1000] µg/L		13:06:38

2	S 181.975 Axial†	574.6	549.1	[2000]	µg/L	13:06:38
2	Sb 206.836†	1003.0	973.5	[1000]	µg/L	13:06:38
2	Se 196.026†	861.8	841.2	[1000]	µg/L	13:06:38
2	SiO2†	51514.0	49695.7	[10695]	µg/L	13:06:17
2	Si 251.611†	62935.5	62039.9	[5000]	µg/L	13:06:17
2	Sn 189.927†	2254.3	2230.7	[1000]	µg/L	13:06:38
2	Ti 334.940†	383328.4	380098.8	[1000]	µg/L	13:06:11
2	Tl 190.801†	863.2	881.5	[1000]	µg/L	13:06:38
2	U 409.014†	10771.0	10529.2	[1000]	µg/L	13:06:17
2	V 292.402†	81323.3	80788.3	[1000]	µg/L	13:06:17
2	Zn 213.857†	38757.2	37849.6	[1000]	µg/L	13:06:17
3	Sc RADIAL	111477.0	111477.0	102	%	13:05:06
3	Al 396.153Radial†	20648.8	20402.0	[10000]	µg/L	13:05:06
3	Ca 317.933Radial†	31555.3	30527.4	[10000]	µg/L	13:05:06
3	Fe 238.204 Radial†	1373.2	1313.9	[10000]	µg/L	13:05:27
3	K 766.490 Radial†	18248.8	17645.4	[10000]	µg/L	13:05:06
3	Mg 279.077 IEC†	1030.0	1000.2	[10000]	µg/L	13:05:27
3	Na 589.592 Radial†	29412.3	28576.4	[10000]	µg/L	13:05:06
3	Sr 421.552†	226300.5	221524.5	[1000]	µg/L	13:05:06
3	Sc 361.383	1677142.2	1677142.2	99.671	%	13:06:45
3	Y 371.029	932906.8	932906.8	99.657	%	13:06:45
3	Ag 328.068†	109785.6	110713.4	[1000]	µg/L	13:06:50
3	As 188.979†	495.9	501.4	[1000]	µg/L	13:07:11
3	B 249.677†	18667.2	18570.1	[1000]	µg/L	13:06:50
3	Ba 233.527†	37589.9	37731.7	[1000]	µg/L	13:06:50
3	Be 313.107†	1367875.6	1374330.1	[1000]	µg/L	13:06:45
3	Cd 226.502†	32932.0	33184.8	[1000]	µg/L	13:06:50
3	Co 228.616†	18532.7	18571.5	[1000]	µg/L	13:06:50
3	Cr 267.716†	36784.7	36815.8	[1000]	µg/L	13:06:50
3	Cu 324.752†	137116.7	134945.6	[1000]	µg/L	13:06:50
3	Mn 257.610†	263596.1	265009.2	[1000]	µg/L	13:06:50
3	Mo 202.031†	7958.7	7980.5	[1000]	µg/L	13:07:11
3	Ni 231.604†	13320.3	13065.6	[1000]	µg/L	13:07:11
3	P 214.914†	2383.9	2150.3	[5000]	µg/L	13:07:11
3	Pb 220.353†	2999.1	2966.1	[1000]	µg/L	13:07:11
3	S 181.975 Axial†	518.8	499.8	[2000]	µg/L	13:07:11
3	Sb 206.836†	892.4	874.3	[1000]	µg/L	13:07:11
3	Se 196.026†	774.4	763.6	[1000]	µg/L	13:07:11
3	SiO2†	49307.9	48087.3	[10695]	µg/L	13:06:50
3	Si 251.611†	60211.1	60045.6	[5000]	µg/L	13:06:50
3	Sn 189.927†	1920.1	1921.9	[1000]	µg/L	13:07:11
3	Ti 334.940†	366213.3	367428.6	[1000]	µg/L	13:06:45
3	Tl 190.801†	788.8	817.0	[1000]	µg/L	13:07:11
3	U 409.014†	9990.4	9872.5	[1000]	µg/L	13:06:50
3	V 292.402†	75406.1	75806.6	[1000]	µg/L	13:06:50
3	Zn 213.857†	36289.5	35828.8	[1000]	µg/L	13:06:50

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1687012.2	9931.57	0.59%	100.26 %
Sc RADIAL	111605.6	526.59	0.47%	102 %
Y 371.029	935212.7	5164.47	0.55%	99.903 %
Ag 328.068†	112477.4	1589.69	1.41%	[1000] µg/L
Al 396.153Radial†	20410.6	51.64	0.25%	[10000] µg/L
As 188.979†	545.3	38.03	6.97%	[1000] µg/L
B 249.677†	18955.9	336.83	1.78%	[1000] µg/L
Ba 233.527†	38953.8	1059.44	2.72%	[1000] µg/L
Be 313.107†	1401206.5	23284.68	1.66%	[1000] µg/L
Ca 317.933Radial†	30525.7	47.77	0.16%	[10000] µg/L
Cd 226.502†	34280.3	955.36	2.79%	[1000] µg/L
Co 228.616†	19327.2	656.75	3.40%	[1000] µg/L
Cr 267.716†	38835.2	1754.92	4.52%	[1000] µg/L
Cu 324.752†	140030.5	4421.02	3.16%	[1000] µg/L
Fe 238.204 Radial†	1311.5	8.19	0.62%	[10000] µg/L
K 766.490 Radial†	17683.0	59.00	0.33%	[10000] µg/L
Mg 279.077 IEC†	997.5	4.43	0.44%	[10000] µg/L
Mn 257.610†	275009.9	8685.16	3.16%	[1000] µg/L
Mo 202.031†	8770.4	684.42	7.80%	[1000] µg/L
Na 589.592 Radial†	28528.9	73.46	0.26%	[10000] µg/L

Ni 231.604†	14346.7	1110.43	7.74%	[1000]	µg/L
P 214.914†	2328.4	154.57	6.64%	[5000]	µg/L
Pb 220.353†	3185.4	190.15	5.97%	[1000]	µg/L
S 181.975 Axial†	529.2	26.02	4.92%	[2000]	µg/L
Sb 206.836†	943.4	59.97	6.36%	[1000]	µg/L
Se 196.026†	815.8	45.22	5.54%	[1000]	µg/L
SiO2†	49187.3	953.55	1.94%	[10695]	µg/L
Si 251.611†	61381.9	1157.30	1.89%	[5000]	µg/L
Sn 189.927†	2133.8	183.71	8.61%	[1000]	µg/L
Sr 421.552†	221479.8	220.88	0.10%	[1000]	µg/L
Ti 334.940†	375896.6	7333.58	1.95%	[1000]	µg/L
Tl 190.801†	860.5	37.66	4.38%	[1000]	µg/L
U 409.014†	10324.3	391.82	3.80%	[1000]	µg/L
V 292.402†	79277.1	3013.87	3.80%	[1000]	µg/L
Zn 213.857†	37221.4	1207.98	3.25%	[1000]	µg/L

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

Autosampler Location: 5  
 Date Collected: 2/26/2010 13:07:20  
 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	109415.2	109415.2	100 %	13:07:53
1	Al 396.153Radial†	104101.9	104072.7	[50000] µg/L	13:07:53
1	Ca 317.933Radial†	154690.2	154003.3	[50000] µg/L	13:07:53
1	Fe 238.204 Radial†	2687.8	2651.3	[20000] µg/L	13:08:13
1	Mg 279.077 IEC†	5003.5	4984.9	[50000] µg/L	13:08:13
1	Na 589.592 Radial†	57874.2	57525.4	[20000] µg/L	13:07:53
1	Sc 361.383	1674532.3	1674532.3	99.516 %	13:09:17
1	Y 371.029	924652.9	924652.9	98.775 %	13:09:17
2	Sc RADIAL	108323.3	108323.3	99.2 %	13:08:19
2	Al 396.153Radial†	104054.4	105072.0	[50000] µg/L	13:08:19
2	Ca 317.933Radial†	154003.4	154867.1	[50000] µg/L	13:08:19
2	Fe 238.204 Radial†	2677.0	2667.4	[20000] µg/L	13:08:39
2	Mg 279.077 IEC†	4983.5	5015.1	[50000] µg/L	13:08:39
2	Na 589.592 Radial†	57985.6	58219.9	[20000] µg/L	13:08:19
2	Sc 361.383	1668694.4	1668694.4	99.169 %	13:09:25
2	Y 371.029	919288.7	919288.7	98.202 %	13:09:25
3	Sc RADIAL	108023.3	108023.3	98.9 %	13:08:45
3	Al 396.153Radial†	103406.3	104708.2	[50000] µg/L	13:08:45
3	Ca 317.933Radial†	152741.4	154022.5	[50000] µg/L	13:08:45
3	Fe 238.204 Radial†	2680.1	2678.0	[20000] µg/L	13:09:05
3	Mg 279.077 IEC†	4982.8	5028.4	[50000] µg/L	13:09:05
3	Na 589.592 Radial†	57680.0	58073.4	[20000] µg/L	13:08:45
3	Sc 361.383	1679190.1	1679190.1	99.793 %	13:09:33
3	Y 371.029	924194.2	924194.2	98.726 %	13:09:33

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1674138.9	5258.92	0.31%	99.493 %
Sc RADIAL	108587.3	732.50	0.67%	99.4 %
Y 371.029	922711.9	2973.44	0.32%	98.568 %
Al 396.153Radial†	104617.7	505.77	0.48%	[50000] µg/L
Ca 317.933Radial†	154297.6	493.27	0.32%	[50000] µg/L
Fe 238.204 Radial†	2665.6	13.47	0.51%	[20000] µg/L
Mg 279.077 IEC†	5009.5	22.25	0.44%	[50000] µg/L
Na 589.592 Radial†	57939.6	366.07	0.63%	[20000] µg/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	111.9	0.00000	0.999942	
Al 396.153Radial	3	Lin Thru 0	0.0	2.089	0.00000	0.999979	
As 188.979	3	Lin Thru 0	0.0	0.5422	0.00000	0.999930	
B 249.677	3	Lin Thru 0	0.0	18.85	0.00000	0.999933	
Ba 233.527	3	Lin Thru 0	0.0	38.80	0.00000	0.999951	
Be 313.107	3	Lin Thru 0	0.0	1397	0.00000	0.999969	
Ca 317.933Radial	3	Lin Thru 0	0.0	3.083	0.00000	0.999988	
Cd 226.502	3	Lin Thru 0	0.0	34.16	0.00000	0.999947	
Co 228.616	3	Lin Thru 0	0.0	19.27	0.00000	0.999967	
Cr 267.716	3	Lin Thru 0	0.0	38.67	0.00000	0.999936	
Cu 324.752	3	Lin Thru 0	0.0	139.5	0.00000	0.999939	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1329	0.00000	0.999979	
K 766.490 Radial	3	Lin Thru 0	0.0	1.762	0.00000	0.999968	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1002	0.00000	0.999998	
Mn 257.610	3	Lin Thru 0	0.0	274.2	0.00000	0.999956	
Mo 202.031	3	Lin Thru 0	0.0	8.749	0.00000	0.999956	
Na 589.592 Radia	2	Lin Thru 0	0.0	2.888	0.00000	0.999981	



Ni 231.604	3	Lin Thru 0	0.0	14.42	0.00000	0.999923
P 214.914	3	Lin Thru 0	0.0	0.4641	0.00000	0.999915
Pb 220.353	3	Lin Thru 0	0.0	3.176	0.00000	0.999954
S 181.975 Axial	3	Lin Thru 0	0.0	0.2635	0.00000	0.999912
Sb 206.836	3	Lin Thru 0	0.0	0.9373	0.00000	0.999860
Se 196.026	3	Lin Thru 0	0.0	0.8140	0.00000	0.999971
SiO2	3	Lin Thru 0	0.0	4.582	0.00000	0.999964
Si 251.611	3	Lin Thru 0	0.0	12.23	0.00000	0.999967
Sn 189.927	3	Lin Thru 0	0.0	2.128	0.00000	0.999946
Sr 421.552	3	Lin Thru 0	0.0	220.8	0.00000	0.999980
Ti 334.940	3	Lin Thru 0	0.0	374.8	0.00000	0.999980
Tl 190.801	3	Lin Thru 0	0.0	0.8592	0.00000	0.999965
U 409.014	3	Lin Thru 0	0.0	10.21	0.00000	0.999732
V 292.402	3	Lin Thru 0	0.0	78.91	0.00000	0.999936
Zn 213.857	3	Lin Thru 0	0.0	37.22	0.00000	0.999956

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/26/2010 13:09:41

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	110132.3	110132.3	101 %		13:10:15
1	Al 396.153Radial†	9965.8	10056.4	4801.6 µg/L	4801.6 ppb	13:10:15
1	Ca 317.933Radial†	15212.4	14700.1	4767.6 µg/L	4767.6 ppb	13:10:15
1	Fe 238.204 Radial†	680.5	643.5	4854.6 µg/L	4854.6 ppb	13:10:35
1	K 766.490 Radial†	4472.2	4203.6	2385.6 µg/L	2385.6 ppb	13:10:15
1	Mg 279.077 IEC†	511.5	498.4	4980.5 µg/L	4980.5 ppb	13:10:35
1	Na 589.592 Radial†	6933.3	6639.4	2298.8 µg/L	2298.8 ppb	13:10:15
1	Sr 421.552†	112896.6	111786.6	506.28 µg/L	506.28 ppb	13:10:15
1	Sc 361.383	1685460.8	1685460.8	100.17 %		13:11:39
1	Y 371.029	936222.6	936222.6	100.01 %		13:11:39
1	Ag 328.068†	28349.9	28868.9	261.89 µg/L	261.89 ppb	13:11:45
1	As 188.979†	257.1	260.5	479.34 µg/L	479.34 ppb	13:12:05
1	B 249.677†	9876.4	9701.4	512.84 µg/L	512.84 ppb	13:11:45
1	Ba 233.527†	19728.3	19713.6	508.99 µg/L	508.99 ppb	13:11:45
1	Be 313.107†	362950.2	364295.1	260.58 µg/L	260.58 ppb	13:11:39
1	Cd 226.502†	17127.2	17243.1	504.70 µg/L	504.70 ppb	13:11:45
1	Co 228.616†	9920.5	9881.8	512.16 µg/L	512.16 ppb	13:11:45
1	Cr 267.716†	19203.7	19081.8	493.75 µg/L	493.75 ppb	13:11:45
1	Cu 324.752†	73382.1	70637.5	507.27 µg/L	507.27 ppb	13:11:45
1	Mn 257.610†	142166.1	142475.0	519.49 µg/L	519.49 ppb	13:11:39
1	Mo 202.031†	4835.0	4822.7	551.41 µg/L	551.41 ppb	13:12:05
1	Ni 231.604†	7876.8	7565.1	524.05 µg/L	524.05 ppb	13:11:45
1	P 214.914†	1442.5	1198.6	2535.0 µg/L	2535.0 ppb	13:12:05
1	Pb 220.353†	1650.2	1604.6	505.57 µg/L	505.57 ppb	13:12:05
1	S 181.975 Axial†	691.0	669.2	2539.8 µg/L	2539.8 ppb	13:12:05
1	Sb 206.836†	499.5	477.6	512.90 µg/L	512.90 ppb	13:12:05
1	Se 196.026†	2146.5	2129.6	2628.4 µg/L	2628.4 ppb	13:12:05
1	SiO2†	48217.9	46754.9	10203 µg/L	10203 ppb	13:11:45
1	Si 251.611†	58718.5	58257.3	4762.3 µg/L	4762.3 ppb	13:11:45
1	Sn 189.927†	1189.6	1183.0	556.35 µg/L	556.35 ppb	13:12:05
1	Ti 334.940†	185464.7	185165.8	493.66 µg/L	493.66 ppb	13:11:39
1	Tl 190.801†	430.9	455.8	535.49 µg/L	535.49 ppb	13:12:05
1	U 409.014†	4961.0	4802.0	469.47 µg/L	469.47 ppb	13:11:45
1	V 292.402†	40287.2	40372.5	517.69 µg/L	517.69 ppb	13:11:45
1	Zn 213.857†	19963.0	19349.7	516.16 µg/L	516.16 ppb	13:11:45
2	Sc RADIAL	110647.3	110647.3	101 %		13:10:41
2	Al 396.153Radial†	9964.7	10009.3	4779.1 µg/L	4779.1 ppb	13:10:41
2	Ca 317.933Radial†	15331.4	14747.4	4782.9 µg/L	4782.9 ppb	13:10:41
2	Fe 238.204 Radial†	677.5	637.4	4808.4 µg/L	4808.4 ppb	13:11:01
2	K 766.490 Radial†	4575.0	4284.5	2431.5 µg/L	2431.5 ppb	13:10:41
2	Mg 279.077 IEC†	514.2	498.7	4983.4 µg/L	4983.4 ppb	13:11:01
2	Na 589.592 Radial†	6954.8	6628.6	2295.1 µg/L	2295.1 ppb	13:10:41
2	Sr 421.552†	113375.9	111738.6	506.06 µg/L	506.06 ppb	13:10:41
2	Sc 361.383	1693171.1	1693171.1	100.62 %		13:12:12
2	Y 371.029	942627.9	942627.9	100.70 %		13:12:12
2	Ag 328.068†	28188.7	28579.8	259.27 µg/L	259.27 ppb	13:12:18
2	As 188.979†	263.2	265.4	488.39 µg/L	488.39 ppb	13:12:38
2	B 249.677†	9853.5	9633.8	509.27 µg/L	509.27 ppb	13:12:18
2	Ba 233.527†	19695.5	19591.2	505.83 µg/L	505.83 ppb	13:12:18
2	Be 313.107†	363072.7	362766.8	259.48 µg/L	259.48 ppb	13:12:12
2	Cd 226.502†	17088.0	17126.2	501.28 µg/L	501.28 ppb	13:12:18
2	Co 228.616†	9867.3	9783.9	507.08 µg/L	507.08 ppb	13:12:18
2	Cr 267.716†	19221.3	19011.9	491.94 µg/L	491.94 ppb	13:12:18
2	Cu 324.752†	73135.7	70059.0	503.11 µg/L	503.11 ppb	13:12:18
2	Mn 257.610†	142487.7	142148.3	518.30 µg/L	518.30 ppb	13:12:12
2	Mo 202.031†	4824.9	4790.6	547.74 µg/L	547.74 ppb	13:12:38
2	Ni 231.604†	7833.7	7486.4	518.60 µg/L	518.60 ppb	13:12:18
2	P 214.914†	1437.7	1187.3	2511.0 µg/L	2511.0 ppb	13:12:38
2	Pb 220.353†	1646.4	1593.4	502.02 µg/L	502.02 ppb	13:12:38

2	S 181.975 Axial†	690.0	665.0	2524.0 µg/L	2524.0 ppb	13:12:38
2	Sb 206.836†	495.9	471.8	506.66 µg/L	506.66 ppb	13:12:38
2	Se 196.026†	2144.2	2117.6	2613.4 µg/L	2613.4 ppb	13:12:38
2	SiO2†	48197.7	46515.6	10151 µg/L	10151 ppb	13:12:18
2	Si 251.611†	58584.3	57857.0	4729.6 µg/L	4729.6 ppb	13:12:18
2	Sn 189.927†	1184.7	1172.8	551.52 µg/L	551.52 ppb	13:12:38
2	Ti 334.940†	185672.8	184529.4	491.97 µg/L	491.97 ppb	13:12:12
2	Tl 190.801†	430.7	453.6	532.95 µg/L	532.95 ppb	13:12:38
2	U 409.014†	5042.2	4860.1	475.17 µg/L	475.17 ppb	13:12:18
2	V 292.402†	40136.5	40039.5	513.44 µg/L	513.44 ppb	13:12:18
2	Zn 213.857†	19890.2	19186.6	511.81 µg/L	511.81 ppb	13:12:18
3	Sc RADIAL	109464.8	109464.8	100 %		13:11:07
3	Al 396.153Radial†	9918.9	10069.9	4809.6 µg/L	4809.6 ppb	13:11:07
3	Ca 317.933Radial†	15256.9	14836.5	4811.8 µg/L	4811.8 ppb	13:11:07
3	Fe 238.204 Radial†	679.5	646.5	4876.7 µg/L	4876.7 ppb	13:11:27
3	K 766.490 Radial†	4533.2	4291.5	2435.5 µg/L	2435.5 ppb	13:11:07
3	Mg 279.077 IEC†	511.7	501.7	5011.6 µg/L	5011.6 ppb	13:11:27
3	Na 589.592 Radial†	6945.4	6693.3	2317.5 µg/L	2317.5 ppb	13:11:07
3	Sr 421.552†	112882.9	112455.4	509.31 µg/L	509.31 ppb	13:11:07
3	Sc 361.383	1690137.7	1690137.7	100.44 %		13:12:46
3	Y 371.029	939692.7	939692.7	100.38 %		13:12:46
3	Ag 328.068†	27179.1	27624.9	250.56 µg/L	250.56 ppb	13:12:51
3	As 188.979†	227.6	230.4	424.06 µg/L	424.06 ppb	13:13:12
3	B 249.677†	9513.6	9312.9	492.16 µg/L	492.16 ppb	13:12:51
3	Ba 233.527†	18772.5	18707.5	483.00 µg/L	483.00 ppb	13:12:51
3	Be 313.107†	354777.6	355155.9	254.04 µg/L	254.04 ppb	13:12:46
3	Cd 226.502†	16135.7	16208.6	474.39 µg/L	474.39 ppb	13:12:51
3	Co 228.616†	9358.9	9295.3	481.69 µg/L	481.69 ppb	13:12:51
3	Cr 267.716†	17808.1	17639.3	456.43 µg/L	456.43 ppb	13:12:51
3	Cu 324.752†	69567.0	66636.5	478.59 µg/L	478.59 ppb	13:12:51
3	Mn 257.610†	139015.0	138945.1	506.62 µg/L	506.62 ppb	13:12:46
3	Mo 202.031†	4181.0	4158.2	475.46 µg/L	475.46 ppb	13:13:12
3	Ni 231.604†	7416.4	7085.0	490.79 µg/L	490.79 ppb	13:12:51
3	P 214.914†	1290.6	1043.4	2202.2 µg/L	2202.2 ppb	13:13:12
3	Pb 220.353†	1484.5	1435.1	452.03 µg/L	452.03 ppb	13:13:12
3	S 181.975 Axial†	632.0	608.5	2309.4 µg/L	2309.4 ppb	13:13:12
3	Sb 206.836†	441.9	418.9	449.48 µg/L	449.48 ppb	13:13:12
3	Se 196.026†	1925.2	1903.4	2350.5 µg/L	2350.5 ppb	13:13:12
3	SiO2†	46371.2	44783.2	9772.9 µg/L	9772.9 ppb	13:12:51
3	Si 251.611†	56262.9	55650.3	4549.2 µg/L	4549.2 ppb	13:12:51
3	Sn 189.927†	1014.7	1005.7	473.02 µg/L	473.02 ppb	13:13:12
3	Ti 334.940†	180783.1	179992.5	479.86 µg/L	479.86 ppb	13:12:46
3	Tl 190.801†	397.6	421.5	495.46 µg/L	495.46 ppb	13:13:12
3	U 409.014†	4678.2	4506.7	440.53 µg/L	440.53 ppb	13:12:51
3	V 292.402†	37758.7	37743.8	483.68 µg/L	483.68 ppb	13:12:51
3	Zn 213.857†	18827.6	18164.2	484.50 µg/L	484.50 ppb	13:12:51

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1689589.9	100.41 %	0.231			0.23%
Sc RADIAL	110081.5	101 %	0.5			0.54%
Y 371.029	939514.4	100.36 %	0.343			0.34%
Ag 328.068†	28357.9	257.24 µg/L	5.932	257.24 ppb	5.932	2.31%
QC value within limits for Ag 328.068 Recovery = 102.89%						
Al 396.153Radial†	10045.2	4796.7 µg/L	15.80	4796.7 ppb	15.80	0.33%
QC value within limits for Al 396.153Radial Recovery = 95.93%						
As 188.979†	252.1	463.93 µg/L	34.822	463.93 ppb	34.822	7.51%
QC value within limits for As 188.979 Recovery = 92.79%						
B 249.677†	9549.3	504.75 µg/L	11.054	504.75 ppb	11.054	2.19%
QC value within limits for B 249.677 Recovery = 100.95%						
Ba 233.527†	19337.4	499.28 µg/L	14.181	499.28 ppb	14.181	2.84%
QC value within limits for Ba 233.527 Recovery = 99.86%						
Be 313.107†	360739.3	258.03 µg/L	3.501	258.03 ppb	3.501	1.36%
QC value within limits for Be 313.107 Recovery = 103.21%						
Ca 317.933Radial†	14761.3	4787.5 µg/L	22.46	4787.5 ppb	22.46	0.47%
QC value within limits for Ca 317.933Radial Recovery = 95.75%						
Cd 226.502†	16859.3	493.45 µg/L	16.603	493.45 ppb	16.603	3.36%
QC value within limits for Cd 226.502 Recovery = 98.69%						
Co 228.616†	9653.7	500.31 µg/L	16.323	500.31 ppb	16.323	3.26%

Cr	267.716†	18577.6	480.71 µg/L	21.045	480.71 ppb	21.045	4.38%
Cu	324.752†	69111.0	496.33 µg/L	15.497	496.33 ppb	15.497	3.12%
Fe	238.204 Radial†	642.5	4846.6 µg/L	34.85	4846.6 ppb	34.85	0.72%
K	766.490 Radial†	4259.9	2417.6 µg/L	27.72	2417.6 ppb	27.72	1.15%
Mg	279.077 IEC†	499.6	4991.8 µg/L	17.17	4991.8 ppb	17.17	0.34%
Mn	257.610†	141189.4	514.80 µg/L	7.113	514.80 ppb	7.113	1.38%
Mo	202.031†	4590.5	524.87 µg/L	42.830	524.87 ppb	42.830	8.16%
Na	589.592 Radial†	6653.8	2303.8 µg/L	12.01	2303.8 ppb	12.01	0.52%
Ni	231.604†	7378.8	511.14 µg/L	17.837	511.14 ppb	17.837	3.49%
P	214.914†	1143.1	2416.1 µg/L	185.58	2416.1 ppb	185.58	7.68%
Pb	220.353†	1544.4	486.54 µg/L	29.936	486.54 ppb	29.936	6.15%
S	181.975 Axial†	647.6	2457.7 µg/L	128.67	2457.7 ppb	128.67	5.24%
Sb	206.836†	456.1	489.68 µg/L	34.952	489.68 ppb	34.952	7.14%
Se	196.026†	2050.2	2530.8 µg/L	156.26	2530.8 ppb	156.26	6.17%
SiO2†		46017.9	10042 µg/L	234.8	10042 ppb	234.8	2.34%
Si	251.611†	57254.9	4680.4 µg/L	114.77	4680.4 ppb	114.77	2.45%
Sn	189.927†	1120.5	526.96 µg/L	46.782	526.96 ppb	46.782	8.88%
Sr	421.552†	111993.5	507.21 µg/L	1.815	507.21 ppb	1.815	0.36%
Ti	334.940†	183229.2	488.50 µg/L	7.527	488.50 ppb	7.527	1.54%
Tl	190.801†	443.6	521.30 µg/L	22.418	521.30 ppb	22.418	4.30%
U	409.014†	4722.9	461.72 µg/L	18.570	461.72 ppb	18.570	4.02%
V	292.402†	39385.3	504.94 µg/L	18.533	504.94 ppb	18.533	3.67%
Zn	213.857†	18900.1	504.16 µg/L	17.160	504.16 ppb	17.160	3.40%

QC value within limits for Co 228.616 Recovery = 100.06%

QC value within limits for Cr 267.716 Recovery = 96.14%

QC value within limits for Cu 324.752 Recovery = 99.27%

QC value within limits for Fe 238.204 Radial Recovery = 96.93%

QC value within limits for K 766.490 Radial Recovery = 96.70%

QC value within limits for Mg 279.077 IEC Recovery = 99.84%

QC value within limits for Mn 257.610 Recovery = 102.96%

QC value within limits for Mo 202.031 Recovery = 104.97%

QC value within limits for Na 589.592 Radial Recovery = 92.15%

QC value within limits for Ni 231.604 Recovery = 102.23%

QC value within limits for P 214.914 Recovery = 96.64%

QC value within limits for Pb 220.353 Recovery = 97.31%

QC value within limits for S 181.975 Axial Recovery = 98.31%

QC value within limits for Sb 206.836 Recovery = 97.94%

QC value within limits for Se 196.026 Recovery = 101.23%

QC value within limits for SiO2 Recovery = 93.90%

QC value within limits for Si 251.611 Recovery = 93.61%

QC value within limits for Sn 189.927 Recovery = 105.39%

QC value within limits for Sr 421.552 Recovery = 101.44%

QC value within limits for Ti 334.940 Recovery = 97.70%

QC value within limits for Tl 190.801 Recovery = 104.26%

QC value within limits for U 409.014 Recovery = 92.34%

QC value within limits for V 292.402 Recovery = 100.99%

QC value within limits for Zn 213.857 Recovery = 100.83%

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/26/2010 13:13:21

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	107313.6	107313.6	98.3 %		13:13:54
1	Al 396.153Radial†	-185.1	-13.4	-6.4653 µg/L	-6.4653 ppb	13:13:54
1	Ca 317.933Radial†	383.9	7.1	2.2988 µg/L	2.2988 ppb	13:14:15
1	Fe 238.204 Radial†	29.8	-0.9	-7.0484 µg/L	-7.0484 ppb	13:14:15
1	K 766.490 Radial†	244.8	18.4	10.436 µg/L	10.436 ppb	13:13:54
1	Mg 279.077 IEC†	10.4	1.8	17.904 µg/L	17.904 ppb	13:14:15
1	Na 589.592 Radial†	252.7	21.9	7.5703 µg/L	7.5703 ppb	13:13:54
1	Sr 421.552†	153.8	1.5	0.0068 µg/L	0.0068 ppb	13:13:54
1	Sc 361.383	1680864.9	1680864.9	99.893 %		13:15:17
1	Y 371.029	929555.4	929555.4	99.299 %		13:15:17
1	Ag 328.068†	-516.3	49.1	0.4385 µg/L	0.4385 ppb	13:15:23
1	As 188.979†	-11.4	-7.6	-13.977 µg/L	-13.977 ppb	13:15:43
1	B 249.677†	186.6	28.1	1.4946 µg/L	1.4946 ppb	13:15:43
1	Ba 233.527†	-14.3	3.6	0.0938 µg/L	0.0938 ppb	13:15:43
1	Be 313.107†	-1920.0	23.8	0.0169 µg/L	0.0169 ppb	13:15:23
1	Cd 226.502†	-145.6	-1.5	-0.0446 µg/L	-0.0446 ppb	13:15:43
1	Co 228.616†	22.1	-0.2	-0.0082 µg/L	-0.0082 ppb	13:15:43
1	Cr 267.716†	69.8	-20.3	-0.5247 µg/L	-0.5247 ppb	13:15:43
1	Cu 324.752†	2750.6	130.5	0.9343 µg/L	0.9343 ppb	13:15:23
1	Mn 257.610†	-523.0	20.6	0.0737 µg/L	0.0737 ppb	13:15:43
1	Mo 202.031†	17.1	12.8	1.4643 µg/L	1.4643 ppb	13:15:43
1	Ni 231.604†	294.0	-4.4	-0.3032 µg/L	-0.3032 ppb	13:15:43
1	P 214.914†	241.3	0.1	0.1336 µg/L	0.1336 ppb	13:15:43
1	Pb 220.353†	49.6	6.8	2.1406 µg/L	2.1406 ppb	13:15:43
1	S 181.975 Axial†	19.5	-1.1	-4.2873 µg/L	-4.2873 ppb	13:15:43
1	Sb 206.836†	21.7	0.7	0.7763 µg/L	0.7763 ppb	13:15:43
1	Se 196.026†	20.1	6.8	8.3179 µg/L	8.3179 ppb	13:15:43
1	SiO2†	1437.8	56.2	12.265 µg/L	12.265 ppb	13:15:23
1	Si 251.611†	404.9	41.3	3.3800 µg/L	3.3800 ppb	13:15:43
1	Sn 189.927†	1.7	-2.8	-1.3355 µg/L	-1.3355 ppb	13:15:43
1	Ti 334.940†	156.0	164.3	0.4369 µg/L	0.4369 ppb	13:15:23
1	Tl 190.801†	-20.0	5.6	6.5308 µg/L	6.5308 ppb	13:15:43
1	U 409.014†	181.4	30.8	3.0148 µg/L	3.0148 ppb	13:15:23
1	V 292.402†	-138.1	13.7	0.1861 µg/L	0.1861 ppb	13:15:23
1	Zn 213.857†	572.5	-7.2	-0.1930 µg/L	-0.1930 ppb	13:15:43
2	Sc RADIAL	107556.6	107556.6	98.5 %		13:14:20
2	Al 396.153Radial†	-140.7	32.1	15.328 µg/L	15.328 ppb	13:14:20
2	Ca 317.933Radial†	388.4	10.8	3.5007 µg/L	3.5007 ppb	13:14:41
2	Fe 238.204 Radial†	31.7	0.9	6.4481 µg/L	6.4481 ppb	13:14:41
2	K 766.490 Radial†	220.4	-6.9	-3.9418 µg/L	-3.9418 ppb	13:14:20
2	Mg 279.077 IEC†	11.5	2.9	29.372 µg/L	29.372 ppb	13:14:41
2	Na 589.592 Radial†	222.3	-9.6	-3.3214 µg/L	-3.3214 ppb	13:14:20
2	Sr 421.552†	138.8	-14.0	-0.0635 µg/L	-0.0635 ppb	13:14:20
2	Sc 361.383	1671154.0	1671154.0	99.316 %		13:15:49
2	Y 371.029	927348.1	927348.1	99.063 %		13:15:49
2	Ag 328.068†	-501.1	61.4	0.5468 µg/L	0.5468 ppb	13:15:55
2	As 188.979†	-4.9	-1.1	-1.9751 µg/L	-1.9751 ppb	13:16:15
2	B 249.677†	180.4	23.0	1.2171 µg/L	1.2171 ppb	13:16:15
2	Ba 233.527†	-26.4	-8.7	-0.2246 µg/L	-0.2246 ppb	13:16:15
2	Be 313.107†	-1883.3	49.5	0.0354 µg/L	0.0354 ppb	13:15:55
2	Cd 226.502†	-142.6	0.7	0.0189 µg/L	0.0189 ppb	13:16:15
2	Co 228.616†	19.9	-2.2	-0.1146 µg/L	-0.1146 ppb	13:16:15
2	Cr 267.716†	75.6	-14.0	-0.3625 µg/L	-0.3625 ppb	13:16:15
2	Cu 324.752†	2785.0	181.2	1.3000 µg/L	1.3000 ppb	13:15:55
2	Mn 257.610†	-521.2	19.4	0.0693 µg/L	0.0693 ppb	13:16:15
2	Mo 202.031†	17.7	13.5	1.5441 µg/L	1.5441 ppb	13:16:15
2	Ni 231.604†	302.6	6.0	0.4186 µg/L	0.4186 ppb	13:16:15
2	P 214.914†	246.1	6.3	13.380 µg/L	13.380 ppb	13:16:15
2	Pb 220.353†	43.5	0.9	0.3012 µg/L	0.3012 ppb	13:16:15

2	S 181.975 Axial†	24.6	4.0	15.350 µg/L	15.350 ppb	13:16:15
2	Sb 206.836†	22.1	1.3	1.3793 µg/L	1.3793 ppb	13:16:15
2	Se 196.026†	11.0	-2.2	-2.7423 µg/L	-2.7423 ppb	13:16:15
2	SiO2†	1398.9	25.3	5.5248 µg/L	5.5248 ppb	13:15:55
2	Si 251.611†	415.2	54.0	4.4180 µg/L	4.4180 ppb	13:16:15
2	Sn 189.927†	3.2	-1.4	-0.6421 µg/L	-0.6421 ppb	13:16:15
2	Ti 334.940†	93.2	101.9	0.2697 µg/L	0.2697 ppb	13:15:55
2	Tl 190.801†	-26.4	-1.0	-1.2044 µg/L	-1.2044 ppb	13:16:15
2	U 409.014†	120.0	-30.0	-2.9449 µg/L	-2.9449 ppb	13:15:55
2	V 292.402†	-176.6	-25.9	-0.3199 µg/L	-0.3199 ppb	13:15:55
2	Zn 213.857†	564.2	-12.2	-0.3342 µg/L	-0.3342 ppb	13:16:15
3	Sc RADIAL	108481.8	108481.8	99.3 %		13:14:46
3	Al 396.153Radial†	-159.3	14.5	6.9171 µg/L	6.9171 ppb	13:14:46
3	Ca 317.933Radial†	401.0	20.1	6.5050 µg/L	6.5050 ppb	13:15:07
3	Fe 238.204 Radial†	31.5	0.4	3.0680 µg/L	3.0680 ppb	13:15:07
3	K 766.490 Radial†	206.3	-23.1	-13.092 µg/L	-13.092 ppb	13:14:46
3	Mg 279.077 IEC†	4.6	-4.1	-41.308 µg/L	-41.308 ppb	13:15:07
3	Na 589.592 Radial†	241.8	8.1	2.8106 µg/L	2.8106 ppb	13:14:46
3	Sr 421.552†	149.9	-4.1	-0.0184 µg/L	-0.0184 ppb	13:14:46
3	Sc 361.383	1664238.1	1664238.1	98.905 %		13:16:21
3	Y 371.029	928336.9	928336.9	99.168 %		13:16:21
3	Ag 328.068†	-488.5	72.0	0.6444 µg/L	0.6444 ppb	13:16:27
3	As 188.979†	-4.9	-1.1	-2.0589 µg/L	-2.0589 ppb	13:16:48
3	B 249.677†	177.8	21.1	1.1201 µg/L	1.1201 ppb	13:16:48
3	Ba 233.527†	-16.2	1.5	0.0402 µg/L	0.0402 ppb	13:16:48
3	Be 313.107†	-1786.8	139.3	0.0995 µg/L	0.0995 ppb	13:16:27
3	Cd 226.502†	-126.4	16.4	0.4792 µg/L	0.4792 ppb	13:16:48
3	Co 228.616†	25.3	3.3	0.1737 µg/L	0.1737 ppb	13:16:48
3	Cr 267.716†	94.8	5.6	0.1458 µg/L	0.1458 ppb	13:16:48
3	Cu 324.752†	2759.8	167.3	1.2001 µg/L	1.2001 ppb	13:16:27
3	Mn 257.610†	-523.4	15.0	0.0578 µg/L	0.0578 ppb	13:16:48
3	Mo 202.031†	16.1	11.9	1.3638 µg/L	1.3638 ppb	13:16:48
3	Ni 231.604†	295.0	-0.4	-0.0289 µg/L	-0.0289 ppb	13:16:48
3	P 214.914†	244.9	6.1	13.091 µg/L	13.091 ppb	13:16:48
3	Pb 220.353†	33.3	-9.2	-2.8802 µg/L	-2.8802 ppb	13:16:48
3	S 181.975 Axial†	19.4	-1.1	-4.2102 µg/L	-4.2102 ppb	13:16:48
3	Sb 206.836†	24.2	3.4	3.6524 µg/L	3.6524 ppb	13:16:48
3	Se 196.026†	19.9	6.9	8.4628 µg/L	8.4628 ppb	13:16:48
3	SiO2†	1415.1	47.6	10.382 µg/L	10.382 ppb	13:16:27
3	Si 251.611†	410.7	51.2	4.1893 µg/L	4.1893 ppb	13:16:48
3	Sn 189.927†	2.5	-2.0	-0.9650 µg/L	-0.9650 ppb	13:16:48
3	Ti 334.940†	169.2	179.2	0.4814 µg/L	0.4814 ppb	13:16:27
3	Tl 190.801†	-24.9	0.4	0.4501 µg/L	0.4501 ppb	13:16:48
3	U 409.014†	160.0	10.9	1.0703 µg/L	1.0703 ppb	13:16:27
3	V 292.402†	-141.1	9.3	0.1301 µg/L	0.1301 ppb	13:16:27
3	Zn 213.857†	572.0	-1.9	-0.0507 µg/L	-0.0507 ppb	13:16:48

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1672085.7	99.371 %	0.4964			0.50%
Sc RADIAL	107784.0	98.7 %	0.56			0.57%
Y 371.029	928413.5	99.177 %	0.1181			0.12%
Ag 328.068†	60.8	0.5432 µg/L	0.10297	0.5432 ppb	0.10297	18.95%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.1	5.2598 µg/L	10.99061	5.2598 ppb	10.99061	208.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.3	-6.0035 µg/L	6.90503	-6.0035 ppb	6.90503	115.02%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	24.1	1.2773 µg/L	0.19435	1.2773 ppb	0.19435	15.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.2	-0.0302 µg/L	0.17047	-0.0302 ppb	0.17047	563.92%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	70.9	0.0506 µg/L	0.04337	0.0506 ppb	0.04337	85.77%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.6	4.1015 µg/L	2.16651	4.1015 ppb	2.16651	52.82%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.2	0.1512 µg/L	0.28586	0.1512 ppb	0.28586	189.07%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.3	0.0169 µg/L	0.14580	0.0169 ppb	0.14580	860.73%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
		-9.6	-0.2471 µg/L	0.34983	-0.2471 ppb
				0.34983	141.57%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
		159.7	1.1448 µg/L	0.18904	1.1448 ppb
				0.18904	16.51%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
		0.1	0.8226 µg/L	7.02285	0.8226 ppb
				7.02285	853.79%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
		-3.9	-2.1993 µg/L	11.86020	-2.1993 ppb
				11.86020	539.26%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
		0.2	1.9892 µg/L	37.93270	1.9892 ppb
				37.93270	>999.9%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
		18.4	0.0669 µg/L	0.00818	0.0669 ppb
				0.00818	12.22%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
		12.8	1.4574 µg/L	0.09031	1.4574 ppb
				0.09031	6.20%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
		6.8	2.3532 µg/L	5.46022	2.3532 ppb
				5.46022	232.04%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
		0.4	0.0288 µg/L	0.36435	0.0288 ppb
				0.36435	>999.9%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
		4.2	8.8682 µg/L	7.56578	8.8682 ppb
				7.56578	85.31%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
		-0.5	-0.1461 µg/L	2.54013	-0.1461 ppb
				2.54013	>999.9%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
		0.6	2.2842 µg/L	11.31550	2.2842 ppb
				11.31550	495.38%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
		1.8	1.9360 µg/L	1.51671	1.9360 ppb
				1.51671	78.34%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
		3.8	4.6795 µg/L	6.42786	4.6795 ppb
				6.42786	137.36%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated		
		43.0	9.3909 µg/L	3.47800	9.3909 ppb
				3.47800	37.04%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated		
		48.9	3.9958 µg/L	0.54542	3.9958 ppb
				0.54542	13.65%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
		-2.1	-0.9809 µg/L	0.34696	-0.9809 ppb
				0.34696	35.37%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
		-5.5	-0.0251 µg/L	0.03562	-0.0251 ppb
				0.03562	142.08%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
		148.5	0.3960 µg/L	0.11160	0.3960 ppb
				0.11160	28.18%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
		1.7	1.9255 µg/L	4.07319	1.9255 ppb
				4.07319	211.54%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
		3.9	0.3801 µg/L	3.03925	0.3801 ppb
				3.03925	799.69%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
		-1.0	-0.0012 µg/L	0.27740	-0.0012 ppb
				0.27740	>999.9%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
		-7.1	-0.1927 µg/L	0.14177	-0.1927 ppb
				0.14177	73.59%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/26/2010 13:16:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	107574.9	107574.9	98.5 %		13:17:30
1	Al 396.153Radial†	234.9	413.4	197.64 µg/L	197.64 ppb	13:17:30
1	Ca 317.933Radial†	961.9	592.9	192.30 µg/L	192.30 ppb	13:17:51
1	Fe 238.204 Radial†	42.0	11.4	85.701 µg/L	85.701 ppb	13:17:51
1	K 766.490 Radial†	519.0	296.1	168.06 µg/L	168.06 ppb	13:17:30
1	Mg 279.077 IEC†	33.9	25.7	256.45 µg/L	256.45 ppb	13:17:51
1	Na 589.592 Radial†	1091.9	873.1	302.30 µg/L	302.30 ppb	13:17:30
1	Sr 421.552†	1207.4	1070.6	4.8488 µg/L	4.8488 ppb	13:17:30
1	Sc 361.383	1688148.7	1688148.7	100.33 %		13:18:53
1	Y 371.029	940106.3	940106.3	100.43 %		13:18:53
1	Ag 328.068†	-16.1	549.9	4.9562 µg/L	4.9562 ppb	13:18:58
1	As 188.979†	9.7	13.5	24.833 µg/L	24.833 ppb	13:19:19
1	B 249.677†	1063.5	901.4	47.776 µg/L	47.776 ppb	13:18:58
1	Ba 233.527†	174.6	191.9	4.9553 µg/L	4.9553 ppb	13:19:19
1	Be 313.107†	4722.6	6653.1	4.7605 µg/L	4.7605 ppb	13:18:58
1	Cd 226.502†	23.2	167.4	4.8945 µg/L	4.8945 ppb	13:19:19
1	Co 228.616†	114.0	91.3	4.7378 µg/L	4.7378 ppb	13:19:19
1	Cr 267.716†	261.7	170.7	4.4171 µg/L	4.4171 ppb	13:19:19
1	Cu 324.752†	4053.7	1417.5	10.178 µg/L	10.178 ppb	13:18:58
1	Mn 257.610†	2193.1	2730.2	9.9437 µg/L	9.9437 ppb	13:18:58
1	Mo 202.031†	87.0	82.3	9.4156 µg/L	9.4156 ppb	13:19:19
1	Ni 231.604†	365.4	65.5	4.5408 µg/L	4.5408 ppb	13:19:19
1	P 214.914†	312.4	69.9	149.71 µg/L	149.71 ppb	13:19:19
1	Pb 220.353†	68.5	25.5	7.9797 µg/L	7.9797 ppb	13:19:19
1	S 181.975 Axial†	45.4	24.5	93.159 µg/L	93.159 ppb	13:19:19
1	Sb 206.836†	31.0	9.9	10.632 µg/L	10.632 ppb	13:19:19
1	Se 196.026†	36.9	23.4	28.891 µg/L	28.891 ppb	13:19:19
1	SiO2†	2311.1	920.4	200.85 µg/L	200.85 ppb	13:18:58
1	Si 251.611†	1479.8	1111.0	90.820 µg/L	90.820 ppb	13:19:19
1	Sn 189.927†	23.9	19.2	9.0660 µg/L	9.0660 ppb	13:19:19
1	Ti 334.940†	1756.2	1758.7	4.6746 µg/L	4.6746 ppb	13:18:58
1	Tl 190.801†	-9.3	16.3	19.138 µg/L	19.138 ppb	13:19:19
1	U 409.014†	749.0	595.7	58.337 µg/L	58.337 ppb	13:18:58
1	V 292.402†	243.9	395.0	5.1524 µg/L	5.1524 ppb	13:18:58
1	Zn 213.857†	914.1	330.9	8.8339 µg/L	8.8339 ppb	13:19:19
2	Sc RADIAL	106836.0	106836.0	97.8 %		13:17:56
2	Al 396.153Radial†	222.4	402.2	192.29 µg/L	192.29 ppb	13:17:56
2	Ca 317.933Radial†	963.9	601.6	195.13 µg/L	195.13 ppb	13:18:17
2	Fe 238.204 Radial†	42.6	12.2	92.181 µg/L	92.181 ppb	13:18:17
2	K 766.490 Radial†	487.7	267.7	151.94 µg/L	151.94 ppb	13:17:56
2	Mg 279.077 IEC†	37.8	29.9	298.25 µg/L	298.25 ppb	13:18:17
2	Na 589.592 Radial†	1004.7	791.7	274.12 µg/L	274.12 ppb	13:17:56
2	Sr 421.552†	1232.9	1105.2	5.0052 µg/L	5.0052 ppb	13:17:56
2	Sc 361.383	1674205.3	1674205.3	99.497 %		13:19:25
2	Y 371.029	931146.5	931146.5	99.469 %		13:19:25
2	Ag 328.068†	35.1	601.2	5.4126 µg/L	5.4126 ppb	13:19:30
2	As 188.979†	12.4	16.3	30.075 µg/L	30.075 ppb	13:19:51
2	B 249.677†	1052.1	898.7	47.628 µg/L	47.628 ppb	13:19:30
2	Ba 233.527†	168.2	187.0	4.8267 µg/L	4.8267 ppb	13:19:51
2	Be 313.107†	4648.2	6617.5	4.7349 µg/L	4.7349 ppb	13:19:30
2	Cd 226.502†	27.2	171.6	5.0174 µg/L	5.0174 ppb	13:19:51
2	Co 228.616†	109.6	87.9	4.5593 µg/L	4.5593 ppb	13:19:51
2	Cr 267.716†	249.7	160.8	4.1613 µg/L	4.1613 ppb	13:19:51
2	Cu 324.752†	4018.9	1416.2	10.169 µg/L	10.169 ppb	13:19:30
2	Mn 257.610†	2192.2	2747.5	10.004 µg/L	10.004 ppb	13:19:30
2	Mo 202.031†	89.1	85.2	9.7396 µg/L	9.7396 ppb	13:19:51
2	Ni 231.604†	364.8	68.0	4.7140 µg/L	4.7140 ppb	13:19:51
2	P 214.914†	313.0	73.1	156.57 µg/L	156.57 ppb	13:19:51
2	Pb 220.353†	71.5	29.0	9.1035 µg/L	9.1035 ppb	13:19:51



2	S 181.975 Axial†	45.6	25.1	95.314 µg/L	95.314 ppb	13:19:51
2	Sb 206.836†	29.3	8.4	9.1238 µg/L	9.1238 ppb	13:19:51
2	Se 196.026†	44.1	31.0	38.227 µg/L	38.227 ppb	13:19:51
2	SiO2†	2328.7	957.3	208.91 µg/L	208.91 ppb	13:19:30
2	Si 251.611†	1489.8	1133.4	92.649 µg/L	92.649 ppb	13:19:51
2	Sn 189.927†	28.5	24.1	11.341 µg/L	11.341 ppb	13:19:51
2	Ti 334.940†	1846.1	1863.6	4.9513 µg/L	4.9513 ppb	13:19:30
2	Tl 190.801†	-9.8	15.7	18.386 µg/L	18.386 ppb	13:19:51
2	U 409.014†	666.4	518.9	50.808 µg/L	50.808 ppb	13:19:30
2	V 292.402†	209.3	362.3	4.7326 µg/L	4.7326 ppb	13:19:30
2	Zn 213.857†	919.9	344.2	9.1890 µg/L	9.1890 ppb	13:19:51
3	Sc RADIAL	106926.3	106926.3	97.9 %		13:18:22
3	Al 396.153Radial†	202.5	381.8	182.51 µg/L	182.51 ppb	13:18:22
3	Ca 317.933Radial†	962.3	599.2	194.34 µg/L	194.34 ppb	13:18:43
3	Fe 238.204 Radial†	43.2	12.8	96.350 µg/L	96.350 ppb	13:18:43
3	K 766.490 Radial†	538.4	319.1	181.08 µg/L	181.08 ppb	13:18:22
3	Mg 279.077 IEC†	43.7	35.8	357.63 µg/L	357.63 ppb	13:18:43
3	Na 589.592 Radial†	1075.1	862.7	298.72 µg/L	298.72 ppb	13:18:22
3	Sr 421.552†	1234.3	1105.6	5.0070 µg/L	5.0070 ppb	13:18:22
3	Sc 361.383	1677299.1	1677299.1	99.681 %		13:19:57
3	Y 371.029	931475.0	931475.0	99.504 %		13:19:57
3	Ag 328.068†	34.3	600.3	5.4058 µg/L	5.4058 ppb	13:20:03
3	As 188.979†	6.7	10.6	19.436 µg/L	19.436 ppb	13:20:23
3	B 249.677†	1040.1	884.8	46.888 µg/L	46.888 ppb	13:20:03
3	Ba 233.527†	160.3	178.8	4.6162 µg/L	4.6162 ppb	13:20:23
3	Be 313.107†	4515.1	6475.3	4.6332 µg/L	4.6332 ppb	13:20:03
3	Cd 226.502†	9.3	153.5	4.4880 µg/L	4.4880 ppb	13:20:23
3	Co 228.616†	97.1	75.2	3.9006 µg/L	3.9006 ppb	13:20:23
3	Cr 267.716†	230.5	141.0	3.6502 µg/L	3.6502 ppb	13:20:23
3	Cu 324.752†	4014.0	1403.8	10.081 µg/L	10.081 ppb	13:20:03
3	Mn 257.610†	2102.6	2653.6	9.6582 µg/L	9.6582 ppb	13:20:03
3	Mo 202.031†	88.2	84.1	9.6184 µg/L	9.6184 ppb	13:20:23
3	Ni 231.604†	363.5	66.0	4.5712 µg/L	4.5712 ppb	13:20:23
3	P 214.914†	301.3	60.7	129.92 µg/L	129.92 ppb	13:20:23
3	Pb 220.353†	69.2	26.6	8.3260 µg/L	8.3260 ppb	13:20:23
3	S 181.975 Axial†	50.4	29.9	113.56 µg/L	113.56 ppb	13:20:23
3	Sb 206.836†	23.1	2.2	2.4389 µg/L	2.4389 ppb	13:20:23
3	Se 196.026†	41.1	27.9	34.310 µg/L	34.310 ppb	13:20:23
3	SiO2†	2329.2	953.5	208.08 µg/L	208.08 ppb	13:20:03
3	Si 251.611†	1416.8	1057.3	86.433 µg/L	86.433 ppb	13:20:23
3	Sn 189.927†	21.6	17.1	8.0672 µg/L	8.0672 ppb	13:20:23
3	Ti 334.940†	1789.2	1803.1	4.7850 µg/L	4.7850 ppb	13:20:03
3	Tl 190.801†	-9.3	16.2	19.013 µg/L	19.013 ppb	13:20:23
3	U 409.014†	732.0	583.5	57.136 µg/L	57.136 ppb	13:20:03
3	V 292.402†	219.7	372.3	4.8639 µg/L	4.8639 ppb	13:20:03
3	Zn 213.857†	884.5	307.1	8.1886 µg/L	8.1886 ppb	13:20:23

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1679884.4	99.834 %	0.4352			0.44%
Sc RADIAL	107112.4	98.1 %	0.37			0.38%
Y 371.029	934242.6	99.799 %	0.5427			0.54%
Ag 328.068†	583.8	5.2582 µg/L	0.26160	5.2582 ppb	0.26160	4.98%
QC value within limits for Ag 328.068 Recovery = 105.16%						
Al 396.153Radial†	399.1	190.81 µg/L	7.674	190.81 ppb	7.674	4.02%
QC value within limits for Al 396.153Radial Recovery = 95.41%						
As 188.979†	13.4	24.782 µg/L	5.3199	24.782 ppb	5.3199	21.47%
QC value within limits for As 188.979 Recovery = 82.61%						
B 249.677†	895.0	47.431 µg/L	0.4758	47.431 ppb	0.4758	1.00%
QC value within limits for B 249.677 Recovery = 94.86%						
Ba 233.527†	185.9	4.7994 µg/L	0.17120	4.7994 ppb	0.17120	3.57%
QC value within limits for Ba 233.527 Recovery = 95.99%						
Be 313.107†	6582.0	4.7096 µg/L	0.06732	4.7096 ppb	0.06732	1.43%
QC value within limits for Be 313.107 Recovery = 94.19%						
Ca 317.933Radial†	597.9	193.92 µg/L	1.457	193.92 ppb	1.457	0.75%
QC value within limits for Ca 317.933Radial Recovery = 96.96%						
Cd 226.502†	164.2	4.8000 µg/L	0.27707	4.8000 ppb	0.27707	5.77%
QC value within limits for Cd 226.502 Recovery = 96.00%						
Co 228.616†	84.8	4.3992 µg/L	0.44100	4.3992 ppb	0.44100	10.02%

Cr	267.716†	157.5	4.0762 µg/L	0.39046	4.0762 ppb	0.39046	9.58%
QC value within limits for Cr 267.716 Recovery = 81.52%							
Cu	324.752†	1412.5	10.143 µg/L	0.0532	10.143 ppb	0.0532	0.52%
QC value within limits for Cu 324.752 Recovery = 101.43%							
Fe	238.204 Radial†	12.1	91.410 µg/L	5.3663	91.410 ppb	5.3663	5.87%
QC value within limits for Fe 238.204 Radial Recovery = 91.41%							
K	766.490 Radial†	294.3	167.02 µg/L	14.600	167.02 ppb	14.600	8.74%
QC value within limits for K 766.490 Radial Recovery = 111.35%							
Mg	279.077 IEC†	30.5	304.11 µg/L	50.842	304.11 ppb	50.842	16.72%
QC value within limits for Mg 279.077 IEC Recovery = 101.37%							
Mn	257.610†	2710.5	9.8687 µg/L	0.18486	9.8687 ppb	0.18486	1.87%
QC value within limits for Mn 257.610 Recovery = 98.69%							
Mo	202.031†	83.9	9.5912 µg/L	0.16370	9.5912 ppb	0.16370	1.71%
QC value within limits for Mo 202.031 Recovery = 95.91%							
Na	589.592 Radial†	842.5	291.71 µg/L	15.341	291.71 ppb	15.341	5.26%
QC value within limits for Na 589.592 Radial Recovery = 97.24%							
Ni	231.604†	66.5	4.6087 µg/L	0.09247	4.6087 ppb	0.09247	2.01%
QC value within limits for Ni 231.604 Recovery = 92.17%							
P	214.914†	67.9	145.40 µg/L	13.837	145.40 ppb	13.837	9.52%
QC value within limits for P 214.914 Recovery = 96.93%							
Pb	220.353†	27.0	8.4698 µg/L	0.57554	8.4698 ppb	0.57554	6.80%
QC value within limits for Pb 220.353 Recovery = 84.70%							
S	181.975 Axial†	26.5	100.68 µg/L	11.206	100.68 ppb	11.206	11.13%
QC value within limits for S 181.975 Axial Recovery = 100.68%							
Sb	206.836†	6.8	7.3982 µg/L	4.36058	7.3982 ppb	4.36058	58.94%
QC value within limits for Sb 206.836 Recovery = 73.98%							
Se	196.026†	27.5	33.809 µg/L	4.6881	33.809 ppb	4.6881	13.87%
QC value within limits for Se 196.026 Recovery = 112.70%							
SiO2†		943.7	205.95 µg/L	4.432	205.95 ppb	4.432	2.15%
QC value within limits for SiO2 Recovery = 96.69%							
Si	251.611†	1100.6	89.967 µg/L	3.1945	89.967 ppb	3.1945	3.55%
QC value within limits for Si 251.611 Recovery = 89.97%							
Sn	189.927†	20.1	9.4915 µg/L	1.67798	9.4915 ppb	1.67798	17.68%
QC value within limits for Sn 189.927 Recovery = 94.92%							
Sr	421.552†	1093.8	4.9537 µg/L	0.09081	4.9537 ppb	0.09081	1.83%
QC value within limits for Sr 421.552 Recovery = 99.07%							
Ti	334.940†	1808.5	4.8036 µg/L	0.13925	4.8036 ppb	0.13925	2.90%
QC value within limits for Ti 334.940 Recovery = 96.07%							
Tl	190.801†	16.1	18.846 µg/L	0.4033	18.846 ppb	0.4033	2.14%
QC value within limits for Tl 190.801 Recovery = 94.23%							
U	409.014†	566.0	55.427 µg/L	4.0446	55.427 ppb	4.0446	7.30%
QC value within limits for U 409.014 Recovery = 110.85%							
V	292.402†	376.6	4.9163 µg/L	0.21471	4.9163 ppb	0.21471	4.37%
QC value within limits for V 292.402 Recovery = 98.33%							
Zn	213.857†	327.4	8.7372 µg/L	0.50717	8.7372 ppb	0.50717	5.80%
QC value within limits for Zn 213.857 Recovery = 87.37%							

All analyte(s) passed QC.

Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 103  
 Date Collected: 2/26/2010 13:20:32  
 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	103941.2	103941.2	95.2 %		13:21:14
1	Al 396.153Radial†	993840.6	1044303.9	499790 µg/L	499790 ppb	13:21:08
1	Ca 317.933Radial†	1376364.9	1445625.6	468850 µg/L	468850 ppb	13:21:08
1	Fe 238.204 Radial†	23143.5	24283.3	182780 µg/L	182780 ppb	13:21:14
1	K 766.490 Radial†	173.2	-48.7	-27.661 µg/L	-27.661 ppb	13:21:14
1	Mg 279.077 IEC†	45794.1	48102.5	480090 µg/L	480090 ppb	13:21:14
1	Na 589.592 Radial†	196.9	-28.4	-9.8191 µg/L	-9.8191 ppb	13:21:14
1	Sr 421.552†	861.8	750.4	3.3987 µg/L	3.3987 ppb	13:21:14
1	Sc 361.383	1544612.9	1544612.9	91.795 %		13:21:48
1	Y 371.029	852557.2	852557.2	91.073 %		13:21:48
1	Ag 328.068†	-2922.4	-2617.6	0.2185 µg/L	0.2185 ppb	13:21:48
1	As 188.979†	4.5	8.8	2.3965 µg/L	2.3965 ppb	13:22:09
1	B 249.677†	1472.3	1445.3	-18.722 µg/L	-18.722 ppb	13:21:48
1	Ba 233.527†	236.4	275.4	7.0901 µg/L	7.0901 ppb	13:22:09
1	Be 313.107†	-2566.4	-850.0	-0.6173 µg/L	-0.6173 ppb	13:21:48
1	Cd 226.502†	728.1	937.4	6.7792 µg/L	6.7792 ppb	13:22:09
1	Co 228.616†	70.3	54.3	2.7633 µg/L	2.7633 ppb	13:22:09
1	Cr 267.716†	-6.1	-96.8	-2.5070 µg/L	-2.5070 ppb	13:22:09
1	Cu 324.752†	-2093.2	-4903.3	-0.7854 µg/L	-0.7854 ppb	13:21:48
1	Mn 257.610†	4989.6	5979.8	0.2550 µg/L	0.2550 ppb	13:21:48
1	Mo 202.031†	-62.6	-72.5	-1.3413 µg/L	-1.3413 ppb	13:22:09
1	Ni 231.604†	220.0	-59.0	-1.7203 µg/L	-1.7203 ppb	13:22:09
1	P 214.914†	255.4	36.8	77.472 µg/L	77.472 ppb	13:22:09
1	Pb 220.353†	-71.7	-120.9	-17.519 µg/L	-17.519 ppb	13:22:09
1	S 181.975 Axial†	-9.8	-31.3	-118.92 µg/L	-118.92 ppb	13:22:09
1	Sb 206.836†	18.0	-1.4	-8.6670 µg/L	-8.6670 ppb	13:22:09
1	Se 196.026†	-149.9	-176.6	26.887 µg/L	26.887 ppb	13:22:09
1	SiO2†	1117.7	-165.6	-36.136 µg/L	-36.136 ppb	13:22:09
1	Si 251.611†	368.2	37.1	3.0321 µg/L	3.0321 ppb	13:22:09
1	Sn 189.927†	-128.5	-144.6	-12.452 µg/L	-12.452 ppb	13:22:09
1	Ti 334.940†	8021.9	8747.0	-7.1061 µg/L	-7.1061 ppb	13:21:48
1	Tl 190.801†	17.5	44.7	-12.948 µg/L	-12.948 ppb	13:22:09
1	U 409.014†	278.3	152.3	-39.089 µg/L	-39.089 ppb	13:21:48
1	V 292.402†	-493.1	-385.2	1.7720 µg/L	1.7720 ppb	13:22:09
1	Zn 213.857†	1783.2	1362.3	0.7570 µg/L	0.7570 ppb	13:22:09
2	Sc RADIAL	103485.4	103485.4	94.8 %		13:21:25
2	Al 396.153Radial†	998169.4	1053470.3	504180 µg/L	504180 ppb	13:21:20
2	Ca 317.933Radial†	1380058.4	1455891.5	472180 µg/L	472180 ppb	13:21:20
2	Fe 238.204 Radial†	22794.6	24022.2	180820 µg/L	180820 ppb	13:21:25
2	K 766.490 Radial†	186.1	-34.4	-19.502 µg/L	-19.502 ppb	13:21:25
2	Mg 279.077 IEC†	45368.6	47865.4	477730 µg/L	477730 ppb	13:21:25
2	Na 589.592 Radial†	206.3	-17.5	-6.0731 µg/L	-6.0731 ppb	13:21:25
2	Sr 421.552†	855.8	748.1	3.3880 µg/L	3.3880 ppb	13:21:25
2	Sc 361.383	1538500.2	1538500.2	91.432 %		13:22:15
2	Y 371.029	855195.9	855195.9	91.355 %		13:22:15
2	Ag 328.068†	-2892.4	-2597.5	0.1477 µg/L	0.1477 ppb	13:22:15
2	As 188.979†	14.1	19.3	21.537 µg/L	21.537 ppb	13:22:36
2	B 249.677†	1429.2	1404.5	-19.861 µg/L	-19.861 ppb	13:22:15
2	Ba 233.527†	255.0	296.8	7.6404 µg/L	7.6404 ppb	13:22:36
2	Be 313.107†	-2441.6	-724.6	-0.5273 µg/L	-0.5273 ppb	13:22:15
2	Cd 226.502†	716.5	927.9	6.7248 µg/L	6.7248 ppb	13:22:36
2	Co 228.616†	76.9	61.8	3.1516 µg/L	3.1516 ppb	13:22:36
2	Cr 267.716†	-7.6	-98.5	-2.5493 µg/L	-2.5493 ppb	13:22:36
2	Cu 324.752†	-2048.4	-4863.4	-0.8687 µg/L	-0.8687 ppb	13:22:15
2	Mn 257.610†	4945.5	5953.2	0.2012 µg/L	0.2012 ppb	13:22:15
2	Mo 202.031†	-61.6	-71.8	-1.3315 µg/L	-1.3315 ppb	13:22:36
2	Ni 231.604†	244.9	-30.8	0.2122 µg/L	0.2122 ppb	13:22:36
2	P 214.914†	230.5	10.6	24.026 µg/L	24.026 ppb	13:22:36
2	Pb 220.353†	-69.9	-119.3	-16.686 µg/L	-16.686 ppb	13:22:36

2	S 181.975 Axial†	-19.8	-42.4	-160.89 µg/L	-160.89 ppb	13:22:36
2	Sb 206.836†	20.9	1.8	-5.2476 µg/L	-5.2476 ppb	13:22:36
2	Se 196.026†	-158.2	-186.4	9.8165 µg/L	9.8165 ppb	13:22:36
2	SiO2†	1150.7	-124.7	-27.204 µg/L	-27.204 ppb	13:22:36
2	Si 251.611†	379.1	50.6	4.1350 µg/L	4.1350 ppb	13:22:36
2	Sn 189.927†	-121.0	-136.9	-8.9975 µg/L	-8.9975 ppb	13:22:36
2	Ti 334.940†	7794.7	8533.3	-7.4360 µg/L	-7.4360 ppb	13:22:15
2	Tl 190.801†	13.8	40.6	-18.511 µg/L	-18.511 ppb	13:22:36
2	U 409.014†	323.1	202.6	-34.093 µg/L	-34.093 ppb	13:22:15
2	V 292.402†	-458.2	-349.2	2.1624 µg/L	2.1624 ppb	13:22:36
2	Zn 213.857†	1777.1	1363.4	1.0033 µg/L	1.0033 ppb	13:22:36
3	Sc RADIAL	103820.2	103820.2	95.1 %		13:21:37
3	Al 396.153Radial†	995343.4	1047101.0	501130 µg/L	501130 ppb	13:21:31
3	Ca 317.933Radial†	1377375.9	1448373.6	469740 µg/L	469740 ppb	13:21:31
3	Fe 238.204 Radial†	22913.1	24069.2	181170 µg/L	181170 ppb	13:21:37
3	K 766.490 Radial†	161.2	-61.2	-34.719 µg/L	-34.719 ppb	13:21:37
3	Mg 279.077 IEC†	45505.1	47854.6	477620 µg/L	477620 ppb	13:21:37
3	Na 589.592 Radial†	235.2	12.1	4.1873 µg/L	4.1873 ppb	13:21:37
3	Sr 421.552†	926.8	819.8	3.7130 µg/L	3.7130 ppb	13:21:37
3	Sc 361.383	1541428.2	1541428.2	91.606 %		13:22:43
3	Y 371.029	851225.3	851225.3	90.931 %		13:22:43
3	Ag 328.068†	-3005.2	-2714.7	-0.8547 µg/L	-0.8547 ppb	13:22:43
3	As 188.979†	12.6	17.6	18.546 µg/L	18.546 ppb	13:23:03
3	B 249.677†	1444.9	1418.7	-19.292 µg/L	-19.292 ppb	13:22:43
3	Ba 233.527†	254.9	296.2	7.6245 µg/L	7.6245 ppb	13:23:03
3	Be 313.107†	-2507.9	-791.8	-0.5755 µg/L	-0.5755 ppb	13:22:43
3	Cd 226.502†	728.4	939.4	7.0210 µg/L	7.0210 ppb	13:23:03
3	Co 228.616†	75.9	60.6	3.0867 µg/L	3.0867 ppb	13:23:03
3	Cr 267.716†	-9.9	-101.0	-2.6139 µg/L	-2.6139 ppb	13:23:03
3	Cu 324.752†	-1961.5	-4764.3	-0.0920 µg/L	-0.0920 ppb	13:22:43
3	Mn 257.610†	5063.2	6071.4	0.6606 µg/L	0.6606 ppb	13:22:43
3	Mo 202.031†	-67.2	-77.7	-1.9994 µg/L	-1.9994 ppb	13:23:03
3	Ni 231.604†	238.7	-38.1	-0.2872 µg/L	-0.2872 ppb	13:23:03
3	P 214.914†	249.8	31.2	67.164 µg/L	67.164 ppb	13:23:03
3	Pb 220.353†	-86.2	-136.9	-22.423 µg/L	-22.423 ppb	13:23:03
3	S 181.975 Axial†	-17.5	-39.8	-151.14 µg/L	-151.14 ppb	13:23:03
3	Sb 206.836†	20.0	0.8	-6.3384 µg/L	-6.3384 ppb	13:23:03
3	Se 196.026†	-150.1	-177.2	22.436 µg/L	22.436 ppb	13:23:03
3	SiO2†	1143.5	-135.0	-29.450 µg/L	-29.450 ppb	13:23:03
3	Si 251.611†	406.9	80.2	6.5538 µg/L	6.5538 ppb	13:23:03
3	Sn 189.927†	-118.7	-134.1	-7.7666 µg/L	-7.7666 ppb	13:23:03
3	Ti 334.940†	7789.0	8510.8	-7.5263 µg/L	-7.5263 ppb	13:22:43
3	Tl 190.801†	14.6	41.5	-16.987 µg/L	-16.987 ppb	13:23:03
3	U 409.014†	269.2	143.0	-39.829 µg/L	-39.829 ppb	13:22:43
3	V 292.402†	-472.1	-363.4	1.9841 µg/L	1.9841 ppb	13:23:03
3	Zn 213.857†	1769.7	1351.6	0.6787 µg/L	0.6787 ppb	13:23:03

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1541513.8	91.611 %	0.1817			0.20%
Sc RADIAL	103748.9	95.0 %	0.22			0.23%
Y 371.029	852992.8	91.120 %	0.2159			0.24%
Ag 328.068†	-2643.3	-0.1628 µg/L	0.60025	-0.1628 ppb	0.60025	368.65%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1048291.8	501700 µg/L	2248.3	501700 ppb	2248.3	0.45%
QC value within limits for Al 396.153Radial Recovery = 100.34%						
As 188.979†	15.2	14.160 µg/L	10.2964	14.160 ppb	10.2964	72.72%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1422.8	-19.292 µg/L	0.5693	-19.292 ppb	0.5693	2.95%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	289.5	7.4517 µg/L	0.31325	7.4517 ppb	0.31325	4.20%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-788.8	-0.5734 µg/L	0.04503	-0.5734 ppb	0.04503	7.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1449963.6	470260 µg/L	1723.6	470260 ppb	1723.6	0.37%
QC value within limits for Ca 317.933Radial Recovery = 94.05%						
Cd 226.502†	934.9	6.8416 µg/L	0.15767	6.8416 ppb	0.15767	2.30%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	58.9	3.0005 µg/L	0.20797	3.0005 ppb	0.20797	6.93%

Cr	267.716†	-98.8	-2.5567 µg/L	0.05381	-2.5567 ppb	0.05381	2.10%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-4843.7	-0.5821 µg/L	0.42645	-0.5821 ppb	0.42645	73.27%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	24124.9	181590 µg/L	1047.4	181590 ppb	1047.4	0.58%
QC value within limits for Fe 238.204 Radial Recovery = 90.80%							
K	766.490 Radial†	-48.1	-27.294 µg/L	7.6151	-27.294 ppb	7.6151	27.90%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	47940.8	478480 µg/L	1398.2	478480 ppb	1398.2	0.29%
QC value within limits for Mg 279.077 IEC Recovery = 95.70%							
Mn	257.610†	6001.5	0.3722 µg/L	0.25116	0.3722 ppb	0.25116	67.47%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-74.0	-1.5574 µg/L	0.38278	-1.5574 ppb	0.38278	24.58%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-11.3	-3.9017 µg/L	7.25130	-3.9017 ppb	7.25130	185.85%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-42.6	-0.5984 µg/L	1.00310	-0.5984 ppb	1.00310	167.63%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	26.2	56.221 µg/L	28.3537	56.221 ppb	28.3537	50.43%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-125.7	-18.876 µg/L	3.1001	-18.876 ppb	3.1001	16.42%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-37.8	-143.65 µg/L	21.967	-143.65 ppb	21.967	15.29%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.4	-6.7510 µg/L	1.74666	-6.7510 ppb	1.74666	25.87%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-180.0	19.713 µg/L	8.8550	19.713 ppb	8.8550	44.92%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-141.7	-30.930 µg/L	4.6462	-30.930 ppb	4.6462	15.02%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	55.9	4.5736 µg/L	1.80136	4.5736 ppb	1.80136	39.39%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-138.5	-9.7388 µg/L	2.42922	-9.7388 ppb	2.42922	24.94%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	772.8	3.4999 µg/L	0.18463	3.4999 ppb	0.18463	5.28%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	8597.0	-7.3561 µg/L	0.22120	-7.3561 ppb	0.22120	3.01%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	42.3	-16.149 µg/L	2.8749	-16.149 ppb	2.8749	17.80%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	165.9	-37.670 µg/L	3.1196	-37.670 ppb	3.1196	8.28%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-365.9	1.9728 µg/L	0.19544	1.9728 ppb	0.19544	9.91%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	1359.1	0.8130 µg/L	0.16943	0.8130 ppb	0.16943	20.84%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: ICSAB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 104  
 Date Collected: 2/26/2010 13:23:13  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	103767.5	103767.5	95.0	%		13:23:53
1	Al 396.153Radial†	988171.9	1040086.2	497760	µg/L	497760 ppb	13:23:47
1	Ca 317.933Radial†	1367825.2	1439059.2	466720	µg/L	466720 ppb	13:23:47
1	Fe 238.204 Radial†	22767.2	23928.0	180120	µg/L	180120 ppb	13:23:53
1	K 766.490 Radial†	9109.5	9355.7	5309.5	µg/L	5309.5 ppb	13:23:53
1	Mg 279.077 IEC†	45222.9	47582.0	474910	µg/L	474910 ppb	13:23:53
1	Na 589.592 Radial†	13880.7	14372.2	4976.2	µg/L	4976.2 ppb	13:23:53
1	Sr 421.552†	104666.1	109991.3	498.15	µg/L	498.15 ppb	13:23:53
1	Sc 361.383	1551579.6	1551579.6	92.209	%		13:24:28
1	Y 371.029	862225.5	862225.5	92.106	%		13:24:28
1	Ag 328.068†	23660.5	26225.4	260.80	µg/L	260.80 ppb	13:24:28
1	As 188.979†	278.0	305.3	548.34	µg/L	548.34 ppb	13:24:48
1	B 249.677†	10297.9	11009.3	490.72	µg/L	490.72 ppb	13:24:28
1	Ba 233.527†	17249.4	18724.7	483.47	µg/L	483.47 ppb	13:24:48
1	Be 313.107†	304465.6	332135.3	237.54	µg/L	237.54 ppb	13:24:28
1	Cd 226.502†	14925.9	16331.1	458.12	µg/L	458.12 ppb	13:24:48
1	Co 228.616†	7703.0	8331.6	431.61	µg/L	431.61 ppb	13:24:48
1	Cr 267.716†	16789.1	18117.5	468.81	µg/L	468.81 ppb	13:24:48
1	Cu 324.752†	67348.7	70415.8	538.63	µg/L	538.63 ppb	13:24:28
1	Mn 257.610†	123549.0	134531.7	469.22	µg/L	469.22 ppb	13:24:28
1	Mo 202.031†	3929.2	4256.8	493.39	µg/L	493.39 ppb	13:24:48
1	Ni 231.604†	6207.4	6433.2	447.93	µg/L	447.93 ppb	13:24:48
1	P 214.914†	1321.0	1191.2	2517.0	µg/L	2517.0 ppb	13:24:48
1	Pb 220.353†	1303.0	1370.2	452.02	µg/L	452.02 ppb	13:24:48
1	S 181.975 Axial†	609.2	640.0	2429.0	µg/L	2429.0 ppb	13:24:48
1	Sb 206.836†	454.8	472.3	499.48	µg/L	499.48 ppb	13:24:48
1	Se 196.026†	1605.2	1727.5	2360.8	µg/L	2360.8 ppb	13:24:48
1	SiO2†	46170.3	48688.0	10625	µg/L	10625 ppb	13:24:28
1	Si 251.611†	56667.9	61091.7	4994.0	µg/L	4994.0 ppb	13:24:28
1	Sn 189.927†	860.8	929.0	491.54	µg/L	491.54 ppb	13:24:48
1	Ti 334.940†	179786.9	194984.9	490.11	µg/L	490.11 ppb	13:24:28
1	Tl 190.801†	374.0	431.2	442.38	µg/L	442.38 ppb	13:24:48
1	U 409.014†	4719.9	4967.8	433.17	µg/L	433.17 ppb	13:24:28
1	V 292.402†	35619.1	38780.4	503.41	µg/L	503.41 ppb	13:24:48
1	Zn 213.857†	17590.5	18496.4	458.61	µg/L	458.61 ppb	13:24:48
2	Sc RADIAL	104417.0	104417.0	95.6	%		13:24:05
2	Al 396.153Radial†	996200.6	1042013.8	498690	µg/L	498690 ppb	13:23:59
2	Ca 317.933Radial†	1381020.2	1443904.4	468290	µg/L	468290 ppb	13:23:59
2	Fe 238.204 Radial†	22850.5	23866.0	179650	µg/L	179650 ppb	13:24:05
2	K 766.490 Radial†	9073.3	9258.2	5254.2	µg/L	5254.2 ppb	13:24:05
2	Mg 279.077 IEC†	45380.2	47450.4	473590	µg/L	473590 ppb	13:24:05
2	Na 589.592 Radial†	13999.1	14405.2	4987.7	µg/L	4987.7 ppb	13:24:05
2	Sr 421.552†	105195.5	109859.8	497.55	µg/L	497.55 ppb	13:24:05
2	Sc 361.383	1567999.3	1567999.3	93.185	%		13:24:55
2	Y 371.029	867919.6	867919.6	92.714	%		13:24:55
2	Ag 328.068†	23586.3	25877.2	257.59	µg/L	257.59 ppb	13:24:55
2	As 188.979†	273.4	297.3	533.40	µg/L	533.40 ppb	13:25:16
2	B 249.677†	10259.8	10851.4	482.58	µg/L	482.58 ppb	13:24:55
2	Ba 233.527†	17267.2	18547.9	478.90	µg/L	478.90 ppb	13:25:16
2	Be 313.107†	304920.0	329165.2	235.42	µg/L	235.42 ppb	13:24:55
2	Cd 226.502†	14915.3	16150.3	452.88	µg/L	452.88 ppb	13:25:16
2	Co 228.616†	7741.6	8285.5	429.23	µg/L	429.23 ppb	13:25:16
2	Cr 267.716†	16784.1	17921.3	463.73	µg/L	463.73 ppb	13:25:16
2	Cu 324.752†	67524.2	69839.3	534.41	µg/L	534.41 ppb	13:24:55
2	Mn 257.610†	123440.0	133011.6	463.74	µg/L	463.74 ppb	13:24:55
2	Mo 202.031†	3933.3	4216.6	488.78	µg/L	488.78 ppb	13:25:16
2	Ni 231.604†	6196.5	6351.0	442.23	µg/L	442.23 ppb	13:25:16
2	P 214.914†	1311.8	1166.2	2464.2	µg/L	2464.2 ppb	13:25:16
2	Pb 220.353†	1294.3	1346.1	444.48	µg/L	444.48 ppb	13:25:16

2	S 181.975 Axial†	622.3	647.1	2455.8 µg/L	2455.8 ppb	13:25:16
2	Sb 206.836†	457.5	470.0	497.01 µg/L	497.01 ppb	13:25:16
2	Se 196.026†	1601.7	1705.5	2333.0 µg/L	2333.0 ppb	13:25:16
2	SiO2†	46262.0	48262.0	10532 µg/L	10532 ppb	13:24:55
2	Si 251.611†	56912.6	60710.8	4962.9 µg/L	4962.9 ppb	13:24:55
2	Sn 189.927†	855.5	913.5	484.14 µg/L	484.14 ppb	13:25:16
2	Ti 334.940†	179835.8	192995.7	484.93 µg/L	484.93 ppb	13:24:55
2	Tl 190.801†	363.7	415.9	424.09 µg/L	424.09 ppb	13:25:16
2	U 409.014†	4759.4	4956.6	432.04 µg/L	432.04 ppb	13:24:55
2	V 292.402†	35596.8	38352.0	497.91 µg/L	497.91 ppb	13:25:16
2	Zn 213.857†	17578.5	18283.8	453.02 µg/L	453.02 ppb	13:25:16
3	Sc RADIAL	104623.2	104623.2	95.8 %		13:24:16
3	Al 396.153Radial†	995290.6	1039010.8	497250 µg/L	497250 ppb	13:24:11
3	Ca 317.933Radial†	1378471.0	1438397.3	466510 µg/L	466510 ppb	13:24:11
3	Fe 238.204 Radial†	22974.6	23948.5	180270 µg/L	180270 ppb	13:24:16
3	K 766.490 Radial†	8967.5	9129.1	5180.9 µg/L	5180.9 ppb	13:24:16
3	Mg 279.077 IEC†	45510.3	47492.7	474010 µg/L	474010 ppb	13:24:16
3	Na 589.592 Radial†	13974.1	14350.2	4968.6 µg/L	4968.6 ppb	13:24:16
3	Sr 421.552†	105374.2	109829.5	497.41 µg/L	497.41 ppb	13:24:16
3	Sc 361.383	1558014.6	1558014.6	92.592 %		13:25:23
3	Y 371.029	857502.2	857502.2	91.602 %		13:25:23
3	Ag 328.068†	23576.8	26029.1	259.05 µg/L	259.05 ppb	13:25:23
3	As 188.979†	279.7	305.9	549.39 µg/L	549.39 ppb	13:25:43
3	B 249.677†	10331.3	10999.3	490.10 µg/L	490.10 ppb	13:25:23
3	Ba 233.527†	17258.3	18657.1	481.72 µg/L	481.72 ppb	13:25:43
3	Be 313.107†	305069.8	331424.0	237.04 µg/L	237.04 ppb	13:25:23
3	Cd 226.502†	14911.3	16248.6	455.69 µg/L	455.69 ppb	13:25:43
3	Co 228.616†	7719.6	8314.9	430.75 µg/L	430.75 ppb	13:25:43
3	Cr 267.716†	16781.4	18033.9	466.64 µg/L	466.64 ppb	13:25:43
3	Cu 324.752†	67504.3	70282.2	537.70 µg/L	537.70 ppb	13:25:23
3	Mn 257.610†	123890.4	134347.1	468.61 µg/L	468.61 ppb	13:25:23
3	Mo 202.031†	3947.7	4259.2	493.67 µg/L	493.67 ppb	13:25:43
3	Ni 231.604†	6220.0	6419.0	446.95 µg/L	446.95 ppb	13:25:43
3	P 214.914†	1297.8	1160.1	2450.0 µg/L	2450.0 ppb	13:25:43
3	Pb 220.353†	1301.4	1362.7	449.59 µg/L	449.59 ppb	13:25:43
3	S 181.975 Axial†	617.0	645.7	2450.7 µg/L	2450.7 ppb	13:25:43
3	Sb 206.836†	453.0	468.2	495.20 µg/L	495.20 ppb	13:25:43
3	Se 196.026†	1613.3	1729.1	2363.9 µg/L	2363.9 ppb	13:25:43
3	SiO2†	46412.8	48743.1	10637 µg/L	10637 ppb	13:25:23
3	Si 251.611†	57000.5	61197.0	5002.6 µg/L	5002.6 ppb	13:25:23
3	Sn 189.927†	873.6	938.9	496.09 µg/L	496.09 ppb	13:25:43
3	Ti 334.940†	180273.5	194705.2	489.43 µg/L	489.43 ppb	13:25:23
3	Tl 190.801†	372.3	427.7	438.29 µg/L	438.29 ppb	13:25:43
3	U 409.014†	4850.7	5088.0	444.94 µg/L	444.94 ppb	13:25:23
3	V 292.402†	35611.2	38612.4	501.29 µg/L	501.29 ppb	13:25:43
3	Zn 213.857†	17583.4	18410.0	456.33 µg/L	456.33 ppb	13:25:43

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1559197.8	92.662 %	0.4917			0.53%
Sc RADIAL	104269.2	95.5 %	0.41			0.43%
Y 371.029	862549.1	92.141 %	0.5572			0.60%
Ag 328.068†	26043.9	259.15 µg/L	1.606	259.15 ppb	1.606	0.62%
QC value within limits for Ag 328.068 Recovery = 103.66%						
Al 396.153Radial†	1040370.3	497900 µg/L	728.2	497900 ppb	728.2	0.15%
QC value within limits for Al 396.153Radial Recovery = 99.58%						
As 188.979†	302.8	543.71 µg/L	8.945	543.71 ppb	8.945	1.65%
QC value within limits for As 188.979 Recovery = 108.74%						
B 249.677†	10953.4	487.80 µg/L	4.532	487.80 ppb	4.532	0.93%
QC value within limits for B 249.677 Recovery = 97.56%						
Ba 233.527†	18643.2	481.37 µg/L	2.304	481.37 ppb	2.304	0.48%
QC value within limits for Ba 233.527 Recovery = 96.27%						
Be 313.107†	330908.2	236.67 µg/L	1.109	236.67 ppb	1.109	0.47%
QC value within limits for Be 313.107 Recovery = 94.67%						
Ca 317.933Radial†	1440453.6	467170 µg/L	975.1	467170 ppb	975.1	0.21%
QC value within limits for Ca 317.933Radial Recovery = 93.43%						
Cd 226.502†	16243.3	455.56 µg/L	2.625	455.56 ppb	2.625	0.58%
QC value within limits for Cd 226.502 Recovery = 91.11%						
Co 228.616†	8310.7	430.53 µg/L	1.207	430.53 ppb	1.207	0.28%

Cr	267.716†	18024.2	466.39 µg/L	2.547	466.39 ppb	2.547	0.55%
Cu	324.752†	70179.1	536.91 µg/L	2.218	536.91 ppb	2.218	0.41%
Fe	238.204 Radial†	23914.2	180010 µg/L	323.4	180010 ppb	323.4	0.18%
K	766.490 Radial†	9247.7	5248.2 µg/L	64.50	5248.2 ppb	64.50	1.23%
Mg	279.077 IEC†	47508.4	474170 µg/L	670.4	474170 ppb	670.4	0.14%
Mn	257.610†	133963.4	467.19 µg/L	3.006	467.19 ppb	3.006	0.64%
Mo	202.031†	4244.2	491.95 µg/L	2.745	491.95 ppb	2.745	0.56%
Na	589.592 Radial†	14375.9	4977.5 µg/L	9.58	4977.5 ppb	9.58	0.19%
Ni	231.604†	6401.1	445.70 µg/L	3.050	445.70 ppb	3.050	0.68%
P	214.914†	1172.5	2477.0 µg/L	35.30	2477.0 ppb	35.30	1.43%
Pb	220.353†	1359.7	448.69 µg/L	3.849	448.69 ppb	3.849	0.86%
S	181.975 Axial†	644.3	2445.2 µg/L	14.25	2445.2 ppb	14.25	0.58%
Sb	206.836†	470.1	497.23 µg/L	2.151	497.23 ppb	2.151	0.43%
Se	196.026†	1720.7	2352.6 µg/L	17.01	2352.6 ppb	17.01	0.72%
SiO2†		48564.4	10598 µg/L	57.5	10598 ppb	57.5	0.54%
Si	251.611†	60999.8	4986.5 µg/L	20.91	4986.5 ppb	20.91	0.42%
Sn	189.927†	927.1	490.59 µg/L	6.030	490.59 ppb	6.030	1.23%
Sr	421.552†	109893.5	497.70 µg/L	0.390	497.70 ppb	0.390	0.08%
Ti	334.940†	194228.6	488.16 µg/L	2.814	488.16 ppb	2.814	0.58%
Tl	190.801†	424.9	434.92 µg/L	9.602	434.92 ppb	9.602	2.21%
U	409.014†	5004.1	436.72 µg/L	7.139	436.72 ppb	7.139	1.63%
V	292.402†	38581.6	500.87 µg/L	2.771	500.87 ppb	2.771	0.55%
Zn	213.857†	18396.7	455.99 µg/L	2.807	455.99 ppb	2.807	0.62%

QC value within limits for Co 228.616 Recovery = 86.11%

QC value within limits for Cr 267.716 Recovery = 93.28%

QC value within limits for Cu 324.752 Recovery = 107.38%

QC value within limits for Fe 238.204 Radial Recovery = 90.01%

QC value within limits for K 766.490 Radial Recovery = 104.96%

QC value within limits for Mg 279.077 IEC Recovery = 94.83%

QC value within limits for Mn 257.610 Recovery = 93.44%

QC value within limits for Mo 202.031 Recovery = 98.39%

QC value within limits for Na 589.592 Radial Recovery = 99.55%

QC value within limits for Ni 231.604 Recovery = 89.14%

QC value within limits for P 214.914 Recovery = 99.08%

QC value within limits for Pb 220.353 Recovery = 89.74%

QC value within limits for S 181.975 Axial Recovery = 97.81%

QC value within limits for Sb 206.836 Recovery = 99.45%

QC value within limits for Se 196.026 Recovery = 94.10%

QC value within limits for SiO2 Recovery = 99.09%

QC value within limits for Si 251.611 Recovery = 99.73%

QC value within limits for Sn 189.927 Recovery = 98.12%

QC value within limits for Sr 421.552 Recovery = 99.54%

QC value within limits for Ti 334.940 Recovery = 97.63%

QC value within limits for Tl 190.801 Recovery = 86.98%

QC value within limits for U 409.014 Recovery = 87.34%

QC value within limits for V 292.402 Recovery = 100.17%

QC value within limits for Zn 213.857 Recovery = 91.20%

All analyte(s) passed QC.



Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/26/2010 13:25:54

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	104683.1	104683.1	95.9 %		13:26:34
1	Al 396.153Radial†	940971.0	981752.5	469860 µg/L	469860 ppb	13:26:29
1	Ca 317.933Radial†	1317483.3	1373954.3	445610 µg/L	445610 ppb	13:26:29
1	Fe 238.204 Radial†	53112.6	55373.4	416800 µg/L	416800 ppb	13:26:34
1	K 766.490 Radial†	44.2	-184.6	-104.76 µg/L	-104.76 ppb	13:26:34
1	Mg 279.077 IEC†	43574.3	45446.0	453320 µg/L	453320 ppb	13:26:34
1	Na 589.592 Radial†	1267157.1	1321604.7	457590 µg/L	457590 ppb	13:26:29
1	Sr 421.552†	2563.6	2519.2	11.410 µg/L	11.410 ppb	13:26:34
1	Sc 361.383	1544013.8	1544013.8	91.760 %		13:27:08
1	Y 371.029	845910.5	845910.5	90.363 %		13:27:08
1	Ag 328.068†	-5662.7	-5605.3	3.6494 µg/L	3.6494 ppb	13:27:29
1	As 188.979†	-15.3	-12.9	-22.702 µg/L	-22.702 ppb	13:27:29
1	B 249.677†	2980.7	3089.8	-53.592 µg/L	-53.592 ppb	13:27:08
1	Ba 233.527†	518.2	582.7	14.971 µg/L	14.971 ppb	13:27:29
1	Be 313.107†	-8647.8	-7478.6	-5.3638 µg/L	-5.3638 ppb	13:27:08
1	Cd 226.502†	1774.7	2078.3	13.732 µg/L	13.732 ppb	13:27:29
1	Co 228.616†	200.0	195.7	10.077 µg/L	10.077 ppb	13:27:29
1	Cr 267.716†	313.2	251.2	6.4782 µg/L	6.4782 ppb	13:27:29
1	Cu 324.752†	-6949.2	-10196.3	5.2676 µg/L	5.2676 ppb	13:27:29
1	Mn 257.610†	5394.3	6423.0	17.513 µg/L	17.513 ppb	13:27:08
1	Mo 202.031†	-140.3	-157.2	-2.1337 µg/L	-2.1337 ppb	13:27:29
1	Ni 231.604†	215.9	-63.3	1.0144 µg/L	1.0144 ppb	13:27:29
1	P 214.914†	353.6	143.9	113.84 µg/L	113.84 ppb	13:27:29
1	Pb 220.353†	-5.4	-48.8	-20.723 µg/L	-20.723 ppb	13:27:29
1	S 181.975 Axial†	-20.5	-43.0	-163.23 µg/L	-163.23 ppb	13:27:29
1	Sb 206.836†	18.2	-1.2	-8.3023 µg/L	-8.3023 ppb	13:27:29
1	Se 196.026†	-309.5	-350.6	603.03 µg/L	603.03 ppb	13:27:29
1	SiO2†	1217.8	-56.0	-12.221 µg/L	-12.221 ppb	13:27:29
1	Si 215.611†	-156.7	-534.8	-43.716 µg/L	-43.716 ppb	13:27:29
1	Sn 189.927†	-98.6	-112.0	-17.021 µg/L	-17.021 ppb	13:27:29
1	Ti 334.940†	9555.0	10421.2	-0.9163 µg/L	-0.9163 ppb	13:27:08
1	Tl 190.801†	9.3	35.7	32.190 µg/L	32.190 ppb	13:27:29
1	U 409.014†	139180.0	151527.9	14760 µg/L	14760 ppb	13:27:08
1	V 292.402†	-2024.4	-2054.3	4.5633 µg/L	4.5633 ppb	13:27:29
1	Zn 213.857†	2899.5	2579.6	23.909 µg/L	23.909 ppb	13:27:29
2	Sc RADIAL	103650.6	103650.6	94.9 %		13:26:46
2	Al 396.153Radial†	934126.5	984319.6	471080 µg/L	471080 ppb	13:26:40
2	Ca 317.933Radial†	1308346.4	1378018.8	446920 µg/L	446920 ppb	13:26:40
2	Fe 238.204 Radial†	52558.5	55341.4	416560 µg/L	416560 ppb	13:26:46
2	K 766.490 Radial†	168.3	-53.5	-30.353 µg/L	-30.353 ppb	13:26:46
2	Mg 279.077 IEC†	43061.9	45358.9	452450 µg/L	452450 ppb	13:26:46
2	Na 589.592 Radial†	1261268.6	1328568.5	460010 µg/L	460010 ppb	13:26:40
2	Sr 421.552†	2542.9	2524.0	11.431 µg/L	11.431 ppb	13:26:46
2	Sc 361.383	1532332.8	1532332.8	91.066 %		13:27:36
2	Y 371.029	840543.4	840543.4	89.790 %		13:27:36
2	Ag 328.068†	-5654.6	-5643.4	3.2766 µg/L	3.2766 ppb	13:27:56
2	As 188.979†	-12.5	-9.8	-17.166 µg/L	-17.166 ppb	13:27:56
2	B 249.677†	2971.0	3103.8	-52.723 µg/L	-52.723 ppb	13:27:36
2	Ba 233.527†	521.1	590.2	15.163 µg/L	15.163 ppb	13:27:56
2	Be 313.107†	-8793.7	-7710.6	-5.5305 µg/L	-5.5305 ppb	13:27:36
2	Cd 226.502†	1775.5	2094.0	14.216 µg/L	14.216 ppb	13:27:56
2	Co 228.616†	203.0	200.7	10.334 µg/L	10.334 ppb	13:27:56
2	Cr 267.716†	295.0	233.7	6.0275 µg/L	6.0275 ppb	13:27:56
2	Cu 324.752†	-7019.2	-10330.9	4.2577 µg/L	4.2577 ppb	13:27:56
2	Mn 257.610†	5480.7	6562.7	18.067 µg/L	18.067 ppb	13:27:36
2	Mo 202.031†	-149.5	-168.5	-3.4269 µg/L	-3.4269 ppb	13:27:56
2	Ni 231.604†	211.0	-66.9	0.7639 µg/L	0.7639 ppb	13:27:56
2	P 214.914†	359.8	153.6	135.41 µg/L	135.41 ppb	13:27:56
2	Pb 220.353†	-17.1	-61.6	-24.923 µg/L	-24.923 ppb	13:27:56

2	S 181.975 Axial†	-22.7	-45.7	-173.29 µg/L	-173.29 ppb	13:27:56
2	Sb 206.836†	21.9	3.0	-3.8948 µg/L	-3.8948 ppb	13:27:56
2	Se 196.026†	-315.8	-360.1	591.14 µg/L	591.14 ppb	13:27:56
2	SiO2†	1204.7	-60.3	-13.153 µg/L	-13.153 ppb	13:27:56
2	Si 251.611†	-169.9	-550.6	-45.006 µg/L	-45.006 ppb	13:27:56
2	Sn 189.927†	-102.2	-116.8	-19.361 µg/L	-19.361 ppb	13:27:56
2	Ti 334.940†	10019.0	11010.1	0.7445 µg/L	0.7445 ppb	13:27:36
2	Tl 190.801†	1.9	27.6	22.789 µg/L	22.789 ppb	13:27:56
2	U 409.014†	140199.0	153803.2	14982 µg/L	14982 ppb	13:27:36
2	V 292.402†	-2020.5	-2066.8	4.6162 µg/L	4.6162 ppb	13:27:56
2	Zn 213.857†	2908.7	2613.8	24.890 µg/L	24.890 ppb	13:27:56
3	Sc RADIAL	104536.9	104536.9	95.7 %		13:26:58
3	Al 396.153Radial†	935709.9	977629.8	467880 µg/L	467880 ppb	13:26:52
3	Ca 317.933Radial†	1313078.3	1371275.4	444740 µg/L	444740 ppb	13:26:52
3	Fe 238.204 Radial†	53082.6	55419.5	417150 µg/L	417150 ppb	13:26:58
3	K 766.490 Radial†	126.8	-98.3	-55.785 µg/L	-55.785 ppb	13:26:58
3	Mg 279.077 IEC†	43497.5	45429.2	453150 µg/L	453150 ppb	13:26:58
3	Na 589.592 Radial†	1263891.1	1320042.0	457050 µg/L	457050 ppb	13:26:52
3	Sr 421.552†	2545.9	2504.5	11.343 µg/L	11.343 ppb	13:26:58
3	Sc 361.383	1530388.9	1530388.9	90.950 %		13:28:03
3	Y 371.029	839990.5	839990.5	89.731 %		13:28:03
3	Ag 328.068†	-5650.8	-5647.1	3.3190 µg/L	3.3190 ppb	13:28:24
3	As 188.979†	-14.1	-11.6	-20.298 µg/L	-20.298 ppb	13:28:24
3	B 249.677†	2868.6	2995.4	-58.780 µg/L	-58.780 ppb	13:28:03
3	Ba 233.527†	514.0	583.1	14.980 µg/L	14.980 ppb	13:28:24
3	Be 313.107†	-8692.4	-7611.5	-5.4591 µg/L	-5.4591 ppb	13:28:03
3	Cd 226.502†	1767.2	2087.2	13.953 µg/L	13.953 ppb	13:28:24
3	Co 228.616†	192.2	189.0	9.7316 µg/L	9.7316 ppb	13:28:24
3	Cr 267.716†	296.7	236.0	6.0870 µg/L	6.0870 ppb	13:28:24
3	Cu 324.752†	-6984.0	-10301.9	4.5758 µg/L	4.5758 ppb	13:28:24
3	Mn 257.610†	5374.9	6454.0	17.658 µg/L	17.658 ppb	13:28:03
3	Mo 202.031†	-147.2	-166.2	-3.1466 µg/L	-3.1466 ppb	13:28:24
3	Ni 231.604†	219.1	-57.7	1.4091 µg/L	1.4091 ppb	13:28:24
3	P 214.914†	354.0	147.8	121.39 µg/L	121.39 ppb	13:28:24
3	Pb 220.353†	-5.5	-48.9	-21.037 µg/L	-21.037 ppb	13:28:24
3	S 181.975 Axial†	-38.7	-63.2	-239.91 µg/L	-239.91 ppb	13:28:24
3	Sb 206.836†	13.7	-5.9	-13.379 µg/L	-13.379 ppb	13:28:24
3	Se 196.026†	-304.3	-347.9	607.76 µg/L	607.76 ppb	13:28:24
3	SiO2†	1228.8	-32.1	-7.0157 µg/L	-7.0157 ppb	13:28:24
3	Si 251.611†	-138.8	-516.6	-42.233 µg/L	-42.233 ppb	13:28:24
3	Sn 189.927†	-100.6	-115.1	-18.550 µg/L	-18.550 ppb	13:28:24
3	Ti 334.940†	9590.3	10552.7	-0.5660 µg/L	-0.5660 ppb	13:28:03
3	Tl 190.801†	10.5	37.2	34.271 µg/L	34.271 ppb	13:28:24
3	U 409.014†	139310.7	153021.9	14906 µg/L	14906 ppb	13:28:03
3	V 292.402†	-2024.0	-2073.5	4.4759 µg/L	4.4759 ppb	13:28:24
3	Zn 213.857†	2890.4	2597.7	24.387 µg/L	24.387 ppb	13:28:24

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1535578.5	91.258 %		0.4380				0.48%
Sc RADIAL	104290.2	95.5 %		0.51				0.54%
Y 371.029	842148.1	89.961 %		0.3493				0.39%
Ag 328.068†	-5631.9	3.4150 µg/L		0.20408	3.4150 ppb		0.20408	5.98%
Al 396.153Radial†	981234.0	469610 µg/L		1615.2	469610 ppb		1615.2	0.34%
QC value within limits for Al 396.153Radial Recovery = 93.92%								
As 188.979†	-11.4	-20.055 µg/L		2.7762	-20.055 ppb		2.7762	13.84%
B 249.677†	3063.0	-55.032 µg/L		3.2748	-55.032 ppb		3.2748	5.95%
Ba 233.527†	585.3	15.038 µg/L		0.1083	15.038 ppb		0.1083	0.72%
Be 313.107†	-7600.2	-5.4511 µg/L		0.08361	-5.4511 ppb		0.08361	1.53%
Ca 317.933Radial†	1374416.2	445760 µg/L		1101.2	445760 ppb		1101.2	0.25%
QC value less than the lower limit for Ca 317.933Radial Recovery = 89.15%								
Cd 226.502†	2086.5	13.967 µg/L		0.2423	13.967 ppb		0.2423	1.74%
Co 228.616†	195.1	10.048 µg/L		0.3024	10.048 ppb		0.3024	3.01%
Cr 267.716†	240.3	6.1976 µg/L		0.24481	6.1976 ppb		0.24481	3.95%
Cu 324.752†	-10276.4	4.7004 µg/L		0.51637	4.7004 ppb		0.51637	10.99%
Fe 238.204 Radial†	55378.1	416840 µg/L		295.5	416840 ppb		295.5	0.07%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 83.37%								
K 766.490 Radial†	-112.1	-63.633 µg/L		37.8194	-63.633 ppb		37.8194	59.43%
Mg 279.077 IEC†	45411.4	452970 µg/L		460.9	452970 ppb		460.9	0.10%

QC value within limits for Mg 279.077 IEC Recovery = 90.59%

Mn 257.610†	6479.9	17.746 µg/L	0.2872	17.746 ppb	0.2872	1.62%
Mo 202.031†	-164.0	-2.9024 µg/L	0.68032	-2.9024 ppb	0.68032	23.44%
Na 589.592 Radial†	1323405.1	458220 µg/L	1571.7	458220 ppb	1571.7	0.34%

QC value within limits for Na 589.592 Radial Recovery = 91.64%

Ni 231.604†	-62.6	1.0625 µg/L	0.32529	1.0625 ppb	0.32529	30.62%
P 214.914†	148.4	123.55 µg/L	10.945	123.55 ppb	10.945	8.86%
Pb 220.353†	-53.1	-22.228 µg/L	2.3393	-22.228 ppb	2.3393	10.52%
S 181.975 Axial†	-50.6	-192.14 µg/L	41.670	-192.14 ppb	41.670	21.69%
Sb 206.836†	-1.4	-8.5253 µg/L	4.74594	-8.5253 ppb	4.74594	55.67%
Se 196.026†	-352.9	600.64 µg/L	8.560	600.64 ppb	8.560	1.43%
SiO2†	-49.5	-10.796 µg/L	3.3071	-10.796 ppb	3.3071	30.63%
Si 251.611†	-534.0	-43.652 µg/L	1.3880	-43.652 ppb	1.3880	3.18%
Sn 189.927†	-114.6	-18.310 µg/L	1.1883	-18.310 ppb	1.1883	6.49%
Sr 421.552†	2515.9	11.395 µg/L	0.0460	11.395 ppb	0.0460	0.40%
Ti 334.940†	10661.3	-0.2459 µg/L	0.87546	-0.2459 ppb	0.87546	355.97%
Tl 190.801†	33.5	29.750 µg/L	6.1178	29.750 ppb	6.1178	20.56%
U 409.014†	152784.3	14883 µg/L	113.2	14883 ppb	113.2	0.76%

QC value within limits for U 409.014 Recovery = 99.22%

V 292.402†	-2064.8	4.5518 µg/L	0.07088	4.5518 ppb	0.07088	1.56%
Zn 213.857†	2597.0	24.395 µg/L	0.4906	24.395 ppb	0.4906	2.01%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/26/2010 13:28:33

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	108717.9	108717.9	99.6 %		13:29:16
1	Al 396.153Radial†	669.3	847.2	203.33 µg/L	203.33 ppb	13:29:16
1	Ca 317.933Radial†	571.2	190.1	61.669 µg/L	61.669 ppb	13:29:37
1	Fe 238.204 Radial†	26.2	-4.9	159.48 µg/L	159.48 ppb	13:29:37
1	K 766.490 Radial†	513045.4	515092.3	292320 µg/L	292320 ppb	13:29:11
1	Mg 279.077 IEC†	5.7	-3.0	135.24 µg/L	135.24 ppb	13:29:37
1	Na 589.592 Radial†	740.7	508.7	176.15 µg/L	176.15 ppb	13:29:16
1	Sr 421.552†	2089010.0	2098129.4	9502.3 µg/L	9502.3 ppb	13:29:11
1	Sc 361.383	1675175.8	1675175.8	99.555 %		13:31:07
1	Y 371.029	920522.0	920522.0	98.334 %		13:31:07
1	Ag 328.068†	-5780.7	-5240.7	18.228 µg/L	18.228 ppb	13:31:13
1	As 188.979†	5261.5	5288.9	9734.8 µg/L	9734.8 ppb	13:31:13
1	B 249.677†	90573.7	90820.3	4855.7 µg/L	4855.7 ppb	13:31:07
1	Ba 233.527†	527774.8	530153.9	13681 µg/L	13681 ppb	13:31:07
1	Be 313.107†	3883980.8	3903302.8	2790.4 µg/L	2790.4 ppb	13:31:07
1	Cd 226.502†	321638.6	323221.8	9470.9 µg/L	9470.9 ppb	13:31:07
1	Co 228.616†	177754.7	178527.7	9251.5 µg/L	9251.5 ppb	13:31:07
1	Cr 267.716†	924949.4	928997.2	24029 µg/L	24029 ppb	13:31:07
1	Cu 324.752†	2752181.5	2761871.1	19798 µg/L	19798 ppb	13:31:07
1	Mn 257.610†	2540477.9	2552387.8	9307.4 µg/L	9307.4 ppb	13:31:07
1	Mo 202.031†	85702.6	86081.6	9839.0 µg/L	9839.0 ppb	13:31:07
1	Ni 231.604†	141497.3	141831.7	9824.2 µg/L	9824.2 ppb	13:31:07
1	P 214.914†	9239.8	9039.7	17537 µg/L	17537 ppb	13:31:13
1	Pb 220.353†	76139.5	76437.3	24063 µg/L	24063 ppb	13:31:07
1	S 181.975 Axial†	13379.5	13418.6	50928 µg/L	50928 ppb	13:31:13
1	Sb 206.836†	9165.1	9185.1	9688.1 µg/L	9688.1 ppb	13:31:13
1	Se 196.026†	7776.1	7797.5	9578.7 µg/L	9578.7 ppb	13:31:13
1	SiO2†	446664.1	447279.2	97608 µg/L	97608 ppb	13:31:07
1	Si 251.611†	555039.5	557158.6	45546 µg/L	45546 ppb	13:31:07
1	Sn 189.927†	21292.7	21383.4	10049 µg/L	10049 ppb	13:31:13
1	Ti 334.940†	3530501.6	3546304.5	9460.7 µg/L	9460.7 ppb	13:31:07
1	Tl 190.801†	7916.3	7977.7	9372.8 µg/L	9372.8 ppb	13:31:13
1	U 409.014†	-7408.5	-7592.5	-743.81 µg/L	-743.81 ppb	13:31:07
1	V 292.402†	774314.7	777930.7	9989.1 µg/L	9989.1 ppb	13:31:07
1	Zn 213.857†	526041.3	527814.4	14104 µg/L	14104 ppb	13:31:07
2	Sc RADIAL	107943.8	107943.8	98.8 %		13:29:49
2	Al 396.153Radial†	676.0	858.8	208.26 µg/L	208.26 ppb	13:29:49
2	Ca 317.933Radial†	581.8	205.0	66.490 µg/L	66.490 ppb	13:30:10
2	Fe 238.204 Radial†	24.9	-6.1	151.08 µg/L	151.08 ppb	13:30:10
2	K 766.490 Radial†	512829.9	518570.3	294300 µg/L	294300 ppb	13:29:44
2	Mg 279.077 IEC†	4.9	-3.8	128.34 µg/L	128.34 ppb	13:30:10
2	Na 589.592 Radial†	690.2	463.0	160.30 µg/L	160.30 ppb	13:29:49
2	Sr 421.552†	2086358.7	2110496.3	9558.4 µg/L	9558.4 ppb	13:29:44
2	Sc 361.383	1667192.6	1667192.6	99.080 %		13:31:29
2	Y 371.029	915374.2	915374.2	97.784 %		13:31:29
2	Ag 328.068†	-5661.3	-5148.0	19.232 µg/L	19.232 ppb	13:31:35
2	As 188.979†	5172.2	5224.0	9615.1 µg/L	9615.1 ppb	13:31:35
2	B 249.677†	90498.1	91179.6	4874.9 µg/L	4874.9 ppb	13:31:29
2	Ba 233.527†	527017.6	531928.2	13727 µg/L	13727 ppb	13:31:29
2	Be 313.107†	3879818.5	3917783.2	2800.7 µg/L	2800.7 ppb	13:31:29
2	Cd 226.502†	321668.9	324799.4	9517.1 µg/L	9517.1 ppb	13:31:29
2	Co 228.616†	177447.8	179072.9	9279.8 µg/L	9279.8 ppb	13:31:29
2	Cr 267.716†	923857.5	932344.1	24116 µg/L	24116 ppb	13:31:29
2	Cu 324.752†	2750288.9	2773198.6	19879 µg/L	19879 ppb	13:31:29
2	Mn 257.610†	2536630.5	2560724.0	9337.8 µg/L	9337.8 ppb	13:31:29
2	Mo 202.031†	85551.0	86340.8	9868.7 µg/L	9868.7 ppb	13:31:29
2	Ni 231.604†	141259.7	142272.5	9854.7 µg/L	9854.7 ppb	13:31:29
2	P 214.914†	9064.2	8906.9	17239 µg/L	17239 ppb	13:31:35
2	Pb 220.353†	75973.1	76635.6	24126 µg/L	24126 ppb	13:31:29

2	S 181.975 Axial†	13141.0	13242.3	50259 µg/L	50259 ppb	13:31:35
2	Sb 206.836†	9018.4	9081.1	9576.8 µg/L	9576.8 ppb	13:31:35
2	Se 196.026†	7713.5	7771.8	9547.1 µg/L	9547.1 ppb	13:31:35
2	SiO2†	448758.2	451541.1	98538 µg/L	98538 ppb	13:31:29
2	Si 251.611†	557642.3	562455.2	45979 µg/L	45979 ppb	13:31:29
2	Sn 189.927†	20835.6	21024.5	9880.7 µg/L	9880.7 ppb	13:31:35
2	Ti 334.940†	3527661.4	3560419.2	9498.4 µg/L	9498.4 ppb	13:31:29
2	Tl 190.801†	7861.9	7960.4	9353.5 µg/L	9353.5 ppb	13:31:35
2	U 409.014†	-7379.3	-7598.7	-744.41 µg/L	-744.41 ppb	13:31:29
2	V 292.402†	772728.7	780054.4	10016 µg/L	10016 ppb	13:31:29
2	Zn 213.857†	525581.3	529880.4	14159 µg/L	14159 ppb	13:31:29
3	Sc RADIAL	108379.3	108379.3	99.2 %		13:30:22
3	Al 396.153Radial†	728.5	908.9	244.35 µg/L	244.35 ppb	13:30:22
3	Ca 317.933Radial†	645.6	267.0	86.589 µg/L	86.589 ppb	13:30:42
3	Fe 238.204 Radial†	26.6	-4.4	151.81 µg/L	151.81 ppb	13:30:42
3	K 766.490 Radial†	517197.9	520886.7	295610 µg/L	295610 ppb	13:30:16
3	Mg 279.077 IEC†	-3.6	-12.4	32.193 µg/L	32.193 ppb	13:30:42
3	Na 589.592 Radial†	634.9	404.5	140.04 µg/L	140.04 ppb	13:30:22
3	Sr 421.552†	2112648.1	2128503.4	9639.9 µg/L	9639.9 ppb	13:30:16
3	Sc 361.383	1678637.2	1678637.2	99.760 %		13:31:51
3	Y 371.029	921426.9	921426.9	98.430 %		13:31:51
3	Ag 328.068†	-5208.6	-4655.2	19.563 µg/L	19.563 ppb	13:31:57
3	As 188.979†	4810.9	4826.3	8882.7 µg/L	8882.7 ppb	13:31:57
3	B 249.677†	87894.5	87947.0	4700.3 µg/L	4700.3 ppb	13:31:51
3	Ba 233.527†	503138.8	504365.5	13016 µg/L	13016 ppb	13:31:51
3	Be 313.107†	3669136.8	3679897.8	2630.7 µg/L	2630.7 ppb	13:31:51
3	Cd 226.502†	305108.8	305986.1	8965.8 µg/L	8965.8 ppb	13:31:51
3	Co 228.616†	167818.6	168199.6	8716.3 µg/L	8716.3 ppb	13:31:51
3	Cr 267.716†	855258.0	857222.6	22173 µg/L	22173 ppb	13:31:51
3	Cu 324.752†	2599223.0	2602844.6	18658 µg/L	18658 ppb	13:31:51
3	Mn 257.610†	2396276.8	2402578.1	8761.1 µg/L	8761.1 ppb	13:31:51
3	Mo 202.031†	80996.7	81187.0	9279.6 µg/L	9279.6 ppb	13:31:51
3	Ni 231.604†	133335.0	133356.7	9237.1 µg/L	9237.1 ppb	13:31:51
3	P 214.914†	8321.9	8100.4	15615 µg/L	15615 ppb	13:31:57
3	Pb 220.353†	73141.9	73274.8	23068 µg/L	23068 ppb	13:31:51
3	S 181.975 Axial†	12334.8	12343.8	46849 µg/L	46849 ppb	13:31:57
3	Sb 206.836†	8347.9	8346.9	8805.8 µg/L	8805.8 ppb	13:31:57
3	Se 196.026†	7164.0	7167.9	8805.3 µg/L	8805.3 ppb	13:31:57
3	SiO2†	434304.2	433964.5	94703 µg/L	94703 ppb	13:31:51
3	Si 251.611†	539820.8	540753.7	44205 µg/L	44205 ppb	13:31:51
3	Sn 189.927†	18796.4	18837.0	8852.7 µg/L	8852.7 ppb	13:31:57
3	Ti 334.940†	3339831.8	3347864.0	8931.4 µg/L	8931.4 ppb	13:31:51
3	Tl 190.801†	7561.2	7605.0	8934.5 µg/L	8934.5 ppb	13:31:57
3	U 409.014†	-6944.1	-7111.6	-696.70 µg/L	-696.70 ppb	13:31:51
3	V 292.402†	729440.5	731344.9	9390.1 µg/L	9390.1 ppb	13:31:51
3	Zn 213.857†	498101.3	498717.7	13327 µg/L	13327 ppb	13:31:51

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1673668.5	99.465 %	0.3488			0.35%
Sc RADIAL	108347.0	99.2 %	0.36			0.36%
Y 371.029	919107.7	98.183 %	0.3488			0.36%
Ag 328.068†	-5014.6	19.008 µg/L	0.6953	19.008 ppb	0.6953	3.66%
Al 396.153Radial†	871.6	218.65 µg/L	22.399	218.65 ppb	22.399	10.24%
As 188.979†	5113.1	9410.9 µg/L	461.32	9410.9 ppb	461.32	4.90%
QC value within limits for As 188.979 Recovery = 94.11%						
B 249.677†	89982.3	4810.3 µg/L	95.73	4810.3 ppb	95.73	1.99%
QC value within limits for B 249.677 Recovery = 96.21%						
Ba 233.527†	522149.2	13475 µg/L	398.2	13475 ppb	398.2	2.96%
QC value less than the lower limit for Ba 233.527 Recovery = 89.83%						
Be 313.107†	3833661.2	2740.6 µg/L	95.34	2740.6 ppb	95.34	3.48%
QC value within limits for Be 313.107 Recovery = 91.35%						
Ca 317.933Radial†	220.7	71.583 µg/L	13.2175	71.583 ppb	13.2175	18.46%
Cd 226.502†	318002.4	9317.9 µg/L	305.83	9317.9 ppb	305.83	3.28%
QC value within limits for Cd 226.502 Recovery = 93.18%						
Co 228.616†	175266.7	9082.5 µg/L	317.49	9082.5 ppb	317.49	3.50%
QC value within limits for Co 228.616 Recovery = 90.83%						
Cr 267.716†	906188.0	23439 µg/L	1097.6	23439 ppb	1097.6	4.68%
QC value within limits for Cr 267.716 Recovery = 93.76%						

Cu 324.752†	2712638.1	19445 µg/L	682.8	19445 ppb	682.8	3.51%
QC value within limits for Cu 324.752 Recovery = 97.23%						
Fe 238.204 Radial†	-5.2	154.12 µg/L	4.655	154.12 ppb	4.655	3.02%
K 766.490 Radial†	518183.1	294080 µg/L	1655.2	294080 ppb	1655.2	0.56%
QC value within limits for K 766.490 Radial Recovery = 98.03%						
Mg 279.077 IEC†	-6.4	98.590 µg/L	57.6052	98.590 ppb	57.6052	58.43%
Mn 257.610†	2505230.0	9135.5 µg/L	324.53	9135.5 ppb	324.53	3.55%
QC value within limits for Mn 257.610 Recovery = 91.35%						
Mo 202.031†	84536.5	9662.4 µg/L	331.88	9662.4 ppb	331.88	3.43%
QC value within limits for Mo 202.031 Recovery = 96.62%						
Na 589.592 Radial†	458.7	158.83 µg/L	18.098	158.83 ppb	18.098	11.39%
Ni 231.604†	139153.6	9638.7 µg/L	348.08	9638.7 ppb	348.08	3.61%
QC value within limits for Ni 231.604 Recovery = 96.39%						
P 214.914†	8682.3	16797 µg/L	1034.2	16797 ppb	1034.2	6.16%
QC value greater than the upper limit for P 214.914 Recovery = 111.98%						
Pb 220.353†	75449.2	23752 µg/L	593.6	23752 ppb	593.6	2.50%
QC value within limits for Pb 220.353 Recovery = 95.01%						
S 181.975 Axial†	13001.6	49345 µg/L	2187.8	49345 ppb	2187.8	4.43%
QC value within limits for S 181.975 Axial Recovery = 98.69%						
Sb 206.836†	8871.0	9356.9 µg/L	480.48	9356.9 ppb	480.48	5.14%
QC value within limits for Sb 206.836 Recovery = 93.57%						
Se 196.026†	7579.1	9310.4 µg/L	437.68	9310.4 ppb	437.68	4.70%
QC value within limits for Se 196.026 Recovery = 93.10%						
SiO2†	444261.6	96950 µg/L	2000.8	96950 ppb	2000.8	2.06%
QC value within limits for SiO2 Recovery = 90.61%						
Si 251.611†	553455.9	45243 µg/L	924.9	45243 ppb	924.9	2.04%
QC value within limits for Si 251.611 Recovery = 90.49%						
Sn 189.927†	20415.0	9594.3 µg/L	647.73	9594.3 ppb	647.73	6.75%
QC value within limits for Sn 189.927 Recovery = 95.94%						
Sr 421.552†	2112376.4	9566.9 µg/L	69.18	9566.9 ppb	69.18	0.72%
QC value within limits for Sr 421.552 Recovery = 95.67%						
Ti 334.940†	3484862.5	9296.8 µg/L	317.07	9296.8 ppb	317.07	3.41%
QC value within limits for Ti 334.940 Recovery = 92.97%						
Tl 190.801†	7847.6	9220.3 µg/L	247.70	9220.3 ppb	247.70	2.69%
QC value within limits for Tl 190.801 Recovery = 92.20%						
U 409.014†	-7434.2	-728.30 µg/L	27.375	-728.30 ppb	27.375	3.76%
V 292.402†	763110.0	9798.5 µg/L	353.94	9798.5 ppb	353.94	3.61%
QC value within limits for V 292.402 Recovery = 97.99%						
Zn 213.857†	518804.2	13863 µg/L	465.5	13863 ppb	465.5	3.36%
QC value within limits for Zn 213.857 Recovery = 92.42%						

QC Failed. Continue with analysis.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 13:32:07

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	111974.6	111974.6	103 %		13:32:45
1	Al 396.153Radial†	9623.1	9559.6	4564.9 µg/L	4564.9 ppb	13:32:45
1	Ca 317.933Radial†	14762.6	14013.3	4544.9 µg/L	4544.9 ppb	13:33:05
1	Fe 238.204 Radial†	662.0	614.3	4634.1 µg/L	4634.1 ppb	13:33:05
1	K 766.490 Radial†	9341.0	8878.8	5038.9 µg/L	5038.9 ppb	13:32:45
1	Mg 279.077 IEC†	495.9	474.8	4744.2 µg/L	4744.2 ppb	13:33:05
1	Na 589.592 Radial†	27454.1	26538.8	9188.8 µg/L	9188.8 ppb	13:32:45
1	Sr 421.552†	106611.8	103815.7	470.18 µg/L	470.18 ppb	13:32:45
1	Sc 361.383	1721888.6	1721888.6	102.33 %		13:34:08
1	Y 371.029	948049.3	948049.3	101.27 %		13:34:08
1	Ag 328.068†	53291.8	52643.9	474.01 µg/L	474.01 ppb	13:34:14
1	As 188.979†	261.8	259.7	478.02 µg/L	478.02 ppb	13:34:34
1	B 249.677†	9382.4	9010.1	476.26 µg/L	476.26 ppb	13:34:14
1	Ba 233.527†	18874.9	18462.9	476.70 µg/L	476.70 ppb	13:34:14
1	Be 313.107†	668584.5	655302.4	468.89 µg/L	468.89 ppb	13:34:08
1	Cd 226.502†	16504.6	16272.9	476.30 µg/L	476.30 ppb	13:34:14
1	Co 228.616†	9479.0	9240.9	478.89 µg/L	478.89 ppb	13:34:14
1	Cr 267.716†	19054.7	18530.5	479.48 µg/L	479.48 ppb	13:34:14
1	Cu 324.752†	70519.6	66290.4	476.07 µg/L	476.07 ppb	13:34:14
1	Mn 257.610†	133143.7	130655.5	476.40 µg/L	476.40 ppb	13:34:14
1	Mo 202.031†	4442.3	4336.7	495.86 µg/L	495.86 ppb	13:34:34
1	Ni 231.604†	7598.1	7126.4	493.66 µg/L	493.66 ppb	13:34:14
1	P 214.914†	1379.3	1106.4	2338.7 µg/L	2338.7 ppb	13:34:34
1	Pb 220.353†	1613.3	1533.7	483.13 µg/L	483.13 ppb	13:34:34
1	S 181.975 Axial†	276.6	249.6	947.38 µg/L	947.38 ppb	13:34:34
1	Sb 206.836†	485.2	453.1	486.05 µg/L	486.05 ppb	13:34:34
1	Se 196.026†	416.0	393.2	494.72 µg/L	494.72 ppb	13:34:34
1	SiO2†	25481.1	23517.5	5132.2 µg/L	5132.2 ppb	13:34:14
1	Si 251.611†	30477.5	29419.3	2404.9 µg/L	2404.9 ppb	13:34:14
1	Sn 189.927†	1061.2	1032.5	485.57 µg/L	485.57 ppb	13:34:34
1	Ti 334.940†	181606.5	177478.3	473.17 µg/L	473.17 ppb	13:34:08
1	Tl 190.801†	397.1	413.6	486.21 µg/L	486.21 ppb	13:34:34
1	U 409.014†	5022.0	4756.8	465.09 µg/L	465.09 ppb	13:34:14
1	V 292.402†	38331.0	37609.9	482.21 µg/L	482.21 ppb	13:34:14
1	Zn 213.857†	19107.3	18091.8	482.58 µg/L	482.58 ppb	13:34:14
2	Sc RADIAL	112054.7	112054.7	103 %		13:33:10
2	Al 396.153Radial†	9588.9	9519.6	4545.7 µg/L	4545.7 ppb	13:33:10
2	Ca 317.933Radial†	14778.6	14018.6	4546.6 µg/L	4546.6 ppb	13:33:31
2	Fe 238.204 Radial†	661.8	613.7	4629.3 µg/L	4629.3 ppb	13:33:31
2	K 766.490 Radial†	9117.5	8654.5	4911.6 µg/L	4911.6 ppb	13:33:10
2	Mg 279.077 IEC†	490.6	469.4	4689.8 µg/L	4689.8 ppb	13:33:31
2	Na 589.592 Radial†	27366.1	26433.8	9152.5 µg/L	9152.5 ppb	13:33:10
2	Sr 421.552†	106282.2	103420.1	468.39 µg/L	468.39 ppb	13:33:10
2	Sc 361.383	1711353.1	1711353.1	101.70 %		13:34:41
2	Y 371.029	948712.5	948712.5	101.35 %		13:34:41
2	Ag 328.068†	53434.6	53105.0	478.14 µg/L	478.14 ppb	13:34:47
2	As 188.979†	265.5	264.9	487.64 µg/L	487.64 ppb	13:35:07
2	B 249.677†	9323.1	9008.2	476.17 µg/L	476.17 ppb	13:34:47
2	Ba 233.527†	18834.6	18536.9	478.61 µg/L	478.61 ppb	13:34:47
2	Be 313.107†	666699.0	657470.7	470.44 µg/L	470.44 ppb	13:34:41
2	Cd 226.502†	16500.1	16367.8	479.08 µg/L	479.08 ppb	13:34:47
2	Co 228.616†	9428.7	9248.5	479.29 µg/L	479.29 ppb	13:34:47
2	Cr 267.716†	19051.2	18641.7	482.35 µg/L	482.35 ppb	13:34:47
2	Cu 324.752†	70701.8	66893.8	480.39 µg/L	480.39 ppb	13:34:47
2	Mn 257.610†	133250.2	131561.1	479.70 µg/L	479.70 ppb	13:34:47
2	Mo 202.031†	4428.4	4349.8	497.35 µg/L	497.35 ppb	13:35:07
2	Ni 231.604†	7593.3	7167.4	496.50 µg/L	496.50 ppb	13:34:47
2	P 214.914†	1377.3	1112.7	2351.8 µg/L	2351.8 ppb	13:35:07
2	Pb 220.353†	1614.1	1544.2	486.41 µg/L	486.41 ppb	13:35:07

2	S 181.975 Axial†	276.7	251.3	953.91 µg/L	953.91 ppb	13:35:07
2	Sb 206.836†	488.9	459.7	493.01 µg/L	493.01 ppb	13:35:07
2	Se 196.026†	422.3	401.9	505.38 µg/L	505.38 ppb	13:35:07
2	SiO2†	25539.2	23728.0	5178.1 µg/L	5178.1 ppb	13:34:47
2	Si 251.611†	30493.4	29618.3	2421.2 µg/L	2421.2 ppb	13:34:47
2	Sn 189.927†	1070.5	1048.0	492.86 µg/L	492.86 ppb	13:35:07
2	Ti 334.940†	181154.8	178126.8	474.90 µg/L	474.90 ppb	13:34:41
2	Tl 190.801†	392.5	411.5	483.74 µg/L	483.74 ppb	13:35:07
2	U 409.014†	5030.2	4795.1	468.84 µg/L	468.84 ppb	13:34:47
2	V 292.402†	38280.8	37791.1	484.52 µg/L	484.52 ppb	13:34:47
2	Zn 213.857†	19021.3	18122.2	483.38 µg/L	483.38 ppb	13:34:47
3	Sc RADIAL	112255.4	112255.4	103 %		13:33:36
3	Al 396.153Radial†	9587.2	9501.2	4538.1 µg/L	4538.1 ppb	13:33:36
3	Ca 317.933Radial†	14673.8	13890.9	4505.2 µg/L	4505.2 ppb	13:33:57
3	Fe 238.204 Radial†	653.3	604.3	4558.1 µg/L	4558.1 ppb	13:33:57
3	K 766.490 Radial†	9075.7	8598.0	4879.5 µg/L	4879.5 ppb	13:33:36
3	Mg 279.077 IEC†	490.0	467.9	4674.7 µg/L	4674.7 ppb	13:33:57
3	Na 589.592 Radial†	27362.2	26382.3	9134.6 µg/L	9134.6 ppb	13:33:36
3	Sr 421.552†	106199.3	103154.4	467.18 µg/L	467.18 ppb	13:33:36
3	Sc 361.383	1712250.8	1712250.8	101.76 %		13:35:14
3	Y 371.029	946732.5	946732.5	101.13 %		13:35:14
3	Ag 328.068†	51574.7	51249.6	461.37 µg/L	461.37 ppb	13:35:19
3	As 188.979†	245.5	245.1	451.28 µg/L	451.28 ppb	13:35:40
3	B 249.677†	8993.0	8679.0	458.69 µg/L	458.69 ppb	13:35:19
3	Ba 233.527†	17969.3	17676.8	456.39 µg/L	456.39 ppb	13:35:19
3	Be 313.107†	654270.6	644913.3	461.45 µg/L	461.45 ppb	13:35:14
3	Cd 226.502†	15661.3	15535.0	454.68 µg/L	454.68 ppb	13:35:19
3	Co 228.616†	8936.9	8760.3	453.93 µg/L	453.93 ppb	13:35:19
3	Cr 267.716†	17741.9	17345.2	448.81 µg/L	448.81 ppb	13:35:19
3	Cu 324.752†	67200.9	63416.9	455.45 µg/L	455.45 ppb	13:35:19
3	Mn 257.610†	125940.3	124308.8	453.25 µg/L	453.25 ppb	13:35:19
3	Mo 202.031†	3924.7	3852.5	440.51 µg/L	440.51 ppb	13:35:40
3	Ni 231.604†	7151.1	6728.9	466.13 µg/L	466.13 ppb	13:35:19
3	P 214.914†	1269.4	1006.0	2123.6 µg/L	2123.6 ppb	13:35:40
3	Pb 220.353†	1473.2	1404.9	442.48 µg/L	442.48 ppb	13:35:40
3	S 181.975 Axial†	260.8	235.6	894.31 µg/L	894.31 ppb	13:35:40
3	Sb 206.836†	450.9	422.1	452.33 µg/L	452.33 ppb	13:35:40
3	Se 196.026†	380.5	360.6	454.45 µg/L	454.45 ppb	13:35:40
3	SiO2†	24589.4	22781.4	4971.5 µg/L	4971.5 ppb	13:35:19
3	Si 251.611†	29403.0	28531.0	2332.3 µg/L	2332.3 ppb	13:35:19
3	Sn 189.927†	932.6	912.0	428.93 µg/L	428.93 ppb	13:35:40
3	Ti 334.940†	177711.2	174649.3	465.63 µg/L	465.63 ppb	13:35:14
3	Tl 190.801†	371.8	391.0	459.76 µg/L	459.76 ppb	13:35:40
3	U 409.014†	4730.3	4497.7	439.72 µg/L	439.72 ppb	13:35:19
3	V 292.402†	36046.3	35575.5	455.90 µg/L	455.90 ppb	13:35:19
3	Zn 213.857†	18111.2	17218.1	459.27 µg/L	459.27 ppb	13:35:19

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1715164.2	101.93 %	0.347			0.34%
Sc RADIAL	112094.9	103 %	0.1			0.13%
Y 371.029	947831.4	101.25 %	0.108			0.11%
Ag 328.068†	52332.8	471.17 µg/L	8.736	471.17 ppb	8.736	1.85%
QC value within limits for Ag 328.068 Recovery = 94.23%						
Al 396.153Radial†	9526.8	4549.6 µg/L	13.82	4549.6 ppb	13.82	0.30%
QC value within limits for Al 396.153Radial Recovery = 90.99%						
As 188.979†	256.6	472.31 µg/L	18.836	472.31 ppb	18.836	3.99%
QC value within limits for As 188.979 Recovery = 94.46%						
B 249.677†	8899.1	470.37 µg/L	10.118	470.37 ppb	10.118	2.15%
QC value within limits for B 249.677 Recovery = 94.07%						
Ba 233.527†	18225.5	470.56 µg/L	12.313	470.56 ppb	12.313	2.62%
QC value within limits for Ba 233.527 Recovery = 94.11%						
Be 313.107†	652562.1	466.93 µg/L	4.803	466.93 ppb	4.803	1.03%
QC value within limits for Be 313.107 Recovery = 93.39%						
Ca 317.933Radial†	13974.3	4532.2 µg/L	23.43	4532.2 ppb	23.43	0.52%
QC value within limits for Ca 317.933Radial Recovery = 90.64%						
Cd 226.502†	16058.6	470.02 µg/L	13.358	470.02 ppb	13.358	2.84%
QC value within limits for Cd 226.502 Recovery = 94.00%						
Co 228.616†	9083.2	470.70 µg/L	14.530	470.70 ppb	14.530	3.09%



QC value within limits for Co 228.616 Recovery = 94.14%					
Cr 267.716†	18172.5	470.21 µg/L	18.592	470.21 ppb	18.592 3.95%
QC value within limits for Cr 267.716 Recovery = 94.04%					
Cu 324.752†	65533.7	470.64 µg/L	13.326	470.64 ppb	13.326 2.83%
QC value within limits for Cu 324.752 Recovery = 94.13%					
Fe 238.204 Radial†	610.7	4607.2 µg/L	42.58	4607.2 ppb	42.58 0.92%
QC value within limits for Fe 238.204 Radial Recovery = 92.14%					
K 766.490 Radial†	8710.4	4943.3 µg/L	84.31	4943.3 ppb	84.31 1.71%
QC value within limits for K 766.490 Radial Recovery = 98.87%					
Mg 279.077 IEC†	470.7	4702.9 µg/L	36.51	4702.9 ppb	36.51 0.78%
QC value within limits for Mg 279.077 IEC Recovery = 94.06%					
Mn 257.610†	128841.8	469.78 µg/L	14.411	469.78 ppb	14.411 3.07%
QC value within limits for Mn 257.610 Recovery = 93.96%					
Mo 202.031†	4179.7	477.91 µg/L	32.396	477.91 ppb	32.396 6.78%
QC value within limits for Mo 202.031 Recovery = 95.58%					
Na 589.592 Radial†	26451.6	9158.6 µg/L	27.61	9158.6 ppb	27.61 0.30%
QC value within limits for Na 589.592 Radial Recovery = 91.59%					
Ni 231.604†	7007.6	485.43 µg/L	16.779	485.43 ppb	16.779 3.46%
QC value within limits for Ni 231.604 Recovery = 97.09%					
P 214.914†	1075.1	2271.4 µg/L	128.12	2271.4 ppb	128.12 5.64%
QC value within limits for P 214.914 Recovery = 90.86%					
Pb 220.353†	1494.3	470.67 µg/L	24.474	470.67 ppb	24.474 5.20%
QC value within limits for Pb 220.353 Recovery = 94.13%					
S 181.975 Axial†	245.5	931.87 µg/L	32.689	931.87 ppb	32.689 3.51%
QC value within limits for S 181.975 Axial Recovery = 93.19%					
Sb 206.836†	445.0	477.13 µg/L	21.756	477.13 ppb	21.756 4.56%
QC value within limits for Sb 206.836 Recovery = 95.43%					
Se 196.026†	385.2	484.85 µg/L	26.861	484.85 ppb	26.861 5.54%
QC value within limits for Se 196.026 Recovery = 96.97%					
SiO2†	23342.3	5093.9 µg/L	108.46	5093.9 ppb	108.46 2.13%
QC value within limits for SiO2 Recovery = 95.26%					
Si 251.611†	29189.6	2386.1 µg/L	47.32	2386.1 ppb	47.32 1.98%
QC value within limits for Si 251.611 Recovery = 95.45%					
Sn 189.927†	997.5	469.12 µg/L	34.993	469.12 ppb	34.993 7.46%
QC value within limits for Sn 189.927 Recovery = 93.82%					
Sr 421.552†	103463.4	468.58 µg/L	1.507	468.58 ppb	1.507 0.32%
QC value within limits for Sr 421.552 Recovery = 93.72%					
Ti 334.940†	176751.5	471.23 µg/L	4.932	471.23 ppb	4.932 1.05%
QC value within limits for Ti 334.940 Recovery = 94.25%					
Tl 190.801†	405.4	476.57 µg/L	14.614	476.57 ppb	14.614 3.07%
QC value within limits for Tl 190.801 Recovery = 95.31%					
U 409.014†	4683.2	457.88 µg/L	15.840	457.88 ppb	15.840 3.46%
QC value within limits for U 409.014 Recovery = 91.58%					
V 292.402†	36992.2	474.21 µg/L	15.901	474.21 ppb	15.901 3.35%
QC value within limits for V 292.402 Recovery = 94.84%					
Zn 213.857†	17810.7	475.07 µg/L	13.694	475.07 ppb	13.694 2.88%
QC value within limits for Zn 213.857 Recovery = 95.01%					

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 13:35:49

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	108349.5	108349.5	99.2 %		13:36:22
1	Al 396.153Radial†	-146.9	26.8	12.823 µg/L	12.823 ppb	13:36:22
1	Ca 317.933Radial†	409.5	29.2	9.4683 µg/L	9.4683 ppb	13:36:43
1	Fe 238.204 Radial†	32.1	1.1	7.9080 µg/L	7.9080 ppb	13:36:43
1	K 766.490 Radial†	464.8	237.7	134.91 µg/L	134.91 ppb	13:36:22
1	Mg 279.077 IEC†	12.6	3.9	38.992 µg/L	38.992 ppb	13:36:43
1	Na 589.592 Radial†	320.3	87.6	30.326 µg/L	30.326 ppb	13:36:22
1	Sr 421.552†	278.3	125.5	0.5682 µg/L	0.5682 ppb	13:36:22
1	Sc 361.383	1691152.3	1691152.3	100.50 %		13:37:45
1	Y 371.029	936132.7	936132.7	100.00 %		13:37:45
1	Ag 328.068†	-493.7	74.7	0.6680 µg/L	0.6680 ppb	13:37:50
1	As 188.979†	-4.2	-0.4	-0.6902 µg/L	-0.6902 ppb	13:38:11
1	B 249.677†	219.5	59.7	3.1638 µg/L	3.1638 ppb	13:38:11
1	Ba 233.527†	-7.9	10.0	0.2588 µg/L	0.2588 ppb	13:38:11
1	Be 313.107†	-1886.3	69.0	0.0492 µg/L	0.0492 ppb	13:37:50
1	Cd 226.502†	-123.6	21.2	0.6205 µg/L	0.6205 ppb	13:38:11
1	Co 228.616†	24.7	2.4	0.1232 µg/L	0.1232 ppb	13:38:11
1	Cr 267.716†	81.4	-9.2	-0.2381 µg/L	-0.2381 ppb	13:38:11
1	Cu 324.752†	2673.7	37.2	0.2683 µg/L	0.2683 ppb	13:37:50
1	Mn 257.610†	-503.1	43.6	0.1570 µg/L	0.1570 ppb	13:38:11
1	Mo 202.031†	15.4	11.0	1.2524 µg/L	1.2524 ppb	13:38:11
1	Ni 231.604†	304.8	4.7	0.3235 µg/L	0.3235 ppb	13:38:11
1	P 214.914†	246.3	3.6	7.7666 µg/L	7.7666 ppb	13:38:11
1	Pb 220.353†	46.0	3.0	0.9423 µg/L	0.9423 ppb	13:38:11
1	S 181.975 Axial†	24.2	3.4	12.747 µg/L	12.747 ppb	13:38:11
1	Sb 206.836†	25.2	4.0	4.2927 µg/L	4.2927 ppb	13:38:11
1	Se 196.026†	16.3	2.9	3.5121 µg/L	3.5121 ppb	13:38:11
1	SiO2†	1462.5	72.0	15.702 µg/L	15.702 ppb	13:37:50
1	Si 251.611†	481.0	114.6	9.3661 µg/L	9.3661 ppb	13:38:11
1	Sn 189.927†	0.7	-3.9	-1.8163 µg/L	-1.8163 ppb	13:38:11
1	Ti 334.940†	216.8	223.8	0.5942 µg/L	0.5942 ppb	13:37:50
1	Tl 190.801†	-25.6	0.1	0.0951 µg/L	0.0951 ppb	13:38:11
1	U 409.014†	118.2	-33.2	-3.2572 µg/L	-3.2572 ppb	13:37:50
1	V 292.402†	-158.7	-6.0	-0.0702 µg/L	-0.0702 ppb	13:37:50
1	Zn 213.857†	641.3	57.8	1.5472 µg/L	1.5472 ppb	13:38:11
2	Sc RADIAL	108056.3	108056.3	99.0 %		13:36:48
2	Al 396.153Radial†	-150.6	22.8	10.857 µg/L	10.857 ppb	13:36:48
2	Ca 317.933Radial†	411.7	32.5	10.549 µg/L	10.549 ppb	13:37:09
2	Fe 238.204 Radial†	31.1	0.2	1.1735 µg/L	1.1735 ppb	13:37:09
2	K 766.490 Radial†	466.3	240.5	136.47 µg/L	136.47 ppb	13:36:48
2	Mg 279.077 IEC†	11.1	2.5	24.891 µg/L	24.891 ppb	13:37:09
2	Na 589.592 Radial†	312.7	80.7	27.948 µg/L	27.948 ppb	13:36:48
2	Sr 421.552†	240.8	88.4	0.4003 µg/L	0.4003 ppb	13:36:48
2	Sc 361.383	1691483.6	1691483.6	100.52 %		13:38:17
2	Y 371.029	941172.7	941172.7	100.54 %		13:38:17
2	Ag 328.068†	-532.3	36.4	0.3271 µg/L	0.3271 ppb	13:38:22
2	As 188.979†	-4.5	-0.6	-1.1857 µg/L	-1.1857 ppb	13:38:43
2	B 249.677†	202.1	42.4	2.2502 µg/L	2.2502 ppb	13:38:43
2	Ba 233.527†	-2.5	15.4	0.3984 µg/L	0.3984 ppb	13:38:43
2	Be 313.107†	-1844.7	110.8	0.0790 µg/L	0.0790 ppb	13:38:22
2	Cd 226.502†	-122.7	22.1	0.6483 µg/L	0.6483 ppb	13:38:43
2	Co 228.616†	22.9	0.5	0.0257 µg/L	0.0257 ppb	13:38:43
2	Cr 267.716†	89.2	-1.4	-0.0372 µg/L	-0.0372 ppb	13:38:43
2	Cu 324.752†	2698.1	61.0	0.4376 µg/L	0.4376 ppb	13:38:22
2	Mn 257.610†	-500.7	46.1	0.1666 µg/L	0.1666 ppb	13:38:43
2	Mo 202.031†	18.9	14.5	1.6530 µg/L	1.6530 ppb	13:38:43
2	Ni 231.604†	302.3	2.1	0.1454 µg/L	0.1454 ppb	13:38:43
2	P 214.914†	241.6	-1.2	-2.5710 µg/L	-2.5710 ppb	13:38:43
2	Pb 220.353†	39.6	-3.4	-1.0734 µg/L	-1.0734 ppb	13:38:43

2	S 181.975 Axial†	23.6	2.8	10.706 µg/L	10.706 ppb	13:38:43
2	Sb 206.836†	23.4	2.2	2.4012 µg/L	2.4012 ppb	13:38:43
2	Se 196.026†	25.5	12.0	14.759 µg/L	14.759 ppb	13:38:43
2	SiO2†	1493.2	102.2	22.311 µg/L	22.311 ppb	13:38:22
2	Si 251.611†	507.3	140.7	11.501 µg/L	11.501 ppb	13:38:43
2	Sn 189.927†	4.0	-0.6	-0.2654 µg/L	-0.2654 ppb	13:38:43
2	Ti 334.940†	270.9	277.7	0.7390 µg/L	0.7390 ppb	13:38:22
2	Tl 190.801†	-25.9	-0.2	-0.2092 µg/L	-0.2092 ppb	13:38:43
2	U 409.014†	136.3	-15.3	-1.4965 µg/L	-1.4965 ppb	13:38:22
2	V 292.402†	-126.8	25.8	0.3386 µg/L	0.3386 ppb	13:38:22
2	Zn 213.857†	641.1	57.4	1.5403 µg/L	1.5403 ppb	13:38:43
3	Sc RADIAL	107577.4	107577.4	98.5 %		13:37:14
3	Al 396.153Radial†	-106.1	67.2	32.100 µg/L	32.100 ppb	13:37:14
3	Ca 317.933Radial†	410.6	33.3	10.789 µg/L	10.789 ppb	13:37:34
3	Fe 238.204 Radial†	31.5	0.7	5.4574 µg/L	5.4574 ppb	13:37:34
3	K 766.490 Radial†	377.5	152.5	86.519 µg/L	86.519 ppb	13:37:14
3	Mg 279.077 IEC†	11.8	3.2	31.661 µg/L	31.661 ppb	13:37:34
3	Na 589.592 Radial†	282.2	51.2	17.724 µg/L	17.724 ppb	13:37:14
3	Sr 421.552†	273.2	122.4	0.5543 µg/L	0.5543 ppb	13:37:14
3	Sc 361.383	1682481.8	1682481.8	99.989 %		13:38:49
3	Y 371.029	931197.3	931197.3	99.474 %		13:38:49
3	Ag 328.068†	-584.6	-18.8	-0.1644 µg/L	-0.1644 ppb	13:38:55
3	As 188.979†	-5.2	-1.4	-2.5688 µg/L	-2.5688 ppb	13:39:15
3	B 249.677†	212.4	53.8	2.8518 µg/L	2.8518 ppb	13:39:15
3	Ba 233.527†	4.7	22.6	0.5833 µg/L	0.5833 ppb	13:39:15
3	Be 313.107†	-1903.9	41.7	0.0296 µg/L	0.0296 ppb	13:38:55
3	Cd 226.502†	-126.1	18.1	0.5291 µg/L	0.5291 ppb	13:39:15
3	Co 228.616†	27.4	5.2	0.2681 µg/L	0.2681 ppb	13:39:15
3	Cr 267.716†	108.2	18.1	0.4679 µg/L	0.4679 ppb	13:39:15
3	Cu 324.752†	2717.3	94.5	0.6787 µg/L	0.6787 ppb	13:38:55
3	Mn 257.610†	-481.7	62.4	0.2259 µg/L	0.2259 ppb	13:39:15
3	Mo 202.031†	22.8	18.4	2.1057 µg/L	2.1057 ppb	13:39:15
3	Ni 231.604†	302.2	3.6	0.2501 µg/L	0.2501 ppb	13:39:15
3	P 214.914†	242.5	1.1	2.2589 µg/L	2.2589 ppb	13:39:15
3	Pb 220.353†	53.7	10.9	3.4279 µg/L	3.4279 ppb	13:39:15
3	S 181.975 Axial†	22.1	1.4	5.3435 µg/L	5.3435 ppb	13:39:15
3	Sb 206.836†	26.8	5.8	6.1707 µg/L	6.1707 ppb	13:39:15
3	Se 196.026†	20.2	6.9	8.4833 µg/L	8.4833 ppb	13:39:15
3	SiO2†	1516.5	133.4	29.121 µg/L	29.121 ppb	13:38:55
3	Si 251.611†	510.3	146.3	11.962 µg/L	11.962 ppb	13:39:15
3	Sn 189.927†	7.7	3.1	1.4709 µg/L	1.4709 ppb	13:39:15
3	Ti 334.940†	234.8	242.9	0.6457 µg/L	0.6457 ppb	13:38:55
3	Tl 190.801†	-26.1	-0.5	-0.6113 µg/L	-0.6113 ppb	13:39:15
3	U 409.014†	184.4	33.6	3.2856 µg/L	3.2856 ppb	13:38:55
3	V 292.402†	-123.2	28.8	0.3855 µg/L	0.3855 ppb	13:38:55
3	Zn 213.857†	633.3	53.0	1.4207 µg/L	1.4207 ppb	13:39:15

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1688372.5	100.34 %		0.303				0.30%
Sc RADIAL	107994.4	98.9 %		0.36				0.36%
Y 371.029	936167.6	100.00 %		0.533				0.53%
Ag 328.068†	30.8	0.2769 µg/L		0.41850	0.2769 ppb		0.41850	151.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	38.9	18.593 µg/L		11.7381	18.593 ppb		11.7381	63.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.8	-1.4816 µg/L		0.97358	-1.4816 ppb		0.97358	65.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	52.0	2.7553 µg/L		0.46437	2.7553 ppb		0.46437	16.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	16.0	0.4135 µg/L		0.16280	0.4135 ppb		0.16280	39.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	73.8	0.0526 µg/L		0.02487	0.0526 ppb		0.02487	47.28%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	31.7	10.269 µg/L		0.7033	10.269 ppb		0.7033	6.85%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	20.5	0.5993 µg/L		0.06237	0.5993 ppb		0.06237	10.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.7	0.1390 µg/L		0.12199	0.1390 ppb		0.12199	87.76%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.5	0.0642 µg/L	0.36376	0.0642 ppb	0.36376	566.81%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	64.3	0.4616 µg/L	0.20626	0.4616 ppb	0.20626	44.69%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.6	4.8463 µg/L	3.40861	4.8463 ppb	3.40861	70.33%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	210.2	119.30 µg/L	28.401	119.30 ppb	28.401	23.81%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	3.2	31.848 µg/L	7.0528	31.848 ppb	7.0528	22.15%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	50.7	0.1832 µg/L	0.03729	0.1832 ppb	0.03729	20.36%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	14.6	1.6704 µg/L	0.42694	1.6704 ppb	0.42694	25.56%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	73.2	25.332 µg/L	6.6958	25.332 ppb	6.6958	26.43%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	3.5	0.2397 µg/L	0.08952	0.2397 ppb	0.08952	37.35%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	1.2	2.4848 µg/L	5.17246	2.4848 ppb	5.17246	208.16%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	3.5	1.0989 µg/L	2.25475	1.0989 ppb	2.25475	205.18%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.5	9.5989 µg/L	3.82398	9.5989 ppb	3.82398	39.84%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.0	4.2882 µg/L	1.88475	4.2882 ppb	1.88475	43.95%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	7.3	8.9180 µg/L	5.63582	8.9180 ppb	5.63582	63.20%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	102.5	22.378 µg/L	6.7098	22.378 ppb	6.7098	29.98%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	133.9	10.943 µg/L	1.3851	10.943 ppb	1.3851	12.66%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.4	-0.2036 µg/L	1.64444	-0.2036 ppb	1.64444	807.61%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	112.1	0.5076 µg/L	0.09319	0.5076 ppb	0.09319	18.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	248.1	0.6596 µg/L	0.07339	0.6596 ppb	0.07339	11.13%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.2	-0.2418 µg/L	0.35436	-0.2418 ppb	0.35436	146.55%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-5.0	-0.4894 µg/L	3.38563	-0.4894 ppb	3.38563	691.85%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	16.2	0.2180 µg/L	0.25063	0.2180 ppb	0.25063	114.98%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	56.1	1.5027 µg/L	0.07112	1.5027 ppb	0.07112	4.73%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/26/2010 13:45:10

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\022610B.sif

Batch ID:

Results Data Set: 022610D

Results Library: c:\pe\optima1\Results\Results.mdb  
=====

## Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 2/26/2010 12:57:20

IEC File: 011510.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	No
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	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
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

  
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Sequence No.: 1

Autosampler Location: 113

Sample ID: LR1

Date Collected: 2/26/2010 13:45:12

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

## Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	110333.3	110333.3	101 %		13:45:47
1	Al 396.153Radial†	-195.8	-18.8	-8.7422 µg/L	-8.7422 ppb	13:45:47
1	Ca 317.933Radial†	549.9	160.7	52.105 µg/L	52.105 ppb	13:46:07
1	Fe 238.204 Radial†	47830.1	47307.8	356090 µg/L	356090 ppb	13:45:47

1	K 766.490 Radial†	167.4	-65.1	-36.954 µg/L	-36.954 ppb	13:45:47
1	Mg 279.077 IEC†	27.3	18.2	-200.25 µg/L	-200.25 ppb	13:46:07
1	Na 589.592 Radial†	268.8	30.8	10.653 µg/L	10.653 ppb	13:45:47
1	Sr 421.552†	296.7	138.7	0.6280 µg/L	0.6280 ppb	13:45:47
1	Sc 361.383	1711781.4	1711781.4	101.73 %		13:47:09
1	Y 371.029	940092.0	940092.0	100.42 %		13:47:09
1	Ag 328.068†	-4643.2	-3998.3	10.290 µg/L	10.290 ppb	13:47:15
1	As 188.979†	-42.2	-37.6	-48.715 µg/L	-48.715 ppb	13:47:36
1	B 249.677†	2585.6	2383.0	-59.422 µg/L	-59.422 ppb	13:47:15
1	Ba 233.527†	453.8	464.0	11.948 µg/L	11.948 ppb	13:47:36
1	Be 313.107†	-2068.1	-87.1	-0.0623 µg/L	-0.0623 ppb	13:47:15
1	Cd 226.502†	1584.1	1701.3	9.5564 µg/L	9.5564 ppb	13:47:15
1	Co 228.616†	383.3	354.5	18.383 µg/L	18.383 ppb	13:47:36
1	Cr 267.716†	-109.1	-197.4	-5.1093 µg/L	-5.1093 ppb	13:47:36
1	Cu 324.752†	-3493.2	-6056.9	23.527 µg/L	23.527 ppb	13:47:15
1	Mn 257.610†	126.4	668.5	23.506 µg/L	23.506 ppb	13:47:09
1	Mo 202.031†	-116.5	-118.9	-0.0572 µg/L	-0.0572 ppb	13:47:15
1	Ni 231.604†	229.5	-73.0	-0.4575 µg/L	-0.4575 ppb	13:47:36
1	P 214.914†	368.0	120.2	-25.472 µg/L	-25.472 ppb	13:47:36
1	Pb 220.353†	53.8	10.0	-10.433 µg/L	-10.433 ppb	13:47:36
1	S 181.975 Axial†	6.4	-14.4	-54.680 µg/L	-54.680 ppb	13:47:36
1	Sb 206.836†	13.1	-8.1	-8.8373 µg/L	-8.8373 ppb	13:47:36
1	Se 196.026†	-240.6	-249.8	865.21 µg/L	865.21 ppb	13:47:36
1	SiO2†	1187.1	-216.3	-47.203 µg/L	-47.203 ppb	13:47:36
1	Si 251.611†	-256.5	-616.2	-50.369 µg/L	-50.369 ppb	13:47:36
1	Sn 189.927†	6.3	1.7	-23.766 µg/L	-23.766 ppb	13:47:36
1	Ti 334.940†	-119.0	-108.8	-0.3039 µg/L	-0.3039 ppb	13:47:15
1	Tl 190.801†	-34.6	-8.4	40.517 µg/L	40.517 ppb	13:47:36
1	U 409.014†	964.5	797.2	28.602 µg/L	28.602 ppb	13:47:15
1	V 292.402†	-599.4	-437.2	7.4922 µg/L	7.4922 ppb	13:47:15
1	Zn 213.857†	2246.9	1628.4	26.912 µg/L	26.912 ppb	13:47:36
2	Sc RADIAL	110009.1	110009.1	101 %		13:46:13
2	Al 396.153Radial†	-224.1	-47.5	-22.490 µg/L	-22.490 ppb	13:46:13
2	Ca 317.933Radial†	557.8	170.2	55.188 µg/L	55.188 ppb	13:46:33
2	Fe 238.204 Radial†	48217.5	47831.9	360040 µg/L	360040 ppb	13:46:13
2	K 766.490 Radial†	138.1	-93.7	-53.175 µg/L	-53.175 ppb	13:46:13
2	Mg 279.077 IEC†	29.7	20.7	-179.37 µg/L	-179.37 ppb	13:46:33
2	Na 589.592 Radial†	234.7	-2.3	-0.7804 µg/L	-0.7804 ppb	13:46:13
2	Sr 421.552†	253.2	96.4	0.4366 µg/L	0.4366 ppb	13:46:13
2	Sc 361.383	1707214.5	1707214.5	101.46 %		13:47:42
2	Y 371.029	940537.8	940537.8	100.47 %		13:47:42
2	Ag 328.068†	-4612.0	-3979.8	10.964 µg/L	10.964 ppb	13:47:48
2	As 188.979†	-45.5	-41.0	-54.640 µg/L	-54.640 ppb	13:48:08
2	B 249.677†	2595.6	2399.6	-60.596 µg/L	-60.596 ppb	13:47:48
2	Ba 233.527†	467.3	478.5	12.323 µg/L	12.323 ppb	13:48:08
2	Be 313.107†	-2075.1	-99.5	-0.0712 µg/L	-0.0712 ppb	13:47:48
2	Cd 226.502†	1616.1	1737.0	10.155 µg/L	10.155 ppb	13:47:48
2	Co 228.616†	386.3	358.5	18.590 µg/L	18.590 ppb	13:48:08
2	Cr 267.716†	-113.5	-202.0	-5.2269 µg/L	-5.2269 ppb	13:48:08
2	Cu 324.752†	-3416.2	-5990.2	24.747 µg/L	24.747 ppb	13:47:48
2	Mn 257.610†	212.9	754.1	24.050 µg/L	24.050 ppb	13:47:42
2	Mo 202.031†	-100.2	-103.2	1.8906 µg/L	1.8906 ppb	13:47:48
2	Ni 231.604†	216.3	-85.5	-1.2689 µg/L	-1.2689 ppb	13:48:08
2	P 214.914†	371.1	124.3	-20.051 µg/L	-20.051 ppb	13:48:08
2	Pb 220.353†	57.1	13.5	-9.4828 µg/L	-9.4828 ppb	13:48:08
2	S 181.975 Axial†	7.9	-12.9	-49.032 µg/L	-49.032 ppb	13:48:08
2	Sb 206.836†	16.5	-4.8	-5.2442 µg/L	-5.2442 ppb	13:48:08
2	Se 196.026†	-233.7	-243.7	885.74 µg/L	885.74 ppb	13:48:08
2	SiO2†	1217.1	-183.5	-40.051 µg/L	-40.051 ppb	13:48:08
2	Si 251.611†	-225.6	-586.4	-47.933 µg/L	-47.933 ppb	13:48:08
2	Sn 189.927†	3.3	-1.3	-25.444 µg/L	-25.444 ppb	13:48:08
2	Ti 334.940†	-59.6	-50.6	-0.1505 µg/L	-0.1505 ppb	13:47:48
2	Tl 190.801†	-28.0	-2.0	48.493 µg/L	48.493 ppb	13:48:08
2	U 409.014†	942.1	777.7	26.142 µg/L	26.142 ppb	13:47:48
2	V 292.402†	-616.5	-455.7	7.4144 µg/L	7.4144 ppb	13:47:48
2	Zn 213.857†	2253.1	1640.5	27.051 µg/L	27.051 ppb	13:48:08
3	Sc RADIAL	110705.4	110705.4	101 %		13:46:38
3	Al 396.153Radial†	-177.3	0.0	0.3050 µg/L	0.3050 ppb	13:46:38
3	Ca 317.933Radial†	557.3	166.2	53.898 µg/L	53.898 ppb	13:46:59
3	Fe 238.204 Radial†	48225.1	47538.4	357830 µg/L	357830 ppb	13:46:38
3	K 766.490 Radial†	196.1	-37.3	-21.166 µg/L	-21.166 ppb	13:46:38

3	Mg 279.077 IEC†	31.7	22.5	-159.24 µg/L	-159.24 ppb	13:46:59
3	Na 589.592 Radial†	255.3	16.5	5.7211 µg/L	5.7211 ppb	13:46:38
3	Sr 421.552†	279.3	120.5	0.5459 µg/L	0.5459 ppb	13:46:38
3	Sc 361.383	1701403.6	1701403.6	101.11 %		13:48:15
3	Y 371.029	936850.6	936850.6	100.08 %		13:48:15
3	Ag 328.068†	-4381.1	-3766.9	12.574 µg/L	12.574 ppb	13:48:20
3	As 188.979†	-31.8	-27.6	-30.181 µg/L	-30.181 ppb	13:48:41
3	B 249.677†	2413.1	2227.9	-68.554 µg/L	-68.554 ppb	13:48:20
3	Ba 233.527†	385.6	399.3	10.278 µg/L	10.278 ppb	13:48:41
3	Be 313.107†	-2109.4	-140.4	-0.1005 µg/L	-0.1005 ppb	13:48:20
3	Cd 226.502†	1498.6	1626.3	7.1643 µg/L	7.1643 ppb	13:48:20
3	Co 228.616†	341.9	315.9	16.378 µg/L	16.378 ppb	13:48:41
3	Cr 267.716†	-84.7	-173.9	-4.5017 µg/L	-4.5017 ppb	13:48:41
3	Cu 324.752†	-3106.5	-5695.4	26.445 µg/L	26.445 ppb	13:48:20
3	Mn 257.610†	187.6	729.8	23.829 µg/L	23.829 ppb	13:48:15
3	Mo 202.031†	-122.4	-125.4	-0.7363 µg/L	-0.7363 ppb	13:48:20
3	Ni 231.604†	234.3	-66.9	-0.0090 µg/L	-0.0090 ppb	13:48:41
3	P 214.914†	359.1	113.7	-41.241 µg/L	-41.241 ppb	13:48:41
3	Pb 220.353†	50.3	6.9	-11.465 µg/L	-11.465 ppb	13:48:41
3	S 181.975 Axial†	10.9	-9.9	-37.762 µg/L	-37.762 ppb	13:48:41
3	Sb 206.836†	13.1	-8.1	-8.8418 µg/L	-8.8418 ppb	13:48:41
3	Se 196.026†	-197.1	-208.2	922.03 µg/L	922.03 ppb	13:48:41
3	SiO2†	1259.1	-137.9	-30.096 µg/L	-30.096 ppb	13:48:41
3	Si 251.611†	-137.1	-499.6	-40.841 µg/L	-40.841 ppb	13:48:41
3	Sn 189.927†	11.1	6.4	-21.651 µg/L	-21.651 ppb	13:48:41
3	Ti 334.940†	-16.4	-8.1	-0.0384 µg/L	-0.0384 ppb	13:48:20
3	Tl 190.801†	-38.0	-12.0	36.584 µg/L	36.584 ppb	13:48:41
3	U 409.014†	867.6	707.2	19.536 µg/L	19.536 ppb	13:48:20
3	V 292.402†	-679.5	-520.0	6.4929 µg/L	6.4929 ppb	13:48:20
3	Zn 213.857†	2014.1	1411.6	20.998 µg/L	20.998 ppb	13:48:41

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1706799.9	101.43 %	0.309			0.30%
Sc RADIAL	110349.3	101 %	0.3			0.32%
Y 371.029	939160.1	100.32 %	0.215			0.21%
Ag 328.068†	-3915.0	11.276 µg/L	1.1737	11.276 ppb	1.1737	10.41%
Al 396.153Radial†	-22.1	-10.309 µg/L	11.4781	-10.309 ppb	11.4781	111.34%
As 188.979†	-35.4	-44.512 µg/L	12.7596	-44.512 ppb	12.7596	28.67%
B 249.677†	2336.8	-62.857 µg/L	4.9680	-62.857 ppb	4.9680	7.90%
Ba 233.527†	447.3	11.516 µg/L	1.0885	11.516 ppb	1.0885	9.45%
Be 313.107†	-109.0	-0.0780 µg/L	0.01998	-0.0780 ppb	0.01998	25.63%
Ca 317.933Radial†	165.7	53.730 µg/L	1.5487	53.730 ppb	1.5487	2.88%
Cd 226.502†	1688.2	8.9586 µg/L	1.58241	8.9586 ppb	1.58241	17.66%
Co 228.616†	343.0	17.783 µg/L	1.2216	17.783 ppb	1.2216	6.87%
Cr 267.716†	-191.1	-4.9460 µg/L	0.38924	-4.9460 ppb	0.38924	7.87%
Cu 324.752†	-5914.1	24.906 µg/L	1.4653	24.906 ppb	1.4653	5.88%
Fe 238.204 Radial†	47559.3	357990 µg/L	1976.9	357990 ppb	1976.9	0.55%
K 766.490 Radial†	-65.4	-37.098 µg/L	16.0050	-37.098 ppb	16.0050	43.14%
Mg 279.077 IEC†	20.5	-179.62 µg/L	20.503	-179.62 ppb	20.503	11.41%
Mn 257.610†	717.4	23.795 µg/L	0.2735	23.795 ppb	0.2735	1.15%
Mo 202.031†	-115.8	0.3657 µg/L	1.36356	0.3657 ppb	1.36356	372.87%
Na 589.592 Radial†	15.0	5.1979 µg/L	5.73470	5.1979 ppb	5.73470	110.33%
Ni 231.604†	-75.1	-0.5785 µg/L	0.63861	-0.5785 ppb	0.63861	110.39%
P 214.914†	119.4	-28.921 µg/L	11.0084	-28.921 ppb	11.0084	38.06%
Pb 220.353†	10.1	-10.460 µg/L	0.9915	-10.460 ppb	0.9915	9.48%
S 181.975 Axial†	-12.4	-47.158 µg/L	8.6133	-47.158 ppb	8.6133	18.26%
Sb 206.836†	-7.0	-7.6411 µg/L	2.07574	-7.6411 ppb	2.07574	27.17%
Se 196.026†	-233.9	890.99 µg/L	28.769	890.99 ppb	28.769	3.23%
SiO2†	-179.2	-39.117 µg/L	8.5917	-39.117 ppb	8.5917	21.96%
Si 251.611†	-567.4	-46.381 µg/L	4.9497	-46.381 ppb	4.9497	10.67%
Sn 189.927†	2.2	-23.620 µg/L	1.9006	-23.620 ppb	1.9006	8.05%
Sr 421.552†	118.5	0.5368 µg/L	0.09602	0.5368 ppb	0.09602	17.89%
Ti 334.940†	-55.8	-0.1643 µg/L	0.13328	-0.1643 ppb	0.13328	81.14%
Tl 190.801†	-7.5	41.865 µg/L	6.0678	41.865 ppb	6.0678	14.49%
U 409.014†	760.7	24.760 µg/L	4.6879	24.760 ppb	4.6879	18.93%
V 292.402†	-471.0	7.1332 µg/L	0.55588	7.1332 ppb	0.55588	7.79%
Zn 213.857†	1560.2	24.987 µg/L	3.4549	24.987 ppb	3.4549	13.83%

Sequence No.: 2

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 2/26/2010 13:48:50

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	109181.1	109181.1	100.0 %		13:49:24
1	Al 396.153Radial†	-108.9	66.0	31.586 µg/L	31.586 ppb	13:49:29
1	Ca 317.933Radial†	1144928.0	1144748.6	371270 µg/L	371270 ppb	13:49:24
1	Fe 238.204 Radial†	34.1	2.8	20.858 µg/L	20.858 ppb	13:49:50
1	K 766.490 Radial†	175.3	-55.5	-31.478 µg/L	-31.478 ppb	13:49:29
1	Mg 279.077 IEC†	1.9	-6.9	-68.492 µg/L	-68.492 ppb	13:49:50
1	Na 589.592 Radial†	266.5	31.3	10.830 µg/L	10.830 ppb	13:49:29
1	Sr 421.552†	797.3	642.5	2.9098 µg/L	2.9098 ppb	13:49:29
1	Sc 361.383	1636795.0	1636795.0	97.274 %		13:51:03
1	Y 371.029	920202.6	920202.6	98.299 %		13:51:03
1	Ag 328.068†	-898.2	-357.4	-3.1963 µg/L	-3.1963 ppb	13:51:08
1	As 188.979†	26.6	31.2	38.290 µg/L	38.290 ppb	13:51:29
1	B 249.677†	273.9	123.0	6.5110 µg/L	6.5110 ppb	13:51:29
1	Ba 233.527†	-1.3	16.6	0.4250 µg/L	0.4250 ppb	13:51:29
1	Be 313.107†	-2111.5	-224.9	-0.1574 µg/L	-0.1574 ppb	13:51:08
1	Cd 226.502†	-56.8	85.8	2.5085 µg/L	2.5085 ppb	13:51:29
1	Co 228.616†	14.5	-7.3	-0.3607 µg/L	-0.3607 ppb	13:51:29
1	Cr 267.716†	49.6	-39.2	-1.0149 µg/L	-1.0149 ppb	13:51:29
1	Cu 324.752†	2831.7	288.0	2.0687 µg/L	2.0687 ppb	13:51:08
1	Mn 257.610†	-530.5	-1.2	0.0016 µg/L	0.0016 ppb	13:51:29
1	Mo 202.031†	9.3	5.3	0.6015 µg/L	0.6015 ppb	13:51:29
1	Ni 231.604†	282.3	-8.4	-0.5824 µg/L	-0.5824 ppb	13:51:29
1	P 214.914†	263.0	28.9	61.136 µg/L	61.136 ppb	13:51:29
1	Pb 220.353†	14.6	-27.9	-8.7590 µg/L	-8.7590 ppb	13:51:29
1	S 181.975 Axial†	11.3	-9.1	-34.440 µg/L	-34.440 ppb	13:51:29
1	Sb 206.836†	24.0	3.6	-1.6665 µg/L	-1.6665 ppb	13:51:29
1	Se 196.026†	-38.2	-52.6	-86.927 µg/L	-86.927 ppb	13:51:29
1	SiO2†	1407.9	64.2	14.013 µg/L	14.013 ppb	13:51:29
1	Si 251.611†	431.7	79.8	6.5226 µg/L	6.5226 ppb	13:51:29
1	Sn 189.927†	-120.8	-128.8	-57.262 µg/L	-57.262 ppb	13:51:29
1	Ti 334.940†	-3454.8	-3543.5	-3.5075 µg/L	-3.5075 ppb	13:51:08
1	Tl 190.801†	45.5	72.4	-1.4189 µg/L	-1.4189 ppb	13:51:29
1	U 409.014†	-63.6	-216.3	-43.837 µg/L	-43.837 ppb	13:51:08
1	V 292.402†	-217.4	-71.6	-0.9262 µg/L	-0.9262 ppb	13:51:08
1	Zn 213.857†	952.9	399.3	10.729 µg/L	10.729 ppb	13:51:29
2	Sc RADIAL	108666.3	108666.3	99.5 %		13:49:55
2	Al 396.153Radial†	-110.2	64.1	30.689 µg/L	30.689 ppb	13:50:01
2	Ca 317.933Radial†	1143828.7	1149069.6	372670 µg/L	372670 ppb	13:49:55
2	Fe 238.204 Radial†	32.5	1.3	9.9967 µg/L	9.9967 ppb	13:50:21
2	K 766.490 Radial†	230.6	1.0	0.5808 µg/L	0.5808 ppb	13:50:01
2	Mg 279.077 IEC†	1.6	-7.2	-71.706 µg/L	-71.706 ppb	13:50:21
2	Na 589.592 Radial†	306.1	72.3	25.030 µg/L	25.030 ppb	13:50:01
2	Sr 421.552†	797.8	646.7	2.9290 µg/L	2.9290 ppb	13:50:01
2	Sc 361.383	1640476.1	1640476.1	97.492 %		13:51:35
2	Y 371.029	915322.9	915322.9	97.778 %		13:51:35
2	Ag 328.068†	-1010.5	-470.6	-4.2123 µg/L	-4.2123 ppb	13:51:40
2	As 188.979†	20.5	24.8	26.426 µg/L	26.426 ppb	13:52:01
2	B 249.677†	277.6	126.1	6.6835 µg/L	6.6835 ppb	13:52:01
2	Ba 233.527†	1.5	19.4	0.4983 µg/L	0.4983 ppb	13:52:01
2	Be 313.107†	-2218.9	-330.1	-0.2328 µg/L	-0.2328 ppb	13:51:40
2	Cd 226.502†	-61.5	81.2	2.3748 µg/L	2.3748 ppb	13:52:01
2	Co 228.616†	18.2	-3.6	-0.1670 µg/L	-0.1670 ppb	13:52:01
2	Cr 267.716†	52.6	-36.2	-0.9381 µg/L	-0.9381 ppb	13:52:01
2	Cu 324.752†	2857.6	308.1	2.2103 µg/L	2.2103 ppb	13:51:40
2	Mn 257.610†	-532.0	-1.4	0.0002 µg/L	0.0002 ppb	13:52:01
2	Mo 202.031†	7.3	3.2	0.3608 µg/L	0.3608 ppb	13:52:01
2	Ni 231.604†	283.7	-7.7	-0.5324 µg/L	-0.5324 ppb	13:52:01
2	P 214.914†	259.0	24.1	50.912 µg/L	50.912 ppb	13:52:01
2	Pb 220.353†	14.4	-28.1	-8.8148 µg/L	-8.8148 ppb	13:52:01
2	S 181.975 Axial†	12.5	-7.9	-29.983 µg/L	-29.983 ppb	13:52:01



2	Sb 206.836†	16.1	-4.5	-10.366 µg/L	-10.366 ppb	13:52:01
2	Se 196.026†	-32.3	-46.4	-79.483 µg/L	-79.483 ppb	13:52:01
2	SiO2†	1432.7	86.4	18.848 µg/L	18.848 ppb	13:52:01
2	Si 251.611†	446.6	94.1	7.6938 µg/L	7.6938 ppb	13:52:01
2	Sn 189.927†	-118.3	-125.9	-55.885 µg/L	-55.885 ppb	13:52:01
2	Ti 334.940†	-3402.7	-3482.1	-3.3209 µg/L	-3.3209 ppb	13:51:40
2	Tl 190.801†	42.6	69.3	-5.3562 µg/L	-5.3562 ppb	13:52:01
2	U 409.014†	-73.6	-226.4	-44.911 µg/L	-44.911 ppb	13:51:40
2	V 292.402†	-265.4	-120.3	-1.5461 µg/L	-1.5461 ppb	13:51:40
2	Zn 213.857†	941.2	385.1	10.349 µg/L	10.349 ppb	13:52:01
3	Sc RADIAL	108631.2	108631.2	99.5 %		13:50:27
3	Al 396.153Radial†	-123.8	50.5	24.140 µg/L	24.140 ppb	13:50:32
3	Ca 317.933Radial†	1136567.1	1142140.8	370420 µg/L	370420 ppb	13:50:27
3	Fe 238.204 Radial†	36.8	5.7	43.183 µg/L	43.183 ppb	13:50:53
3	K 766.490 Radial†	296.3	67.1	38.102 µg/L	38.102 ppb	13:50:32
3	Mg 279.077 IEC†	-3.3	-12.1	-120.60 µg/L	-120.60 ppb	13:50:53
3	Na 589.592 Radial†	278.7	44.9	15.551 µg/L	15.551 ppb	13:50:32
3	Sr 421.552†	778.7	627.8	2.8433 µg/L	2.8433 ppb	13:50:32
3	Sc 361.383	1630185.3	1630185.3	96.881 %		13:52:07
3	Y 371.029	911496.8	911496.8	97.370 %		13:52:07
3	Ag 328.068†	-925.8	-389.7	-3.4787 µg/L	-3.4787 ppb	13:52:12
3	As 188.979†	29.9	34.7	44.736 µg/L	44.736 ppb	13:52:33
3	B 249.677†	260.7	110.5	5.8354 µg/L	5.8354 ppb	13:52:33
3	Ba 233.527†	-0.0	17.9	0.4607 µg/L	0.4607 ppb	13:52:33
3	Be 313.107†	-2080.4	-201.6	-0.1412 µg/L	-0.1412 ppb	13:52:12
3	Cd 226.502†	-78.6	63.1	1.8423 µg/L	1.8423 ppb	13:52:33
3	Co 228.616†	20.7	-0.9	-0.0300 µg/L	-0.0300 ppb	13:52:33
3	Cr 267.716†	53.1	-35.4	-0.9158 µg/L	-0.9158 ppb	13:52:33
3	Cu 324.752†	2792.1	258.9	1.8642 µg/L	1.8642 ppb	13:52:12
3	Mn 257.610†	-539.2	-12.3	-0.0342 µg/L	-0.0342 ppb	13:52:33
3	Mo 202.031†	13.2	9.3	1.0673 µg/L	1.0673 ppb	13:52:33
3	Ni 231.604†	282.1	-7.4	-0.5156 µg/L	-0.5156 ppb	13:52:33
3	P 214.914†	259.1	26.0	54.853 µg/L	54.853 ppb	13:52:33
3	Pb 220.353†	26.8	-15.2	-4.7531 µg/L	-4.7531 ppb	13:52:33
3	S 181.975 Axial†	14.7	-5.5	-20.999 µg/L	-20.999 ppb	13:52:33
3	Sb 206.836†	27.7	7.6	2.5585 µg/L	2.5585 ppb	13:52:33
3	Se 196.026†	-34.9	-49.4	-82.827 µg/L	-82.827 ppb	13:52:33
3	SiO2†	1420.4	83.0	18.110 µg/L	18.110 ppb	13:52:33
3	Si 251.611†	465.7	116.6	9.5354 µg/L	9.5354 ppb	13:52:33
3	Sn 189.927†	-126.2	-134.8	-60.122 µg/L	-60.122 ppb	13:52:33
3	Ti 334.940†	-2943.7	-3030.3	-2.1478 µg/L	-2.1478 ppb	13:52:12
3	Tl 190.801†	32.6	59.2	-16.511 µg/L	-16.511 ppb	13:52:33
3	U 409.014†	-24.2	-175.8	-39.822 µg/L	-39.822 ppb	13:52:12
3	V 292.402†	-183.4	-37.3	-0.4833 µg/L	-0.4833 ppb	13:52:12
3	Zn 213.857†	922.2	371.6	9.9872 µg/L	9.9872 ppb	13:52:33

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1635818.8	97.216 %		0.3099				0.32%
Sc RADIAL	108826.2	99.7 %		0.28				0.28%
Y 371.029	915674.1	97.816 %		0.4661				0.48%
Ag 328.068†	-405.9	-3.6291 µg/L		0.52440	-3.6291 ppb		0.52440	14.45%
Al 396.153Radial†	60.2	28.805 µg/L		4.0650	28.805 ppb		4.0650	14.11%
As 188.979†	30.3	36.484 µg/L		9.2876	36.484 ppb		9.2876	25.46%
B 249.677†	119.9	6.3433 µg/L		0.44825	6.3433 ppb		0.44825	7.07%
Ba 233.527†	18.0	0.4613 µg/L		0.03667	0.4613 ppb		0.03667	7.95%
Be 313.107†	-252.2	-0.1771 µg/L		0.04886	-0.1771 ppb		0.04886	27.59%
Ca 317.933Radial†	1145319.7	371450 µg/L		1135.0	371450 ppb		1135.0	0.31%
Cd 226.502†	76.7	2.2419 µg/L		0.35241	2.2419 ppb		0.35241	15.72%
Co 228.616†	-4.0	-0.1859 µg/L		0.16617	-0.1859 ppb		0.16617	89.37%
Cr 267.716†	-37.0	-0.9563 µg/L		0.05199	-0.9563 ppb		0.05199	5.44%
Cu 324.752†	285.0	2.0477 µg/L		0.17402	2.0477 ppb		0.17402	8.50%
Fe 238.204 Radial†	3.3	24.679 µg/L		16.9202	24.679 ppb		16.9202	68.56%
K 766.490 Radial†	4.2	2.4019 µg/L		34.82581	2.4019 ppb		34.82581	>999.9%
Mg 279.077 IEC†	-8.7	-86.933 µg/L		29.2021	-86.933 ppb		29.2021	33.59%
Mn 257.610†	-5.0	-0.0108 µg/L		0.02028	-0.0108 ppb		0.02028	187.51%
Mo 202.031†	5.9	0.6766 µg/L		0.35921	0.6766 ppb		0.35921	53.09%
Na 589.592 Radial†	49.5	17.137 µg/L		7.2316	17.137 ppb		7.2316	42.20%
Ni 231.604†	-7.8	-0.5435 µg/L		0.03476	-0.5435 ppb		0.03476	6.40%

P 214.914†	26.3	55.634 µg/L	5.1564	55.634 ppb	5.1564	9.27%
Pb 220.353†	-23.7	-7.4423 µg/L	2.32907	-7.4423 ppb	2.32907	31.30%
S 181.975 Axial†	-7.5	-28.474 µg/L	6.8464	-28.474 ppb	6.8464	24.04%
Sb 206.836†	2.2	-3.1580 µg/L	6.59010	-3.1580 ppb	6.59010	208.68%
Se 196.026†	-49.5	-83.079 µg/L	3.7282	-83.079 ppb	3.7282	4.49%
SiO2†	77.9	16.990 µg/L	2.6047	16.990 ppb	2.6047	15.33%
Si 251.611†	96.9	7.9173 µg/L	1.51876	7.9173 ppb	1.51876	19.18%
Sn 189.927†	-129.8	-57.756 µg/L	2.1615	-57.756 ppb	2.1615	3.74%
Sr 421.552†	639.0	2.8941 µg/L	0.04498	2.8941 ppb	0.04498	1.55%
Ti 334.940†	-3351.9	-2.9921 µg/L	0.73708	-2.9921 ppb	0.73708	24.63%
Tl 190.801†	67.0	-7.7620 µg/L	7.82840	-7.7620 ppb	7.82840	100.85%
U 409.014†	-206.1	-42.856 µg/L	2.6824	-42.856 ppb	2.6824	6.26%
V 292.402†	-76.4	-0.9852 µg/L	0.53385	-0.9852 ppb	0.53385	54.19%
Zn 213.857†	385.4	10.355 µg/L	0.3709	10.355 ppb	0.3709	3.58%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 13:52:42

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	111640.3	111640.3	102 %		13:53:19
1	Al 396.153Radial†	9677.1	9640.5	4603.6 µg/L	4603.6 ppb	13:53:19
1	Ca 317.933Radial†	15167.8	14452.8	4687.4 µg/L	4687.4 ppb	13:53:19
1	Fe 238.204 Radial†	660.1	614.4	4635.2 µg/L	4635.2 ppb	13:53:39
1	K 766.490 Radial†	8900.5	8475.3	4809.9 µg/L	4809.9 ppb	13:53:19
1	Mg 279.077 IEC†	489.6	470.1	4697.6 µg/L	4697.6 ppb	13:53:39
1	Na 589.592 Radial†	27426.1	26591.5	9207.1 µg/L	9207.1 ppb	13:53:19
1	Sr 421.552†	106939.2	104447.3	473.04 µg/L	473.04 ppb	13:53:19
1	Sc 361.383	1689207.7	1689207.7	100.39 %		13:54:42
1	Y 371.029	929092.3	929092.3	99.249 %		13:54:42
1	Ag 328.068†	53512.0	53870.8	485.02 µg/L	485.02 ppb	13:54:47
1	As 188.979†	262.5	265.3	488.30 µg/L	488.30 ppb	13:55:08
1	B 249.677†	9241.8	9047.4	478.25 µg/L	478.25 ppb	13:54:47
1	Ba 233.527†	18862.0	18806.9	485.58 µg/L	485.58 ppb	13:54:47
1	Be 313.107†	671046.3	670395.1	479.69 µg/L	479.69 ppb	13:54:42
1	Cd 226.502†	16554.4	16634.6	486.89 µg/L	486.89 ppb	13:54:47
1	Co 228.616†	9496.0	9437.0	489.06 µg/L	489.06 ppb	13:54:47
1	Cr 267.716†	19029.4	18865.6	488.15 µg/L	488.15 ppb	13:54:47
1	Cu 324.752†	70569.4	67673.2	485.98 µg/L	485.98 ppb	13:54:47
1	Mn 257.610†	133479.9	133507.5	486.80 µg/L	486.80 ppb	13:54:47
1	Mo 202.031†	4403.5	4382.1	501.05 µg/L	501.05 ppb	13:55:08
1	Ni 231.604†	7560.4	7232.5	501.01 µg/L	501.01 ppb	13:54:47
1	P 214.914†	1397.3	1150.4	2432.6 µg/L	2432.6 ppb	13:55:08
1	Pb 220.353†	1617.2	1568.1	493.95 µg/L	493.95 ppb	13:55:08
1	S 181.975 Axial†	282.1	260.3	987.85 µg/L	987.85 ppb	13:55:08
1	Sb 206.836†	482.4	459.5	492.85 µg/L	492.85 ppb	13:55:08
1	Se 196.026†	426.3	411.3	516.99 µg/L	516.99 ppb	13:55:08
1	SiO2†	25232.8	23752.0	5183.3 µg/L	5183.3 ppb	13:54:47
1	Si 251.611†	30167.2	29686.5	2426.8 µg/L	2426.8 ppb	13:54:47
1	Sn 189.927†	1077.3	1068.6	502.55 µg/L	502.55 ppb	13:55:08
1	Ti 334.940†	181481.4	180787.2	482.00 µg/L	482.00 ppb	13:54:42
1	Tl 190.801†	399.0	423.0	497.19 µg/L	497.19 ppb	13:55:08
1	U 409.014†	4953.8	4783.8	467.72 µg/L	467.72 ppb	13:54:47
1	V 292.402†	38280.6	38284.3	490.82 µg/L	490.82 ppb	13:54:47
1	Zn 213.857†	19025.1	18371.2	490.04 µg/L	490.04 ppb	13:54:47
2	Sc RADIAL	112109.0	112109.0	103 %		13:53:45
2	Al 396.153Radial†	9714.6	9637.5	4602.1 µg/L	4602.1 ppb	13:53:45
2	Ca 317.933Radial†	15275.6	14495.8	4701.3 µg/L	4701.3 ppb	13:53:45
2	Fe 238.204 Radial†	665.6	617.1	4655.2 µg/L	4655.2 ppb	13:54:05
2	K 766.490 Radial†	8850.3	8390.0	4761.5 µg/L	4761.5 ppb	13:53:45
2	Mg 279.077 IEC†	492.8	471.3	4708.9 µg/L	4708.9 ppb	13:54:05
2	Na 589.592 Radial†	27588.2	26637.2	9222.9 µg/L	9222.9 ppb	13:53:45
2	Sr 421.552†	107523.5	104579.1	473.63 µg/L	473.63 ppb	13:53:45
2	Sc 361.383	1689532.1	1689532.1	100.41 %		13:55:14
2	Y 371.029	929019.6	929019.6	99.241 %		13:55:14
2	Ag 328.068†	53852.7	54199.9	487.99 µg/L	487.99 ppb	13:55:20
2	As 188.979†	266.8	269.6	496.28 µg/L	496.28 ppb	13:55:40
2	B 249.677†	9331.6	9135.0	482.90 µg/L	482.90 ppb	13:55:20
2	Ba 233.527†	18981.5	18922.3	488.56 µg/L	488.56 ppb	13:55:20
2	Be 313.107†	670747.9	669969.6	479.38 µg/L	479.38 ppb	13:55:14
2	Cd 226.502†	16696.2	16772.6	490.93 µg/L	490.93 ppb	13:55:20
2	Co 228.616†	9540.6	9479.6	491.27 µg/L	491.27 ppb	13:55:20
2	Cr 267.716†	19140.9	18973.0	490.93 µg/L	490.93 ppb	13:55:20
2	Cu 324.752†	70881.0	67970.1	488.11 µg/L	488.11 ppb	13:55:20
2	Mn 257.610†	134025.3	134025.2	488.69 µg/L	488.69 ppb	13:55:20
2	Mo 202.031†	4414.7	4392.4	502.22 µg/L	502.22 ppb	13:55:40
2	Ni 231.604†	7656.0	7326.3	507.51 µg/L	507.51 ppb	13:55:20
2	P 214.914†	1394.2	1147.1	2425.2 µg/L	2425.2 ppb	13:55:40
2	Pb 220.353†	1636.9	1587.4	500.00 µg/L	500.00 ppb	13:55:40

2	S 181.975 Axial†	283.2	261.3	991.88 µg/L	991.88 ppb	13:55:40
2	Sb 206.836†	479.6	456.6	489.76 µg/L	489.76 ppb	13:55:40
2	Se 196.026†	417.6	402.6	506.36 µg/L	506.36 ppb	13:55:40
2	SiO2†	25415.7	23929.3	5222.0 µg/L	5222.0 ppb	13:55:20
2	Si 251.611†	30420.4	29932.9	2446.9 µg/L	2446.9 ppb	13:55:20
2	Sn 189.927†	1084.2	1075.2	505.67 µg/L	505.67 ppb	13:55:40
2	Ti 334.940†	181116.8	180389.3	480.94 µg/L	480.94 ppb	13:55:14
2	Tl 190.801†	403.8	427.8	502.72 µg/L	502.72 ppb	13:55:40
2	U 409.014†	5089.5	4918.0	480.86 µg/L	480.86 ppb	13:55:20
2	V 292.402†	38571.5	38566.8	494.43 µg/L	494.43 ppb	13:55:20
2	Zn 213.857†	19130.5	18472.5	492.73 µg/L	492.73 ppb	13:55:20
3	Sc RADIAL	111743.5	111743.5	102 %		13:54:11
3	Al 396.153Radial†	9729.2	9682.7	4625.0 µg/L	4625.0 ppb	13:54:11
3	Ca 317.933Radial†	15218.1	14488.3	4698.9 µg/L	4698.9 ppb	13:54:11
3	Fe 238.204 Radial†	658.8	612.5	4620.4 µg/L	4620.4 ppb	13:54:31
3	K 766.490 Radial†	8839.8	8407.9	4771.6 µg/L	4771.6 ppb	13:54:11
3	Mg 279.077 IEC†	489.2	469.3	4688.5 µg/L	4688.5 ppb	13:54:31
3	Na 589.592 Radial†	27527.6	26665.9	9232.8 µg/L	9232.8 ppb	13:54:11
3	Sr 421.552†	107332.8	104735.3	474.34 µg/L	474.34 ppb	13:54:11
3	Sc 361.383	1690843.8	1690843.8	100.49 %		13:55:46
3	Y 371.029	932978.5	932978.5	99.664 %		13:55:46
3	Ag 328.068†	52208.1	52521.7	472.81 µg/L	472.81 ppb	13:55:52
3	As 188.979†	233.3	236.0	434.45 µg/L	434.45 ppb	13:56:12
3	B 249.677†	8996.8	8794.7	464.81 µg/L	464.81 ppb	13:55:52
3	Ba 233.527†	18109.1	18039.5	465.76 µg/L	465.76 ppb	13:55:52
3	Be 313.107†	659785.6	658542.0	471.21 µg/L	471.21 ppb	13:55:46
3	Cd 226.502†	15807.4	15875.2	464.64 µg/L	464.64 ppb	13:55:52
3	Co 228.616†	9045.4	8979.5	465.29 µg/L	465.29 ppb	13:55:52
3	Cr 267.716†	17866.1	17689.5	457.72 µg/L	457.72 ppb	13:55:52
3	Cu 324.752†	67604.6	64654.8	464.34 µg/L	464.34 ppb	13:55:52
3	Mn 257.610†	127181.9	127111.3	463.48 µg/L	463.48 ppb	13:55:52
3	Mo 202.031†	3894.7	3871.5	442.69 µg/L	442.69 ppb	13:56:12
3	Ni 231.604†	7262.4	6928.6	479.97 µg/L	479.97 ppb	13:55:52
3	P 214.914†	1272.3	1024.7	2163.1 µg/L	2163.1 ppb	13:56:12
3	Pb 220.353†	1485.7	1435.7	452.15 µg/L	452.15 ppb	13:56:12
3	S 181.975 Axial†	264.7	242.7	921.22 µg/L	921.22 ppb	13:56:12
3	Sb 206.836†	429.3	406.2	435.31 µg/L	435.31 ppb	13:56:12
3	Se 196.026†	390.0	374.8	472.11 µg/L	472.11 ppb	13:56:12
3	SiO2†	24550.8	23048.9	5029.9 µg/L	5029.9 ppb	13:55:52
3	Si 251.611†	29297.0	28791.4	2353.6 µg/L	2353.6 ppb	13:55:52
3	Sn 189.927†	937.0	927.9	436.44 µg/L	436.44 ppb	13:56:12
3	Ti 334.940†	177972.2	177120.0	472.22 µg/L	472.22 ppb	13:55:46
3	Tl 190.801†	372.9	396.7	466.36 µg/L	466.36 ppb	13:56:12
3	U 409.014†	4736.2	4562.5	446.04 µg/L	446.04 ppb	13:55:52
3	V 292.402†	36441.5	36417.3	466.61 µg/L	466.61 ppb	13:55:52
3	Zn 213.857†	18176.9	17508.7	467.00 µg/L	467.00 ppb	13:55:52

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1689861.2	100.43 %	0.051			0.05%
Sc RADIAL	111830.9	102 %	0.2			0.22%
Y 371.029	930363.5	99.385 %	0.2420			0.24%
Ag 328.068†	53530.8	481.94 µg/L	8.043	481.94 ppb	8.043	1.67%
QC value within limits for Ag 328.068 Recovery = 96.39%						
Al 396.153Radial†	9653.6	4610.2 µg/L	12.80	4610.2 ppb	12.80	0.28%
QC value within limits for Al 396.153Radial Recovery = 92.20%						
As 188.979†	257.0	473.01 µg/L	33.628	473.01 ppb	33.628	7.11%
QC value within limits for As 188.979 Recovery = 94.60%						
B 249.677†	8992.4	475.32 µg/L	9.394	475.32 ppb	9.394	1.98%
QC value within limits for B 249.677 Recovery = 95.06%						
Ba 233.527†	18589.6	479.96 µg/L	12.395	479.96 ppb	12.395	2.58%
QC value within limits for Ba 233.527 Recovery = 95.99%						
Be 313.107†	666302.2	476.76 µg/L	4.811	476.76 ppb	4.811	1.01%
QC value within limits for Be 313.107 Recovery = 95.35%						
Ca 317.933Radial†	14478.9	4695.9 µg/L	7.45	4695.9 ppb	7.45	0.16%
QC value within limits for Ca 317.933Radial Recovery = 93.92%						
Cd 226.502†	16427.5	480.82 µg/L	14.157	480.82 ppb	14.157	2.94%
QC value within limits for Cd 226.502 Recovery = 96.16%						
Co 228.616†	9298.7	481.87 µg/L	14.406	481.87 ppb	14.406	2.99%

QC value within limits for Co 228.616 Recovery = 96.37%						
Cr 267.716†	18509.4	478.93 µg/L	18.422	478.93 ppb	18.422	3.85%
QC value within limits for Cr 267.716 Recovery = 95.79%						
Cu 324.752†	66766.0	479.48 µg/L	13.152	479.48 ppb	13.152	2.74%
QC value within limits for Cu 324.752 Recovery = 95.90%						
Fe 238.204 Radial†	614.7	4636.9 µg/L	17.51	4636.9 ppb	17.51	0.38%
QC value within limits for Fe 238.204 Radial Recovery = 92.74%						
K 766.490 Radial†	8424.4	4781.0 µg/L	25.53	4781.0 ppb	25.53	0.53%
QC value within limits for K 766.490 Radial Recovery = 95.62%						
Mg 279.077 IEC†	470.2	4698.3 µg/L	10.19	4698.3 ppb	10.19	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 93.97%						
Mn 257.610†	131548.0	479.65 µg/L	14.043	479.65 ppb	14.043	2.93%
QC value within limits for Mn 257.610 Recovery = 95.93%						
Mo 202.031†	4215.3	481.99 µg/L	34.039	481.99 ppb	34.039	7.06%
QC value within limits for Mo 202.031 Recovery = 96.40%						
Na 589.592 Radial†	26631.5	9220.9 µg/L	12.99	9220.9 ppb	12.99	0.14%
QC value within limits for Na 589.592 Radial Recovery = 92.21%						
Ni 231.604†	7162.5	496.16 µg/L	14.397	496.16 ppb	14.397	2.90%
QC value within limits for Ni 231.604 Recovery = 99.23%						
P 214.914†	1107.4	2340.3 µg/L	153.49	2340.3 ppb	153.49	6.56%
QC value within limits for P 214.914 Recovery = 93.61%						
Pb 220.353†	1530.4	482.03 µg/L	26.059	482.03 ppb	26.059	5.41%
QC value within limits for Pb 220.353 Recovery = 96.41%						
S 181.975 Axial†	254.8	966.99 µg/L	39.683	966.99 ppb	39.683	4.10%
QC value within limits for S 181.975 Axial Recovery = 96.70%						
Sb 206.836†	440.8	472.64 µg/L	32.362	472.64 ppb	32.362	6.85%
QC value within limits for Sb 206.836 Recovery = 94.53%						
Se 196.026†	396.2	498.49 µg/L	23.453	498.49 ppb	23.453	4.70%
QC value within limits for Se 196.026 Recovery = 99.70%						
SiO2†	23576.8	5145.1 µg/L	101.61	5145.1 ppb	101.61	1.97%
QC value within limits for SiO2 Recovery = 96.21%						
Si 251.611†	29470.2	2409.1 µg/L	49.10	2409.1 ppb	49.10	2.04%
QC value within limits for Si 251.611 Recovery = 96.36%						
Sn 189.927†	1023.9	481.56 µg/L	39.102	481.56 ppb	39.102	8.12%
QC value within limits for Sn 189.927 Recovery = 96.31%						
Sr 421.552†	104587.2	473.67 µg/L	0.653	473.67 ppb	0.653	0.14%
QC value within limits for Sr 421.552 Recovery = 94.73%						
Ti 334.940†	179432.2	478.39 µg/L	5.368	478.39 ppb	5.368	1.12%
QC value within limits for Ti 334.940 Recovery = 95.68%						
Tl 190.801†	415.8	488.76 µg/L	19.592	488.76 ppb	19.592	4.01%
QC value within limits for Tl 190.801 Recovery = 97.75%						
U 409.014†	4754.8	464.88 µg/L	17.584	464.88 ppb	17.584	3.78%
QC value within limits for U 409.014 Recovery = 92.98%						
V 292.402†	37756.1	483.95 µg/L	15.124	483.95 ppb	15.124	3.13%
QC value within limits for V 292.402 Recovery = 96.79%						
Zn 213.857†	18117.5	483.25 µg/L	14.142	483.25 ppb	14.142	2.93%
QC value within limits for Zn 213.857 Recovery = 96.65%						

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 13:56:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	109104.0	109104.0	99.9 %		13:56:55
1	Al 396.153Radial†	-133.2	41.6	19.897 µg/L	19.897 ppb	13:56:55
1	Ca 317.933Radial†	420.6	37.4	12.144 µg/L	12.144 ppb	13:57:15
1	Fe 238.204 Radial†	29.5	-1.8	-13.347 µg/L	-13.347 ppb	13:57:15
1	K 766.490 Radial†	264.7	34.2	19.392 µg/L	19.392 ppb	13:56:55
1	Mg 279.077 IEC†	9.9	1.2	11.880 µg/L	11.880 ppb	13:57:15
1	Na 589.592 Radial†	218.8	-16.2	-5.6249 µg/L	-5.6249 ppb	13:56:55
1	Sr 421.552†	159.6	4.7	0.0214 µg/L	0.0214 ppb	13:56:55
1	Sc 361.383	1697141.8	1697141.8	100.86 %		13:58:17
1	Y 371.029	946235.9	946235.9	101.08 %		13:58:17
1	Ag 328.068†	-512.3	58.0	0.5165 µg/L	0.5165 ppb	13:58:23
1	As 188.979†	-6.1	-2.2	-4.1353 µg/L	-4.1353 ppb	13:58:43
1	B 249.677†	176.0	15.9	0.8479 µg/L	0.8479 ppb	13:58:43
1	Ba 233.527†	-9.0	9.0	0.2332 µg/L	0.2332 ppb	13:58:43
1	Be 313.107†	-1915.8	46.4	0.0331 µg/L	0.0331 ppb	13:58:23
1	Cd 226.502†	-139.8	5.6	0.1649 µg/L	0.1649 ppb	13:58:43
1	Co 228.616†	20.1	-2.3	-0.1183 µg/L	-0.1183 ppb	13:58:43
1	Cr 267.716†	73.6	-17.2	-0.4438 µg/L	-0.4438 ppb	13:58:43
1	Cu 324.752†	2663.6	17.8	0.1251 µg/L	0.1251 ppb	13:58:23
1	Mn 257.610†	-536.1	12.7	0.0447 µg/L	0.0447 ppb	13:58:43
1	Mo 202.031†	11.9	7.4	0.8482 µg/L	0.8482 ppb	13:58:43
1	Ni 231.604†	296.3	-4.9	-0.3401 µg/L	-0.3401 ppb	13:58:43
1	P 214.914†	250.5	6.8	14.741 µg/L	14.741 ppb	13:58:43
1	Pb 220.353†	40.6	-2.6	-0.8267 µg/L	-0.8267 ppb	13:58:43
1	S 181.975 Axial†	21.9	1.0	3.8638 µg/L	3.8638 ppb	13:58:43
1	Sb 206.836†	25.2	4.0	4.2444 µg/L	4.2444 ppb	13:58:43
1	Se 196.026†	22.0	8.5	10.399 µg/L	10.399 ppb	13:58:43
1	SiO2†	1409.2	14.0	3.0475 µg/L	3.0475 ppb	13:58:23
1	Si 251.611†	395.7	28.3	2.3150 µg/L	2.3150 ppb	13:58:43
1	Sn 189.927†	4.3	-0.3	-0.1550 µg/L	-0.1550 ppb	13:58:43
1	Ti 334.940†	87.0	94.4	0.2511 µg/L	0.2511 ppb	13:58:23
1	Tl 190.801†	-23.6	2.2	2.5210 µg/L	2.5210 ppb	13:58:43
1	U 409.014†	159.1	6.9	0.6733 µg/L	0.6733 ppb	13:58:23
1	V 292.402†	-146.4	6.8	0.0921 µg/L	0.0921 ppb	13:58:23
1	Zn 213.857†	595.8	10.5	0.2824 µg/L	0.2824 ppb	13:58:43
2	Sc RADIAL	108425.8	108425.8	99.3 %		13:57:21
2	Al 396.153Radial†	-164.8	9.0	4.2712 µg/L	4.2712 ppb	13:57:21
2	Ca 317.933Radial†	419.3	38.7	12.559 µg/L	12.559 ppb	13:57:41
2	Fe 238.204 Radial†	30.2	-0.9	-6.6343 µg/L	-6.6343 ppb	13:57:41
2	K 766.490 Radial†	249.3	20.3	11.536 µg/L	11.536 ppb	13:57:21
2	Mg 279.077 IEC†	12.6	4.0	39.542 µg/L	39.542 ppb	13:57:41
2	Na 589.592 Radial†	307.7	74.6	25.833 µg/L	25.833 ppb	13:57:21
2	Sr 421.552†	192.2	38.6	0.1750 µg/L	0.1750 ppb	13:57:21
2	Sc 361.383	1686554.5	1686554.5	100.23 %		13:58:49
2	Y 371.029	936341.8	936341.8	100.02 %		13:58:49
2	Ag 328.068†	-531.5	35.7	0.3186 µg/L	0.3186 ppb	13:58:55
2	As 188.979†	-8.4	-4.6	-8.4275 µg/L	-8.4275 ppb	13:59:16
2	B 249.677†	167.6	8.6	0.4606 µg/L	0.4606 ppb	13:59:16
2	Ba 233.527†	-13.1	4.9	0.1259 µg/L	0.1259 ppb	13:59:16
2	Be 313.107†	-1960.4	-10.0	-0.0073 µg/L	-0.0073 ppb	13:58:55
2	Cd 226.502†	-136.4	8.1	0.2393 µg/L	0.2393 ppb	13:59:16
2	Co 228.616†	18.2	-4.1	-0.2098 µg/L	-0.2098 ppb	13:59:16
2	Cr 267.716†	85.8	-4.6	-0.1187 µg/L	-0.1187 ppb	13:59:16
2	Cu 324.752†	2622.4	-6.6	-0.0489 µg/L	-0.0489 ppb	13:58:55
2	Mn 257.610†	-524.8	20.6	0.0721 µg/L	0.0721 ppb	13:59:16
2	Mo 202.031†	14.9	10.5	1.2012 µg/L	1.2012 ppb	13:59:16
2	Ni 231.604†	307.2	7.9	0.5451 µg/L	0.5451 ppb	13:59:16
2	P 214.914†	239.0	-3.0	-6.5561 µg/L	-6.5561 ppb	13:59:16
2	Pb 220.353†	41.9	-1.0	-0.3219 µg/L	-0.3219 ppb	13:59:16

2	S 181.975 Axial†	21.5	0.8	2.9515 µg/L	2.9515 ppb	13:59:16
2	Sb 206.836†	26.6	5.5	5.9178 µg/L	5.9178 ppb	13:59:16
2	Se 196.026†	16.1	2.8	3.3611 µg/L	3.3611 ppb	13:59:16
2	SiO2†	1424.9	38.4	8.3873 µg/L	8.3873 ppb	13:58:55
2	Si 251.611†	406.3	41.4	3.3810 µg/L	3.3810 ppb	13:59:16
2	Sn 189.927†	3.6	-1.0	-0.4554 µg/L	-0.4554 ppb	13:59:16
2	Ti 334.940†	113.8	121.7	0.3217 µg/L	0.3217 ppb	13:58:55
2	Tl 190.801†	-21.1	4.6	5.3122 µg/L	5.3122 ppb	13:59:16
2	U 409.014†	178.2	27.0	2.6418 µg/L	2.6418 ppb	13:58:55
2	V 292.402†	-143.6	8.7	0.1213 µg/L	0.1213 ppb	13:58:55
2	Zn 213.857†	597.1	15.4	0.4103 µg/L	0.4103 ppb	13:59:16
3	Sc RADIAL	108217.0	108217.0	99.1 %		13:57:47
3	Al 396.153Radial†	-139.2	34.4	16.462 µg/L	16.462 ppb	13:57:47
3	Ca 317.933Radial†	435.9	56.4	18.280 µg/L	18.280 ppb	13:58:07
3	Fe 238.204 Radial†	32.0	1.0	7.6993 µg/L	7.6993 ppb	13:58:07
3	K 766.490 Radial†	192.6	-36.4	-20.665 µg/L	-20.665 ppb	13:57:47
3	Mg 279.077 IEC†	10.6	2.0	19.629 µg/L	19.629 ppb	13:58:07
3	Na 589.592 Radial†	234.6	1.5	0.5080 µg/L	0.5080 ppb	13:57:47
3	Sr 421.552†	190.9	37.7	0.1706 µg/L	0.1706 ppb	13:57:47
3	Sc 361.383	1682113.1	1682113.1	99.967 %		13:59:22
3	Y 371.029	932942.6	932942.6	99.660 %		13:59:22
3	Ag 328.068†	-512.2	53.6	0.4810 µg/L	0.4810 ppb	13:59:27
3	As 188.979†	-1.4	2.5	4.5800 µg/L	4.5800 ppb	13:59:48
3	B 249.677†	172.8	14.2	0.7505 µg/L	0.7505 ppb	13:59:48
3	Ba 233.527†	-22.8	-4.9	-0.1248 µg/L	-0.1248 ppb	13:59:48
3	Be 313.107†	-1921.8	23.3	0.0165 µg/L	0.0165 ppb	13:59:27
3	Cd 226.502†	-141.7	2.5	0.0716 µg/L	0.0716 ppb	13:59:48
3	Co 228.616†	23.2	0.9	0.0466 µg/L	0.0466 ppb	13:59:48
3	Cr 267.716†	90.9	0.7	0.0190 µg/L	0.0190 ppb	13:59:48
3	Cu 324.752†	2641.6	19.4	0.1407 µg/L	0.1407 ppb	13:59:27
3	Mn 257.610†	-527.2	16.8	0.0605 µg/L	0.0605 ppb	13:59:48
3	Mo 202.031†	8.4	4.1	0.4665 µg/L	0.4665 ppb	13:59:48
3	Ni 231.604†	290.9	-7.7	-0.5333 µg/L	-0.5333 ppb	13:59:48
3	P 214.914†	249.8	8.4	18.162 µg/L	18.162 ppb	13:59:48
3	Pb 220.353†	34.5	-8.3	-2.6218 µg/L	-2.6218 ppb	13:59:48
3	S 181.975 Axial†	20.7	0.0	0.1232 µg/L	0.1232 ppb	13:59:48
3	Sb 206.836†	23.4	2.4	2.5629 µg/L	2.5629 ppb	13:59:48
3	Se 196.026†	17.3	4.0	4.8798 µg/L	4.8798 ppb	13:59:48
3	SiO2†	1418.6	35.9	7.8373 µg/L	7.8373 ppb	13:59:27
3	Si 251.611†	415.2	51.4	4.1979 µg/L	4.1979 ppb	13:59:48
3	Sn 189.927†	4.2	-0.4	-0.1668 µg/L	-0.1668 ppb	13:59:48
3	Ti 334.940†	168.0	176.2	0.4688 µg/L	0.4688 ppb	13:59:27
3	Tl 190.801†	-25.2	0.4	0.4632 µg/L	0.4632 ppb	13:59:48
3	U 409.014†	118.5	-32.3	-3.1654 µg/L	-3.1654 ppb	13:59:27
3	V 292.402†	-135.0	16.9	0.2145 µg/L	0.2145 ppb	13:59:27
3	Zn 213.857†	584.8	4.7	0.1281 µg/L	0.1281 ppb	13:59:48

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1688603.1	100.35 %	0.459			0.46%
Sc RADIAL	108582.3	99.4 %	0.42			0.43%
Y 371.029	938506.7	100.25 %	0.738			0.74%
Ag 328.068†	49.1	0.4387 µg/L	0.10549	0.4387 ppb	0.10549	24.05%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	28.3	13.543 µg/L	8.2115	13.543 ppb	8.2115	60.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-2.6609 µg/L	6.62788	-2.6609 ppb	6.62788	249.08%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	12.9	0.6863 µg/L	0.20149	0.6863 ppb	0.20149	29.36%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.0	0.0781 µg/L	0.18376	0.0781 ppb	0.18376	235.26%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	19.9	0.0141 µg/L	0.02030	0.0141 ppb	0.02030	143.94%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	44.2	14.328 µg/L	3.4289	14.328 ppb	3.4289	23.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.4	0.1586 µg/L	0.08405	0.1586 ppb	0.08405	53.00%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.8	-0.0938 µg/L	0.12994	-0.0938 ppb	0.12994	138.49%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	-7.0	-0.1812 µg/L	0.23762	-0.1812 ppb
			0.23762	131.17%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	10.2	0.0723 µg/L	0.10522	0.0723 ppb
			0.10522	145.53%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	-0.5	-4.0940 µg/L	10.75073	-4.0940 ppb
			10.75073	262.59%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	6.0	3.4211 µg/L	21.22585	3.4211 ppb
			21.22585	620.45%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	2.4	23.684 µg/L	14.2699	23.684 ppb
			14.2699	60.25%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	16.7	0.0591 µg/L	0.01372	0.0591 ppb
			0.01372	23.21%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	7.3	0.8386 µg/L	0.36748	0.8386 ppb
			0.36748	43.82%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	19.9	6.9055 µg/L	16.67645	6.9055 ppb
			16.67645	241.50%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	-1.6	-0.1094 µg/L	0.57501	-0.1094 ppb
			0.57501	525.49%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	4.1	8.7825 µg/L	13.39324	8.7825 ppb
			13.39324	152.50%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-4.0	-1.2568 µg/L	1.20874	-1.2568 ppb
			1.20874	96.18%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	0.6	2.3128 µg/L	1.95035	2.3128 ppb
			1.95035	84.33%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	4.0	4.2417 µg/L	1.67747	4.2417 ppb
			1.67747	39.55%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	5.1	6.2132 µg/L	3.70344	6.2132 ppb
			3.70344	59.61%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	29.4	6.4241 µg/L	2.93705	6.4241 ppb
			2.93705	45.72%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	40.3	3.2980 µg/L	0.94420	3.2980 ppb
			0.94420	28.63%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	-0.6	-0.2591 µg/L	0.17013	-0.2591 ppb
			0.17013	65.67%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	27.0	0.1223 µg/L	0.08742	0.1223 ppb
			0.08742	71.48%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	130.8	0.3472 µg/L	0.11111	0.3472 ppb
			0.11111	32.00%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	2.4	2.7655 µg/L	2.43371	2.7655 ppb
			2.43371	88.00%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	0.5	0.0499 µg/L	2.95333	0.0499 ppb
			2.95333	>999.9%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	10.8	0.1426 µg/L	0.06391	0.1426 ppb
			0.06391	44.80%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	10.2	0.2736 µg/L	0.14132	0.2736 ppb
			0.14132	51.65%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.



Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 14:36:50

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	109544.2	109544.2	100 %		14:37:27
1	Al 396.153Radial†	9934.0	10077.7	4812.6 µg/L	4812.6 ppb	14:37:27
1	Ca 317.933Radial†	15298.0	14866.5	4821.6 µg/L	4821.6 ppb	14:37:27
1	Fe 238.204 Radial†	673.4	640.0	4827.6 µg/L	4827.6 ppb	14:37:48
1	K 766.490 Radial†	8943.2	8684.4	4928.5 µg/L	4928.5 ppb	14:37:27
1	Mg 279.077 IEC†	500.6	490.3	4898.8 µg/L	4898.8 ppb	14:37:48
1	Na 589.592 Radial†	27888.0	27565.3	9544.2 µg/L	9544.2 ppb	14:37:27
1	Sr 421.552†	109381.8	108883.8	493.13 µg/L	493.13 ppb	14:37:27
1	Sc 361.383	1686070.5	1686070.5	100.20 %		14:38:51
1	Y 371.029	929061.8	929061.8	99.246 %		14:38:51
1	Ag 328.068†	54570.5	55026.4	495.44 µg/L	495.44 ppb	14:38:57
1	As 188.979†	267.1	270.4	497.68 µg/L	497.68 ppb	14:39:17
1	B 249.677†	9399.0	9221.4	487.40 µg/L	487.40 ppb	14:38:57
1	Ba 233.527†	19205.5	19184.7	495.33 µg/L	495.33 ppb	14:38:57
1	Be 313.107†	690770.7	691323.5	494.66 µg/L	494.66 ppb	14:38:51
1	Cd 226.502†	16739.8	16850.3	493.19 µg/L	493.19 ppb	14:38:57
1	Co 228.616†	9638.0	9596.3	497.30 µg/L	497.30 ppb	14:38:57
1	Cr 267.716†	19372.6	19243.3	497.92 µg/L	497.92 ppb	14:38:57
1	Cu 324.752†	72072.9	69304.5	497.71 µg/L	497.71 ppb	14:38:57
1	Mn 257.610†	135609.9	135880.6	495.45 µg/L	495.45 ppb	14:38:57
1	Mo 202.031†	4469.9	4456.5	509.56 µg/L	509.56 ppb	14:39:17
1	Ni 231.604†	7696.4	7382.2	511.38 µg/L	511.38 ppb	14:38:57
1	P 214.914†	1404.8	1160.5	2453.1 µg/L	2453.1 ppb	14:39:17
1	Pb 220.353†	1649.5	1603.3	505.03 µg/L	505.03 ppb	14:39:17
1	S 181.975 Axial†	283.4	262.2	995.06 µg/L	995.06 ppb	14:39:17
1	Sb 206.836†	481.2	459.3	492.59 µg/L	492.59 ppb	14:39:17
1	Se 196.026†	424.3	410.1	516.02 µg/L	516.02 ppb	14:39:17
1	SiO2†	25839.4	24404.1	5325.6 µg/L	5325.6 ppb	14:38:57
1	Si 251.611†	30968.2	30541.7	2496.7 µg/L	2496.7 ppb	14:38:57
1	Sn 189.927†	1092.5	1085.7	510.60 µg/L	510.60 ppb	14:39:17
1	Ti 334.940†	187118.7	186749.5	497.90 µg/L	497.90 ppb	14:38:51
1	Tl 190.801†	399.3	424.1	498.60 µg/L	498.60 ppb	14:39:17
1	U 409.014†	5123.5	4962.4	485.18 µg/L	485.18 ppb	14:38:57
1	V 292.402†	39093.9	39167.0	502.11 µg/L	502.11 ppb	14:38:57
1	Zn 213.857†	19316.2	18697.0	498.70 µg/L	498.70 ppb	14:38:57
2	Sc RADIAL	108562.3	108562.3	99.4 %		14:37:53
2	Al 396.153Radial†	9839.9	10072.7	4810.3 µg/L	4810.3 ppb	14:37:53
2	Ca 317.933Radial†	15194.6	14900.4	4832.5 µg/L	4832.5 ppb	14:37:53
2	Fe 238.204 Radial†	667.9	640.5	4831.7 µg/L	4831.7 ppb	14:38:14
2	K 766.490 Radial†	8946.3	8768.2	4976.1 µg/L	4976.1 ppb	14:37:53
2	Mg 279.077 IEC†	496.1	490.2	4898.0 µg/L	4898.0 ppb	14:38:14
2	Na 589.592 Radial†	27715.5	27643.2	9571.2 µg/L	9571.2 ppb	14:37:53
2	Sr 421.552†	108710.5	109194.7	494.54 µg/L	494.54 ppb	14:37:53
2	Sc 361.383	1682961.1	1682961.1	100.02 %		14:39:24
2	Y 371.029	925284.9	925284.9	98.842 %		14:39:24
2	Ag 328.068†	54681.7	55238.2	497.34 µg/L	497.34 ppb	14:39:29
2	As 188.979†	262.0	265.8	489.32 µg/L	489.32 ppb	14:39:50
2	B 249.677†	9468.8	9308.5	492.02 µg/L	492.02 ppb	14:39:29
2	Ba 233.527†	19191.4	19206.0	495.89 µg/L	495.89 ppb	14:39:29
2	Be 313.107†	685701.7	687529.0	491.95 µg/L	491.95 ppb	14:39:24
2	Cd 226.502†	16783.7	16925.1	495.38 µg/L	495.38 ppb	14:39:29
2	Co 228.616†	9662.0	9638.1	499.47 µg/L	499.47 ppb	14:39:29
2	Cr 267.716†	19363.5	19270.0	498.61 µg/L	498.61 ppb	14:39:29
2	Cu 324.752†	72191.3	69555.8	499.51 µg/L	499.51 ppb	14:39:29
2	Mn 257.610†	135741.0	136261.8	496.84 µg/L	496.84 ppb	14:39:29
2	Mo 202.031†	4434.5	4429.4	506.46 µg/L	506.46 ppb	14:39:50
2	Ni 231.604†	7721.7	7421.7	514.12 µg/L	514.12 ppb	14:39:29
2	P 214.914†	1394.6	1152.9	2436.5 µg/L	2436.5 ppb	14:39:50
2	Pb 220.353†	1632.4	1589.2	500.58 µg/L	500.58 ppb	14:39:50

2	S 181.975 Axial†	287.4	266.7	1012.0 µg/L	1012.0 ppb	14:39:50
2	Sb 206.836†	479.1	458.0	491.15 µg/L	491.15 ppb	14:39:50
2	Se 196.026†	415.5	402.1	506.17 µg/L	506.17 ppb	14:39:50
2	SiO2†	26063.7	24676.1	5385.0 µg/L	5385.0 ppb	14:39:29
2	Si 251.611†	31195.0	30825.6	2519.9 µg/L	2519.9 ppb	14:39:29
2	Sn 189.927†	1076.4	1071.7	504.00 µg/L	504.00 ppb	14:39:50
2	Ti 334.940†	185830.1	185806.1	495.38 µg/L	495.38 ppb	14:39:24
2	Tl 190.801†	399.1	424.6	499.18 µg/L	499.18 ppb	14:39:50
2	U 409.014†	5204.4	5052.7	494.03 µg/L	494.03 ppb	14:39:29
2	V 292.402†	39117.8	39262.9	503.32 µg/L	503.32 ppb	14:39:29
2	Zn 213.857†	19345.0	18761.3	500.42 µg/L	500.42 ppb	14:39:29
3	Sc RADIAL	110118.1	110118.1	101 %		14:38:19
3	Al 396.153Radial†	9944.6	10036.6	4794.2 µg/L	4794.2 ppb	14:38:19
3	Ca 317.933Radial†	15416.4	14904.4	4833.9 µg/L	4833.9 ppb	14:38:19
3	Fe 238.204 Radial†	668.1	631.2	4761.2 µg/L	4761.2 ppb	14:38:40
3	K 766.490 Radial†	9074.3	8768.0	4976.0 µg/L	4976.0 ppb	14:38:19
3	Mg 279.077 IEC†	499.4	486.4	4859.2 µg/L	4859.2 ppb	14:38:40
3	Na 589.592 Radial†	28006.3	27537.7	9534.7 µg/L	9534.7 ppb	14:38:19
3	Sr 421.552†	109767.8	108698.3	492.29 µg/L	492.29 ppb	14:38:19
3	Sc 361.383	1673078.9	1673078.9	99.430 %		14:39:56
3	Y 371.029	922815.6	922815.6	98.579 %		14:39:56
3	Ag 328.068†	52735.9	53604.2	482.55 µg/L	482.55 ppb	14:40:02
3	As 188.979†	240.0	245.3	451.48 µg/L	451.48 ppb	14:40:23
3	B 249.677†	9044.9	8938.1	472.36 µg/L	472.36 ppb	14:40:02
3	Ba 233.527†	18230.4	18352.8	473.85 µg/L	473.85 ppb	14:40:02
3	Be 313.107†	666220.3	671985.4	480.82 µg/L	480.82 ppb	14:39:56
3	Cd 226.502†	15924.7	16160.2	472.98 µg/L	472.98 ppb	14:40:02
3	Co 228.616†	9116.6	9146.6	473.94 µg/L	473.94 ppb	14:40:02
3	Cr 267.716†	17983.4	17996.4	465.66 µg/L	465.66 ppb	14:40:02
3	Cu 324.752†	68301.9	66070.5	474.51 µg/L	474.51 ppb	14:40:02
3	Mn 257.610†	128118.9	129397.6	471.81 µg/L	471.81 ppb	14:40:02
3	Mo 202.031†	3920.3	3938.5	450.34 µg/L	450.34 ppb	14:40:23
3	Ni 231.604†	7292.9	7036.0	487.40 µg/L	487.40 ppb	14:40:02
3	P 214.914†	1296.7	1062.7	2243.9 µg/L	2243.9 ppb	14:40:23
3	Pb 220.353†	1496.5	1462.2	460.50 µg/L	460.50 ppb	14:40:23
3	S 181.975 Axial†	263.6	244.5	927.81 µg/L	927.81 ppb	14:40:23
3	Sb 206.836†	441.5	423.0	453.30 µg/L	453.30 ppb	14:40:23
3	Se 196.026†	387.0	375.9	473.79 µg/L	473.79 ppb	14:40:23
3	SiO2†	25028.3	23788.6	5191.3 µg/L	5191.3 ppb	14:40:02
3	Si 251.611†	29868.3	29675.5	2425.9 µg/L	2425.9 ppb	14:40:02
3	Sn 189.927†	943.5	944.4	444.19 µg/L	444.19 ppb	14:40:23
3	Ti 334.940†	180118.1	181158.8	482.98 µg/L	482.98 ppb	14:39:56
3	Tl 190.801†	376.2	403.9	474.92 µg/L	474.92 ppb	14:40:23
3	U 409.014†	4796.8	4673.5	456.89 µg/L	456.89 ppb	14:40:02
3	V 292.402†	36679.4	37041.6	474.62 µg/L	474.62 ppb	14:40:02
3	Zn 213.857†	18264.8	17789.2	474.47 µg/L	474.47 ppb	14:40:02

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1680703.5	99.883 %	0.4031			0.40%
Sc RADIAL	109408.2	100 %	0.7			0.72%
Y 371.029	925720.8	98.889 %	0.3360			0.34%
Ag 328.068†	54622.9	491.78 µg/L	8.047	491.78 ppb	8.047	1.64%
QC value within limits for Ag 328.068 Recovery = 98.36%						
Al 396.153Radial†	10062.4	4805.7 µg/L	10.05	4805.7 ppb	10.05	0.21%
QC value within limits for Al 396.153Radial Recovery = 96.11%						
As 188.979†	260.5	479.49 µg/L	24.614	479.49 ppb	24.614	5.13%
QC value within limits for As 188.979 Recovery = 95.90%						
B 249.677†	9156.0	483.92 µg/L	10.281	483.92 ppb	10.281	2.12%
QC value within limits for B 249.677 Recovery = 96.78%						
Ba 233.527†	18914.5	488.36 µg/L	12.568	488.36 ppb	12.568	2.57%
QC value within limits for Ba 233.527 Recovery = 97.67%						
Be 313.107†	683612.6	489.14 µg/L	7.332	489.14 ppb	7.332	1.50%
QC value within limits for Be 313.107 Recovery = 97.83%						
Ca 317.933Radial†	14890.4	4829.3 µg/L	6.75	4829.3 ppb	6.75	0.14%
QC value within limits for Ca 317.933Radial Recovery = 96.59%						
Cd 226.502†	16645.2	487.18 µg/L	12.354	487.18 ppb	12.354	2.54%
QC value within limits for Cd 226.502 Recovery = 97.44%						
Co 228.616†	9460.3	490.24 µg/L	14.152	490.24 ppb	14.152	2.89%

Cr	267.716†	18836.6	487.40 µg/L	18.829	487.40 ppb	18.829	3.86%
Cu	324.752†	68310.3	490.58 µg/L	13.941	490.58 ppb	13.941	2.84%
Fe	238.204 Radial†	637.2	4806.8 µg/L	39.57	4806.8 ppb	39.57	0.82%
K	766.490 Radial†	8740.2	4960.2 µg/L	27.42	4960.2 ppb	27.42	0.55%
Mg	279.077 IEC†	489.0	4885.3 µg/L	22.59	4885.3 ppb	22.59	0.46%
Mn	257.610†	133846.7	488.03 µg/L	14.068	488.03 ppb	14.068	2.88%
Mo	202.031†	4274.8	488.79 µg/L	33.329	488.79 ppb	33.329	6.82%
Na	589.592 Radial†	27582.1	9550.0 µg/L	18.94	9550.0 ppb	18.94	0.20%
Ni	231.604†	7280.0	504.30 µg/L	14.699	504.30 ppb	14.699	2.91%
P	214.914†	1125.3	2377.8 µg/L	116.30	2377.8 ppb	116.30	4.89%
Pb	220.353†	1551.6	488.70 µg/L	24.527	488.70 ppb	24.527	5.02%
S	181.975 Axial†	257.8	978.31 µg/L	44.548	978.31 ppb	44.548	4.55%
Sb	206.836†	446.7	479.01 µg/L	22.277	479.01 ppb	22.277	4.65%
Se	196.026†	396.0	498.66 µg/L	22.094	498.66 ppb	22.094	4.43%
SiO2†		24289.6	5300.6 µg/L	99.22	5300.6 ppb	99.22	1.87%
Si	251.611†	30347.6	2480.8 µg/L	48.98	2480.8 ppb	48.98	1.97%
Sn	189.927†	1033.9	486.26 µg/L	36.582	486.26 ppb	36.582	7.52%
Sr	421.552†	108925.6	493.32 µg/L	1.136	493.32 ppb	1.136	0.23%
Ti	334.940†	184571.5	492.09 µg/L	7.982	492.09 ppb	7.982	1.62%
Tl	190.801†	417.5	490.90 µg/L	13.842	490.90 ppb	13.842	2.82%
U	409.014†	4896.2	478.70 µg/L	19.399	478.70 ppb	19.399	4.05%
V	292.402†	38490.5	493.35 µg/L	16.234	493.35 ppb	16.234	3.29%
Zn	213.857†	18415.8	491.20 µg/L	14.513	491.20 ppb	14.513	2.95%

QC value within limits for Co 228.616 Recovery = 98.05%

QC value within limits for Cr 267.716 Recovery = 97.48%

QC value within limits for Cu 324.752 Recovery = 98.12%

QC value within limits for Fe 238.204 Radial Recovery = 96.14%

QC value within limits for K 766.490 Radial Recovery = 99.20%

QC value within limits for Mg 279.077 IEC Recovery = 97.71%

QC value within limits for Mn 257.610 Recovery = 97.61%

QC value within limits for Mo 202.031 Recovery = 97.76%

QC value within limits for Na 589.592 Radial Recovery = 95.50%

QC value within limits for Ni 231.604 Recovery = 100.86%

QC value within limits for P 214.914 Recovery = 95.11%

QC value within limits for Pb 220.353 Recovery = 97.74%

QC value within limits for S 181.975 Axial Recovery = 97.83%

QC value within limits for Sb 206.836 Recovery = 95.80%

QC value within limits for Se 196.026 Recovery = 99.73%

QC value within limits for SiO2 Recovery = 99.12%

QC value within limits for Si 251.611 Recovery = 99.23%

QC value within limits for Sn 189.927 Recovery = 97.25%

QC value within limits for Sr 421.552 Recovery = 98.66%

QC value within limits for Ti 334.940 Recovery = 98.42%

QC value within limits for Tl 190.801 Recovery = 98.18%

QC value within limits for U 409.014 Recovery = 95.74%

QC value within limits for V 292.402 Recovery = 98.67%

QC value within limits for Zn 213.857 Recovery = 98.24%

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 14:40:32  
 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	108653.6	108653.6	99.5 %		14:41:05
1	Al 396.153Radial†	-153.3	20.8	9.9303 µg/L	9.9303 ppb	14:41:05
1	Ca 317.933Radial†	388.1	6.5	2.0930 µg/L	2.0930 ppb	14:41:25
1	Fe 238.204 Radial†	29.9	-1.2	-9.3807 µg/L	-9.3807 ppb	14:41:25
1	K 766.490 Radial†	253.4	23.9	13.552 µg/L	13.552 ppb	14:41:05
1	Mg 279.077 IEC†	8.7	0.0	0.1490 µg/L	0.1490 ppb	14:41:25
1	Na 589.592 Radial†	198.9	-35.4	-12.256 µg/L	-12.256 ppb	14:41:05
1	Sr 421.552†	178.9	24.9	0.1126 µg/L	0.1126 ppb	14:41:05
1	Sc 361.383	1669339.6	1669339.6	99.208 %		14:42:27
1	Y 371.029	922794.8	922794.8	98.576 %		14:42:27
1	Ag 328.068†	-586.0	-24.8	-0.2220 µg/L	-0.2220 ppb	14:42:33
1	As 188.979†	-10.7	-6.9	-12.751 µg/L	-12.751 ppb	14:42:53
1	B 249.677†	181.2	24.0	1.2792 µg/L	1.2792 ppb	14:42:53
1	Ba 233.527†	-17.1	0.6	0.0169 µg/L	0.0169 ppb	14:42:53
1	Be 313.107†	-2001.7	-71.9	-0.0516 µg/L	-0.0516 ppb	14:42:33
1	Cd 226.502†	-136.3	6.8	0.2011 µg/L	0.2011 ppb	14:42:53
1	Co 228.616†	20.7	-1.4	-0.0736 µg/L	-0.0736 ppb	14:42:53
1	Cr 267.716†	83.7	-5.8	-0.1510 µg/L	-0.1510 ppb	14:42:53
1	Cu 324.752†	2636.7	34.7	0.2473 µg/L	0.2473 ppb	14:42:33
1	Mn 257.610†	-481.5	58.9	0.2143 µg/L	0.2143 ppb	14:42:53
1	Mo 202.031†	18.2	14.0	1.5951 µg/L	1.5951 ppb	14:42:53
1	Ni 231.604†	290.6	-5.7	-0.3985 µg/L	-0.3985 ppb	14:42:53
1	P 214.914†	249.5	10.0	21.474 µg/L	21.474 ppb	14:42:53
1	Pb 220.353†	43.9	1.4	0.4383 µg/L	0.4383 ppb	14:42:53
1	S 181.975 Axial†	20.8	0.3	0.9722 µg/L	0.9722 ppb	14:42:53
1	Sb 206.836†	28.1	7.3	7.7822 µg/L	7.7822 ppb	14:42:53
1	Se 196.026†	10.5	-2.7	-3.3306 µg/L	-3.3306 ppb	14:42:53
1	SiO2†	1456.3	84.7	18.493 µg/L	18.493 ppb	14:42:33
1	Si 251.611†	457.6	97.3	7.9499 µg/L	7.9499 ppb	14:42:53
1	Sn 189.927†	3.1	-1.4	-0.6475 µg/L	-0.6475 ppb	14:42:53
1	Ti 334.940†	128.8	138.0	0.3681 µg/L	0.3681 ppb	14:42:33
1	Tl 190.801†	-20.2	5.2	6.0558 µg/L	6.0558 ppb	14:42:53
1	U 409.014†	129.0	-20.8	-2.0392 µg/L	-2.0392 ppb	14:42:33
1	V 292.402†	-140.6	10.2	0.1386 µg/L	0.1386 ppb	14:42:33
1	Zn 213.857†	589.4	13.8	0.3724 µg/L	0.3724 ppb	14:42:53
2	Sc RADIAL	108110.5	108110.5	99.0 %		14:41:31
2	Al 396.153Radial†	-153.8	19.6	9.3482 µg/L	9.3482 ppb	14:41:31
2	Ca 317.933Radial†	394.0	14.4	4.6687 µg/L	4.6687 ppb	14:41:51
2	Fe 238.204 Radial†	31.7	0.8	5.7541 µg/L	5.7541 ppb	14:41:51
2	K 766.490 Radial†	199.8	-28.9	-16.419 µg/L	-16.419 ppb	14:41:31
2	Mg 279.077 IEC†	11.9	3.2	32.392 µg/L	32.392 ppb	14:41:51
2	Na 589.592 Radial†	253.9	21.2	7.3489 µg/L	7.3489 ppb	14:41:31
2	Sr 421.552†	132.1	-21.5	-0.0974 µg/L	-0.0974 ppb	14:41:31
2	Sc 361.383	1671426.8	1671426.8	99.332 %		14:42:59
2	Y 371.029	922403.4	922403.4	98.535 %		14:42:59
2	Ag 328.068†	-499.2	63.4	0.5652 µg/L	0.5652 ppb	14:43:05
2	As 188.979†	-10.0	-6.2	-11.440 µg/L	-11.440 ppb	14:43:25
2	B 249.677†	156.9	-0.7	-0.0403 µg/L	-0.0403 ppb	14:43:25
2	Ba 233.527†	-11.0	6.8	0.1751 µg/L	0.1751 ppb	14:43:25
2	Be 313.107†	-2002.9	-70.6	-0.0507 µg/L	-0.0507 ppb	14:43:05
2	Cd 226.502†	-139.4	3.9	0.1139 µg/L	0.1139 ppb	14:43:25
2	Co 228.616†	16.4	-5.8	-0.2994 µg/L	-0.2994 ppb	14:43:25
2	Cr 267.716†	85.7	-3.9	-0.1006 µg/L	-0.1006 ppb	14:43:25
2	Cu 324.752†	2604.3	-1.3	-0.0079 µg/L	-0.0079 ppb	14:43:05
2	Mn 257.610†	-497.2	43.7	0.1573 µg/L	0.1573 ppb	14:43:25
2	Mo 202.031†	14.3	10.1	1.1514 µg/L	1.1514 ppb	14:43:25
2	Ni 231.604†	291.8	-4.9	-0.3404 µg/L	-0.3404 ppb	14:43:25
2	P 214.914†	256.5	16.8	36.146 µg/L	36.146 ppb	14:43:25
2	Pb 220.353†	42.6	0.0	0.0142 µg/L	0.0142 ppb	14:43:25

2	S 181.975 Axial†	21.0	0.5	1.7393 µg/L	1.7393 ppb	14:43:25
2	Sb 206.836†	21.1	0.2	0.1990 µg/L	0.1990 ppb	14:43:25
2	Se 196.026†	10.4	-2.8	-3.4621 µg/L	-3.4621 ppb	14:43:25
2	SiO2†	1480.8	107.6	23.476 µg/L	23.476 ppb	14:43:05
2	Si 251.611†	515.0	154.5	12.626 µg/L	12.626 ppb	14:43:25
2	Sn 189.927†	6.2	1.7	0.8147 µg/L	0.8147 ppb	14:43:25
2	Ti 334.940†	138.3	147.3	0.3906 µg/L	0.3906 ppb	14:43:05
2	Tl 190.801†	-26.0	-0.5	-0.6313 µg/L	-0.6313 ppb	14:43:25
2	U 409.014†	162.6	12.9	1.2599 µg/L	1.2599 ppb	14:43:05
2	V 292.402†	-172.0	-21.2	-0.2584 µg/L	-0.2584 ppb	14:43:05
2	Zn 213.857†	586.5	10.2	0.2721 µg/L	0.2721 ppb	14:43:25
3	Sc RADIAL	108765.9	108765.9	99.6 %		14:41:57
3	Al 396.153Radial†	-137.0	37.4	17.877 µg/L	17.877 ppb	14:41:57
3	Ca 317.933Radial†	395.8	13.9	4.4948 µg/L	4.4948 ppb	14:42:17
3	Fe 238.204 Radial†	31.7	0.5	4.0251 µg/L	4.0251 ppb	14:42:17
3	K 766.490 Radial†	266.5	36.9	20.921 µg/L	20.921 ppb	14:41:57
3	Mg 279.077 IEC†	8.0	-0.8	-7.7276 µg/L	-7.7276 ppb	14:42:17
3	Na 589.592 Radial†	186.5	-48.0	-16.633 µg/L	-16.633 ppb	14:41:57
3	Sr 421.552†	144.2	-10.2	-0.0460 µg/L	-0.0460 ppb	14:41:57
3	Sc 361.383	1670817.7	1670817.7	99.296 %		14:43:31
3	Y 371.029	924374.2	924374.2	98.745 %		14:43:31
3	Ag 328.068†	-471.0	91.6	0.8221 µg/L	0.8221 ppb	14:43:37
3	As 188.979†	-8.8	-5.0	-9.2300 µg/L	-9.2300 ppb	14:43:57
3	B 249.677†	163.3	5.8	0.3060 µg/L	0.3060 ppb	14:43:57
3	Ba 233.527†	-28.4	-10.7	-0.2753 µg/L	-0.2753 ppb	14:43:57
3	Be 313.107†	-2030.3	-98.9	-0.0709 µg/L	-0.0709 ppb	14:43:37
3	Cd 226.502†	-138.9	4.3	0.1248 µg/L	0.1248 ppb	14:43:57
3	Co 228.616†	15.3	-6.8	-0.3545 µg/L	-0.3545 ppb	14:43:57
3	Cr 267.716†	83.4	-6.2	-0.1595 µg/L	-0.1595 ppb	14:43:57
3	Cu 324.752†	2609.3	4.7	0.0347 µg/L	0.0347 ppb	14:43:37
3	Mn 257.610†	-507.2	33.4	0.1226 µg/L	0.1226 ppb	14:43:57
3	Mo 202.031†	9.1	4.8	0.5475 µg/L	0.5475 ppb	14:43:57
3	Ni 231.604†	288.6	-8.0	-0.5515 µg/L	-0.5515 ppb	14:43:57
3	P 214.914†	252.6	13.0	27.937 µg/L	27.937 ppb	14:43:57
3	Pb 220.353†	37.9	-4.6	-1.4653 µg/L	-1.4653 ppb	14:43:57
3	S 181.975 Axial†	16.6	-3.9	-14.991 µg/L	-14.991 ppb	14:43:57
3	Sb 206.836†	25.2	4.4	4.6792 µg/L	4.6792 ppb	14:43:57
3	Se 196.026†	20.7	7.6	9.3074 µg/L	9.3074 ppb	14:43:57
3	SiO2†	1533.7	161.4	35.219 µg/L	35.219 ppb	14:43:37
3	Si 251.611†	510.2	149.8	12.246 µg/L	12.246 ppb	14:43:57
3	Sn 189.927†	6.3	1.8	0.8533 µg/L	0.8533 ppb	14:43:57
3	Ti 334.940†	166.4	175.7	0.4695 µg/L	0.4695 ppb	14:43:37
3	Tl 190.801†	-18.2	7.2	8.4248 µg/L	8.4248 ppb	14:43:57
3	U 409.014†	210.0	60.7	5.9453 µg/L	5.9453 ppb	14:43:37
3	V 292.402†	-107.9	43.3	0.5585 µg/L	0.5585 ppb	14:43:37
3	Zn 213.857†	585.6	9.5	0.2580 µg/L	0.2580 ppb	14:43:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1670528.0	99.278 %	0.0638			0.06%
Sc RADIAL	108510.0	99.4 %	0.32			0.32%
Y 371.029	923190.8	98.619 %	0.1115			0.11%
Ag 328.068†	43.4	0.3884 µg/L	0.54402	0.3884 ppb	0.54402	140.06%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	25.9	12.385 µg/L	4.7650	12.385 ppb	4.7650	38.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-6.0	-11.140 µg/L	1.7796	-11.140 ppb	1.7796	15.97%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	9.7	0.5149 µg/L	0.68415	0.5149 ppb	0.68415	132.86%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.1	-0.0278 µg/L	0.22848	-0.0278 ppb	0.22848	822.37%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-80.4	-0.0577 µg/L	0.01146	-0.0577 ppb	0.01146	19.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	11.6	3.7521 µg/L	1.43950	3.7521 ppb	1.43950	38.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.0	0.1466 µg/L	0.04754	0.1466 ppb	0.04754	32.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.7	-0.2425 µg/L	0.14882	-0.2425 ppb	0.14882	61.37%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-5.3	-0.1370 µg/L	0.03181	-0.1370 ppb	0.03181 23.22%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	12.7	0.0914 µg/L	0.13673	0.0914 ppb	0.13673 149.65%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	0.0	0.1328 µg/L	8.28419	0.1328 ppb	8.28419 >999.9%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	10.6	6.0179 µg/L	19.77710	6.0179 ppb	19.77710 328.64%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	0.8	8.2712 µg/L	21.25747	8.2712 ppb	21.25747 257.01%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	45.3	0.1648 µg/L	0.04629	0.1648 ppb	0.04629 28.10%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	9.6	1.0980 µg/L	0.52585	1.0980 ppb	0.52585 47.89%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-20.7	-7.1800 µg/L	12.77128	-7.1800 ppb	12.77128 177.87%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-6.2	-0.4301 µg/L	0.10902	-0.4301 ppb	0.10902 25.35%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	13.2	28.519 µg/L	7.3534	28.519 ppb	7.3534 25.78%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-1.1	-0.3376 µg/L	0.99935	-0.3376 ppb	0.99935 296.01%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-1.1	-4.0932 µg/L	9.44565	-4.0932 ppb	9.44565 230.76%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	3.9	4.2201 µg/L	3.81239	4.2201 ppb	3.81239 90.34%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	0.7	0.8383 µg/L	7.33481	0.8383 ppb	7.33481 875.00%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	117.9	25.729 µg/L	8.5876	25.729 ppb	8.5876 33.38%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	133.8	10.941 µg/L	2.5969	10.941 ppb	2.5969 23.74%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	0.7	0.3402 µg/L	0.85557	0.3402 ppb	0.85557 251.50%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-2.3	-0.0103 µg/L	0.10949	-0.0103 ppb	0.10949 >999.9%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	153.7	0.4094 µg/L	0.05324	0.4094 ppb	0.05324 13.00%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	4.0	4.6164 µg/L	4.69651	4.6164 ppb	4.69651 101.73%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	17.6	1.7220 µg/L	4.01224	1.7220 ppb	4.01224 233.00%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	10.8	0.1462 µg/L	0.40854	0.1462 ppb	0.40854 279.35%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	11.2	0.3008 µg/L	0.06239	0.3008 ppb	0.06239 20.74%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 15:17:14

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	108898.9	108898.9	99.7 %		15:17:53
1	Al 396.153Radial†	9991.1	10193.7	4868.0 µg/L	4868.0 ppb	15:17:53
1	Ca 317.933Radial†	15470.9	15130.3	4907.1 µg/L	4907.1 ppb	15:17:53
1	Fe 238.204 Radial†	681.9	652.5	4922.0 µg/L	4922.0 ppb	15:18:14
1	K 766.490 Radial†	8964.6	8758.7	4970.7 µg/L	4970.7 ppb	15:17:53
1	Mg 279.077 IEC†	502.4	495.1	4946.4 µg/L	4946.4 ppb	15:18:14
1	Na 589.592 Radial†	28037.4	27879.8	9653.1 µg/L	9653.1 ppb	15:17:53
1	Sr 421.552†	109836.3	109985.6	498.12 µg/L	498.12 ppb	15:17:53
1	Sc 361.383	1673496.1	1673496.1	99.455 %		15:19:17
1	Y 371.029	923037.6	923037.6	98.602 %		15:19:17
1	Ag 328.068†	55008.9	55876.4	503.11 µg/L	503.11 ppb	15:19:23
1	As 188.979†	264.0	269.3	495.59 µg/L	495.59 ppb	15:19:43
1	B 249.677†	9467.7	9361.0	494.76 µg/L	494.76 ppb	15:19:23
1	Ba 233.527†	19409.6	19533.9	504.35 µg/L	504.35 ppb	15:19:23
1	Be 313.107†	693201.5	698947.5	500.12 µg/L	500.12 ppb	15:19:17
1	Cd 226.502†	16952.3	17189.4	503.12 µg/L	503.12 ppb	15:19:23
1	Co 228.616†	9741.3	9772.5	506.43 µg/L	506.43 ppb	15:19:23
1	Cr 267.716†	19528.5	19545.4	505.74 µg/L	505.74 ppb	15:19:23
1	Cu 324.752†	72574.1	70348.9	505.21 µg/L	505.21 ppb	15:19:23
1	Mn 257.610†	136831.9	138126.3	503.64 µg/L	503.64 ppb	15:19:23
1	Mo 202.031†	4513.2	4533.5	518.37 µg/L	518.37 ppb	15:19:43
1	Ni 231.604†	7764.8	7508.8	520.15 µg/L	520.15 ppb	15:19:23
1	P 214.914†	1420.1	1186.4	2508.3 µg/L	2508.3 ppb	15:19:43
1	Pb 220.353†	1658.8	1625.1	511.88 µg/L	511.88 ppb	15:19:43
1	S 181.975 Axial†	293.7	274.6	1042.3 µg/L	1042.3 ppb	15:19:43
1	Sb 206.836†	487.4	469.0	503.07 µg/L	503.07 ppb	15:19:43
1	Se 196.026†	433.2	422.3	531.25 µg/L	531.25 ppb	15:19:43
1	SiO2†	26110.5	24870.5	5427.4 µg/L	5427.4 ppb	15:19:23
1	Si 251.611†	31335.6	31143.3	2545.9 µg/L	2545.9 ppb	15:19:23
1	Sn 189.927†	1103.4	1104.9	519.64 µg/L	519.64 ppb	15:19:43
1	Ti 334.940†	187781.4	188819.0	503.41 µg/L	503.41 ppb	15:19:17
1	Tl 190.801†	407.8	435.6	512.06 µg/L	512.06 ppb	15:19:43
1	U 409.014†	5190.5	5068.1	495.52 µg/L	495.52 ppb	15:19:23
1	V 292.402†	39560.1	39928.9	511.87 µg/L	511.87 ppb	15:19:23
1	Zn 213.857†	19471.8	18998.3	506.74 µg/L	506.74 ppb	15:19:23
2	Sc RADIAL	109441.2	109441.2	100 %		15:18:19
2	Al 396.153Radial†	10058.9	10211.7	4876.6 µg/L	4876.6 ppb	15:18:19
2	Ca 317.933Radial†	15597.9	15180.1	4923.3 µg/L	4923.3 ppb	15:18:19
2	Fe 238.204 Radial†	678.7	645.9	4872.7 µg/L	4872.7 ppb	15:18:40
2	K 766.490 Radial†	9120.0	8869.2	5033.4 µg/L	5033.4 ppb	15:18:19
2	Mg 279.077 IEC†	503.5	493.6	4932.2 µg/L	4932.2 ppb	15:18:40
2	Na 589.592 Radial†	28189.7	27892.5	9657.5 µg/L	9657.5 ppb	15:18:19
2	Sr 421.552†	110678.1	110279.8	499.45 µg/L	499.45 ppb	15:18:19
2	Sc 361.383	1679861.0	1679861.0	99.833 %		15:19:50
2	Y 371.029	924939.8	924939.8	98.806 %		15:19:50
2	Ag 328.068†	54615.5	55272.8	497.68 µg/L	497.68 ppb	15:19:56
2	As 188.979†	273.5	277.9	511.45 µg/L	511.45 ppb	15:20:16
2	B 249.677†	9393.5	9250.6	488.92 µg/L	488.92 ppb	15:19:56
2	Ba 233.527†	19279.2	19329.4	499.07 µg/L	499.07 ppb	15:19:56
2	Be 313.107†	694766.3	697874.0	499.35 µg/L	499.35 ppb	15:19:50
2	Cd 226.502†	16780.6	16952.9	496.20 µg/L	496.20 ppb	15:19:56
2	Co 228.616†	9671.1	9665.0	500.86 µg/L	500.86 ppb	15:19:56
2	Cr 267.716†	19353.5	19295.7	499.28 µg/L	499.28 ppb	15:19:56
2	Cu 324.752†	72210.3	69708.0	500.61 µg/L	500.61 ppb	15:19:56
2	Mn 257.610†	136114.8	136886.7	499.12 µg/L	499.12 ppb	15:19:56
2	Mo 202.031†	4492.6	4495.8	514.05 µg/L	514.05 ppb	15:20:16
2	Ni 231.604†	7750.6	7464.9	517.12 µg/L	517.12 ppb	15:19:56
2	P 214.914†	1418.0	1178.9	2492.6 µg/L	2492.6 ppb	15:20:16
2	Pb 220.353†	1658.5	1618.4	509.78 µg/L	509.78 ppb	15:20:16

2	S 181.975 Axial†	287.7	267.5	1015.3 µg/L	1015.3 ppb	15:20:16
2	Sb 206.836†	486.5	466.3	500.14 µg/L	500.14 ppb	15:20:16
2	Se 196.026†	425.5	412.9	519.54 µg/L	519.54 ppb	15:20:16
2	SiO2†	26060.8	24721.3	5394.8 µg/L	5394.8 ppb	15:19:56
2	Si 251.611†	31223.2	30911.4	2526.9 µg/L	2526.9 ppb	15:19:56
2	Sn 189.927†	1097.9	1095.2	515.07 µg/L	515.07 ppb	15:20:16
2	Ti 334.940†	188268.9	188591.9	502.81 µg/L	502.81 ppb	15:19:50
2	Tl 190.801†	406.1	432.4	508.33 µg/L	508.33 ppb	15:20:16
2	U 409.014†	5188.0	5045.8	493.34 µg/L	493.34 ppb	15:19:56
2	V 292.402†	39238.0	39455.6	505.82 µg/L	505.82 ppb	15:19:56
2	Zn 213.857†	19359.9	18812.0	501.76 µg/L	501.76 ppb	15:19:56
3	Sc RADIAL	108995.9	108995.9	99.8 %		15:18:45
3	Al 396.153Radial†	10032.0	10225.8	4884.6 µg/L	4884.6 ppb	15:18:45
3	Ca 317.933Radial†	15490.0	15135.6	4908.8 µg/L	4908.8 ppb	15:18:45
3	Fe 238.204 Radial†	675.0	644.9	4864.7 µg/L	4864.7 ppb	15:19:06
3	K 766.490 Radial†	9061.9	8848.1	5021.5 µg/L	5021.5 ppb	15:18:45
3	Mg 279.077 IEC†	500.9	493.1	4925.9 µg/L	4925.9 ppb	15:19:06
3	Na 589.592 Radial†	28143.1	27960.7	9681.1 µg/L	9681.1 ppb	15:18:45
3	Sr 421.552†	110395.2	110447.6	500.21 µg/L	500.21 ppb	15:18:45
3	Sc 361.383	1663036.4	1663036.4	98.833 %		15:20:23
3	Y 371.029	915218.7	915218.7	97.767 %		15:20:23
3	Ag 328.068†	53266.4	54461.2	490.28 µg/L	490.28 ppb	15:20:28
3	As 188.979†	237.1	243.7	448.64 µg/L	448.64 ppb	15:20:49
3	B 249.677†	9147.1	9096.4	480.71 µg/L	480.71 ppb	15:20:28
3	Ba 233.527†	18488.3	18724.5	483.44 µg/L	483.44 ppb	15:20:28
3	Be 313.107†	667458.4	677284.3	484.62 µg/L	484.62 ppb	15:20:23
3	Cd 226.502†	16163.5	16498.6	482.88 µg/L	482.88 ppb	15:20:28
3	Co 228.616†	9198.3	9284.6	481.10 µg/L	481.10 ppb	15:20:28
3	Cr 267.716†	18234.5	18359.6	475.06 µg/L	475.06 ppb	15:20:28
3	Cu 324.752†	68670.6	66858.3	480.18 µg/L	480.18 ppb	15:20:28
3	Mn 257.610†	129325.5	131396.6	479.10 µg/L	479.10 ppb	15:20:28
3	Mo 202.031†	3954.3	3996.6	457.00 µg/L	457.00 ppb	15:20:49
3	Ni 231.604†	7377.5	7165.9	496.41 µg/L	496.41 ppb	15:20:28
3	P 214.914†	1291.8	1065.6	2249.5 µg/L	2249.5 ppb	15:20:49
3	Pb 220.353†	1506.7	1481.7	466.64 µg/L	466.64 ppb	15:20:49
3	S 181.975 Axial†	269.2	251.7	955.43 µg/L	955.43 ppb	15:20:49
3	Sb 206.836†	443.9	428.1	458.79 µg/L	458.79 ppb	15:20:49
3	Se 196.026†	387.0	378.2	476.91 µg/L	476.91 ppb	15:20:49
3	SiO2†	25262.4	24177.5	5276.2 µg/L	5276.2 ppb	15:20:28
3	Si 251.611†	30173.4	30165.6	2465.9 µg/L	2465.9 ppb	15:20:28
3	Sn 189.927†	942.5	949.1	446.42 µg/L	446.42 ppb	15:20:49
3	Ti 334.940†	180369.7	182507.2	486.58 µg/L	486.58 ppb	15:20:23
3	Tl 190.801†	379.8	409.8	481.85 µg/L	481.85 ppb	15:20:49
3	U 409.014†	4868.8	4775.4	466.86 µg/L	466.86 ppb	15:20:28
3	V 292.402†	37104.0	37694.0	482.97 µg/L	482.97 ppb	15:20:28
3	Zn 213.857†	18469.0	18106.7	482.94 µg/L	482.94 ppb	15:20:28

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1672131.2	99.374 %	0.5049			0.51%
Sc RADIAL	109112.0	99.9 %	0.26			0.27%
Y 371.029	921065.3	98.392 %	0.5503			0.56%
Ag 328.068†	55203.4	497.02 µg/L	6.443	497.02 ppb	6.443	1.30%
QC value within limits for Ag 328.068 Recovery = 99.40%						
Al 396.153Radial†	10210.4	4876.4 µg/L	8.30	4876.4 ppb	8.30	0.17%
QC value within limits for Al 396.153Radial Recovery = 97.53%						
As 188.979†	263.6	485.22 µg/L	32.660	485.22 ppb	32.660	6.73%
QC value within limits for As 188.979 Recovery = 97.04%						
B 249.677†	9236.0	488.13 µg/L	7.058	488.13 ppb	7.058	1.45%
QC value within limits for B 249.677 Recovery = 97.63%						
Ba 233.527†	19195.9	495.62 µg/L	10.875	495.62 ppb	10.875	2.19%
QC value within limits for Ba 233.527 Recovery = 99.12%						
Be 313.107†	691368.6	494.69 µg/L	8.736	494.69 ppb	8.736	1.77%
QC value within limits for Be 313.107 Recovery = 98.94%						
Ca 317.933Radial†	15148.6	4913.1 µg/L	8.87	4913.1 ppb	8.87	0.18%
QC value within limits for Ca 317.933Radial Recovery = 98.26%						
Cd 226.502†	16880.3	494.06 µg/L	10.287	494.06 ppb	10.287	2.08%
QC value within limits for Cd 226.502 Recovery = 98.81%						
Co 228.616†	9574.0	496.13 µg/L	13.310	496.13 ppb	13.310	2.68%



QC value within limits for Co 228.616 Recovery = 99.23%					
Cr 267.716†	19066.9	493.36 µg/L	16.174	493.36 ppb	16.174 3.28%
QC value within limits for Cr 267.716 Recovery = 98.67%					
Cu 324.752†	68971.7	495.33 µg/L	13.324	495.33 ppb	13.324 2.69%
QC value within limits for Cu 324.752 Recovery = 99.07%					
Fe 238.204 Radial†	647.8	4886.5 µg/L	31.02	4886.5 ppb	31.02 0.63%
QC value within limits for Fe 238.204 Radial Recovery = 97.73%					
K 766.490 Radial†	8825.4	5008.5 µg/L	33.31	5008.5 ppb	33.31 0.66%
QC value within limits for K 766.490 Radial Recovery = 100.17%					
Mg 279.077 IEC†	493.9	4934.8 µg/L	10.50	4934.8 ppb	10.50 0.21%
QC value within limits for Mg 279.077 IEC Recovery = 98.70%					
Mn 257.610†	135469.8	493.95 µg/L	13.061	493.95 ppb	13.061 2.64%
QC value within limits for Mn 257.610 Recovery = 98.79%					
Mo 202.031†	4342.0	496.47 µg/L	34.253	496.47 ppb	34.253 6.90%
QC value within limits for Mo 202.031 Recovery = 99.29%					
Na 589.592 Radial†	27911.0	9663.9 µg/L	15.06	9663.9 ppb	15.06 0.16%
QC value within limits for Na 589.592 Radial Recovery = 96.64%					
Ni 231.604†	7379.9	511.22 µg/L	12.922	511.22 ppb	12.922 2.53%
QC value within limits for Ni 231.604 Recovery = 102.24%					
P 214.914†	1143.6	2416.8 µg/L	145.11	2416.8 ppb	145.11 6.00%
QC value within limits for P 214.914 Recovery = 96.67%					
Pb 220.353†	1575.0	496.10 µg/L	25.538	496.10 ppb	25.538 5.15%
QC value within limits for Pb 220.353 Recovery = 99.22%					
S 181.975 Axial†	264.6	1004.3 µg/L	44.46	1004.3 ppb	44.46 4.43%
QC value within limits for S 181.975 Axial Recovery = 100.43%					
Sb 206.836†	454.5	487.33 µg/L	24.761	487.33 ppb	24.761 5.08%
QC value within limits for Sb 206.836 Recovery = 97.47%					
Se 196.026†	404.5	509.24 µg/L	28.600	509.24 ppb	28.600 5.62%
QC value within limits for Se 196.026 Recovery = 101.85%					
SiO2†	24589.7	5366.1 µg/L	79.60	5366.1 ppb	79.60 1.48%
QC value within limits for SiO2 Recovery = 100.35%					
Si 251.611†	30740.1	2512.9 µg/L	41.76	2512.9 ppb	41.76 1.66%
QC value within limits for Si 251.611 Recovery = 100.52%					
Sn 189.927†	1049.8	493.71 µg/L	41.021	493.71 ppb	41.021 8.31%
QC value within limits for Sn 189.927 Recovery = 98.74%					
Sr 421.552†	110237.7	499.26 µg/L	1.059	499.26 ppb	1.059 0.21%
QC value within limits for Sr 421.552 Recovery = 99.85%					
Ti 334.940†	186639.4	497.60 µg/L	9.551	497.60 ppb	9.551 1.92%
QC value within limits for Ti 334.940 Recovery = 99.52%					
Tl 190.801†	425.9	500.74 µg/L	16.471	500.74 ppb	16.471 3.29%
QC value within limits for Tl 190.801 Recovery = 100.15%					
U 409.014†	4963.1	485.24 µg/L	15.959	485.24 ppb	15.959 3.29%
QC value within limits for U 409.014 Recovery = 97.05%					
V 292.402†	39026.1	500.22 µg/L	15.241	500.22 ppb	15.241 3.05%
QC value within limits for V 292.402 Recovery = 100.04%					
Zn 213.857†	18639.0	497.15 µg/L	12.554	497.15 ppb	12.554 2.53%
QC value within limits for Zn 213.857 Recovery = 99.43%					

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 15:20:58

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	108697.4	108697.4	99.5 %		15:21:31
1	Al 396.153Radial†	-136.7	37.6	17.977 µg/L	17.977 ppb	15:21:31
1	Ca 317.933Radial†	395.2	13.5	4.3815 µg/L	4.3815 ppb	15:21:52
1	Fe 238.204 Radial†	32.6	1.4	10.762 µg/L	10.762 ppb	15:21:52
1	K 766.490 Radial†	194.3	-35.5	-20.171 µg/L	-20.171 ppb	15:21:31
1	Mg 279.077 IEC†	10.7	1.9	19.441 µg/L	19.441 ppb	15:21:52
1	Na 589.592 Radial†	199.0	-35.3	-12.235 µg/L	-12.235 ppb	15:21:31
1	Sr 421.552†	149.6	-4.7	-0.0213 µg/L	-0.0213 ppb	15:21:31
1	Sc 361.383	1675824.1	1675824.1	99.593 %		15:22:54
1	Y 371.029	925474.6	925474.6	98.863 %		15:22:54
1	Ag 328.068†	-531.8	32.0	0.2884 µg/L	0.2884 ppb	15:22:59
1	As 188.979†	-2.1	1.8	3.2296 µg/L	3.2296 ppb	15:23:20
1	B 249.677†	164.0	6.0	0.3127 µg/L	0.3127 ppb	15:23:20
1	Ba 233.527†	-19.4	-1.6	-0.0410 µg/L	-0.0410 ppb	15:23:20
1	Be 313.107†	-2056.9	-119.5	-0.0856 µg/L	-0.0856 ppb	15:22:59
1	Cd 226.502†	-140.2	3.5	0.1000 µg/L	0.1000 ppb	15:23:20
1	Co 228.616†	16.2	-6.0	-0.3092 µg/L	-0.3092 ppb	15:23:20
1	Cr 267.716†	75.0	-14.9	-0.3848 µg/L	-0.3848 ppb	15:23:20
1	Cu 324.752†	2602.3	-10.2	-0.0708 µg/L	-0.0708 ppb	15:22:59
1	Mn 257.610†	-511.2	31.0	0.1124 µg/L	0.1124 ppb	15:23:20
1	Mo 202.031†	14.5	10.2	1.1627 µg/L	1.1627 ppb	15:23:20
1	Ni 231.604†	293.8	-3.7	-0.2544 µg/L	-0.2544 ppb	15:23:20
1	P 214.914†	249.6	9.2	19.820 µg/L	19.820 ppb	15:23:20
1	Pb 220.353†	36.4	-6.3	-1.9663 µg/L	-1.9663 ppb	15:23:20
1	S 181.975 Axial†	21.0	0.4	1.4765 µg/L	1.4765 ppb	15:23:20
1	Sb 206.836†	24.5	3.5	3.8030 µg/L	3.8030 ppb	15:23:20
1	Se 196.026†	13.5	0.3	0.3672 µg/L	0.3672 ppb	15:23:20
1	SiO2†	1485.9	108.8	23.741 µg/L	23.741 ppb	15:22:59
1	Si 251.611†	443.0	80.8	6.6080 µg/L	6.6080 ppb	15:23:20
1	Sn 189.927†	7.3	2.7	1.2838 µg/L	1.2838 ppb	15:23:20
1	Ti 334.940†	70.6	79.0	0.2093 µg/L	0.2093 ppb	15:22:59
1	Tl 190.801†	-27.1	-1.6	-1.8726 µg/L	-1.8726 ppb	15:23:20
1	U 409.014†	150.6	0.4	0.0377 µg/L	0.0377 ppb	15:22:59
1	V 292.402†	-133.1	18.2	0.2397 µg/L	0.2397 ppb	15:22:59
1	Zn 213.857†	579.7	1.8	0.0475 µg/L	0.0475 ppb	15:23:20
2	Sc RADIAL	108415.5	108415.5	99.3 %		15:21:57
2	Al 396.153Radial†	-139.0	34.9	16.721 µg/L	16.721 ppb	15:21:57
2	Ca 317.933Radial†	384.5	3.7	1.2129 µg/L	1.2129 ppb	15:22:18
2	Fe 238.204 Radial†	32.7	1.6	12.386 µg/L	12.386 ppb	15:22:18
2	K 766.490 Radial†	208.2	-21.0	-11.934 µg/L	-11.934 ppb	15:21:57
2	Mg 279.077 IEC†	9.7	1.0	10.416 µg/L	10.416 ppb	15:22:18
2	Na 589.592 Radial†	251.0	17.5	6.0586 µg/L	6.0586 ppb	15:21:57
2	Sr 421.552†	132.1	-21.9	-0.0992 µg/L	-0.0992 ppb	15:21:57
2	Sc 361.383	1677010.1	1677010.1	99.664 %		15:23:26
2	Y 371.029	920088.3	920088.3	98.287 %		15:23:26
2	Ag 328.068†	-549.5	14.6	0.1320 µg/L	0.1320 ppb	15:23:31
2	As 188.979†	-4.9	-1.0	-1.8962 µg/L	-1.8962 ppb	15:23:52
2	B 249.677†	179.8	21.8	1.1468 µg/L	1.1468 ppb	15:23:52
2	Ba 233.527†	-19.3	-1.4	-0.0362 µg/L	-0.0362 ppb	15:23:52
2	Be 313.107†	-2122.5	-183.8	-0.1317 µg/L	-0.1317 ppb	15:23:31
2	Cd 226.502†	-141.5	2.2	0.0631 µg/L	0.0631 ppb	15:23:52
2	Co 228.616†	10.1	-12.2	-0.6311 µg/L	-0.6311 ppb	15:23:52
2	Cr 267.716†	76.1	-13.8	-0.3580 µg/L	-0.3580 ppb	15:23:52
2	Cu 324.752†	2592.6	-21.7	-0.1532 µg/L	-0.1532 ppb	15:23:31
2	Mn 257.610†	-521.9	20.5	0.0750 µg/L	0.0750 ppb	15:23:52
2	Mo 202.031†	6.5	2.2	0.2530 µg/L	0.2530 ppb	15:23:52
2	Ni 231.604†	284.3	-13.4	-0.9274 µg/L	-0.9274 ppb	15:23:52
2	P 214.914†	245.7	5.0	10.780 µg/L	10.780 ppb	15:23:52
2	Pb 220.353†	37.1	-5.6	-1.7568 µg/L	-1.7568 ppb	15:23:52

2	S 181.975 Axial†	20.2	-0.4	-1.6675 µg/L	-1.6675 ppb	15:23:52
2	Sb 206.836†	18.6	-2.4	-2.5042 µg/L	-2.5042 ppb	15:23:52
2	Se 196.026†	17.8	4.5	5.5719 µg/L	5.5719 ppb	15:23:52
2	SiO2†	1473.4	95.2	20.783 µg/L	20.783 ppb	15:23:31
2	Si 251.611†	478.6	116.2	9.5015 µg/L	9.5015 ppb	15:23:52
2	Sn 189.927†	3.3	-1.3	-0.6007 µg/L	-0.6007 ppb	15:23:52
2	Ti 334.940†	124.9	133.4	0.3552 µg/L	0.3552 ppb	15:23:31
2	Tl 190.801†	-25.5	-0.0	0.0021 µg/L	0.0021 ppb	15:23:52
2	U 409.014†	108.0	-42.5	-4.1621 µg/L	-4.1621 ppb	15:23:31
2	V 292.402†	-148.8	2.6	0.0305 µg/L	0.0305 ppb	15:23:31
2	Zn 213.857†	582.6	4.3	0.1186 µg/L	0.1186 ppb	15:23:52
3	Sc RADIAL	108000.0	108000.0	98.9 %		15:22:23
3	Al 396.153Radial†	-133.6	39.8	19.040 µg/L	19.040 ppb	15:22:23
3	Ca 317.933Radial†	389.3	10.0	3.2592 µg/L	3.2592 ppb	15:22:43
3	Fe 238.204 Radial†	32.2	1.3	9.8972 µg/L	9.8972 ppb	15:22:43
3	K 766.490 Radial†	179.8	-48.9	-27.762 µg/L	-27.762 ppb	15:22:23
3	Mg 279.077 IEC†	7.2	-1.5	-14.483 µg/L	-14.483 ppb	15:22:43
3	Na 589.592 Radial†	184.1	-49.1	-16.995 µg/L	-16.995 ppb	15:22:23
3	Sr 421.552†	164.1	11.0	0.0497 µg/L	0.0497 ppb	15:22:23
3	Sc 361.383	1677182.9	1677182.9	99.674 %		15:23:58
3	Y 371.029	923262.6	923262.6	98.626 %		15:23:58
3	Ag 328.068†	-538.1	26.0	0.2355 µg/L	0.2355 ppb	15:24:04
3	As 188.979†	0.1	3.9	7.2242 µg/L	7.2242 ppb	15:24:24
3	B 249.677†	158.2	0.0	-0.0029 µg/L	-0.0029 ppb	15:24:24
3	Ba 233.527†	-26.0	-8.1	-0.2089 µg/L	-0.2089 ppb	15:24:24
3	Be 313.107†	-2039.5	-100.4	-0.0720 µg/L	-0.0720 ppb	15:24:04
3	Cd 226.502†	-136.7	7.1	0.2064 µg/L	0.2064 ppb	15:24:24
3	Co 228.616†	16.1	-6.1	-0.3154 µg/L	-0.3154 ppb	15:24:24
3	Cr 267.716†	86.0	-3.9	-0.1008 µg/L	-0.1008 ppb	15:24:24
3	Cu 324.752†	2605.7	-8.8	-0.0613 µg/L	-0.0613 ppb	15:24:04
3	Mn 257.610†	-522.2	20.4	0.0758 µg/L	0.0758 ppb	15:24:24
3	Mo 202.031†	12.0	7.7	0.8781 µg/L	0.8781 ppb	15:24:24
3	Ni 231.604†	295.4	-2.3	-0.1611 µg/L	-0.1611 ppb	15:24:24
3	P 214.914†	252.2	11.5	24.837 µg/L	24.837 ppb	15:24:24
3	Pb 220.353†	32.8	-10.0	-3.1309 µg/L	-3.1309 ppb	15:24:24
3	S 181.975 Axial†	20.9	0.3	1.1432 µg/L	1.1432 ppb	15:24:24
3	Sb 206.836†	24.2	3.3	3.5297 µg/L	3.5297 ppb	15:24:24
3	Se 196.026†	17.4	4.2	5.1662 µg/L	5.1662 ppb	15:24:24
3	SiO2†	1438.2	59.7	13.032 µg/L	13.032 ppb	15:24:04
3	Si 251.611†	484.7	122.3	9.9974 µg/L	9.9974 ppb	15:24:24
3	Sn 189.927†	5.1	0.6	0.2600 µg/L	0.2600 ppb	15:24:24
3	Ti 334.940†	142.5	151.1	0.4044 µg/L	0.4044 ppb	15:24:04
3	Tl 190.801†	-29.1	-3.6	-4.1443 µg/L	-4.1443 ppb	15:24:24
3	U 409.014†	124.3	-26.2	-2.5647 µg/L	-2.5647 ppb	15:24:04
3	V 292.402†	-130.4	21.1	0.2712 µg/L	0.2712 ppb	15:24:04
3	Zn 213.857†	573.3	-5.1	-0.1368 µg/L	-0.1368 ppb	15:24:24

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1676672.4	99.644 %	0.0440			0.04%
Sc RADIAL	108370.9	99.2 %	0.32			0.32%
Y 371.029	922941.8	98.592 %	0.2892			0.29%
Ag 328.068†	24.2	0.2186 µg/L	0.07960	0.2186 ppb	0.07960	36.41%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	37.5	17.913 µg/L	1.1608	17.913 ppb	1.1608	6.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.5	2.8525 µg/L	4.57184	2.8525 ppb	4.57184	160.27%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	9.3	0.4855 µg/L	0.59403	0.4855 ppb	0.59403	122.34%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.7	-0.0954 µg/L	0.09835	-0.0954 ppb	0.09835	103.13%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-134.6	-0.0965 µg/L	0.03131	-0.0965 ppb	0.03131	32.46%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.1	2.9512 µg/L	1.60658	2.9512 ppb	1.60658	54.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.3	0.1231 µg/L	0.07439	0.1231 ppb	0.07439	60.41%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.1	-0.4186 µg/L	0.18406	-0.4186 ppb	0.18406	43.98%

Cr	267.716†	-10.9	-0.2812 µg/L	0.15682	-0.2812 ppb	0.15682	55.77%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-13.6	-0.0951 µg/L	0.05051	-0.0951 ppb	0.05051	53.11%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.5	11.015 µg/L	1.2635	11.015 ppb	1.2635	11.47%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-35.2	-19.956 µg/L	7.9163	-19.956 ppb	7.9163	39.67%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.5	5.1246 µg/L	17.56969	5.1246 ppb	17.56969	342.85%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	24.0	0.0877 µg/L	0.02135	0.0877 ppb	0.02135	24.35%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	6.7	0.7646 µg/L	0.46539	0.7646 ppb	0.46539	60.87%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-22.3	-7.7239 µg/L	12.17101	-7.7239 ppb	12.17101	157.58%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-6.5	-0.4477 µg/L	0.41806	-0.4477 ppb	0.41806	93.39%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	8.6	18.479 µg/L	7.1240	18.479 ppb	7.1240	38.55%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-7.3	-2.2847 µg/L	0.74033	-2.2847 ppb	0.74033	32.40%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.1	0.3174 µg/L	1.72707	0.3174 ppb	1.72707	544.13%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.5	1.6095 µg/L	3.56523	1.6095 ppb	3.56523	221.51%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.0	3.7018 µg/L	2.89496	3.7018 ppb	2.89496	78.20%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		87.9	19.185 µg/L	5.5302	19.185 ppb	5.5302	28.83%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	106.5	8.7023 µg/L	1.83056	8.7023 ppb	1.83056	21.04%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	0.7	0.3144 µg/L	0.94343	0.3144 ppb	0.94343	300.11%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-5.2	-0.0236 µg/L	0.07447	-0.0236 ppb	0.07447	315.50%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	121.2	0.3229 µg/L	0.10147	0.3229 ppb	0.10147	31.42%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.7	-2.0049 µg/L	2.07635	-2.0049 ppb	2.07635	103.56%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-22.7	-2.2297 µg/L	2.11983	-2.2297 ppb	2.11983	95.07%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	14.0	0.1805 µg/L	0.13083	0.1805 ppb	0.13083	72.48%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	0.3	0.0097 µg/L	0.13181	0.0097 ppb	0.13181	>999.9%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 16:04:30

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	108124.6	108124.6	99.0 %		16:05:09
1	Al 396.153Radial†	10131.8	10407.6	4970.2 µg/L	4970.2 ppb	16:05:09
1	Ca 317.933Radial†	15614.4	15386.2	4990.1 µg/L	4990.1 ppb	16:05:09
1	Fe 238.204 Radial†	675.2	650.7	4908.6 µg/L	4908.6 ppb	16:05:29
1	K 766.490 Radial†	9155.2	9015.5	5116.5 µg/L	5116.5 ppb	16:05:09
1	Mg 279.077 IEC†	499.6	495.8	4954.1 µg/L	4954.1 ppb	16:05:29
1	Na 589.592 Radial†	28705.0	28755.4	9956.3 µg/L	9956.3 ppb	16:05:09
1	Sr 421.552†	111583.3	112538.7	509.68 µg/L	509.68 ppb	16:05:09
1	Sc 361.383	1658940.8	1658940.8	98.590 %		16:06:33
1	Y 371.029	910131.1	910131.1	97.224 %		16:06:33
1	Ag 328.068†	55187.3	56542.6	509.09 µg/L	509.09 ppb	16:06:38
1	As 188.979†	265.2	272.9	502.29 µg/L	502.29 ppb	16:06:59
1	B 249.677†	9519.0	9496.5	501.97 µg/L	501.97 ppb	16:06:38
1	Ba 233.527†	19368.2	19663.1	507.69 µg/L	507.69 ppb	16:06:38
1	Be 313.107†	689965.3	701780.3	502.14 µg/L	502.14 ppb	16:06:33
1	Cd 226.502†	16994.8	17382.1	508.77 µg/L	508.77 ppb	16:06:38
1	Co 228.616†	9780.2	9897.9	512.94 µg/L	512.94 ppb	16:06:38
1	Cr 267.716†	19584.9	19774.9	511.68 µg/L	511.68 ppb	16:06:38
1	Cu 324.752†	72837.9	71256.7	511.72 µg/L	511.72 ppb	16:06:38
1	Mn 257.610†	137226.4	139733.5	509.50 µg/L	509.50 ppb	16:06:33
1	Mo 202.031†	4503.5	4563.6	521.80 µg/L	521.80 ppb	16:06:59
1	Ni 231.604†	7797.6	7610.5	527.19 µg/L	527.19 ppb	16:06:38
1	P 214.914†	1414.9	1193.6	2523.1 µg/L	2523.1 ppb	16:06:59
1	Pb 220.353†	1644.8	1625.5	512.02 µg/L	512.02 ppb	16:06:59
1	S 181.975 Axial†	286.3	269.7	1023.5 µg/L	1023.5 ppb	16:06:59
1	Sb 206.836†	489.9	475.8	510.33 µg/L	510.33 ppb	16:06:59
1	Se 196.026†	431.7	424.6	534.02 µg/L	534.02 ppb	16:06:59
1	SiO2†	25888.6	24875.7	5428.6 µg/L	5428.6 ppb	16:06:38
1	Si 251.611†	31022.1	31101.9	2542.5 µg/L	2542.5 ppb	16:06:38
1	Sn 189.927†	1090.4	1101.5	518.02 µg/L	518.02 ppb	16:06:59
1	Ti 334.940†	187112.7	189797.3	506.02 µg/L	506.02 ppb	16:06:33
1	Tl 190.801†	407.5	438.9	515.97 µg/L	515.97 ppb	16:06:59
1	U 409.014†	5246.2	5170.4	505.54 µg/L	505.54 ppb	16:06:38
1	V 292.402†	39538.0	40255.5	516.06 µg/L	516.06 ppb	16:06:38
1	Zn 213.857†	19483.4	19181.8	511.63 µg/L	511.63 ppb	16:06:38
2	Sc RADIAL	107768.1	107768.1	98.7 %		16:05:35
2	Al 396.153Radial†	10079.3	10388.2	4961.0 µg/L	4961.0 ppb	16:05:35
2	Ca 317.933Radial†	15512.4	15335.0	4973.5 µg/L	4973.5 ppb	16:05:35
2	Fe 238.204 Radial†	673.2	650.8	4909.8 µg/L	4909.8 ppb	16:05:55
2	K 766.490 Radial†	9075.4	8965.3	5088.0 µg/L	5088.0 ppb	16:05:35
2	Mg 279.077 IEC†	506.9	504.9	5044.6 µg/L	5044.6 ppb	16:05:55
2	Na 589.592 Radial†	28422.1	28564.6	9890.2 µg/L	9890.2 ppb	16:05:35
2	Sr 421.552†	110681.3	111997.6	507.23 µg/L	507.23 ppb	16:05:35
2	Sc 361.383	1654297.5	1654297.5	98.314 %		16:07:06
2	Y 371.029	908855.7	908855.7	97.087 %		16:07:06
2	Ag 328.068†	54538.4	56039.7	504.58 µg/L	504.58 ppb	16:07:12
2	As 188.979†	264.6	273.0	502.47 µg/L	502.47 ppb	16:07:32
2	B 249.677†	9400.5	9403.1	497.00 µg/L	497.00 ppb	16:07:12
2	Ba 233.527†	19189.2	19536.3	504.42 µg/L	504.42 ppb	16:07:12
2	Be 313.107†	686348.1	700065.4	500.92 µg/L	500.92 ppb	16:07:06
2	Cd 226.502†	16713.2	17144.1	501.80 µg/L	501.80 ppb	16:07:12
2	Co 228.616†	9633.4	9776.4	506.63 µg/L	506.63 ppb	16:07:12
2	Cr 267.716†	19344.8	19586.4	506.80 µg/L	506.80 ppb	16:07:12
2	Cu 324.752†	72181.5	70796.5	508.42 µg/L	508.42 ppb	16:07:12
2	Mn 257.610†	136368.3	139251.4	507.74 µg/L	507.74 ppb	16:07:06
2	Mo 202.031†	4450.8	4522.8	517.14 µg/L	517.14 ppb	16:07:32
2	Ni 231.604†	7735.6	7569.6	524.37 µg/L	524.37 ppb	16:07:12
2	P 214.914†	1405.6	1188.2	2511.8 µg/L	2511.8 ppb	16:07:32
2	Pb 220.353†	1645.1	1630.4	513.57 µg/L	513.57 ppb	16:07:32

2	S 181.975 Axial†	285.1	269.3	1021.9 µg/L	1021.9 ppb	16:07:32
2	Sb 206.836†	482.8	470.1	504.13 µg/L	504.13 ppb	16:07:32
2	Se 196.026†	424.4	418.3	526.26 µg/L	526.26 ppb	16:07:32
2	SiO2†	25646.7	24703.4	5390.9 µg/L	5390.9 ppb	16:07:12
2	Si 251.611†	30808.2	30972.6	2531.9 µg/L	2531.9 ppb	16:07:12
2	Sn 189.927†	1084.4	1098.4	516.60 µg/L	516.60 ppb	16:07:32
2	Ti 334.940†	186050.5	189249.5	504.56 µg/L	504.56 ppb	16:07:06
2	Tl 190.801†	404.2	436.8	513.42 µg/L	513.42 ppb	16:07:32
2	U 409.014†	5136.5	5073.8	496.08 µg/L	496.08 ppb	16:07:12
2	V 292.402†	39224.1	40048.7	513.38 µg/L	513.38 ppb	16:07:12
2	Zn 213.857†	19302.5	19053.3	508.19 µg/L	508.19 ppb	16:07:12
3	Sc RADIAL	108255.0	108255.0	99.1 %		16:06:01
3	Al 396.153Radial†	10083.8	10346.8	4942.7 µg/L	4942.7 ppb	16:06:01
3	Ca 317.933Radial†	15519.5	15271.5	4952.9 µg/L	4952.9 ppb	16:06:01
3	Fe 238.204 Radial†	668.4	642.9	4849.5 µg/L	4849.5 ppb	16:06:21
3	K 766.490 Radial†	9040.9	8889.1	5044.7 µg/L	5044.7 ppb	16:06:01
3	Mg 279.077 IEC†	502.6	498.2	4976.6 µg/L	4976.6 ppb	16:06:21
3	Na 589.592 Radial†	28445.4	28458.6	9853.5 µg/L	9853.5 ppb	16:06:01
3	Sr 421.552†	110868.7	111682.1	505.80 µg/L	505.80 ppb	16:06:01
3	Sc 361.383	1678412.8	1678412.8	99.747 %		16:07:39
3	Y 371.029	920413.1	920413.1	98.322 %		16:07:39
3	Ag 328.068†	52805.5	53505.4	481.69 µg/L	481.69 ppb	16:07:45
3	As 188.979†	236.5	240.9	443.46 µg/L	443.46 ppb	16:08:05
3	B 249.677†	9116.1	8980.6	474.55 µg/L	474.55 ppb	16:07:45
3	Ba 233.527†	18285.6	18349.9	473.77 µg/L	473.77 ppb	16:07:45
3	Be 313.107†	668606.5	672248.3	481.01 µg/L	481.01 ppb	16:07:39
3	Cd 226.502†	15950.5	16135.2	472.24 µg/L	472.24 ppb	16:07:45
3	Co 228.616†	9165.4	9166.4	474.96 µg/L	474.96 ppb	16:07:45
3	Cr 267.716†	17923.7	17879.0	462.63 µg/L	462.63 ppb	16:07:45
3	Cu 324.752†	68381.3	65931.7	473.54 µg/L	473.54 ppb	16:07:45
3	Mn 257.610†	133368.9	134251.4	489.51 µg/L	489.51 ppb	16:07:39
3	Mo 202.031†	3885.3	3890.8	444.90 µg/L	444.90 ppb	16:08:05
3	Ni 231.604†	7344.6	7064.6	489.39 µg/L	489.39 ppb	16:07:45
3	P 214.914†	1273.2	1035.0	2184.1 µg/L	2184.1 ppb	16:08:05
3	Pb 220.353†	1486.5	1447.4	455.83 µg/L	455.83 ppb	16:08:05
3	S 181.975 Axial†	261.6	241.6	916.94 µg/L	916.94 ppb	16:08:05
3	Sb 206.836†	432.5	412.6	442.15 µg/L	442.15 ppb	16:08:05
3	Se 196.026†	381.1	368.8	465.24 µg/L	465.24 ppb	16:08:05
3	SiO2†	24767.2	23446.9	5116.7 µg/L	5116.7 ppb	16:07:45
3	Si 251.611†	29597.1	29308.2	2395.8 µg/L	2395.8 ppb	16:07:45
3	Sn 189.927†	927.4	925.2	435.18 µg/L	435.18 ppb	16:08:05
3	Ti 334.940†	180505.5	180971.5	482.48 µg/L	482.48 ppb	16:07:39
3	Tl 190.801†	369.9	396.4	466.28 µg/L	466.28 ppb	16:08:05
3	U 409.014†	4902.6	4764.2	465.75 µg/L	465.75 ppb	16:07:45
3	V 292.402†	36859.2	37104.6	475.38 µg/L	475.38 ppb	16:07:45
3	Zn 213.857†	18349.1	17815.3	475.15 µg/L	475.15 ppb	16:07:45

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1663883.7	98.884 %	0.7604			0.77%
Sc RADIAL	108049.2	98.9 %	0.23			0.23%
Y 371.029	913133.3	97.544 %	0.6769			0.69%
Ag 328.068†	55362.5	498.45 µg/L	14.693	498.45 ppb	14.693	2.95%
QC value within limits for Ag 328.068 Recovery = 99.69%						
Al 396.153Radial†	10380.8	4958.0 µg/L	14.00	4958.0 ppb	14.00	0.28%
QC value within limits for Al 396.153Radial Recovery = 99.16%						
As 188.979†	262.3	482.74 µg/L	34.021	482.74 ppb	34.021	7.05%
QC value within limits for As 188.979 Recovery = 96.55%						
B 249.677†	9293.4	491.18 µg/L	14.608	491.18 ppb	14.608	2.97%
QC value within limits for B 249.677 Recovery = 98.24%						
Ba 233.527†	19183.1	495.29 µg/L	18.708	495.29 ppb	18.708	3.78%
QC value within limits for Ba 233.527 Recovery = 99.06%						
Be 313.107†	691364.7	494.69 µg/L	11.861	494.69 ppb	11.861	2.40%
QC value within limits for Be 313.107 Recovery = 98.94%						
Ca 317.933Radial†	15330.9	4972.2 µg/L	18.64	4972.2 ppb	18.64	0.37%
QC value within limits for Ca 317.933Radial Recovery = 99.44%						
Cd 226.502†	16887.1	494.27 µg/L	19.394	494.27 ppb	19.394	3.92%
QC value within limits for Cd 226.502 Recovery = 98.85%						
Co 228.616†	9613.5	498.18 µg/L	20.349	498.18 ppb	20.349	4.08%

Cr	267.716†	19080.1	493.70 µg/L	27.022	493.70 ppb	27.022	5.47%
Cu	324.752†	69328.3	497.89 µg/L	21.157	497.89 ppb	21.157	4.25%
Fe	238.204 Radial†	648.1	4889.3 µg/L	34.49	4889.3 ppb	34.49	0.71%
K	766.490 Radial†	8956.7	5083.1 µg/L	36.12	5083.1 ppb	36.12	0.71%
Mg	279.077 IEC†	499.6	4991.8 µg/L	47.10	4991.8 ppb	47.10	0.94%
Mn	257.610†	137745.5	502.25 µg/L	11.071	502.25 ppb	11.071	2.20%
Mo	202.031†	4325.8	494.61 µg/L	43.116	494.61 ppb	43.116	8.72%
Na	589.592 Radial†	28592.8	9900.0 µg/L	52.08	9900.0 ppb	52.08	0.53%
Ni	231.604†	7414.9	513.65 µg/L	21.060	513.65 ppb	21.060	4.10%
P	214.914†	1138.9	2406.4 µg/L	192.54	2406.4 ppb	192.54	8.00%
Pb	220.353†	1567.8	493.81 µg/L	32.901	493.81 ppb	32.901	6.66%
S	181.975 Axial†	260.2	987.47 µg/L	61.085	987.47 ppb	61.085	6.19%
Sb	206.836†	452.8	485.53 µg/L	37.703	485.53 ppb	37.703	7.77%
Se	196.026†	403.9	508.51 µg/L	37.670	508.51 ppb	37.670	7.41%
SiO2†		24342.0	5312.1 µg/L	170.21	5312.1 ppb	170.21	3.20%
Si	251.611†	30460.9	2490.1 µg/L	81.78	2490.1 ppb	81.78	3.28%
Sn	189.927†	1041.7	489.93 µg/L	47.423	489.93 ppb	47.423	9.68%
Sr	421.552†	112072.8	507.57 µg/L	1.962	507.57 ppb	1.962	0.39%
Ti	334.940†	186672.8	497.69 µg/L	13.192	497.69 ppb	13.192	2.65%
Tl	190.801†	424.0	498.56 µg/L	27.983	498.56 ppb	27.983	5.61%
U	409.014†	5002.8	489.12 µg/L	20.784	489.12 ppb	20.784	4.25%
V	292.402†	39136.3	501.61 µg/L	22.753	501.61 ppb	22.753	4.54%
Zn	213.857†	18683.5	498.32 µg/L	20.142	498.32 ppb	20.142	4.04%

QC value within limits for Co 228.616 Recovery = 99.64%

QC value within limits for Cr 267.716 Recovery = 98.74%

QC value within limits for Cu 324.752 Recovery = 99.58%

QC value within limits for Fe 238.204 Radial Recovery = 97.79%

QC value within limits for K 766.490 Radial Recovery = 101.66%

QC value within limits for Mg 279.077 IEC Recovery = 99.84%

QC value within limits for Mn 257.610 Recovery = 100.45%

QC value within limits for Mo 202.031 Recovery = 98.92%

QC value within limits for Na 589.592 Radial Recovery = 99.00%

QC value within limits for Ni 231.604 Recovery = 102.73%

QC value within limits for P 214.914 Recovery = 96.25%

QC value within limits for Pb 220.353 Recovery = 98.76%

QC value within limits for S 181.975 Axial Recovery = 98.75%

QC value within limits for Sb 206.836 Recovery = 97.11%

QC value within limits for Se 196.026 Recovery = 101.70%

QC value within limits for SiO2 Recovery = 99.34%

QC value within limits for Si 251.611 Recovery = 99.60%

QC value within limits for Sn 189.927 Recovery = 97.99%

QC value within limits for Sr 421.552 Recovery = 101.51%

QC value within limits for Ti 334.940 Recovery = 99.54%

QC value within limits for Tl 190.801 Recovery = 99.71%

QC value within limits for U 409.014 Recovery = 97.82%

QC value within limits for V 292.402 Recovery = 100.32%

QC value within limits for Zn 213.857 Recovery = 99.66%

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/26/2010 16:08:15

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	107221.7	107221.7	98.2 %		16:08:50
1	Al 396.153Radial†	239.9	419.3	200.44 µg/L	200.44 ppb	16:08:50
1	Ca 317.933Radial†	957.8	591.9	191.98 µg/L	191.98 ppb	16:09:10
1	Fe 238.204 Radial†	42.1	11.6	87.179 µg/L	87.179 ppb	16:09:10
1	K 766.490 Radial†	482.0	260.2	147.66 µg/L	147.66 ppb	16:08:50
1	Mg 279.077 IEC†	38.6	30.5	304.84 µg/L	304.84 ppb	16:09:10
1	Na 589.592 Radial†	1269.8	1057.9	366.30 µg/L	366.30 ppb	16:08:50
1	Sr 421.552†	1270.8	1139.2	5.1596 µg/L	5.1596 ppb	16:08:50
1	Sc 361.383	1669290.6	1669290.6	99.205 %		16:10:12
1	Y 371.029	918795.5	918795.5	98.149 %		16:10:12
1	Ag 328.068†	10.9	576.9	5.1990 µg/L	5.1990 ppb	16:10:18
1	As 188.979†	10.9	14.9	27.430 µg/L	27.430 ppb	16:10:38
1	B 249.677†	1094.3	944.5	50.057 µg/L	50.057 ppb	16:10:18
1	Ba 233.527†	166.9	186.2	4.8075 µg/L	4.8075 ppb	16:10:38
1	Be 313.107†	4625.5	6608.4	4.7284 µg/L	4.7284 ppb	16:10:18
1	Cd 226.502†	32.8	177.3	5.1826 µg/L	5.1826 ppb	16:10:38
1	Co 228.616†	103.8	82.4	4.2757 µg/L	4.2757 ppb	16:10:38
1	Cr 267.716†	264.9	176.9	4.5775 µg/L	4.5775 ppb	16:10:38
1	Cu 324.752†	4046.3	1455.7	10.452 µg/L	10.452 ppb	16:10:18
1	Mn 257.610†	2209.3	2771.2	10.090 µg/L	10.090 ppb	16:10:18
1	Mo 202.031†	98.1	94.5	10.804 µg/L	10.804 ppb	16:10:38
1	Ni 231.604†	353.9	58.0	4.0212 µg/L	4.0212 ppb	16:10:38
1	P 214.914†	317.2	78.3	167.79 µg/L	167.79 ppb	16:10:38
1	Pb 220.353†	77.6	35.4	11.098 µg/L	11.098 ppb	16:10:38
1	S 181.975 Axial†	43.9	23.6	89.486 µg/L	89.486 ppb	16:10:38
1	Sb 206.836†	33.7	13.0	13.964 µg/L	13.964 ppb	16:10:38
1	Se 196.026†	41.9	29.0	35.638 µg/L	35.638 ppb	16:10:38
1	SiO2†	2285.3	920.4	200.86 µg/L	200.86 ppb	16:10:18
1	Si 251.611†	1515.0	1163.1	95.079 µg/L	95.079 ppb	16:10:38
1	Sn 189.927†	29.8	25.5	12.004 µg/L	12.004 ppb	16:10:38
1	Ti 334.940†	1886.2	1909.4	5.0729 µg/L	5.0729 ppb	16:10:18
1	Tl 190.801†	-10.6	14.9	17.490 µg/L	17.490 ppb	16:10:38
1	U 409.014†	672.1	526.6	51.566 µg/L	51.566 ppb	16:10:18
1	V 292.402†	254.9	408.8	5.3317 µg/L	5.3317 ppb	16:10:18
1	Zn 213.857†	909.4	336.4	8.9799 µg/L	8.9799 ppb	16:10:38
2	Sc RADIAL	107068.2	107068.2	98.0 %		16:09:16
2	Al 396.153Radial†	251.5	431.4	206.24 µg/L	206.24 ppb	16:09:16
2	Ca 317.933Radial†	958.6	594.1	192.69 µg/L	192.69 ppb	16:09:36
2	Fe 238.204 Radial†	43.9	13.5	101.88 µg/L	101.88 ppb	16:09:36
2	K 766.490 Radial†	588.2	369.1	209.49 µg/L	209.49 ppb	16:09:16
2	Mg 279.077 IEC†	37.5	29.5	294.66 µg/L	294.66 ppb	16:09:36
2	Na 589.592 Radial†	1274.5	1064.7	368.63 µg/L	368.63 ppb	16:09:16
2	Sr 421.552†	1242.6	1112.4	5.0378 µg/L	5.0378 ppb	16:09:16
2	Sc 361.383	1668139.2	1668139.2	99.136 %		16:10:44
2	Y 371.029	916882.2	916882.2	97.945 %		16:10:44
2	Ag 328.068†	16.9	582.9	5.2542 µg/L	5.2542 ppb	16:10:50
2	As 188.979†	9.6	13.5	24.941 µg/L	24.941 ppb	16:11:10
2	B 249.677†	1086.9	937.7	49.694 µg/L	49.694 ppb	16:10:50
2	Ba 233.527†	168.7	188.1	4.8575 µg/L	4.8575 ppb	16:11:10
2	Be 313.107†	4749.1	6736.3	4.8199 µg/L	4.8199 ppb	16:10:50
2	Cd 226.502†	33.3	177.8	5.1982 µg/L	5.1982 ppb	16:11:10
2	Co 228.616†	108.6	87.3	4.5292 µg/L	4.5292 ppb	16:11:10
2	Cr 267.716†	278.9	191.2	4.9474 µg/L	4.9474 ppb	16:11:10
2	Cu 324.752†	4067.3	1479.6	10.626 µg/L	10.626 ppb	16:10:50
2	Mn 257.610†	2187.4	2750.7	10.017 µg/L	10.017 ppb	16:10:50
2	Mo 202.031†	93.4	89.8	10.273 µg/L	10.273 ppb	16:11:10
2	Ni 231.604†	367.8	72.4	5.0154 µg/L	5.0154 ppb	16:11:10
2	P 214.914†	312.0	73.2	156.83 µg/L	156.83 ppb	16:11:10
2	Pb 220.353†	81.6	39.4	12.367 µg/L	12.367 ppb	16:11:10



2	S 181.975 Axial†	45.1	24.8	94.239 µg/L	94.239 ppb	16:11:10
2	Sb 206.836†	32.9	12.2	13.101 µg/L	13.101 ppb	16:11:10
2	Se 196.026†	34.5	21.5	26.508 µg/L	26.508 ppb	16:11:10
2	SiO2†	2328.2	965.3	210.66 µg/L	210.66 ppb	16:10:50
2	Si 251.611†	1517.0	1166.2	95.332 µg/L	95.332 ppb	16:11:10
2	Sn 189.927†	29.0	24.7	11.657 µg/L	11.657 ppb	16:11:10
2	Ti 334.940†	1896.5	1921.2	5.1051 µg/L	5.1051 ppb	16:10:50
2	Tl 190.801†	-10.5	15.0	17.603 µg/L	17.603 ppb	16:11:10
2	U 409.014†	812.4	668.6	65.476 µg/L	65.476 ppb	16:10:50
2	V 292.402†	251.3	405.4	5.3006 µg/L	5.3006 ppb	16:10:50
2	Zn 213.857†	907.7	335.4	8.9481 µg/L	8.9481 ppb	16:11:10
3	Sc RADIAL	107156.0	107156.0	98.1 %		16:09:42
3	Al 396.153Radial†	243.3	422.8	202.16 µg/L	202.16 ppb	16:09:42
3	Ca 317.933Radial†	952.6	587.2	190.46 µg/L	190.46 ppb	16:10:02
3	Fe 238.204 Radial†	42.5	12.0	90.239 µg/L	90.239 ppb	16:10:02
3	K 766.490 Radial†	525.3	304.6	172.88 µg/L	172.88 ppb	16:09:42
3	Mg 279.077 IEC†	39.8	31.8	317.80 µg/L	317.80 ppb	16:10:02
3	Na 589.592 Radial†	1253.4	1042.1	360.81 µg/L	360.81 ppb	16:09:42
3	Sr 421.552†	1250.4	1119.3	5.0691 µg/L	5.0691 ppb	16:09:42
3	Sc 361.383	1657178.0	1657178.0	98.485 %		16:11:16
3	Y 371.029	912125.7	912125.7	97.437 %		16:11:16
3	Ag 328.068†	16.3	582.4	5.2472 µg/L	5.2472 ppb	16:11:22
3	As 188.979†	9.6	13.6	25.116 µg/L	25.116 ppb	16:11:42
3	B 249.677†	1018.5	875.6	46.401 µg/L	46.401 ppb	16:11:22
3	Ba 233.527†	156.2	176.5	4.5582 µg/L	4.5582 ppb	16:11:42
3	Be 313.107†	4679.0	6696.8	4.7916 µg/L	4.7916 ppb	16:11:22
3	Cd 226.502†	14.6	159.1	4.6504 µg/L	4.6504 ppb	16:11:42
3	Co 228.616†	101.5	80.8	4.1893 µg/L	4.1893 ppb	16:11:42
3	Cr 267.716†	242.5	156.0	4.0382 µg/L	4.0382 ppb	16:11:42
3	Cu 324.752†	3961.4	1399.3	10.048 µg/L	10.048 ppb	16:11:22
3	Mn 257.610†	2141.4	2718.6	9.8974 µg/L	9.8974 ppb	16:11:22
3	Mo 202.031†	90.3	87.3	9.9849 µg/L	9.9849 ppb	16:11:42
3	Ni 231.604†	360.0	66.9	4.6373 µg/L	4.6373 ppb	16:11:42
3	P 214.914†	300.6	63.7	136.32 µg/L	136.32 ppb	16:11:42
3	Pb 220.353†	80.2	38.6	12.110 µg/L	12.110 ppb	16:11:42
3	S 181.975 Axial†	44.8	24.8	94.016 µg/L	94.016 ppb	16:11:42
3	Sb 206.836†	32.1	11.5	12.436 µg/L	12.436 ppb	16:11:42
3	Se 196.026†	40.9	28.3	34.789 µg/L	34.789 ppb	16:11:42
3	SiO2†	2316.6	969.0	211.47 µg/L	211.47 ppb	16:11:22
3	Si 251.611†	1440.8	1098.9	89.834 µg/L	89.834 ppb	16:11:42
3	Sn 189.927†	20.2	15.9	7.5156 µg/L	7.5156 ppb	16:11:42
3	Ti 334.940†	1877.6	1914.6	5.0858 µg/L	5.0858 ppb	16:11:22
3	Tl 190.801†	-7.6	17.8	20.886 µg/L	20.886 ppb	16:11:42
3	U 409.014†	677.9	537.5	52.628 µg/L	52.628 ppb	16:11:22
3	V 292.402†	236.4	392.0	5.1118 µg/L	5.1118 ppb	16:11:22
3	Zn 213.857†	873.9	307.1	8.1899 µg/L	8.1899 ppb	16:11:42

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1664869.3	98.942 %	0.3973			0.40%
Sc RADIAL	107148.6	98.1 %	0.07			0.07%
Y 371.029	915934.5	97.844 %	0.3669			0.37%
Ag 328.068†	580.8	5.2335 µg/L	0.03006	5.2335 ppb	0.03006	0.57%
QC value within limits for Ag 328.068 Recovery = 104.67%						
Al 396.153Radial†	424.5	202.95 µg/L	2.977	202.95 ppb	2.977	1.47%
QC value within limits for Al 396.153Radial Recovery = 101.47%						
As 188.979†	14.0	25.829 µg/L	1.3892	25.829 ppb	1.3892	5.38%
QC value within limits for As 188.979 Recovery = 86.10%						
B 249.677†	919.3	48.717 µg/L	2.0143	48.717 ppb	2.0143	4.13%
QC value within limits for B 249.677 Recovery = 97.43%						
Ba 233.527†	183.6	4.7410 µg/L	0.16034	4.7410 ppb	0.16034	3.38%
QC value within limits for Ba 233.527 Recovery = 94.82%						
Be 313.107†	6680.5	4.7800 µg/L	0.04687	4.7800 ppb	0.04687	0.98%
QC value within limits for Be 313.107 Recovery = 95.60%						
Ca 317.933Radial†	591.1	191.71 µg/L	1.141	191.71 ppb	1.141	0.60%
QC value within limits for Ca 317.933Radial Recovery = 95.86%						
Cd 226.502†	171.4	5.0104 µg/L	0.31185	5.0104 ppb	0.31185	6.22%
QC value within limits for Cd 226.502 Recovery = 100.21%						
Co 228.616†	83.5	4.3314 µg/L	0.17668	4.3314 ppb	0.17668	4.08%

QC value within limits for Co 228.616	Recovery = 86.63%			
Cr 267.716†	174.7	4.5210 µg/L	0.45722	4.5210 ppb 0.45722 10.11%
QC value within limits for Cr 267.716	Recovery = 90.42%			
Cu 324.752†	1444.9	10.375 µg/L	0.2964	10.375 ppb 0.2964 2.86%
QC value within limits for Cu 324.752	Recovery = 103.75%			
Fe 238.204 Radial†	12.4	93.099 µg/L	7.7548	93.099 ppb 7.7548 8.33%
QC value within limits for Fe 238.204 Radial	Recovery = 93.10%			
K 766.490 Radial†	311.3	176.67 µg/L	31.091	176.67 ppb 31.091 17.60%
QC value within limits for K 766.490 Radial	Recovery = 117.78%			
Mg 279.077 IEC†	30.6	305.77 µg/L	11.598	305.77 ppb 11.598 3.79%
QC value within limits for Mg 279.077 IEC	Recovery = 101.92%			
Mn 257.610†	2746.8	10.001 µg/L	0.0972	10.001 ppb 0.0972 0.97%
QC value within limits for Mn 257.610	Recovery = 100.01%			
Mo 202.031†	90.6	10.354 µg/L	0.4158	10.354 ppb 0.4158 4.02%
QC value within limits for Mo 202.031	Recovery = 103.54%			
Na 589.592 Radial†	1054.9	365.25 µg/L	4.013	365.25 ppb 4.013 1.10%
QC value within limits for Na 589.592 Radial	Recovery = 121.75%			
Ni 231.604†	65.8	4.5580 µg/L	0.50180	4.5580 ppb 0.50180 11.01%
QC value within limits for Ni 231.604	Recovery = 91.16%			
P 214.914†	71.8	153.65 µg/L	15.978	153.65 ppb 15.978 10.40%
QC value within limits for P 214.914	Recovery = 102.43%			
Pb 220.353†	37.8	11.859 µg/L	0.6706	11.859 ppb 0.6706 5.66%
QC value within limits for Pb 220.353	Recovery = 118.59%			
S 181.975 Axial†	24.4	92.580 µg/L	2.6820	92.580 ppb 2.6820 2.90%
QC value within limits for S 181.975 Axial	Recovery = 92.58%			
Sb 206.836†	12.2	13.167 µg/L	0.7662	13.167 ppb 0.7662 5.82%
QC value greater than the upper limit for Sb 206.836	Recovery = 131.67%			
Se 196.026†	26.2	32.312 µg/L	5.0438	32.312 ppb 5.0438 15.61%
QC value within limits for Se 196.026	Recovery = 107.71%			
SiO2†	951.6	207.66 µg/L	5.908	207.66 ppb 5.908 2.84%
QC value within limits for SiO2	Recovery = 97.49%			
Si 251.611†	1142.7	93.415 µg/L	3.1037	93.415 ppb 3.1037 3.32%
QC value within limits for Si 251.611	Recovery = 93.42%			
Sn 189.927†	22.0	10.392 µg/L	2.4972	10.392 ppb 2.4972 24.03%
QC value within limits for Sn 189.927	Recovery = 103.92%			
Sr 421.552†	1123.6	5.0888 µg/L	0.06324	5.0888 ppb 0.06324 1.24%
QC value within limits for Sr 421.552	Recovery = 101.78%			
Ti 334.940†	1915.1	5.0879 µg/L	0.01620	5.0879 ppb 0.01620 0.32%
QC value within limits for Ti 334.940	Recovery = 101.76%			
Tl 190.801†	15.9	18.660 µg/L	1.9287	18.660 ppb 1.9287 10.34%
QC value within limits for Tl 190.801	Recovery = 93.30%			
U 409.014†	577.6	56.557 µg/L	7.7427	56.557 ppb 7.7427 13.69%
QC value within limits for U 409.014	Recovery = 113.11%			
V 292.402†	402.1	5.2480 µg/L	0.11899	5.2480 ppb 0.11899 2.27%
QC value within limits for V 292.402	Recovery = 104.96%			
Zn 213.857†	326.3	8.7060 µg/L	0.44723	8.7060 ppb 0.44723 5.14%
QC value within limits for Zn 213.857	Recovery = 87.06%			

QC Failed. Continue with analysis.

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

Autosampler Location: 8  
 Date Collected: 2/26/2010 16:11:52  
 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	105693.1	105693.1	96.8 %		16:12:26
1	Al 396.153Radial†	-159.4	10.3	4.9174 µg/L	4.9174 ppb	16:12:26
1	Ca 317.933Radial†	387.0	16.3	5.2816 µg/L	5.2816 ppb	16:12:46
1	Fe 238.204 Radial†	28.4	-2.0	-14.899 µg/L	-14.899 ppb	16:12:46
1	K 766.490 Radial†	291.9	70.9	40.218 µg/L	40.218 ppb	16:12:26
1	Mg 279.077 IEC†	9.4	1.0	9.5292 µg/L	9.5292 ppb	16:12:46
1	Na 589.592 Radial†	392.8	170.6	59.057 µg/L	59.057 ppb	16:12:26
1	Sr 421.552†	151.9	1.9	0.0087 µg/L	0.0087 ppb	16:12:26
1	Sc 361.383	1645865.3	1645865.3	97.813 %		16:13:48
1	Y 371.029	904534.7	904534.7	96.626 %		16:13:48
1	Ag 328.068†	-534.4	19.5	0.1729 µg/L	0.1729 ppb	16:13:54
1	As 188.979†	-3.6	0.2	0.3389 µg/L	0.3389 ppb	16:14:15
1	B 249.677†	154.6	-0.6	-0.0260 µg/L	-0.0260 ppb	16:14:15
1	Ba 233.527†	-21.4	-4.0	-0.1018 µg/L	-0.1018 ppb	16:14:15
1	Be 313.107†	-2041.7	-141.6	-0.1014 µg/L	-0.1014 ppb	16:13:54
1	Cd 226.502†	-137.7	3.4	0.1018 µg/L	0.1018 ppb	16:14:15
1	Co 228.616†	15.6	-6.3	-0.3265 µg/L	-0.3265 ppb	16:14:15
1	Cr 267.716†	70.5	-18.1	-0.4683 µg/L	-0.4683 ppb	16:14:15
1	Cu 324.752†	2596.0	31.0	0.2192 µg/L	0.2192 ppb	16:13:54
1	Mn 257.610†	-532.0	0.4	-0.0001 µg/L	-0.0001 ppb	16:14:15
1	Mo 202.031†	2.3	-2.0	-0.2325 µg/L	-0.2325 ppb	16:14:15
1	Ni 231.604†	298.0	6.0	0.4174 µg/L	0.4174 ppb	16:14:15
1	P 214.914†	245.6	9.6	20.630 µg/L	20.630 ppb	16:14:15
1	Pb 220.353†	49.3	7.6	2.3868 µg/L	2.3868 ppb	16:14:15
1	S 181.975 Axial†	21.7	1.5	5.6996 µg/L	5.6996 ppb	16:14:15
1	Sb 206.836†	20.8	0.2	0.2066 µg/L	0.2066 ppb	16:14:15
1	Se 196.026†	14.4	1.4	1.6880 µg/L	1.6880 ppb	16:14:15
1	SiO2†	1367.1	14.5	3.1668 µg/L	3.1668 ppb	16:13:54
1	Si 251.611†	364.8	9.0	0.7347 µg/L	0.7347 ppb	16:14:15
1	Sn 189.927†	1.3	-3.2	-1.5205 µg/L	-1.5205 ppb	16:14:15
1	Ti 334.940†	13.8	22.2	0.0587 µg/L	0.0587 ppb	16:13:54
1	Tl 190.801†	-27.7	-2.7	-3.1870 µg/L	-3.1870 ppb	16:14:15
1	U 409.014†	157.5	10.2	1.0015 µg/L	1.0015 ppb	16:13:54
1	V 292.402†	-144.9	3.7	0.0451 µg/L	0.0451 ppb	16:13:54
1	Zn 213.857†	567.9	0.3	0.0059 µg/L	0.0059 ppb	16:14:15
2	Sc RADIAL	105409.0	105409.0	96.5 %		16:12:52
2	Al 396.153Radial†	-162.7	6.3	3.0226 µg/L	3.0226 ppb	16:12:52
2	Ca 317.933Radial†	385.4	15.8	5.1107 µg/L	5.1107 ppb	16:13:12
2	Fe 238.204 Radial†	30.6	0.4	3.0989 µg/L	3.0989 ppb	16:13:12
2	K 766.490 Radial†	245.1	23.2	13.167 µg/L	13.167 ppb	16:12:52
2	Mg 279.077 IEC†	8.8	0.4	3.5858 µg/L	3.5858 ppb	16:13:12
2	Na 589.592 Radial†	358.8	136.4	47.235 µg/L	47.235 ppb	16:12:52
2	Sr 421.552†	141.8	-8.1	-0.0366 µg/L	-0.0366 ppb	16:12:52
2	Sc 361.383	1655101.1	1655101.1	98.362 %		16:14:21
2	Y 371.029	910593.7	910593.7	97.273 %		16:14:21
2	Ag 328.068†	-443.6	114.9	1.0284 µg/L	1.0284 ppb	16:14:26
2	As 188.979†	-5.5	-1.7	-3.1770 µg/L	-3.1770 ppb	16:14:47
2	B 249.677†	162.3	6.4	0.3357 µg/L	0.3357 ppb	16:14:47
2	Ba 233.527†	-26.0	-8.5	-0.2192 µg/L	-0.2192 ppb	16:14:47
2	Be 313.107†	-2045.2	-133.5	-0.0956 µg/L	-0.0956 ppb	16:14:26
2	Cd 226.502†	-141.7	0.2	0.0052 µg/L	0.0052 ppb	16:14:47
2	Co 228.616†	18.0	-4.0	-0.2074 µg/L	-0.2074 ppb	16:14:47
2	Cr 267.716†	77.0	-11.9	-0.3067 µg/L	-0.3067 ppb	16:14:47
2	Cu 324.752†	2545.7	-34.9	-0.2496 µg/L	-0.2496 ppb	16:14:26
2	Mn 257.610†	-530.0	5.5	0.0198 µg/L	0.0198 ppb	16:14:47
2	Mo 202.031†	2.5	-1.8	-0.2093 µg/L	-0.2093 ppb	16:14:47
2	Ni 231.604†	294.2	0.5	0.0347 µg/L	0.0347 ppb	16:14:47
2	P 214.914†	248.8	11.5	24.762 µg/L	24.762 ppb	16:14:47
2	Pb 220.353†	48.0	5.9	1.8643 µg/L	1.8643 ppb	16:14:47

2	S 181.975 Axial†	20.2	-0.1	-0.4022 µg/L	-0.4022 ppb	16:14:47
2	Sb 206.836†	19.2	-1.6	-1.6571 µg/L	-1.6571 ppb	16:14:47
2	Se 196.026†	7.2	-6.0	-7.3070 µg/L	-7.3070 ppb	16:14:47
2	SiO2†	1370.3	10.0	2.1743 µg/L	2.1743 ppb	16:14:26
2	Si 251.611†	371.2	13.3	1.0906 µg/L	1.0906 ppb	16:14:47
2	Sn 189.927†	2.8	-1.7	-0.7954 µg/L	-0.7954 ppb	16:14:47
2	Ti 334.940†	-2.2	5.9	0.0156 µg/L	0.0156 ppb	16:14:26
2	Tl 190.801†	-24.7	0.4	0.5188 µg/L	0.5188 ppb	16:14:47
2	U 409.014†	211.9	64.6	6.3280 µg/L	6.3280 ppb	16:14:26
2	V 292.402†	-131.1	18.7	0.2410 µg/L	0.2410 ppb	16:14:26
2	Zn 213.857†	567.1	-3.8	-0.1010 µg/L	-0.1010 ppb	16:14:47
3	Sc RADIAL	104637.3	104637.3	95.8 %		16:13:18
3	Al 396.153Radial†	-154.1	14.1	6.7280 µg/L	6.7280 ppb	16:13:18
3	Ca 317.933Radial†	374.8	7.6	2.4596 µg/L	2.4596 ppb	16:13:38
3	Fe 238.204 Radial†	28.1	-2.0	-14.984 µg/L	-14.984 ppb	16:13:38
3	K 766.490 Radial†	256.8	37.2	21.111 µg/L	21.111 ppb	16:13:18
3	Mg 279.077 IEC†	12.7	4.5	44.643 µg/L	44.643 ppb	16:13:38
3	Na 589.592 Radial†	366.2	146.9	50.857 µg/L	50.857 ppb	16:13:18
3	Sr 421.552†	138.3	-10.7	-0.0482 µg/L	-0.0482 ppb	16:13:18
3	Sc 361.383	1646897.9	1646897.9	97.874 %		16:14:53
3	Y 371.029	904518.5	904518.5	96.624 %		16:14:53
3	Ag 328.068†	-505.4	49.6	0.4392 µg/L	0.4392 ppb	16:14:58
3	As 188.979†	-1.8	2.1	3.7865 µg/L	3.7865 ppb	16:15:19
3	B 249.677†	150.2	-5.2	-0.2691 µg/L	-0.2691 ppb	16:15:19
3	Ba 233.527†	-19.3	-1.8	-0.0479 µg/L	-0.0479 ppb	16:15:19
3	Be 313.107†	-2071.5	-170.7	-0.1222 µg/L	-0.1222 ppb	16:14:58
3	Cd 226.502†	-138.5	2.7	0.0814 µg/L	0.0814 ppb	16:15:19
3	Co 228.616†	15.3	-6.6	-0.3423 µg/L	-0.3423 ppb	16:15:19
3	Cr 267.716†	70.1	-18.5	-0.4791 µg/L	-0.4791 ppb	16:15:19
3	Cu 324.752†	2599.0	32.4	0.2298 µg/L	0.2298 ppb	16:14:58
3	Mn 257.610†	-556.5	-24.4	-0.0927 µg/L	-0.0927 ppb	16:15:19
3	Mo 202.031†	7.3	3.1	0.3592 µg/L	0.3592 ppb	16:15:19
3	Ni 231.604†	293.8	1.5	0.1069 µg/L	0.1069 ppb	16:15:19
3	P 214.914†	249.2	13.1	28.195 µg/L	28.195 ppb	16:15:19
3	Pb 220.353†	39.9	-2.1	-0.6510 µg/L	-0.6510 ppb	16:15:19
3	S 181.975 Axial†	17.1	-3.2	-12.324 µg/L	-12.324 ppb	16:15:19
3	Sb 206.836†	19.0	-1.6	-1.6986 µg/L	-1.6986 ppb	16:15:19
3	Se 196.026†	19.5	6.6	8.0601 µg/L	8.0601 ppb	16:15:19
3	SiO2†	1361.1	7.5	1.6268 µg/L	1.6268 ppb	16:14:58
3	Si 251.611†	359.5	3.3	0.2680 µg/L	0.2680 ppb	16:15:19
3	Sn 189.927†	4.7	0.3	0.1254 µg/L	0.1254 ppb	16:15:19
3	Ti 334.940†	-0.8	7.3	0.0160 µg/L	0.0160 ppb	16:14:58
3	Tl 190.801†	-24.6	0.4	0.4883 µg/L	0.4883 ppb	16:15:19
3	U 409.014†	126.7	-21.4	-2.0961 µg/L	-2.0961 ppb	16:14:58
3	V 292.402†	-168.7	-20.5	-0.2603 µg/L	-0.2603 ppb	16:14:58
3	Zn 213.857†	566.3	-1.7	-0.0479 µg/L	-0.0479 ppb	16:15:19

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1649288.1	98.016 %	0.3007			0.31%
Sc RADIAL	105246.5	96.4 %	0.50			0.52%
Y 371.029	906549.0	96.841 %	0.3742			0.39%
Ag 328.068†	61.3	0.5468 µg/L	0.43780	0.5468 ppb	0.43780	80.06%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	10.2	4.8893 µg/L	1.85282	4.8893 ppb	1.85282	37.90%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.2	0.3161 µg/L	3.48180	0.3161 ppb	3.48180	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	0.2	0.0135 µg/L	0.30431	0.0135 ppb	0.30431	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-4.8	-0.1230 µg/L	0.08760	-0.1230 ppb	0.08760	71.25%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-148.6	-0.1064 µg/L	0.01400	-0.1064 ppb	0.01400	13.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	13.2	4.2840 µg/L	1.58225	4.2840 ppb	1.58225	36.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	2.1	0.0628 µg/L	0.05094	0.0628 ppb	0.05094	81.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.6	-0.2921 µg/L	0.07378	-0.2921 ppb	0.07378	25.26%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		-16.2	-0.4180 µg/L	0.09657	-0.4180 ppb	0.09657 23.10%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
		9.5	0.0664 µg/L	0.27379	0.0664 ppb	0.27379 412.04%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
		-1.2	-8.9281 µg/L	10.41574	-8.9281 ppb	10.41574 116.66%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
		43.8	24.832 µg/L	13.9038	24.832 ppb	13.9038 55.99%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
		1.9	19.253 µg/L	22.1885	19.253 ppb	22.1885 115.25%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
		-6.2	-0.0243 µg/L	0.06006	-0.0243 ppb	0.06006 246.65%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
		-0.2	-0.0275 µg/L	0.33515	-0.0275 ppb	0.33515 >999.9%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
		151.3	52.383 µg/L	6.0573	52.383 ppb	6.0573 11.56%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
		2.7	0.1863 µg/L	0.20336	0.1863 ppb	0.20336 109.14%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
		11.4	24.529 µg/L	3.7878	24.529 ppb	3.7878 15.44%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
		3.8	1.2000 µg/L	1.62419	1.2000 ppb	1.62419 135.35%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
		-0.6	-2.3421 µg/L	9.16689	-2.3421 ppb	9.16689 391.39%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
		-1.0	-1.0497 µg/L	1.08814	-1.0497 ppb	1.08814 103.66%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
		0.7	0.8137 µg/L	7.72077	0.8137 ppb	7.72077 948.82%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated			
		10.6	2.3226 µg/L	0.78065	2.3226 ppb	0.78065 33.61%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated			
		8.5	0.6978 µg/L	0.41255	0.6978 ppb	0.41255 59.12%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
		-1.6	-0.7302 µg/L	0.82487	-0.7302 ppb	0.82487 112.97%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
		-5.6	-0.0254 µg/L	0.03008	-0.0254 ppb	0.03008 118.41%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
		11.8	0.0301 µg/L	0.02475	0.0301 ppb	0.02475 82.22%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
		-0.6	-0.7266 µg/L	2.13078	-0.7266 ppb	2.13078 293.24%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
		17.8	1.7445 µg/L	4.26090	1.7445 ppb	4.26090 244.25%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
		0.7	0.0086 µg/L	0.25265	0.0086 ppb	0.25265 >999.9%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
		-1.7	-0.0477 µg/L	0.05343	-0.0477 ppb	0.05343 112.10%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 16:19:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	110648.5	110648.5	101 %			16:19:41
1	Al 396.153Radial†	9848.3	9894.4	4724.7 µg/L		4724.7 ppb	16:19:41
1	Ca 317.933Radial†	15291.3	14707.6	4770.0 µg/L		4770.0 ppb	16:19:41
1	Fe 238.204 Radial†	676.1	636.0	4797.9 µg/L		4797.9 ppb	16:20:01
1	K 766.490 Radial†	8872.3	8525.4	4838.3 µg/L		4838.3 ppb	16:19:41
1	Mg 279.077 IEC†	498.8	483.5	4831.2 µg/L		4831.2 ppb	16:20:01
1	Na 589.592 Radial†	28531.1	27922.5	9667.9 µg/L		9667.9 ppb	16:19:41
1	Sr 421.552†	110206.4	108609.4	491.89 µg/L		491.89 ppb	16:19:41
1	Sc 361.383	1672912.7	1672912.7	99.420 %			16:21:04
1	Y 371.029	915958.9	915958.9	97.846 %			16:21:04
1	Ag 328.068†	54519.9	55403.8	498.85 µg/L		498.85 ppb	16:21:10
1	As 188.979†	263.8	269.2	495.45 µg/L		495.45 ppb	16:21:30
1	B 249.677†	9390.2	9286.3	490.86 µg/L		490.86 ppb	16:21:10
1	Ba 233.527†	19291.3	19421.8	501.46 µg/L		501.46 ppb	16:21:10
1	Be 313.107†	688666.1	694628.7	497.03 µg/L		497.03 ppb	16:21:04
1	Cd 226.502†	16789.9	17032.0	498.52 µg/L		498.52 ppb	16:21:10
1	Co 228.616†	9690.5	9724.7	503.96 µg/L		503.96 ppb	16:21:10
1	Cr 267.716†	19387.9	19410.8	502.26 µg/L		502.26 ppb	16:21:10
1	Cu 324.752†	72153.8	69951.6	502.34 µg/L		502.34 ppb	16:21:10
1	Mn 257.610†	135765.5	137101.6	499.91 µg/L		499.91 ppb	16:21:10
1	Mo 202.031†	4490.0	4511.9	515.89 µg/L		515.89 ppb	16:21:30
1	Ni 231.604†	7752.6	7499.1	519.48 µg/L		519.48 ppb	16:21:10
1	P 214.914†	1412.7	1179.5	2493.6 µg/L		2493.6 ppb	16:21:30
1	Pb 220.353†	1655.9	1622.7	511.13 µg/L		511.13 ppb	16:21:30
1	S 181.975 Axial†	288.2	269.2	1021.6 µg/L		1021.6 ppb	16:21:30
1	Sb 206.836†	481.6	463.3	497.01 µg/L		497.01 ppb	16:21:30
1	Se 196.026†	431.0	420.2	528.40 µg/L		528.40 ppb	16:21:30
1	SiO2†	25614.9	24381.2	5320.6 µg/L		5320.6 ppb	16:21:10
1	Si 251.611†	30730.6	30545.9	2497.0 µg/L		2497.0 ppb	16:21:10
1	Sn 189.927†	1096.3	1098.1	516.43 µg/L		516.43 ppb	16:21:30
1	Ti 334.940†	186435.7	187531.3	499.99 µg/L		499.99 ppb	16:21:04
1	Tl 190.801†	403.0	430.9	506.56 µg/L		506.56 ppb	16:21:30
1	U 409.014†	5198.3	5077.7	496.49 µg/L		496.49 ppb	16:21:10
1	V 292.402†	39243.5	39624.3	507.98 µg/L		507.98 ppb	16:21:10
1	Zn 213.857†	19347.2	18879.8	503.58 µg/L		503.58 ppb	16:21:10
2	Sc RADIAL	110164.1	110164.1	101 %			16:20:07
2	Al 396.153Radial†	9847.1	9935.9	4744.7 µg/L		4744.7 ppb	16:20:07
2	Ca 317.933Radial†	15264.4	14747.3	4782.9 µg/L		4782.9 ppb	16:20:07
2	Fe 238.204 Radial†	669.7	632.6	4772.4 µg/L		4772.4 ppb	16:20:27
2	K 766.490 Radial†	8902.9	8594.3	4877.4 µg/L		4877.4 ppb	16:20:07
2	Mg 279.077 IEC†	497.4	484.3	4839.0 µg/L		4839.0 ppb	16:20:27
2	Na 589.592 Radial†	28633.4	28147.7	9745.9 µg/L		9745.9 ppb	16:20:07
2	Sr 421.552†	110294.2	109174.5	494.45 µg/L		494.45 ppb	16:20:07
2	Sc 361.383	1683797.0	1683797.0	100.07 %			16:21:37
2	Y 371.029	925369.3	925369.3	98.851 %			16:21:37
2	Ag 328.068†	55037.7	55566.8	500.32 µg/L		500.32 ppb	16:21:43
2	As 188.979†	264.4	268.1	493.42 µg/L		493.42 ppb	16:22:03
2	B 249.677†	9504.6	9339.6	493.71 µg/L		493.71 ppb	16:21:43
2	Ba 233.527†	19457.8	19462.7	502.51 µg/L		502.51 ppb	16:21:43
2	Be 313.107†	697794.8	699273.6	500.35 µg/L		500.35 ppb	16:21:37
2	Cd 226.502†	16989.9	17122.8	501.19 µg/L		501.19 ppb	16:21:43
2	Co 228.616†	9754.4	9725.6	504.00 µg/L		504.00 ppb	16:21:43
2	Cr 267.716†	19611.0	19507.7	504.76 µg/L		504.76 ppb	16:21:43
2	Cu 324.752†	72647.6	69976.0	502.51 µg/L		502.51 ppb	16:21:43
2	Mn 257.610†	137046.3	137498.8	501.35 µg/L		501.35 ppb	16:21:43
2	Mo 202.031†	4478.8	4471.4	511.26 µg/L		511.26 ppb	16:22:03
2	Ni 231.604†	7850.9	7547.0	522.80 µg/L		522.80 ppb	16:21:43
2	P 214.914†	1415.1	1172.7	2478.9 µg/L		2478.9 ppb	16:22:03
2	Pb 220.353†	1645.7	1601.8	504.53 µg/L		504.53 ppb	16:22:03

2	S 181.975 Axial†	285.1	264.2	1002.9 µg/L	1002.9 ppb	16:22:03
2	Sb 206.836†	484.7	463.3	496.86 µg/L	496.86 ppb	16:22:03
2	Se 196.026†	426.8	413.2	519.66 µg/L	519.66 ppb	16:22:03
2	SiO2†	25954.7	24554.2	5358.4 µg/L	5358.4 ppb	16:21:43
2	Si 251.611†	31066.3	30681.5	2508.1 µg/L	2508.1 ppb	16:21:43
2	Sn 189.927†	1085.1	1079.9	507.85 µg/L	507.85 ppb	16:22:03
2	Ti 334.940†	188656.9	188538.8	502.67 µg/L	502.67 ppb	16:21:37
2	Tl 190.801†	410.9	436.2	512.73 µg/L	512.73 ppb	16:22:03
2	U 409.014†	5187.2	5032.9	492.10 µg/L	492.10 ppb	16:21:43
2	V 292.402†	39659.9	39785.3	509.98 µg/L	509.98 ppb	16:21:43
2	Zn 213.857†	19531.6	18938.2	505.13 µg/L	505.13 ppb	16:21:43
3	Sc RADIAL	111006.9	111006.9	102 %		16:20:33
3	Al 396.153Radial†	9886.4	9900.4	4728.9 µg/L	4728.9 ppb	16:20:33
3	Ca 317.933Radial†	15426.2	14791.7	4797.3 µg/L	4797.3 ppb	16:20:33
3	Fe 238.204 Radial†	679.2	636.9	4804.2 µg/L	4804.2 ppb	16:20:53
3	K 766.490 Radial†	8952.1	8575.7	4866.8 µg/L	4866.8 ppb	16:20:33
3	Mg 279.077 IEC†	505.2	488.2	4877.5 µg/L	4877.5 ppb	16:20:53
3	Na 589.592 Radial†	28899.0	28193.5	9761.8 µg/L	9761.8 ppb	16:20:33
3	Sr 421.552†	111448.2	109479.7	495.83 µg/L	495.83 ppb	16:20:33
3	Sc 361.383	1673892.2	1673892.2	99.478 %		16:22:10
3	Y 371.029	917060.6	917060.6	97.964 %		16:22:10
3	Ag 328.068†	53006.6	53850.5	484.79 µg/L	484.79 ppb	16:22:16
3	As 188.979†	231.4	236.4	435.15 µg/L	435.15 ppb	16:22:36
3	B 249.677†	9123.1	9012.3	476.27 µg/L	476.27 ppb	16:22:16
3	Ba 233.527†	18443.7	18558.3	479.15 µg/L	479.15 ppb	16:22:16
3	Be 313.107†	667947.6	673396.2	481.83 µg/L	481.83 ppb	16:22:10
3	Cd 226.502†	16063.2	16291.7	476.83 µg/L	476.83 ppb	16:22:16
3	Co 228.616†	9241.9	9268.1	480.25 µg/L	480.25 ppb	16:22:16
3	Cr 267.716†	18094.1	18098.8	468.31 µg/L	468.31 ppb	16:22:16
3	Cu 324.752†	68723.3	66460.6	477.32 µg/L	477.32 ppb	16:22:16
3	Mn 257.610†	128879.3	130099.4	474.37 µg/L	474.37 ppb	16:22:16
3	Mo 202.031†	3937.4	3953.7	452.09 µg/L	452.09 ppb	16:22:36
3	Ni 231.604†	7398.7	7138.9	494.53 µg/L	494.53 ppb	16:22:16
3	P 214.914†	1285.4	1050.6	2217.6 µg/L	2217.6 ppb	16:22:36
3	Pb 220.353†	1492.2	1457.2	458.92 µg/L	458.92 ppb	16:22:36
3	S 181.975 Axial†	261.8	242.5	920.38 µg/L	920.38 ppb	16:22:36
3	Sb 206.836†	435.5	416.8	446.69 µg/L	446.69 ppb	16:22:36
3	Se 196.026†	389.3	378.1	476.56 µg/L	476.56 ppb	16:22:36
3	SiO2†	24912.9	23660.3	5163.3 µg/L	5163.3 ppb	16:22:16
3	Si 251.611†	29790.7	29582.9	2418.3 µg/L	2418.3 ppb	16:22:16
3	Sn 189.927†	942.9	943.3	443.69 µg/L	443.69 ppb	16:22:36
3	Ti 334.940†	180350.4	181304.4	483.37 µg/L	483.37 ppb	16:22:10
3	Tl 190.801†	374.2	401.7	472.37 µg/L	472.37 ppb	16:22:36
3	U 409.014†	4867.3	4742.0	463.60 µg/L	463.60 ppb	16:22:16
3	V 292.402†	37055.0	37401.3	479.20 µg/L	479.20 ppb	16:22:16
3	Zn 213.857†	18416.8	17933.1	478.29 µg/L	478.29 ppb	16:22:16

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1676867.3	99.655 %	0.3578			0.36%
Sc RADIAL	110606.5	101 %	0.4			0.38%
Y 371.029	919462.9	98.220 %	0.5496			0.56%
Ag 328.068†	54940.4	494.65 µg/L	8.573	494.65 ppb	8.573	1.73%
QC value within limits for Ag 328.068 Recovery = 98.93%						
Al 396.153Radial†	9910.2	4732.8 µg/L	10.54	4732.8 ppb	10.54	0.22%
QC value within limits for Al 396.153Radial Recovery = 94.66%						
As 188.979†	257.9	474.68 µg/L	34.243	474.68 ppb	34.243	7.21%
QC value within limits for As 188.979 Recovery = 94.94%						
B 249.677†	9212.7	486.95 µg/L	9.355	486.95 ppb	9.355	1.92%
QC value within limits for B 249.677 Recovery = 97.39%						
Ba 233.527†	19147.6	494.37 µg/L	13.194	494.37 ppb	13.194	2.67%
QC value within limits for Ba 233.527 Recovery = 98.87%						
Be 313.107†	689099.5	493.07 µg/L	9.871	493.07 ppb	9.871	2.00%
QC value within limits for Be 313.107 Recovery = 98.61%						
Ca 317.933Radial†	14748.9	4783.4 µg/L	13.63	4783.4 ppb	13.63	0.29%
QC value within limits for Ca 317.933Radial Recovery = 95.67%						
Cd 226.502†	16815.5	492.18 µg/L	13.361	492.18 ppb	13.361	2.71%
QC value within limits for Cd 226.502 Recovery = 98.44%						
Co 228.616†	9572.8	496.07 µg/L	13.701	496.07 ppb	13.701	2.76%

Cr	267.716†	19005.8	491.78 µg/L	20.361	491.78 ppb	20.361	4.14%
	QC value within limits for Cr 267.716 Recovery = 98.36%						
Cu	324.752†	68796.1	494.06 µg/L	14.497	494.06 ppb	14.497	2.93%
	QC value within limits for Cu 324.752 Recovery = 98.81%						
Fe	238.204 Radial†	635.2	4791.5 µg/L	16.85	4791.5 ppb	16.85	0.35%
	QC value within limits for Fe 238.204 Radial Recovery = 95.83%						
K	766.490 Radial†	8565.1	4860.8 µg/L	20.20	4860.8 ppb	20.20	0.42%
	QC value within limits for K 766.490 Radial Recovery = 97.22%						
Mg	279.077 IEC†	485.4	4849.2 µg/L	24.77	4849.2 ppb	24.77	0.51%
	QC value within limits for Mg 279.077 IEC Recovery = 96.98%						
Mn	257.610†	134899.9	491.88 µg/L	15.178	491.88 ppb	15.178	3.09%
	QC value within limits for Mn 257.610 Recovery = 98.38%						
Mo	202.031†	4312.3	493.08 µg/L	35.574	493.08 ppb	35.574	7.21%
	QC value within limits for Mo 202.031 Recovery = 98.62%						
Na	589.592 Radial†	28087.9	9725.2 µg/L	50.23	9725.2 ppb	50.23	0.52%
	QC value within limits for Na 589.592 Radial Recovery = 97.25%						
Ni	231.604†	7395.0	512.27 µg/L	15.453	512.27 ppb	15.453	3.02%
	QC value within limits for Ni 231.604 Recovery = 102.45%						
P	214.914†	1134.3	2396.7 µg/L	155.28	2396.7 ppb	155.28	6.48%
	QC value within limits for P 214.914 Recovery = 95.87%						
Pb	220.353†	1560.6	491.53 µg/L	28.429	491.53 ppb	28.429	5.78%
	QC value within limits for Pb 220.353 Recovery = 98.31%						
S	181.975 Axial†	258.6	981.62 µg/L	53.847	981.62 ppb	53.847	5.49%
	QC value within limits for S 181.975 Axial Recovery = 98.16%						
Sb	206.836†	447.8	480.19 µg/L	29.005	480.19 ppb	29.005	6.04%
	QC value within limits for Sb 206.836 Recovery = 96.04%						
Se	196.026†	403.8	508.21 µg/L	27.749	508.21 ppb	27.749	5.46%
	QC value within limits for Se 196.026 Recovery = 101.64%						
SiO2†		24198.6	5280.8 µg/L	103.46	5280.8 ppb	103.46	1.96%
	QC value within limits for SiO2 Recovery = 98.75%						
Si	251.611†	30270.1	2474.5 µg/L	48.96	2474.5 ppb	48.96	1.98%
	QC value within limits for Si 251.611 Recovery = 98.98%						
Sn	189.927†	1040.4	489.33 µg/L	39.752	489.33 ppb	39.752	8.12%
	QC value within limits for Sn 189.927 Recovery = 97.87%						
Sr	421.552†	109087.8	494.05 µg/L	2.000	494.05 ppb	2.000	0.40%
	QC value within limits for Sr 421.552 Recovery = 98.81%						
Ti	334.940†	185791.5	495.34 µg/L	10.455	495.34 ppb	10.455	2.11%
	QC value within limits for Ti 334.940 Recovery = 99.07%						
Tl	190.801†	422.9	497.22 µg/L	21.739	497.22 ppb	21.739	4.37%
	QC value within limits for Tl 190.801 Recovery = 99.44%						
U	409.014†	4950.9	484.06 µg/L	17.859	484.06 ppb	17.859	3.69%
	QC value within limits for U 409.014 Recovery = 96.81%						
V	292.402†	38937.0	499.06 µg/L	17.222	499.06 ppb	17.222	3.45%
	QC value within limits for V 292.402 Recovery = 99.81%						
Zn	213.857†	18583.7	495.67 µg/L	15.066	495.67 ppb	15.066	3.04%
	QC value within limits for Zn 213.857 Recovery = 99.13%						

All analyte(s) passed QC.



Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 16:22:45

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	106559.5	106559.5	97.6 %		16:23:18
1	Al 396.153Radial†	-168.9	1.8	0.8219 µg/L	0.8219 ppb	16:23:18
1	Ca 317.933Radial†	387.8	13.8	4.4888 µg/L	4.4888 ppb	16:23:39
1	Fe 238.204 Radial†	29.0	-1.6	-11.941 µg/L	-11.941 ppb	16:23:39
1	K 766.490 Radial†	217.8	-7.5	-4.2730 µg/L	-4.2730 ppb	16:23:18
1	Mg 279.077 IEC†	10.8	2.3	22.501 µg/L	22.501 ppb	16:23:39
1	Na 589.592 Radial†	358.9	132.5	45.872 µg/L	45.872 ppb	16:23:18
1	Sr 421.552†	137.8	-13.8	-0.0624 µg/L	-0.0624 ppb	16:23:18
1	Sc 361.383	1661221.3	1661221.3	98.725 %		16:24:41
1	Y 371.029	910974.7	910974.7	97.314 %		16:24:41
1	Ag 328.068†	-556.9	1.8	0.0162 µg/L	0.0162 ppb	16:24:46
1	As 188.979†	-2.8	1.0	1.9314 µg/L	1.9314 ppb	16:25:07
1	B 249.677†	175.9	19.6	1.0438 µg/L	1.0438 ppb	16:25:07
1	Ba 233.527†	-21.2	-3.5	-0.0909 µg/L	-0.0909 ppb	16:25:07
1	Be 313.107†	-1968.8	-48.4	-0.0347 µg/L	-0.0347 ppb	16:24:46
1	Cd 226.502†	-137.2	5.2	0.1550 µg/L	0.1550 ppb	16:25:07
1	Co 228.616†	8.5	-13.7	-0.7074 µg/L	-0.7074 ppb	16:25:07
1	Cr 267.716†	66.9	-22.4	-0.5781 µg/L	-0.5781 ppb	16:25:07
1	Cu 324.752†	2615.7	26.4	0.1873 µg/L	0.1873 ppb	16:24:46
1	Mn 257.610†	-546.1	-8.9	-0.0348 µg/L	-0.0348 ppb	16:25:07
1	Mo 202.031†	15.2	11.0	1.2581 µg/L	1.2581 ppb	16:25:07
1	Ni 231.604†	298.4	3.6	0.2536 µg/L	0.2536 ppb	16:25:07
1	P 214.914†	256.0	17.8	38.326 µg/L	38.326 ppb	16:25:07
1	Pb 220.353†	44.7	2.5	0.7741 µg/L	0.7741 ppb	16:25:07
1	S 181.975 Axial†	22.0	1.6	6.1304 µg/L	6.1304 ppb	16:25:07
1	Sb 206.836†	23.8	3.1	3.2867 µg/L	3.2867 ppb	16:25:07
1	Se 196.026†	15.9	2.8	3.4247 µg/L	3.4247 ppb	16:25:07
1	SiO2†	1383.5	18.2	3.9657 µg/L	3.9657 ppb	16:24:46
1	Si 251.611†	353.3	-6.2	-0.5049 µg/L	-0.5049 ppb	16:25:07
1	Sn 189.927†	6.3	1.8	0.8684 µg/L	0.8684 ppb	16:25:07
1	Ti 334.940†	53.5	62.3	0.1646 µg/L	0.1646 ppb	16:24:46
1	Tl 190.801†	-22.8	2.5	2.9487 µg/L	2.9487 ppb	16:25:07
1	U 409.014†	175.9	27.3	2.6770 µg/L	2.6770 ppb	16:24:46
1	V 292.402†	-129.9	20.3	0.2684 µg/L	0.2684 ppb	16:24:46
1	Zn 213.857†	577.0	4.2	0.1096 µg/L	0.1096 ppb	16:25:07
2	Sc RADIAL	107356.1	107356.1	98.3 %		16:23:44
2	Al 396.153Radial†	-138.1	34.5	16.468 µg/L	16.468 ppb	16:23:44
2	Ca 317.933Radial†	390.2	13.4	4.3410 µg/L	4.3410 ppb	16:24:04
2	Fe 238.204 Radial†	29.7	-1.1	-8.3440 µg/L	-8.3440 ppb	16:24:04
2	K 766.490 Radial†	258.4	32.1	18.217 µg/L	18.217 ppb	16:23:44
2	Mg 279.077 IEC†	8.3	-0.4	-3.5201 µg/L	-3.5201 ppb	16:24:04
2	Na 589.592 Radial†	304.5	74.5	25.779 µg/L	25.779 ppb	16:23:44
2	Sr 421.552†	145.1	-7.4	-0.0333 µg/L	-0.0333 ppb	16:23:44
2	Sc 361.383	1676097.0	1676097.0	99.609 %		16:25:13
2	Y 371.029	920961.7	920961.7	98.381 %		16:25:13
2	Ag 328.068†	-508.6	55.3	0.4938 µg/L	0.4938 ppb	16:25:18
2	As 188.979†	-4.8	-1.0	-1.8805 µg/L	-1.8805 ppb	16:25:39
2	B 249.677†	162.2	4.2	0.2255 µg/L	0.2255 ppb	16:25:39
2	Ba 233.527†	-20.6	-2.8	-0.0718 µg/L	-0.0718 ppb	16:25:39
2	Be 313.107†	-1939.9	-1.7	-0.0012 µg/L	-0.0012 ppb	16:25:18
2	Cd 226.502†	-148.3	-4.7	-0.1374 µg/L	-0.1374 ppb	16:25:39
2	Co 228.616†	16.8	-5.4	-0.2796 µg/L	-0.2796 ppb	16:25:39
2	Cr 267.716†	81.6	-8.3	-0.2135 µg/L	-0.2135 ppb	16:25:39
2	Cu 324.752†	2588.6	-24.3	-0.1760 µg/L	-0.1760 ppb	16:25:18
2	Mn 257.610†	-536.3	5.9	0.0212 µg/L	0.0212 ppb	16:25:39
2	Mo 202.031†	17.2	12.9	1.4761 µg/L	1.4761 ppb	16:25:39
2	Ni 231.604†	289.3	-8.2	-0.5701 µg/L	-0.5701 ppb	16:25:39
2	P 214.914†	249.2	8.7	18.742 µg/L	18.742 ppb	16:25:39
2	Pb 220.353†	48.2	5.5	1.7538 µg/L	1.7538 ppb	16:25:39

2	S 181.975 Axial†	16.7	-3.9	-14.793 µg/L	-14.793 ppb	16:25:39
2	Sb 206.836†	24.1	3.1	3.3694 µg/L	3.3694 ppb	16:25:39
2	Se 196.026†	20.7	7.5	9.1492 µg/L	9.1492 ppb	16:25:39
2	SiO2†	1326.4	-51.6	-11.251 µg/L	-11.251 ppb	16:25:18
2	Si 251.611†	372.4	9.9	0.8075 µg/L	0.8075 ppb	16:25:39
2	Sn 189.927†	2.7	-1.9	-0.8875 µg/L	-0.8875 ppb	16:25:39
2	Ti 334.940†	14.3	22.5	0.0603 µg/L	0.0603 ppb	16:25:18
2	Tl 190.801†	-25.9	-0.5	-0.5412 µg/L	-0.5412 ppb	16:25:39
2	U 409.014†	125.0	-25.4	-2.4845 µg/L	-2.4845 ppb	16:25:18
2	V 292.402†	-143.6	7.7	0.1060 µg/L	0.1060 ppb	16:25:18
2	Zn 213.857†	574.4	-3.6	-0.0933 µg/L	-0.0933 ppb	16:25:39
3	Sc RADIAL	107349.1	107349.1	98.3 %		16:24:10
3	Al 396.153Radial†	-172.1	-0.2	-0.1089 µg/L	-0.1089 ppb	16:24:10
3	Ca 317.933Radial†	376.1	-1.0	-0.3240 µg/L	-0.3240 ppb	16:24:30
3	Fe 238.204 Radial†	29.7	-1.1	-8.3612 µg/L	-8.3612 ppb	16:24:30
3	K 766.490 Radial†	232.8	6.1	3.4404 µg/L	3.4404 ppb	16:24:10
3	Mg 279.077 IEC†	10.9	2.4	23.574 µg/L	23.574 ppb	16:24:30
3	Na 589.592 Radial†	371.4	142.5	49.357 µg/L	49.357 ppb	16:24:10
3	Sr 421.552†	153.8	1.4	0.0065 µg/L	0.0065 ppb	16:24:10
3	Sc 361.383	1668738.3	1668738.3	99.172 %		16:25:45
3	Y 371.029	916867.8	916867.8	97.943 %		16:25:45
3	Ag 328.068†	-437.5	124.7	1.1129 µg/L	1.1129 ppb	16:25:51
3	As 188.979†	-5.7	-1.9	-3.4197 µg/L	-3.4197 ppb	16:26:11
3	B 249.677†	174.6	17.5	0.9301 µg/L	0.9301 ppb	16:26:11
3	Ba 233.527†	-30.0	-12.3	-0.3169 µg/L	-0.3169 ppb	16:26:11
3	Be 313.107†	-1923.5	6.3	0.0044 µg/L	0.0044 ppb	16:25:51
3	Cd 226.502†	-134.8	8.3	0.2424 µg/L	0.2424 ppb	16:26:11
3	Co 228.616†	14.9	-7.2	-0.3730 µg/L	-0.3730 ppb	16:26:11
3	Cr 267.716†	84.3	-5.2	-0.1344 µg/L	-0.1344 ppb	16:26:11
3	Cu 324.752†	2576.6	-24.9	-0.1802 µg/L	-0.1802 ppb	16:25:51
3	Mn 257.610†	-540.3	-0.5	-0.0041 µg/L	-0.0041 ppb	16:26:11
3	Mo 202.031†	12.1	7.8	0.8968 µg/L	0.8968 ppb	16:26:11
3	Ni 231.604†	294.7	-1.5	-0.1033 µg/L	-0.1033 ppb	16:26:11
3	P 214.914†	255.0	15.6	33.740 µg/L	33.740 ppb	16:26:11
3	Pb 220.353†	40.4	-2.1	-0.6556 µg/L	-0.6556 ppb	16:26:11
3	S 181.975 Axial†	21.1	0.6	2.1481 µg/L	2.1481 ppb	16:26:11
3	Sb 206.836†	22.6	1.8	1.8904 µg/L	1.8904 ppb	16:26:11
3	Se 196.026†	19.0	5.9	7.1605 µg/L	7.1605 ppb	16:26:11
3	SiO2†	1387.4	15.8	3.4480 µg/L	3.4480 ppb	16:25:51
3	Si 251.611†	373.0	12.1	0.9927 µg/L	0.9927 ppb	16:26:11
3	Sn 189.927†	6.9	2.4	1.1120 µg/L	1.1120 ppb	16:26:11
3	Ti 334.940†	97.1	106.0	0.2810 µg/L	0.2810 ppb	16:25:51
3	Tl 190.801†	-23.6	1.8	2.1192 µg/L	2.1192 ppb	16:26:11
3	U 409.014†	201.4	52.3	5.1226 µg/L	5.1226 ppb	16:25:51
3	V 292.402†	-152.8	-2.2	-0.0160 µg/L	-0.0160 ppb	16:25:51
3	Zn 213.857†	570.5	-5.0	-0.1350 µg/L	-0.1350 ppb	16:26:11

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1668685.5	99.169 %		0.4420				0.45%
Sc RADIAL	107088.2	98.1 %		0.42				0.43%
Y 371.029	916268.1	97.879 %		0.5363				0.55%
Ag 328.068†	60.6	0.5409 µg/L		0.54988	0.5409 ppb		0.54988	101.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.0	5.7269 µg/L		9.31337	5.7269 ppb		9.31337	162.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-1.1229 µg/L		2.75481	-1.1229 ppb		2.75481	245.33%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	13.7	0.7331 µg/L		0.44332	0.7331 ppb		0.44332	60.47%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-6.2	-0.1599 µg/L		0.13635	-0.1599 ppb		0.13635	85.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-14.6	-0.0105 µg/L		0.02116	-0.0105 ppb		0.02116	201.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.7	2.8353 µg/L		2.73697	2.8353 ppb		2.73697	96.53%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.9	0.0867 µg/L		0.19891	0.0867 ppb		0.19891	229.55%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.8	-0.4533 µg/L		0.22494	-0.4533 ppb		0.22494	49.62%

Cr	267.716†	-11.9	-0.3087 µg/L	0.23665	-0.3087 ppb	0.23665	76.66%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-7.6	-0.0563 µg/L	0.21097	-0.0563 ppb	0.21097	374.95%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	-1.3	-9.5488 µg/L	2.07192	-9.5488 ppb	2.07192	21.70%
	QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	10.2	5.7948 µg/L	11.42832	5.7948 ppb	11.42832	197.22%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	1.4	14.185 µg/L	15.3423	14.185 ppb	15.3423	108.16%
	QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	-1.2	-0.0059 µg/L	0.02805	-0.0059 ppb	0.02805	475.13%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	10.6	1.2103 µg/L	0.29259	1.2103 ppb	0.29259	24.17%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	116.5	40.336 µg/L	12.7267	40.336 ppb	12.7267	31.55%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-2.0	-0.1399 µg/L	0.41304	-0.1399 ppb	0.41304	295.15%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	14.0	30.269 µg/L	10.2431	30.269 ppb	10.2431	33.84%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	2.0	0.6241 µg/L	1.21168	0.6241 ppb	1.21168	194.14%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-0.6	-2.1717 µg/L	11.11064	-2.1717 ppb	11.11064	511.62%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	2.6	2.8488 µg/L	0.83106	2.8488 ppb	0.83106	29.17%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	5.4	6.5781 µg/L	2.90634	6.5781 ppb	2.90634	44.18%
	QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†		-5.9	-1.2791 µg/L	8.63994	-1.2791 ppb	8.63994	675.45%
	QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	5.3	0.4318 µg/L	0.81646	0.4318 ppb	0.81646	189.10%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	0.8	0.3643 µg/L	1.09093	0.3643 ppb	1.09093	299.47%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	-6.6	-0.0297 µg/L	0.03459	-0.0297 ppb	0.03459	116.32%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	63.6	0.1686 µg/L	0.11043	0.1686 ppb	0.11043	65.49%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	1.3	1.5089 µg/L	1.82323	1.5089 ppb	1.82323	120.83%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	18.1	1.7717 µg/L	3.88351	1.7717 ppb	3.88351	219.19%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	8.6	0.1195 µg/L	0.14267	0.1195 ppb	0.14267	119.42%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	-1.5	-0.0396 µg/L	0.13083	-0.0396 ppb	0.13083	330.72%
	QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 17:21:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	108208.9	108208.9	99.1 %		17:22:25
1	Al 396.153Radial†	9928.1	10194.0	4867.9 µg/L	4867.9 ppb	17:22:25
1	Ca 317.933Radial†	15198.6	14954.3	4850.1 µg/L	4850.1 ppb	17:22:25
1	Fe 238.204 Radial†	667.7	642.5	4847.4 µg/L	4847.4 ppb	17:22:45
1	K 766.490 Radial†	8937.8	8789.0	4987.9 µg/L	4987.9 ppb	17:22:25
1	Mg 279.077 IEC†	495.7	491.5	4910.9 µg/L	4910.9 ppb	17:22:45
1	Na 589.592 Radial†	28405.8	28430.8	9843.9 µg/L	9843.9 ppb	17:22:25
1	Sr 421.552†	110440.6	111297.8	504.06 µg/L	504.06 ppb	17:22:25
1	Sc 361.383	1643453.5	1643453.5	97.669 %		17:23:48
1	Y 371.029	897521.1	897521.1	95.877 %		17:23:48
1	Ag 328.068†	54505.4	56371.9	507.56 µg/L	507.56 ppb	17:23:53
1	As 188.979†	264.2	274.3	504.97 µg/L	504.97 ppb	17:24:14
1	B 249.677†	9388.7	9454.1	499.74 µg/L	499.74 ppb	17:23:53
1	Ba 233.527†	19164.0	19639.2	507.07 µg/L	507.07 ppb	17:23:53
1	Be 313.107†	681360.4	699565.1	500.56 µg/L	500.56 ppb	17:23:48
1	Cd 226.502†	16657.3	17199.0	503.41 µg/L	503.41 ppb	17:23:53
1	Co 228.616†	9623.5	9830.9	509.46 µg/L	509.46 ppb	17:23:53
1	Cr 267.716†	19276.1	19645.9	508.34 µg/L	508.34 ppb	17:23:53
1	Cu 324.752†	72140.9	71239.3	511.58 µg/L	511.58 ppb	17:23:53
1	Mn 257.610†	134913.7	138677.3	505.65 µg/L	505.65 ppb	17:23:53
1	Mo 202.031†	4483.5	4586.2	524.38 µg/L	524.38 ppb	17:24:14
1	Ni 231.604†	7672.6	7557.0	523.49 µg/L	523.49 ppb	17:23:53
1	P 214.914†	1404.9	1197.0	2530.4 µg/L	2530.4 ppb	17:24:14
1	Pb 220.353†	1646.2	1642.6	517.42 µg/L	517.42 ppb	17:24:14
1	S 181.975 Axial†	288.9	275.1	1044.0 µg/L	1044.0 ppb	17:24:14
1	Sb 206.836†	486.5	477.1	511.74 µg/L	511.74 ppb	17:24:14
1	Se 196.026†	414.0	410.6	516.60 µg/L	516.60 ppb	17:24:14
1	SiO2†	25813.0	25045.7	5465.7 µg/L	5465.7 ppb	17:23:53
1	Si 251.611†	30889.7	31262.8	2555.6 µg/L	2555.6 ppb	17:23:53
1	Sn 189.927†	1084.4	1105.7	520.00 µg/L	520.00 ppb	17:24:14
1	Ti 334.940†	185494.2	189928.7	506.38 µg/L	506.38 ppb	17:23:48
1	Tl 190.801†	403.2	438.4	515.39 µg/L	515.39 ppb	17:24:14
1	U 409.014†	5169.9	5142.4	502.81 µg/L	502.81 ppb	17:23:53
1	V 292.402†	39157.2	40243.5	515.91 µg/L	515.91 ppb	17:23:53
1	Zn 213.857†	19269.7	19149.2	510.78 µg/L	510.78 ppb	17:23:53
2	Sc RADIAL	108830.5	108830.5	99.7 %		17:22:51
2	Al 396.153Radial†	10015.3	10224.2	4882.6 µg/L	4882.6 ppb	17:22:51
2	Ca 317.933Radial†	15407.7	15076.6	4889.7 µg/L	4889.7 ppb	17:22:51
2	Fe 238.204 Radial†	674.8	645.8	4871.6 µg/L	4871.6 ppb	17:23:11
2	K 766.490 Radial†	9024.9	8824.9	5008.3 µg/L	5008.3 ppb	17:22:51
2	Mg 279.077 IEC†	503.6	496.6	4961.5 µg/L	4961.5 ppb	17:23:11
2	Na 589.592 Radial†	28697.2	28559.5	9888.5 µg/L	9888.5 ppb	17:22:51
2	Sr 421.552†	111428.7	111652.6	505.67 µg/L	505.67 ppb	17:22:51
2	Sc 361.383	1661535.9	1661535.9	98.744 %		17:24:20
2	Y 371.029	905092.2	905092.2	96.685 %		17:24:20
2	Ag 328.068†	54879.6	56143.6	505.50 µg/L	505.50 ppb	17:24:26
2	As 188.979†	267.6	274.9	505.98 µg/L	505.98 ppb	17:24:46
2	B 249.677†	9429.6	9390.9	496.38 µg/L	496.38 ppb	17:24:26
2	Ba 233.527†	19330.6	19594.4	505.91 µg/L	505.91 ppb	17:24:26
2	Be 313.107†	685956.8	696627.9	498.46 µg/L	498.46 ppb	17:24:20
2	Cd 226.502†	16827.0	17185.3	503.01 µg/L	503.01 ppb	17:24:26
2	Co 228.616†	9702.7	9803.8	508.06 µg/L	508.06 ppb	17:24:26
2	Cr 267.716†	19381.9	19538.3	505.56 µg/L	505.56 ppb	17:24:26
2	Cu 324.752†	72496.9	70796.0	508.41 µg/L	508.41 ppb	17:24:26
2	Mn 257.610†	135840.9	138113.0	503.59 µg/L	503.59 ppb	17:24:26
2	Mo 202.031†	4467.1	4519.5	516.76 µg/L	516.76 ppb	17:24:46
2	Ni 231.604†	7746.1	7545.9	522.72 µg/L	522.72 ppb	17:24:26
2	P 214.914†	1402.3	1178.6	2491.2 µg/L	2491.2 ppb	17:24:46
2	Pb 220.353†	1641.2	1619.2	510.03 µg/L	510.03 ppb	17:24:46

2	S 181.975 Axial†	288.2	271.2	1029.2 µg/L	1029.2 ppb	17:24:46
2	Sb 206.836†	488.4	473.6	507.94 µg/L	507.94 ppb	17:24:46
2	Se 196.026†	415.8	407.8	513.28 µg/L	513.28 ppb	17:24:46
2	SiO2†	26017.3	24965.1	5448.0 µg/L	5448.0 ppb	17:24:26
2	Si 251.611†	31215.1	31248.2	2554.4 µg/L	2554.4 ppb	17:24:26
2	Sn 189.927†	1084.9	1094.1	514.55 µg/L	514.55 ppb	17:24:46
2	Ti 334.940†	186449.0	188828.7	503.44 µg/L	503.44 ppb	17:24:20
2	Tl 190.801†	405.5	436.2	512.75 µg/L	512.75 ppb	17:24:46
2	U 409.014†	5173.2	5088.2	497.50 µg/L	497.50 ppb	17:24:26
2	V 292.402†	39347.4	39999.9	512.76 µg/L	512.76 ppb	17:24:26
2	Zn 213.857†	19360.7	19026.7	507.49 µg/L	507.49 ppb	17:24:26
3	Sc RADIAL	108847.4	108847.4	99.7 %		17:23:17
3	Al 396.153Radial†	10056.5	10264.1	4902.8 µg/L	4902.8 ppb	17:23:17
3	Ca 317.933Radial†	15432.2	15098.7	4896.9 µg/L	4896.9 ppb	17:23:17
3	Fe 238.204 Radial†	670.7	641.6	4839.6 µg/L	4839.6 ppb	17:23:37
3	K 766.490 Radial†	9046.8	8845.4	5019.9 µg/L	5019.9 ppb	17:23:17
3	Mg 279.077 IEC†	501.0	493.8	4933.5 µg/L	4933.5 ppb	17:23:37
3	Na 589.592 Radial†	28669.4	28527.1	9877.3 µg/L	9877.3 ppb	17:23:17
3	Sr 421.552†	111493.3	111700.0	505.88 µg/L	505.88 ppb	17:23:17
3	Sc 361.383	1653379.7	1653379.7	98.259 %		17:24:52
3	Y 371.029	900743.6	900743.6	96.221 %		17:24:52
3	Ag 328.068†	53477.0	54990.3	495.05 µg/L	495.05 ppb	17:24:58
3	As 188.979†	239.2	247.3	455.19 µg/L	455.19 ppb	17:25:18
3	B 249.677†	9201.3	9205.7	486.53 µg/L	486.53 ppb	17:24:58
3	Ba 233.527†	18686.4	19035.4	491.47 µg/L	491.47 ppb	17:24:58
3	Be 313.107†	668771.8	682565.3	488.39 µg/L	488.39 ppb	17:24:52
3	Cd 226.502†	16151.6	16581.9	485.33 µg/L	485.33 ppb	17:24:58
3	Co 228.616†	9313.9	9456.7	490.02 µg/L	490.02 ppb	17:24:58
3	Cr 267.716†	18315.6	18549.9	479.98 µg/L	479.98 ppb	17:24:58
3	Cu 324.752†	69666.6	68277.8	490.35 µg/L	490.35 ppb	17:24:58
3	Mn 257.610†	130415.3	133269.9	485.93 µg/L	485.93 ppb	17:24:58
3	Mo 202.031†	3976.3	4042.4	462.23 µg/L	462.23 ppb	17:25:18
3	Ni 231.604†	7431.8	7264.8	503.25 µg/L	503.25 ppb	17:24:58
3	P 214.914†	1294.0	1075.5	2269.9 µg/L	2269.9 ppb	17:25:18
3	Pb 220.353†	1502.6	1486.4	468.11 µg/L	468.11 ppb	17:25:18
3	S 181.975 Axial†	267.4	251.5	954.34 µg/L	954.34 ppb	17:25:18
3	Sb 206.836†	442.9	429.7	460.48 µg/L	460.48 ppb	17:25:18
3	Se 196.026†	385.5	379.0	477.78 µg/L	477.78 ppb	17:25:18
3	SiO2†	25338.2	24403.9	5325.6 µg/L	5325.6 ppb	17:24:58
3	Si 251.611†	30363.5	30537.4	2496.3 µg/L	2496.3 ppb	17:24:58
3	Sn 189.927†	953.5	965.9	454.29 µg/L	454.29 ppb	17:25:18
3	Ti 334.940†	181530.6	184754.7	492.57 µg/L	492.57 ppb	17:24:52
3	Tl 190.801†	380.8	413.1	485.74 µg/L	485.74 ppb	17:25:18
3	U 409.014†	4947.8	4884.6	477.56 µg/L	477.56 ppb	17:24:58
3	V 292.402†	37518.2	38334.7	491.15 µg/L	491.15 ppb	17:24:58
3	Zn 213.857†	18620.7	18370.3	489.97 µg/L	489.97 ppb	17:24:58

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1652789.7	98.224 %	0.5382			0.55%
Sc RADIAL	108628.9	99.5 %	0.33			0.33%
Y 371.029	901119.0	96.261 %	0.4059			0.42%
Ag 328.068†	55835.3	502.70 µg/L	6.704	502.70 ppb	6.704	1.33%
QC value within limits for Ag 328.068 Recovery = 100.54%						
Al 396.153Radial†	10227.4	4884.4 µg/L	17.49	4884.4 ppb	17.49	0.36%
QC value within limits for Al 396.153Radial Recovery = 97.69%						
As 188.979†	265.5	488.72 µg/L	29.036	488.72 ppb	29.036	5.94%
QC value within limits for As 188.979 Recovery = 97.74%						
B 249.677†	9350.2	494.22 µg/L	6.867	494.22 ppb	6.867	1.39%
QC value within limits for B 249.677 Recovery = 98.84%						
Ba 233.527†	19423.0	501.49 µg/L	8.695	501.49 ppb	8.695	1.73%
QC value within limits for Ba 233.527 Recovery = 100.30%						
Be 313.107†	692919.4	495.80 µg/L	6.501	495.80 ppb	6.501	1.31%
QC value within limits for Be 313.107 Recovery = 99.16%						
Ca 317.933Radial†	15043.2	4878.9 µg/L	25.22	4878.9 ppb	25.22	0.52%
QC value within limits for Ca 317.933Radial Recovery = 97.58%						
Cd 226.502†	16988.7	497.25 µg/L	10.325	497.25 ppb	10.325	2.08%
QC value within limits for Cd 226.502 Recovery = 99.45%						
Co 228.616†	9697.1	502.52 µg/L	10.842	502.52 ppb	10.842	2.16%

Cr	267.716†	19244.7	497.96 µg/L	15.630	497.96 ppb	15.630	3.14%
Cu	324.752†	70104.4	503.45 µg/L	11.452	503.45 ppb	11.452	2.27%
Fe	238.204 Radial†	643.3	4852.9 µg/L	16.71	4852.9 ppb	16.71	0.34%
K	766.490 Radial†	8819.7	5005.3 µg/L	16.20	5005.3 ppb	16.20	0.32%
Mg	279.077 IEC†	494.0	4935.3 µg/L	25.32	4935.3 ppb	25.32	0.51%
Mn	257.610†	136686.8	498.39 µg/L	10.840	498.39 ppb	10.840	2.18%
Mo	202.031†	4382.7	501.12 µg/L	33.901	501.12 ppb	33.901	6.76%
Na	589.592 Radial†	28505.8	9869.9 µg/L	23.18	9869.9 ppb	23.18	0.23%
Ni	231.604†	7455.9	516.49 µg/L	11.471	516.49 ppb	11.471	2.22%
P	214.914†	1150.4	2430.5 µg/L	140.44	2430.5 ppb	140.44	5.78%
Pb	220.353†	1582.8	498.52 µg/L	26.593	498.52 ppb	26.593	5.33%
S	181.975 Axial†	265.9	1009.2 µg/L	48.05	1009.2 ppb	48.05	4.76%
Sb	206.836†	460.1	493.39 µg/L	28.559	493.39 ppb	28.559	5.79%
Se	196.026†	399.1	502.55 µg/L	21.521	502.55 ppb	21.521	4.28%
SiO2†		24804.9	5413.1 µg/L	76.30	5413.1 ppb	76.30	1.41%
Si	251.611†	31016.1	2535.5 µg/L	33.90	2535.5 ppb	33.90	1.34%
Sn	189.927†	1055.2	496.28 µg/L	36.471	496.28 ppb	36.471	7.35%
Sr	421.552†	111550.2	505.21 µg/L	0.996	505.21 ppb	0.996	0.20%
Ti	334.940†	187837.4	500.80 µg/L	7.272	500.80 ppb	7.272	1.45%
Tl	190.801†	429.3	504.63 µg/L	16.414	504.63 ppb	16.414	3.25%
U	409.014†	5038.4	492.62 µg/L	13.314	492.62 ppb	13.314	2.70%
V	292.402†	39526.0	506.61 µg/L	13.477	506.61 ppb	13.477	2.66%
Zn	213.857†	18848.7	502.75 µg/L	11.182	502.75 ppb	11.182	2.22%

QC value within limits for Co 228.616 Recovery = 100.50%

QC value within limits for Cr 267.716 Recovery = 99.59%

QC value within limits for Cu 324.752 Recovery = 100.69%

QC value within limits for Fe 238.204 Radial Recovery = 97.06%

QC value within limits for K 766.490 Radial Recovery = 100.11%

QC value within limits for Mg 279.077 IEC Recovery = 98.71%

QC value within limits for Mn 257.610 Recovery = 99.68%

QC value within limits for Mo 202.031 Recovery = 100.22%

QC value within limits for Na 589.592 Radial Recovery = 98.70%

QC value within limits for Ni 231.604 Recovery = 103.30%

QC value within limits for P 214.914 Recovery = 97.22%

QC value within limits for Pb 220.353 Recovery = 99.70%

QC value within limits for S 181.975 Axial Recovery = 100.92%

QC value within limits for Sb 206.836 Recovery = 98.68%

QC value within limits for Se 196.026 Recovery = 100.51%

QC value within limits for SiO2 Recovery = 101.23%

QC value within limits for Si 251.611 Recovery = 101.42%

QC value within limits for Sn 189.927 Recovery = 99.26%

QC value within limits for Sr 421.552 Recovery = 101.04%

QC value within limits for Ti 334.940 Recovery = 100.16%

QC value within limits for Tl 190.801 Recovery = 100.93%

QC value within limits for U 409.014 Recovery = 98.52%

QC value within limits for V 292.402 Recovery = 101.32%

QC value within limits for Zn 213.857 Recovery = 100.55%

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 17:25:27

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	106676.7	106676.7	97.7 %		17:26:00
1	Al 396.153Radial†	-144.9	26.6	12.730 µg/L	12.730 ppb	17:26:00
1	Ca 317.933Radial†	391.9	17.6	5.7043 µg/L	5.7043 ppb	17:26:20
1	Fe 238.204 Radial†	30.8	0.2	1.7754 µg/L	1.7754 ppb	17:26:20
1	K 766.490 Radial†	180.3	-46.2	-26.206 µg/L	-26.206 ppb	17:26:00
1	Mg 279.077 IEC†	8.8	0.3	2.6052 µg/L	2.6052 ppb	17:26:20
1	Na 589.592 Radial†	279.3	50.7	17.548 µg/L	17.548 ppb	17:26:00
1	Sr 421.552†	150.1	-1.4	-0.0063 µg/L	-0.0063 ppb	17:26:00
1	Sc 361.383	1661905.3	1661905.3	98.766 %		17:27:22
1	Y 371.029	914409.1	914409.1	97.681 %		17:27:22
1	Ag 328.068†	-485.9	73.9	0.6576 µg/L	0.6576 ppb	17:27:28
1	As 188.979†	-4.2	-0.4	-0.7371 µg/L	-0.7371 ppb	17:27:48
1	B 249.677†	173.1	16.6	0.8788 µg/L	0.8788 ppb	17:27:48
1	Ba 233.527†	-23.0	-5.3	-0.1381 µg/L	-0.1381 ppb	17:27:48
1	Be 313.107†	-1948.7	-27.2	-0.0196 µg/L	-0.0196 ppb	17:27:28
1	Cd 226.502†	-145.1	-2.7	-0.0794 µg/L	-0.0794 ppb	17:27:48
1	Co 228.616†	15.9	-6.2	-0.3195 µg/L	-0.3195 ppb	17:27:48
1	Cr 267.716†	61.8	-27.6	-0.7129 µg/L	-0.7129 ppb	17:27:48
1	Cu 324.752†	2533.4	-58.0	-0.4155 µg/L	-0.4155 ppb	17:27:28
1	Mn 257.610†	-545.1	-7.7	-0.0280 µg/L	-0.0280 ppb	17:27:48
1	Mo 202.031†	9.7	5.4	0.6200 µg/L	0.6200 ppb	17:27:48
1	Ni 231.604†	297.6	2.7	0.1884 µg/L	0.1884 ppb	17:27:48
1	P 214.914†	248.3	9.9	21.332 µg/L	21.332 ppb	17:27:48
1	Pb 220.353†	47.1	4.8	1.5244 µg/L	1.5244 ppb	17:27:48
1	S 181.975 Axial†	21.8	1.3	5.1218 µg/L	5.1218 ppb	17:27:48
1	Sb 206.836†	25.2	4.5	4.8039 µg/L	4.8039 ppb	17:27:48
1	Se 196.026†	16.8	3.7	4.5730 µg/L	4.5730 ppb	17:27:48
1	SiO2†	1382.6	16.7	3.6507 µg/L	3.6507 ppb	17:27:28
1	Si 251.611†	371.2	11.9	0.9691 µg/L	0.9691 ppb	17:27:48
1	Sn 189.927†	6.0	1.6	0.7308 µg/L	0.7308 ppb	17:27:48
1	Ti 334.940†	101.9	111.4	0.2969 µg/L	0.2969 ppb	17:27:28
1	Tl 190.801†	-24.2	1.1	1.3073 µg/L	1.3073 ppb	17:27:48
1	U 409.014†	149.6	0.6	0.0611 µg/L	0.0611 ppb	17:27:28
1	V 292.402†	-185.6	-36.0	-0.4525 µg/L	-0.4525 ppb	17:27:28
1	Zn 213.857†	569.0	-4.2	-0.1136 µg/L	-0.1136 ppb	17:27:48
2	Sc RADIAL	106651.8	106651.8	97.7 %		17:26:26
2	Al 396.153Radial†	-179.3	-8.6	-4.1530 µg/L	-4.1530 ppb	17:26:26
2	Ca 317.933Radial†	390.8	16.6	5.3677 µg/L	5.3677 ppb	17:26:46
2	Fe 238.204 Radial†	29.8	-0.8	-5.6785 µg/L	-5.6785 ppb	17:26:46
2	K 766.490 Radial†	230.2	5.0	2.8261 µg/L	2.8261 ppb	17:26:26
2	Mg 279.077 IEC†	7.3	-1.3	-12.735 µg/L	-12.735 ppb	17:26:46
2	Na 589.592 Radial†	273.1	44.4	15.367 µg/L	15.367 ppb	17:26:26
2	Sr 421.552†	104.8	-47.7	-0.2159 µg/L	-0.2159 ppb	17:26:26
2	Sc 361.383	1662182.4	1662182.4	98.782 %		17:27:54
2	Y 371.029	913388.3	913388.3	97.572 %		17:27:54
2	Ag 328.068†	-569.2	-10.3	-0.0940 µg/L	-0.0940 ppb	17:28:00
2	As 188.979†	-6.8	-3.0	-5.5326 µg/L	-5.5326 ppb	17:28:20
2	B 249.677†	168.7	12.2	0.6486 µg/L	0.6486 ppb	17:28:20
2	Ba 233.527†	-24.3	-6.7	-0.1725 µg/L	-0.1725 ppb	17:28:20
2	Be 313.107†	-2011.0	-89.9	-0.0645 µg/L	-0.0645 ppb	17:28:00
2	Cd 226.502†	-142.5	0.0	0.0002 µg/L	0.0002 ppb	17:28:20
2	Co 228.616†	19.7	-2.3	-0.1197 µg/L	-0.1197 ppb	17:28:20
2	Cr 267.716†	67.0	-22.3	-0.5777 µg/L	-0.5777 ppb	17:28:20
2	Cu 324.752†	2556.6	-34.9	-0.2515 µg/L	-0.2515 ppb	17:28:00
2	Mn 257.610†	-547.9	-10.4	-0.0373 µg/L	-0.0373 ppb	17:28:20
2	Mo 202.031†	14.1	9.9	1.1292 µg/L	1.1292 ppb	17:28:20
2	Ni 231.604†	288.2	-6.9	-0.4761 µg/L	-0.4761 ppb	17:28:20
2	P 214.914†	240.9	2.4	5.2747 µg/L	5.2747 ppb	17:28:20
2	Pb 220.353†	40.3	-2.0	-0.6435 µg/L	-0.6435 ppb	17:28:20

2	S 181.975 Axial†	20.0	-0.5	-1.8116 µg/L	-1.8116 ppb	17:28:20
2	Sb 206.836†	25.1	4.3	4.6554 µg/L	4.6554 ppb	17:28:20
2	Se 196.026†	20.5	7.5	9.1844 µg/L	9.1844 ppb	17:28:20
2	SiO2†	1324.4	-42.4	-9.2562 µg/L	-9.2562 ppb	17:28:00
2	Si 251.611†	380.6	21.3	1.7441 µg/L	1.7441 ppb	17:28:20
2	Sn 189.927†	5.9	1.5	0.6808 µg/L	0.6808 ppb	17:28:20
2	Ti 334.940†	68.2	77.2	0.2070 µg/L	0.2070 ppb	17:28:00
2	Tl 190.801†	-24.2	1.1	1.2549 µg/L	1.2549 ppb	17:28:20
2	U 409.014†	234.9	87.0	8.5193 µg/L	8.5193 ppb	17:28:00
2	V 292.402†	-162.0	-12.1	-0.1373 µg/L	-0.1373 ppb	17:28:00
2	Zn 213.857†	571.1	-2.2	-0.0544 µg/L	-0.0544 ppb	17:28:20
3	Sc RADIAL	107269.8	107269.8	98.2 %		17:26:52
3	Al 396.153Radial†	-125.4	47.2	22.605 µg/L	22.605 ppb	17:26:52
3	Ca 317.933Radial†	392.6	16.1	5.2291 µg/L	5.2291 ppb	17:27:12
3	Fe 238.204 Radial†	28.5	-2.3	-17.283 µg/L	-17.283 ppb	17:27:12
3	K 766.490 Radial†	197.0	-30.2	-17.155 µg/L	-17.155 ppb	17:26:52
3	Mg 279.077 IEC†	13.8	5.3	53.074 µg/L	53.074 ppb	17:27:12
3	Na 589.592 Radial†	268.7	38.2	13.239 µg/L	13.239 ppb	17:26:52
3	Sr 421.552†	132.7	-19.9	-0.0901 µg/L	-0.0901 ppb	17:26:52
3	Sc 361.383	1663226.3	1663226.3	98.844 %		17:28:26
3	Y 371.029	916871.7	916871.7	97.944 %		17:28:26
3	Ag 328.068†	-537.3	22.3	0.1976 µg/L	0.1976 ppb	17:28:32
3	As 188.979†	-5.3	-1.5	-2.8582 µg/L	-2.8582 ppb	17:28:52
3	B 249.677†	166.5	9.8	0.5272 µg/L	0.5272 ppb	17:28:52
3	Ba 233.527†	-23.8	-6.2	-0.1590 µg/L	-0.1590 ppb	17:28:52
3	Be 313.107†	-1960.0	-37.1	-0.0267 µg/L	-0.0267 ppb	17:28:32
3	Cd 226.502†	-135.3	7.3	0.2166 µg/L	0.2166 ppb	17:28:52
3	Co 228.616†	15.5	-6.5	-0.3395 µg/L	-0.3395 ppb	17:28:52
3	Cr 267.716†	71.0	-18.3	-0.4744 µg/L	-0.4744 ppb	17:28:52
3	Cu 324.752†	2582.5	-10.3	-0.0774 µg/L	-0.0774 ppb	17:28:32
3	Mn 257.610†	-536.1	1.8	0.0021 µg/L	0.0021 ppb	17:28:52
3	Mo 202.031†	1.1	-3.2	-0.3667 µg/L	-0.3667 ppb	17:28:52
3	Ni 231.604†	295.6	0.4	0.0287 µg/L	0.0287 ppb	17:28:52
3	P 214.914†	254.3	15.8	33.979 µg/L	33.979 ppb	17:28:52
3	Pb 220.353†	33.6	-8.8	-2.7709 µg/L	-2.7709 ppb	17:28:52
3	S 181.975 Axial†	23.6	3.1	11.911 µg/L	11.911 ppb	17:28:52
3	Sb 206.836†	24.9	4.1	4.4258 µg/L	4.4258 ppb	17:28:52
3	Se 196.026†	10.3	-2.9	-3.6511 µg/L	-3.6511 ppb	17:28:52
3	SiO2†	1368.8	1.6	0.3450 µg/L	0.3450 ppb	17:28:32
3	Si 251.611†	385.9	26.4	2.1610 µg/L	2.1610 ppb	17:28:52
3	Sn 189.927†	3.9	-0.6	-0.2605 µg/L	-0.2605 ppb	17:28:52
3	Ti 334.940†	95.7	105.0	0.2759 µg/L	0.2759 ppb	17:28:32
3	Tl 190.801†	-22.2	3.1	3.5953 µg/L	3.5953 ppb	17:28:52
3	U 409.014†	128.0	-21.3	-2.0842 µg/L	-2.0842 ppb	17:28:32
3	V 292.402†	-141.8	8.5	0.1006 µg/L	0.1006 ppb	17:28:32
3	Zn 213.857†	571.5	-2.0	-0.0572 µg/L	-0.0572 ppb	17:28:52

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1662438.0	98.798 %	0.0414			0.04%
Sc RADIAL	106866.1	97.9 %	0.32			0.33%
Y 371.029	914889.7	97.732 %	0.1913			0.20%
Ag 328.068†	28.6	0.2537 µg/L	0.37893	0.2537 ppb	0.37893	149.36%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	21.7	10.394 µg/L	13.5312	10.394 ppb	13.5312	130.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.6	-3.0426 µg/L	2.40306	-3.0426 ppb	2.40306	78.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	12.9	0.6849 µg/L	0.17860	0.6849 ppb	0.17860	26.08%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-6.1	-0.1565 µg/L	0.01730	-0.1565 ppb	0.01730	11.05%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-51.4	-0.0369 µg/L	0.02412	-0.0369 ppb	0.02412	65.36%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	16.8	5.4337 µg/L	0.24442	5.4337 ppb	0.24442	4.50%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.5	0.0458 µg/L	0.15314	0.0458 ppb	0.15314	334.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.0	-0.2596 µg/L	0.12153	-0.2596 ppb	0.12153	46.82%



Cr	267.716†	-22.7	-0.5884 µg/L	0.11963	-0.5884 ppb	0.11963	20.33%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-34.4	-0.2481 µg/L	0.16908	-0.2481 ppb	0.16908	68.14%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.9	-7.0621 µg/L	9.60439	-7.0621 ppb	9.60439	136.00%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-23.8	-13.512 µg/L	14.8550	-13.512 ppb	14.8550	109.94%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.4	14.315 µg/L	34.4317	14.315 ppb	34.4317	240.53%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-5.4	-0.0211 µg/L	0.02061	-0.0211 ppb	0.02061	97.81%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.0	0.4608 µg/L	0.76056	0.4608 ppb	0.76056	165.04%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	44.4	15.385 µg/L	2.1546	15.385 ppb	2.1546	14.00%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-1.2	-0.0864 µg/L	0.34686	-0.0864 ppb	0.34686	401.58%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	9.4	20.195 µg/L	14.3860	20.195 ppb	14.3860	71.23%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-2.0	-0.6300 µg/L	2.14768	-0.6300 ppb	2.14768	340.90%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	1.3	5.0738 µg/L	6.86154	5.0738 ppb	6.86154	135.23%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	4.3	4.6284 µg/L	0.19049	4.6284 ppb	0.19049	4.12%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	2.8	3.3688 µg/L	6.50190	3.3688 ppb	6.50190	193.01%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-8.0	-1.7535 µg/L	6.70445	-1.7535 ppb	6.70445	382.34%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	19.9	1.6248 µg/L	0.60485	1.6248 ppb	0.60485	37.23%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	0.8	0.3837 µg/L	0.55846	0.3837 ppb	0.55846	145.54%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-23.0	-0.1041 µg/L	0.10552	-0.1041 ppb	0.10552	101.36%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	97.8	0.2600 µg/L	0.04703	0.2600 ppb	0.04703	18.09%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.8	2.0525 µg/L	1.33638	2.0525 ppb	1.33638	65.11%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	22.1	2.1654 µg/L	5.60617	2.1654 ppb	5.60617	258.90%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-13.2	-0.1631 µg/L	0.27744	-0.1631 ppb	0.27744	170.10%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-2.8	-0.0751 µg/L	0.03342	-0.0751 ppb	0.03342	44.52%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 17:48:41

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	107661.9	107661.9	98.6 %		17:49:19
1	Al 396.153Radial†	10014.7	10332.7	4934.2 µg/L	4934.2 ppb	17:49:19
1	Ca 317.933Radial†	15547.6	15386.3	4990.1 µg/L	4990.1 ppb	17:49:19
1	Fe 238.204 Radial†	675.1	653.4	4929.5 µg/L	4929.5 ppb	17:49:39
1	K 766.490 Radial†	9077.8	8976.8	5094.5 µg/L	5094.5 ppb	17:49:19
1	Mg 279.077 IEC†	507.2	505.7	5052.6 µg/L	5052.6 ppb	17:49:39
1	Na 589.592 Radial†	28184.2	28351.8	9816.5 µg/L	9816.5 ppb	17:49:19
1	Sr 421.552†	110546.2	111971.1	507.11 µg/L	507.11 ppb	17:49:19
1	Sc 361.383	1655646.3	1655646.3	98.394 %		17:50:42
1	Y 371.029	905594.9	905594.9	96.739 %		17:50:42
1	Ag 328.068†	54949.6	56412.4	507.95 µg/L	507.95 ppb	17:50:48
1	As 188.979†	271.4	279.7	514.88 µg/L	514.88 ppb	17:51:08
1	B 249.677†	9464.6	9460.4	500.05 µg/L	500.05 ppb	17:50:48
1	Ba 233.527†	19491.5	19827.5	511.93 µg/L	511.93 ppb	17:50:48
1	Be 313.107†	699433.6	712795.8	510.03 µg/L	510.03 ppb	17:50:42
1	Cd 226.502†	17022.3	17444.4	510.59 µg/L	510.59 ppb	17:50:48
1	Co 228.616†	9793.1	9930.7	514.63 µg/L	514.63 ppb	17:50:48
1	Cr 267.716†	19577.1	19806.4	512.49 µg/L	512.49 ppb	17:50:48
1	Cu 324.752†	72510.2	71070.7	510.39 µg/L	510.39 ppb	17:50:48
1	Mn 257.610†	139491.0	142312.1	518.90 µg/L	518.90 ppb	17:50:42
1	Mo 202.031†	4569.3	4639.5	530.48 µg/L	530.48 ppb	17:51:08
1	Ni 231.604†	7839.5	7668.8	531.24 µg/L	531.24 ppb	17:50:48
1	P 214.914†	1434.4	1216.4	2572.4 µg/L	2572.4 ppb	17:51:08
1	Pb 220.353†	1687.0	1671.7	526.58 µg/L	526.58 ppb	17:51:08
1	S 181.975 Axial†	293.2	277.3	1052.6 µg/L	1052.6 ppb	17:51:08
1	Sb 206.836†	499.8	487.0	522.32 µg/L	522.32 ppb	17:51:08
1	Se 196.026†	434.4	428.2	538.46 µg/L	538.46 ppb	17:51:08
1	SiO2†	25936.5	24976.7	5450.6 µg/L	5450.6 ppb	17:50:48
1	Si 251.611†	31065.9	31208.9	2551.2 µg/L	2551.2 ppb	17:50:48
1	Sn 189.927†	1113.6	1127.3	530.15 µg/L	530.15 ppb	17:51:08
1	Ti 334.940†	189180.4	192276.4	512.63 µg/L	512.63 ppb	17:50:42
1	Tl 190.801†	412.4	444.7	522.74 µg/L	522.74 ppb	17:51:08
1	U 409.014†	5238.7	5173.4	505.83 µg/L	505.83 ppb	17:50:48
1	V 292.402†	39673.5	40473.0	518.89 µg/L	518.89 ppb	17:50:48
1	Zn 213.857†	19516.8	19255.1	513.58 µg/L	513.58 ppb	17:50:48
2	Sc RADIAL	107534.0	107534.0	98.5 %		17:49:45
2	Al 396.153Radial†	10005.4	10335.4	4935.6 µg/L	4935.6 ppb	17:49:45
2	Ca 317.933Radial†	15503.0	15359.7	4981.5 µg/L	4981.5 ppb	17:49:45
2	Fe 238.204 Radial†	672.6	651.8	4917.0 µg/L	4917.0 ppb	17:50:06
2	K 766.490 Radial†	9080.8	8990.8	5102.4 µg/L	5102.4 ppb	17:49:45
2	Mg 279.077 IEC†	502.0	501.0	5006.1 µg/L	5006.1 ppb	17:50:06
2	Na 589.592 Radial†	28159.9	28361.1	9819.8 µg/L	9819.8 ppb	17:49:45
2	Sr 421.552†	110444.4	112001.1	507.25 µg/L	507.25 ppb	17:49:45
2	Sc 361.383	1652749.7	1652749.7	98.222 %		17:51:14
2	Y 371.029	905520.6	905520.6	96.731 %		17:51:14
2	Ag 328.068†	55344.4	56912.3	512.43 µg/L	512.43 ppb	17:51:20
2	As 188.979†	274.7	283.6	521.95 µg/L	521.95 ppb	17:51:40
2	B 249.677†	9577.1	9591.9	507.03 µg/L	507.03 ppb	17:51:20
2	Ba 233.527†	19547.9	19919.7	514.31 µg/L	514.31 ppb	17:51:20
2	Be 313.107†	699964.2	714581.8	511.30 µg/L	511.30 ppb	17:51:14
2	Cd 226.502†	17146.2	17600.9	515.18 µg/L	515.18 ppb	17:51:20
2	Co 228.616†	9861.9	10018.2	519.17 µg/L	519.17 ppb	17:51:20
2	Cr 267.716†	19729.2	19996.2	517.40 µg/L	517.40 ppb	17:51:20
2	Cu 324.752†	73172.5	71874.1	516.15 µg/L	516.15 ppb	17:51:20
2	Mn 257.610†	139682.8	142755.8	520.52 µg/L	520.52 ppb	17:51:14
2	Mo 202.031†	4505.5	4582.7	523.98 µg/L	523.98 ppb	17:51:40
2	Ni 231.604†	7892.5	7736.7	535.94 µg/L	535.94 ppb	17:51:20
2	P 214.914†	1407.5	1191.5	2518.1 µg/L	2518.1 ppb	17:51:40
2	Pb 220.353†	1649.4	1636.4	515.45 µg/L	515.45 ppb	17:51:40

2	S 181.975 Axial†	287.8	272.3	1033.4 µg/L	1033.4 ppb	17:51:40
2	Sb 206.836†	485.5	473.3	507.58 µg/L	507.58 ppb	17:51:40
2	Se 196.026†	429.5	423.9	533.20 µg/L	533.20 ppb	17:51:40
2	SiO2†	26176.5	25267.2	5514.0 µg/L	5514.0 ppb	17:51:20
2	Si 251.611†	31341.2	31544.6	2578.7 µg/L	2578.7 ppb	17:51:20
2	Sn 189.927†	1100.5	1115.9	524.78 µg/L	524.78 ppb	17:51:40
2	Ti 334.940†	189172.9	192605.7	513.51 µg/L	513.51 ppb	17:51:14
2	Tl 190.801†	405.3	438.2	515.20 µg/L	515.20 ppb	17:51:40
2	U 409.014†	5241.7	5185.8	507.04 µg/L	507.04 ppb	17:51:20
2	V 292.402†	39863.5	40737.1	522.19 µg/L	522.19 ppb	17:51:20
2	Zn 213.857†	19621.4	19396.3	517.34 µg/L	517.34 ppb	17:51:20
3	Sc RADIAL	107357.2	107357.2	98.3 %		17:50:11
3	Al 396.153Radial†	10062.7	10410.4	4973.0 µg/L	4973.0 ppb	17:50:11
3	Ca 317.933Radial†	15545.7	15429.1	5004.0 µg/L	5004.0 ppb	17:50:11
3	Fe 238.204 Radial†	674.0	654.3	4935.1 µg/L	4935.1 ppb	17:50:32
3	K 766.490 Radial†	9039.1	8963.5	5087.0 µg/L	5087.0 ppb	17:50:11
3	Mg 279.077 IEC†	505.4	505.3	5047.6 µg/L	5047.6 ppb	17:50:32
3	Na 589.592 Radial†	28355.9	28607.5	9905.1 µg/L	9905.1 ppb	17:50:11
3	Sr 421.552†	110837.2	112585.3	509.89 µg/L	509.89 ppb	17:50:11
3	Sc 361.383	1676649.7	1676649.7	99.642 %		17:51:46
3	Y 371.029	918573.8	918573.8	98.125 %		17:51:46
3	Ag 328.068†	53037.7	53794.1	484.30 µg/L	484.30 ppb	17:51:52
3	As 188.979†	244.9	249.6	459.51 µg/L	459.51 ppb	17:52:13
3	B 249.677†	9145.8	9020.0	476.61 µg/L	476.61 ppb	17:51:52
3	Ba 233.527†	18448.4	18532.6	478.49 µg/L	478.49 ppb	17:51:52
3	Be 313.107†	673041.3	677403.9	484.70 µg/L	484.70 ppb	17:51:46
3	Cd 226.502†	16059.5	16261.4	475.93 µg/L	475.93 ppb	17:51:52
3	Co 228.616†	9205.0	9215.8	477.53 µg/L	477.53 ppb	17:51:52
3	Cr 267.716†	18192.5	18167.6	470.09 µg/L	470.09 ppb	17:51:52
3	Cu 324.752†	68660.3	66283.8	476.08 µg/L	476.08 ppb	17:51:52
3	Mn 257.610†	134644.0	135671.7	494.69 µg/L	494.69 ppb	17:51:46
3	Mo 202.031†	3976.9	3986.8	455.88 µg/L	455.88 ppb	17:52:13
3	Ni 231.604†	7400.9	7128.8	493.84 µg/L	493.84 ppb	17:51:52
3	P 214.914†	1295.0	1058.2	2234.1 µg/L	2234.1 ppb	17:52:13
3	Pb 220.353†	1512.5	1475.1	464.56 µg/L	464.56 ppb	17:52:13
3	S 181.975 Axial†	266.2	246.5	935.55 µg/L	935.55 ppb	17:52:13
3	Sb 206.836†	438.4	418.9	448.97 µg/L	448.97 ppb	17:52:13
3	Se 196.026†	380.6	368.7	465.32 µg/L	465.32 ppb	17:52:13
3	SiO2†	24848.6	23554.6	5140.3 µg/L	5140.3 ppb	17:51:52
3	Si 251.611†	29720.2	29463.0	2408.5 µg/L	2408.5 ppb	17:51:52
3	Sn 189.927†	956.0	954.9	449.13 µg/L	449.13 ppb	17:52:13
3	Ti 334.940†	181734.9	182395.6	486.27 µg/L	486.27 ppb	17:51:46
3	Tl 190.801†	375.3	402.2	473.05 µg/L	473.05 ppb	17:52:13
3	U 409.014†	4842.2	4708.8	460.31 µg/L	460.31 ppb	17:51:52
3	V 292.402†	37081.2	37366.3	478.80 µg/L	478.80 ppb	17:51:52
3	Zn 213.857†	18439.5	17925.4	478.08 µg/L	478.08 ppb	17:51:52

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1661681.9	98.753 %	0.7751			0.78%
Sc RADIAL	107517.7	98.5 %	0.14			0.14%
Y 371.029	909896.5	97.199 %	0.8028			0.83%
Ag 328.068†	55706.3	501.56 µg/L	15.115	501.56 ppb	15.115	3.01%
QC value within limits for Ag 328.068 Recovery = 100.31%						
Al 396.153Radial†	10359.5	4947.6 µg/L	21.97	4947.6 ppb	21.97	0.44%
QC value within limits for Al 396.153Radial Recovery = 98.95%						
As 188.979†	271.0	498.78 µg/L	34.191	498.78 ppb	34.191	6.85%
QC value within limits for As 188.979 Recovery = 99.76%						
B 249.677†	9357.4	494.56 µg/L	15.933	494.56 ppb	15.933	3.22%
QC value within limits for B 249.677 Recovery = 98.91%						
Ba 233.527†	19426.6	501.58 µg/L	20.032	501.58 ppb	20.032	3.99%
QC value within limits for Ba 233.527 Recovery = 100.32%						
Be 313.107†	701593.8	502.01 µg/L	15.003	502.01 ppb	15.003	2.99%
QC value within limits for Be 313.107 Recovery = 100.40%						
Ca 317.933Radial†	15391.7	4991.9 µg/L	11.35	4991.9 ppb	11.35	0.23%
QC value within limits for Ca 317.933Radial Recovery = 99.84%						
Cd 226.502†	17102.2	500.56 µg/L	21.461	500.56 ppb	21.461	4.29%
QC value within limits for Cd 226.502 Recovery = 100.11%						
Co 228.616†	9721.6	503.78 µg/L	22.842	503.78 ppb	22.842	4.53%

Cr	267.716†	19323.4	500.00 µg/L	26.015	500.00 ppb	26.015	5.20%
Cu	324.752†	69742.9	500.87 µg/L	21.665	500.87 ppb	21.665	4.33%
Fe	238.204 Radial†	653.2	4927.2 µg/L	9.29	4927.2 ppb	9.29	0.19%
K	766.490 Radial†	8977.0	5094.6 µg/L	7.73	5094.6 ppb	7.73	0.15%
Mg	279.077 IEC†	504.0	5035.4 µg/L	25.51	5035.4 ppb	25.51	0.51%
Mn	257.610†	140246.5	511.37 µg/L	14.470	511.37 ppb	14.470	2.83%
Mo	202.031†	4403.0	503.45 µg/L	41.322	503.45 ppb	41.322	8.21%
Na	589.592 Radial†	28440.1	9847.1 µg/L	50.23	9847.1 ppb	50.23	0.51%
Ni	231.604†	7511.4	520.34 µg/L	23.072	520.34 ppb	23.072	4.43%
P	214.914†	1155.3	2441.5 µg/L	181.71	2441.5 ppb	181.71	7.44%
Pb	220.353†	1594.4	502.20 µg/L	33.066	502.20 ppb	33.066	6.58%
S	181.975 Axial†	265.4	1007.2 µg/L	62.76	1007.2 ppb	62.76	6.23%
Sb	206.836†	459.7	492.96 µg/L	38.798	492.96 ppb	38.798	7.87%
Se	196.026†	406.9	512.32 µg/L	40.793	512.32 ppb	40.793	7.96%
SiO2†		24599.5	5368.3 µg/L	200.00	5368.3 ppb	200.00	3.73%
Si	251.611†	30738.8	2512.8 µg/L	91.36	2512.8 ppb	91.36	3.64%
Sn	189.927†	1066.0	501.35 µg/L	45.306	501.35 ppb	45.306	9.04%
Sr	421.552†	112185.9	508.09 µg/L	1.568	508.09 ppb	1.568	0.31%
Ti	334.940†	189092.6	504.14 µg/L	15.479	504.14 ppb	15.479	3.07%
Tl	190.801†	428.4	503.67 µg/L	26.778	503.67 ppb	26.778	5.32%
U	409.014†	5022.6	491.06 µg/L	26.636	491.06 ppb	26.636	5.42%
V	292.402†	39525.5	506.62 µg/L	24.158	506.62 ppb	24.158	4.77%
Zn	213.857†	18859.0	503.00 µg/L	21.665	503.00 ppb	21.665	4.31%

QC value within limits for Co 228.616 Recovery = 100.76%

QC value within limits for Cr 267.716 Recovery = 100.00%

QC value within limits for Cu 324.752 Recovery = 100.17%

QC value within limits for Fe 238.204 Radial Recovery = 98.54%

QC value within limits for K 766.490 Radial Recovery = 101.89%

QC value within limits for Mg 279.077 IEC Recovery = 100.71%

QC value within limits for Mn 257.610 Recovery = 102.27%

QC value within limits for Mo 202.031 Recovery = 100.69%

QC value within limits for Na 589.592 Radial Recovery = 98.47%

QC value within limits for Ni 231.604 Recovery = 104.07%

QC value within limits for P 214.914 Recovery = 97.66%

QC value within limits for Pb 220.353 Recovery = 100.44%

QC value within limits for S 181.975 Axial Recovery = 100.72%

QC value within limits for Sb 206.836 Recovery = 98.59%

QC value within limits for Se 196.026 Recovery = 102.46%

QC value within limits for SiO2 Recovery = 100.39%

QC value within limits for Si 251.611 Recovery = 100.51%

QC value within limits for Sn 189.927 Recovery = 100.27%

QC value within limits for Sr 421.552 Recovery = 101.62%

QC value within limits for Ti 334.940 Recovery = 100.83%

QC value within limits for Tl 190.801 Recovery = 100.73%

QC value within limits for U 409.014 Recovery = 98.21%

QC value within limits for V 292.402 Recovery = 101.32%

QC value within limits for Zn 213.857 Recovery = 100.60%

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 17:52:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	108958.0	108958.0	99.8 %		17:52:55
1	Al 396.153Radial†	-170.5	4.0	1.9250 µg/L	1.9250 ppb	17:52:55
1	Ca 317.933Radial†	401.3	18.6	6.0471 µg/L	6.0471 ppb	17:53:15
1	Fe 238.204 Radial†	29.3	-1.9	-14.369 µg/L	-14.369 ppb	17:53:15
1	K 766.490 Radial†	266.3	36.1	20.502 µg/L	20.502 ppb	17:52:55
1	Mg 279.077 IEC†	8.9	0.1	1.5032 µg/L	1.5032 ppb	17:53:15
1	Na 589.592 Radial†	329.2	94.6	32.771 µg/L	32.771 ppb	17:52:55
1	Sr 421.552†	152.9	-1.7	-0.0078 µg/L	-0.0078 ppb	17:52:55
1	Sc 361.383	1698441.3	1698441.3	100.94 %		17:54:17
1	Y 371.029	939018.6	939018.6	100.31 %		17:54:17
1	Ag 328.068†	-527.5	43.4	0.3857 µg/L	0.3857 ppb	17:54:23
1	As 188.979†	-5.6	-1.7	-3.0563 µg/L	-3.0563 ppb	17:54:43
1	B 249.677†	168.4	8.2	0.4399 µg/L	0.4399 ppb	17:54:43
1	Ba 233.527†	-25.2	-7.0	-0.1808 µg/L	-0.1808 ppb	17:54:43
1	Be 313.107†	-1970.5	-6.4	-0.0046 µg/L	-0.0046 ppb	17:54:23
1	Cd 226.502†	-139.2	6.3	0.1845 µg/L	0.1845 ppb	17:54:43
1	Co 228.616†	15.8	-6.6	-0.3399 µg/L	-0.3399 ppb	17:54:43
1	Cr 267.716†	76.6	-14.3	-0.3686 µg/L	-0.3686 ppb	17:54:43
1	Cu 324.752†	2618.8	-28.6	-0.2074 µg/L	-0.2074 ppb	17:54:23
1	Mn 257.610†	-559.6	-10.2	-0.0381 µg/L	-0.0381 ppb	17:54:43
1	Mo 202.031†	6.7	2.3	0.2624 µg/L	0.2624 ppb	17:54:43
1	Ni 231.604†	292.5	-8.8	-0.6114 µg/L	-0.6114 ppb	17:54:43
1	P 214.914†	248.9	5.1	10.993 µg/L	10.993 ppb	17:54:43
1	Pb 220.353†	45.2	2.0	0.6155 µg/L	0.6155 ppb	17:54:43
1	S 181.975 Axial†	22.6	1.7	6.3939 µg/L	6.3939 ppb	17:54:43
1	Sb 206.836†	26.7	5.4	5.7664 µg/L	5.7664 ppb	17:54:43
1	Se 196.026†	14.7	1.2	1.4285 µg/L	1.4285 ppb	17:54:43
1	SiO2†	1363.8	-32.0	-6.9889 µg/L	-6.9889 ppb	17:54:23
1	Si 251.611†	350.4	-16.8	-1.3762 µg/L	-1.3762 ppb	17:54:43
1	Sn 189.927†	11.3	6.6	3.1103 µg/L	3.1103 ppb	17:54:43
1	Ti 334.940†	13.0	21.0	0.0561 µg/L	0.0561 ppb	17:54:23
1	Tl 190.801†	-29.3	-3.4	-4.0001 µg/L	-4.0001 ppb	17:54:43
1	U 409.014†	215.3	62.4	6.1173 µg/L	6.1173 ppb	17:54:23
1	V 292.402†	-150.5	2.8	0.0430 µg/L	0.0430 ppb	17:54:23
1	Zn 213.857†	581.2	-4.5	-0.1163 µg/L	-0.1163 ppb	17:54:43
2	Sc RADIAL	109044.8	109044.8	99.9 %		17:53:21
2	Al 396.153Radial†	-152.3	22.4	10.696 µg/L	10.696 ppb	17:53:21
2	Ca 317.933Radial†	398.6	15.6	5.0634 µg/L	5.0634 ppb	17:53:41
2	Fe 238.204 Radial†	31.8	0.6	4.2755 µg/L	4.2755 ppb	17:53:41
2	K 766.490 Radial†	273.3	42.9	24.372 µg/L	24.372 ppb	17:53:21
2	Mg 279.077 IEC†	9.1	0.4	3.8122 µg/L	3.8122 ppb	17:53:41
2	Na 589.592 Radial†	224.2	-10.7	-3.7153 µg/L	-3.7153 ppb	17:53:21
2	Sr 421.552†	142.2	-12.6	-0.0570 µg/L	-0.0570 ppb	17:53:21
2	Sc 361.383	1700502.4	1700502.4	101.06 %		17:54:49
2	Y 371.029	933325.6	933325.6	99.701 %		17:54:49
2	Ag 328.068†	-514.8	56.5	0.5087 µg/L	0.5087 ppb	17:54:55
2	As 188.979†	-2.5	1.4	2.5114 µg/L	2.5114 ppb	17:55:15
2	B 249.677†	167.4	7.0	0.3690 µg/L	0.3690 ppb	17:55:15
2	Ba 233.527†	-25.2	-7.0	-0.1790 µg/L	-0.1790 ppb	17:55:15
2	Be 313.107†	-1993.8	-27.1	-0.0195 µg/L	-0.0195 ppb	17:54:55
2	Cd 226.502†	-131.5	14.1	0.4108 µg/L	0.4108 ppb	17:55:15
2	Co 228.616†	20.8	-1.7	-0.0873 µg/L	-0.0873 ppb	17:55:15
2	Cr 267.716†	68.7	-22.2	-0.5743 µg/L	-0.5743 ppb	17:55:15
2	Cu 324.752†	2587.2	-63.0	-0.4505 µg/L	-0.4505 ppb	17:54:55
2	Mn 257.610†	-548.6	1.4	0.0049 µg/L	0.0049 ppb	17:55:15
2	Mo 202.031†	10.3	5.8	0.6642 µg/L	0.6642 ppb	17:55:15
2	Ni 231.604†	291.7	-10.0	-0.6938 µg/L	-0.6938 ppb	17:55:15
2	P 214.914†	249.8	5.7	12.439 µg/L	12.439 ppb	17:55:15
2	Pb 220.353†	42.7	-0.6	-0.1767 µg/L	-0.1767 ppb	17:55:15

2	S 181.975 Axial†	20.6	-0.3	-1.0395 µg/L	-1.0395 ppb	17:55:15
2	Sb 206.836†	27.6	6.3	6.7511 µg/L	6.7511 ppb	17:55:15
2	Se 196.026†	14.2	0.7	0.9050 µg/L	0.9050 ppb	17:55:15
2	SiO2†	1343.4	-53.9	-11.757 µg/L	-11.757 ppb	17:54:55
2	Si 251.611†	356.7	-11.1	-0.9040 µg/L	-0.9040 ppb	17:55:15
2	Sn 189.927†	8.9	4.3	2.0086 µg/L	2.0086 ppb	17:55:15
2	Ti 334.940†	86.4	93.6	0.2496 µg/L	0.2496 ppb	17:54:55
2	Tl 190.801†	-21.4	4.4	5.1416 µg/L	5.1416 ppb	17:55:15
2	U 409.014†	139.6	-12.7	-1.2408 µg/L	-1.2408 ppb	17:54:55
2	V 292.402†	-114.0	39.1	0.4986 µg/L	0.4986 ppb	17:54:55
2	Zn 213.857†	580.6	-5.8	-0.1519 µg/L	-0.1519 ppb	17:55:15
3	Sc RADIAL	108437.0	108437.0	99.3 %		17:53:47
3	Al 396.153Radial†	-173.5	0.2	0.0593 µg/L	0.0593 ppb	17:53:47
3	Ca 317.933Radial†	395.8	15.1	4.8827 µg/L	4.8827 ppb	17:54:07
3	Fe 238.204 Radial†	29.1	-2.0	-15.179 µg/L	-15.179 ppb	17:54:07
3	K 766.490 Radial†	185.1	-44.4	-25.174 µg/L	-25.174 ppb	17:53:47
3	Mg 279.077 IEC†	12.3	3.6	36.243 µg/L	36.243 ppb	17:54:07
3	Na 589.592 Radial†	249.8	16.3	5.6321 µg/L	5.6321 ppb	17:53:47
3	Sr 421.552†	120.3	-33.9	-0.1534 µg/L	-0.1534 ppb	17:53:47
3	Sc 361.383	1711786.9	1711786.9	101.73 %		17:55:21
3	Y 371.029	942954.0	942954.0	100.73 %		17:55:21
3	Ag 328.068†	-520.8	54.0	0.4823 µg/L	0.4823 ppb	17:55:27
3	As 188.979†	-6.4	-2.5	-4.5451 µg/L	-4.5451 ppb	17:55:47
3	B 249.677†	153.6	-7.6	-0.3965 µg/L	-0.3965 ppb	17:55:47
3	Ba 233.527†	-28.8	-10.4	-0.2670 µg/L	-0.2670 ppb	17:55:47
3	Be 313.107†	-1992.4	-12.7	-0.0091 µg/L	-0.0091 ppb	17:55:27
3	Cd 226.502†	-141.2	5.4	0.1583 µg/L	0.1583 ppb	17:55:47
3	Co 228.616†	16.2	-6.3	-0.3280 µg/L	-0.3280 ppb	17:55:47
3	Cr 267.716†	74.8	-16.6	-0.4298 µg/L	-0.4298 ppb	17:55:47
3	Cu 324.752†	2629.5	-38.3	-0.2771 µg/L	-0.2771 ppb	17:55:27
3	Mn 257.610†	-543.5	10.0	0.0331 µg/L	0.0331 ppb	17:55:47
3	Mo 202.031†	10.9	6.4	0.7310 µg/L	0.7310 ppb	17:55:47
3	Ni 231.604†	287.6	-15.9	-1.1057 µg/L	-1.1057 ppb	17:55:47
3	P 214.914†	251.0	5.2	11.287 µg/L	11.287 ppb	17:55:47
3	Pb 220.353†	38.1	-5.4	-1.6953 µg/L	-1.6953 ppb	17:55:47
3	S 181.975 Axial†	18.1	-2.9	-10.819 µg/L	-10.819 ppb	17:55:47
3	Sb 206.836†	22.0	0.6	0.6800 µg/L	0.6800 ppb	17:55:47
3	Se 196.026†	20.7	7.0	8.5534 µg/L	8.5534 ppb	17:55:47
3	SiO2†	1376.9	-29.7	-6.4812 µg/L	-6.4812 ppb	17:55:27
3	Si 251.611†	365.7	-4.5	-0.3701 µg/L	-0.3701 ppb	17:55:47
3	Sn 189.927†	4.9	0.3	0.1510 µg/L	0.1510 ppb	17:55:47
3	Ti 334.940†	33.0	40.6	0.1055 µg/L	0.1055 ppb	17:55:27
3	Tl 190.801†	-27.7	-1.7	-1.9454 µg/L	-1.9454 ppb	17:55:47
3	U 409.014†	157.9	4.3	0.4275 µg/L	0.4275 ppb	17:55:27
3	V 292.402†	-130.5	23.6	0.3041 µg/L	0.3041 ppb	17:55:27
3	Zn 213.857†	572.7	-17.4	-0.4622 µg/L	-0.4622 ppb	17:55:47

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1703576.9	101.24 %	0.427			0.42%
Sc RADIAL	108813.3	99.6 %	0.30			0.30%
Y 371.029	938432.8	100.25 %	0.517			0.52%
Ag 328.068†	51.3	0.4589 µg/L	0.06477	0.4589 ppb	0.06477	14.11%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.9	4.2266 µg/L	5.67939	4.2266 ppb	5.67939	134.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.9	-1.6967 µg/L	3.71954	-1.6967 ppb	3.71954	219.23%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	2.5	0.1375 µg/L	0.46376	0.1375 ppb	0.46376	337.34%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-8.1	-0.2089 µg/L	0.05028	-0.2089 ppb	0.05028	24.07%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-15.4	-0.0111 µg/L	0.00766	-0.0111 ppb	0.00766	69.22%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	16.4	5.3311 µg/L	0.62666	5.3311 ppb	0.62666	11.75%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.6	0.2512 µg/L	0.13883	0.2512 ppb	0.13883	55.27%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.9	-0.2517 µg/L	0.14252	-0.2517 ppb	0.14252	56.62%

Cr	267.716†	-17.7	-0.4576 µg/L	0.10563	-0.4576 ppb	0.10563	23.08%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-43.3	-0.3116 µg/L	0.12518	-0.3116 ppb	0.12518	40.17%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.1	-8.4242 µg/L	11.00570	-8.4242 ppb	11.00570	130.64%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	11.6	6.5666 µg/L	27.55600	6.5666 ppb	27.55600	419.64%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.4	13.853 µg/L	19.4249	13.853 ppb	19.4249	140.22%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	0.4	0.0000 µg/L	0.03586	0.0000 ppb	0.03586	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.8	0.5525 µg/L	0.25346	0.5525 ppb	0.25346	45.87%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	33.4	11.562 µg/L	18.9521	11.562 ppb	18.9521	163.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-11.6	-0.8036 µg/L	0.26483	-0.8036 ppb	0.26483	32.95%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	5.3	11.573 µg/L	0.7641	11.573 ppb	0.7641	6.60%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-1.3	-0.4188 µg/L	1.17429	-0.4188 ppb	1.17429	280.38%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-0.5	-1.8216 µg/L	8.63320	-1.8216 ppb	8.63320	473.93%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	4.1	4.3992 µg/L	3.25832	4.3992 ppb	3.25832	74.07%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.0	3.6290 µg/L	4.27274	3.6290 ppb	4.27274	117.74%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-38.5	-8.4092 µg/L	2.91075	-8.4092 ppb	2.91075	34.61%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-10.8	-0.8834 µg/L	0.50335	-0.8834 ppb	0.50335	56.98%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	3.7	1.7566 µg/L	1.49561	1.7566 ppb	1.49561	85.14%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-16.1	-0.0727 µg/L	0.07408	-0.0727 ppb	0.07408	101.83%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	51.8	0.1371 µg/L	0.10052	0.1371 ppb	0.10052	73.34%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.2	-0.2680 µg/L	4.79614	-0.2680 ppb	4.79614	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	18.0	1.7680 µg/L	3.85786	1.7680 ppb	3.85786	218.20%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	21.9	0.2819 µg/L	0.22858	0.2819 ppb	0.22858	81.09%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-9.2	-0.2435 µg/L	0.19025	-0.2435 ppb	0.19025	78.14%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/26/2010 17:56:15

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022610E.sif

Batch ID:

Results Data Set: 022610D

Results Library: c:\pe\optimal\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 301

Sample ID: 1202039765|951752|1

Date Collected: 2/26/2010 17:56:17

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: 1202039765|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	105775.5	105775.5	96.9 %		17:56:53
1	Al 396.153Radial†	-162.1	7.6	3.6279 µg/L	3.6279 ppb	17:56:53
1	Ca 317.933Radial†	438.3	68.9	22.354 µg/L	22.354 ppb	17:57:14
1	Fe 238.204 Radial†	35.6	5.4	40.924 µg/L	40.924 ppb	17:57:14
1	K 766.490 Radial†	318.2	97.8	55.476 µg/L	55.476 ppb	17:56:53
1	Mg 279.077 IEC†	9.7	1.2	12.196 µg/L	12.196 ppb	17:57:14
1	Na 589.592 Radial†	343.2	119.1	41.234 µg/L	41.234 ppb	17:56:53
1	Sr 421.552†	159.8	10.0	0.0454 µg/L	0.0454 ppb	17:56:53
1	Sc 361.383	1649791.8	1649791.8	98.046 %		17:58:16
1	Y 371.029	907050.8	907050.8	96.895 %		17:58:16
1	Ag 328.068†	-541.8	13.3	0.1272 µg/L	0.1272 ppb	17:58:21
1	As 188.979†	-1.6	2.2	4.1299 µg/L	4.1299 ppb	17:58:42
1	B 249.677†	166.7	11.4	0.5855 µg/L	0.5855 ppb	17:58:42
1	Ba 233.527†	-9.8	7.9	0.2043 µg/L	0.2043 ppb	17:58:42
1	Be 313.107†	-2003.7	-97.8	-0.0703 µg/L	-0.0703 ppb	17:58:21
1	Cd 226.502†	-145.3	-4.0	-0.1215 µg/L	-0.1215 ppb	17:58:42
1	Co 228.616†	23.5	1.7	0.0881 µg/L	0.0881 ppb	17:58:42
1	Cr 267.716†	116.6	28.7	0.7428 µg/L	0.7428 ppb	17:58:42
1	Cu 324.752†	2558.0	-14.1	-0.0934 µg/L	-0.0934 ppb	17:58:21
1	Mn 257.610†	-362.8	174.2	0.6367 µg/L	0.6367 ppb	17:58:42
1	Mo 202.031†	6.2	2.0	0.2275 µg/L	0.2275 ppb	17:58:42
1	Ni 231.604†	301.5	8.9	0.6179 µg/L	0.6179 ppb	17:58:42
1	P 214.914†	252.7	16.2	35.005 µg/L	35.005 ppb	17:58:42
1	Pb 220.353†	35.9	-6.2	-1.9577 µg/L	-1.9577 ppb	17:58:42
1	S 181.975 Axial†	22.7	2.4	9.1663 µg/L	9.1663 ppb	17:58:42
1	Sb 206.836†	22.4	1.9	1.9716 µg/L	1.9716 ppb	17:58:42
1	Se 196.026†	13.8	0.8	1.1024 µg/L	1.1024 ppb	17:58:42
1	SiO2†	1611.7	260.7	56.889 µg/L	56.889 ppb	17:58:21
1	Si 251.611†	684.7	334.3	27.328 µg/L	27.328 ppb	17:58:42
1	Sn 189.927†	8.3	4.0	1.8555 µg/L	1.8555 ppb	17:58:42
1	Ti 334.940†	263.8	277.2	0.7389 µg/L	0.7389 ppb	17:58:21
1	Tl 190.801†	-24.3	0.8	0.9840 µg/L	0.9840 ppb	17:58:42
1	U 409.014†	174.3	26.9	2.6298 µg/L	2.6298 ppb	17:58:21
1	V 292.402†	-115.7	33.9	0.4371 µg/L	0.4371 ppb	17:58:21
1	Zn 213.857†	615.6	47.6	1.2729 µg/L	1.2729 ppb	17:58:42
2	Sc RADIAL	105424.5	105424.5	96.5 %		17:57:19
2	Al 396.153Radial†	-134.9	35.2	16.818 µg/L	16.818 ppb	17:57:19
2	Ca 317.933Radial†	433.6	65.6	21.267 µg/L	21.267 ppb	17:57:40
2	Fe 238.204 Radial†	35.7	5.6	42.419 µg/L	42.419 ppb	17:57:40
2	K 766.490 Radial†	236.8	14.5	8.2202 µg/L	8.2202 ppb	17:57:19
2	Mg 279.077 IEC†	10.4	2.0	20.100 µg/L	20.100 ppb	17:57:40
2	Na 589.592 Radial†	343.9	121.0	41.882 µg/L	41.882 ppb	17:57:19
2	Sr 421.552†	136.5	-13.6	-0.0618 µg/L	-0.0618 ppb	17:57:19
2	Sc 361.383	1640623.4	1640623.4	97.501 %		17:58:48
2	Y 371.029	906305.7	906305.7	96.815 %		17:58:48
2	Ag 328.068†	-527.5	24.9	0.2259 µg/L	0.2259 ppb	17:58:53
2	As 188.979†	-4.9	-1.2	-2.1900 µg/L	-2.1900 ppb	17:59:14



2	B 249.677†	167.7	13.4	0.6874 µg/L	0.6874 ppb	17:59:14
2	Ba 233.527†	-17.0	0.5	0.0121 µg/L	0.0121 ppb	17:59:14
2	Be 313.107†	-1962.7	-67.1	-0.0483 µg/L	-0.0483 ppb	17:58:53
2	Cd 226.502†	-145.7	-5.2	-0.1554 µg/L	-0.1554 ppb	17:59:14
2	Co 228.616†	11.3	-10.7	-0.5564 µg/L	-0.5564 ppb	17:59:14
2	Cr 267.716†	102.5	14.9	0.3854 µg/L	0.3854 ppb	17:59:14
2	Cu 324.752†	2580.8	23.9	0.1792 µg/L	0.1792 ppb	17:58:53
2	Mn 257.610†	-354.6	180.5	0.6594 µg/L	0.6594 ppb	17:59:14
2	Mo 202.031†	6.4	2.2	0.2537 µg/L	0.2537 ppb	17:59:14
2	Ni 231.604†	307.4	16.6	1.1538 µg/L	1.1538 ppb	17:59:14
2	P 214.914†	243.6	8.3	17.915 µg/L	17.915 ppb	17:59:14
2	Pb 220.353†	42.9	1.2	0.3761 µg/L	0.3761 ppb	17:59:14
2	S 181.975 Axial†	20.7	0.6	2.2063 µg/L	2.2063 ppb	17:59:14
2	Sb 206.836†	14.7	-5.9	-6.2984 µg/L	-6.2984 ppb	17:59:14
2	Se 196.026†	6.2	-7.0	-8.4773 µg/L	-8.4773 ppb	17:59:14
2	SiO2†	1642.0	300.9	65.667 µg/L	65.667 ppb	17:58:53
2	Si 251.611†	703.2	357.3	29.205 µg/L	29.205 ppb	17:59:14
2	Sn 189.927†	10.7	6.4	3.0306 µg/L	3.0306 ppb	17:59:14
2	Ti 334.940†	272.6	287.8	0.7664 µg/L	0.7664 ppb	17:58:53
2	Tl 190.801†	-23.9	1.0	1.2064 µg/L	1.2064 ppb	17:59:14
2	U 409.014†	129.4	-18.2	-1.7871 µg/L	-1.7871 ppb	17:58:53
2	V 292.402†	-169.8	-22.2	-0.2794 µg/L	-0.2794 ppb	17:58:53
2	Zn 213.857†	611.7	47.0	1.2554 µg/L	1.2554 ppb	17:59:14
3	Sc RADIAL	105898.5	105898.5	97.0 %		17:57:45
3	Al 396.153Radial†	-141.5	29.0	13.876 µg/L	13.876 ppb	17:57:45
3	Ca 317.933Radial†	418.6	48.1	15.591 µg/L	15.591 ppb	17:58:05
3	Fe 238.204 Radial†	34.6	4.4	33.286 µg/L	33.286 ppb	17:58:05
3	K 766.490 Radial†	205.4	-18.9	-10.729 µg/L	-10.729 ppb	17:57:45
3	Mg 279.077 IEC†	12.6	4.2	41.919 µg/L	41.919 ppb	17:58:05
3	Na 589.592 Radial†	323.8	98.6	34.149 µg/L	34.149 ppb	17:57:45
3	Sr 421.552†	154.4	4.3	0.0193 µg/L	0.0193 ppb	17:57:45
3	Sc 361.383	1650796.5	1650796.5	98.106 %		17:59:20
3	Y 371.029	908586.1	908586.1	97.059 %		17:59:20
3	Ag 328.068†	-556.0	-0.8	-0.0030 µg/L	-0.0030 ppb	17:59:25
3	As 188.979†	-3.5	0.3	0.4804 µg/L	0.4804 ppb	17:59:46
3	B 249.677†	176.9	21.7	1.1350 µg/L	1.1350 ppb	17:59:46
3	Ba 233.527†	-5.5	12.3	0.3174 µg/L	0.3174 ppb	17:59:46
3	Be 313.107†	-1893.8	15.4	0.0108 µg/L	0.0108 ppb	17:59:25
3	Cd 226.502†	-134.9	6.7	0.1926 µg/L	0.1926 ppb	17:59:46
3	Co 228.616†	12.6	-9.4	-0.4905 µg/L	-0.4905 ppb	17:59:46
3	Cr 267.716†	98.7	10.5	0.2711 µg/L	0.2711 ppb	17:59:46
3	Cu 324.752†	2626.7	54.4	0.3960 µg/L	0.3960 ppb	17:59:25
3	Mn 257.610†	-361.9	175.4	0.6386 µg/L	0.6386 ppb	17:59:46
3	Mo 202.031†	4.8	0.6	0.0684 µg/L	0.0684 ppb	17:59:46
3	Ni 231.604†	309.2	16.5	1.1453 µg/L	1.1453 ppb	17:59:46
3	P 214.914†	252.6	16.0	34.518 µg/L	34.518 ppb	17:59:46
3	Pb 220.353†	42.5	0.4	0.1389 µg/L	0.1389 ppb	17:59:46
3	S 181.975 Axial†	27.5	7.3	27.767 µg/L	27.767 ppb	17:59:46
3	Sb 206.836†	17.5	-3.2	-3.4466 µg/L	-3.4466 ppb	17:59:46
3	Se 196.026†	15.8	2.8	3.5003 µg/L	3.5003 ppb	17:59:46
3	SiO2†	1684.5	333.9	72.860 µg/L	72.860 ppb	17:59:25
3	Si 251.611†	698.7	348.2	28.462 µg/L	28.462 ppb	17:59:46
3	Sn 189.927†	6.9	2.5	1.1683 µg/L	1.1683 ppb	17:59:46
3	Ti 334.940†	215.4	227.7	0.6043 µg/L	0.6043 ppb	17:59:25
3	Tl 190.801†	-26.2	-1.1	-1.2784 µg/L	-1.2784 ppb	17:59:46
3	U 409.014†	159.6	11.9	1.1569 µg/L	1.1569 ppb	17:59:25
3	V 292.402†	-146.3	2.8	0.0397 µg/L	0.0397 ppb	17:59:25
3	Zn 213.857†	622.2	53.9	1.4394 µg/L	1.4394 ppb	17:59:46

Mean Data: 1202039765|951752|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1647070.5	97.884	%	0.3332				0.34%
Sc RADIAL	105699.5	96.8	%	0.23				0.23%
Y 371.029	907314.2	96.923	%	0.1242				0.13%
Ag 328.068†	12.5	0.1167	µg/L	0.11482	0.1167	ppb	0.11482	98.37%
Al 396.153Radial†	23.9	11.441	µg/L	6.9242	11.441	ppb	6.9242	60.52%
As 188.979†	0.4	0.8068	µg/L	3.17257	0.8068	ppb	3.17257	393.23%
B 249.677†	15.5	0.8026	µg/L	0.29232	0.8026	ppb	0.29232	36.42%
Ba 233.527†	6.9	0.1779	µg/L	0.15433	0.1779	ppb	0.15433	86.74%

Be 313.107†	-49.8	-0.0359 µg/L	0.04195	-0.0359 ppb	0.04195	116.69%
Ca 317.933Radial†	60.9	19.737 µg/L	3.6322	19.737 ppb	3.6322	18.40%
Cd 226.502†	-0.8	-0.0281 µg/L	0.19187	-0.0281 ppb	0.19187	682.17%
Co 228.616†	-6.1	-0.3196 µg/L	0.35461	-0.3196 ppb	0.35461	110.94%
Cr 267.716†	18.0	0.4665 µg/L	0.24607	0.4665 ppb	0.24607	52.75%
Cu 324.752†	21.4	0.1606 µg/L	0.24523	0.1606 ppb	0.24523	152.70%
Fe 238.204 Radial†	5.2	38.876 µg/L	4.8986	38.876 ppb	4.8986	12.60%
K 766.490 Radial†	31.1	17.656 µg/L	34.0964	17.656 ppb	34.0964	193.12%
Mg 279.077 IEC†	2.5	24.738 µg/L	15.3948	24.738 ppb	15.3948	62.23%
Mn 257.610†	176.7	0.6449 µg/L	0.01260	0.6449 ppb	0.01260	1.95%
Mo 202.031†	1.6	0.1832 µg/L	0.10032	0.1832 ppb	0.10032	54.76%
Na 589.592 Radial†	112.9	39.089 µg/L	4.2896	39.089 ppb	4.2896	10.97%
Ni 231.604†	14.0	0.9724 µg/L	0.30697	0.9724 ppb	0.30697	31.57%
P 214.914†	13.5	29.146 µg/L	9.7294	29.146 ppb	9.7294	33.38%
Pb 220.353†	-1.5	-0.4809 µg/L	1.28441	-0.4809 ppb	1.28441	267.08%
S 181.975 Axial†	3.4	13.046 µg/L	13.2145	13.046 ppb	13.2145	101.29%
Sb 206.836†	-2.4	-2.5911 µg/L	4.20087	-2.5911 ppb	4.20087	162.13%
Se 196.026†	-1.1	-1.2916 µg/L	6.33746	-1.2916 ppb	6.33746	490.69%
SiO2†	298.5	65.139 µg/L	7.9990	65.139 ppb	7.9990	12.28%
Si 251.611†	346.6	28.332 µg/L	0.9450	28.332 ppb	0.9450	3.34%
Sn 189.927†	4.3	2.0181 µg/L	0.94174	2.0181 ppb	0.94174	46.66%
Sr 421.552†	0.2	0.0010 µg/L	0.05590	0.0010 ppb	0.05590	>999.9%
Ti 334.940†	264.2	0.7032 µg/L	0.08676	0.7032 ppb	0.08676	12.34%
Tl 190.801†	0.3	0.3040 µg/L	1.37488	0.3040 ppb	1.37488	452.28%
U 409.014†	6.9	0.6665 µg/L	2.24893	0.6665 ppb	2.24893	337.41%
V 292.402†	4.8	0.0658 µg/L	0.35896	0.0658 ppb	0.35896	545.41%
Zn 213.857†	49.5	1.3226 µg/L	0.10158	1.3226 ppb	0.10158	7.68%

Sequence No.: 2

Sample ID: 1202039766|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 302

Date Collected: 2/26/2010 17:59:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039766|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	109628.2	109628.2	100 %		18:00:29
1	Al 396.153Radial†	204166.5	203545.1	97403 µg/L	97403 ppb	18:00:29
1	Ca 317.933Radial†	319399.3	317770.0	103060 µg/L	103060 ppb	18:00:29
1	Fe 238.204 Radial†	26722.7	26587.2	200150 µg/L	200150 ppb	18:00:34
1	K 766.490 Radial†	78585.4	78048.2	44294 µg/L	44294 ppb	18:00:29
1	Mg 279.077 IEC†	4026.1	4001.6	39749 µg/L	39749 ppb	18:00:34
1	Na 589.592 Radial†	29870.0	29518.2	10220 µg/L	10220 ppb	18:00:29
1	Sr 421.552†	540661.1	538397.5	2438.4 µg/L	2438.4 ppb	18:00:29
1	Sc 361.383	1668208.8	1668208.8	99.141 %		18:01:13
1	Y 371.029	936152.6	936152.6	100.00 %		18:01:13
1	Ag 328.068†	32859.8	33710.6	335.68 µg/L	335.68 ppb	18:01:13
1	As 188.979†	605.7	614.8	1139.1 µg/L	1139.1 ppb	18:01:33
1	B 249.677†	28611.3	28700.7	1421.9 µg/L	1421.9 ppb	18:01:13
1	Ba 233.527†	81627.8	82353.3	2124.8 µg/L	2124.8 ppb	18:01:13
1	Be 313.107†	1170520.2	1182613.1	844.14 µg/L	844.14 ppb	18:01:13
1	Cd 226.502†	21701.4	22033.8	623.77 µg/L	623.77 ppb	18:01:33
1	Co 228.616†	18496.1	18634.2	954.22 µg/L	954.22 ppb	18:01:33
1	Cr 267.716†	96029.8	96772.0	2503.2 µg/L	2503.2 ppb	18:01:13
1	Cu 324.752†	269017.5	268726.5	1964.0 µg/L	1964.0 ppb	18:01:13
1	Mn 257.610†	1555004.1	1569028.4	5730.7 µg/L	5730.7 ppb	18:01:13
1	Mo 202.031†	4598.4	4633.9	537.25 µg/L	537.25 ppb	18:01:33
1	Ni 231.604†	20740.5	20621.6	1431.4 µg/L	1431.4 ppb	18:01:33
1	P 214.914†	4255.1	4050.5	8406.3 µg/L	8406.3 ppb	18:01:33
1	Pb 220.353†	2854.4	2836.3	889.37 µg/L	889.37 ppb	18:01:33
1	S 181.975 Axial†	1108.1	1097.0	4163.6 µg/L	4163.6 ppb	18:01:33
1	Sb 206.836†	1096.9	1085.3	1136.7 µg/L	1136.7 ppb	18:01:33
1	Se 196.026†	2405.9	2413.4	3589.9 µg/L	3589.9 ppb	18:01:33
1	SiO2†	285269.0	286358.8	62491 µg/L	62491 ppb	18:01:13
1	Si 251.611†	353582.7	356283.9	29125 µg/L	29125 ppb	18:01:13
1	Sn 189.927†	2336.7	2352.4	1097.9 µg/L	1097.9 ppb	18:01:33
1	Ti 334.940†	2321324.0	2341455.3	6245.0 µg/L	6245.0 ppb	18:01:13
1	Tl 190.801†	1060.6	1095.4	1356.9 µg/L	1356.9 ppb	18:01:33
1	U 409.014†	-2608.8	-2782.2	-306.67 µg/L	-306.67 ppb	18:01:13
1	V 292.402†	102658.4	103700.3	1331.1 µg/L	1331.1 ppb	18:01:13
1	Zn 213.857†	236973.8	238447.8	6384.4 µg/L	6384.4 ppb	18:01:13
2	Sc RADIAL	110166.0	110166.0	101 %		18:00:40
2	Al 396.153Radial†	203816.3	202205.2	96762 µg/L	96762 ppb	18:00:40
2	Ca 317.933Radial†	318607.0	315431.5	102300 µg/L	102300 ppb	18:00:40
2	Fe 238.204 Radial†	26667.3	26402.3	198760 µg/L	198760 ppb	18:00:46
2	K 766.490 Radial†	78458.3	77540.1	44005 µg/L	44005 ppb	18:00:40
2	Mg 279.077 IEC†	3991.4	3947.7	39212 µg/L	39212 ppb	18:00:46
2	Na 589.592 Radial†	29917.3	29419.9	10186 µg/L	10186 ppb	18:00:40
2	Sr 421.552†	540800.2	535906.2	2427.1 µg/L	2427.1 ppb	18:00:40
2	Sc 361.383	1654734.4	1654734.4	98.340 %		18:01:44
2	Y 371.029	931502.3	931502.3	99.507 %		18:01:44
2	Ag 328.068†	32632.6	33749.4	335.82 µg/L	335.82 ppb	18:01:44
2	As 188.979†	610.4	624.5	1156.9 µg/L	1156.9 ppb	18:02:04
2	B 249.677†	28308.1	28627.4	1418.7 µg/L	1418.7 ppb	18:01:44
2	Ba 233.527†	80802.3	82184.3	2120.5 µg/L	2120.5 ppb	18:01:44
2	Be 313.107†	1158948.6	1180460.2	842.60 µg/L	842.60 ppb	18:01:44
2	Cd 226.502†	21772.2	22284.0	631.26 µg/L	631.26 ppb	18:02:04
2	Co 228.616†	18530.5	18821.1	963.93 µg/L	963.93 ppb	18:02:04
2	Cr 267.716†	95101.5	96616.9	2499.2 µg/L	2499.2 ppb	18:01:44
2	Cu 324.752†	267429.9	269321.7	1968.0 µg/L	1968.0 ppb	18:01:44
2	Mn 257.610†	1542759.4	1569349.0	5731.8 µg/L	5731.8 ppb	18:01:44
2	Mo 202.031†	4588.4	4661.5	540.36 µg/L	540.36 ppb	18:02:04
2	Ni 231.604†	20793.6	20846.0	1447.0 µg/L	1447.0 ppb	18:02:04
2	P 214.914†	4289.6	4120.5	8557.9 µg/L	8557.9 ppb	18:02:04
2	Pb 220.353†	2865.4	2871.0	900.31 µg/L	900.31 ppb	18:02:04

2	S 181.975 Axial†	1111.7	1109.8	4212.0 µg/L	4212.0 ppb	18:02:04
2	Sb 206.836†	1096.7	1094.2	1146.3 µg/L	1146.3 ppb	18:02:04
2	Se 196.026†	2402.7	2430.0	3606.1 µg/L	3606.1 ppb	18:02:04
2	SiO2†	282999.6	286394.1	62499 µg/L	62499 ppb	18:01:44
2	Si 251.611†	350725.0	356282.1	29125 µg/L	29125 ppb	18:01:44
2	Sn 189.927†	2355.6	2390.8	1116.0 µg/L	1116.0 ppb	18:02:04
2	Ti 334.940†	2301449.1	2340311.1	6241.9 µg/L	6241.9 ppb	18:01:44
2	Tl 190.801†	1054.0	1097.4	1359.1 µg/L	1359.1 ppb	18:02:04
2	U 409.014†	-2667.6	-2863.4	-314.39 µg/L	-314.39 ppb	18:01:44
2	V 292.402†	101523.9	103389.8	1327.1 µg/L	1327.1 ppb	18:01:44
2	Zn 213.857†	234599.2	237979.5	6371.9 µg/L	6371.9 ppb	18:01:44
3	Sc RADIAL	109756.6	109756.6	101 %		18:00:52
3	Al 396.153Radial†	203267.9	202413.1	96862 µg/L	96862 ppb	18:00:52
3	Ca 317.933Radial†	318571.2	316573.8	102670 µg/L	102670 ppb	18:00:52
3	Fe 238.204 Radial†	26752.8	26586.0	200140 µg/L	200140 ppb	18:00:57
3	K 766.490 Radial†	78628.5	77999.4	44266 µg/L	44266 ppb	18:00:52
3	Mg 279.077 IEC†	3984.7	3955.7	39291 µg/L	39291 ppb	18:00:57
3	Na 589.592 Radial†	29938.3	29551.3	10232 µg/L	10232 ppb	18:00:52
3	Sr 421.552†	541578.6	538679.9	2439.7 µg/L	2439.7 ppb	18:00:52
3	Sc 361.383	1661696.3	1661696.3	98.754 %		18:02:14
3	Y 371.029	935447.5	935447.5	99.928 %		18:02:14
3	Ag 328.068†	32928.2	33909.7	337.47 µg/L	337.47 ppb	18:02:14
3	As 188.979†	592.9	604.3	1119.7 µg/L	1119.7 ppb	18:02:35
3	B 249.677†	28548.3	28750.0	1424.5 µg/L	1424.5 ppb	18:02:14
3	Ba 233.527†	81448.7	82494.7	2128.5 µg/L	2128.5 ppb	18:02:14
3	Be 313.107†	1168849.1	1185548.1	846.23 µg/L	846.23 ppb	18:02:14
3	Cd 226.502†	21745.3	22163.9	627.58 µg/L	627.58 ppb	18:02:35
3	Co 228.616†	18479.6	18690.6	957.12 µg/L	957.12 ppb	18:02:35
3	Cr 267.716†	95961.6	97082.7	2511.3 µg/L	2511.3 ppb	18:02:14
3	Cu 324.752†	269071.5	269844.7	1972.0 µg/L	1972.0 ppb	18:02:14
3	Mn 257.610†	1551527.2	1571654.8	5740.3 µg/L	5740.3 ppb	18:02:14
3	Mo 202.031†	4605.1	4658.9	540.11 µg/L	540.11 ppb	18:02:35
3	Ni 231.604†	20730.2	20693.3	1436.4 µg/L	1436.4 ppb	18:02:35
3	P 214.914†	4256.3	4068.5	8444.2 µg/L	8444.2 ppb	18:02:35
3	Pb 220.353†	2846.1	2839.2	890.24 µg/L	890.24 ppb	18:02:35
3	S 181.975 Axial†	1121.4	1114.9	4231.4 µg/L	4231.4 ppb	18:02:35
3	Sb 206.836†	1096.1	1088.9	1140.5 µg/L	1140.5 ppb	18:02:35
3	Se 196.026†	2388.9	2405.7	3580.7 µg/L	3580.7 ppb	18:02:35
3	SiO2†	284812.6	287024.3	62636 µg/L	62636 ppb	18:02:14
3	Si 251.611†	352826.8	356916.2	29177 µg/L	29177 ppb	18:02:14
3	Sn 189.927†	2331.7	2356.5	1099.8 µg/L	1099.8 ppb	18:02:35
3	Ti 334.940†	2317867.2	2347131.4	6260.1 µg/L	6260.1 ppb	18:02:14
3	Tl 190.801†	1059.8	1098.7	1361.1 µg/L	1361.1 ppb	18:02:35
3	U 409.014†	-2627.7	-2811.7	-309.53 µg/L	-309.53 ppb	18:02:14
3	V 292.402†	102439.2	103884.2	1333.5 µg/L	1333.5 ppb	18:02:14
3	Zn 213.857†	236378.5	238781.7	6393.4 µg/L	6393.4 ppb	18:02:14

Mean Data: 1202039766|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1661546.5	98.745 %	0.4005			0.41%
Sc RADIAL	109850.3	101 %	0.3			0.26%
Y 371.029	934367.5	99.813 %	0.2677			0.27%
Ag 328.068†	33789.9	336.33 µg/L	0.997	336.33 ppb	0.997	0.30%
Al 396.153Radial†	202721.1	97009 µg/L	345.1	97009 ppb	345.1	0.36%
As 188.979†	614.5	1138.6 µg/L	18.64	1138.6 ppb	18.64	1.64%
B 249.677†	28692.7	1421.7 µg/L	2.91	1421.7 ppb	2.91	0.20%
Ba 233.527†	82344.1	2124.6 µg/L	4.01	2124.6 ppb	4.01	0.19%
Be 313.107†	1182873.8	844.32 µg/L	1.825	844.32 ppb	1.825	0.22%
Ca 317.933Radial†	316591.8	102680 µg/L	379.2	102680 ppb	379.2	0.37%
Cd 226.502†	22160.6	627.54 µg/L	3.749	627.54 ppb	3.749	0.60%
Co 228.616†	18715.3	958.42 µg/L	4.984	958.42 ppb	4.984	0.52%
Cr 267.716†	96823.9	2504.6 µg/L	6.14	2504.6 ppb	6.14	0.24%
Cu 324.752†	269297.6	1968.0 µg/L	4.01	1968.0 ppb	4.01	0.20%
Fe 238.204 Radial†	26525.2	199680 µg/L	800.6	199680 ppb	800.6	0.40%
K 766.490 Radial†	77862.5	44188 µg/L	159.1	44188 ppb	159.1	0.36%
Mg 279.077 IEC†	3968.3	39417 µg/L	289.9	39417 ppb	289.9	0.74%
Mn 257.610†	1570010.7	5734.3 µg/L	5.25	5734.3 ppb	5.25	0.09%
Mo 202.031†	4651.4	539.24 µg/L	1.726	539.24 ppb	1.726	0.32%
Na 589.592 Radial†	29496.5	10213 µg/L	23.7	10213 ppb	23.7	0.23%

Ni 231.604†	20720.3	1438.3 µg/L	7.93	1438.3 ppb	7.93	0.55%
P 214.914†	4079.8	8469.5 µg/L	78.88	8469.5 ppb	78.88	0.93%
Pb 220.353†	2848.8	893.31 µg/L	6.080	893.31 ppb	6.080	0.68%
S 181.975 Axial†	1107.2	4202.3 µg/L	34.92	4202.3 ppb	34.92	0.83%
Sb 206.836†	1089.5	1141.2 µg/L	4.80	1141.2 ppb	4.80	0.42%
Se 196.026†	2416.4	3592.2 µg/L	12.83	3592.2 ppb	12.83	0.36%
SiO2†	286592.4	62542 µg/L	81.7	62542 ppb	81.7	0.13%
Si 251.611†	356494.0	29142 µg/L	29.9	29142 ppb	29.9	0.10%
Sn 189.927†	2366.6	1104.6 µg/L	9.93	1104.6 ppb	9.93	0.90%
Sr 421.552†	537661.2	2435.0 µg/L	6.91	2435.0 ppb	6.91	0.28%
Ti 334.940†	2342965.9	6249.0 µg/L	9.75	6249.0 ppb	9.75	0.16%
Tl 190.801†	1097.2	1359.0 µg/L	2.07	1359.0 ppb	2.07	0.15%
U 409.014†	-2819.1	-310.20 µg/L	3.901	-310.20 ppb	3.901	1.26%
V 292.402†	103658.1	1330.6 µg/L	3.21	1330.6 ppb	3.21	0.24%
Zn 213.857†	238403.0	6383.2 µg/L	10.81	6383.2 ppb	10.81	0.17%

Sequence No.: 3  
 Sample ID: 246554001|951752|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 303  
 Date Collected: 2/26/2010 18:02:45  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246554001|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	106287.9	106287.9	97.3 %		18:03:17
1	Al 396.153Radial†	13193.3	13729.7	6570.7 µg/L	6570.7 ppb	18:03:17
1	Ca 317.933Radial†	9969.3	9858.9	3197.5 µg/L	3197.5 ppb	18:03:17
1	Fe 238.204 Radial†	10818.5	11083.7	83429 µg/L	83429 ppb	18:03:17
1	K 766.490 Radial†	4920.0	4824.1	2737.8 µg/L	2737.8 ppb	18:03:17
1	Mg 279.077 IEC†	194.1	190.6	1813.7 µg/L	1813.7 ppb	18:03:38
1	Na 589.592 Radial†	6688.3	6636.3	2297.8 µg/L	2297.8 ppb	18:03:17
1	Sr 421.552†	4007.0	3961.8	17.943 µg/L	17.943 ppb	18:03:17
1	Sc 361.383	1660630.9	1660630.9	98.690 %		18:04:43
1	Y 371.029	997018.3	997018.3	106.51 %		18:04:43
1	Ag 328.068†	-1551.7	-1006.4	1.9791 µg/L	1.9791 ppb	18:04:48
1	As 188.979†	-8.5	-4.7	-4.0356 µg/L	-4.0356 ppb	18:05:09
1	B 249.677†	757.4	608.8	-11.160 µg/L	-11.160 ppb	18:04:48
1	Ba 233.527†	6692.9	6799.6	175.29 µg/L	175.29 ppb	18:04:48
1	Be 313.107†	5773.6	7796.1	3.8808 µg/L	3.8808 ppb	18:04:48
1	Cd 226.502†	278.2	426.1	3.0748 µg/L	3.0748 ppb	18:05:09
1	Co 228.616†	297.0	278.7	5.1554 µg/L	5.1554 ppb	18:05:09
1	Cr 267.716†	2060.4	1997.5	51.671 µg/L	51.671 ppb	18:05:09
1	Cu 324.752†	3135.4	554.0	19.656 µg/L	19.656 ppb	18:04:48
1	Mn 257.610†	699114.0	708936.7	2590.0 µg/L	2590.0 ppb	18:04:43
1	Mo 202.031†	80.9	77.6	12.044 µg/L	12.044 ppb	18:05:09
1	Ni 231.604†	730.3	441.4	31.675 µg/L	31.675 ppb	18:05:09
1	P 214.914†	581.4	347.6	682.84 µg/L	682.84 ppb	18:05:09
1	Pb 220.353†	126.7	85.5	24.495 µg/L	24.495 ppb	18:05:09
1	S 181.975 Axial†	51.2	31.2	118.45 µg/L	118.45 ppb	18:05:09
1	Sb 206.836†	12.7	-8.1	-9.1501 µg/L	-9.1501 ppb	18:05:09
1	Se 196.026†	-45.3	-59.2	200.44 µg/L	200.44 ppb	18:05:09
1	SiO2†	121906.8	122141.5	26655 µg/L	26655 ppb	18:04:48
1	Si 251.611†	152150.0	153805.3	12573 µg/L	12573 ppb	18:04:43
1	Sn 189.927†	6.9	2.5	-4.3132 µg/L	-4.3132 ppb	18:05:09
1	Ti 334.940†	1650285.1	1672195.2	4460.9 µg/L	4460.9 ppb	18:04:43
1	Tl 190.801†	-73.5	-48.9	3.3199 µg/L	3.3199 ppb	18:05:09
1	U 409.014†	-3249.2	-3443.2	-349.11 µg/L	-349.11 ppb	18:04:43
1	V 292.402†	1997.1	2175.6	30.470 µg/L	30.470 ppb	18:04:48
1	Zn 213.857†	19348.5	19025.0	506.87 µg/L	506.87 ppb	18:04:48
2	Sc RADIAL	106488.9	106488.9	97.5 %		18:03:44
2	Al 396.153Radial†	13229.3	13741.1	6576.2 µg/L	6576.2 ppb	18:03:44
2	Ca 317.933Radial†	10033.8	9905.8	3212.7 µg/L	3212.7 ppb	18:03:44
2	Fe 238.204 Radial†	10921.4	11168.2	84065 µg/L	84065 ppb	18:03:44
2	K 766.490 Radial†	4981.0	4877.1	2767.8 µg/L	2767.8 ppb	18:03:44
2	Mg 279.077 IEC†	196.6	192.9	1835.7 µg/L	1835.7 ppb	18:04:04
2	Na 589.592 Radial†	6721.1	6656.9	2304.9 µg/L	2304.9 ppb	18:03:44
2	Sr 421.552†	3975.0	3921.2	17.759 µg/L	17.759 ppb	18:03:44
2	Sc 361.383	1657296.0	1657296.0	98.492 %		18:05:16
2	Y 371.029	997283.4	997283.4	106.53 %		18:05:16
2	Ag 328.068†	-1570.7	-1028.9	1.8569 µg/L	1.8569 ppb	18:05:22
2	As 188.979†	-14.2	-10.6	-14.878 µg/L	-14.878 ppb	18:05:42
2	B 249.677†	753.4	606.3	-11.622 µg/L	-11.622 ppb	18:05:22
2	Ba 233.527†	6655.8	6775.7	174.68 µg/L	174.68 ppb	18:05:22
2	Be 313.107†	5791.9	7826.4	3.9011 µg/L	3.9011 ppb	18:05:22
2	Cd 226.502†	280.8	429.3	3.0965 µg/L	3.0965 ppb	18:05:42
2	Co 228.616†	297.0	279.3	5.1785 µg/L	5.1785 ppb	18:05:42
2	Cr 267.716†	2070.1	2011.7	52.036 µg/L	52.036 ppb	18:05:42
2	Cu 324.752†	3127.9	552.7	19.766 µg/L	19.766 ppb	18:05:22
2	Mn 257.610†	699004.4	710250.8	2594.8 µg/L	2594.8 ppb	18:05:16
2	Mo 202.031†	78.6	75.4	11.816 µg/L	11.816 ppb	18:05:42
2	Ni 231.604†	726.6	439.1	31.525 µg/L	31.525 ppb	18:05:42
2	P 214.914†	584.3	351.8	691.29 µg/L	691.29 ppb	18:05:42
2	Pb 220.353†	130.9	90.0	25.887 µg/L	25.887 ppb	18:05:42

2	S 181.975 Axial†	60.0	40.3	152.82 µg/L	152.82 ppb	18:05:42
2	Sb 206.836†	14.3	-6.5	-7.3998 µg/L	-7.3998 ppb	18:05:42
2	Se 196.026†	-44.0	-58.0	204.02 µg/L	204.02 ppb	18:05:42
2	SiO2†	120764.9	121230.7	26456 µg/L	26456 ppb	18:05:22
2	Si 251.611†	151659.5	153617.5	12558 µg/L	12558 ppb	18:05:16
2	Sn 189.927†	7.2	2.7	-4.2353 µg/L	-4.2353 ppb	18:05:42
2	Ti 334.940†	1648349.8	1673595.2	4464.7 µg/L	4464.7 ppb	18:05:16
2	Tl 190.801†	-75.4	-50.9	1.0779 µg/L	1.0779 ppb	18:05:42
2	U 409.014†	-3229.7	-3430.0	-347.91 µg/L	-347.91 ppb	18:05:16
2	V 292.402†	1946.9	2128.6	29.898 µg/L	29.898 ppb	18:05:22
2	Zn 213.857†	19238.6	18952.9	504.90 µg/L	504.90 ppb	18:05:22
3	Sc RADIAL	106109.8	106109.8	97.2 %		18:04:10
3	Al 396.153Radial†	13128.9	13686.2	6549.9 µg/L	6549.9 ppb	18:04:10
3	Ca 317.933Radial†	9942.2	9848.2	3194.0 µg/L	3194.0 ppb	18:04:10
3	Fe 238.204 Radial†	10819.4	11103.2	83576 µg/L	83576 ppb	18:04:10
3	K 766.490 Radial†	4974.3	4888.4	2774.3 µg/L	2774.3 ppb	18:04:10
3	Mg 279.077 IEC†	191.5	188.3	1790.9 µg/L	1790.9 ppb	18:04:30
3	Na 589.592 Radial†	6756.5	6718.1	2326.1 µg/L	2326.1 ppb	18:04:10
3	Sr 421.552†	3961.4	3921.8	17.762 µg/L	17.762 ppb	18:04:10
3	Sc 361.383	1657910.8	1657910.8	98.529 %		18:05:50
3	Y 371.029	990317.9	990317.9	105.79 %		18:05:50
3	Ag 328.068†	-1488.8	-945.1	2.5363 µg/L	2.5363 ppb	18:05:55
3	As 188.979†	-11.0	-7.3	-8.8589 µg/L	-8.8589 ppb	18:06:16
3	B 249.677†	734.2	586.5	-12.422 µg/L	-12.422 ppb	18:05:55
3	Ba 233.527†	6501.7	6616.7	170.58 µg/L	170.58 ppb	18:05:55
3	Be 313.107†	5737.8	7769.3	3.8941 µg/L	3.8941 ppb	18:05:55
3	Cd 226.502†	238.0	385.8	1.8774 µg/L	1.8774 ppb	18:06:16
3	Co 228.616†	274.9	256.7	4.1940 µg/L	4.1940 ppb	18:06:16
3	Cr 267.716†	1921.5	1860.0	48.114 µg/L	48.114 ppb	18:06:16
3	Cu 324.752†	3125.2	548.9	19.647 µg/L	19.647 ppb	18:05:55
3	Mn 257.610†	686611.1	697409.3	2548.0 µg/L	2548.0 ppb	18:05:50
3	Mo 202.031†	74.4	71.2	11.311 µg/L	11.311 ppb	18:06:16
3	Ni 231.604†	705.4	417.3	30.006 µg/L	30.006 ppb	18:06:16
3	P 214.914†	554.5	321.3	625.91 µg/L	625.91 ppb	18:06:16
3	Pb 220.353†	121.8	80.8	22.989 µg/L	22.989 ppb	18:06:16
3	S 181.975 Axial†	53.3	33.4	126.66 µg/L	126.66 ppb	18:06:16
3	Sb 206.836†	17.5	-3.3	-3.9593 µg/L	-3.9593 ppb	18:06:16
3	Se 196.026†	-46.0	-60.0	199.88 µg/L	199.88 ppb	18:06:16
3	SiO2†	118528.5	118915.4	25951 µg/L	25951 ppb	18:05:55
3	Si 251.611†	150332.6	152213.7	12443 µg/L	12443 ppb	18:05:50
3	Sn 189.927†	7.4	3.0	-4.0835 µg/L	-4.0835 ppb	18:06:16
3	Ti 334.940†	1616088.5	1640231.5	4375.7 µg/L	4375.7 ppb	18:05:50
3	Tl 190.801†	-71.0	-46.4	5.2785 µg/L	5.2785 ppb	18:06:16
3	U 409.014†	-3235.8	-3435.0	-348.33 µg/L	-348.33 ppb	18:05:50
3	V 292.402†	1883.1	2063.2	29.038 µg/L	29.038 ppb	18:05:55
3	Zn 213.857†	18801.5	18502.0	492.82 µg/L	492.82 ppb	18:05:55

Mean Data: 246554001|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1658612.5	98.570 %	0.1055			0.11%
Sc RADIAL	106295.5	97.3 %	0.17			0.18%
Y 371.029	994873.2	106.28 %	0.422			0.40%
Ag 328.068†	-993.5	2.1241 µg/L	0.36215	2.1241 ppb	0.36215	17.05%
Al 396.153Radial†	13719.0	6565.6 µg/L	13.87	6565.6 ppb	13.87	0.21%
As 188.979†	-7.6	-9.2574 µg/L	5.43202	-9.2574 ppb	5.43202	58.68%
B 249.677†	600.5	-11.735 µg/L	0.6388	-11.735 ppb	0.6388	5.44%
Ba 233.527†	6730.7	173.51 µg/L	2.564	173.51 ppb	2.564	1.48%
Be 313.107†	7797.3	3.8920 µg/L	0.01032	3.8920 ppb	0.01032	0.27%
Ca 317.933Radial†	9871.0	3201.4 µg/L	9.92	3201.4 ppb	9.92	0.31%
Cd 226.502†	413.7	2.6829 µg/L	0.69767	2.6829 ppb	0.69767	26.00%
Co 228.616†	271.5	4.8426 µg/L	0.56181	4.8426 ppb	0.56181	11.60%
Cr 267.716†	1956.4	50.607 µg/L	2.1666	50.607 ppb	2.1666	4.28%
Cu 324.752†	551.8	19.689 µg/L	0.0665	19.689 ppb	0.0665	0.34%
Fe 238.204 Radial†	11118.4	83690 µg/L	332.9	83690 ppb	332.9	0.40%
K 766.490 Radial†	4863.2	2760.0 µg/L	19.49	2760.0 ppb	19.49	0.71%
Mg 279.077 IEC†	190.6	1813.4 µg/L	22.40	1813.4 ppb	22.40	1.24%
Mn 257.610†	705532.3	2577.6 µg/L	25.77	2577.6 ppb	25.77	1.00%
Mo 202.031†	74.7	11.724 µg/L	0.3748	11.724 ppb	0.3748	3.20%
Na 589.592 Radial†	6670.4	2309.6 µg/L	14.72	2309.6 ppb	14.72	0.64%

Ni 231.604†	432.6	31.069 µg/L	0.9230	31.069 ppb	0.9230	2.97%
P 214.914†	340.2	666.68 µg/L	35.557	666.68 ppb	35.557	5.33%
Pb 220.353†	85.5	24.457 µg/L	1.4494	24.457 ppb	1.4494	5.93%
S 181.975 Axial†	34.9	132.64 µg/L	17.946	132.64 ppb	17.946	13.53%
Sb 206.836†	-6.0	-6.8364 µg/L	2.64089	-6.8364 ppb	2.64089	38.63%
Se 196.026†	-59.1	201.45 µg/L	2.244	201.45 ppb	2.244	1.11%
SiO2†	120762.5	26354 µg/L	363.0	26354 ppb	363.0	1.38%
Si 251.611†	153212.2	12525 µg/L	71.1	12525 ppb	71.1	0.57%
Sn 189.927†	2.7	-4.2107 µg/L	0.11682	-4.2107 ppb	0.11682	2.77%
Sr 421.552†	3934.9	17.821 µg/L	0.1055	17.821 ppb	0.1055	0.59%
Ti 334.940†	1662007.3	4433.8 µg/L	50.34	4433.8 ppb	50.34	1.14%
Tl 190.801†	-48.7	3.2255 µg/L	2.10191	3.2255 ppb	2.10191	65.17%
U 409.014†	-3436.1	-348.45 µg/L	0.608	-348.45 ppb	0.608	0.17%
V 292.402†	2122.5	29.802 µg/L	0.7208	29.802 ppb	0.7208	2.42%
Zn 213.857†	18826.6	501.53 µg/L	7.607	501.53 ppb	7.607	1.52%



Sequence No.: 4

Sample ID: 1202039767|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 304

Date Collected: 2/26/2010 18:06:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039767|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	106099.7	106099.7	97.2 %		18:06:59
1	Al 396.153Radial†	10522.3	11004.8	5266.6 µg/L	5266.6 ppb	18:06:59
1	Ca 317.933Radial†	7670.5	7511.1	2436.0 µg/L	2436.0 ppb	18:06:59
1	Fe 238.204 Radial†	8318.8	8530.6	64212 µg/L	64212 ppb	18:06:59
1	K 766.490 Radial†	4034.9	3922.1	2225.9 µg/L	2225.9 ppb	18:06:59
1	Mg 279.077 IEC†	154.8	150.5	1434.0 µg/L	1434.0 ppb	18:07:19
1	Na 589.592 Radial†	5338.8	5259.6	1821.1 µg/L	1821.1 ppb	18:06:59
1	Sr 421.552†	4541.1	4518.9	20.466 µg/L	20.466 ppb	18:06:59
1	Sc 361.383	1666765.1	1666765.1	99.055 %		18:08:23
1	Y 371.029	981926.9	981926.9	104.89 %		18:08:23
1	Ag 328.068†	-1364.0	-811.1	1.2027 µg/L	1.2027 ppb	18:08:29
1	As 188.979†	-9.7	-5.9	-7.3457 µg/L	-7.3457 ppb	18:08:49
1	B 249.677†	613.8	461.0	-9.0018 µg/L	-9.0018 ppb	18:08:29
1	Ba 233.527†	13102.1	13245.1	341.40 µg/L	341.40 ppb	18:08:29
1	Be 313.107†	4301.0	6287.9	3.1676 µg/L	3.1676 ppb	18:08:29
1	Cd 226.502†	176.9	322.9	2.2152 µg/L	2.2152 ppb	18:08:49
1	Co 228.616†	235.5	215.5	3.8857 µg/L	3.8857 ppb	18:08:49
1	Cr 267.716†	1269.2	1191.2	30.816 µg/L	30.816 ppb	18:08:49
1	Cu 324.752†	3148.9	555.9	16.057 µg/L	16.057 ppb	18:08:29
1	Mn 257.610†	601988.7	608277.4	2221.8 µg/L	2221.8 ppb	18:08:23
1	Mo 202.031†	61.1	57.3	8.9948 µg/L	8.9948 ppb	18:08:49
1	Ni 231.604†	592.6	299.6	21.594 µg/L	21.594 ppb	18:08:49
1	P 214.914†	511.8	275.2	541.97 µg/L	541.97 ppb	18:08:49
1	Pb 220.353†	119.4	77.7	22.612 µg/L	22.612 ppb	18:08:49
1	S 181.975 Axial†	65.9	45.9	174.08 µg/L	174.08 ppb	18:08:49
1	Sb 206.836†	13.1	-7.8	-8.6078 µg/L	-8.6078 ppb	18:08:49
1	Se 196.026†	-33.0	-46.6	152.98 µg/L	152.98 ppb	18:08:49
1	SiO2†	104789.0	104405.8	22784 µg/L	22784 ppb	18:08:29
1	Si 251.611†	129414.4	130285.3	10650 µg/L	10650 ppb	18:08:29
1	Sn 189.927†	15.2	10.8	0.8614 µg/L	0.8614 ppb	18:08:49
1	Ti 334.940†	1299301.1	1311707.8	3499.3 µg/L	3499.3 ppb	18:08:23
1	Tl 190.801†	-65.5	-40.6	0.6528 µg/L	0.6528 ppb	18:08:49
1	U 409.014†	-2581.4	-2756.9	-279.16 µg/L	-279.16 ppb	18:08:23
1	V 292.402†	1573.0	1740.0	24.248 µg/L	24.248 ppb	18:08:29
1	Zn 213.857†	15062.7	14626.2	389.68 µg/L	389.68 ppb	18:08:29
2	Sc RADIAL	106782.3	106782.3	97.8 %		18:07:24
2	Al 396.153Radial†	10639.1	11054.9	5290.6 µg/L	5290.6 ppb	18:07:24
2	Ca 317.933Radial†	7741.8	7533.6	2443.3 µg/L	2443.3 ppb	18:07:24
2	Fe 238.204 Radial†	8356.1	8514.1	64087 µg/L	64087 ppb	18:07:24
2	K 766.490 Radial†	4068.5	3929.9	2230.3 µg/L	2230.3 ppb	18:07:24
2	Mg 279.077 IEC†	155.2	149.9	1428.2 µg/L	1428.2 ppb	18:07:45
2	Na 589.592 Radial†	5342.0	5227.7	1810.0 µg/L	1810.0 ppb	18:07:24
2	Sr 421.552†	4607.6	4557.0	20.639 µg/L	20.639 ppb	18:07:24
2	Sc 361.383	1670109.4	1670109.4	99.254 %		18:08:57
2	Y 371.029	988091.8	988091.8	105.55 %		18:08:57
2	Ag 328.068†	-1378.5	-822.9	1.0753 µg/L	1.0753 ppb	18:09:02
2	As 188.979†	-17.7	-13.9	-22.121 µg/L	-22.121 ppb	18:09:23
2	B 249.677†	607.2	453.2	-9.3559 µg/L	-9.3559 ppb	18:09:02
2	Ba 233.527†	12931.9	13047.0	336.29 µg/L	336.29 ppb	18:09:02
2	Be 313.107†	4135.9	6112.8	3.0509 µg/L	3.0509 ppb	18:09:02
2	Cd 226.502†	193.4	339.1	2.7054 µg/L	2.7054 ppb	18:09:23
2	Co 228.616†	244.0	223.6	4.3485 µg/L	4.3485 ppb	18:09:23
2	Cr 267.716†	1257.3	1176.6	30.439 µg/L	30.439 ppb	18:09:23
2	Cu 324.752†	3136.6	537.2	15.899 µg/L	15.899 ppb	18:09:02
2	Mn 257.610†	600051.7	605108.9	2210.3 µg/L	2210.3 ppb	18:08:57
2	Mo 202.031†	64.3	60.4	9.3418 µg/L	9.3418 ppb	18:09:23
2	Ni 231.604†	601.8	307.7	22.154 µg/L	22.154 ppb	18:09:23
2	P 214.914†	501.2	263.4	516.70 µg/L	516.70 ppb	18:09:23
2	Pb 220.353†	117.5	75.5	21.923 µg/L	21.923 ppb	18:09:23

2	S 181.975 Axial†	61.0	40.8	154.74 µg/L	154.74 ppb	18:09:23
2	Sb 206.836†	9.6	-11.4	-12.405 µg/L	-12.405 ppb	18:09:23
2	Se 196.026†	-31.4	-45.0	154.54 µg/L	154.54 ppb	18:09:23
2	SiO2†	103410.1	102804.7	22435 µg/L	22435 ppb	18:09:02
2	Si 251.611†	127804.7	128401.9	10496 µg/L	10496 ppb	18:09:02
2	Sn 189.927†	1.0	-3.5	-5.8575 µg/L	-5.8575 ppb	18:09:23
2	Ti 334.940†	1293573.8	1303310.9	3476.9 µg/L	3476.9 ppb	18:08:57
2	Tl 190.801†	-61.2	-36.1	5.5532 µg/L	5.5532 ppb	18:09:23
2	U 409.014†	-2592.3	-2762.6	-279.70 µg/L	-279.70 ppb	18:08:57
2	V 292.402†	1512.3	1675.6	23.429 µg/L	23.429 ppb	18:09:02
2	Zn 213.857†	14789.0	14319.9	381.46 µg/L	381.46 ppb	18:09:02
3	Sc RADIAL	105458.8	105458.8	96.6 %		18:07:50
3	Al 396.153Radial†	10475.0	11021.5	5274.6 µg/L	5274.6 ppb	18:07:50
3	Ca 317.933Radial†	7636.0	7523.4	2440.0 µg/L	2440.0 ppb	18:07:50
3	Fe 238.204 Radial†	8232.6	8493.4	63931 µg/L	63931 ppb	18:07:50
3	K 766.490 Radial†	4028.5	3940.7	2236.4 µg/L	2236.4 ppb	18:07:50
3	Mg 279.077 IEC†	151.5	148.1	1410.5 µg/L	1410.5 ppb	18:08:11
3	Na 589.592 Radial†	5293.7	5246.3	1816.5 µg/L	1816.5 ppb	18:07:50
3	Sr 421.552†	4540.3	4546.4	20.590 µg/L	20.590 ppb	18:07:50
3	Sc 361.383	1658298.5	1658298.5	98.552 %		18:09:30
3	Y 371.029	975136.9	975136.9	104.17 %		18:09:30
3	Ag 328.068†	-1296.3	-749.5	1.7088 µg/L	1.7088 ppb	18:09:36
3	As 188.979†	-9.2	-5.5	-6.6062 µg/L	-6.6062 ppb	18:09:56
3	B 249.677†	610.8	461.2	-8.8535 µg/L	-8.8535 ppb	18:09:36
3	Ba 233.527†	12736.9	12942.0	333.59 µg/L	333.59 ppb	18:09:36
3	Be 313.107†	4032.2	6037.3	3.0113 µg/L	3.0113 ppb	18:09:36
3	Cd 226.502†	161.1	307.7	1.8009 µg/L	1.8009 ppb	18:09:56
3	Co 228.616†	212.7	193.5	2.8692 µg/L	2.8692 ppb	18:09:56
3	Cr 267.716†	1166.8	1093.8	28.296 µg/L	28.296 ppb	18:09:56
3	Cu 324.752†	3210.8	634.9	16.571 µg/L	16.571 ppb	18:09:36
3	Mn 257.610†	590509.6	599732.5	2190.6 µg/L	2190.6 ppb	18:09:30
3	Mo 202.031†	58.1	54.6	8.6692 µg/L	8.6692 ppb	18:09:56
3	Ni 231.604†	576.6	286.4	20.678 µg/L	20.678 ppb	18:09:56
3	P 214.914†	484.2	249.8	487.47 µg/L	487.47 ppb	18:09:56
3	Pb 220.353†	104.8	63.5	18.143 µg/L	18.143 ppb	18:09:56
3	S 181.975 Axial†	59.2	39.3	149.29 µg/L	149.29 ppb	18:09:56
3	Sb 206.836†	14.5	-6.3	-7.0147 µg/L	-7.0147 ppb	18:09:56
3	Se 196.026†	-24.2	-37.9	162.77 µg/L	162.77 ppb	18:09:56
3	SiO2†	102609.6	102734.5	22419 µg/L	22419 ppb	18:09:36
3	Si 251.611†	126757.0	128255.9	10484 µg/L	10484 ppb	18:09:36
3	Sn 189.927†	11.1	6.7	-1.0614 µg/L	-1.0614 ppb	18:09:56
3	Ti 334.940†	1270414.4	1289093.6	3438.9 µg/L	3438.9 ppb	18:09:30
3	Tl 190.801†	-60.6	-35.9	5.3961 µg/L	5.3961 ppb	18:09:56
3	U 409.014†	-2545.3	-2733.5	-276.83 µg/L	-276.83 ppb	18:09:30
3	V 292.402†	1469.4	1642.9	23.002 µg/L	23.002 ppb	18:09:36
3	Zn 213.857†	14691.7	14327.4	381.67 µg/L	381.67 ppb	18:09:36

Mean Data: 1202039767|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1665057.7	98.953 %	0.3618			0.37%
Sc RADIAL	106113.6	97.2 %	0.61			0.62%
Y 371.029	981718.6	104.87 %	0.692			0.66%
Ag 328.068†	-794.5	1.3289 µg/L	0.33510	1.3289 ppb	0.33510	25.22%
Al 396.153Radial†	11027.1	5277.3 µg/L	12.21	5277.3 ppb	12.21	0.23%
As 188.979†	-8.5	-12.024 µg/L	8.7519	-12.024 ppb	8.7519	72.78%
B 249.677†	458.5	-9.0704 µg/L	0.25810	-9.0704 ppb	0.25810	2.85%
Ba 233.527†	13078.0	337.09 µg/L	3.968	337.09 ppb	3.968	1.18%
Be 313.107†	6146.0	3.0766 µg/L	0.08129	3.0766 ppb	0.08129	2.64%
Ca 317.933Radial†	7522.7	2439.8 µg/L	3.66	2439.8 ppb	3.66	0.15%
Cd 226.502†	323.2	2.2405 µg/L	0.45280	2.2405 ppb	0.45280	20.21%
Co 228.616†	210.9	3.7011 µg/L	0.75677	3.7011 ppb	0.75677	20.45%
Cr 267.716†	1153.8	29.850 µg/L	1.3589	29.850 ppb	1.3589	4.55%
Cu 324.752†	576.0	16.175 µg/L	0.3512	16.175 ppb	0.3512	2.17%
Fe 238.204 Radial†	8512.7	64077 µg/L	140.4	64077 ppb	140.4	0.22%
K 766.490 Radial†	3930.9	2230.9 µg/L	5.28	2230.9 ppb	5.28	0.24%
Mg 279.077 IEC†	149.5	1424.2 µg/L	12.24	1424.2 ppb	12.24	0.86%
Mn 257.610†	604372.9	2207.6 µg/L	15.76	2207.6 ppb	15.76	0.71%
Mo 202.031†	57.5	9.0019 µg/L	0.33636	9.0019 ppb	0.33636	3.74%
Na 589.592 Radial†	5244.5	1815.9 µg/L	5.55	1815.9 ppb	5.55	0.31%

Ni 231.604†	297.9	21.475 µg/L	0.7451	21.475 ppb	0.7451	3.47%
P 214.914†	262.8	515.38 µg/L	27.271	515.38 ppb	27.271	5.29%
Pb 220.353†	72.2	20.893 µg/L	2.4060	20.893 ppb	2.4060	11.52%
S 181.975 Axial†	42.0	159.37 µg/L	13.029	159.37 ppb	13.029	8.18%
Sb 206.836†	-8.5	-9.3426 µg/L	2.76942	-9.3426 ppb	2.76942	29.64%
Se 196.026†	-43.1	156.76 µg/L	5.262	156.76 ppb	5.262	3.36%
SiO2†	103315.0	22546 µg/L	206.3	22546 ppb	206.3	0.91%
Si 251.611†	128981.0	10544 µg/L	92.5	10544 ppb	92.5	0.88%
Sn 189.927†	4.6	-2.0192 µg/L	3.46031	-2.0192 ppb	3.46031	171.37%
Sr 421.552†	4540.8	20.565 µg/L	0.0892	20.565 ppb	0.0892	0.43%
Ti 334.940†	1301370.8	3471.7 µg/L	30.50	3471.7 ppb	30.50	0.88%
Tl 190.801†	-37.5	3.8674 µg/L	2.78499	3.8674 ppb	2.78499	72.01%
U 409.014†	-2751.0	-278.56 µg/L	1.527	-278.56 ppb	1.527	0.55%
V 292.402†	1686.2	23.560 µg/L	0.6332	23.560 ppb	0.6332	2.69%
Zn 213.857†	14424.5	384.27 µg/L	4.687	384.27 ppb	4.687	1.22%

Sequence No.: 5  
 Sample ID: 1202039768|951752|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 305  
 Date Collected: 2/26/2010 18:10:07  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039768|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	107314.3	107314.3	98.3 %			18:10:39
1	Al 396.153Radial†	37669.3	38506.3	18418 µg/L		18418 ppb	18:10:39
1	Ca 317.933Radial†	28192.9	28304.9	9179.9 µg/L		9179.9 ppb	18:10:39
1	Fe 238.204 Radial†	11427.0	11596.5	87300 µg/L		87300 ppb	18:11:00
1	K 766.490 Radial†	19337.4	19446.5	11036 µg/L		11036 ppb	18:10:39
1	Mg 279.077 IEC†	704.4	708.0	6984.7 µg/L		6984.7 ppb	18:11:00
1	Na 589.592 Radial†	30621.5	30924.5	10707 µg/L		10707 ppb	18:10:39
1	Sr 421.552†	116014.9	117899.2	533.96 µg/L		533.96 ppb	18:10:39
1	Sc 361.383	1675191.5	1675191.5	99.556 %			18:12:04
1	Y 371.029	1013636.9	1013636.9	108.28 %			18:12:04
1	Ag 328.068†	54880.0	55690.9	512.28 µg/L		512.28 ppb	18:12:10
1	As 188.979†	275.2	280.3	520.49 µg/L		520.49 ppb	18:12:30
1	B 249.677†	10304.3	10191.6	495.92 µg/L		495.92 ppb	18:12:10
1	Ba 233.527†	32854.7	33019.3	851.95 µg/L		851.95 ppb	18:12:10
1	Be 313.107†	743242.2	748506.1	533.91 µg/L		533.91 ppb	18:12:04
1	Cd 226.502†	18032.5	18257.3	525.10 µg/L		525.10 ppb	18:12:10
1	Co 228.616†	9964.2	9986.4	508.34 µg/L		508.34 ppb	18:12:30
1	Cr 267.716†	21518.7	21524.6	556.94 µg/L		556.94 ppb	18:12:10
1	Cu 324.752†	77432.9	75155.5	555.16 µg/L		555.16 ppb	18:12:10
1	Mn 257.610†	984452.0	989391.2	3612.6 µg/L		3612.6 ppb	18:12:04
1	Mo 202.031†	4569.4	4585.5	527.43 µg/L		527.43 ppb	18:12:30
1	Ni 231.604†	8331.9	8070.4	560.16 µg/L		560.16 ppb	18:12:30
1	P 214.914†	951.0	713.7	1423.3 µg/L		1423.3 ppb	18:12:30
1	Pb 220.353†	1844.1	1809.4	567.81 µg/L		567.81 ppb	18:12:30
1	S 181.975 Axial†	1469.1	1455.0	5522.0 µg/L		5522.0 ppb	18:12:30
1	Sb 206.836†	473.1	454.2	486.73 µg/L		486.73 ppb	18:12:30
1	Se 196.026†	390.2	378.7	747.13 µg/L		747.13 ppb	18:12:30
1	SiO2†	171302.5	170684.0	37248 µg/L		37248 ppb	18:12:10
1	Si 251.611†	211653.8	212234.7	17349 µg/L		17349 ppb	18:12:10
1	Sn 189.927†	1116.7	1117.2	520.03 µg/L		520.03 ppb	18:12:30
1	Ti 334.940†	1832338.9	1840527.4	4909.7 µg/L		4909.7 ppb	18:12:04
1	Tl 190.801†	373.5	400.8	533.31 µg/L		533.31 ppb	18:12:30
1	U 409.014†	2274.6	2133.9	196.35 µg/L		196.35 ppb	18:12:10
1	V 292.402†	41645.9	41983.8	540.80 µg/L		540.80 ppb	18:12:10
1	Zn 213.857†	38873.7	38467.0	1025.5 µg/L		1025.5 ppb	18:12:10
2	Sc RADIAL	107740.2	107740.2	98.7 %			18:11:05
2	Al 396.153Radial†	37719.1	38405.3	18370 µg/L		18370 ppb	18:11:05
2	Ca 317.933Radial†	28248.5	28247.9	9161.5 µg/L		9161.5 ppb	18:11:05
2	Fe 238.204 Radial†	11386.3	11509.4	86644 µg/L		86644 ppb	18:11:26
2	K 766.490 Radial†	19381.8	19413.7	11018 µg/L		11018 ppb	18:11:05
2	Mg 279.077 IEC†	707.1	707.9	6983.7 µg/L		6983.7 ppb	18:11:26
2	Na 589.592 Radial†	30857.0	31040.0	10747 µg/L		10747 ppb	18:11:05
2	Sr 421.552†	116488.1	117912.1	534.02 µg/L		534.02 ppb	18:11:05
2	Sc 361.383	1673890.2	1673890.2	99.478 %			18:12:38
2	Y 371.029	1010878.8	1010878.8	107.99 %			18:12:38
2	Ag 328.068†	54860.7	55714.3	512.41 µg/L		512.41 ppb	18:12:43
2	As 188.979†	270.3	275.6	511.73 µg/L		511.73 ppb	18:13:04
2	B 249.677†	10375.7	10271.5	500.50 µg/L		500.50 ppb	18:12:43
2	Ba 233.527†	32850.9	33041.1	852.52 µg/L		852.52 ppb	18:12:43
2	Be 313.107†	741573.0	747408.6	533.13 µg/L		533.13 ppb	18:12:38
2	Cd 226.502†	18041.0	18279.8	525.84 µg/L		525.84 ppb	18:12:43
2	Co 228.616†	9991.8	10022.0	510.19 µg/L		510.19 ppb	18:13:04
2	Cr 267.716†	21514.1	21536.7	557.25 µg/L		557.25 ppb	18:12:43
2	Cu 324.752†	77427.9	75210.9	555.43 µg/L		555.43 ppb	18:12:43
2	Mn 257.610†	984387.7	990095.3	3615.1 µg/L		3615.1 ppb	18:12:38
2	Mo 202.031†	4562.9	4582.5	527.06 µg/L		527.06 ppb	18:13:04
2	Ni 231.604†	8332.0	8077.1	560.61 µg/L		560.61 ppb	18:13:04
2	P 214.914†	960.8	724.4	1446.6 µg/L		1446.6 ppb	18:13:04
2	Pb 220.353†	1850.5	1817.3	570.30 µg/L		570.30 ppb	18:13:04

2	S 181.975 Axial†	1480.9	1468.0	5571.6 µg/L	5571.6 ppb	18:13:04
2	Sb 206.836†	466.7	448.1	480.21 µg/L	480.21 ppb	18:13:04
2	Se 196.026†	394.8	383.5	750.96 µg/L	750.96 ppb	18:13:04
2	SiO2†	171273.6	170788.8	37271 µg/L	37271 ppb	18:12:43
2	Si 251.611†	211532.2	212277.7	17353 µg/L	17353 ppb	18:12:43
2	Sn 189.927†	1122.5	1123.9	523.22 µg/L	523.22 ppb	18:13:04
2	Ti 334.940†	1830300.7	1839909.3	4908.0 µg/L	4908.0 ppb	18:12:38
2	Tl 190.801†	368.7	396.3	527.97 µg/L	527.97 ppb	18:13:04
2	U 409.014†	2345.2	2206.6	203.57 µg/L	203.57 ppb	18:12:43
2	V 292.402†	41686.4	42057.0	541.71 µg/L	541.71 ppb	18:12:43
2	Zn 213.857†	38892.2	38516.0	1026.8 µg/L	1026.8 ppb	18:12:43
3	Sc RADIAL	108211.8	108211.8	99.1 %		18:11:31
3	Al 396.153Radial†	37743.6	38263.4	18302 µg/L	18302 ppb	18:11:31
3	Ca 317.933Radial†	28324.7	28200.0	9145.9 µg/L	9145.9 ppb	18:11:31
3	Fe 238.204 Radial†	11370.0	11442.6	86141 µg/L	86141 ppb	18:11:52
3	K 766.490 Radial†	19450.0	19396.9	11008 µg/L	11008 ppb	18:11:31
3	Mg 279.077 IEC†	704.4	702.1	6925.7 µg/L	6925.7 ppb	18:11:52
3	Na 589.592 Radial†	30800.3	30846.4	10680 µg/L	10680 ppb	18:11:31
3	Sr 421.552†	116584.9	117495.2	532.13 µg/L	532.13 ppb	18:11:31
3	Sc 361.383	1673652.7	1673652.7	99.464 %		18:13:11
3	Y 371.029	1007758.8	1007758.8	107.65 %		18:13:11
3	Ag 328.068†	54528.5	55388.2	509.34 µg/L	509.34 ppb	18:13:17
3	As 188.979†	258.2	263.5	489.45 µg/L	489.45 ppb	18:13:37
3	B 249.677†	10253.2	10149.8	494.28 µg/L	494.28 ppb	18:13:17
3	Ba 233.527†	32253.7	32445.4	837.14 µg/L	837.14 ppb	18:13:17
3	Be 313.107†	731750.9	737639.3	526.16 µg/L	526.16 ppb	18:13:11
3	Cd 226.502†	17803.8	18044.0	518.96 µg/L	518.96 ppb	18:13:17
3	Co 228.616†	9298.2	9326.1	474.22 µg/L	474.22 ppb	18:13:37
3	Cr 267.716†	20898.6	20921.0	541.32 µg/L	541.32 ppb	18:13:17
3	Cu 324.752†	75686.1	73470.9	542.86 µg/L	542.86 ppb	18:13:17
3	Mn 257.610†	971800.4	977580.6	3569.4 µg/L	3569.4 ppb	18:13:11
3	Mo 202.031†	4267.7	4286.4	493.20 µg/L	493.20 ppb	18:13:37
3	Ni 231.604†	7792.7	7536.1	523.12 µg/L	523.12 ppb	18:13:37
3	P 214.914†	921.7	685.1	1363.4 µg/L	1363.4 ppb	18:13:37
3	Pb 220.353†	1752.9	1719.5	539.46 µg/L	539.46 ppb	18:13:37
3	S 181.975 Axial†	1426.3	1413.2	5363.7 µg/L	5363.7 ppb	18:13:37
3	Sb 206.836†	439.4	420.8	450.64 µg/L	450.64 ppb	18:13:37
3	Se 196.026†	381.8	370.6	733.41 µg/L	733.41 ppb	18:13:37
3	SiO2†	169536.9	169067.2	36895 µg/L	36895 ppb	18:13:17
3	Si 251.611†	209676.3	210442.0	17203 µg/L	17203 ppb	18:13:17
3	Sn 189.927†	1050.2	1051.3	489.12 µg/L	489.12 ppb	18:13:37
3	Ti 334.940†	1801147.5	1810860.1	4830.6 µg/L	4830.6 ppb	18:13:11
3	Tl 190.801†	354.5	382.0	510.55 µg/L	510.55 ppb	18:13:37
3	U 409.014†	2228.9	2090.1	192.23 µg/L	192.23 ppb	18:13:17
3	V 292.402†	40635.0	41005.9	528.06 µg/L	528.06 ppb	18:13:17
3	Zn 213.857†	38221.2	37846.8	1009.1 µg/L	1009.1 ppb	18:13:17

Mean Data: 1202039768|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1674244.8	99.499 %	0.0492			0.05%
Sc RADIAL	107755.4	98.7 %	0.41			0.42%
Y 371.029	1010758.2	107.97 %	0.314			0.29%
Ag 328.068†	55597.8	511.34 µg/L	1.734	511.34 ppb	1.734	0.34%
Al 396.153Radial†	38391.7	18363 µg/L	58.0	18363 ppb	58.0	0.32%
As 188.979†	273.1	507.22 µg/L	16.005	507.22 ppb	16.005	3.16%
B 249.677†	10204.3	496.90 µg/L	3.224	496.90 ppb	3.224	0.65%
Ba 233.527†	32835.3	847.20 µg/L	8.721	847.20 ppb	8.721	1.03%
Be 313.107†	744518.0	531.07 µg/L	4.265	531.07 ppb	4.265	0.80%
Ca 317.933Radial†	28250.9	9162.5 µg/L	17.03	9162.5 ppb	17.03	0.19%
Cd 226.502†	18193.7	523.30 µg/L	3.781	523.30 ppb	3.781	0.72%
Co 228.616†	9778.1	497.58 µg/L	20.258	497.58 ppb	20.258	4.07%
Cr 267.716†	21327.4	551.84 µg/L	9.107	551.84 ppb	9.107	1.65%
Cu 324.752†	74612.4	551.15 µg/L	7.178	551.15 ppb	7.178	1.30%
Fe 238.204 Radial†	11516.2	86695 µg/L	581.3	86695 ppb	581.3	0.67%
K 766.490 Radial†	19419.1	11021 µg/L	14.3	11021 ppb	14.3	0.13%
Mg 279.077 IEC†	706.0	6964.7 µg/L	33.77	6964.7 ppb	33.77	0.48%
Mn 257.610†	985689.0	3599.0 µg/L	25.66	3599.0 ppb	25.66	0.71%
Mo 202.031†	4484.8	515.90 µg/L	19.658	515.90 ppb	19.658	3.81%
Na 589.592 Radial†	30937.0	10712 µg/L	33.7	10712 ppb	33.7	0.31%

Ni 231.604†	7894.5	547.96 µg/L	21.511	547.96 ppb	21.511	3.93%
P 214.914†	707.7	1411.1 µg/L	42.96	1411.1 ppb	42.96	3.04%
Pb 220.353†	1782.1	559.19 µg/L	17.134	559.19 ppb	17.134	3.06%
S 181.975 Axial†	1445.4	5485.8 µg/L	108.55	5485.8 ppb	108.55	1.98%
Sb 206.836†	441.0	472.53 µg/L	19.230	472.53 ppb	19.230	4.07%
Se 196.026†	377.6	743.83 µg/L	9.227	743.83 ppb	9.227	1.24%
SiO2†	170180.0	37138 µg/L	210.6	37138 ppb	210.6	0.57%
Si 251.611†	211651.5	17302 µg/L	85.6	17302 ppb	85.6	0.49%
Sn 189.927†	1097.4	510.79 µg/L	18.833	510.79 ppb	18.833	3.69%
Sr 421.552†	117768.8	533.37 µg/L	1.074	533.37 ppb	1.074	0.20%
Ti 334.940†	1830432.2	4882.8 µg/L	45.22	4882.8 ppb	45.22	0.93%
Tl 190.801†	393.0	523.94 µg/L	11.898	523.94 ppb	11.898	2.27%
U 409.014†	2143.5	197.39 µg/L	5.741	197.39 ppb	5.741	2.91%
V 292.402†	41682.2	536.86 µg/L	7.631	536.86 ppb	7.631	1.42%
Zn 213.857†	38276.6	1020.5 µg/L	9.89	1020.5 ppb	9.89	0.97%

Sequence No.: 6

Sample ID: 1202039770|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 306

Date Collected: 2/26/2010 18:13:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039770|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	109403.8	109403.8	100 %		18:14:19
1	Al 396.153Radial†	35238.1	35347.6	16907 µg/L	16907 ppb	18:14:19
1	Ca 317.933Radial†	26165.1	25732.9	8345.8 µg/L	8345.8 ppb	18:14:19
1	Fe 238.204 Radial†	10410.4	10359.8	77990 µg/L	77990 ppb	18:14:40
1	K 766.490 Radial†	18670.6	18405.1	10445 µg/L	10445 ppb	18:14:19
1	Mg 279.077 IEC†	684.1	674.0	6654.7 µg/L	6654.7 ppb	18:14:40
1	Na 589.592 Radial†	29796.2	29505.6	10216 µg/L	10216 ppb	18:14:19
1	Sr 421.552†	116271.4	115900.6	524.91 µg/L	524.91 ppb	18:14:19
1	Sc 361.383	1698424.9	1698424.9	100.94 %		18:15:45
1	Y 371.029	1015395.1	1015395.1	108.47 %		18:15:45
1	Ag 328.068†	53914.1	53979.9	495.65 µg/L	495.65 ppb	18:15:51
1	As 188.979†	269.2	270.5	502.05 µg/L	502.05 ppb	18:16:11
1	B 249.677†	10033.7	9782.0	479.08 µg/L	479.08 ppb	18:15:51
1	Ba 233.527†	24412.1	24203.6	624.71 µg/L	624.71 ppb	18:15:51
1	Be 313.107†	726715.7	721920.5	515.09 µg/L	515.09 ppb	18:15:45
1	Cd 226.502†	17780.0	17759.3	511.58 µg/L	511.58 ppb	18:15:51
1	Co 228.616†	9945.8	9831.2	501.42 µg/L	501.42 ppb	18:15:51
1	Cr 267.716†	22468.7	22170.1	573.62 µg/L	573.62 ppb	18:15:51
1	Cu 324.752†	75591.4	72267.1	532.70 µg/L	532.70 ppb	18:15:51
1	Mn 257.610†	732159.4	725912.1	2651.2 µg/L	2651.2 ppb	18:15:45
1	Mo 202.031†	4455.1	4409.4	506.96 µg/L	506.96 ppb	18:16:11
1	Ni 231.604†	8490.3	8112.9	562.99 µg/L	562.99 ppb	18:15:51
1	P 214.914†	829.9	580.7	1145.7 µg/L	1145.7 ppb	18:16:11
1	Pb 220.353†	1788.2	1728.8	542.67 µg/L	542.67 ppb	18:16:11
1	S 181.975 Axial†	1453.9	1419.7	5388.3 µg/L	5388.3 ppb	18:16:11
1	Sb 206.836†	460.2	434.9	465.65 µg/L	465.65 ppb	18:16:11
1	Se 196.026†	392.4	375.5	712.84 µg/L	712.84 ppb	18:16:11
1	SiO2†	158051.6	155202.3	33869 µg/L	33869 ppb	18:15:51
1	Si 251.611†	196556.6	194369.4	15889 µg/L	15889 ppb	18:15:45
1	Sn 189.927†	1095.9	1081.2	503.73 µg/L	503.73 ppb	18:16:11
1	Ti 334.940†	1649191.7	1633901.8	4358.5 µg/L	4358.5 ppb	18:15:45
1	Tl 190.801†	370.9	393.1	514.47 µg/L	514.47 ppb	18:16:11
1	U 409.014†	2230.5	2059.0	190.36 µg/L	190.36 ppb	18:15:45
1	V 292.402†	40475.8	40252.3	518.39 µg/L	518.39 ppb	18:15:51
1	Zn 213.857†	36686.4	35765.8	953.40 µg/L	953.40 ppb	18:15:51
2	Sc RADIAL	107756.8	107756.8	98.7 %		18:14:45
2	Al 396.153Radial†	34643.4	35282.5	16876 µg/L	16876 ppb	18:14:45
2	Ca 317.933Radial†	25663.2	25623.5	8310.3 µg/L	8310.3 ppb	18:14:45
2	Fe 238.204 Radial†	10410.2	10518.4	79185 µg/L	79185 ppb	18:15:06
2	K 766.490 Radial†	18284.3	18298.5	10385 µg/L	10385 ppb	18:14:45
2	Mg 279.077 IEC†	684.0	684.4	6756.8 µg/L	6756.8 ppb	18:15:06
2	Na 589.592 Radial†	29326.8	29484.5	10209 µg/L	10209 ppb	18:14:45
2	Sr 421.552†	114519.9	115899.4	524.90 µg/L	524.90 ppb	18:14:45
2	Sc 361.383	1705643.8	1705643.8	101.37 %		18:16:19
2	Y 371.029	1021842.8	1021842.8	109.16 %		18:16:19
2	Ag 328.068†	53620.9	53464.6	491.17 µg/L	491.17 ppb	18:16:25
2	As 188.979†	267.9	268.2	497.74 µg/L	497.74 ppb	18:16:45
2	B 249.677†	10041.2	9747.3	476.60 µg/L	476.60 ppb	18:16:25
2	Ba 233.527†	24254.9	23946.1	618.07 µg/L	618.07 ppb	18:16:25
2	Be 313.107†	729192.6	721316.8	514.66 µg/L	514.66 ppb	18:16:19
2	Cd 226.502†	17744.5	17649.7	508.24 µg/L	508.24 ppb	18:16:25
2	Co 228.616†	9940.3	9784.2	499.00 µg/L	499.00 ppb	18:16:25
2	Cr 267.716†	22330.8	21939.8	567.66 µg/L	567.66 ppb	18:16:25
2	Cu 324.752†	75316.1	71678.6	528.71 µg/L	528.71 ppb	18:16:25
2	Mn 257.610†	733727.1	724388.6	2645.7 µg/L	2645.7 ppb	18:16:19
2	Mo 202.031†	4443.3	4379.1	503.53 µg/L	503.53 ppb	18:16:45
2	Ni 231.604†	8461.9	8049.3	558.60 µg/L	558.60 ppb	18:16:25
2	P 214.914†	824.8	572.2	1126.8 µg/L	1126.8 ppb	18:16:45
2	Pb 220.353†	1777.2	1710.4	536.86 µg/L	536.86 ppb	18:16:45

2	S 181.975 Axial†	1441.4	1401.3	5318.4 µg/L	5318.4 ppb	18:16:45
2	Sb 206.836†	461.5	434.2	464.92 µg/L	464.92 ppb	18:16:45
2	Se 196.026†	395.3	376.7	718.17 µg/L	718.17 ppb	18:16:45
2	SiO2†	157504.2	153999.6	33607 µg/L	33607 ppb	18:16:25
2	Si 251.611†	196973.4	193956.3	15855 µg/L	15855 ppb	18:16:19
2	Sn 189.927†	1098.4	1079.0	502.61 µg/L	502.61 ppb	18:16:45
2	Ti 334.940†	1651461.7	1629226.0	4346.0 µg/L	4346.0 ppb	18:16:19
2	Tl 190.801†	368.8	389.4	510.20 µg/L	510.20 ppb	18:16:45
2	U 409.014†	2103.5	1924.4	177.01 µg/L	177.01 ppb	18:16:19
2	V 292.402†	40361.0	39969.3	514.79 µg/L	514.79 ppb	18:16:25
2	Zn 213.857†	36440.7	35369.6	942.72 µg/L	942.72 ppb	18:16:25
3	Sc RADIAL	108256.5	108256.5	99.1 %		18:15:11
3	Al 396.153Radial†	34824.5	35303.2	16886 µg/L	16886 ppb	18:15:11
3	Ca 317.933Radial†	25752.2	25593.2	8300.5 µg/L	8300.5 ppb	18:15:11
3	Fe 238.204 Radial†	10422.7	10482.3	78912 µg/L	78912 ppb	18:15:32
3	K 766.490 Radial†	18390.9	18320.5	10397 µg/L	10397 ppb	18:15:11
3	Mg 279.077 IEC†	684.5	681.7	6730.1 µg/L	6730.1 ppb	18:15:32
3	Na 589.592 Radial†	29667.0	29690.5	10280 µg/L	10280 ppb	18:15:11
3	Sr 421.552†	115532.9	116385.5	527.11 µg/L	527.11 ppb	18:15:11
3	Sc 361.383	1706440.7	1706440.7	101.41 %		18:16:53
3	Y 371.029	1018692.8	1018692.8	108.82 %		18:16:53
3	Ag 328.068†	52866.4	52695.9	484.14 µg/L	484.14 ppb	18:16:59
3	As 188.979†	253.4	253.7	471.11 µg/L	471.11 ppb	18:17:19
3	B 249.677†	9822.5	9527.0	465.02 µg/L	465.02 ppb	18:16:59
3	Ba 233.527†	23510.7	23201.1	598.83 µg/L	598.83 ppb	18:16:59
3	Be 313.107†	710564.8	702612.6	501.32 µg/L	501.32 ppb	18:16:53
3	Cd 226.502†	17254.0	17157.9	493.85 µg/L	493.85 ppb	18:16:59
3	Co 228.616†	9567.2	9411.7	479.88 µg/L	479.88 ppb	18:16:59
3	Cr 267.716†	21315.6	20928.5	541.49 µg/L	541.49 ppb	18:16:59
3	Cu 324.752†	72760.9	69124.3	510.34 µg/L	510.34 ppb	18:16:59
3	Mn 257.610†	718453.4	708989.7	2589.6 µg/L	2589.6 ppb	18:16:53
3	Mo 202.031†	4105.9	4044.3	465.26 µg/L	465.26 ppb	18:17:19
3	Ni 231.604†	8191.6	7778.9	539.86 µg/L	539.86 ppb	18:16:59
3	P 214.914†	792.1	539.6	1058.1 µg/L	1058.1 ppb	18:17:19
3	Pb 220.353†	1681.8	1615.5	506.90 µg/L	506.90 ppb	18:17:19
3	S 181.975 Axial†	1377.6	1337.7	5077.0 µg/L	5077.0 ppb	18:17:19
3	Sb 206.836†	428.1	401.1	429.25 µg/L	429.25 ppb	18:17:19
3	Se 196.026†	366.5	348.1	682.13 µg/L	682.13 ppb	18:17:19
3	SiO2†	153326.5	149807.5	32692 µg/L	32692 ppb	18:16:59
3	Si 251.611†	193816.4	190752.5	15593 µg/L	15593 ppb	18:16:53
3	Sn 189.927†	1015.8	997.1	464.13 µg/L	464.13 ppb	18:17:19
3	Ti 334.940†	1610034.9	1587615.5	4235.0 µg/L	4235.0 ppb	18:16:53
3	Tl 190.801†	343.9	364.7	480.29 µg/L	480.29 ppb	18:17:19
3	U 409.014†	2134.8	1954.2	179.97 µg/L	179.97 ppb	18:16:53
3	V 292.402†	38746.7	38358.9	494.02 µg/L	494.02 ppb	18:16:59
3	Zn 213.857†	35497.0	34422.2	917.40 µg/L	917.40 ppb	18:16:59

Mean Data: 1202039770|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1703503.1	101.24 %	0.262			0.26%
Sc RADIAL	108472.3	99.3 %	0.77			0.78%
Y 371.029	1018643.6	108.82 %	0.344			0.32%
Ag 328.068†	53380.1	490.32 µg/L	5.802	490.32 ppb	5.802	1.18%
Al 396.153Radial†	35311.1	16889 µg/L	15.8	16889 ppb	15.8	0.09%
As 188.979†	264.1	490.30 µg/L	16.761	490.30 ppb	16.761	3.42%
B 249.677†	9685.4	473.57 µg/L	7.504	473.57 ppb	7.504	1.58%
Ba 233.527†	23783.6	613.87 µg/L	13.441	613.87 ppb	13.441	2.19%
Be 313.107†	715283.3	510.36 µg/L	7.832	510.36 ppb	7.832	1.53%
Ca 317.933Radial†	25649.9	8318.9 µg/L	23.84	8318.9 ppb	23.84	0.29%
Cd 226.502†	17522.3	504.56 µg/L	9.421	504.56 ppb	9.421	1.87%
Co 228.616†	9675.7	493.43 µg/L	11.805	493.43 ppb	11.805	2.39%
Cr 267.716†	21679.5	560.92 µg/L	17.087	560.92 ppb	17.087	3.05%
Cu 324.752†	71023.3	523.92 µg/L	11.923	523.92 ppb	11.923	2.28%
Fe 238.204 Radial†	10453.5	78696 µg/L	626.0	78696 ppb	626.0	0.80%
K 766.490 Radial†	18341.4	10409 µg/L	31.9	10409 ppb	31.9	0.31%
Mg 279.077 IEC†	680.1	6713.9 µg/L	52.92	6713.9 ppb	52.92	0.79%
Mn 257.610†	719763.5	2628.9 µg/L	34.12	2628.9 ppb	34.12	1.30%
Mo 202.031†	4277.6	491.92 µg/L	23.148	491.92 ppb	23.148	4.71%
Na 589.592 Radial†	29560.2	10235 µg/L	39.2	10235 ppb	39.2	0.38%



Ni 231.604†	7980.3	553.82 µg/L	12.280	553.82 ppb	12.280	2.22%
P 214.914†	564.2	1110.2 µg/L	46.11	1110.2 ppb	46.11	4.15%
Pb 220.353†	1684.9	528.81 µg/L	19.196	528.81 ppb	19.196	3.63%
S 181.975 Axial†	1386.2	5261.2 µg/L	163.32	5261.2 ppb	163.32	3.10%
Sb 206.836†	423.4	453.27 µg/L	20.812	453.27 ppb	20.812	4.59%
Se 196.026†	366.7	704.38 µg/L	19.450	704.38 ppb	19.450	2.76%
SiO2†	153003.1	33389 µg/L	618.0	33389 ppb	618.0	1.85%
Si 251.611†	193026.1	15779 µg/L	161.8	15779 ppb	161.8	1.03%
Sn 189.927†	1052.4	490.16 µg/L	22.546	490.16 ppb	22.546	4.60%
Sr 421.552†	116061.8	525.64 µg/L	1.269	525.64 ppb	1.269	0.24%
Ti 334.940†	1616914.4	4313.2 µg/L	67.98	4313.2 ppb	67.98	1.58%
Tl 190.801†	382.4	501.65 µg/L	18.623	501.65 ppb	18.623	3.71%
U 409.014†	1979.2	182.45 µg/L	7.011	182.45 ppb	7.011	3.84%
V 292.402†	39526.8	509.07 µg/L	13.153	509.07 ppb	13.153	2.58%
Zn 213.857†	35185.9	937.84 µg/L	18.491	937.84 ppb	18.491	1.97%

Sequence No.: 7  
 Sample ID: 1202039769|951752|5  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 307  
 Date Collected: 2/26/2010 18:17:28  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039769|951752|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	109822.6	109822.6	101 %		18:18:01
1	Al 396.153Radial†	2404.0	2565.3	1227.7 µg/L	1227.7 ppb	18:18:01
1	Ca 317.933Radial†	2215.7	1819.6	590.13 µg/L	590.13 ppb	18:18:21
1	Fe 238.204 Radial†	2116.7	2073.5	15607 µg/L	15607 ppb	18:18:21
1	K 766.490 Radial†	1153.7	916.4	520.08 µg/L	520.08 ppb	18:18:01
1	Mg 279.077 IEC†	44.8	35.7	340.10 µg/L	340.10 ppb	18:18:21
1	Na 589.592 Radial†	1494.3	1250.6	433.01 µg/L	433.01 ppb	18:18:01
1	Sr 421.552†	903.2	743.1	3.3657 µg/L	3.3657 ppb	18:18:01
1	Sc 361.383	1728773.3	1728773.3	102.74 %		18:19:24
1	Y 371.029	964762.2	964762.2	103.06 %		18:19:24
1	Ag 328.068†	-741.0	-155.3	0.6645 µg/L	0.6645 ppb	18:19:30
1	As 188.979†	-5.4	-1.4	-1.6698 µg/L	-1.6698 ppb	18:19:50
1	B 249.677†	282.3	116.1	-1.9727 µg/L	-1.9727 ppb	18:19:30
1	Ba 233.527†	1264.8	1249.0	32.199 µg/L	32.199 ppb	18:19:50
1	Be 313.107†	-465.4	1492.8	0.7504 µg/L	0.7504 ppb	18:19:30
1	Cd 226.502†	-55.4	90.3	0.8861 µg/L	0.8861 ppb	18:19:50
1	Co 228.616†	70.7	46.5	0.6735 µg/L	0.6735 ppb	18:19:50
1	Cr 267.716†	432.2	330.5	8.5493 µg/L	8.5493 ppb	18:19:30
1	Cu 324.752†	2793.1	95.5	3.6191 µg/L	3.6191 ppb	18:19:30
1	Mn 257.610†	136623.7	133524.5	487.80 µg/L	487.80 ppb	18:19:30
1	Mo 202.031†	23.9	18.9	2.7575 µg/L	2.7575 ppb	18:19:50
1	Ni 231.604†	391.8	82.7	5.9328 µg/L	5.9328 ppb	18:19:50
1	P 214.914†	306.6	57.0	110.41 µg/L	110.41 ppb	18:19:50
1	Pb 220.353†	62.7	18.2	5.2729 µg/L	5.2729 ppb	18:19:50
1	S 181.975 Axial†	26.8	5.4	20.424 µg/L	20.424 ppb	18:19:50
1	Sb 206.836†	22.2	0.6	0.5445 µg/L	0.5445 ppb	18:19:50
1	Se 196.026†	7.8	-5.7	44.068 µg/L	44.068 ppb	18:19:50
1	SiO2†	24942.0	22893.7	4996.0 µg/L	4996.0 ppb	18:19:30
1	Si 251.611†	29777.6	28619.5	2339.5 µg/L	2339.5 ppb	18:19:30
1	Sn 189.927†	6.4	1.7	-0.2467 µg/L	-0.2467 ppb	18:19:50
1	Ti 334.940†	321580.7	313012.9	835.03 µg/L	835.03 ppb	18:19:24
1	Tl 190.801†	-38.1	-11.5	-2.1375 µg/L	-2.1375 ppb	18:19:50
1	U 409.014†	-482.6	-620.6	-63.000 µg/L	-63.000 ppb	18:19:30
1	V 292.402†	260.2	405.2	5.6808 µg/L	5.6808 ppb	18:19:30
1	Zn 213.857†	4157.4	3466.2	92.328 µg/L	92.328 ppb	18:19:30
2	Sc RADIAL	109854.3	109854.3	101 %		18:18:27
2	Al 396.153Radial†	2375.9	2536.7	1214.0 µg/L	1214.0 ppb	18:18:27
2	Ca 317.933Radial†	2209.8	1813.1	588.03 µg/L	588.03 ppb	18:18:47
2	Fe 238.204 Radial†	2119.2	2075.3	15621 µg/L	15621 ppb	18:18:47
2	K 766.490 Radial†	1187.0	949.2	538.66 µg/L	538.66 ppb	18:18:27
2	Mg 279.077 IEC†	44.2	35.1	334.09 µg/L	334.09 ppb	18:18:47
2	Na 589.592 Radial†	1473.2	1229.2	425.59 µg/L	425.59 ppb	18:18:27
2	Sr 421.552†	849.1	689.1	3.1209 µg/L	3.1209 ppb	18:18:27
2	Sc 361.383	1739825.4	1739825.4	103.40 %		18:19:56
2	Y 371.029	974207.8	974207.8	104.07 %		18:19:56
2	Ag 328.068†	-711.2	-122.0	0.9647 µg/L	0.9647 ppb	18:20:02
2	As 188.979†	-6.4	-2.3	-3.4514 µg/L	-3.4514 ppb	18:20:22
2	B 249.677†	296.2	127.8	-1.3579 µg/L	-1.3579 ppb	18:20:02
2	Ba 233.527†	1264.7	1241.1	31.995 µg/L	31.995 ppb	18:20:22
2	Be 313.107†	-501.8	1460.5	0.7275 µg/L	0.7275 ppb	18:20:02
2	Cd 226.502†	-62.8	83.5	0.6839 µg/L	0.6839 ppb	18:20:22
2	Co 228.616†	69.8	45.2	0.6069 µg/L	0.6069 ppb	18:20:22
2	Cr 267.716†	433.8	329.4	8.5215 µg/L	8.5215 ppb	18:20:02
2	Cu 324.752†	2767.2	53.2	3.3182 µg/L	3.3182 ppb	18:20:02
2	Mn 257.610†	135750.4	131835.1	481.64 µg/L	481.64 ppb	18:20:02
2	Mo 202.031†	25.4	20.2	2.9020 µg/L	2.9020 ppb	18:20:22
2	Ni 231.604†	385.7	74.4	5.3562 µg/L	5.3562 ppb	18:20:22
2	P 214.914†	311.3	59.6	115.97 µg/L	115.97 ppb	18:20:22
2	Pb 220.353†	65.7	20.7	6.0723 µg/L	6.0723 ppb	18:20:22

2	S 181.975 Axial†	28.4	6.8	25.682 µg/L	25.682 ppb	18:20:22
2	Sb 206.836†	23.0	1.3	1.2716 µg/L	1.2716 ppb	18:20:22
2	Se 196.026†	-0.5	-13.8	34.187 µg/L	34.187 ppb	18:20:22
2	SiO2†	24834.0	22635.0	4939.6 µg/L	4939.6 ppb	18:20:02
2	Si 251.611†	29478.6	28146.2	2300.9 µg/L	2300.9 ppb	18:20:02
2	Sn 189.927†	3.1	-1.6	-1.7602 µg/L	-1.7602 ppb	18:20:22
2	Ti 334.940†	323413.4	312797.1	834.45 µg/L	834.45 ppb	18:19:56
2	Tl 190.801†	-34.1	-7.4	2.6096 µg/L	2.6096 ppb	18:20:22
2	U 409.014†	-506.5	-640.7	-64.974 µg/L	-64.974 ppb	18:20:02
2	V 292.402†	269.3	412.3	5.7710 µg/L	5.7710 ppb	18:20:02
2	Zn 213.857†	4167.2	3450.1	91.896 µg/L	91.896 ppb	18:20:02
3	Sc RADIAL	109718.6	109718.6	100 %		18:18:53
3	Al 396.153Radial†	2421.7	2585.2	1237.2 µg/L	1237.2 ppb	18:18:53
3	Ca 317.933Radial†	2209.6	1815.6	588.84 µg/L	588.84 ppb	18:19:13
3	Fe 238.204 Radial†	2103.3	2062.1	15522 µg/L	15522 ppb	18:19:13
3	K 766.490 Radial†	1104.8	868.9	493.09 µg/L	493.09 ppb	18:18:53
3	Mg 279.077 IEC†	42.8	33.9	321.44 µg/L	321.44 ppb	18:19:13
3	Na 589.592 Radial†	1457.4	1215.2	420.76 µg/L	420.76 ppb	18:18:53
3	Sr 421.552†	867.5	708.4	3.2083 µg/L	3.2083 ppb	18:18:53
3	Sc 361.383	1745829.0	1745829.0	103.75 %		18:20:29
3	Y 371.029	976885.6	976885.6	104.35 %		18:20:29
3	Ag 328.068†	-693.5	-102.5	1.1252 µg/L	1.1252 ppb	18:20:35
3	As 188.979†	-5.7	-1.7	-2.2433 µg/L	-2.2433 ppb	18:20:55
3	B 249.677†	284.3	115.3	-1.9669 µg/L	-1.9669 ppb	18:20:35
3	Ba 233.527†	1145.4	1121.9	28.923 µg/L	28.923 ppb	18:20:55
3	Be 313.107†	-463.0	1499.6	0.7608 µg/L	0.7608 ppb	18:20:35
3	Cd 226.502†	-68.8	77.9	0.5294 µg/L	0.5294 ppb	18:20:55
3	Co 228.616†	68.4	43.6	0.5528 µg/L	0.5528 ppb	18:20:55
3	Cr 267.716†	451.5	345.0	8.9242 µg/L	8.9242 ppb	18:20:35
3	Cu 324.752†	2757.1	34.3	3.1638 µg/L	3.1638 ppb	18:20:35
3	Mn 257.610†	130510.6	126333.3	461.58 µg/L	461.58 ppb	18:20:35
3	Mo 202.031†	16.0	11.0	1.8506 µg/L	1.8506 ppb	18:20:55
3	Ni 231.604†	371.0	59.0	4.2872 µg/L	4.2872 ppb	18:20:55
3	P 214.914†	303.8	51.3	98.224 µg/L	98.224 ppb	18:20:55
3	Pb 220.353†	57.6	12.7	3.5350 µg/L	3.5350 ppb	18:20:55
3	S 181.975 Axial†	28.3	6.6	25.104 µg/L	25.104 ppb	18:20:55
3	Sb 206.836†	18.5	-3.2	-3.4941 µg/L	-3.4941 ppb	18:20:55
3	Se 196.026†	11.8	-1.9	48.444 µg/L	48.444 ppb	18:20:55
3	SiO2†	24210.1	21951.1	4790.3 µg/L	4790.3 ppb	18:20:35
3	Si 251.611†	28801.0	27395.0	2239.4 µg/L	2239.4 ppb	18:20:35
3	Sn 189.927†	3.5	-1.1	-1.5571 µg/L	-1.5571 ppb	18:20:55
3	Ti 334.940†	319063.2	307528.6	820.40 µg/L	820.40 ppb	18:20:29
3	Tl 190.801†	-35.3	-8.5	1.1828 µg/L	1.1828 ppb	18:20:55
3	U 409.014†	-385.4	-522.3	-53.361 µg/L	-53.361 ppb	18:20:35
3	V 292.402†	265.3	407.6	5.7126 µg/L	5.7126 ppb	18:20:35
3	Zn 213.857†	4038.4	3312.0	88.199 µg/L	88.199 ppb	18:20:35

Mean Data: 1202039769|951752|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1738142.6	103.30 %		0.514				0.50%
Sc RADIAL	109798.5	101 %		0.1				0.06%
Y 371.029	971951.9	103.83 %		0.680				0.66%
Ag 328.068†	-126.6	0.9182 µg/L		0.23382	0.9182 ppb		0.23382	25.47%
Al 396.153Radial†	2562.4	1226.3 µg/L		11.68	1226.3 ppb		11.68	0.95%
As 188.979†	-1.8	-2.4549 µg/L		0.90942	-2.4549 ppb		0.90942	37.05%
B 249.677†	119.8	-1.7658 µg/L		0.35330	-1.7658 ppb		0.35330	20.01%
Ba 233.527†	1204.0	31.039 µg/L		1.8357	31.039 ppb		1.8357	5.91%
Be 313.107†	1484.3	0.7462 µg/L		0.01704	0.7462 ppb		0.01704	2.28%
Ca 317.933Radial†	1816.1	589.00 µg/L		1.055	589.00 ppb		1.055	0.18%
Cd 226.502†	83.9	0.6998 µg/L		0.17888	0.6998 ppb		0.17888	25.56%
Co 228.616†	45.1	0.6111 µg/L		0.06043	0.6111 ppb		0.06043	9.89%
Cr 267.716†	335.0	8.6650 µg/L		0.22492	8.6650 ppb		0.22492	2.60%
Cu 324.752†	61.0	3.3671 µg/L		0.23151	3.3671 ppb		0.23151	6.88%
Fe 238.204 Radial†	2070.3	15583 µg/L		53.7	15583 ppb		53.7	0.34%
K 766.490 Radial†	911.5	517.28 µg/L		22.913	517.28 ppb		22.913	4.43%
Mg 279.077 IEC†	34.9	331.88 µg/L		9.524	331.88 ppb		9.524	2.87%
Mn 257.610†	130564.3	477.01 µg/L		13.714	477.01 ppb		13.714	2.88%
Mo 202.031†	16.7	2.5034 µg/L		0.56992	2.5034 ppb		0.56992	22.77%
Na 589.592 Radial†	1231.7	426.45 µg/L		6.168	426.45 ppb		6.168	1.45%

Ni 231.604†	72.0	5.1921 µg/L	0.83498	5.1921 ppb	0.83498	16.08%
P 214.914†	55.9	108.20 µg/L	9.077	108.20 ppb	9.077	8.39%
Pb 220.353†	17.2	4.9601 µg/L	1.29722	4.9601 ppb	1.29722	26.15%
S 181.975 Axial†	6.3	23.737 µg/L	2.8833	23.737 ppb	2.8833	12.15%
Sb 206.836†	-0.5	-0.5593 µg/L	2.56743	-0.5593 ppb	2.56743	459.02%
Se 196.026†	-7.2	42.233 µg/L	7.3031	42.233 ppb	7.3031	17.29%
SiO2†	22493.3	4908.6 µg/L	106.28	4908.6 ppb	106.28	2.17%
Si 251.611†	28053.6	2293.3 µg/L	50.48	2293.3 ppb	50.48	2.20%
Sn 189.927†	-0.3	-1.1880 µg/L	0.82149	-1.1880 ppb	0.82149	69.15%
Sr 421.552†	713.5	3.2316 µg/L	0.12405	3.2316 ppb	0.12405	3.84%
Ti 334.940†	311112.8	829.96 µg/L	8.285	829.96 ppb	8.285	1.00%
Tl 190.801†	-9.1	0.5516 µg/L	2.43568	0.5516 ppb	2.43568	441.56%
U 409.014†	-594.5	-60.445 µg/L	6.2137	-60.445 ppb	6.2137	10.28%
V 292.402†	408.4	5.7215 µg/L	0.04579	5.7215 ppb	0.04579	0.80%
Zn 213.857†	3409.4	90.807 µg/L	2.2696	90.807 ppb	2.2696	2.50%

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 18:21:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	111217.0	111217.0	102 %		18:21:43
1	Al 396.153Radial†	9911.1	9906.3	4730.6 µg/L	4730.6 ppb	18:21:43
1	Ca 317.933Radial†	15510.6	14845.8	4814.9 µg/L	4814.9 ppb	18:21:43
1	Fe 238.204 Radial†	672.3	628.9	4744.1 µg/L	4744.1 ppb	18:22:03
1	K 766.490 Radial†	8979.5	8586.0	4872.7 µg/L	4872.7 ppb	18:21:43
1	Mg 279.077 IEC†	504.7	486.8	4864.1 µg/L	4864.1 ppb	18:22:03
1	Na 589.592 Radial†	27266.3	26536.7	9188.1 µg/L	9188.1 ppb	18:21:43
1	Sr 421.552†	107182.6	105084.5	475.92 µg/L	475.92 ppb	18:21:43
1	Sc 361.383	1727283.3	1727283.3	102.65 %		18:23:07
1	Y 371.029	951505.4	951505.4	101.64 %		18:23:07
1	Ag 328.068†	55156.7	54298.0	488.89 µg/L	488.89 ppb	18:23:13
1	As 188.979†	277.4	274.1	504.49 µg/L	504.49 ppb	18:23:33
1	B 249.677†	9541.2	9136.1	482.91 µg/L	482.91 ppb	18:23:13
1	Ba 233.527†	19647.5	19158.0	494.64 µg/L	494.64 ppb	18:23:13
1	Be 313.107†	705903.4	689616.8	493.44 µg/L	493.44 ppb	18:23:07
1	Cd 226.502†	17250.5	16949.2	496.10 µg/L	496.10 ppb	18:23:13
1	Co 228.616†	9910.9	9632.7	499.20 µg/L	499.20 ppb	18:23:13
1	Cr 267.716†	19736.8	19136.9	495.17 µg/L	495.17 ppb	18:23:13
1	Cu 324.752†	72443.5	67949.3	487.98 µg/L	487.98 ppb	18:23:13
1	Mn 257.610†	140673.8	137584.7	501.66 µg/L	501.66 ppb	18:23:07
1	Mo 202.031†	4581.4	4458.7	509.80 µg/L	509.80 ppb	18:23:33
1	Ni 231.604†	7882.9	7380.7	511.27 µg/L	511.27 ppb	18:23:13
1	P 214.914†	1445.9	1167.0	2468.3 µg/L	2468.3 ppb	18:23:33
1	Pb 220.353†	1693.9	1607.3	506.30 µg/L	506.30 ppb	18:23:33
1	S 181.975 Axial†	298.4	270.0	1024.7 µg/L	1024.7 ppb	18:23:33
1	Sb 206.836†	498.2	464.3	498.05 µg/L	498.05 ppb	18:23:33
1	Se 196.026†	445.4	420.5	528.57 µg/L	528.57 ppb	18:23:33
1	SiO2†	26108.6	24051.1	5248.6 µg/L	5248.6 ppb	18:23:13
1	Si 251.611†	31320.5	30147.6	2464.5 µg/L	2464.5 ppb	18:23:13
1	Sn 189.927†	1123.9	1090.3	512.77 µg/L	512.77 ppb	18:23:33
1	Ti 334.940†	189723.0	184830.9	492.78 µg/L	492.78 ppb	18:23:07
1	Tl 190.801†	418.1	432.9	508.78 µg/L	508.78 ppb	18:23:33
1	U 409.014†	5123.6	4840.4	473.25 µg/L	473.25 ppb	18:23:13
1	V 292.402†	39636.2	38764.4	496.99 µg/L	496.99 ppb	18:23:13
1	Zn 213.857†	19706.0	18616.8	496.57 µg/L	496.57 ppb	18:23:13
2	Sc RADIAL	111249.8	111249.8	102 %		18:22:09
2	Al 396.153Radial†	9910.5	9902.8	4728.9 µg/L	4728.9 ppb	18:22:09
2	Ca 317.933Radial†	15528.0	14858.4	4818.9 µg/L	4818.9 ppb	18:22:09
2	Fe 238.204 Radial†	672.5	628.9	4744.2 µg/L	4744.2 ppb	18:22:29
2	K 766.490 Radial†	8949.7	8554.1	4854.6 µg/L	4854.6 ppb	18:22:09
2	Mg 279.077 IEC†	504.9	486.8	4864.4 µg/L	4864.4 ppb	18:22:29
2	Na 589.592 Radial†	27320.3	26581.7	9203.7 µg/L	9203.7 ppb	18:22:09
2	Sr 421.552†	107723.7	105584.5	478.19 µg/L	478.19 ppb	18:22:09
2	Sc 361.383	1724470.2	1724470.2	102.48 %		18:23:40
2	Y 371.029	947462.6	947462.6	101.21 %		18:23:40
2	Ag 328.068†	55271.1	54497.3	490.69 µg/L	490.69 ppb	18:23:46
2	As 188.979†	274.7	271.9	500.53 µg/L	500.53 ppb	18:24:06
2	B 249.677†	9552.2	9162.0	484.29 µg/L	484.29 ppb	18:23:46
2	Ba 233.527†	19709.0	19249.2	496.99 µg/L	496.99 ppb	18:23:46
2	Be 313.107†	703898.3	688782.1	492.84 µg/L	492.84 ppb	18:23:40
2	Cd 226.502†	17283.8	17009.1	497.85 µg/L	497.85 ppb	18:23:46
2	Co 228.616†	9927.9	9665.0	500.87 µg/L	500.87 ppb	18:23:46
2	Cr 267.716†	19703.0	19135.3	495.13 µg/L	495.13 ppb	18:23:46
2	Cu 324.752†	72519.0	68138.2	489.33 µg/L	489.33 ppb	18:23:46
2	Mn 257.610†	140169.2	137315.8	500.68 µg/L	500.68 ppb	18:23:40
2	Mo 202.031†	4568.5	4453.4	509.20 µg/L	509.20 ppb	18:24:06
2	Ni 231.604†	7904.6	7414.4	513.61 µg/L	513.61 ppb	18:23:46
2	P 214.914†	1447.2	1170.6	2476.0 µg/L	2476.0 ppb	18:24:06
2	Pb 220.353†	1701.6	1617.5	509.51 µg/L	509.51 ppb	18:24:06

2	S 181.975 Axial†	293.9	266.1	1009.9 µg/L	1009.9 ppb	18:24:06
2	Sb 206.836†	494.7	461.7	495.18 µg/L	495.18 ppb	18:24:06
2	Se 196.026†	427.0	403.3	507.41 µg/L	507.41 ppb	18:24:06
2	SiO2†	26211.4	24192.9	5279.5 µg/L	5279.5 ppb	18:23:46
2	Si 251.611†	31510.1	30382.3	2483.6 µg/L	2483.6 ppb	18:23:46
2	Sn 189.927†	1127.7	1095.9	515.38 µg/L	515.38 ppb	18:24:06
2	Ti 334.940†	189156.7	184579.9	492.11 µg/L	492.11 ppb	18:23:40
2	Tl 190.801†	413.8	429.4	504.66 µg/L	504.66 ppb	18:24:06
2	U 409.014†	5157.1	4881.3	477.25 µg/L	477.25 ppb	18:23:46
2	V 292.402†	39764.0	38952.1	499.37 µg/L	499.37 ppb	18:23:46
2	Zn 213.857†	19783.9	18724.1	499.44 µg/L	499.44 ppb	18:23:46
3	Sc RADIAL	111155.6	111155.6	102 %		18:22:35
3	Al 396.153Radial†	9923.5	9923.9	4740.4 µg/L	4740.4 ppb	18:22:35
3	Ca 317.933Radial†	15547.0	14890.0	4829.2 µg/L	4829.2 ppb	18:22:35
3	Fe 238.204 Radial†	670.6	627.5	4733.3 µg/L	4733.3 ppb	18:22:55
3	K 766.490 Radial†	9073.3	8683.0	4927.7 µg/L	4927.7 ppb	18:22:35
3	Mg 279.077 IEC†	501.9	484.3	4837.6 µg/L	4837.6 ppb	18:22:55
3	Na 589.592 Radial†	27314.3	26598.6	9209.5 µg/L	9209.5 ppb	18:22:35
3	Sr 421.552†	107614.4	105566.6	478.11 µg/L	478.11 ppb	18:22:35
3	Sc 361.383	1721408.3	1721408.3	102.30 %		18:24:13
3	Y 371.029	944697.1	944697.1	100.92 %		18:24:13
3	Ag 328.068†	53500.1	52862.1	475.89 µg/L	475.89 ppb	18:24:19
3	As 188.979†	242.1	240.5	442.77 µg/L	442.77 ppb	18:24:40
3	B 249.677†	9219.6	8853.5	467.87 µg/L	467.87 ppb	18:24:19
3	Ba 233.527†	18706.7	18303.6	472.57 µg/L	472.57 ppb	18:24:19
3	Be 313.107†	678866.9	665535.7	476.21 µg/L	476.21 ppb	18:24:13
3	Cd 226.502†	16421.8	16196.5	474.04 µg/L	474.04 ppb	18:24:19
3	Co 228.616†	9336.1	9103.8	471.73 µg/L	471.73 ppb	18:24:19
3	Cr 267.716†	18314.2	17811.9	460.89 µg/L	460.89 ppb	18:24:19
3	Cu 324.752†	68758.0	64587.7	463.88 µg/L	463.88 ppb	18:24:19
3	Mn 257.610†	135316.5	132815.6	484.27 µg/L	484.27 ppb	18:24:13
3	Mo 202.031†	3946.6	3853.4	440.62 µg/L	440.62 ppb	18:24:40
3	Ni 231.604†	7489.0	7021.8	486.42 µg/L	486.42 ppb	18:24:19
3	P 214.914†	1302.2	1031.4	2177.6 µg/L	2177.6 ppb	18:24:40
3	Pb 220.353†	1525.2	1448.0	456.04 µg/L	456.04 ppb	18:24:40
3	S 181.975 Axial†	268.1	241.4	916.19 µg/L	916.19 ppb	18:24:40
3	Sb 206.836†	442.7	411.7	441.13 µg/L	441.13 ppb	18:24:40
3	Se 196.026†	394.8	372.6	469.66 µg/L	469.66 ppb	18:24:40
3	SiO2†	25269.5	23317.6	5088.5 µg/L	5088.5 ppb	18:24:19
3	Si 251.611†	30240.2	29195.6	2386.6 µg/L	2386.6 ppb	18:24:19
3	Sn 189.927†	952.2	926.3	435.67 µg/L	435.67 ppb	18:24:40
3	Ti 334.940†	181934.3	177848.2	474.15 µg/L	474.15 ppb	18:24:13
3	Tl 190.801†	379.8	396.8	466.64 µg/L	466.64 ppb	18:24:40
3	U 409.014†	4867.8	4607.4	450.42 µg/L	450.42 ppb	18:24:19
3	V 292.402†	37340.2	36651.8	469.58 µg/L	469.58 ppb	18:24:19
3	Zn 213.857†	18725.2	17723.5	472.73 µg/L	472.73 ppb	18:24:19

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1724387.3	102.48 %	0.175			0.17%
Sc RADIAL	111207.5	102 %	0.0			0.04%
Y 371.029	947888.4	101.26 %	0.366			0.36%
Ag 328.068†	53885.8	485.16 µg/L	8.077	485.16 ppb	8.077	1.66%
QC value within limits for Ag 328.068 Recovery = 97.03%						
Al 396.153Radial†	9911.0	4733.3 µg/L	6.20	4733.3 ppb	6.20	0.13%
QC value within limits for Al 396.153Radial Recovery = 94.67%						
As 188.979†	262.2	482.60 µg/L	34.553	482.60 ppb	34.553	7.16%
QC value within limits for As 188.979 Recovery = 96.52%						
B 249.677†	9050.6	478.36 µg/L	9.106	478.36 ppb	9.106	1.90%
QC value within limits for B 249.677 Recovery = 95.67%						
Ba 233.527†	18903.6	488.07 µg/L	13.472	488.07 ppb	13.472	2.76%
QC value within limits for Ba 233.527 Recovery = 97.61%						
Be 313.107†	681311.5	487.50 µg/L	9.780	487.50 ppb	9.780	2.01%
QC value within limits for Be 313.107 Recovery = 97.50%						
Ca 317.933Radial†	14864.7	4821.0 µg/L	7.39	4821.0 ppb	7.39	0.15%
QC value within limits for Ca 317.933Radial Recovery = 96.42%						
Cd 226.502†	16718.2	489.33 µg/L	13.270	489.33 ppb	13.270	2.71%
QC value within limits for Cd 226.502 Recovery = 97.87%						
Co 228.616†	9467.2	490.60 µg/L	16.363	490.60 ppb	16.363	3.34%

Cr	267.716†	18694.7	483.73 µg/L	19.779	483.73 ppb	19.779	4.09%
	QC value within limits for Cr 267.716 Recovery = 96.75%						
Cu	324.752†	66891.7	480.40 µg/L	14.321	480.40 ppb	14.321	2.98%
	QC value within limits for Cu 324.752 Recovery = 96.08%						
Fe	238.204 Radial†	628.4	4740.5 µg/L	6.30	4740.5 ppb	6.30	0.13%
	QC value within limits for Fe 238.204 Radial Recovery = 94.81%						
K	766.490 Radial†	8607.7	4885.0 µg/L	38.09	4885.0 ppb	38.09	0.78%
	QC value within limits for K 766.490 Radial Recovery = 97.70%						
Mg	279.077 IEC†	486.0	4855.4 µg/L	15.39	4855.4 ppb	15.39	0.32%
	QC value within limits for Mg 279.077 IEC Recovery = 97.11%						
Mn	257.610†	135905.4	495.54 µg/L	9.769	495.54 ppb	9.769	1.97%
	QC value within limits for Mn 257.610 Recovery = 99.11%						
Mo	202.031†	4255.2	486.54 µg/L	39.768	486.54 ppb	39.768	8.17%
	QC value within limits for Mo 202.031 Recovery = 97.31%						
Na	589.592 Radial†	26572.3	9200.4 µg/L	11.09	9200.4 ppb	11.09	0.12%
	QC value within limits for Na 589.592 Radial Recovery = 92.00%						
Ni	231.604†	7272.3	503.77 µg/L	15.068	503.77 ppb	15.068	2.99%
	QC value within limits for Ni 231.604 Recovery = 100.75%						
P	214.914†	1123.0	2374.0 µg/L	170.11	2374.0 ppb	170.11	7.17%
	QC value within limits for P 214.914 Recovery = 94.96%						
Pb	220.353†	1557.6	490.62 µg/L	29.990	490.62 ppb	29.990	6.11%
	QC value within limits for Pb 220.353 Recovery = 98.12%						
S	181.975 Axial†	259.2	983.59 µg/L	58.835	983.59 ppb	58.835	5.98%
	QC value within limits for S 181.975 Axial Recovery = 98.36%						
Sb	206.836†	445.9	478.12 µg/L	32.067	478.12 ppb	32.067	6.71%
	QC value within limits for Sb 206.836 Recovery = 95.62%						
Se	196.026†	398.8	501.88 µg/L	29.842	501.88 ppb	29.842	5.95%
	QC value within limits for Se 196.026 Recovery = 100.38%						
SiO2†		23853.9	5205.6 µg/L	102.52	5205.6 ppb	102.52	1.97%
	QC value within limits for SiO2 Recovery = 97.35%						
Si	251.611†	29908.5	2444.9 µg/L	51.37	2444.9 ppb	51.37	2.10%
	QC value within limits for Si 251.611 Recovery = 97.80%						
Sn	189.927†	1037.5	487.94 µg/L	45.286	487.94 ppb	45.286	9.28%
	QC value within limits for Sn 189.927 Recovery = 97.59%						
Sr	421.552†	105411.9	477.41 µg/L	1.285	477.41 ppb	1.285	0.27%
	QC value within limits for Sr 421.552 Recovery = 95.48%						
Ti	334.940†	182419.6	486.35 µg/L	10.566	486.35 ppb	10.566	2.17%
	QC value within limits for Ti 334.940 Recovery = 97.27%						
Tl	190.801†	419.7	493.36 µg/L	23.234	493.36 ppb	23.234	4.71%
	QC value within limits for Tl 190.801 Recovery = 98.67%						
U	409.014†	4776.4	466.97 µg/L	14.473	466.97 ppb	14.473	3.10%
	QC value within limits for U 409.014 Recovery = 93.39%						
V	292.402†	38122.8	488.65 µg/L	16.554	488.65 ppb	16.554	3.39%
	QC value within limits for V 292.402 Recovery = 97.73%						
Zn	213.857†	18354.8	489.58 µg/L	14.665	489.58 ppb	14.665	3.00%
	QC value within limits for Zn 213.857 Recovery = 97.92%						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 18:24:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	108505.1	108505.1	99.4 %		18:25:22
1	Al 396.153Radial†	-165.0	8.9	4.2192 µg/L	4.2192 ppb	18:25:22
1	Ca 317.933Radial†	396.4	15.4	4.9928 µg/L	4.9928 ppb	18:25:43
1	Fe 238.204 Radial†	32.0	0.9	7.0810 µg/L	7.0810 ppb	18:25:43
1	K 766.490 Radial†	264.8	35.7	20.287 µg/L	20.287 ppb	18:25:22
1	Mg 279.077 IEC†	10.5	1.8	17.581 µg/L	17.581 ppb	18:25:43
1	Na 589.592 Radial†	273.5	40.0	13.847 µg/L	13.847 ppb	18:25:22
1	Sr 421.552†	161.3	7.4	0.0334 µg/L	0.0334 ppb	18:25:22
1	Sc 361.383	1705285.5	1705285.5	101.34 %		18:26:45
1	Y 371.029	943783.5	943783.5	100.82 %		18:26:45
1	Ag 328.068†	-547.7	25.5	0.2270 µg/L	0.2270 ppb	18:26:50
1	As 188.979†	-9.9	-5.9	-10.927 µg/L	-10.927 ppb	18:27:11
1	B 249.677†	191.5	30.3	1.6043 µg/L	1.6043 ppb	18:27:11
1	Ba 233.527†	-20.9	-2.7	-0.0691 µg/L	-0.0691 ppb	18:27:11
1	Be 313.107†	-2013.8	-41.3	-0.0297 µg/L	-0.0297 ppb	18:26:50
1	Cd 226.502†	-149.1	-2.9	-0.0875 µg/L	-0.0875 ppb	18:27:11
1	Co 228.616†	21.6	-1.0	-0.0488 µg/L	-0.0488 ppb	18:27:11
1	Cr 267.716†	64.7	-26.3	-0.6802 µg/L	-0.6802 ppb	18:27:11
1	Cu 324.752†	2679.1	20.5	0.1486 µg/L	0.1486 ppb	18:26:50
1	Mn 257.610†	-551.1	0.5	0.0010 µg/L	0.0010 ppb	18:27:11
1	Mo 202.031†	17.6	13.0	1.4824 µg/L	1.4824 ppb	18:27:11
1	Ni 231.604†	287.8	-14.7	-1.0179 µg/L	-1.0179 ppb	18:27:11
1	P 214.914†	245.8	1.0	2.1959 µg/L	2.1959 ppb	18:27:11
1	Pb 220.353†	43.5	0.1	0.0410 µg/L	0.0410 ppb	18:27:11
1	S 181.975 Axial†	21.5	0.6	2.1208 µg/L	2.1208 ppb	18:27:11
1	Sb 206.836†	24.9	3.6	3.8651 µg/L	3.8651 ppb	18:27:11
1	Se 196.026†	21.3	7.7	9.4345 µg/L	9.4345 ppb	18:27:11
1	SiO2†	1403.1	1.3	0.2857 µg/L	0.2857 ppb	18:26:50
1	Si 251.611†	379.6	10.6	0.8669 µg/L	0.8669 ppb	18:27:11
1	Sn 189.927†	4.0	-0.6	-0.2979 µg/L	-0.2979 ppb	18:27:11
1	Ti 334.940†	75.6	82.7	0.2194 µg/L	0.2194 ppb	18:26:50
1	Tl 190.801†	-24.1	1.8	2.1447 µg/L	2.1447 ppb	18:27:11
1	U 409.014†	174.0	20.8	2.0405 µg/L	2.0405 ppb	18:26:50
1	V 292.402†	-175.4	-21.2	-0.2560 µg/L	-0.2560 ppb	18:26:50
1	Zn 213.857†	585.8	-2.3	-0.0580 µg/L	-0.0580 ppb	18:27:11
2	Sc RADIAL	107504.4	107504.4	98.4 %		18:25:48
2	Al 396.153Radial†	-187.3	-15.4	-7.3688 µg/L	-7.3688 ppb	18:25:48
2	Ca 317.933Radial†	391.6	14.2	4.5994 µg/L	4.5994 ppb	18:26:09
2	Fe 238.204 Radial†	28.5	-2.4	-17.919 µg/L	-17.919 ppb	18:26:09
2	K 766.490 Radial†	234.5	7.5	4.2528 µg/L	4.2528 ppb	18:25:48
2	Mg 279.077 IEC†	8.5	-0.2	-1.7281 µg/L	-1.7281 ppb	18:26:09
2	Na 589.592 Radial†	282.6	51.8	17.922 µg/L	17.922 ppb	18:25:48
2	Sr 421.552†	119.6	-33.5	-0.1518 µg/L	-0.1518 ppb	18:25:48
2	Sc 361.383	1706695.8	1706695.8	101.43 %		18:27:17
2	Y 371.029	941560.7	941560.7	100.58 %		18:27:17
2	Ag 328.068†	-524.3	48.9	0.4343 µg/L	0.4343 ppb	18:27:22
2	As 188.979†	-3.0	0.9	1.5908 µg/L	1.5908 ppb	18:27:43
2	B 249.677†	173.6	12.5	0.6718 µg/L	0.6718 ppb	18:27:43
2	Ba 233.527†	-18.0	0.2	0.0053 µg/L	0.0053 ppb	18:27:43
2	Be 313.107†	-1940.9	32.2	0.0230 µg/L	0.0230 ppb	18:27:22
2	Cd 226.502†	-144.1	2.1	0.0643 µg/L	0.0643 ppb	18:27:43
2	Co 228.616†	9.3	-13.1	-0.6806 µg/L	-0.6806 ppb	18:27:43
2	Cr 267.716†	75.3	-15.9	-0.4109 µg/L	-0.4109 ppb	18:27:43
2	Cu 324.752†	2680.4	19.6	0.1375 µg/L	0.1375 ppb	18:27:22
2	Mn 257.610†	-540.5	11.3	0.0403 µg/L	0.0403 ppb	18:27:43
2	Mo 202.031†	11.5	6.9	0.7933 µg/L	0.7933 ppb	18:27:43
2	Ni 231.604†	305.5	2.6	0.1804 µg/L	0.1804 ppb	18:27:43
2	P 214.914†	246.8	1.9	3.9974 µg/L	3.9974 ppb	18:27:43
2	Pb 220.353†	48.9	5.3	1.6720 µg/L	1.6720 ppb	18:27:43



2	S 181.975 Axial†	20.9	-0.1	-0.4402 µg/L	-0.4402 ppb	18:27:43
2	Sb 206.836†	24.5	3.1	3.3228 µg/L	3.3228 ppb	18:27:43
2	Se 196.026†	16.2	2.7	3.2030 µg/L	3.2030 ppb	18:27:43
2	SiO2†	1443.2	39.7	8.6733 µg/L	8.6733 ppb	18:27:22
2	Si 251.611†	406.0	36.3	2.9685 µg/L	2.9685 ppb	18:27:43
2	Sn 189.927†	4.9	0.3	0.1267 µg/L	0.1267 ppb	18:27:43
2	Ti 334.940†	99.2	105.9	0.2827 µg/L	0.2827 ppb	18:27:22
2	Tl 190.801†	-27.2	-1.2	-1.3945 µg/L	-1.3945 ppb	18:27:43
2	U 409.014†	268.8	114.2	11.188 µg/L	11.188 ppb	18:27:22
2	V 292.402†	-161.8	-7.6	-0.0804 µg/L	-0.0804 ppb	18:27:22
2	Zn 213.857†	575.3	-13.1	-0.3516 µg/L	-0.3516 ppb	18:27:43
3	Sc RADIAL	108564.8	108564.8	99.4 %		18:26:14
3	Al 396.153Radial†	-178.2	-4.4	-2.1059 µg/L	-2.1059 ppb	18:26:14
3	Ca 317.933Radial†	397.0	15.8	5.1224 µg/L	5.1224 ppb	18:26:34
3	Fe 238.204 Radial†	30.0	-1.1	-8.4226 µg/L	-8.4226 ppb	18:26:34
3	K 766.490 Radial†	277.0	47.8	27.145 µg/L	27.145 ppb	18:26:14
3	Mg 279.077 IEC†	11.8	3.1	30.857 µg/L	30.857 ppb	18:26:34
3	Na 589.592 Radial†	297.1	63.6	22.024 µg/L	22.024 ppb	18:26:14
3	Sr 421.552†	149.1	-5.0	-0.0227 µg/L	-0.0227 ppb	18:26:14
3	Sc 361.383	1709041.3	1709041.3	101.57 %		18:27:49
3	Y 371.029	946063.2	946063.2	101.06 %		18:27:49
3	Ag 328.068†	-563.8	10.8	0.0956 µg/L	0.0956 ppb	18:27:55
3	As 188.979†	-6.7	-2.7	-5.0165 µg/L	-5.0165 ppb	18:28:15
3	B 249.677†	175.3	14.0	0.7461 µg/L	0.7461 ppb	18:28:15
3	Ba 233.527†	-19.6	-1.3	-0.0342 µg/L	-0.0342 ppb	18:28:15
3	Be 313.107†	-1915.0	60.4	0.0431 µg/L	0.0431 ppb	18:27:55
3	Cd 226.502†	-146.4	0.0	0.0018 µg/L	0.0018 ppb	18:28:15
3	Co 228.616†	10.1	-12.3	-0.6403 µg/L	-0.6403 ppb	18:28:15
3	Cr 267.716†	85.4	-6.1	-0.1574 µg/L	-0.1574 ppb	18:28:15
3	Cu 324.752†	2704.5	39.8	0.2834 µg/L	0.2834 ppb	18:27:55
3	Mn 257.610†	-539.0	13.5	0.0467 µg/L	0.0467 ppb	18:28:15
3	Mo 202.031†	12.7	8.1	0.9286 µg/L	0.9286 ppb	18:28:15
3	Ni 231.604†	302.0	-1.3	-0.0900 µg/L	-0.0900 ppb	18:28:15
3	P 214.914†	251.4	6.0	12.974 µg/L	12.974 ppb	18:28:15
3	Pb 220.353†	36.6	-6.8	-2.1598 µg/L	-2.1598 ppb	18:28:15
3	S 181.975 Axial†	19.0	-2.0	-7.5263 µg/L	-7.5263 ppb	18:28:15
3	Sb 206.836†	20.2	-1.1	-1.2013 µg/L	-1.2013 ppb	18:28:15
3	Se 196.026†	14.4	0.9	1.0053 µg/L	1.0053 ppb	18:28:15
3	SiO2†	1409.5	4.6	1.0018 µg/L	1.0018 ppb	18:27:55
3	Si 251.611†	384.7	14.7	1.2036 µg/L	1.2036 ppb	18:28:15
3	Sn 189.927†	8.2	3.6	1.6802 µg/L	1.6802 ppb	18:28:15
3	Ti 334.940†	160.3	166.0	0.4404 µg/L	0.4404 ppb	18:27:55
3	Tl 190.801†	-23.4	2.5	2.9761 µg/L	2.9761 ppb	18:28:15
3	U 409.014†	218.1	63.9	6.2640 µg/L	6.2640 ppb	18:27:55
3	V 292.402†	-151.3	3.0	0.0513 µg/L	0.0513 ppb	18:27:55
3	Zn 213.857†	572.7	-16.4	-0.4418 µg/L	-0.4418 ppb	18:28:15

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1707007.6	101.45 %	0.113			0.11%
Sc RADIAL	108191.4	99.1 %	0.55			0.55%
Y 371.029	943802.5	100.82 %	0.240			0.24%
Ag 328.068†	28.4	0.2523 µg/L	0.17078	0.2523 ppb	0.17078	67.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-3.6	-1.7519 µg/L	5.80212	-1.7519 ppb	5.80212	331.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.6	-4.7841 µg/L	6.26189	-4.7841 ppb	6.26189	130.89%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	18.9	1.0074 µg/L	0.51827	1.0074 ppb	0.51827	51.45%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.3	-0.0327 µg/L	0.03723	-0.0327 ppb	0.03723	114.01%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	17.1	0.0121 µg/L	0.03755	0.0121 ppb	0.03755	309.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	15.1	4.9049 µg/L	0.27239	4.9049 ppb	0.27239	5.55%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-0.3	-0.0071 µg/L	0.07628	-0.0071 ppb	0.07628	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.8	-0.4566 µg/L	0.35374	-0.4566 ppb	0.35374	77.48%

Cr	267.716†	-16.1	-0.4161 µg/L	0.26143	-0.4161 ppb	0.26143	62.82%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	26.6	0.1898 µg/L	0.08123	0.1898 ppb	0.08123	42.79%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.9	-6.4201 µg/L	12.61957	-6.4201 ppb	12.61957	196.56%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	30.4	17.228 µg/L	11.7487	17.228 ppb	11.7487	68.19%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.6	15.570 µg/L	16.3851	15.570 ppb	16.3851	105.24%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	8.4	0.0294 µg/L	0.02474	0.0294 ppb	0.02474	84.26%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	9.3	1.0681 µg/L	0.36514	1.0681 ppb	0.36514	34.19%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	51.8	17.931 µg/L	4.0889	17.931 ppb	4.0889	22.80%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-4.5	-0.3092 µg/L	0.62847	-0.3092 ppb	0.62847	203.28%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	3.0	6.3890 µg/L	5.77325	6.3890 ppb	5.77325	90.36%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-0.5	-0.1489 µg/L	1.92295	-0.1489 ppb	1.92295	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-0.5	-1.9486 µg/L	4.99726	-1.9486 ppb	4.99726	256.46%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.8	1.9955 µg/L	2.78178	1.9955 ppb	2.78178	139.40%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.7	4.5476 µg/L	4.37252	4.5476 ppb	4.37252	96.15%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		15.2	3.3203 µg/L	4.64969	3.3203 ppb	4.64969	140.04%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	20.5	1.6797 µg/L	1.12875	1.6797 ppb	1.12875	67.20%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.1	0.5030 µg/L	1.04140	0.5030 ppb	1.04140	207.03%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-10.4	-0.0470 µg/L	0.09496	-0.0470 ppb	0.09496	202.01%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	118.2	0.3142 µg/L	0.11380	0.3142 ppb	0.11380	36.22%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.1	1.2421 µg/L	2.32088	1.2421 ppb	2.32088	186.85%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	66.3	6.4974 µg/L	4.57815	6.4974 ppb	4.57815	70.46%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-8.6	-0.0950 µg/L	0.15414	-0.0950 ppb	0.15414	162.19%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-10.6	-0.2838 µg/L	0.20065	-0.2838 ppb	0.20065	70.70%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: 246554002|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 308

Date Collected: 2/26/2010 18:28:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246554002|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	110493.6	110493.6	101 %		18:29:03
1	Al 396.153Radial†	134564.2	133164.5	63731 µg/L	63731 ppb	18:29:03
1	Ca 317.933Radial†	87467.5	86060.4	27911 µg/L	27911 ppb	18:29:03
1	Fe 238.204 Radial†	14615.5	14413.2	108490 µg/L	108490 ppb	18:29:23
1	K 766.490 Radial†	18056.4	17614.3	9996.4 µg/L	9996.4 ppb	18:29:03
1	Mg 279.077 IEC†	1438.9	1413.3	13995 µg/L	13995 ppb	18:29:23
1	Na 589.592 Radial†	7783.8	7457.5	2582.1 µg/L	2582.1 ppb	18:29:23
1	Sr 421.552†	56056.3	55245.4	250.20 µg/L	250.20 ppb	18:29:03
1	Sc 361.383	1709322.4	1709322.4	101.58 %		18:30:29
1	Y 371.029	963874.7	963874.7	102.96 %		18:30:29
1	Ag 328.068†	-1932.8	-1336.8	2.8350 µg/L	2.8350 ppb	18:30:34
1	As 188.979†	4.5	8.3	20.079 µg/L	20.079 ppb	18:30:55
1	B 249.677†	1220.6	1043.0	-1.1792 µg/L	-1.1792 ppb	18:30:34
1	Ba 233.527†	64994.4	63998.9	1649.6 µg/L	1649.6 ppb	18:30:34
1	Be 313.107†	9732.6	11526.6	7.2825 µg/L	7.2825 ppb	18:30:34
1	Cd 226.502†	426.4	564.0	4.3348 µg/L	4.3348 ppb	18:30:55
1	Co 228.616†	1028.0	989.8	46.050 µg/L	46.050 ppb	18:30:55
1	Cr 267.716†	2823.9	2689.7	69.623 µg/L	69.623 ppb	18:30:55
1	Cu 324.752†	6838.0	4108.3	49.846 µg/L	49.846 ppb	18:30:34
1	Mn 257.610†	1630633.3	1605752.3	5860.9 µg/L	5860.9 ppb	18:30:29
1	Mo 202.031†	39.0	34.0	8.0127 µg/L	8.0127 ppb	18:30:55
1	Ni 231.604†	1564.4	1241.4	87.433 µg/L	87.433 ppb	18:30:55
1	P 214.914†	495.1	245.9	456.73 µg/L	456.73 ppb	18:30:55
1	Pb 220.353†	406.1	356.9	112.16 µg/L	112.16 ppb	18:30:55
1	S 181.975 Axial†	115.1	92.6	351.50 µg/L	351.50 ppb	18:30:55
1	Sb 206.836†	11.9	-9.3	-11.043 µg/L	-11.043 ppb	18:30:55
1	Se 196.026†	-68.7	-80.9	246.36 µg/L	246.36 ppb	18:30:55
1	SiO2†	294443.4	288469.2	62952 µg/L	62952 ppb	18:30:29
1	Si 251.611†	364380.6	358335.1	29293 µg/L	29293 ppb	18:30:29
1	Sn 189.927†	-33.8	-37.8	-23.131 µg/L	-23.131 ppb	18:30:55
1	Ti 334.940†	967703.7	952623.1	2540.7 µg/L	2540.7 ppb	18:30:29
1	Tl 190.801†	-57.3	-30.9	20.641 µg/L	20.641 ppb	18:30:55
1	U 409.014†	-4189.4	-4275.0	-435.59 µg/L	-435.59 ppb	18:30:29
1	V 292.402†	8936.2	8948.8	117.14 µg/L	117.14 ppb	18:30:34
1	Zn 213.857†	16362.4	15527.0	410.73 µg/L	410.73 ppb	18:30:34
2	Sc RADIAL	109941.5	109941.5	101 %		18:29:29
2	Al 396.153Radial†	133706.1	132979.9	63643 µg/L	63643 ppb	18:29:29
2	Ca 317.933Radial†	86610.5	85643.2	27776 µg/L	27776 ppb	18:29:29
2	Fe 238.204 Radial†	14593.1	14463.5	108870 µg/L	108870 ppb	18:29:49
2	K 766.490 Radial†	17996.6	17644.6	10014 µg/L	10014 ppb	18:29:29
2	Mg 279.077 IEC†	1429.7	1411.3	13975 µg/L	13975 ppb	18:29:49
2	Na 589.592 Radial†	7746.1	7458.6	2582.5 µg/L	2582.5 ppb	18:29:49
2	Sr 421.552†	55995.1	55462.8	251.19 µg/L	251.19 ppb	18:29:29
2	Sc 361.383	1717142.5	1717142.5	102.05 %		18:31:03
2	Y 371.029	973958.4	973958.4	104.04 %		18:31:03
2	Ag 328.068†	-1961.2	-1355.9	2.7147 µg/L	2.7147 ppb	18:31:08
2	As 188.979†	4.5	8.3	20.138 µg/L	20.138 ppb	18:31:28
2	B 249.677†	1244.2	1060.6	-0.4406 µg/L	-0.4406 ppb	18:31:08
2	Ba 233.527†	65554.0	64255.9	1656.2 µg/L	1656.2 ppb	18:31:08
2	Be 313.107†	9815.4	11564.2	7.3126 µg/L	7.3126 ppb	18:31:08
2	Cd 226.502†	407.9	543.9	3.7055 µg/L	3.7055 ppb	18:31:28
2	Co 228.616†	1027.1	984.2	45.781 µg/L	45.781 ppb	18:31:28
2	Cr 267.716†	2835.6	2688.5	69.592 µg/L	69.592 ppb	18:31:28
2	Cu 324.752†	6935.3	4173.0	50.381 µg/L	50.381 ppb	18:31:08
2	Mn 257.610†	1637720.3	1605386.6	5859.6 µg/L	5859.6 ppb	18:31:03
2	Mo 202.031†	37.1	32.0	7.7985 µg/L	7.7985 ppb	18:31:28
2	Ni 231.604†	1581.6	1251.2	88.120 µg/L	88.120 ppb	18:31:28
2	P 214.914†	504.2	252.6	470.94 µg/L	470.94 ppb	18:31:28
2	Pb 220.353†	400.8	349.9	109.95 µg/L	109.95 ppb	18:31:28

2	S 181.975 Axial†	123.1	100.0	379.41 µg/L	379.41 ppb	18:31:28
2	Sb 206.836†	17.1	-4.3	-5.6922 µg/L	-5.6922 ppb	18:31:28
2	Se 196.026†	-61.9	-73.9	256.22 µg/L	256.22 ppb	18:31:28
2	SiO2†	294751.9	287451.5	62730 µg/L	62730 ppb	18:31:03
2	Si 251.611†	364502.0	356820.5	29169 µg/L	29169 ppb	18:31:03
2	Sn 189.927†	-23.7	-27.8	-18.466 µg/L	-18.466 ppb	18:31:28
2	Ti 334.940†	968911.4	949468.2	2532.3 µg/L	2532.3 ppb	18:31:03
2	Tl 190.801†	-58.3	-31.5	19.890 µg/L	19.890 ppb	18:31:28
2	U 409.014†	-4212.2	-4278.5	-435.97 µg/L	-435.97 ppb	18:31:03
2	V 292.402†	9002.1	8973.3	117.47 µg/L	117.47 ppb	18:31:08
2	Zn 213.857†	16484.3	15573.1	411.95 µg/L	411.95 ppb	18:31:08
3	Sc RADIAL	109408.8	109408.8	100 %		18:29:55
3	Al 396.153Radial†	133564.4	133485.1	63884 µg/L	63884 ppb	18:29:55
3	Ca 317.933Radial†	86257.8	85710.2	27798 µg/L	27798 ppb	18:29:55
3	Fe 238.204 Radial†	14628.7	14569.6	109670 µg/L	109670 ppb	18:30:15
3	K 766.490 Radial†	17879.7	17614.9	9996.7 µg/L	9996.7 ppb	18:29:55
3	Mg 279.077 IEC†	1440.6	1429.1	14151 µg/L	14151 ppb	18:30:15
3	Na 589.592 Radial†	7807.4	7557.3	2616.6 µg/L	2616.6 ppb	18:30:15
3	Sr 421.552†	55947.9	55686.5	252.20 µg/L	252.20 ppb	18:29:55
3	Sc 361.383	1705082.8	1705082.8	101.33 %		18:31:36
3	Y 371.029	964467.7	964467.7	103.03 %		18:31:36
3	Ag 328.068†	-1898.6	-1307.7	3.2156 µg/L	3.2156 ppb	18:31:42
3	As 188.979†	3.5	7.3	18.412 µg/L	18.412 ppb	18:32:02
3	B 249.677†	1169.6	995.6	-4.3153 µg/L	-4.3153 ppb	18:31:42
3	Ba 233.527†	63253.9	62440.4	1609.4 µg/L	1609.4 ppb	18:31:42
3	Be 313.107†	9300.0	11123.6	7.0162 µg/L	7.0162 ppb	18:31:42
3	Cd 226.502†	363.0	502.4	2.3954 µg/L	2.3954 ppb	18:32:02
3	Co 228.616†	953.7	919.0	42.499 µg/L	42.499 ppb	18:32:02
3	Cr 267.716†	2596.9	2472.6	64.007 µg/L	64.007 ppb	18:32:02
3	Cu 324.752†	6762.7	4050.7	49.655 µg/L	49.655 ppb	18:31:42
3	Mn 257.610†	1596421.7	1575981.7	5752.4 µg/L	5752.4 ppb	18:31:36
3	Mo 202.031†	40.8	35.9	8.2681 µg/L	8.2681 ppb	18:32:02
3	Ni 231.604†	1487.6	1169.4	82.459 µg/L	82.459 ppb	18:32:02
3	P 214.914†	477.7	229.9	421.42 µg/L	421.42 ppb	18:32:02
3	Pb 220.353†	393.9	345.9	108.65 µg/L	108.65 ppb	18:32:02
3	S 181.975 Axial†	120.3	98.0	371.95 µg/L	371.95 ppb	18:32:02
3	Sb 206.836†	14.4	-6.8	-8.3263 µg/L	-8.3263 ppb	18:32:02
3	Se 196.026†	-70.6	-83.0	247.61 µg/L	247.61 ppb	18:32:02
3	SiO2†	289285.4	284099.7	61998 µg/L	61998 ppb	18:31:36
3	Si 251.611†	358058.2	352987.7	28856 µg/L	28856 ppb	18:31:36
3	Sn 189.927†	-29.8	-33.9	-21.361 µg/L	-21.361 ppb	18:32:02
3	Ti 334.940†	943214.9	930824.9	2482.5 µg/L	2482.5 ppb	18:31:36
3	Tl 190.801†	-49.5	-23.2	28.784 µg/L	28.784 ppb	18:32:02
3	U 409.014†	-4169.6	-4265.6	-434.83 µg/L	-434.83 ppb	18:31:36
3	V 292.402†	8539.9	8579.6	112.50 µg/L	112.50 ppb	18:31:42
3	Zn 213.857†	15943.3	15153.4	400.65 µg/L	400.65 ppb	18:31:42

Mean Data: 246554002|951752|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1710515.9	101.65 %		0.364				0.36%
Sc RADIAL	109948.0	101 %		0.5				0.49%
Y 371.029	967433.6	103.34 %		0.604				0.58%
Ag 328.068†	-1333.5	2.9218 µg/L		0.26147	2.9218 ppb		0.26147	8.95%
Al 396.153Radial†	133209.9	63753 µg/L		122.3	63753 ppb		122.3	0.19%
As 188.979†	8.0	19.543 µg/L		0.9797	19.543 ppb		0.9797	5.01%
B 249.677†	1033.1	-1.9783 µg/L		2.05725	-1.9783 ppb		2.05725	103.99%
Ba 233.527†	63565.1	1638.4 µg/L		25.33	1638.4 ppb		25.33	1.55%
Be 313.107†	11404.8	7.2038 µg/L		0.16315	7.2038 ppb		0.16315	2.26%
Ca 317.933Radial†	85804.6	27829 µg/L		72.7	27829 ppb		72.7	0.26%
Cd 226.502†	536.8	3.4786 µg/L		0.98943	3.4786 ppb		0.98943	28.44%
Co 228.616†	964.3	44.777 µg/L		1.9772	44.777 ppb		1.9772	4.42%
Cr 267.716†	2616.9	67.741 µg/L		3.2336	67.741 ppb		3.2336	4.77%
Cu 324.752†	4110.7	49.961 µg/L		0.3766	49.961 ppb		0.3766	0.75%
Fe 238.204 Radial†	14482.1	109010 µg/L		600.9	109010 ppb		600.9	0.55%
K 766.490 Radial†	17624.6	10002 µg/L		9.8	10002 ppb		9.8	0.10%
Mg 279.077 IEC†	1417.9	14040 µg/L		96.5	14040 ppb		96.5	0.69%
Mn 257.610†	1595706.9	5824.3 µg/L		62.27	5824.3 ppb		62.27	1.07%
Mo 202.031†	34.0	8.0264 µg/L		0.23509	8.0264 ppb		0.23509	2.93%
Na 589.592 Radial†	7491.1	2593.7 µg/L		19.84	2593.7 ppb		19.84	0.77%

Ni 231.604†	1220.7	86.004 µg/L	3.0893	86.004 ppb	3.0893	3.59%
P 214.914†	242.8	449.70 µg/L	25.496	449.70 ppb	25.496	5.67%
Pb 220.353†	350.9	110.25 µg/L	1.776	110.25 ppb	1.776	1.61%
S 181.975 Axial†	96.9	367.62 µg/L	14.452	367.62 ppb	14.452	3.93%
Sb 206.836†	-6.8	-8.3539 µg/L	2.67560	-8.3539 ppb	2.67560	32.03%
Se 196.026†	-79.3	250.07 µg/L	5.370	250.07 ppb	5.370	2.15%
SiO2†	286673.4	62560 µg/L	498.9	62560 ppb	498.9	0.80%
Si 251.611†	356047.8	29106 µg/L	225.3	29106 ppb	225.3	0.77%
Sn 189.927†	-33.2	-20.986 µg/L	2.3553	-20.986 ppb	2.3553	11.22%
Sr 421.552†	55464.9	251.20 µg/L	0.999	251.20 ppb	0.999	0.40%
Ti 334.940†	944305.4	2518.5 µg/L	31.44	2518.5 ppb	31.44	1.25%
Tl 190.801†	-28.5	23.105 µg/L	4.9322	23.105 ppb	4.9322	21.35%
U 409.014†	-4273.0	-435.46 µg/L	0.582	-435.46 ppb	0.582	0.13%
V 292.402†	8833.9	115.70 µg/L	2.780	115.70 ppb	2.780	2.40%
Zn 213.857†	15417.8	407.78 µg/L	6.200	407.78 ppb	6.200	1.52%

Sequence No.: 11  
 Sample ID: 246554003|951752|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 309  
 Date Collected: 2/26/2010 18:32:12  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 246554003|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	110532.5	110532.5	101 %		18:32:44
1	Al 396.153Radial†	101200.3	100155.8	47933 µg/L	47933 ppb	18:32:44
1	Ca 317.933Radial†	33673.2	32883.9	10665 µg/L	10665 ppb	18:32:44
1	Fe 238.204 Radial†	11194.2	11028.0	83010 µg/L	83010 ppb	18:33:05
1	K 766.490 Radial†	9152.6	8811.6	5000.7 µg/L	5000.7 ppb	18:32:44
1	Mg 279.077 IEC†	682.3	665.3	6554.3 µg/L	6554.3 ppb	18:33:05
1	Na 589.592 Radial†	3663.7	3384.3	1171.8 µg/L	1171.8 ppb	18:32:44
1	Sr 421.552†	12709.6	12401.5	56.166 µg/L	56.166 ppb	18:32:44
1	Sc 361.383	1712828.4	1712828.4	101.79 %		18:34:10
1	Y 371.029	1030194.6	1030194.6	110.05 %		18:34:10
1	Ag 328.068†	-1626.9	-1032.3	1.9133 µg/L	1.9133 ppb	18:34:15
1	As 188.979†	-1.3	2.5	8.9510 µg/L	8.9510 ppb	18:34:36
1	B 249.677†	896.1	721.7	-4.9399 µg/L	-4.9399 ppb	18:34:15
1	Ba 233.527†	13270.8	13055.0	336.57 µg/L	336.57 ppb	18:34:15
1	Be 313.107†	16007.6	17671.6	11.428 µg/L	11.428 ppb	18:34:15
1	Cd 226.502†	286.9	426.1	3.1236 µg/L	3.1236 ppb	18:34:36
1	Co 228.616†	324.0	296.0	8.6698 µg/L	8.6698 ppb	18:34:36
1	Cr 267.716†	2440.2	2307.0	59.696 µg/L	59.696 ppb	18:34:36
1	Cu 324.752†	5178.7	2464.5	33.272 µg/L	33.272 ppb	18:34:15
1	Mn 257.610†	624427.6	613977.4	2243.4 µg/L	2243.4 ppb	18:34:10
1	Mo 202.031†	38.0	33.0	6.9276 µg/L	6.9276 ppb	18:34:36
1	Ni 231.604†	770.2	458.0	32.823 µg/L	32.823 ppb	18:34:36
1	P 214.914†	628.1	375.6	753.71 µg/L	753.71 ppb	18:34:36
1	Pb 220.353†	170.6	124.7	39.068 µg/L	39.068 ppb	18:34:36
1	S 181.975 Axial†	105.7	83.1	315.53 µg/L	315.53 ppb	18:34:36
1	Sb 206.836†	13.4	-7.8	-9.1088 µg/L	-9.1088 ppb	18:34:36
1	Se 196.026†	-36.5	-49.2	207.62 µg/L	207.62 ppb	18:34:36
1	SiO2†	196185.0	191347.5	41757 µg/L	41757 ppb	18:34:10
1	Si 251.611†	242314.9	237684.4	19430 µg/L	19430 ppb	18:34:10
1	Sn 189.927†	-11.5	-15.8	-12.186 µg/L	-12.186 ppb	18:34:36
1	Ti 334.940†	1223371.5	1201839.4	3205.9 µg/L	3205.9 ppb	18:34:10
1	Tl 190.801†	-64.0	-37.3	4.1337 µg/L	4.1337 ppb	18:34:36
1	U 409.014†	-3200.5	-3294.9	-334.98 µg/L	-334.98 ppb	18:34:10
1	V 292.402†	4733.2	4801.8	63.730 µg/L	63.730 ppb	18:34:15
1	Zn 213.857†	15952.3	15091.2	400.92 µg/L	400.92 ppb	18:34:15
2	Sc RADIAL	110446.4	110446.4	101 %		18:33:10
2	Al 396.153Radial†	101596.3	100625.3	48158 µg/L	48158 ppb	18:33:10
2	Ca 317.933Radial†	33754.4	32990.1	10699 µg/L	10699 ppb	18:33:10
2	Fe 238.204 Radial†	11231.4	11073.4	83352 µg/L	83352 ppb	18:33:31
2	K 766.490 Radial†	9108.0	8774.5	4979.7 µg/L	4979.7 ppb	18:33:10
2	Mg 279.077 IEC†	692.2	675.6	6656.7 µg/L	6656.7 ppb	18:33:31
2	Na 589.592 Radial†	3737.7	3460.2	1198.1 µg/L	1198.1 ppb	18:33:10
2	Sr 421.552†	12771.6	12472.5	56.488 µg/L	56.488 ppb	18:33:10
2	Sc 361.383	1717061.6	1717061.6	102.04 %		18:34:44
2	Y 371.029	1037123.8	1037123.8	110.79 %		18:34:44
2	Ag 328.068†	-1619.8	-1021.5	2.0529 µg/L	2.0529 ppb	18:34:49
2	As 188.979†	-5.6	-1.6	1.3044 µg/L	1.3044 ppb	18:35:10
2	B 249.677†	910.3	733.4	-4.4973 µg/L	-4.4973 ppb	18:34:49
2	Ba 233.527†	13387.9	13137.6	338.70 µg/L	338.70 ppb	18:34:49
2	Be 313.107†	16034.5	17659.2	11.417 µg/L	11.417 ppb	18:34:49
2	Cd 226.502†	303.3	441.5	3.5361 µg/L	3.5361 ppb	18:35:10
2	Co 228.616†	332.7	303.8	9.0651 µg/L	9.0651 ppb	18:35:10
2	Cr 267.716†	2436.9	2298.0	59.461 µg/L	59.461 ppb	18:35:10
2	Cu 324.752†	5236.6	2508.7	33.653 µg/L	33.653 ppb	18:34:49
2	Mn 257.610†	628661.8	616614.5	2253.0 µg/L	2253.0 ppb	18:34:44
2	Mo 202.031†	42.5	37.3	7.4295 µg/L	7.4295 ppb	18:35:10
2	Ni 231.604†	776.5	462.3	33.124 µg/L	33.124 ppb	18:35:10
2	P 214.914†	627.7	373.7	749.34 µg/L	749.34 ppb	18:35:10
2	Pb 220.353†	177.0	130.6	40.905 µg/L	40.905 ppb	18:35:10

2	S 181.975 Axial†	100.1	77.4	293.84 µg/L	293.84 ppb	18:35:10
2	Sb 206.836†	12.7	-8.6	-9.9314 µg/L	-9.9314 ppb	18:35:10
2	Se 196.026†	-36.3	-48.9	209.01 µg/L	209.01 ppb	18:35:10
2	SiO2†	196959.0	191630.9	41819 µg/L	41819 ppb	18:34:44
2	Si 251.611†	243385.2	238146.4	19468 µg/L	19468 ppb	18:34:44
2	Sn 189.927†	-8.5	-12.9	-10.822 µg/L	-10.822 ppb	18:35:10
2	Ti 334.940†	1228279.0	1203685.7	3210.8 µg/L	3210.8 ppb	18:34:44
2	Tl 190.801†	-59.7	-32.9	9.3404 µg/L	9.3404 ppb	18:35:10
2	U 409.014†	-3140.2	-3228.1	-328.49 µg/L	-328.49 ppb	18:34:44
2	V 292.402†	4730.9	4788.0	63.578 µg/L	63.578 ppb	18:34:49
2	Zn 213.857†	16061.5	15159.5	402.73 µg/L	402.73 ppb	18:34:49
3	Sc RADIAL	110685.0	110685.0	101 %		18:33:36
3	Al 396.153Radial†	101379.6	100194.9	47952 µg/L	47952 ppb	18:33:36
3	Ca 317.933Radial†	33659.0	32824.0	10646 µg/L	10646 ppb	18:33:36
3	Fe 238.204 Radial†	11187.7	11006.4	82847 µg/L	82847 ppb	18:33:57
3	K 766.490 Radial†	9106.0	8753.1	4967.6 µg/L	4967.6 ppb	18:33:36
3	Mg 279.077 IEC†	685.3	667.3	6574.3 µg/L	6574.3 ppb	18:33:57
3	Na 589.592 Radial†	3616.1	3332.3	1153.8 µg/L	1153.8 ppb	18:33:36
3	Sr 421.552†	12748.2	12422.2	56.260 µg/L	56.260 ppb	18:33:36
3	Sc 361.383	1703159.4	1703159.4	101.22 %		18:35:17
3	Y 371.029	1027661.7	1027661.7	109.78 %		18:35:17
3	Ag 328.068†	-1661.2	-1075.3	1.5012 µg/L	1.5012 ppb	18:35:23
3	As 188.979†	-3.2	0.7	5.5213 µg/L	5.5213 ppb	18:35:43
3	B 249.677†	891.5	722.1	-4.8393 µg/L	-4.8393 ppb	18:35:23
3	Ba 233.527†	12970.0	12831.9	330.82 µg/L	330.82 ppb	18:35:23
3	Be 313.107†	15366.5	17127.5	11.052 µg/L	11.052 ppb	18:35:23
3	Cd 226.502†	247.1	388.3	2.0354 µg/L	2.0354 ppb	18:35:43
3	Co 228.616†	318.6	292.5	8.5630 µg/L	8.5630 ppb	18:35:43
3	Cr 267.716†	2238.4	2121.3	54.892 µg/L	54.892 ppb	18:35:43
3	Cu 324.752†	5163.8	2478.6	33.343 µg/L	33.343 ppb	18:35:23
3	Mn 257.610†	616357.8	609487.2	2227.0 µg/L	2227.0 ppb	18:35:17
3	Mo 202.031†	38.0	33.2	6.9406 µg/L	6.9406 ppb	18:35:43
3	Ni 231.604†	754.6	446.9	32.047 µg/L	32.047 ppb	18:35:43
3	P 214.914†	602.3	353.6	706.48 µg/L	706.48 ppb	18:35:43
3	Pb 220.353†	164.1	119.3	37.352 µg/L	37.352 ppb	18:35:43
3	S 181.975 Axial†	98.6	76.7	291.12 µg/L	291.12 ppb	18:35:43
3	Sb 206.836†	12.1	-9.1	-10.393 µg/L	-10.393 ppb	18:35:43
3	Se 196.026†	-42.6	-55.4	199.49 µg/L	199.49 ppb	18:35:43
3	SiO2†	194044.2	190326.7	41534 µg/L	41534 ppb	18:35:17
3	Si 251.611†	239900.5	236650.5	19345 µg/L	19345 ppb	18:35:17
3	Sn 189.927†	-8.0	-12.4	-10.583 µg/L	-10.583 ppb	18:35:43
3	Ti 334.940†	1202937.3	1188474.0	3170.2 µg/L	3170.2 ppb	18:35:17
3	Tl 190.801†	-58.2	-31.9	10.060 µg/L	10.060 ppb	18:35:43
3	U 409.014†	-3051.9	-3166.0	-322.33 µg/L	-322.33 ppb	18:35:17
3	V 292.402†	4619.2	4715.6	62.634 µg/L	62.634 ppb	18:35:23
3	Zn 213.857†	15654.8	14886.2	395.42 µg/L	395.42 ppb	18:35:23

Mean Data: 246554003|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1711016.5	101.68 %	0.423			0.42%
Sc RADIAL	110554.6	101 %	0.1			0.11%
Y 371.029	1031660.0	110.21 %	0.523			0.47%
Ag 328.068†	-1043.0	1.8225 µg/L	0.28688	1.8225 ppb	0.28688	15.74%
Al 396.153Radial†	100325.3	48014 µg/L	124.7	48014 ppb	124.7	0.26%
As 188.979†	0.5	5.2589 µg/L	3.83009	5.2589 ppb	3.83009	72.83%
B 249.677†	725.7	-4.7588 µg/L	0.23201	-4.7588 ppb	0.23201	4.88%
Ba 233.527†	13008.2	335.36 µg/L	4.078	335.36 ppb	4.078	1.22%
Be 313.107†	17486.1	11.299 µg/L	0.2140	11.299 ppb	0.2140	1.89%
Ca 317.933Radial†	32899.4	10670 µg/L	27.3	10670 ppb	27.3	0.26%
Cd 226.502†	418.6	2.8983 µg/L	0.77528	2.8983 ppb	0.77528	26.75%
Co 228.616†	297.5	8.7660 µg/L	0.26449	8.7660 ppb	0.26449	3.02%
Cr 267.716†	2242.1	58.016 µg/L	2.7080	58.016 ppb	2.7080	4.67%
Cu 324.752†	2483.9	33.423 µg/L	0.2026	33.423 ppb	0.2026	0.61%
Fe 238.204 Radial†	11036.0	83070 µg/L	257.4	83070 ppb	257.4	0.31%
K 766.490 Radial†	8779.7	4982.7 µg/L	16.79	4982.7 ppb	16.79	0.34%
Mg 279.077 IEC†	669.4	6595.1 µg/L	54.30	6595.1 ppb	54.30	0.82%
Mn 257.610†	613359.7	2241.1 µg/L	13.15	2241.1 ppb	13.15	0.59%
Mo 202.031†	34.5	7.0992 µg/L	0.28608	7.0992 ppb	0.28608	4.03%
Na 589.592 Radial†	3392.3	1174.5 µg/L	22.28	1174.5 ppb	22.28	1.90%

Ni 231.604†	455.7	32.664 µg/L	0.5557	32.664 ppb	0.5557	1.70%
P 214.914†	367.6	736.51 µg/L	26.099	736.51 ppb	26.099	3.54%
Pb 220.353†	124.9	39.108 µg/L	1.7769	39.108 ppb	1.7769	4.54%
S 181.975 Axial†	79.1	300.17 µg/L	13.378	300.17 ppb	13.378	4.46%
Sb 206.836†	-8.5	-9.8110 µg/L	0.65037	-9.8110 ppb	0.65037	6.63%
Se 196.026†	-51.2	205.37 µg/L	5.144	205.37 ppb	5.144	2.50%
SiO2†	191101.7	41704 µg/L	149.7	41704 ppb	149.7	0.36%
Si 251.611†	237493.7	19414 µg/L	62.6	19414 ppb	62.6	0.32%
Sn 189.927†	-13.7	-11.197 µg/L	0.8651	-11.197 ppb	0.8651	7.73%
Sr 421.552†	12432.1	56.304 µg/L	0.1655	56.304 ppb	0.1655	0.29%
Ti 334.940†	1197999.7	3195.6 µg/L	22.14	3195.6 ppb	22.14	0.69%
Tl 190.801†	-34.0	7.8446 µg/L	3.23380	7.8446 ppb	3.23380	41.22%
U 409.014†	-3229.7	-328.60 µg/L	6.327	-328.60 ppb	6.327	1.93%
V 292.402†	4768.5	63.314 µg/L	0.5940	63.314 ppb	0.5940	0.94%
Zn 213.857†	15045.6	399.69 µg/L	3.806	399.69 ppb	3.806	0.95%



Sequence No.: 12

Sample ID: 246554004|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 310

Date Collected: 2/26/2010 18:35:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246554004|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	106631.1	106631.1	97.6 %		18:36:25
1	Al 396.153Radial†	17190.0	17779.1	8508.7 µg/L	8508.7 ppb	18:36:25
1	Ca 317.933Radial†	16448.3	16461.1	5338.7 µg/L	5338.7 ppb	18:36:25
1	Fe 238.204 Radial†	8888.4	9071.3	68282 µg/L	68282 ppb	18:36:25
1	K 766.490 Radial†	4517.2	4395.3	2494.4 µg/L	2494.4 ppb	18:36:25
1	Mg 279.077 IEC†	309.0	307.7	2999.1 µg/L	2999.1 ppb	18:36:45
1	Na 589.592 Radial†	3060.6	2899.1	1003.8 µg/L	1003.8 ppb	18:36:25
1	Sr 421.552†	3157.4	3078.5	13.942 µg/L	13.942 ppb	18:36:25
1	Sc 361.383	1675832.0	1675832.0	99.594 %		18:37:50
1	Y 371.029	1001440.7	1001440.7	106.98 %		18:37:50
1	Ag 328.068†	-1471.2	-911.3	0.8612 µg/L	0.8612 ppb	18:37:55
1	As 188.979†	-13.0	-9.2	-13.226 µg/L	-13.226 ppb	18:38:16
1	B 249.677†	668.8	512.9	-8.4001 µg/L	-8.4001 ppb	18:37:55
1	Ba 233.527†	6430.2	6474.3	166.91 µg/L	166.91 ppb	18:37:55
1	Be 313.107†	9007.5	10990.0	6.5366 µg/L	6.5366 ppb	18:37:55
1	Cd 226.502†	207.4	352.5	2.6093 µg/L	2.6093 ppb	18:38:16
1	Co 228.616†	269.6	248.4	5.6119 µg/L	5.6119 ppb	18:38:16
1	Cr 267.716†	729.6	642.4	16.627 µg/L	16.627 ppb	18:38:16
1	Cu 324.752†	3540.9	932.3	19.520 µg/L	19.520 ppb	18:37:55
1	Mn 257.610†	587009.6	589949.1	2155.1 µg/L	2155.1 ppb	18:37:50
1	Mo 202.031†	85.2	81.2	11.876 µg/L	11.876 ppb	18:38:16
1	Ni 231.604†	396.3	99.2	7.7547 µg/L	7.7547 ppb	18:38:16
1	P 214.914†	517.8	278.4	546.14 µg/L	546.14 ppb	18:38:16
1	Pb 220.353†	201.2	159.2	48.290 µg/L	48.290 ppb	18:38:16
1	S 181.975 Axial†	24.8	4.2	15.904 µg/L	15.904 ppb	18:38:16
1	Sb 206.836†	10.9	-10.1	-10.854 µg/L	-10.854 ppb	18:38:16
1	Se 196.026†	-35.5	-48.9	162.27 µg/L	162.27 ppb	18:38:16
1	SiO2†	109693.6	108758.1	23734 µg/L	23734 ppb	18:37:55
1	Si 251.611†	135779.2	135969.3	11115 µg/L	11115 ppb	18:37:55
1	Sn 189.927†	-6.8	-11.4	-9.6103 µg/L	-9.6103 ppb	18:38:16
1	Ti 334.940†	1303298.1	1308624.3	3491.0 µg/L	3491.0 ppb	18:37:50
1	Tl 190.801†	-67.4	-42.0	-1.3958 µg/L	-1.3958 ppb	18:38:16
1	U 409.014†	-2492.7	-2653.7	-269.79 µg/L	-269.79 ppb	18:37:50
1	V 292.402†	1904.6	2064.3	28.506 µg/L	28.506 ppb	18:37:55
1	Zn 213.857†	16610.4	16097.9	428.99 µg/L	428.99 ppb	18:37:55
2	Sc RADIAL	107348.4	107348.4	98.3 %		18:36:51
2	Al 396.153Radial†	17465.3	17941.6	8586.4 µg/L	8586.4 ppb	18:36:51
2	Ca 317.933Radial†	16691.2	16595.6	5382.4 µg/L	5382.4 ppb	18:36:51
2	Fe 238.204 Radial†	9011.1	9135.3	68763 µg/L	68763 ppb	18:36:51
2	K 766.490 Radial†	4634.6	4483.8	2544.6 µg/L	2544.6 ppb	18:36:51
2	Mg 279.077 IEC†	309.6	306.1	2983.0 µg/L	2983.0 ppb	18:37:11
2	Na 589.592 Radial†	3163.6	2982.9	1032.8 µg/L	1032.8 ppb	18:36:51
2	Sr 421.552†	3182.0	3082.0	13.958 µg/L	13.958 ppb	18:36:51
2	Sc 361.383	1702686.6	1702686.6	101.19 %		18:38:23
2	Y 371.029	1019973.0	1019973.0	108.96 %		18:38:23
2	Ag 328.068†	-1457.9	-874.9	1.2444 µg/L	1.2444 ppb	18:38:29
2	As 188.979†	-11.4	-7.4	-9.9091 µg/L	-9.9091 ppb	18:38:49
2	B 249.677†	703.2	536.3	-7.4095 µg/L	-7.4095 ppb	18:38:29
2	Ba 233.527†	6324.4	6268.0	161.59 µg/L	161.59 ppb	18:38:29
2	Be 313.107†	8829.8	10671.8	6.3358 µg/L	6.3358 ppb	18:38:29
2	Cd 226.502†	218.8	360.4	2.7859 µg/L	2.7859 ppb	18:38:49
2	Co 228.616†	261.8	236.5	5.1377 µg/L	5.1377 ppb	18:38:49
2	Cr 267.716†	716.6	618.0	15.997 µg/L	15.997 ppb	18:38:49
2	Cu 324.752†	3484.9	820.9	18.812 µg/L	18.812 ppb	18:38:29
2	Mn 257.610†	585413.9	579076.1	2115.5 µg/L	2115.5 ppb	18:38:23
2	Mo 202.031†	80.7	75.4	11.232 µg/L	11.232 ppb	18:38:49
2	Ni 231.604†	401.9	98.5	7.7108 µg/L	7.7108 ppb	18:38:49
2	P 214.914†	505.2	257.8	501.35 µg/L	501.35 ppb	18:38:49
2	Pb 220.353†	198.6	153.4	46.445 µg/L	46.445 ppb	18:38:49

2	S 181.975 Axial†	28.3	7.3	27.677 µg/L	27.677 ppb	18:38:49
2	Sb 206.836†	10.4	-10.7	-11.567 µg/L	-11.567 ppb	18:38:49
2	Se 196.026†	-29.3	-42.3	172.01 µg/L	172.01 ppb	18:38:49
2	SiO2†	108373.0	105715.8	23070 µg/L	23070 ppb	18:38:29
2	Si 251.611†	133893.6	131955.6	10787 µg/L	10787 ppb	18:38:29
2	Sn 189.927†	-8.6	-13.0	-10.406 µg/L	-10.406 ppb	18:38:49
2	Ti 334.940†	1297283.0	1282040.6	3420.0 µg/L	3420.0 ppb	18:38:23
2	Tl 190.801†	-61.1	-34.7	6.3677 µg/L	6.3677 ppb	18:38:49
2	U 409.014†	-2556.8	-2677.6	-272.20 µg/L	-272.20 ppb	18:38:23
2	V 292.402†	1887.9	2017.7	27.924 µg/L	27.924 ppb	18:38:29
2	Zn 213.857†	16377.8	15605.0	415.73 µg/L	415.73 ppb	18:38:29
3	Sc RADIAL	107079.4	107079.4	98.1 %		18:37:17
3	Al 396.153Radial†	17462.2	17983.0	8606.3 µg/L	8606.3 ppb	18:37:17
3	Ca 317.933Radial†	16655.3	16601.7	5384.3 µg/L	5384.3 ppb	18:37:17
3	Fe 238.204 Radial†	9005.8	9152.9	68896 µg/L	68896 ppb	18:37:17
3	K 766.490 Radial†	4647.3	4508.6	2558.7 µg/L	2558.7 ppb	18:37:17
3	Mg 279.077 IEC†	297.2	294.4	2865.3 µg/L	2865.3 ppb	18:37:37
3	Na 589.592 Radial†	3133.9	2960.7	1025.1 µg/L	1025.1 ppb	18:37:17
3	Sr 421.552†	3213.2	3121.9	14.139 µg/L	14.139 ppb	18:37:17
3	Sc 361.383	1694548.3	1694548.3	100.71 %		18:38:57
3	Y 371.029	1008955.0	1008955.0	107.78 %		18:38:57
3	Ag 328.068†	-1507.1	-930.6	0.7582 µg/L	0.7582 ppb	18:39:02
3	As 188.979†	-8.2	-4.3	-4.1831 µg/L	-4.1831 ppb	18:39:23
3	B 249.677†	699.8	536.2	-7.4838 µg/L	-7.4838 ppb	18:39:02
3	Ba 233.527†	6221.7	6196.0	159.73 µg/L	159.73 ppb	18:39:02
3	Be 313.107†	8511.3	10397.4	6.1537 µg/L	6.1537 ppb	18:39:02
3	Cd 226.502†	179.7	322.7	1.6670 µg/L	1.6670 ppb	18:39:23
3	Co 228.616†	240.9	217.0	4.2045 µg/L	4.2045 ppb	18:39:23
3	Cr 267.716†	685.3	590.3	15.281 µg/L	15.281 ppb	18:39:23
3	Cu 324.752†	3481.2	833.8	18.929 µg/L	18.929 ppb	18:39:02
3	Mn 257.610†	576427.3	572931.0	2093.1 µg/L	2093.1 ppb	18:38:57
3	Mo 202.031†	71.5	66.7	10.240 µg/L	10.240 ppb	18:39:23
3	Ni 231.604†	393.0	91.6	7.2368 µg/L	7.2368 ppb	18:39:23
3	P 214.914†	492.6	247.7	479.50 µg/L	479.50 ppb	18:39:23
3	Pb 220.353†	181.5	137.4	41.391 µg/L	41.391 ppb	18:39:23
3	S 181.975 Axial†	26.5	5.7	21.487 µg/L	21.487 ppb	18:39:23
3	Sb 206.836†	12.2	-8.9	-9.6021 µg/L	-9.6021 ppb	18:39:23
3	Se 196.026†	-22.0	-35.1	181.32 µg/L	181.32 ppb	18:39:23
3	SiO2†	107305.8	105170.5	22951 µg/L	22951 ppb	18:39:02
3	Si 251.611†	132647.7	131353.9	10738 µg/L	10738 ppb	18:39:02
3	Sn 189.927†	-6.1	-10.6	-9.3124 µg/L	-9.3124 ppb	18:39:23
3	Ti 334.940†	1276906.8	1267964.3	3382.5 µg/L	3382.5 ppb	18:38:57
3	Tl 190.801†	-66.7	-40.6	-0.8512 µg/L	-0.8512 ppb	18:39:23
3	U 409.014†	-2490.4	-2623.8	-266.95 µg/L	-266.95 ppb	18:38:57
3	V 292.402†	1815.5	1954.7	27.127 µg/L	27.127 ppb	18:39:02
3	Zn 213.857†	16179.2	15485.6	412.52 µg/L	412.52 ppb	18:39:02

Mean Data: 246554004|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1691022.3	100.50 %	0.818			0.81%
Sc RADIAL	107019.7	98.0 %	0.33			0.34%
Y 371.029	1010122.9	107.91 %	0.996			0.92%
Ag 328.068†	-905.6	0.9546 µg/L	0.25619	0.9546 ppb	0.25619	26.84%
Al 396.153Radial†	17901.2	8567.2 µg/L	51.59	8567.2 ppb	51.59	0.60%
As 188.979†	-6.9	-9.1059 µg/L	4.57440	-9.1059 ppb	4.57440	50.24%
B 249.677†	528.5	-7.7644 µg/L	0.55172	-7.7644 ppb	0.55172	7.11%
Ba 233.527†	6312.8	162.74 µg/L	3.724	162.74 ppb	3.724	2.29%
Be 313.107†	10686.4	6.3420 µg/L	0.19151	6.3420 ppb	0.19151	3.02%
Ca 317.933Radial†	16552.8	5368.5 µg/L	25.78	5368.5 ppb	25.78	0.48%
Cd 226.502†	345.2	2.3541 µg/L	0.60154	2.3541 ppb	0.60154	25.55%
Co 228.616†	234.0	4.9847 µg/L	0.71610	4.9847 ppb	0.71610	14.37%
Cr 267.716†	616.9	15.968 µg/L	0.6735	15.968 ppb	0.6735	4.22%
Cu 324.752†	862.3	19.087 µg/L	0.3797	19.087 ppb	0.3797	1.99%
Fe 238.204 Radial†	9119.8	68647 µg/L	323.2	68647 ppb	323.2	0.47%
K 766.490 Radial†	4462.6	2532.6 µg/L	33.82	2532.6 ppb	33.82	1.34%
Mg 279.077 IEC†	302.7	2949.1 µg/L	73.07	2949.1 ppb	73.07	2.48%
Mn 257.610†	580652.1	2121.2 µg/L	31.40	2121.2 ppb	31.40	1.48%
Mo 202.031†	74.4	11.116 µg/L	0.8244	11.116 ppb	0.8244	7.42%
Na 589.592 Radial†	2947.6	1020.6 µg/L	15.04	1020.6 ppb	15.04	1.47%

Ni 231.604†	96.5	7.5674 µg/L	0.28718	7.5674 ppb	0.28718	3.79%
P 214.914†	261.3	508.99 µg/L	33.971	508.99 ppb	33.971	6.67%
Pb 220.353†	150.0	45.375 µg/L	3.5714	45.375 ppb	3.5714	7.87%
S 181.975 Axial†	5.7	21.689 µg/L	5.8890	21.689 ppb	5.8890	27.15%
Sb 206.836†	-9.9	-10.674 µg/L	0.9946	-10.674 ppb	0.9946	9.32%
Se 196.026†	-42.1	171.87 µg/L	9.525	171.87 ppb	9.525	5.54%
SiO2†	106548.1	23252 µg/L	421.9	23252 ppb	421.9	1.81%
Si 251.611†	133092.9	10880 µg/L	205.1	10880 ppb	205.1	1.89%
Sn 189.927†	-11.7	-9.7762 µg/L	0.56527	-9.7762 ppb	0.56527	5.78%
Sr 421.552†	3094.1	14.013 µg/L	0.1092	14.013 ppb	0.1092	0.78%
Ti 334.940†	1286209.7	3431.2 µg/L	55.08	3431.2 ppb	55.08	1.61%
Tl 190.801†	-39.1	1.3736 µg/L	4.33360	1.3736 ppb	4.33360	315.50%
U 409.014†	-2651.7	-269.65 µg/L	2.630	-269.65 ppb	2.630	0.98%
V 292.402†	2012.2	27.852 µg/L	0.6925	27.852 ppb	0.6925	2.49%
Zn 213.857†	15729.5	419.08 µg/L	8.731	419.08 ppb	8.731	2.08%

Sequence No.: 13

Sample ID: 246554005|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 311

Date Collected: 2/26/2010 18:39:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246554005|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	107840.5	107840.5	98.8 %		18:40:04
1	Al 396.153Radial†	62865.8	63833.6	30550 µg/L	30550 ppb	18:40:04
1	Ca 317.933Radial†	24085.7	24005.9	7785.7 µg/L	7785.7 ppb	18:40:04
1	Fe 238.204 Radial†	10999.9	11107.4	83607 µg/L	83607 ppb	18:40:24
1	K 766.490 Radial†	6729.1	6583.2	3736.1 µg/L	3736.1 ppb	18:40:04
1	Mg 279.077 IEC†	537.6	535.6	5258.1 µg/L	5258.1 ppb	18:40:24
1	Na 589.592 Radial†	2191.7	1984.1	686.98 µg/L	686.98 ppb	18:40:04
1	Sr 421.552†	8073.8	8020.7	36.325 µg/L	36.325 ppb	18:40:04
1	Sc 361.383	1702436.1	1702436.1	101.17 %		18:41:29
1	Y 371.029	1015955.6	1015955.6	108.53 %		18:41:29
1	Ag 328.068†	-1637.7	-1052.7	1.7338 µg/L	1.7338 ppb	18:41:34
1	As 188.979†	-4.1	-0.2	4.1151 µg/L	4.1151 ppb	18:41:55
1	B 249.677†	842.3	673.8	-7.8462 µg/L	-7.8462 ppb	18:41:34
1	Ba 233.527†	7547.3	7477.6	192.81 µg/L	192.81 ppb	18:41:34
1	Be 313.107†	21018.8	22720.6	14.937 µg/L	14.937 ppb	18:41:34
1	Cd 226.502†	281.0	421.9	2.9197 µg/L	2.9197 ppb	18:41:55
1	Co 228.616†	306.7	280.9	7.3130 µg/L	7.3130 ppb	18:41:55
1	Cr 267.716†	1023.9	921.8	23.869 µg/L	23.869 ppb	18:41:55
1	Cu 324.752†	4844.2	2164.9	31.237 µg/L	31.237 ppb	18:41:34
1	Mn 257.610†	626813.2	620079.9	2265.7 µg/L	2265.7 ppb	18:41:29
1	Mo 202.031†	66.8	61.7	10.228 µg/L	10.228 ppb	18:41:55
1	Ni 231.604†	556.4	251.2	18.492 µg/L	18.492 ppb	18:41:55
1	P 214.914†	627.6	378.8	755.52 µg/L	755.52 ppb	18:41:55
1	Pb 220.353†	150.7	106.1	32.201 µg/L	32.201 ppb	18:41:55
1	S 181.975 Axial†	52.2	30.9	117.28 µg/L	117.28 ppb	18:41:55
1	Sb 206.836†	10.8	-10.3	-11.311 µg/L	-11.311 ppb	18:41:55
1	Se 196.026†	-42.5	-55.3	203.17 µg/L	203.17 ppb	18:41:55
1	SiO2†	202573.5	198838.4	43392 µg/L	43392 ppb	18:41:29
1	Si 251.611†	250286.7	247016.8	20193 µg/L	20193 ppb	18:41:29
1	Sn 189.927†	-5.2	-9.7	-9.5240 µg/L	-9.5240 ppb	18:41:55
1	Ti 334.940†	1320666.6	1305341.4	3482.1 µg/L	3482.1 ppb	18:41:29
1	Tl 190.801†	-65.0	-38.6	5.2712 µg/L	5.2712 ppb	18:41:55
1	U 409.014†	-2649.4	-2769.5	-283.42 µg/L	-283.42 ppb	18:41:29
1	V 292.402†	3808.5	3916.3	52.526 µg/L	52.526 ppb	18:41:34
1	Zn 213.857†	17130.1	16350.9	434.87 µg/L	434.87 ppb	18:41:34
2	Sc RADIAL	108121.3	108121.3	99.0 %		18:40:30
2	Al 396.153Radial†	62896.7	63699.5	30486 µg/L	30486 ppb	18:40:30
2	Ca 317.933Radial†	24123.3	23980.5	7777.5 µg/L	7777.5 ppb	18:40:30
2	Fe 238.204 Radial†	11052.5	11131.5	83789 µg/L	83789 ppb	18:40:50
2	K 766.490 Radial†	6887.1	6725.1	3816.6 µg/L	3816.6 ppb	18:40:30
2	Mg 279.077 IEC†	541.5	538.1	5282.9 µg/L	5282.9 ppb	18:40:50
2	Na 589.592 Radial†	2200.7	1987.4	688.13 µg/L	688.13 ppb	18:40:30
2	Sr 421.552†	8015.7	7940.7	35.963 µg/L	35.963 ppb	18:40:30
2	Sc 361.383	1691706.6	1691706.6	100.54 %		18:42:02
2	Y 371.029	1011659.7	1011659.7	108.07 %		18:42:02
2	Ag 328.068†	-1643.4	-1068.7	1.6149 µg/L	1.6149 ppb	18:42:08
2	As 188.979†	-10.8	-6.9	-8.2436 µg/L	-8.2436 ppb	18:42:28
2	B 249.677†	851.5	688.3	-7.1737 µg/L	-7.1737 ppb	18:42:08
2	Ba 233.527†	7512.1	7489.9	193.12 µg/L	193.12 ppb	18:42:08
2	Be 313.107†	20926.9	22760.9	14.967 µg/L	14.967 ppb	18:42:08
2	Cd 226.502†	284.3	427.0	3.0487 µg/L	3.0487 ppb	18:42:28
2	Co 228.616†	310.1	286.2	7.5966 µg/L	7.5966 ppb	18:42:28
2	Cr 267.716†	1022.7	927.1	24.004 µg/L	24.004 ppb	18:42:28
2	Cu 324.752†	4801.4	2152.7	31.184 µg/L	31.184 ppb	18:42:08
2	Mn 257.610†	621488.3	618712.8	2260.8 µg/L	2260.8 ppb	18:42:02
2	Mo 202.031†	73.1	68.4	11.003 µg/L	11.003 ppb	18:42:28
2	Ni 231.604†	553.8	252.2	18.560 µg/L	18.560 ppb	18:42:28
2	P 214.914†	611.0	366.3	728.27 µg/L	728.27 ppb	18:42:28
2	Pb 220.353†	143.5	99.9	30.220 µg/L	30.220 ppb	18:42:28

2	S 181.975 Axial†	51.0	30.0	113.99	µg/L	113.99	ppb	18:42:28
2	Sb 206.836†	10.0	-11.1	-12.092	µg/L	-12.092	ppb	18:42:28
2	Se 196.026†	-36.9	-50.1	210.19	µg/L	210.19	ppb	18:42:28
2	SiO2†	201065.3	198608.2	43342	µg/L	43342	ppb	18:42:02
2	Si 251.611†	248488.5	246797.1	20175	µg/L	20175	ppb	18:42:02
2	Sn 189.927†	-5.8	-10.4	-9.8685	µg/L	-9.8685	ppb	18:42:28
2	Ti 334.940†	1310729.6	1303736.4	3477.8	µg/L	3477.8	ppb	18:42:02
2	Tl 190.801†	-68.1	-42.1	1.1906	µg/L	1.1906	ppb	18:42:28
2	U 409.014†	-2633.9	-2770.6	-283.55	µg/L	-283.55	ppb	18:42:02
2	V 292.402†	3786.8	3918.5	52.567	µg/L	52.567	ppb	18:42:08
2	Zn 213.857†	17039.7	16368.4	435.33	µg/L	435.33	ppb	18:42:08
3	Sc RADIAL	106989.1	106989.1	98.0	%			18:40:56
3	Al 396.153Radial†	62655.2	64125.2	30689	µg/L	30689	ppb	18:40:56
3	Ca 317.933Radial†	23919.5	24030.4	7793.6	µg/L	7793.6	ppb	18:40:56
3	Fe 238.204 Radial†	11049.8	11246.9	84658	µg/L	84658	ppb	18:41:16
3	K 766.490 Radial†	6727.8	6636.1	3766.1	µg/L	3766.1	ppb	18:40:56
3	Mg 279.077 IEC†	540.2	542.5	5326.4	µg/L	5326.4	ppb	18:41:16
3	Na 589.592 Radial†	2182.5	1992.3	689.82	µg/L	689.82	ppb	18:40:56
3	Sr 421.552†	7986.5	7996.6	36.216	µg/L	36.216	ppb	18:40:56
3	Sc 361.383	1722663.9	1722663.9	102.38	%			18:42:36
3	Y 371.029	1025037.8	1025037.8	109.50	%			18:42:36
3	Ag 328.068†	-1592.6	-989.7	2.4046	µg/L	2.4046	ppb	18:42:42
3	As 188.979†	-2.7	1.2	6.7433	µg/L	6.7433	ppb	18:43:02
3	B 249.677†	835.3	657.3	-9.2779	µg/L	-9.2779	ppb	18:42:42
3	Ba 233.527†	7127.0	6979.5	179.96	µg/L	179.96	ppb	18:42:42
3	Be 313.107†	19538.1	21030.3	13.799	µg/L	13.799	ppb	18:42:42
3	Cd 226.502†	239.6	378.2	1.5202	µg/L	1.5202	ppb	18:43:02
3	Co 228.616†	283.6	254.8	6.3535	µg/L	6.3535	ppb	18:43:02
3	Cr 267.716†	919.9	808.3	20.931	µg/L	20.931	ppb	18:43:02
3	Cu 324.752†	4640.6	1909.8	29.606	µg/L	29.606	ppb	18:42:42
3	Mn 257.610†	602372.4	588931.9	2152.2	µg/L	2152.2	ppb	18:42:36
3	Mo 202.031†	69.4	63.4	10.464	µg/L	10.464	ppb	18:43:02
3	Ni 231.604†	524.2	213.4	15.884	µg/L	15.884	ppb	18:43:02
3	P 214.914†	575.6	320.7	629.70	µg/L	629.70	ppb	18:43:02
3	Pb 220.353†	133.9	87.9	26.419	µg/L	26.419	ppb	18:43:02
3	S 181.975 Axial†	44.9	23.2	88.046	µg/L	88.046	ppb	18:43:02
3	Sb 206.836†	12.9	-8.5	-9.2582	µg/L	-9.2582	ppb	18:43:02
3	Se 196.026†	-46.3	-58.5	202.61	µg/L	202.61	ppb	18:43:02
3	SiO2†	195401.2	189481.5	41350	µg/L	41350	ppb	18:42:36
3	Si 251.611†	241281.1	235315.4	19236	µg/L	19236	ppb	18:42:36
3	Sn 189.927†	1.4	-3.1	-6.5296	µg/L	-6.5296	ppb	18:43:02
3	Ti 334.940†	1263622.9	1234294.6	3292.5	µg/L	3292.5	ppb	18:42:36
3	Tl 190.801†	-68.8	-41.6	-0.1150	µg/L	-0.1150	ppb	18:43:02
3	U 409.014†	-2480.7	-2574.0	-264.40	µg/L	-264.40	ppb	18:42:36
3	V 292.402†	3510.2	3580.6	48.326	µg/L	48.326	ppb	18:42:42
3	Zn 213.857†	16282.1	15323.8	407.24	µg/L	407.24	ppb	18:42:42

Mean Data: 246554005|951752|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1705602.2	101.36	%	0.934			0.92%
Sc RADIAL	107650.3	98.6	%	0.54			0.55%
Y 371.029	1017551.0	108.70	%	0.730			0.67%
Ag 328.068†	-1037.1	1.9178	µg/L	0.42577	1.9178	ppb	0.42577 22.20%
Al 396.153Radial†	63886.1	30575	µg/L	104.2	30575	ppb	104.2 0.34%
As 188.979†	-1.9	0.8716	µg/L	8.00264	0.8716	ppb	8.00264 918.17%
B 249.677†	673.1	-8.0993	µg/L	1.07466	-8.0993	ppb	1.07466 13.27%
Ba 233.527†	7315.7	188.63	µg/L	7.510	188.63	ppb	7.510 3.98%
Be 313.107†	22170.6	14.568	µg/L	0.6658	14.568	ppb	0.6658 4.57%
Ca 317.933Radial†	24005.6	7785.6	µg/L	8.08	7785.6	ppb	8.08 0.10%
Cd 226.502†	409.1	2.4962	µg/L	0.84770	2.4962	ppb	0.84770 33.96%
Co 228.616†	274.0	7.0877	µg/L	0.65143	7.0877	ppb	0.65143 9.19%
Cr 267.716†	885.7	22.935	µg/L	1.7363	22.935	ppb	1.7363 7.57%
Cu 324.752†	2075.8	30.676	µg/L	0.9267	30.676	ppb	0.9267 3.02%
Fe 238.204 Radial†	11161.9	84018	µg/L	561.3	84018	ppb	561.3 0.67%
K 766.490 Radial†	6648.1	3772.9	µg/L	40.70	3772.9	ppb	40.70 1.08%
Mg 279.077 IEC†	538.7	5289.2	µg/L	34.57	5289.2	ppb	34.57 0.65%
Mn 257.610†	609241.5	2226.2	µg/L	64.16	2226.2	ppb	64.16 2.88%
Mo 202.031†	64.5	10.565	µg/L	0.3969	10.565	ppb	0.3969 3.76%
Na 589.592 Radial†	1988.0	688.31	µg/L	1.428	688.31	ppb	1.428 0.21%

Ni 231.604†	239.0	17.645 µg/L	1.5256	17.645 ppb	1.5256	8.65%
P 214.914†	355.3	704.50 µg/L	66.193	704.50 ppb	66.193	9.40%
Pb 220.353†	98.0	29.613 µg/L	2.9387	29.613 ppb	2.9387	9.92%
S 181.975 Axial†	28.0	106.44 µg/L	16.014	106.44 ppb	16.014	15.04%
Sb 206.836†	-10.0	-10.887 µg/L	1.4636	-10.887 ppb	1.4636	13.44%
Se 196.026†	-54.6	205.32 µg/L	4.224	205.32 ppb	4.224	2.06%
SiO2†	195642.7	42694 µg/L	1164.7	42694 ppb	1164.7	2.73%
Si 251.611†	243043.1	19868 µg/L	547.2	19868 ppb	547.2	2.75%
Sn 189.927†	-7.7	-8.6407 µg/L	1.83634	-8.6407 ppb	1.83634	21.25%
Sr 421.552†	7986.0	36.168 µg/L	0.1858	36.168 ppb	0.1858	0.51%
Ti 334.940†	1281124.1	3417.4 µg/L	108.22	3417.4 ppb	108.22	3.17%
Tl 190.801†	-40.8	2.1156 µg/L	2.80970	2.1156 ppb	2.80970	132.81%
U 409.014†	-2704.7	-277.12 µg/L	11.015	-277.12 ppb	11.015	3.97%
V 292.402†	3805.1	51.140 µg/L	2.4367	51.140 ppb	2.4367	4.76%
Zn 213.857†	16014.4	425.81 µg/L	16.086	425.81 ppb	16.086	3.78%

Sequence No.: 14

Sample ID: 246554006|951752|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 312

Date Collected: 2/26/2010 18:43:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246554006|951752|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	107664.8	107664.8	98.6 %		18:43:44
1	Al 396.153Radial†	10333.3	10655.6	5099.5 µg/L	5099.5 ppb	18:43:44
1	Ca 317.933Radial†	8719.3	8460.1	2743.8 µg/L	2743.8 ppb	18:43:44
1	Fe 238.204 Radial†	9002.0	9099.1	68490 µg/L	68490 ppb	18:43:44
1	K 766.490 Radial†	3814.6	3638.3	2064.8 µg/L	2064.8 ppb	18:43:44
1	Mg 279.077 IEC†	151.3	144.7	1371.3 µg/L	1371.3 ppb	18:44:05
1	Na 589.592 Radial†	4936.4	4771.5	1652.1 µg/L	1652.1 ppb	18:43:44
1	Sr 421.552†	2899.3	2785.6	12.616 µg/L	12.616 ppb	18:43:44
1	Sc 361.383	1727742.3	1727742.3	102.68 %		18:45:09
1	Y 371.029	1014020.4	1014020.4	108.32 %		18:45:09
1	Ag 328.068†	-1407.7	-805.1	1.8285 µg/L	1.8285 ppb	18:45:15
1	As 188.979†	-10.1	-6.0	-7.1922 µg/L	-7.1922 ppb	18:45:35
1	B 249.677†	637.5	462.2	-11.102 µg/L	-11.102 ppb	18:45:15
1	Ba 233.527†	4188.6	4097.2	105.64 µg/L	105.64 ppb	18:45:15
1	Be 313.107†	4421.8	6252.3	3.1092 µg/L	3.1092 ppb	18:45:15
1	Cd 226.502†	180.2	319.7	1.6615 µg/L	1.6615 ppb	18:45:15
1	Co 228.616†	266.5	237.3	4.8345 µg/L	4.8345 ppb	18:45:35
1	Cr 267.716†	3088.1	2917.4	75.455 µg/L	75.455 ppb	18:45:15
1	Cu 324.752†	3117.5	413.1	15.838 µg/L	15.838 ppb	18:45:15
1	Mn 257.610†	623085.7	607375.4	2218.8 µg/L	2218.8 ppb	18:45:09
1	Mo 202.031†	68.2	62.1	9.6983 µg/L	9.6983 ppb	18:45:35
1	Ni 231.604†	922.3	599.6	42.457 µg/L	42.457 ppb	18:45:35
1	P 214.914†	563.0	306.9	606.80 µg/L	606.80 ppb	18:45:35
1	Pb 220.353†	120.0	74.0	21.287 µg/L	21.287 ppb	18:45:35
1	S 181.975 Axial†	42.6	20.8	78.883 µg/L	78.883 ppb	18:45:35
1	Sb 206.836†	11.7	-9.7	-11.103 µg/L	-11.103 ppb	18:45:35
1	Se 196.026†	-33.6	-46.1	167.71 µg/L	167.71 ppb	18:45:35
1	SiO2†	100880.4	96865.6	21139 µg/L	21139 ppb	18:45:15
1	Si 251.611†	124526.5	120913.9	9884.3 µg/L	9884.3 ppb	18:45:15
1	Sn 189.927†	12.4	7.5	-0.9832 µg/L	-0.9832 ppb	18:45:35
1	Ti 334.940†	1380117.5	1344122.1	3585.7 µg/L	3585.7 ppb	18:45:09
1	Tl 190.801†	-69.9	-42.4	-0.2896 µg/L	-0.2896 ppb	18:45:35
1	U 409.014†	-2678.8	-2759.8	-280.05 µg/L	-280.05 ppb	18:45:09
1	V 292.402†	1859.9	1963.3	27.342 µg/L	27.342 ppb	18:45:15
1	Zn 213.857†	16329.6	15323.3	408.12 µg/L	408.12 ppb	18:45:15
2	Sc RADIAL	108579.2	108579.2	99.4 %		18:44:10
2	Al 396.153Radial†	10399.4	10633.9	5089.1 µg/L	5089.1 ppb	18:44:10
2	Ca 317.933Radial†	8736.9	8403.3	2725.4 µg/L	2725.4 ppb	18:44:10
2	Fe 238.204 Radial†	9112.0	9132.9	68745 µg/L	68745 ppb	18:44:10
2	K 766.490 Radial†	3887.0	3678.5	2087.6 µg/L	2087.6 ppb	18:44:10
2	Mg 279.077 IEC†	151.4	143.5	1358.9 µg/L	1358.9 ppb	18:44:31
2	Na 589.592 Radial†	4993.6	4786.9	1657.4 µg/L	1657.4 ppb	18:44:10
2	Sr 421.552†	2885.2	2746.7	12.440 µg/L	12.440 ppb	18:44:10
2	Sc 361.383	1724588.9	1724588.9	102.49 %		18:45:43
2	Y 371.029	1015007.3	1015007.3	108.43 %		18:45:43
2	Ag 328.068†	-1471.1	-869.4	1.2842 µg/L	1.2842 ppb	18:45:48
2	As 188.979†	-10.3	-6.2	-7.5894 µg/L	-7.5894 ppb	18:46:09
2	B 249.677†	636.4	462.3	-11.234 µg/L	-11.234 ppb	18:45:48
2	Ba 233.527†	4144.9	4062.0	104.73 µg/L	104.73 ppb	18:45:48
2	Be 313.107†	4413.7	6252.3	3.1184 µg/L	3.1184 ppb	18:45:48
2	Cd 226.502†	203.1	342.4	2.2957 µg/L	2.2957 ppb	18:45:48
2	Co 228.616†	258.5	230.0	4.5068 µg/L	4.5068 ppb	18:46:09
2	Cr 267.716†	3035.3	2871.3	74.264 µg/L	74.264 ppb	18:45:48
2	Cu 324.752†	3087.2	389.1	15.713 µg/L	15.713 ppb	18:45:48
2	Mn 257.610†	617038.9	602585.1	2201.3 µg/L	2201.3 ppb	18:45:43
2	Mo 202.031†	74.8	68.7	10.462 µg/L	10.462 ppb	18:46:09
2	Ni 231.604†	933.3	612.0	43.315 µg/L	43.315 ppb	18:46:09
2	P 214.914†	555.7	300.7	593.28 µg/L	593.28 ppb	18:46:09
2	Pb 220.353†	119.3	73.6	21.143 µg/L	21.143 ppb	18:46:09

2	S 181.975 Axial†	46.1	24.3	92.057 µg/L	92.057 ppb	18:46:09
2	Sb 206.836†	12.7	-8.7	-9.9872 µg/L	-9.9872 ppb	18:46:09
2	Se 196.026†	-24.7	-37.4	179.16 µg/L	179.16 ppb	18:46:09
2	SiO2†	99832.6	96022.8	20955 µg/L	20955 ppb	18:45:48
2	Si 251.611†	123268.1	119907.9	9802.0 µg/L	9802.0 ppb	18:45:48
2	Sn 189.927†	6.2	1.5	-3.8415 µg/L	-3.8415 ppb	18:46:09
2	Ti 334.940†	1368331.5	1335080.3	3561.6 µg/L	3561.6 ppb	18:45:43
2	Tl 190.801†	-66.0	-38.8	3.6671 µg/L	3.6671 ppb	18:46:09
2	U 409.014†	-2735.8	-2820.1	-286.00 µg/L	-286.00 ppb	18:45:43
2	V 292.402†	1825.7	1933.2	26.967 µg/L	26.967 ppb	18:45:48
2	Zn 213.857†	16126.2	15154.0	403.55 µg/L	403.55 ppb	18:45:48
3	Sc RADIAL	108733.9	108733.9	99.6 %		18:44:36
3	Al 396.153Radial†	10295.8	10514.9	5032.1 µg/L	5032.1 ppb	18:44:36
3	Ca 317.933Radial†	8742.6	8396.5	2723.2 µg/L	2723.2 ppb	18:44:36
3	Fe 238.204 Radial†	9049.9	9057.5	68177 µg/L	68177 ppb	18:44:36
3	K 766.490 Radial†	3826.5	3612.1	2049.9 µg/L	2049.9 ppb	18:44:36
3	Mg 279.077 IEC†	147.6	139.5	1319.9 µg/L	1319.9 ppb	18:44:57
3	Na 589.592 Radial†	4962.0	4748.0	1644.0 µg/L	1644.0 ppb	18:44:36
3	Sr 421.552†	2868.7	2726.0	12.346 µg/L	12.346 ppb	18:44:36
3	Sc 361.383	1737171.9	1737171.9	103.24 %		18:46:16
3	Y 371.029	1021011.7	1021011.7	109.07 %		18:46:16
3	Ag 328.068†	-1348.6	-740.4	2.3552 µg/L	2.3552 ppb	18:46:22
3	As 188.979†	-7.6	-3.5	-2.7318 µg/L	-2.7318 ppb	18:46:42
3	B 249.677†	623.7	445.5	-11.832 µg/L	-11.832 ppb	18:46:22
3	Ba 233.527†	4049.3	3940.2	101.59 µg/L	101.59 ppb	18:46:22
3	Be 313.107†	4124.2	5940.6	2.9265 µg/L	2.9265 ppb	18:46:22
3	Cd 226.502†	176.1	314.8	1.5494 µg/L	1.5494 ppb	18:46:22
3	Co 228.616†	239.3	209.5	3.6159 µg/L	3.6159 ppb	18:46:42
3	Cr 267.716†	2911.4	2729.9	70.606 µg/L	70.606 ppb	18:46:22
3	Cu 324.752†	3080.4	360.7	15.403 µg/L	15.403 ppb	18:46:22
3	Mn 257.610†	609243.5	590673.5	2157.9 µg/L	2157.9 ppb	18:46:16
3	Mo 202.031†	74.6	67.9	10.350 µg/L	10.350 ppb	18:46:42
3	Ni 231.604†	881.5	555.2	39.373 µg/L	39.373 ppb	18:46:42
3	P 214.914†	534.4	276.2	540.86 µg/L	540.86 ppb	18:46:42
3	Pb 220.353†	112.7	66.4	18.880 µg/L	18.880 ppb	18:46:42
3	S 181.975 Axial†	43.8	21.7	82.520 µg/L	82.520 ppb	18:46:42
3	Sb 206.836†	10.5	-10.8	-12.276 µg/L	-12.276 ppb	18:46:42
3	Se 196.026†	-29.5	-41.9	171.91 µg/L	171.91 ppb	18:46:42
3	SiO2†	97824.7	93372.4	20376 µg/L	20376 ppb	18:46:22
3	Si 251.611†	120741.8	116589.7	9530.8 µg/L	9530.8 ppb	18:46:22
3	Sn 189.927†	3.1	-1.5	-5.2056 µg/L	-5.2056 ppb	18:46:42
3	Ti 334.940†	1346647.4	1304406.1	3479.8 µg/L	3479.8 ppb	18:46:16
3	Tl 190.801†	-62.6	-35.1	7.0742 µg/L	7.0742 ppb	18:46:42
3	U 409.014†	-2706.2	-2772.2	-281.22 µg/L	-281.22 ppb	18:46:16
3	V 292.402†	1741.4	1838.7	25.744 µg/L	25.744 ppb	18:46:22
3	Zn 213.857†	15799.3	14723.3	392.03 µg/L	392.03 ppb	18:46:22

Mean Data: 246554006|951752|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1729834.4	102.80 %	0.389			0.38%
Sc RADIAL	108326.0	99.2 %	0.53			0.53%
Y 371.029	1016679.8	108.61 %	0.404			0.37%
Ag 328.068†	-804.9	1.8226 µg/L	0.53552	1.8226 ppb	0.53552	29.38%
Al 396.153Radial†	10601.4	5073.6 µg/L	36.26	5073.6 ppb	36.26	0.71%
As 188.979†	-5.2	-5.8378 µg/L	2.69718	-5.8378 ppb	2.69718	46.20%
B 249.677†	456.6	-11.389 µg/L	0.3891	-11.389 ppb	0.3891	3.42%
Ba 233.527†	4033.2	103.99 µg/L	2.125	103.99 ppb	2.125	2.04%
Be 313.107†	6148.4	3.0514 µg/L	0.10823	3.0514 ppb	0.10823	3.55%
Ca 317.933Radial†	8420.0	2730.8 µg/L	11.33	2730.8 ppb	11.33	0.41%
Cd 226.502†	325.6	1.8355 µg/L	0.40245	1.8355 ppb	0.40245	21.93%
Co 228.616†	225.6	4.3191 µg/L	0.63062	4.3191 ppb	0.63062	14.60%
Cr 267.716†	2839.5	73.442 µg/L	2.5272	73.442 ppb	2.5272	3.44%
Cu 324.752†	387.7	15.651 µg/L	0.2239	15.651 ppb	0.2239	1.43%
Fe 238.204 Radial†	9096.5	68471 µg/L	284.4	68471 ppb	284.4	0.42%
K 766.490 Radial†	3643.0	2067.4 µg/L	18.96	2067.4 ppb	18.96	0.92%
Mg 279.077 IEC†	142.6	1350.1 µg/L	26.85	1350.1 ppb	26.85	1.99%
Mn 257.610†	600211.3	2192.7 µg/L	31.37	2192.7 ppb	31.37	1.43%
Mo 202.031†	66.2	10.170 µg/L	0.4122	10.170 ppb	0.4122	4.05%
Na 589.592 Radial†	4768.8	1651.2 µg/L	6.78	1651.2 ppb	6.78	0.41%



Ni 231.604†	588.9	41.715 µg/L	2.0732	41.715 ppb	2.0732	4.97%
P 214.914†	294.6	580.31 µg/L	34.828	580.31 ppb	34.828	6.00%
Pb 220.353†	71.3	20.437 µg/L	1.3502	20.437 ppb	1.3502	6.61%
S 181.975 Axial†	22.3	84.487 µg/L	6.8036	84.487 ppb	6.8036	8.05%
Sb 206.836†	-9.7	-11.122 µg/L	1.1446	-11.122 ppb	1.1446	10.29%
Se 196.026†	-41.8	172.93 µg/L	5.791	172.93 ppb	5.791	3.35%
SiO2†	95420.3	20823 µg/L	397.8	20823 ppb	397.8	1.91%
Si 251.611†	119137.2	9739.0 µg/L	184.97	9739.0 ppb	184.97	1.90%
Sn 189.927†	2.5	-3.3434 µg/L	2.15482	-3.3434 ppb	2.15482	64.45%
Sr 421.552†	2752.8	12.467 µg/L	0.1371	12.467 ppb	0.1371	1.10%
Ti 334.940†	1327869.5	3542.4 µg/L	55.53	3542.4 ppb	55.53	1.57%
Tl 190.801†	-38.8	3.4839 µg/L	3.68533	3.4839 ppb	3.68533	105.78%
U 409.014†	-2784.0	-282.42 µg/L	3.150	-282.42 ppb	3.150	1.12%
V 292.402†	1911.8	26.685 µg/L	0.8356	26.685 ppb	0.8356	3.13%
Zn 213.857†	15066.9	401.24 µg/L	8.291	401.24 ppb	8.291	2.07%

Sequence No.: 15  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/26/2010 18:46:51  
 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	110850.9	110850.9	102 %		18:47:27
1	Al 396.153Radial†	9867.1	9895.1	4725.2 µg/L	4725.2 ppb	18:47:27
1	Ca 317.933Radial†	15590.3	14974.6	4856.6 µg/L	4856.6 ppb	18:47:27
1	Fe 238.204 Radial†	663.8	622.6	4697.3 µg/L	4697.3 ppb	18:47:48
1	K 766.490 Radial†	9093.9	8727.8	4953.2 µg/L	4953.2 ppb	18:47:27
1	Mg 279.077 IEC†	502.1	485.9	4854.7 µg/L	4854.7 ppb	18:47:48
1	Na 589.592 Radial†	26660.6	26028.5	9012.1 µg/L	9012.1 ppb	18:47:27
1	Sr 421.552†	105871.4	104140.3	471.65 µg/L	471.65 ppb	18:47:27
1	Sc 361.383	1726545.7	1726545.7	102.61 %		18:48:51
1	Y 371.029	947909.7	947909.7	101.26 %		18:48:51
1	Ag 328.068†	55271.8	54433.1	490.11 µg/L	490.11 ppb	18:48:57
1	As 188.979†	274.5	271.4	499.46 µg/L	499.46 ppb	18:49:17
1	B 249.677†	9552.5	9151.1	483.74 µg/L	483.74 ppb	18:48:57
1	Ba 233.527†	19804.2	19318.9	498.79 µg/L	498.79 ppb	18:48:57
1	Be 313.107†	709824.5	693732.0	496.39 µg/L	496.39 ppb	18:48:51
1	Cd 226.502†	17483.6	17183.5	502.97 µg/L	502.97 ppb	18:48:57
1	Co 228.616†	9978.1	9702.3	502.81 µg/L	502.81 ppb	18:48:57
1	Cr 267.716†	19921.8	19325.4	500.04 µg/L	500.04 ppb	18:48:57
1	Cu 324.752†	72301.7	67841.3	487.20 µg/L	487.20 ppb	18:48:57
1	Mn 257.610†	141156.9	138114.0	503.59 µg/L	503.59 ppb	18:48:51
1	Mo 202.031†	4577.0	4456.4	509.54 µg/L	509.54 ppb	18:49:17
1	Ni 231.604†	7972.0	7470.8	517.52 µg/L	517.52 ppb	18:48:57
1	P 214.914†	1459.5	1180.9	2498.4 µg/L	2498.4 ppb	18:49:17
1	Pb 220.353†	1710.1	1623.8	511.51 µg/L	511.51 ppb	18:49:17
1	S 181.975 Axial†	294.2	266.0	1009.7 µg/L	1009.7 ppb	18:49:17
1	Sb 206.836†	495.7	462.0	495.54 µg/L	495.54 ppb	18:49:17
1	Se 196.026†	438.4	414.0	520.33 µg/L	520.33 ppb	18:49:17
1	SiO2†	26293.2	24241.8	5290.2 µg/L	5290.2 ppb	18:48:57
1	Si 251.611†	31530.4	30365.1	2482.2 µg/L	2482.2 ppb	18:48:57
1	Sn 189.927†	1126.1	1092.9	514.00 µg/L	514.00 ppb	18:49:17
1	Ti 334.940†	189966.6	185147.3	493.63 µg/L	493.63 ppb	18:48:51
1	Tl 190.801†	418.9	433.8	509.83 µg/L	509.83 ppb	18:49:17
1	U 409.014†	5181.0	4898.5	478.94 µg/L	478.94 ppb	18:48:57
1	V 292.402†	39857.8	38996.8	499.95 µg/L	499.95 ppb	18:48:57
1	Zn 213.857†	19893.7	18807.8	501.68 µg/L	501.68 ppb	18:48:57
2	Sc RADIAL	110194.2	110194.2	101 %		18:47:53
2	Al 396.153Radial†	9875.6	9961.5	4757.0 µg/L	4757.0 ppb	18:47:53
2	Ca 317.933Radial†	15542.2	15018.5	4870.9 µg/L	4870.9 ppb	18:47:53
2	Fe 238.204 Radial†	663.9	626.6	4727.2 µg/L	4727.2 ppb	18:48:13
2	K 766.490 Radial†	9117.5	8804.6	4996.7 µg/L	4996.7 ppb	18:47:53
2	Mg 279.077 IEC†	508.7	495.3	4949.0 µg/L	4949.0 ppb	18:48:13
2	Na 589.592 Radial†	26525.7	26051.2	9020.0 µg/L	9020.0 ppb	18:47:53
2	Sr 421.552†	105559.0	104452.2	473.06 µg/L	473.06 ppb	18:47:53
2	Sc 361.383	1722365.1	1722365.1	102.36 %		18:49:24
2	Y 371.029	946412.1	946412.1	101.10 %		18:49:24
2	Ag 328.068†	54822.2	54124.6	487.35 µg/L	487.35 ppb	18:49:30
2	As 188.979†	272.9	270.5	497.89 µg/L	497.89 ppb	18:49:51
2	B 249.677†	9500.4	9122.8	482.22 µg/L	482.22 ppb	18:49:30
2	Ba 233.527†	19671.9	19236.5	496.66 µg/L	496.66 ppb	18:49:30
2	Be 313.107†	707334.0	692978.1	495.85 µg/L	495.85 ppb	18:49:24
2	Cd 226.502†	17307.5	17052.9	499.14 µg/L	499.14 ppb	18:49:30
2	Co 228.616†	9886.3	9636.2	499.38 µg/L	499.38 ppb	18:49:30
2	Cr 267.716†	19719.6	19175.0	496.15 µg/L	496.15 ppb	18:49:30
2	Cu 324.752†	71902.2	67622.0	485.63 µg/L	485.63 ppb	18:49:30
2	Mn 257.610†	140621.4	137924.8	502.90 µg/L	502.90 ppb	18:49:24
2	Mo 202.031†	4548.3	4439.1	507.56 µg/L	507.56 ppb	18:49:51
2	Ni 231.604†	7935.5	7454.0	516.36 µg/L	516.36 ppb	18:49:30
2	P 214.914†	1453.6	1178.6	2493.5 µg/L	2493.5 ppb	18:49:51
2	Pb 220.353†	1693.1	1611.3	507.57 µg/L	507.57 ppb	18:49:51

2	S 181.975 Axial†	291.9	264.5	1003.9 µg/L	1003.9 ppb	18:49:51
2	Sb 206.836†	497.5	465.1	498.76 µg/L	498.76 ppb	18:49:51
2	Se 196.026†	431.7	408.4	513.55 µg/L	513.55 ppb	18:49:51
2	SiO2†	26219.5	24232.0	5288.1 µg/L	5288.1 ppb	18:49:30
2	Si 251.611†	31416.4	30328.3	2479.2 µg/L	2479.2 ppb	18:49:30
2	Sn 189.927†	1115.5	1085.2	510.38 µg/L	510.38 ppb	18:49:51
2	Ti 334.940†	189374.0	185017.7	493.27 µg/L	493.27 ppb	18:49:24
2	Tl 190.801†	413.5	429.5	504.86 µg/L	504.86 ppb	18:49:51
2	U 409.014†	5097.1	4828.8	472.11 µg/L	472.11 ppb	18:49:30
2	V 292.402†	39588.2	38827.8	497.78 µg/L	497.78 ppb	18:49:30
2	Zn 213.857†	19731.1	18696.0	498.68 µg/L	498.68 ppb	18:49:30
3	Sc RADIAL	110984.3	110984.3	102 %		18:48:19
3	Al 396.153Radial†	9952.4	9967.3	4761.1 µg/L	4761.1 ppb	18:48:19
3	Ca 317.933Radial†	15712.6	15076.5	4889.7 µg/L	4889.7 ppb	18:48:19
3	Fe 238.204 Radial†	668.0	626.0	4722.0 µg/L	4722.0 ppb	18:48:39
3	K 766.490 Radial†	9189.9	8811.4	5000.6 µg/L	5000.6 ppb	18:48:19
3	Mg 279.077 IEC†	509.5	492.5	4920.0 µg/L	4920.0 ppb	18:48:39
3	Na 589.592 Radial†	26769.9	26104.4	9038.4 µg/L	9038.4 ppb	18:48:19
3	Sr 421.552†	106343.5	104479.4	473.18 µg/L	473.18 ppb	18:48:19
3	Sc 361.383	1722888.2	1722888.2	102.39 %		18:49:58
3	Y 371.029	947282.4	947282.4	101.19 %		18:49:58
3	Ag 328.068†	53217.2	52540.9	473.00 µg/L	473.00 ppb	18:50:03
3	As 188.979†	246.0	244.1	449.35 µg/L	449.35 ppb	18:50:24
3	B 249.677†	9279.2	8903.9	470.55 µg/L	470.55 ppb	18:50:03
3	Ba 233.527†	18775.0	18354.7	473.88 µg/L	473.88 ppb	18:50:03
3	Be 313.107†	677552.0	663681.4	474.88 µg/L	474.88 ppb	18:49:58
3	Cd 226.502†	16461.1	16221.0	474.76 µg/L	474.76 ppb	18:50:03
3	Co 228.616†	9389.0	9147.6	474.01 µg/L	474.01 ppb	18:50:03
3	Cr 267.716†	18334.8	17816.6	461.01 µg/L	461.01 ppb	18:50:03
3	Cu 324.752†	68227.4	64011.7	459.75 µg/L	459.75 ppb	18:50:03
3	Mn 257.610†	135128.5	132518.4	483.18 µg/L	483.18 ppb	18:49:58
3	Mo 202.031†	3983.0	3885.7	444.31 µg/L	444.31 ppb	18:50:24
3	Ni 231.604†	7499.4	7025.7	486.69 µg/L	486.69 ppb	18:50:03
3	P 214.914†	1313.3	1041.2	2199.1 µg/L	2199.1 ppb	18:50:24
3	Pb 220.353†	1542.8	1463.9	461.07 µg/L	461.07 ppb	18:50:24
3	S 181.975 Axial†	266.7	239.8	909.98 µg/L	909.98 ppb	18:50:24
3	Sb 206.836†	449.8	418.2	448.18 µg/L	448.18 ppb	18:50:24
3	Se 196.026†	403.2	380.5	479.26 µg/L	479.26 ppb	18:50:24
3	SiO2†	25303.5	23329.6	5091.1 µg/L	5091.1 ppb	18:50:03
3	Si 251.611†	30291.1	29220.0	2388.6 µg/L	2388.6 ppb	18:50:03
3	Sn 189.927†	970.8	943.6	443.84 µg/L	443.84 ppb	18:50:24
3	Ti 334.940†	181016.5	176799.1	471.35 µg/L	471.35 ppb	18:49:58
3	Tl 190.801†	384.1	400.7	471.14 µg/L	471.14 ppb	18:50:24
3	U 409.014†	4810.0	4546.9	444.49 µg/L	444.49 ppb	18:50:03
3	V 292.402†	37220.3	36503.4	467.72 µg/L	467.72 ppb	18:50:03
3	Zn 213.857†	18779.0	17760.4	473.72 µg/L	473.72 ppb	18:50:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1723933.0	102.45 %	0.135			0.13%
Sc RADIAL	110676.5	101 %	0.4			0.38%
Y 371.029	947201.4	101.18 %	0.080			0.08%
Ag 328.068†	53699.5	483.49 µg/L	9.184	483.49 ppb	9.184	1.90%
QC value within limits for Ag 328.068 Recovery = 96.70%						
Al 396.153Radial†	9941.3	4747.8 µg/L	19.64	4747.8 ppb	19.64	0.41%
QC value within limits for Al 396.153Radial Recovery = 94.96%						
As 188.979†	262.0	482.23 µg/L	28.488	482.23 ppb	28.488	5.91%
QC value within limits for As 188.979 Recovery = 96.45%						
B 249.677†	9059.3	478.84 µg/L	7.213	478.84 ppb	7.213	1.51%
QC value within limits for B 249.677 Recovery = 95.77%						
Ba 233.527†	18970.0	489.78 µg/L	13.807	489.78 ppb	13.807	2.82%
QC value within limits for Ba 233.527 Recovery = 97.96%						
Be 313.107†	683463.9	489.04 µg/L	12.261	489.04 ppb	12.261	2.51%
QC value within limits for Be 313.107 Recovery = 97.81%						
Ca 317.933Radial†	15023.2	4872.4 µg/L	16.57	4872.4 ppb	16.57	0.34%
QC value within limits for Ca 317.933Radial Recovery = 97.45%						
Cd 226.502†	16819.1	492.29 µg/L	15.300	492.29 ppb	15.300	3.11%
QC value within limits for Cd 226.502 Recovery = 98.46%						
Co 228.616†	9495.4	492.06 µg/L	15.727	492.06 ppb	15.727	3.20%

Cr	267.716†	18772.3	485.73 µg/L	21.501	485.73 ppb	21.501	4.43%
	QC value within limits for Cr 267.716 Recovery = 97.15%						
Cu	324.752†	66491.7	477.52 µg/L	15.414	477.52 ppb	15.414	3.23%
	QC value within limits for Cu 324.752 Recovery = 95.50%						
Fe	238.204 Radial†	625.1	4715.5 µg/L	16.01	4715.5 ppb	16.01	0.34%
	QC value within limits for Fe 238.204 Radial Recovery = 94.31%						
K	766.490 Radial†	8781.3	4983.5 µg/L	26.35	4983.5 ppb	26.35	0.53%
	QC value within limits for K 766.490 Radial Recovery = 99.67%						
Mg	279.077 IEC†	491.2	4907.9 µg/L	48.31	4907.9 ppb	48.31	0.98%
	QC value within limits for Mg 279.077 IEC Recovery = 98.16%						
Mn	257.610†	136185.7	496.56 µg/L	11.587	496.56 ppb	11.587	2.33%
	QC value within limits for Mn 257.610 Recovery = 99.31%						
Mo	202.031†	4260.4	487.14 µg/L	37.104	487.14 ppb	37.104	7.62%
	QC value within limits for Mo 202.031 Recovery = 97.43%						
Na	589.592 Radial†	26061.4	9023.5 µg/L	13.49	9023.5 ppb	13.49	0.15%
	QC value within limits for Na 589.592 Radial Recovery = 90.24%						
Ni	231.604†	7316.8	506.85 µg/L	17.473	506.85 ppb	17.473	3.45%
	QC value within limits for Ni 231.604 Recovery = 101.37%						
P	214.914†	1133.6	2397.0 µg/L	171.39	2397.0 ppb	171.39	7.15%
	QC value within limits for P 214.914 Recovery = 95.88%						
Pb	220.353†	1566.3	493.38 µg/L	28.053	493.38 ppb	28.053	5.69%
	QC value within limits for Pb 220.353 Recovery = 98.68%						
S	181.975 Axial†	256.8	974.54 µg/L	55.981	974.54 ppb	55.981	5.74%
	QC value within limits for S 181.975 Axial Recovery = 97.45%						
Sb	206.836†	448.4	480.83 µg/L	28.318	480.83 ppb	28.318	5.89%
	QC value within limits for Sb 206.836 Recovery = 96.17%						
Se	196.026†	401.0	504.38 µg/L	22.018	504.38 ppb	22.018	4.37%
	QC value within limits for Se 196.026 Recovery = 100.88%						
SiO2†		23934.5	5223.1 µg/L	114.32	5223.1 ppb	114.32	2.19%
	QC value within limits for SiO2 Recovery = 97.67%						
Si	251.611†	29971.1	2450.0 µg/L	53.20	2450.0 ppb	53.20	2.17%
	QC value within limits for Si 251.611 Recovery = 98.00%						
Sn	189.927†	1040.6	489.41 µg/L	39.505	489.41 ppb	39.505	8.07%
	QC value within limits for Sn 189.927 Recovery = 97.88%						
Sr	421.552†	104357.3	472.63 µg/L	0.853	472.63 ppb	0.853	0.18%
	QC value within limits for Sr 421.552 Recovery = 94.53%						
Ti	334.940†	182321.3	486.08 µg/L	12.760	486.08 ppb	12.760	2.63%
	QC value within limits for Ti 334.940 Recovery = 97.22%						
Tl	190.801†	421.4	495.28 µg/L	21.054	495.28 ppb	21.054	4.25%
	QC value within limits for Tl 190.801 Recovery = 99.06%						
U	409.014†	4758.1	465.18 µg/L	18.241	465.18 ppb	18.241	3.92%
	QC value within limits for U 409.014 Recovery = 93.04%						
V	292.402†	38109.3	488.49 µg/L	18.012	488.49 ppb	18.012	3.69%
	QC value within limits for V 292.402 Recovery = 97.70%						
Zn	213.857†	18421.4	491.36 µg/L	15.351	491.36 ppb	15.351	3.12%
	QC value within limits for Zn 213.857 Recovery = 98.27%						

All analyte(s) passed QC.

Sequence No.: 16  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 18:50:33  
 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	109329.9	109329.9	100 %		18:51:06
1	Al 396.153Radial†	-162.4	12.7	6.0792 µg/L	6.0792 ppb	18:51:06
1	Ca 317.933Radial†	388.6	4.6	1.4963 µg/L	1.4963 ppb	18:51:27
1	Fe 238.204 Radial†	30.2	-1.2	-8.6785 µg/L	-8.6785 ppb	18:51:27
1	K 766.490 Radial†	305.8	74.7	42.384 µg/L	42.384 ppb	18:51:06
1	Mg 279.077 IEC†	12.0	3.2	31.808 µg/L	31.808 ppb	18:51:27
1	Na 589.592 Radial†	287.1	51.5	17.825 µg/L	17.825 ppb	18:51:06
1	Sr 421.552†	171.2	16.1	0.0727 µg/L	0.0727 ppb	18:51:06
1	Sc 361.383	1715551.7	1715551.7	101.95 %		18:52:29
1	Y 371.029	940807.4	940807.4	100.50 %		18:52:29
1	Ag 328.068†	-605.1	-27.6	-0.2446 µg/L	-0.2446 ppb	18:52:34
1	As 188.979†	-2.7	1.2	2.2682 µg/L	2.2682 ppb	18:52:55
1	B 249.677†	192.5	30.2	1.6041 µg/L	1.6041 ppb	18:52:55
1	Ba 233.527†	-21.9	-3.6	-0.0908 µg/L	-0.0908 ppb	18:52:55
1	Be 313.107†	-2229.2	-240.7	-0.1724 µg/L	-0.1724 ppb	18:52:34
1	Cd 226.502†	-148.8	-1.7	-0.0499 µg/L	-0.0499 ppb	18:52:55
1	Co 228.616†	10.9	-11.6	-0.6014 µg/L	-0.6014 ppb	18:52:55
1	Cr 267.716†	76.4	-15.2	-0.3927 µg/L	-0.3927 ppb	18:52:34
1	Cu 324.752†	2661.2	-12.8	-0.0935 µg/L	-0.0935 ppb	18:52:34
1	Mn 257.610†	-562.5	-7.5	-0.0301 µg/L	-0.0301 ppb	18:52:55
1	Mo 202.031†	5.9	1.4	0.1648 µg/L	0.1648 ppb	18:52:55
1	Ni 231.604†	307.7	3.1	0.2164 µg/L	0.2164 ppb	18:52:55
1	P 214.914†	249.9	3.7	7.8585 µg/L	7.8585 ppb	18:52:55
1	Pb 220.353†	39.2	-4.4	-1.3786 µg/L	-1.3786 ppb	18:52:55
1	S 181.975 Axial†	21.7	0.6	2.3109 µg/L	2.3109 ppb	18:52:55
1	Sb 206.836†	24.1	2.6	2.7631 µg/L	2.7631 ppb	18:52:55
1	Se 196.026†	15.2	1.6	1.8579 µg/L	1.8579 ppb	18:52:55
1	SiO2†	1439.4	28.6	6.2494 µg/L	6.2494 ppb	18:52:34
1	Si 251.611†	397.7	26.1	2.1345 µg/L	2.1345 ppb	18:52:55
1	Sn 189.927†	0.8	-3.8	-1.7687 µg/L	-1.7687 ppb	18:52:55
1	Ti 334.940†	118.7	124.5	0.3297 µg/L	0.3297 ppb	18:52:34
1	Tl 190.801†	-26.9	-0.8	-0.9553 µg/L	-0.9553 ppb	18:52:55
1	U 409.014†	205.3	50.5	4.9480 µg/L	4.9480 ppb	18:52:34
1	V 292.402†	-115.3	38.9	0.4977 µg/L	0.4977 ppb	18:52:34
1	Zn 213.857†	580.7	-10.7	-0.2892 µg/L	-0.2892 ppb	18:52:55
2	Sc RADIAL	108891.7	108891.7	99.7 %		18:51:32
2	Al 396.153Radial†	-174.5	-0.1	-0.0450 µg/L	-0.0450 ppb	18:51:32
2	Ca 317.933Radial†	389.4	6.9	2.2525 µg/L	2.2525 ppb	18:51:53
2	Fe 238.204 Radial†	29.7	-1.5	-11.008 µg/L	-11.008 ppb	18:51:53
2	K 766.490 Radial†	146.9	-83.4	-47.348 µg/L	-47.348 ppb	18:51:32
2	Mg 279.077 IEC†	10.8	2.0	20.309 µg/L	20.309 ppb	18:51:53
2	Na 589.592 Radial†	252.9	18.3	6.3463 µg/L	6.3463 ppb	18:51:32
2	Sr 421.552†	142.5	-12.1	-0.0546 µg/L	-0.0546 ppb	18:51:32
2	Sc 361.383	1722161.7	1722161.7	102.35 %		18:53:01
2	Y 371.029	946257.2	946257.2	101.08 %		18:53:01
2	Ag 328.068†	-569.4	9.6	0.0885 µg/L	0.0885 ppb	18:53:06
2	As 188.979†	-5.7	-1.7	-3.1977 µg/L	-3.1977 ppb	18:53:27
2	B 249.677†	178.9	16.2	0.8629 µg/L	0.8629 ppb	18:53:27
2	Ba 233.527†	-18.4	-0.0	0.0008 µg/L	0.0008 ppb	18:53:27
2	Be 313.107†	-2148.3	-153.2	-0.1098 µg/L	-0.1098 ppb	18:53:06
2	Cd 226.502†	-133.5	13.8	0.4046 µg/L	0.4046 ppb	18:53:27
2	Co 228.616†	22.1	-0.6	-0.0337 µg/L	-0.0337 ppb	18:53:27
2	Cr 267.716†	64.7	-27.0	-0.6975 µg/L	-0.6975 ppb	18:53:06
2	Cu 324.752†	2700.1	15.1	0.1062 µg/L	0.1062 ppb	18:53:06
2	Mn 257.610†	-534.7	21.8	0.0775 µg/L	0.0775 ppb	18:53:27
2	Mo 202.031†	2.1	-2.3	-0.2583 µg/L	-0.2583 ppb	18:53:27
2	Ni 231.604†	307.3	1.6	0.1090 µg/L	0.1090 ppb	18:53:27
2	P 214.914†	255.5	8.2	17.665 µg/L	17.665 ppb	18:53:27
2	Pb 220.353†	33.0	-10.6	-3.3520 µg/L	-3.3520 ppb	18:53:27

2	S 181.975 Axial†	19.5	-1.6	-6.1528 µg/L	-6.1528 ppb	18:53:27
2	Sb 206.836†	20.0	-1.5	-1.6272 µg/L	-1.6272 ppb	18:53:27
2	Se 196.026†	17.5	3.8	4.5772 µg/L	4.5772 ppb	18:53:27
2	SiO2†	1394.5	-20.7	-4.5136 µg/L	-4.5136 ppb	18:53:06
2	Si 251.611†	447.4	73.1	5.9769 µg/L	5.9769 ppb	18:53:27
2	Sn 189.927†	2.9	-1.7	-0.8061 µg/L	-0.8061 ppb	18:53:27
2	Ti 334.940†	170.3	174.5	0.4640 µg/L	0.4640 ppb	18:53:06
2	Tl 190.801†	-26.9	-0.7	-0.8409 µg/L	-0.8409 ppb	18:53:27
2	U 409.014†	206.9	51.3	5.0284 µg/L	5.0284 ppb	18:53:06
2	V 292.402†	-100.7	53.6	0.6803 µg/L	0.6803 ppb	18:53:06
2	Zn 213.857†	578.6	-14.9	-0.4022 µg/L	-0.4022 ppb	18:53:27
3	Sc RADIAL	107309.8	107309.8	98.3 %		18:51:58
3	Al 396.153Radial†	-168.7	3.3	1.5529 µg/L	1.5529 ppb	18:51:58
3	Ca 317.933Radial†	387.0	10.3	3.3316 µg/L	3.3316 ppb	18:52:18
3	Fe 238.204 Radial†	28.2	-2.6	-19.594 µg/L	-19.594 ppb	18:52:18
3	K 766.490 Radial†	284.1	58.3	33.106 µg/L	33.106 ppb	18:51:58
3	Mg 279.077 IEC†	9.6	0.9	9.5132 µg/L	9.5132 ppb	18:52:18
3	Na 589.592 Radial†	213.1	-18.4	-6.3874 µg/L	-6.3874 ppb	18:51:58
3	Sr 421.552†	147.8	-4.6	-0.0207 µg/L	-0.0207 ppb	18:51:58
3	Sc 361.383	1716235.9	1716235.9	101.99 %		18:53:33
3	Y 371.029	946864.8	946864.8	101.15 %		18:53:33
3	Ag 328.068†	-524.3	51.9	0.4609 µg/L	0.4609 ppb	18:53:39
3	As 188.979†	-5.9	-1.9	-3.5430 µg/L	-3.5430 ppb	18:53:59
3	B 249.677†	161.4	-0.4	-0.0138 µg/L	-0.0138 ppb	18:53:59
3	Ba 233.527†	-12.6	5.5	0.1423 µg/L	0.1423 ppb	18:53:59
3	Be 313.107†	-2010.6	-25.4	-0.0184 µg/L	-0.0184 ppb	18:53:39
3	Cd 226.502†	-133.9	13.0	0.3812 µg/L	0.3812 ppb	18:53:59
3	Co 228.616†	19.3	-3.3	-0.1721 µg/L	-0.1721 ppb	18:53:59
3	Cr 267.716†	60.7	-30.7	-0.7934 µg/L	-0.7934 ppb	18:53:39
3	Cu 324.752†	2722.9	46.6	0.3302 µg/L	0.3302 ppb	18:53:39
3	Mn 257.610†	-540.2	14.6	0.0515 µg/L	0.0515 ppb	18:53:59
3	Mo 202.031†	12.6	8.0	0.9177 µg/L	0.9177 ppb	18:53:59
3	Ni 231.604†	293.2	-11.2	-0.7760 µg/L	-0.7760 ppb	18:53:59
3	P 214.914†	251.5	5.1	10.914 µg/L	10.914 ppb	18:53:59
3	Pb 220.353†	44.7	1.0	0.3090 µg/L	0.3090 ppb	18:53:59
3	S 181.975 Axial†	25.3	4.1	15.698 µg/L	15.698 ppb	18:53:59
3	Sb 206.836†	24.0	2.5	2.6622 µg/L	2.6622 ppb	18:53:59
3	Se 196.026†	19.1	5.4	6.5827 µg/L	6.5827 ppb	18:53:59
3	SiO2†	1418.4	7.5	1.6335 µg/L	1.6335 ppb	18:53:39
3	Si 251.611†	426.2	53.8	4.4020 µg/L	4.4020 ppb	18:53:59
3	Sn 189.927†	8.6	3.8	1.8064 µg/L	1.8064 ppb	18:53:59
3	Ti 334.940†	176.9	181.5	0.4836 µg/L	0.4836 ppb	18:53:39
3	Tl 190.801†	-23.8	2.3	2.6771 µg/L	2.6771 ppb	18:53:59
3	U 409.014†	149.9	-3.9	-0.3779 µg/L	-0.3779 ppb	18:53:39
3	V 292.402†	-152.5	2.4	0.0342 µg/L	0.0342 ppb	18:53:39
3	Zn 213.857†	573.6	-17.9	-0.4788 µg/L	-0.4788 ppb	18:53:59

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1717983.1	102.10 %	0.216			0.21%
Sc RADIAL	108510.5	99.4 %	0.97			0.98%
Y 371.029	944643.1	100.91 %	0.356			0.35%
Ag 328.068†	11.3	0.1016 µg/L	0.35294	0.1016 ppb	0.35294	347.27%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.3	2.5291 µg/L	3.17665	2.5291 ppb	3.17665	125.61%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.8	-1.4908 µg/L	3.25998	-1.4908 ppb	3.25998	218.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	15.3	0.8177 µg/L	0.80991	0.8177 ppb	0.80991	99.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.6	0.0174 µg/L	0.11748	0.0174 ppb	0.11748	673.65%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-139.8	-0.1002 µg/L	0.07745	-0.1002 ppb	0.07745	77.29%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.3	2.3602 µg/L	0.92238	2.3602 ppb	0.92238	39.08%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.3	0.2453 µg/L	0.25589	0.2453 ppb	0.25589	104.32%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.2	-0.2691 µg/L	0.29604	-0.2691 ppb	0.29604	110.03%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-24.3	-0.6279 µg/L	0.20921	-0.6279 ppb	0.20921	33.32%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	16.3	0.1143 µg/L	0.21198	0.1143 ppb	0.21198	185.46%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.7	-13.093 µg/L	5.7490	-13.093 ppb	5.7490	43.91%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	16.5	9.3808 µg/L	49.34679	9.3808 ppb	49.34679	526.04%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.1	20.543 µg/L	11.1493	20.543 ppb	11.1493	54.27%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	9.6	0.0330 µg/L	0.05610	0.0330 ppb	0.05610	170.22%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.4	0.2747 µg/L	0.59564	0.2747 ppb	0.59564	216.81%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	17.1	5.9279 µg/L	12.11153	5.9279 ppb	12.11153	204.31%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-2.2	-0.1502 µg/L	0.54462	-0.1502 ppb	0.54462	362.57%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	5.6	12.146 µg/L	5.0179	12.146 ppb	5.0179	41.31%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.7	-1.4739 µg/L	1.83239	-1.4739 ppb	1.83239	124.33%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.0	3.9519 µg/L	11.01725	3.9519 ppb	11.01725	278.78%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	1.2	1.2661 µg/L	2.50612	1.2661 ppb	2.50612	197.94%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.6	4.3393 µg/L	2.37137	4.3393 ppb	2.37137	54.65%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	5.1	1.1231 µg/L	5.39963	1.1231 ppb	5.39963	480.78%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	51.0	4.1711 µg/L	1.93158	4.1711 ppb	1.93158	46.31%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.6	-0.2561 µg/L	1.84993	-0.2561 ppb	1.84993	722.23%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-0.2	-0.0009 µg/L	0.06595	-0.0009 ppb	0.06595	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	160.2	0.4258 µg/L	0.08376	0.4258 ppb	0.08376	19.67%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.2	0.2936 µg/L	2.06495	0.2936 ppb	2.06495	703.30%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	32.6	3.1995 µg/L	3.09835	3.1995 ppb	3.09835	96.84%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	31.6	0.4041 µg/L	0.33310	0.4041 ppb	0.33310	82.43%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-14.5	-0.3901 µg/L	0.09539	-0.3901 ppb	0.09539	24.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

=====  
Analysis Begun

Start Time: 3/5/2010 03:15:39

Plasma On Time: 3/3/2010 20:44:45

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\030410A.sif

Batch ID:

Results Data Set: 030510B

Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/5/2010 03:15:39

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	100500.8	100500.8	100 %	03:16:14
1	Al 396.153Radial†	-405.1	-404.5	[0.00] µg/L	03:16:14
1	Ca 317.933Radial†	391.2	390.6	[0.00] µg/L	03:16:34
1	Fe 238.204 Radial†	12.9	12.9	[0.00] µg/L	03:16:34
1	K 766.490 Radial†	348.5	347.9	[0.00] µg/L	03:16:14
1	Mg 279.077 IEC†	6.7	6.7	[0.00] µg/L	03:16:34
1	Na 589.592 Radial†	227.8	227.4	[0.00] µg/L	03:16:14
1	Sr 421.552†	172.7	172.5	[0.00] µg/L	03:16:14
1	Sc 361.383	1918147.5	1918147.5	99.820 %	03:17:36
1	Y 371.029	1334383.4	1334383.4	99.728 %	03:17:36
1	Ag 328.068†	-573.6	-574.6	[0.00] µg/L	03:17:42
1	As 188.979†	-2.1	-2.1	[0.00] µg/L	03:18:02
1	B 249.677†	360.3	360.9	[0.00] µg/L	03:17:42
1	Ba 233.527†	-24.9	-25.0	[0.00] µg/L	03:18:02
1	Be 313.107†	-1517.3	-1520.0	[0.00] µg/L	03:17:42
1	Cd 226.502†	-184.8	-185.2	[0.00] µg/L	03:18:02
1	Co 228.616†	23.1	23.2	[0.00] µg/L	03:18:02
1	Cr 267.716†	87.6	87.7	[0.00] µg/L	03:17:42
1	Cu 324.752†	3559.8	3566.2	[0.00] µg/L	03:17:42
1	Mn 257.610†	-803.4	-804.9	[0.00] µg/L	03:18:02
1	Mo 202.031†	8.7	8.7	[0.00] µg/L	03:18:02
1	Ni 231.604†	359.6	360.2	[0.00] µg/L	03:18:02
1	P 214.914†	314.4	315.0	[0.00] µg/L	03:18:02
1	Pb 220.353†	56.7	56.8	[0.00] µg/L	03:18:02
1	S 181.975 Axial†	25.7	25.8	[0.00] µg/L	03:18:02
1	Sb 206.836†	27.9	28.0	[0.00] µg/L	03:18:02
1	Se 196.026†	31.5	31.5	[0.00] µg/L	03:18:02
1	SiO2†	2328.7	2332.9	[0.00] µg/L	03:17:42
1	Si 251.611†	394.0	394.7	[0.00] µg/L	03:18:02
1	Sn 189.927†	-2.6	-2.6	[0.00] µg/L	03:18:02
1	Ti 334.940†	-687.1	-688.3	[0.00] µg/L	03:17:42
1	Tl 190.801†	-31.6	-31.7	[0.00] µg/L	03:18:02
1	U 409.014†	-28.5	-28.6	[0.00] µg/L	03:17:42
1	V 292.402†	119.6	119.8	[0.00] µg/L	03:17:42
1	Zn 213.857†	594.8	595.9	[0.00] µg/L	03:18:02
2	Sc RADIAL	100598.0	100598.0	100 %	03:16:40
2	Al 396.153Radial†	-411.6	-410.6	[0.00] µg/L	03:16:40
2	Ca 317.933Radial†	387.6	386.6	[0.00] µg/L	03:17:00
2	Fe 238.204 Radial†	14.0	14.0	[0.00] µg/L	03:17:00
2	K 766.490 Radial†	217.9	217.3	[0.00] µg/L	03:16:40
2	Mg 279.077 IEC†	11.9	11.9	[0.00] µg/L	03:17:00
2	Na 589.592 Radial†	275.5	274.8	[0.00] µg/L	03:16:40
2	Sr 421.552†	140.1	139.7	[0.00] µg/L	03:16:40
2	Sc 361.383	1928023.1	1928023.1	100.33 %	03:18:08
2	Y 371.029	1342498.6	1342498.6	100.33 %	03:18:08
2	Ag 328.068†	-523.0	-521.3	[0.00] µg/L	03:18:14
2	As 188.979†	-3.2	-3.2	[0.00] µg/L	03:18:34



2	B 249.677†	365.8	364.5	[0.00]	µg/L	03:18:14
2	Ba 233.527†	-38.4	-38.3	[0.00]	µg/L	03:18:34
2	Be 313.107†	-1534.5	-1529.4	[0.00]	µg/L	03:18:14
2	Cd 226.502†	-178.4	-177.8	[0.00]	µg/L	03:18:34
2	Co 228.616†	17.2	17.1	[0.00]	µg/L	03:18:34
2	Cr 267.716†	43.9	43.8	[0.00]	µg/L	03:18:14
2	Cu 324.752†	3615.6	3603.6	[0.00]	µg/L	03:18:14
2	Mn 257.610†	-771.1	-768.6	[0.00]	µg/L	03:18:34
2	Mo 202.031†	5.6	5.5	[0.00]	µg/L	03:18:34
2	Ni 231.604†	371.6	370.4	[0.00]	µg/L	03:18:34
2	P 214.914†	302.6	301.6	[0.00]	µg/L	03:18:34
2	Pb 220.353†	58.4	58.2	[0.00]	µg/L	03:18:34
2	S 181.975 Axial†	21.4	21.3	[0.00]	µg/L	03:18:34
2	Sb 206.836†	30.7	30.6	[0.00]	µg/L	03:18:34
2	Se 196.026†	17.8	17.7	[0.00]	µg/L	03:18:34
2	SiO2†	2333.1	2325.3	[0.00]	µg/L	03:18:14
2	Si 251.611†	397.9	396.6	[0.00]	µg/L	03:18:34
2	Sn 189.927†	5.7	5.7	[0.00]	µg/L	03:18:34
2	Ti 334.940†	-694.1	-691.8	[0.00]	µg/L	03:18:14
2	Tl 190.801†	-42.1	-41.9	[0.00]	µg/L	03:18:34
2	U 409.014†	-48.1	-47.9	[0.00]	µg/L	03:18:14
2	V 292.402†	95.4	95.1	[0.00]	µg/L	03:18:14
2	Zn 213.857†	595.6	593.6	[0.00]	µg/L	03:18:34
3	Sc RADIAL	99941.4	99941.4	99.6	%	03:17:05
3	Al 396.153Radial†	-384.5	-386.1	[0.00]	µg/L	03:17:05
3	Ca 317.933Radial†	384.1	385.7	[0.00]	µg/L	03:17:26
3	Fe 238.204 Radial†	14.4	14.4	[0.00]	µg/L	03:17:05
3	K 766.490 Radial†	405.0	406.6	[0.00]	µg/L	03:17:26
3	Mg 279.077 IEC†	9.6	9.6	[0.00]	µg/L	03:17:05
3	Na 589.592 Radial†	132.2	132.7	[0.00]	µg/L	03:17:05
3	Sr 421.552†	134.6	135.1	[0.00]	µg/L	03:18:40
3	Sc 361.383	1918670.3	1918670.3	99.847	%	03:18:40
3	Y 371.029	1337197.6	1337197.6	99.938	%	03:18:46
3	Ag 328.068†	-606.7	-607.7	[0.00]	µg/L	03:19:06
3	As 188.979†	-4.2	-4.3	[0.00]	µg/L	03:18:46
3	B 249.677†	343.7	344.3	[0.00]	µg/L	03:19:06
3	Ba 233.527†	-29.9	-30.0	[0.00]	µg/L	03:19:06
3	Be 313.107†	-1531.5	-1533.9	[0.00]	µg/L	03:19:06
3	Cd 226.502†	-175.7	-176.0	[0.00]	µg/L	03:19:06
3	Co 228.616†	16.9	17.0	[0.00]	µg/L	03:19:06
3	Cr 267.716†	92.1	92.2	[0.00]	µg/L	03:19:06
3	Cu 324.752†	3592.3	3597.8	[0.00]	µg/L	03:19:06
3	Mn 257.610†	-774.2	-775.4	[0.00]	µg/L	03:19:06
3	Mo 202.031†	9.6	9.7	[0.00]	µg/L	03:19:06
3	Ni 231.604†	369.6	370.1	[0.00]	µg/L	03:19:06
3	P 214.914†	304.0	304.5	[0.00]	µg/L	03:19:06
3	Pb 220.353†	53.3	53.4	[0.00]	µg/L	03:19:06
3	S 181.975 Axial†	23.5	23.5	[0.00]	µg/L	03:19:06
3	Sb 206.836†	24.1	24.2	[0.00]	µg/L	03:19:06
3	Se 196.026†	12.4	12.4	[0.00]	µg/L	03:19:06
3	SiO2†	2346.0	2349.5	[0.00]	µg/L	03:19:06
3	Si 251.611†	401.5	402.1	[0.00]	µg/L	03:19:06
3	Sn 189.927†	2.7	2.7	[0.00]	µg/L	03:19:06
3	Ti 334.940†	-667.0	-668.0	[0.00]	µg/L	03:19:06
3	Tl 190.801†	-34.6	-34.6	[0.00]	µg/L	03:19:06
3	U 409.014†	-13.9	-14.0	[0.00]	µg/L	03:19:06
3	V 292.402†	75.6	75.8	[0.00]	µg/L	03:19:06
3	Zn 213.857†	581.5	582.4	[0.00]	µg/L	03:19:06

## Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1921613.6	5556.95	0.29%	100.00 %
Sc RADIAL	100346.8	354.36	0.35%	100 %
Y 371.029	1338026.5	4120.61	0.31%	100.00 %
Ag 328.068†	-567.9	43.59	7.68%	[0.00] µg/L
Al 396.153Radial†	-400.4	12.77	3.19%	[0.00] µg/L
As 188.979†	-3.2	1.07	33.33%	[0.00] µg/L
B 249.677†	356.6	10.82	3.03%	[0.00] µg/L
Ba 233.527†	-31.1	6.73	21.65%	[0.00] µg/L

Be 313.107†	-1527.8	7.06	0.46%	[0.00]	µg/L
Ca 317.933Radial†	387.6	2.61	0.67%	[0.00]	µg/L
Cd 226.502†	-179.7	4.85	2.70%	[0.00]	µg/L
Co 228.616†	19.1	3.54	18.55%	[0.00]	µg/L
Cr 267.716†	74.6	26.75	35.87%	[0.00]	µg/L
Cu 324.752†	3589.2	20.10	0.56%	[0.00]	µg/L
Fe 238.204 Radial†	13.7	0.81	5.88%	[0.00]	µg/L
K 766.490 Radial†	324.0	96.91	29.91%	[0.00]	µg/L
Mg 279.077 IEC†	9.4	2.58	27.40%	[0.00]	µg/L
Mn 257.610†	-782.9	19.29	2.46%	[0.00]	µg/L
Mo 202.031†	8.0	2.16	27.04%	[0.00]	µg/L
Na 589.592 Radial†	211.6	72.35	34.19%	[0.00]	µg/L
Ni 231.604†	366.9	5.80	1.58%	[0.00]	µg/L
P 214.914†	307.0	7.04	2.29%	[0.00]	µg/L
Pb 220.353†	56.1	2.46	4.39%	[0.00]	µg/L
S 181.975 Axial†	23.5	2.23	9.48%	[0.00]	µg/L
Sb 206.836†	27.6	3.25	11.80%	[0.00]	µg/L
Se 196.026†	20.6	9.87	48.01%	[0.00]	µg/L
SiO2†	2335.9	12.40	0.53%	[0.00]	µg/L
Si 251.611†	397.8	3.86	0.97%	[0.00]	µg/L
Sn 189.927†	1.9	4.20	218.14%	[0.00]	µg/L
Sr 421.552†	149.1	20.35	13.65%	[0.00]	µg/L
Ti 334.940†	-682.7	12.85	1.88%	[0.00]	µg/L
Tl 190.801†	-36.1	5.28	14.65%	[0.00]	µg/L
U 409.014†	-30.2	17.05	56.54%	[0.00]	µg/L
V 292.402†	96.9	22.08	22.78%	[0.00]	µg/L
Zn 213.857†	590.6	7.25	1.23%	[0.00]	µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/5/2010 03:19:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

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Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	100935.3	100935.3	101 %	03:19:50
1	K 766.490 Radial†	2397.0	2059.0	[1000] µg/L	03:19:50
1	Sr 421.552†	19024.6	18764.6	[100] µg/L	03:19:50
1	Sc 361.383	1921211.6	1921211.6	99.979 %	03:20:12
1	Y 371.029	1337135.9	1337135.9	99.933 %	03:20:12
1	Ag 328.068†	12172.9	12743.3	[100] µg/L	03:20:17
1	As 188.979†	67.8	71.1	[100] µg/L	03:20:38
1	B 249.677†	2536.3	2180.3	[100] µg/L	03:20:17
1	Ba 233.527†	4610.9	4643.0	[100] µg/L	03:20:38
1	Be 313.107†	170579.8	172143.3	[100] µg/L	03:20:12
1	Cd 226.502†	4153.3	4333.9	[100] µg/L	03:20:38
1	Co 228.616†	2418.1	2399.5	[100] µg/L	03:20:38
1	Cr 267.716†	4872.9	4799.3	[100] µg/L	03:20:17
1	Cu 324.752†	19201.2	15616.1	[100] µg/L	03:20:17
1	Mn 257.610†	32633.9	33423.6	[100] µg/L	03:20:17
1	Mo 202.031†	1109.5	1101.8	[100] µg/L	03:20:38
1	Ni 231.604†	2229.8	1863.4	[100] µg/L	03:20:38
1	P 214.914†	622.5	315.6	[500] µg/L	03:20:38
1	Pb 220.353†	463.0	407.0	[100] µg/L	03:20:38
1	S 181.975 Axial†	84.7	61.2	[200] µg/L	03:20:38
1	Sb 206.836†	148.1	120.5	[100] µg/L	03:20:38
1	Se 196.026†	121.9	101.4	[100] µg/L	03:20:38
1	SiO2†	8238.1	5903.9	[1069.5] µg/L	03:20:17
1	Si 251.611†	7745.2	7349.1	[500] µg/L	03:20:17
1	Sn 189.927†	273.9	272.0	[100] µg/L	03:20:38
1	Ti 334.940†	42190.7	42882.3	[100] µg/L	03:20:17
1	Tl 190.801†	65.6	101.6	[100] µg/L	03:20:38
1	U 409.014†	1121.0	1151.3	[100] µg/L	03:20:17
1	V 292.402†	8742.3	8647.2	[100] µg/L	03:20:17
1	Zn 213.857†	5138.3	4548.8	[100] µg/L	03:20:38
2	Sc RADIAL	100707.3	100707.3	100 %	03:19:56
2	K 766.490 Radial†	2455.9	2123.2	[1000] µg/L	03:19:56
2	Sr 421.552†	18997.9	18780.7	[100] µg/L	03:19:56
2	Sc 361.383	1907581.1	1907581.1	99.270 %	03:20:44
2	Y 371.029	1327402.1	1327402.1	99.206 %	03:20:44
2	Ag 328.068†	12115.3	12772.3	[100] µg/L	03:20:50
2	As 188.979†	67.5	71.2	[100] µg/L	03:21:11
2	B 249.677†	2507.3	2169.2	[100] µg/L	03:20:50
2	Ba 233.527†	4589.2	4654.0	[100] µg/L	03:21:11
2	Be 313.107†	169553.1	172328.1	[100] µg/L	03:20:44
2	Cd 226.502†	4120.5	4330.5	[100] µg/L	03:21:11
2	Co 228.616†	2408.7	2407.3	[100] µg/L	03:21:11
2	Cr 267.716†	4870.3	4831.6	[100] µg/L	03:20:50
2	Cu 324.752†	19164.6	15716.4	[100] µg/L	03:20:50
2	Mn 257.610†	32533.8	33556.0	[100] µg/L	03:20:50
2	Mo 202.031†	1103.1	1103.3	[100] µg/L	03:21:11
2	Ni 231.604†	2225.5	1875.0	[100] µg/L	03:21:11
2	P 214.914†	632.1	329.7	[500] µg/L	03:21:11
2	Pb 220.353†	462.6	409.9	[100] µg/L	03:21:11
2	S 181.975 Axial†	85.1	62.2	[200] µg/L	03:21:11
2	Sb 206.836†	141.1	114.6	[100] µg/L	03:21:11
2	Se 196.026†	132.3	112.7	[100] µg/L	03:21:11
2	SiO2†	8199.9	5924.3	[1069.5] µg/L	03:20:50
2	Si 251.611†	7758.3	7417.6	[500] µg/L	03:20:50
2	Sn 189.927†	272.8	272.9	[100] µg/L	03:21:11
2	Ti 334.940†	42042.6	43034.6	[100] µg/L	03:20:50
2	Tl 190.801†	67.6	104.2	[100] µg/L	03:21:11
2	U 409.014†	1139.2	1177.7	[100] µg/L	03:20:50
2	V 292.402†	8717.1	8684.4	[100] µg/L	03:20:50

2	Zn 213.857†	5119.6	4566.6	[100]	µg/L	03:21:11
3	Sc RADIAL	101200.9	101200.9	101	%	03:20:01
3	K 766.490 Radial†	2403.3	2059.0	[1000]	µg/L	03:20:01
3	Sr 421.552†	19102.6	18792.3	[100]	µg/L	03:20:01
3	Sc 361.383	1922145.3	1922145.3	100.03	%	03:21:17
3	Y 371.029	1337606.3	1337606.3	99.969	%	03:21:17
3	Ag 328.068†	12104.6	12669.2	[100]	µg/L	03:21:23
3	As 188.979†	67.4	70.6	[100]	µg/L	03:21:43
3	B 249.677†	2486.7	2129.4	[100]	µg/L	03:21:23
3	Ba 233.527†	4595.4	4625.2	[100]	µg/L	03:21:43
3	Be 313.107†	169818.6	171299.4	[100]	µg/L	03:21:17
3	Cd 226.502†	4151.1	4329.6	[100]	µg/L	03:21:43
3	Co 228.616†	2422.4	2402.6	[100]	µg/L	03:21:43
3	Cr 267.716†	4818.4	4742.5	[100]	µg/L	03:21:23
3	Cu 324.752†	19201.5	15607.0	[100]	µg/L	03:21:23
3	Mn 257.610†	32445.1	33219.1	[100]	µg/L	03:21:23
3	Mo 202.031†	1101.3	1093.0	[100]	µg/L	03:21:43
3	Ni 231.604†	2230.3	1862.8	[100]	µg/L	03:21:43
3	P 214.914†	617.8	310.5	[500]	µg/L	03:21:43
3	Pb 220.353†	464.5	408.2	[100]	µg/L	03:21:43
3	S 181.975 Axial†	87.9	64.4	[200]	µg/L	03:21:43
3	Sb 206.836†	148.2	120.6	[100]	µg/L	03:21:43
3	Se 196.026†	128.5	107.9	[100]	µg/L	03:21:43
3	SiO2†	8239.8	5901.6	[1069.5]	µg/L	03:21:23
3	Si 251.611†	7844.8	7444.9	[500]	µg/L	03:21:23
3	Sn 189.927†	272.7	270.7	[100]	µg/L	03:21:43
3	Ti 334.940†	42057.0	42728.1	[100]	µg/L	03:21:23
3	Tl 190.801†	67.0	103.0	[100]	µg/L	03:21:43
3	U 409.014†	1136.0	1165.9	[100]	µg/L	03:21:23
3	V 292.402†	8707.7	8608.4	[100]	µg/L	03:21:23
3	Zn 213.857†	5126.3	4534.3	[100]	µg/L	03:21:43

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1916979.3	8152.51	0.43%	99.759	%
Sc RADIAL	100947.9	247.06	0.24%	101	%
Y 371.029	1334048.1	5760.43	0.43%	99.703	%
Ag 328.068†	12728.3	53.20	0.42%	[100]	µg/L
As 188.979†	70.9	0.29	0.41%	[100]	µg/L
B 249.677†	2159.6	26.76	1.24%	[100]	µg/L
Ba 233.527†	4640.8	14.53	0.31%	[100]	µg/L
Be 313.107†	171923.6	548.42	0.32%	[100]	µg/L
Cd 226.502†	4331.3	2.25	0.05%	[100]	µg/L
Co 228.616†	2403.1	3.95	0.16%	[100]	µg/L
Cr 267.716†	4791.1	45.09	0.94%	[100]	µg/L
Cu 324.752†	15646.5	60.73	0.39%	[100]	µg/L
K 766.490 Radial†	2080.4	37.03	1.78%	[1000]	µg/L
Mn 257.610†	33399.6	169.75	0.51%	[100]	µg/L
Mo 202.031†	1099.3	5.56	0.51%	[100]	µg/L
Ni 231.604†	1867.1	6.87	0.37%	[100]	µg/L
P 214.914†	318.6	9.94	3.12%	[500]	µg/L
Pb 220.353†	408.4	1.45	0.36%	[100]	µg/L
S 181.975 Axial†	62.6	1.64	2.62%	[200]	µg/L
Sb 206.836†	118.6	3.46	2.92%	[100]	µg/L
Se 196.026†	107.3	5.69	5.30%	[100]	µg/L
SiO2†	5909.9	12.48	0.21%	[1069.5]	µg/L
Si 251.611†	7403.8	49.34	0.67%	[500]	µg/L
Sn 189.927†	271.9	1.08	0.40%	[100]	µg/L
Sr 421.552†	18779.2	13.93	0.07%	[100]	µg/L
Ti 334.940†	42881.7	153.25	0.36%	[100]	µg/L
Tl 190.801†	103.0	1.28	1.24%	[100]	µg/L
U 409.014†	1165.0	13.20	1.13%	[100]	µg/L
V 292.402†	8646.7	37.97	0.44%	[100]	µg/L
Zn 213.857†	4549.9	16.20	0.36%	[100]	µg/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/5/2010 03:21:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	102101.0	102101.0	102	%	03:22:26
1	Al 396.153Radial†	10508.7	10728.5	[5000]	µg/L	03:22:26
1	Ca 317.933Radial†	16592.5	15919.8	[5000]	µg/L	03:22:26
1	K 766.490 Radial†	10678.5	10171.0	[5000]	µg/L	03:22:26
1	Mg 279.077 IEC†	484.5	466.8	[5000]	µg/L	03:22:46
1	Sr 421.552†	94742.1	92965.1	[500]	µg/L	03:22:26
1	Sc 361.383	1923019.8	1923019.8	100.07	%	03:23:50
1	Y 371.029	1336361.5	1336361.5	99.876	%	03:23:50
1	Ag 328.068†	61460.6	61983.6	[500]	µg/L	03:23:55
1	As 188.979†	344.6	347.5	[500]	µg/L	03:24:16
1	B 249.677†	11094.0	10729.3	[500]	µg/L	03:23:55
1	Ba 233.527†	22947.4	22961.7	[500]	µg/L	03:23:55
1	Be 313.107†	840878.3	841791.3	[500]	µg/L	03:23:50
1	Cd 226.502†	21256.9	21421.1	[500]	µg/L	03:23:55
1	Co 228.616†	11866.7	11838.9	[500]	µg/L	03:23:55
1	Cr 267.716†	23499.9	23408.1	[500]	µg/L	03:23:55
1	Cu 324.752†	80104.7	76457.0	[500]	µg/L	03:23:55
1	Mn 257.610†	161331.0	161996.0	[500]	µg/L	03:23:50
1	Mo 202.031†	5352.8	5340.9	[500]	µg/L	03:24:16
1	Ni 231.604†	9609.4	9235.5	[500]	µg/L	03:23:55
1	P 214.914†	1836.6	1528.3	[2500]	µg/L	03:24:16
1	Pb 220.353†	2032.5	1974.9	[500]	µg/L	03:24:16
1	S 181.975 Axial†	353.9	330.1	[1000]	µg/L	03:24:16
1	Sb 206.836†	601.5	573.5	[500]	µg/L	03:24:16
1	Se 196.026†	549.1	528.2	[500]	µg/L	03:24:16
1	SiO2†	31369.1	29010.3	[5347.5]	µg/L	03:23:55
1	Si 251.611†	36598.8	36174.3	[2500]	µg/L	03:23:55
1	Sn 189.927†	1346.6	1343.7	[500]	µg/L	03:24:16
1	Ti 334.940†	210461.0	210989.8	[500]	µg/L	03:23:50
1	Tl 190.801†	469.7	505.5	[500]	µg/L	03:24:16
1	U 409.014†	5785.9	5811.8	[500]	µg/L	03:23:55
1	V 292.402†	42678.4	42550.3	[500]	µg/L	03:23:55
1	Zn 213.857†	23217.4	22609.8	[500]	µg/L	03:23:55
2	Sc RADIAL	101816.6	101816.6	101	%	03:22:52
2	Al 396.153Radial†	10574.1	10821.8	[5000]	µg/L	03:22:52
2	Ca 317.933Radial†	16555.3	15928.7	[5000]	µg/L	03:22:52
2	K 766.490 Radial†	10690.3	10212.0	[5000]	µg/L	03:22:52
2	Mg 279.077 IEC†	483.2	466.8	[5000]	µg/L	03:23:12
2	Sr 421.552†	94815.1	93297.3	[500]	µg/L	03:22:52
2	Sc 361.383	1917786.4	1917786.4	99.801	%	03:24:23
2	Y 371.029	1331944.2	1331944.2	99.545	%	03:24:23
2	Ag 328.068†	61340.7	62031.0	[500]	µg/L	03:24:28
2	As 188.979†	347.1	351.0	[500]	µg/L	03:24:49
2	B 249.677†	11095.3	10760.9	[500]	µg/L	03:24:28
2	Ba 233.527†	22922.2	22999.0	[500]	µg/L	03:24:28
2	Be 313.107†	841079.6	844285.8	[500]	µg/L	03:24:23
2	Cd 226.502†	21174.6	21396.6	[500]	µg/L	03:24:28
2	Co 228.616†	11875.6	11880.2	[500]	µg/L	03:24:28
2	Cr 267.716†	23366.7	23338.8	[500]	µg/L	03:24:28
2	Cu 324.752†	79763.2	76333.2	[500]	µg/L	03:24:28
2	Mn 257.610†	160997.8	162102.0	[500]	µg/L	03:24:23
2	Mo 202.031†	5345.5	5348.2	[500]	µg/L	03:24:49
2	Ni 231.604†	9543.8	9195.9	[500]	µg/L	03:24:28
2	P 214.914†	1847.6	1544.3	[2500]	µg/L	03:24:49
2	Pb 220.353†	2030.0	1977.9	[500]	µg/L	03:24:49
2	S 181.975 Axial†	348.1	325.3	[1000]	µg/L	03:24:49
2	Sb 206.836†	599.4	573.0	[500]	µg/L	03:24:49
2	Se 196.026†	566.5	547.1	[500]	µg/L	03:24:49
2	SiO2†	31275.1	29001.6	[5347.5]	µg/L	03:24:28

2	Si 251.611†	36561.4	36236.6	[2500] µg/L	03:24:28
2	Sn 189.927†	1341.5	1342.3	[500] µg/L	03:24:49
2	Ti 334.940†	210359.1	211461.6	[500] µg/L	03:24:23
2	Tl 190.801†	475.2	512.2	[500] µg/L	03:24:49
2	U 409.014†	5704.7	5746.2	[500] µg/L	03:24:28
2	V 292.402†	42563.5	42551.5	[500] µg/L	03:24:28
2	Zn 213.857†	23116.7	22572.2	[500] µg/L	03:24:28
3	Sc RADIAL	102225.4	102225.4	102 %	03:23:18
3	Al 396.153Radial†	10548.6	10755.1	[5000] µg/L	03:23:18
3	Ca 317.933Radial†	16615.6	15922.7	[5000] µg/L	03:23:18
3	K 766.490 Radial†	10735.6	10214.3	[5000] µg/L	03:23:18
3	Mg 279.077 IEC†	475.1	457.0	[5000] µg/L	03:23:38
3	Sr 421.552†	94861.5	92969.1	[500] µg/L	03:23:18
3	Sc 361.383	1923697.7	1923697.7	100.11 %	03:24:56
3	Y 371.029	1335144.3	1335144.3	99.785 %	03:24:56
3	Ag 328.068†	58396.8	58901.4	[500] µg/L	03:25:02
3	As 188.979†	302.8	305.7	[500] µg/L	03:25:22
3	B 249.677†	10506.5	10138.6	[500] µg/L	03:25:02
3	Ba 233.527†	21391.4	21399.3	[500] µg/L	03:25:02
3	Be 313.107†	803418.1	804075.4	[500] µg/L	03:24:56
3	Cd 226.502†	19623.4	19781.8	[500] µg/L	03:25:02
3	Co 228.616†	10942.9	10912.0	[500] µg/L	03:25:02
3	Cr 267.716†	21191.2	21093.7	[500] µg/L	03:25:02
3	Cu 324.752†	73849.6	70180.5	[500] µg/L	03:25:02
3	Mn 257.610†	154576.7	155192.1	[500] µg/L	03:24:56
3	Mo 202.031†	4523.2	4510.3	[500] µg/L	03:25:22
3	Ni 231.604†	8827.4	8450.9	[500] µg/L	03:25:02
3	P 214.914†	1630.0	1321.2	[2500] µg/L	03:25:22
3	Pb 220.353†	1786.5	1728.4	[500] µg/L	03:25:22
3	S 181.975 Axial†	313.8	289.9	[1000] µg/L	03:25:22
3	Sb 206.836†	530.0	501.9	[500] µg/L	03:25:22
3	Se 196.026†	487.9	466.8	[500] µg/L	03:25:22
3	SiO2†	29569.3	27201.4	[5347.5] µg/L	03:25:02
3	Si 251.611†	34402.8	33967.8	[2500] µg/L	03:25:02
3	Sn 189.927†	1116.3	1113.2	[500] µg/L	03:25:22
3	Ti 334.940†	200275.7	200741.5	[500] µg/L	03:24:56
3	Tl 190.801†	427.7	463.3	[500] µg/L	03:25:22
3	U 409.014†	5265.9	5290.3	[500] µg/L	03:25:02
3	V 292.402†	39019.2	38880.1	[500] µg/L	03:25:02
3	Zn 213.857†	21415.0	20801.2	[500] µg/L	03:25:02

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1921501.3	3234.98	0.17%	99.994 %
Sc RADIAL	102047.7	209.59	0.21%	102 %
Y 371.029	1334483.4	2281.60	0.17%	99.735 %
Ag 328.068†	60972.0	1793.37	2.94%	[500] µg/L
Al 396.153Radial†	10768.5	48.05	0.45%	[5000] µg/L
As 188.979†	334.7	25.22	7.53%	[500] µg/L
B 249.677†	10542.9	350.51	3.32%	[500] µg/L
Ba 233.527†	22453.3	913.02	4.07%	[500] µg/L
Be 313.107†	830050.9	22529.91	2.71%	[500] µg/L
Ca 317.933Radial†	15923.7	4.51	0.03%	[5000] µg/L
Cd 226.502†	20866.5	939.43	4.50%	[500] µg/L
Co 228.616†	11543.7	547.48	4.74%	[500] µg/L
Cr 267.716†	22613.5	1316.69	5.82%	[500] µg/L
Cu 324.752†	74323.5	3588.56	4.83%	[500] µg/L
K 766.490 Radial†	10199.1	24.34	0.24%	[5000] µg/L
Mg 279.077 IEC†	463.6	5.67	1.22%	[5000] µg/L
Mn 257.610†	159763.4	3959.16	2.48%	[500] µg/L
Mo 202.031†	5066.5	481.63	9.51%	[500] µg/L
Ni 231.604†	8960.8	441.97	4.93%	[500] µg/L
P 214.914†	1464.6	124.45	8.50%	[2500] µg/L
Pb 220.353†	1893.7	143.19	7.56%	[500] µg/L
S 181.975 Axial†	315.1	21.94	6.96%	[1000] µg/L
Sb 206.836†	549.5	41.21	7.50%	[500] µg/L
Se 196.026†	514.0	41.98	8.17%	[500] µg/L
SiO2†	28404.4	1041.87	3.67%	[5347.5] µg/L
Si 251.611†	35459.5	1292.29	3.64%	[2500] µg/L

Sn 189.927†	1266.4	132.69	10.48%	[500]	µg/L
Sr 421.552†	93077.2	190.65	0.20%	[500]	µg/L
Ti 334.940†	207731.0	6057.68	2.92%	[500]	µg/L
Tl 190.801†	493.7	26.53	5.37%	[500]	µg/L
U 409.014†	5616.1	284.06	5.06%	[500]	µg/L
V 292.402†	41327.3	2119.36	5.13%	[500]	µg/L
Zn 213.857†	21994.4	1033.52	4.70%	[500]	µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/5/2010 03:25:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	102058.3	102058.3	102	%	03:26:05
1	Al 396.153Radial†	21502.6	21542.4	[10000]	µg/L	03:26:05
1	Ca 317.933Radial†	32750.0	31813.2	[10000]	µg/L	03:26:05
1	Fe 238.204 Radial†	1059.3	1027.8	[10000]	µg/L	03:26:25
1	K 766.490 Radial†	21028.2	20351.5	[10000]	µg/L	03:26:05
1	Mg 279.077 IEC†	952.5	927.2	[10000]	µg/L	03:26:25
1	Na 589.592 Radial†	23244.1	22642.7	[10000]	µg/L	03:26:05
1	Sr 421.552†	188116.2	184812.3	[1000]	µg/L	03:26:05
1	Sc 361.383	1915874.8	1915874.8	99.701	%	03:27:29
1	Y 371.029	1330195.0	1330195.0	99.415	%	03:27:29
1	Ag 328.068†	123539.3	124477.2	[1000]	µg/L	03:27:35
1	As 188.979†	705.4	710.7	[1000]	µg/L	03:27:56
1	B 249.677†	21746.6	21455.1	[1000]	µg/L	03:27:35
1	Ba 233.527†	45432.2	45599.4	[1000]	µg/L	03:27:35
1	Be 313.107†	1679421.3	1685979.6	[1000]	µg/L	03:27:29
1	Cd 226.502†	41984.4	42289.8	[1000]	µg/L	03:27:35
1	Co 228.616†	23375.6	23426.5	[1000]	µg/L	03:27:35
1	Cr 267.716†	46536.3	46601.1	[1000]	µg/L	03:27:35
1	Cu 324.752†	155350.2	152226.3	[1000]	µg/L	03:27:35
1	Mn 257.610†	318717.8	320455.5	[1000]	µg/L	03:27:35
1	Mo 202.031†	10804.2	10828.6	[1000]	µg/L	03:27:56
1	Ni 231.604†	18384.4	18072.6	[1000]	µg/L	03:27:35
1	P 214.914†	3408.5	3111.6	[5000]	µg/L	03:27:56
1	Pb 220.353†	4058.5	4014.5	[1000]	µg/L	03:27:56
1	S 181.975 Axial†	683.1	661.6	[2000]	µg/L	03:27:56
1	Sb 206.836†	1197.0	1173.0	[1000]	µg/L	03:27:56
1	Se 196.026†	1087.2	1069.9	[1000]	µg/L	03:27:56
1	SiO2†	60129.8	57974.0	[10695]	µg/L	03:27:35
1	Si 251.611†	72431.7	72250.9	[5000]	µg/L	03:27:35
1	Sn 189.927†	2736.4	2742.6	[1000]	µg/L	03:27:56
1	Ti 334.940†	424352.2	426306.0	[1000]	µg/L	03:27:29
1	Tl 190.801†	989.0	1028.0	[1000]	µg/L	03:27:56
1	U 409.014†	11504.7	11569.3	[1000]	µg/L	03:27:35
1	V 292.402†	84828.5	84985.7	[1000]	µg/L	03:27:35
1	Zn 213.857†	44850.7	44394.4	[1000]	µg/L	03:27:35
2	Sc RADIAL	101817.2	101817.2	101	%	03:26:31
2	Al 396.153Radial†	21498.9	21588.8	[10000]	µg/L	03:26:31
2	Ca 317.933Radial†	32611.1	31752.5	[10000]	µg/L	03:26:31
2	Fe 238.204 Radial†	1066.5	1037.3	[10000]	µg/L	03:26:51
2	K 766.490 Radial†	20831.1	20206.3	[10000]	µg/L	03:26:31
2	Mg 279.077 IEC†	964.2	940.9	[10000]	µg/L	03:26:51
2	Na 589.592 Radial†	23286.7	22738.7	[10000]	µg/L	03:26:31
2	Sr 421.552†	187854.1	184991.9	[1000]	µg/L	03:26:31
2	Sc 361.383	1931814.2	1931814.2	100.53	%	03:28:02
2	Y 371.029	1340219.6	1340219.6	100.16	%	03:28:02
2	Ag 328.068†	124600.3	124510.2	[1000]	µg/L	03:28:08
2	As 188.979†	689.5	689.1	[1000]	µg/L	03:28:29
2	B 249.677†	21959.8	21487.3	[1000]	µg/L	03:28:08
2	Ba 233.527†	45978.6	45766.9	[1000]	µg/L	03:28:08
2	Be 313.107†	1686950.7	1679570.9	[1000]	µg/L	03:28:02
2	Cd 226.502†	42406.0	42361.7	[1000]	µg/L	03:28:08
2	Co 228.616†	23645.4	23501.4	[1000]	µg/L	03:28:08
2	Cr 267.716†	46956.5	46633.9	[1000]	µg/L	03:28:08
2	Cu 324.752†	156715.4	152298.7	[1000]	µg/L	03:28:08
2	Mn 257.610†	321911.9	320995.1	[1000]	µg/L	03:28:08
2	Mo 202.031†	10654.4	10590.2	[1000]	µg/L	03:28:29
2	Ni 231.604†	18646.3	18180.9	[1000]	µg/L	03:28:08
2	P 214.914†	3365.0	3040.2	[5000]	µg/L	03:28:29
2	Pb 220.353†	4004.1	3926.8	[1000]	µg/L	03:28:29



2	S 181.975 Axial†	678.1	651.0	[2000]	µg/L	03:28:29
2	Sb 206.836†	1184.7	1150.9	[1000]	µg/L	03:28:29
2	Se 196.026†	1077.6	1051.3	[1000]	µg/L	03:28:29
2	SiO2†	60779.5	58122.6	[10695]	µg/L	03:28:08
2	Si 251.611†	73357.1	72572.0	[5000]	µg/L	03:28:08
2	Sn 189.927†	2691.5	2675.4	[1000]	µg/L	03:28:29
2	Ti 334.940†	425994.9	424428.3	[1000]	µg/L	03:28:02
2	Tl 190.801†	981.1	1012.0	[1000]	µg/L	03:28:29
2	U 409.014†	11641.5	11610.2	[1000]	µg/L	03:28:08
2	V 292.402†	85556.3	85007.6	[1000]	µg/L	03:28:08
2	Zn 213.857†	45271.3	44441.7	[1000]	µg/L	03:28:08
3	Sc RADIAL	102183.7	102183.7	102	%	03:26:57
3	Al 396.153Radial†	21488.6	21502.6	[10000]	µg/L	03:26:57
3	Ca 317.933Radial†	32636.8	31662.5	[10000]	µg/L	03:26:57
3	Fe 238.204 Radial†	1061.0	1028.2	[10000]	µg/L	03:27:17
3	K 766.490 Radial†	20980.6	20279.5	[10000]	µg/L	03:26:57
3	Mg 279.077 IEC†	951.6	925.1	[10000]	µg/L	03:27:17
3	Na 589.592 Radial†	23238.7	22609.3	[10000]	µg/L	03:26:57
3	Sr 421.552†	188050.0	184520.2	[1000]	µg/L	03:26:57
3	Sc 361.383	1929559.0	1929559.0	100.41	%	03:28:35
3	Y 371.029	1336325.5	1336325.5	99.873	%	03:28:35
3	Ag 328.068†	115894.8	115985.5	[1000]	µg/L	03:28:41
3	As 188.979†	596.8	597.5	[1000]	µg/L	03:29:02
3	B 249.677†	20305.1	19864.9	[1000]	µg/L	03:28:41
3	Ba 233.527†	41713.1	41572.4	[1000]	µg/L	03:28:41
3	Be 313.107†	1564447.3	1559533.2	[1000]	µg/L	03:28:35
3	Cd 226.502†	38137.2	38159.8	[1000]	µg/L	03:28:41
3	Co 228.616†	21156.7	21050.5	[1000]	µg/L	03:28:41
3	Cr 267.716†	40726.9	40484.6	[1000]	µg/L	03:28:41
3	Cu 324.752†	141147.5	136977.1	[1000]	µg/L	03:28:41
3	Mn 257.610†	287975.4	287572.6	[1000]	µg/L	03:28:41
3	Mo 202.031†	8941.9	8897.1	[1000]	µg/L	03:29:02
3	Ni 231.604†	16708.9	16273.2	[1000]	µg/L	03:28:41
3	P 214.914†	2947.5	2628.3	[5000]	µg/L	03:29:02
3	Pb 220.353†	3477.1	3406.7	[1000]	µg/L	03:29:02
3	S 181.975 Axial†	599.3	573.3	[2000]	µg/L	03:29:02
3	Sb 206.836†	1030.0	998.2	[1000]	µg/L	03:29:02
3	Se 196.026†	945.2	920.8	[1000]	µg/L	03:29:02
3	SiO2†	56021.4	53454.7	[10695]	µg/L	03:28:41
3	Si 251.611†	67395.7	66720.4	[5000]	µg/L	03:28:41
3	Sn 189.927†	2226.7	2215.6	[1000]	µg/L	03:29:02
3	Ti 334.940†	392975.4	392040.0	[1000]	µg/L	03:28:35
3	Tl 190.801†	893.2	925.6	[1000]	µg/L	03:29:02
3	U 409.014†	10198.5	10186.7	[1000]	µg/L	03:28:41
3	V 292.402†	75704.6	75296.0	[1000]	µg/L	03:28:41
3	Zn 213.857†	40721.9	39963.6	[1000]	µg/L	03:28:41

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1925749.3	8625.57	0.45%	100.22 %
Sc RADIAL	102019.8	186.26	0.18%	102 %
Y 371.029	1335580.1	5053.70	0.38%	99.817 %
Ag 328.068†	121657.6	4912.25	4.04%	[1000] µg/L
Al 396.153Radial†	21544.6	43.14	0.20%	[10000] µg/L
As 188.979†	665.8	60.10	9.03%	[1000] µg/L
B 249.677†	20935.7	927.54	4.43%	[1000] µg/L
Ba 233.527†	44312.9	2374.79	5.36%	[1000] µg/L
Be 313.107†	1641694.6	71225.97	4.34%	[1000] µg/L
Ca 317.933Radial†	31742.7	75.83	0.24%	[10000] µg/L
Cd 226.502†	40937.1	2405.47	5.88%	[1000] µg/L
Co 228.616†	22659.5	1393.91	6.15%	[1000] µg/L
Cr 267.716†	44573.2	3540.87	7.94%	[1000] µg/L
Cu 324.752†	147167.4	8825.12	6.00%	[1000] µg/L
Fe 238.204 Radial†	1031.1	5.40	0.52%	[10000] µg/L
K 766.490 Radial†	20279.1	72.61	0.36%	[10000] µg/L
Mg 279.077 IEC†	931.1	8.58	0.92%	[10000] µg/L
Mn 257.610†	309674.4	19142.62	6.18%	[1000] µg/L
Mo 202.031†	10105.3	1053.07	10.42%	[1000] µg/L
Na 589.592 Radial†	22663.6	67.19	0.30%	[10000] µg/L

Ni 231.604†	17508.9	1071.50	6.12%	[1000] µg/L
P 214.914†	2926.7	260.87	8.91%	[5000] µg/L
Pb 220.353†	3782.7	328.56	8.69%	[1000] µg/L
S 181.975 Axial†	628.6	48.22	7.67%	[2000] µg/L
Sb 206.836†	1107.4	95.17	8.59%	[1000] µg/L
Se 196.026†	1014.0	81.26	8.01%	[1000] µg/L
SiO2†	56517.1	2653.13	4.69%	[10695] µg/L
Si 251.611†	70514.4	3289.64	4.67%	[5000] µg/L
Sn 189.927†	2544.5	286.87	11.27%	[1000] µg/L
Sr 421.552†	184774.8	238.06	0.13%	[1000] µg/L
Ti 334.940†	414258.1	19264.32	4.65%	[1000] µg/L
Tl 190.801†	988.5	55.11	5.57%	[1000] µg/L
U 409.014†	11122.0	810.31	7.29%	[1000] µg/L
V 292.402†	81763.1	5600.69	6.85%	[1000] µg/L
Zn 213.857†	42933.2	2571.88	5.99%	[1000] µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/5/2010 03:29:12

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	101652.7	101652.7	101 %	03:29:44
1	Al 396.153Radial†	106739.8	105768.9	[50000] µg/L	03:29:44
1	Ca 317.933Radial†	157196.1	154789.0	[50000] µg/L	03:29:44
1	Fe 238.204 Radial†	2071.9	2031.6	[20000] µg/L	03:30:05
1	Mg 279.077 IEC†	4640.5	4571.5	[50000] µg/L	03:30:05
1	Na 589.592 Radial†	46350.1	45543.0	[20000] µg/L	03:29:44
1	Sc 361.383	1928413.3	1928413.3	100.35 %	03:31:08
1	Y 371.029	1332302.1	1332302.1	99.572 %	03:31:08
2	Sc RADIAL	101877.4	101877.4	102 %	03:30:10
2	Al 396.153Radial†	107219.9	106009.4	[50000] µg/L	03:30:10
2	Ca 317.933Radial†	157869.3	155109.8	[50000] µg/L	03:30:10
2	Fe 238.204 Radial†	2087.1	2042.0	[20000] µg/L	03:30:31
2	Mg 279.077 IEC†	4649.8	4570.5	[50000] µg/L	03:30:31
2	Na 589.592 Radial†	46646.5	45734.0	[20000] µg/L	03:30:10
2	Sc 361.383	1924461.7	1924461.7	100.15 %	03:31:16
2	Y 371.029	1327610.8	1327610.8	99.222 %	03:31:16
3	Sc RADIAL	102082.5	102082.5	102 %	03:30:36
3	Al 396.153Radial†	106947.6	105529.5	[50000] µg/L	03:30:36
3	Ca 317.933Radial†	157663.5	154595.0	[50000] µg/L	03:30:36
3	Fe 238.204 Radial†	2077.9	2028.9	[20000] µg/L	03:30:57
3	Mg 279.077 IEC†	4630.6	4542.5	[50000] µg/L	03:30:57
3	Na 589.592 Radial†	46705.4	45699.6	[20000] µg/L	03:30:36
3	Sc 361.383	1925476.3	1925476.3	100.20 %	03:31:24
3	Y 371.029	1327584.2	1327584.2	99.220 %	03:31:24

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1926117.1	2052.28	0.11%	100.23 %
Sc RADIAL	101870.9	215.00	0.21%	102 %
Y 371.029	1329165.7	2716.23	0.20%	99.338 %
Al 396.153Radial†	105769.3	239.91	0.23%	[50000] µg/L
Ca 317.933Radial†	154831.3	259.96	0.17%	[50000] µg/L
Fe 238.204 Radial†	2034.2	6.96	0.34%	[20000] µg/L
Mg 279.077 IEC†	4561.5	16.48	0.36%	[50000] µg/L
Na 589.592 Radial†	45658.9	101.81	0.22%	[20000] µg/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	121.8	0.00000	0.999991	
Al 396.153Radial	3	Lin Thru 0	0.0	2.117	0.00000	0.999992	
As 188.979	3	Lin Thru 0	0.0	0.6668	0.00000	0.999981	
B 249.677	3	Lin Thru 0	0.0	20.97	0.00000	0.999992	
Ba 233.527	3	Lin Thru 0	0.0	44.45	0.00000	0.999978	
Be 313.107	3	Lin Thru 0	0.0	1646	0.00000	0.999982	
Ca 317.933Radial	3	Lin Thru 0	0.0	3.100	0.00000	0.999985	
Cd 226.502	3	Lin Thru 0	0.0	41.11	0.00000	0.999959	
Co 228.616	3	Lin Thru 0	0.0	22.76	0.00000	0.999959	
Cr 267.716	3	Lin Thru 0	0.0	44.73	0.00000	0.999963	
Cu 324.752	3	Lin Thru 0	0.0	147.5	0.00000	0.999977	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1020	0.00000	0.999985	
K 766.490 Radial	3	Lin Thru 0	0.0	2.031	0.00000	0.999995	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0913	0.00000	0.999991	
Mn 257.610	3	Lin Thru 0	0.0	311.8	0.00000	0.999901	
Mo 202.031	3	Lin Thru 0	0.0	10.12	0.00000	0.999969	
Na 589.592 Radia	2	Lin Thru 0	0.0	2.280	0.00000	0.999996	

Ni 231.604	3	Lin Thru 0	0.0	17.60	0.00000	0.999942
P 214.914	3	Lin Thru 0	0.0	0.5858	0.00000	0.999969
Pb 220.353	3	Lin Thru 0	0.0	3.786	0.00000	0.999975
S 181.975 Axial	3	Lin Thru 0	0.0	0.3145	0.00000	0.999999
Sb 206.836	3	Lin Thru 0	0.0	1.106	0.00000	0.999975
Se 196.026	3	Lin Thru 0	0.0	1.017	0.00000	0.999973
SiO2	3	Lin Thru 0	0.0	5.292	0.00000	0.999990
Si 251.611	3	Lin Thru 0	0.0	14.12	0.00000	0.999988
Sn 189.927	3	Lin Thru 0	0.0	2.544	0.00000	0.999979
Sr 421.552	3	Lin Thru 0	0.0	185.1	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	414.6	0.00000	0.999995
Tl 190.801	3	Lin Thru 0	0.0	0.9886	0.00000	0.999993
U 409.014	3	Lin Thru 0	0.0	11.15	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	81.98	0.00000	0.999979
Zn 213.857	3	Lin Thru 0	0.0	43.16	0.00000	0.999941

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/5/2010 03:31:34

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	101407.3	101407.3	101 %		03:32:07
1	Al 396.153Radial†	10519.4	10809.8	5094.5 µg/L	5094.5 ppb	03:32:07
1	Ca 317.933Radial†	16222.7	15665.5	5052.7 µg/L	5052.7 ppb	03:32:07
1	Fe 238.204 Radial†	529.6	510.3	5015.1 µg/L	5015.1 ppb	03:32:28
1	K 766.490 Radial†	5338.0	4958.2	2441.6 µg/L	2441.6 ppb	03:32:07
1	Mg 279.077 IEC†	466.8	452.5	4959.5 µg/L	4959.5 ppb	03:32:28
1	Na 589.592 Radial†	5642.3	5371.7	2356.4 µg/L	2356.4 ppb	03:32:07
1	Sr 421.552†	97009.9	95846.3	517.89 µg/L	517.89 ppb	03:32:07
1	Sc 361.383	1932093.4	1932093.4	100.55 %		03:33:31
1	Y 371.029	1343128.4	1343128.4	100.38 %		03:33:31
1	Ag 328.068†	29851.9	30257.8	252.23 µg/L	252.23 ppb	03:33:37
1	As 188.979†	332.6	334.0	498.62 µg/L	498.62 ppb	03:33:57
1	B 249.677†	11453.8	11035.0	524.41 µg/L	524.41 ppb	03:33:37
1	Ba 233.527†	23205.9	23111.1	520.88 µg/L	520.88 ppb	03:33:37
1	Be 313.107†	423859.7	423088.4	256.86 µg/L	256.86 ppb	03:33:31
1	Cd 226.502†	21063.8	21129.2	513.85 µg/L	513.85 ppb	03:33:37
1	Co 228.616†	12011.4	11927.2	523.63 µg/L	523.63 ppb	03:33:37
1	Cr 267.716†	22900.8	22702.0	507.86 µg/L	507.86 ppb	03:33:37
1	Cu 324.752†	80256.9	76232.4	517.65 µg/L	517.65 ppb	03:33:37
1	Mn 257.610†	158278.7	158203.1	507.31 µg/L	507.31 ppb	03:33:31
1	Mo 202.031†	5519.1	5481.1	541.92 µg/L	541.92 ppb	03:33:57
1	Ni 231.604†	9250.6	8833.6	501.35 µg/L	501.35 ppb	03:33:37
1	P 214.914†	1849.1	1532.0	2566.0 µg/L	2566.0 ppb	03:33:57
1	Pb 220.353†	2022.9	1955.8	517.24 µg/L	517.24 ppb	03:33:57
1	S 181.975 Axial†	805.4	777.5	2472.7 µg/L	2472.7 ppb	03:33:57
1	Sb 206.836†	586.8	556.0	505.60 µg/L	505.60 ppb	03:33:57
1	Se 196.026†	2653.4	2618.4	2585.8 µg/L	2585.8 ppb	03:33:57
1	SiO2†	58684.9	56030.7	10588 µg/L	10588 ppb	03:33:37
1	Si 251.611†	70572.4	69791.8	4941.2 µg/L	4941.2 ppb	03:33:37
1	Sn 189.927†	1393.6	1384.1	538.36 µg/L	538.36 ppb	03:33:57
1	Ti 334.940†	200600.4	200195.0	482.54 µg/L	482.54 ppb	03:33:31
1	Tl 190.801†	476.7	510.2	520.92 µg/L	520.92 ppb	03:33:57
1	U 409.014†	5353.2	5354.3	479.28 µg/L	479.28 ppb	03:33:37
1	V 292.402†	41847.5	41523.6	511.36 µg/L	511.36 ppb	03:33:37
1	Zn 213.857†	22514.4	21801.7	501.53 µg/L	501.53 ppb	03:33:37
2	Sc RADIAL	101211.9	101211.9	101 %		03:32:33
2	Al 396.153Radial†	10521.2	10831.6	5104.9 µg/L	5104.9 ppb	03:32:33
2	Ca 317.933Radial†	16217.3	15691.1	5061.0 µg/L	5061.0 ppb	03:32:33
2	Fe 238.204 Radial†	531.8	513.5	5045.6 µg/L	5045.6 ppb	03:32:54
2	K 766.490 Radial†	5321.5	4952.1	2438.6 µg/L	2438.6 ppb	03:32:33
2	Mg 279.077 IEC†	471.7	458.3	5022.4 µg/L	5022.4 ppb	03:32:54
2	Na 589.592 Radial†	5712.0	5451.5	2391.4 µg/L	2391.4 ppb	03:32:33
2	Sr 421.552†	97082.4	96103.5	519.27 µg/L	519.27 ppb	03:32:33
2	Sc 361.383	1932306.6	1932306.6	100.56 %		03:34:04
2	Y 371.029	1341730.8	1341730.8	100.28 %		03:34:04
2	Ag 328.068†	29836.9	30239.6	252.09 µg/L	252.09 ppb	03:34:10
2	As 188.979†	327.2	328.6	490.44 µg/L	490.44 ppb	03:34:31
2	B 249.677†	11468.7	11048.6	525.04 µg/L	525.04 ppb	03:34:10
2	Ba 233.527†	23233.1	23135.6	521.43 µg/L	521.43 ppb	03:34:10
2	Be 313.107†	424509.2	423687.9	257.23 µg/L	257.23 ppb	03:34:04
2	Cd 226.502†	21070.1	21133.1	513.95 µg/L	513.95 ppb	03:34:10
2	Co 228.616†	11971.7	11886.3	521.83 µg/L	521.83 ppb	03:34:10
2	Cr 267.716†	22951.0	22749.4	508.92 µg/L	508.92 ppb	03:34:10
2	Cu 324.752†	80119.6	76087.1	516.67 µg/L	516.67 ppb	03:34:10
2	Mn 257.610†	159095.8	158998.4	509.86 µg/L	509.86 ppb	03:34:04
2	Mo 202.031†	5459.8	5421.6	536.04 µg/L	536.04 ppb	03:34:31
2	Ni 231.604†	9271.8	8853.6	502.49 µg/L	502.49 ppb	03:34:10
2	P 214.914†	1840.3	1523.1	2550.8 µg/L	2550.8 ppb	03:34:31
2	Pb 220.353†	2006.9	1939.7	512.96 µg/L	512.96 ppb	03:34:31

2	S 181.975 Axial†	799.2	771.3	2452.7 µg/L	2452.7 ppb	03:34:31
2	Sb 206.836†	575.3	544.5	495.14 µg/L	495.14 ppb	03:34:31
2	Se 196.026†	2647.1	2611.9	2579.4 µg/L	2579.4 ppb	03:34:31
2	SiO2†	58792.4	56131.2	10607 µg/L	10607 ppb	03:34:10
2	Si 251.611†	70598.6	69810.1	4942.5 µg/L	4942.5 ppb	03:34:10
2	Sn 189.927†	1379.4	1369.9	532.72 µg/L	532.72 ppb	03:34:31
2	Ti 334.940†	200743.7	200315.6	482.82 µg/L	482.82 ppb	03:34:04
2	Tl 190.801†	477.8	511.2	521.92 µg/L	521.92 ppb	03:34:31
2	U 409.014†	5420.8	5420.9	485.26 µg/L	485.26 ppb	03:34:10
2	V 292.402†	41864.7	41536.1	511.47 µg/L	511.47 ppb	03:34:10
2	Zn 213.857†	22505.5	21790.3	501.26 µg/L	501.26 ppb	03:34:10
3	Sc RADIAL	100873.4	100873.4	101 %		03:32:59
3	Al 396.153Radial†	10426.5	10772.4	5078.8 µg/L	5078.8 ppb	03:32:59
3	Ca 317.933Radial†	16122.8	15651.0	5048.0 µg/L	5048.0 ppb	03:32:59
3	Fe 238.204 Radial†	532.1	515.5	5064.8 µg/L	5064.8 ppb	03:33:19
3	K 766.490 Radial†	5332.8	4981.0	2452.9 µg/L	2452.9 ppb	03:32:59
3	Mg 279.077 IEC†	468.5	456.7	5003.0 µg/L	5003.0 ppb	03:33:19
3	Na 589.592 Radial†	5650.7	5409.6	2373.0 µg/L	2373.0 ppb	03:32:59
3	Sr 421.552†	96591.6	95938.2	518.38 µg/L	518.38 ppb	03:32:59
3	Sc 361.383	1953083.2	1953083.2	101.64 %		03:34:38
3	Y 371.029	1355406.5	1355406.5	101.30 %		03:34:38
3	Ag 328.068†	28481.9	28590.8	238.21 µg/L	238.21 ppb	03:34:44
3	As 188.979†	282.3	281.0	419.23 µg/L	419.23 ppb	03:35:04
3	B 249.677†	10895.6	10363.4	492.26 µg/L	492.26 ppb	03:34:44
3	Ba 233.527†	21501.9	21186.5	477.49 µg/L	477.49 ppb	03:34:44
3	Be 313.107†	402521.1	397563.1	241.37 µg/L	241.37 ppb	03:34:38
3	Cd 226.502†	19373.9	19241.4	467.88 µg/L	467.88 ppb	03:34:44
3	Co 228.616†	10987.2	10791.1	473.69 µg/L	473.69 ppb	03:34:44
3	Cr 267.716†	20428.2	20024.5	447.97 µg/L	447.97 ppb	03:34:44
3	Cu 324.752†	73755.8	68978.2	468.49 µg/L	468.49 ppb	03:34:44
3	Mn 257.610†	151169.7	149516.9	479.46 µg/L	479.46 ppb	03:34:38
3	Mo 202.031†	4601.3	4519.2	446.85 µg/L	446.85 ppb	03:35:04
3	Ni 231.604†	8447.9	7944.9	450.92 µg/L	450.92 ppb	03:34:44
3	P 214.914†	1626.6	1293.3	2162.2 µg/L	2162.2 ppb	03:35:04
3	Pb 220.353†	1760.7	1676.2	443.25 µg/L	443.25 ppb	03:35:04
3	S 181.975 Axial†	720.2	685.1	2178.6 µg/L	2178.6 ppb	03:35:04
3	Sb 206.836†	505.8	470.1	427.07 µg/L	427.07 ppb	03:35:04
3	Se 196.026†	2337.6	2279.3	2252.6 µg/L	2252.6 ppb	03:35:04
3	SiO2†	55173.8	51948.8	9816.9 µg/L	9816.9 ppb	03:34:44
3	Si 251.611†	66194.7	64730.4	4582.8 µg/L	4582.8 ppb	03:34:44
3	Sn 189.927†	1151.5	1131.0	438.80 µg/L	438.80 ppb	03:35:04
3	Ti 334.940†	189442.6	187072.9	450.88 µg/L	450.88 ppb	03:34:38
3	Tl 190.801†	433.1	462.2	472.06 µg/L	472.06 ppb	03:35:04
3	U 409.014†	4866.9	4818.6	431.23 µg/L	431.23 ppb	03:34:44
3	V 292.402†	38057.9	37347.8	459.50 µg/L	459.50 ppb	03:34:44
3	Zn 213.857†	20679.8	19756.0	454.44 µg/L	454.44 ppb	03:34:44

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1939161.1	100.91 %	0.627			0.62%
Sc RADIAL	101164.2	101 %	0.3			0.27%
Y 371.029	1346755.2	100.65 %	0.562			0.56%
Ag 328.068†	29696.1	247.51 µg/L	8.054	247.51 ppb	8.054	3.25%
QC value within limits for Ag 328.068 Recovery = 99.00%						
Al 396.153Radial†	10804.6	5092.7 µg/L	13.16	5092.7 ppb	13.16	0.26%
QC value within limits for Al 396.153Radial Recovery = 101.85%						
As 188.979†	314.5	469.43 µg/L	43.666	469.43 ppb	43.666	9.30%
QC value within limits for As 188.979 Recovery = 93.89%						
B 249.677†	10815.7	513.91 µg/L	18.747	513.91 ppb	18.747	3.65%
QC value within limits for B 249.677 Recovery = 102.78%						
Ba 233.527†	22477.7	506.60 µg/L	25.214	506.60 ppb	25.214	4.98%
QC value within limits for Ba 233.527 Recovery = 101.32%						
Be 313.107†	414779.8	251.82 µg/L	9.053	251.82 ppb	9.053	3.60%
QC value within limits for Be 313.107 Recovery = 100.73%						
Ca 317.933Radial†	15669.2	5053.9 µg/L	6.55	5053.9 ppb	6.55	0.13%
QC value within limits for Ca 317.933Radial Recovery = 101.08%						
Cd 226.502†	20501.2	498.56 µg/L	26.569	498.56 ppb	26.569	5.33%
QC value within limits for Cd 226.502 Recovery = 99.71%						
Co 228.616†	11534.9	506.38 µg/L	28.332	506.38 ppb	28.332	5.59%

QC value within limits for Co 228.616 Recovery = 101.28%							
Cr 267.716†	21825.3	488.25 µg/L	34.889	488.25 ppb	34.889	7.15%	
QC value within limits for Cr 267.716 Recovery = 97.65%							
Cu 324.752†	73765.9	500.94 µg/L	28.104	500.94 ppb	28.104	5.61%	
QC value within limits for Cu 324.752 Recovery = 100.19%							
Fe 238.204 Radial†	513.1	5041.8 µg/L	25.07	5041.8 ppb	25.07	0.50%	
QC value within limits for Fe 238.204 Radial Recovery = 100.84%							
K 766.490 Radial†	4963.8	2444.4 µg/L	7.50	2444.4 ppb	7.50	0.31%	
QC value within limits for K 766.490 Radial Recovery = 97.77%							
Mg 279.077 IEC†	455.8	4995.0 µg/L	32.18	4995.0 ppb	32.18	0.64%	
QC value within limits for Mg 279.077 IEC Recovery = 99.90%							
Mn 257.610†	155572.8	498.88 µg/L	16.867	498.88 ppb	16.867	3.38%	
QC value within limits for Mn 257.610 Recovery = 99.78%							
Mo 202.031†	5140.6	508.27 µg/L	53.276	508.27 ppb	53.276	10.48%	
QC value within limits for Mo 202.031 Recovery = 101.65%							
Na 589.592 Radial†	5410.9	2373.6 µg/L	17.51	2373.6 ppb	17.51	0.74%	
QC value within limits for Na 589.592 Radial Recovery = 94.94%							
Ni 231.604†	8544.0	484.92 µg/L	29.451	484.92 ppb	29.451	6.07%	
QC value within limits for Ni 231.604 Recovery = 96.98%							
P 214.914†	1449.5	2426.3 µg/L	228.86	2426.3 ppb	228.86	9.43%	
QC value within limits for P 214.914 Recovery = 97.05%							
Pb 220.353†	1857.2	491.15 µg/L	41.538	491.15 ppb	41.538	8.46%	
QC value within limits for Pb 220.353 Recovery = 98.23%							
S 181.975 Axial†	744.6	2368.0 µg/L	164.32	2368.0 ppb	164.32	6.94%	
QC value within limits for S 181.975 Axial Recovery = 94.72%							
Sb 206.836†	523.5	475.94 µg/L	42.643	475.94 ppb	42.643	8.96%	
QC value within limits for Sb 206.836 Recovery = 95.19%							
Se 196.026†	2503.2	2472.6 µg/L	190.56	2472.6 ppb	190.56	7.71%	
QC value within limits for Se 196.026 Recovery = 98.91%							
SiO2†	54703.6	10337 µg/L	450.9	10337 ppb	450.9	4.36%	
QC value within limits for SiO2 Recovery = 96.66%							
Si 251.611†	68110.8	4822.2 µg/L	207.27	4822.2 ppb	207.27	4.30%	
QC value within limits for Si 251.611 Recovery = 96.44%							
Sn 189.927†	1295.0	503.29 µg/L	55.924	503.29 ppb	55.924	11.11%	
QC value within limits for Sn 189.927 Recovery = 100.66%							
Sr 421.552†	95962.7	518.51 µg/L	0.704	518.51 ppb	0.704	0.14%	
QC value within limits for Sr 421.552 Recovery = 103.70%							
Ti 334.940†	195861.2	472.08 µg/L	18.358	472.08 ppb	18.358	3.89%	
QC value within limits for Ti 334.940 Recovery = 94.42%							
Tl 190.801†	494.5	504.97 µg/L	28.504	504.97 ppb	28.504	5.64%	
QC value within limits for Tl 190.801 Recovery = 100.99%							
U 409.014†	5197.9	465.26 µg/L	29.622	465.26 ppb	29.622	6.37%	
QC value within limits for U 409.014 Recovery = 93.05%							
V 292.402†	40135.8	494.11 µg/L	29.972	494.11 ppb	29.972	6.07%	
QC value within limits for V 292.402 Recovery = 98.82%							
Zn 213.857†	21116.0	485.74 µg/L	27.114	485.74 ppb	27.114	5.58%	
QC value within limits for Zn 213.857 Recovery = 97.15%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/5/2010 03:35:14

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	99971.3	99971.3	99.6 %		03:35:46
1	Al 396.153Radial†	-386.6	12.4	5.8024 µg/L	5.8024 ppb	03:35:46
1	Ca 317.933Radial†	392.8	6.6	2.1436 µg/L	2.1436 ppb	03:36:07
1	Fe 238.204 Radial†	17.0	3.3	32.447 µg/L	32.447 ppb	03:36:07
1	K 766.490 Radial†	269.1	-53.9	-26.529 µg/L	-26.529 ppb	03:35:46
1	Mg 279.077 IEC†	14.6	5.3	58.021 µg/L	58.021 ppb	03:36:07
1	Na 589.592 Radial†	251.5	40.8	17.878 µg/L	17.878 ppb	03:35:46
1	Sr 421.552†	150.8	2.3	0.0123 µg/L	0.0123 ppb	03:35:46
1	Sc 361.383	1922909.8	1922909.8	100.07 %		03:37:08
1	Y 371.029	1339663.0	1339663.0	100.12 %		03:37:08
1	Ag 328.068†	-530.4	37.8	0.3148 µg/L	0.3148 ppb	03:37:14
1	As 188.979†	-1.4	1.8	2.6303 µg/L	2.6303 ppb	03:37:34
1	B 249.677†	381.0	24.1	1.1352 µg/L	1.1352 ppb	03:37:14
1	Ba 233.527†	-32.1	-1.0	-0.0208 µg/L	-0.0208 ppb	03:37:34
1	Be 313.107†	-1463.2	65.6	0.0399 µg/L	0.0399 ppb	03:37:14
1	Cd 226.502†	-179.6	0.2	0.0020 µg/L	0.0020 ppb	03:37:34
1	Co 228.616†	20.0	0.9	0.0392 µg/L	0.0392 ppb	03:37:34
1	Cr 267.716†	99.8	25.1	0.5623 µg/L	0.5623 ppb	03:37:14
1	Cu 324.752†	3583.3	-8.3	-0.0504 µg/L	-0.0504 ppb	03:37:14
1	Mn 257.610†	-720.5	62.9	0.1997 µg/L	0.1997 ppb	03:37:14
1	Mo 202.031†	24.4	16.4	1.6232 µg/L	1.6232 ppb	03:37:34
1	Ni 231.604†	378.6	11.5	0.6531 µg/L	0.6531 ppb	03:37:34
1	P 214.914†	303.3	-3.9	-6.6868 µg/L	-6.6868 ppb	03:37:34
1	Pb 220.353†	47.2	-8.9	-2.3531 µg/L	-2.3531 ppb	03:37:34
1	S 181.975 Axial†	21.3	-2.2	-7.1022 µg/L	-7.1022 ppb	03:37:34
1	Sb 206.836†	27.7	0.0	0.0652 µg/L	0.0652 ppb	03:37:34
1	Se 196.026†	21.6	1.0	1.0723 µg/L	1.0723 ppb	03:37:34
1	SiO2†	2351.0	13.4	2.5409 µg/L	2.5409 ppb	03:37:14
1	Si 251.611†	413.0	14.9	1.0562 µg/L	1.0562 ppb	03:37:34
1	Sn 189.927†	2.7	0.7	0.2541 µg/L	0.2541 ppb	03:37:34
1	Ti 334.940†	-677.4	5.8	0.0094 µg/L	0.0094 ppb	03:37:14
1	Tl 190.801†	-31.8	4.3	4.3321 µg/L	4.3321 ppb	03:37:34
1	U 409.014†	-54.1	-23.9	-2.1527 µg/L	-2.1527 ppb	03:37:14
1	V 292.402†	121.5	24.5	0.3045 µg/L	0.3045 ppb	03:37:14
1	Zn 213.857†	596.4	5.4	0.1173 µg/L	0.1173 ppb	03:37:34
2	Sc RADIAL	99963.8	99963.8	99.6 %		03:36:12
2	Al 396.153Radial†	-384.6	14.3	6.7444 µg/L	6.7444 ppb	03:36:12
2	Ca 317.933Radial†	398.2	12.1	3.9084 µg/L	3.9084 ppb	03:36:32
2	Fe 238.204 Radial†	15.7	2.0	19.999 µg/L	19.999 ppb	03:36:32
2	K 766.490 Radial†	319.1	-3.7	-1.8085 µg/L	-1.8085 ppb	03:36:12
2	Mg 279.077 IEC†	12.6	3.3	36.074 µg/L	36.074 ppb	03:36:32
2	Na 589.592 Radial†	251.2	40.5	17.768 µg/L	17.768 ppb	03:36:12
2	Sr 421.552†	148.6	0.0	0.0002 µg/L	0.0002 ppb	03:36:12
2	Sc 361.383	1919395.3	1919395.3	99.885 %		03:37:40
2	Y 371.029	1337520.4	1337520.4	99.962 %		03:37:40
2	Ag 328.068†	-508.8	58.5	0.4837 µg/L	0.4837 ppb	03:37:46
2	As 188.979†	-4.4	-1.2	-1.8101 µg/L	-1.8101 ppb	03:38:07
2	B 249.677†	407.2	51.0	2.4228 µg/L	2.4228 ppb	03:37:46
2	Ba 233.527†	-36.9	-5.8	-0.1305 µg/L	-0.1305 ppb	03:38:07
2	Be 313.107†	-1420.3	105.9	0.0643 µg/L	0.0643 ppb	03:37:46
2	Cd 226.502†	-174.7	4.8	0.1141 µg/L	0.1141 ppb	03:38:07
2	Co 228.616†	25.0	6.0	0.2635 µg/L	0.2635 ppb	03:38:07
2	Cr 267.716†	49.2	-25.3	-0.5650 µg/L	-0.5650 ppb	03:37:46
2	Cu 324.752†	3592.0	6.9	0.0507 µg/L	0.0507 ppb	03:37:46
2	Mn 257.610†	-699.9	82.2	0.2623 µg/L	0.2623 ppb	03:37:46
2	Mo 202.031†	16.9	8.9	0.8842 µg/L	0.8842 ppb	03:38:07
2	Ni 231.604†	379.6	13.1	0.7439 µg/L	0.7439 ppb	03:38:07
2	P 214.914†	307.4	0.7	1.1383 µg/L	1.1383 ppb	03:38:07
2	Pb 220.353†	50.2	-5.9	-1.5528 µg/L	-1.5528 ppb	03:38:07



2	S 181.975 Axial†	17.7	-5.8	-18.545 µg/L	-18.545 ppb	03:38:07
2	Sb 206.836†	27.1	-0.4	-0.3533 µg/L	-0.3533 ppb	03:38:07
2	Se 196.026†	20.4	-0.2	-0.1425 µg/L	-0.1425 ppb	03:38:07
2	SiO2†	2339.3	6.1	1.1464 µg/L	1.1464 ppb	03:37:46
2	Si 251.611†	417.2	19.9	1.4073 µg/L	1.4073 ppb	03:38:07
2	Sn 189.927†	3.9	2.0	0.7693 µg/L	0.7693 ppb	03:38:07
2	Ti 334.940†	-626.7	55.3	0.1306 µg/L	0.1306 ppb	03:37:46
2	Tl 190.801†	-37.5	-1.5	-1.5061 µg/L	-1.5061 ppb	03:38:07
2	U 409.014†	-4.6	25.5	2.2874 µg/L	2.2874 ppb	03:37:46
2	V 292.402†	115.4	18.6	0.2310 µg/L	0.2310 ppb	03:37:46
2	Zn 213.857†	604.2	14.3	0.3240 µg/L	0.3240 ppb	03:38:07
3	Sc RADIAL	99958.4	99958.4	99.6 %		03:36:38
3	Al 396.153Radial†	-383.8	15.1	7.0841 µg/L	7.0841 ppb	03:36:38
3	Ca 317.933Radial†	392.1	6.0	1.9406 µg/L	1.9406 ppb	03:36:58
3	Fe 238.204 Radial†	15.2	1.5	15.025 µg/L	15.025 ppb	03:36:58
3	K 766.490 Radial†	392.6	70.2	34.566 µg/L	34.566 ppb	03:36:38
3	Mg 279.077 IEC†	9.7	0.3	3.5707 µg/L	3.5707 ppb	03:36:58
3	Na 589.592 Radial†	193.9	-17.0	-7.4711 µg/L	-7.4711 ppb	03:36:38
3	Sr 421.552†	123.3	-25.4	-0.1371 µg/L	-0.1371 ppb	03:36:38
3	Sc 361.383	1913792.0	1913792.0	99.593 %		03:38:13
3	Y 371.029	1332907.9	1332907.9	99.617 %		03:38:13
3	Ag 328.068†	-494.2	71.6	0.5900 µg/L	0.5900 ppb	03:38:18
3	As 188.979†	-25.8	-22.7	-34.073 µg/L	-34.073 ppb	03:38:39
3	B 249.677†	361.2	6.1	0.2822 µg/L	0.2822 ppb	03:38:18
3	Ba 233.527†	-33.8	-2.9	-0.0648 µg/L	-0.0648 ppb	03:38:39
3	Be 313.107†	-1384.8	137.4	0.0833 µg/L	0.0833 ppb	03:38:18
3	Cd 226.502†	-174.4	4.6	0.1101 µg/L	0.1101 ppb	03:38:39
3	Co 228.616†	16.9	-2.1	-0.0923 µg/L	-0.0923 ppb	03:38:39
3	Cr 267.716†	82.0	7.8	0.1746 µg/L	0.1746 ppb	03:38:18
3	Cu 324.752†	3571.8	-2.8	-0.0158 µg/L	-0.0158 ppb	03:38:18
3	Mn 257.610†	-743.4	36.5	0.1177 µg/L	0.1177 ppb	03:38:18
3	Mo 202.031†	27.4	19.6	1.9340 µg/L	1.9340 ppb	03:38:39
3	Ni 231.604†	366.7	1.3	0.0761 µg/L	0.0761 ppb	03:38:39
3	P 214.914†	299.4	-6.5	-11.015 µg/L	-11.015 ppb	03:38:39
3	Pb 220.353†	53.7	-2.2	-0.5848 µg/L	-0.5848 ppb	03:38:39
3	S 181.975 Axial†	21.4	-2.0	-6.3789 µg/L	-6.3789 ppb	03:38:39
3	Sb 206.836†	30.2	2.8	2.5361 µg/L	2.5361 ppb	03:38:39
3	Se 196.026†	29.1	8.7	8.5532 µg/L	8.5532 ppb	03:38:39
3	SiO2†	2335.2	8.9	1.6729 µg/L	1.6729 ppb	03:38:18
3	Si 251.611†	419.0	23.0	1.6264 µg/L	1.6264 ppb	03:38:39
3	Sn 189.927†	5.4	3.5	1.3758 µg/L	1.3758 ppb	03:38:39
3	Ti 334.940†	-537.5	143.1	0.3448 µg/L	0.3448 ppb	03:38:18
3	Tl 190.801†	-34.5	1.4	1.4245 µg/L	1.4245 ppb	03:38:39
3	U 409.014†	-14.5	15.6	1.3970 µg/L	1.3970 ppb	03:38:18
3	V 292.402†	103.6	7.1	0.1010 µg/L	0.1010 ppb	03:38:18
3	Zn 213.857†	605.3	17.2	0.3966 µg/L	0.3966 ppb	03:38:39

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1918699.1	99.848 %	0.2393			0.24%
Sc RADIAL	99964.5	99.6 %	0.01			0.01%
Y 371.029	1336697.1	99.901 %	0.2580			0.26%
Ag 328.068†	56.0	0.4628 µg/L	0.13878	0.4628 ppb	0.13878	29.99%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	13.9	6.5436 µg/L	0.66403	6.5436 ppb	0.66403	10.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-7.4	-11.084 µg/L	20.0324	-11.084 ppb	20.0324	180.73%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	27.1	1.2801 µg/L	1.07759	1.2801 ppb	1.07759	84.18%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.2	-0.0721 µg/L	0.05518	-0.0721 ppb	0.05518	76.58%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	103.0	0.0625 µg/L	0.02179	0.0625 ppb	0.02179	34.87%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.3	2.6642 µg/L	1.08225	2.6642 ppb	1.08225	40.62%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	3.2	0.0754 µg/L	0.06362	0.0754 ppb	0.06362	84.37%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.6	0.0702 µg/L	0.17993	0.0702 ppb	0.17993	256.48%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	2.6 0.0573 µg/L	0.57271 0.0573 ppb	0.57271 999.67%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-1.4 -0.0052 µg/L	0.05139 -0.0052 ppb	0.05139 994.28%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	2.3 22.490 µg/L	8.9744 22.490 ppb	8.9744 39.90%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	4.2 2.0762 µg/L	30.73203 2.0762 ppb	30.73203 >999.9%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	3.0 32.555 µg/L	27.3950 32.555 ppb	27.3950 84.15%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	60.5 0.1932 µg/L	0.07250 0.1932 ppb	0.07250 37.52%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	15.0 1.4805 µg/L	0.53930 1.4805 ppb	0.53930 36.43%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	21.4 9.3917 µg/L	14.60364 9.3917 ppb	14.60364 155.50%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	8.6 0.4911 µg/L	0.36221 0.4911 ppb	0.36221 73.76%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-3.2 -5.5210 µg/L	6.15977 -5.5210 ppb	6.15977 111.57%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-5.7 -1.4969 µg/L	0.88548 -1.4969 ppb	0.88548 59.16%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-3.4 -10.675 µg/L	6.8247 -10.675 ppb	6.8247 63.93%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	0.8 0.7493 µg/L	1.56150 0.7493 ppb	1.56150 208.38%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.2 3.1610 µg/L	4.70913 3.1610 ppb	4.70913 148.98%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	9.5 1.7867 µg/L	0.70417 1.7867 ppb	0.70417 39.41%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	19.3 1.3633 µg/L	0.28763 1.3633 ppb	0.28763 21.10%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.1 0.7997 µg/L	0.56145 0.7997 ppb	0.56145 70.20%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-7.7 -0.0415 µg/L	0.08300 -0.0415 ppb	0.08300 199.89%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	68.0 0.1616 µg/L	0.16982 0.1616 ppb	0.16982 105.10%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.4 1.4168 µg/L	2.91911 1.4168 ppb	2.91911 206.03%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	5.7 0.5106 µg/L	2.34903 0.5106 ppb	2.34903 460.10%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	16.7 0.2122 µg/L	0.10304 0.2122 ppb	0.10304 48.56%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	12.3 0.2793 µg/L	0.14493 0.2793 ppb	0.14493 51.89%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8  
 Sample ID: PQL  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 101  
 Date Collected: 3/5/2010 03:38:49  
 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	99531.6	99531.6	99.2 %		03:39:21
1	Al 396.153Radial†	81.0	482.1	227.46 µg/L	227.46 ppb	03:39:21
1	Ca 317.933Radial†	1029.0	649.9	209.61 µg/L	209.61 ppb	03:39:41
1	Fe 238.204 Radial†	24.7	11.2	109.77 µg/L	109.77 ppb	03:39:41
1	K 766.490 Radial†	625.9	307.1	151.21 µg/L	151.21 ppb	03:39:21
1	Mg 279.077 IEC†	35.5	26.4	288.84 µg/L	288.84 ppb	03:39:41
1	Na 589.592 Radial†	896.5	692.2	303.64 µg/L	303.64 ppb	03:39:21
1	Sr 421.552†	1122.7	982.8	5.3105 µg/L	5.3105 ppb	03:39:21
1	Sc 361.383	1914797.1	1914797.1	99.645 %		03:40:43
1	Y 371.029	1335986.6	1335986.6	99.848 %		03:40:43
1	Ag 328.068†	103.7	671.9	5.5594 µg/L	5.5594 ppb	03:40:49
1	As 188.979†	19.4	22.7	33.923 µg/L	33.923 ppb	03:41:10
1	B 249.677†	1407.9	1056.3	50.323 µg/L	50.323 ppb	03:40:49
1	Ba 233.527†	192.5	224.2	5.0541 µg/L	5.0541 ppb	03:41:10
1	Be 313.107†	6837.4	8389.5	5.0950 µg/L	5.0950 ppb	03:40:49
1	Cd 226.502†	24.0	203.8	4.9497 µg/L	4.9497 ppb	03:41:10
1	Co 228.616†	133.7	115.0	5.0542 µg/L	5.0542 ppb	03:41:10
1	Cr 267.716†	321.1	247.7	5.5414 µg/L	5.5414 ppb	03:40:49
1	Cu 324.752†	5110.7	1539.7	10.457 µg/L	10.457 ppb	03:40:49
1	Mn 257.610†	2534.2	3326.2	10.654 µg/L	10.654 ppb	03:40:49
1	Mo 202.031†	117.3	109.8	10.852 µg/L	10.852 ppb	03:41:10
1	Ni 231.604†	465.3	100.1	5.6814 µg/L	5.6814 ppb	03:41:10
1	P 214.914†	387.5	81.8	138.71 µg/L	138.71 ppb	03:41:10
1	Pb 220.353†	97.7	41.9	11.049 µg/L	11.049 ppb	03:41:10
1	S 181.975 Axial†	56.9	33.6	106.83 µg/L	106.83 ppb	03:41:10
1	Sb 206.836†	35.8	8.3	7.6027 µg/L	7.6027 ppb	03:41:10
1	Se 196.026†	37.5	17.0	16.865 µg/L	16.865 ppb	03:41:10
1	Si02†	3566.3	1243.0	234.90 µg/L	234.90 ppb	03:40:49
1	Si 251.611†	1899.8	1508.8	106.82 µg/L	106.82 ppb	03:40:49
1	Sn 189.927†	28.8	27.0	10.495 µg/L	10.495 ppb	03:41:10
1	Ti 334.940†	1484.0	2172.0	5.2191 µg/L	5.2191 ppb	03:40:49
1	Tl 190.801†	-16.3	19.8	20.100 µg/L	20.100 ppb	03:41:10
1	U 409.014†	577.6	609.8	54.669 µg/L	54.669 ppb	03:40:49
1	V 292.402†	501.4	406.2	5.0875 µg/L	5.0875 ppb	03:40:49
1	Zn 213.857†	1021.9	435.0	10.014 µg/L	10.014 ppb	03:41:10
2	Sc RADIAL	99596.2	99596.2	99.3 %		03:39:47
2	Al 396.153Radial†	68.1	469.0	221.30 µg/L	221.30 ppb	03:39:47
2	Ca 317.933Radial†	1021.1	641.2	206.82 µg/L	206.82 ppb	03:40:07
2	Fe 238.204 Radial†	24.2	10.6	104.13 µg/L	104.13 ppb	03:40:07
2	K 766.490 Radial†	531.9	212.0	104.40 µg/L	104.40 ppb	03:39:47
2	Mg 279.077 IEC†	39.5	30.4	333.39 µg/L	333.39 ppb	03:40:07
2	Na 589.592 Radial†	885.9	681.0	298.72 µg/L	298.72 ppb	03:39:47
2	Sr 421.552†	1071.6	930.6	5.0281 µg/L	5.0281 ppb	03:39:47
2	Sc 361.383	1911075.9	1911075.9	99.452 %		03:41:16
2	Y 371.029	1332175.8	1332175.8	99.563 %		03:41:16
2	Ag 328.068†	36.7	604.8	5.0087 µg/L	5.0087 ppb	03:41:21
2	As 188.979†	15.8	19.1	28.524 µg/L	28.524 ppb	03:41:42
2	B 249.677†	1409.3	1060.5	50.525 µg/L	50.525 ppb	03:41:21
2	Ba 233.527†	200.5	232.7	5.2444 µg/L	5.2444 ppb	03:41:42
2	Be 313.107†	6741.5	8306.4	5.0446 µg/L	5.0446 ppb	03:41:21
2	Cd 226.502†	32.1	211.9	5.1483 µg/L	5.1483 ppb	03:41:42
2	Co 228.616†	135.1	116.7	5.1284 µg/L	5.1284 ppb	03:41:42
2	Cr 267.716†	325.7	253.0	5.6584 µg/L	5.6584 ppb	03:41:21
2	Cu 324.752†	5067.7	1506.5	10.231 µg/L	10.231 ppb	03:41:21
2	Mn 257.610†	2538.8	3335.7	10.681 µg/L	10.681 ppb	03:41:21
2	Mo 202.031†	111.3	103.9	10.278 µg/L	10.278 ppb	03:41:42
2	Ni 231.604†	456.0	91.6	5.2005 µg/L	5.2005 ppb	03:41:42
2	P 214.914†	390.5	85.6	145.24 µg/L	145.24 ppb	03:41:42
2	Pb 220.353†	85.8	30.1	7.9317 µg/L	7.9317 ppb	03:41:42

2	S 181.975 Axial†	55.2	32.0	101.67 µg/L	101.67 ppb	03:41:42
2	Sb 206.836†	40.0	12.6	11.476 µg/L	11.476 ppb	03:41:42
2	Se 196.026†	54.9	34.7	34.142 µg/L	34.142 ppb	03:41:42
2	SiO2†	3555.9	1239.6	234.24 µg/L	234.24 ppb	03:41:21
2	Si 251.611†	1916.3	1529.1	108.26 µg/L	108.26 ppb	03:41:21
2	Sn 189.927†	28.8	27.0	10.513 µg/L	10.513 ppb	03:41:42
2	Ti 334.940†	1457.7	2148.5	5.1589 µg/L	5.1589 ppb	03:41:21
2	Tl 190.801†	-11.9	24.1	24.504 µg/L	24.504 ppb	03:41:42
2	U 409.014†	581.3	614.6	55.105 µg/L	55.105 ppb	03:41:21
2	V 292.402†	511.3	417.2	5.2185 µg/L	5.2185 ppb	03:41:21
2	Zn 213.857†	1029.1	444.2	10.228 µg/L	10.228 ppb	03:41:42
3	Sc RADIAL	98934.3	98934.3	98.6 %		03:40:13
3	Al 396.153Radial†	80.6	482.1	227.51 µg/L	227.51 ppb	03:40:13
3	Ca 317.933Radial†	1023.6	650.6	209.83 µg/L	209.83 ppb	03:40:33
3	Fe 238.204 Radial†	22.6	9.1	89.792 µg/L	89.792 ppb	03:40:33
3	K 766.490 Radial†	572.8	257.0	126.54 µg/L	126.54 ppb	03:40:13
3	Mg 279.077 IEC†	35.0	26.1	286.01 µg/L	286.01 ppb	03:40:33
3	Na 589.592 Radial†	878.7	679.6	298.12 µg/L	298.12 ppb	03:40:13
3	Sr 421.552†	1100.9	967.5	5.2276 µg/L	5.2276 ppb	03:40:13
3	Sc 361.383	1868498.9	1868498.9	97.236 %		03:41:48
3	Y 371.029	1300243.8	1300243.8	97.176 %		03:41:48
3	Ag 328.068†	67.2	637.0	5.2703 µg/L	5.2703 ppb	03:41:54
3	As 188.979†	15.9	19.6	29.307 µg/L	29.307 ppb	03:42:14
3	B 249.677†	1351.7	1033.6	49.249 µg/L	49.249 ppb	03:41:54
3	Ba 233.527†	175.0	211.1	4.7581 µg/L	4.7581 ppb	03:42:14
3	Be 313.107†	6133.8	7836.0	4.7588 µg/L	4.7588 ppb	03:41:54
3	Cd 226.502†	8.9	188.8	4.5883 µg/L	4.5883 ppb	03:42:14
3	Co 228.616†	120.6	104.9	4.6078 µg/L	4.6078 ppb	03:42:14
3	Cr 267.716†	322.4	257.0	5.7479 µg/L	5.7479 ppb	03:41:54
3	Cu 324.752†	5004.5	1557.6	10.574 µg/L	10.574 ppb	03:41:54
3	Mn 257.610†	2315.0	3163.8	10.132 µg/L	10.132 ppb	03:41:54
3	Mo 202.031†	105.5	100.5	9.9361 µg/L	9.9361 ppb	03:42:14
3	Ni 231.604†	445.2	91.0	5.1663 µg/L	5.1663 ppb	03:42:14
3	P 214.914†	379.0	82.8	140.27 µg/L	140.27 ppb	03:42:14
3	Pb 220.353†	92.7	39.2	10.335 µg/L	10.335 ppb	03:42:14
3	S 181.975 Axial†	58.2	36.4	115.64 µg/L	115.64 ppb	03:42:14
3	Sb 206.836†	36.9	10.3	9.4214 µg/L	9.4214 ppb	03:42:14
3	Se 196.026†	55.3	36.3	35.775 µg/L	35.775 ppb	03:42:14
3	SiO2†	3429.9	1191.5	225.16 µg/L	225.16 ppb	03:41:54
3	Si 251.611†	1821.5	1475.5	104.47 µg/L	104.47 ppb	03:41:54
3	Sn 189.927†	20.9	19.6	7.5964 µg/L	7.5964 ppb	03:42:14
3	Ti 334.940†	1360.1	2081.5	5.0010 µg/L	5.0010 ppb	03:41:54
3	Tl 190.801†	-24.1	11.3	11.567 µg/L	11.567 ppb	03:42:14
3	U 409.014†	533.8	579.1	51.925 µg/L	51.925 ppb	03:41:54
3	V 292.402†	475.8	392.4	4.9133 µg/L	4.9133 ppb	03:41:54
3	Zn 213.857†	966.4	403.2	9.2819 µg/L	9.2819 ppb	03:42:14

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1898124.0	98.778 %	1.3386			1.36%
Sc RADIAL	99354.0	99.0 %	0.36			0.37%
Y 371.029	1322802.1	98.862 %	1.4670			1.48%
Ag 328.068†	637.9	5.2794 µg/L	0.27547	5.2794 ppb	0.27547	5.22%
QC value within limits for Ag 328.068 Recovery = 105.59%						
Al 396.153Radial†	477.7	225.43 µg/L	3.572	225.43 ppb	3.572	1.58%
QC value within limits for Al 396.153Radial Recovery = 112.71%						
As 188.979†	20.4	30.585 µg/L	2.9173	30.585 ppb	2.9173	9.54%
QC value within limits for As 188.979 Recovery = 101.95%						
B 249.677†	1050.1	50.032 µg/L	0.6857	50.032 ppb	0.6857	1.37%
QC value within limits for B 249.677 Recovery = 100.06%						
Ba 233.527†	222.7	5.0188 µg/L	0.24506	5.0188 ppb	0.24506	4.88%
QC value within limits for Ba 233.527 Recovery = 100.38%						
Be 313.107†	8177.3	4.9661 µg/L	0.18132	4.9661 ppb	0.18132	3.65%
QC value within limits for Be 313.107 Recovery = 99.32%						
Ca 317.933Radial†	647.2	208.75 µg/L	1.675	208.75 ppb	1.675	0.80%
QC value within limits for Ca 317.933Radial Recovery = 104.38%						
Cd 226.502†	201.5	4.8954 µg/L	0.28391	4.8954 ppb	0.28391	5.80%
QC value within limits for Cd 226.502 Recovery = 97.91%						
Co 228.616†	112.2	4.9302 µg/L	0.28164	4.9302 ppb	0.28164	5.71%

Cr	267.716†	252.5	5.6492 µg/L	0.10357	5.6492 ppb	0.10357	1.83%
QC value within limits for Cr 267.716 Recovery = 112.98%							
Cu	324.752†	1534.6	10.420 µg/L	0.1746	10.420 ppb	0.1746	1.68%
QC value within limits for Cu 324.752 Recovery = 104.20%							
Fe	238.204 Radial†	10.3	101.23 µg/L	10.299	101.23 ppb	10.299	10.17%
QC value within limits for Fe 238.204 Radial Recovery = 101.23%							
K	766.490 Radial†	258.7	127.38 µg/L	23.418	127.38 ppb	23.418	18.38%
QC value within limits for K 766.490 Radial Recovery = 84.92%							
Mg	279.077 IEC†	27.6	302.75 µg/L	26.577	302.75 ppb	26.577	8.78%
QC value within limits for Mg 279.077 IEC Recovery = 100.92%							
Mn	257.610†	3275.2	10.489 µg/L	0.3095	10.489 ppb	0.3095	2.95%
QC value within limits for Mn 257.610 Recovery = 104.89%							
Mo	202.031†	104.7	10.355 µg/L	0.4629	10.355 ppb	0.4629	4.47%
QC value within limits for Mo 202.031 Recovery = 103.55%							
Na	589.592 Radial†	684.3	300.16 µg/L	3.028	300.16 ppb	3.028	1.01%
QC value within limits for Na 589.592 Radial Recovery = 100.05%							
Ni	231.604†	94.2	5.3494 µg/L	0.28804	5.3494 ppb	0.28804	5.38%
QC value within limits for Ni 231.604 Recovery = 106.99%							
P	214.914†	83.4	141.41 µg/L	3.408	141.41 ppb	3.408	2.41%
QC value within limits for P 214.914 Recovery = 94.27%							
Pb	220.353†	37.1	9.7717 µg/L	1.63299	9.7717 ppb	1.63299	16.71%
QC value within limits for Pb 220.353 Recovery = 97.72%							
S	181.975 Axial†	34.0	108.05 µg/L	7.060	108.05 ppb	7.060	6.53%
QC value within limits for S 181.975 Axial Recovery = 108.05%							
Sb	206.836†	10.4	9.4999 µg/L	1.93773	9.4999 ppb	1.93773	20.40%
QC value within limits for Sb 206.836 Recovery = 95.00%							
Se	196.026†	29.3	28.927 µg/L	10.4782	28.927 ppb	10.4782	36.22%
QC value within limits for Se 196.026 Recovery = 96.42%							
SiO2†		1224.7	231.43 µg/L	5.441	231.43 ppb	5.441	2.35%
QC value within limits for SiO2 Recovery = 108.65%							
Si	251.611†	1504.5	106.52 µg/L	1.916	106.52 ppb	1.916	1.80%
QC value within limits for Si 251.611 Recovery = 106.52%							
Sn	189.927†	24.5	9.5348 µg/L	1.67870	9.5348 ppb	1.67870	17.61%
QC value within limits for Sn 189.927 Recovery = 95.35%							
Sr	421.552†	960.3	5.1887 µg/L	0.14513	5.1887 ppb	0.14513	2.80%
QC value within limits for Sr 421.552 Recovery = 103.77%							
Ti	334.940†	2134.0	5.1263 µg/L	0.11263	5.1263 ppb	0.11263	2.20%
QC value within limits for Ti 334.940 Recovery = 102.53%							
Tl	190.801†	18.4	18.723 µg/L	6.5774	18.723 ppb	6.5774	35.13%
QC value within limits for Tl 190.801 Recovery = 93.62%							
U	409.014†	601.2	53.899 µg/L	1.7241	53.899 ppb	1.7241	3.20%
QC value within limits for U 409.014 Recovery = 107.80%							
V	292.402†	405.3	5.0731 µg/L	0.15308	5.0731 ppb	0.15308	3.02%
QC value within limits for V 292.402 Recovery = 101.46%							
Zn	213.857†	427.5	9.8411 µg/L	0.49596	9.8411 ppb	0.49596	5.04%
QC value within limits for Zn 213.857 Recovery = 98.41%							

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 3/5/2010 03:42:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICSA

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	97875.0	97875.0	97.5 %		03:43:05
1	Al 396.153Radial†	1071820.5	1099288.8	519210 µg/L	519210 ppb	03:42:59
1	Ca 317.933Radial†	1477222.6	1514141.0	488370 µg/L	488370 ppb	03:42:59
1	Fe 238.204 Radial†	18729.4	19188.7	188150 µg/L	188150 ppb	03:43:05
1	K 766.490 Radial†	181.7	-137.7	-67.816 µg/L	-67.816 ppb	03:43:05
1	Mg 279.077 IEC†	44202.0	45308.9	495980 µg/L	495980 ppb	03:43:05
1	Na 589.592 Radial†	123.1	-85.4	-37.471 µg/L	-37.471 ppb	03:43:05
1	Sr 421.552†	750.1	620.0	3.3498 µg/L	3.3498 ppb	03:43:05
1	Sc 361.383	1803376.2	1803376.2	93.847 %		03:43:40
1	Y 371.029	1244702.8	1244702.8	93.025 %		03:43:40
1	Ag 328.068†	-2417.4	-2008.0	-1.8302 µg/L	-1.8302 ppb	03:44:01
1	As 188.979†	23.8	28.5	-39.944 µg/L	-39.944 ppb	03:44:01
1	B 249.677†	1572.2	1318.7	-35.294 µg/L	-35.294 ppb	03:43:40
1	Ba 233.527†	273.9	322.9	7.3178 µg/L	7.3178 ppb	03:44:01
1	Be 313.107†	-2023.7	-628.6	-0.3936 µg/L	-0.3936 ppb	03:43:40
1	Cd 226.502†	773.1	1003.5	3.1435 µg/L	3.1435 ppb	03:44:01
1	Co 228.616†	79.6	65.7	2.8181 µg/L	2.8181 ppb	03:44:01
1	Cr 267.716†	15.1	-58.5	-1.2897 µg/L	-1.2897 ppb	03:44:01
1	Cu 324.752†	-2177.2	-5909.1	-4.6809 µg/L	-4.6809 ppb	03:44:01
1	Mn 257.610†	5789.6	6952.1	-0.0093 µg/L	-0.0093 ppb	03:43:40
1	Mo 202.031†	-67.3	-79.7	-0.7246 µg/L	-0.7246 ppb	03:44:01
1	Ni 231.604†	289.4	-58.5	-0.8813 µg/L	-0.8813 ppb	03:44:01
1	P 214.914†	316.0	29.6	50.914 µg/L	50.914 ppb	03:44:01
1	Pb 220.353†	-88.7	-150.6	2.2941 µg/L	2.2941 ppb	03:44:01
1	S 181.975 Axial†	-23.8	-48.9	-155.64 µg/L	-155.64 ppb	03:44:01
1	Sb 206.836†	31.6	6.1	-1.9231 µg/L	-1.9231 ppb	03:44:01
1	Se 196.026†	-151.7	-182.2	7.1236 µg/L	7.1236 ppb	03:44:01
1	SiO2†	2026.2	-176.8	-33.418 µg/L	-33.418 ppb	03:44:01
1	Si 251.611†	433.5	64.1	4.5387 µg/L	4.5387 ppb	03:44:01
1	Sn 189.927†	-102.1	-110.7	-263.77 µg/L	-263.77 ppb	03:44:01
1	Ti 334.940†	11269.7	12691.3	-0.8719 µg/L	-0.8719 ppb	03:43:40
1	Tl 190.801†	4.3	40.7	-26.807 µg/L	-26.807 ppb	03:44:01
1	U 409.014†	89.5	125.5	-44.687 µg/L	-44.687 ppb	03:43:40
1	V 292.402†	2344.4	2401.2	-5.3794 µg/L	-5.3794 ppb	03:44:01
1	Zn 213.857†	1996.9	1537.2	-1.3764 µg/L	-1.3764 ppb	03:44:01
2	Sc RADIAL	98191.4	98191.4	97.9 %		03:43:17
2	Al 396.153Radial†	1071519.6	1095440.9	517390 µg/L	517390 ppb	03:43:11
2	Ca 317.933Radial†	1479279.3	1511363.3	487470 µg/L	487470 ppb	03:43:11
2	Fe 238.204 Radial†	18793.0	19191.8	188180 µg/L	188180 ppb	03:43:17
2	K 766.490 Radial†	161.0	-159.4	-78.485 µg/L	-78.485 ppb	03:43:17
2	Mg 279.077 IEC†	44224.4	45185.8	494630 µg/L	494630 ppb	03:43:17
2	Na 589.592 Radial†	166.2	-41.8	-18.345 µg/L	-18.345 ppb	03:43:17
2	Sr 421.552†	771.3	639.2	3.4536 µg/L	3.4536 ppb	03:43:17
2	Sc 361.383	1797866.8	1797866.8	93.560 %		03:44:09
2	Y 371.029	1240013.2	1240013.2	92.675 %		03:44:09
2	Ag 328.068†	-2432.2	-2031.7	-2.0233 µg/L	-2.0233 ppb	03:44:30
2	As 188.979†	27.5	32.6	-33.713 µg/L	-33.713 ppb	03:44:30
2	B 249.677†	1723.4	1485.4	-27.360 µg/L	-27.360 ppb	03:44:09
2	Ba 233.527†	289.3	340.3	7.7097 µg/L	7.7097 ppb	03:44:30
2	Be 313.107†	-2034.3	-646.5	-0.4043 µg/L	-0.4043 ppb	03:44:09
2	Cd 226.502†	751.8	983.3	2.6466 µg/L	2.6466 ppb	03:44:30
2	Co 228.616†	100.7	88.6	3.8209 µg/L	3.8209 ppb	03:44:30
2	Cr 267.716†	14.1	-59.5	-1.3125 µg/L	-1.3125 ppb	03:44:30
2	Cu 324.752†	-2122.6	-5857.9	-4.3280 µg/L	-4.3280 ppb	03:44:30
2	Mn 257.610†	5819.8	7003.3	0.2477 µg/L	0.2477 ppb	03:44:09
2	Mo 202.031†	-76.4	-89.7	-1.7102 µg/L	-1.7102 ppb	03:44:30
2	Ni 231.604†	263.4	-85.3	-2.4058 µg/L	-2.4058 ppb	03:44:30
2	P 214.914†	305.0	19.0	32.045 µg/L	32.045 ppb	03:44:30
2	Pb 220.353†	-101.2	-164.3	-1.4547 µg/L	-1.4547 ppb	03:44:30

2	S 181.975 Axial†	-27.8	-53.3	-169.40 µg/L	-169.40 ppb	03:44:30
2	Sb 206.836†	26.9	1.2	-6.3857 µg/L	-6.3857 ppb	03:44:30
2	Se 196.026†	-149.9	-180.8	9.6639 µg/L	9.6639 ppb	03:44:30
2	SiO2†	2054.9	-139.6	-26.386 µg/L	-26.386 ppb	03:44:30
2	Si 251.611†	452.9	86.3	6.1080 µg/L	6.1080 ppb	03:44:30
2	Sn 189.927†	-115.2	-125.0	-269.45 µg/L	-269.45 ppb	03:44:30
2	Ti 334.940†	11059.3	12503.3	-1.2331 µg/L	-1.2331 ppb	03:44:09
2	Tl 190.801†	-2.6	33.3	-34.148 µg/L	-34.148 ppb	03:44:30
2	U 409.014†	119.8	158.2	-41.699 µg/L	-41.699 ppb	03:44:09
2	V 292.402†	2323.1	2386.1	-5.5745 µg/L	-5.5745 ppb	03:44:30
2	Zn 213.857†	2000.9	1548.0	-1.0460 µg/L	-1.0460 ppb	03:44:30
3	Sc RADIAL	98827.1	98827.1	98.5 %		03:43:28
3	Al 396.153Radial†	1072060.1	1088945.6	514320 µg/L	514320 ppb	03:43:23
3	Ca 317.933Radial†	1481276.3	1503666.4	484990 µg/L	484990 ppb	03:43:23
3	Fe 238.204 Radial†	18932.5	19209.9	188350 µg/L	188350 ppb	03:43:28
3	K 766.490 Radial†	97.3	-225.2	-110.88 µg/L	-110.88 ppb	03:43:28
3	Mg 279.077 IEC†	44617.7	45294.4	495820 µg/L	495820 ppb	03:43:28
3	Na 589.592 Radial†	121.3	-88.5	-38.805 µg/L	-38.805 ppb	03:43:28
3	Sr 421.552†	732.2	594.4	3.2116 µg/L	3.2116 ppb	03:43:28
3	Sc 361.383	1796507.6	1796507.6	93.490 %		03:44:38
3	Y 371.029	1239762.3	1239762.3	92.656 %		03:44:38
3	Ag 328.068†	-2445.6	-2048.1	-2.1390 µg/L	-2.1390 ppb	03:44:59
3	As 188.979†	28.8	34.0	-31.264 µg/L	-31.264 ppb	03:44:59
3	B 249.677†	1614.0	1369.8	-32.965 µg/L	-32.965 ppb	03:44:38
3	Ba 233.527†	278.1	328.6	7.4467 µg/L	7.4467 ppb	03:44:59
3	Be 313.107†	-1894.1	-498.3	-0.3143 µg/L	-0.3143 ppb	03:44:38
3	Cd 226.502†	778.4	1012.2	3.3344 µg/L	3.3344 ppb	03:44:59
3	Co 228.616†	92.5	79.8	3.4373 µg/L	3.4373 ppb	03:44:59
3	Cr 267.716†	-15.7	-91.3	-2.0226 µg/L	-2.0226 ppb	03:44:59
3	Cu 324.752†	-2189.1	-5930.7	-4.7884 µg/L	-4.7884 ppb	03:44:59
3	Mn 257.610†	5874.4	7066.4	0.3803 µg/L	0.3803 ppb	03:44:38
3	Mo 202.031†	-75.3	-88.5	-1.5889 µg/L	-1.5889 ppb	03:44:59
3	Ni 231.604†	315.5	-29.4	0.7722 µg/L	0.7722 ppb	03:44:59
3	P 214.914†	299.7	13.6	21.929 µg/L	21.929 ppb	03:44:59
3	Pb 220.353†	-81.2	-143.0	3.9495 µg/L	3.9495 ppb	03:44:59
3	S 181.975 Axial†	-25.0	-50.3	-159.81 µg/L	-159.81 ppb	03:44:59
3	Sb 206.836†	21.4	-4.7	-11.672 µg/L	-11.672 ppb	03:44:59
3	Se 196.026†	-151.1	-182.2	8.2249 µg/L	8.2249 ppb	03:44:59
3	SiO2†	2046.8	-146.6	-27.699 µg/L	-27.699 ppb	03:44:59
3	Si 251.611†	414.2	45.2	3.2030 µg/L	3.2030 ppb	03:44:59
3	Sn 189.927†	-106.0	-115.3	-265.54 µg/L	-265.54 ppb	03:44:59
3	Ti 334.940†	11183.4	12644.9	-1.0247 µg/L	-1.0247 ppb	03:44:38
3	Tl 190.801†	19.7	57.1	-9.4998 µg/L	-9.4998 ppb	03:44:59
3	U 409.014†	27.5	59.6	-50.418 µg/L	-50.418 ppb	03:44:38
3	V 292.402†	2380.6	2449.5	-4.8427 µg/L	-4.8427 ppb	03:44:59
3	Zn 213.857†	1999.8	1548.4	-1.1256 µg/L	-1.1256 ppb	03:44:59

## Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1799250.2	93.632 %	0.1893			0.20%
Sc RADIAL	98297.8	98.0 %	0.48			0.49%
Y 371.029	1241492.8	92.785 %	0.2080			0.22%
Ag 328.068†	-2029.3	-1.9975 µg/L	0.15603	-1.9975 ppb	0.15603	7.81%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1094558.4	516970 µg/L	2469.1	516970 ppb	2469.1	0.48%
QC value within limits for Al 396.153Radial Recovery = 103.39%						
As 188.979†	31.7	-34.973 µg/L	4.4754	-34.973 ppb	4.4754	12.80%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1391.3	-31.873 µg/L	4.0779	-31.873 ppb	4.0779	12.79%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	330.6	7.4914 µg/L	0.19975	7.4914 ppb	0.19975	2.67%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-591.1	-0.3707 µg/L	0.04913	-0.3707 ppb	0.04913	13.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1509723.6	486940 µg/L	1750.2	486940 ppb	1750.2	0.36%
QC value within limits for Ca 317.933Radial Recovery = 97.39%						
Cd 226.502†	999.7	3.0415 µg/L	0.35506	3.0415 ppb	0.35506	11.67%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	78.0	3.3588 µg/L	0.50598	3.3588 ppb	0.50598	15.06%

Cr	267.716†	-69.8	-1.5416 µg/L	0.41674	-1.5416 ppb	0.41674	27.03%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-5899.2	-4.5991 µg/L	0.24085	-4.5991 ppb	0.24085	5.24%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	19196.8	188230 µg/L	112.1	188230 ppb	112.1	0.06%
QC value within limits for Fe 238.204 Radial Recovery = 94.11%							
K	766.490 Radial†	-174.1	-85.726 µg/L	22.4248	-85.726 ppb	22.4248	26.16%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	45263.0	495480 µg/L	736.8	495480 ppb	736.8	0.15%
QC value within limits for Mg 279.077 IEC Recovery = 99.10%							
Mn	257.610†	7007.3	0.2062 µg/L	0.19806	0.2062 ppb	0.19806	96.04%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-85.9	-1.3412 µg/L	0.53747	-1.3412 ppb	0.53747	40.07%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-71.9	-31.540 µg/L	11.4468	-31.540 ppb	11.4468	36.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-57.7	-0.8383 µg/L	1.58943	-0.8383 ppb	1.58943	189.60%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	20.7	34.962 µg/L	14.7111	34.962 ppb	14.7111	42.08%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-152.7	1.5963 µg/L	2.76885	1.5963 ppb	2.76885	173.45%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-50.8	-161.62 µg/L	7.052	-161.62 ppb	7.052	4.36%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.8	-6.6602 µg/L	4.88022	-6.6602 ppb	4.88022	73.27%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-181.7	8.3375 µg/L	1.27391	8.3375 ppb	1.27391	15.28%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-154.3	-29.168 µg/L	3.7386	-29.168 ppb	3.7386	12.82%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	65.2	4.6166 µg/L	1.45404	4.6166 ppb	1.45404	31.50%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-117.0	-266.25 µg/L	2.905	-266.25 ppb	2.905	1.09%
QC value less than the lower limit for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	617.8	3.3383 µg/L	0.12140	3.3383 ppb	0.12140	3.64%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	12613.2	-1.0432 µg/L	0.18134	-1.0432 ppb	0.18134	17.38%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	43.7	-23.485 µg/L	12.6555	-23.485 ppb	12.6555	53.89%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	114.4	-45.601 µg/L	4.4304	-45.601 ppb	4.4304	9.72%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	2412.3	-5.2656 µg/L	0.37895	-5.2656 ppb	0.37895	7.20%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	1544.5	-1.1827 µg/L	0.17244	-1.1827 ppb	0.17244	14.58%
QC value within limits for Zn 213.857 Recovery = Not calculated							

QC Failed. Continue with analysis.



Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 3/5/2010 03:45:08

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	97642.1	97642.1	97.3 %		03:45:48
1	Al 396.153Radial†	1062898.7	1092741.6	516110 µg/L	516110 ppb	03:45:42
1	Ca 317.933Radial†	1470799.6	1511153.4	487400 µg/L	487400 ppb	03:45:42
1	Fe 238.204 Radial†	18653.0	19155.9	187830 µg/L	187830 ppb	03:45:48
1	K 766.490 Radial†	10496.4	10463.2	5152.5 µg/L	5152.5 ppb	03:45:48
1	Mg 279.077 IEC†	44350.8	45569.9	498850 µg/L	498850 ppb	03:45:48
1	Na 589.592 Radial†	11371.5	11474.9	5033.7 µg/L	5033.7 ppb	03:45:48
1	Sr 421.552†	90813.0	93179.4	503.48 µg/L	503.48 ppb	03:45:48
1	Sc 361.383	1800032.7	1800032.7	93.673 %		03:46:25
1	Y 371.029	1243752.7	1243752.7	92.954 %		03:46:25
1	Ag 328.068†	26949.3	29337.5	258.98 µg/L	258.98 ppb	03:46:25
1	As 188.979†	348.1	374.8	478.49 µg/L	478.49 ppb	03:46:45
1	B 249.677†	11803.0	12243.6	486.61 µg/L	486.61 ppb	03:46:25
1	Ba 233.527†	21022.7	22473.8	506.61 µg/L	506.61 ppb	03:46:45
1	Be 313.107†	375205.5	402076.1	244.08 µg/L	244.08 ppb	03:46:25
1	Cd 226.502†	18715.5	20159.3	469.55 µg/L	469.55 ppb	03:46:45
1	Co 228.616†	9680.0	10314.7	452.62 µg/L	452.62 ppb	03:46:45
1	Cr 267.716†	20419.7	21724.3	486.03 µg/L	486.03 ppb	03:46:45
1	Cu 324.752†	73260.6	74619.7	541.09 µg/L	541.09 ppb	03:46:25
1	Mn 257.610†	148582.8	159401.6	488.68 µg/L	488.68 ppb	03:46:25
1	Mo 202.031†	4769.0	5083.1	509.53 µg/L	509.53 ppb	03:46:45
1	Ni 231.604†	7758.9	7916.1	451.68 µg/L	451.68 ppb	03:46:45
1	P 214.914†	1738.0	1548.4	2592.7 µg/L	2592.7 ppb	03:46:45
1	Pb 220.353†	1647.1	1702.2	491.50 µg/L	491.50 ppb	03:46:45
1	S 181.975 Axial†	767.8	796.2	2531.8 µg/L	2531.8 ppb	03:46:45
1	Sb 206.836†	561.9	572.3	512.67 µg/L	512.67 ppb	03:46:45
1	Se 196.026†	2162.2	2287.7	2432.2 µg/L	2432.2 ppb	03:46:45
1	SiO2†	56877.8	58383.6	11033 µg/L	11033 ppb	03:46:25
1	Si 251.611†	68932.5	73190.7	5181.8 µg/L	5181.8 ppb	03:46:25
1	Sn 189.927†	1121.7	1195.5	250.42 µg/L	250.42 ppb	03:46:45
1	Ti 334.940†	208035.7	222769.9	505.57 µg/L	505.57 ppb	03:46:25
1	Tl 190.801†	444.7	510.8	454.36 µg/L	454.36 ppb	03:46:45
1	U 409.014†	5145.9	5523.7	439.64 µg/L	439.64 ppb	03:46:25
1	V 292.402†	41855.7	44585.9	514.74 µg/L	514.74 ppb	03:46:25
1	Zn 213.857†	21301.8	22149.9	473.15 µg/L	473.15 ppb	03:46:45
2	Sc RADIAL	97831.8	97831.8	97.5 %		03:45:59
2	Al 396.153Radial†	1067596.8	1095442.3	517380 µg/L	517380 ppb	03:45:54
2	Ca 317.933Radial†	1475711.8	1513260.9	488080 µg/L	488080 ppb	03:45:54
2	Fe 238.204 Radial†	18676.2	19142.6	187700 µg/L	187700 ppb	03:45:59
2	K 766.490 Radial†	10437.9	10382.3	5112.7 µg/L	5112.7 ppb	03:45:59
2	Mg 279.077 IEC†	44450.5	45583.8	499000 µg/L	499000 ppb	03:45:59
2	Na 589.592 Radial†	11475.1	11558.5	5070.3 µg/L	5070.3 ppb	03:45:59
2	Sr 421.552†	90997.1	93187.3	503.52 µg/L	503.52 ppb	03:45:59
2	Sc 361.383	1808386.8	1808386.8	94.108 %		03:46:55
2	Y 371.029	1251608.5	1251608.5	93.541 %		03:46:55
2	Ag 328.068†	26920.6	29174.1	257.63 µg/L	257.63 ppb	03:46:55
2	As 188.979†	349.1	374.1	477.40 µg/L	477.40 ppb	03:47:15
2	B 249.677†	11789.6	12171.2	483.22 µg/L	483.22 ppb	03:46:55
2	Ba 233.527†	20982.1	22327.0	503.31 µg/L	503.31 ppb	03:47:15
2	Be 313.107†	377132.0	402272.8	244.20 µg/L	244.20 ppb	03:46:55
2	Cd 226.502†	18706.3	20057.2	467.08 µg/L	467.08 ppb	03:47:15
2	Co 228.616†	9651.4	10236.6	449.19 µg/L	449.19 ppb	03:47:15
2	Cr 267.716†	20373.8	21574.9	482.68 µg/L	482.68 ppb	03:47:15
2	Cu 324.752†	73697.4	74722.5	541.76 µg/L	541.76 ppb	03:46:55
2	Mn 257.610†	149475.7	159617.7	489.35 µg/L	489.35 ppb	03:46:55
2	Mo 202.031†	4744.0	5033.1	504.58 µg/L	504.58 ppb	03:47:15
2	Ni 231.604†	7732.8	7850.1	447.93 µg/L	447.93 ppb	03:47:15
2	P 214.914†	1722.0	1522.8	2549.3 µg/L	2549.3 ppb	03:47:15
2	Pb 220.353†	1630.2	1676.2	484.68 µg/L	484.68 ppb	03:47:15

2	S 181.975 Axial†	760.9	785.0	2496.4 µg/L	2496.4 ppb	03:47:15
2	Sb 206.836†	570.4	578.6	518.31 µg/L	518.31 ppb	03:47:15
2	Se 196.026†	2176.7	2292.4	2436.2 µg/L	2436.2 ppb	03:47:15
2	SiO2†	57118.1	58358.5	11028 µg/L	11028 ppb	03:46:55
2	Si 251.611†	69260.7	73199.5	5182.4 µg/L	5182.4 ppb	03:46:55
2	Sn 189.927†	1118.0	1186.1	246.82 µg/L	246.82 ppb	03:47:15
2	Ti 334.940†	209006.2	222775.2	505.59 µg/L	505.59 ppb	03:46:55
2	Tl 190.801†	449.7	513.9	457.37 µg/L	457.37 ppb	03:47:15
2	U 409.014†	5253.9	5613.0	447.63 µg/L	447.63 ppb	03:46:55
2	V 292.402†	42034.2	44569.2	514.52 µg/L	514.52 ppb	03:46:55
2	Zn 213.857†	21289.0	22031.3	470.42 µg/L	470.42 ppb	03:47:15
3	Sc RADIAL	96774.9	96774.9	96.4 %		03:46:11
3	Al 396.153Radial†	1071446.3	1111393.0	524920 µg/L	524920 ppb	03:46:05
3	Ca 317.933Radial†	1483819.5	1538198.7	496130 µg/L	496130 ppb	03:46:05
3	Fe 238.204 Radial†	18486.3	19154.9	187820 µg/L	187820 ppb	03:46:11
3	K 766.490 Radial†	10510.9	10574.9	5207.5 µg/L	5207.5 ppb	03:46:11
3	Mg 279.077 IEC†	44078.5	45696.0	500230 µg/L	500230 ppb	03:46:11
3	Na 589.592 Radial†	11358.5	11566.1	5073.7 µg/L	5073.7 ppb	03:46:11
3	Sr 421.552†	90220.2	93401.1	504.67 µg/L	504.67 ppb	03:46:11
3	Sc 361.383	1812276.1	1812276.1	94.310 %		03:47:24
3	Y 371.029	1252416.6	1252416.6	93.602 %		03:47:24
3	Ag 328.068†	26966.5	29161.3	257.53 µg/L	257.53 ppb	03:47:24
3	As 188.979†	346.0	370.1	470.33 µg/L	470.33 ppb	03:47:45
3	B 249.677†	11837.2	12194.7	484.28 µg/L	484.28 ppb	03:47:24
3	Ba 233.527†	21030.4	22330.3	503.38 µg/L	503.38 ppb	03:47:45
3	Be 313.107†	377992.4	402325.1	244.23 µg/L	244.23 ppb	03:47:24
3	Cd 226.502†	18757.0	20068.3	467.34 µg/L	467.34 ppb	03:47:45
3	Co 228.616†	9698.9	10265.0	450.43 µg/L	450.43 ppb	03:47:45
3	Cr 267.716†	20481.6	21642.8	484.20 µg/L	484.20 ppb	03:47:45
3	Cu 324.752†	73877.3	74745.3	541.94 µg/L	541.94 ppb	03:47:24
3	Mn 257.610†	149791.9	159612.0	489.26 µg/L	489.26 ppb	03:47:24
3	Mo 202.031†	4741.2	5019.3	503.22 µg/L	503.22 ppb	03:47:45
3	Ni 231.604†	7705.2	7803.1	445.26 µg/L	445.26 ppb	03:47:45
3	P 214.914†	1736.0	1533.7	2569.9 µg/L	2569.9 ppb	03:47:45
3	Pb 220.353†	1662.0	1706.1	493.16 µg/L	493.16 ppb	03:47:45
3	S 181.975 Axial†	778.5	801.9	2550.2 µg/L	2550.2 ppb	03:47:45
3	Sb 206.836†	568.4	575.1	515.05 µg/L	515.05 ppb	03:47:45
3	Se 196.026†	2166.1	2276.3	2419.0 µg/L	2419.0 ppb	03:47:45
3	SiO2†	57325.1	58447.7	11045 µg/L	11045 ppb	03:47:24
3	Si 251.611†	69467.0	73260.3	5186.7 µg/L	5186.7 ppb	03:47:24
3	Sn 189.927†	1117.4	1182.8	244.88 µg/L	244.88 ppb	03:47:45
3	Ti 334.940†	209434.7	222752.9	505.56 µg/L	505.56 ppb	03:47:24
3	Tl 190.801†	443.9	506.7	448.53 µg/L	448.53 ppb	03:47:45
3	U 409.014†	5294.6	5644.2	449.92 µg/L	449.92 ppb	03:47:24
3	V 292.402†	42156.5	44602.9	514.91 µg/L	514.91 ppb	03:47:24
3	Zn 213.857†	21332.3	22028.7	470.29 µg/L	470.29 ppb	03:47:45

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1806898.5	94.030 %	0.3256			0.35%
Sc RADIAL	97416.2	97.1 %	0.56			0.58%
Y 371.029	1249259.3	93.366 %	0.3577			0.38%
Ag 328.068†	29224.3	258.05 µg/L	0.810	258.05 ppb	0.810	0.31%
QC value within limits for Ag 328.068 Recovery = 103.22%						
Al 396.153Radial†	1099859.0	519470 µg/L	4760.8	519470 ppb	4760.8	0.92%
QC value within limits for Al 396.153Radial Recovery = 103.89%						
As 188.979†	373.0	475.41 µg/L	4.427	475.41 ppb	4.427	0.93%
QC value within limits for As 188.979 Recovery = 95.08%						
B 249.677†	12203.2	484.71 µg/L	1.735	484.71 ppb	1.735	0.36%
QC value within limits for B 249.677 Recovery = 96.94%						
Ba 233.527†	22377.0	504.43 µg/L	1.885	504.43 ppb	1.885	0.37%
QC value within limits for Ba 233.527 Recovery = 100.89%						
Be 313.107†	402224.7	244.17 µg/L	0.080	244.17 ppb	0.080	0.03%
QC value within limits for Be 313.107 Recovery = 97.67%						
Ca 317.933Radial†	1520871.0	490540 µg/L	4852.0	490540 ppb	4852.0	0.99%
QC value within limits for Ca 317.933Radial Recovery = 98.11%						
Cd 226.502†	20094.9	467.99 µg/L	1.360	467.99 ppb	1.360	0.29%
QC value within limits for Cd 226.502 Recovery = 93.60%						
Co 228.616†	10272.1	450.75 µg/L	1.740	450.75 ppb	1.740	0.39%

Cr 267.716†	21647.3	484.30 µg/L	1.673	484.30 ppb	1.673	0.35%
QC value within limits for Cr 267.716 Recovery = 96.86%						
Cu 324.752†	74695.8	541.60 µg/L	0.448	541.60 ppb	0.448	0.08%
QC value within limits for Cu 324.752 Recovery = 108.32%						
Fe 238.204 Radial†	19151.1	187790 µg/L	72.8	187790 ppb	72.8	0.04%
QC value within limits for Fe 238.204 Radial Recovery = 93.89%						
K 766.490 Radial†	10473.5	5157.6 µg/L	47.62	5157.6 ppb	47.62	0.92%
QC value within limits for K 766.490 Radial Recovery = 103.15%						
Mg 279.077 IEC†	45616.6	499360 µg/L	757.1	499360 ppb	757.1	0.15%
QC value within limits for Mg 279.077 IEC Recovery = 99.87%						
Mn 257.610†	159543.8	489.10 µg/L	0.366	489.10 ppb	0.366	0.07%
QC value within limits for Mn 257.610 Recovery = 97.82%						
Mo 202.031†	5045.2	505.78 µg/L	3.319	505.78 ppb	3.319	0.66%
QC value within limits for Mo 202.031 Recovery = 101.16%						
Na 589.592 Radial†	11533.1	5059.2 µg/L	22.20	5059.2 ppb	22.20	0.44%
QC value within limits for Na 589.592 Radial Recovery = 101.18%						
Ni 231.604†	7856.4	448.29 µg/L	3.224	448.29 ppb	3.224	0.72%
QC value within limits for Ni 231.604 Recovery = 89.66%						
P 214.914†	1534.9	2570.6 µg/L	21.67	2570.6 ppb	21.67	0.84%
QC value within limits for P 214.914 Recovery = 102.83%						
Pb 220.353†	1694.8	489.78 µg/L	4.492	489.78 ppb	4.492	0.92%
QC value within limits for Pb 220.353 Recovery = 97.96%						
S 181.975 Axial†	794.4	2526.1 µg/L	27.37	2526.1 ppb	27.37	1.08%
QC value within limits for S 181.975 Axial Recovery = 101.05%						
Sb 206.836†	575.3	515.35 µg/L	2.831	515.35 ppb	2.831	0.55%
QC value within limits for Sb 206.836 Recovery = 103.07%						
Se 196.026†	2285.5	2429.1 µg/L	9.01	2429.1 ppb	9.01	0.37%
QC value within limits for Se 196.026 Recovery = 97.17%						
SiO2†	58396.6	11035 µg/L	8.7	11035 ppb	8.7	0.08%
QC value within limits for SiO2 Recovery = 103.18%						
Si 251.611†	73216.8	5183.7 µg/L	2.68	5183.7 ppb	2.68	0.05%
QC value within limits for Si 251.611 Recovery = 103.67%						
Sn 189.927†	1188.2	247.37 µg/L	2.812	247.37 ppb	2.812	1.14%
QC value less than the lower limit for Sn 189.927 Recovery = 49.47%						
Sr 421.552†	93255.9	503.89 µg/L	0.679	503.89 ppb	0.679	0.13%
QC value within limits for Sr 421.552 Recovery = 100.78%						
Ti 334.940†	222766.0	505.57 µg/L	0.012	505.57 ppb	0.012	0.00%
QC value within limits for Ti 334.940 Recovery = 101.11%						
Tl 190.801†	510.5	453.42 µg/L	4.494	453.42 ppb	4.494	0.99%
QC value within limits for Tl 190.801 Recovery = 90.68%						
U 409.014†	5593.6	445.73 µg/L	5.396	445.73 ppb	5.396	1.21%
QC value within limits for U 409.014 Recovery = 89.15%						
V 292.402†	44586.0	514.72 µg/L	0.193	514.72 ppb	0.193	0.04%
QC value within limits for V 292.402 Recovery = 102.94%						
Zn 213.857†	22070.0	471.29 µg/L	1.616	471.29 ppb	1.616	0.34%
QC value within limits for Zn 213.857 Recovery = 94.26%						
QC Failed. Continue with analysis.						

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 3/5/2010 03:47:55

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	96392.4	96392.4	96.1 %		03:48:35
1	Al 396.153Radial†	1069254.0	1113518.5	525930 µg/L	525930 ppb	03:48:29
1	Ca 317.933Radial†	1481930.8	1542336.5	497460 µg/L	497460 ppb	03:48:29
1	Fe 238.204 Radial†	44619.7	46436.4	455310 µg/L	455310 ppb	03:48:35
1	K 766.490 Radial†	244.6	-69.3	-34.142 µg/L	-34.142 ppb	03:48:35
1	Mg 279.077 IEC†	43886.3	45677.3	499730 µg/L	499730 ppb	03:48:35
1	Na 589.592 Radial†	1093563.1	1138212.8	499300 µg/L	499300 ppb	03:48:29
1	Sr 421.552†	2240.0	2182.8	11.794 µg/L	11.794 ppb	03:48:35
1	Sc 361.383	1773633.6	1773633.6	92.299 %		03:49:12
1	Y 371.029	1220606.7	1220606.7	91.224 %		03:49:12
1	Ag 328.068†	-4833.6	-4669.0	-2.9581 µg/L	-2.9581 ppb	03:49:12
1	As 188.979†	15.3	19.8	-87.073 µg/L	-87.073 ppb	03:49:33
1	B 249.677†	3100.1	3002.2	-94.409 µg/L	-94.409 ppb	03:49:12
1	Ba 233.527†	639.2	723.6	16.383 µg/L	16.383 ppb	03:49:33
1	Be 313.107†	-9582.4	-8854.1	-5.3943 µg/L	-5.3943 ppb	03:49:12
1	Cd 226.502†	1993.5	2339.5	5.4488 µg/L	5.4488 ppb	03:49:33
1	Co 228.616†	254.0	256.1	11.153 µg/L	11.153 ppb	03:49:33
1	Cr 267.716†	380.9	338.1	7.5951 µg/L	7.5951 ppb	03:49:33
1	Cu 324.752†	-8398.5	-12688.3	-0.4041 µg/L	-0.4041 ppb	03:49:33
1	Mn 257.610†	6579.0	7910.9	18.610 µg/L	18.610 ppb	03:49:12
1	Mo 202.031†	-188.9	-212.6	-3.7136 µg/L	-3.7136 ppb	03:49:33
1	Ni 231.604†	261.6	-83.5	1.1626 µg/L	1.1626 ppb	03:49:33
1	P 214.914†	452.5	183.2	102.95 µg/L	102.95 ppb	03:49:33
1	Pb 220.353†	-12.7	-69.8	13.298 µg/L	13.298 ppb	03:49:33
1	S 181.975 Axial†	-38.8	-65.6	-208.47 µg/L	-208.47 ppb	03:49:33
1	Sb 206.836†	15.9	-10.3	-17.219 µg/L	-17.219 ppb	03:49:33
1	Se 196.026†	-353.0	-403.0	635.72 µg/L	635.72 ppb	03:49:33
1	SiO2†	2149.3	-7.3	-1.3806 µg/L	-1.3806 ppb	03:49:33
1	Si 251.611†	-215.6	-631.4	-44.702 µg/L	-44.702 ppb	03:49:33
1	Sn 189.927†	-88.4	-97.7	-566.55 µg/L	-566.55 ppb	03:49:33
1	Ti 334.940†	14412.1	16297.3	7.6503 µg/L	7.6503 ppb	03:49:12
1	Tl 190.801†	-13.3	21.7	8.0312 µg/L	8.0312 ppb	03:49:33
1	U 409.014†	152145.0	164869.1	14695 µg/L	14695 ppb	03:49:12
1	V 292.402†	4388.8	4658.1	-11.736 µg/L	-11.736 ppb	03:49:33
1	Zn 213.857†	3405.7	3099.2	21.972 µg/L	21.972 ppb	03:49:33
2	Sc RADIAL	96458.8	96458.8	96.1 %		03:48:47
2	Al 396.153Radial†	1070108.0	1113640.9	525990 µg/L	525990 ppb	03:48:41
2	Ca 317.933Radial†	1482874.8	1542257.1	497430 µg/L	497430 ppb	03:48:41
2	Fe 238.204 Radial†	44731.3	46520.5	456140 µg/L	456140 ppb	03:48:47
2	K 766.490 Radial†	175.0	-141.9	-69.896 µg/L	-69.896 ppb	03:48:47
2	Mg 279.077 IEC†	43911.2	45671.7	499660 µg/L	499660 ppb	03:48:47
2	Na 589.592 Radial†	1095926.5	1139888.1	500030 µg/L	500030 ppb	03:48:41
2	Sr 421.552†	2245.9	2187.3	11.819 µg/L	11.819 ppb	03:48:47
2	Sc 361.383	1786138.7	1786138.7	92.950 %		03:49:41
2	Y 371.029	1228059.9	1228059.9	91.781 %		03:49:41
2	Ag 328.068†	-4993.2	-4804.1	-3.9861 µg/L	-3.9861 ppb	03:49:41
2	As 188.979†	6.1	9.7	-102.28 µg/L	-102.28 ppb	03:50:02
2	B 249.677†	3077.0	2953.8	-97.145 µg/L	-97.145 ppb	03:49:41
2	Ba 233.527†	633.8	712.9	16.147 µg/L	16.147 ppb	03:50:02
2	Be 313.107†	-9360.1	-8542.2	-5.2041 µg/L	-5.2041 ppb	03:49:41
2	Cd 226.502†	2014.6	2347.1	5.5386 µg/L	5.5386 ppb	03:50:02
2	Co 228.616†	242.2	241.4	10.513 µg/L	10.513 ppb	03:50:02
2	Cr 267.716†	390.5	345.6	7.7629 µg/L	7.7629 ppb	03:50:02
2	Cu 324.752†	-8468.6	-12700.1	-0.3286 µg/L	-0.3286 ppb	03:50:02
2	Mn 257.610†	6633.7	7919.8	18.691 µg/L	18.691 ppb	03:49:41
2	Mo 202.031†	-192.3	-214.8	-3.8982 µg/L	-3.8982 ppb	03:50:02
2	Ni 231.604†	243.6	-104.8	-0.0384 µg/L	-0.0384 ppb	03:50:02
2	P 214.914†	455.7	183.2	102.37 µg/L	102.37 ppb	03:50:02
2	Pb 220.353†	-3.8	-60.2	15.896 µg/L	15.896 ppb	03:50:02

2	S 181.975 Axial†	-32.8	-58.8	-187.01 µg/L	-187.01 ppb	03:50:02
2	Sb 206.836†	12.6	-14.1	-20.603 µg/L	-20.603 ppb	03:50:02
2	Se 196.026†	-344.3	-391.0	650.27 µg/L	650.27 ppb	03:50:02
2	SiO2†	2182.6	12.2	2.3033 µg/L	2.3033 ppb	03:50:02
2	Si 251.611†	-216.9	-631.1	-44.684 µg/L	-44.684 ppb	03:50:02
2	Sn 189.927†	-95.9	-105.1	-570.42 µg/L	-570.42 ppb	03:50:02
2	Ti 334.940†	13790.4	15519.1	5.7778 µg/L	5.7778 ppb	03:49:41
2	Tl 190.801†	-22.0	12.4	-1.2685 µg/L	-1.2685 ppb	03:50:02
2	U 409.014†	152871.2	164496.3	14662 µg/L	14662 ppb	03:49:41
2	V 292.402†	4624.5	4878.4	-9.2362 µg/L	-9.2362 ppb	03:50:02
2	Zn 213.857†	3400.5	3067.8	21.214 µg/L	21.214 ppb	03:50:02
3	Sc RADIAL	96117.9	96117.9	95.8 %		03:48:59
3	Al 396.153Radial†	1060275.8	1107324.4	523000 µg/L	523000 ppb	03:48:53
3	Ca 317.933Radial†	1468698.7	1532928.4	494430 µg/L	494430 ppb	03:48:53
3	Fe 238.204 Radial†	44432.1	46373.2	454690 µg/L	454690 ppb	03:48:59
3	K 766.490 Radial†	302.9	-7.8	-3.8172 µg/L	-3.8172 ppb	03:48:59
3	Mg 279.077 IEC†	43648.8	45559.8	498440 µg/L	498440 ppb	03:48:59
3	Na 589.592 Radial†	1085818.7	1133379.1	497180 µg/L	497180 ppb	03:48:53
3	Sr 421.552†	2277.8	2228.9	12.043 µg/L	12.043 ppb	03:48:59
3	Sc 361.383	1789079.6	1789079.6	93.103 %		03:50:10
3	Y 371.029	1229358.2	1229358.2	91.878 %		03:50:10
3	Ag 328.068†	-4936.3	-4734.1	-3.5366 µg/L	-3.5366 ppb	03:50:10
3	As 188.979†	8.2	12.0	-98.324 µg/L	-98.324 ppb	03:50:31
3	B 249.677†	3085.0	2956.9	-96.243 µg/L	-96.243 ppb	03:50:10
3	Ba 233.527†	652.4	731.8	16.568 µg/L	16.568 ppb	03:50:31
3	Be 313.107†	-9588.4	-8770.9	-5.3429 µg/L	-5.3429 ppb	03:50:10
3	Cd 226.502†	1973.3	2299.2	4.5357 µg/L	4.5357 ppb	03:50:31
3	Co 228.616†	246.0	245.1	10.677 µg/L	10.677 ppb	03:50:31
3	Cr 267.716†	405.3	360.8	8.1018 µg/L	8.1018 ppb	03:50:31
3	Cu 324.752†	-8401.6	-12613.2	-0.0113 µg/L	-0.0113 ppb	03:50:31
3	Mn 257.610†	6577.7	7848.0	18.458 µg/L	18.458 ppb	03:50:10
3	Mo 202.031†	-185.3	-207.0	-3.1761 µg/L	-3.1761 ppb	03:50:31
3	Ni 231.604†	234.8	-114.7	-0.6200 µg/L	-0.6200 ppb	03:50:31
3	P 214.914†	451.1	177.5	92.697 µg/L	92.697 ppb	03:50:31
3	Pb 220.353†	-19.5	-77.1	11.176 µg/L	11.176 ppb	03:50:31
3	S 181.975 Axial†	-41.2	-67.8	-215.46 µg/L	-215.46 ppb	03:50:31
3	Sb 206.836†	16.4	-10.0	-16.871 µg/L	-16.871 ppb	03:50:31
3	Se 196.026†	-349.2	-395.6	642.31 µg/L	642.31 ppb	03:50:31
3	SiO2†	2178.4	3.8	0.7173 µg/L	0.7173 ppb	03:50:31
3	Si 251.611†	-199.1	-611.7	-43.305 µg/L	-43.305 ppb	03:50:31
3	Sn 189.927†	-106.1	-115.9	-572.85 µg/L	-572.85 ppb	03:50:31
3	Ti 334.940†	13739.4	15439.9	5.6360 µg/L	5.6360 ppb	03:50:10
3	Tl 190.801†	-14.4	20.6	7.3388 µg/L	7.3388 ppb	03:50:31
3	U 409.014†	153197.0	164575.9	14669 µg/L	14669 ppb	03:50:10
3	V 292.402†	4470.2	4704.5	-11.078 µg/L	-11.078 ppb	03:50:31
3	Zn 213.857†	3404.1	3065.7	21.305 µg/L	21.305 ppb	03:50:31

## Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1782950.7	92.784 %	0.4268			0.46%
Sc RADIAL	96323.1	96.0 %	0.18			0.19%
Y 371.029	1226008.3	91.628 %	0.3530			0.39%
Ag 328.068†	-4735.7	-3.4936 µg/L	0.51537	-3.4936 ppb	0.51537	14.75%
Al 396.153Radial†	1111494.6	524970 µg/L	1706.0	524970 ppb	1706.0	0.32%
QC value within limits for Al 396.153Radial Recovery = 104.99%						
As 188.979†	13.9	-95.893 µg/L	7.8896	-95.893 ppb	7.8896	8.23%
B 249.677†	2971.0	-95.933 µg/L	1.3940	-95.933 ppb	1.3940	1.45%
Ba 233.527†	722.8	16.366 µg/L	0.2109	16.366 ppb	0.2109	1.29%
Be 313.107†	-8722.4	-5.3138 µg/L	0.09841	-5.3138 ppb	0.09841	1.85%
Ca 317.933Radial†	1539174.0	496440 µg/L	1744.6	496440 ppb	1744.6	0.35%
QC value within limits for Ca 317.933Radial Recovery = 99.29%						
Cd 226.502†	2328.6	5.1744 µg/L	0.55492	5.1744 ppb	0.55492	10.72%
Co 228.616†	247.6	10.781 µg/L	0.3324	10.781 ppb	0.3324	3.08%
Cr 267.716†	348.1	7.8199 µg/L	0.25814	7.8199 ppb	0.25814	3.30%
Cu 324.752†	-12667.2	-0.2480 µg/L	0.20843	-0.2480 ppb	0.20843	84.04%
Fe 238.204 Radial†	46443.3	455380 µg/L	724.6	455380 ppb	724.6	0.16%
QC value within limits for Fe 238.204 Radial Recovery = 91.08%						
K 766.490 Radial†	-73.0	-35.952 µg/L	33.0766	-35.952 ppb	33.0766	92.00%
Mg 279.077 IEC†	45636.3	499280 µg/L	725.3	499280 ppb	725.3	0.15%

QC value within limits for Mg 279.077 IEC Recovery = 99.86%

Mn 257.610†	7892.9	18.586 µg/L	0.1184	18.586 ppb	0.1184	0.64%
Mo 202.031†	-211.5	-3.5960 µg/L	0.37515	-3.5960 ppb	0.37515	10.43%
Na 589.592 Radial†	1137160.0	498840 µg/L	1482.6	498840 ppb	1482.6	0.30%

QC value within limits for Na 589.592 Radial Recovery = 99.77%

Ni 231.604†	-101.0	0.1681 µg/L	0.90904	0.1681 ppb	0.90904	540.81%
P 214.914†	181.3	99.342 µg/L	5.7619	99.342 ppb	5.7619	5.80%
Pb 220.353†	-69.1	13.457 µg/L	2.3641	13.457 ppb	2.3641	17.57%
S 181.975 Axial†	-64.0	-203.65 µg/L	14.825	-203.65 ppb	14.825	7.28%
Sb 206.836†	-11.5	-18.231 µg/L	2.0615	-18.231 ppb	2.0615	11.31%
Se 196.026†	-396.5	642.77 µg/L	7.287	642.77 ppb	7.287	1.13%
SiO2†	2.9	0.5467 µg/L	1.84787	0.5467 ppb	1.84787	338.02%
Si 251.611†	-624.7	-44.230 µg/L	0.8017	-44.230 ppb	0.8017	1.81%
Sn 189.927†	-106.2	-569.94 µg/L	3.177	-569.94 ppb	3.177	0.56%
Sr 421.552†	2199.7	11.885 µg/L	0.1372	11.885 ppb	0.1372	1.15%
Ti 334.940†	15752.1	6.3547 µg/L	1.12422	6.3547 ppb	1.12422	17.69%
Tl 190.801†	18.2	4.7005 µg/L	5.18088	4.7005 ppb	5.18088	110.22%
U 409.014†	164647.1	14675 µg/L	17.6	14675 ppb	17.6	0.12%

QC value within limits for U 409.014 Recovery = 97.84%

V 292.402†	4747.0	-10.683 µg/L	1.2957	-10.683 ppb	1.2957	12.13%
Zn 213.857†	3077.5	21.497 µg/L	0.4143	21.497 ppb	0.4143	1.93%

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 3/5/2010 03:50:41

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	99427.9	99427.9	99.1 %		03:51:24
1	Al 396.153Radial†	564.9	970.5	243.89 µg/L	243.89 ppb	03:51:24
1	Ca 317.933Radial†	550.1	167.6	54.056 µg/L	54.056 ppb	03:51:44
1	Fe 238.204 Radial†	9.7	-3.9	173.32 µg/L	173.32 ppb	03:51:44
1	K 766.490 Radial†	618174.2	623563.2	307070 µg/L	307070 ppb	03:51:18
1	Mg 279.077 IEC†	-2.0	-11.4	50.651 µg/L	50.651 ppb	03:51:44
1	Na 589.592 Radial†	1051.2	849.3	372.55 µg/L	372.55 ppb	03:51:24
1	Sr 421.552†	1878717.7	1895931.0	10244 µg/L	10244 ppb	03:51:18
1	Sc 361.383	1877349.0	1877349.0	97.696 %		03:53:17
1	Y 371.029	1294640.3	1294640.3	96.757 %		03:53:17
1	Ag 328.068†	-6701.5	-6291.6	17.346 µg/L	17.346 ppb	03:53:23
1	As 188.979†	6714.1	6875.6	10290 µg/L	10290 ppb	03:53:23
1	B 249.677†	105061.1	107181.7	5152.1 µg/L	5152.1 ppb	03:53:17
1	Ba 233.527†	666978.1	682735.3	15379 µg/L	15379 ppb	03:53:17
1	Be 313.107†	4815871.9	4930949.5	2991.9 µg/L	2991.9 ppb	03:53:07
1	Cd 226.502†	407431.2	417217.3	10158 µg/L	10158 ppb	03:53:17
1	Co 228.616†	221766.7	226976.5	9963.0 µg/L	9963.0 ppb	03:53:17
1	Cr 267.716†	1123476.4	1149891.4	25714 µg/L	25714 ppb	03:53:17
1	Cu 324.752†	3029281.5	3097117.5	20992 µg/L	20992 ppb	03:53:17
1	Mn 257.610†	3037171.6	3109565.7	9972.2 µg/L	9972.2 ppb	03:53:17
1	Mo 202.031†	103206.3	105631.8	10440 µg/L	10440 ppb	03:53:17
1	Ni 231.604†	176723.0	180522.9	10245 µg/L	10245 ppb	03:53:17
1	P 214.914†	12557.3	12546.4	19362 µg/L	19362 ppb	03:53:23
1	Pb 220.353†	96548.5	98768.8	26083 µg/L	26083 ppb	03:53:17
1	S 181.975 Axial†	16845.1	17218.7	54757 µg/L	54757 ppb	03:53:23
1	Sb 206.836†	11506.9	11750.6	10501 µg/L	10501 ppb	03:53:23
1	Se 196.026†	10286.2	10508.1	10330 µg/L	10330 ppb	03:53:23
1	SiO2†	530073.7	540236.0	102090 µg/L	102090 ppb	03:53:17
1	Si 251.611†	656896.7	671987.4	47576 µg/L	47576 ppb	03:53:17
1	Sn 189.927†	27372.0	28015.4	11014 µg/L	11014 ppb	03:53:23
1	Ti 334.940†	4090604.3	4187736.3	10100 µg/L	10100 ppb	03:53:07
1	Tl 190.801†	9907.4	10177.1	10390 µg/L	10390 ppb	03:53:23
1	U 409.014†	-1311.2	-1311.9	-117.68 µg/L	-117.68 ppb	03:53:17
1	V 292.402†	837908.1	857567.6	10596 µg/L	10596 ppb	03:53:17
1	Zn 213.857†	642667.7	657230.0	15148 µg/L	15148 ppb	03:53:17
2	Sc RADIAL	98621.2	98621.2	98.3 %		03:51:56
2	Al 396.153Radial†	529.3	939.0	234.61 µg/L	234.61 ppb	03:51:56
2	Ca 317.933Radial†	568.5	190.8	61.553 µg/L	61.553 ppb	03:52:17
2	Fe 238.204 Radial†	12.2	-1.3	193.10 µg/L	193.10 ppb	03:52:17
2	K 766.490 Radial†	608430.3	618752.0	304700 µg/L	304700 ppb	03:51:51
2	Mg 279.077 IEC†	2.4	-7.0	94.699 µg/L	94.699 ppb	03:52:17
2	Na 589.592 Radial†	881.7	685.5	300.71 µg/L	300.71 ppb	03:51:56
2	Sr 421.552†	1853738.9	1886024.3	10191 µg/L	10191 ppb	03:51:51
2	Sc 361.383	1900082.6	1900082.6	98.880 %		03:53:42
2	Y 371.029	1309304.3	1309304.3	97.853 %		03:53:42
2	Ag 328.068†	-6333.8	-5837.7	18.887 µg/L	18.887 ppb	03:53:47
2	As 188.979†	6477.9	6554.5	9809.1 µg/L	9809.1 ppb	03:53:47
2	B 249.677†	104682.4	105512.0	5070.9 µg/L	5070.9 ppb	03:53:42
2	Ba 233.527†	660755.8	668274.4	15053 µg/L	15053 ppb	03:53:42
2	Be 313.107†	4829777.1	4886034.2	2964.7 µg/L	2964.7 ppb	03:53:32
2	Cd 226.502†	402533.5	407274.5	9916.0 µg/L	9916.0 ppb	03:53:42
2	Co 228.616†	218382.3	220837.9	9693.2 µg/L	9693.2 ppb	03:53:42
2	Cr 267.716†	1092845.0	1105154.1	24714 µg/L	24714 ppb	03:53:42
2	Cu 324.752†	2974134.0	3004246.6	20363 µg/L	20363 ppb	03:53:42
2	Mn 257.610†	2983156.8	3017743.8	9677.8 µg/L	9677.8 ppb	03:53:42
2	Mo 202.031†	101730.6	102875.4	10168 µg/L	10168 ppb	03:53:42
2	Ni 231.604†	174228.1	175835.5	9979.1 µg/L	9979.1 ppb	03:53:42
2	P 214.914†	11891.5	11719.2	18004 µg/L	18004 ppb	03:53:47
2	Pb 220.353†	95963.9	96995.2	25614 µg/L	25614 ppb	03:53:42

2	S 181.975 Axial†	16104.1	16263.1	51718 µg/L	51718 ppb	03:53:47
2	Sb 206.836†	10944.7	11041.1	9866.4 µg/L	9866.4 ppb	03:53:47
2	Se 196.026†	9932.3	10024.3	9854.5 µg/L	9854.5 ppb	03:53:47
2	SiO2†	528033.5	531681.1	100470 µg/L	100470 ppb	03:53:42
2	Si 251.611†	654841.6	661864.3	46859 µg/L	46859 ppb	03:53:42
2	Sn 189.927†	25566.9	25854.7	10165 µg/L	10165 ppb	03:53:47
2	Ti 334.940†	4099900.5	4147041.9	10002 µg/L	10002 ppb	03:53:32
2	Tl 190.801†	9678.7	9824.5	10032 µg/L	10032 ppb	03:53:47
2	U 409.014†	-1196.0	-1179.4	-105.80 µg/L	-105.80 ppb	03:53:42
2	V 292.402†	821158.3	830366.5	10260 µg/L	10260 ppb	03:53:42
2	Zn 213.857†	633463.5	640051.1	14752 µg/L	14752 ppb	03:53:42
3	Sc RADIAL	99662.8	99662.8	99.3 %		03:52:29
3	Al 396.153Radial†	601.2	1005.7	294.69 µg/L	294.69 ppb	03:52:29
3	Ca 317.933Radial†	602.4	218.9	70.603 µg/L	70.603 ppb	03:52:49
3	Fe 238.204 Radial†	12.2	-1.5	163.51 µg/L	163.51 ppb	03:52:49
3	K 766.490 Radial†	611360.1	615231.7	302970 µg/L	302970 ppb	03:52:24
3	Mg 279.077 IEC†	2.2	-7.2	68.490 µg/L	68.490 ppb	03:52:49
3	Na 589.592 Radial†	784.9	578.6	253.81 µg/L	253.81 ppb	03:52:29
3	Sr 421.552†	1861786.2	1874414.1	10128 µg/L	10128 ppb	03:52:24
3	Sc 361.383	1873584.8	1873584.8	97.501 %		03:54:07
3	Y 371.029	1292390.1	1292390.1	96.589 %		03:54:07
3	Ag 328.068†	-5428.1	-4999.4	16.740 µg/L	16.740 ppb	03:54:12
3	As 188.979†	5575.2	5721.3	8562.3 µg/L	8562.3 ppb	03:54:12
3	B 249.677†	93331.8	95367.8	4581.1 µg/L	4581.1 ppb	03:54:07
3	Ba 233.527†	570118.7	584764.6	13172 µg/L	13172 ppb	03:54:07
3	Be 313.107†	4298146.5	4409856.1	2675.8 µg/L	2675.8 ppb	03:53:56
3	Cd 226.502†	345986.4	355035.4	8644.0 µg/L	8644.0 ppb	03:54:07
3	Co 228.616†	185931.2	190678.5	8368.6 µg/L	8368.6 ppb	03:54:07
3	Cr 267.716†	913325.6	936663.9	20946 µg/L	20946 ppb	03:54:07
3	Cu 324.752†	2548890.4	2610641.4	17695 µg/L	17695 ppb	03:54:07
3	Mn 257.610†	2548367.6	2614477.2	8384.5 µg/L	8384.5 ppb	03:54:07
3	Mo 202.031†	86602.0	88814.1	8778.0 µg/L	8778.0 ppb	03:54:07
3	Ni 231.604†	148416.8	151854.5	8618.1 µg/L	8618.1 ppb	03:54:07
3	P 214.914†	10044.2	9994.7	15320 µg/L	15320 ppb	03:54:12
3	Pb 220.353†	83871.5	85965.4	22702 µg/L	22702 ppb	03:54:07
3	S 181.975 Axial†	13933.6	14267.2	45371 µg/L	45371 ppb	03:54:12
3	Sb 206.836†	9443.9	9658.4	8636.5 µg/L	8636.5 ppb	03:54:12
3	Se 196.026†	8571.3	8770.4	8621.8 µg/L	8621.8 ppb	03:54:12
3	SiO2†	464526.0	474098.1	89592 µg/L	89592 ppb	03:54:07
3	Si 251.611†	576213.3	590586.6	41813 µg/L	41813 ppb	03:54:07
3	Sn 189.927†	21392.1	21938.6	8625.1 µg/L	8625.1 ppb	03:54:12
3	Ti 334.940†	3649494.2	3743730.7	9029.5 µg/L	9029.5 ppb	03:53:56
3	Tl 190.801†	8684.0	8942.7	9130.5 µg/L	9130.5 ppb	03:54:12
3	U 409.014†	-1099.1	-1097.1	-98.416 µg/L	-98.416 ppb	03:54:07
3	V 292.402†	700293.9	718148.9	8872.3 µg/L	8872.3 ppb	03:54:07
3	Zn 213.857†	543913.8	557266.3	12844 µg/L	12844 ppb	03:54:07

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1883672.1	98.026 %	0.7460			0.76%
Sc RADIAL	99237.3	98.9 %	0.54			0.55%
Y 371.029	1298778.2	97.067 %	0.6865			0.71%
Ag 328.068†	-5709.6	17.658 µg/L	1.1070	17.658 ppb	1.1070	6.27%
Al 396.153Radial†	971.7	257.73 µg/L	32.342	257.73 ppb	32.342	12.55%
As 188.979†	6383.8	9553.8 µg/L	891.71	9553.8 ppb	891.71	9.33%
QC value within limits for As 188.979 Recovery = 95.54%						
B 249.677†	102687.2	4934.7 µg/L	308.89	4934.7 ppb	308.89	6.26%
QC value within limits for B 249.677 Recovery = 98.69%						
Ba 233.527†	645258.1	14535 µg/L	1191.5	14535 ppb	1191.5	8.20%
QC value within limits for Ba 233.527 Recovery = 96.90%						
Be 313.107†	4742279.9	2877.5 µg/L	175.21	2877.5 ppb	175.21	6.09%
QC value within limits for Be 313.107 Recovery = 95.92%						
Ca 317.933Radial†	192.4	62.071 µg/L	8.2856	62.071 ppb	8.2856	13.35%
Cd 226.502†	393175.7	9572.7 µg/L	813.31	9572.7 ppb	813.31	8.50%
QC value within limits for Cd 226.502 Recovery = 95.73%						
Co 228.616†	212830.9	9341.6 µg/L	853.38	9341.6 ppb	853.38	9.14%
QC value within limits for Co 228.616 Recovery = 93.42%						
Cr 267.716†	1063903.2	23791 µg/L	2514.3	23791 ppb	2514.3	10.57%
QC value within limits for Cr 267.716 Recovery = 95.17%						



Cu 324.752†	2904001.8	19684 µg/L	1750.5	19684 ppb	1750.5	8.89%
QC value within limits for Cu 324.752 Recovery = 98.42%						
Fe 238.204 Radial†	-2.2	176.64 µg/L	15.076	176.64 ppb	15.076	8.53%
K 766.490 Radial†	619182.3	304910 µg/L	2059.6	304910 ppb	2059.6	0.68%
QC value within limits for K 766.490 Radial Recovery = 101.64%						
Mg 279.077 IEC†	-8.5	71.280 µg/L	22.1561	71.280 ppb	22.1561	31.08%
Mn 257.610†	2913928.9	9344.8 µg/L	844.60	9344.8 ppb	844.60	9.04%
QC value within limits for Mn 257.610 Recovery = 93.45%						
Mo 202.031†	99107.1	9795.3 µg/L	891.49	9795.3 ppb	891.49	9.10%
QC value within limits for Mo 202.031 Recovery = 97.95%						
Na 589.592 Radial†	704.5	309.02 µg/L	59.803	309.02 ppb	59.803	19.35%
Ni 231.604†	169404.3	9614.1 µg/L	872.75	9614.1 ppb	872.75	9.08%
QC value within limits for Ni 231.604 Recovery = 96.14%						
P 214.914†	11420.1	17562 µg/L	2057.3	17562 ppb	2057.3	11.71%
QC value greater than the upper limit for P 214.914 Recovery = 117.08%						
Pb 220.353†	93909.8	24799 µg/L	1831.9	24799 ppb	1831.9	7.39%
QC value within limits for Pb 220.353 Recovery = 99.20%						
S 181.975 Axial†	15916.3	50615 µg/L	4789.1	50615 ppb	4789.1	9.46%
QC value within limits for S 181.975 Axial Recovery = 101.23%						
Sb 206.836†	10816.7	9667.9 µg/L	947.90	9667.9 ppb	947.90	9.80%
QC value within limits for Sb 206.836 Recovery = 96.68%						
Se 196.026†	9767.6	9602.1 µg/L	881.63	9602.1 ppb	881.63	9.18%
QC value within limits for Se 196.026 Recovery = 96.02%						
SiO2†	515338.4	97385 µg/L	6797.4	97385 ppb	6797.4	6.98%
QC value within limits for SiO2 Recovery = 91.01%						
Si 251.611†	641479.4	45416 µg/L	3140.9	45416 ppb	3140.9	6.92%
QC value within limits for Si 251.611 Recovery = 90.83%						
Sn 189.927†	25269.6	9934.7 µg/L	1211.06	9934.7 ppb	1211.06	12.19%
QC value within limits for Sn 189.927 Recovery = 99.35%						
Sr 421.552†	1885456.5	10188 µg/L	58.2	10188 ppb	58.2	0.57%
QC value within limits for Sr 421.552 Recovery = 101.88%						
Ti 334.940†	4026169.6	9710.7 µg/L	591.99	9710.7 ppb	591.99	6.10%
QC value within limits for Ti 334.940 Recovery = 97.11%						
Tl 190.801†	9648.1	9850.6 µg/L	648.78	9850.6 ppb	648.78	6.59%
QC value within limits for Tl 190.801 Recovery = 98.51%						
U 409.014†	-1196.2	-107.30 µg/L	9.720	-107.30 ppb	9.720	9.06%
V 292.402†	802027.6	9909.4 µg/L	913.71	9909.4 ppb	913.71	9.22%
QC value within limits for V 292.402 Recovery = 99.09%						
Zn 213.857†	618182.5	14248 µg/L	1231.6	14248 ppb	1231.6	8.64%
QC value within limits for Zn 213.857 Recovery = 94.99%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 03:54:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	100303.5	100303.5	100.0 %		03:54:59
1	Al 396.153Radial†	10638.2	11043.2	5204.9 µg/L	5204.9 ppb	03:54:59
1	Ca 317.933Radial†	16741.4	16361.0	5277.0 µg/L	5277.0 ppb	03:54:59
1	Fe 238.204 Radial†	535.1	521.5	5124.6 µg/L	5124.6 ppb	03:55:20
1	K 766.490 Radial†	11237.0	10917.9	5376.4 µg/L	5376.4 ppb	03:54:59
1	Mg 279.077 IEC†	485.3	476.1	5217.1 µg/L	5217.1 ppb	03:55:20
1	Na 589.592 Radial†	23277.7	23076.1	10123 µg/L	10123 ppb	03:54:59
1	Sr 421.552†	93828.6	93719.9	506.40 µg/L	506.40 ppb	03:54:59
1	Sc 361.383	1952884.8	1952884.8	101.63 %		03:56:24
1	Y 371.029	1353607.6	1353607.6	101.16 %		03:56:24
1	Ag 328.068†	61778.4	61357.0	507.71 µg/L	507.71 ppb	03:56:29
1	As 188.979†	358.0	355.5	530.76 µg/L	530.76 ppb	03:56:50
1	B 249.677†	11300.3	10762.7	511.39 µg/L	511.39 ppb	03:56:29
1	Ba 233.527†	23137.8	22798.3	513.86 µg/L	513.86 ppb	03:56:29
1	Be 313.107†	846800.3	834768.4	506.97 µg/L	506.97 ppb	03:56:24
1	Cd 226.502†	21404.5	21241.4	516.59 µg/L	516.59 ppb	03:56:29
1	Co 228.616†	11915.4	11705.5	513.83 µg/L	513.83 ppb	03:56:29
1	Cr 267.716†	23709.7	23255.4	520.24 µg/L	520.24 ppb	03:56:29
1	Cu 324.752†	80881.5	75997.2	516.08 µg/L	516.08 ppb	03:56:29
1	Mn 257.610†	162652.1	160830.5	515.73 µg/L	515.73 ppb	03:56:24
1	Mo 202.031†	5485.1	5389.3	532.85 µg/L	532.85 ppb	03:56:50
1	Ni 231.604†	9638.0	9116.8	517.45 µg/L	517.45 ppb	03:56:29
1	P 214.914†	1854.8	1518.0	2542.0 µg/L	2542.0 ppb	03:56:50
1	Pb 220.353†	2082.0	1992.6	526.91 µg/L	526.91 ppb	03:56:50
1	S 181.975 Axial†	361.1	331.8	1055.2 µg/L	1055.2 ppb	03:56:50
1	Sb 206.836†	620.7	583.2	529.85 µg/L	529.85 ppb	03:56:50
1	Se 196.026†	570.3	540.7	543.41 µg/L	543.41 ppb	03:56:50
1	SiO2†	31716.9	28873.1	5456.2 µg/L	5456.2 ppb	03:56:29
1	Si 251.611†	37047.2	36056.2	2552.7 µg/L	2552.7 ppb	03:56:29
1	Sn 189.927†	1373.1	1349.2	524.51 µg/L	524.51 ppb	03:56:50
1	Ti 334.940†	212366.5	209648.7	505.32 µg/L	505.32 ppb	03:56:24
1	Tl 190.801†	486.0	514.3	525.29 µg/L	525.29 ppb	03:56:50
1	U 409.014†	5746.2	5684.3	508.86 µg/L	508.86 ppb	03:56:29
1	V 292.402†	42924.8	42140.5	518.85 µg/L	518.85 ppb	03:56:29
1	Zn 213.857†	23319.0	22355.0	514.26 µg/L	514.26 ppb	03:56:29
2	Sc RADIAL	101382.1	101382.1	101 %		03:55:25
2	Al 396.153Radial†	10548.9	10841.5	5109.8 µg/L	5109.8 ppb	03:55:25
2	Ca 317.933Radial†	16608.8	16051.5	5177.2 µg/L	5177.2 ppb	03:55:25
2	Fe 238.204 Radial†	533.3	514.1	5052.1 µg/L	5052.1 ppb	03:55:46
2	K 766.490 Radial†	11167.9	10729.9	5283.8 µg/L	5283.8 ppb	03:55:25
2	Mg 279.077 IEC†	486.1	471.8	5169.9 µg/L	5169.9 ppb	03:55:46
2	Na 589.592 Radial†	23226.3	22777.5	9991.8 µg/L	9991.8 ppb	03:55:25
2	Sr 421.552†	93475.2	92371.5	499.11 µg/L	499.11 ppb	03:55:25
2	Sc 361.383	1955176.6	1955176.6	101.75 %		03:56:57
2	Y 371.029	1355084.7	1355084.7	101.27 %		03:56:57
2	Ag 328.068†	61759.7	61267.4	506.95 µg/L	506.95 ppb	03:57:03
2	As 188.979†	358.1	355.2	530.30 µg/L	530.30 ppb	03:57:23
2	B 249.677†	11285.5	10735.2	510.11 µg/L	510.11 ppb	03:57:03
2	Ba 233.527†	23176.1	22809.4	514.10 µg/L	514.10 ppb	03:57:03
2	Be 313.107†	844943.8	831967.1	505.27 µg/L	505.27 ppb	03:56:57
2	Cd 226.502†	21325.1	21138.7	514.10 µg/L	514.10 ppb	03:57:03
2	Co 228.616†	11928.8	11705.0	513.81 µg/L	513.81 ppb	03:57:03
2	Cr 267.716†	23711.5	23229.9	519.66 µg/L	519.66 ppb	03:57:03
2	Cu 324.752†	81015.6	76035.7	516.32 µg/L	516.32 ppb	03:57:03
2	Mn 257.610†	162449.4	160443.7	514.49 µg/L	514.49 ppb	03:56:57
2	Mo 202.031†	5435.9	5334.6	527.44 µg/L	527.44 ppb	03:57:23
2	Ni 231.604†	9616.8	9084.8	515.64 µg/L	515.64 ppb	03:57:03
2	P 214.914†	1844.8	1506.1	2521.6 µg/L	2521.6 ppb	03:57:23
2	Pb 220.353†	2071.2	1979.6	523.45 µg/L	523.45 ppb	03:57:23

2	S 181.975 Axial†	356.8	327.1	1040.2 µg/L	1040.2 ppb	03:57:23
2	Sb 206.836†	619.1	580.9	527.74 µg/L	527.74 ppb	03:57:23
2	Se 196.026†	569.2	538.9	541.49 µg/L	541.49 ppb	03:57:23
2	SiO2†	31761.4	28880.2	5457.6 µg/L	5457.6 ppb	03:57:03
2	Si 251.611†	37114.9	36080.0	2554.4 µg/L	2554.4 ppb	03:57:03
2	Sn 189.927†	1365.5	1340.1	521.02 µg/L	521.02 ppb	03:57:23
2	Ti 334.940†	212093.9	209135.8	504.09 µg/L	504.09 ppb	03:56:57
2	Tl 190.801†	482.8	510.6	521.54 µg/L	521.54 ppb	03:57:23
2	U 409.014†	5714.1	5646.1	505.45 µg/L	505.45 ppb	03:57:03
2	V 292.402†	42816.0	41984.1	516.91 µg/L	516.91 ppb	03:57:03
2	Zn 213.857†	23382.6	22390.6	515.10 µg/L	515.10 ppb	03:57:03
3	Sc RADIAL	101981.0	101981.0	102 %		03:55:51
3	Al 396.153Radial†	10586.7	10817.4	5100.1 µg/L	5100.1 ppb	03:55:51
3	Ca 317.933Radial†	16609.0	15955.2	5146.1 µg/L	5146.1 ppb	03:55:51
3	Fe 238.204 Radial†	531.0	508.8	4998.4 µg/L	4998.4 ppb	03:56:12
3	K 766.490 Radial†	11027.2	10526.5	5183.7 µg/L	5183.7 ppb	03:55:51
3	Mg 279.077 IEC†	483.6	466.5	5110.7 µg/L	5110.7 ppb	03:56:12
3	Na 589.592 Radial†	23215.3	22631.6	9927.8 µg/L	9927.8 ppb	03:55:51
3	Sr 421.552†	93315.2	91670.7	495.32 µg/L	495.32 ppb	03:55:51
3	Sc 361.383	1953276.2	1953276.2	101.65 %		03:57:30
3	Y 371.029	1354644.8	1354644.8	101.24 %		03:57:30
3	Ag 328.068†	58605.3	58223.2	481.65 µg/L	481.65 ppb	03:57:36
3	As 188.979†	305.6	303.8	453.52 µg/L	453.52 ppb	03:57:56
3	B 249.677†	10685.7	10155.9	482.43 µg/L	482.43 ppb	03:57:36
3	Ba 233.527†	21489.7	21172.4	477.19 µg/L	477.19 ppb	03:57:36
3	Be 313.107†	799129.7	787703.6	478.39 µg/L	478.39 ppb	03:57:30
3	Cd 226.502†	19704.5	19564.8	475.77 µg/L	475.77 ppb	03:57:36
3	Co 228.616†	10965.9	10769.1	472.66 µg/L	472.66 ppb	03:57:36
3	Cr 267.716†	21163.6	20745.9	464.10 µg/L	464.10 ppb	03:57:36
3	Cu 324.752†	74836.7	70034.4	475.64 µg/L	475.64 ppb	03:57:36
3	Mn 257.610†	153946.7	152234.2	488.16 µg/L	488.16 ppb	03:57:30
3	Mo 202.031†	4550.2	4468.5	441.83 µg/L	441.83 ppb	03:57:56
3	Ni 231.604†	8810.3	8300.6	471.13 µg/L	471.13 ppb	03:57:36
3	P 214.914†	1624.6	1291.2	2157.7 µg/L	2157.7 ppb	03:57:56
3	Pb 220.353†	1798.3	1713.0	452.92 µg/L	452.92 ppb	03:57:56
3	S 181.975 Axial†	306.7	278.2	884.64 µg/L	884.64 ppb	03:57:56
3	Sb 206.836†	539.3	503.0	456.54 µg/L	456.54 ppb	03:57:56
3	Se 196.026†	496.6	467.9	471.63 µg/L	471.63 ppb	03:57:56
3	SiO2†	29859.3	27039.4	5109.7 µg/L	5109.7 ppb	03:57:36
3	Si 251.611†	34750.6	33789.5	2392.3 µg/L	2392.3 ppb	03:57:36
3	Sn 189.927†	1117.2	1097.1	425.54 µg/L	425.54 ppb	03:57:56
3	Ti 334.940†	200000.5	197441.3	475.88 µg/L	475.88 ppb	03:57:30
3	Tl 190.801†	431.4	460.5	470.57 µg/L	470.57 ppb	03:57:56
3	U 409.014†	5161.1	5107.6	457.15 µg/L	457.15 ppb	03:57:36
3	V 292.402†	39018.7	38289.3	471.02 µg/L	471.02 ppb	03:57:36
3	Zn 213.857†	21484.5	20545.6	472.63 µg/L	472.63 ppb	03:57:36

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1953779.2	101.67 %	0.064			0.06%
Sc RADIAL	101222.2	101 %	0.8			0.84%
Y 371.029	1354445.7	101.23 %	0.057			0.06%
Ag 328.068†	60282.5	498.77 µg/L	14.831	498.77 ppb	14.831	2.97%
QC value within limits for Ag 328.068 Recovery = 99.75%						
Al 396.153Radial†	10900.7	5138.3 µg/L	57.90	5138.3 ppb	57.90	1.13%
QC value within limits for Al 396.153Radial Recovery = 102.77%						
As 188.979†	338.2	504.86 µg/L	44.464	504.86 ppb	44.464	8.81%
QC value within limits for As 188.979 Recovery = 100.97%						
B 249.677†	10551.3	501.31 µg/L	16.366	501.31 ppb	16.366	3.26%
QC value within limits for B 249.677 Recovery = 100.26%						
Ba 233.527†	22260.0	501.72 µg/L	21.240	501.72 ppb	21.240	4.23%
QC value within limits for Ba 233.527 Recovery = 100.34%						
Be 313.107†	818146.4	496.87 µg/L	16.034	496.87 ppb	16.034	3.23%
QC value within limits for Be 313.107 Recovery = 99.37%						
Ca 317.933Radial†	16122.6	5200.1 µg/L	68.38	5200.1 ppb	68.38	1.31%
QC value within limits for Ca 317.933Radial Recovery = 104.00%						
Cd 226.502†	20648.3	502.15 µg/L	22.878	502.15 ppb	22.878	4.56%
QC value within limits for Cd 226.502 Recovery = 100.43%						
Co 228.616†	11393.2	500.10 µg/L	23.763	500.10 ppb	23.763	4.75%

Cr	267.716†	22410.4	501.34 µg/L	32.245	501.34 ppb	32.245	6.43%
Cu	324.752†	74022.4	502.68 µg/L	23.419	502.68 ppb	23.419	4.66%
Fe	238.204 Radial†	514.8	5058.3 µg/L	63.34	5058.3 ppb	63.34	1.25%
K	766.490 Radial†	10724.7	5281.3 µg/L	96.39	5281.3 ppb	96.39	1.83%
Mg	279.077 IEC†	471.5	5165.9 µg/L	53.33	5165.9 ppb	53.33	1.03%
Mn	257.610†	157836.1	506.12 µg/L	15.571	506.12 ppb	15.571	3.08%
Mo	202.031†	5064.1	500.71 µg/L	51.059	500.71 ppb	51.059	10.20%
Na	589.592 Radial†	22828.4	10014 µg/L	99.4	10014 ppb	99.4	0.99%
Ni	231.604†	8834.1	501.41 µg/L	26.238	501.41 ppb	26.238	5.23%
P	214.914†	1438.5	2407.1 µg/L	216.22	2407.1 ppb	216.22	8.98%
Pb	220.353†	1895.1	501.09 µg/L	41.753	501.09 ppb	41.753	8.33%
S	181.975 Axial†	312.4	993.36 µg/L	94.456	993.36 ppb	94.456	9.51%
Sb	206.836†	555.7	504.71 µg/L	41.729	504.71 ppb	41.729	8.27%
Se	196.026†	515.8	518.84 µg/L	40.904	518.84 ppb	40.904	7.88%
SiO2†		28264.2	5341.2 µg/L	200.45	5341.2 ppb	200.45	3.75%
Si	251.611†	35308.6	2499.8 µg/L	93.14	2499.8 ppb	93.14	3.73%
Sn	189.927†	1262.2	490.36 µg/L	56.160	490.36 ppb	56.160	11.45%
Sr	421.552†	92587.4	500.28 µg/L	5.628	500.28 ppb	5.628	1.12%
Ti	334.940†	205408.6	495.10 µg/L	16.650	495.10 ppb	16.650	3.36%
Tl	190.801†	495.1	505.80 µg/L	30.566	505.80 ppb	30.566	6.04%
U	409.014†	5479.3	490.48 µg/L	28.921	490.48 ppb	28.921	5.90%
V	292.402†	40804.6	502.26 µg/L	27.072	502.26 ppb	27.072	5.39%
Zn	213.857†	21763.7	500.66 µg/L	24.285	500.66 ppb	24.285	4.85%

QC value within limits for Co 228.616 Recovery = 100.02%

QC value within limits for Cr 267.716 Recovery = 100.27%

QC value within limits for Cu 324.752 Recovery = 100.54%

QC value within limits for Fe 238.204 Radial Recovery = 101.17%

QC value within limits for K 766.490 Radial Recovery = 105.63%

QC value within limits for Mg 279.077 IEC Recovery = 103.32%

QC value within limits for Mn 257.610 Recovery = 101.22%

QC value within limits for Mo 202.031 Recovery = 100.14%

QC value within limits for Na 589.592 Radial Recovery = 100.14%

QC value within limits for Ni 231.604 Recovery = 100.28%

QC value within limits for P 214.914 Recovery = 96.28%

QC value within limits for Pb 220.353 Recovery = 100.22%

QC value within limits for S 181.975 Axial Recovery = 99.34%

QC value within limits for Sb 206.836 Recovery = 100.94%

QC value within limits for Se 196.026 Recovery = 103.77%

QC value within limits for SiO2 Recovery = 99.88%

QC value within limits for Si 251.611 Recovery = 99.99%

QC value within limits for Sn 189.927 Recovery = 98.07%

QC value within limits for Sr 421.552 Recovery = 100.06%

QC value within limits for Ti 334.940 Recovery = 99.02%

QC value within limits for Tl 190.801 Recovery = 101.16%

QC value within limits for U 409.014 Recovery = 98.10%

QC value within limits for V 292.402 Recovery = 100.45%

QC value within limits for Zn 213.857 Recovery = 100.13%

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 03:58:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	100730.3	100730.3	100 %		03:58:38
1	Al 396.153Radial†	-338.8	62.9	29.644 µg/L	29.644 ppb	03:58:38
1	Ca 317.933Radial†	432.5	43.3	13.953 µg/L	13.953 ppb	03:58:58
1	Fe 238.204 Radial†	18.0	4.2	41.155 µg/L	41.155 ppb	03:58:58
1	K 766.490 Radial†	465.7	140.0	68.940 µg/L	68.940 ppb	03:58:38
1	Mg 279.077 IEC†	14.1	4.6	50.513 µg/L	50.513 ppb	03:58:58
1	Na 589.592 Radial†	380.9	167.8	73.599 µg/L	73.599 ppb	03:58:38
1	Sr 421.552†	226.9	76.9	0.4157 µg/L	0.4157 ppb	03:58:38
1	Sc 361.383	1943886.6	1943886.6	101.16 %		04:00:01
1	Y 371.029	1354620.4	1354620.4	101.24 %		04:00:01
1	Ag 328.068†	-549.9	24.3	0.2062 µg/L	0.2062 ppb	04:00:06
1	As 188.979†	1.0	4.2	6.2514 µg/L	6.2514 ppb	04:00:27
1	B 249.677†	437.2	75.7	3.5884 µg/L	3.5884 ppb	04:00:27
1	Ba 233.527†	-7.4	23.7	0.5351 µg/L	0.5351 ppb	04:00:27
1	Be 313.107†	-1259.8	282.4	0.1714 µg/L	0.1714 ppb	04:00:06
1	Cd 226.502†	-166.9	14.7	0.3539 µg/L	0.3539 ppb	04:00:27
1	Co 228.616†	38.1	18.5	0.8160 µg/L	0.8160 ppb	04:00:27
1	Cr 267.716†	136.7	60.6	1.3544 µg/L	1.3544 ppb	04:00:27
1	Cu 324.752†	4409.9	770.1	5.2278 µg/L	5.2278 ppb	04:00:06
1	Mn 257.610†	-643.1	147.2	0.4712 µg/L	0.4712 ppb	04:00:27
1	Mo 202.031†	37.0	28.6	2.8288 µg/L	2.8288 ppb	04:00:27
1	Ni 231.604†	397.3	25.8	1.4669 µg/L	1.4669 ppb	04:00:27
1	P 214.914†	302.4	-8.1	-14.370 µg/L	-14.370 ppb	04:00:27
1	Pb 220.353†	67.5	10.6	2.7993 µg/L	2.7993 ppb	04:00:27
1	S 181.975 Axial†	23.4	-0.4	-1.3943 µg/L	-1.3943 ppb	04:00:27
1	Sb 206.836†	37.8	9.8	8.8779 µg/L	8.8779 ppb	04:00:27
1	Se 196.026†	22.9	2.0	2.0972 µg/L	2.0972 ppb	04:00:27
1	SiO2†	2410.5	46.9	8.8717 µg/L	8.8717 ppb	04:00:27
1	Si 251.611†	501.7	98.1	6.9481 µg/L	6.9481 ppb	04:00:27
1	Sn 189.927†	2.9	0.9	0.3284 µg/L	0.3284 ppb	04:00:27
1	Ti 334.940†	-456.1	231.9	0.5555 µg/L	0.5555 ppb	04:00:06
1	Tl 190.801†	-29.6	6.8	6.9402 µg/L	6.9402 ppb	04:00:27
1	U 409.014†	38.1	67.8	6.0771 µg/L	6.0771 ppb	04:00:06
1	V 292.402†	139.7	41.1	0.5254 µg/L	0.5254 ppb	04:00:06
1	Zn 213.857†	641.4	43.4	0.9866 µg/L	0.9866 ppb	04:00:27
2	Sc RADIAL	100668.5	100668.5	100 %		03:59:04
2	Al 396.153Radial†	-347.6	53.8	25.390 µg/L	25.390 ppb	03:59:04
2	Ca 317.933Radial†	448.9	59.9	19.308 µg/L	19.308 ppb	03:59:25
2	Fe 238.204 Radial†	16.2	2.4	23.918 µg/L	23.918 ppb	03:59:25
2	K 766.490 Radial†	526.9	201.2	99.083 µg/L	99.083 ppb	03:59:04
2	Mg 279.077 IEC†	14.9	5.4	59.621 µg/L	59.621 ppb	03:59:25
2	Na 589.592 Radial†	365.6	152.8	67.008 µg/L	67.008 ppb	03:59:04
2	Sr 421.552†	207.6	57.9	0.3127 µg/L	0.3127 ppb	03:59:04
2	Sc 361.383	1932619.0	1932619.0	100.57 %		04:00:33
2	Y 371.029	1344431.2	1344431.2	100.48 %		04:00:33
2	Ag 328.068†	-521.8	49.0	0.4066 µg/L	0.4066 ppb	04:00:39
2	As 188.979†	2.5	5.7	8.5249 µg/L	8.5249 ppb	04:00:59
2	B 249.677†	422.4	63.4	3.0115 µg/L	3.0115 ppb	04:00:59
2	Ba 233.527†	-7.3	23.9	0.5375 µg/L	0.5375 ppb	04:00:59
2	Be 313.107†	-1322.5	212.8	0.1290 µg/L	0.1290 ppb	04:00:39
2	Cd 226.502†	-159.0	21.5	0.5221 µg/L	0.5221 ppb	04:00:59
2	Co 228.616†	37.5	18.1	0.7980 µg/L	0.7980 ppb	04:00:59
2	Cr 267.716†	137.5	62.1	1.3895 µg/L	1.3895 ppb	04:00:59
2	Cu 324.752†	4362.0	747.9	5.0741 µg/L	5.0741 ppb	04:00:39
2	Mn 257.610†	-643.8	142.8	0.4554 µg/L	0.4554 ppb	04:00:59
2	Mo 202.031†	28.8	20.7	2.0450 µg/L	2.0450 ppb	04:00:59
2	Ni 231.604†	381.1	12.1	0.6854 µg/L	0.6854 ppb	04:00:59
2	P 214.914†	314.9	6.1	9.8030 µg/L	9.8030 ppb	04:00:59
2	Pb 220.353†	61.5	5.1	1.3334 µg/L	1.3334 ppb	04:00:59

2	S 181.975 Axial†	20.3	-3.4	-10.659 µg/L	-10.659 ppb	04:00:59
2	Sb 206.836†	34.8	7.0	6.3505 µg/L	6.3505 ppb	04:00:59
2	Se 196.026†	17.2	-3.5	-3.3619 µg/L	-3.3619 ppb	04:00:59
2	SiO2†	2413.9	64.2	12.130 µg/L	12.130 ppb	04:00:59
2	Si 251.611†	498.2	97.6	6.9118 µg/L	6.9118 ppb	04:00:59
2	Sn 189.927†	5.4	3.5	1.3465 µg/L	1.3465 ppb	04:00:59
2	Ti 334.940†	-400.6	284.4	0.6816 µg/L	0.6816 ppb	04:00:39
2	Tl 190.801†	-35.6	0.6	0.6400 µg/L	0.6400 ppb	04:00:59
2	U 409.014†	13.7	43.8	3.9262 µg/L	3.9262 ppb	04:00:39
2	V 292.402†	126.1	28.5	0.3662 µg/L	0.3662 ppb	04:00:39
2	Zn 213.857†	634.5	40.3	0.9173 µg/L	0.9173 ppb	04:00:59
3	Sc RADIAL	100883.3	100883.3	101 %		03:59:30
3	Al 396.153Radial†	-305.9	96.1	45.329 µg/L	45.329 ppb	03:59:30
3	Ca 317.933Radial†	456.6	66.5	21.455 µg/L	21.455 ppb	03:59:50
3	Fe 238.204 Radial†	16.7	2.9	28.261 µg/L	28.261 ppb	03:59:50
3	K 766.490 Radial†	426.4	100.1	49.311 µg/L	49.311 ppb	03:59:30
3	Mg 279.077 IEC†	12.8	3.3	36.245 µg/L	36.245 ppb	03:59:50
3	Na 589.592 Radial†	351.3	137.8	60.443 µg/L	60.443 ppb	03:59:30
3	Sr 421.552†	243.8	93.4	0.5048 µg/L	0.5048 ppb	03:59:30
3	Sc 361.383	1924233.9	1924233.9	100.14 %		04:01:05
3	Y 371.029	1339821.0	1339821.0	100.13 %		04:01:05
3	Ag 328.068†	-586.0	-17.4	-0.1412 µg/L	-0.1412 ppb	04:01:11
3	As 188.979†	2.4	5.6	8.3146 µg/L	8.3146 ppb	04:01:31
3	B 249.677†	421.3	64.2	3.0464 µg/L	3.0464 ppb	04:01:31
3	Ba 233.527†	-10.8	20.3	0.4558 µg/L	0.4558 ppb	04:01:31
3	Be 313.107†	-1225.8	303.6	0.1842 µg/L	0.1842 ppb	04:01:11
3	Cd 226.502†	-157.2	22.7	0.5490 µg/L	0.5490 ppb	04:01:31
3	Co 228.616†	23.4	4.3	0.1884 µg/L	0.1884 ppb	04:01:31
3	Cr 267.716†	112.0	37.3	0.8343 µg/L	0.8343 ppb	04:01:31
3	Cu 324.752†	4382.6	787.5	5.3430 µg/L	5.3430 ppb	04:01:11
3	Mn 257.610†	-664.4	119.5	0.3823 µg/L	0.3823 ppb	04:01:31
3	Mo 202.031†	31.8	23.8	2.3489 µg/L	2.3489 ppb	04:01:31
3	Ni 231.604†	376.8	9.4	0.5329 µg/L	0.5329 ppb	04:01:31
3	P 214.914†	316.3	8.8	14.446 µg/L	14.446 ppb	04:01:31
3	Pb 220.353†	57.4	1.2	0.3147 µg/L	0.3147 ppb	04:01:31
3	S 181.975 Axial†	27.2	3.7	11.674 µg/L	11.674 ppb	04:01:31
3	Sb 206.836†	28.3	0.7	0.6390 µg/L	0.6390 ppb	04:01:31
3	Se 196.026†	29.1	8.5	8.4653 µg/L	8.4653 ppb	04:01:31
3	SiO2†	2388.0	48.8	9.2260 µg/L	9.2260 ppb	04:01:31
3	Si 251.611†	496.5	98.1	6.9438 µg/L	6.9438 ppb	04:01:31
3	Sn 189.927†	5.8	3.8	1.4750 µg/L	1.4750 ppb	04:01:31
3	Ti 334.940†	-419.0	264.3	0.6348 µg/L	0.6348 ppb	04:01:11
3	Tl 190.801†	-38.2	-2.0	-2.0510 µg/L	-2.0510 ppb	04:01:31
3	U 409.014†	-35.0	-4.8	-0.4359 µg/L	-0.4359 ppb	04:01:11
3	V 292.402†	87.3	-9.8	-0.1047 µg/L	-0.1047 ppb	04:01:11
3	Zn 213.857†	633.0	41.5	0.9471 µg/L	0.9471 ppb	04:01:31

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1933579.8	100.62 %	0.513			0.51%
Sc RADIAL	100760.7	100 %	0.1			0.11%
Y 371.029	1346290.9	100.62 %	0.566			0.56%
Ag 328.068†	18.7	0.1572 µg/L	0.27715	0.1572 ppb	0.27715	176.33%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	70.9	33.454 µg/L	10.5013	33.454 ppb	10.5013	31.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	5.1	7.6970 µg/L	1.25630	7.6970 ppb	1.25630	16.32%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	67.7	3.2154 µg/L	0.32346	3.2154 ppb	0.32346	10.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	22.6	0.5095 µg/L	0.04648	0.5095 ppb	0.04648	9.12%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	266.3	0.1615 µg/L	0.02889	0.1615 ppb	0.02889	17.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	56.5	18.239 µg/L	3.8635	18.239 ppb	3.8635	21.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	19.6	0.4750 µg/L	0.10574	0.4750 ppb	0.10574	22.26%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.7	0.6008 µg/L	0.35723	0.6008 ppb	0.35723	59.46%

Cr 267.716†	53.3	1.1927 µg/L	0.31086	1.1927 ppb	0.31086	26.06%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	768.5	5.2150 µg/L	0.13487	5.2150 ppb	0.13487	2.59%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	3.2	31.111 µg/L	8.9651	31.111 ppb	8.9651	28.82%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	147.1	72.444 µg/L	25.0705	72.444 ppb	25.0705	34.61%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	4.5	48.793 µg/L	11.7822	48.793 ppb	11.7822	24.15%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	136.5	0.4363 µg/L	0.04743	0.4363 ppb	0.04743	10.87%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	24.3	2.4075 µg/L	0.39518	2.4075 ppb	0.39518	16.41%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	152.8	67.016 µg/L	6.5782	67.016 ppb	6.5782	9.82%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	15.8	0.8951 µg/L	0.50109	0.8951 ppb	0.50109	55.98%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.3	3.2933 µg/L	15.47168	3.2933 ppb	15.47168	469.79%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	5.6	1.4825 µg/L	1.24896	1.4825 ppb	1.24896	84.25%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.0	-0.1264 µg/L	11.22070	-0.1264 ppb	11.22070	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.8	5.2891 µg/L	4.22075	5.2891 ppb	4.22075	79.80%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.4	2.4002 µg/L	5.91941	2.4002 ppb	5.91941	246.62%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	53.3	10.076 µg/L	1.7879	10.076 ppb	1.7879	17.74%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	97.9	6.9346 µg/L	0.01985	6.9346 ppb	0.01985	0.29%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.8	1.0499 µg/L	0.62820	1.0499 ppb	0.62820	59.83%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	76.1	0.4110 µg/L	0.09614	0.4110 ppb	0.09614	23.39%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	260.2	0.6240 µg/L	0.06374	0.6240 ppb	0.06374	10.21%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.8	1.8431 µg/L	4.61478	1.8431 ppb	4.61478	250.38%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	35.6	3.1891 µg/L	3.31845	3.1891 ppb	3.31845	104.05%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	20.0	0.2623 µg/L	0.32767	0.2623 ppb	0.32767	124.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	41.7	0.9503 µg/L	0.03477	0.9503 ppb	0.03477	3.66%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/5/2010 04:32:34  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	101344.2	101344.2	101 %		04:33:12
1	Al 396.153Radial†	10517.9	10814.7	5097.2 µg/L	5097.2 ppb	04:33:12
1	Ca 317.933Radial†	16352.2	15803.6	5097.2 µg/L	5097.2 ppb	04:33:12
1	Fe 238.204 Radial†	529.8	510.8	5019.6 µg/L	5019.6 ppb	04:33:33
1	K 766.490 Radial†	10609.7	10181.3	5013.7 µg/L	5013.7 ppb	04:33:12
1	Mg 279.077 IEC†	474.2	460.1	5042.0 µg/L	5042.0 ppb	04:33:33
1	Na 589.592 Radial†	22738.0	22302.6	9783.4 µg/L	9783.4 ppb	04:33:12
1	Sr 421.552†	92191.9	91135.4	492.43 µg/L	492.43 ppb	04:33:12
1	Sc 361.383	1955756.3	1955756.3	101.78 %		04:34:37
1	Y 371.029	1356589.1	1356589.1	101.39 %		04:34:37
1	Ag 328.068†	61620.9	61113.0	505.67 µg/L	505.67 ppb	04:34:42
1	As 188.979†	356.7	353.7	528.06 µg/L	528.06 ppb	04:35:03
1	B 249.677†	11126.8	10576.0	502.53 µg/L	502.53 ppb	04:34:42
1	Ba 233.527†	23098.9	22726.7	512.24 µg/L	512.24 ppb	04:34:42
1	Be 313.107†	847503.9	834236.4	506.65 µg/L	506.65 ppb	04:34:37
1	Cd 226.502†	21372.7	21179.2	515.08 µg/L	515.08 ppb	04:34:42
1	Co 228.616†	11895.7	11668.9	512.23 µg/L	512.23 ppb	04:34:42
1	Cr 267.716†	23551.5	23065.8	516.00 µg/L	516.00 ppb	04:34:42
1	Cu 324.752†	79961.6	74976.5	509.14 µg/L	509.14 ppb	04:34:42
1	Mn 257.610†	162904.9	160844.0	515.78 µg/L	515.78 ppb	04:34:37
1	Mo 202.031†	5402.6	5300.3	524.04 µg/L	524.04 ppb	04:35:03
1	Ni 231.604†	9600.2	9065.7	514.55 µg/L	514.55 ppb	04:34:42
1	P 214.914†	1857.0	1517.5	2541.9 µg/L	2541.9 ppb	04:35:03
1	Pb 220.353†	2080.1	1987.6	525.59 µg/L	525.59 ppb	04:35:03
1	S 181.975 Axial†	356.3	326.5	1038.4 µg/L	1038.4 ppb	04:35:03
1	Sb 206.836†	606.3	568.1	516.19 µg/L	516.19 ppb	04:35:03
1	Se 196.026†	560.8	530.4	533.15 µg/L	533.15 ppb	04:35:03
1	Si02†	31598.2	28710.6	5425.5 µg/L	5425.5 ppb	04:34:42
1	Si 251.611†	36963.2	35920.2	2543.1 µg/L	2543.1 ppb	04:34:42
1	Sn 189.927†	1372.2	1346.4	523.51 µg/L	523.51 ppb	04:35:03
1	Ti 334.940†	211348.8	208341.9	502.18 µg/L	502.18 ppb	04:34:37
1	Tl 190.801†	484.0	511.6	522.63 µg/L	522.63 ppb	04:35:03
1	U 409.014†	5685.4	5616.2	502.78 µg/L	502.78 ppb	04:34:42
1	V 292.402†	42730.4	41887.5	515.70 µg/L	515.70 ppb	04:34:42
1	Zn 213.857†	23399.0	22399.9	515.34 µg/L	515.34 ppb	04:34:42
2	Sc RADIAL	101781.9	101781.9	101 %		04:33:38
2	Al 396.153Radial†	10511.4	10763.6	5073.1 µg/L	5073.1 ppb	04:33:38
2	Ca 317.933Radial†	16474.9	15855.0	5113.8 µg/L	5113.8 ppb	04:33:38
2	Fe 238.204 Radial†	524.3	503.2	4944.5 µg/L	4944.5 ppb	04:33:59
2	K 766.490 Radial†	10798.8	10322.6	5083.3 µg/L	5083.3 ppb	04:33:38
2	Mg 279.077 IEC†	480.9	464.7	5092.4 µg/L	5092.4 ppb	04:33:59
2	Na 589.592 Radial†	22788.7	22255.7	9762.9 µg/L	9762.9 ppb	04:33:38
2	Sr 421.552†	92575.2	91120.7	492.35 µg/L	492.35 ppb	04:33:38
2	Sc 361.383	1953758.9	1953758.9	101.67 %		04:35:10
2	Y 371.029	1352740.7	1352740.7	101.10 %		04:35:10
2	Ag 328.068†	61626.7	61180.6	506.23 µg/L	506.23 ppb	04:35:15
2	As 188.979†	348.8	346.3	517.05 µg/L	517.05 ppb	04:35:36
2	B 249.677†	11138.7	10598.8	503.66 µg/L	503.66 ppb	04:35:15
2	Ba 233.527†	23177.9	22827.6	514.51 µg/L	514.51 ppb	04:35:15
2	Be 313.107†	846198.3	833803.6	506.38 µg/L	506.38 ppb	04:35:10
2	Cd 226.502†	21366.1	21194.2	515.46 µg/L	515.46 ppb	04:35:15
2	Co 228.616†	11948.9	11733.2	515.05 µg/L	515.05 ppb	04:35:15
2	Cr 267.716†	23557.0	23094.8	516.65 µg/L	516.65 ppb	04:35:15
2	Cu 324.752†	80198.8	75290.1	511.25 µg/L	511.25 ppb	04:35:15
2	Mn 257.610†	162875.5	160978.6	516.20 µg/L	516.20 ppb	04:35:10
2	Mo 202.031†	5342.3	5246.4	518.72 µg/L	518.72 ppb	04:35:36
2	Ni 231.604†	9666.7	9140.8	518.81 µg/L	518.81 ppb	04:35:15
2	P 214.914†	1845.0	1507.6	2524.6 µg/L	2524.6 ppb	04:35:36
2	Pb 220.353†	2048.3	1958.5	517.86 µg/L	517.86 ppb	04:35:36



2	S 181.975 Axial†	352.1	322.8	1026.4 µg/L	1026.4 ppb	04:35:36
2	Sb 206.836†	606.2	568.6	516.50 µg/L	516.50 ppb	04:35:36
2	Se 196.026†	552.9	523.2	525.79 µg/L	525.79 ppb	04:35:36
2	SiO2†	31771.0	28912.4	5463.6 µg/L	5463.6 ppb	04:35:15
2	Si 251.611†	37152.8	36143.8	2558.9 µg/L	2558.9 ppb	04:35:15
2	Sn 189.927†	1349.5	1325.3	515.33 µg/L	515.33 ppb	04:35:36
2	Ti 334.940†	211441.0	208644.9	502.91 µg/L	502.91 ppb	04:35:10
2	Tl 190.801†	482.4	510.5	521.48 µg/L	521.48 ppb	04:35:36
2	U 409.014†	5716.9	5653.0	506.08 µg/L	506.08 ppb	04:35:15
2	V 292.402†	42779.3	41978.5	516.79 µg/L	516.79 ppb	04:35:15
2	Zn 213.857†	23433.1	22457.0	516.64 µg/L	516.64 ppb	04:35:15
3	Sc RADIAL	101718.9	101718.9	101 %		04:34:04
3	Al 396.153Radial†	10445.8	10705.3	5047.3 µg/L	5047.3 ppb	04:34:04
3	Ca 317.933Radial†	16477.3	15867.5	5117.8 µg/L	5117.8 ppb	04:34:04
3	Fe 238.204 Radial†	521.8	501.0	4922.8 µg/L	4922.8 ppb	04:34:25
3	K 766.490 Radial†	10642.2	10174.7	5010.5 µg/L	5010.5 ppb	04:34:04
3	Mg 279.077 IEC†	474.9	459.0	5029.1 µg/L	5029.1 ppb	04:34:25
3	Na 589.592 Radial†	22691.7	22174.0	9727.0 µg/L	9727.0 ppb	04:34:04
3	Sr 421.552†	92125.0	90733.1	490.26 µg/L	490.26 ppb	04:34:04
3	Sc 361.383	1963084.7	1963084.7	102.16 %		04:35:43
3	Y 371.029	1362496.8	1362496.8	101.83 %		04:35:43
3	Ag 328.068†	58374.9	57709.6	477.40 µg/L	477.40 ppb	04:35:49
3	As 188.979†	306.2	302.9	452.11 µg/L	452.11 ppb	04:36:09
3	B 249.677†	10510.8	9932.2	471.79 µg/L	471.79 ppb	04:35:49
3	Ba 233.527†	21427.6	21006.0	473.44 µg/L	473.44 ppb	04:35:49
3	Be 313.107†	810069.9	794484.6	482.51 µg/L	482.51 ppb	04:35:43
3	Cd 226.502†	19646.4	19411.1	472.04 µg/L	472.04 ppb	04:35:49
3	Co 228.616†	10938.3	10688.1	469.10 µg/L	469.10 ppb	04:35:49
3	Cr 267.716†	21147.2	20625.9	461.42 µg/L	461.42 ppb	04:35:49
3	Cu 324.752†	73940.0	68788.8	467.18 µg/L	467.18 ppb	04:35:49
3	Mn 257.610†	155907.6	153396.9	491.89 µg/L	491.89 ppb	04:35:43
3	Mo 202.031†	4516.7	4413.3	436.38 µg/L	436.38 ppb	04:36:09
3	Ni 231.604†	8840.7	8287.0	470.36 µg/L	470.36 ppb	04:35:49
3	P 214.914†	1633.5	1292.0	2159.9 µg/L	2159.9 ppb	04:36:09
3	Pb 220.353†	1794.8	1700.8	449.69 µg/L	449.69 ppb	04:36:09
3	S 181.975 Axial†	315.9	285.7	908.51 µg/L	908.51 ppb	04:36:09
3	Sb 206.836†	535.9	497.0	451.04 µg/L	451.04 ppb	04:36:09
3	Se 196.026†	491.3	460.4	464.01 µg/L	464.01 ppb	04:36:09
3	SiO2†	29846.9	26880.5	5079.7 µg/L	5079.7 ppb	04:35:49
3	Si 251.611†	34634.4	33504.9	2372.1 µg/L	2372.1 ppb	04:35:49
3	Sn 189.927†	1123.5	1097.9	425.92 µg/L	425.92 ppb	04:36:09
3	Ti 334.940†	201143.7	197577.1	476.22 µg/L	476.22 ppb	04:35:43
3	Tl 190.801†	434.7	461.6	471.76 µg/L	471.76 ppb	04:36:09
3	U 409.014†	5121.5	5043.5	451.41 µg/L	451.41 ppb	04:35:49
3	V 292.402†	38909.0	37990.1	467.33 µg/L	467.33 ppb	04:35:49
3	Zn 213.857†	21463.5	20419.4	469.73 µg/L	469.73 ppb	04:35:49

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1957533.3	101.87 %	0.256			0.25%
Sc RADIAL	101615.0	101 %	0.2			0.23%
Y 371.029	1357275.5	101.44 %	0.367			0.36%
Ag 328.068†	60001.1	496.44 µg/L	16.486	496.44 ppb	16.486	3.32%
QC value within limits for Ag 328.068 Recovery = 99.29%						
Al 396.153Radial†	10761.2	5072.5 µg/L	24.94	5072.5 ppb	24.94	0.49%
QC value within limits for Al 396.153Radial Recovery = 101.45%						
As 188.979†	334.3	499.07 µg/L	41.045	499.07 ppb	41.045	8.22%
QC value within limits for As 188.979 Recovery = 99.81%						
B 249.677†	10369.0	492.66 µg/L	18.082	492.66 ppb	18.082	3.67%
QC value within limits for B 249.677 Recovery = 98.53%						
Ba 233.527†	22186.8	500.06 µg/L	23.084	500.06 ppb	23.084	4.62%
QC value within limits for Ba 233.527 Recovery = 100.01%						
Be 313.107†	820841.5	498.51 µg/L	13.863	498.51 ppb	13.863	2.78%
QC value within limits for Be 313.107 Recovery = 99.70%						
Ca 317.933Radial†	15842.0	5109.6 µg/L	10.91	5109.6 ppb	10.91	0.21%
QC value within limits for Ca 317.933Radial Recovery = 102.19%						
Cd 226.502†	20594.8	500.86 µg/L	24.958	500.86 ppb	24.958	4.98%
QC value within limits for Cd 226.502 Recovery = 100.17%						
Co 228.616†	11363.4	498.79 µg/L	25.753	498.79 ppb	25.753	5.16%

Cr	267.716†	22262.2	498.02 µg/L	31.699	498.02 ppb	31.699	6.37%
QC value within limits for Cr 267.716 Recovery = 99.60%							
Cu	324.752†	73018.5	495.85 µg/L	24.857	495.85 ppb	24.857	5.01%
QC value within limits for Cu 324.752 Recovery = 99.17%							
Fe	238.204 Radial†	505.0	4962.3 µg/L	50.77	4962.3 ppb	50.77	1.02%
QC value within limits for Fe 238.204 Radial Recovery = 99.25%							
K	766.490 Radial†	10226.2	5035.8 µg/L	41.14	5035.8 ppb	41.14	0.82%
QC value within limits for K 766.490 Radial Recovery = 100.72%							
Mg	279.077 IEC†	461.3	5054.5 µg/L	33.44	5054.5 ppb	33.44	0.66%
QC value within limits for Mg 279.077 IEC Recovery = 101.09%							
Mn	257.610†	158406.5	507.96 µg/L	13.915	507.96 ppb	13.915	2.74%
QC value within limits for Mn 257.610 Recovery = 101.59%							
Mo	202.031†	4986.7	493.05 µg/L	49.151	493.05 ppb	49.151	9.97%
QC value within limits for Mo 202.031 Recovery = 98.61%							
Na	589.592 Radial†	22244.1	9757.8 µg/L	28.56	9757.8 ppb	28.56	0.29%
QC value within limits for Na 589.592 Radial Recovery = 97.58%							
Ni	231.604†	8831.2	501.24 µg/L	26.830	501.24 ppb	26.830	5.35%
QC value within limits for Ni 231.604 Recovery = 100.25%							
P	214.914†	1439.0	2408.8 µg/L	215.72	2408.8 ppb	215.72	8.96%
QC value within limits for P 214.914 Recovery = 96.35%							
Pb	220.353†	1882.3	497.71 µg/L	41.770	497.71 ppb	41.770	8.39%
QC value within limits for Pb 220.353 Recovery = 99.54%							
S	181.975 Axial†	311.7	991.12 µg/L	71.793	991.12 ppb	71.793	7.24%
QC value within limits for S 181.975 Axial Recovery = 99.11%							
Sb	206.836†	544.6	494.58 µg/L	37.705	494.58 ppb	37.705	7.62%
QC value within limits for Sb 206.836 Recovery = 98.92%							
Se	196.026†	504.7	507.65 µg/L	37.971	507.65 ppb	37.971	7.48%
QC value within limits for Se 196.026 Recovery = 101.53%							
SiO2†		28167.8	5323.0 µg/L	211.54	5323.0 ppb	211.54	3.97%
QC value within limits for SiO2 Recovery = 99.54%							
Si	251.611†	35189.6	2491.4 µg/L	103.60	2491.4 ppb	103.60	4.16%
QC value within limits for Si 251.611 Recovery = 99.66%							
Sn	189.927†	1256.5	488.25 µg/L	54.140	488.25 ppb	54.140	11.09%
QC value within limits for Sn 189.927 Recovery = 97.65%							
Sr	421.552†	90996.4	491.68 µg/L	1.233	491.68 ppb	1.233	0.25%
QC value within limits for Sr 421.552 Recovery = 98.34%							
Ti	334.940†	204854.7	493.77 µg/L	15.204	493.77 ppb	15.204	3.08%
QC value within limits for Ti 334.940 Recovery = 98.75%							
Tl	190.801†	494.6	505.29 µg/L	29.045	505.29 ppb	29.045	5.75%
QC value within limits for Tl 190.801 Recovery = 101.06%							
U	409.014†	5437.6	486.76 µg/L	30.654	486.76 ppb	30.654	6.30%
QC value within limits for U 409.014 Recovery = 97.35%							
V	292.402†	40618.7	499.94 µg/L	28.246	499.94 ppb	28.246	5.65%
QC value within limits for V 292.402 Recovery = 99.99%							
Zn	213.857†	21758.8	500.57 µg/L	26.719	500.57 ppb	26.719	5.34%
QC value within limits for Zn 213.857 Recovery = 100.11%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 04:36:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	100240.2	100240.2	99.9 %		04:36:52
1	Al 396.153Radial†	-380.2	19.8	9.3323 µg/L	9.3323 ppb	04:36:52
1	Ca 317.933Radial†	402.5	15.4	4.9549 µg/L	4.9549 ppb	04:37:12
1	Fe 238.204 Radial†	17.4	3.6	35.569 µg/L	35.569 ppb	04:37:12
1	K 766.490 Radial†	350.7	27.1	13.329 µg/L	13.329 ppb	04:36:52
1	Mg 279.077 IEC†	10.1	0.7	7.6637 µg/L	7.6637 ppb	04:37:12
1	Na 589.592 Radial†	258.7	47.4	20.779 µg/L	20.779 ppb	04:36:52
1	Sr 421.552†	158.0	9.1	0.0492 µg/L	0.0492 ppb	04:36:52
1	Sc 361.383	1947179.2	1947179.2	101.33 %		04:38:15
1	Y 371.029	1356286.2	1356286.2	101.36 %		04:38:15
1	Ag 328.068†	-530.8	44.0	0.3637 µg/L	0.3637 ppb	04:38:20
1	As 188.979†	-1.4	1.8	2.7411 µg/L	2.7411 ppb	04:38:41
1	B 249.677†	372.6	11.1	0.5123 µg/L	0.5123 ppb	04:38:41
1	Ba 233.527†	-13.3	17.9	0.4029 µg/L	0.4029 ppb	04:38:41
1	Be 313.107†	-1422.1	124.3	0.0754 µg/L	0.0754 ppb	04:38:20
1	Cd 226.502†	-177.7	4.3	0.1012 µg/L	0.1012 ppb	04:38:41
1	Co 228.616†	23.1	3.7	0.1639 µg/L	0.1639 ppb	04:38:41
1	Cr 267.716†	82.8	7.1	0.1595 µg/L	0.1595 ppb	04:38:41
1	Cu 324.752†	3912.4	271.9	1.8495 µg/L	1.8495 ppb	04:38:20
1	Mn 257.610†	-707.0	85.2	0.2749 µg/L	0.2749 ppb	04:38:41
1	Mo 202.031†	14.2	6.1	0.6020 µg/L	0.6020 ppb	04:38:41
1	Ni 231.604†	370.4	-1.4	-0.0779 µg/L	-0.0779 ppb	04:38:41
1	P 214.914†	316.5	5.3	8.7553 µg/L	8.7553 ppb	04:38:41
1	Pb 220.353†	48.9	-7.8	-2.0668 µg/L	-2.0668 ppb	04:38:41
1	S 181.975 Axial†	28.5	4.6	14.717 µg/L	14.717 ppb	04:38:41
1	Sb 206.836†	29.5	1.5	1.3625 µg/L	1.3625 ppb	04:38:41
1	Se 196.026†	19.4	-1.4	-1.2976 µg/L	-1.2976 ppb	04:38:41
1	SiO2†	2376.1	9.0	1.6970 µg/L	1.6970 ppb	04:38:41
1	Si 251.611†	476.0	72.0	5.0970 µg/L	5.0970 ppb	04:38:41
1	Sn 189.927†	1.0	-0.9	-0.3987 µg/L	-0.3987 ppb	04:38:41
1	Ti 334.940†	-545.6	144.3	0.3475 µg/L	0.3475 ppb	04:38:20
1	Tl 190.801†	-36.3	0.2	0.2242 µg/L	0.2242 ppb	04:38:41
1	U 409.014†	-28.6	1.9	0.1689 µg/L	0.1689 ppb	04:38:20
1	V 292.402†	93.6	-4.6	-0.0569 µg/L	-0.0569 ppb	04:38:20
1	Zn 213.857†	646.3	47.1	1.0876 µg/L	1.0876 ppb	04:38:41
2	Sc RADIAL	101178.0	101178.0	101 %		04:37:18
2	Al 396.153Radial†	-378.7	24.8	11.684 µg/L	11.684 ppb	04:37:18
2	Ca 317.933Radial†	396.2	5.4	1.7264 µg/L	1.7264 ppb	04:37:38
2	Fe 238.204 Radial†	16.2	2.3	22.510 µg/L	22.510 ppb	04:37:38
2	K 766.490 Radial†	381.7	54.6	26.874 µg/L	26.874 ppb	04:37:18
2	Mg 279.077 IEC†	8.4	-1.0	-11.336 µg/L	-11.336 ppb	04:37:38
2	Na 589.592 Radial†	221.8	8.4	3.6735 µg/L	3.6735 ppb	04:37:18
2	Sr 421.552†	140.9	-9.4	-0.0508 µg/L	-0.0508 ppb	04:37:18
2	Sc 361.383	1947358.1	1947358.1	101.34 %		04:38:47
2	Y 371.029	1353614.9	1353614.9	101.17 %		04:38:47
2	Ag 328.068†	-568.1	7.3	0.0622 µg/L	0.0622 ppb	04:38:52
2	As 188.979†	-0.5	2.7	3.9887 µg/L	3.9887 ppb	04:39:13
2	B 249.677†	385.5	23.8	1.1235 µg/L	1.1235 ppb	04:39:13
2	Ba 233.527†	-20.6	10.8	0.2421 µg/L	0.2421 ppb	04:39:13
2	Be 313.107†	-1377.3	168.7	0.1025 µg/L	0.1025 ppb	04:38:52
2	Cd 226.502†	-166.5	15.3	0.3707 µg/L	0.3707 ppb	04:39:13
2	Co 228.616†	17.7	-1.6	-0.0699 µg/L	-0.0699 ppb	04:39:13
2	Cr 267.716†	85.9	10.2	0.2281 µg/L	0.2281 ppb	04:39:13
2	Cu 324.752†	3970.8	329.2	2.2353 µg/L	2.2353 ppb	04:38:52
2	Mn 257.610†	-699.9	92.3	0.2980 µg/L	0.2980 ppb	04:39:13
2	Mo 202.031†	13.3	5.1	0.5050 µg/L	0.5050 ppb	04:39:13
2	Ni 231.604†	377.9	6.0	0.3411 µg/L	0.3411 ppb	04:39:13
2	P 214.914†	316.3	5.1	8.4470 µg/L	8.4470 ppb	04:39:13
2	Pb 220.353†	61.9	5.0	1.3210 µg/L	1.3210 ppb	04:39:13

2	S 181.975 Axial†	18.7	-5.1	-16.228 µg/L	-16.228 ppb	04:39:13
2	Sb 206.836†	29.0	1.0	0.9030 µg/L	0.9030 ppb	04:39:13
2	Se 196.026†	25.5	4.7	4.6533 µg/L	4.6533 ppb	04:39:13
2	SiO2†	2395.9	28.3	5.3519 µg/L	5.3519 ppb	04:39:13
2	Si 251.611†	491.3	87.0	6.1599 µg/L	6.1599 ppb	04:39:13
2	Sn 189.927†	-3.2	-5.1	-2.0332 µg/L	-2.0332 ppb	04:39:13
2	Ti 334.940†	-657.9	33.5	0.0818 µg/L	0.0818 ppb	04:38:52
2	Tl 190.801†	-38.6	-2.0	-2.0152 µg/L	-2.0152 ppb	04:39:13
2	U 409.014†	-71.0	-39.9	-3.5852 µg/L	-3.5852 ppb	04:38:52
2	V 292.402†	103.1	4.8	0.0549 µg/L	0.0549 ppb	04:38:52
2	Zn 213.857†	650.3	51.1	1.1791 µg/L	1.1791 ppb	04:39:13
3	Sc RADIAL	100800.9	100800.9	100 %		04:37:44
3	Al 396.153Radial†	-375.9	26.2	12.336 µg/L	12.336 ppb	04:37:44
3	Ca 317.933Radial†	397.3	7.9	2.5339 µg/L	2.5339 ppb	04:38:04
3	Fe 238.204 Radial†	16.0	2.2	21.641 µg/L	21.641 ppb	04:38:04
3	K 766.490 Radial†	384.5	58.8	28.952 µg/L	28.952 ppb	04:37:44
3	Mg 279.077 IEC†	10.9	1.5	15.955 µg/L	15.955 ppb	04:38:04
3	Na 589.592 Radial†	224.7	12.1	5.3052 µg/L	5.3052 ppb	04:37:44
3	Sr 421.552†	173.4	23.5	0.1270 µg/L	0.1270 ppb	04:37:44
3	Sc 361.383	1942648.8	1942648.8	101.09 %		04:39:19
3	Y 371.029	1352122.5	1352122.5	101.05 %		04:39:19
3	Ag 328.068†	-520.1	53.4	0.4405 µg/L	0.4405 ppb	04:39:24
3	As 188.979†	0.7	3.8	5.7644 µg/L	5.7644 ppb	04:39:45
3	B 249.677†	363.3	2.8	0.1237 µg/L	0.1237 ppb	04:39:45
3	Ba 233.527†	-23.0	8.3	0.1879 µg/L	0.1879 ppb	04:39:45
3	Be 313.107†	-1473.7	70.0	0.0424 µg/L	0.0424 ppb	04:39:24
3	Cd 226.502†	-179.2	2.4	0.0561 µg/L	0.0561 ppb	04:39:45
3	Co 228.616†	16.1	-3.2	-0.1404 µg/L	-0.1404 ppb	04:39:45
3	Cr 267.716†	89.2	13.7	0.3066 µg/L	0.3066 ppb	04:39:45
3	Cu 324.752†	3975.7	343.4	2.3318 µg/L	2.3318 ppb	04:39:24
3	Mn 257.610†	-726.5	64.3	0.2065 µg/L	0.2065 ppb	04:39:45
3	Mo 202.031†	15.5	7.4	0.7281 µg/L	0.7281 ppb	04:39:45
3	Ni 231.604†	366.1	-4.8	-0.2709 µg/L	-0.2709 ppb	04:39:45
3	P 214.914†	309.3	-1.1	-2.2274 µg/L	-2.2274 ppb	04:39:45
3	Pb 220.353†	51.4	-5.3	-1.3943 µg/L	-1.3943 ppb	04:39:45
3	S 181.975 Axial†	19.7	-4.1	-12.957 µg/L	-12.957 ppb	04:39:45
3	Sb 206.836†	27.4	-0.5	-0.4554 µg/L	-0.4554 ppb	04:39:45
3	Se 196.026†	23.1	2.3	2.3290 µg/L	2.3290 ppb	04:39:45
3	SiO2†	2384.9	23.1	4.3719 µg/L	4.3719 ppb	04:39:45
3	Si 251.611†	492.6	89.5	6.3377 µg/L	6.3377 ppb	04:39:45
3	Sn 189.927†	-3.5	-5.4	-2.1535 µg/L	-2.1535 ppb	04:39:45
3	Ti 334.940†	-580.7	108.4	0.2601 µg/L	0.2601 ppb	04:39:24
3	Tl 190.801†	-34.6	1.8	1.8402 µg/L	1.8402 ppb	04:39:45
3	U 409.014†	1.2	31.3	2.8086 µg/L	2.8086 ppb	04:39:24
3	V 292.402†	102.8	4.8	0.0638 µg/L	0.0638 ppb	04:39:24
3	Zn 213.857†	654.0	56.3	1.3006 µg/L	1.3006 ppb	04:39:45

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1945728.7	101.25 %	0.139			0.14%
Sc RADIAL	100739.7	100 %	0.5			0.47%
Y 371.029	1354007.8	101.19 %	0.158			0.16%
Ag 328.068†	34.9	0.2888 µg/L	0.19997	0.2888 ppb	0.19997	69.24%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	23.6	11.118 µg/L	1.5801	11.118 ppb	1.5801	14.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.8	4.1647 µg/L	1.51933	4.1647 ppb	1.51933	36.48%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	12.6	0.5865 µg/L	0.50403	0.5865 ppb	0.50403	85.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.3	0.2776 µg/L	0.11185	0.2776 ppb	0.11185	40.29%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	121.0	0.0734 µg/L	0.03007	0.0734 ppb	0.03007	40.94%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.5	3.0717 µg/L	1.68013	3.0717 ppb	1.68013	54.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.4	0.1760 µg/L	0.17011	0.1760 ppb	0.17011	96.65%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.4	-0.0155 µg/L	0.15931	-0.0155 ppb	0.15931	>999.9%

Cr	267.716†	10.3	0.2314 µg/L	0.07358	0.2314 ppb	0.07358	31.80%
Cu	324.752†	314.8	2.1389 µg/L	0.25519	2.1389 ppb	0.25519	11.93%
Fe	238.204 Radial†	2.7	26.573 µg/L	7.8027	26.573 ppb	7.8027	29.36%
K	766.490 Radial†	46.8	23.051 µg/L	8.4841	23.051 ppb	8.4841	36.81%
Mg	279.077 IEC†	0.4	4.0943 µg/L	13.99098	4.0943 ppb	13.99098	341.72%
Mn	257.610†	80.6	0.2598 µg/L	0.04761	0.2598 ppb	0.04761	18.32%
Mo	202.031†	6.2	0.6117 µg/L	0.11184	0.6117 ppb	0.11184	18.28%
Na	589.592 Radial†	22.6	9.9192 µg/L	9.44005	9.9192 ppb	9.44005	95.17%
Ni	231.604†	-0.1	-0.0026 µg/L	0.31284	-0.0026 ppb	0.31284	>999.9%
P	214.914†	3.1	4.9916 µg/L	6.25379	4.9916 ppb	6.25379	125.29%
Pb	220.353†	-2.7	-0.7134 µg/L	1.79361	-0.7134 ppb	1.79361	251.42%
S	181.975 Axial†	-1.5	-4.8227 µg/L	17.00046	-4.8227 ppb	17.00046	352.51%
Sb	206.836†	0.7	0.6033 µg/L	0.94528	0.6033 ppb	0.94528	156.67%
Se	196.026†	1.8	1.8949 µg/L	2.99909	1.8949 ppb	2.99909	158.27%
SiO2†		20.1	3.8069 µg/L	1.89183	3.8069 ppb	1.89183	49.69%
Si	251.611†	82.8	5.8649 µg/L	0.67092	5.8649 ppb	0.67092	11.44%
Sn	189.927†	-3.8	-1.5285 µg/L	0.98025	-1.5285 ppb	0.98025	64.13%
Sr	421.552†	7.7	0.0418 µg/L	0.08916	0.0418 ppb	0.08916	213.39%
Ti	334.940†	95.4	0.2298 µg/L	0.13542	0.2298 ppb	0.13542	58.93%
Tl	190.801†	0.0	0.0164 µg/L	1.93609	0.0164 ppb	1.93609	>999.9%
U	409.014†	-2.2	-0.2025 µg/L	3.21306	-0.2025 ppb	3.21306	>999.9%
V	292.402†	1.7	0.0206 µg/L	0.06728	0.0206 ppb	0.06728	326.35%
Zn	213.857†	51.5	1.1891 µg/L	0.10687	1.1891 ppb	0.10687	8.99%

QC value within limits for Co 228.616 Recovery = Not calculated

QC value within limits for Cr 267.716 Recovery = Not calculated

QC value within limits for Cu 324.752 Recovery = Not calculated

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

QC value within limits for K 766.490 Radial Recovery = Not calculated

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

QC value within limits for Mn 257.610 Recovery = Not calculated

QC value within limits for Mo 202.031 Recovery = Not calculated

QC value within limits for Na 589.592 Radial Recovery = Not calculated

QC value within limits for Ni 231.604 Recovery = Not calculated

QC value within limits for P 214.914 Recovery = Not calculated

QC value within limits for Pb 220.353 Recovery = Not calculated

QC value within limits for S 181.975 Axial Recovery = Not calculated

QC value within limits for Sb 206.836 Recovery = Not calculated

QC value within limits for Se 196.026 Recovery = Not calculated

QC value within limits for SiO2 Recovery = Not calculated

QC value within limits for Si 251.611 Recovery = Not calculated

QC value within limits for Sn 189.927 Recovery = Not calculated

QC value within limits for Sr 421.552 Recovery = Not calculated

QC value within limits for Ti 334.940 Recovery = Not calculated

QC value within limits for Tl 190.801 Recovery = Not calculated

QC value within limits for U 409.014 Recovery = Not calculated

QC value within limits for V 292.402 Recovery = Not calculated

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 05:14:18

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	101581.0	101581.0	101 %		05:14:57
1	Al 396.153Radial†	10849.1	11117.6	5239.6 µg/L	5239.6 ppb	05:14:57
1	Ca 317.933Radial†	17255.4	16658.1	5372.8 µg/L	5372.8 ppb	05:14:57
1	Fe 238.204 Radial†	582.0	561.1	5513.7 µg/L	5513.7 ppb	05:15:17
1	K 766.490 Radial†	11050.0	10591.7	5215.8 µg/L	5215.8 ppb	05:14:57
1	Mg 279.077 IEC†	510.2	494.6	5419.5 µg/L	5419.5 ppb	05:15:17
1	Na 589.592 Radial†	25119.0	24602.1	10792 µg/L	10792 ppb	05:14:57
1	Sr 421.552†	99537.9	98179.3	530.49 µg/L	530.49 ppb	05:14:57
1	Sc 361.383	1891406.4	1891406.4	98.428 %		05:16:21
1	Y 371.029	1312429.3	1312429.3	98.087 %		05:16:21
1	Ag 328.068†	63744.8	65330.7	540.61 µg/L	540.61 ppb	05:16:26
1	As 188.979†	362.2	371.2	554.16 µg/L	554.16 ppb	05:16:47
1	B 249.677†	11462.7	11289.2	536.35 µg/L	536.35 ppb	05:16:26
1	Ba 233.527†	23943.7	24357.2	548.99 µg/L	548.99 ppb	05:16:26
1	Be 313.107†	873792.7	889275.7	540.07 µg/L	540.07 ppb	05:16:21
1	Cd 226.502†	22219.8	22754.3	553.38 µg/L	553.38 ppb	05:16:26
1	Co 228.616†	12398.1	12577.0	552.09 µg/L	552.09 ppb	05:16:26
1	Cr 267.716†	24547.0	24864.4	556.23 µg/L	556.23 ppb	05:16:26
1	Cu 324.752†	82712.9	80444.7	546.29 µg/L	546.29 ppb	05:16:26
1	Mn 257.610†	168114.0	171581.8	550.22 µg/L	550.22 ppb	05:16:21
1	Mo 202.031†	5536.7	5617.1	555.38 µg/L	555.38 ppb	05:16:47
1	Ni 231.604†	10007.4	9800.4	556.25 µg/L	556.25 ppb	05:16:26
1	P 214.914†	1900.0	1623.3	2718.5 µg/L	2718.5 ppb	05:16:47
1	Pb 220.353†	2115.6	2093.3	553.50 µg/L	553.50 ppb	05:16:47
1	S 181.975 Axial†	353.6	335.7	1067.6 µg/L	1067.6 ppb	05:16:47
1	Sb 206.836†	628.4	610.9	554.87 µg/L	554.87 ppb	05:16:47
1	Se 196.026†	579.8	568.5	571.89 µg/L	571.89 ppb	05:16:47
1	SiO2†	32798.9	30986.8	5855.7 µg/L	5855.7 ppb	05:16:26
1	Si 251.611†	38388.4	38603.7	2733.1 µg/L	2733.1 ppb	05:16:26
1	Sn 189.927†	1396.8	1417.2	550.80 µg/L	550.80 ppb	05:16:47
1	Ti 334.940†	218217.9	222385.7	536.03 µg/L	536.03 ppb	05:16:21
1	Tl 190.801†	496.7	540.7	552.39 µg/L	552.39 ppb	05:16:47
1	U 409.014†	5953.7	6079.0	544.20 µg/L	544.20 ppb	05:16:26
1	V 292.402†	44490.6	45104.2	555.22 µg/L	555.22 ppb	05:16:26
1	Zn 213.857†	24197.0	23992.8	551.96 µg/L	551.96 ppb	05:16:26
2	Sc RADIAL	101434.8	101434.8	101 %		05:15:23
2	Al 396.153Radial†	10844.7	11128.8	5244.9 µg/L	5244.9 ppb	05:15:23
2	Ca 317.933Radial†	17223.2	16650.9	5370.5 µg/L	5370.5 ppb	05:15:23
2	Fe 238.204 Radial†	581.0	561.0	5512.2 µg/L	5512.2 ppb	05:15:43
2	K 766.490 Radial†	10816.6	10376.6	5109.9 µg/L	5109.9 ppb	05:15:23
2	Mg 279.077 IEC†	512.8	497.9	5455.4 µg/L	5455.4 ppb	05:15:43
2	Na 589.592 Radial†	25005.2	24525.4	10759 µg/L	10759 ppb	05:15:23
2	Sr 421.552†	99181.2	97968.2	529.35 µg/L	529.35 ppb	05:15:23
2	Sc 361.383	1888130.3	1888130.3	98.258 %		05:16:54
2	Y 371.029	1312381.4	1312381.4	98.083 %		05:16:54
2	Ag 328.068†	63114.2	64801.3	536.24 µg/L	536.24 ppb	05:17:00
2	As 188.979†	361.3	370.9	553.78 µg/L	553.78 ppb	05:17:20
2	B 249.677†	11384.1	11229.4	533.49 µg/L	533.49 ppb	05:17:00
2	Ba 233.527†	23892.6	24347.4	548.77 µg/L	548.77 ppb	05:17:00
2	Be 313.107†	873428.9	890445.7	540.78 µg/L	540.78 ppb	05:16:54
2	Cd 226.502†	22027.8	22598.1	549.58 µg/L	549.58 ppb	05:17:00
2	Co 228.616†	12355.0	12555.0	551.12 µg/L	551.12 ppb	05:17:00
2	Cr 267.716†	24290.8	24647.0	551.37 µg/L	551.37 ppb	05:17:00
2	Cu 324.752†	82328.9	80199.7	544.63 µg/L	544.63 ppb	05:17:00
2	Mn 257.610†	168147.1	171911.9	551.27 µg/L	551.27 ppb	05:16:54
2	Mo 202.031†	5521.5	5611.5	554.82 µg/L	554.82 ppb	05:17:20
2	Ni 231.604†	9930.5	9739.7	552.81 µg/L	552.81 ppb	05:17:00
2	P 214.914†	1898.9	1625.6	2722.7 µg/L	2722.7 ppb	05:17:20
2	Pb 220.353†	2126.5	2108.1	557.41 µg/L	557.41 ppb	05:17:20

2	S 181.975 Axial†	360.5	343.4	1092.0 µg/L	1092.0 ppb	05:17:20
2	Sb 206.836†	627.9	611.5	555.44 µg/L	555.44 ppb	05:17:20
2	Se 196.026†	559.5	548.9	552.55 µg/L	552.55 ppb	05:17:20
2	SiO2†	32619.6	30862.1	5832.1 µg/L	5832.1 ppb	05:17:00
2	Si 251.611†	38305.0	38586.5	2731.9 µg/L	2731.9 ppb	05:17:00
2	Sn 189.927†	1394.3	1417.1	550.75 µg/L	550.75 ppb	05:17:20
2	Ti 334.940†	218136.4	222687.5	536.75 µg/L	536.75 ppb	05:16:54
2	Tl 190.801†	491.3	536.1	547.72 µg/L	547.72 ppb	05:17:20
2	U 409.014†	5891.4	6026.1	539.45 µg/L	539.45 ppb	05:17:00
2	V 292.402†	44079.4	44764.2	551.05 µg/L	551.05 ppb	05:17:00
2	Zn 213.857†	24048.8	23884.6	549.47 µg/L	549.47 ppb	05:17:00
3	Sc RADIAL	100794.0	100794.0	100 %		05:15:48
3	Al 396.153Radial†	10753.1	11105.8	5235.8 µg/L	5235.8 ppb	05:15:48
3	Ca 317.933Radial†	17118.8	16655.2	5371.9 µg/L	5371.9 ppb	05:15:48
3	Fe 238.204 Radial†	582.2	565.8	5558.8 µg/L	5558.8 ppb	05:16:09
3	K 766.490 Radial†	10876.1	10503.9	5172.6 µg/L	5172.6 ppb	05:15:48
3	Mg 279.077 IEC†	510.1	498.4	5459.8 µg/L	5459.8 ppb	05:16:09
3	Na 589.592 Radial†	24815.3	24493.6	10745 µg/L	10745 ppb	05:15:48
3	Sr 421.552†	98683.5	98096.5	530.04 µg/L	530.04 ppb	05:15:48
3	Sc 361.383	1890706.7	1890706.7	98.392 %		05:17:27
3	Y 371.029	1312891.4	1312891.4	98.121 %		05:17:27
3	Ag 328.068†	60009.4	61558.2	509.28 µg/L	509.28 ppb	05:17:33
3	As 188.979†	312.0	320.3	478.11 µg/L	478.11 ppb	05:17:53
3	B 249.677†	10792.7	10612.5	503.96 µg/L	503.96 ppb	05:17:33
3	Ba 233.527†	22122.2	22514.9	507.45 µg/L	507.45 ppb	05:17:33
3	Be 313.107†	832056.8	847186.0	514.51 µg/L	514.51 ppb	05:17:27
3	Cd 226.502†	20307.8	20819.4	506.26 µg/L	506.26 ppb	05:17:33
3	Co 228.616†	11291.5	11457.0	502.85 µg/L	502.85 ppb	05:17:33
3	Cr 267.716†	21904.3	22187.8	496.36 µg/L	496.36 ppb	05:17:33
3	Cu 324.752†	75979.6	73632.4	500.13 µg/L	500.13 ppb	05:17:33
3	Mn 257.610†	160170.6	163571.8	524.53 µg/L	524.53 ppb	05:17:27
3	Mo 202.031†	4667.1	4735.5	468.24 µg/L	468.24 ppb	05:17:53
3	Ni 231.604†	9137.8	8920.2	506.31 µg/L	506.31 ppb	05:17:33
3	P 214.914†	1673.9	1394.2	2330.9 µg/L	2330.9 ppb	05:17:53
3	Pb 220.353†	1849.9	1824.0	482.26 µg/L	482.26 ppb	05:17:53
3	S 181.975 Axial†	319.0	300.6	956.04 µg/L	956.04 ppb	05:17:53
3	Sb 206.836†	538.7	519.9	471.86 µg/L	471.86 ppb	05:17:53
3	Se 196.026†	512.7	500.5	505.16 µg/L	505.16 ppb	05:17:53
3	SiO2†	30722.9	28889.2	5459.3 µg/L	5459.3 ppb	05:17:33
3	Si 251.611†	35885.2	36074.1	2554.0 µg/L	2554.0 ppb	05:17:33
3	Sn 189.927†	1158.5	1175.5	455.74 µg/L	455.74 ppb	05:17:53
3	Ti 334.940†	206680.4	210741.7	507.94 µg/L	507.94 ppb	05:17:27
3	Tl 190.801†	443.9	487.2	498.01 µg/L	498.01 ppb	05:17:53
3	U 409.014†	5411.0	5529.6	494.92 µg/L	494.92 ppb	05:17:33
3	V 292.402†	40193.4	40753.5	501.29 µg/L	501.29 ppb	05:17:33
3	Zn 213.857†	22162.9	21934.5	504.56 µg/L	504.56 ppb	05:17:33

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1890081.1	98.359 %	0.0898			0.09%
Sc RADIAL	101269.9	101 %	0.4			0.41%
Y 371.029	1312567.4	98.097 %	0.0210			0.02%
Ag 328.068†	63896.7	528.71 µg/L	16.967	528.71 ppb	16.967	3.21%
QC value within limits for Ag 328.068 Recovery = 105.74%						
Al 396.153Radial†	11117.4	5240.1 µg/L	4.56	5240.1 ppb	4.56	0.09%
QC value within limits for Al 396.153Radial Recovery = 104.80%						
As 188.979†	354.1	528.68 µg/L	43.803	528.68 ppb	43.803	8.29%
QC value within limits for As 188.979 Recovery = 105.74%						
B 249.677†	11043.7	524.60 µg/L	17.930	524.60 ppb	17.930	3.42%
QC value within limits for B 249.677 Recovery = 104.92%						
Ba 233.527†	23739.8	535.07 µg/L	23.920	535.07 ppb	23.920	4.47%
QC value within limits for Ba 233.527 Recovery = 107.01%						
Be 313.107†	875635.8	531.79 µg/L	14.967	531.79 ppb	14.967	2.81%
QC value within limits for Be 313.107 Recovery = 106.36%						
Ca 317.933Radial†	16654.7	5371.8 µg/L	1.18	5371.8 ppb	1.18	0.02%
QC value within limits for Ca 317.933Radial Recovery = 107.44%						
Cd 226.502†	22057.3	536.41 µg/L	26.175	536.41 ppb	26.175	4.88%
QC value within limits for Cd 226.502 Recovery = 107.28%						
Co 228.616†	12196.4	535.35 µg/L	28.153	535.35 ppb	28.153	5.26%

Cr	267.716†	23899.7	534.65 µg/L	33.253	534.65 ppb	33.253	6.22%
Cu	324.752†	78092.3	530.35 µg/L	26.187	530.35 ppb	26.187	4.94%
Fe	238.204 Radial†	562.7	5528.3 µg/L	26.48	5528.3 ppb	26.48	0.48%
K	766.490 Radial†	10490.8	5166.1 µg/L	53.26	5166.1 ppb	53.26	1.03%
Mg	279.077 IEC†	496.9	5444.9 µg/L	22.15	5444.9 ppb	22.15	0.41%
Mn	257.610†	169021.8	542.01 µg/L	15.145	542.01 ppb	15.145	2.79%
Mo	202.031†	5321.4	526.15 µg/L	50.149	526.15 ppb	50.149	9.53%
Na	589.592 Radial†	24540.4	10765 µg/L	24.5	10765 ppb	24.5	0.23%
Ni	231.604†	9486.8	538.46 µg/L	27.896	538.46 ppb	27.896	5.18%
P	214.914†	1547.7	2590.7 µg/L	224.99	2590.7 ppb	224.99	8.68%
Pb	220.353†	2008.5	531.06 µg/L	42.305	531.06 ppb	42.305	7.97%
S	181.975 Axial†	326.6	1038.6 µg/L	72.49	1038.6 ppb	72.49	6.98%
Sb	206.836†	580.7	527.39 µg/L	48.094	527.39 ppb	48.094	9.12%
Se	196.026†	539.3	543.20 µg/L	34.337	543.20 ppb	34.337	6.32%
SiO2†		30246.0	5715.7 µg/L	222.37	5715.7 ppb	222.37	3.89%
Si	251.611†	37754.8	2673.0 µg/L	103.05	2673.0 ppb	103.05	3.86%
Sn	189.927†	1336.6	519.09 µg/L	54.871	519.09 ppb	54.871	10.57%
Sr	421.552†	98081.4	529.96 µg/L	0.575	529.96 ppb	0.575	0.11%
Ti	334.940†	218605.0	526.91 µg/L	16.430	526.91 ppb	16.430	3.12%
Tl	190.801†	521.3	532.71 µg/L	30.137	532.71 ppb	30.137	5.66%
U	409.014†	5878.2	526.19 µg/L	27.187	526.19 ppb	27.187	5.17%
V	292.402†	43540.6	535.85 µg/L	30.006	535.85 ppb	30.006	5.60%
Zn	213.857†	23270.7	535.33 µg/L	26.674	535.33 ppb	26.674	4.98%

QC value within limits for Co 228.616 Recovery = 107.07%  
 QC value within limits for Cr 267.716 Recovery = 106.93%  
 QC value within limits for Cu 324.752 Recovery = 106.07%  
 QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.57%  
 QC value within limits for K 766.490 Radial Recovery = 103.32%  
 QC value within limits for Mg 279.077 IEC Recovery = 108.90%  
 QC value within limits for Mn 257.610 Recovery = 108.40%  
 QC value within limits for Mo 202.031 Recovery = 105.23%  
 QC value within limits for Na 589.592 Radial Recovery = 107.65%  
 QC value within limits for Ni 231.604 Recovery = 107.69%  
 QC value within limits for P 214.914 Recovery = 103.63%  
 QC value within limits for Pb 220.353 Recovery = 106.21%  
 QC value within limits for S 181.975 Axial Recovery = 103.86%  
 QC value within limits for Sb 206.836 Recovery = 105.48%  
 QC value within limits for Se 196.026 Recovery = 108.64%  
 QC value within limits for SiO2 Recovery = 106.89%  
 QC value within limits for Si 251.611 Recovery = 106.92%  
 QC value within limits for Sn 189.927 Recovery = 103.82%  
 QC value within limits for Sr 421.552 Recovery = 105.99%  
 QC value within limits for Ti 334.940 Recovery = 105.38%  
 QC value within limits for Tl 190.801 Recovery = 106.54%  
 QC value within limits for U 409.014 Recovery = 105.24%  
 QC value within limits for V 292.402 Recovery = 107.17%  
 QC value within limits for Zn 213.857 Recovery = 107.07%

QC Failed. Continue with analysis.



Sequence No.: 23

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 05:18:02

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	101279.5	101279.5	101 %		05:18:35
1	Al 396.153Radial†	-351.6	52.1	24.594 µg/L	24.594 ppb	05:18:35
1	Ca 317.933Radial†	382.3	-8.8	-2.8370 µg/L	-2.8370 ppb	05:18:55
1	Fe 238.204 Radial†	19.9	6.0	58.698 µg/L	58.698 ppb	05:18:55
1	K 766.490 Radial†	292.1	-34.5	-17.002 µg/L	-17.002 ppb	05:18:35
1	Mg 279.077 IEC†	14.1	4.6	50.204 µg/L	50.204 ppb	05:18:55
1	Na 589.592 Radial†	253.2	39.3	17.224 µg/L	17.224 ppb	05:18:35
1	Sr 421.552†	168.5	17.8	0.0961 µg/L	0.0961 ppb	05:18:35
1	Sc 361.383	1883595.4	1883595.4	98.022 %		05:19:58
1	Y 371.029	1311726.8	1311726.8	98.034 %		05:19:58
1	Ag 328.068†	-524.1	33.2	0.2794 µg/L	0.2794 ppb	05:20:03
1	As 188.979†	0.6	3.8	5.7092 µg/L	5.7092 ppb	05:20:24
1	B 249.677†	368.9	19.7	0.9113 µg/L	0.9113 ppb	05:20:24
1	Ba 233.527†	-18.4	12.3	0.2778 µg/L	0.2778 ppb	05:20:24
1	Be 313.107†	-1400.1	99.4	0.0604 µg/L	0.0604 ppb	05:20:03
1	Cd 226.502†	-182.0	-6.0	-0.1497 µg/L	-0.1497 ppb	05:20:24
1	Co 228.616†	16.8	-1.9	-0.0837 µg/L	-0.0837 ppb	05:20:24
1	Cr 267.716†	100.6	28.1	0.6277 µg/L	0.6277 ppb	05:20:24
1	Cu 324.752†	3737.9	224.2	1.5307 µg/L	1.5307 ppb	05:20:03
1	Mn 257.610†	-686.7	82.4	0.2642 µg/L	0.2642 ppb	05:20:24
1	Mo 202.031†	6.3	-1.5	-0.1467 µg/L	-0.1467 ppb	05:20:24
1	Ni 231.604†	392.8	33.8	1.9210 µg/L	1.9210 ppb	05:20:24
1	P 214.914†	313.9	13.2	22.248 µg/L	22.248 ppb	05:20:24
1	Pb 220.353†	57.4	2.4	0.6447 µg/L	0.6447 ppb	05:20:24
1	S 181.975 Axial†	20.7	-2.5	-7.8538 µg/L	-7.8538 ppb	05:20:24
1	Sb 206.836†	27.4	0.3	0.2750 µg/L	0.2750 ppb	05:20:24
1	Se 196.026†	8.2	-12.2	-11.832 µg/L	-11.832 ppb	05:20:24
1	SiO2†	2410.5	123.2	23.281 µg/L	23.281 ppb	05:20:24
1	Si 251.611†	500.2	112.5	7.9623 µg/L	7.9623 ppb	05:20:24
1	Sn 189.927†	-1.2	-3.1	-1.2827 µg/L	-1.2827 ppb	05:20:24
1	Ti 334.940†	-672.6	-3.4	-0.0123 µg/L	-0.0123 ppb	05:20:03
1	Tl 190.801†	-38.7	-3.4	-3.4143 µg/L	-3.4143 ppb	05:20:24
1	U 409.014†	-55.3	-26.3	-2.3656 µg/L	-2.3656 ppb	05:20:03
1	V 292.402†	123.8	29.4	0.3450 µg/L	0.3450 ppb	05:20:03
1	Zn 213.857†	630.7	52.8	1.2062 µg/L	1.2062 ppb	05:20:24
2	Sc RADIAL	101423.8	101423.8	101 %		05:19:01
2	Al 396.153Radial†	-354.2	49.9	23.561 µg/L	23.561 ppb	05:19:01
2	Ca 317.933Radial†	389.8	-2.0	-0.6290 µg/L	-0.6290 ppb	05:19:21
2	Fe 238.204 Radial†	16.2	2.3	22.362 µg/L	22.362 ppb	05:19:21
2	K 766.490 Radial†	259.3	-67.4	-33.215 µg/L	-33.215 ppb	05:19:01
2	Mg 279.077 IEC†	13.5	3.9	43.111 µg/L	43.111 ppb	05:19:21
2	Na 589.592 Radial†	229.7	15.6	6.8534 µg/L	6.8534 ppb	05:19:01
2	Sr 421.552†	176.6	25.6	0.1384 µg/L	0.1384 ppb	05:19:01
2	Sc 361.383	1878977.7	1878977.7	97.781 %		05:20:30
2	Y 371.029	1309221.8	1309221.8	97.847 %		05:20:30
2	Ag 328.068†	-541.8	13.8	0.1164 µg/L	0.1164 ppb	05:20:36
2	As 188.979†	-1.6	1.6	2.3524 µg/L	2.3524 ppb	05:20:56
2	B 249.677†	379.9	31.9	1.5117 µg/L	1.5117 ppb	05:20:56
2	Ba 233.527†	-14.9	15.8	0.3570 µg/L	0.3570 ppb	05:20:56
2	Be 313.107†	-1427.3	68.1	0.0413 µg/L	0.0413 ppb	05:20:36
2	Cd 226.502†	-171.7	4.0	0.0965 µg/L	0.0965 ppb	05:20:56
2	Co 228.616†	18.2	-0.4	-0.0185 µg/L	-0.0185 ppb	05:20:56
2	Cr 267.716†	93.6	21.2	0.4730 µg/L	0.4730 ppb	05:20:56
2	Cu 324.752†	3682.7	177.1	1.2046 µg/L	1.2046 ppb	05:20:36
2	Mn 257.610†	-706.4	60.5	0.1926 µg/L	0.1926 ppb	05:20:56
2	Mo 202.031†	14.2	6.5	0.6480 µg/L	0.6480 ppb	05:20:56
2	Ni 231.604†	379.3	21.0	1.1951 µg/L	1.1951 ppb	05:20:56
2	P 214.914†	318.3	18.4	31.325 µg/L	31.325 ppb	05:20:56
2	Pb 220.353†	47.0	-8.1	-2.1337 µg/L	-2.1337 ppb	05:20:56

2	S 181.975 Axial†	20.8	-2.3	-7.3561 µg/L	-7.3561 ppb	05:20:56
2	Sb 206.836†	31.8	4.9	4.4680 µg/L	4.4680 ppb	05:20:56
2	Se 196.026†	17.3	-2.9	-2.8000 µg/L	-2.8000 ppb	05:20:56
2	SiO2†	2430.9	150.2	28.376 µg/L	28.376 ppb	05:20:56
2	Si 251.611†	524.5	138.6	9.8123 µg/L	9.8123 ppb	05:20:56
2	Sn 189.927†	-0.0	-2.0	-0.7971 µg/L	-0.7971 ppb	05:20:56
2	Ti 334.940†	-635.1	33.3	0.0768 µg/L	0.0768 ppb	05:20:36
2	Tl 190.801†	-32.2	3.1	3.1829 µg/L	3.1829 ppb	05:20:56
2	U 409.014†	23.0	53.7	4.8144 µg/L	4.8144 ppb	05:20:36
2	V 292.402†	114.5	20.2	0.2527 µg/L	0.2527 ppb	05:20:36
2	Zn 213.857†	630.7	54.4	1.2486 µg/L	1.2486 ppb	05:20:56
3	Sc RADIAL	101346.6	101346.6	101 %		05:19:27
3	Al 396.153Radial†	-341.8	62.0	29.265 µg/L	29.265 ppb	05:19:27
3	Ca 317.933Radial†	396.6	5.1	1.6422 µg/L	1.6422 ppb	05:19:48
3	Fe 238.204 Radial†	18.0	4.1	40.257 µg/L	40.257 ppb	05:19:48
3	K 766.490 Radial†	298.5	-28.4	-14.006 µg/L	-14.006 ppb	05:19:27
3	Mg 279.077 IEC†	6.2	-3.3	-35.973 µg/L	-35.973 ppb	05:19:48
3	Na 589.592 Radial†	221.6	7.8	3.4167 µg/L	3.4167 ppb	05:19:27
3	Sr 421.552†	161.4	10.7	0.0576 µg/L	0.0576 ppb	05:19:27
3	Sc 361.383	1897859.3	1897859.3	98.764 %		05:21:02
3	Y 371.029	1320428.1	1320428.1	98.685 %		05:21:02
3	Ag 328.068†	-553.6	7.3	0.0657 µg/L	0.0657 ppb	05:21:08
3	As 188.979†	-5.0	-1.9	-2.7952 µg/L	-2.7952 ppb	05:21:28
3	B 249.677†	373.6	21.7	1.0157 µg/L	1.0157 ppb	05:21:28
3	Ba 233.527†	-13.4	17.5	0.3948 µg/L	0.3948 ppb	05:21:28
3	Be 313.107†	-1370.1	140.5	0.0853 µg/L	0.0853 ppb	05:21:08
3	Cd 226.502†	-176.7	0.8	0.0158 µg/L	0.0158 ppb	05:21:28
3	Co 228.616†	31.2	12.5	0.5476 µg/L	0.5476 ppb	05:21:28
3	Cr 267.716†	93.3	19.9	0.4458 µg/L	0.4458 ppb	05:21:28
3	Cu 324.752†	3709.1	166.3	1.1349 µg/L	1.1349 ppb	05:21:08
3	Mn 257.610†	-690.0	84.3	0.2751 µg/L	0.2751 ppb	05:21:28
3	Mo 202.031†	9.0	1.2	0.1165 µg/L	0.1165 ppb	05:21:28
3	Ni 231.604†	383.8	21.7	1.2340 µg/L	1.2340 ppb	05:21:28
3	P 214.914†	307.1	3.9	6.4621 µg/L	6.4621 ppb	05:21:28
3	Pb 220.353†	60.5	5.2	1.3701 µg/L	1.3701 ppb	05:21:28
3	S 181.975 Axial†	23.0	-0.2	-0.7499 µg/L	-0.7499 ppb	05:21:28
3	Sb 206.836†	29.0	1.7	1.5756 µg/L	1.5756 ppb	05:21:28
3	Se 196.026†	19.1	-1.2	-1.0001 µg/L	-1.0001 ppb	05:21:28
3	SiO2†	2426.8	121.3	22.920 µg/L	22.920 ppb	05:21:28
3	Si 251.611†	525.0	133.7	9.4684 µg/L	9.4684 ppb	05:21:28
3	Sn 189.927†	-3.4	-5.3	-2.1409 µg/L	-2.1409 ppb	05:21:28
3	Ti 334.940†	-597.5	77.8	0.1904 µg/L	0.1904 ppb	05:21:08
3	Tl 190.801†	-38.4	-2.8	-2.8172 µg/L	-2.8172 ppb	05:21:28
3	U 409.014†	-100.3	-71.4	-6.4076 µg/L	-6.4076 ppb	05:21:08
3	V 292.402†	124.8	29.5	0.3477 µg/L	0.3477 ppb	05:21:08
3	Zn 213.857†	630.0	47.2	1.0868 µg/L	1.0868 ppb	05:21:28

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1886810.8	98.189 %	0.5122			0.52%
Sc RADIAL	101350.0	101 %	0.1			0.07%
Y 371.029	1313792.2	98.189 %	0.4396			0.45%
Ag 328.068†	18.1	0.1538 µg/L	0.11162	0.1538 ppb	0.11162	72.56%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	54.6	25.807 µg/L	3.0392	25.807 ppb	3.0392	11.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.2	1.7555 µg/L	4.28348	1.7555 ppb	4.28348	244.01%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	24.5	1.1462 µg/L	0.32075	1.1462 ppb	0.32075	27.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	15.2	0.3432 µg/L	0.05971	0.3432 ppb	0.05971	17.40%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	102.6	0.0623 µg/L	0.02205	0.0623 ppb	0.02205	35.38%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-0.6079 µg/L	2.23968	-0.6079 ppb	2.23968	368.41%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-0.4	-0.0125 µg/L	0.12554	-0.0125 ppb	0.12554	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.4	0.1485 µg/L	0.34716	0.1485 ppb	0.34716	233.85%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	23.0	0.5155 µg/L	0.09812	0.5155 ppb	0.09812	19.03%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	189.2	1.2901 µg/L	0.21133	1.2901 ppb	0.21133	16.38%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	4.1	40.439 µg/L	18.1685	40.439 ppb	18.1685	44.93%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-43.5	-21.408 µg/L	10.3344	-21.408 ppb	10.3344	48.27%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.7	19.114 µg/L	47.8382	19.114 ppb	47.8382	250.28%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	75.7	0.2440 µg/L	0.04485	0.2440 ppb	0.04485	18.38%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.1	0.2059 µg/L	0.40484	0.2059 ppb	0.40484	196.58%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	20.9	9.1646 µg/L	7.18777	9.1646 ppb	7.18777	78.43%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	25.5	1.4500 µg/L	0.40836	1.4500 ppb	0.40836	28.16%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	11.8	20.012 µg/L	12.5816	20.012 ppb	12.5816	62.87%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-0.2	-0.0396 µg/L	1.84940	-0.0396 ppb	1.84940	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.7	-5.3199 µg/L	3.96559	-5.3199 ppb	3.96559	74.54%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.3	2.1062 µg/L	2.14623	2.1062 ppb	2.14623	101.90%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-5.4	-5.2108 µg/L	5.80455	-5.2108 ppb	5.80455	111.40%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	131.5	24.859 µg/L	3.0512	24.859 ppb	3.0512	12.27%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	128.3	9.0810 µg/L	0.98394	9.0810 ppb	0.98394	10.84%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.5	-1.4069 µg/L	0.68047	-1.4069 ppb	0.68047	48.37%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	18.0	0.0974 µg/L	0.04040	0.0974 ppb	0.04040	41.50%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	35.9	0.0850 µg/L	0.10160	0.0850 ppb	0.10160	119.53%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.0	-1.0162 µg/L	3.64872	-1.0162 ppb	3.64872	359.06%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-14.6	-1.3196 µg/L	5.68364	-1.3196 ppb	5.68364	430.70%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	26.3	0.3151 µg/L	0.05406	0.3151 ppb	0.05406	17.15%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	51.5	1.1806 µg/L	0.08389	1.1806 ppb	0.08389	7.11%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 05:54:26

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	103552.4	103552.4	103 %		05:55:03
1	Al 396.153Radial†	10888.5	10951.8	5161.7 µg/L	5161.7 ppb	05:55:03
1	Ca 317.933Radial†	16887.1	15976.8	5153.1 µg/L	5153.1 ppb	05:55:03
1	Fe 238.204 Radial†	542.2	511.7	5028.3 µg/L	5028.3 ppb	05:55:23
1	K 766.490 Radial†	10969.1	10305.6	5074.9 µg/L	5074.9 ppb	05:55:03
1	Mg 279.077 IEC†	480.5	456.2	4999.8 µg/L	4999.8 ppb	05:55:23
1	Na 589.592 Radial†	23639.2	22695.8	9955.9 µg/L	9955.9 ppb	05:55:03
1	Sr 421.552†	96071.5	92948.3	502.23 µg/L	502.23 ppb	05:55:03
1	Sc 361.383	1945146.2	1945146.2	101.22 %		05:56:27
1	Y 371.029	1349240.3	1349240.3	100.84 %		05:56:27
1	Ag 328.068†	62136.5	61952.6	512.62 µg/L	512.62 ppb	05:56:33
1	As 188.979†	354.4	353.3	527.58 µg/L	527.58 ppb	05:56:53
1	B 249.677†	11192.5	10700.5	508.47 µg/L	508.47 ppb	05:56:33
1	Ba 233.527†	23122.8	22874.2	515.57 µg/L	515.57 ppb	05:56:33
1	Be 313.107†	854188.9	845382.6	513.41 µg/L	513.41 ppb	05:56:27
1	Cd 226.502†	21352.2	21273.5	517.38 µg/L	517.38 ppb	05:56:33
1	Co 228.616†	11922.9	11759.6	516.19 µg/L	516.19 ppb	05:56:33
1	Cr 267.716†	23700.8	23339.5	522.12 µg/L	522.12 ppb	05:56:33
1	Cu 324.752†	80881.9	76314.2	518.21 µg/L	518.21 ppb	05:56:33
1	Mn 257.610†	165151.6	163936.6	525.70 µg/L	525.70 ppb	05:56:27
1	Mo 202.031†	5457.2	5383.2	532.24 µg/L	532.24 ppb	05:56:53
1	Ni 231.604†	9624.5	9141.1	518.83 µg/L	518.83 ppb	05:56:33
1	P 214.914†	1862.3	1532.8	2567.0 µg/L	2567.0 ppb	05:56:53
1	Pb 220.353†	2072.0	1990.8	526.43 µg/L	526.43 ppb	05:56:53
1	S 181.975 Axial†	351.0	323.2	1027.8 µg/L	1027.8 ppb	05:56:53
1	Sb 206.836†	610.0	575.1	522.52 µg/L	522.52 ppb	05:56:53
1	Se 196.026†	564.0	536.7	539.35 µg/L	539.35 ppb	05:56:53
1	SiO2†	31714.2	28994.6	5479.2 µg/L	5479.2 ppb	05:56:33
1	Si 251.611†	37072.3	36226.0	2564.8 µg/L	2564.8 ppb	05:56:33
1	Sn 189.927†	1369.3	1350.8	525.25 µg/L	525.25 ppb	05:56:53
1	Ti 334.940†	214637.0	212723.0	512.75 µg/L	512.75 ppb	05:56:27
1	Tl 190.801†	482.9	513.2	524.29 µg/L	524.29 ppb	05:56:53
1	U 409.014†	5819.3	5779.0	517.38 µg/L	517.38 ppb	05:56:33
1	V 292.402†	43089.6	42471.4	522.91 µg/L	522.91 ppb	05:56:33
1	Zn 213.857†	23355.6	22482.4	517.22 µg/L	517.22 ppb	05:56:33
2	Sc RADIAL	102666.6	102666.6	102 %		05:55:29
2	Al 396.153Radial†	10761.5	10918.7	5146.3 µg/L	5146.3 ppb	05:55:29
2	Ca 317.933Radial†	16773.3	16006.7	5162.7 µg/L	5162.7 ppb	05:55:29
2	Fe 238.204 Radial†	548.1	521.9	5128.4 µg/L	5128.4 ppb	05:55:49
2	K 766.490 Radial†	10869.1	10299.5	5071.9 µg/L	5071.9 ppb	05:55:29
2	Mg 279.077 IEC†	489.9	469.4	5144.0 µg/L	5144.0 ppb	05:55:49
2	Na 589.592 Radial†	23353.7	22614.4	9920.2 µg/L	9920.2 ppb	05:55:29
2	Sr 421.552†	94866.8	92574.1	500.20 µg/L	500.20 ppb	05:55:29
2	Sc 361.383	1948057.2	1948057.2	101.38 %		05:57:01
2	Y 371.029	1353858.6	1353858.6	101.18 %		05:57:01
2	Ag 328.068†	62109.5	61834.3	511.66 µg/L	511.66 ppb	05:57:06
2	As 188.979†	350.4	348.8	520.83 µg/L	520.83 ppb	05:57:27
2	B 249.677†	11179.0	10670.6	507.00 µg/L	507.00 ppb	05:57:06
2	Ba 233.527†	23087.3	22804.9	514.01 µg/L	514.01 ppb	05:57:06
2	Be 313.107†	851009.6	840985.5	510.74 µg/L	510.74 ppb	05:57:01
2	Cd 226.502†	21273.6	21164.4	514.71 µg/L	514.71 ppb	05:57:06
2	Co 228.616†	11958.8	11777.4	516.98 µg/L	516.98 ppb	05:57:06
2	Cr 267.716†	23647.6	23252.0	520.16 µg/L	520.16 ppb	05:57:06
2	Cu 324.752†	80908.3	76220.8	517.59 µg/L	517.59 ppb	05:57:06
2	Mn 257.610†	164198.8	162752.9	521.90 µg/L	521.90 ppb	05:57:01
2	Mo 202.031†	5394.7	5313.5	525.35 µg/L	525.35 ppb	05:57:27
2	Ni 231.604†	9600.1	9102.9	516.66 µg/L	516.66 ppb	05:57:06
2	P 214.914†	1856.0	1523.8	2551.5 µg/L	2551.5 ppb	05:57:27
2	Pb 220.353†	2026.1	1942.5	513.65 µg/L	513.65 ppb	05:57:27

2	S 181.975 Axial†	349.2	320.9	1020.6 µg/L	1020.6 ppb	05:57:27
2	Sb 206.836†	611.0	575.1	522.47 µg/L	522.47 ppb	05:57:27
2	Se 196.026†	556.0	527.9	530.97 µg/L	530.97 ppb	05:57:27
2	SiO2†	31857.6	29089.2	5497.1 µg/L	5497.1 ppb	05:57:06
2	Si 251.611†	37199.7	36296.9	2569.8 µg/L	2569.8 ppb	05:57:06
2	Sn 189.927†	1351.6	1331.3	517.47 µg/L	517.47 ppb	05:57:27
2	Ti 334.940†	213500.6	211285.2	509.27 µg/L	509.27 ppb	05:57:01
2	Tl 190.801†	488.6	518.1	529.22 µg/L	529.22 ppb	05:57:27
2	U 409.014†	5817.7	5768.9	516.45 µg/L	516.45 ppb	05:57:06
2	V 292.402†	43181.0	42497.9	523.16 µg/L	523.16 ppb	05:57:06
2	Zn 213.857†	23296.5	22389.7	515.07 µg/L	515.07 ppb	05:57:06
3	Sc RADIAL	103609.3	103609.3	103 %		05:55:55
3	Al 396.153Radial†	10823.9	10883.5	5131.3 µg/L	5131.3 ppb	05:55:55
3	Ca 317.933Radial†	16977.1	16054.9	5178.3 µg/L	5178.3 ppb	05:55:55
3	Fe 238.204 Radial†	542.8	511.9	5029.6 µg/L	5029.6 ppb	05:56:15
3	K 766.490 Radial†	10947.5	10278.8	5061.7 µg/L	5061.7 ppb	05:55:55
3	Mg 279.077 IEC†	484.2	459.5	5034.5 µg/L	5034.5 ppb	05:56:15
3	Na 589.592 Radial†	23482.1	22531.0	9883.6 µg/L	9883.6 ppb	05:55:55
3	Sr 421.552†	95470.6	92315.2	498.81 µg/L	498.81 ppb	05:55:55
3	Sc 361.383	1954783.7	1954783.7	101.73 %		05:57:34
3	Y 371.029	1356758.8	1356758.8	101.40 %		05:57:34
3	Ag 328.068†	59281.7	58843.7	486.79 µg/L	486.79 ppb	05:57:39
3	As 188.979†	308.4	306.4	457.28 µg/L	457.28 ppb	05:58:00
3	B 249.677†	10624.7	10087.8	479.18 µg/L	479.18 ppb	05:57:39
3	Ba 233.527†	21554.7	21220.0	478.27 µg/L	478.27 ppb	05:57:39
3	Be 313.107†	815264.0	802957.9	487.65 µg/L	487.65 ppb	05:57:34
3	Cd 226.502†	19748.5	19593.1	476.47 µg/L	476.47 ppb	05:57:39
3	Co 228.616†	11021.4	10815.3	474.67 µg/L	474.67 ppb	05:57:39
3	Cr 267.716†	21458.1	21019.5	470.22 µg/L	470.22 ppb	05:57:39
3	Cu 324.752†	75258.8	70392.6	478.07 µg/L	478.07 ppb	05:57:39
3	Mn 257.610†	157661.3	155768.9	499.50 µg/L	499.50 ppb	05:57:34
3	Mo 202.031†	4574.6	4489.0	443.86 µg/L	443.86 ppb	05:58:00
3	Ni 231.604†	8929.6	8411.1	477.41 µg/L	477.41 ppb	05:57:39
3	P 214.914†	1648.4	1313.4	2195.3 µg/L	2195.3 ppb	05:58:00
3	Pb 220.353†	1818.9	1732.0	457.91 µg/L	457.91 ppb	05:58:00
3	S 181.975 Axial†	316.8	287.9	915.39 µg/L	915.39 ppb	05:58:00
3	Sb 206.836†	533.2	496.6	450.73 µg/L	450.73 ppb	05:58:00
3	Se 196.026†	487.8	459.0	462.95 µg/L	462.95 ppb	05:58:00
3	SiO2†	29996.7	27151.8	5130.9 µg/L	5130.9 ppb	05:57:39
3	Si 251.611†	35004.4	34012.6	2408.1 µg/L	2408.1 ppb	05:57:39
3	Sn 189.927†	1125.1	1104.0	428.22 µg/L	428.22 ppb	05:58:00
3	Ti 334.940†	203895.9	201118.8	484.76 µg/L	484.76 ppb	05:57:34
3	Tl 190.801†	438.2	466.8	477.14 µg/L	477.14 ppb	05:58:00
3	U 409.014†	5361.2	5300.3	474.43 µg/L	474.43 ppb	05:57:39
3	V 292.402†	39617.8	38848.6	477.88 µg/L	477.88 ppb	05:57:39
3	Zn 213.857†	21597.6	20640.5	474.80 µg/L	474.80 ppb	05:57:39

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1949329.0	101.44 %	0.257			0.25%
Sc RADIAL	103276.1	103 %	0.5			0.51%
Y 371.029	1353285.9	101.14 %	0.283			0.28%
Ag 328.068†	60876.8	503.69 µg/L	14.640	503.69 ppb	14.640	2.91%
QC value within limits for Ag 328.068 Recovery = 100.74%						
Al 396.153Radial†	10918.0	5146.4 µg/L	15.22	5146.4 ppb	15.22	0.30%
QC value within limits for Al 396.153Radial Recovery = 102.93%						
As 188.979†	336.2	501.90 µg/L	38.787	501.90 ppb	38.787	7.73%
QC value within limits for As 188.979 Recovery = 100.38%						
B 249.677†	10486.3	498.21 µg/L	16.505	498.21 ppb	16.505	3.31%
QC value within limits for B 249.677 Recovery = 99.64%						
Ba 233.527†	22299.7	502.62 µg/L	21.098	502.62 ppb	21.098	4.20%
QC value within limits for Ba 233.527 Recovery = 100.52%						
Be 313.107†	829775.3	503.94 µg/L	14.167	503.94 ppb	14.167	2.81%
QC value within limits for Be 313.107 Recovery = 100.79%						
Ca 317.933Radial†	16012.8	5164.7 µg/L	12.71	5164.7 ppb	12.71	0.25%
QC value within limits for Ca 317.933Radial Recovery = 103.29%						
Cd 226.502†	20677.0	502.85 µg/L	22.892	502.85 ppb	22.892	4.55%
QC value within limits for Cd 226.502 Recovery = 100.57%						
Co 228.616†	11450.7	502.62 µg/L	24.201	502.62 ppb	24.201	4.81%

QC value within limits for Co 228.616	Recovery = 100.52%			
Cr 267.716†	22537.0	504.17 µg/L	29.414	5.83%
QC value within limits for Cr 267.716	Recovery = 100.83%			
Cu 324.752†	74309.2	504.62 µg/L	22.998	4.56%
QC value within limits for Cu 324.752	Recovery = 100.92%			
Fe 238.204 Radial†	515.2	5062.1 µg/L	57.44	1.13%
QC value within limits for Fe 238.204 Radial	Recovery = 101.24%			
K 766.490 Radial†	10294.6	5069.5 µg/L	6.92	0.14%
QC value within limits for K 766.490 Radial	Recovery = 101.39%			
Mg 279.077 IEC†	461.7	5059.4 µg/L	75.28	1.49%
QC value within limits for Mg 279.077 IEC	Recovery = 101.19%			
Mn 257.610†	160819.5	515.70 µg/L	14.155	2.74%
QC value within limits for Mn 257.610	Recovery = 103.14%			
Mo 202.031†	5061.9	500.49 µg/L	49.159	9.82%
QC value within limits for Mo 202.031	Recovery = 100.10%			
Na 589.592 Radial†	22613.7	9919.9 µg/L	36.15	0.36%
QC value within limits for Na 589.592 Radial	Recovery = 99.20%			
Ni 231.604†	8885.1	504.30 µg/L	23.317	4.62%
QC value within limits for Ni 231.604	Recovery = 100.86%			
P 214.914†	1456.6	2437.9 µg/L	210.26	8.62%
QC value within limits for P 214.914	Recovery = 97.52%			
Pb 220.353†	1888.4	499.33 µg/L	36.436	7.30%
QC value within limits for Pb 220.353	Recovery = 99.87%			
S 181.975 Axial†	310.7	987.95 µg/L	62.939	6.37%
QC value within limits for S 181.975 Axial	Recovery = 98.79%			
Sb 206.836†	548.9	498.57 µg/L	41.432	8.31%
QC value within limits for Sb 206.836	Recovery = 99.71%			
Se 196.026†	507.9	511.09 µg/L	41.902	8.20%
QC value within limits for Se 196.026	Recovery = 102.22%			
SiO2†	28411.8	5369.1 µg/L	206.41	3.84%
QC value within limits for SiO2	Recovery = 100.40%			
Si 251.611†	35511.9	2514.2 µg/L	91.96	3.66%
QC value within limits for Si 251.611	Recovery = 100.57%			
Sn 189.927†	1262.1	490.31 µg/L	53.917	11.00%
QC value within limits for Sn 189.927	Recovery = 98.06%			
Sr 421.552†	92612.5	500.41 µg/L	1.720	0.34%
QC value within limits for Sr 421.552	Recovery = 100.08%			
Ti 334.940†	208375.7	502.26 µg/L	15.256	3.04%
QC value within limits for Ti 334.940	Recovery = 100.45%			
Tl 190.801†	499.3	510.22 µg/L	28.753	5.64%
QC value within limits for Tl 190.801	Recovery = 102.04%			
U 409.014†	5616.1	502.75 µg/L	24.530	4.88%
QC value within limits for U 409.014	Recovery = 100.55%			
V 292.402†	41272.7	507.99 µg/L	26.069	5.13%
QC value within limits for V 292.402	Recovery = 101.60%			
Zn 213.857†	21837.5	502.36 µg/L	23.899	4.76%
QC value within limits for Zn 213.857	Recovery = 100.47%			

All analyte(s) passed QC.

Sequence No.: 34

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 05:58:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	102699.7	102699.7	102 %		05:58:42
1	Al 396.153Radial†	-376.3	32.7	15.410 µg/L	15.410 ppb	05:58:42
1	Ca 317.933Radial†	431.5	34.0	10.959 µg/L	10.959 ppb	05:59:03
1	Fe 238.204 Radial†	18.0	3.8	37.678 µg/L	37.678 ppb	05:59:03
1	K 766.490 Radial†	295.7	-35.0	-17.257 µg/L	-17.257 ppb	05:58:42
1	Mg 279.077 IEC†	9.5	-0.1	-0.7956 µg/L	-0.7956 ppb	05:59:03
1	Na 589.592 Radial†	232.2	15.2	6.6698 µg/L	6.6698 ppb	05:58:42
1	Sr 421.552†	153.3	0.7	0.0039 µg/L	0.0039 ppb	05:58:42
1	Sc 361.383	1936788.5	1936788.5	100.79 %		06:00:05
1	Y 371.029	1351124.8	1351124.8	100.98 %		06:00:05
1	Ag 328.068†	-531.1	40.9	0.3394 µg/L	0.3394 ppb	06:00:10
1	As 188.979†	-4.1	-0.8	-1.2585 µg/L	-1.2585 ppb	06:00:31
1	B 249.677†	361.7	2.3	0.0923 µg/L	0.0923 ppb	06:00:10
1	Ba 233.527†	-20.7	10.5	0.2364 µg/L	0.2364 ppb	06:00:31
1	Be 313.107†	-1334.6	203.6	0.1236 µg/L	0.1236 ppb	06:00:10
1	Cd 226.502†	-163.0	17.9	0.4311 µg/L	0.4311 ppb	06:00:31
1	Co 228.616†	19.3	0.1	0.0031 µg/L	0.0031 ppb	06:00:31
1	Cr 267.716†	104.9	29.5	0.6607 µg/L	0.6607 ppb	06:00:10
1	Cu 324.752†	3601.8	-15.6	-0.0988 µg/L	-0.0988 ppb	06:00:10
1	Mn 257.610†	-672.2	116.1	0.3745 µg/L	0.3745 ppb	06:00:31
1	Mo 202.031†	19.1	11.0	1.0868 µg/L	1.0868 ppb	06:00:31
1	Ni 231.604†	362.7	-7.1	-0.4001 µg/L	-0.4001 ppb	06:00:31
1	P 214.914†	300.3	-9.1	-15.519 µg/L	-15.519 ppb	06:00:31
1	Pb 220.353†	52.7	-3.8	-1.0065 µg/L	-1.0065 ppb	06:00:31
1	S 181.975 Axial†	21.1	-2.6	-8.3686 µg/L	-8.3686 ppb	06:00:31
1	Sb 206.836†	31.1	3.3	2.9624 µg/L	2.9624 ppb	06:00:31
1	Se 196.026†	26.4	5.6	5.6348 µg/L	5.6348 ppb	06:00:31
1	SiO2†	2385.4	30.8	5.8177 µg/L	5.8177 ppb	06:00:10
1	Si 251.611†	470.4	69.0	4.8830 µg/L	4.8830 ppb	06:00:31
1	Sn 189.927†	0.7	-1.2	-0.5296 µg/L	-0.5296 ppb	06:00:31
1	Ti 334.940†	-623.6	64.0	0.1546 µg/L	0.1546 ppb	06:00:10
1	Tl 190.801†	-37.4	-1.1	-1.0868 µg/L	-1.0868 ppb	06:00:31
1	U 409.014†	-60.8	-30.2	-2.7114 µg/L	-2.7114 ppb	06:00:10
1	V 292.402†	106.2	8.5	0.1036 µg/L	0.1036 ppb	06:00:10
1	Zn 213.857†	600.1	4.8	0.1117 µg/L	0.1117 ppb	06:00:31
2	Sc RADIAL	103999.3	103999.3	104 %		05:59:08
2	Al 396.153Radial†	-350.6	62.1	29.309 µg/L	29.309 ppb	05:59:08
2	Ca 317.933Radial†	436.2	33.3	10.732 µg/L	10.732 ppb	05:59:29
2	Fe 238.204 Radial†	15.4	1.1	10.483 µg/L	10.483 ppb	05:59:29
2	K 766.490 Radial†	373.4	36.3	17.892 µg/L	17.892 ppb	05:59:08
2	Mg 279.077 IEC†	12.4	2.6	28.505 µg/L	28.505 ppb	05:59:29
2	Na 589.592 Radial†	203.6	-15.1	-6.6441 µg/L	-6.6441 ppb	05:59:08
2	Sr 421.552†	179.8	24.4	0.1317 µg/L	0.1317 ppb	05:59:08
2	Sc 361.383	1945765.4	1945765.4	101.26 %		06:00:37
2	Y 371.029	1354533.8	1354533.8	101.23 %		06:00:37
2	Ag 328.068†	-587.4	-12.3	-0.0995 µg/L	-0.0995 ppb	06:00:42
2	As 188.979†	0.3	3.5	5.2126 µg/L	5.2126 ppb	06:01:03
2	B 249.677†	344.7	-16.1	-0.7746 µg/L	-0.7746 ppb	06:00:42
2	Ba 233.527†	-19.4	11.9	0.2688 µg/L	0.2688 ppb	06:01:03
2	Be 313.107†	-1365.7	179.1	0.1087 µg/L	0.1087 ppb	06:00:42
2	Cd 226.502†	-177.4	4.5	0.1082 µg/L	0.1082 ppb	06:01:03
2	Co 228.616†	26.9	7.5	0.3284 µg/L	0.3284 ppb	06:01:03
2	Cr 267.716†	85.7	10.1	0.2263 µg/L	0.2263 ppb	06:00:42
2	Cu 324.752†	3587.1	-46.6	-0.3140 µg/L	-0.3140 ppb	06:00:42
2	Mn 257.610†	-675.4	115.9	0.3705 µg/L	0.3705 ppb	06:01:03
2	Mo 202.031†	14.7	6.6	0.6515 µg/L	0.6515 ppb	06:01:03
2	Ni 231.604†	372.8	1.3	0.0736 µg/L	0.0736 ppb	06:01:03
2	P 214.914†	299.7	-11.0	-18.882 µg/L	-18.882 ppb	06:01:03
2	Pb 220.353†	36.8	-19.8	-5.2228 µg/L	-5.2228 ppb	06:01:03

2	S 181.975 Axial†	21.3	-2.5	-8.0562 µg/L	-8.0562 ppb	06:01:03
2	Sb 206.836†	36.4	8.3	7.5289 µg/L	7.5289 ppb	06:01:03
2	Se 196.026†	20.0	-0.8	-0.7531 µg/L	-0.7531 ppb	06:01:03
2	SiO2†	2400.0	34.3	6.4796 µg/L	6.4796 ppb	06:00:42
2	Si 251.611†	473.0	69.3	4.9091 µg/L	4.9091 ppb	06:01:03
2	Sn 189.927†	-10.0	-11.8	-4.6556 µg/L	-4.6556 ppb	06:01:03
2	Ti 334.940†	-569.9	119.9	0.2871 µg/L	0.2871 ppb	06:00:42
2	Tl 190.801†	-33.0	3.5	3.5281 µg/L	3.5281 ppb	06:01:03
2	U 409.014†	-66.2	-35.2	-3.1632 µg/L	-3.1632 ppb	06:00:42
2	V 292.402†	105.0	6.8	0.0832 µg/L	0.0832 ppb	06:00:42
2	Zn 213.857†	602.1	4.0	0.0910 µg/L	0.0910 ppb	06:01:03
3	Sc RADIAL	101442.4	101442.4	101 %		05:59:34
3	Al 396.153Radial†	-344.1	60.0	28.329 µg/L	28.329 ppb	05:59:34
3	Ca 317.933Radial†	432.8	40.5	13.066 µg/L	13.066 ppb	05:59:54
3	Fe 238.204 Radial†	17.2	3.2	31.636 µg/L	31.636 ppb	05:59:54
3	K 766.490 Radial†	292.7	-34.4	-16.961 µg/L	-16.961 ppb	05:59:34
3	Mg 279.077 IEC†	10.9	1.4	15.604 µg/L	15.604 ppb	05:59:54
3	Na 589.592 Radial†	216.6	2.6	1.1332 µg/L	1.1332 ppb	05:59:34
3	Sr 421.552†	163.6	12.7	0.0687 µg/L	0.0687 ppb	05:59:34
3	Sc 361.383	1933192.1	1933192.1	100.60 %		06:01:09
3	Y 371.029	1344953.2	1344953.2	100.52 %		06:01:09
3	Ag 328.068†	-639.4	-67.7	-0.5585 µg/L	-0.5585 ppb	06:01:15
3	As 188.979†	-2.9	0.3	0.4156 µg/L	0.4156 ppb	06:01:35
3	B 249.677†	369.5	10.7	0.4954 µg/L	0.4954 ppb	06:01:15
3	Ba 233.527†	-25.1	6.1	0.1369 µg/L	0.1369 ppb	06:01:35
3	Be 313.107†	-1353.2	182.7	0.1109 µg/L	0.1109 ppb	06:01:15
3	Cd 226.502†	-155.4	25.2	0.6092 µg/L	0.6092 ppb	06:01:35
3	Co 228.616†	22.3	3.1	0.1363 µg/L	0.1363 ppb	06:01:35
3	Cr 267.716†	115.9	40.7	0.9087 µg/L	0.9087 ppb	06:01:15
3	Cu 324.752†	3641.6	30.6	0.2134 µg/L	0.2134 ppb	06:01:15
3	Mn 257.610†	-682.9	104.2	0.3349 µg/L	0.3349 ppb	06:01:35
3	Mo 202.031†	13.0	4.9	0.4850 µg/L	0.4850 ppb	06:01:35
3	Ni 231.604†	363.3	-5.8	-0.3302 µg/L	-0.3302 ppb	06:01:35
3	P 214.914†	305.5	-3.4	-5.7976 µg/L	-5.7976 ppb	06:01:35
3	Pb 220.353†	50.1	-6.4	-1.6712 µg/L	-1.6712 ppb	06:01:35
3	S 181.975 Axial†	20.1	-3.6	-11.418 µg/L	-11.418 ppb	06:01:35
3	Sb 206.836†	33.9	6.1	5.5496 µg/L	5.5496 ppb	06:01:35
3	Se 196.026†	23.3	2.6	2.6421 µg/L	2.6421 ppb	06:01:35
3	SiO2†	2401.2	50.9	9.6182 µg/L	9.6182 ppb	06:01:15
3	Si 251.611†	458.4	57.8	4.0955 µg/L	4.0955 ppb	06:01:35
3	Sn 189.927†	-2.5	-4.4	-1.7722 µg/L	-1.7722 ppb	06:01:35
3	Ti 334.940†	-564.5	121.6	0.2922 µg/L	0.2922 ppb	06:01:15
3	Tl 190.801†	-36.3	-0.0	-0.0498 µg/L	-0.0498 ppb	06:01:35
3	U 409.014†	-81.9	-51.3	-4.6065 µg/L	-4.6065 ppb	06:01:15
3	V 292.402†	33.7	-63.4	-0.7781 µg/L	-0.7781 ppb	06:01:15
3	Zn 213.857†	592.3	-1.9	-0.0444 µg/L	-0.0444 ppb	06:01:35

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1938582.0	100.88 %	0.337			0.33%
Sc RADIAL	102713.8	102 %	1.3			1.24%
Y 371.029	1350203.9	100.91 %	0.363			0.36%
Ag 328.068†	-13.0	-0.1062 µg/L	0.44902	-0.1062 ppb	0.44902	422.80%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	51.6	24.349 µg/L	7.7573	24.349 ppb	7.7573	31.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.0	1.4566 µg/L	3.35881	1.4566 ppb	3.35881	230.60%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-1.0	-0.0623 µg/L	0.64894	-0.0623 ppb	0.64894	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.5	0.2140 µg/L	0.06876	0.2140 ppb	0.06876	32.12%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	188.4	0.1144 µg/L	0.00808	0.1144 ppb	0.00808	7.06%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	35.9	11.586 µg/L	1.2872	11.586 ppb	1.2872	11.11%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	15.9	0.3829 µg/L	0.25396	0.3829 ppb	0.25396	66.33%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.5	0.1559 µg/L	0.16358	0.1559 ppb	0.16358	104.91%



Cr	267.716†	QC value within limits for Co 228.616 Recovery = Not calculated	26.8	0.5985 µg/L	0.34541	0.5985 ppb	0.34541	57.71%
		QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	QC value within limits for Cu 324.752 Recovery = Not calculated	-10.5	-0.0665 µg/L	0.26519	-0.0665 ppb	0.26519	399.07%
Fe	238.204 Radial†	QC value within limits for Fe 238.204 Radial Recovery = Not calculated	2.7	26.599 µg/L	14.2800	26.599 ppb	14.2800	53.69%
K	766.490 Radial†	QC value within limits for K 766.490 Radial Recovery = Not calculated	-11.1	-5.4420 µg/L	20.20806	-5.4420 ppb	20.20806	371.34%
Mg	279.077 IEC†	QC value within limits for Mg 279.077 IEC Recovery = Not calculated	1.3	14.438 µg/L	14.6851	14.438 ppb	14.6851	101.71%
Mn	257.610†	QC value within limits for Mn 257.610 Recovery = Not calculated	112.1	0.3599 µg/L	0.02177	0.3599 ppb	0.02177	6.05%
Mo	202.031†	QC value within limits for Mo 202.031 Recovery = Not calculated	7.5	0.7411 µg/L	0.31076	0.7411 ppb	0.31076	41.93%
Na	589.592 Radial†	QC value within limits for Na 589.592 Radial Recovery = Not calculated	0.9	0.3863 µg/L	6.68827	0.3863 ppb	6.68827	>999.9%
Ni	231.604†	QC value within limits for Ni 231.604 Recovery = Not calculated	-3.9	-0.2189 µg/L	0.25575	-0.2189 ppb	0.25575	116.83%
P	214.914†	QC value within limits for P 214.914 Recovery = Not calculated	-7.8	-13.400 µg/L	6.7947	-13.400 ppb	6.7947	50.71%
Pb	220.353†	QC value within limits for Pb 220.353 Recovery = Not calculated	-10.0	-2.6335 µg/L	2.26688	-2.6335 ppb	2.26688	86.08%
S	181.975 Axial†	QC value within limits for S 181.975 Axial Recovery = Not calculated	-2.9	-9.2811 µg/L	1.85754	-9.2811 ppb	1.85754	20.01%
Sb	206.836†	QC value within limits for Sb 206.836 Recovery = Not calculated	5.9	5.3470 µg/L	2.28996	5.3470 ppb	2.28996	42.83%
Se	196.026†	QC value within limits for Se 196.026 Recovery = Not calculated	2.5	2.5079 µg/L	3.19604	2.5079 ppb	3.19604	127.44%
SiO2†		QC value within limits for SiO2 Recovery = Not calculated	38.7	7.3052 µg/L	2.03027	7.3052 ppb	2.03027	27.79%
Si	251.611†	QC value within limits for Si 251.611 Recovery = Not calculated	65.4	4.6292 µg/L	0.46238	4.6292 ppb	0.46238	9.99%
Sn	189.927†	QC value within limits for Sn 189.927 Recovery = Not calculated	-5.8	-2.3191 µg/L	2.11666	-2.3191 ppb	2.11666	91.27%
Sr	421.552†	QC value within limits for Sr 421.552 Recovery = Not calculated	12.6	0.0681 µg/L	0.06393	0.0681 ppb	0.06393	93.89%
Ti	334.940†	QC value within limits for Ti 334.940 Recovery = Not calculated	101.8	0.2446 µg/L	0.07801	0.2446 ppb	0.07801	31.89%
Tl	190.801†	QC value within limits for Tl 190.801 Recovery = Not calculated	0.8	0.7972 µg/L	2.42118	0.7972 ppb	2.42118	303.72%
U	409.014†	QC value within limits for U 409.014 Recovery = Not calculated	-38.9	-3.4937 µg/L	0.98985	-3.4937 ppb	0.98985	28.33%
V	292.402†	QC value within limits for V 292.402 Recovery = Not calculated	-16.0	-0.1971 µg/L	0.50329	-0.1971 ppb	0.50329	255.38%
Zn	213.857†	QC value within limits for Zn 213.857 Recovery = Not calculated	2.3	0.0528 µg/L	0.08479	0.0528 ppb	0.08479	160.58%

All analyte(s) passed QC.

Sequence No.: 45

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 06:35:51

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	102516.5	102516.5	102 %		06:36:26
1	Al 396.153Radial†	10562.4	10739.3	5061.6 µg/L	5061.6 ppb	06:36:26
1	Ca 317.933Radial†	16267.3	15535.4	5010.7 µg/L	5010.7 ppb	06:36:26
1	Fe 238.204 Radial†	535.8	510.7	5018.4 µg/L	5018.4 ppb	06:36:46
1	K 766.490 Radial†	10737.2	10186.0	5016.0 µg/L	5016.0 ppb	06:36:26
1	Mg 279.077 IEC†	473.8	454.4	4979.5 µg/L	4979.5 ppb	06:36:46
1	Na 589.592 Radial†	23260.3	22556.4	9894.8 µg/L	9894.8 ppb	06:36:26
1	Sr 421.552†	94261.9	92117.8	497.74 µg/L	497.74 ppb	06:36:26
1	Sc 361.383	1928622.8	1928622.8	100.36 %		06:37:50
1	Y 371.029	1337149.3	1337149.3	99.934 %		06:37:50
1	Ag 328.068†	61448.0	61792.6	511.27 µg/L	511.27 ppb	06:37:55
1	As 188.979†	345.9	347.8	519.37 µg/L	519.37 ppb	06:38:16
1	B 249.677†	10969.2	10572.8	502.38 µg/L	502.38 ppb	06:37:55
1	Ba 233.527†	22649.1	22597.9	509.35 µg/L	509.35 ppb	06:37:55
1	Be 313.107†	829588.3	828101.2	502.92 µg/L	502.92 ppb	06:37:50
1	Cd 226.502†	20815.2	20919.2	508.75 µg/L	508.75 ppb	06:37:55
1	Co 228.616†	11697.0	11635.4	510.74 µg/L	510.74 ppb	06:37:55
1	Cr 267.716†	23194.5	23035.6	515.32 µg/L	515.32 ppb	06:37:55
1	Cu 324.752†	79904.6	76025.0	516.24 µg/L	516.24 ppb	06:37:55
1	Mn 257.610†	160441.2	160641.1	515.13 µg/L	515.13 ppb	06:37:50
1	Mo 202.031†	5301.2	5273.9	521.44 µg/L	521.44 ppb	06:38:16
1	Ni 231.604†	9395.2	8994.1	510.49 µg/L	510.49 ppb	06:37:55
1	P 214.914†	1821.1	1507.4	2523.7 µg/L	2523.7 ppb	06:38:16
1	Pb 220.353†	2001.5	1938.1	512.47 µg/L	512.47 ppb	06:38:16
1	S 181.975 Axial†	341.0	316.3	1005.7 µg/L	1005.7 ppb	06:38:16
1	Sb 206.836†	599.7	570.0	517.79 µg/L	517.79 ppb	06:38:16
1	Se 196.026†	548.0	525.4	528.30 µg/L	528.30 ppb	06:38:16
1	SiO2†	31231.0	28781.5	5438.9 µg/L	5438.9 ppb	06:37:55
1	Si 251.611†	36480.3	35950.0	2545.2 µg/L	2545.2 ppb	06:37:55
1	Sn 189.927†	1335.4	1328.6	516.53 µg/L	516.53 ppb	06:38:16
1	Ti 334.940†	209378.4	209300.2	504.50 µg/L	504.50 ppb	06:37:50
1	Tl 190.801†	475.3	509.7	520.69 µg/L	520.69 ppb	06:38:16
1	U 409.014†	5696.5	5705.9	510.83 µg/L	510.83 ppb	06:37:55
1	V 292.402†	42306.1	42055.4	517.74 µg/L	517.74 ppb	06:37:55
1	Zn 213.857†	22910.8	22236.9	511.58 µg/L	511.58 ppb	06:37:55
2	Sc RADIAL	102267.7	102267.7	102 %		06:36:52
2	Al 396.153Radial†	10510.6	10713.6	5049.5 µg/L	5049.5 ppb	06:36:52
2	Ca 317.933Radial†	16267.1	15573.9	5023.2 µg/L	5023.2 ppb	06:36:52
2	Fe 238.204 Radial†	538.0	514.1	5052.1 µg/L	5052.1 ppb	06:37:12
2	K 766.490 Radial†	10715.1	10189.9	5017.9 µg/L	5017.9 ppb	06:36:52
2	Mg 279.077 IEC†	473.6	455.3	4989.7 µg/L	4989.7 ppb	06:37:12
2	Na 589.592 Radial†	23274.6	22625.8	9925.2 µg/L	9925.2 ppb	06:36:52
2	Sr 421.552†	94273.3	92353.4	499.01 µg/L	499.01 ppb	06:36:52
2	Sc 361.383	1946476.1	1946476.1	101.29 %		06:38:23
2	Y 371.029	1350517.0	1350517.0	100.93 %		06:38:23
2	Ag 328.068†	61763.9	61542.9	509.21 µg/L	509.21 ppb	06:38:29
2	As 188.979†	345.9	344.7	514.61 µg/L	514.61 ppb	06:38:49
2	B 249.677†	11090.7	10592.4	503.30 µg/L	503.30 ppb	06:38:29
2	Ba 233.527†	22844.6	22583.9	509.03 µg/L	509.03 ppb	06:38:29
2	Be 313.107†	837942.7	828767.4	503.32 µg/L	503.32 ppb	06:38:23
2	Cd 226.502†	21063.4	20974.0	510.09 µg/L	510.09 ppb	06:38:29
2	Co 228.616†	11811.6	11641.7	511.02 µg/L	511.02 ppb	06:38:29
2	Cr 267.716†	23398.1	23024.7	515.08 µg/L	515.08 ppb	06:38:29
2	Cu 324.752†	80283.0	75668.3	513.83 µg/L	513.83 ppb	06:38:29
2	Mn 257.610†	161796.9	160513.2	514.72 µg/L	514.72 ppb	06:38:23
2	Mo 202.031†	5298.4	5222.7	516.38 µg/L	516.38 ppb	06:38:49
2	Ni 231.604†	9493.3	9005.1	511.11 µg/L	511.11 ppb	06:38:29
2	P 214.914†	1812.8	1482.6	2481.5 µg/L	2481.5 ppb	06:38:49
2	Pb 220.353†	2006.9	1925.1	509.04 µg/L	509.04 ppb	06:38:49

2	S 181.975 Axial†	350.2	322.2	1024.7 µg/L	1024.7 ppb	06:38:49
2	Sb 206.836†	598.1	562.9	511.31 µg/L	511.31 ppb	06:38:49
2	Se 196.026†	557.3	529.6	532.54 µg/L	532.54 ppb	06:38:49
2	SiO2†	31479.8	28741.8	5431.4 µg/L	5431.4 ppb	06:38:29
2	Si 251.611†	36823.2	35955.1	2545.6 µg/L	2545.6 ppb	06:38:29
2	Sn 189.927†	1324.1	1305.3	507.31 µg/L	507.31 ppb	06:38:49
2	Ti 334.940†	210673.3	208665.1	502.96 µg/L	502.96 ppb	06:38:23
2	Tl 190.801†	481.9	511.8	522.82 µg/L	522.82 ppb	06:38:49
2	U 409.014†	5783.1	5739.4	513.83 µg/L	513.83 ppb	06:38:29
2	V 292.402†	42624.5	41983.2	516.81 µg/L	516.81 ppb	06:38:29
2	Zn 213.857†	23120.6	22234.7	511.52 µg/L	511.52 ppb	06:38:29
3	Sc RADIAL	104102.7	104102.7	104 %		06:37:18
3	Al 396.153Radial†	10667.0	10682.6	5036.5 µg/L	5036.5 ppb	06:37:18
3	Ca 317.933Radial†	16531.8	15547.7	5014.7 µg/L	5014.7 ppb	06:37:18
3	Fe 238.204 Radial†	535.8	502.7	4938.9 µg/L	4938.9 ppb	06:37:38
3	K 766.490 Radial†	10933.4	10215.0	5030.3 µg/L	5030.3 ppb	06:37:18
3	Mg 279.077 IEC†	475.8	449.2	4921.2 µg/L	4921.2 ppb	06:37:38
3	Na 589.592 Radial†	23615.1	22551.4	9892.6 µg/L	9892.6 ppb	06:37:18
3	Sr 421.552†	95410.8	91819.3	496.13 µg/L	496.13 ppb	06:37:18
3	Sc 361.383	1940666.3	1940666.3	100.99 %		06:38:56
3	Y 371.029	1346811.1	1346811.1	100.66 %		06:38:56
3	Ag 328.068†	58893.7	58883.4	487.10 µg/L	487.10 ppb	06:39:02
3	As 188.979†	298.2	298.4	445.44 µg/L	445.44 ppb	06:39:22
3	B 249.677†	10482.5	10023.0	476.13 µg/L	476.13 ppb	06:39:02
3	Ba 233.527†	21296.2	21118.2	475.98 µg/L	475.98 ppb	06:39:02
3	Be 313.107†	798596.3	792283.8	481.17 µg/L	481.17 ppb	06:38:56
3	Cd 226.502†	19467.5	19456.0	473.14 µg/L	473.14 ppb	06:39:02
3	Co 228.616†	10854.8	10729.1	470.89 µg/L	470.89 ppb	06:39:02
3	Cr 267.716†	21228.5	20945.5	468.57 µg/L	468.57 ppb	06:39:02
3	Cu 324.752†	74536.9	70216.0	476.85 µg/L	476.85 ppb	06:39:02
3	Mn 257.610†	154550.9	153816.5	493.24 µg/L	493.24 ppb	06:38:56
3	Mo 202.031†	4474.6	4422.7	437.31 µg/L	437.31 ppb	06:39:22
3	Ni 231.604†	8760.0	8307.1	471.50 µg/L	471.50 ppb	06:39:02
3	P 214.914†	1602.8	1280.0	2138.5 µg/L	2138.5 ppb	06:39:22
3	Pb 220.353†	1761.2	1687.8	446.23 µg/L	446.23 ppb	06:39:22
3	S 181.975 Axial†	303.2	276.7	879.81 µg/L	879.81 ppb	06:39:22
3	Sb 206.836†	526.5	493.7	448.05 µg/L	448.05 ppb	06:39:22
3	Se 196.026†	497.3	471.9	475.43 µg/L	475.43 ppb	06:39:22
3	SiO2†	29776.3	27148.0	5130.2 µg/L	5130.2 ppb	06:39:02
3	Si 251.611†	34550.0	33813.0	2393.9 µg/L	2393.9 ppb	06:39:02
3	Sn 189.927†	1106.1	1093.3	424.12 µg/L	424.12 ppb	06:39:22
3	Ti 334.940†	200260.0	198976.7	479.60 µg/L	479.60 ppb	06:38:56
3	Tl 190.801†	424.3	456.2	466.38 µg/L	466.38 ppb	06:39:22
3	U 409.014†	5280.1	5258.5	470.70 µg/L	470.70 ppb	06:39:02
3	V 292.402†	39245.7	38763.5	476.80 µg/L	476.80 ppb	06:39:02
3	Zn 213.857†	21357.5	20557.2	472.90 µg/L	472.90 ppb	06:39:02

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1938588.4	100.88 %	0.474			0.47%
Sc RADIAL	102962.3	103 %	1.0			0.97%
Y 371.029	1344825.8	100.51 %	0.516			0.51%
Ag 328.068†	60739.6	502.53 µg/L	13.398	502.53 ppb	13.398	2.67%
QC value within limits for Ag 328.068 Recovery = 100.51%						
Al 396.153Radial†	10711.8	5049.2 µg/L	12.53	5049.2 ppb	12.53	0.25%
QC value within limits for Al 396.153Radial Recovery = 100.98%						
As 188.979†	330.3	493.14 µg/L	41.375	493.14 ppb	41.375	8.39%
QC value within limits for As 188.979 Recovery = 98.63%						
B 249.677†	10396.1	493.93 µg/L	15.429	493.93 ppb	15.429	3.12%
QC value within limits for B 249.677 Recovery = 98.79%						
Ba 233.527†	22100.0	498.12 µg/L	19.172	498.12 ppb	19.172	3.85%
QC value within limits for Ba 233.527 Recovery = 99.62%						
Be 313.107†	816384.1	495.80 µg/L	12.677	495.80 ppb	12.677	2.56%
QC value within limits for Be 313.107 Recovery = 99.16%						
Ca 317.933Radial†	15552.3	5016.2 µg/L	6.35	5016.2 ppb	6.35	0.13%
QC value within limits for Ca 317.933Radial Recovery = 100.32%						
Cd 226.502†	20449.7	497.33 µg/L	20.958	497.33 ppb	20.958	4.21%
QC value within limits for Cd 226.502 Recovery = 99.47%						
Co 228.616†	11335.4	497.55 µg/L	23.087	497.55 ppb	23.087	4.64%

QC value within limits for Co 228.616 Recovery = 99.51%							
Cr 267.716†	22335.3	499.66 µg/L	26.923	499.66 ppb	26.923	5.39%	
QC value within limits for Cr 267.716 Recovery = 99.93%							
Cu 324.752†	73969.8	502.31 µg/L	22.078	502.31 ppb	22.078	4.40%	
QC value within limits for Cu 324.752 Recovery = 100.46%							
Fe 238.204 Radial†	509.2	5003.1 µg/L	58.15	5003.1 ppb	58.15	1.16%	
QC value within limits for Fe 238.204 Radial Recovery = 100.06%							
K 766.490 Radial†	10196.9	5021.4 µg/L	7.75	5021.4 ppb	7.75	0.15%	
QC value within limits for K 766.490 Radial Recovery = 100.43%							
Mg 279.077 IEC†	453.0	4963.5 µg/L	36.98	4963.5 ppb	36.98	0.74%	
QC value within limits for Mg 279.077 IEC Recovery = 99.27%							
Mn 257.610†	158323.6	507.70 µg/L	12.520	507.70 ppb	12.520	2.47%	
QC value within limits for Mn 257.610 Recovery = 101.54%							
Mo 202.031†	4973.1	491.71 µg/L	47.181	491.71 ppb	47.181	9.60%	
QC value within limits for Mo 202.031 Recovery = 98.34%							
Na 589.592 Radial†	22577.9	9904.2 µg/L	18.24	9904.2 ppb	18.24	0.18%	
QC value within limits for Na 589.592 Radial Recovery = 99.04%							
Ni 231.604†	8768.8	497.70 µg/L	22.693	497.70 ppb	22.693	4.56%	
QC value within limits for Ni 231.604 Recovery = 99.54%							
P 214.914†	1423.3	2381.2 µg/L	211.31	2381.2 ppb	211.31	8.87%	
QC value within limits for P 214.914 Recovery = 95.25%							
Pb 220.353†	1850.4	489.25 µg/L	37.296	489.25 ppb	37.296	7.62%	
QC value within limits for Pb 220.353 Recovery = 97.85%							
S 181.975 Axial†	305.1	970.09 µg/L	78.760	970.09 ppb	78.760	8.12%	
QC value within limits for S 181.975 Axial Recovery = 97.01%							
Sb 206.836†	542.2	492.38 µg/L	38.533	492.38 ppb	38.533	7.83%	
QC value within limits for Sb 206.836 Recovery = 98.48%							
Se 196.026†	509.0	512.09 µg/L	31.817	512.09 ppb	31.817	6.21%	
QC value within limits for Se 196.026 Recovery = 102.42%							
SiO2†	28223.8	5333.5 µg/L	176.10	5333.5 ppb	176.10	3.30%	
QC value within limits for SiO2 Recovery = 99.74%							
Si 251.611†	35239.3	2494.9 µg/L	87.45	2494.9 ppb	87.45	3.51%	
QC value within limits for Si 251.611 Recovery = 99.80%							
Sn 189.927†	1242.4	482.65 µg/L	50.902	482.65 ppb	50.902	10.55%	
QC value within limits for Sn 189.927 Recovery = 96.53%							
Sr 421.552†	92096.8	497.63 µg/L	1.446	497.63 ppb	1.446	0.29%	
QC value within limits for Sr 421.552 Recovery = 99.53%							
Ti 334.940†	205647.3	495.69 µg/L	13.952	495.69 ppb	13.952	2.81%	
QC value within limits for Ti 334.940 Recovery = 99.14%							
Tl 190.801†	492.6	503.30 µg/L	31.988	503.30 ppb	31.988	6.36%	
QC value within limits for Tl 190.801 Recovery = 100.66%							
U 409.014†	5567.9	498.45 µg/L	24.080	498.45 ppb	24.080	4.83%	
QC value within limits for U 409.014 Recovery = 99.69%							
V 292.402†	40934.0	503.78 µg/L	23.370	503.78 ppb	23.370	4.64%	
QC value within limits for V 292.402 Recovery = 100.76%							
Zn 213.857†	21676.2	498.67 µg/L	22.313	498.67 ppb	22.313	4.47%	
QC value within limits for Zn 213.857 Recovery = 99.73%							
All analyte(s) passed QC.							

Sequence No.: 46

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 06:39:31

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	100711.7	100711.7	100 %		06:40:04
1	Al 396.153Radial†	-352.9	48.8	23.021 µg/L	23.021 ppb	06:40:04
1	Ca 317.933Radial†	393.5	4.5	1.4504 µg/L	1.4504 ppb	06:40:25
1	Fe 238.204 Radial†	15.1	1.3	12.441 µg/L	12.441 ppb	06:40:25
1	K 766.490 Radial†	400.8	75.4	37.107 µg/L	37.107 ppb	06:40:04
1	Mg 279.077 IEC†	12.0	2.6	27.975 µg/L	27.975 ppb	06:40:25
1	Na 589.592 Radial†	227.4	15.0	6.5586 µg/L	6.5586 ppb	06:40:04
1	Sr 421.552†	128.0	-21.6	-0.1167 µg/L	-0.1167 ppb	06:40:04
1	Sc 361.383	1934305.7	1934305.7	100.66 %		06:41:27
1	Y 371.029	1348539.7	1348539.7	100.79 %		06:41:27
1	Ag 328.068†	-584.5	-12.8	-0.1036 µg/L	-0.1036 ppb	06:41:33
1	As 188.979†	-2.3	0.9	1.3142 µg/L	1.3142 ppb	06:41:53
1	B 249.677†	388.0	28.8	1.3689 µg/L	1.3689 ppb	06:41:33
1	Ba 233.527†	-23.5	7.7	0.1732 µg/L	0.1732 ppb	06:41:53
1	Be 313.107†	-1237.6	298.3	0.1811 µg/L	0.1811 ppb	06:41:33
1	Cd 226.502†	-173.0	7.8	0.1880 µg/L	0.1880 ppb	06:41:53
1	Co 228.616†	21.5	2.3	0.1005 µg/L	0.1005 ppb	06:41:53
1	Cr 267.716†	94.9	19.7	0.4410 µg/L	0.4410 ppb	06:41:33
1	Cu 324.752†	3584.9	-27.8	-0.1859 µg/L	-0.1859 ppb	06:41:33
1	Mn 257.610†	-663.5	123.8	0.3957 µg/L	0.3957 ppb	06:41:33
1	Mo 202.031†	13.1	5.1	0.5019 µg/L	0.5019 ppb	06:41:53
1	Ni 231.604†	369.2	-0.1	-0.0040 µg/L	-0.0040 ppb	06:41:53
1	P 214.914†	306.2	-2.9	-4.9459 µg/L	-4.9459 ppb	06:41:53
1	Pb 220.353†	46.9	-9.5	-2.5002 µg/L	-2.5002 ppb	06:41:53
1	S 181.975 Axial†	20.0	-3.6	-11.575 µg/L	-11.575 ppb	06:41:53
1	Sb 206.836†	27.5	-0.3	-0.2353 µg/L	-0.2353 ppb	06:41:53
1	Se 196.026†	18.5	-2.2	-2.1495 µg/L	-2.1495 ppb	06:41:53
1	SiO2†	2408.8	57.1	10.787 µg/L	10.787 ppb	06:41:33
1	Si 251.611†	459.5	58.7	4.1535 µg/L	4.1535 ppb	06:41:53
1	Sn 189.927†	-5.9	-7.8	-3.0604 µg/L	-3.0604 ppb	06:41:53
1	Ti 334.940†	-550.1	136.2	0.3264 µg/L	0.3264 ppb	06:41:33
1	Tl 190.801†	-29.1	7.1	7.2317 µg/L	7.2317 ppb	06:41:53
1	U 409.014†	-35.9	-5.5	-0.4950 µg/L	-0.4950 ppb	06:41:33
1	V 292.402†	102.0	4.5	0.0564 µg/L	0.0564 ppb	06:41:33
1	Zn 213.857†	616.2	21.5	0.4966 µg/L	0.4966 ppb	06:41:53
2	Sc RADIAL	100097.2	100097.2	99.8 %		06:40:30
2	Al 396.153Radial†	-395.7	3.7	1.7401 µg/L	1.7401 ppb	06:40:30
2	Ca 317.933Radial†	390.3	3.6	1.1684 µg/L	1.1684 ppb	06:40:51
2	Fe 238.204 Radial†	16.8	3.1	30.055 µg/L	30.055 ppb	06:40:51
2	K 766.490 Radial†	359.7	36.6	18.034 µg/L	18.034 ppb	06:40:30
2	Mg 279.077 IEC†	7.0	-2.4	-26.360 µg/L	-26.360 ppb	06:40:51
2	Na 589.592 Radial†	193.5	-17.7	-7.7450 µg/L	-7.7450 ppb	06:40:30
2	Sr 421.552†	106.9	-42.0	-0.2267 µg/L	-0.2267 ppb	06:40:30
2	Sc 361.383	1929960.4	1929960.4	100.43 %		06:41:59
2	Y 371.029	1344796.5	1344796.5	100.51 %		06:41:59
2	Ag 328.068†	-565.8	4.5	0.0381 µg/L	0.0381 ppb	06:42:05
2	As 188.979†	-0.9	2.3	3.5017 µg/L	3.5017 ppb	06:42:25
2	B 249.677†	371.7	13.5	0.6311 µg/L	0.6311 ppb	06:42:05
2	Ba 233.527†	-25.1	6.1	0.1372 µg/L	0.1372 ppb	06:42:25
2	Be 313.107†	-1357.1	176.6	0.1072 µg/L	0.1072 ppb	06:42:05
2	Cd 226.502†	-179.3	1.2	0.0253 µg/L	0.0253 ppb	06:42:25
2	Co 228.616†	22.1	3.0	0.1299 µg/L	0.1299 ppb	06:42:25
2	Cr 267.716†	104.2	29.2	0.6518 µg/L	0.6518 ppb	06:42:05
2	Cu 324.752†	3537.4	-67.1	-0.4494 µg/L	-0.4494 ppb	06:42:05
2	Mn 257.610†	-661.7	124.1	0.4016 µg/L	0.4016 ppb	06:42:05
2	Mo 202.031†	13.1	5.1	0.5026 µg/L	0.5026 ppb	06:42:25
2	Ni 231.604†	377.9	9.4	0.5349 µg/L	0.5349 ppb	06:42:25
2	P 214.914†	306.2	-2.2	-3.7199 µg/L	-3.7199 ppb	06:42:25
2	Pb 220.353†	52.8	-3.6	-0.9475 µg/L	-0.9475 ppb	06:42:25

2	S 181.975 Axial†	23.1	-0.5	-1.5615 µg/L	-1.5615 ppb	06:42:25
2	Sb 206.836†	25.3	-2.4	-2.1657 µg/L	-2.1657 ppb	06:42:25
2	Se 196.026†	23.6	2.9	3.0033 µg/L	3.0033 ppb	06:42:25
2	SiO2†	2398.3	52.0	9.8254 µg/L	9.8254 ppb	06:42:05
2	Si 251.611†	466.7	66.9	4.7373 µg/L	4.7373 ppb	06:42:25
2	Sn 189.927†	-1.1	-3.0	-1.2090 µg/L	-1.2090 ppb	06:42:25
2	Ti 334.940†	-564.6	120.6	0.2930 µg/L	0.2930 ppb	06:42:05
2	Tl 190.801†	-31.0	5.2	5.2642 µg/L	5.2642 ppb	06:42:25
2	U 409.014†	-0.7	29.5	2.6380 µg/L	2.6380 ppb	06:42:05
2	V 292.402†	81.4	-15.9	-0.1909 µg/L	-0.1909 ppb	06:42:05
2	Zn 213.857†	604.2	11.0	0.2526 µg/L	0.2526 ppb	06:42:25
3	Sc RADIAL	99636.8	99636.8	99.3 %		06:40:56
3	Al 396.153Radial†	-365.6	32.2	15.192 µg/L	15.192 ppb	06:40:56
3	Ca 317.933Radial†	390.6	5.8	1.8671 µg/L	1.8671 ppb	06:41:17
3	Fe 238.204 Radial†	14.9	1.3	12.521 µg/L	12.521 ppb	06:41:17
3	K 766.490 Radial†	324.5	2.8	1.4005 µg/L	1.4005 ppb	06:40:56
3	Mg 279.077 IEC†	11.3	2.0	21.825 µg/L	21.825 ppb	06:41:17
3	Na 589.592 Radial†	200.0	-10.2	-4.4805 µg/L	-4.4805 ppb	06:40:56
3	Sr 421.552†	144.8	-3.3	-0.0180 µg/L	-0.0180 ppb	06:40:56
3	Sc 361.383	1935978.3	1935978.3	100.75 %		06:42:31
3	Y 371.029	1348717.4	1348717.4	100.80 %		06:42:31
3	Ag 328.068†	-463.4	107.9	0.8851 µg/L	0.8851 ppb	06:42:37
3	As 188.979†	-5.9	-2.6	-3.9191 µg/L	-3.9191 ppb	06:42:58
3	B 249.677†	356.2	-3.0	-0.1492 µg/L	-0.1492 ppb	06:42:37
3	Ba 233.527†	-24.9	6.3	0.1419 µg/L	0.1419 ppb	06:42:58
3	Be 313.107†	-1312.5	225.0	0.1367 µg/L	0.1367 ppb	06:42:37
3	Cd 226.502†	-171.8	9.1	0.2203 µg/L	0.2203 ppb	06:42:58
3	Co 228.616†	18.8	-0.5	-0.0207 µg/L	-0.0207 ppb	06:42:58
3	Cr 267.716†	71.4	-3.7	-0.0840 µg/L	-0.0840 ppb	06:42:37
3	Cu 324.752†	3575.7	-40.0	-0.2686 µg/L	-0.2686 ppb	06:42:37
3	Mn 257.610†	-662.5	125.4	0.4013 µg/L	0.4013 ppb	06:42:37
3	Mo 202.031†	11.5	3.4	0.3362 µg/L	0.3362 ppb	06:42:58
3	Ni 231.604†	375.3	5.6	0.3189 µg/L	0.3189 ppb	06:42:58
3	P 214.914†	301.4	-7.9	-13.518 µg/L	-13.518 ppb	06:42:58
3	Pb 220.353†	48.0	-8.5	-2.2378 µg/L	-2.2378 ppb	06:42:58
3	S 181.975 Axial†	20.2	-3.5	-11.060 µg/L	-11.060 ppb	06:42:58
3	Sb 206.836†	32.7	4.9	4.3934 µg/L	4.3934 ppb	06:42:58
3	Se 196.026†	19.8	-0.9	-0.8668 µg/L	-0.8668 ppb	06:42:58
3	SiO2†	2406.1	52.3	9.8803 µg/L	9.8803 ppb	06:42:37
3	Si 251.611†	464.7	63.4	4.4912 µg/L	4.4912 ppb	06:42:58
3	Sn 189.927†	-2.0	-3.9	-1.5410 µg/L	-1.5410 ppb	06:42:58
3	Ti 334.940†	-635.0	52.4	0.1247 µg/L	0.1247 ppb	06:42:37
3	Tl 190.801†	-35.9	0.5	0.4669 µg/L	0.4669 ppb	06:42:58
3	U 409.014†	-27.2	3.1	0.2780 µg/L	0.2780 ppb	06:42:37
3	V 292.402†	68.0	-29.4	-0.3585 µg/L	-0.3585 ppb	06:42:37
3	Zn 213.857†	603.2	8.1	0.1855 µg/L	0.1855 ppb	06:42:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1933414.8	100.61 %	0.162			0.16%
Sc RADIAL	100148.6	99.8 %	0.54			0.54%
Y 371.029	1347351.2	100.70 %	0.165			0.16%
Ag 328.068†	33.2	0.2732 µg/L	0.53462	0.2732 ppb	0.53462	195.70%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	28.2	13.318 µg/L	10.7637	13.318 ppb	10.7637	80.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.2	0.2989 µg/L	3.81319	0.2989 ppb	3.81319	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	13.1	0.6169 µg/L	0.75917	0.6169 ppb	0.75917	123.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.7	0.1508 µg/L	0.01953	0.1508 ppb	0.01953	12.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	233.3	0.1417 µg/L	0.03722	0.1417 ppb	0.03722	26.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.6	1.4953 µg/L	0.35152	1.4953 ppb	0.35152	23.51%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.0	0.1445 µg/L	0.10453	0.1445 ppb	0.10453	72.32%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.6	0.0699 µg/L	0.07981	0.0699 ppb	0.07981	114.18%

Cr	267.716†	15.0	0.3363 µg/L	0.37888	0.3363 ppb	0.37888	112.67%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-45.0	-0.3013 µg/L	0.13474	-0.3013 ppb	0.13474	44.72%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.9	18.339 µg/L	10.1464	18.339 ppb	10.1464	55.33%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	38.3	18.847 µg/L	17.8671	18.847 ppb	17.8671	94.80%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.7	7.8134 µg/L	29.75413	7.8134 ppb	29.75413	380.81%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	124.4	0.3995 µg/L	0.00331	0.3995 ppb	0.00331	0.83%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.5	0.4469 µg/L	0.09584	0.4469 ppb	0.09584	21.45%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-4.3	-1.8890 µg/L	7.49572	-1.8890 ppb	7.49572	396.82%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	5.0	0.2833 µg/L	0.27123	0.2833 ppb	0.27123	95.74%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-4.3	-7.3947 µg/L	5.33849	-7.3947 ppb	5.33849	72.19%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-7.2	-1.8952 µg/L	0.83114	-1.8952 ppb	0.83114	43.86%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-2.5	-8.0657 µg/L	5.63876	-8.0657 ppb	5.63876	69.91%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.7	0.6641 µg/L	3.37078	0.6641 ppb	3.37078	507.58%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-0.1	-0.0043 µg/L	2.68246	-0.0043 ppb	2.68246	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		53.8	10.164 µg/L	0.5399	10.164 ppb	0.5399	5.31%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	63.0	4.4607 µg/L	0.29309	4.4607 ppb	0.29309	6.57%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-4.9	-1.9368 µg/L	0.98716	-1.9368 ppb	0.98716	50.97%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-22.3	-0.1205 µg/L	0.10442	-0.1205 ppb	0.10442	86.69%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	103.1	0.2481 µg/L	0.10809	0.2481 ppb	0.10809	43.57%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	4.3	4.3209 µg/L	3.47966	4.3209 ppb	3.47966	80.53%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	9.0	0.8070 µg/L	1.63214	0.8070 ppb	1.63214	202.24%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-13.6	-0.1643 µg/L	0.20873	-0.1643 ppb	0.20873	127.02%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	13.5	0.3116 µg/L	0.16372	0.3116 ppb	0.16372	52.55%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 53  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/5/2010 07:04:46  
 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	104428.4	104428.4	104 %		07:05:24
1	Al 396.153Radial†	10460.4	10451.9	4926.2 µg/L	4926.2 ppb	07:05:24
1	Ca 317.933Radial†	16198.2	15177.5	4895.3 µg/L	4895.3 ppb	07:05:24
1	Fe 238.204 Radial†	520.1	486.1	4776.4 µg/L	4776.4 ppb	07:05:45
1	K 766.490 Radial†	10675.7	9934.4	4892.1 µg/L	4892.1 ppb	07:05:24
1	Mg 279.077 IEC†	467.0	439.3	4814.2 µg/L	4814.2 ppb	07:05:45
1	Na 589.592 Radial†	23057.6	21944.8	9626.5 µg/L	9626.5 ppb	07:05:24
1	Sr 421.552†	93299.8	89504.1	483.62 µg/L	483.62 ppb	07:05:24
1	Sc 361.383	1973052.6	1973052.6	102.68 %		07:06:48
1	Y 371.029	1369545.1	1369545.1	102.36 %		07:06:48
1	Ag 328.068†	60905.6	59885.6	495.48 µg/L	495.48 ppb	07:06:54
1	As 188.979†	343.1	337.3	503.66 µg/L	503.66 ppb	07:07:14
1	B 249.677†	10906.7	10265.8	487.84 µg/L	487.84 ppb	07:06:54
1	Ba 233.527†	22354.3	21802.6	491.42 µg/L	491.42 ppb	07:06:54
1	Be 313.107†	825851.8	805849.0	489.40 µg/L	489.40 ppb	07:06:48
1	Cd 226.502†	20570.7	20214.1	491.62 µg/L	491.62 ppb	07:06:54
1	Co 228.616†	11541.2	11221.2	492.56 µg/L	492.56 ppb	07:06:54
1	Cr 267.716†	22874.7	22203.7	496.71 µg/L	496.71 ppb	07:06:54
1	Cu 324.752†	78925.0	73278.2	497.58 µg/L	497.58 ppb	07:06:54
1	Mn 257.610†	159655.8	156276.4	501.13 µg/L	501.13 ppb	07:06:48
1	Mo 202.031†	5237.6	5093.0	503.55 µg/L	503.55 ppb	07:07:14
1	Ni 231.604†	9307.5	8697.9	493.67 µg/L	493.67 ppb	07:06:54
1	P 214.914†	1801.4	1447.4	2423.2 µg/L	2423.2 ppb	07:07:14
1	Pb 220.353†	1981.7	1873.9	495.49 µg/L	495.49 ppb	07:07:14
1	S 181.975 Axial†	345.0	312.5	993.80 µg/L	993.80 ppb	07:07:14
1	Sb 206.836†	594.1	551.0	500.57 µg/L	500.57 ppb	07:07:14
1	Se 196.026†	544.5	509.7	512.22 µg/L	512.22 ppb	07:07:14
1	SiO2†	30782.7	27644.2	5224.0 µg/L	5224.0 ppb	07:06:54
1	Si 251.611†	35840.0	34507.8	2443.1 µg/L	2443.1 ppb	07:06:54
1	Sn 189.927†	1314.3	1278.1	496.94 µg/L	496.94 ppb	07:07:14
1	Ti 334.940†	207798.2	203063.5	489.46 µg/L	489.46 ppb	07:06:48
1	Tl 190.801†	475.0	498.7	509.45 µg/L	509.45 ppb	07:07:14
1	U 409.014†	5696.5	5578.1	499.40 µg/L	499.40 ppb	07:06:54
1	V 292.402†	41930.4	40740.3	501.55 µg/L	501.55 ppb	07:06:54
1	Zn 213.857†	22686.5	21504.4	494.73 µg/L	494.73 ppb	07:06:54
2	Sc RADIAL	104133.6	104133.6	104 %		07:05:50
2	Al 396.153Radial†	10334.2	10358.8	4882.3 µg/L	4882.3 ppb	07:05:50
2	Ca 317.933Radial†	16127.4	15153.3	4887.5 µg/L	4887.5 ppb	07:05:50
2	Fe 238.204 Radial†	525.4	492.6	4839.9 µg/L	4839.9 ppb	07:06:11
2	K 766.490 Radial†	10660.0	9948.4	4899.0 µg/L	4899.0 ppb	07:05:50
2	Mg 279.077 IEC†	469.1	442.6	4850.2 µg/L	4850.2 ppb	07:06:11
2	Na 589.592 Radial†	23009.7	21961.3	9633.7 µg/L	9633.7 ppb	07:05:50
2	Sr 421.552†	93062.9	89529.5	483.75 µg/L	483.75 ppb	07:05:50
2	Sc 361.383	1975058.9	1975058.9	102.78 %		07:07:21
2	Y 371.029	1370537.7	1370537.7	102.43 %		07:07:21
2	Ag 328.068†	60579.2	59507.8	492.36 µg/L	492.36 ppb	07:07:27
2	As 188.979†	338.9	332.9	497.10 µg/L	497.10 ppb	07:07:47
2	B 249.677†	10851.8	10201.5	484.74 µg/L	484.74 ppb	07:07:27
2	Ba 233.527†	22298.6	21726.3	489.70 µg/L	489.70 ppb	07:07:27
2	Be 313.107†	827163.6	806308.3	489.68 µg/L	489.68 ppb	07:07:21
2	Cd 226.502†	20487.1	20112.3	489.13 µg/L	489.13 ppb	07:07:27
2	Co 228.616†	11509.1	11178.5	490.68 µg/L	490.68 ppb	07:07:27
2	Cr 267.716†	22905.2	22210.8	496.87 µg/L	496.87 ppb	07:07:27
2	Cu 324.752†	78636.1	72919.0	495.16 µg/L	495.16 ppb	07:07:27
2	Mn 257.610†	160099.4	156550.0	502.01 µg/L	502.01 ppb	07:07:21
2	Mo 202.031†	5220.9	5071.6	501.44 µg/L	501.44 ppb	07:07:47
2	Ni 231.604†	9237.3	8620.4	489.27 µg/L	489.27 ppb	07:07:27
2	P 214.914†	1795.7	1440.1	2410.9 µg/L	2410.9 ppb	07:07:47
2	Pb 220.353†	1977.9	1868.3	494.01 µg/L	494.01 ppb	07:07:47



2	S 181.975 Axial†	340.5	307.8	978.69 µg/L	978.69 ppb	07:07:47
2	Sb 206.836†	593.5	549.8	499.49 µg/L	499.49 ppb	07:07:47
2	Se 196.026†	537.9	502.8	505.55 µg/L	505.55 ppb	07:07:47
2	SiO2†	30680.8	27514.7	5199.5 µg/L	5199.5 ppb	07:07:27
2	Si 251.611†	35742.5	34377.5	2433.9 µg/L	2433.9 ppb	07:07:27
2	Sn 189.927†	1307.0	1269.7	493.59 µg/L	493.59 ppb	07:07:47
2	Ti 334.940†	207997.5	203051.8	489.43 µg/L	489.43 ppb	07:07:21
2	Tl 190.801†	469.9	493.2	503.92 µg/L	503.92 ppb	07:07:47
2	U 409.014†	5650.1	5527.4	494.84 µg/L	494.84 ppb	07:07:27
2	V 292.402†	41725.6	40499.6	498.58 µg/L	498.58 ppb	07:07:27
2	Zn 213.857†	22538.7	21338.2	490.90 µg/L	490.90 ppb	07:07:27
3	Sc RADIAL	104938.6	104938.6	105 %		07:06:16
3	Al 396.153Radial†	10483.8	10425.4	4915.3 µg/L	4915.3 ppb	07:06:16
3	Ca 317.933Radial†	16339.6	15237.0	4914.5 µg/L	4914.5 ppb	07:06:16
3	Fe 238.204 Radial†	521.6	485.1	4765.7 µg/L	4765.7 ppb	07:06:37
3	K 766.490 Radial†	10664.7	9874.1	4862.4 µg/L	4862.4 ppb	07:06:16
3	Mg 279.077 IEC†	470.3	440.3	4823.5 µg/L	4823.5 ppb	07:06:37
3	Na 589.592 Radial†	23169.6	21944.1	9626.2 µg/L	9626.2 ppb	07:06:16
3	Sr 421.552†	93719.6	89469.6	483.43 µg/L	483.43 ppb	07:06:16
3	Sc 361.383	1964755.6	1964755.6	102.25 %		07:07:55
3	Y 371.029	1364427.0	1364427.0	101.97 %		07:07:55
3	Ag 328.068†	57843.6	57141.3	472.67 µg/L	472.67 ppb	07:08:00
3	As 188.979†	289.2	286.0	426.91 µg/L	426.91 ppb	07:08:21
3	B 249.677†	10298.3	9715.5	461.53 µg/L	461.53 ppb	07:08:00
3	Ba 233.527†	20854.5	20427.7	460.42 µg/L	460.42 ppb	07:08:00
3	Be 313.107†	786233.8	770497.5	467.94 µg/L	467.94 ppb	07:07:55
3	Cd 226.502†	19037.5	18799.2	457.16 µg/L	457.16 ppb	07:08:00
3	Co 228.616†	10616.6	10364.4	454.88 µg/L	454.88 ppb	07:08:00
3	Cr 267.716†	20649.7	20121.7	450.14 µg/L	450.14 ppb	07:08:00
3	Cu 324.752†	73165.0	67969.3	461.59 µg/L	461.59 ppb	07:08:00
3	Mn 257.610†	152165.0	149606.7	479.74 µg/L	479.74 ppb	07:07:55
3	Mo 202.031†	4413.0	4308.1	425.98 µg/L	425.98 ppb	07:08:21
3	Ni 231.604†	8567.1	8012.0	454.75 µg/L	454.75 ppb	07:08:00
3	P 214.914†	1587.8	1245.9	2081.8 µg/L	2081.8 ppb	07:08:21
3	Pb 220.353†	1737.7	1643.4	434.49 µg/L	434.49 ppb	07:08:21
3	S 181.975 Axial†	307.8	277.5	882.63 µg/L	882.63 ppb	07:08:21
3	Sb 206.836†	514.7	475.8	431.87 µg/L	431.87 ppb	07:08:21
3	Se 196.026†	474.8	443.9	447.43 µg/L	447.43 ppb	07:08:21
3	SiO2†	29042.0	26068.4	4926.2 µg/L	4926.2 ppb	07:08:00
3	Si 251.611†	33740.9	32602.2	2308.2 µg/L	2308.2 ppb	07:08:00
3	Sn 189.927†	1089.5	1063.6	412.64 µg/L	412.64 ppb	07:08:21
3	Ti 334.940†	196969.2	193326.9	465.98 µg/L	465.98 ppb	07:07:55
3	Tl 190.801†	428.8	455.5	465.50 µg/L	465.50 ppb	07:08:21
3	U 409.014†	5208.9	5124.6	458.73 µg/L	458.73 ppb	07:08:00
3	V 292.402†	38294.7	37356.9	459.54 µg/L	459.54 ppb	07:08:00
3	Zn 213.857†	20911.9	19862.1	456.91 µg/L	456.91 ppb	07:08:00

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1970955.7	102.57 %	0.284			0.28%
Sc RADIAL	104500.2	104 %	0.4			0.39%
Y 371.029	1368169.9	102.25 %	0.245			0.24%
Ag 328.068†	58844.9	486.84 µg/L	12.369	486.84 ppb	12.369	2.54%
QC value within limits for Ag 328.068 Recovery = 97.37%						
Al 396.153Radial†	10412.0	4907.9 µg/L	22.87	4907.9 ppb	22.87	0.47%
QC value within limits for Al 396.153Radial Recovery = 98.16%						
As 188.979†	318.8	475.89 µg/L	42.544	475.89 ppb	42.544	8.94%
QC value within limits for As 188.979 Recovery = 95.18%						
B 249.677†	10061.0	478.03 µg/L	14.379	478.03 ppb	14.379	3.01%
QC value within limits for B 249.677 Recovery = 95.61%						
Ba 233.527†	21318.8	480.51 µg/L	17.427	480.51 ppb	17.427	3.63%
QC value within limits for Ba 233.527 Recovery = 96.10%						
Be 313.107†	794218.3	482.34 µg/L	12.476	482.34 ppb	12.476	2.59%
QC value within limits for Be 313.107 Recovery = 96.47%						
Ca 317.933Radial†	15189.2	4899.1 µg/L	13.89	4899.1 ppb	13.89	0.28%
QC value within limits for Ca 317.933Radial Recovery = 97.98%						
Cd 226.502†	19708.5	479.30 µg/L	19.214	479.30 ppb	19.214	4.01%
QC value within limits for Cd 226.502 Recovery = 95.86%						
Co 228.616†	10921.4	479.37 µg/L	21.231	479.37 ppb	21.231	4.43%

QC value within limits for Co 228.616 Recovery = 95.87%							
Cr 267.716†	21512.1	481.24 µg/L	26.935	481.24 ppb	26.935	5.60%	
QC value within limits for Cr 267.716 Recovery = 96.25%							
Cu 324.752†	71388.8	484.78 µg/L	20.114	484.78 ppb	20.114	4.15%	
QC value within limits for Cu 324.752 Recovery = 96.96%							
Fe 238.204 Radial†	487.9	4794.0 µg/L	40.11	4794.0 ppb	40.11	0.84%	
QC value within limits for Fe 238.204 Radial Recovery = 95.88%							
K 766.490 Radial†	9919.0	4884.5 µg/L	19.45	4884.5 ppb	19.45	0.40%	
QC value within limits for K 766.490 Radial Recovery = 97.69%							
Mg 279.077 IEC†	440.7	4829.3 µg/L	18.67	4829.3 ppb	18.67	0.39%	
QC value within limits for Mg 279.077 IEC Recovery = 96.59%							
Mn 257.610†	154144.4	494.29 µg/L	12.611	494.29 ppb	12.611	2.55%	
QC value within limits for Mn 257.610 Recovery = 98.86%							
Mo 202.031†	4824.3	476.99 µg/L	44.191	476.99 ppb	44.191	9.26%	
QC value within limits for Mo 202.031 Recovery = 95.40%							
Na 589.592 Radial†	21950.0	9628.8 µg/L	4.26	9628.8 ppb	4.26	0.04%	
QC value within limits for Na 589.592 Radial Recovery = 96.29%							
Ni 231.604†	8443.5	479.23 µg/L	21.317	479.23 ppb	21.317	4.45%	
QC value within limits for Ni 231.604 Recovery = 95.85%							
P 214.914†	1377.8	2305.3 µg/L	193.66	2305.3 ppb	193.66	8.40%	
QC value within limits for P 214.914 Recovery = 92.21%							
Pb 220.353†	1795.2	474.66 µg/L	34.799	474.66 ppb	34.799	7.33%	
QC value within limits for Pb 220.353 Recovery = 94.93%							
S 181.975 Axial†	299.3	951.71 µg/L	60.298	951.71 ppb	60.298	6.34%	
QC value within limits for S 181.975 Axial Recovery = 95.17%							
Sb 206.836†	525.5	477.31 µg/L	39.356	477.31 ppb	39.356	8.25%	
QC value within limits for Sb 206.836 Recovery = 95.46%							
Se 196.026†	485.4	488.40 µg/L	35.638	488.40 ppb	35.638	7.30%	
QC value within limits for Se 196.026 Recovery = 97.68%							
SiO2†	27075.8	5116.6 µg/L	165.32	5116.6 ppb	165.32	3.23%	
QC value within limits for SiO2 Recovery = 95.68%							
Si 251.611†	33829.2	2395.1 µg/L	75.37	2395.1 ppb	75.37	3.15%	
QC value within limits for Si 251.611 Recovery = 95.80%							
Sn 189.927†	1203.8	467.72 µg/L	47.730	467.72 ppb	47.730	10.20%	
QC value within limits for Sn 189.927 Recovery = 93.54%							
Sr 421.552†	89501.0	483.60 µg/L	0.163	483.60 ppb	0.163	0.03%	
QC value within limits for Sr 421.552 Recovery = 96.72%							
Ti 334.940†	199814.1	481.63 µg/L	13.550	481.63 ppb	13.550	2.81%	
QC value within limits for Ti 334.940 Recovery = 96.33%							
Tl 190.801†	482.5	492.96 µg/L	23.936	492.96 ppb	23.936	4.86%	
QC value within limits for Tl 190.801 Recovery = 98.59%							
U 409.014†	5410.0	484.32 µg/L	22.285	484.32 ppb	22.285	4.60%	
QC value within limits for U 409.014 Recovery = 96.86%							
V 292.402†	39532.3	486.56 µg/L	23.445	486.56 ppb	23.445	4.82%	
QC value within limits for V 292.402 Recovery = 97.31%							
Zn 213.857†	20901.6	480.85 µg/L	20.817	480.85 ppb	20.817	4.33%	
QC value within limits for Zn 213.857 Recovery = 96.17%							

All analyte(s) passed QC.

Sequence No.: 54  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 3/5/2010 07:08:30  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	102492.5	102492.5	102 %		07:09:05
1	Al 396.153Radial†	-368.8	39.3	18.558 µg/L	18.558 ppb	07:09:05
1	Ca 317.933Radial†	417.8	21.4	6.9093 µg/L	6.9093 ppb	07:09:26
1	Fe 238.204 Radial†	14.3	0.3	2.8143 µg/L	2.8143 ppb	07:09:26
1	K 766.490 Radial†	316.1	-14.4	-7.1064 µg/L	-7.1064 ppb	07:09:05
1	Mg 279.077 IEC†	9.6	-0.0	-0.3684 µg/L	-0.3684 ppb	07:09:26
1	Na 589.592 Radial†	212.1	-4.0	-1.7541 µg/L	-1.7541 ppb	07:09:05
1	Sr 421.552†	156.5	4.1	0.0223 µg/L	0.0223 ppb	07:09:05
1	Sc 361.383	1885255.0	1885255.0	98.108 %		07:10:28
1	Y 371.029	1313764.3	1313764.3	98.187 %		07:10:28
1	Ag 328.068†	-487.7	70.7	0.5826 µg/L	0.5826 ppb	07:10:33
1	As 188.979†	-1.4	1.8	2.6514 µg/L	2.6514 ppb	07:10:54
1	B 249.677†	358.4	8.7	0.4139 µg/L	0.4139 ppb	07:10:33
1	Ba 233.527†	-21.2	9.5	0.2134 µg/L	0.2134 ppb	07:10:54
1	Be 313.107†	-1279.0	224.1	0.1361 µg/L	0.1361 ppb	07:10:33
1	Cd 226.502†	-170.0	6.4	0.1561 µg/L	0.1561 ppb	07:10:54
1	Co 228.616†	25.9	7.3	0.3204 µg/L	0.3204 ppb	07:10:54
1	Cr 267.716†	74.7	1.5	0.0347 µg/L	0.0347 ppb	07:10:33
1	Cu 324.752†	3570.5	50.2	0.3408 µg/L	0.3408 ppb	07:10:33
1	Mn 257.610†	-698.2	71.3	0.2287 µg/L	0.2287 ppb	07:10:33
1	Mo 202.031†	15.0	7.3	0.7192 µg/L	0.7192 ppb	07:10:54
1	Ni 231.604†	364.4	4.5	0.2576 µg/L	0.2576 ppb	07:10:54
1	P 214.914†	301.9	0.6	1.0801 µg/L	1.0801 ppb	07:10:54
1	Pb 220.353†	59.3	4.4	1.1555 µg/L	1.1555 ppb	07:10:54
1	S 181.975 Axial†	24.4	1.3	4.1039 µg/L	4.1039 ppb	07:10:54
1	Sb 206.836†	29.5	2.5	2.2380 µg/L	2.2380 ppb	07:10:54
1	Se 196.026†	25.5	5.4	5.3545 µg/L	5.3545 ppb	07:10:54
1	SiO2†	2384.2	94.2	17.807 µg/L	17.807 ppb	07:10:33
1	Si 251.611†	425.9	36.3	2.5711 µg/L	2.5711 ppb	07:10:54
1	Sn 189.927†	2.5	0.7	0.2576 µg/L	0.2576 ppb	07:10:54
1	Ti 334.940†	-628.3	42.3	0.1023 µg/L	0.1023 ppb	07:10:33
1	Tl 190.801†	-40.2	-4.9	-4.9746 µg/L	-4.9746 ppb	07:10:54
1	U 409.014†	-52.3	-23.2	-2.0819 µg/L	-2.0819 ppb	07:10:33
1	V 292.402†	114.2	19.5	0.2407 µg/L	0.2407 ppb	07:10:33
1	Zn 213.857†	604.5	25.6	0.5903 µg/L	0.5903 ppb	07:10:54
2	Sc RADIAL	99281.2	99281.2	98.9 %		07:09:31
2	Al 396.153Radial†	-364.5	32.0	15.088 µg/L	15.088 ppb	07:09:31
2	Ca 317.933Radial†	399.9	16.6	5.3629 µg/L	5.3629 ppb	07:09:52
2	Fe 238.204 Radial†	16.2	2.6	25.558 µg/L	25.558 ppb	07:09:52
2	K 766.490 Radial†	269.4	-51.7	-25.457 µg/L	-25.457 ppb	07:09:31
2	Mg 279.077 IEC†	11.4	2.1	22.761 µg/L	22.761 ppb	07:09:52
2	Na 589.592 Radial†	249.8	40.9	17.932 µg/L	17.932 ppb	07:09:31
2	Sr 421.552†	139.3	-8.3	-0.0448 µg/L	-0.0448 ppb	07:09:31
2	Sc 361.383	1896036.1	1896036.1	98.669 %		07:11:00
2	Y 371.029	1320776.6	1320776.6	98.711 %		07:11:00
2	Ag 328.068†	-489.8	71.5	0.5874 µg/L	0.5874 ppb	07:11:05
2	As 188.979†	0.6	3.8	5.6470 µg/L	5.6470 ppb	07:11:26
2	B 249.677†	358.9	7.2	0.3287 µg/L	0.3287 ppb	07:11:05
2	Ba 233.527†	-18.2	12.6	0.2834 µg/L	0.2834 ppb	07:11:26
2	Be 313.107†	-1277.8	232.8	0.1413 µg/L	0.1413 ppb	07:11:05
2	Cd 226.502†	-170.6	6.7	0.1613 µg/L	0.1613 ppb	07:11:26
2	Co 228.616†	24.2	5.5	0.2411 µg/L	0.2411 ppb	07:11:26
2	Cr 267.716†	80.1	6.6	0.1469 µg/L	0.1469 ppb	07:11:05
2	Cu 324.752†	3643.3	103.2	0.7045 µg/L	0.7045 ppb	07:11:05
2	Mn 257.610†	-729.2	43.9	0.1408 µg/L	0.1408 ppb	07:11:05
2	Mo 202.031†	21.9	14.2	1.4070 µg/L	1.4070 ppb	07:11:26
2	Ni 231.604†	364.2	2.2	0.1239 µg/L	0.1239 ppb	07:11:26
2	P 214.914†	296.8	-6.2	-10.680 µg/L	-10.680 ppb	07:11:26
2	Pb 220.353†	48.3	-7.2	-1.9009 µg/L	-1.9009 ppb	07:11:26

2	S 181.975 Axial†	21.4	-1.8	-5.8528 µg/L	-5.8528 ppb	07:11:26
2	Sb 206.836†	29.1	1.9	1.6996 µg/L	1.6996 ppb	07:11:26
2	Se 196.026†	17.3	-3.0	-2.9103 µg/L	-2.9103 ppb	07:11:26
2	SiO2†	2346.5	42.3	7.9871 µg/L	7.9871 ppb	07:11:05
2	Si 251.611†	441.6	49.8	3.5247 µg/L	3.5247 ppb	07:11:26
2	Sn 189.927†	-2.5	-4.5	-1.7823 µg/L	-1.7823 ppb	07:11:26
2	Ti 334.940†	-541.5	133.9	0.3214 µg/L	0.3214 ppb	07:11:05
2	Tl 190.801†	-32.1	3.5	3.5420 µg/L	3.5420 ppb	07:11:26
2	U 409.014†	-48.4	-18.9	-1.7017 µg/L	-1.7017 ppb	07:11:05
2	V 292.402†	73.7	-22.2	-0.2660 µg/L	-0.2660 ppb	07:11:05
2	Zn 213.857†	598.8	16.3	0.3724 µg/L	0.3724 ppb	07:11:26
3	Sc RADIAL	98195.1	98195.1	97.9 %		07:09:57
3	Al 396.153Radial†	-332.7	60.4	28.499 µg/L	28.499 ppb	07:09:57
3	Ca 317.933Radial†	407.5	28.8	9.2801 µg/L	9.2801 ppb	07:10:18
3	Fe 238.204 Radial†	15.2	1.7	17.055 µg/L	17.055 ppb	07:10:18
3	K 766.490 Radial†	366.5	50.5	24.882 µg/L	24.882 ppb	07:09:57
3	Mg 279.077 IEC†	12.2	3.1	33.784 µg/L	33.784 ppb	07:10:18
3	Na 589.592 Radial†	239.7	33.3	14.624 µg/L	14.624 ppb	07:09:57
3	Sr 421.552†	123.3	-23.1	-0.1248 µg/L	-0.1248 ppb	07:09:57
3	Sc 361.383	1905686.9	1905686.9	99.171 %		07:11:32
3	Y 371.029	1328512.0	1328512.0	99.289 %		07:11:32
3	Ag 328.068†	-510.6	53.0	0.4364 µg/L	0.4364 ppb	07:11:38
3	As 188.979†	-1.8	1.4	2.1225 µg/L	2.1225 ppb	07:11:58
3	B 249.677†	367.5	14.0	0.6608 µg/L	0.6608 ppb	07:11:38
3	Ba 233.527†	-31.8	-1.0	-0.0220 µg/L	-0.0220 ppb	07:11:58
3	Be 313.107†	-1187.0	330.9	0.2009 µg/L	0.2009 ppb	07:11:38
3	Cd 226.502†	-173.0	5.3	0.1271 µg/L	0.1271 ppb	07:11:58
3	Co 228.616†	36.8	18.0	0.7924 µg/L	0.7924 ppb	07:11:58
3	Cr 267.716†	85.1	11.2	0.2510 µg/L	0.2510 ppb	07:11:38
3	Cu 324.752†	3611.8	52.8	0.3608 µg/L	0.3608 ppb	07:11:38
3	Mn 257.610†	-707.0	70.0	0.2233 µg/L	0.2233 ppb	07:11:38
3	Mo 202.031†	11.3	3.4	0.3351 µg/L	0.3351 ppb	07:11:58
3	Ni 231.604†	382.3	18.6	1.0549 µg/L	1.0549 ppb	07:11:58
3	P 214.914†	305.7	1.2	1.9425 µg/L	1.9425 ppb	07:11:58
3	Pb 220.353†	62.5	6.9	1.8122 µg/L	1.8122 ppb	07:11:58
3	S 181.975 Axial†	24.5	1.2	3.6880 µg/L	3.6880 ppb	07:11:58
3	Sb 206.836†	31.7	4.4	3.9646 µg/L	3.9646 ppb	07:11:58
3	Se 196.026†	17.1	-3.4	-3.2682 µg/L	-3.2682 ppb	07:11:58
3	SiO2†	2328.4	11.9	2.2579 µg/L	2.2579 ppb	07:11:38
3	Si 251.611†	439.3	45.2	3.2016 µg/L	3.2016 ppb	07:11:58
3	Sn 189.927†	-1.7	-3.6	-1.4452 µg/L	-1.4452 ppb	07:11:58
3	Ti 334.940†	-581.3	96.5	0.2303 µg/L	0.2303 ppb	07:11:38
3	Tl 190.801†	-33.8	2.0	1.9991 µg/L	1.9991 ppb	07:11:58
3	U 409.014†	-7.5	22.6	2.0200 µg/L	2.0200 ppb	07:11:38
3	V 292.402†	97.0	0.9	0.0131 µg/L	0.0131 ppb	07:11:38
3	Zn 213.857†	600.2	14.6	0.3294 µg/L	0.3294 ppb	07:11:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1895659.3	98.649 %	0.5319			0.54%
Sc RADIAL	99989.6	99.6 %	2.23			2.23%
Y 371.029	1321017.6	98.729 %	0.5513			0.56%
Ag 328.068†	65.1	0.5355 µg/L	0.08582	0.5355 ppb	0.08582	16.03%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	43.9	20.715 µg/L	6.9610	20.715 ppb	6.9610	33.60%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.3	3.4736 µg/L	1.90071	3.4736 ppb	1.90071	54.72%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	10.0	0.4678 µg/L	0.17247	0.4678 ppb	0.17247	36.87%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.0	0.1583 µg/L	0.15998	0.1583 ppb	0.15998	101.08%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	262.6	0.1595 µg/L	0.03602	0.1595 ppb	0.03602	22.59%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	22.3	7.1841 µg/L	1.97303	7.1841 ppb	1.97303	27.46%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.1	0.1481 µg/L	0.01841	0.1481 ppb	0.01841	12.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	10.3	0.4513 µg/L	0.29804	0.4513 ppb	0.29804	66.04%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		6.5	0.1442 µg/L	0.10822	0.1442 ppb	0.10822 75.05%
		QC value within limits for Cr 267.716	Recovery = Not calculated			
Cu	324.752†	68.7	0.4687 µg/L	0.20447	0.4687 ppb	0.20447 43.63%
		QC value within limits for Cu 324.752	Recovery = Not calculated			
Fe	238.204 Radial†	1.5	15.143 µg/L	11.4919	15.143 ppb	11.4919 75.89%
		QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
K	766.490 Radial†	-5.2	-2.5607 µg/L	25.47539	-2.5607 ppb	25.47539 994.88%
		QC value within limits for K 766.490 Radial	Recovery = Not calculated			
Mg	279.077 IEC†	1.7	18.726 µg/L	17.4301	18.726 ppb	17.4301 93.08%
		QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
Mn	257.610†	61.7	0.1976 µg/L	0.04926	0.1976 ppb	0.04926 24.93%
		QC value within limits for Mn 257.610	Recovery = Not calculated			
Mo	202.031†	8.3	0.8204 µg/L	0.54305	0.8204 ppb	0.54305 66.19%
		QC value within limits for Mo 202.031	Recovery = Not calculated			
Na	589.592 Radial†	23.4	10.267 µg/L	10.5415	10.267 ppb	10.5415 102.67%
		QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
Ni	231.604†	8.4	0.4788 µg/L	0.50339	0.4788 ppb	0.50339 105.14%
		QC value within limits for Ni 231.604	Recovery = Not calculated			
P	214.914†	-1.5	-2.5525 µg/L	7.05197	-2.5525 ppb	7.05197 276.28%
		QC value within limits for P 214.914	Recovery = Not calculated			
Pb	220.353†	1.3	0.3556 µg/L	1.98161	0.3556 ppb	1.98161 557.24%
		QC value within limits for Pb 220.353	Recovery = Not calculated			
S	181.975 Axial†	0.2	0.6464 µg/L	5.63230	0.6464 ppb	5.63230 871.40%
		QC value within limits for S 181.975 Axial	Recovery = Not calculated			
Sb	206.836†	2.9	2.6341 µg/L	1.18334	2.6341 ppb	1.18334 44.92%
		QC value within limits for Sb 206.836	Recovery = Not calculated			
Se	196.026†	-0.3	-0.2747 µg/L	4.87828	-0.2747 ppb	4.87828 >999.9%
		QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†		49.5	9.3506 µg/L	7.86362	9.3506 ppb	7.86362 84.10%
		QC value within limits for SiO2	Recovery = Not calculated			
Si	251.611†	43.8	3.0991 µg/L	0.48499	3.0991 ppb	0.48499 15.65%
		QC value within limits for Si 251.611	Recovery = Not calculated			
Sn	189.927†	-2.5	-0.9900 µg/L	1.09352	-0.9900 ppb	1.09352 110.46%
		QC value within limits for Sn 189.927	Recovery = Not calculated			
Sr	421.552†	-9.1	-0.0491 µg/L	0.07361	-0.0491 ppb	0.07361 149.87%
		QC value within limits for Sr 421.552	Recovery = Not calculated			
Ti	334.940†	90.9	0.2180 µg/L	0.11007	0.2180 ppb	0.11007 50.50%
		QC value within limits for Ti 334.940	Recovery = Not calculated			
Tl	190.801†	0.2	0.1888 µg/L	4.53772	0.1888 ppb	4.53772 >999.9%
		QC value within limits for Tl 190.801	Recovery = Not calculated			
U	409.014†	-6.5	-0.5879 µg/L	2.26647	-0.5879 ppb	2.26647 385.55%
		QC value within limits for U 409.014	Recovery = Not calculated			
V	292.402†	-0.6	-0.0041 µg/L	0.25383	-0.0041 ppb	0.25383 >999.9%
		QC value within limits for V 292.402	Recovery = Not calculated			
Zn	213.857†	18.8	0.4307 µg/L	0.13989	0.4307 ppb	0.13989 32.48%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 61  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/5/2010 07:33:48  
 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	101908.9	101908.9	102 %		07:34:23
1	Al 396.153Radial†	10728.2	10964.1	5167.6 µg/L	5167.6 ppb	07:34:23
1	Ca 317.933Radial†	16518.3	15877.5	5121.1 µg/L	5121.1 ppb	07:34:23
1	Fe 238.204 Radial†	539.7	517.7	5086.8 µg/L	5086.8 ppb	07:34:44
1	K 766.490 Radial†	10856.7	10366.3	5104.8 µg/L	5104.8 ppb	07:34:23
1	Mg 279.077 IEC†	480.6	463.8	5083.1 µg/L	5083.1 ppb	07:34:44
1	Na 589.592 Radial†	23489.4	22917.7	10053 µg/L	10053 ppb	07:34:23
1	Sr 421.552†	95399.6	93788.1	506.76 µg/L	506.76 ppb	07:34:23
1	Sc 361.383	1921838.3	1921838.3	100.01 %		07:35:48
1	Y 371.029	1334927.2	1334927.2	99.768 %		07:35:48
1	Ag 328.068†	62165.5	62726.1	518.99 µg/L	518.99 ppb	07:35:53
1	As 188.979†	349.5	352.7	526.58 µg/L	526.58 ppb	07:36:14
1	B 249.677†	11040.4	10682.5	507.59 µg/L	507.59 ppb	07:35:53
1	Ba 233.527†	22861.8	22890.2	515.93 µg/L	515.93 ppb	07:35:53
1	Be 313.107†	846930.8	848359.6	515.22 µg/L	515.22 ppb	07:35:48
1	Cd 226.502†	20993.1	21170.3	514.86 µg/L	514.86 ppb	07:35:53
1	Co 228.616†	11779.9	11759.4	516.18 µg/L	516.18 ppb	07:35:53
1	Cr 267.716†	23406.5	23329.2	521.89 µg/L	521.89 ppb	07:35:53
1	Cu 324.752†	80722.8	77124.2	523.71 µg/L	523.71 ppb	07:35:53
1	Mn 257.610†	163626.5	164390.3	527.15 µg/L	527.15 ppb	07:35:48
1	Mo 202.031†	5385.0	5376.4	531.57 µg/L	531.57 ppb	07:36:14
1	Ni 231.604†	9502.6	9134.6	518.46 µg/L	518.46 ppb	07:35:53
1	P 214.914†	1829.5	1522.2	2548.4 µg/L	2548.4 ppb	07:36:14
1	Pb 220.353†	2034.5	1978.1	523.07 µg/L	523.07 ppb	07:36:14
1	S 181.975 Axial†	350.9	327.3	1040.9 µg/L	1040.9 ppb	07:36:14
1	Sb 206.836†	617.6	589.9	535.93 µg/L	535.93 ppb	07:36:14
1	Se 196.026†	555.3	534.7	537.52 µg/L	537.52 ppb	07:36:14
1	SiO2†	31431.8	29092.2	5497.6 µg/L	5497.6 ppb	07:35:53
1	Si 251.611†	36670.5	36268.4	2567.8 µg/L	2567.8 ppb	07:35:53
1	Sn 189.927†	1361.9	1359.8	528.70 µg/L	528.70 ppb	07:36:14
1	Ti 334.940†	213199.7	213857.5	515.48 µg/L	515.48 ppb	07:35:48
1	Tl 190.801†	478.7	514.7	525.94 µg/L	525.94 ppb	07:36:14
1	U 409.014†	5751.4	5780.9	517.54 µg/L	517.54 ppb	07:35:53
1	V 292.402†	42712.7	42610.8	524.60 µg/L	524.60 ppb	07:35:53
1	Zn 213.857†	23142.7	22549.3	518.76 µg/L	518.76 ppb	07:35:53
2	Sc RADIAL	102019.3	102019.3	102 %		07:34:49
2	Al 396.153Radial†	10754.6	10978.7	5174.5 µg/L	5174.5 ppb	07:34:49
2	Ca 317.933Radial†	16582.2	15922.7	5135.7 µg/L	5135.7 ppb	07:34:49
2	Fe 238.204 Radial†	545.3	522.6	5135.2 µg/L	5135.2 ppb	07:35:10
2	K 766.490 Radial†	10920.3	10417.3	5129.9 µg/L	5129.9 ppb	07:34:49
2	Mg 279.077 IEC†	485.1	467.8	5126.2 µg/L	5126.2 ppb	07:35:10
2	Na 589.592 Radial†	23585.1	22986.8	10084 µg/L	10084 ppb	07:34:49
2	Sr 421.552†	95562.0	93846.2	507.08 µg/L	507.08 ppb	07:34:49
2	Sc 361.383	1926728.5	1926728.5	100.27 %		07:36:21
2	Y 371.029	1335648.1	1335648.1	99.822 %		07:36:21
2	Ag 328.068†	62513.2	62915.1	520.55 µg/L	520.55 ppb	07:36:27
2	As 188.979†	350.2	352.4	526.20 µg/L	526.20 ppb	07:36:47
2	B 249.677†	11137.1	10751.0	510.83 µg/L	510.83 ppb	07:36:27
2	Ba 233.527†	22993.2	22963.2	517.58 µg/L	517.58 ppb	07:36:27
2	Be 313.107†	849051.1	848324.9	515.20 µg/L	515.20 ppb	07:36:21
2	Cd 226.502†	21175.4	21298.8	517.98 µg/L	517.98 ppb	07:36:27
2	Co 228.616†	11821.9	11771.4	516.71 µg/L	516.71 ppb	07:36:27
2	Cr 267.716†	23628.1	23490.8	525.50 µg/L	525.50 ppb	07:36:27
2	Cu 324.752†	80885.7	77081.8	523.43 µg/L	523.43 ppb	07:36:27
2	Mn 257.610†	164584.5	164930.5	528.88 µg/L	528.88 ppb	07:36:21
2	Mo 202.031†	5376.0	5353.7	529.33 µg/L	529.33 ppb	07:36:47
2	Ni 231.604†	9512.6	9120.5	517.66 µg/L	517.66 ppb	07:36:27
2	P 214.914†	1844.2	1532.3	2565.5 µg/L	2565.5 ppb	07:36:47
2	Pb 220.353†	2025.7	1964.2	519.37 µg/L	519.37 ppb	07:36:47

2	S 181.975 Axial†	347.4	323.0	1027.1 µg/L	1027.1 ppb	07:36:47
2	Sb 206.836†	616.9	587.7	533.83 µg/L	533.83 ppb	07:36:47
2	Se 196.026†	553.8	531.7	534.75 µg/L	534.75 ppb	07:36:47
2	SiO2†	31656.2	29236.3	5524.9 µg/L	5524.9 ppb	07:36:27
2	Si 251.611†	36933.0	36437.2	2579.7 µg/L	2579.7 ppb	07:36:27
2	Sn 189.927†	1345.9	1340.4	521.03 µg/L	521.03 ppb	07:36:47
2	Ti 334.940†	213846.8	213961.8	515.73 µg/L	515.73 ppb	07:36:21
2	Tl 190.801†	491.4	526.1	537.48 µg/L	537.48 ppb	07:36:47
2	U 409.014†	5796.3	5811.1	520.24 µg/L	520.24 ppb	07:36:27
2	V 292.402†	42955.9	42745.0	526.22 µg/L	526.22 ppb	07:36:27
2	Zn 213.857†	23215.5	22563.3	519.08 µg/L	519.08 ppb	07:36:27
3	Sc RADIAL	101288.8	101288.8	101 %		07:35:15
3	Al 396.153Radial†	10703.5	11004.3	5188.3 µg/L	5188.3 ppb	07:35:15
3	Ca 317.933Radial†	16481.3	15940.4	5141.4 µg/L	5141.4 ppb	07:35:15
3	Fe 238.204 Radial†	537.5	518.8	5096.7 µg/L	5096.7 ppb	07:35:36
3	K 766.490 Radial†	10913.0	10487.5	5164.5 µg/L	5164.5 ppb	07:35:15
3	Mg 279.077 IEC†	472.4	458.6	5024.2 µg/L	5024.2 ppb	07:35:36
3	Na 589.592 Radial†	23469.0	23039.1	10107 µg/L	10107 ppb	07:35:15
3	Sr 421.552†	95352.5	94316.5	509.62 µg/L	509.62 ppb	07:35:15
3	Sc 361.383	1925928.0	1925928.0	100.22 %		07:36:54
3	Y 371.029	1336685.4	1336685.4	99.900 %		07:36:54
3	Ag 328.068†	59435.9	59870.6	495.26 µg/L	495.26 ppb	07:37:00
3	As 188.979†	302.1	304.6	454.65 µg/L	454.65 ppb	07:37:20
3	B 249.677†	10556.4	10176.2	483.36 µg/L	483.36 ppb	07:37:00
3	Ba 233.527†	21514.8	21497.7	484.53 µg/L	484.53 ppb	07:37:00
3	Be 313.107†	809274.6	808989.5	491.31 µg/L	491.31 ppb	07:36:54
3	Cd 226.502†	19588.1	19723.8	479.64 µg/L	479.64 ppb	07:37:00
3	Co 228.616†	10940.0	10896.4	478.23 µg/L	478.23 ppb	07:37:00
3	Cr 267.716†	21253.7	21131.5	472.73 µg/L	472.73 ppb	07:37:00
3	Cu 324.752†	75121.8	71364.3	484.67 µg/L	484.67 ppb	07:37:00
3	Mn 257.610†	157149.9	157580.8	505.32 µg/L	505.32 ppb	07:36:54
3	Mo 202.031†	4529.4	4511.3	446.07 µg/L	446.07 ppb	07:37:20
3	Ni 231.604†	8822.9	8436.2	478.83 µg/L	478.83 ppb	07:37:00
3	P 214.914†	1619.2	1308.6	2186.4 µg/L	2186.4 ppb	07:37:20
3	Pb 220.353†	1785.6	1725.5	456.21 µg/L	456.21 ppb	07:37:20
3	S 181.975 Axial†	316.3	292.0	928.62 µg/L	928.62 ppb	07:37:20
3	Sb 206.836†	534.6	505.8	459.03 µg/L	459.03 ppb	07:37:20
3	Se 196.026†	495.8	474.1	478.07 µg/L	478.07 ppb	07:37:20
3	SiO2†	29852.9	27450.1	5187.3 µg/L	5187.3 ppb	07:37:00
3	Si 251.611†	34769.8	34294.1	2428.0 µg/L	2428.0 ppb	07:37:00
3	Sn 189.927†	1116.1	1111.6	431.13 µg/L	431.13 ppb	07:37:20
3	Ti 334.940†	202670.8	202899.5	489.06 µg/L	489.06 ppb	07:36:54
3	Tl 190.801†	430.9	466.0	476.37 µg/L	476.37 ppb	07:37:20
3	U 409.014†	5237.3	5255.8	470.43 µg/L	470.43 ppb	07:37:00
3	V 292.402†	39334.0	39149.0	481.55 µg/L	481.55 ppb	07:37:00
3	Zn 213.857†	21515.8	20876.9	480.25 µg/L	480.25 ppb	07:37:00

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1924831.6	100.17 %	0.136			0.14%
Sc RADIAL	101739.0	101 %	0.4			0.39%
Y 371.029	1335753.6	99.830 %	0.0661			0.07%
Ag 328.068†	61837.3	511.60 µg/L	14.174	511.60 ppb	14.174	2.77%
QC value within limits for Ag 328.068 Recovery = 102.32%						
Al 396.153Radial†	10982.4	5176.8 µg/L	10.56	5176.8 ppb	10.56	0.20%
QC value within limits for Al 396.153Radial Recovery = 103.54%						
As 188.979†	336.6	502.48 µg/L	41.421	502.48 ppb	41.421	8.24%
QC value within limits for As 188.979 Recovery = 100.50%						
B 249.677†	10536.6	500.59 µg/L	15.013	500.59 ppb	15.013	3.00%
QC value within limits for B 249.677 Recovery = 100.12%						
Ba 233.527†	22450.4	506.01 µg/L	18.626	506.01 ppb	18.626	3.68%
QC value within limits for Ba 233.527 Recovery = 101.20%						
Be 313.107†	835224.6	507.25 µg/L	13.798	507.25 ppb	13.798	2.72%
QC value within limits for Be 313.107 Recovery = 101.45%						
Ca 317.933Radial†	15913.5	5132.7 µg/L	10.47	5132.7 ppb	10.47	0.20%
QC value within limits for Ca 317.933Radial Recovery = 102.65%						
Cd 226.502†	20731.0	504.16 µg/L	21.294	504.16 ppb	21.294	4.22%
QC value within limits for Cd 226.502 Recovery = 100.83%						
Co 228.616†	11475.7	503.71 µg/L	22.062	503.71 ppb	22.062	4.38%

Cr	267.716†	22650.5	506.71 µg/L	29.481	506.71 ppb	29.481	5.82%
Cu	324.752†	75190.1	510.60 µg/L	22.459	510.60 ppb	22.459	4.40%
Fe	238.204 Radial†	519.7	5106.3 µg/L	25.57	5106.3 ppb	25.57	0.50%
K	766.490 Radial†	10423.7	5133.1 µg/L	29.97	5133.1 ppb	29.97	0.58%
Mg	279.077 IEC†	463.4	5077.8 µg/L	51.22	5077.8 ppb	51.22	1.01%
Mn	257.610†	162300.6	520.45 µg/L	13.134	520.45 ppb	13.134	2.52%
Mo	202.031†	5080.5	502.33 µg/L	48.732	502.33 ppb	48.732	9.70%
Na	589.592 Radial†	22981.2	10081 µg/L	26.7	10081 ppb	26.7	0.26%
Ni	231.604†	8897.1	504.98 µg/L	22.656	504.98 ppb	22.656	4.49%
P	214.914†	1454.4	2433.4 µg/L	214.11	2433.4 ppb	214.11	8.80%
Pb	220.353†	1889.3	499.55 µg/L	37.577	499.55 ppb	37.577	7.52%
S	181.975 Axial†	314.1	998.87 µg/L	61.229	998.87 ppb	61.229	6.13%
Sb	206.836†	561.1	509.60 µg/L	43.801	509.60 ppb	43.801	8.60%
Se	196.026†	513.5	516.78 µg/L	33.552	516.78 ppb	33.552	6.49%
SiO2†		28592.9	5403.3 µg/L	187.51	5403.3 ppb	187.51	3.47%
Si	251.611†	35666.6	2525.2 µg/L	84.36	2525.2 ppb	84.36	3.34%
Sn	189.927†	1270.6	493.62 µg/L	54.252	493.62 ppb	54.252	10.99%
Sr	421.552†	93983.6	507.82 µg/L	1.566	507.82 ppb	1.566	0.31%
Ti	334.940†	210239.6	506.76 µg/L	15.329	506.76 ppb	15.329	3.02%
Tl	190.801†	502.3	513.26 µg/L	32.468	513.26 ppb	32.468	6.33%
U	409.014†	5615.9	502.73 µg/L	28.011	502.73 ppb	28.011	5.57%
V	292.402†	41501.6	510.79 µg/L	25.332	510.79 ppb	25.332	4.96%
Zn	213.857†	21996.5	506.03 µg/L	22.325	506.03 ppb	22.325	4.41%

QC value within limits for Co 228.616 Recovery = 100.74%  
 QC value within limits for Cr 267.716 Recovery = 101.34%  
 QC value within limits for Cu 324.752 Recovery = 102.12%  
 QC value within limits for Fe 238.204 Radial Recovery = 102.13%  
 QC value within limits for K 766.490 Radial Recovery = 102.66%  
 QC value within limits for Mg 279.077 IEC Recovery = 101.56%  
 QC value within limits for Mn 257.610 Recovery = 104.09%  
 QC value within limits for Mo 202.031 Recovery = 100.47%  
 QC value within limits for Na 589.592 Radial Recovery = 100.81%  
 QC value within limits for Ni 231.604 Recovery = 101.00%  
 QC value within limits for P 214.914 Recovery = 97.34%  
 QC value within limits for Pb 220.353 Recovery = 99.91%  
 QC value within limits for S 181.975 Axial Recovery = 99.89%  
 QC value within limits for Sb 206.836 Recovery = 101.92%  
 QC value within limits for Se 196.026 Recovery = 103.36%  
 QC value within limits for SiO2 Recovery = 101.04%  
 QC value within limits for Si 251.611 Recovery = 101.01%  
 QC value within limits for Sn 189.927 Recovery = 98.72%  
 QC value within limits for Sr 421.552 Recovery = 101.56%  
 QC value within limits for Ti 334.940 Recovery = 101.35%  
 QC value within limits for Tl 190.801 Recovery = 102.65%  
 QC value within limits for U 409.014 Recovery = 100.55%  
 QC value within limits for V 292.402 Recovery = 102.16%  
 QC value within limits for Zn 213.857 Recovery = 101.21%

All analyte(s) passed QC.



Sequence No.: 62

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/5/2010 07:37:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98111.9	98111.9	97.8 %		07:38:04
1	Al 396.153Radial†	-323.8	69.2	32.666 µg/L	32.666 ppb	07:38:04
1	Ca 317.933Radial†	391.0	12.3	3.9808 µg/L	3.9808 ppb	07:38:25
1	Fe 238.204 Radial†	16.4	3.0	29.428 µg/L	29.428 ppb	07:38:25
1	K 766.490 Radial†	353.0	37.1	18.264 µg/L	18.264 ppb	07:38:04
1	Mg 279.077 IEC†	6.7	-2.5	-27.870 µg/L	-27.870 ppb	07:38:25
1	Na 589.592 Radial†	226.8	20.3	8.9236 µg/L	8.9236 ppb	07:38:04
1	Sr 421.552†	130.0	-16.1	-0.0873 µg/L	-0.0873 ppb	07:38:04
1	Sc 361.383	1926221.6	1926221.6	100.24 %		07:39:27
1	Y 371.029	1344909.8	1344909.8	100.51 %		07:39:27
1	Ag 328.068†	-460.9	108.1	0.8870 µg/L	0.8870 ppb	07:39:32
1	As 188.979†	-7.8	-4.6	-6.8788 µg/L	-6.8788 ppb	07:39:53
1	B 249.677†	371.2	13.8	0.6415 µg/L	0.6415 ppb	07:39:32
1	Ba 233.527†	-19.7	11.4	0.2560 µg/L	0.2560 ppb	07:39:53
1	Be 313.107†	-1280.2	250.6	0.1521 µg/L	0.1521 ppb	07:39:32
1	Cd 226.502†	-177.7	2.4	0.0546 µg/L	0.0546 ppb	07:39:53
1	Co 228.616†	32.9	13.7	0.6032 µg/L	0.6032 ppb	07:39:53
1	Cr 267.716†	95.9	21.1	0.4721 µg/L	0.4721 ppb	07:39:32
1	Cu 324.752†	3537.7	-59.9	-0.4008 µg/L	-0.4008 ppb	07:39:32
1	Mn 257.610†	-704.3	80.3	0.2612 µg/L	0.2612 ppb	07:39:53
1	Mo 202.031†	15.2	7.2	0.7080 µg/L	0.7080 ppb	07:39:53
1	Ni 231.604†	365.3	-2.5	-0.1414 µg/L	-0.1414 ppb	07:39:53
1	P 214.914†	306.4	-1.4	-2.3780 µg/L	-2.3780 ppb	07:39:53
1	Pb 220.353†	45.5	-10.8	-2.8368 µg/L	-2.8368 ppb	07:39:53
1	S 181.975 Axial†	19.4	-4.2	-13.299 µg/L	-13.299 ppb	07:39:53
1	Sb 206.836†	27.9	0.3	0.2450 µg/L	0.2450 ppb	07:39:53
1	Se 196.026†	22.0	1.4	1.4434 µg/L	1.4434 ppb	07:39:53
1	SiO2†	2410.5	68.8	13.009 µg/L	13.009 ppb	07:39:32
1	Si 251.611†	440.2	41.4	2.9307 µg/L	2.9307 ppb	07:39:53
1	Sn 189.927†	0.2	-1.7	-0.7013 µg/L	-0.7013 ppb	07:39:53
1	Ti 334.940†	-527.9	156.1	0.3787 µg/L	0.3787 ppb	07:39:32
1	Tl 190.801†	-30.3	5.8	5.9213 µg/L	5.9213 ppb	07:39:53
1	U 409.014†	-0.9	29.3	2.6230 µg/L	2.6230 ppb	07:39:32
1	V 292.402†	62.0	-35.0	-0.4232 µg/L	-0.4232 ppb	07:39:32
1	Zn 213.857†	600.5	8.5	0.1978 µg/L	0.1978 ppb	07:39:53
2	Sc RADIAL	99309.2	99309.2	99.0 %		07:38:30
2	Al 396.153Radial†	-388.4	7.9	3.7113 µg/L	3.7113 ppb	07:38:30
2	Ca 317.933Radial†	383.0	-0.6	-0.1919 µg/L	-0.1919 ppb	07:38:50
2	Fe 238.204 Radial†	15.1	1.5	14.765 µg/L	14.765 ppb	07:38:50
2	K 766.490 Radial†	364.9	44.8	22.049 µg/L	22.049 ppb	07:38:30
2	Mg 279.077 IEC†	7.0	-2.3	-25.543 µg/L	-25.543 ppb	07:38:50
2	Na 589.592 Radial†	143.2	-66.9	-29.349 µg/L	-29.349 ppb	07:38:30
2	Sr 421.552†	152.2	4.7	0.0255 µg/L	0.0255 ppb	07:38:30
2	Sc 361.383	1902928.3	1902928.3	99.028 %		07:39:59
2	Y 371.029	1324486.1	1324486.1	98.988 %		07:39:59
2	Ag 328.068†	-484.9	78.2	0.6447 µg/L	0.6447 ppb	07:40:04
2	As 188.979†	-2.8	0.3	0.5029 µg/L	0.5029 ppb	07:40:25
2	B 249.677†	341.8	-11.4	-0.5511 µg/L	-0.5511 ppb	07:40:04
2	Ba 233.527†	-18.1	12.8	0.2879 µg/L	0.2879 ppb	07:40:25
2	Be 313.107†	-1251.9	263.6	0.1600 µg/L	0.1600 ppb	07:40:04
2	Cd 226.502†	-163.5	14.6	0.3524 µg/L	0.3524 ppb	07:40:25
2	Co 228.616†	20.7	1.8	0.0800 µg/L	0.0800 ppb	07:40:25
2	Cr 267.716†	106.9	33.4	0.7472 µg/L	0.7472 ppb	07:40:04
2	Cu 324.752†	3538.6	-15.9	-0.1049 µg/L	-0.1049 ppb	07:40:04
2	Mn 257.610†	-683.1	93.2	0.3014 µg/L	0.3014 ppb	07:40:25
2	Mo 202.031†	15.7	7.9	0.7798 µg/L	0.7798 ppb	07:40:25
2	Ni 231.604†	363.1	-0.2	-0.0120 µg/L	-0.0120 ppb	07:40:25
2	P 214.914†	291.4	-12.8	-21.834 µg/L	-21.834 ppb	07:40:25
2	Pb 220.353†	43.6	-12.1	-3.2049 µg/L	-3.2049 ppb	07:40:25

2	S 181.975 Axial†	19.4	-4.0	-12.604 µg/L	-12.604 ppb	07:40:25
2	Sb 206.836†	26.2	-1.2	-1.0362 µg/L	-1.0362 ppb	07:40:25
2	Se 196.026†	34.5	14.3	14.154 µg/L	14.154 ppb	07:40:25
2	SiO2†	2393.7	81.3	15.360 µg/L	15.360 ppb	07:40:04
2	Si 251.611†	443.8	50.4	3.5672 µg/L	3.5672 ppb	07:40:25
2	Sn 189.927†	-3.3	-5.3	-2.0835 µg/L	-2.0835 ppb	07:40:25
2	Ti 334.940†	-554.9	122.4	0.2972 µg/L	0.2972 ppb	07:40:04
2	Tl 190.801†	-36.7	-1.0	-1.0028 µg/L	-1.0028 ppb	07:40:25
2	U 409.014†	14.7	44.9	4.0300 µg/L	4.0300 ppb	07:40:04
2	V 292.402†	114.2	18.4	0.2334 µg/L	0.2334 ppb	07:40:04
2	Zn 213.857†	609.9	25.2	0.5857 µg/L	0.5857 ppb	07:40:25
3	Sc RADIAL	98827.9	98827.9	98.5 %		07:38:56
3	Al 396.153Radial†	-324.8	70.6	33.346 µg/L	33.346 ppb	07:38:56
3	Ca 317.933Radial†	398.7	17.2	5.5468 µg/L	5.5468 ppb	07:39:16
3	Fe 238.204 Radial†	13.1	-0.4	-4.2374 µg/L	-4.2374 ppb	07:39:16
3	K 766.490 Radial†	299.1	-20.3	-9.9931 µg/L	-9.9931 ppb	07:38:56
3	Mg 279.077 IEC†	9.4	0.1	1.0649 µg/L	1.0649 ppb	07:39:16
3	Na 589.592 Radial†	169.6	-39.4	-17.303 µg/L	-17.303 ppb	07:38:56
3	Sr 421.552†	156.2	9.5	0.0511 µg/L	0.0511 ppb	07:38:56
3	Sc 361.383	1907596.3	1907596.3	99.271 %		07:40:31
3	Y 371.029	1329713.6	1329713.6	99.379 %		07:40:31
3	Ag 328.068†	-567.2	-3.5	-0.0296 µg/L	-0.0296 ppb	07:40:37
3	As 188.979†	-4.0	-0.9	-1.3030 µg/L	-1.3030 ppb	07:40:57
3	B 249.677†	362.8	8.9	0.4237 µg/L	0.4237 ppb	07:40:37
3	Ba 233.527†	-26.0	4.8	0.1087 µg/L	0.1087 ppb	07:40:57
3	Be 313.107†	-1325.1	192.9	0.1171 µg/L	0.1171 ppb	07:40:37
3	Cd 226.502†	-173.6	4.7	0.1158 µg/L	0.1158 ppb	07:40:57
3	Co 228.616†	32.9	14.1	0.6190 µg/L	0.6190 ppb	07:40:57
3	Cr 267.716†	55.4	-18.8	-0.4198 µg/L	-0.4198 ppb	07:40:37
3	Cu 324.752†	3608.6	45.9	0.3104 µg/L	0.3104 ppb	07:40:37
3	Mn 257.610†	-697.2	80.6	0.2583 µg/L	0.2583 ppb	07:40:57
3	Mo 202.031†	16.2	8.3	0.8250 µg/L	0.8250 ppb	07:40:57
3	Ni 231.604†	364.8	0.6	0.0315 µg/L	0.0315 ppb	07:40:57
3	P 214.914†	302.5	-2.4	-4.0758 µg/L	-4.0758 ppb	07:40:57
3	Pb 220.353†	47.8	-8.0	-2.0985 µg/L	-2.0985 ppb	07:40:57
3	S 181.975 Axial†	22.2	-1.2	-3.8991 µg/L	-3.8991 ppb	07:40:57
3	Sb 206.836†	30.5	3.2	2.8821 µg/L	2.8821 ppb	07:40:57
3	Se 196.026†	18.7	-1.7	-1.6609 µg/L	-1.6609 ppb	07:40:57
3	SiO2†	2363.6	45.1	8.5161 µg/L	8.5161 ppb	07:40:37
3	Si 251.611†	423.3	28.6	2.0240 µg/L	2.0240 ppb	07:40:57
3	Sn 189.927†	-5.2	-7.2	-2.8215 µg/L	-2.8215 ppb	07:40:57
3	Ti 334.940†	-571.9	106.6	0.2571 µg/L	0.2571 ppb	07:40:37
3	Tl 190.801†	-36.9	-1.1	-1.0640 µg/L	-1.0640 ppb	07:40:57
3	U 409.014†	-5.1	25.0	2.2419 µg/L	2.2419 ppb	07:40:37
3	V 292.402†	85.7	-10.6	-0.1209 µg/L	-0.1209 ppb	07:40:37
3	Zn 213.857†	608.0	21.8	0.5053 µg/L	0.5053 ppb	07:40:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1912248.8	99.513 %	0.6413			0.64%
Sc RADIAL	98749.7	98.4 %	0.60			0.61%
Y 371.029	1333036.5	99.627 %	0.7929			0.80%
Ag 328.068†	60.9	0.5007 µg/L	0.47494	0.5007 ppb	0.47494	94.85%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	49.2	23.241 µg/L	16.9166	23.241 ppb	16.9166	72.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.7	-2.5596 µg/L	3.84795	-2.5596 ppb	3.84795	150.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	3.7	0.1714 µg/L	0.63512	0.1714 ppb	0.63512	370.59%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.7	0.2175 µg/L	0.09562	0.2175 ppb	0.09562	43.96%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	235.7	0.1431 µg/L	0.02285	0.1431 ppb	0.02285	15.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.6	3.1119 µg/L	2.96641	3.1119 ppb	2.96641	95.32%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.2	0.1743 µg/L	0.15727	0.1743 ppb	0.15727	90.24%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.9	0.4341 µg/L	0.30676	0.4341 ppb	0.30676	70.67%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	11.9	0.2665 µg/L	0.61006	0.2665 ppb	0.61006 228.89%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-10.0	-0.0651 µg/L	0.35729	-0.0651 ppb	0.35729 549.02%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.4	13.319 µg/L	16.8795	13.319 ppb	16.8795 126.74%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	20.5	10.107 µg/L	17.5096	10.107 ppb	17.5096 173.25%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.6	-17.449 µg/L	16.0761	-17.449 ppb	16.0761 92.13%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	84.7	0.2736 µg/L	0.02408	0.2736 ppb	0.02408 8.80%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	7.8	0.7709 µg/L	0.05896	0.7709 ppb	0.05896 7.65%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-28.7	-12.576 µg/L	19.5694	-12.576 ppb	19.5694 155.61%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-0.7	-0.0406 µg/L	0.08992	-0.0406 ppb	0.08992 221.24%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-5.5	-9.4294 µg/L	10.77654	-9.4294 ppb	10.77654 114.29%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-10.3	-2.7134 µg/L	0.56339	-2.7134 ppb	0.56339 20.76%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-3.1	-9.9338 µg/L	5.23775	-9.9338 ppb	5.23775 52.73%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	0.8	0.6970 µg/L	1.99790	0.6970 ppb	1.99790 286.65%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	4.7	4.6454 µg/L	8.37939	4.6454 ppb	8.37939 180.38%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	65.1	12.295 µg/L	3.4773	12.295 ppb	3.4773 28.28%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	40.1	2.8406 µg/L	0.77557	2.8406 ppb	0.77557 27.30%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-4.7	-1.8688 µg/L	1.07632	-1.8688 ppb	1.07632 57.59%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-0.7	-0.0035 µg/L	0.07363	-0.0035 ppb	0.07363 >999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	128.3	0.3110 µg/L	0.06197	0.3110 ppb	0.06197 19.93%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	1.3	1.2849 µg/L	4.01544	1.2849 ppb	4.01544 312.52%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	33.1	2.9650 µg/L	0.94182	2.9650 ppb	0.94182 31.76%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-9.1	-0.1036 µg/L	0.32863	-0.1036 ppb	0.32863 317.32%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	18.5	0.4296 µg/L	0.20474	0.4296 ppb	0.20474 47.66%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 69

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/5/2010 08:04:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	101451.9	101451.9	101 %		08:04:54
1	Al 396.153Radial†	11389.6	11665.9	5498.6 µg/L	5498.6 ppb	08:04:54
1	Ca 317.933Radial†	17780.2	17198.9	5547.3 µg/L	5547.3 ppb	08:04:54
1	Fe 238.204 Radial†	571.9	551.9	5423.3 µg/L	5423.3 ppb	08:05:14
1	K 766.490 Radial†	11584.1	11133.9	5482.8 µg/L	5482.8 ppb	08:04:54
1	Mg 279.077 IEC†	506.5	491.6	5387.2 µg/L	5387.2 ppb	08:05:14
1	Na 589.592 Radial†	25964.4	25469.9	11173 µg/L	11173 ppb	08:04:54
1	Sr 421.552†	102146.6	100884.7	545.11 µg/L	545.11 ppb	08:04:54
1	Sc 361.383	1922490.5	1922490.5	100.05 %		08:06:14
1	Y 371.029	1335714.8	1335714.8	99.827 %		08:06:14
1	Ag 328.068†	65088.1	65626.2	543.02 µg/L	543.02 ppb	08:06:20
1	As 188.979†	369.5	372.5	556.22 µg/L	556.22 ppb	08:06:40
1	B 249.677†	11683.3	11321.3	537.92 µg/L	537.92 ppb	08:06:20
1	Ba 233.527†	24129.3	24149.3	544.31 µg/L	544.31 ppb	08:06:20
1	Be 313.107†	889984.4	891106.2	541.18 µg/L	541.18 ppb	08:06:14
1	Cd 226.502†	22325.5	22495.0	547.07 µg/L	547.07 ppb	08:06:20
1	Co 228.616†	12423.5	12398.7	544.25 µg/L	544.25 ppb	08:06:20
1	Cr 267.716†	24784.0	24698.2	552.51 µg/L	552.51 ppb	08:06:20
1	Cu 324.752†	84306.2	80678.6	547.86 µg/L	547.86 ppb	08:06:20
1	Mn 257.610†	172438.3	173142.6	555.22 µg/L	555.22 ppb	08:06:14
1	Mo 202.031†	5628.8	5618.2	555.49 µg/L	555.49 ppb	08:06:40
1	Ni 231.604†	9950.2	9578.7	543.67 µg/L	543.67 ppb	08:06:20
1	P 214.914†	1916.1	1608.1	2692.7 µg/L	2692.7 ppb	08:06:40
1	Pb 220.353†	2121.9	2064.8	545.99 µg/L	545.99 ppb	08:06:40
1	S 181.975 Axial†	362.8	339.1	1078.3 µg/L	1078.3 ppb	08:06:40
1	Sb 206.836†	646.3	618.4	561.70 µg/L	561.70 ppb	08:06:40
1	Se 196.026†	589.1	568.3	571.35 µg/L	571.35 ppb	08:06:40
1	SiO2†	32928.7	30577.8	5778.4 µg/L	5778.4 ppb	08:06:20
1	Si 251.611†	38477.1	38061.8	2694.7 µg/L	2694.7 ppb	08:06:20
1	Sn 189.927†	1417.1	1414.5	549.84 µg/L	549.84 ppb	08:06:40
1	Ti 334.940†	223424.7	224005.5	539.94 µg/L	539.94 ppb	08:06:14
1	Tl 190.801†	501.1	536.9	548.60 µg/L	548.60 ppb	08:06:40
1	U 409.014†	6090.5	6117.9	547.69 µg/L	547.69 ppb	08:06:20
1	V 292.402†	45043.5	44926.0	553.06 µg/L	553.06 ppb	08:06:20
1	Zn 213.857†	24334.1	23732.4	545.99 µg/L	545.99 ppb	08:06:20
2	Sc RADIAL	102788.3	102788.3	102 %		08:05:20
2	Al 396.153Radial†	11214.3	11348.3	5348.5 µg/L	5348.5 ppb	08:05:20
2	Ca 317.933Radial†	17525.7	16721.8	5393.4 µg/L	5393.4 ppb	08:05:20
2	Fe 238.204 Radial†	575.6	548.2	5386.6 µg/L	5386.6 ppb	08:05:40
2	K 766.490 Radial†	11452.6	10856.6	5346.3 µg/L	5346.3 ppb	08:05:20
2	Mg 279.077 IEC†	503.4	482.0	5282.5 µg/L	5282.5 ppb	08:05:40
2	Na 589.592 Radial†	25637.9	24817.3	10887 µg/L	10887 ppb	08:05:20
2	Sr 421.552†	100876.6	98331.3	531.31 µg/L	531.31 ppb	08:05:20
2	Sc 361.383	1924683.9	1924683.9	100.16 %		08:06:47
2	Y 371.029	1336471.0	1336471.0	99.884 %		08:06:47
2	Ag 328.068†	65118.4	65582.4	542.67 µg/L	542.67 ppb	08:06:52
2	As 188.979†	371.9	374.5	559.21 µg/L	559.21 ppb	08:07:12
2	B 249.677†	11704.2	11328.9	538.30 µg/L	538.30 ppb	08:06:52
2	Ba 233.527†	24088.8	24081.4	542.79 µg/L	542.79 ppb	08:06:52
2	Be 313.107†	888976.0	889085.6	539.96 µg/L	539.96 ppb	08:06:47
2	Cd 226.502†	22310.6	22454.6	546.09 µg/L	546.09 ppb	08:06:52
2	Co 228.616†	12425.3	12386.3	543.71 µg/L	543.71 ppb	08:06:52
2	Cr 267.716†	24861.2	24747.0	553.61 µg/L	553.61 ppb	08:06:52
2	Cu 324.752†	84265.8	80542.2	546.93 µg/L	546.93 ppb	08:06:52
2	Mn 257.610†	172244.4	172752.6	553.97 µg/L	553.97 ppb	08:06:47
2	Mo 202.031†	5637.9	5621.0	555.76 µg/L	555.76 ppb	08:07:12
2	Ni 231.604†	9980.4	9597.5	544.74 µg/L	544.74 ppb	08:06:52
2	P 214.914†	1925.0	1614.9	2704.3 µg/L	2704.3 ppb	08:07:12
2	Pb 220.353†	2129.8	2070.3	547.44 µg/L	547.44 ppb	08:07:12

2	S 181.975 Axial†	367.5	343.4	1091.9 µg/L	1091.9 ppb	08:07:12
2	Sb 206.836†	639.5	610.9	554.96 µg/L	554.96 ppb	08:07:12
2	Se 196.026†	584.9	563.4	566.53 µg/L	566.53 ppb	08:07:12
2	SiO2†	32907.6	30519.2	5767.3 µg/L	5767.3 ppb	08:06:52
2	Si 251.611†	38558.6	38099.4	2697.4 µg/L	2697.4 ppb	08:06:52
2	Sn 189.927†	1414.7	1410.5	548.31 µg/L	548.31 ppb	08:07:12
2	Ti 334.940†	223060.6	223387.5	538.45 µg/L	538.45 ppb	08:06:47
2	Tl 190.801†	503.1	538.4	550.11 µg/L	550.11 ppb	08:07:12
2	U 409.014†	6042.9	6063.4	542.82 µg/L	542.82 ppb	08:06:52
2	V 292.402†	45256.5	45087.5	555.03 µg/L	555.03 ppb	08:06:52
2	Zn 213.857†	24304.1	23674.7	544.65 µg/L	544.65 ppb	08:06:52
3	Sc RADIAL	102513.9	102513.9	102 %		08:05:45
3	Al 396.153Radial†	11204.3	11367.8	5359.0 µg/L	5359.0 ppb	08:05:45
3	Ca 317.933Radial†	17572.5	16813.4	5423.0 µg/L	5423.0 ppb	08:05:45
3	Fe 238.204 Radial†	571.0	545.2	5356.7 µg/L	5356.7 ppb	08:06:05
3	K 766.490 Radial†	11328.8	10765.4	5301.3 µg/L	5301.3 ppb	08:05:45
3	Mg 279.077 IEC†	511.1	490.9	5378.8 µg/L	5378.8 ppb	08:06:05
3	Na 589.592 Radial†	25619.4	24866.1	10908 µg/L	10908 ppb	08:05:45
3	Sr 421.552†	100703.3	98425.3	531.82 µg/L	531.82 ppb	08:05:45
3	Sc 361.383	1911740.5	1911740.5	99.486 %		08:07:19
3	Y 371.029	1327275.5	1327275.5	99.197 %		08:07:19
3	Ag 328.068†	63242.3	64136.8	530.64 µg/L	530.64 ppb	08:07:24
3	As 188.979†	332.0	336.9	502.93 µg/L	502.93 ppb	08:07:44
3	B 249.677†	11308.6	11010.4	523.09 µg/L	523.09 ppb	08:07:24
3	Ba 233.527†	23194.6	23345.5	526.19 µg/L	526.19 ppb	08:07:24
3	Be 313.107†	869684.7	875704.0	531.83 µg/L	531.83 ppb	08:07:19
3	Cd 226.502†	21343.3	21633.2	526.10 µg/L	526.10 ppb	08:07:24
3	Co 228.616†	11884.9	11927.2	523.49 µg/L	523.49 ppb	08:07:24
3	Cr 267.716†	23423.6	23470.0	525.04 µg/L	525.04 ppb	08:07:24
3	Cu 324.752†	81117.8	77947.5	529.34 µg/L	529.34 ppb	08:07:24
3	Mn 257.610†	168504.2	170157.4	545.64 µg/L	545.64 ppb	08:07:19
3	Mo 202.031†	4980.0	4997.7	494.15 µg/L	494.15 ppb	08:07:44
3	Ni 231.604†	9561.3	9243.8	524.66 µg/L	524.66 ppb	08:07:24
3	P 214.914†	1749.7	1451.6	2426.5 µg/L	2426.5 ppb	08:07:44
3	Pb 220.353†	1928.4	1882.2	497.64 µg/L	497.64 ppb	08:07:44
3	S 181.975 Axial†	335.5	313.6	997.42 µg/L	997.42 ppb	08:07:44
3	Sb 206.836†	582.0	557.5	505.94 µg/L	505.94 ppb	08:07:44
3	Se 196.026†	537.3	519.6	523.27 µg/L	523.27 ppb	08:07:44
3	SiO2†	31962.5	29791.6	5629.8 µg/L	5629.8 ppb	08:07:24
3	Si 251.611†	37307.5	37102.4	2626.8 µg/L	2626.8 ppb	08:07:24
3	Sn 189.927†	1236.8	1241.3	481.81 µg/L	481.81 ppb	08:07:44
3	Ti 334.940†	218040.0	219848.8	529.91 µg/L	529.91 ppb	08:07:19
3	Tl 190.801†	467.6	506.0	517.29 µg/L	517.29 ppb	08:07:44
3	U 409.014†	5754.8	5814.7	520.51 µg/L	520.51 ppb	08:07:24
3	V 292.402†	43033.1	43158.4	530.95 µg/L	530.95 ppb	08:07:24
3	Zn 213.857†	23326.4	22856.3	525.80 µg/L	525.80 ppb	08:07:24

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1919638.3	99.897 %	0.3605			0.36%
Sc RADIAL	102251.4	102 %	0.7			0.69%
Y 371.029	1333153.7	99.636 %	0.3815			0.38%
Ag 328.068†	65115.1	538.77 µg/L	7.049	538.77 ppb	7.049	1.31%
QC value within limits for Ag 328.068 Recovery = 107.75%						
Al 396.153Radial†	11460.7	5402.0 µg/L	83.76	5402.0 ppb	83.76	1.55%
QC value within limits for Al 396.153Radial Recovery = 108.04%						
As 188.979†	361.3	539.45 µg/L	31.667	539.45 ppb	31.667	5.87%
QC value within limits for As 188.979 Recovery = 107.89%						
B 249.677†	11220.2	533.10 µg/L	8.679	533.10 ppb	8.679	1.63%
QC value within limits for B 249.677 Recovery = 106.62%						
Ba 233.527†	23858.8	537.76 µg/L	10.053	537.76 ppb	10.053	1.87%
QC value within limits for Ba 233.527 Recovery = 107.55%						
Be 313.107†	885298.6	537.66 µg/L	5.083	537.66 ppb	5.083	0.95%
QC value within limits for Be 313.107 Recovery = 107.53%						
Ca 317.933Radial†	16911.4	5454.5 µg/L	81.66	5454.5 ppb	81.66	1.50%
QC value within limits for Ca 317.933Radial Recovery = 109.09%						
Cd 226.502†	22194.3	539.75 µg/L	11.837	539.75 ppb	11.837	2.19%
QC value within limits for Cd 226.502 Recovery = 107.95%						
Co 228.616†	12237.4	537.15 µg/L	11.831	537.15 ppb	11.831	2.20%

QC value within limits for Co 228.616 Recovery = 107.43%							
Cr 267.716†	24305.1	543.72 µg/L	16.185	543.72 ppb	16.185	2.98%	
QC value within limits for Cr 267.716 Recovery = 108.74%							
Cu 324.752†	79722.8	541.38 µg/L	10.436	541.38 ppb	10.436	1.93%	
QC value within limits for Cu 324.752 Recovery = 108.28%							
Fe 238.204 Radial†	548.4	5388.9 µg/L	33.37	5388.9 ppb	33.37	0.62%	
QC value within limits for Fe 238.204 Radial Recovery = 107.78%							
K 766.490 Radial†	10918.6	5376.8 µg/L	94.52	5376.8 ppb	94.52	1.76%	
QC value within limits for K 766.490 Radial Recovery = 107.54%							
Mg 279.077 IEC†	488.2	5349.5 µg/L	58.20	5349.5 ppb	58.20	1.09%	
QC value within limits for Mg 279.077 IEC Recovery = 106.99%							
Mn 257.610†	172017.5	551.61 µg/L	5.207	551.61 ppb	5.207	0.94%	
QC value greater than the upper limit for Mn 257.610 Recovery = 110.32%							
Mo 202.031†	5412.3	535.13 µg/L	35.489	535.13 ppb	35.489	6.63%	
QC value within limits for Mo 202.031 Recovery = 107.03%							
Na 589.592 Radial†	25051.1	10989 µg/L	159.5	10989 ppb	159.5	1.45%	
QC value within limits for Na 589.592 Radial Recovery = 109.89%							
Ni 231.604†	9473.4	537.69 µg/L	11.295	537.69 ppb	11.295	2.10%	
QC value within limits for Ni 231.604 Recovery = 107.54%							
P 214.914†	1558.2	2607.8 µg/L	157.13	2607.8 ppb	157.13	6.03%	
QC value within limits for P 214.914 Recovery = 104.31%							
Pb 220.353†	2005.8	530.35 µg/L	28.344	530.35 ppb	28.344	5.34%	
QC value within limits for Pb 220.353 Recovery = 106.07%							
S 181.975 Axial†	332.0	1055.9 µg/L	51.09	1055.9 ppb	51.09	4.84%	
QC value within limits for S 181.975 Axial Recovery = 105.59%							
Sb 206.836†	595.6	540.87 µg/L	30.434	540.87 ppb	30.434	5.63%	
QC value within limits for Sb 206.836 Recovery = 108.17%							
Se 196.026†	550.4	553.72 µg/L	26.476	553.72 ppb	26.476	4.78%	
QC value greater than the upper limit for Se 196.026 Recovery = 110.74%							
SiO2†	30296.2	5725.2 µg/L	82.76	5725.2 ppb	82.76	1.45%	
QC value within limits for SiO2 Recovery = 107.06%							
Si 251.611†	37754.5	2673.0 µg/L	40.00	2673.0 ppb	40.00	1.50%	
QC value within limits for Si 251.611 Recovery = 106.92%							
Sn 189.927†	1355.5	526.65 µg/L	38.841	526.65 ppb	38.841	7.37%	
QC value within limits for Sn 189.927 Recovery = 105.33%							
Sr 421.552†	99213.8	536.08 µg/L	7.823	536.08 ppb	7.823	1.46%	
QC value within limits for Sr 421.552 Recovery = 107.22%							
Ti 334.940†	222413.9	536.10 µg/L	5.412	536.10 ppb	5.412	1.01%	
QC value within limits for Ti 334.940 Recovery = 107.22%							
Tl 190.801†	527.1	538.67 µg/L	18.531	538.67 ppb	18.531	3.44%	
QC value within limits for Tl 190.801 Recovery = 107.73%							
U 409.014†	5998.6	537.01 µg/L	14.493	537.01 ppb	14.493	2.70%	
QC value within limits for U 409.014 Recovery = 107.40%							
V 292.402†	44390.6	546.35 µg/L	13.372	546.35 ppb	13.372	2.45%	
QC value within limits for V 292.402 Recovery = 109.27%							
Zn 213.857†	23421.1	538.81 µg/L	11.287	538.81 ppb	11.287	2.09%	
QC value within limits for Zn 213.857 Recovery = 107.76%							
QC Failed. Continue with analysis.							

Sequence No.: 70

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/5/2010 08:07:54

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	100050.5	100050.5	99.7 %		08:08:27
1	Al 396.153Radial†	99.1	499.8	235.81 µg/L	235.81 ppb	08:08:27
1	Ca 317.933Radial†	1053.1	668.6	215.64 µg/L	215.64 ppb	08:08:47
1	Fe 238.204 Radial†	27.1	13.5	132.15 µg/L	132.15 ppb	08:08:47
1	K 766.490 Radial†	667.3	345.3	170.02 µg/L	170.02 ppb	08:08:27
1	Mg 279.077 IEC†	33.6	24.3	265.75 µg/L	265.75 ppb	08:08:47
1	Na 589.592 Radial†	1479.0	1271.8	557.88 µg/L	557.88 ppb	08:08:27
1	Sr 421.552†	1147.9	1002.2	5.4152 µg/L	5.4152 ppb	08:08:27
1	Sc 361.383	1890587.6	1890587.6	98.385 %		08:09:45
1	Y 371.029	1320384.7	1320384.7	98.682 %		08:09:45
1	Ag 328.068†	111.0	680.7	5.6349 µg/L	5.6349 ppb	08:09:50
1	As 188.979†	19.8	23.3	34.888 µg/L	34.888 ppb	08:10:11
1	B 249.677†	1420.0	1086.7	51.761 µg/L	51.761 ppb	08:10:11
1	Ba 233.527†	225.8	260.6	5.8715 µg/L	5.8715 ppb	08:10:11
1	Be 313.107†	7411.2	9060.6	5.5026 µg/L	5.5026 ppb	08:09:50
1	Cd 226.502†	36.7	217.0	5.2692 µg/L	5.2692 ppb	08:10:11
1	Co 228.616†	145.7	129.0	5.6673 µg/L	5.6673 ppb	08:10:11
1	Cr 267.716†	323.3	254.1	5.6832 µg/L	5.6832 ppb	08:10:11
1	Cu 324.752†	5326.4	1824.6	12.392 µg/L	12.392 ppb	08:09:50
1	Mn 257.610†	2703.3	3530.6	11.312 µg/L	11.312 ppb	08:10:11
1	Mo 202.031†	127.2	121.3	11.998 µg/L	11.998 ppb	08:10:11
1	Ni 231.604†	468.3	109.1	6.1917 µg/L	6.1917 ppb	08:10:11
1	P 214.914†	401.0	100.6	170.51 µg/L	170.51 ppb	08:10:11
1	Pb 220.353†	91.4	36.8	9.6763 µg/L	9.6763 ppb	08:10:11
1	S 181.975 Axial†	52.2	29.5	93.854 µg/L	93.854 ppb	08:10:11
1	Sb 206.836†	41.5	14.6	13.362 µg/L	13.362 ppb	08:10:11
1	Se 196.026†	60.0	40.4	39.951 µg/L	39.951 ppb	08:10:11
1	SiO2†	3641.7	1365.6	258.05 µg/L	258.05 ppb	08:09:50
1	Si 251.611†	1920.6	1554.4	110.05 µg/L	110.05 ppb	08:10:11
1	Sn 189.927†	29.2	27.8	10.779 µg/L	10.779 ppb	08:10:11
1	Ti 334.940†	1653.1	2363.0	5.6817 µg/L	5.6817 ppb	08:09:50
1	Tl 190.801†	-8.3	27.7	28.113 µg/L	28.113 ppb	08:10:11
1	U 409.014†	648.5	689.3	61.797 µg/L	61.797 ppb	08:09:50
1	V 292.402†	511.2	422.7	5.3012 µg/L	5.3012 ppb	08:09:50
1	Zn 213.857†	1067.3	494.2	11.381 µg/L	11.381 ppb	08:10:11
2	Sc RADIAL	100084.5	100084.5	99.7 %		08:08:52
2	Al 396.153Radial†	90.9	491.5	231.89 µg/L	231.89 ppb	08:08:52
2	Ca 317.933Radial†	1049.0	664.2	214.22 µg/L	214.22 ppb	08:09:12
2	Fe 238.204 Radial†	26.7	13.0	127.95 µg/L	127.95 ppb	08:09:12
2	K 766.490 Radial†	726.9	404.8	199.35 µg/L	199.35 ppb	08:08:52
2	Mg 279.077 IEC†	33.6	24.3	266.32 µg/L	266.32 ppb	08:09:12
2	Na 589.592 Radial†	1417.5	1209.5	530.59 µg/L	530.59 ppb	08:08:52
2	Sr 421.552†	1199.9	1053.9	5.6947 µg/L	5.6947 ppb	08:08:52
2	Sc 361.383	1886417.6	1886417.6	98.168 %		08:10:16
2	Y 371.029	1314699.9	1314699.9	98.257 %		08:10:16
2	Ag 328.068†	79.2	648.5	5.3734 µg/L	5.3734 ppb	08:10:22
2	As 188.979†	17.6	21.1	31.552 µg/L	31.552 ppb	08:10:42
2	B 249.677†	1443.0	1113.3	53.031 µg/L	53.031 ppb	08:10:42
2	Ba 233.527†	218.1	253.2	5.7069 µg/L	5.7069 ppb	08:10:42
2	Be 313.107†	7359.0	9024.1	5.4804 µg/L	5.4804 ppb	08:10:22
2	Cd 226.502†	38.3	218.6	5.3096 µg/L	5.3096 ppb	08:10:42
2	Co 228.616†	137.4	120.9	5.3121 µg/L	5.3121 ppb	08:10:42
2	Cr 267.716†	331.2	262.8	5.8796 µg/L	5.8796 ppb	08:10:42
2	Cu 324.752†	5304.9	1814.6	12.324 µg/L	12.324 ppb	08:10:22
2	Mn 257.610†	2689.9	3523.0	11.288 µg/L	11.288 ppb	08:10:42
2	Mo 202.031†	128.4	122.8	12.146 µg/L	12.146 ppb	08:10:42
2	Ni 231.604†	470.2	112.1	6.3643 µg/L	6.3643 ppb	08:10:42
2	P 214.914†	397.9	98.2	166.47 µg/L	166.47 ppb	08:10:42
2	Pb 220.353†	86.5	32.0	8.4346 µg/L	8.4346 ppb	08:10:42

2	S 181.975 Axial†	54.8	32.2	102.55 µg/L	102.55 ppb	08:10:42
2	Sb 206.836†	37.1	10.2	9.3231 µg/L	9.3231 ppb	08:10:42
2	Se 196.026†	49.5	29.9	29.564 µg/L	29.564 ppb	08:10:42
2	SiO2†	3678.9	1411.6	266.76 µg/L	266.76 ppb	08:10:22
2	Si 251.611†	1926.7	1564.9	110.79 µg/L	110.79 ppb	08:10:42
2	Sn 189.927†	23.6	22.1	8.5619 µg/L	8.5619 ppb	08:10:42
2	Ti 334.940†	1654.7	2368.3	5.6945 µg/L	5.6945 ppb	08:10:22
2	Tl 190.801†	-9.8	26.1	26.519 µg/L	26.519 ppb	08:10:42
2	U 409.014†	520.6	560.4	50.242 µg/L	50.242 ppb	08:10:22
2	V 292.402†	549.9	463.2	5.7857 µg/L	5.7857 ppb	08:10:22
2	Zn 213.857†	1067.9	497.2	11.450 µg/L	11.450 ppb	08:10:42
3	Sc RADIAL	100308.8	100308.8	100.0 %		08:09:17
3	Al 396.153Radial†	53.5	453.9	214.18 µg/L	214.18 ppb	08:09:17
3	Ca 317.933Radial†	1056.7	669.5	215.92 µg/L	215.92 ppb	08:09:37
3	Fe 238.204 Radial†	27.2	13.5	132.36 µg/L	132.36 ppb	08:09:37
3	K 766.490 Radial†	723.9	400.2	197.06 µg/L	197.06 ppb	08:09:17
3	Mg 279.077 IEC†	39.4	30.0	328.53 µg/L	328.53 ppb	08:09:37
3	Na 589.592 Radial†	1415.1	1204.0	528.16 µg/L	528.16 ppb	08:09:17
3	Sr 421.552†	1149.3	1000.6	5.4064 µg/L	5.4064 ppb	08:09:17
3	Sc 361.383	1903635.7	1903635.7	99.064 %		08:10:48
3	Y 371.029	1329169.5	1329169.5	99.338 %		08:10:48
3	Ag 328.068†	144.3	713.6	5.9042 µg/L	5.9042 ppb	08:10:53
3	As 188.979†	19.7	23.1	34.605 µg/L	34.605 ppb	08:11:13
3	B 249.677†	1360.5	1016.8	48.426 µg/L	48.426 ppb	08:11:13
3	Ba 233.527†	202.7	235.7	5.3111 µg/L	5.3111 ppb	08:11:13
3	Be 313.107†	7174.1	8769.7	5.3259 µg/L	5.3259 ppb	08:10:53
3	Cd 226.502†	28.3	208.2	5.0566 µg/L	5.0566 ppb	08:11:13
3	Co 228.616†	132.7	114.9	5.0471 µg/L	5.0471 ppb	08:11:13
3	Cr 267.716†	300.4	228.6	5.1145 µg/L	5.1145 ppb	08:11:13
3	Cu 324.752†	5243.7	1704.0	11.575 µg/L	11.575 ppb	08:10:53
3	Mn 257.610†	2369.7	3175.0	10.168 µg/L	10.168 ppb	08:11:13
3	Mo 202.031†	110.6	103.7	10.255 µg/L	10.255 ppb	08:11:13
3	Ni 231.604†	474.9	112.5	6.3890 µg/L	6.3890 ppb	08:11:13
3	P 214.914†	390.1	86.7	146.94 µg/L	146.94 ppb	08:11:13
3	Pb 220.353†	93.5	38.3	10.076 µg/L	10.076 ppb	08:11:13
3	S 181.975 Axial†	55.9	32.9	104.68 µg/L	104.68 ppb	08:11:13
3	Sb 206.836†	39.0	11.8	10.792 µg/L	10.792 ppb	08:11:13
3	Se 196.026†	60.2	40.2	39.670 µg/L	39.670 ppb	08:11:13
3	SiO2†	3620.2	1318.5	249.16 µg/L	249.16 ppb	08:10:53
3	Si 251.611†	1819.3	1438.7	101.86 µg/L	101.86 ppb	08:11:13
3	Sn 189.927†	25.6	23.9	9.2597 µg/L	9.2597 ppb	08:11:13
3	Ti 334.940†	1547.6	2244.9	5.3920 µg/L	5.3920 ppb	08:10:53
3	Tl 190.801†	-14.4	21.5	21.857 µg/L	21.857 ppb	08:11:13
3	U 409.014†	616.5	652.5	58.497 µg/L	58.497 ppb	08:10:53
3	V 292.402†	508.7	416.6	5.2087 µg/L	5.2087 ppb	08:10:53
3	Zn 213.857†	1033.5	452.7	10.415 µg/L	10.415 ppb	08:11:13

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1893547.0	98.539 %	0.4674			0.47%
Sc RADIAL	100147.9	99.8 %	0.14			0.14%
Y 371.029	1321418.0	98.759 %	0.5448			0.55%
Ag 328.068†	680.9	5.6375 µg/L	0.26543	5.6375 ppb	0.26543	4.71%
QC value within limits for Ag 328.068 Recovery = 112.75%						
Al 396.153Radial†	481.7	227.29 µg/L	11.524	227.29 ppb	11.524	5.07%
QC value within limits for Al 396.153Radial Recovery = 113.65%						
As 188.979†	22.5	33.681 µg/L	1.8497	33.681 ppb	1.8497	5.49%
QC value within limits for As 188.979 Recovery = 112.27%						
B 249.677†	1072.3	51.073 µg/L	2.3785	51.073 ppb	2.3785	4.66%
QC value within limits for B 249.677 Recovery = 102.15%						
Ba 233.527†	249.8	5.6299 µg/L	0.28805	5.6299 ppb	0.28805	5.12%
QC value within limits for Ba 233.527 Recovery = 112.60%						
Be 313.107†	8951.5	5.4363 µg/L	0.09623	5.4363 ppb	0.09623	1.77%
QC value within limits for Be 313.107 Recovery = 108.73%						
Ca 317.933Radial†	667.4	215.26 µg/L	0.914	215.26 ppb	0.914	0.42%
QC value within limits for Ca 317.933Radial Recovery = 107.63%						
Cd 226.502†	214.6	5.2118 µg/L	0.13595	5.2118 ppb	0.13595	2.61%
QC value within limits for Cd 226.502 Recovery = 104.24%						
Co 228.616†	121.6	5.3422 µg/L	0.31121	5.3422 ppb	0.31121	5.83%



Cr	267.716†	248.5	5.5591 µg/L	0.39738	5.5591 ppb	0.39738	7.15%
Cu	324.752†	1781.1	12.097 µg/L	0.4535	12.097 ppb	0.4535	3.75%
Fe	238.204 Radial†	13.3	130.82 µg/L	2.488	130.82 ppb	2.488	1.90%
K	766.490 Radial†	383.4	188.81 µg/L	16.310	188.81 ppb	16.310	8.64%
Mg	279.077 IEC†	26.2	286.86 µg/L	36.082	286.86 ppb	36.082	12.58%
Mn	257.610†	3409.5	10.923 µg/L	0.6537	10.923 ppb	0.6537	5.99%
Mo	202.031†	116.0	11.466 µg/L	1.0515	11.466 ppb	1.0515	9.17%
Na	589.592 Radial†	1228.4	538.88 µg/L	16.499	538.88 ppb	16.499	3.06%
Ni	231.604†	111.2	6.3150 µg/L	0.10750	6.3150 ppb	0.10750	1.70%
P	214.914†	95.2	161.31 µg/L	12.605	161.31 ppb	12.605	7.81%
Pb	220.353†	35.7	9.3955 µg/L	0.85572	9.3955 ppb	0.85572	9.11%
S	181.975 Axial†	31.6	100.36 µg/L	5.735	100.36 ppb	5.735	5.71%
Sb	206.836†	12.2	11.159 µg/L	2.0441	11.159 ppb	2.0441	18.32%
Se	196.026†	36.8	36.395 µg/L	5.9178	36.395 ppb	5.9178	16.26%
SiO2†		1365.2	257.99 µg/L	8.801	257.99 ppb	8.801	3.41%
Si	251.611†	1519.3	107.56 µg/L	4.958	107.56 ppb	4.958	4.61%
Sn	189.927†	24.6	9.5335 µg/L	1.13354	9.5335 ppb	1.13354	11.89%
Sr	421.552†	1018.9	5.5054 µg/L	0.16396	5.5054 ppb	0.16396	2.98%
Ti	334.940†	2325.4	5.5894 µg/L	0.17112	5.5894 ppb	0.17112	3.06%
Tl	190.801†	25.1	25.497 µg/L	3.2507	25.497 ppb	3.2507	12.75%
U	409.014†	634.1	56.845 µg/L	5.9520	56.845 ppb	5.9520	10.47%
V	292.402†	434.2	5.4319 µg/L	0.30990	5.4319 ppb	0.30990	5.71%
Zn	213.857†	481.4	11.082 µg/L	0.5786	11.082 ppb	0.5786	5.22%

QC value within limits for Co 228.616 Recovery = 106.84%

QC value within limits for Cr 267.716 Recovery = 111.18%

QC value within limits for Cu 324.752 Recovery = 120.97%

QC value greater than the upper limit for Fe 238.204 Radial Recovery = 130.82%

QC value within limits for K 766.490 Radial Recovery = 125.87%

QC value within limits for Mg 279.077 IEC Recovery = 95.62%

QC value within limits for Mn 257.610 Recovery = 109.23%

QC value within limits for Mo 202.031 Recovery = 114.66%

QC value greater than the upper limit for Na 589.592 Radial Recovery = 179.63%

QC value within limits for Ni 231.604 Recovery = 126.30%

QC value within limits for P 214.914 Recovery = 107.54%

QC value within limits for Pb 220.353 Recovery = 93.95%

QC value within limits for S 181.975 Axial Recovery = 100.36%

QC value within limits for Sb 206.836 Recovery = 111.59%

QC value within limits for Se 196.026 Recovery = 121.32%

QC value within limits for SiO2 Recovery = 121.12%

QC value within limits for Si 251.611 Recovery = 107.56%

QC value within limits for Sn 189.927 Recovery = 95.33%

QC value within limits for Sr 421.552 Recovery = 110.11%

QC value within limits for Ti 334.940 Recovery = 111.79%

QC value within limits for Tl 190.801 Recovery = 127.48%

QC value within limits for U 409.014 Recovery = 113.69%

QC value within limits for V 292.402 Recovery = 108.64%

QC value within limits for Zn 213.857 Recovery = 110.82%

QC Failed. Continue with analysis.

Sequence No.: 71

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/5/2010 08:11:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	98060.0	98060.0	97.7 %		08:11:54
1	Al 396.153Radial†	-403.0	-12.0	-5.6872 µg/L	-5.6872 ppb	08:11:54
1	Ca 317.933Radial†	390.4	11.8	3.8192 µg/L	3.8192 ppb	08:12:14
1	Fe 238.204 Radial†	15.5	2.2	21.168 µg/L	21.168 ppb	08:12:14
1	K 766.490 Radial†	312.7	-3.9	-1.9415 µg/L	-1.9415 ppb	08:11:54
1	Mg 279.077 IEC†	6.5	-2.8	-30.633 µg/L	-30.633 ppb	08:12:14
1	Na 589.592 Radial†	606.7	409.2	179.52 µg/L	179.52 ppb	08:11:54
1	Sr 421.552†	122.8	-23.5	-0.1268 µg/L	-0.1268 ppb	08:11:54
1	Sc 361.383	1893880.8	1893880.8	98.557 %		08:13:13
1	Y 371.029	1319827.5	1319827.5	98.640 %		08:13:13
1	Ag 328.068†	-507.8	52.6	0.4380 µg/L	0.4380 ppb	08:13:18
1	As 188.979†	-0.2	3.0	4.5339 µg/L	4.5339 ppb	08:13:38
1	B 249.677†	351.7	0.3	0.0039 µg/L	0.0039 ppb	08:13:38
1	Ba 233.527†	-25.7	5.0	0.1130 µg/L	0.1130 ppb	08:13:38
1	Be 313.107†	-1340.2	167.9	0.1020 µg/L	0.1020 ppb	08:13:18
1	Cd 226.502†	-166.4	10.8	0.2618 µg/L	0.2618 ppb	08:13:38
1	Co 228.616†	27.8	9.1	0.4018 µg/L	0.4018 ppb	08:13:38
1	Cr 267.716†	92.5	19.3	0.4324 µg/L	0.4324 ppb	08:13:38
1	Cu 324.752†	3592.1	55.5	0.3804 µg/L	0.3804 ppb	08:13:18
1	Mn 257.610†	-710.4	62.1	0.2026 µg/L	0.2026 ppb	08:13:38
1	Mo 202.031†	15.0	7.2	0.7169 µg/L	0.7169 ppb	08:13:38
1	Ni 231.604†	380.9	19.6	1.1119 µg/L	1.1119 ppb	08:13:38
1	P 214.914†	307.2	4.7	7.8647 µg/L	7.8647 ppb	08:13:38
1	Pb 220.353†	63.6	8.5	2.2330 µg/L	2.2330 ppb	08:13:38
1	S 181.975 Axial†	24.7	1.5	4.8001 µg/L	4.8001 ppb	08:13:38
1	Sb 206.836†	22.8	-4.5	-4.0312 µg/L	-4.0312 ppb	08:13:38
1	Se 196.026†	17.5	-2.8	-2.6255 µg/L	-2.6255 ppb	08:13:38
1	SiO2†	2371.6	70.4	13.307 µg/L	13.307 ppb	08:13:38
1	Si 251.611†	445.4	54.1	3.8322 µg/L	3.8322 ppb	08:13:38
1	Sn 189.927†	-0.6	-2.6	-1.0340 µg/L	-1.0340 ppb	08:13:38
1	Ti 334.940†	-605.1	68.7	0.1683 µg/L	0.1683 ppb	08:13:18
1	Tl 190.801†	-36.6	-1.0	-1.0309 µg/L	-1.0309 ppb	08:13:38
1	U 409.014†	-17.9	12.0	1.0751 µg/L	1.0751 ppb	08:13:18
1	V 292.402†	147.6	52.8	0.6481 µg/L	0.6481 ppb	08:13:18
1	Zn 213.857†	616.4	34.8	0.8014 µg/L	0.8014 ppb	08:13:38
2	Sc RADIAL	98216.3	98216.3	97.9 %		08:12:20
2	Al 396.153Radial†	-356.6	36.0	17.025 µg/L	17.025 ppb	08:12:20
2	Ca 317.933Radial†	390.9	11.8	3.7932 µg/L	3.7932 ppb	08:12:40
2	Fe 238.204 Radial†	15.6	2.2	21.436 µg/L	21.436 ppb	08:12:40
2	K 766.490 Radial†	398.8	83.5	41.126 µg/L	41.126 ppb	08:12:20
2	Mg 279.077 IEC†	10.7	1.6	17.286 µg/L	17.286 ppb	08:12:40
2	Na 589.592 Radial†	537.4	337.4	148.03 µg/L	148.03 ppb	08:12:20
2	Sr 421.552†	167.5	22.0	0.1189 µg/L	0.1189 ppb	08:12:20
2	Sc 361.383	1896438.2	1896438.2	98.690 %		08:13:44
2	Y 371.029	1323307.6	1323307.6	98.900 %		08:13:44
2	Ag 328.068†	-541.9	18.8	0.1579 µg/L	0.1579 ppb	08:13:49
2	As 188.979†	-2.8	0.4	0.5567 µg/L	0.5567 ppb	08:14:09
2	B 249.677†	348.5	-3.4	-0.1751 µg/L	-0.1751 ppb	08:14:09
2	Ba 233.527†	-20.9	9.9	0.2235 µg/L	0.2235 ppb	08:14:09
2	Be 313.107†	-1249.7	261.5	0.1588 µg/L	0.1588 ppb	08:13:49
2	Cd 226.502†	-184.3	-7.1	-0.1742 µg/L	-0.1742 ppb	08:14:09
2	Co 228.616†	19.3	0.4	0.0184 µg/L	0.0184 ppb	08:14:09
2	Cr 267.716†	72.7	-0.9	-0.0206 µg/L	-0.0206 ppb	08:14:09
2	Cu 324.752†	3654.0	113.3	0.7722 µg/L	0.7722 ppb	08:13:49
2	Mn 257.610†	-710.4	63.1	0.2025 µg/L	0.2025 ppb	08:14:09
2	Mo 202.031†	3.4	-4.5	-0.4430 µg/L	-0.4430 ppb	08:14:09
2	Ni 231.604†	379.4	17.5	0.9953 µg/L	0.9953 ppb	08:14:09
2	P 214.914†	300.0	-3.0	-5.2650 µg/L	-5.2650 ppb	08:14:09
2	Pb 220.353†	46.8	-8.7	-2.2809 µg/L	-2.2809 ppb	08:14:09

2	S 181.975 Axial†	17.6	-5.7	-18.224 µg/L	-18.224 ppb	08:14:09
2	Sb 206.836†	23.3	-4.0	-3.6470 µg/L	-3.6470 ppb	08:14:09
2	Se 196.026†	17.6	-2.7	-2.6117 µg/L	-2.6117 ppb	08:14:09
2	SiO2†	2364.3	59.7	11.285 µg/L	11.285 ppb	08:14:09
2	Si 251.611†	435.4	43.4	3.0704 µg/L	3.0704 ppb	08:14:09
2	Sn 189.927†	-0.3	-2.2	-0.8995 µg/L	-0.8995 ppb	08:14:09
2	Ti 334.940†	-616.0	58.5	0.1399 µg/L	0.1399 ppb	08:13:49
2	Tl 190.801†	-35.1	0.6	0.5534 µg/L	0.5534 ppb	08:14:09
2	U 409.014†	-110.5	-81.8	-7.3431 µg/L	-7.3431 ppb	08:13:49
2	V 292.402†	117.8	22.4	0.2585 µg/L	0.2585 ppb	08:13:49
2	Zn 213.857†	613.6	31.1	0.7137 µg/L	0.7137 ppb	08:14:09
3	Sc RADIAL	98300.4	98300.4	98.0 %		08:12:45
3	Al 396.153Radial†	-367.6	25.2	11.884 µg/L	11.884 ppb	08:12:45
3	Ca 317.933Radial†	398.5	19.2	6.2014 µg/L	6.2014 ppb	08:13:05
3	Fe 238.204 Radial†	15.5	2.1	20.495 µg/L	20.495 ppb	08:13:05
3	K 766.490 Radial†	407.1	91.6	45.129 µg/L	45.129 ppb	08:12:45
3	Mg 279.077 IEC†	10.5	1.3	14.320 µg/L	14.320 ppb	08:13:05
3	Na 589.592 Radial†	505.6	304.5	133.56 µg/L	133.56 ppb	08:12:45
3	Sr 421.552†	141.4	-4.8	-0.0260 µg/L	-0.0260 ppb	08:12:45
3	Sc 361.383	1900007.0	1900007.0	98.876 %		08:14:15
3	Y 371.029	1324649.8	1324649.8	99.000 %		08:14:15
3	Ag 328.068†	-599.1	-38.1	-0.3138 µg/L	-0.3138 ppb	08:14:20
3	As 188.979†	-2.8	0.3	0.4969 µg/L	0.4969 ppb	08:14:41
3	B 249.677†	361.8	9.3	0.4358 µg/L	0.4358 ppb	08:14:41
3	Ba 233.527†	-16.8	14.1	0.3155 µg/L	0.3155 ppb	08:14:41
3	Be 313.107†	-1234.5	279.3	0.1697 µg/L	0.1697 ppb	08:14:20
3	Cd 226.502†	-171.6	6.1	0.1467 µg/L	0.1467 ppb	08:14:41
3	Co 228.616†	30.0	11.3	0.4950 µg/L	0.4950 ppb	08:14:41
3	Cr 267.716†	91.3	17.8	0.3966 µg/L	0.3966 ppb	08:14:41
3	Cu 324.752†	3606.8	58.6	0.4014 µg/L	0.4014 ppb	08:14:20
3	Mn 257.610†	-715.0	59.8	0.1921 µg/L	0.1921 ppb	08:14:41
3	Mo 202.031†	7.2	-0.7	-0.0655 µg/L	-0.0655 ppb	08:14:41
3	Ni 231.604†	377.8	15.2	0.8661 µg/L	0.8661 ppb	08:14:41
3	P 214.914†	304.5	0.9	1.5243 µg/L	1.5243 ppb	08:14:41
3	Pb 220.353†	58.6	3.1	0.8175 µg/L	0.8175 ppb	08:14:41
3	S 181.975 Axial†	24.9	1.7	5.3323 µg/L	5.3323 ppb	08:14:41
3	Sb 206.836†	31.1	3.9	3.5245 µg/L	3.5245 ppb	08:14:41
3	Se 196.026†	21.0	0.6	0.6893 µg/L	0.6893 ppb	08:14:41
3	SiO2†	2347.4	38.1	7.2061 µg/L	7.2061 ppb	08:14:41
3	Si 251.611†	442.4	49.7	3.5160 µg/L	3.5160 ppb	08:14:41
3	Sn 189.927†	-2.0	-4.0	-1.5763 µg/L	-1.5763 ppb	08:14:41
3	Ti 334.940†	-689.9	-15.0	-0.0372 µg/L	-0.0372 ppb	08:14:20
3	Tl 190.801†	-40.9	-5.3	-5.3937 µg/L	-5.3937 ppb	08:14:41
3	U 409.014†	-14.2	15.8	1.4161 µg/L	1.4161 ppb	08:14:20
3	V 292.402†	61.5	-34.7	-0.4248 µg/L	-0.4248 ppb	08:14:20
3	Zn 213.857†	617.2	33.6	0.7712 µg/L	0.7712 ppb	08:14:41

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1896775.3	98.707 %	0.1601			0.16%
Sc RADIAL	98192.2	97.9 %	0.12			0.12%
Y 371.029	1322595.0	98.847 %	0.1860			0.19%
Ag 328.068†	11.1	0.0940 µg/L	0.37997	0.0940 ppb	0.37997	404.06%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	16.4	7.7405 µg/L	11.90943	7.7405 ppb	11.90943	153.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.2	1.8625 µg/L	2.31369	1.8625 ppb	2.31369	124.22%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	2.1	0.0882 µg/L	0.31405	0.0882 ppb	0.31405	356.17%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.6	0.2173 µg/L	0.10139	0.2173 ppb	0.10139	46.65%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	236.2	0.1435 µg/L	0.03637	0.1435 ppb	0.03637	25.34%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	14.3	4.6046 µg/L	1.38291	4.6046 ppb	1.38291	30.03%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	3.3	0.0781 µg/L	0.22595	0.0781 ppb	0.22595	289.21%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.9	0.3051 µg/L	0.25258	0.3051 ppb	0.25258	82.79%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	12.0	0.2695 µg/L	0.25183	0.2695 ppb
			0.25183	93.45%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	75.8	0.5180 µg/L	0.22043	0.5180 ppb
			0.22043	42.55%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	2.1	21.033 µg/L	0.4848	21.033 ppb
			0.4848	2.31%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	57.1	28.104 µg/L	26.0975	28.104 ppb
			26.0975	92.86%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	0.0	0.3243 µg/L	26.85041	0.3243 ppb
			26.85041	>999.9%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	61.7	0.1991 µg/L	0.00604	0.1991 ppb
			0.00604	3.03%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	0.7	0.0695 µg/L	0.59159	0.0695 ppb
			0.59159	851.77%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	350.4	153.70 µg/L	23.501	153.70 ppb
			23.501	15.29%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	17.4	0.9911 µg/L	0.12295	0.9911 ppb
			0.12295	12.41%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	0.9	1.3747 µg/L	6.56611	1.3747 ppb
			6.56611	477.65%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	1.0	0.2566 µg/L	2.30863	0.2566 ppb
			2.30863	899.86%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	-0.8	-2.6973 µg/L	13.44936	-2.6973 ppb
			13.44936	498.63%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	-1.5	-1.3846 µg/L	4.25573	-1.3846 ppb
			4.25573	307.36%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-1.6	-1.5160 µg/L	1.90984	-1.5160 ppb
			1.90984	125.98%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	56.1	10.599 µg/L	3.1077	10.599 ppb
			3.1077	29.32%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	49.1	3.4729 µg/L	0.38272	3.4729 ppb
			0.38272	11.02%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	-2.9	-1.1699 µg/L	0.35829	-1.1699 ppb
			0.35829	30.62%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	-2.1	-0.0113 µg/L	0.12352	-0.0113 ppb
			0.12352	>999.9%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	37.4	0.0903 µg/L	0.11133	0.0903 ppb
			0.11133	123.27%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	-1.9	-1.9571 µg/L	3.07982	-1.9571 ppb
			3.07982	157.37%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	-18.0	-1.6173 µg/L	4.96163	-1.6173 ppb
			4.96163	306.79%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	13.5	0.1606 µg/L	0.54312	0.1606 ppb
			0.54312	338.23%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	33.2	0.7621 µg/L	0.04454	0.7621 ppb
			0.04454	5.84%
	QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 78

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/5/2010 08:38:36

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	102202.4	102202.4	102 %		08:39:13
1	Al 396.153Radial†	10749.1	10954.3	5162.7 µg/L	5162.7 ppb	08:39:13
1	Ca 317.933Radial†	16740.0	16048.4	5176.2 µg/L	5176.2 ppb	08:39:13
1	Fe 238.204 Radial†	552.0	528.3	5190.9 µg/L	5190.9 ppb	08:39:33
1	K 766.490 Radial†	10969.0	10445.9	5144.0 µg/L	5144.0 ppb	08:39:13
1	Mg 279.077 IEC†	490.0	471.7	5169.3 µg/L	5169.3 ppb	08:39:33
1	Na 589.592 Radial†	24336.2	23682.7	10389 µg/L	10389 ppb	08:39:13
1	Sr 421.552†	96235.9	94339.5	509.74 µg/L	509.74 ppb	08:39:13
1	Sc 361.383	1906383.7	1906383.7	99.207 %		08:40:33
1	Y 371.029	1323304.8	1323304.8	98.900 %		08:40:33
1	Ag 328.068†	62630.5	63698.7	527.06 µg/L	527.06 ppb	08:40:38
1	As 188.979†	356.4	362.5	541.19 µg/L	541.19 ppb	08:40:58
1	B 249.677†	25397.4	25243.7	1201.9 µg/L	1201.9 ppb	08:40:38
1	Ba 233.527†	23207.8	23424.3	527.97 µg/L	527.97 ppb	08:40:38
1	Be 313.107†	858056.3	866439.0	526.20 µg/L	526.20 ppb	08:40:33
1	Cd 226.502†	21370.9	21721.3	528.27 µg/L	528.27 ppb	08:40:38
1	Co 228.616†	11986.8	12063.5	529.53 µg/L	529.53 ppb	08:40:38
1	Cr 267.716†	23778.3	23893.7	534.52 µg/L	534.52 ppb	08:40:38
1	Cu 324.752†	81323.2	78383.7	532.26 µg/L	532.26 ppb	08:40:38
1	Mn 257.610†	166481.4	168594.4	540.63 µg/L	540.63 ppb	08:40:33
1	Mo 202.031†	5452.6	5488.2	542.63 µg/L	542.63 ppb	08:40:58
1	Ni 231.604†	9634.8	9344.9	530.40 µg/L	530.40 ppb	08:40:38
1	P 214.914†	1865.4	1573.2	2634.6 µg/L	2634.6 ppb	08:40:58
1	Pb 220.353†	2063.7	2024.1	535.20 µg/L	535.20 ppb	08:40:58
1	S 181.975 Axial†	355.5	334.8	1064.8 µg/L	1064.8 ppb	08:40:58
1	Sb 206.836†	616.1	593.4	539.13 µg/L	539.13 ppb	08:40:58
1	Se 196.026†	571.0	555.0	557.81 µg/L	557.81 ppb	08:40:58
1	SiO2†	31678.1	29595.2	5592.7 µg/L	5592.7 ppb	08:40:38
1	Si 251.611†	37057.9	36956.2	2616.5 µg/L	2616.5 ppb	08:40:38
1	Sn 189.927†	1372.5	1381.5	537.12 µg/L	537.12 ppb	08:40:58
1	Ti 334.940†	215516.1	217920.6	525.27 µg/L	525.27 ppb	08:40:33
1	Tl 190.801†	491.0	531.0	542.46 µg/L	542.46 ppb	08:40:58
1	U 409.014†	5924.1	6001.6	537.31 µg/L	537.31 ppb	08:40:38
1	V 292.402†	43393.9	43643.6	537.31 µg/L	537.31 ppb	08:40:38
1	Zn 213.857†	23485.9	23082.9	531.04 µg/L	531.04 ppb	08:40:38
2	Sc RADIAL	102191.4	102191.4	102 %		08:39:38
2	Al 396.153Radial†	10748.9	10955.3	5163.2 µg/L	5163.2 ppb	08:39:38
2	Ca 317.933Radial†	16818.8	16127.6	5201.8 µg/L	5201.8 ppb	08:39:38
2	Fe 238.204 Radial†	547.9	524.3	5152.0 µg/L	5152.0 ppb	08:39:58
2	K 766.490 Radial†	11042.1	10518.9	5179.9 µg/L	5179.9 ppb	08:39:38
2	Mg 279.077 IEC†	487.4	469.2	5141.7 µg/L	5141.7 ppb	08:39:58
2	Na 589.592 Radial†	24399.4	23747.3	10417 µg/L	10417 ppb	08:39:38
2	Sr 421.552†	96617.2	94724.1	511.82 µg/L	511.82 ppb	08:39:38
2	Sc 361.383	1900648.0	1900648.0	98.909 %		08:41:05
2	Y 371.029	1321054.5	1321054.5	98.732 %		08:41:05
2	Ag 328.068†	62670.4	63929.6	528.98 µg/L	528.98 ppb	08:41:11
2	As 188.979†	353.8	360.9	538.86 µg/L	538.86 ppb	08:41:31
2	B 249.677†	23592.1	23495.7	1118.6 µg/L	1118.6 ppb	08:41:11
2	Ba 233.527†	23102.4	23388.3	527.17 µg/L	527.17 ppb	08:41:11
2	Be 313.107†	856459.7	867434.9	526.81 µg/L	526.81 ppb	08:41:05
2	Cd 226.502†	21390.7	21806.3	530.34 µg/L	530.34 ppb	08:41:11
2	Co 228.616†	11925.7	12038.2	528.42 µg/L	528.42 ppb	08:41:11
2	Cr 267.716†	23853.2	24041.8	537.83 µg/L	537.83 ppb	08:41:11
2	Cu 324.752†	81027.2	78331.8	531.90 µg/L	531.90 ppb	08:41:11
2	Mn 257.610†	165819.0	168431.1	540.11 µg/L	540.11 ppb	08:41:05
2	Mo 202.031†	5433.8	5485.7	542.38 µg/L	542.38 ppb	08:41:31
2	Ni 231.604†	9588.5	9327.3	529.40 µg/L	529.40 ppb	08:41:11
2	P 214.914†	1869.2	1582.7	2650.9 µg/L	2650.9 ppb	08:41:31
2	Pb 220.353†	2053.2	2019.8	534.06 µg/L	534.06 ppb	08:41:31

2	S 181.975 Axial†	355.2	335.6	1067.1 µg/L	1067.1 ppb	08:41:31
2	Sb 206.836†	614.8	594.0	539.64 µg/L	539.64 ppb	08:41:31
2	Se 196.026†	570.3	556.0	558.65 µg/L	558.65 ppb	08:41:31
2	SiO2†	31738.6	29752.8	5622.5 µg/L	5622.5 ppb	08:41:11
2	Si 251.611†	36988.4	36998.7	2619.5 µg/L	2619.5 ppb	08:41:11
2	Sn 189.927†	1372.4	1385.6	538.78 µg/L	538.78 ppb	08:41:31
2	Ti 334.940†	214907.3	217960.6	525.37 µg/L	525.37 ppb	08:41:05
2	Tl 190.801†	491.0	532.5	544.00 µg/L	544.00 ppb	08:41:31
2	U 409.014†	5905.9	6001.2	537.28 µg/L	537.28 ppb	08:41:11
2	V 292.402†	43515.7	43898.8	540.43 µg/L	540.43 ppb	08:41:11
2	Zn 213.857†	23389.7	23057.0	530.45 µg/L	530.45 ppb	08:41:11
3	Sc RADIAL	101309.1	101309.1	101 %		08:40:04
3	Al 396.153Radial†	10777.5	11075.5	5221.0 µg/L	5221.0 ppb	08:40:04
3	Ca 317.933Radial†	16762.6	16215.7	5230.2 µg/L	5230.2 ppb	08:40:04
3	Fe 238.204 Radial†	550.3	531.3	5220.0 µg/L	5220.0 ppb	08:40:24
3	K 766.490 Radial†	10921.8	10494.1	5167.7 µg/L	5167.7 ppb	08:40:04
3	Mg 279.077 IEC†	485.9	471.9	5170.0 µg/L	5170.0 ppb	08:40:24
3	Na 589.592 Radial†	24311.0	23868.4	10470 µg/L	10470 ppb	08:40:04
3	Sr 421.552†	96501.3	95435.5	515.67 µg/L	515.67 ppb	08:40:04
3	Sc 361.383	1885690.2	1885690.2	98.131 %		08:41:38
3	Y 371.029	1308946.7	1308946.7	97.827 %		08:41:38
3	Ag 328.068†	61144.4	62877.1	520.21 µg/L	520.21 ppb	08:41:43
3	As 188.979†	328.9	338.3	505.13 µg/L	505.13 ppb	08:42:03
3	B 249.677†	22080.8	22144.9	1054.1 µg/L	1054.1 ppb	08:41:43
3	Ba 233.527†	22339.2	22795.8	513.80 µg/L	513.80 ppb	08:41:43
3	Be 313.107†	835088.5	852525.2	517.75 µg/L	517.75 ppb	08:41:38
3	Cd 226.502†	20605.1	21177.3	515.01 µg/L	515.01 ppb	08:41:43
3	Co 228.616†	11455.4	11654.6	511.54 µg/L	511.54 ppb	08:41:43
3	Cr 267.716†	22710.5	23068.6	516.06 µg/L	516.06 ppb	08:41:43
3	Cu 324.752†	78045.3	75942.9	515.73 µg/L	515.73 ppb	08:41:43
3	Mn 257.610†	161898.0	165765.2	531.56 µg/L	531.56 ppb	08:41:38
3	Mo 202.031†	4882.0	4967.0	491.11 µg/L	491.11 ppb	08:42:03
3	Ni 231.604†	9231.1	9040.1	513.10 µg/L	513.10 ppb	08:41:43
3	P 214.914†	1721.3	1447.0	2420.2 µg/L	2420.2 ppb	08:42:03
3	Pb 220.353†	1907.1	1887.3	498.99 µg/L	498.99 ppb	08:42:03
3	S 181.975 Axial†	332.6	315.4	1003.0 µg/L	1003.0 ppb	08:42:03
3	Sb 206.836†	569.0	552.2	501.24 µg/L	501.24 ppb	08:42:03
3	Se 196.026†	525.9	515.4	518.88 µg/L	518.88 ppb	08:42:03
3	SiO2†	30816.5	29067.7	5493.0 µg/L	5493.0 ppb	08:41:43
3	Si 251.611†	35908.7	36194.9	2562.6 µg/L	2562.6 ppb	08:41:43
3	Sn 189.927†	1227.5	1248.9	484.96 µg/L	484.96 ppb	08:42:03
3	Ti 334.940†	209285.7	213955.5	515.71 µg/L	515.71 ppb	08:41:38
3	Tl 190.801†	463.9	508.8	519.92 µg/L	519.92 ppb	08:42:03
3	U 409.014†	5544.3	5680.1	508.47 µg/L	508.47 ppb	08:41:43
3	V 292.402†	41569.4	42264.4	520.01 µg/L	520.01 ppb	08:41:43
3	Zn 213.857†	22472.9	22310.4	513.25 µg/L	513.25 ppb	08:41:43

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1897574.0	98.749 %	0.5560			0.56%
Sc RADIAL	101900.9	102 %	0.5			0.50%
Y 371.029	1317768.7	98.486 %	0.5772			0.59%
Ag 328.068†	63501.8	525.42 µg/L	4.612	525.42 ppb	4.612	0.88%
QC value within limits for Ag 328.068 Recovery = 105.08%						
Al 396.153Radial†	10995.0	5182.3 µg/L	33.53	5182.3 ppb	33.53	0.65%
QC value within limits for Al 396.153Radial Recovery = 103.65%						
As 188.979†	353.9	528.40 µg/L	20.179	528.40 ppb	20.179	3.82%
QC value within limits for As 188.979 Recovery = 105.68%						
B 249.677†	23628.1	1124.9 µg/L	74.11	1124.9 ppb	74.11	6.59%
QC value greater than the upper limit for B 249.677 Recovery = 224.97%						
Ba 233.527†	23202.8	522.98 µg/L	7.959	522.98 ppb	7.959	1.52%
QC value within limits for Ba 233.527 Recovery = 104.60%						
Be 313.107†	862133.0	523.59 µg/L	5.062	523.59 ppb	5.062	0.97%
QC value within limits for Be 313.107 Recovery = 104.72%						
Ca 317.933Radial†	16130.6	5202.7 µg/L	26.99	5202.7 ppb	26.99	0.52%
QC value within limits for Ca 317.933Radial Recovery = 104.05%						
Cd 226.502†	21568.3	524.54 µg/L	8.314	524.54 ppb	8.314	1.59%
QC value within limits for Cd 226.502 Recovery = 104.91%						
Co 228.616†	11918.7	523.16 µg/L	10.084	523.16 ppb	10.084	1.93%

Cr	267.716†	23668.0	529.47 µg/L	11.731	529.47 ppb	11.731	2.22%
Cu	324.752†	77552.8	526.63 µg/L	9.446	526.63 ppb	9.446	1.79%
Fe	238.204 Radial†	527.9	5187.7 µg/L	34.11	5187.7 ppb	34.11	0.66%
K	766.490 Radial†	10486.3	5163.9 µg/L	18.27	5163.9 ppb	18.27	0.35%
Mg	279.077 IEC†	470.9	5160.4 µg/L	16.14	5160.4 ppb	16.14	0.31%
Mn	257.610†	167596.9	537.43 µg/L	5.093	537.43 ppb	5.093	0.95%
Mo	202.031†	5313.6	525.37 µg/L	29.669	525.37 ppb	29.669	5.65%
Na	589.592 Radial†	23766.1	10425 µg/L	41.4	10425 ppb	41.4	0.40%
Ni	231.604†	9237.4	524.30 µg/L	9.710	524.30 ppb	9.710	1.85%
P	214.914†	1534.3	2568.6 µg/L	128.78	2568.6 ppb	128.78	5.01%
Pb	220.353†	1977.1	522.75 µg/L	20.586	522.75 ppb	20.586	3.94%
S	181.975 Axial†	328.6	1045.0 µg/L	36.34	1045.0 ppb	36.34	3.48%
Sb	206.836†	579.9	526.67 µg/L	22.026	526.67 ppb	22.026	4.18%
Se	196.026†	542.1	545.11 µg/L	22.723	545.11 ppb	22.723	4.17%
SiO2†		29471.9	5569.4 µg/L	67.81	5569.4 ppb	67.81	1.22%
Si	251.611†	36716.6	2599.5 µg/L	32.02	2599.5 ppb	32.02	1.23%
Sn	189.927†	1338.7	520.29 µg/L	30.606	520.29 ppb	30.606	5.88%
Sr	421.552†	94833.0	512.41 µg/L	3.005	512.41 ppb	3.005	0.59%
Ti	334.940†	216612.2	522.12 µg/L	5.550	522.12 ppb	5.550	1.06%
Tl	190.801†	524.1	535.46 µg/L	13.481	535.46 ppb	13.481	2.52%
U	409.014†	5894.3	527.69 µg/L	16.644	527.69 ppb	16.644	3.15%
V	292.402†	43269.0	532.59 µg/L	11.000	532.59 ppb	11.000	2.07%
Zn	213.857†	22816.8	524.92 µg/L	10.108	524.92 ppb	10.108	1.93%

QC value within limits for Co 228.616 Recovery = 104.63%  
 QC value within limits for Cr 267.716 Recovery = 105.89%  
 QC value within limits for Cu 324.752 Recovery = 105.33%  
 QC value within limits for Fe 238.204 Radial Recovery = 103.75%  
 QC value within limits for K 766.490 Radial Recovery = 103.28%  
 QC value within limits for Mg 279.077 IEC Recovery = 103.21%  
 QC value within limits for Mn 257.610 Recovery = 107.49%  
 QC value within limits for Mo 202.031 Recovery = 105.07%  
 QC value within limits for Na 589.592 Radial Recovery = 104.25%  
 QC value within limits for Ni 231.604 Recovery = 104.86%  
 QC value within limits for P 214.914 Recovery = 102.74%  
 QC value within limits for Pb 220.353 Recovery = 104.55%  
 QC value within limits for S 181.975 Axial Recovery = 104.50%  
 QC value within limits for Sb 206.836 Recovery = 105.33%  
 QC value within limits for Se 196.026 Recovery = 109.02%  
 QC value within limits for SiO2 Recovery = 104.15%  
 QC value within limits for Si 251.611 Recovery = 103.98%  
 QC value within limits for Sn 189.927 Recovery = 104.06%  
 QC value within limits for Sr 421.552 Recovery = 102.48%  
 QC value within limits for Ti 334.940 Recovery = 104.42%  
 QC value within limits for Tl 190.801 Recovery = 107.09%  
 QC value within limits for U 409.014 Recovery = 105.54%  
 QC value within limits for V 292.402 Recovery = 106.52%  
 QC value within limits for Zn 213.857 Recovery = 104.98%

QC Failed. Continue with analysis.

Sequence No.: 79

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/5/2010 08:42:12

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	99417.4	99417.4	99.1 %		08:42:45
1	Al 396.153Radial†	49.7	450.6	212.59 µg/L	212.59 ppb	08:42:45
1	Ca 317.933Radial†	1000.4	622.1	200.65 µg/L	200.65 ppb	08:43:05
1	Fe 238.204 Radial†	25.2	11.7	114.38 µg/L	114.38 ppb	08:43:05
1	K 766.490 Radial†	729.1	412.0	202.88 µg/L	202.88 ppb	08:42:45
1	Mg 279.077 IEC†	34.9	25.9	283.30 µg/L	283.30 ppb	08:43:05
1	Na 589.592 Radial†	1134.8	933.8	409.62 µg/L	409.62 ppb	08:42:45
1	Sr 421.552†	1081.7	942.7	5.0938 µg/L	5.0938 ppb	08:42:45
1	Sc 361.383	1911261.9	1911261.9	99.461 %		08:44:03
1	Y 371.029	1335105.9	1335105.9	99.782 %		08:44:03
1	Ag 328.068†	98.3	666.7	5.5200 µg/L	5.5200 ppb	08:44:08
1	As 188.979†	21.0	24.3	36.428 µg/L	36.428 ppb	08:44:29
1	B 249.677†	9106.2	8799.0	419.53 µg/L	419.53 ppb	08:44:08
1	Ba 233.527†	212.0	244.2	5.5037 µg/L	5.5037 ppb	08:44:29
1	Be 313.107†	7028.9	8594.7	5.2196 µg/L	5.2196 ppb	08:44:08
1	Cd 226.502†	17.1	196.9	4.7813 µg/L	4.7813 ppb	08:44:29
1	Co 228.616†	134.1	115.8	5.0863 µg/L	5.0863 ppb	08:44:29
1	Cr 267.716†	317.0	244.2	5.4626 µg/L	5.4626 ppb	08:44:29
1	Cu 324.752†	5227.4	1666.6	11.318 µg/L	11.318 ppb	08:44:08
1	Mn 257.610†	2532.6	3329.2	10.664 µg/L	10.664 ppb	08:44:29
1	Mo 202.031†	122.8	115.4	11.414 µg/L	11.414 ppb	08:44:29
1	Ni 231.604†	453.7	89.3	5.0681 µg/L	5.0681 ppb	08:44:29
1	P 214.914†	390.5	85.5	144.89 µg/L	144.89 ppb	08:44:29
1	Pb 220.353†	82.9	27.2	7.1648 µg/L	7.1648 ppb	08:44:29
1	S 181.975 Axial†	58.6	35.3	112.35 µg/L	112.35 ppb	08:44:29
1	Sb 206.836†	42.6	15.2	13.900 µg/L	13.900 ppb	08:44:29
1	Se 196.026†	56.7	36.4	35.958 µg/L	35.958 ppb	08:44:29
1	SiO2†	3518.6	1201.8	227.10 µg/L	227.10 ppb	08:44:08
1	Si 251.611†	1805.9	1417.9	100.38 µg/L	100.38 ppb	08:44:29
1	Sn 189.927†	22.3	20.4	7.9118 µg/L	7.9118 ppb	08:44:29
1	Ti 334.940†	1581.4	2272.7	5.4622 µg/L	5.4622 ppb	08:44:08
1	Tl 190.801†	-20.2	15.8	16.047 µg/L	16.047 ppb	08:44:29
1	U 409.014†	529.3	562.3	50.410 µg/L	50.410 ppb	08:44:08
1	V 292.402†	533.5	439.5	5.4920 µg/L	5.4920 ppb	08:44:08
1	Zn 213.857†	1042.4	457.4	10.535 µg/L	10.535 ppb	08:44:29
2	Sc RADIAL	98991.7	98991.7	98.6 %		08:43:10
2	Al 396.153Radial†	40.3	441.2	208.17 µg/L	208.17 ppb	08:43:10
2	Ca 317.933Radial†	994.8	620.8	200.24 µg/L	200.24 ppb	08:43:30
2	Fe 238.204 Radial†	25.2	11.8	115.48 µg/L	115.48 ppb	08:43:30
2	K 766.490 Radial†	660.9	346.0	170.39 µg/L	170.39 ppb	08:43:10
2	Mg 279.077 IEC†	35.7	26.8	293.96 µg/L	293.96 ppb	08:43:30
2	Na 589.592 Radial†	1130.2	934.1	409.74 µg/L	409.74 ppb	08:43:10
2	Sr 421.552†	1069.8	935.4	5.0540 µg/L	5.0540 ppb	08:43:10
2	Sc 361.383	1907938.8	1907938.8	99.288 %		08:44:34
2	Y 371.029	1328157.5	1328157.5	99.262 %		08:44:34
2	Ag 328.068†	33.9	602.0	4.9882 µg/L	4.9882 ppb	08:44:40
2	As 188.979†	17.0	20.3	30.340 µg/L	30.340 ppb	08:45:00
2	B 249.677†	8727.5	8433.5	402.10 µg/L	402.10 ppb	08:44:40
2	Ba 233.527†	202.6	235.1	5.2987 µg/L	5.2987 ppb	08:45:00
2	Be 313.107†	6985.4	8563.2	5.2006 µg/L	5.2006 ppb	08:44:40
2	Cd 226.502†	34.0	213.9	5.1966 µg/L	5.1966 ppb	08:45:00
2	Co 228.616†	142.5	124.5	5.4687 µg/L	5.4687 ppb	08:45:00
2	Cr 267.716†	306.3	233.9	5.2331 µg/L	5.2331 ppb	08:45:00
2	Cu 324.752†	5209.4	1657.6	11.257 µg/L	11.257 ppb	08:44:40
2	Mn 257.610†	2531.6	3332.7	10.675 µg/L	10.675 ppb	08:45:00
2	Mo 202.031†	120.3	113.2	11.194 µg/L	11.194 ppb	08:45:00
2	Ni 231.604†	476.5	113.0	6.4166 µg/L	6.4166 ppb	08:45:00
2	P 214.914†	396.1	91.9	155.84 µg/L	155.84 ppb	08:45:00
2	Pb 220.353†	86.7	31.2	8.2123 µg/L	8.2123 ppb	08:45:00



2	S 181.975 Axial†	51.8	28.6	90.976 µg/L	90.976 ppb	08:45:00
2	Sb 206.836†	40.1	12.8	11.722 µg/L	11.722 ppb	08:45:00
2	Se 196.026†	53.0	32.8	32.412 µg/L	32.412 ppb	08:45:00
2	SiO2†	3565.9	1255.5	237.26 µg/L	237.26 ppb	08:44:40
2	Si 251.611†	1814.3	1429.5	101.21 µg/L	101.21 ppb	08:45:00
2	Sn 189.927†	23.3	21.5	8.3247 µg/L	8.3247 ppb	08:45:00
2	Ti 334.940†	1482.1	2175.5	5.2270 µg/L	5.2270 ppb	08:44:40
2	Tl 190.801†	-16.2	19.7	20.054 µg/L	20.054 ppb	08:45:00
2	U 409.014†	581.7	616.0	55.225 µg/L	55.225 ppb	08:44:40
2	V 292.402†	530.3	437.2	5.4670 µg/L	5.4670 ppb	08:44:40
2	Zn 213.857†	1031.4	448.2	10.314 µg/L	10.314 ppb	08:45:00
3	Sc RADIAL	100194.7	100194.7	99.8 %		08:43:35
3	Al 396.153Radial†	35.8	436.3	205.85 µg/L	205.85 ppb	08:43:35
3	Ca 317.933Radial†	989.1	603.0	194.50 µg/L	194.50 ppb	08:43:55
3	Fe 238.204 Radial†	23.6	9.9	97.438 µg/L	97.438 ppb	08:43:55
3	K 766.490 Radial†	629.4	306.4	150.88 µg/L	150.88 ppb	08:43:35
3	Mg 279.077 IEC†	39.4	30.0	329.11 µg/L	329.11 ppb	08:43:55
3	Na 589.592 Radial†	1116.7	906.8	397.79 µg/L	397.79 ppb	08:43:35
3	Sr 421.552†	1102.2	954.7	5.1588 µg/L	5.1588 ppb	08:43:35
3	Sc 361.383	1910135.0	1910135.0	99.403 %		08:45:06
3	Y 371.029	1331047.0	1331047.0	99.478 %		08:45:06
3	Ag 328.068†	61.3	629.6	5.2099 µg/L	5.2099 ppb	08:45:11
3	As 188.979†	15.9	19.2	28.782 µg/L	28.782 ppb	08:45:31
3	B 249.677†	8343.1	8036.7	383.19 µg/L	383.19 ppb	08:45:11
3	Ba 233.527†	181.1	213.3	4.8067 µg/L	4.8067 ppb	08:45:31
3	Be 313.107†	6750.0	8318.4	5.0518 µg/L	5.0518 ppb	08:45:11
3	Cd 226.502†	16.3	196.1	4.7628 µg/L	4.7628 ppb	08:45:31
3	Co 228.616†	127.8	109.5	4.8102 µg/L	4.8102 ppb	08:45:31
3	Cr 267.716†	292.9	220.1	4.9242 µg/L	4.9242 ppb	08:45:31
3	Cu 324.752†	5131.1	1572.7	10.678 µg/L	10.678 ppb	08:45:11
3	Mn 257.610†	2250.2	3046.7	9.7541 µg/L	9.7541 ppb	08:45:31
3	Mo 202.031†	110.6	103.3	10.210 µg/L	10.210 ppb	08:45:31
3	Ni 231.604†	455.3	91.2	5.1747 µg/L	5.1747 ppb	08:45:31
3	P 214.914†	376.2	71.4	120.86 µg/L	120.86 ppb	08:45:31
3	Pb 220.353†	86.6	31.0	8.1516 µg/L	8.1516 ppb	08:45:31
3	S 181.975 Axial†	50.5	27.3	86.784 µg/L	86.784 ppb	08:45:31
3	Sb 206.836†	35.4	8.0	7.3822 µg/L	7.3822 ppb	08:45:31
3	Se 196.026†	61.1	40.9	40.223 µg/L	40.223 ppb	08:45:31
3	SiO2†	3539.2	1224.5	231.41 µg/L	231.41 ppb	08:45:11
3	Si 251.611†	1718.7	1331.2	94.251 µg/L	94.251 ppb	08:45:31
3	Sn 189.927†	23.2	21.5	8.3324 µg/L	8.3324 ppb	08:45:31
3	Ti 334.940†	1447.5	2138.9	5.1360 µg/L	5.1360 ppb	08:45:11
3	Tl 190.801†	-13.8	22.2	22.583 µg/L	22.583 ppb	08:45:31
3	U 409.014†	584.4	618.1	55.415 µg/L	55.415 ppb	08:45:11
3	V 292.402†	489.7	395.8	4.9566 µg/L	4.9566 ppb	08:45:11
3	Zn 213.857†	986.7	402.0	9.2497 µg/L	9.2497 ppb	08:45:31

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1909778.6	99.384 %	0.0879			0.09%
Sc RADIAL	99534.6	99.2 %	0.61			0.61%
Y 371.029	1331436.8	99.508 %	0.2609			0.26%
Ag 328.068†	632.8	5.2394 µg/L	0.26715	5.2394 ppb	0.26715	5.10%
QC value within limits for Ag 328.068 Recovery = 104.79%						
Al 396.153Radial†	442.7	208.87 µg/L	3.424	208.87 ppb	3.424	1.64%
QC value within limits for Al 396.153Radial Recovery = 104.43%						
As 188.979†	21.3	31.850 µg/L	4.0409	31.850 ppb	4.0409	12.69%
QC value within limits for As 188.979 Recovery = 106.17%						
B 249.677†	8423.0	401.61 µg/L	18.177	401.61 ppb	18.177	4.53%
QC value greater than the upper limit for B 249.677 Recovery = 803.22%						
Ba 233.527†	230.8	5.2030 µg/L	0.35825	5.2030 ppb	0.35825	6.89%
QC value within limits for Ba 233.527 Recovery = 104.06%						
Be 313.107†	8492.1	5.1573 µg/L	0.09186	5.1573 ppb	0.09186	1.78%
QC value within limits for Be 313.107 Recovery = 103.15%						
Ca 317.933Radial†	615.3	198.47 µg/L	3.440	198.47 ppb	3.440	1.73%
QC value within limits for Ca 317.933Radial Recovery = 99.23%						
Cd 226.502†	202.3	4.9136 µg/L	0.24525	4.9136 ppb	0.24525	4.99%
QC value within limits for Cd 226.502 Recovery = 98.27%						
Co 228.616†	116.6	5.1217 µg/L	0.33071	5.1217 ppb	0.33071	6.46%

Cr	267.716†	232.7	5.2066 µg/L	0.27018	5.19%
QC value within limits for Co 228.616 Recovery = 102.43%					
Cu	324.752†	1632.3	11.084 µg/L	0.3528	3.18%
QC value within limits for Cr 267.716 Recovery = 104.13%					
Fe	238.204 Radial†	11.1	109.10 µg/L	10.115	9.27%
QC value within limits for Cu 324.752 Recovery = 110.84%					
K	766.490 Radial†	354.8	174.71 µg/L	26.266	15.03%
QC value within limits for Fe 238.204 Radial Recovery = 109.10%					
Mg	279.077 IEC†	27.6	302.12 µg/L	23.974	7.94%
QC value within limits for K 766.490 Radial Recovery = 116.48%					
Mn	257.610†	3236.2	10.364 µg/L	0.5286	5.10%
QC value within limits for Mg 279.077 IEC Recovery = 100.71%					
Mo	202.031†	110.6	10.940 µg/L	0.6413	5.86%
QC value within limits for Mn 257.610 Recovery = 103.64%					
Na	589.592 Radial†	924.9	405.72 µg/L	6.868	1.69%
QC value within limits for Mo 202.031 Recovery = 109.40%					
Ni	231.604†	97.8	5.5531 µg/L	0.74968	13.50%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 135.24%					
P	214.914†	83.0	140.53 µg/L	17.890	12.73%
QC value within limits for Ni 231.604 Recovery = 111.06%					
Pb	220.353†	29.8	7.8429 µg/L	0.58802	7.50%
QC value within limits for P 214.914 Recovery = 93.69%					
S	181.975 Axial†	30.4	96.704 µg/L	13.7124	14.18%
QC value within limits for Pb 220.353 Recovery = 78.43%					
Sb	206.836†	12.0	11.002 µg/L	3.3182	30.16%
QC value within limits for S 181.975 Axial Recovery = 96.70%					
Se	196.026†	36.7	36.198 µg/L	3.9110	10.80%
QC value within limits for Sb 206.836 Recovery = 110.02%					
SiO2†	1227.3	231.92 µg/L	5.100	2.20%	
QC value within limits for Se 196.026 Recovery = 120.66%					
Si	251.611†	1392.9	98.615 µg/L	3.8020	3.86%
QC value within limits for SiO2 Recovery = 108.88%					
Sn	189.927†	21.1	8.1896 µg/L	0.24062	2.94%
QC value within limits for Si 251.611 Recovery = 98.61%					
Sr	421.552†	944.3	5.1022 µg/L	0.05290	1.04%
QC value within limits for Sn 189.927 Recovery = 81.90%					
Ti	334.940†	2195.7	5.2751 µg/L	0.16835	3.19%
QC value within limits for Sr 421.552 Recovery = 102.04%					
Tl	190.801†	19.2	19.561 µg/L	3.2959	16.85%
QC value within limits for Ti 334.940 Recovery = 105.50%					
U	409.014†	598.8	53.683 µg/L	2.8366	5.28%
QC value within limits for Tl 190.801 Recovery = 97.81%					
V	292.402†	424.2	5.3052 µg/L	0.30212	5.69%
QC value within limits for U 409.014 Recovery = 107.37%					
Zn	213.857†	435.8	10.033 µg/L	0.6874	6.85%
QC value within limits for V 292.402 Recovery = 106.10%					
QC value within limits for Zn 213.857 Recovery = 100.33%					
QC Failed. Continue with analysis.					

Sequence No.: 80

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/5/2010 08:45:39

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	99963.6	99963.6	99.6 %		08:46:12
1	Al 396.153Radial†	-377.2	21.7	10.279 µg/L	10.279 ppb	08:46:12
1	Ca 317.933Radial†	382.8	-3.4	-1.0926 µg/L	-1.0926 ppb	08:46:32
1	Fe 238.204 Radial†	13.8	0.1	1.4011 µg/L	1.4011 ppb	08:46:32
1	K 766.490 Radial†	253.0	-70.0	-34.463 µg/L	-34.463 ppb	08:46:12
1	Mg 279.077 IEC†	8.5	-0.9	-10.021 µg/L	-10.021 ppb	08:46:32
1	Na 589.592 Radial†	411.6	201.6	88.418 µg/L	88.418 ppb	08:46:12
1	Sr 421.552†	142.3	-6.3	-0.0341 µg/L	-0.0341 ppb	08:46:12
1	Sc 361.383	1912195.4	1912195.4	99.510 %		08:47:31
1	Y 371.029	1333484.6	1333484.6	99.661 %		08:47:31
1	Ag 328.068†	-518.4	46.9	0.3807 µg/L	0.3807 ppb	08:47:36
1	As 188.979†	-1.2	2.0	2.9695 µg/L	2.9695 ppb	08:47:56
1	B 249.677†	6023.2	5696.3	271.63 µg/L	271.63 ppb	08:47:36
1	Ba 233.527†	-16.3	14.7	0.3285 µg/L	0.3285 ppb	08:47:56
1	Be 313.107†	-1301.7	219.7	0.1334 µg/L	0.1334 ppb	08:47:36
1	Cd 226.502†	-164.5	14.4	0.3502 µg/L	0.3502 ppb	08:47:56
1	Co 228.616†	28.7	9.7	0.4258 µg/L	0.4258 ppb	08:47:56
1	Cr 267.716†	84.1	9.9	0.2217 µg/L	0.2217 ppb	08:47:36
1	Cu 324.752†	3636.0	64.7	0.4391 µg/L	0.4391 ppb	08:47:36
1	Mn 257.610†	-721.7	57.7	0.1857 µg/L	0.1857 ppb	08:47:36
1	Mo 202.031†	0.8	-7.2	-0.7080 µg/L	-0.7080 ppb	08:47:56
1	Ni 231.604†	368.8	3.7	0.2081 µg/L	0.2081 ppb	08:47:56
1	P 214.914†	299.4	-6.2	-10.603 µg/L	-10.603 ppb	08:47:56
1	Pb 220.353†	40.2	-15.8	-4.1681 µg/L	-4.1681 ppb	08:47:56
1	S 181.975 Axial†	22.8	-0.6	-1.9134 µg/L	-1.9134 ppb	08:47:56
1	Sb 206.836†	23.6	-3.9	-3.5006 µg/L	-3.5006 ppb	08:47:56
1	Se 196.026†	16.9	-3.6	-3.5240 µg/L	-3.5240 ppb	08:47:56
1	SiO2†	2379.7	55.4	10.478 µg/L	10.478 ppb	08:47:36
1	Si 251.611†	423.3	27.6	1.9523 µg/L	1.9523 ppb	08:47:56
1	Sn 189.927†	1.1	-0.8	-0.3227 µg/L	-0.3227 ppb	08:47:56
1	Ti 334.940†	-577.3	102.6	0.2482 µg/L	0.2482 ppb	08:47:36
1	Tl 190.801†	-37.1	-1.3	-1.2709 µg/L	-1.2709 ppb	08:47:56
1	U 409.014†	-28.9	1.2	0.1031 µg/L	0.1031 ppb	08:47:36
1	V 292.402†	37.4	-59.3	-0.7283 µg/L	-0.7283 ppb	08:47:36
1	Zn 213.857†	608.9	21.3	0.4912 µg/L	0.4912 ppb	08:47:56
2	Sc RADIAL	98914.0	98914.0	98.6 %		08:46:38
2	Al 396.153Radial†	-345.6	49.8	23.517 µg/L	23.517 ppb	08:46:38
2	Ca 317.933Radial†	389.3	7.4	2.3773 µg/L	2.3773 ppb	08:46:58
2	Fe 238.204 Radial†	15.9	2.3	22.927 µg/L	22.927 ppb	08:46:58
2	K 766.490 Radial†	356.6	37.8	18.598 µg/L	18.598 ppb	08:46:38
2	Mg 279.077 IEC†	13.9	4.7	51.275 µg/L	51.275 ppb	08:46:58
2	Na 589.592 Radial†	422.7	217.2	95.284 µg/L	95.284 ppb	08:46:38
2	Sr 421.552†	134.4	-12.8	-0.0689 µg/L	-0.0689 ppb	08:46:38
2	Sc 361.383	1908043.8	1908043.8	99.294 %		08:48:02
2	Y 371.029	1331471.2	1331471.2	99.510 %		08:48:02
2	Ag 328.068†	-472.7	91.8	0.7525 µg/L	0.7525 ppb	08:48:07
2	As 188.979†	-4.0	-0.8	-1.2507 µg/L	-1.2507 ppb	08:48:28
2	B 249.677†	5859.7	5544.8	264.39 µg/L	264.39 ppb	08:48:07
2	Ba 233.527†	-20.2	10.7	0.2397 µg/L	0.2397 ppb	08:48:28
2	Be 313.107†	-1294.8	223.8	0.1359 µg/L	0.1359 ppb	08:48:07
2	Cd 226.502†	-173.9	4.5	0.1074 µg/L	0.1074 ppb	08:48:28
2	Co 228.616†	30.6	11.8	0.5171 µg/L	0.5171 ppb	08:48:28
2	Cr 267.716†	69.5	-4.6	-0.1029 µg/L	-0.1029 ppb	08:48:07
2	Cu 324.752†	3638.7	75.4	0.5152 µg/L	0.5152 ppb	08:48:07
2	Mn 257.610†	-718.1	59.8	0.1896 µg/L	0.1896 ppb	08:48:07
2	Mo 202.031†	14.4	6.5	0.6440 µg/L	0.6440 ppb	08:48:28
2	Ni 231.604†	368.6	4.3	0.2454 µg/L	0.2454 ppb	08:48:28
2	P 214.914†	302.6	-2.3	-4.0836 µg/L	-4.0836 ppb	08:48:28
2	Pb 220.353†	39.6	-16.2	-4.2798 µg/L	-4.2798 ppb	08:48:28

2	S 181.975 Axial†	17.3	-6.1	-19.324 µg/L	-19.324 ppb	08:48:28
2	Sb 206.836†	28.2	0.8	0.7438 µg/L	0.7438 ppb	08:48:28
2	Se 196.026†	22.2	1.8	1.7933 µg/L	1.7933 ppb	08:48:28
2	SiO2†	2373.4	54.3	10.268 µg/L	10.268 ppb	08:48:07
2	Si 251.611†	426.0	31.2	2.2119 µg/L	2.2119 ppb	08:48:28
2	Sn 189.927†	-2.7	-4.6	-1.8472 µg/L	-1.8472 ppb	08:48:28
2	Ti 334.940†	-595.5	83.0	0.1961 µg/L	0.1961 ppb	08:48:07
2	Tl 190.801†	-38.7	-2.9	-2.9710 µg/L	-2.9710 ppb	08:48:28
2	U 409.014†	-89.5	-60.0	-5.3821 µg/L	-5.3821 ppb	08:48:07
2	V 292.402†	60.4	-36.1	-0.4454 µg/L	-0.4454 ppb	08:48:07
2	Zn 213.857†	589.5	3.1	0.0664 µg/L	0.0664 ppb	08:48:28
3	Sc RADIAL	100017.4	100017.4	99.7 %		08:47:03
3	Al 396.153Radial†	-328.0	71.3	33.666 µg/L	33.666 ppb	08:47:03
3	Ca 317.933Radial†	399.7	13.4	4.3101 µg/L	4.3101 ppb	08:47:23
3	Fe 238.204 Radial†	15.0	1.3	13.080 µg/L	13.080 ppb	08:47:23
3	K 766.490 Radial†	374.5	51.8	25.509 µg/L	25.509 ppb	08:47:03
3	Mg 279.077 IEC†	10.3	0.9	9.9611 µg/L	9.9611 ppb	08:47:23
3	Na 589.592 Radial†	388.8	178.4	78.267 µg/L	78.267 ppb	08:47:03
3	Sr 421.552†	130.5	-18.2	-0.0984 µg/L	-0.0984 ppb	08:47:03
3	Sc 361.383	1922305.1	1922305.1	100.04 %		08:48:33
3	Y 371.029	1341158.8	1341158.8	100.23 %		08:48:33
3	Ag 328.068†	-566.1	2.0	0.0201 µg/L	0.0201 ppb	08:48:39
3	As 188.979†	-1.4	1.8	2.7023 µg/L	2.7023 ppb	08:48:59
3	B 249.677†	5693.3	5334.7	254.38 µg/L	254.38 ppb	08:48:39
3	Ba 233.527†	-16.3	14.8	0.3334 µg/L	0.3334 ppb	08:48:59
3	Be 313.107†	-1239.8	288.4	0.1751 µg/L	0.1751 ppb	08:48:39
3	Cd 226.502†	-178.7	1.0	0.0230 µg/L	0.0230 ppb	08:48:59
3	Co 228.616†	34.9	15.8	0.6945 µg/L	0.6945 ppb	08:48:59
3	Cr 267.716†	75.5	0.9	0.0214 µg/L	0.0214 ppb	08:48:39
3	Cu 324.752†	3595.4	4.9	0.0357 µg/L	0.0357 ppb	08:48:39
3	Mn 257.610†	-707.5	75.7	0.2428 µg/L	0.2428 ppb	08:48:39
3	Mo 202.031†	7.8	-0.2	-0.0162 µg/L	-0.0162 ppb	08:48:59
3	Ni 231.604†	364.5	-2.5	-0.1443 µg/L	-0.1443 ppb	08:48:59
3	P 214.914†	301.1	-6.0	-10.312 µg/L	-10.312 ppb	08:48:59
3	Pb 220.353†	40.6	-15.5	-4.0858 µg/L	-4.0858 ppb	08:48:59
3	S 181.975 Axial†	22.7	-0.8	-2.6046 µg/L	-2.6046 ppb	08:48:59
3	Sb 206.836†	24.3	-3.3	-2.9587 µg/L	-2.9587 ppb	08:48:59
3	Se 196.026†	22.9	2.4	2.3722 µg/L	2.3722 ppb	08:48:59
3	SiO2†	2376.2	39.4	7.4398 µg/L	7.4398 ppb	08:48:39
3	Si 251.611†	429.4	31.5	2.2284 µg/L	2.2284 ppb	08:48:59
3	Sn 189.927†	-5.1	-7.0	-2.7695 µg/L	-2.7695 ppb	08:48:59
3	Ti 334.940†	-590.4	92.5	0.2224 µg/L	0.2224 ppb	08:48:39
3	Tl 190.801†	-34.1	2.0	1.9893 µg/L	1.9893 ppb	08:48:59
3	U 409.014†	-69.7	-39.5	-3.5436 µg/L	-3.5436 ppb	08:48:39
3	V 292.402†	130.7	33.7	0.4054 µg/L	0.4054 ppb	08:48:39
3	Zn 213.857†	598.3	7.4	0.1718 µg/L	0.1718 ppb	08:48:59

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1914181.4	99.613 %	0.3817			0.38%
Sc RADIAL	99631.7	99.3 %	0.62			0.62%
Y 371.029	1335371.5	99.802 %	0.3821			0.38%
Ag 328.068†	46.9	0.3844 µg/L	0.36620	0.3844 ppb	0.36620	95.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	47.6	22.487 µg/L	11.7274	22.487 ppb	11.7274	52.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.0	1.4737 µg/L	2.36318	1.4737 ppb	2.36318	160.36%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	5525.3	263.47 µg/L	8.663	263.47 ppb	8.663	3.29%
QC value greater than the upper limit for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.4	0.3005 µg/L	0.05273	0.3005 ppb	0.05273	17.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	244.0	0.1481 µg/L	0.02343	0.1481 ppb	0.02343	15.82%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	1.8650 µg/L	2.73752	1.8650 ppb	2.73752	146.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.6	0.1602 µg/L	0.16989	0.1602 ppb	0.16989	106.05%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	12.4	0.5458 µg/L	0.13664	0.5458 ppb	0.13664	25.03%

Cr 267.716†	2.1	0.0467 µg/L	0.16378	0.0467 ppb	0.16378	350.37%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	48.3	0.3300 µg/L	0.25767	0.3300 ppb	0.25767	78.08%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.3	12.469 µg/L	10.7760	12.469 ppb	10.7760	86.42%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	6.5	3.2147 µg/L	32.81240	3.2147 ppb	32.81240	>999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	17.072 µg/L	31.2605	17.072 ppb	31.2605	183.11%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	64.4	0.2061 µg/L	0.03191	0.2061 ppb	0.03191	15.49%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-0.3	-0.0267 µg/L	0.67605	-0.0267 ppb	0.67605	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	199.1	87.323 µg/L	8.5612	87.323 ppb	8.5612	9.80%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.8	0.1031 µg/L	0.21502	0.1031 ppb	0.21502	208.57%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.8	-8.3331 µg/L	3.68303	-8.3331 ppb	3.68303	44.20%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-15.8	-4.1779 µg/L	0.09739	-4.1779 ppb	0.09739	2.33%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.5	-7.9474 µg/L	9.85870	-7.9474 ppb	9.85870	124.05%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.1	-1.9052 µg/L	2.31000	-1.9052 ppb	2.31000	121.25%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.2	0.2138 µg/L	3.24997	0.2138 ppb	3.24997	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	49.7	9.3955 µg/L	1.69695	9.3955 ppb	1.69695	18.06%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	30.1	2.1309 µg/L	0.15487	2.1309 ppb	0.15487	7.27%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-4.2	-1.6465 µg/L	1.23573	-1.6465 ppb	1.23573	75.05%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-12.4	-0.0672 µg/L	0.03219	-0.0672 ppb	0.03219	47.92%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	92.7	0.2222 µg/L	0.02605	0.2222 ppb	0.02605	11.72%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.7	-0.7509 µg/L	2.52071	-0.7509 ppb	2.52071	335.71%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-32.8	-2.9408 µg/L	2.79184	-2.9408 ppb	2.79184	94.93%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-20.5	-0.2561 µg/L	0.59005	-0.2561 ppb	0.59005	230.41%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	10.6	0.2431 µg/L	0.22121	0.2431 ppb	0.22121	90.98%
QC value within limits for Zn 213.857 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 09:15:18

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	100406.1	100406.1	100 %		09:15:54
1	Al 396.153Radial†	10934.2	11328.2	5339.2 µg/L	5339.2 ppb	09:15:54
1	Ca 317.933Radial†	16945.9	16548.2	5337.4 µg/L	5337.4 ppb	09:15:54
1	Fe 238.204 Radial†	548.1	534.1	5247.8 µg/L	5247.8 ppb	09:16:14
1	K 766.490 Radial†	11077.0	10746.5	5292.0 µg/L	5292.0 ppb	09:15:54
1	Mg 279.077 IEC†	499.3	489.6	5365.5 µg/L	5365.5 ppb	09:16:14
1	Na 589.592 Radial†	23584.7	23359.1	10247 µg/L	10247 ppb	09:15:54
1	Sr 421.552†	97010.1	96803.6	523.06 µg/L	523.06 ppb	09:15:54
1	Sc 361.383	1910143.8	1910143.8	99.403 %		09:17:14
1	Y 371.029	1327814.8	1327814.8	99.237 %		09:17:14
1	Ag 328.068†	63001.2	63947.4	529.16 µg/L	529.16 ppb	09:17:20
1	As 188.979†	358.4	363.8	543.13 µg/L	543.13 ppb	09:17:40
1	B 249.677†	13177.6	12900.2	613.29 µg/L	613.29 ppb	09:17:20
1	Ba 233.527†	23579.4	23752.1	535.36 µg/L	535.36 ppb	09:17:20
1	Be 313.107†	872489.7	879256.5	533.99 µg/L	533.99 ppb	09:17:14
1	Cd 226.502†	21797.5	22108.0	537.68 µg/L	537.68 ppb	09:17:20
1	Co 228.616†	12199.2	12253.3	537.88 µg/L	537.88 ppb	09:17:20
1	Cr 267.716†	24356.4	24428.1	546.47 µg/L	546.47 ppb	09:17:20
1	Cu 324.752†	82726.2	79633.7	540.75 µg/L	540.75 ppb	09:17:20
1	Mn 257.610†	169171.4	170970.2	548.24 µg/L	548.24 ppb	09:17:14
1	Mo 202.031†	5516.6	5541.8	547.92 µg/L	547.92 ppb	09:17:40
1	Ni 231.604†	9843.8	9536.0	541.24 µg/L	541.24 ppb	09:17:20
1	P 214.914†	1898.2	1602.6	2683.9 µg/L	2683.9 ppb	09:17:40
1	Pb 220.353†	2095.5	2052.0	542.58 µg/L	542.58 ppb	09:17:40
1	S 181.975 Axial†	356.6	335.2	1065.9 µg/L	1065.9 ppb	09:17:40
1	Sb 206.836†	615.7	591.8	537.60 µg/L	537.60 ppb	09:17:40
1	Se 196.026†	575.8	558.7	561.39 µg/L	561.39 ppb	09:17:40
1	SiO2†	32026.5	29882.9	5647.1 µg/L	5647.1 ppb	09:17:20
1	Si 251.611†	37445.0	37272.1	2638.8 µg/L	2638.8 ppb	09:17:20
1	Sn 189.927†	1391.2	1397.6	543.41 µg/L	543.41 ppb	09:17:40
1	Ti 334.940†	216828.5	218813.3	527.41 µg/L	527.41 ppb	09:17:14
1	Tl 190.801†	489.2	528.2	539.71 µg/L	539.71 ppb	09:17:40
1	U 409.014†	5909.9	5975.6	534.96 µg/L	534.96 ppb	09:17:20
1	V 292.402†	44109.2	44277.2	545.09 µg/L	545.09 ppb	09:17:20
1	Zn 213.857†	23700.8	23252.5	534.90 µg/L	534.90 ppb	09:17:20
2	Sc RADIAL	100487.0	100487.0	100 %		09:16:20
2	Al 396.153Radial†	10974.1	11359.2	5354.0 µg/L	5354.0 ppb	09:16:20
2	Ca 317.933Radial†	17019.4	16608.0	5356.7 µg/L	5356.7 ppb	09:16:20
2	Fe 238.204 Radial†	549.8	535.3	5260.4 µg/L	5260.4 ppb	09:16:40
2	K 766.490 Radial†	11119.4	10779.9	5308.5 µg/L	5308.5 ppb	09:16:20
2	Mg 279.077 IEC†	501.6	491.5	5386.3 µg/L	5386.3 ppb	09:16:40
2	Na 589.592 Radial†	23711.3	23466.6	10294 µg/L	10294 ppb	09:16:20
2	Sr 421.552†	97125.2	96840.5	523.26 µg/L	523.26 ppb	09:16:20
2	Sc 361.383	1917809.7	1917809.7	99.802 %		09:17:47
2	Y 371.029	1334060.0	1334060.0	99.704 %		09:17:47
2	Ag 328.068†	63128.5	63821.6	528.14 µg/L	528.14 ppb	09:17:52
2	As 188.979†	359.5	363.4	542.61 µg/L	542.61 ppb	09:18:12
2	B 249.677†	13167.5	12837.0	610.27 µg/L	610.27 ppb	09:17:52
2	Ba 233.527†	23699.8	23777.9	535.95 µg/L	535.95 ppb	09:17:52
2	Be 313.107†	876985.4	880252.7	534.59 µg/L	534.59 ppb	09:17:47
2	Cd 226.502†	21947.2	22170.4	539.19 µg/L	539.19 ppb	09:17:52
2	Co 228.616†	12225.9	12231.1	536.89 µg/L	536.89 ppb	09:17:52
2	Cr 267.716†	24443.9	24417.8	546.24 µg/L	546.24 ppb	09:17:52
2	Cu 324.752†	82872.9	79448.1	539.49 µg/L	539.49 ppb	09:17:52
2	Mn 257.610†	169851.4	170971.3	548.25 µg/L	548.25 ppb	09:17:47
2	Mo 202.031†	5480.6	5483.5	542.16 µg/L	542.16 ppb	09:18:12
2	Ni 231.604†	9886.9	9539.6	541.45 µg/L	541.45 ppb	09:17:52
2	P 214.914†	1892.6	1589.4	2661.3 µg/L	2661.3 ppb	09:18:12
2	Pb 220.353†	2105.3	2053.4	542.94 µg/L	542.94 ppb	09:18:12

2	S 181.975 Axial†	358.9	336.1	1068.7 µg/L	1068.7 ppb	09:18:12
2	Sb 206.836†	614.5	588.1	534.18 µg/L	534.18 ppb	09:18:12
2	Se 196.026†	565.5	546.1	549.07 µg/L	549.07 ppb	09:18:12
2	SiO2†	32140.3	29868.2	5644.3 µg/L	5644.3 ppb	09:17:52
2	Si 251.611†	37518.0	37194.7	2633.3 µg/L	2633.3 ppb	09:17:52
2	Sn 189.927†	1370.3	1371.1	532.96 µg/L	532.96 ppb	09:18:12
2	Ti 334.940†	217629.4	218743.8	527.25 µg/L	527.25 ppb	09:17:47
2	Tl 190.801†	496.6	533.7	545.23 µg/L	545.23 ppb	09:18:12
2	U 409.014†	5991.1	6033.2	540.13 µg/L	540.13 ppb	09:17:52
2	V 292.402†	44461.8	44453.1	547.20 µg/L	547.20 ppb	09:17:52
2	Zn 213.857†	23773.1	23229.6	534.37 µg/L	534.37 ppb	09:17:52
3	Sc RADIAL	100326.5	100326.5	100.0 %		09:16:45
3	Al 396.153Radial†	10892.2	11294.8	5324.8 µg/L	5324.8 ppb	09:16:45
3	Ca 317.933Radial†	16987.6	16603.4	5355.2 µg/L	5355.2 ppb	09:16:45
3	Fe 238.204 Radial†	555.8	542.2	5327.0 µg/L	5327.0 ppb	09:17:05
3	K 766.490 Radial†	11093.4	10771.6	5304.4 µg/L	5304.4 ppb	09:16:45
3	Mg 279.077 IEC†	497.6	488.3	5349.7 µg/L	5349.7 ppb	09:17:05
3	Na 589.592 Radial†	23709.0	23502.2	10310 µg/L	10310 ppb	09:16:45
3	Sr 421.552†	97136.7	97007.2	524.16 µg/L	524.16 ppb	09:16:45
3	Sc 361.383	1910322.3	1910322.3	99.412 %		09:18:19
3	Y 371.029	1328620.4	1328620.4	99.297 %		09:18:19
3	Ag 328.068†	61284.8	62214.9	514.77 µg/L	514.77 ppb	09:18:24
3	As 188.979†	320.3	325.4	485.71 µg/L	485.71 ppb	09:18:44
3	B 249.677†	12790.6	12509.6	594.57 µg/L	594.57 ppb	09:18:24
3	Ba 233.527†	22623.1	22787.9	513.62 µg/L	513.62 ppb	09:18:24
3	Be 313.107†	846427.3	852958.1	518.02 µg/L	518.02 ppb	09:18:19
3	Cd 226.502†	20854.2	21157.1	514.51 µg/L	514.51 ppb	09:18:24
3	Co 228.616†	11621.3	11670.9	512.26 µg/L	512.26 ppb	09:18:24
3	Cr 267.716†	22794.7	22854.9	511.28 µg/L	511.28 ppb	09:18:24
3	Cu 324.752†	78785.4	75661.8	513.84 µg/L	513.84 ppb	09:18:24
3	Mn 257.610†	163837.1	165588.5	530.99 µg/L	530.99 ppb	09:18:19
3	Mo 202.031†	4846.9	4867.5	481.29 µg/L	481.29 ppb	09:18:44
3	Ni 231.604†	9414.8	9103.6	516.71 µg/L	516.71 ppb	09:18:24
3	P 214.914†	1738.7	1441.9	2411.4 µg/L	2411.4 ppb	09:18:44
3	Pb 220.353†	1922.5	1877.8	496.46 µg/L	496.46 ppb	09:18:44
3	S 181.975 Axial†	326.7	305.1	970.32 µg/L	970.32 ppb	09:18:44
3	Sb 206.836†	562.1	537.8	488.14 µg/L	488.14 ppb	09:18:44
3	Se 196.026†	522.8	505.3	509.23 µg/L	509.23 ppb	09:18:44
3	SiO2†	31056.6	28904.2	5462.1 µg/L	5462.1 ppb	09:18:24
3	Si 251.611†	36125.1	35940.8	2544.6 µg/L	2544.6 ppb	09:18:24
3	Sn 189.927†	1205.9	1211.1	469.99 µg/L	469.99 ppb	09:18:44
3	Ti 334.940†	209575.2	211496.7	509.77 µg/L	509.77 ppb	09:18:19
3	Tl 190.801†	462.1	500.9	511.93 µg/L	511.93 ppb	09:18:44
3	U 409.014†	5584.8	5648.0	505.57 µg/L	505.57 ppb	09:18:24
3	V 292.402†	42065.4	42217.1	519.33 µg/L	519.33 ppb	09:18:24
3	Zn 213.857†	22597.9	22140.9	509.29 µg/L	509.29 ppb	09:18:24

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1912758.6	99.539 %	0.2277			0.23%
Sc RADIAL	100406.5	100 %	0.1			0.08%
Y 371.029	1330165.1	99.412 %	0.2539			0.26%
Ag 328.068†	63327.9	524.03 µg/L	8.029	524.03 ppb	8.029	1.53%
QC value within limits for Ag 328.068 Recovery = 104.81%						
Al 396.153Radial†	11327.4	5339.3 µg/L	14.59	5339.3 ppb	14.59	0.27%
QC value within limits for Al 396.153Radial Recovery = 106.79%						
As 188.979†	350.9	523.81 µg/L	33.002	523.81 ppb	33.002	6.30%
QC value within limits for As 188.979 Recovery = 104.76%						
B 249.677†	12748.9	606.05 µg/L	10.051	606.05 ppb	10.051	1.66%
QC value greater than the upper limit for B 249.677 Recovery = 121.21%						
Ba 233.527†	23439.3	528.31 µg/L	12.723	528.31 ppb	12.723	2.41%
QC value within limits for Ba 233.527 Recovery = 105.66%						
Be 313.107†	870822.4	528.87 µg/L	9.400	528.87 ppb	9.400	1.78%
QC value within limits for Be 313.107 Recovery = 105.77%						
Ca 317.933Radial†	16586.6	5349.8 µg/L	10.73	5349.8 ppb	10.73	0.20%
QC value within limits for Ca 317.933Radial Recovery = 107.00%						
Cd 226.502†	21811.8	530.46 µg/L	13.831	530.46 ppb	13.831	2.61%
QC value within limits for Cd 226.502 Recovery = 106.09%						
Co 228.616†	12051.8	529.01 µg/L	14.515	529.01 ppb	14.515	2.74%

Cr	267.716†	23900.3	534.66 µg/L	20.250	534.66 ppb	20.250	3.79%
Cu	324.752†	78247.9	531.36 µg/L	15.185	531.36 ppb	15.185	2.86%
Fe	238.204 Radial†	537.2	5278.4 µg/L	42.56	5278.4 ppb	42.56	0.81%
K	766.490 Radial†	10766.0	5301.7 µg/L	8.57	5301.7 ppb	8.57	0.16%
Mg	279.077 IEC†	489.8	5367.2 µg/L	18.35	5367.2 ppb	18.35	0.34%
Mn	257.610†	169176.6	542.49 µg/L	9.962	542.49 ppb	9.962	1.84%
Mo	202.031†	5297.6	523.79 µg/L	36.922	523.79 ppb	36.922	7.05%
Na	589.592 Radial†	23442.6	10284 µg/L	32.7	10284 ppb	32.7	0.32%
Ni	231.604†	9393.1	533.14 µg/L	14.226	533.14 ppb	14.226	2.67%
P	214.914†	1544.6	2585.6 µg/L	151.23	2585.6 ppb	151.23	5.85%
Pb	220.353†	1994.4	527.33 µg/L	26.734	527.33 ppb	26.734	5.07%
S	181.975 Axial†	325.5	1035.0 µg/L	56.02	1035.0 ppb	56.02	5.41%
Sb	206.836†	572.6	519.97 µg/L	27.626	519.97 ppb	27.626	5.31%
Se	196.026†	536.7	539.90 µg/L	27.261	539.90 ppb	27.261	5.05%
SiO2†		29551.8	5584.5 µg/L	105.98	5584.5 ppb	105.98	1.90%
Si	251.611†	36802.5	2605.6 µg/L	52.91	2605.6 ppb	52.91	2.03%
Sn	189.927†	1326.6	515.45 µg/L	39.719	515.45 ppb	39.719	7.71%
Sr	421.552†	96883.8	523.49 µg/L	0.586	523.49 ppb	0.586	0.11%
Ti	334.940†	216351.2	521.48 µg/L	10.139	521.48 ppb	10.139	1.94%
Tl	190.801†	521.0	532.29 µg/L	17.851	532.29 ppb	17.851	3.35%
U	409.014†	5885.6	526.89 µg/L	18.643	526.89 ppb	18.643	3.54%
V	292.402†	43649.1	537.21 µg/L	15.518	537.21 ppb	15.518	2.89%
Zn	213.857†	22874.3	526.19 µg/L	14.632	526.19 ppb	14.632	2.78%

QC value within limits for Co 228.616 Recovery = 105.80%  
 QC value within limits for Cr 267.716 Recovery = 106.93%  
 QC value within limits for Cu 324.752 Recovery = 106.27%  
 QC value within limits for Fe 238.204 Radial Recovery = 105.57%  
 QC value within limits for K 766.490 Radial Recovery = 106.03%  
 QC value within limits for Mg 279.077 IEC Recovery = 107.34%  
 QC value within limits for Mn 257.610 Radial Recovery = 108.50%  
 QC value within limits for Mo 202.031 Recovery = 104.76%  
 QC value within limits for Na 589.592 Radial Recovery = 102.84%  
 QC value within limits for Ni 231.604 Recovery = 106.63%  
 QC value within limits for P 214.914 Recovery = 103.42%  
 QC value within limits for Pb 220.353 Recovery = 105.47%  
 QC value within limits for S 181.975 Axial Recovery = 103.50%  
 QC value within limits for Sb 206.836 Recovery = 103.99%  
 QC value within limits for Se 196.026 Recovery = 107.98%  
 QC value within limits for SiO2 Recovery = 104.43%  
 QC value within limits for Si 251.611 Recovery = 104.22%  
 QC value within limits for Sn 189.927 Recovery = 103.09%  
 QC value within limits for Sr 421.552 Recovery = 104.70%  
 QC value within limits for Ti 334.940 Recovery = 104.30%  
 QC value within limits for Tl 190.801 Recovery = 106.46%  
 QC value within limits for U 409.014 Recovery = 105.38%  
 QC value within limits for V 292.402 Recovery = 107.44%  
 QC value within limits for Zn 213.857 Recovery = 105.24%

QC Failed. Continue with analysis.



Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 09:18:52

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	99135.5	99135.5	98.8 %		09:19:24
1	Al 396.153Radial†	-349.7	46.4	21.884 µg/L	21.884 ppb	09:19:24
1	Ca 317.933Radial†	379.6	-3.4	-1.0939 µg/L	-1.0939 ppb	09:19:44
1	Fe 238.204 Radial†	14.1	0.5	4.6797 µg/L	4.6797 ppb	09:19:44
1	K 766.490 Radial†	287.5	-32.9	-16.208 µg/L	-16.208 ppb	09:19:24
1	Mg 279.077 IEC†	13.6	4.4	47.717 µg/L	47.717 ppb	09:19:44
1	Na 589.592 Radial†	268.2	59.9	26.267 µg/L	26.267 ppb	09:19:24
1	Sr 421.552†	106.4	-41.4	-0.2239 µg/L	-0.2239 ppb	09:19:24
1	Sc 361.383	1914351.3	1914351.3	99.622 %		09:20:43
1	Y 371.029	1336666.5	1336666.5	99.898 %		09:20:43
1	Ag 328.068†	-580.9	-15.3	-0.1193 µg/L	-0.1193 ppb	09:20:48
1	As 188.979†	-2.6	0.6	0.9491 µg/L	0.9491 ppb	09:21:08
1	B 249.677†	2046.8	1697.9	80.965 µg/L	80.965 ppb	09:20:48
1	Ba 233.527†	-23.0	8.0	0.1808 µg/L	0.1808 ppb	09:21:08
1	Be 313.107†	-1353.0	169.7	0.1030 µg/L	0.1030 ppb	09:20:48
1	Cd 226.502†	-170.9	8.1	0.1971 µg/L	0.1971 ppb	09:21:08
1	Co 228.616†	26.1	7.1	0.3127 µg/L	0.3127 ppb	09:21:08
1	Cr 267.716†	84.1	9.9	0.2209 µg/L	0.2209 ppb	09:20:48
1	Cu 324.752†	3641.6	66.2	0.4498 µg/L	0.4498 ppb	09:20:48
1	Mn 257.610†	-704.3	75.9	0.2406 µg/L	0.2406 ppb	09:20:48
1	Mo 202.031†	16.2	8.3	0.8172 µg/L	0.8172 ppb	09:21:08
1	Ni 231.604†	383.6	18.1	1.0302 µg/L	1.0302 ppb	09:21:08
1	P 214.914†	301.2	-4.7	-8.0891 µg/L	-8.0891 ppb	09:21:08
1	Pb 220.353†	53.3	-2.6	-0.6841 µg/L	-0.6841 ppb	09:21:08
1	S 181.975 Axial†	15.7	-7.7	-24.584 µg/L	-24.584 ppb	09:21:08
1	Sb 206.836†	25.9	-1.6	-1.4674 µg/L	-1.4674 ppb	09:21:08
1	Se 196.026†	26.4	5.9	5.8165 µg/L	5.8165 ppb	09:21:08
1	SiO2†	2403.8	77.0	14.550 µg/L	14.550 ppb	09:20:48
1	Si 251.611†	402.0	5.7	0.4065 µg/L	0.4065 ppb	09:21:08
1	Sn 189.927†	0.4	-1.6	-0.6148 µg/L	-0.6148 ppb	09:21:08
1	Ti 334.940†	-651.6	28.6	0.0652 µg/L	0.0652 ppb	09:20:48
1	Tl 190.801†	-40.1	-4.2	-4.2567 µg/L	-4.2567 ppb	09:21:08
1	U 409.014†	-27.4	2.7	0.2390 µg/L	0.2390 ppb	09:20:48
1	V 292.402†	165.8	69.5	0.8545 µg/L	0.8545 ppb	09:20:48
1	Zn 213.857†	586.2	-2.2	-0.0589 µg/L	-0.0589 ppb	09:21:08
2	Sc RADIAL	99033.7	99033.7	98.7 %		09:19:50
2	Al 396.153Radial†	-375.4	20.0	9.4319 µg/L	9.4319 ppb	09:19:50
2	Ca 317.933Radial†	376.9	-5.7	-1.8353 µg/L	-1.8353 ppb	09:20:10
2	Fe 238.204 Radial†	16.4	2.9	28.254 µg/L	28.254 ppb	09:20:10
2	K 766.490 Radial†	373.2	54.2	26.673 µg/L	26.673 ppb	09:19:50
2	Mg 279.077 IEC†	14.5	5.2	57.434 µg/L	57.434 ppb	09:20:10
2	Na 589.592 Radial†	319.9	112.5	49.345 µg/L	49.345 ppb	09:19:50
2	Sr 421.552†	154.9	7.8	0.0421 µg/L	0.0421 ppb	09:19:50
2	Sc 361.383	1906746.8	1906746.8	99.226 %		09:21:14
2	Y 371.029	1330154.6	1330154.6	99.412 %		09:21:14
2	Ag 328.068†	-509.2	54.6	0.4532 µg/L	0.4532 ppb	09:21:19
2	As 188.979†	-2.4	0.8	1.1307 µg/L	1.1307 ppb	09:21:40
2	B 249.677†	2091.3	1751.0	83.483 µg/L	83.483 ppb	09:21:19
2	Ba 233.527†	-29.3	1.6	0.0355 µg/L	0.0355 ppb	09:21:40
2	Be 313.107†	-1299.4	218.3	0.1326 µg/L	0.1326 ppb	09:21:19
2	Cd 226.502†	-160.0	18.4	0.4456 µg/L	0.4456 ppb	09:21:40
2	Co 228.616†	33.6	14.7	0.6480 µg/L	0.6480 ppb	09:21:40
2	Cr 267.716†	90.8	17.0	0.3792 µg/L	0.3792 ppb	09:21:19
2	Cu 324.752†	3635.4	74.6	0.5108 µg/L	0.5108 ppb	09:21:19
2	Mn 257.610†	-748.8	28.3	0.0886 µg/L	0.0886 ppb	09:21:19
2	Mo 202.031†	13.5	5.6	0.5552 µg/L	0.5552 ppb	09:21:40
2	Ni 231.604†	377.8	13.8	0.7849 µg/L	0.7849 ppb	09:21:40
2	P 214.914†	305.3	0.6	1.0071 µg/L	1.0071 ppb	09:21:40
2	Pb 220.353†	57.6	1.9	0.4969 µg/L	0.4969 ppb	09:21:40

2	S 181.975 Axial†	14.6	-8.8	-28.085 µg/L	-28.085 ppb	09:21:40
2	Sb 206.836†	28.3	0.9	0.8044 µg/L	0.8044 ppb	09:21:40
2	Se 196.026†	15.4	-5.1	-4.9444 µg/L	-4.9444 ppb	09:21:40
2	SiO2†	2361.2	43.6	8.2450 µg/L	8.2450 ppb	09:21:19
2	Si 251.611†	412.1	17.5	1.2405 µg/L	1.2405 ppb	09:21:40
2	Sn 189.927†	-1.7	-3.6	-1.4462 µg/L	-1.4462 ppb	09:21:40
2	Ti 334.940†	-639.5	38.2	0.0876 µg/L	0.0876 ppb	09:21:19
2	Tl 190.801†	-37.6	-1.8	-1.8087 µg/L	-1.8087 ppb	09:21:40
2	U 409.014†	-13.7	16.4	1.4631 µg/L	1.4631 ppb	09:21:19
2	V 292.402†	122.9	27.0	0.3309 µg/L	0.3309 ppb	09:21:19
2	Zn 213.857†	577.8	-8.3	-0.2012 µg/L	-0.2012 ppb	09:21:40
3	Sc RADIAL	99203.5	99203.5	98.9 %		09:20:15
3	Al 396.153Radial†	-393.4	2.4	1.1295 µg/L	1.1295 ppb	09:20:15
3	Ca 317.933Radial†	382.1	-1.1	-0.3541 µg/L	-0.3541 ppb	09:20:35
3	Fe 238.204 Radial†	13.8	0.2	2.0540 µg/L	2.0540 ppb	09:20:35
3	K 766.490 Radial†	351.0	31.1	15.304 µg/L	15.304 ppb	09:20:15
3	Mg 279.077 IEC†	11.4	2.1	22.808 µg/L	22.808 ppb	09:20:35
3	Na 589.592 Radial†	272.6	64.1	28.105 µg/L	28.105 ppb	09:20:15
3	Sr 421.552†	120.4	-27.3	-0.1475 µg/L	-0.1475 ppb	09:20:15
3	Sc 361.383	1910764.8	1910764.8	99.435 %		09:21:45
3	Y 371.029	1333404.0	1333404.0	99.655 %		09:21:45
3	Ag 328.068†	-623.1	-58.8	-0.4804 µg/L	-0.4804 ppb	09:21:51
3	As 188.979†	-9.5	-6.4	-9.5942 µg/L	-9.5942 ppb	09:22:11
3	B 249.677†	1980.4	1635.1	77.968 µg/L	77.968 ppb	09:21:51
3	Ba 233.527†	-17.5	13.5	0.3046 µg/L	0.3046 ppb	09:22:11
3	Be 313.107†	-1310.8	209.6	0.1272 µg/L	0.1272 ppb	09:21:51
3	Cd 226.502†	-175.7	3.0	0.0732 µg/L	0.0732 ppb	09:22:11
3	Co 228.616†	33.2	14.3	0.6271 µg/L	0.6271 ppb	09:22:11
3	Cr 267.716†	111.7	37.8	0.8449 µg/L	0.8449 ppb	09:21:51
3	Cu 324.752†	3656.7	88.2	0.5985 µg/L	0.5985 ppb	09:21:51
3	Mn 257.610†	-752.5	26.2	0.0826 µg/L	0.0826 ppb	09:21:51
3	Mo 202.031†	15.9	8.0	0.7906 µg/L	0.7906 ppb	09:22:11
3	Ni 231.604†	373.5	8.7	0.4930 µg/L	0.4930 ppb	09:22:11
3	P 214.914†	301.7	-3.6	-6.2594 µg/L	-6.2594 ppb	09:22:11
3	Pb 220.353†	57.0	1.2	0.3086 µg/L	0.3086 ppb	09:22:11
3	S 181.975 Axial†	18.6	-4.9	-15.526 µg/L	-15.526 ppb	09:22:11
3	Sb 206.836†	29.2	1.8	1.6233 µg/L	1.6233 ppb	09:22:11
3	Se 196.026†	22.2	1.8	1.7473 µg/L	1.7473 ppb	09:22:11
3	SiO2†	2428.0	105.8	20.001 µg/L	20.001 ppb	09:21:51
3	Si 251.611†	417.5	22.0	1.5610 µg/L	1.5610 ppb	09:22:11
3	Sn 189.927†	-4.2	-6.2	-2.4251 µg/L	-2.4251 ppb	09:22:11
3	Ti 334.940†	-551.9	127.7	0.3063 µg/L	0.3063 ppb	09:21:51
3	Tl 190.801†	-31.3	4.6	4.6421 µg/L	4.6421 ppb	09:22:11
3	U 409.014†	16.7	46.9	4.2065 µg/L	4.2065 ppb	09:21:51
3	V 292.402†	124.2	28.0	0.3537 µg/L	0.3537 ppb	09:21:51
3	Zn 213.857†	587.4	0.1	-0.0025 µg/L	-0.0025 ppb	09:22:11

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1910621.0	99.428 %	0.1980			0.20%
Sc RADIAL	99124.2	98.8 %	0.09			0.09%
Y 371.029	1333408.4	99.655 %	0.2433			0.24%
Ag 328.068†	-6.5	-0.0488 µg/L	0.47074	-0.0488 ppb	0.47074	963.77%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	22.9	10.815 µg/L	10.4461	10.815 ppb	10.4461	96.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.7	-2.5048 µg/L	6.14028	-2.5048 ppb	6.14028	245.14%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1694.7	80.806 µg/L	2.7608	80.806 ppb	2.7608	3.42%
QC value greater than the upper limit for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.7	0.1736 µg/L	0.13466	0.1736 ppb	0.13466	77.56%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	199.2	0.1210 µg/L	0.01574	0.1210 ppb	0.01574	13.01%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.4	-1.0944 µg/L	0.74058	-1.0944 ppb	0.74058	67.67%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	9.8	0.2386 µg/L	0.18966	0.2386 ppb	0.18966	79.48%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	12.0	0.5293 µg/L	0.18781	0.5293 ppb	0.18781	35.48%

Cr	267.716†	21.5	0.4817 µg/L	0.32438	0.4817 ppb	0.32438	67.34%
	QC value within limits	for Cr	267.716	Recovery =	Not calculated		
Cu	324.752†	76.3	0.5197 µg/L	0.07474	0.5197 ppb	0.07474	14.38%
	QC value within limits	for Cu	324.752	Recovery =	Not calculated		
Fe	238.204 Radial†	1.2	11.663 µg/L	14.4284	11.663 ppb	14.4284	123.72%
	QC value within limits	for Fe	238.204	Radial	Recovery =	Not calculated	
K	766.490 Radial†	17.4	8.5898 µg/L	22.21507	8.5898 ppb	22.21507	258.62%
	QC value within limits	for K	766.490	Radial	Recovery =	Not calculated	
Mg	279.077 IEC†	3.9	42.653 µg/L	17.8600	42.653 ppb	17.8600	41.87%
	QC value within limits	for Mg	279.077	IEC	Recovery =	Not calculated	
Mn	257.610†	43.5	0.1372 µg/L	0.08953	0.1372 ppb	0.08953	65.23%
	QC value within limits	for Mn	257.610	Recovery =	Not calculated		
Mo	202.031†	7.3	0.7210 µg/L	0.14421	0.7210 ppb	0.14421	20.00%
	QC value within limits	for Mo	202.031	Recovery =	Not calculated		
Na	589.592 Radial†	78.8	34.572 µg/L	12.8263	34.572 ppb	12.8263	37.10%
	QC value within limits	for Na	589.592	Radial	Recovery =	Not calculated	
Ni	231.604†	13.5	0.7693 µg/L	0.26895	0.7693 ppb	0.26895	34.96%
	QC value within limits	for Ni	231.604	Recovery =	Not calculated		
P	214.914†	-2.6	-4.4471 µg/L	4.81128	-4.4471 ppb	4.81128	108.19%
	QC value within limits	for P	214.914	Recovery =	Not calculated		
Pb	220.353†	0.2	0.0404 µg/L	0.63451	0.0404 ppb	0.63451	>999.9%
	QC value within limits	for Pb	220.353	Recovery =	Not calculated		
S	181.975 Axial†	-7.1	-22.732 µg/L	6.4811	-22.732 ppb	6.4811	28.51%
	QC value within limits	for S	181.975	Axial	Recovery =	Not calculated	
Sb	206.836†	0.3	0.3201 µg/L	1.60124	0.3201 ppb	1.60124	500.19%
	QC value within limits	for Sb	206.836	Recovery =	Not calculated		
Se	196.026†	0.9	0.8731 µg/L	5.43344	0.8731 ppb	5.43344	622.28%
	QC value within limits	for Se	196.026	Recovery =	Not calculated		
SiO2†		75.5	14.265 µg/L	5.8831	14.265 ppb	5.8831	41.24%
	QC value within limits	for SiO2		Recovery =	Not calculated		
Si	251.611†	15.1	1.0693 µg/L	0.59596	1.0693 ppb	0.59596	55.73%
	QC value within limits	for Si	251.611	Recovery =	Not calculated		
Sn	189.927†	-3.8	-1.4954 µg/L	0.90615	-1.4954 ppb	0.90615	60.60%
	QC value within limits	for Sn	189.927	Recovery =	Not calculated		
Sr	421.552†	-20.3	-0.1098 µg/L	0.13697	-0.1098 ppb	0.13697	124.80%
	QC value within limits	for Sr	421.552	Recovery =	Not calculated		
Ti	334.940†	64.9	0.1530 µg/L	0.13317	0.1530 ppb	0.13317	87.02%
	QC value within limits	for Ti	334.940	Recovery =	Not calculated		
Tl	190.801†	-0.5	-0.4744 µg/L	4.59697	-0.4744 ppb	4.59697	968.96%
	QC value within limits	for Tl	190.801	Recovery =	Not calculated		
U	409.014†	22.0	1.9696 µg/L	2.03162	1.9696 ppb	2.03162	103.15%
	QC value within limits	for U	409.014	Recovery =	Not calculated		
V	292.402†	41.5	0.5130 µg/L	0.29596	0.5130 ppb	0.29596	57.69%
	QC value within limits	for V	292.402	Recovery =	Not calculated		
Zn	213.857†	-3.5	-0.0875 µg/L	0.10240	-0.0875 ppb	0.10240	117.01%
	QC value within limits	for Zn	213.857	Recovery =	Not calculated		
QC Failed. Continue with analysis.							

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 09:46:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	101360.9	101360.9	101	%		09:47:06
1	Al 396.153Radial†	10632.6	10926.6	5149.8	µg/L	5149.8 ppb	09:47:06
1	Ca 317.933Radial†	16862.0	16305.6	5259.2	µg/L	5259.2 ppb	09:47:06
1	Fe 238.204 Radial†	551.5	532.2	5229.7	µg/L	5229.7 ppb	09:47:26
1	K 766.490 Radial†	10827.8	10395.5	5119.2	µg/L	5119.2 ppb	09:47:06
1	Mg 279.077 IEC†	501.1	486.7	5333.4	µg/L	5333.4 ppb	09:47:26
1	Na 589.592 Radial†	23741.5	23292.3	10218	µg/L	10218 ppb	09:47:06
1	Sr 421.552†	95577.3	94471.8	510.46	µg/L	510.46 ppb	09:47:06
1	Sc 361.383	1933437.6	1933437.6	100.62	%		09:48:26
1	Y 371.029	1342769.4	1342769.4	100.35	%		09:48:26
1	Ag 328.068†	62331.0	62517.7	517.36	µg/L	517.36 ppb	09:48:32
1	As 188.979†	360.0	361.0	539.01	µg/L	539.01 ppb	09:48:52
1	B 249.677†	12456.8	12024.1	571.51	µg/L	571.51 ppb	09:48:32
1	Ba 233.527†	23719.8	23605.9	532.06	µg/L	532.06 ppb	09:48:32
1	Be 313.107†	868265.4	864483.3	525.02	µg/L	525.02 ppb	09:48:26
1	Cd 226.502†	21883.0	21928.9	533.31	µg/L	533.31 ppb	09:48:32
1	Co 228.616†	12242.3	12148.3	533.28	µg/L	533.28 ppb	09:48:32
1	Cr 267.716†	24300.2	24077.0	538.62	µg/L	538.62 ppb	09:48:32
1	Cu 324.752†	81435.7	77348.5	525.25	µg/L	525.25 ppb	09:48:32
1	Mn 257.610†	168174.9	167929.4	538.49	µg/L	538.49 ppb	09:48:26
1	Mo 202.031†	5466.5	5425.1	536.39	µg/L	536.39 ppb	09:48:52
1	Ni 231.604†	9864.1	9436.9	535.62	µg/L	535.62 ppb	09:48:32
1	P 214.914†	1883.3	1564.8	2620.9	µg/L	2620.9 ppb	09:48:52
1	Pb 220.353†	2104.2	2035.2	538.13	µg/L	538.13 ppb	09:48:52
1	S 181.975 Axial†	351.5	325.8	1036.0	µg/L	1036.0 ppb	09:48:52
1	Sb 206.836†	616.6	585.3	531.60	µg/L	531.60 ppb	09:48:52
1	Se 196.026†	563.5	539.5	542.54	µg/L	542.54 ppb	09:48:52
1	SiO2†	31878.2	29347.3	5545.8	µg/L	5545.8 ppb	09:48:32
1	Si 251.611†	37231.4	36605.9	2591.7	µg/L	2591.7 ppb	09:48:32
1	Sn 189.927†	1387.4	1377.0	535.31	µg/L	535.31 ppb	09:48:52
1	Ti 334.940†	214453.9	213825.1	515.38	µg/L	515.38 ppb	09:48:26
1	Tl 190.801†	499.3	532.3	543.65	µg/L	543.65 ppb	09:48:52
1	U 409.014†	5862.5	5856.8	524.31	µg/L	524.31 ppb	09:48:32
1	V 292.402†	43935.7	43570.1	536.35	µg/L	536.35 ppb	09:48:32
1	Zn 213.857†	23691.8	22956.3	528.09	µg/L	528.09 ppb	09:48:32
2	Sc RADIAL	101623.4	101623.4	101	%		09:47:32
2	Al 396.153Radial†	10742.7	11008.1	5188.3	µg/L	5188.3 ppb	09:47:32
2	Ca 317.933Radial†	16985.2	16384.2	5284.5	µg/L	5284.5 ppb	09:47:32
2	Fe 238.204 Radial†	555.3	534.6	5253.1	µg/L	5253.1 ppb	09:47:52
2	K 766.490 Radial†	10891.4	10430.7	5136.5	µg/L	5136.5 ppb	09:47:32
2	Mg 279.077 IEC†	488.1	472.5	5178.3	µg/L	5178.3 ppb	09:47:52
2	Na 589.592 Radial†	23942.3	23429.9	10278	µg/L	10278 ppb	09:47:32
2	Sr 421.552†	96151.2	94794.2	512.20	µg/L	512.20 ppb	09:47:32
2	Sc 361.383	1938852.8	1938852.8	100.90	%		09:48:59
2	Y 371.029	1346342.3	1346342.3	100.62	%		09:48:59
2	Ag 328.068†	62061.0	62077.0	513.73	µg/L	513.73 ppb	09:49:04
2	As 188.979†	362.0	362.0	540.50	µg/L	540.50 ppb	09:49:24
2	B 249.677†	12382.4	11915.7	566.32	µg/L	566.32 ppb	09:49:04
2	Ba 233.527†	23620.0	23441.1	528.35	µg/L	528.35 ppb	09:49:04
2	Be 313.107†	872896.5	866663.0	526.34	µg/L	526.34 ppb	09:48:59
2	Cd 226.502†	21880.3	21865.4	531.77	µg/L	531.77 ppb	09:49:04
2	Co 228.616†	12172.4	12045.1	528.74	µg/L	528.74 ppb	09:49:04
2	Cr 267.716†	24179.9	23890.3	534.44	µg/L	534.44 ppb	09:49:04
2	Cu 324.752†	81146.8	76836.1	521.79	µg/L	521.79 ppb	09:49:04
2	Mn 257.610†	168796.5	168078.6	538.98	µg/L	538.98 ppb	09:48:59
2	Mo 202.031†	5465.3	5408.7	534.77	µg/L	534.77 ppb	09:49:24
2	Ni 231.604†	9835.0	9380.7	532.43	µg/L	532.43 ppb	09:49:04
2	P 214.914†	1887.3	1563.4	2618.9	µg/L	2618.9 ppb	09:49:24
2	Pb 220.353†	2101.5	2026.7	535.90	µg/L	535.90 ppb	09:49:24

2	S 181.975 Axial†	354.1	327.5	1041.3 µg/L	1041.3 ppb	09:49:24
2	Sb 206.836†	613.5	580.4	527.27 µg/L	527.27 ppb	09:49:24
2	Se 196.026†	564.6	539.0	542.25 µg/L	542.25 ppb	09:49:24
2	SiO2†	31811.9	29193.1	5516.7 µg/L	5516.7 ppb	09:49:04
2	Si 251.611†	37208.8	36480.2	2582.8 µg/L	2582.8 ppb	09:49:04
2	Sn 189.927†	1382.9	1368.7	532.02 µg/L	532.02 ppb	09:49:24
2	Ti 334.940†	215271.7	214040.4	515.92 µg/L	515.92 ppb	09:48:59
2	Tl 190.801†	486.7	518.5	529.70 µg/L	529.70 ppb	09:49:24
2	U 409.014†	5878.6	5856.5	524.29 µg/L	524.29 ppb	09:49:04
2	V 292.402†	43861.9	43375.0	533.95 µg/L	533.95 ppb	09:49:04
2	Zn 213.857†	23582.6	22782.3	524.08 µg/L	524.08 ppb	09:49:04
3	Sc RADIAL	101654.2	101654.2	101 %		09:47:57
3	Al 396.153Radial†	10668.2	10931.3	5153.3 µg/L	5153.3 ppb	09:47:57
3	Ca 317.933Radial†	16853.9	16249.6	5241.1 µg/L	5241.1 ppb	09:47:57
3	Fe 238.204 Radial†	553.3	532.5	5231.4 µg/L	5231.4 ppb	09:48:17
3	K 766.490 Radial†	10953.5	10488.6	5165.1 µg/L	5165.1 ppb	09:47:57
3	Mg 279.077 IEC†	495.5	479.7	5255.7 µg/L	5255.7 ppb	09:48:17
3	Na 589.592 Radial†	23759.9	23242.7	10196 µg/L	10196 ppb	09:47:57
3	Sr 421.552†	95540.9	94162.9	508.79 µg/L	508.79 ppb	09:47:57
3	Sc 361.383	1940053.0	1940053.0	100.96 %		09:49:31
3	Y 371.029	1347708.3	1347708.3	100.72 %		09:49:31
3	Ag 328.068†	60487.7	60480.7	500.43 µg/L	500.43 ppb	09:49:36
3	As 188.979†	330.2	330.2	493.00 µg/L	493.00 ppb	09:49:56
3	B 249.677†	12106.0	11634.3	552.86 µg/L	552.86 ppb	09:49:36
3	Ba 233.527†	22539.6	22356.5	503.89 µg/L	503.89 ppb	09:49:36
3	Be 313.107†	847022.6	840499.8	510.45 µg/L	510.45 ppb	09:49:31
3	Cd 226.502†	20930.1	20910.9	508.52 µg/L	508.52 ppb	09:49:36
3	Co 228.616†	11585.8	11456.6	502.85 µg/L	502.85 ppb	09:49:36
3	Cr 267.716†	22645.0	22355.2	500.10 µg/L	500.10 ppb	09:49:36
3	Cu 324.752†	77480.9	73155.3	496.83 µg/L	496.83 ppb	09:49:36
3	Mn 257.610†	163896.3	163121.5	523.08 µg/L	523.08 ppb	09:49:31
3	Mo 202.031†	4846.5	4792.5	473.87 µg/L	473.87 ppb	09:49:56
3	Ni 231.604†	9350.3	8894.6	504.84 µg/L	504.84 ppb	09:49:36
3	P 214.914†	1727.7	1404.3	2348.8 µg/L	2348.8 ppb	09:49:56
3	Pb 220.353†	1919.2	1844.9	487.77 µg/L	487.77 ppb	09:49:56
3	S 181.975 Axial†	328.7	302.1	960.62 µg/L	960.62 ppb	09:49:56
3	Sb 206.836†	560.5	527.6	478.92 µg/L	478.92 ppb	09:49:56
3	Se 196.026†	517.7	492.2	496.08 µg/L	496.08 ppb	09:49:56
3	SiO2†	30715.5	28087.6	5307.8 µg/L	5307.8 ppb	09:49:36
3	Si 251.611†	35758.6	35021.0	2479.4 µg/L	2479.4 ppb	09:49:36
3	Sn 189.927†	1203.3	1190.0	461.77 µg/L	461.77 ppb	09:49:56
3	Ti 334.940†	208504.8	207205.8	499.43 µg/L	499.43 ppb	09:49:31
3	Tl 190.801†	463.0	494.6	505.45 µg/L	505.45 ppb	09:49:56
3	U 409.014†	5485.7	5463.7	489.06 µg/L	489.06 ppb	09:49:36
3	V 292.402†	41595.9	41103.6	505.66 µg/L	505.66 ppb	09:49:36
3	Zn 213.857†	22434.6	21630.8	497.57 µg/L	497.57 ppb	09:49:36

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1937447.8	100.82 %	0.183			0.18%
Sc RADIAL	101546.2	101 %	0.2			0.16%
Y 371.029	1345606.7	100.57 %	0.191			0.19%
Ag 328.068†	61691.8	510.51 µg/L	8.912	510.51 ppb	8.912	1.75%
QC value within limits for Ag 328.068 Recovery = 102.10%						
Al 396.153Radial†	10955.4	5163.8 µg/L	21.30	5163.8 ppb	21.30	0.41%
QC value within limits for Al 396.153Radial Recovery = 103.28%						
As 188.979†	351.1	524.17 µg/L	27.002	524.17 ppb	27.002	5.15%
QC value within limits for As 188.979 Recovery = 104.83%						
B 249.677†	11858.0	563.57 µg/L	9.625	563.57 ppb	9.625	1.71%
QC value greater than the upper limit for B 249.677 Recovery = 112.71%						
Ba 233.527†	23134.5	521.43 µg/L	15.302	521.43 ppb	15.302	2.93%
QC value within limits for Ba 233.527 Recovery = 104.29%						
Be 313.107†	857215.4	520.60 µg/L	8.816	520.60 ppb	8.816	1.69%
QC value within limits for Be 313.107 Recovery = 104.12%						
Ca 317.933Radial†	16313.1	5261.6 µg/L	21.82	5261.6 ppb	21.82	0.41%
QC value within limits for Ca 317.933Radial Recovery = 105.23%						
Cd 226.502†	21568.4	524.53 µg/L	13.888	524.53 ppb	13.888	2.65%
QC value within limits for Cd 226.502 Recovery = 104.91%						
Co 228.616†	11883.3	521.62 µg/L	16.412	521.62 ppb	16.412	3.15%

Cr	267.716†	23440.9	524.39 µg/L	21.133	524.39 ppb	21.133	4.03%
Cu	324.752†	75780.0	514.62 µg/L	15.505	514.62 ppb	15.505	3.01%
Fe	238.204 Radial†	533.1	5238.1 µg/L	13.02	5238.1 ppb	13.02	0.25%
K	766.490 Radial†	10438.3	5140.2 µg/L	23.17	5140.2 ppb	23.17	0.45%
Mg	279.077 IEC†	479.7	5255.8 µg/L	77.59	5255.8 ppb	77.59	1.48%
Mn	257.610†	166376.5	533.52 µg/L	9.044	533.52 ppb	9.044	1.70%
Mo	202.031†	5208.8	515.01 µg/L	35.640	515.01 ppb	35.640	6.92%
Na	589.592 Radial†	23321.6	10230 µg/L	42.5	10230 ppb	42.5	0.42%
Ni	231.604†	9237.4	524.30 µg/L	16.924	524.30 ppb	16.924	3.23%
P	214.914†	1510.8	2529.5 µg/L	156.52	2529.5 ppb	156.52	6.19%
Pb	220.353†	1968.9	520.60 µg/L	28.453	520.60 ppb	28.453	5.47%
S	181.975 Axial†	318.4	1012.7 µg/L	45.15	1012.7 ppb	45.15	4.46%
Sb	206.836†	564.4	512.60 µg/L	29.244	512.60 ppb	29.244	5.71%
Se	196.026†	523.6	526.95 µg/L	26.742	526.95 ppb	26.742	5.07%
SiO2†		28876.0	5456.8 µg/L	129.84	5456.8 ppb	129.84	2.38%
Si	251.611†	36035.7	2551.3 µg/L	62.37	2551.3 ppb	62.37	2.44%
Sn	189.927†	1311.9	509.70 µg/L	41.540	509.70 ppb	41.540	8.15%
Sr	421.552†	94476.3	510.48 µg/L	1.706	510.48 ppb	1.706	0.33%
Ti	334.940†	211690.4	510.24 µg/L	9.371	510.24 ppb	9.371	1.84%
Tl	190.801†	515.1	526.27 µg/L	19.332	526.27 ppb	19.332	3.67%
U	409.014†	5725.7	512.55 µg/L	20.347	512.55 ppb	20.347	3.97%
V	292.402†	42682.9	525.32 µg/L	17.066	525.32 ppb	17.066	3.25%
Zn	213.857†	22456.5	516.58 µg/L	16.588	516.58 ppb	16.588	3.21%

QC value within limits for Co 228.616 Recovery = 104.32%  
 QC value within limits for Cr 267.716 Recovery = 104.88%  
 QC value within limits for Cu 324.752 Recovery = 102.92%  
 QC value within limits for Fe 238.204 Radial Recovery = 104.76%  
 QC value within limits for K 766.490 Radial Recovery = 102.80%  
 QC value within limits for Mg 279.077 IEC Recovery = 105.12%  
 QC value within limits for Mn 257.610 Recovery = 106.70%  
 QC value within limits for Mo 202.031 Recovery = 103.00%  
 QC value within limits for Na 589.592 Radial Recovery = 102.30%  
 QC value within limits for Ni 231.604 Recovery = 104.86%  
 QC value within limits for P 214.914 Recovery = 101.18%  
 QC value within limits for Pb 220.353 Recovery = 104.12%  
 QC value within limits for S 181.975 Axial Recovery = 101.27%  
 QC value within limits for Sb 206.836 Recovery = 102.52%  
 QC value within limits for Se 196.026 Recovery = 105.39%  
 QC value within limits for SiO2 Recovery = 102.04%  
 QC value within limits for Si 251.611 Recovery = 102.05%  
 QC value within limits for Sn 189.927 Recovery = 101.94%  
 QC value within limits for Sr 421.552 Recovery = 102.10%  
 QC value within limits for Ti 334.940 Recovery = 102.05%  
 QC value within limits for Tl 190.801 Recovery = 105.25%  
 QC value within limits for U 409.014 Recovery = 102.51%  
 QC value within limits for V 292.402 Recovery = 105.06%  
 QC value within limits for Zn 213.857 Recovery = 103.32%

QC Failed. Continue with analysis.

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 09:50:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	99806.2	99806.2	99.5 %		09:50:36
1	Al 396.153Radial†	-431.7	-33.7	-15.927 µg/L	-15.927 ppb	09:50:36
1	Ca 317.933Radial†	384.9	-0.6	-0.1873 µg/L	-0.1873 ppb	09:50:56
1	Fe 238.204 Radial†	15.1	1.4	14.002 µg/L	14.002 ppb	09:50:56
1	K 766.490 Radial†	303.2	-19.1	-9.4156 µg/L	-9.4156 ppb	09:50:36
1	Mg 279.077 IEC†	15.8	6.5	70.980 µg/L	70.980 ppb	09:50:56
1	Na 589.592 Radial†	438.9	229.7	100.75 µg/L	100.75 ppb	09:50:36
1	Sr 421.552†	222.2	74.3	0.4014 µg/L	0.4014 ppb	09:50:36
1	Sc 361.383	1926402.9	1926402.9	100.25 %		09:51:55
1	Y 371.029	1341150.0	1341150.0	100.23 %		09:51:55
1	Ag 328.068†	-466.2	102.8	0.8443 µg/L	0.8443 ppb	09:52:00
1	As 188.979†	-1.5	1.7	2.5770 µg/L	2.5770 ppb	09:52:20
1	B 249.677†	1417.2	1057.0	50.399 µg/L	50.399 ppb	09:52:20
1	Ba 233.527†	-22.2	9.0	0.2011 µg/L	0.2011 ppb	09:52:20
1	Be 313.107†	-1309.9	221.1	0.1343 µg/L	0.1343 ppb	09:52:00
1	Cd 226.502†	-175.9	4.2	0.1007 µg/L	0.1007 ppb	09:52:20
1	Co 228.616†	31.0	11.9	0.5221 µg/L	0.5221 ppb	09:52:20
1	Cr 267.716†	94.8	20.0	0.4480 µg/L	0.4480 ppb	09:52:20
1	Cu 324.752†	3583.5	-14.6	-0.0963 µg/L	-0.0963 ppb	09:52:00
1	Mn 257.610†	-750.2	34.6	0.1070 µg/L	0.1070 ppb	09:52:20
1	Mo 202.031†	19.3	11.2	1.1123 µg/L	1.1123 ppb	09:52:20
1	Ni 231.604†	376.9	9.0	0.5124 µg/L	0.5124 ppb	09:52:20
1	P 214.914†	301.7	-6.1	-10.434 µg/L	-10.434 ppb	09:52:20
1	Pb 220.353†	58.2	1.9	0.5068 µg/L	0.5068 ppb	09:52:20
1	S 181.975 Axial†	22.0	-1.6	-5.0680 µg/L	-5.0680 ppb	09:52:20
1	Sb 206.836†	35.0	7.3	6.6556 µg/L	6.6556 ppb	09:52:20
1	Se 196.026†	23.5	2.9	2.8574 µg/L	2.8574 ppb	09:52:20
1	SiO2†	2375.4	33.6	6.3457 µg/L	6.3457 ppb	09:52:20
1	Si 251.611†	422.5	23.7	1.6789 µg/L	1.6789 ppb	09:52:20
1	Sn 189.927†	0.3	-1.6	-0.6415 µg/L	-0.6415 ppb	09:52:20
1	Ti 334.940†	-597.2	87.0	0.2042 µg/L	0.2042 ppb	09:52:00
1	Tl 190.801†	-36.0	0.2	0.1942 µg/L	0.1942 ppb	09:52:20
1	U 409.014†	-79.6	-49.3	-4.4217 µg/L	-4.4217 ppb	09:52:00
1	V 292.402†	85.6	-11.5	-0.1378 µg/L	-0.1378 ppb	09:52:00
1	Zn 213.857†	591.3	-0.8	-0.0252 µg/L	-0.0252 ppb	09:52:20
2	Sc RADIAL	99591.7	99591.7	99.2 %		09:51:02
2	Al 396.153Radial†	-399.5	-2.1	-1.0262 µg/L	-1.0262 ppb	09:51:02
2	Ca 317.933Radial†	376.3	-8.4	-2.7145 µg/L	-2.7145 ppb	09:51:22
2	Fe 238.204 Radial†	14.1	0.4	4.3217 µg/L	4.3217 ppb	09:51:22
2	K 766.490 Radial†	344.7	23.3	11.495 µg/L	11.495 ppb	09:51:02
2	Mg 279.077 IEC†	4.7	-4.7	-51.005 µg/L	-51.005 ppb	09:51:22
2	Na 589.592 Radial†	412.9	204.4	89.674 µg/L	89.674 ppb	09:51:02
2	Sr 421.552†	180.5	32.8	0.1772 µg/L	0.1772 ppb	09:51:02
2	Sc 361.383	1938275.2	1938275.2	100.87 %		09:52:26
2	Y 371.029	1352777.6	1352777.6	101.10 %		09:52:26
2	Ag 328.068†	-569.5	3.2	0.0231 µg/L	0.0231 ppb	09:52:31
2	As 188.979†	-5.7	-2.5	-3.6988 µg/L	-3.6988 ppb	09:52:52
2	B 249.677†	1395.6	1027.1	48.974 µg/L	48.974 ppb	09:52:52
2	Ba 233.527†	-22.6	8.7	0.1945 µg/L	0.1945 ppb	09:52:52
2	Be 313.107†	-1319.8	219.4	0.1332 µg/L	0.1332 ppb	09:52:31
2	Cd 226.502†	-183.8	-2.5	-0.0617 µg/L	-0.0617 ppb	09:52:52
2	Co 228.616†	33.3	13.9	0.6129 µg/L	0.6129 ppb	09:52:52
2	Cr 267.716†	98.2	22.8	0.5090 µg/L	0.5090 ppb	09:52:52
2	Cu 324.752†	3557.3	-62.5	-0.4227 µg/L	-0.4227 ppb	09:52:31
2	Mn 257.610†	-756.0	33.4	0.1108 µg/L	0.1108 ppb	09:52:52
2	Mo 202.031†	14.3	6.2	0.6161 µg/L	0.6161 ppb	09:52:52
2	Ni 231.604†	370.1	0.1	0.0022 µg/L	0.0022 ppb	09:52:52
2	P 214.914†	305.7	-4.0	-6.7053 µg/L	-6.7053 ppb	09:52:52
2	Pb 220.353†	54.4	-2.2	-0.5726 µg/L	-0.5726 ppb	09:52:52

2	S 181.975 Axial†	22.0	-1.8	-5.6472 µg/L	-5.6472 ppb	09:52:52
2	Sb 206.836†	33.1	5.2	4.6834 µg/L	4.6834 ppb	09:52:52
2	Se 196.026†	20.0	-0.8	-0.6906 µg/L	-0.6906 ppb	09:52:52
2	SiO2†	2338.9	-17.2	-3.2422 µg/L	-3.2422 ppb	09:52:52
2	Si 251.611†	412.5	11.1	0.7881 µg/L	0.7881 ppb	09:52:52
2	Sn 189.927†	2.5	0.6	0.2084 µg/L	0.2084 ppb	09:52:52
2	Ti 334.940†	-570.9	116.8	0.2856 µg/L	0.2856 ppb	09:52:31
2	Tl 190.801†	-37.4	-1.0	-1.0202 µg/L	-1.0202 ppb	09:52:52
2	U 409.014†	-13.1	17.1	1.5351 µg/L	1.5351 ppb	09:52:31
2	V 292.402†	52.6	-44.8	-0.5396 µg/L	-0.5396 ppb	09:52:31
2	Zn 213.857†	587.2	-8.5	-0.1936 µg/L	-0.1936 ppb	09:52:52
3	Sc RADIAL	99874.9	99874.9	99.5 %		09:51:27
3	Al 396.153Radial†	-393.3	5.2	2.4443 µg/L	2.4443 ppb	09:51:27
3	Ca 317.933Radial†	376.5	-9.3	-2.9985 µg/L	-2.9985 ppb	09:51:47
3	Fe 238.204 Radial†	14.0	0.3	3.0348 µg/L	3.0348 ppb	09:51:47
3	K 766.490 Radial†	393.5	71.4	35.181 µg/L	35.181 ppb	09:51:27
3	Mg 279.077 IEC†	11.4	2.0	22.203 µg/L	22.203 ppb	09:51:47
3	Na 589.592 Radial†	387.8	178.0	78.076 µg/L	78.076 ppb	09:51:27
3	Sr 421.552†	171.5	23.2	0.1254 µg/L	0.1254 ppb	09:51:27
3	Sc 361.383	1928707.7	1928707.7	100.37 %		09:52:57
3	Y 371.029	1342985.1	1342985.1	100.37 %		09:52:57
3	Ag 328.068†	-647.3	-77.1	-0.6281 µg/L	-0.6281 ppb	09:53:03
3	As 188.979†	-3.2	0.0	0.0247 µg/L	0.0247 ppb	09:53:23
3	B 249.677†	1393.7	1031.9	49.207 µg/L	49.207 ppb	09:53:23
3	Ba 233.527†	-25.6	5.6	0.1277 µg/L	0.1277 ppb	09:53:23
3	Be 313.107†	-1430.8	102.2	0.0621 µg/L	0.0621 ppb	09:53:03
3	Cd 226.502†	-177.7	2.6	0.0637 µg/L	0.0637 ppb	09:53:23
3	Co 228.616†	28.1	8.9	0.3907 µg/L	0.3907 ppb	09:53:23
3	Cr 267.716†	74.8	-0.1	-0.0013 µg/L	-0.0013 ppb	09:53:23
3	Cu 324.752†	3617.1	14.6	0.0998 µg/L	0.0998 ppb	09:53:03
3	Mn 257.610†	-750.9	34.8	0.1102 µg/L	0.1102 ppb	09:53:23
3	Mo 202.031†	15.6	7.5	0.7429 µg/L	0.7429 ppb	09:53:23
3	Ni 231.604†	367.1	-1.2	-0.0670 µg/L	-0.0670 ppb	09:53:23
3	P 214.914†	302.8	-5.3	-9.1298 µg/L	-9.1298 ppb	09:53:23
3	Pb 220.353†	42.7	-13.6	-3.5934 µg/L	-3.5934 ppb	09:53:23
3	S 181.975 Axial†	18.6	-5.0	-15.775 µg/L	-15.775 ppb	09:53:23
3	Sb 206.836†	34.9	7.2	6.5112 µg/L	6.5112 ppb	09:53:23
3	Se 196.026†	21.8	1.2	1.1300 µg/L	1.1300 ppb	09:53:23
3	SiO2†	2354.6	10.1	1.8996 µg/L	1.8996 ppb	09:53:23
3	Si 251.611†	421.5	22.2	1.5698 µg/L	1.5698 ppb	09:53:23
3	Sn 189.927†	-0.2	-2.1	-0.8361 µg/L	-0.8361 ppb	09:53:23
3	Ti 334.940†	-661.2	23.9	0.0559 µg/L	0.0559 ppb	09:53:03
3	Tl 190.801†	-36.1	0.1	0.0640 µg/L	0.0640 ppb	09:53:23
3	U 409.014†	-11.5	18.7	1.6797 µg/L	1.6797 ppb	09:53:03
3	V 292.402†	156.1	58.7	0.7225 µg/L	0.7225 ppb	09:53:03
3	Zn 213.857†	584.0	-8.7	-0.2036 µg/L	-0.2036 ppb	09:53:23

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1931128.6	100.50 %	0.328			0.33%
Sc RADIAL	99757.6	99.4 %	0.15			0.15%
Y 371.029	1345637.6	100.57 %	0.467			0.46%
Ag 328.068†	9.6	0.0797 µg/L	0.73783	0.0797 ppb	0.73783	925.18%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.2	-4.8364 µg/L	9.76041	-4.8364 ppb	9.76041	201.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.3657 µg/L	3.15604	-0.3657 ppb	3.15604	863.01%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1038.7	49.527 µg/L	0.7643	49.527 ppb	0.7643	1.54%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.8	0.1744 µg/L	0.04062	0.1744 ppb	0.04062	23.29%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	180.9	0.1098 µg/L	0.04136	0.1098 ppb	0.04136	37.65%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-6.1	-1.9668 µg/L	1.54761	-1.9668 ppb	1.54761	78.69%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.4	0.0342 µg/L	0.08509	0.0342 ppb	0.08509	248.63%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	11.6	0.5086 µg/L	0.11172	0.5086 ppb	0.11172	21.97%



Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		14.2	0.3186 µg/L	0.27868	0.3186 ppb	0.27868 87.47%
		QC value within limits for Cr 267.716	Recovery = Not calculated			
Cu	324.752†	-20.8	-0.1397 µg/L	0.26394	-0.1397 ppb	0.26394 188.92%
		QC value within limits for Cu 324.752	Recovery = Not calculated			
Fe	238.204 Radial†	0.7	7.1196 µg/L	5.99530	7.1196 ppb	5.99530 84.21%
		QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
K	766.490 Radial†	25.2	12.420 µg/L	22.3126	12.420 ppb	22.3126 179.65%
		QC value within limits for K 766.490 Radial	Recovery = Not calculated			
Mg	279.077 IEC†	1.3	14.059 µg/L	61.3989	14.059 ppb	61.3989 436.71%
		QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
Mn	257.610†	34.3	0.1093 µg/L	0.00203	0.1093 ppb	0.00203 1.86%
		QC value within limits for Mn 257.610	Recovery = Not calculated			
Mo	202.031†	8.3	0.8238 µg/L	0.25778	0.8238 ppb	0.25778 31.29%
		QC value within limits for Mo 202.031	Recovery = Not calculated			
Na	589.592 Radial†	204.0	89.500 µg/L	11.3377	89.500 ppb	11.3377 12.67%
		QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
Ni	231.604†	2.6	0.1492 µg/L	0.31643	0.1492 ppb	0.31643 212.12%
		QC value within limits for Ni 231.604	Recovery = Not calculated			
P	214.914†	-5.1	-8.7564 µg/L	1.89226	-8.7564 ppb	1.89226 21.61%
		QC value within limits for P 214.914	Recovery = Not calculated			
Pb	220.353†	-4.6	-1.2198 µg/L	2.12530	-1.2198 ppb	2.12530 174.24%
		QC value within limits for Pb 220.353	Recovery = Not calculated			
S	181.975 Axial†	-2.8	-8.8302 µg/L	6.02173	-8.8302 ppb	6.02173 68.19%
		QC value within limits for S 181.975 Axial	Recovery = Not calculated			
Sb	206.836†	6.6	5.9501 µg/L	1.09936	5.9501 ppb	1.09936 18.48%
		QC value within limits for Sb 206.836	Recovery = Not calculated			
Se	196.026†	1.1	1.0990 µg/L	1.77422	1.0990 ppb	1.77422 161.45%
		QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†		8.8	1.6677 µg/L	4.79818	1.6677 ppb	4.79818 287.71%
		QC value within limits for SiO2	Recovery = Not calculated			
Si	251.611†	19.0	1.3456 µg/L	0.48588	1.3456 ppb	0.48588 36.11%
		QC value within limits for Si 251.611	Recovery = Not calculated			
Sn	189.927†	-1.1	-0.4231 µg/L	0.55545	-0.4231 ppb	0.55545 131.28%
		QC value within limits for Sn 189.927	Recovery = Not calculated			
Sr	421.552†	43.4	0.2347 µg/L	0.14674	0.2347 ppb	0.14674 62.53%
		QC value within limits for Sr 421.552	Recovery = Not calculated			
Ti	334.940†	75.9	0.1819 µg/L	0.11647	0.1819 ppb	0.11647 64.03%
		QC value within limits for Ti 334.940	Recovery = Not calculated			
Tl	190.801†	-0.3	-0.2540 µg/L	0.66672	-0.2540 ppb	0.66672 262.49%
		QC value within limits for Tl 190.801	Recovery = Not calculated			
U	409.014†	-4.5	-0.4023 µg/L	3.48167	-0.4023 ppb	3.48167 865.39%
		QC value within limits for U 409.014	Recovery = Not calculated			
V	292.402†	0.8	0.0150 µg/L	0.64480	0.0150 ppb	0.64480 >999.9%
		QC value within limits for V 292.402	Recovery = Not calculated			
Zn	213.857†	-6.0	-0.1408 µg/L	0.10021	-0.1408 ppb	0.10021 71.17%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 10:32:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	110095.6	110095.6	110 %		10:32:57
1	Al 396.153Radial†	11373.0	10766.3	5074.5 µg/L	5074.5 ppb	10:32:57
1	Ca 317.933Radial†	17458.0	15524.5	5007.2 µg/L	5007.2 ppb	10:32:57
1	Fe 238.204 Radial†	539.7	478.2	4699.2 µg/L	4699.2 ppb	10:33:17
1	K 766.490 Radial†	11855.3	10481.6	5161.6 µg/L	5161.6 ppb	10:32:57
1	Mg 279.077 IEC†	486.8	434.3	4760.0 µg/L	4760.0 ppb	10:33:17
1	Na 589.592 Radial†	40823.7	36997.2	16229 µg/L	16229 ppb	10:32:57
1	Sr 421.552†	103279.7	93985.2	507.83 µg/L	507.83 ppb	10:32:57
1	Sc 361.383	2002250.3	2002250.3	104.20 %		10:34:17
1	Y 371.029	1390314.5	1390314.5	103.91 %		10:34:17
1	Ag 328.068†	60598.2	58725.6	486.02 µg/L	486.02 ppb	10:34:22
1	As 188.979†	358.2	347.0	518.17 µg/L	518.17 ppb	10:34:42
1	B 249.677†	11473.8	10655.1	506.46 µg/L	506.46 ppb	10:34:22
1	Ba 233.527†	23364.2	22454.3	506.10 µg/L	506.10 ppb	10:34:22
1	Be 313.107†	862952.6	829726.7	503.91 µg/L	503.91 ppb	10:34:17
1	Cd 226.502†	21555.5	20867.0	507.52 µg/L	507.52 ppb	10:34:22
1	Co 228.616†	11963.8	11462.9	503.18 µg/L	503.18 ppb	10:34:22
1	Cr 267.716†	23844.2	22809.4	510.26 µg/L	510.26 ppb	10:34:22
1	Cu 324.752†	79675.6	72877.6	494.85 µg/L	494.85 ppb	10:34:22
1	Mn 257.610†	166400.3	160481.8	514.61 µg/L	514.61 ppb	10:34:17
1	Mo 202.031†	5409.5	5183.7	512.51 µg/L	512.51 ppb	10:34:42
1	Ni 231.604†	9676.2	8919.6	506.26 µg/L	506.26 ppb	10:34:22
1	P 214.914†	1883.6	1500.7	2514.8 µg/L	2514.8 ppb	10:34:42
1	Pb 220.353†	2073.2	1933.6	511.30 µg/L	511.30 ppb	10:34:42
1	S 181.975 Axial†	352.4	314.7	1000.6 µg/L	1000.6 ppb	10:34:42
1	Sb 206.836†	609.6	557.5	506.43 µg/L	506.43 ppb	10:34:42
1	Se 196.026†	551.5	508.7	511.00 µg/L	511.00 ppb	10:34:42
1	SiO2†	31363.2	27764.1	5246.7 µg/L	5246.7 ppb	10:34:22
1	Si 251.611†	36586.1	34714.9	2457.8 µg/L	2457.8 ppb	10:34:22
1	Sn 189.927†	1364.6	1307.7	508.68 µg/L	508.68 ppb	10:34:42
1	Ti 334.940†	213195.9	205292.6	494.85 µg/L	494.85 ppb	10:34:17
1	Tl 190.801†	487.3	503.8	514.60 µg/L	514.60 ppb	10:34:42
1	U 409.014†	5759.0	5557.2	497.53 µg/L	497.53 ppb	10:34:22
1	V 292.402†	43400.0	41555.2	511.60 µg/L	511.60 ppb	10:34:22
1	Zn 213.857†	23318.6	21788.9	501.28 µg/L	501.28 ppb	10:34:22
2	Sc RADIAL	109737.9	109737.9	109 %		10:33:22
2	Al 396.153Radial†	11356.8	10785.3	5083.5 µg/L	5083.5 ppb	10:33:22
2	Ca 317.933Radial†	17281.1	15414.6	4971.8 µg/L	4971.8 ppb	10:33:22
2	Fe 238.204 Radial†	534.5	475.0	4668.3 µg/L	4668.3 ppb	10:33:42
2	K 766.490 Radial†	11828.6	10492.4	5166.9 µg/L	5166.9 ppb	10:33:22
2	Mg 279.077 IEC†	486.4	435.3	4771.1 µg/L	4771.1 ppb	10:33:42
2	Na 589.592 Radial†	40269.1	36611.3	16060 µg/L	16060 ppb	10:33:22
2	Sr 421.552†	102522.9	93600.1	505.75 µg/L	505.75 ppb	10:33:22
2	Sc 361.383	2000016.4	2000016.4	104.08 %		10:34:49
2	Y 371.029	1388590.2	1388590.2	103.78 %		10:34:49
2	Ag 328.068†	60812.2	58996.1	488.24 µg/L	488.24 ppb	10:34:54
2	As 188.979†	359.7	348.8	520.89 µg/L	520.89 ppb	10:35:15
2	B 249.677†	11484.6	10677.8	507.57 µg/L	507.57 ppb	10:34:54
2	Ba 233.527†	23488.3	22598.7	509.35 µg/L	509.35 ppb	10:34:54
2	Be 313.107†	861456.9	829214.7	503.60 µg/L	503.60 ppb	10:34:49
2	Cd 226.502†	21638.4	20969.9	510.02 µg/L	510.02 ppb	10:34:54
2	Co 228.616†	11998.7	11509.2	505.21 µg/L	505.21 ppb	10:34:54
2	Cr 267.716†	23901.7	22890.2	512.07 µg/L	512.07 ppb	10:34:54
2	Cu 324.752†	79610.6	72900.6	495.00 µg/L	495.00 ppb	10:34:54
2	Mn 257.610†	165884.3	160164.4	513.59 µg/L	513.59 ppb	10:34:49
2	Mo 202.031†	5408.1	5188.1	512.95 µg/L	512.95 ppb	10:35:15
2	Ni 231.604†	9698.9	8951.8	508.08 µg/L	508.08 ppb	10:34:54
2	P 214.914†	1867.1	1486.8	2491.1 µg/L	2491.1 ppb	10:35:15
2	Pb 220.353†	2068.5	1931.3	510.70 µg/L	510.70 ppb	10:35:15

2	S 181.975 Axial†	348.4	311.2	989.56 µg/L	989.56 ppb	10:35:15
2	Sb 206.836†	605.5	554.1	503.39 µg/L	503.39 ppb	10:35:15
2	Se 196.026†	555.5	513.2	515.30 µg/L	515.30 ppb	10:35:15
2	SiO2†	31547.0	27974.4	5286.4 µg/L	5286.4 ppb	10:34:54
2	Si 251.611†	36770.6	34931.4	2473.1 µg/L	2473.1 ppb	10:34:54
2	Sn 189.927†	1371.1	1315.4	511.73 µg/L	511.73 ppb	10:35:15
2	Ti 334.940†	212811.9	205152.2	494.51 µg/L	494.51 ppb	10:34:49
2	Tl 190.801†	484.6	501.7	512.46 µg/L	512.46 ppb	10:35:15
2	U 409.014†	5709.6	5515.9	493.83 µg/L	493.83 ppb	10:34:54
2	V 292.402†	43452.4	41652.1	512.79 µg/L	512.79 ppb	10:34:54
2	Zn 213.857†	23358.1	21851.8	502.73 µg/L	502.73 ppb	10:34:54
3	Sc RADIAL	109653.9	109653.9	109 %		10:33:48
3	Al 396.153Radial†	11335.3	10773.6	5079.2 µg/L	5079.2 ppb	10:33:48
3	Ca 317.933Radial†	17155.9	15312.1	4938.7 µg/L	4938.7 ppb	10:33:48
3	Fe 238.204 Radial†	535.7	476.5	4682.0 µg/L	4682.0 ppb	10:34:08
3	K 766.490 Radial†	11790.0	10465.3	5153.6 µg/L	5153.6 ppb	10:33:48
3	Mg 279.077 IEC†	481.8	431.5	4728.0 µg/L	4728.0 ppb	10:34:08
3	Na 589.592 Radial†	39787.4	36198.7	15879 µg/L	15879 ppb	10:33:48
3	Sr 421.552†	102101.7	93286.5	504.05 µg/L	504.05 ppb	10:33:48
3	Sc 361.383	2004439.6	2004439.6	104.31 %		10:35:21
3	Y 371.029	1390651.2	1390651.2	103.93 %		10:35:21
3	Ag 328.068†	59108.2	57233.6	473.59 µg/L	473.59 ppb	10:35:27
3	As 188.979†	322.5	312.4	466.41 µg/L	466.41 ppb	10:35:47
3	B 249.677†	11137.7	10320.9	490.49 µg/L	490.49 ppb	10:35:27
3	Ba 233.527†	22557.9	21656.9	488.12 µg/L	488.12 ppb	10:35:27
3	Be 313.107†	837756.5	804667.1	488.69 µg/L	488.69 ppb	10:35:21
3	Cd 226.502†	20678.9	20004.1	486.50 µg/L	486.50 ppb	10:35:27
3	Co 228.616†	11453.5	10961.2	481.11 µg/L	481.11 ppb	10:35:27
3	Cr 267.716†	22433.3	21431.8	479.45 µg/L	479.45 ppb	10:35:27
3	Cu 324.752†	76170.7	69434.1	471.51 µg/L	471.51 ppb	10:35:27
3	Mn 257.610†	161556.5	155663.8	499.16 µg/L	499.16 ppb	10:35:21
3	Mo 202.031†	4802.7	4596.2	454.45 µg/L	454.45 ppb	10:35:47
3	Ni 231.604†	9190.9	8444.3	479.28 µg/L	479.28 ppb	10:35:27
3	P 214.914†	1732.6	1353.9	2265.7 µg/L	2265.7 ppb	10:35:47
3	Pb 220.353†	1900.2	1765.6	466.83 µg/L	466.83 ppb	10:35:47
3	S 181.975 Axial†	325.1	288.1	916.32 µg/L	916.32 ppb	10:35:47
3	Sb 206.836†	552.8	502.3	455.98 µg/L	455.98 ppb	10:35:47
3	Se 196.026†	514.3	472.5	475.35 µg/L	475.35 ppb	10:35:47
3	SiO2†	30512.3	26915.6	5086.3 µg/L	5086.3 ppb	10:35:27
3	Si 251.611†	35539.2	33672.9	2384.0 µg/L	2384.0 ppb	10:35:27
3	Sn 189.927†	1195.5	1144.2	444.41 µg/L	444.41 ppb	10:35:47
3	Ti 334.940†	206358.5	198514.3	478.50 µg/L	478.50 ppb	10:35:21
3	Tl 190.801†	446.9	464.5	474.74 µg/L	474.74 ppb	10:35:47
3	U 409.014†	5457.9	5262.5	471.10 µg/L	471.10 ppb	10:35:27
3	V 292.402†	41194.7	39395.6	484.72 µg/L	484.72 ppb	10:35:27
3	Zn 213.857†	22247.0	20737.1	477.07 µg/L	477.07 ppb	10:35:27

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2002235.4	104.20 %	0.115			0.11%
Sc RADIAL	109829.2	109 %	0.2			0.21%
Y 371.029	1389852.0	103.87 %	0.083			0.08%
Ag 328.068†	58318.5	482.61 µg/L	7.897	482.61 ppb	7.897	1.64%
QC value within limits for Ag 328.068 Recovery = 96.52%						
Al 396.153Radial†	10775.0	5079.1 µg/L	4.48	5079.1 ppb	4.48	0.09%
QC value within limits for Al 396.153Radial Recovery = 101.58%						
As 188.979†	336.1	501.82 µg/L	30.701	501.82 ppb	30.701	6.12%
QC value within limits for As 188.979 Recovery = 100.36%						
B 249.677†	10551.3	501.51 µg/L	9.559	501.51 ppb	9.559	1.91%
QC value within limits for B 249.677 Recovery = 100.30%						
Ba 233.527†	22236.6	501.19 µg/L	11.440	501.19 ppb	11.440	2.28%
QC value within limits for Ba 233.527 Recovery = 100.24%						
Be 313.107†	821202.8	498.73 µg/L	8.698	498.73 ppb	8.698	1.74%
QC value within limits for Be 313.107 Recovery = 99.75%						
Ca 317.933Radial†	15417.1	4972.6 µg/L	34.25	4972.6 ppb	34.25	0.69%
QC value within limits for Ca 317.933Radial Recovery = 99.45%						
Cd 226.502†	20613.6	501.35 µg/L	12.917	501.35 ppb	12.917	2.58%
QC value within limits for Cd 226.502 Recovery = 100.27%						
Co 228.616†	11311.1	496.50 µg/L	13.367	496.50 ppb	13.367	2.69%

QC value within limits for Co 228.616 Recovery = 99.30%					
Cr 267.716†	22377.1	500.59 µg/L	18.335	500.59 ppb	18.335 3.66%
QC value within limits for Cr 267.716 Recovery = 100.12%					
Cu 324.752†	71737.4	487.12 µg/L	13.521	487.12 ppb	13.521 2.78%
QC value within limits for Cu 324.752 Recovery = 97.42%					
Fe 238.204 Radial†	476.6	4683.2 µg/L	15.48	4683.2 ppb	15.48 0.33%
QC value within limits for Fe 238.204 Radial Recovery = 93.66%					
K 766.490 Radial†	10479.8	5160.7 µg/L	6.71	5160.7 ppb	6.71 0.13%
QC value within limits for K 766.490 Radial Recovery = 103.21%					
Mg 279.077 IEC†	433.7	4753.0 µg/L	22.34	4753.0 ppb	22.34 0.47%
QC value within limits for Mg 279.077 IEC Recovery = 95.06%					
Mn 257.610†	158770.0	509.12 µg/L	8.641	509.12 ppb	8.641 1.70%
QC value within limits for Mn 257.610 Recovery = 101.82%					
Mo 202.031†	4989.4	493.30 µg/L	33.649	493.30 ppb	33.649 6.82%
QC value within limits for Mo 202.031 Recovery = 98.66%					
Na 589.592 Radial†	36602.4	16056 µg/L	175.2	16056 ppb	175.2 1.09%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 160.56%					
Ni 231.604†	8771.9	497.87 µg/L	16.131	497.87 ppb	16.131 3.24%
QC value within limits for Ni 231.604 Recovery = 99.57%					
P 214.914†	1447.2	2423.8 µg/L	137.47	2423.8 ppb	137.47 5.67%
QC value within limits for P 214.914 Recovery = 96.95%					
Pb 220.353†	1876.8	496.28 µg/L	25.506	496.28 ppb	25.506 5.14%
QC value within limits for Pb 220.353 Recovery = 99.26%					
S 181.975 Axial†	304.7	968.84 µg/L	45.823	968.84 ppb	45.823 4.73%
QC value within limits for S 181.975 Axial Recovery = 96.88%					
Sb 206.836†	538.0	488.60 µg/L	28.291	488.60 ppb	28.291 5.79%
QC value within limits for Sb 206.836 Recovery = 97.72%					
Se 196.026†	498.1	500.55 µg/L	21.929	500.55 ppb	21.929 4.38%
QC value within limits for Se 196.026 Recovery = 100.11%					
SiO2†	27551.4	5206.5 µg/L	105.93	5206.5 ppb	105.93 2.03%
QC value within limits for SiO2 Recovery = 97.36%					
Si 251.611†	34439.7	2438.3 µg/L	47.64	2438.3 ppb	47.64 1.95%
QC value within limits for Si 251.611 Recovery = 97.53%					
Sn 189.927†	1255.8	488.27 µg/L	38.018	488.27 ppb	38.018 7.79%
QC value within limits for Sn 189.927 Recovery = 97.65%					
Sr 421.552†	93623.9	505.88 µg/L	1.891	505.88 ppb	1.891 0.37%
QC value within limits for Sr 421.552 Recovery = 101.18%					
Ti 334.940†	202986.3	489.28 µg/L	9.341	489.28 ppb	9.341 1.91%
QC value within limits for Ti 334.940 Recovery = 97.86%					
Tl 190.801†	490.0	500.60 µg/L	22.421	500.60 ppb	22.421 4.48%
QC value within limits for Tl 190.801 Recovery = 100.12%					
U 409.014†	5445.2	487.49 µg/L	14.310	487.49 ppb	14.310 2.94%
QC value within limits for U 409.014 Recovery = 97.50%					
V 292.402†	40867.7	503.04 µg/L	15.876	503.04 ppb	15.876 3.16%
QC value within limits for V 292.402 Recovery = 100.61%					
Zn 213.857†	21459.3	493.69 µg/L	14.413	493.69 ppb	14.413 2.92%
QC value within limits for Zn 213.857 Recovery = 98.74%					
QC Failed. Continue with analysis.					

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

Autosampler Location: 8  
 Date Collected: 3/5/2010 10:35:56  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	107177.0	107177.0	107 %		10:36:28
1	Al 396.153Radial†	-391.4	33.9	15.999 µg/L	15.999 ppb	10:36:28
1	Ca 317.933Radial†	548.4	125.9	40.597 µg/L	40.597 ppb	10:36:48
1	Fe 238.204 Radial†	15.4	0.6	6.2088 µg/L	6.2088 ppb	10:36:48
1	K 766.490 Radial†	451.3	98.5	48.529 µg/L	48.529 ppb	10:36:28
1	Mg 279.077 IEC†	10.6	0.6	6.1667 µg/L	6.1667 ppb	10:36:48
1	Na 589.592 Radial†	13442.6	12374.3	5428.2 µg/L	5428.2 ppb	10:36:28
1	Sr 421.552†	1237.3	1009.3	5.4536 µg/L	5.4536 ppb	10:36:28
1	Sc 361.383	2004827.3	2004827.3	104.33 %		10:37:46
1	Y 371.029	1397318.3	1397318.3	104.43 %		10:37:46
1	Ag 328.068†	-539.0	51.3	0.4218 µg/L	0.4218 ppb	10:37:52
1	As 188.979†	-1.3	1.9	2.8996 µg/L	2.8996 ppb	10:38:12
1	B 249.677†	676.0	291.4	13.892 µg/L	13.892 ppb	10:37:52
1	Ba 233.527†	93.8	121.0	2.7214 µg/L	2.7214 ppb	10:38:12
1	Be 313.107†	-1394.2	191.4	0.1162 µg/L	0.1162 ppb	10:37:52
1	Cd 226.502†	-179.2	7.9	0.1908 µg/L	0.1908 ppb	10:38:12
1	Co 228.616†	28.4	8.1	0.3557 µg/L	0.3557 ppb	10:38:12
1	Cr 267.716†	90.4	12.1	0.2695 µg/L	0.2695 ppb	10:37:52
1	Cu 324.752†	3667.8	-73.6	-0.4977 µg/L	-0.4977 ppb	10:37:52
1	Mn 257.610†	-638.6	170.8	0.5478 µg/L	0.5478 ppb	10:37:52
1	Mo 202.031†	17.1	8.4	0.8287 µg/L	0.8287 ppb	10:38:12
1	Ni 231.604†	385.7	2.8	0.1602 µg/L	0.1602 ppb	10:38:12
1	P 214.914†	300.4	-19.1	-32.605 µg/L	-32.605 ppb	10:38:12
1	Pb 220.353†	57.0	-1.5	-0.3983 µg/L	-0.3983 ppb	10:38:12
1	S 181.975 Axial†	22.7	-1.8	-5.6606 µg/L	-5.6606 ppb	10:38:12
1	Sb 206.836†	28.7	-0.1	-0.0884 µg/L	-0.0884 ppb	10:38:12
1	Se 196.026†	33.5	11.6	11.379 µg/L	11.379 ppb	10:38:12
1	SiO2†	2385.4	-49.6	-9.3679 µg/L	-9.3679 ppb	10:37:52
1	Si 251.611†	421.9	6.6	0.4680 µg/L	0.4680 ppb	10:38:12
1	Sn 189.927†	-5.1	-6.8	-2.6822 µg/L	-2.6822 ppb	10:38:12
1	Ti 334.940†	-636.7	72.5	0.1750 µg/L	0.1750 ppb	10:37:52
1	Tl 190.801†	-34.8	2.7	2.7593 µg/L	2.7593 ppb	10:38:12
1	U 409.014†	64.0	91.5	8.2077 µg/L	8.2077 ppb	10:37:52
1	V 292.402†	103.9	2.7	0.0469 µg/L	0.0469 ppb	10:37:52
1	Zn 213.857†	589.4	-25.7	-0.5957 µg/L	-0.5957 ppb	10:38:12
2	Sc RADIAL	108122.1	108122.1	108 %		10:36:53
2	Al 396.153Radial†	-444.2	-11.9	-5.6269 µg/L	-5.6269 ppb	10:36:53
2	Ca 317.933Radial†	537.0	110.8	35.735 µg/L	35.735 ppb	10:37:13
2	Fe 238.204 Radial†	13.6	-1.2	-11.345 µg/L	-11.345 ppb	10:37:13
2	K 766.490 Radial†	460.4	103.4	50.902 µg/L	50.902 ppb	10:36:53
2	Mg 279.077 IEC†	11.1	0.9	9.9919 µg/L	9.9919 ppb	10:37:13
2	Na 589.592 Radial†	13141.2	11984.5	5257.2 µg/L	5257.2 ppb	10:36:53
2	Sr 421.552†	1166.7	933.6	5.0447 µg/L	5.0447 ppb	10:36:53
2	Sc 361.383	2009302.3	2009302.3	104.56 %		10:38:18
2	Y 371.029	1400439.5	1400439.5	104.66 %		10:38:18
2	Ag 328.068†	-581.3	11.9	0.0946 µg/L	0.0946 ppb	10:38:23
2	As 188.979†	-3.6	-0.3	-0.4363 µg/L	-0.4363 ppb	10:38:43
2	B 249.677†	637.5	253.1	12.073 µg/L	12.073 ppb	10:38:23
2	Ba 233.527†	59.3	87.8	1.9747 µg/L	1.9747 ppb	10:38:43
2	Be 313.107†	-1344.1	242.3	0.1471 µg/L	0.1471 ppb	10:38:23
2	Cd 226.502†	-184.8	2.9	0.0709 µg/L	0.0709 ppb	10:38:43
2	Co 228.616†	23.2	3.1	0.1365 µg/L	0.1365 ppb	10:38:43
2	Cr 267.716†	46.4	-30.2	-0.6750 µg/L	-0.6750 ppb	10:38:23
2	Cu 324.752†	3581.8	-163.7	-1.1117 µg/L	-1.1117 ppb	10:38:23
2	Mn 257.610†	-667.2	144.8	0.4632 µg/L	0.4632 ppb	10:38:23
2	Mo 202.031†	10.5	2.1	0.2069 µg/L	0.2069 ppb	10:38:43
2	Ni 231.604†	372.2	-10.9	-0.6206 µg/L	-0.6206 ppb	10:38:43
2	P 214.914†	303.6	-16.7	-28.352 µg/L	-28.352 ppb	10:38:43
2	Pb 220.353†	63.2	4.4	1.1462 µg/L	1.1462 ppb	10:38:43

2	S 181.975 Axial†	26.1	1.5	4.6171 µg/L	4.6171 ppb	10:38:43
2	Sb 206.836†	32.7	3.7	3.3327 µg/L	3.3327 ppb	10:38:43
2	Se 196.026†	19.4	-2.0	-2.0167 µg/L	-2.0167 ppb	10:38:43
2	SiO2†	2370.7	-68.7	-12.980 µg/L	-12.980 ppb	10:38:23
2	Si 251.611†	421.5	5.4	0.3801 µg/L	0.3801 ppb	10:38:43
2	Sn 189.927†	-2.2	-4.0	-1.5562 µg/L	-1.5562 ppb	10:38:43
2	Ti 334.940†	-593.6	115.1	0.2773 µg/L	0.2773 ppb	10:38:23
2	Tl 190.801†	-35.7	1.9	1.9621 µg/L	1.9621 ppb	10:38:43
2	U 409.014†	40.1	68.5	6.1458 µg/L	6.1458 ppb	10:38:23
2	V 292.402†	68.7	-31.2	-0.3722 µg/L	-0.3722 ppb	10:38:23
2	Zn 213.857†	591.8	-24.7	-0.5668 µg/L	-0.5668 ppb	10:38:43
3	Sc RADIAL	108074.1	108074.1	108 %		10:37:18
3	Al 396.153Radial†	-407.4	22.1	10.456 µg/L	10.456 ppb	10:37:18
3	Ca 317.933Radial†	574.1	145.5	46.913 µg/L	46.913 ppb	10:37:39
3	Fe 238.204 Radial†	16.7	1.8	17.517 µg/L	17.517 ppb	10:37:39
3	K 766.490 Radial†	419.0	65.0	32.028 µg/L	32.028 ppb	10:37:18
3	Mg 279.077 IEC†	11.3	1.1	12.116 µg/L	12.116 ppb	10:37:39
3	Na 589.592 Radial†	12983.9	11843.9	5195.5 µg/L	5195.5 ppb	10:37:18
3	Sr 421.552†	1282.0	1041.2	5.6260 µg/L	5.6260 ppb	10:37:18
3	Sc 361.383	2001523.7	2001523.7	104.16 %		10:38:49
3	Y 371.029	1395260.6	1395260.6	104.28 %		10:38:49
3	Ag 328.068†	-570.2	20.4	0.1670 µg/L	0.1670 ppb	10:38:54
3	As 188.979†	-8.7	-5.2	-7.7600 µg/L	-7.7600 ppb	10:39:14
3	B 249.677†	660.9	277.9	13.246 µg/L	13.246 ppb	10:38:54
3	Ba 233.527†	57.2	86.0	1.9346 µg/L	1.9346 ppb	10:39:14
3	Be 313.107†	-1340.7	240.6	0.1461 µg/L	0.1461 ppb	10:38:54
3	Cd 226.502†	-180.4	6.5	0.1554 µg/L	0.1554 ppb	10:39:14
3	Co 228.616†	26.1	6.0	0.2636 µg/L	0.2636 ppb	10:39:14
3	Cr 267.716†	99.1	20.6	0.4592 µg/L	0.4592 ppb	10:38:54
3	Cu 324.752†	3603.0	-130.1	-0.8783 µg/L	-0.8783 ppb	10:38:54
3	Mn 257.610†	-651.9	157.1	0.5041 µg/L	0.5041 ppb	10:38:54
3	Mo 202.031†	10.5	2.1	0.2073 µg/L	0.2073 ppb	10:39:14
3	Ni 231.604†	374.9	-7.0	-0.3962 µg/L	-0.3962 ppb	10:39:14
3	P 214.914†	306.4	-12.9	-21.892 µg/L	-21.892 ppb	10:39:14
3	Pb 220.353†	49.9	-8.2	-2.1592 µg/L	-2.1592 ppb	10:39:14
3	S 181.975 Axial†	24.1	-0.4	-1.3592 µg/L	-1.3592 ppb	10:39:14
3	Sb 206.836†	28.1	-0.6	-0.5749 µg/L	-0.5749 ppb	10:39:14
3	Se 196.026†	31.2	9.4	9.2521 µg/L	9.2521 ppb	10:39:14
3	SiO2†	2393.0	-38.4	-7.2638 µg/L	-7.2638 ppb	10:38:54
3	Si 251.611†	421.1	6.5	0.4585 µg/L	0.4585 ppb	10:39:14
3	Sn 189.927†	-1.6	-3.5	-1.3997 µg/L	-1.3997 ppb	10:39:14
3	Ti 334.940†	-623.7	83.9	0.2023 µg/L	0.2023 ppb	10:38:54
3	Tl 190.801†	-37.1	0.4	0.4342 µg/L	0.4342 ppb	10:39:14
3	U 409.014†	4.4	34.4	3.0764 µg/L	3.0764 ppb	10:38:54
3	V 292.402†	71.6	-28.2	-0.3409 µg/L	-0.3409 ppb	10:38:54
3	Zn 213.857†	602.6	-12.1	-0.2785 µg/L	-0.2785 ppb	10:39:14

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2005217.8	104.35 %	0.203			0.19%
Sc RADIAL	107791.1	107 %	0.5			0.49%
Y 371.029	1397672.8	104.46 %	0.195			0.19%
Ag 328.068†	27.9	0.2278 µg/L	0.17188	0.2278 ppb	0.17188	75.46%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	14.7	6.9427 µg/L	11.23283	6.9427 ppb	11.23283	161.79%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.2	-1.7656 µg/L	5.45269	-1.7656 ppb	5.45269	308.83%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	274.1	13.070 µg/L	0.9222	13.070 ppb	0.9222	7.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	98.3	2.2102 µg/L	0.44312	2.2102 ppb	0.44312	20.05%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	224.8	0.1365 µg/L	0.01754	0.1365 ppb	0.01754	12.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	127.4	41.082 µg/L	5.6048	41.082 ppb	5.6048	13.64%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.7	0.1390 µg/L	0.06160	0.1390 ppb	0.06160	44.31%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.7	0.2520 µg/L	0.11006	0.2520 ppb	0.11006	43.68%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.8	0.0179 µg/L	0.60754	0.0179 ppb	0.60754	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-122.5	-0.8292 µg/L	0.30994	-0.8292 ppb	0.30994	37.38%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.4	4.1270 µg/L	14.54284	4.1270 ppb	14.54284	352.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	89.0	43.820 µg/L	10.2805	43.820 ppb	10.2805	23.46%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.9	9.4248 µg/L	3.01474	9.4248 ppb	3.01474	31.99%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	157.6	0.5050 µg/L	0.04231	0.5050 ppb	0.04231	8.38%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.2	0.4143 µg/L	0.35888	0.4143 ppb	0.35888	86.62%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	12067.6	5293.7 µg/L	120.54	5293.7 ppb	120.54	2.28%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-5.0	-0.2855 µg/L	0.40199	-0.2855 ppb	0.40199	140.79%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-16.2	-27.616 µg/L	5.3939	-27.616 ppb	5.3939	19.53%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.8	-0.4704 µg/L	1.65386	-0.4704 ppb	1.65386	351.55%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.3	-0.8009 µg/L	5.16156	-0.8009 ppb	5.16156	644.47%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.0	0.8898 µg/L	2.12956	0.8898 ppb	2.12956	239.34%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.3	6.2047 µg/L	7.19899	6.2047 ppb	7.19899	116.02%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	-52.2	-9.8705 µg/L	2.89105	-9.8705 ppb	2.89105	29.29%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	6.2	0.4355 µg/L	0.04825	0.4355 ppb	0.04825	11.08%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-4.8	-1.8794 µg/L	0.69966	-1.8794 ppb	0.69966	37.23%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	994.7	5.3748 µg/L	0.29853	5.3748 ppb	0.29853	5.55%
QC value greater than the upper limit for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	90.5	0.2182 µg/L	0.05295	0.2182 ppb	0.05295	24.27%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.7	1.7185 µg/L	1.18151	1.7185 ppb	1.18151	68.75%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	64.8	5.8100 µg/L	2.58207	5.8100 ppb	2.58207	44.44%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-18.9	-0.2220 µg/L	0.23342	-0.2220 ppb	0.23342	105.12%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-20.8	-0.4803 µg/L	0.17539	-0.4803 ppb	0.17539	36.52%
QC value within limits for Zn 213.857 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 11:11:51

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	107138.0	107138.0	107 %		11:12:29
1	Al 396.153Radial†	11112.4	10808.4	5094.2 µg/L	5094.2 ppb	11:12:29
1	Ca 317.933Radial†	17099.6	15628.1	5040.6 µg/L	5040.6 ppb	11:12:29
1	Fe 238.204 Radial†	548.8	500.3	4916.1 µg/L	4916.1 ppb	11:12:49
1	K 766.490 Radial†	11976.4	10893.2	5364.3 µg/L	5364.3 ppb	11:12:29
1	Mg 279.077 IEC†	491.6	451.1	4943.0 µg/L	4943.0 ppb	11:12:49
1	Na 589.592 Radial†	34863.8	32442.3	14231 µg/L	14231 ppb	11:12:29
1	Sr 421.552†	101511.8	94928.1	512.92 µg/L	512.92 ppb	11:12:29
1	Sc 361.383	1986282.6	1986282.6	103.37 %		11:13:49
1	Y 371.029	1379973.9	1379973.9	103.14 %		11:13:49
1	Ag 328.068†	61415.9	59984.2	496.44 µg/L	496.44 ppb	11:13:54
1	As 188.979†	359.3	350.8	523.84 µg/L	523.84 ppb	11:14:14
1	B 249.677†	11456.4	10726.8	509.79 µg/L	509.79 ppb	11:13:54
1	Ba 233.527†	23697.3	22956.8	517.43 µg/L	517.43 ppb	11:13:54
1	Be 313.107†	866342.4	839664.0	509.94 µg/L	509.94 ppb	11:13:49
1	Cd 226.502†	21967.7	21432.2	521.25 µg/L	521.25 ppb	11:13:54
1	Co 228.616†	12140.7	11726.3	514.75 µg/L	514.75 ppb	11:13:54
1	Cr 267.716†	24329.0	23462.3	524.86 µg/L	524.86 ppb	11:13:54
1	Cu 324.752†	80516.7	74306.1	504.57 µg/L	504.57 ppb	11:13:54
1	Mn 257.610†	167097.5	162440.1	520.90 µg/L	520.90 ppb	11:13:49
1	Mo 202.031†	5476.5	5290.2	523.05 µg/L	523.05 ppb	11:14:14
1	Ni 231.604†	9791.9	9106.2	516.85 µg/L	516.85 ppb	11:13:54
1	P 214.914†	1887.5	1519.0	2544.9 µg/L	2544.9 ppb	11:14:14
1	Pb 220.353†	2082.6	1958.7	517.94 µg/L	517.94 ppb	11:14:14
1	S 181.975 Axial†	352.0	317.0	1008.0 µg/L	1008.0 ppb	11:14:14
1	Sb 206.836†	610.6	563.1	511.56 µg/L	511.56 ppb	11:14:14
1	Se 196.026†	568.1	529.1	531.60 µg/L	531.60 ppb	11:14:14
1	SiO2†	31687.7	28320.1	5351.7 µg/L	5351.7 ppb	11:13:54
1	Si 251.611†	37065.8	35461.2	2510.6 µg/L	2510.6 ppb	11:13:54
1	Sn 189.927†	1382.9	1336.0	519.54 µg/L	519.54 ppb	11:14:14
1	Ti 334.940†	213808.3	207529.9	500.23 µg/L	500.23 ppb	11:13:49
1	Tl 190.801†	489.7	509.8	520.75 µg/L	520.75 ppb	11:14:14
1	U 409.014†	5806.6	5647.7	505.62 µg/L	505.62 ppb	11:13:54
1	V 292.402†	44008.0	42478.3	522.94 µg/L	522.94 ppb	11:13:54
1	Zn 213.857†	23580.4	22222.1	511.23 µg/L	511.23 ppb	11:13:54
2	Sc RADIAL	106519.7	106519.7	106 %		11:12:54
2	Al 396.153Radial†	11050.4	10810.4	5095.2 µg/L	5095.2 ppb	11:12:54
2	Ca 317.933Radial†	16993.7	15621.2	5038.4 µg/L	5038.4 ppb	11:12:54
2	Fe 238.204 Radial†	549.3	503.7	4949.9 µg/L	4949.9 ppb	11:13:14
2	K 766.490 Radial†	11954.7	10938.0	5386.3 µg/L	5386.3 ppb	11:12:54
2	Mg 279.077 IEC†	490.2	452.4	4958.0 µg/L	4958.0 ppb	11:13:14
2	Na 589.592 Radial†	34604.9	32387.9	14208 µg/L	14208 ppb	11:12:54
2	Sr 421.552†	101041.2	95036.6	513.51 µg/L	513.51 ppb	11:12:54
2	Sc 361.383	1987793.0	1987793.0	103.44 %		11:14:21
2	Y 371.029	1380623.1	1380623.1	103.18 %		11:14:21
2	Ag 328.068†	61328.0	59854.1	495.36 µg/L	495.36 ppb	11:14:27
2	As 188.979†	360.4	351.6	525.01 µg/L	525.01 ppb	11:14:47
2	B 249.677†	11473.3	10734.7	510.15 µg/L	510.15 ppb	11:14:27
2	Ba 233.527†	23652.9	22896.5	516.07 µg/L	516.07 ppb	11:14:27
2	Be 313.107†	870272.7	842826.6	511.87 µg/L	511.87 ppb	11:14:21
2	Cd 226.502†	21867.2	21318.9	518.49 µg/L	518.49 ppb	11:14:27
2	Co 228.616†	12152.0	11728.3	514.84 µg/L	514.84 ppb	11:14:27
2	Cr 267.716†	24185.4	23305.7	521.36 µg/L	521.36 ppb	11:14:27
2	Cu 324.752†	80508.0	74238.5	504.12 µg/L	504.12 ppb	11:14:27
2	Mn 257.610†	167777.1	162974.2	522.61 µg/L	522.61 ppb	11:14:21
2	Mo 202.031†	5480.9	5290.4	523.07 µg/L	523.07 ppb	11:14:47
2	Ni 231.604†	9750.7	9059.2	514.18 µg/L	514.18 ppb	11:14:27
2	P 214.914†	1902.6	1532.2	2567.4 µg/L	2567.4 ppb	11:14:47
2	Pb 220.353†	2087.9	1962.3	518.90 µg/L	518.90 ppb	11:14:47



2	S 181.975 Axial†	354.1	318.8	1013.7 µg/L	1013.7 ppb	11:14:47
2	Sb 206.836†	606.8	559.0	507.84 µg/L	507.84 ppb	11:14:47
2	Se 196.026†	574.5	534.8	537.28 µg/L	537.28 ppb	11:14:47
2	SiO2†	31785.8	28391.6	5365.2 µg/L	5365.2 ppb	11:14:27
2	Si 251.611†	37027.0	35396.5	2506.0 µg/L	2506.0 ppb	11:14:27
2	Sn 189.927†	1380.6	1332.7	518.22 µg/L	518.22 ppb	11:14:47
2	Ti 334.940†	214537.4	208077.5	501.55 µg/L	501.55 ppb	11:14:21
2	Tl 190.801†	487.8	507.6	518.57 µg/L	518.57 ppb	11:14:47
2	U 409.014†	5833.5	5669.4	507.56 µg/L	507.56 ppb	11:14:27
2	V 292.402†	43811.2	42255.7	520.21 µg/L	520.21 ppb	11:14:27
2	Zn 213.857†	23578.6	22203.0	510.80 µg/L	510.80 ppb	11:14:27
3	Sc RADIAL	106345.5	106345.5	106 %		11:13:20
3	Al 396.153Radial†	11027.8	10806.1	5094.5 µg/L	5094.5 ppb	11:13:20
3	Ca 317.933Radial†	16951.6	15607.8	5034.1 µg/L	5034.1 ppb	11:13:20
3	Fe 238.204 Radial†	547.1	502.5	4937.0 µg/L	4937.0 ppb	11:13:40
3	K 766.490 Radial†	11887.6	10893.1	5364.2 µg/L	5364.2 ppb	11:13:20
3	Mg 279.077 IEC†	489.5	452.4	4957.2 µg/L	4957.2 ppb	11:13:40
3	Na 589.592 Radial†	34309.4	32162.4	14109 µg/L	14109 ppb	11:13:20
3	Sr 421.552†	100630.7	94805.2	512.26 µg/L	512.26 ppb	11:13:20
3	Sc 361.383	1991515.4	1991515.4	103.64 %		11:14:54
3	Y 371.029	1382484.6	1382484.6	103.32 %		11:14:54
3	Ag 328.068†	59566.1	58043.3	480.29 µg/L	480.29 ppb	11:14:59
3	As 188.979†	317.5	309.6	462.10 µg/L	462.10 ppb	11:15:19
3	B 249.677†	11125.2	10378.1	493.09 µg/L	493.09 ppb	11:14:59
3	Ba 233.527†	22710.7	21944.6	494.60 µg/L	494.60 ppb	11:14:59
3	Be 313.107†	842774.4	814721.0	494.80 µg/L	494.80 ppb	11:14:54
3	Cd 226.502†	20829.2	20277.8	493.14 µg/L	493.14 ppb	11:14:59
3	Co 228.616†	11535.4	11111.4	487.70 µg/L	487.70 ppb	11:14:59
3	Cr 267.716†	22508.3	21643.7	484.19 µg/L	484.19 ppb	11:14:59
3	Cu 324.752†	76413.3	70142.0	476.35 µg/L	476.35 ppb	11:14:59
3	Mn 257.610†	162715.2	157786.8	505.97 µg/L	505.97 ppb	11:14:54
3	Mo 202.031†	4797.5	4621.2	456.92 µg/L	456.92 ppb	11:15:19
3	Ni 231.604†	9320.7	8626.7	489.63 µg/L	489.63 ppb	11:14:59
3	P 214.914†	1731.2	1363.4	2281.3 µg/L	2281.3 ppb	11:15:19
3	Pb 220.353†	1899.0	1776.2	469.63 µg/L	469.63 ppb	11:15:19
3	S 181.975 Axial†	333.9	298.7	949.75 µg/L	949.75 ppb	11:15:19
3	Sb 206.836†	549.4	502.5	456.13 µg/L	456.13 ppb	11:15:19
3	Se 196.026†	525.1	486.1	489.39 µg/L	489.39 ppb	11:15:19
3	SiO2†	30627.2	27216.3	5143.1 µg/L	5143.1 ppb	11:14:59
3	Si 251.611†	35727.6	34075.8	2412.5 µg/L	2412.5 ppb	11:14:59
3	Sn 189.927†	1192.8	1149.0	446.00 µg/L	446.00 ppb	11:15:19
3	Ti 334.940†	207310.8	200716.9	483.80 µg/L	483.80 ppb	11:14:54
3	Tl 190.801†	456.9	476.9	487.34 µg/L	487.34 ppb	11:15:19
3	U 409.014†	5423.3	5263.1	471.11 µg/L	471.11 ppb	11:14:59
3	V 292.402†	41397.2	39847.3	490.21 µg/L	490.21 ppb	11:14:59
3	Zn 213.857†	22407.7	21030.5	483.79 µg/L	483.79 ppb	11:14:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1988530.3	103.48 %	0.140			0.14%
Sc RADIAL	106667.7	106 %	0.4			0.39%
Y 371.029	1381027.2	103.21 %	0.097			0.09%
Ag 328.068†	59293.9	490.70 µg/L	9.028	490.70 ppb	9.028	1.84%
QC value within limits for Ag 328.068 Recovery = 98.14%						
Al 396.153Radial†	10808.3	5094.6 µg/L	0.48	5094.6 ppb	0.48	0.01%
QC value within limits for Al 396.153Radial Recovery = 101.89%						
As 188.979†	337.3	503.65 µg/L	35.985	503.65 ppb	35.985	7.14%
QC value within limits for As 188.979 Recovery = 100.73%						
B 249.677†	10613.2	504.34 µg/L	9.748	504.34 ppb	9.748	1.93%
QC value within limits for B 249.677 Recovery = 100.87%						
Ba 233.527†	22599.3	509.37 µg/L	12.806	509.37 ppb	12.806	2.51%
QC value within limits for Ba 233.527 Recovery = 101.87%						
Be 313.107†	832403.9	505.54 µg/L	9.350	505.54 ppb	9.350	1.85%
QC value within limits for Be 313.107 Recovery = 101.11%						
Ca 317.933Radial†	15619.0	5037.7 µg/L	3.33	5037.7 ppb	3.33	0.07%
QC value within limits for Ca 317.933Radial Recovery = 100.75%						
Cd 226.502†	21009.6	510.96 µg/L	15.492	510.96 ppb	15.492	3.03%
QC value within limits for Cd 226.502 Recovery = 102.19%						
Co 228.616†	11522.0	505.76 µg/L	15.641	505.76 ppb	15.641	3.09%

Cr	267.716†	22803.9	510.14 µg/L	22.542	510.14 ppb	22.542	4.42%
	QC value within limits for Cr 267.716 Recovery = 102.03%						
Cu	324.752†	72895.5	495.02 µg/L	16.164	495.02 ppb	16.164	3.27%
	QC value within limits for Cu 324.752 Recovery = 99.00%						
Fe	238.204 Radial†	502.1	4934.3 µg/L	17.02	4934.3 ppb	17.02	0.35%
	QC value within limits for Fe 238.204 Radial Recovery = 98.69%						
K	766.490 Radial†	10908.1	5371.6 µg/L	12.74	5371.6 ppb	12.74	0.24%
	QC value within limits for K 766.490 Radial Recovery = 107.43%						
Mg	279.077 IEC†	452.0	4952.7 µg/L	8.44	4952.7 ppb	8.44	0.17%
	QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn	257.610†	161067.1	516.49 µg/L	9.151	516.49 ppb	9.151	1.77%
	QC value within limits for Mn 257.610 Recovery = 103.30%						
Mo	202.031†	5067.3	501.01 µg/L	38.184	501.01 ppb	38.184	7.62%
	QC value within limits for Mo 202.031 Recovery = 100.20%						
Na	589.592 Radial†	32330.8	14183 µg/L	65.1	14183 ppb	65.1	0.46%
	QC value greater than the upper limit for Na 589.592 Radial Recovery = 141.83%						
Ni	231.604†	8930.7	506.89 µg/L	15.001	506.89 ppb	15.001	2.96%
	QC value within limits for Ni 231.604 Recovery = 101.38%						
P	214.914†	1471.5	2464.5 µg/L	159.12	2464.5 ppb	159.12	6.46%
	QC value within limits for P 214.914 Recovery = 98.58%						
Pb	220.353†	1899.1	502.16 µg/L	28.174	502.16 ppb	28.174	5.61%
	QC value within limits for Pb 220.353 Recovery = 100.43%						
S	181.975 Axial†	311.5	990.50 µg/L	35.405	990.50 ppb	35.405	3.57%
	QC value within limits for S 181.975 Axial Recovery = 99.05%						
Sb	206.836†	541.6	491.84 µg/L	30.984	491.84 ppb	30.984	6.30%
	QC value within limits for Sb 206.836 Recovery = 98.37%						
Se	196.026†	516.7	519.43 µg/L	26.163	519.43 ppb	26.163	5.04%
	QC value within limits for Se 196.026 Recovery = 103.89%						
SiO2†		27976.0	5286.7 µg/L	124.52	5286.7 ppb	124.52	2.36%
	QC value within limits for SiO2 Recovery = 98.86%						
Si	251.611†	34977.9	2476.4 µg/L	55.35	2476.4 ppb	55.35	2.24%
	QC value within limits for Si 251.611 Recovery = 99.06%						
Sn	189.927†	1272.6	494.59 µg/L	42.081	494.59 ppb	42.081	8.51%
	QC value within limits for Sn 189.927 Recovery = 98.92%						
Sr	421.552†	94923.3	512.90 µg/L	0.625	512.90 ppb	0.625	0.12%
	QC value within limits for Sr 421.552 Recovery = 102.58%						
Ti	334.940†	205441.5	495.19 µg/L	9.891	495.19 ppb	9.891	2.00%
	QC value within limits for Ti 334.940 Recovery = 99.04%						
Tl	190.801†	498.1	508.88 µg/L	18.690	508.88 ppb	18.690	3.67%
	QC value within limits for Tl 190.801 Recovery = 101.78%						
U	409.014†	5526.7	494.77 µg/L	20.506	494.77 ppb	20.506	4.14%
	QC value within limits for U 409.014 Recovery = 98.95%						
V	292.402†	41527.1	511.12 µg/L	18.161	511.12 ppb	18.161	3.55%
	QC value within limits for V 292.402 Recovery = 102.22%						
Zn	213.857†	21818.5	501.94 µg/L	15.720	501.94 ppb	15.720	3.13%
	QC value within limits for Zn 213.857 Recovery = 100.39%						
QC Failed. Continue with analysis.							

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 11:15:27

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	105035.9	105035.9	105 %		11:15:59
1	Al 396.153Radial†	-412.6	6.2	2.9042 µg/L	2.9042 ppb	11:15:59
1	Ca 317.933Radial†	491.1	81.6	26.312 µg/L	26.312 ppb	11:16:19
1	Fe 238.204 Radial†	18.2	3.7	36.097 µg/L	36.097 ppb	11:16:19
1	K 766.490 Radial†	415.8	73.2	36.062 µg/L	36.062 ppb	11:15:59
1	Mg 279.077 IEC†	9.3	-0.5	-5.4550 µg/L	-5.4550 ppb	11:16:19
1	Na 589.592 Radial†	8777.8	8174.3	3585.8 µg/L	3585.8 ppb	11:15:59
1	Sr 421.552†	787.4	603.2	3.2591 µg/L	3.2591 ppb	11:15:59
1	Sc 361.383	1987917.4	1987917.4	103.45 %		11:17:18
1	Y 371.029	1384982.4	1384982.4	103.51 %		11:17:18
1	Ag 328.068†	-535.1	50.7	0.4190 µg/L	0.4190 ppb	11:17:23
1	As 188.979†	-3.2	0.1	0.1657 µg/L	0.1657 ppb	11:17:43
1	B 249.677†	544.8	170.0	8.0900 µg/L	8.0900 ppb	11:17:43
1	Ba 233.527†	15.8	46.4	1.0430 µg/L	1.0430 ppb	11:17:43
1	Be 313.107†	-1394.4	179.9	0.1092 µg/L	0.1092 ppb	11:17:23
1	Cd 226.502†	-181.3	4.4	0.1032 µg/L	0.1032 ppb	11:17:43
1	Co 228.616†	22.1	2.3	0.1006 µg/L	0.1006 ppb	11:17:43
1	Cr 267.716†	87.8	10.3	0.2311 µg/L	0.2311 ppb	11:17:43
1	Cu 324.752†	3508.6	-197.6	-1.3329 µg/L	-1.3329 ppb	11:17:23
1	Mn 257.610†	-623.5	180.2	0.5805 µg/L	0.5805 ppb	11:17:43
1	Mo 202.031†	10.6	2.2	0.2227 µg/L	0.2227 ppb	11:17:43
1	Ni 231.604†	373.9	-5.5	-0.3097 µg/L	-0.3097 ppb	11:17:43
1	P 214.914†	313.5	-4.0	-6.7949 µg/L	-6.7949 ppb	11:17:43
1	Pb 220.353†	43.8	-13.8	-3.6385 µg/L	-3.6385 ppb	11:17:43
1	S 181.975 Axial†	18.4	-5.7	-18.254 µg/L	-18.254 ppb	11:17:43
1	Sb 206.836†	32.7	4.0	3.6170 µg/L	3.6170 ppb	11:17:43
1	Se 196.026†	22.0	0.7	0.7865 µg/L	0.7865 ppb	11:17:43
1	SiO2†	2359.6	-55.0	-10.398 µg/L	-10.398 ppb	11:17:43
1	Si 251.611†	406.3	-5.0	-0.3574 µg/L	-0.3574 ppb	11:17:43
1	Sn 189.927†	-3.7	-5.5	-2.1930 µg/L	-2.1930 ppb	11:17:43
1	Ti 334.940†	-583.2	119.0	0.2879 µg/L	0.2879 ppb	11:17:23
1	Tl 190.801†	-37.8	-0.4	-0.4370 µg/L	-0.4370 ppb	11:17:43
1	U 409.014†	-80.8	-47.9	-4.3065 µg/L	-4.3065 ppb	11:17:23
1	V 292.402†	102.0	1.7	0.0119 µg/L	0.0119 ppb	11:17:23
1	Zn 213.857†	594.6	-15.9	-0.3656 µg/L	-0.3656 ppb	11:17:43
2	Sc RADIAL	104670.2	104670.2	104 %		11:16:25
2	Al 396.153Radial†	-379.3	36.8	17.359 µg/L	17.359 ppb	11:16:25
2	Ca 317.933Radial†	491.3	83.4	26.893 µg/L	26.893 ppb	11:16:45
2	Fe 238.204 Radial†	16.0	1.5	15.169 µg/L	15.169 ppb	11:16:45
2	K 766.490 Radial†	408.8	67.9	33.452 µg/L	33.452 ppb	11:16:25
2	Mg 279.077 IEC†	12.4	2.5	27.097 µg/L	27.097 ppb	11:16:45
2	Na 589.592 Radial†	8722.1	8150.2	3575.2 µg/L	3575.2 ppb	11:16:25
2	Sr 421.552†	797.7	615.7	3.3266 µg/L	3.3266 ppb	11:16:25
2	Sc 361.383	1997793.0	1997793.0	103.96 %		11:17:49
2	Y 371.029	1392343.7	1392343.7	104.06 %		11:17:49
2	Ag 328.068†	-579.5	10.5	0.0887 µg/L	0.0887 ppb	11:17:54
2	As 188.979†	-4.8	-1.4	-2.0986 µg/L	-2.0986 ppb	11:18:15
2	B 249.677†	536.7	159.7	7.6055 µg/L	7.6055 ppb	11:18:15
2	Ba 233.527†	22.4	52.6	1.1838 µg/L	1.1838 ppb	11:18:15
2	Be 313.107†	-1278.4	298.2	0.1811 µg/L	0.1811 ppb	11:17:54
2	Cd 226.502†	-183.6	3.0	0.0717 µg/L	0.0717 ppb	11:18:15
2	Co 228.616†	17.8	-1.9	-0.0849 µg/L	-0.0849 ppb	11:18:15
2	Cr 267.716†	78.6	1.0	0.0231 µg/L	0.0231 ppb	11:18:15
2	Cu 324.752†	3575.0	-150.5	-1.0171 µg/L	-1.0171 ppb	11:17:54
2	Mn 257.610†	-635.2	171.9	0.5504 µg/L	0.5504 ppb	11:18:15
2	Mo 202.031†	16.2	7.6	0.7474 µg/L	0.7474 ppb	11:18:15
2	Ni 231.604†	374.7	-6.5	-0.3687 µg/L	-0.3687 ppb	11:18:15
2	P 214.914†	309.6	-9.2	-15.612 µg/L	-15.612 ppb	11:18:15
2	Pb 220.353†	47.9	-10.1	-2.6484 µg/L	-2.6484 ppb	11:18:15

2	S 181.975 Axial†	23.0	-1.5	-4.6486 µg/L	-4.6486 ppb	11:18:15
2	Sb 206.836†	25.7	-2.8	-2.5454 µg/L	-2.5454 ppb	11:18:15
2	Se 196.026†	27.1	5.5	5.4231 µg/L	5.4231 ppb	11:18:15
2	SiO2†	2375.6	-51.0	-9.6297 µg/L	-9.6297 ppb	11:18:15
2	Si 251.611†	417.8	4.1	0.2903 µg/L	0.2903 ppb	11:18:15
2	Sn 189.927†	0.3	-1.6	-0.6580 µg/L	-0.6580 ppb	11:18:15
2	Ti 334.940†	-627.7	78.9	0.1887 µg/L	0.1887 ppb	11:17:54
2	Tl 190.801†	-40.6	-3.0	-3.0320 µg/L	-3.0320 ppb	11:18:15
2	U 409.014†	-42.8	-11.0	-0.9932 µg/L	-0.9932 ppb	11:17:54
2	V 292.402†	117.5	16.1	0.1983 µg/L	0.1983 ppb	11:17:54
2	Zn 213.857†	589.3	-23.8	-0.5501 µg/L	-0.5501 ppb	11:18:15
3	Sc RADIAL	104917.7	104917.7	105 %		11:16:50
3	Al 396.153Radial†	-429.2	-10.1	-4.7762 µg/L	-4.7762 ppb	11:16:50
3	Ca 317.933Radial†	576.0	163.3	52.665 µg/L	52.665 ppb	11:17:10
3	Fe 238.204 Radial†	17.0	2.6	25.067 µg/L	25.067 ppb	11:17:10
3	K 766.490 Radial†	472.2	127.7	62.884 µg/L	62.884 ppb	11:16:50
3	Mg 279.077 IEC†	10.6	0.7	8.0278 µg/L	8.0278 ppb	11:17:10
3	Na 589.592 Radial†	8606.2	8019.6	3518.0 µg/L	3518.0 ppb	11:16:50
3	Sr 421.552†	826.5	641.4	3.4657 µg/L	3.4657 ppb	11:16:50
3	Sc 361.383	1996922.9	1996922.9	103.92 %		11:18:20
3	Y 371.029	1392056.4	1392056.4	104.04 %		11:18:20
3	Ag 328.068†	-616.0	-24.9	-0.2000 µg/L	-0.2000 ppb	11:18:25
3	As 188.979†	1.1	4.2	6.3007 µg/L	6.3007 ppb	11:18:46
3	B 249.677†	525.7	149.2	7.1043 µg/L	7.1043 ppb	11:18:46
3	Ba 233.527†	8.2	39.0	0.8785 µg/L	0.8785 ppb	11:18:46
3	Be 313.107†	-1305.7	271.4	0.1648 µg/L	0.1648 ppb	11:18:25
3	Cd 226.502†	-171.5	14.7	0.3532 µg/L	0.3532 ppb	11:18:46
3	Co 228.616†	28.6	8.5	0.3713 µg/L	0.3713 ppb	11:18:46
3	Cr 267.716†	89.5	11.5	0.2584 µg/L	0.2584 ppb	11:18:46
3	Cu 324.752†	3577.6	-146.6	-0.9886 µg/L	-0.9886 ppb	11:18:25
3	Mn 257.610†	-639.3	167.7	0.5388 µg/L	0.5388 ppb	11:18:46
3	Mo 202.031†	13.0	4.5	0.4449 µg/L	0.4449 ppb	11:18:46
3	Ni 231.604†	375.1	-5.9	-0.3356 µg/L	-0.3356 ppb	11:18:46
3	P 214.914†	304.9	-13.6	-23.194 µg/L	-23.194 ppb	11:18:46
3	Pb 220.353†	50.6	-7.5	-1.9688 µg/L	-1.9688 ppb	11:18:46
3	S 181.975 Axial†	17.3	-6.9	-21.979 µg/L	-21.979 ppb	11:18:46
3	Sb 206.836†	31.4	2.6	2.3942 µg/L	2.3942 ppb	11:18:46
3	Se 196.026†	31.1	9.3	9.2591 µg/L	9.2591 ppb	11:18:46
3	SiO2†	2360.7	-64.3	-12.152 µg/L	-12.152 ppb	11:18:46
3	Si 251.611†	413.2	-0.1	-0.0099 µg/L	-0.0099 ppb	11:18:46
3	Sn 189.927†	0.2	-1.7	-0.7201 µg/L	-0.7201 ppb	11:18:46
3	Ti 334.940†	-600.3	105.1	0.2536 µg/L	0.2536 ppb	11:18:25
3	Tl 190.801†	-37.4	0.1	0.1218 µg/L	0.1218 ppb	11:18:46
3	U 409.014†	-15.5	15.2	1.3586 µg/L	1.3586 ppb	11:18:25
3	V 292.402†	138.7	36.5	0.4463 µg/L	0.4463 ppb	11:18:25
3	Zn 213.857†	597.2	-16.0	-0.3687 µg/L	-0.3687 ppb	11:18:46

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Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1994211.1	103.78 %	0.285			0.27%
Sc RADIAL	104874.6	105 %	0.2			0.18%
Y 371.029	1389794.2	103.87 %	0.312			0.30%
Ag 328.068†	12.1	0.1026 µg/L	0.30972	0.1026 ppb	0.30972	301.96%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.0	5.1624 µg/L	11.23917	5.1624 ppb	11.23917	217.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.0	1.4559 µg/L	4.34578	1.4559 ppb	4.34578	298.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	159.6	7.5999 µg/L	0.49290	7.5999 ppb	0.49290	6.49%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	46.0	1.0351 µg/L	0.15279	1.0351 ppb	0.15279	14.76%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	249.8	0.1517 µg/L	0.03769	0.1517 ppb	0.03769	24.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	109.4	35.290 µg/L	15.0500	35.290 ppb	15.0500	42.65%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.4	0.1760 µg/L	0.15425	0.1760 ppb	0.15425	87.63%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.9	0.1290 µg/L	0.22939	0.1290 ppb	0.22939	177.81%

Cr	267.716†	7.6	0.1709 µg/L	0.12870	0.1709 ppb	0.12870	75.31%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-164.9	-1.1129 µg/L	0.19108	-1.1129 ppb	0.19108	17.17%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.6	25.445 µg/L	10.4693	25.445 ppb	10.4693	41.15%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	89.6	44.133 µg/L	16.2916	44.133 ppb	16.2916	36.91%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.9	9.8899 µg/L	16.35568	9.8899 ppb	16.35568	165.38%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	173.3	0.5566 µg/L	0.02151	0.5566 ppb	0.02151	3.86%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.8	0.4717 µg/L	0.26338	0.4717 ppb	0.26338	55.84%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	8114.7	3559.7 µg/L	36.51	3559.7 ppb	36.51	1.03%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-6.0	-0.3380 µg/L	0.02959	-0.3380 ppb	0.02959	8.75%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-9.0	-15.200 µg/L	8.2071	-15.200 ppb	8.2071	53.99%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-10.4	-2.7519 µg/L	0.83965	-2.7519 ppb	0.83965	30.51%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-4.7	-14.961 µg/L	9.1227	-14.961 ppb	9.1227	60.98%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.3	1.1552 µg/L	3.26269	1.1552 ppb	3.26269	282.42%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	5.2	5.1563 µg/L	4.24259	5.1563 ppb	4.24259	82.28%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-56.8	-10.727 µg/L	1.2931	-10.727 ppb	1.2931	12.06%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-0.4	-0.0257 µg/L	0.32415	-0.0257 ppb	0.32415	>999.9%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-2.9	-1.1904 µg/L	0.86889	-1.1904 ppb	0.86889	72.99%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	620.1	3.3504 µg/L	0.10534	3.3504 ppb	0.10534	3.14%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	101.0	0.2434 µg/L	0.05039	0.2434 ppb	0.05039	20.70%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.1	-1.1158 µg/L	1.68291	-1.1158 ppb	1.68291	150.83%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-14.6	-1.3137 µg/L	2.84616	-1.3137 ppb	2.84616	216.65%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	18.1	0.2188 µg/L	0.21793	0.2188 ppb	0.21793	99.58%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-18.5	-0.4281 µg/L	0.10567	-0.4281 ppb	0.10567	24.68%
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 12:04:13

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	103445.2	103445.2	103 %		12:04:49
1	Al 396.153Radial†	11126.3	11193.4	5275.9 µg/L	5275.9 ppb	12:04:49
1	Ca 317.933Radial†	16775.7	15885.6	5123.7 µg/L	5123.7 ppb	12:04:49
1	Fe 238.204 Radial†	540.3	510.3	5014.9 µg/L	5014.9 ppb	12:05:09
1	K 766.490 Radial†	11958.9	11276.7	5553.1 µg/L	5553.1 ppb	12:04:49
1	Mg 279.077 IEC†	490.6	466.5	5112.2 µg/L	5112.2 ppb	12:05:09
1	Na 589.592 Radial†	27893.6	26846.5	11777 µg/L	11777 ppb	12:04:49
1	Sr 421.552†	98010.0	94925.3	512.91 µg/L	512.91 ppb	12:04:49
1	Sc 361.383	1958601.7	1958601.7	101.92 %		12:06:09
1	Y 371.029	1360716.8	1360716.8	101.70 %		12:06:09
1	Ag 328.068†	61593.4	60998.0	504.81 µg/L	504.81 ppb	12:06:14
1	As 188.979†	358.5	354.9	529.92 µg/L	529.92 ppb	12:06:34
1	B 249.677†	11411.5	10839.4	515.12 µg/L	515.12 ppb	12:06:14
1	Ba 233.527†	23638.5	23223.2	523.43 µg/L	523.43 ppb	12:06:14
1	Be 313.107†	864702.7	849900.6	516.16 µg/L	516.16 ppb	12:06:09
1	Cd 226.502†	21913.6	21679.4	527.26 µg/L	527.26 ppb	12:06:14
1	Co 228.616†	12204.5	11955.0	524.79 µg/L	524.79 ppb	12:06:14
1	Cr 267.716†	24284.8	23751.7	531.34 µg/L	531.34 ppb	12:06:14
1	Cu 324.752†	80640.2	75528.1	512.88 µg/L	512.88 ppb	12:06:14
1	Mn 257.610†	166761.8	164395.5	527.16 µg/L	527.16 ppb	12:06:09
1	Mo 202.031†	5451.1	5340.1	527.99 µg/L	527.99 ppb	12:06:34
1	Ni 231.604†	9826.0	9273.6	526.35 µg/L	526.35 ppb	12:06:14
1	P 214.914†	1888.7	1546.0	2590.2 µg/L	2590.2 ppb	12:06:34
1	Pb 220.353†	2095.1	1999.4	528.71 µg/L	528.71 ppb	12:06:34
1	S 181.975 Axial†	358.9	328.6	1045.0 µg/L	1045.0 ppb	12:06:34
1	Sb 206.836†	615.4	576.2	523.35 µg/L	523.35 ppb	12:06:34
1	Se 196.026†	558.7	527.6	530.36 µg/L	530.36 ppb	12:06:34
1	SiO2†	31745.7	28810.2	5444.3 µg/L	5444.3 ppb	12:06:14
1	Si 251.611†	36963.8	35867.9	2539.4 µg/L	2539.4 ppb	12:06:14
1	Sn 189.927†	1393.2	1364.9	530.81 µg/L	530.81 ppb	12:06:34
1	Ti 334.940†	213370.6	210023.8	506.23 µg/L	506.23 ppb	12:06:09
1	Tl 190.801†	485.3	512.2	523.29 µg/L	523.29 ppb	12:06:34
1	U 409.014†	5791.4	5712.1	511.38 µg/L	511.38 ppb	12:06:14
1	V 292.402†	43810.7	42886.4	527.96 µg/L	527.96 ppb	12:06:14
1	Zn 213.857†	23643.6	22606.5	520.07 µg/L	520.07 ppb	12:06:14
2	Sc RADIAL	104496.2	104496.2	104 %		12:05:14
2	Al 396.153Radial†	11179.0	11135.5	5248.7 µg/L	5248.7 ppb	12:05:14
2	Ca 317.933Radial†	16952.9	15892.1	5125.8 µg/L	5125.8 ppb	12:05:14
2	Fe 238.204 Radial†	536.9	501.8	4931.5 µg/L	4931.5 ppb	12:05:34
2	K 766.490 Radial†	12077.2	11273.6	5551.6 µg/L	5551.6 ppb	12:05:14
2	Mg 279.077 IEC†	490.4	461.6	5058.1 µg/L	5058.1 ppb	12:05:34
2	Na 589.592 Radial†	28174.3	26843.9	11776 µg/L	11776 ppb	12:05:14
2	Sr 421.552†	98929.8	94852.3	512.51 µg/L	512.51 ppb	12:05:14
2	Sc 361.383	1969034.3	1969034.3	102.47 %		12:06:41
2	Y 371.029	1365738.8	1365738.8	102.07 %		12:06:41
2	Ag 328.068†	61433.4	60521.8	500.87 µg/L	500.87 ppb	12:06:46
2	As 188.979†	354.9	349.6	521.92 µg/L	521.92 ppb	12:07:07
2	B 249.677†	11405.0	10773.7	512.03 µg/L	512.03 ppb	12:06:46
2	Ba 233.527†	23592.0	23054.9	519.64 µg/L	519.64 ppb	12:06:46
2	Be 313.107†	865684.8	846364.1	514.01 µg/L	514.01 ppb	12:06:41
2	Cd 226.502†	21866.0	21519.1	523.37 µg/L	523.37 ppb	12:06:46
2	Co 228.616†	12197.2	11884.4	521.69 µg/L	521.69 ppb	12:06:46
2	Cr 267.716†	24254.3	23595.6	527.85 µg/L	527.85 ppb	12:06:46
2	Cu 324.752†	80445.9	74919.3	508.73 µg/L	508.73 ppb	12:06:46
2	Mn 257.610†	167051.9	163811.7	525.29 µg/L	525.29 ppb	12:06:41
2	Mo 202.031†	5444.2	5305.1	524.52 µg/L	524.52 ppb	12:07:07
2	Ni 231.604†	9807.6	9204.5	522.43 µg/L	522.43 ppb	12:06:46
2	P 214.914†	1883.6	1531.2	2565.5 µg/L	2565.5 ppb	12:07:07
2	Pb 220.353†	2076.5	1970.4	521.03 µg/L	521.03 ppb	12:07:07

2	S 181.975 Axial†	360.2	328.0	1042.9 µg/L	1042.9 ppb	12:07:07
2	Sb 206.836†	608.8	566.6	514.63 µg/L	514.63 ppb	12:07:07
2	Se 196.026†	565.0	530.9	533.30 µg/L	533.30 ppb	12:07:07
2	SiO2†	31658.6	28560.2	5397.1 µg/L	5397.1 ppb	12:06:46
2	Si 251.611†	36998.5	35709.7	2528.2 µg/L	2528.2 ppb	12:06:46
2	Sn 189.927†	1381.8	1346.6	523.71 µg/L	523.71 ppb	12:07:07
2	Ti 334.940†	213649.1	209186.5	504.22 µg/L	504.22 ppb	12:06:41
2	Tl 190.801†	495.5	519.7	530.77 µg/L	530.77 ppb	12:07:07
2	U 409.014†	5863.0	5751.9	514.96 µg/L	514.96 ppb	12:06:46
2	V 292.402†	43809.7	42657.8	525.15 µg/L	525.15 ppb	12:06:46
2	Zn 213.857†	23584.2	22425.6	515.91 µg/L	515.91 ppb	12:06:46
3	Sc RADIAL	103933.2	103933.2	104 %		12:05:40
3	Al 396.153Radial†	11088.2	11106.0	5236.0 µg/L	5236.0 ppb	12:05:40
3	Ca 317.933Radial†	16823.4	15855.3	5113.9 µg/L	5113.9 ppb	12:05:40
3	Fe 238.204 Radial†	536.9	504.6	4958.2 µg/L	4958.2 ppb	12:06:00
3	K 766.490 Radial†	11976.2	11239.0	5534.5 µg/L	5534.5 ppb	12:05:40
3	Mg 279.077 IEC†	488.2	461.9	5061.2 µg/L	5061.2 ppb	12:06:00
3	Na 589.592 Radial†	27988.4	26811.0	11761 µg/L	11761 ppb	12:05:40
3	Sr 421.552†	98200.7	94663.0	511.49 µg/L	511.49 ppb	12:05:40
3	Sc 361.383	1975033.1	1975033.1	102.78 %		12:07:13
3	Y 371.029	1370044.7	1370044.7	102.39 %		12:07:13
3	Ag 328.068†	59487.5	58446.4	483.62 µg/L	483.62 ppb	12:07:19
3	As 188.979†	325.7	320.1	477.91 µg/L	477.91 ppb	12:07:39
3	B 249.677†	10984.1	10330.4	490.81 µg/L	490.81 ppb	12:07:19
3	Ba 233.527†	22450.8	21874.6	493.03 µg/L	493.03 ppb	12:07:19
3	Be 313.107†	842507.6	821247.8	498.76 µg/L	498.76 ppb	12:07:13
3	Cd 226.502†	20742.2	20360.8	495.16 µg/L	495.16 ppb	12:07:19
3	Co 228.616†	11507.2	11176.9	490.58 µg/L	490.58 ppb	12:07:19
3	Cr 267.716†	22480.2	21797.6	487.63 µg/L	487.63 ppb	12:07:19
3	Cu 324.752†	76280.1	70627.7	479.65 µg/L	479.65 ppb	12:07:19
3	Mn 257.610†	162489.9	158877.9	509.47 µg/L	509.47 ppb	12:07:13
3	Mo 202.031†	4835.0	4696.2	464.34 µg/L	464.34 ppb	12:07:39
3	Ni 231.604†	9246.0	8629.0	489.76 µg/L	489.76 ppb	12:07:19
3	P 214.914†	1742.7	1388.5	2324.0 µg/L	2324.0 ppb	12:07:39
3	Pb 220.353†	1906.8	1799.1	475.71 µg/L	475.71 ppb	12:07:39
3	S 181.975 Axial†	326.4	294.0	934.91 µg/L	934.91 ppb	12:07:39
3	Sb 206.836†	550.4	507.9	461.12 µg/L	461.12 ppb	12:07:39
3	Se 196.026†	522.2	487.6	490.82 µg/L	490.82 ppb	12:07:39
3	SiO2†	30389.5	27231.6	5146.0 µg/L	5146.0 ppb	12:07:19
3	Si 251.611†	35412.6	34057.0	2411.2 µg/L	2411.2 ppb	12:07:19
3	Sn 189.927†	1215.9	1181.1	458.58 µg/L	458.58 ppb	12:07:39
3	Ti 334.940†	207288.1	202364.3	487.76 µg/L	487.76 ppb	12:07:13
3	Tl 190.801†	461.9	485.5	496.07 µg/L	496.07 ppb	12:07:39
3	U 409.014†	5404.8	5288.8	473.41 µg/L	473.41 ppb	12:07:19
3	V 292.402†	41229.7	40017.6	492.35 µg/L	492.35 ppb	12:07:19
3	Zn 213.857†	22342.1	21147.2	486.48 µg/L	486.48 ppb	12:07:19

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1967556.4	102.39 %	0.433			0.42%
Sc RADIAL	103958.2	104 %	0.5			0.51%
Y 371.029	1365500.1	102.05 %	0.349			0.34%
Ag 328.068†	59988.7	496.43 µg/L	11.272	496.43 ppb	11.272	2.27%
QC value within limits for Ag 328.068 Recovery = 99.29%						
Al 396.153Radial†	11144.9	5253.5 µg/L	20.43	5253.5 ppb	20.43	0.39%
QC value within limits for Al 396.153Radial Recovery = 105.07%						
As 188.979†	341.5	509.92 µg/L	28.004	509.92 ppb	28.004	5.49%
QC value within limits for As 188.979 Recovery = 101.98%						
B 249.677†	10647.9	505.98 µg/L	13.233	505.98 ppb	13.233	2.62%
QC value within limits for B 249.677 Recovery = 101.20%						
Ba 233.527†	22717.6	512.03 µg/L	16.567	512.03 ppb	16.567	3.24%
QC value within limits for Ba 233.527 Recovery = 102.41%						
Be 313.107†	839170.8	509.65 µg/L	9.487	509.65 ppb	9.487	1.86%
QC value within limits for Be 313.107 Recovery = 101.93%						
Ca 317.933Radial†	15877.7	5121.1 µg/L	6.33	5121.1 ppb	6.33	0.12%
QC value within limits for Ca 317.933Radial Recovery = 102.42%						
Cd 226.502†	21186.4	515.26 µg/L	17.518	515.26 ppb	17.518	3.40%
QC value within limits for Cd 226.502 Recovery = 103.05%						
Co 228.616†	11672.1	512.35 µg/L	18.921	512.35 ppb	18.921	3.69%

Cr	267.716†	23048.3	515.60 µg/L	24.290	4.71%
QC value within limits for Co 228.616 Recovery = 102.47%					
Cu	324.752†	73691.7	500.42 µg/L	18.106	3.62%
QC value within limits for Cr 267.716 Recovery = 103.12%					
Fe	238.204 Radial†	505.6	4968.2 µg/L	42.60	0.86%
QC value within limits for Cu 324.752 Recovery = 100.08%					
K	766.490 Radial†	11263.1	5546.4 µg/L	10.32	0.19%
QC value within limits for Fe 238.204 Radial Recovery = 99.36%					
Mg	279.077 IEC†	463.3	5077.2 µg/L	30.39	0.60%
QC value greater than the upper limit for K 766.490 Radial Recovery = 110.93%					
Mn	257.610†	162361.7	520.64 µg/L	9.720	1.87%
QC value within limits for Mg 279.077 IEC Recovery = 101.54%					
Mo	202.031†	5113.8	505.62 µg/L	35.786	7.08%
QC value within limits for Mn 257.610 Recovery = 104.13%					
Na	589.592 Radial†	26833.8	11771 µg/L	8.7	0.07%
QC value within limits for Mo 202.031 Recovery = 101.12%					
Ni	231.604†	9035.7	512.85 µg/L	20.087	3.92%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 117.71%					
P	214.914†	1488.6	2493.2 µg/L	147.09	5.90%
QC value within limits for Ni 231.604 Recovery = 102.57%					
Pb	220.353†	1923.0	508.48 µg/L	28.644	5.63%
QC value within limits for P 214.914 Recovery = 99.73%					
S	181.975 Axial†	316.9	1007.6 µg/L	62.98	6.25%
QC value within limits for Pb 220.353 Recovery = 101.70%					
Sb	206.836†	550.2	499.70 µg/L	33.696	6.74%
QC value within limits for S 181.975 Axial Recovery = 100.76%					
Se	196.026†	515.4	518.16 µg/L	23.724	4.58%
QC value within limits for Sb 206.836 Recovery = 99.94%					
SiO2†		28200.7	5329.2 µg/L	160.34	3.01%
QC value within limits for Se 196.026 Recovery = 103.63%					
Si	251.611†	35211.5	2492.9 µg/L	71.01	2.85%
QC value within limits for SiO2 Recovery = 99.66%					
Sn	189.927†	1297.5	504.37 µg/L	39.808	7.89%
QC value within limits for Si 251.611 Recovery = 99.72%					
Sr	421.552†	94813.5	512.30 µg/L	0.732	0.14%
QC value within limits for Sn 189.927 Recovery = 100.87%					
Ti	334.940†	207191.5	499.40 µg/L	10.132	2.03%
QC value within limits for Sr 421.552 Recovery = 102.46%					
Tl	190.801†	505.8	516.71 µg/L	18.260	3.53%
QC value within limits for Ti 334.940 Recovery = 99.88%					
U	409.014†	5584.3	499.92 µg/L	23.023	4.61%
QC value within limits for Tl 190.801 Recovery = 103.34%					
V	292.402†	41853.9	515.15 µg/L	19.798	3.84%
QC value within limits for U 409.014 Recovery = 99.98%					
Zn	213.857†	22059.8	507.48 µg/L	18.310	3.61%
QC value within limits for V 292.402 Recovery = 103.03%					
QC value within limits for Zn 213.857 Recovery = 101.50%					
QC Failed. Continue with analysis.					



Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 12:07:48

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	102352.5	102352.5	102 %		12:08:19
1	Al 396.153Radial†	-329.3	77.5	36.605 µg/L	36.605 ppb	12:08:19
1	Ca 317.933Radial†	508.1	110.6	35.666 µg/L	35.666 ppb	12:08:39
1	Fe 238.204 Radial†	17.2	3.2	30.891 µg/L	30.891 ppb	12:08:39
1	K 766.490 Radial†	506.5	172.7	85.023 µg/L	85.023 ppb	12:08:19
1	Mg 279.077 IEC†	10.9	1.3	14.070 µg/L	14.070 ppb	12:08:39
1	Na 589.592 Radial†	3401.4	3123.1	1370.0 µg/L	1370.0 ppb	12:08:19
1	Sr 421.552†	238.3	84.5	0.4566 µg/L	0.4566 ppb	12:08:19
1	Sc 361.383	1968333.7	1968333.7	102.43 %		12:09:38
1	Y 371.029	1370100.4	1370100.4	102.40 %		12:09:38
1	Ag 328.068†	-544.0	36.8	0.3086 µg/L	0.3086 ppb	12:09:43
1	As 188.979†	-4.6	-1.3	-1.9155 µg/L	-1.9155 ppb	12:10:03
1	B 249.677†	538.2	168.8	8.0347 µg/L	8.0347 ppb	12:09:43
1	Ba 233.527†	-11.6	19.8	0.4462 µg/L	0.4462 ppb	12:10:03
1	Be 313.107†	-1302.2	256.5	0.1558 µg/L	0.1558 ppb	12:09:43
1	Cd 226.502†	-186.1	-2.0	-0.0523 µg/L	-0.0523 ppb	12:10:03
1	Co 228.616†	20.9	1.3	0.0581 µg/L	0.0581 ppb	12:10:03
1	Cr 267.716†	110.4	33.3	0.7438 µg/L	0.7438 ppb	12:09:43
1	Cu 324.752†	3582.3	-91.9	-0.6169 µg/L	-0.6169 ppb	12:09:43
1	Mn 257.610†	-649.0	149.3	0.4797 µg/L	0.4797 ppb	12:09:43
1	Mo 202.031†	14.5	6.2	0.6130 µg/L	0.6130 ppb	12:10:03
1	Ni 231.604†	376.5	0.7	0.0375 µg/L	0.0375 ppb	12:10:03
1	P 214.914†	304.0	-10.2	-17.411 µg/L	-17.411 ppb	12:10:03
1	Pb 220.353†	49.5	-7.8	-2.0520 µg/L	-2.0520 ppb	12:10:03
1	S 181.975 Axial†	31.9	7.6	24.228 µg/L	24.228 ppb	12:10:03
1	Sb 206.836†	27.8	-0.5	-0.4112 µg/L	-0.4112 ppb	12:10:03
1	Se 196.026†	22.1	1.1	1.1228 µg/L	1.1228 ppb	12:10:03
1	SiO2†	2349.2	-42.5	-8.0291 µg/L	-8.0291 ppb	12:09:43
1	Si 251.611†	405.8	-1.6	-0.1141 µg/L	-0.1141 ppb	12:10:03
1	Sn 189.927†	-0.1	-2.0	-0.8392 µg/L	-0.8392 ppb	12:10:03
1	Ti 334.940†	-601.1	95.9	0.2307 µg/L	0.2307 ppb	12:09:43
1	Tl 190.801†	-35.0	1.9	1.8867 µg/L	1.8867 ppb	12:10:03
1	U 409.014†	-68.3	-36.5	-3.2837 µg/L	-3.2837 ppb	12:09:43
1	V 292.402†	151.1	50.6	0.6146 µg/L	0.6146 ppb	12:09:43
1	Zn 213.857†	595.4	-9.4	-0.2188 µg/L	-0.2188 ppb	12:10:03
2	Sc RADIAL	102008.2	102008.2	102 %		12:08:45
2	Al 396.153Radial†	-308.5	96.9	45.767 µg/L	45.767 ppb	12:08:45
2	Ca 317.933Radial†	509.0	113.1	36.481 µg/L	36.481 ppb	12:09:05
2	Fe 238.204 Radial†	18.1	4.0	39.505 µg/L	39.505 ppb	12:09:05
2	K 766.490 Radial†	578.5	245.2	120.73 µg/L	120.73 ppb	12:08:45
2	Mg 279.077 IEC†	13.1	3.5	38.290 µg/L	38.290 ppb	12:09:05
2	Na 589.592 Radial†	3359.7	3093.3	1356.9 µg/L	1356.9 ppb	12:08:45
2	Sr 421.552†	303.4	149.4	0.8071 µg/L	0.8071 ppb	12:08:45
2	Sc 361.383	1968359.1	1968359.1	102.43 %		12:10:09
2	Y 371.029	1371536.4	1371536.4	102.50 %		12:10:09
2	Ag 328.068†	-535.1	45.5	0.3788 µg/L	0.3788 ppb	12:10:14
2	As 188.979†	-1.8	1.4	2.1484 µg/L	2.1484 ppb	12:10:35
2	B 249.677†	491.0	122.8	5.8348 µg/L	5.8348 ppb	12:10:14
2	Ba 233.527†	-16.1	15.4	0.3463 µg/L	0.3463 ppb	12:10:35
2	Be 313.107†	-1259.5	298.2	0.1811 µg/L	0.1811 ppb	12:10:14
2	Cd 226.502†	-182.6	1.4	0.0306 µg/L	0.0306 ppb	12:10:35
2	Co 228.616†	27.8	8.1	0.3557 µg/L	0.3557 ppb	12:10:35
2	Cr 267.716†	71.1	-5.2	-0.1160 µg/L	-0.1160 ppb	12:10:14
2	Cu 324.752†	3491.4	-180.7	-1.2176 µg/L	-1.2176 ppb	12:10:14
2	Mn 257.610†	-674.6	124.3	0.3985 µg/L	0.3985 ppb	12:10:14
2	Mo 202.031†	15.1	6.8	0.6703 µg/L	0.6703 ppb	12:10:35
2	Ni 231.604†	379.9	3.9	0.2245 µg/L	0.2245 ppb	12:10:35
2	P 214.914†	303.0	-11.2	-19.038 µg/L	-19.038 ppb	12:10:35
2	Pb 220.353†	55.8	-1.7	-0.4378 µg/L	-0.4378 ppb	12:10:35

2	S 181.975 Axial†	28.0	3.8	12.069 µg/L	12.069 ppb	12:10:35
2	Sb 206.836†	32.1	3.8	3.4165 µg/L	3.4165 ppb	12:10:35
2	Se 196.026†	34.4	13.0	12.853 µg/L	12.853 ppb	12:10:35
2	SiO2†	2354.8	-37.0	-6.9970 µg/L	-6.9970 ppb	12:10:14
2	Si 251.611†	397.6	-9.6	-0.6791 µg/L	-0.6791 ppb	12:10:35
2	Sn 189.927†	-0.9	-2.8	-1.1368 µg/L	-1.1368 ppb	12:10:35
2	Ti 334.940†	-629.8	67.9	0.1614 µg/L	0.1614 ppb	12:10:14
2	Tl 190.801†	-35.7	1.2	1.2246 µg/L	1.2246 ppb	12:10:35
2	U 409.014†	-44.3	-13.1	-1.1799 µg/L	-1.1799 ppb	12:10:14
2	V 292.402†	129.9	29.9	0.3617 µg/L	0.3617 ppb	12:10:14
2	Zn 213.857†	595.2	-9.5	-0.2236 µg/L	-0.2236 ppb	12:10:35
3	Sc RADIAL	102921.7	102921.7	103 %		12:09:10
3	Al 396.153Radial†	-382.6	27.4	12.917 µg/L	12.917 ppb	12:09:10
3	Ca 317.933Radial†	480.8	81.2	26.179 µg/L	26.179 ppb	12:09:30
3	Fe 238.204 Radial†	17.0	2.8	27.461 µg/L	27.461 ppb	12:09:30
3	K 766.490 Radial†	436.0	101.1	49.799 µg/L	49.799 ppb	12:09:10
3	Mg 279.077 IEC†	12.9	3.2	34.736 µg/L	34.736 ppb	12:09:30
3	Na 589.592 Radial†	3411.2	3114.3	1366.1 µg/L	1366.1 ppb	12:09:10
3	Sr 421.552†	306.9	150.1	0.8110 µg/L	0.8110 ppb	12:09:10
3	Sc 361.383	1959933.4	1959933.4	101.99 %		12:10:40
3	Y 371.029	1365881.5	1365881.5	102.08 %		12:10:40
3	Ag 328.068†	-577.6	1.5	0.0158 µg/L	0.0158 ppb	12:10:46
3	As 188.979†	-7.8	-4.5	-6.6993 µg/L	-6.6993 ppb	12:11:06
3	B 249.677†	485.5	119.5	5.6837 µg/L	5.6837 ppb	12:10:46
3	Ba 233.527†	-15.7	15.7	0.3540 µg/L	0.3540 ppb	12:11:06
3	Be 313.107†	-1278.4	274.4	0.1666 µg/L	0.1666 ppb	12:10:46
3	Cd 226.502†	-179.4	3.8	0.0892 µg/L	0.0892 ppb	12:11:06
3	Co 228.616†	39.5	19.6	0.8623 µg/L	0.8623 ppb	12:11:06
3	Cr 267.716†	102.4	25.9	0.5785 µg/L	0.5785 ppb	12:10:46
3	Cu 324.752†	3520.6	-137.4	-0.9262 µg/L	-0.9262 ppb	12:10:46
3	Mn 257.610†	-666.4	129.6	0.4148 µg/L	0.4148 ppb	12:10:46
3	Mo 202.031†	17.8	9.5	0.9413 µg/L	0.9413 ppb	12:11:06
3	Ni 231.604†	388.1	13.6	0.7708 µg/L	0.7708 ppb	12:11:06
3	P 214.914†	308.7	-4.4	-7.4201 µg/L	-7.4201 ppb	12:11:06
3	Pb 220.353†	51.1	-6.1	-1.5988 µg/L	-1.5988 ppb	12:11:06
3	S 181.975 Axial†	31.5	7.4	23.490 µg/L	23.490 ppb	12:11:06
3	Sb 206.836†	28.7	0.6	0.5185 µg/L	0.5185 ppb	12:11:06
3	Se 196.026†	17.6	-3.3	-3.2183 µg/L	-3.2183 ppb	12:11:06
3	SiO2†	2379.3	-3.2	-0.6000 µg/L	-0.6000 ppb	12:10:46
3	Si 251.611†	389.8	-15.6	-1.1061 µg/L	-1.1061 ppb	12:11:06
3	Sn 189.927†	-2.5	-4.4	-1.7468 µg/L	-1.7468 ppb	12:11:06
3	Ti 334.940†	-602.2	92.3	0.2204 µg/L	0.2204 ppb	12:10:46
3	Tl 190.801†	-41.0	-4.1	-4.1621 µg/L	-4.1621 ppb	12:11:06
3	U 409.014†	25.0	54.6	4.8957 µg/L	4.8957 ppb	12:10:46
3	V 292.402†	112.4	13.3	0.1710 µg/L	0.1710 ppb	12:10:46
3	Zn 213.857†	605.9	3.5	0.0754 µg/L	0.0754 ppb	12:11:06

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1965542.1	102.29 %	0.253			0.25%
Sc RADIAL	102427.4	102 %	0.5			0.45%
Y 371.029	1369172.8	102.33 %	0.220			0.21%
Ag 328.068†	27.9	0.2344 µg/L	0.19259	0.2344 ppb	0.19259	82.16%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	67.3	31.763 µg/L	16.9515	31.763 ppb	16.9515	53.37%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-2.1555 µg/L	4.42875	-2.1555 ppb	4.42875	205.47%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	137.0	6.5177 µg/L	1.31589	6.5177 ppb	1.31589	20.19%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	17.0	0.3821 µg/L	0.05559	0.3821 ppb	0.05559	14.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	276.4	0.1678 µg/L	0.01271	0.1678 ppb	0.01271	7.58%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	101.6	32.775 µg/L	5.7268	32.775 ppb	5.7268	17.47%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.1	0.0225 µg/L	0.07112	0.0225 ppb	0.07112	316.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.7	0.4254 µg/L	0.40664	0.4254 ppb	0.40664	95.60%

Cr	267.716†	18.0	0.4021 µg/L	0.45622	0.4021 ppb	0.45622	113.46%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cu	324.752†	-136.7	-0.9203 µg/L	0.30040	-0.9203 ppb	0.30040	32.64%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Fe	238.204 Radial†	3.3	32.619 µg/L	6.2052	32.619 ppb	6.2052	19.02%
QC value within limits for Cu 324.752 Recovery = Not calculated							
K	766.490 Radial†	173.0	85.182 µg/L	35.4635	85.182 ppb	35.4635	41.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
Mg	279.077 IEC†	2.7	29.032 µg/L	13.0785	29.032 ppb	13.0785	45.05%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mn	257.610†	134.4	0.4310 µg/L	0.04298	0.4310 ppb	0.04298	9.97%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mo	202.031†	7.5	0.7415 µg/L	0.17538	0.7415 ppb	0.17538	23.65%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Na	589.592 Radial†	3110.2	1364.4 µg/L	6.71	1364.4 ppb	6.71	0.49%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni	231.604†	6.1	0.3443 µg/L	0.38105	0.3443 ppb	0.38105	110.68%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
P	214.914†	-8.6	-14.623 µg/L	6.2907	-14.623 ppb	6.2907	43.02%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb	220.353†	-5.2	-1.3629 µg/L	0.83257	-1.3629 ppb	0.83257	61.09%
QC value within limits for P 214.914 Recovery = Not calculated							
S	181.975 Axial†	6.3	19.929 µg/L	6.8170	19.929 ppb	6.8170	34.21%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb	206.836†	1.3	1.1746 µg/L	1.99640	1.1746 ppb	1.99640	169.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Se	196.026†	3.6	3.5859 µg/L	8.31408	3.5859 ppb	8.31408	231.85%
QC value within limits for Sb 206.836 Recovery = Not calculated							
SiO2†		-27.6	-5.2087 µg/L	4.02447	-5.2087 ppb	4.02447	77.26%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-8.9	-0.6331 µg/L	0.49758	-0.6331 ppb	0.49758	78.59%
QC value within limits for SiO2 Recovery = Not calculated							
Sn	189.927†	-3.1	-1.2409 µg/L	0.46265	-1.2409 ppb	0.46265	37.28%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sr	421.552†	128.0	0.6916 µg/L	0.20347	0.6916 ppb	0.20347	29.42%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti	334.940†	85.4	0.2041 µg/L	0.03742	0.2041 ppb	0.03742	18.33%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Tl	190.801†	-0.3	-0.3502 µg/L	3.31771	-0.3502 ppb	3.31771	947.25%
QC value within limits for Ti 334.940 Recovery = Not calculated							
U	409.014†	1.7	0.1440 µg/L	4.24740	0.1440 ppb	4.24740	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V	292.402†	31.3	0.3824 µg/L	0.22253	0.3824 ppb	0.22253	58.19%
QC value within limits for U 409.014 Recovery = Not calculated							
Zn	213.857†	-5.1	-0.1223 µg/L	0.17125	-0.1223 ppb	0.17125	140.01%
QC value within limits for V 292.402 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 17

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 12:14:44

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	105234.8	105234.8	105 %		12:15:17
1	Al 396.153Radial†	11054.6	10941.5	5157.1 µg/L	5157.1 ppb	12:15:17
1	Ca 317.933Radial†	16747.4	15581.9	5025.7 µg/L	5025.7 ppb	12:15:17
1	Fe 238.204 Radial†	528.7	490.4	4819.4 µg/L	4819.4 ppb	12:15:37
1	K 766.490 Radial†	12033.3	11150.4	5490.9 µg/L	5490.9 ppb	12:15:17
1	Mg 279.077 IEC†	483.6	451.7	4950.5 µg/L	4950.5 ppb	12:15:37
1	Na 589.592 Radial†	27484.4	25996.2	11404 µg/L	11404 ppb	12:15:17
1	Sr 421.552†	98503.7	93779.2	506.72 µg/L	506.72 ppb	12:15:17
1	Sc 361.383	1975203.2	1975203.2	102.79 %		12:16:37
1	Y 371.029	1368314.3	1368314.3	102.26 %		12:16:37
1	Ag 328.068†	61413.5	60315.1	499.13 µg/L	499.13 ppb	12:16:43
1	As 188.979†	356.7	350.2	522.96 µg/L	522.96 ppb	12:17:03
1	B 249.677†	11328.6	10664.6	506.87 µg/L	506.87 ppb	12:16:43
1	Ba 233.527†	23504.6	22897.9	516.10 µg/L	516.10 ppb	12:16:43
1	Be 313.107†	863650.6	841746.5	511.21 µg/L	511.21 ppb	12:16:37
1	Cd 226.502†	21761.2	21350.5	519.27 µg/L	519.27 ppb	12:16:43
1	Co 228.616†	12125.1	11777.1	516.98 µg/L	516.98 ppb	12:16:43
1	Cr 267.716†	24055.9	23328.6	521.87 µg/L	521.87 ppb	12:16:43
1	Cu 324.752†	80501.4	74728.1	507.42 µg/L	507.42 ppb	12:16:43
1	Mn 257.610†	166968.0	163220.9	523.39 µg/L	523.39 ppb	12:16:37
1	Mo 202.031†	5454.6	5298.7	523.88 µg/L	523.88 ppb	12:17:03
1	Ni 231.604†	9740.2	9109.0	517.01 µg/L	517.01 ppb	12:16:43
1	P 214.914†	1892.9	1534.5	2571.2 µg/L	2571.2 ppb	12:17:03
1	Pb 220.353†	2086.0	1973.2	521.77 µg/L	521.77 ppb	12:17:03
1	S 181.975 Axial†	354.4	321.2	1021.4 µg/L	1021.4 ppb	12:17:03
1	Sb 206.836†	610.5	566.4	514.51 µg/L	514.51 ppb	12:17:03
1	Se 196.026†	568.4	532.4	534.55 µg/L	534.55 ppb	12:17:03
1	SiO2†	31510.6	28319.8	5351.7 µg/L	5351.7 ppb	12:16:43
1	Si 251.611†	36786.8	35391.0	2505.6 µg/L	2505.6 ppb	12:16:43
1	Sn 189.927†	1384.0	1344.5	523.02 µg/L	523.02 ppb	12:17:03
1	Ti 334.940†	213890.5	208770.2	503.22 µg/L	503.22 ppb	12:16:37
1	Tl 190.801†	493.0	515.7	526.77 µg/L	526.77 ppb	12:17:03
1	U 409.014†	5884.9	5755.4	515.29 µg/L	515.29 ppb	12:16:43
1	V 292.402†	43505.1	42227.9	519.91 µg/L	519.91 ppb	12:16:43
1	Zn 213.857†	23517.6	22289.0	512.78 µg/L	512.78 ppb	12:16:43
2	Sc RADIAL	104402.0	104402.0	104 %		12:15:43
2	Al 396.153Radial†	11017.2	10989.6	5179.9 µg/L	5179.9 ppb	12:15:43
2	Ca 317.933Radial†	16574.9	15543.5	5013.4 µg/L	5013.4 ppb	12:15:43
2	Fe 238.204 Radial†	529.1	494.8	4862.7 µg/L	4862.7 ppb	12:16:03
2	K 766.490 Radial†	11917.8	11130.9	5481.3 µg/L	5481.3 ppb	12:15:43
2	Mg 279.077 IEC†	481.0	452.9	4963.1 µg/L	4963.1 ppb	12:16:03
2	Na 589.592 Radial†	27350.3	26076.3	11439 µg/L	11439 ppb	12:15:43
2	Sr 421.552†	97887.4	93936.2	507.56 µg/L	507.56 ppb	12:15:43
2	Sc 361.383	1979679.9	1979679.9	103.02 %		12:17:10
2	Y 371.029	1371096.2	1371096.2	102.47 %		12:17:10
2	Ag 328.068†	61816.1	60570.8	501.25 µg/L	501.25 ppb	12:17:15
2	As 188.979†	358.8	351.5	524.90 µg/L	524.90 ppb	12:17:35
2	B 249.677†	11407.4	10716.3	509.32 µg/L	509.32 ppb	12:17:15
2	Ba 233.527†	23664.2	23001.2	518.43 µg/L	518.43 ppb	12:17:15
2	Be 313.107†	867109.6	843204.1	512.09 µg/L	512.09 ppb	12:17:10
2	Cd 226.502†	21969.7	21504.9	523.03 µg/L	523.03 ppb	12:17:15
2	Co 228.616†	12227.7	11849.9	520.17 µg/L	520.17 ppb	12:17:15
2	Cr 267.716†	24221.9	23436.9	524.30 µg/L	524.30 ppb	12:17:15
2	Cu 324.752†	80851.6	74890.9	508.53 µg/L	508.53 ppb	12:17:15
2	Mn 257.610†	167896.4	163754.8	525.11 µg/L	525.11 ppb	12:17:10
2	Mo 202.031†	5430.5	5263.2	520.38 µg/L	520.38 ppb	12:17:35
2	Ni 231.604†	9810.5	9155.8	519.66 µg/L	519.66 ppb	12:17:15
2	P 214.914†	1885.5	1523.1	2551.6 µg/L	2551.6 ppb	12:17:35
2	Pb 220.353†	2086.6	1969.2	520.72 µg/L	520.72 ppb	12:17:35

2	S 181.975 Axial†	356.7	322.7	1026.3 µg/L	1026.3 ppb	12:17:35
2	Sb 206.836†	611.7	566.2	514.26 µg/L	514.26 ppb	12:17:35
2	Se 196.026†	563.9	526.8	529.22 µg/L	529.22 ppb	12:17:35
2	SiO2†	31750.7	28483.5	5382.6 µg/L	5382.6 ppb	12:17:15
2	Si 251.611†	37039.0	35554.9	2517.2 µg/L	2517.2 ppb	12:17:15
2	Sn 189.927†	1379.0	1336.6	519.85 µg/L	519.85 ppb	12:17:35
2	Ti 334.940†	214548.2	208938.0	503.62 µg/L	503.62 ppb	12:17:10
2	Tl 190.801†	487.6	509.4	520.37 µg/L	520.37 ppb	12:17:35
2	U 409.014†	5781.6	5642.2	505.13 µg/L	505.13 ppb	12:17:15
2	V 292.402†	43787.8	42406.6	522.05 µg/L	522.05 ppb	12:17:15
2	Zn 213.857†	23594.9	22312.3	513.30 µg/L	513.30 ppb	12:17:15
3	Sc RADIAL	104450.2	104450.2	104 %		12:16:08
3	Al 396.153Radial†	10994.8	10963.3	5168.7 µg/L	5168.7 ppb	12:16:08
3	Ca 317.933Radial†	16563.3	15525.0	5007.4 µg/L	5007.4 ppb	12:16:08
3	Fe 238.204 Radial†	526.5	492.1	4835.1 µg/L	4835.1 ppb	12:16:28
3	K 766.490 Radial†	12035.9	11239.1	5534.6 µg/L	5534.6 ppb	12:16:08
3	Mg 279.077 IEC†	477.1	448.9	4918.9 µg/L	4918.9 ppb	12:16:28
3	Na 589.592 Radial†	27334.7	26049.2	11427 µg/L	11427 ppb	12:16:08
3	Sr 421.552†	97875.3	93881.1	507.27 µg/L	507.27 ppb	12:16:08
3	Sc 361.383	1975953.5	1975953.5	102.83 %		12:17:42
3	Y 371.029	1369331.5	1369331.5	102.34 %		12:17:42
3	Ag 328.068†	59773.2	58697.3	485.67 µg/L	485.67 ppb	12:17:47
3	As 188.979†	321.2	315.6	471.12 µg/L	471.12 ppb	12:18:08
3	B 249.677†	11040.6	10380.4	493.25 µg/L	493.25 ppb	12:17:47
3	Ba 233.527†	22447.5	21861.2	492.73 µg/L	492.73 ppb	12:17:47
3	Be 313.107†	843031.8	821375.8	498.84 µg/L	498.84 ppb	12:17:42
3	Cd 226.502†	20801.4	20409.0	496.35 µg/L	496.35 ppb	12:17:47
3	Co 228.616†	11504.2	11168.8	490.21 µg/L	490.21 ppb	12:17:47
3	Cr 267.716†	22500.9	21807.6	487.85 µg/L	487.85 ppb	12:17:47
3	Cu 324.752†	76717.4	71018.5	482.27 µg/L	482.27 ppb	12:17:47
3	Mn 257.610†	163002.4	159302.7	510.83 µg/L	510.83 ppb	12:17:42
3	Mo 202.031†	4778.2	4638.8	458.66 µg/L	458.66 ppb	12:18:08
3	Ni 231.604†	9246.9	8625.7	489.58 µg/L	489.58 ppb	12:17:47
3	P 214.914†	1718.9	1364.6	2282.8 µg/L	2282.8 ppb	12:18:08
3	Pb 220.353†	1894.2	1786.0	472.21 µg/L	472.21 ppb	12:18:08
3	S 181.975 Axial†	325.2	292.7	930.85 µg/L	930.85 ppb	12:18:08
3	Sb 206.836†	547.9	505.3	458.61 µg/L	458.61 ppb	12:18:08
3	Se 196.026†	527.0	492.0	494.88 µg/L	494.88 ppb	12:18:08
3	SiO2†	30473.4	27299.4	5158.8 µg/L	5158.8 ppb	12:17:47
3	Si 251.611†	35550.8	34175.4	2419.6 µg/L	2419.6 ppb	12:17:47
3	Sn 189.927†	1199.8	1164.9	452.37 µg/L	452.37 ppb	12:18:08
3	Ti 334.940†	208011.6	202973.9	489.24 µg/L	489.24 ppb	12:17:42
3	Tl 190.801†	459.2	482.7	493.24 µg/L	493.24 ppb	12:18:08
3	U 409.014†	5424.9	5305.9	474.97 µg/L	474.97 ppb	12:17:47
3	V 292.402†	41306.6	40073.8	493.02 µg/L	493.02 ppb	12:17:47
3	Zn 213.857†	22410.9	21204.0	487.81 µg/L	487.81 ppb	12:17:47

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1976945.5	102.88 %	0.125			0.12%
Sc RADIAL	104695.6	104 %	0.5			0.45%
Y 371.029	1369580.7	102.36 %	0.105			0.10%
Ag 328.068†	59861.1	495.35 µg/L	8.449	495.35 ppb	8.449	1.71%
QC value within limits for Ag 328.068 Recovery = 99.07%						
Al 396.153Radial†	10964.8	5168.5 µg/L	11.40	5168.5 ppb	11.40	0.22%
QC value within limits for Al 396.153Radial Recovery = 103.37%						
As 188.979†	339.1	506.33 µg/L	30.505	506.33 ppb	30.505	6.02%
QC value within limits for As 188.979 Recovery = 101.27%						
B 249.677†	10587.1	503.15 µg/L	8.654	503.15 ppb	8.654	1.72%
QC value within limits for B 249.677 Recovery = 100.63%						
Ba 233.527†	22586.8	509.09 µg/L	14.213	509.09 ppb	14.213	2.79%
QC value within limits for Ba 233.527 Recovery = 101.82%						
Be 313.107†	835442.1	507.38 µg/L	7.411	507.38 ppb	7.411	1.46%
QC value within limits for Be 313.107 Recovery = 101.48%						
Ca 317.933Radial†	15550.1	5015.5 µg/L	9.37	5015.5 ppb	9.37	0.19%
QC value within limits for Ca 317.933Radial Recovery = 100.31%						
Cd 226.502†	21088.1	512.88 µg/L	14.444	512.88 ppb	14.444	2.82%
QC value within limits for Cd 226.502 Recovery = 102.58%						
Co 228.616†	11598.6	509.12 µg/L	16.452	509.12 ppb	16.452	3.23%

Cr	267.716†	22857.7	511.34 µg/L	20.378	511.34 ppb	20.378	3.99%
Cu	324.752†	73545.9	499.41 µg/L	14.847	499.41 ppb	14.847	2.97%
Fe	238.204 Radial†	492.4	4839.0 µg/L	21.91	4839.0 ppb	21.91	0.45%
K	766.490 Radial†	11173.5	5502.3 µg/L	28.40	5502.3 ppb	28.40	0.52%
Mg	279.077 IEC†	451.2	4944.2 µg/L	22.76	4944.2 ppb	22.76	0.46%
Mn	257.610†	162092.8	519.78 µg/L	7.795	519.78 ppb	7.795	1.50%
Mo	202.031†	5066.9	500.97 µg/L	36.683	500.97 ppb	36.683	7.32%
Na	589.592 Radial†	26040.6	11423 µg/L	17.9	11423 ppb	17.9	0.16%
Ni	231.604†	8963.5	508.75 µg/L	16.656	508.75 ppb	16.656	3.27%
P	214.914†	1474.1	2468.6 µg/L	161.14	2468.6 ppb	161.14	6.53%
Pb	220.353†	1909.5	504.90 µg/L	28.316	504.90 ppb	28.316	5.61%
S	181.975 Axial†	312.2	992.86 µg/L	53.758	992.86 ppb	53.758	5.41%
Sb	206.836†	545.9	495.79 µg/L	32.202	495.79 ppb	32.202	6.50%
Se	196.026†	517.1	519.55 µg/L	21.533	519.55 ppb	21.533	4.14%
SiO2†		28034.2	5297.7 µg/L	121.25	5297.7 ppb	121.25	2.29%
Si	251.611†	35040.4	2480.8 µg/L	53.36	2480.8 ppb	53.36	2.15%
Sn	189.927†	1282.0	498.41 µg/L	39.906	498.41 ppb	39.906	8.01%
Sr	421.552†	93865.5	507.18 µg/L	0.430	507.18 ppb	0.430	0.08%
Ti	334.940†	206894.0	498.69 µg/L	8.189	498.69 ppb	8.189	1.64%
Tl	190.801†	502.6	513.46 µg/L	17.802	513.46 ppb	17.802	3.47%
U	409.014†	5567.8	498.46 µg/L	20.974	498.46 ppb	20.974	4.21%
V	292.402†	41569.4	511.66 µg/L	16.182	511.66 ppb	16.182	3.16%
Zn	213.857†	21935.1	504.63 µg/L	14.572	504.63 ppb	14.572	2.89%

QC value within limits for Co 228.616 Recovery = 101.82%  
 QC value within limits for Cr 267.716 Recovery = 102.27%  
 QC value within limits for Cu 324.752 Recovery = 99.88%  
 QC value within limits for Fe 238.204 Radial Recovery = 96.78%  
 QC value greater than the upper limit for K 766.490 Radial Recovery = 110.05%  
 QC value within limits for Mg 279.077 IEC Recovery = 98.88%  
 QC value within limits for Mn 257.610 Recovery = 103.96%  
 QC value within limits for Mo 202.031 Recovery = 100.19%  
 QC value greater than the upper limit for Na 589.592 Radial Recovery = 114.23%  
 QC value within limits for Ni 231.604 Recovery = 101.75%  
 QC value within limits for P 214.914 Recovery = 98.74%  
 QC value within limits for Pb 220.353 Recovery = 100.98%  
 QC value within limits for S 181.975 Axial Recovery = 99.29%  
 QC value within limits for Sb 206.836 Recovery = 99.16%  
 QC value within limits for Se 196.026 Recovery = 103.91%  
 QC value within limits for SiO2 Recovery = 99.07%  
 QC value within limits for Si 251.611 Recovery = 99.23%  
 QC value within limits for Sn 189.927 Recovery = 99.68%  
 QC value within limits for Sr 421.552 Recovery = 101.44%  
 QC value within limits for Ti 334.940 Recovery = 99.74%  
 QC value within limits for Tl 190.801 Recovery = 102.69%  
 QC value within limits for U 409.014 Recovery = 99.69%  
 QC value within limits for V 292.402 Recovery = 102.33%  
 QC value within limits for Zn 213.857 Recovery = 100.93%

QC Failed. Continue with analysis.

Sequence No.: 18

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 12:18:17

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	103653.4	103653.4	103 %		12:18:48
1	Al 396.153Radial†	-418.9	-5.1	-2.4445 µg/L	-2.4445 ppb	12:18:48
1	Ca 317.933Radial†	399.3	-1.1	-0.3533 µg/L	-0.3533 ppb	12:19:08
1	Fe 238.204 Radial†	14.6	0.4	3.8526 µg/L	3.8526 ppb	12:19:08
1	K 766.490 Radial†	455.4	116.9	57.582 µg/L	57.582 ppb	12:18:48
1	Mg 279.077 IEC†	14.9	5.1	55.470 µg/L	55.470 ppb	12:19:08
1	Na 589.592 Radial†	3209.7	2895.7	1270.3 µg/L	1270.3 ppb	12:18:48
1	Sr 421.552†	241.8	85.0	0.4592 µg/L	0.4592 ppb	12:18:48
1	Sc 361.383	1973713.0	1973713.0	102.71 %		12:20:07
1	Y 371.029	1373992.4	1373992.4	102.69 %		12:20:07
1	Ag 328.068†	-571.5	11.5	0.0935 µg/L	0.0935 ppb	12:20:12
1	As 188.979†	-8.4	-5.0	-7.5467 µg/L	-7.5467 ppb	12:20:32
1	B 249.677†	461.5	92.8	4.4222 µg/L	4.4222 ppb	12:20:12
1	Ba 233.527†	-20.2	11.4	0.2565 µg/L	0.2565 ppb	12:20:32
1	Be 313.107†	-1281.5	280.1	0.1700 µg/L	0.1700 ppb	12:20:12
1	Cd 226.502†	-164.7	19.3	0.4694 µg/L	0.4694 ppb	12:20:32
1	Co 228.616†	34.3	14.3	0.6300 µg/L	0.6300 ppb	12:20:32
1	Cr 267.716†	71.5	-5.0	-0.1114 µg/L	-0.1114 ppb	12:20:12
1	Cu 324.752†	3495.9	-185.6	-1.2571 µg/L	-1.2571 ppb	12:20:12
1	Mn 257.610†	-637.5	162.3	0.5169 µg/L	0.5169 ppb	12:20:12
1	Mo 202.031†	17.4	8.9	0.8844 µg/L	0.8844 ppb	12:20:32
1	Ni 231.604†	371.3	-5.4	-0.3081 µg/L	-0.3081 ppb	12:20:32
1	P 214.914†	307.2	-7.9	-13.394 µg/L	-13.394 ppb	12:20:32
1	Pb 220.353†	55.4	-2.2	-0.5763 µg/L	-0.5763 ppb	12:20:32
1	S 181.975 Axial†	22.3	-1.8	-5.7951 µg/L	-5.7951 ppb	12:20:32
1	Sb 206.836†	26.8	-1.5	-1.3153 µg/L	-1.3153 ppb	12:20:32
1	Se 196.026†	16.2	-4.8	-4.7308 µg/L	-4.7308 ppb	12:20:32
1	SiO2†	2361.0	-37.2	-7.0341 µg/L	-7.0341 ppb	12:20:12
1	Si 251.611†	393.8	-14.4	-1.0172 µg/L	-1.0172 ppb	12:20:32
1	Sn 189.927†	2.0	0.0	0.0001 µg/L	0.0001 ppb	12:20:32
1	Ti 334.940†	-537.5	159.4	0.3801 µg/L	0.3801 ppb	12:20:12
1	Tl 190.801†	-39.6	-2.5	-2.5322 µg/L	-2.5322 ppb	12:20:32
1	U 409.014†	0.8	30.9	2.7731 µg/L	2.7731 ppb	12:20:12
1	V 292.402†	85.0	-14.2	-0.1642 µg/L	-0.1642 ppb	12:20:12
1	Zn 213.857†	602.3	-4.2	-0.0972 µg/L	-0.0972 ppb	12:20:32
2	Sc RADIAL	103029.8	103029.8	103 %		12:19:14
2	Al 396.153Radial†	-397.0	13.7	6.4513 µg/L	6.4513 ppb	12:19:14
2	Ca 317.933Radial†	405.0	6.9	2.2176 µg/L	2.2176 ppb	12:19:34
2	Fe 238.204 Radial†	17.4	3.2	31.055 µg/L	31.055 ppb	12:19:34
2	K 766.490 Radial†	397.0	62.7	30.872 µg/L	30.872 ppb	12:19:14
2	Mg 279.077 IEC†	12.8	3.0	33.153 µg/L	33.153 ppb	12:19:34
2	Na 589.592 Radial†	3204.0	2908.9	1276.0 µg/L	1276.0 ppb	12:19:14
2	Sr 421.552†	258.1	102.3	0.5527 µg/L	0.5527 ppb	12:19:14
2	Sc 361.383	1951020.5	1951020.5	101.53 %		12:20:38
2	Y 371.029	1358375.0	1358375.0	101.52 %		12:20:38
2	Ag 328.068†	-583.0	-6.4	-0.0481 µg/L	-0.0481 ppb	12:20:43
2	As 188.979†	-6.0	-2.7	-4.1090 µg/L	-4.1090 ppb	12:21:04
2	B 249.677†	462.9	99.3	4.7205 µg/L	4.7205 ppb	12:20:43
2	Ba 233.527†	-19.7	11.7	0.2627 µg/L	0.2627 ppb	12:21:04
2	Be 313.107†	-1294.2	253.1	0.1537 µg/L	0.1537 ppb	12:20:43
2	Cd 226.502†	-176.2	6.2	0.1462 µg/L	0.1462 ppb	12:21:04
2	Co 228.616†	25.2	5.8	0.2544 µg/L	0.2544 ppb	12:21:04
2	Cr 267.716†	90.0	14.1	0.3144 µg/L	0.3144 ppb	12:20:43
2	Cu 324.752†	3440.6	-200.5	-1.3530 µg/L	-1.3530 ppb	12:20:43
2	Mn 257.610†	-630.2	162.2	0.5198 µg/L	0.5198 ppb	12:20:43
2	Mo 202.031†	24.4	16.1	1.5912 µg/L	1.5912 ppb	12:21:04
2	Ni 231.604†	373.9	1.4	0.0784 µg/L	0.0784 ppb	12:21:04
2	P 214.914†	306.0	-5.6	-9.5416 µg/L	-9.5416 ppb	12:21:04
2	Pb 220.353†	39.5	-17.2	-4.5417 µg/L	-4.5417 ppb	12:21:04

2	S 181.975 Axial†	21.0	-2.8	-8.9431 µg/L	-8.9431 ppb	12:21:04
2	Sb 206.836†	27.8	-0.3	-0.2064 µg/L	-0.2064 ppb	12:21:04
2	Se 196.026†	16.3	-4.5	-4.3404 µg/L	-4.3404 ppb	12:21:04
2	SiO2†	2331.3	-39.8	-7.5215 µg/L	-7.5215 ppb	12:20:43
2	Si 251.611†	399.7	-4.1	-0.2880 µg/L	-0.2880 ppb	12:21:04
2	Sn 189.927†	-2.5	-4.4	-1.7486 µg/L	-1.7486 ppb	12:21:04
2	Ti 334.940†	-591.2	100.5	0.2397 µg/L	0.2397 ppb	12:20:43
2	Tl 190.801†	-39.3	-2.6	-2.6374 µg/L	-2.6374 ppb	12:21:04
2	U 409.014†	24.9	54.7	4.9001 µg/L	4.9001 ppb	12:20:43
2	V 292.402†	121.2	22.4	0.2859 µg/L	0.2859 ppb	12:20:43
2	Zn 213.857†	589.1	-10.4	-0.2434 µg/L	-0.2434 ppb	12:21:04
3	Sc RADIAL	103148.4	103148.4	103 %		12:19:39
3	Al 396.153Radial†	-409.8	1.8	0.8204 µg/L	0.8204 ppb	12:19:39
3	Ca 317.933Radial†	390.8	-7.4	-2.3883 µg/L	-2.3883 ppb	12:19:59
3	Fe 238.204 Radial†	16.2	2.0	19.398 µg/L	19.398 ppb	12:19:59
3	K 766.490 Radial†	485.9	148.7	73.223 µg/L	73.223 ppb	12:19:39
3	Mg 279.077 IEC†	8.2	-1.4	-15.574 µg/L	-15.574 ppb	12:19:59
3	Na 589.592 Radial†	3150.4	2853.2	1251.6 µg/L	1251.6 ppb	12:19:39
3	Sr 421.552†	223.1	68.0	0.3672 µg/L	0.3672 ppb	12:19:39
3	Sc 361.383	1975819.2	1975819.2	102.82 %		12:21:09
3	Y 371.029	1377291.5	1377291.5	102.93 %		12:21:09
3	Ag 328.068†	-575.4	8.2	0.0674 µg/L	0.0674 ppb	12:21:15
3	As 188.979†	-1.2	2.0	3.0513 µg/L	3.0513 ppb	12:21:35
3	B 249.677†	479.7	109.9	5.2330 µg/L	5.2330 ppb	12:21:15
3	Ba 233.527†	-22.4	9.3	0.2081 µg/L	0.2081 ppb	12:21:35
3	Be 313.107†	-1262.9	299.5	0.1819 µg/L	0.1819 ppb	12:21:15
3	Cd 226.502†	-178.5	6.1	0.1462 µg/L	0.1462 ppb	12:21:35
3	Co 228.616†	36.5	16.4	0.7209 µg/L	0.7209 ppb	12:21:35
3	Cr 267.716†	107.3	29.8	0.6663 µg/L	0.6663 ppb	12:21:15
3	Cu 324.752†	3451.0	-232.9	-1.5750 µg/L	-1.5750 ppb	12:21:15
3	Mn 257.610†	-669.7	131.6	0.4242 µg/L	0.4242 ppb	12:21:15
3	Mo 202.031†	13.7	5.4	0.5312 µg/L	0.5312 ppb	12:21:35
3	Ni 231.604†	383.3	5.8	0.3316 µg/L	0.3316 ppb	12:21:35
3	P 214.914†	310.1	-5.4	-9.1425 µg/L	-9.1425 ppb	12:21:35
3	Pb 220.353†	47.2	-10.2	-2.6852 µg/L	-2.6852 ppb	12:21:35
3	S 181.975 Axial†	22.3	-1.9	-5.9990 µg/L	-5.9990 ppb	12:21:35
3	Sb 206.836†	25.0	-3.3	-2.9696 µg/L	-2.9696 ppb	12:21:35
3	Se 196.026†	26.1	4.9	4.8658 µg/L	4.8658 ppb	12:21:35
3	SiO2†	2328.5	-71.3	-13.467 µg/L	-13.467 ppb	12:21:15
3	Si 251.611†	400.2	-8.5	-0.6047 µg/L	-0.6047 ppb	12:21:35
3	Sn 189.927†	-0.1	-2.0	-0.8093 µg/L	-0.8093 ppb	12:21:35
3	Ti 334.940†	-639.0	61.3	0.1491 µg/L	0.1491 ppb	12:21:15
3	Tl 190.801†	-36.2	0.8	0.8274 µg/L	0.8274 ppb	12:21:35
3	U 409.014†	-49.7	-18.2	-1.6306 µg/L	-1.6306 ppb	12:21:15
3	V 292.402†	76.8	-22.2	-0.2711 µg/L	-0.2711 ppb	12:21:15
3	Zn 213.857†	586.6	-20.1	-0.4657 µg/L	-0.4657 ppb	12:21:35

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1966850.9	102.35 %	0.716			0.70%
Sc RADIAL	103277.2	103 %	0.3			0.32%
Y 371.029	1369886.3	102.38 %	0.755			0.74%
Ag 328.068†	4.5	0.0376 µg/L	0.07536	0.0376 ppb	0.07536	200.45%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	3.5	1.6091 µg/L	4.50005	1.6091 ppb	4.50005	279.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.9	-2.8681 µg/L	5.40684	-2.8681 ppb	5.40684	188.51%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	100.7	4.7919 µg/L	0.41006	4.7919 ppb	0.41006	8.56%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.8	0.2425 µg/L	0.02990	0.2425 ppb	0.02990	12.33%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	277.6	0.1685 µg/L	0.01419	0.1685 ppb	0.01419	8.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.5	-0.1747 µg/L	2.30812	-0.1747 ppb	2.30812	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.5	0.2539 µg/L	0.18659	0.2539 ppb	0.18659	73.48%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	12.2	0.5351 µg/L	0.24732	0.5351 ppb	0.24732	46.22%



Cr	267.716†	13.0	0.2898 µg/L	0.38943	0.2898 ppb	0.38943	134.39%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-206.3	-1.3950 µg/L	0.16304	-1.3950 ppb	0.16304	11.69%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	1.8	18.102 µg/L	13.6476	18.102 ppb	13.6476	75.39%
	QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	109.4	53.892 µg/L	21.4149	53.892 ppb	21.4149	39.74%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	2.2	24.350 µg/L	36.3312	24.350 ppb	36.3312	149.21%
	QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	152.0	0.4870 µg/L	0.05434	0.4870 ppb	0.05434	11.16%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	10.1	1.0023 µg/L	0.53975	1.0023 ppb	0.53975	53.85%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	2885.9	1266.0 µg/L	12.76	1266.0 ppb	12.76	1.01%
	QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	0.6	0.0340 µg/L	0.32218	0.0340 ppb	0.32218	948.43%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-6.3	-10.693 µg/L	2.3476	-10.693 ppb	2.3476	21.96%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-9.9	-2.6011 µg/L	1.98405	-2.6011 ppb	1.98405	76.28%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-2.2	-6.9124 µg/L	1.76159	-6.9124 ppb	1.76159	25.48%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	-1.7	-1.4971 µg/L	1.39056	-1.4971 ppb	1.39056	92.88%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-1.5	-1.4018 µg/L	5.43138	-1.4018 ppb	5.43138	387.46%
	QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†		-49.4	-9.3409 µg/L	3.58176	-9.3409 ppb	3.58176	38.34%
	QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	-9.0	-0.6366 µg/L	0.36563	-0.6366 ppb	0.36563	57.43%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-2.1	-0.8526 µg/L	0.87515	-0.8526 ppb	0.87515	102.65%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	85.1	0.4597 µg/L	0.09273	0.4597 ppb	0.09273	20.17%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	107.1	0.2563 µg/L	0.11639	0.2563 ppb	0.11639	45.42%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-1.4	-1.4474 µg/L	1.97072	-1.4474 ppb	1.97072	136.16%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	22.5	2.0142 µg/L	3.33084	2.0142 ppb	3.33084	165.37%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	-4.7	-0.0498 µg/L	0.29562	-0.0498 ppb	0.29562	593.72%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	-11.6	-0.2688 µg/L	0.18551	-0.2688 ppb	0.18551	69.02%
	QC value within limits for Zn 213.857 Recovery = Not calculated						
QC Failed. Continue with analysis.							

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 12:30:13

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	105995.8	105995.8	106 %		12:30:47
1	Al 396.153Radial†	10910.1	10729.0	5056.9 µg/L	5056.9 ppb	12:30:47
1	Ca 317.933Radial†	16562.0	15291.7	4932.1 µg/L	4932.1 ppb	12:30:47
1	Fe 238.204 Radial†	534.8	492.6	4840.4 µg/L	4840.4 ppb	12:31:07
1	K 766.490 Radial†	11862.4	10906.3	5370.7 µg/L	5370.7 ppb	12:30:47
1	Mg 279.077 IEC†	480.3	445.3	4879.7 µg/L	4879.7 ppb	12:31:07
1	Na 589.592 Radial†	27801.3	26108.0	11453 µg/L	11453 ppb	12:30:47
1	Sr 421.552†	98764.9	93352.1	504.41 µg/L	504.41 ppb	12:30:47
1	Sc 361.383	1993771.4	1993771.4	103.76 %		12:32:07
1	Y 371.029	1381995.1	1381995.1	103.29 %		12:32:07
1	Ag 328.068†	60899.2	59263.0	490.43 µg/L	490.43 ppb	12:32:13
1	As 188.979†	355.6	345.9	516.47 µg/L	516.47 ppb	12:32:33
1	B 249.677†	11235.6	10472.4	497.68 µg/L	497.68 ppb	12:32:13
1	Ba 233.527†	23310.9	22498.3	507.09 µg/L	507.09 ppb	12:32:13
1	Be 313.107†	858287.6	828752.6	503.32 µg/L	503.32 ppb	12:32:07
1	Cd 226.502†	21590.9	20989.2	510.48 µg/L	510.48 ppb	12:32:13
1	Co 228.616†	12007.0	11553.4	507.16 µg/L	507.16 ppb	12:32:13
1	Cr 267.716†	23827.8	22890.9	512.08 µg/L	512.08 ppb	12:32:13
1	Cu 324.752†	79830.6	73352.2	498.09 µg/L	498.09 ppb	12:32:13
1	Mn 257.610†	165684.8	160471.3	514.58 µg/L	514.58 ppb	12:32:07
1	Mo 202.031†	5414.0	5210.1	515.12 µg/L	515.12 ppb	12:32:33
1	Ni 231.604†	9738.9	9019.6	511.93 µg/L	511.93 ppb	12:32:13
1	P 214.914†	1868.3	1493.7	2502.3 µg/L	2502.3 ppb	12:32:33
1	Pb 220.353†	2059.0	1928.4	509.92 µg/L	509.92 ppb	12:32:33
1	S 181.975 Axial†	350.0	313.8	997.76 µg/L	997.76 ppb	12:32:33
1	Sb 206.836†	605.0	555.5	504.64 µg/L	504.64 ppb	12:32:33
1	Se 196.026†	559.1	518.3	520.84 µg/L	520.84 ppb	12:32:33
1	SiO2†	31275.0	27807.1	5254.8 µg/L	5254.8 ppb	12:32:13
1	Si 251.611†	36545.5	34825.1	2465.6 µg/L	2465.6 ppb	12:32:13
1	Sn 189.927†	1377.9	1326.2	515.77 µg/L	515.77 ppb	12:32:33
1	Ti 334.940†	212252.8	205253.8	494.74 µg/L	494.74 ppb	12:32:07
1	Tl 190.801†	484.8	503.3	514.13 µg/L	514.13 ppb	12:32:33
1	U 409.014†	5755.7	5577.6	499.34 µg/L	499.34 ppb	12:32:13
1	V 292.402†	43118.7	41461.3	510.45 µg/L	510.45 ppb	12:32:13
1	Zn 213.857†	23335.6	21900.4	503.82 µg/L	503.82 ppb	12:32:13
2	Sc RADIAL	106276.7	106276.7	106 %		12:31:13
2	Al 396.153Radial†	10939.9	10729.8	5057.3 µg/L	5057.3 ppb	12:31:13
2	Ca 317.933Radial†	16596.0	15282.4	4929.1 µg/L	4929.1 ppb	12:31:13
2	Fe 238.204 Radial†	536.1	492.5	4839.6 µg/L	4839.6 ppb	12:31:33
2	K 766.490 Radial†	11929.0	10939.4	5387.0 µg/L	5387.0 ppb	12:31:13
2	Mg 279.077 IEC†	480.2	444.0	4865.6 µg/L	4865.6 ppb	12:31:33
2	Na 589.592 Radial†	27737.9	25978.6	11396 µg/L	11396 ppb	12:31:13
2	Sr 421.552†	98802.2	93140.2	503.26 µg/L	503.26 ppb	12:31:13
2	Sc 361.383	1988974.4	1988974.4	103.51 %		12:32:40
2	Y 371.029	1380866.0	1380866.0	103.20 %		12:32:40
2	Ag 328.068†	61146.3	59643.3	493.58 µg/L	493.58 ppb	12:32:45
2	As 188.979†	349.5	340.9	508.96 µg/L	508.96 ppb	12:33:05
2	B 249.677†	11268.2	10530.0	500.43 µg/L	500.43 ppb	12:32:45
2	Ba 233.527†	23402.6	22641.1	510.31 µg/L	510.31 ppb	12:32:45
2	Be 313.107†	857256.1	829751.1	503.92 µg/L	503.92 ppb	12:32:40
2	Cd 226.502†	21665.9	21111.8	513.46 µg/L	513.46 ppb	12:32:45
2	Co 228.616†	12076.8	11648.7	511.34 µg/L	511.34 ppb	12:32:45
2	Cr 267.716†	23973.0	23086.6	516.46 µg/L	516.46 ppb	12:32:45
2	Cu 324.752†	80092.6	73790.9	501.07 µg/L	501.07 ppb	12:32:45
2	Mn 257.610†	165012.9	160207.3	513.74 µg/L	513.74 ppb	12:32:40
2	Mo 202.031†	5373.4	5183.4	512.49 µg/L	512.49 ppb	12:33:05
2	Ni 231.604†	9764.3	9066.7	514.61 µg/L	514.61 ppb	12:32:45
2	P 214.914†	1873.5	1503.0	2517.8 µg/L	2517.8 ppb	12:33:05
2	Pb 220.353†	2062.4	1936.4	512.04 µg/L	512.04 ppb	12:33:05

2	S 181.975 Axial†	347.8	312.5	993.77 µg/L	993.77 ppb	12:33:05
2	Sb 206.836†	605.8	557.7	506.54 µg/L	506.54 ppb	12:33:05
2	Se 196.026†	552.9	513.6	516.17 µg/L	516.17 ppb	12:33:05
2	SiO2†	31485.3	28083.0	5306.9 µg/L	5306.9 ppb	12:32:45
2	Si 251.611†	36771.9	35128.7	2487.1 µg/L	2487.1 ppb	12:32:45
2	Sn 189.927†	1364.1	1315.9	511.75 µg/L	511.75 ppb	12:33:05
2	Ti 334.940†	211921.0	205426.6	495.16 µg/L	495.16 ppb	12:32:40
2	Tl 190.801†	483.4	503.1	513.96 µg/L	513.96 ppb	12:33:05
2	U 409.014†	5770.9	5605.6	501.86 µg/L	501.86 ppb	12:32:45
2	V 292.402†	43396.4	41829.8	514.94 µg/L	514.94 ppb	12:32:45
2	Zn 213.857†	23351.2	21969.8	505.41 µg/L	505.41 ppb	12:32:45
3	Sc RADIAL	106054.9	106054.9	106 %		12:31:38
3	Al 396.153Radial†	10903.5	10717.1	5052.4 µg/L	5052.4 ppb	12:31:38
3	Ca 317.933Radial†	16541.4	15263.5	4923.0 µg/L	4923.0 ppb	12:31:38
3	Fe 238.204 Radial†	538.9	496.2	4875.2 µg/L	4875.2 ppb	12:31:58
3	K 766.490 Radial†	11833.1	10872.2	5353.9 µg/L	5353.9 ppb	12:31:38
3	Mg 279.077 IEC†	485.2	449.7	4927.4 µg/L	4927.4 ppb	12:31:58
3	Na 589.592 Radial†	27783.2	26076.2	11439 µg/L	11439 ppb	12:31:38
3	Sr 421.552†	98675.9	93215.8	503.67 µg/L	503.67 ppb	12:31:38
3	Sc 361.383	1988852.7	1988852.7	103.50 %		12:33:12
3	Y 371.029	1380450.7	1380450.7	103.17 %		12:33:12
3	Ag 328.068†	59251.1	57815.8	478.39 µg/L	478.39 ppb	12:33:17
3	As 188.979†	319.3	311.7	465.35 µg/L	465.35 ppb	12:33:38
3	B 249.677†	10922.1	10196.3	484.44 µg/L	484.44 ppb	12:33:17
3	Ba 233.527†	22275.4	21553.4	485.79 µg/L	485.79 ppb	12:33:17
3	Be 313.107†	834667.1	807976.5	490.70 µg/L	490.70 ppb	12:33:12
3	Cd 226.502†	20580.7	20064.6	487.96 µg/L	487.96 ppb	12:33:17
3	Co 228.616†	11409.9	11005.1	483.04 µg/L	483.04 ppb	12:33:17
3	Cr 267.716†	22304.4	21475.8	480.43 µg/L	480.43 ppb	12:33:17
3	Cu 324.752†	76253.1	70085.9	475.96 µg/L	475.96 ppb	12:33:17
3	Mn 257.610†	160973.0	156313.8	501.25 µg/L	501.25 ppb	12:33:12
3	Mo 202.031†	4781.9	4612.2	456.04 µg/L	456.04 ppb	12:33:38
3	Ni 231.604†	9204.5	8526.4	483.94 µg/L	483.94 ppb	12:33:17
3	P 214.914†	1727.2	1361.8	2278.6 µg/L	2278.6 ppb	12:33:38
3	Pb 220.353†	1880.6	1760.9	465.59 µg/L	465.59 ppb	12:33:38
3	S 181.975 Axial†	325.0	290.5	923.81 µg/L	923.81 ppb	12:33:38
3	Sb 206.836†	552.3	506.0	459.31 µg/L	459.31 ppb	12:33:38
3	Se 196.026†	525.5	487.2	490.28 µg/L	490.28 ppb	12:33:38
3	SiO2†	30282.2	26922.5	5087.6 µg/L	5087.6 ppb	12:33:17
3	Si 251.611†	35276.9	33686.5	2385.0 µg/L	2385.0 ppb	12:33:17
3	Sn 189.927†	1205.2	1162.5	451.41 µg/L	451.41 ppb	12:33:38
3	Ti 334.940†	205725.3	199452.9	480.75 µg/L	480.75 ppb	12:33:12
3	Tl 190.801†	451.7	472.5	482.89 µg/L	482.89 ppb	12:33:38
3	U 409.014†	5366.9	5215.6	466.87 µg/L	466.87 ppb	12:33:17
3	V 292.402†	40956.1	39474.6	485.66 µg/L	485.66 ppb	12:33:17
3	Zn 213.857†	22171.9	20831.7	479.21 µg/L	479.21 ppb	12:33:17

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1990532.8	103.59 %	0.146			0.14%
Sc RADIAL	106109.1	106 %	0.1			0.14%
Y 371.029	1381103.9	103.22 %	0.060			0.06%
Ag 328.068†	58907.4	487.47 µg/L	8.020	487.47 ppb	8.020	1.65%
QC value within limits for Ag 328.068 Recovery = 97.49%						
Al 396.153Radial†	10725.3	5055.5 µg/L	2.69	5055.5 ppb	2.69	0.05%
QC value within limits for Al 396.153Radial Recovery = 101.11%						
As 188.979†	332.8	496.93 µg/L	27.602	496.93 ppb	27.602	5.55%
QC value within limits for As 188.979 Recovery = 99.39%						
B 249.677†	10399.5	494.18 µg/L	8.549	494.18 ppb	8.549	1.73%
QC value within limits for B 249.677 Recovery = 98.84%						
Ba 233.527†	22230.9	501.06 µg/L	13.326	501.06 ppb	13.326	2.66%
QC value within limits for Ba 233.527 Recovery = 100.21%						
Be 313.107†	822160.1	499.31 µg/L	7.466	499.31 ppb	7.466	1.50%
QC value within limits for Be 313.107 Recovery = 99.86%						
Ca 317.933Radial†	15279.2	4928.1 µg/L	4.64	4928.1 ppb	4.64	0.09%
QC value within limits for Ca 317.933Radial Recovery = 98.56%						
Cd 226.502†	20721.9	503.97 µg/L	13.944	503.97 ppb	13.944	2.77%
QC value within limits for Cd 226.502 Recovery = 100.79%						
Co 228.616†	11402.4	500.51 µg/L	15.278	500.51 ppb	15.278	3.05%

Cr	267.716†	22484.4	502.99 µg/L	19.660	502.99 ppb	19.660	3.91%
Cu	324.752†	72409.7	491.71 µg/L	13.717	491.71 ppb	13.717	2.79%
Fe	238.204 Radial†	493.7	4851.7 µg/L	20.33	4851.7 ppb	20.33	0.42%
K	766.490 Radial†	10906.0	5370.6 µg/L	16.55	5370.6 ppb	16.55	0.31%
Mg	279.077 IEC†	446.3	4890.9 µg/L	32.39	4890.9 ppb	32.39	0.66%
Mn	257.610†	158997.5	509.85 µg/L	7.466	509.85 ppb	7.466	1.46%
Mo	202.031†	5001.9	494.55 µg/L	33.379	494.55 ppb	33.379	6.75%
Na	589.592 Radial†	26054.3	11429 µg/L	29.6	11429 ppb	29.6	0.26%
Ni	231.604†	8870.9	503.49 µg/L	16.985	503.49 ppb	16.985	3.37%
P	214.914†	1452.8	2432.9 µg/L	133.85	2432.9 ppb	133.85	5.50%
Pb	220.353†	1875.2	495.85 µg/L	26.226	495.85 ppb	26.226	5.29%
S	181.975 Axial†	305.6	971.78 µg/L	41.586	971.78 ppb	41.586	4.28%
Sb	206.836†	539.7	490.16 µg/L	26.739	490.16 ppb	26.739	5.46%
Se	196.026†	506.4	509.10 µg/L	16.461	509.10 ppb	16.461	3.23%
SiO2†		27604.2	5216.4 µg/L	114.57	5216.4 ppb	114.57	2.20%
Si	251.611†	34546.8	2445.9 µg/L	53.83	2445.9 ppb	53.83	2.20%
Sn	189.927†	1268.2	492.98 µg/L	36.055	492.98 ppb	36.055	7.31%
Sr	421.552†	93236.0	503.78 µg/L	0.580	503.78 ppb	0.580	0.12%
Ti	334.940†	203377.7	490.22 µg/L	8.203	490.22 ppb	8.203	1.67%
Tl	190.801†	493.0	503.66 µg/L	17.986	503.66 ppb	17.986	3.57%
U	409.014†	5466.2	489.35 µg/L	19.516	489.35 ppb	19.516	3.99%
V	292.402†	40921.9	503.68 µg/L	15.773	503.68 ppb	15.773	3.13%
Zn	213.857†	21567.3	496.15 µg/L	14.687	496.15 ppb	14.687	2.96%

QC value within limits for Co 228.616 Recovery = 100.10%

QC value within limits for Cr 267.716 Recovery = 100.60%

QC value within limits for Cu 324.752 Recovery = 98.34%

QC value within limits for Fe 238.204 Radial Recovery = 97.03%

QC value within limits for K 766.490 Radial Recovery = 107.41%

QC value within limits for Mg 279.077 IEC Recovery = 97.82%

QC value within limits for Mn 257.610 Recovery = 101.97%

QC value within limits for Mo 202.031 Recovery = 98.91%

QC value greater than the upper limit for Na 589.592 Radial Recovery = 114.29%

QC value within limits for Ni 231.604 Recovery = 100.70%

QC value within limits for P 214.914 Recovery = 97.32%

QC value within limits for Pb 220.353 Recovery = 99.17%

QC value within limits for S 181.975 Axial Recovery = 97.18%

QC value within limits for Sb 206.836 Recovery = 98.03%

QC value within limits for Se 196.026 Recovery = 101.82%

QC value within limits for SiO2 Recovery = 97.55%

QC value within limits for Si 251.611 Recovery = 97.83%

QC value within limits for Sn 189.927 Recovery = 98.60%

QC value within limits for Sr 421.552 Recovery = 100.76%

QC value within limits for Ti 334.940 Recovery = 98.04%

QC value within limits for Tl 190.801 Recovery = 100.73%

QC value within limits for U 409.014 Recovery = 97.87%

QC value within limits for V 292.402 Recovery = 100.74%

QC value within limits for Zn 213.857 Recovery = 99.23%

QC Failed. Continue with analysis.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 12:33:46

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	105158.1	105158.1	105 %		12:34:18
1	Al 396.153Radial†	-403.3	15.6	7.3437 µg/L	7.3437 ppb	12:34:18
1	Ca 317.933Radial†	392.3	-13.3	-4.2859 µg/L	-4.2859 ppb	12:34:38
1	Fe 238.204 Radial†	19.7	5.0	49.514 µg/L	49.514 ppb	12:34:38
1	K 766.490 Radial†	464.8	119.6	58.875 µg/L	58.875 ppb	12:34:18
1	Mg 279.077 IEC†	13.4	3.4	37.500 µg/L	37.500 ppb	12:34:38
1	Na 589.592 Radial†	2993.7	2645.1	1160.3 µg/L	1160.3 ppb	12:34:18
1	Sr 421.552†	247.8	87.3	0.4717 µg/L	0.4717 ppb	12:34:18
1	Sc 361.383	1983581.1	1983581.1	103.22 %		12:35:37
1	Y 371.029	1378408.0	1378408.0	103.02 %		12:35:37
1	Ag 328.068†	-631.8	-44.2	-0.3578 µg/L	-0.3578 ppb	12:35:42
1	As 188.979†	-0.4	2.8	4.1761 µg/L	4.1761 ppb	12:36:02
1	B 249.677†	448.6	78.0	3.6964 µg/L	3.6964 ppb	12:36:02
1	Ba 233.527†	-16.2	15.4	0.3461 µg/L	0.3461 ppb	12:36:02
1	Be 313.107†	-1342.0	227.7	0.1383 µg/L	0.1383 ppb	12:35:42
1	Cd 226.502†	-172.4	12.7	0.3037 µg/L	0.3037 ppb	12:36:02
1	Co 228.616†	30.5	10.5	0.4600 µg/L	0.4600 ppb	12:36:02
1	Cr 267.716†	108.3	30.3	0.6782 µg/L	0.6782 ppb	12:36:02
1	Cu 324.752†	3556.9	-143.4	-0.9628 µg/L	-0.9628 ppb	12:35:42
1	Mn 257.610†	-565.7	234.9	0.7538 µg/L	0.7538 ppb	12:36:02
1	Mo 202.031†	13.2	4.8	0.4726 µg/L	0.4726 ppb	12:36:02
1	Ni 231.604†	392.6	13.4	0.7629 µg/L	0.7629 ppb	12:36:02
1	P 214.914†	309.8	-6.9	-11.700 µg/L	-11.700 ppb	12:36:02
1	Pb 220.353†	46.3	-11.3	-2.9697 µg/L	-2.9697 ppb	12:36:02
1	S 181.975 Axial†	20.9	-3.3	-10.363 µg/L	-10.363 ppb	12:36:02
1	Sb 206.836†	34.7	6.0	5.4325 µg/L	5.4325 ppb	12:36:02
1	Se 196.026†	25.7	4.3	4.3735 µg/L	4.3735 ppb	12:36:02
1	SiO2†	2317.2	-91.2	-17.227 µg/L	-17.227 ppb	12:36:02
1	Si 251.611†	390.9	-19.1	-1.3499 µg/L	-1.3499 ppb	12:36:02
1	Sn 189.927†	-1.3	-3.2	-1.2969 µg/L	-1.2969 ppb	12:36:02
1	Ti 334.940†	-644.5	58.3	0.1377 µg/L	0.1377 ppb	12:35:42
1	Tl 190.801†	-39.1	-1.8	-1.8412 µg/L	-1.8412 ppb	12:36:02
1	U 409.014†	-33.9	-2.7	-0.2518 µg/L	-0.2518 ppb	12:35:42
1	V 292.402†	120.0	19.3	0.2314 µg/L	0.2314 ppb	12:35:42
1	Zn 213.857†	601.8	-7.6	-0.1824 µg/L	-0.1824 ppb	12:36:02
2	Sc RADIAL	104563.1	104563.1	104 %		12:34:44
2	Al 396.153Radial†	-372.7	42.7	20.145 µg/L	20.145 ppb	12:34:44
2	Ca 317.933Radial†	400.3	-3.5	-1.1197 µg/L	-1.1197 ppb	12:35:04
2	Fe 238.204 Radial†	17.2	2.8	27.156 µg/L	27.156 ppb	12:35:04
2	K 766.490 Radial†	537.7	192.1	94.587 µg/L	94.587 ppb	12:34:44
2	Mg 279.077 IEC†	11.3	1.4	15.476 µg/L	15.476 ppb	12:35:04
2	Na 589.592 Radial†	3001.3	2668.7	1170.7 µg/L	1170.7 ppb	12:34:44
2	Sr 421.552†	164.4	8.7	0.0468 µg/L	0.0468 ppb	12:34:44
2	Sc 361.383	1964195.8	1964195.8	102.22 %		12:36:08
2	Y 371.029	1367357.1	1367357.1	102.19 %		12:36:08
2	Ag 328.068†	-519.7	59.5	0.4924 µg/L	0.4924 ppb	12:36:13
2	As 188.979†	0.3	3.5	5.1742 µg/L	5.1742 ppb	12:36:34
2	B 249.677†	457.1	90.6	4.3072 µg/L	4.3072 ppb	12:36:34
2	Ba 233.527†	-16.4	15.0	0.3382 µg/L	0.3382 ppb	12:36:34
2	Be 313.107†	-1347.8	209.2	0.1270 µg/L	0.1270 ppb	12:36:13
2	Cd 226.502†	-192.3	-8.5	-0.2073 µg/L	-0.2073 ppb	12:36:34
2	Co 228.616†	22.4	2.8	0.1241 µg/L	0.1241 ppb	12:36:34
2	Cr 267.716†	120.0	42.8	0.9568 µg/L	0.9568 ppb	12:36:34
2	Cu 324.752†	3507.8	-157.4	-1.0620 µg/L	-1.0620 ppb	12:36:13
2	Mn 257.610†	-565.1	230.1	0.7383 µg/L	0.7383 ppb	12:36:34
2	Mo 202.031†	14.0	5.8	0.5695 µg/L	0.5695 ppb	12:36:34
2	Ni 231.604†	404.5	28.8	1.6387 µg/L	1.6387 ppb	12:36:34
2	P 214.914†	321.0	7.0	12.060 µg/L	12.060 ppb	12:36:34
2	Pb 220.353†	55.7	-1.6	-0.4216 µg/L	-0.4216 ppb	12:36:34

2	S 181.975 Axial†	23.3	-0.8	-2.3865 µg/L	-2.3865 ppb	12:36:34
2	Sb 206.836†	27.4	-0.8	-0.7019 µg/L	-0.7019 ppb	12:36:34
2	Se 196.026†	17.9	-3.1	-2.9464 µg/L	-2.9464 ppb	12:36:34
2	SiO2†	2307.0	-79.0	-14.924 µg/L	-14.924 ppb	12:36:34
2	Si 251.611†	389.2	-17.0	-1.2040 µg/L	-1.2040 ppb	12:36:34
2	Sn 189.927†	-4.3	-6.2	-2.4486 µg/L	-2.4486 ppb	12:36:34
2	Ti 334.940†	-628.2	68.2	0.1632 µg/L	0.1632 ppb	12:36:13
2	Tl 190.801†	-34.4	2.4	2.4038 µg/L	2.4038 ppb	12:36:34
2	U 409.014†	-73.0	-41.3	-3.7076 µg/L	-3.7076 ppb	12:36:13
2	V 292.402†	124.8	25.2	0.3049 µg/L	0.3049 ppb	12:36:13
2	Zn 213.857†	593.3	-10.2	-0.2442 µg/L	-0.2442 ppb	12:36:34
3	Sc RADIAL	104416.6	104416.6	104 %		12:35:09
3	Al 396.153Radial†	-406.3	9.9	4.6639 µg/L	4.6639 ppb	12:35:09
3	Ca 317.933Radial†	401.9	-1.3	-0.4347 µg/L	-0.4347 ppb	12:35:29
3	Fe 238.204 Radial†	17.5	3.1	29.996 µg/L	29.996 ppb	12:35:29
3	K 766.490 Radial†	446.6	105.2	51.807 µg/L	51.807 ppb	12:35:09
3	Mg 279.077 IEC†	10.4	0.6	6.6830 µg/L	6.6830 ppb	12:35:29
3	Na 589.592 Radial†	2964.1	2636.9	1156.7 µg/L	1156.7 ppb	12:35:09
3	Sr 421.552†	188.1	31.6	0.1708 µg/L	0.1708 ppb	12:35:09
3	Sc 361.383	1969623.7	1969623.7	102.50 %		12:36:39
3	Y 371.029	1371972.2	1371972.2	102.54 %		12:36:39
3	Ag 328.068†	-577.4	4.5	0.0399 µg/L	0.0399 ppb	12:36:45
3	As 188.979†	-1.8	1.4	2.1594 µg/L	2.1594 ppb	12:37:05
3	B 249.677†	448.7	81.2	3.8567 µg/L	3.8567 ppb	12:37:05
3	Ba 233.527†	-11.1	20.3	0.4568 µg/L	0.4568 ppb	12:37:05
3	Be 313.107†	-1324.5	235.6	0.1430 µg/L	0.1430 ppb	12:36:45
3	Cd 226.502†	-178.0	6.0	0.1437 µg/L	0.1437 ppb	12:37:05
3	Co 228.616†	23.5	3.9	0.1699 µg/L	0.1699 ppb	12:37:05
3	Cr 267.716†	124.6	47.0	1.0505 µg/L	1.0505 ppb	12:37:05
3	Cu 324.752†	3485.9	-188.3	-1.2706 µg/L	-1.2706 ppb	12:36:45
3	Mn 257.610†	-554.0	242.5	0.7790 µg/L	0.7790 ppb	12:37:05
3	Mo 202.031†	11.6	3.4	0.3342 µg/L	0.3342 ppb	12:37:05
3	Ni 231.604†	398.6	22.0	1.2487 µg/L	1.2487 ppb	12:37:05
3	P 214.914†	308.9	-5.7	-9.6903 µg/L	-9.6903 ppb	12:37:05
3	Pb 220.353†	42.2	-14.9	-3.9466 µg/L	-3.9466 ppb	12:37:05
3	S 181.975 Axial†	23.5	-0.7	-2.0692 µg/L	-2.0692 ppb	12:37:05
3	Sb 206.836†	29.5	1.2	1.0985 µg/L	1.0985 ppb	12:37:05
3	Se 196.026†	27.8	6.6	6.5735 µg/L	6.5735 ppb	12:37:05
3	SiO2†	2317.4	-75.0	-14.169 µg/L	-14.169 ppb	12:37:05
3	Si 251.611†	378.2	-28.8	-2.0390 µg/L	-2.0390 ppb	12:37:05
3	Sn 189.927†	-7.2	-8.9	-3.5526 µg/L	-3.5526 ppb	12:37:05
3	Ti 334.940†	-599.5	97.8	0.2354 µg/L	0.2354 ppb	12:36:45
3	Tl 190.801†	-36.0	1.0	1.0138 µg/L	1.0138 ppb	12:37:05
3	U 409.014†	39.4	68.6	6.1503 µg/L	6.1503 ppb	12:36:45
3	V 292.402†	107.7	8.1	0.1051 µg/L	0.1051 ppb	12:36:45
3	Zn 213.857†	600.5	-4.8	-0.1162 µg/L	-0.1162 ppb	12:37:05

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1972466.9	102.65 %	0.520			0.51%
Sc RADIAL	104712.6	104 %	0.4			0.38%
Y 371.029	1372579.1	102.58 %	0.415			0.40%
Ag 328.068†	6.6	0.0582 µg/L	0.42544	0.0582 ppb	0.42544	731.60%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	22.7	10.717 µg/L	8.2736	10.717 ppb	8.2736	77.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.6	3.8366 µg/L	1.53578	3.8366 ppb	1.53578	40.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	83.3	3.9535 µg/L	0.31670	3.9535 ppb	0.31670	8.01%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	16.9	0.3803 µg/L	0.06633	0.3803 ppb	0.06633	17.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	224.2	0.1361 µg/L	0.00822	0.1361 ppb	0.00822	6.04%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-6.0	-1.9467 µg/L	2.05450	-1.9467 ppb	2.05450	105.54%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	3.4	0.0800 µg/L	0.26138	0.0800 ppb	0.26138	326.58%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.7	0.2513 µg/L	0.18217	0.2513 ppb	0.18217	72.48%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	40.0	0.8952 µg/L	0.19368	0.8952 ppb	0.19368	21.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-163.0	-1.0984 µg/L	0.15712	-1.0984 ppb	0.15712	14.30%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.6	35.555 µg/L	12.1717	35.555 ppb	12.1717	34.23%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	138.9	68.423 µg/L	22.9328	68.423 ppb	22.9328	33.52%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.8	19.886 µg/L	15.8750	19.886 ppb	15.8750	79.83%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	235.8	0.7570 µg/L	0.02052	0.7570 ppb	0.02052	2.71%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	4.6	0.4588 µg/L	0.11829	0.4588 ppb	0.11829	25.78%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	2650.2	1162.6 µg/L	7.23	1162.6 ppb	7.23	0.62%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	21.4	1.2167 µg/L	0.43877	1.2167 ppb	0.43877	36.06%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.9	-3.1103 µg/L	13.17591	-3.1103 ppb	13.17591	423.63%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-9.3	-2.4460 µg/L	1.81993	-2.4460 ppb	1.81993	74.40%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.6	-4.9394 µg/L	4.69921	-4.9394 ppb	4.69921	95.14%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.2	1.9431 µg/L	3.15321	1.9431 ppb	3.15321	162.28%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.6	2.6669 µg/L	4.98415	2.6669 ppb	4.98415	186.89%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-81.7	-15.440 µg/L	1.5929	-15.440 ppb	1.5929	10.32%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-21.6	-1.5310 µg/L	0.44596	-1.5310 ppb	0.44596	29.13%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-6.1	-2.4327 µg/L	1.12795	-2.4327 ppb	1.12795	46.37%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	42.5	0.2298 µg/L	0.21850	0.2298 ppb	0.21850	95.08%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	74.8	0.1788 µg/L	0.05071	0.1788 ppb	0.05071	28.36%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.5	0.5255 µg/L	2.16424	0.5255 ppb	2.16424	411.87%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	8.2	0.7303 µg/L	5.00179	0.7303 ppb	5.00179	684.88%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	17.6	0.2138 µg/L	0.10109	0.2138 ppb	0.10109	47.29%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-7.5	-0.1809 µg/L	0.06401	-0.1809 ppb	0.06401	35.37%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 13:02:55

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	105892.7	105892.7	106 %		13:03:33
1	Al 396.153Radial†	10801.4	10636.1	5013.1 µg/L	5013.1 ppb	13:03:33
1	Ca 317.933Radial†	16285.5	15044.9	4852.5 µg/L	4852.5 ppb	13:03:33
1	Fe 238.204 Radial†	530.9	489.4	4809.1 µg/L	4809.1 ppb	13:03:53
1	K 766.490 Radial†	11720.1	10782.3	5309.7 µg/L	5309.7 ppb	13:03:33
1	Mg 279.077 IEC†	472.5	438.3	4803.5 µg/L	4803.5 ppb	13:03:53
1	Na 589.592 Radial†	27350.0	25705.9	11276 µg/L	11276 ppb	13:03:33
1	Sr 421.552†	98469.2	93162.9	503.39 µg/L	503.39 ppb	13:03:33
1	Sc 361.383	1976828.7	1976828.7	102.87 %		13:04:53
1	Y 371.029	1370477.9	1370477.9	102.43 %		13:04:53
1	Ag 328.068†	60945.8	59811.4	494.95 µg/L	494.95 ppb	13:04:58
1	As 188.979†	351.5	344.9	514.98 µg/L	514.98 ppb	13:05:18
1	B 249.677†	11171.5	10502.9	499.15 µg/L	499.15 ppb	13:04:58
1	Ba 233.527†	23101.8	22487.6	506.86 µg/L	506.86 ppb	13:04:58
1	Be 313.107†	844958.5	822885.7	499.75 µg/L	499.75 ppb	13:04:53
1	Cd 226.502†	21329.5	20913.4	508.63 µg/L	508.63 ppb	13:04:58
1	Co 228.616†	11915.6	11563.7	507.61 µg/L	507.61 ppb	13:04:58
1	Cr 267.716†	23584.6	22851.3	511.20 µg/L	511.20 ppb	13:04:58
1	Cu 324.752†	79746.4	73929.8	502.00 µg/L	502.00 ppb	13:04:58
1	Mn 257.610†	162934.2	159166.2	510.40 µg/L	510.40 ppb	13:04:53
1	Mo 202.031†	5329.9	5173.1	511.47 µg/L	511.47 ppb	13:05:18
1	Ni 231.604†	9586.8	8952.1	508.10 µg/L	508.10 ppb	13:04:58
1	P 214.914†	1845.1	1486.5	2489.5 µg/L	2489.5 ppb	13:05:18
1	Pb 220.353†	2024.0	1911.4	505.40 µg/L	505.40 ppb	13:05:18
1	S 181.975 Axial†	345.2	312.0	992.23 µg/L	992.23 ppb	13:05:18
1	Sb 206.836†	599.8	555.5	504.60 µg/L	504.60 ppb	13:05:18
1	Se 196.026†	557.2	521.1	523.53 µg/L	523.53 ppb	13:05:18
1	SiO2†	31110.4	27905.5	5273.4 µg/L	5273.4 ppb	13:04:58
1	Si 251.611†	36308.3	34896.4	2470.6 µg/L	2470.6 ppb	13:04:58
1	Sn 189.927†	1337.4	1298.1	504.79 µg/L	504.79 ppb	13:05:18
1	Ti 334.940†	209762.4	204586.2	493.14 µg/L	493.14 ppb	13:04:53
1	Tl 190.801†	473.8	496.6	507.37 µg/L	507.37 ppb	13:05:18
1	U 409.014†	5805.4	5673.4	507.95 µg/L	507.95 ppb	13:04:58
1	V 292.402†	42982.6	41685.1	513.17 µg/L	513.17 ppb	13:04:58
1	Zn 213.857†	23100.9	21865.0	503.02 µg/L	503.02 ppb	13:04:58
2	Sc RADIAL	105817.9	105817.9	105 %		13:03:58
2	Al 396.153Radial†	10821.8	10662.7	5025.7 µg/L	5025.7 ppb	13:03:58
2	Ca 317.933Radial†	16338.9	15106.5	4872.4 µg/L	4872.4 ppb	13:03:58
2	Fe 238.204 Radial†	530.3	489.1	4806.7 µg/L	4806.7 ppb	13:04:18
2	K 766.490 Radial†	11672.3	10744.8	5291.2 µg/L	5291.2 ppb	13:03:58
2	Mg 279.077 IEC†	479.1	444.9	4876.0 µg/L	4876.0 ppb	13:04:18
2	Na 589.592 Radial†	27404.2	25775.6	11307 µg/L	11307 ppb	13:03:58
2	Sr 421.552†	98852.6	93592.5	505.71 µg/L	505.71 ppb	13:03:58
2	Sc 361.383	1973716.0	1973716.0	102.71 %		13:05:25
2	Y 371.029	1371102.8	1371102.8	102.47 %		13:05:25
2	Ag 328.068†	60596.6	59564.8	492.91 µg/L	492.91 ppb	13:05:30
2	As 188.979†	348.5	342.5	511.37 µg/L	511.37 ppb	13:05:50
2	B 249.677†	11112.8	10462.8	497.24 µg/L	497.24 ppb	13:05:30
2	Ba 233.527†	23027.7	22450.9	506.02 µg/L	506.02 ppb	13:05:30
2	Be 313.107†	845546.5	824753.4	500.89 µg/L	500.89 ppb	13:05:25
2	Cd 226.502†	21170.4	20791.2	505.66 µg/L	505.66 ppb	13:05:30
2	Co 228.616†	11866.8	11534.5	506.32 µg/L	506.32 ppb	13:05:30
2	Cr 267.716†	23485.5	22790.9	509.85 µg/L	509.85 ppb	13:05:30
2	Cu 324.752†	79629.3	73938.0	502.06 µg/L	502.06 ppb	13:05:30
2	Mn 257.610†	162742.2	159229.1	510.60 µg/L	510.60 ppb	13:05:25
2	Mo 202.031†	5303.4	5155.4	509.72 µg/L	509.72 ppb	13:05:50
2	Ni 231.604†	9589.7	8969.7	509.10 µg/L	509.10 ppb	13:05:30
2	P 214.914†	1847.1	1491.3	2497.7 µg/L	2497.7 ppb	13:05:50
2	Pb 220.353†	2037.5	1927.5	509.68 µg/L	509.68 ppb	13:05:50



2	S 181.975 Axial†	356.0	323.1	1027.4 µg/L	1027.4 ppb	13:05:50
2	Sb 206.836†	597.0	553.7	502.96 µg/L	502.96 ppb	13:05:50
2	Se 196.026†	553.0	517.9	520.28 µg/L	520.28 ppb	13:05:50
2	SiO2†	31101.7	27944.8	5280.8 µg/L	5280.8 ppb	13:05:30
2	Si 251.611†	36350.2	34992.9	2477.5 µg/L	2477.5 ppb	13:05:30
2	Sn 189.927†	1340.9	1303.6	506.95 µg/L	506.95 ppb	13:05:50
2	Ti 334.940†	209773.0	204918.1	493.93 µg/L	493.93 ppb	13:05:25
2	Tl 190.801†	484.2	507.5	518.36 µg/L	518.36 ppb	13:05:50
2	U 409.014†	5703.3	5582.9	499.83 µg/L	499.83 ppb	13:05:30
2	V 292.402†	42699.8	41475.7	510.59 µg/L	510.59 ppb	13:05:30
2	Zn 213.857†	23034.7	21836.0	502.33 µg/L	502.33 ppb	13:05:30
3	Sc RADIAL	106374.5	106374.5	106 %		13:04:23
3	Al 396.153Radial†	10862.1	10646.9	5019.4 µg/L	5019.4 ppb	13:04:23
3	Ca 317.933Radial†	16441.5	15122.2	4877.5 µg/L	4877.5 ppb	13:04:23
3	Fe 238.204 Radial†	531.5	487.6	4791.3 µg/L	4791.3 ppb	13:04:44
3	K 766.490 Radial†	11773.1	10782.1	5309.5 µg/L	5309.5 ppb	13:04:23
3	Mg 279.077 IEC†	473.1	436.9	4786.8 µg/L	4786.8 ppb	13:04:44
3	Na 589.592 Radial†	27492.1	25722.6	11284 µg/L	11284 ppb	13:04:23
3	Sr 421.552†	99171.7	93403.0	504.68 µg/L	504.68 ppb	13:04:23
3	Sc 361.383	1968540.6	1968540.6	102.44 %		13:05:57
3	Y 371.029	1366926.0	1366926.0	102.16 %		13:05:57
3	Ag 328.068†	58761.8	57928.9	479.29 µg/L	479.29 ppb	13:06:03
3	As 188.979†	312.9	308.7	460.78 µg/L	460.78 ppb	13:06:23
3	B 249.677†	10743.2	10130.6	481.35 µg/L	481.35 ppb	13:06:03
3	Ba 233.527†	21898.0	21407.1	482.49 µg/L	482.49 ppb	13:06:03
3	Be 313.107†	819552.0	801543.0	486.79 µg/L	486.79 ppb	13:05:57
3	Cd 226.502†	20154.7	19853.9	482.84 µg/L	482.84 ppb	13:06:03
3	Co 228.616†	11192.9	10907.0	478.73 µg/L	478.73 ppb	13:06:03
3	Cr 267.716†	21913.5	21316.5	476.87 µg/L	476.87 ppb	13:06:03
3	Cu 324.752†	75607.5	70215.9	476.83 µg/L	476.83 ppb	13:06:03
3	Mn 257.610†	158073.6	155088.3	497.32 µg/L	497.32 ppb	13:05:57
3	Mo 202.031†	4689.0	4569.3	451.79 µg/L	451.79 ppb	13:06:23
3	Ni 231.604†	9021.7	8439.7	479.02 µg/L	479.02 ppb	13:06:03
3	P 214.914†	1700.5	1352.9	2263.2 µg/L	2263.2 ppb	13:06:23
3	Pb 220.353†	1856.9	1756.5	464.40 µg/L	464.40 ppb	13:06:23
3	S 181.975 Axial†	318.1	287.0	912.77 µg/L	912.77 ppb	13:06:23
3	Sb 206.836†	544.4	503.9	457.35 µg/L	457.35 ppb	13:06:23
3	Se 196.026†	512.2	479.4	482.53 µg/L	482.53 ppb	13:06:23
3	SiO2†	29796.7	26750.5	5055.1 µg/L	5055.1 ppb	13:06:03
3	Si 251.611†	34843.0	33614.6	2379.9 µg/L	2379.9 ppb	13:06:03
3	Sn 189.927†	1166.0	1136.2	441.16 µg/L	441.16 ppb	13:06:23
3	Ti 334.940†	202946.7	198791.5	479.16 µg/L	479.16 ppb	13:05:57
3	Tl 190.801†	442.8	468.3	478.63 µg/L	478.63 ppb	13:06:23
3	U 409.014†	5370.6	5272.8	472.01 µg/L	472.01 ppb	13:06:03
3	V 292.402†	40319.0	39261.0	483.03 µg/L	483.03 ppb	13:06:03
3	Zn 213.857†	21803.7	20693.3	476.04 µg/L	476.04 ppb	13:06:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1973028.4	102.68 %	0.218			0.21%
Sc RADIAL	106028.4	106 %	0.3			0.28%
Y 371.029	1369502.2	102.35 %	0.168			0.16%
Ag 328.068†	59101.7	489.05 µg/L	8.512	489.05 ppb	8.512	1.74%
QC value within limits for Ag 328.068 Recovery = 97.81%						
Al 396.153Radial†	10648.6	5019.4 µg/L	6.29	5019.4 ppb	6.29	0.13%
QC value within limits for Al 396.153Radial Recovery = 100.39%						
As 188.979†	332.0	495.71 µg/L	30.304	495.71 ppb	30.304	6.11%
QC value within limits for As 188.979 Recovery = 99.14%						
B 249.677†	10365.4	492.58 µg/L	9.773	492.58 ppb	9.773	1.98%
QC value within limits for B 249.677 Recovery = 98.52%						
Ba 233.527†	22115.2	498.46 µg/L	13.832	498.46 ppb	13.832	2.78%
QC value within limits for Ba 233.527 Recovery = 99.69%						
Be 313.107†	816394.0	495.81 µg/L	7.831	495.81 ppb	7.831	1.58%
QC value within limits for Be 313.107 Recovery = 99.16%						
Ca 317.933Radial†	15091.2	4867.5 µg/L	13.17	4867.5 ppb	13.17	0.27%
QC value within limits for Ca 317.933Radial Recovery = 97.35%						
Cd 226.502†	20519.5	499.05 µg/L	14.114	499.05 ppb	14.114	2.83%
QC value within limits for Cd 226.502 Recovery = 99.81%						
Co 228.616†	11335.1	497.55 µg/L	16.317	497.55 ppb	16.317	3.28%

QC value within limits for Co 228.616 Recovery = 99.51%							
Cr 267.716†	22319.6	499.30 µg/L	19.442	499.30 ppb	19.442	3.89%	
QC value within limits for Cr 267.716 Recovery = 99.86%							
Cu 324.752†	72694.6	493.63 µg/L	14.552	493.63 ppb	14.552	2.95%	
QC value within limits for Cu 324.752 Recovery = 98.73%							
Fe 238.204 Radial†	488.7	4802.3 µg/L	9.67	4802.3 ppb	9.67	0.20%	
QC value within limits for Fe 238.204 Radial Recovery = 96.05%							
K 766.490 Radial†	10769.7	5303.5 µg/L	10.63	5303.5 ppb	10.63	0.20%	
QC value within limits for K 766.490 Radial Recovery = 106.07%							
Mg 279.077 IEC†	440.0	4822.1 µg/L	47.38	4822.1 ppb	47.38	0.98%	
QC value within limits for Mg 279.077 IEC Recovery = 96.44%							
Mn 257.610†	157827.9	506.11 µg/L	7.608	506.11 ppb	7.608	1.50%	
QC value within limits for Mn 257.610 Recovery = 101.22%							
Mo 202.031†	4965.9	490.99 µg/L	33.964	490.99 ppb	33.964	6.92%	
QC value within limits for Mo 202.031 Recovery = 98.20%							
Na 589.592 Radial†	25734.7	11289 µg/L	16.0	11289 ppb	16.0	0.14%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = 112.89%							
Ni 231.604†	8787.2	498.74 µg/L	17.085	498.74 ppb	17.085	3.43%	
QC value within limits for Ni 231.604 Recovery = 99.75%							
P 214.914†	1443.5	2416.8 µg/L	133.09	2416.8 ppb	133.09	5.51%	
QC value within limits for P 214.914 Recovery = 96.67%							
Pb 220.353†	1865.1	493.16 µg/L	24.998	493.16 ppb	24.998	5.07%	
QC value within limits for Pb 220.353 Recovery = 98.63%							
S 181.975 Axial†	307.4	977.48 µg/L	58.740	977.48 ppb	58.740	6.01%	
QC value within limits for S 181.975 Axial Recovery = 97.75%							
Sb 206.836†	537.7	488.30 µg/L	26.822	488.30 ppb	26.822	5.49%	
QC value within limits for Sb 206.836 Recovery = 97.66%							
Se 196.026†	506.1	508.78 µg/L	22.793	508.78 ppb	22.793	4.48%	
QC value within limits for Se 196.026 Recovery = 101.76%							
SiO2†	27533.6	5203.1 µg/L	128.21	5203.1 ppb	128.21	2.46%	
QC value within limits for SiO2 Recovery = 97.30%							
Si 251.611†	34501.3	2442.6 µg/L	54.47	2442.6 ppb	54.47	2.23%	
QC value within limits for Si 251.611 Recovery = 97.71%							
Sn 189.927†	1246.0	484.30 µg/L	37.378	484.30 ppb	37.378	7.72%	
QC value within limits for Sn 189.927 Recovery = 96.86%							
Sr 421.552†	93386.1	504.59 µg/L	1.163	504.59 ppb	1.163	0.23%	
QC value within limits for Sr 421.552 Recovery = 100.92%							
Ti 334.940†	202765.3	488.74 µg/L	8.307	488.74 ppb	8.307	1.70%	
QC value within limits for Ti 334.940 Recovery = 97.75%							
Tl 190.801†	490.8	501.45 µg/L	20.520	501.45 ppb	20.520	4.09%	
QC value within limits for Tl 190.801 Recovery = 100.29%							
U 409.014†	5509.7	493.26 µg/L	18.848	493.26 ppb	18.848	3.82%	
QC value within limits for U 409.014 Recovery = 98.65%							
V 292.402†	40807.3	502.26 µg/L	16.705	502.26 ppb	16.705	3.33%	
QC value within limits for V 292.402 Recovery = 100.45%							
Zn 213.857†	21464.8	493.80 µg/L	15.382	493.80 ppb	15.382	3.11%	
QC value within limits for Zn 213.857 Recovery = 98.76%							
QC Failed. Continue with analysis.							

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 13:06:31

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	104230.8	104230.8	104 %		13:07:03
1	Al 396.153Radial†	-402.3	13.1	6.1854 µg/L	6.1854 ppb	13:07:03
1	Ca 317.933Radial†	392.7	-9.5	-3.0665 µg/L	-3.0665 ppb	13:07:24
1	Fe 238.204 Radial†	18.7	4.3	41.830 µg/L	41.830 ppb	13:07:24
1	K 766.490 Radial†	429.4	89.5	44.060 µg/L	44.060 ppb	13:07:03
1	Mg 279.077 IEC†	9.1	-0.7	-7.5610 µg/L	-7.5610 ppb	13:07:24
1	Na 589.592 Radial†	2553.8	2247.0	985.68 µg/L	985.68 ppb	13:07:03
1	Sr 421.552†	191.2	35.0	0.1888 µg/L	0.1888 ppb	13:07:03
1	Sc 361.383	1942557.6	1942557.6	101.09 %		13:08:22
1	Y 371.029	1351087.2	1351087.2	100.98 %		13:08:22
1	Ag 328.068†	-542.2	31.5	0.2633 µg/L	0.2633 ppb	13:08:27
1	As 188.979†	-1.3	1.9	2.8713 µg/L	2.8713 ppb	13:08:48
1	B 249.677†	411.6	50.6	2.3904 µg/L	2.3904 ppb	13:08:27
1	Ba 233.527†	-23.5	7.8	0.1762 µg/L	0.1762 ppb	13:08:48
1	Be 313.107†	-1408.8	134.2	0.0815 µg/L	0.0815 ppb	13:08:27
1	Cd 226.502†	-171.3	10.3	0.2454 µg/L	0.2454 ppb	13:08:48
1	Co 228.616†	13.7	-5.5	-0.2421 µg/L	-0.2421 ppb	13:08:48
1	Cr 267.716†	86.6	11.1	0.2490 µg/L	0.2490 ppb	13:08:27
1	Cu 324.752†	3435.8	-190.4	-1.2827 µg/L	-1.2827 ppb	13:08:27
1	Mn 257.610†	-642.5	147.4	0.4757 µg/L	0.4757 ppb	13:08:27
1	Mo 202.031†	13.6	5.5	0.5424 µg/L	0.5424 ppb	13:08:48
1	Ni 231.604†	385.3	14.3	0.8118 µg/L	0.8118 ppb	13:08:48
1	P 214.914†	302.8	-7.5	-12.647 µg/L	-12.647 ppb	13:08:48
1	Pb 220.353†	40.4	-16.2	-4.2719 µg/L	-4.2719 ppb	13:08:48
1	S 181.975 Axial†	21.9	-1.9	-6.0535 µg/L	-6.0535 ppb	13:08:48
1	Sb 206.836†	27.8	-0.1	-0.0532 µg/L	-0.0532 ppb	13:08:48
1	Se 196.026†	23.7	2.8	2.9314 µg/L	2.9314 ppb	13:08:48
1	SiO2†	2323.8	-37.2	-7.0255 µg/L	-7.0255 ppb	13:08:27
1	Si 251.611†	371.2	-30.6	-2.1630 µg/L	-2.1630 ppb	13:08:48
1	Sn 189.927†	2.1	0.2	0.0210 µg/L	0.0210 ppb	13:08:48
1	Ti 334.940†	-675.4	14.6	0.0358 µg/L	0.0358 ppb	13:08:27
1	Tl 190.801†	-38.7	-2.3	-2.2795 µg/L	-2.2795 ppb	13:08:48
1	U 409.014†	-30.6	-0.1	-0.0161 µg/L	-0.0161 ppb	13:08:27
1	V 292.402†	116.8	18.7	0.2247 µg/L	0.2247 ppb	13:08:27
1	Zn 213.857†	584.0	-12.9	-0.3027 µg/L	-0.3027 ppb	13:08:48
2	Sc RADIAL	104220.1	104220.1	104 %		13:07:29
2	Al 396.153Radial†	-390.3	24.6	11.585 µg/L	11.585 ppb	13:07:29
2	Ca 317.933Radial†	377.7	-23.9	-7.7177 µg/L	-7.7177 ppb	13:07:49
2	Fe 238.204 Radial†	14.7	0.4	3.6730 µg/L	3.6730 ppb	13:07:49
2	K 766.490 Radial†	292.6	-42.2	-20.802 µg/L	-20.802 ppb	13:07:29
2	Mg 279.077 IEC†	13.3	3.4	36.946 µg/L	36.946 ppb	13:07:49
2	Na 589.592 Radial†	2515.7	2210.6	969.71 µg/L	969.71 ppb	13:07:29
2	Sr 421.552†	173.7	18.1	0.0978 µg/L	0.0978 ppb	13:07:29
2	Sc 361.383	1939549.3	1939549.3	100.93 %		13:08:53
2	Y 371.029	1349089.2	1349089.2	100.83 %		13:08:53
2	Ag 328.068†	-535.4	37.4	0.3106 µg/L	0.3106 ppb	13:08:59
2	As 188.979†	-2.4	0.8	1.2703 µg/L	1.2703 ppb	13:09:19
2	B 249.677†	430.5	69.9	3.3348 µg/L	3.3348 ppb	13:08:59
2	Ba 233.527†	-22.1	9.2	0.2071 µg/L	0.2071 ppb	13:09:19
2	Be 313.107†	-1319.3	220.7	0.1340 µg/L	0.1340 ppb	13:08:59
2	Cd 226.502†	-169.2	12.1	0.2931 µg/L	0.2931 ppb	13:09:19
2	Co 228.616†	22.1	2.8	0.1254 µg/L	0.1254 ppb	13:09:19
2	Cr 267.716†	124.6	48.9	1.0927 µg/L	1.0927 ppb	13:08:59
2	Cu 324.752†	3490.0	-131.4	-0.8902 µg/L	-0.8902 ppb	13:08:59
2	Mn 257.610†	-595.4	193.1	0.6169 µg/L	0.6169 ppb	13:08:59
2	Mo 202.031†	19.9	11.7	1.1576 µg/L	1.1576 ppb	13:09:19
2	Ni 231.604†	370.8	0.5	0.0264 µg/L	0.0264 ppb	13:09:19
2	P 214.914†	296.6	-13.2	-22.372 µg/L	-22.372 ppb	13:09:19
2	Pb 220.353†	60.1	3.4	0.9194 µg/L	0.9194 ppb	13:09:19

2	S 181.975 Axial†	21.1	-2.7	-8.4872 µg/L	-8.4872 ppb	13:09:19
2	Sb 206.836†	29.5	1.6	1.4768 µg/L	1.4768 ppb	13:09:19
2	Se 196.026†	21.7	0.9	0.9068 µg/L	0.9068 ppb	13:09:19
2	SiO2†	2336.4	-21.2	-3.9994 µg/L	-3.9994 ppb	13:08:59
2	Si 251.611†	370.2	-31.0	-2.1933 µg/L	-2.1933 ppb	13:09:19
2	Sn 189.927†	0.6	-1.3	-0.5274 µg/L	-0.5274 ppb	13:09:19
2	Ti 334.940†	-604.3	84.0	0.1996 µg/L	0.1996 ppb	13:08:59
2	Tl 190.801†	-35.3	1.1	1.0781 µg/L	1.0781 ppb	13:09:19
2	U 409.014†	-82.9	-52.0	-4.6656 µg/L	-4.6656 ppb	13:08:59
2	V 292.402†	138.4	40.3	0.4967 µg/L	0.4967 ppb	13:08:59
2	Zn 213.857†	578.4	-17.6	-0.4080 µg/L	-0.4080 ppb	13:09:19
3	Sc RADIAL	103799.4	103799.4	103 %		13:07:54
3	Al 396.153Radial†	-385.8	27.4	12.909 µg/L	12.909 ppb	13:07:54
3	Ca 317.933Radial†	391.4	-9.2	-2.9772 µg/L	-2.9772 ppb	13:08:14
3	Fe 238.204 Radial†	17.9	3.5	34.782 µg/L	34.782 ppb	13:08:14
3	K 766.490 Radial†	333.6	-1.4	-0.7048 µg/L	-0.7048 ppb	13:07:54
3	Mg 279.077 IEC†	10.2	0.5	5.3858 µg/L	5.3858 ppb	13:08:14
3	Na 589.592 Radial†	2511.5	2216.3	972.22 µg/L	972.22 ppb	13:07:54
3	Sr 421.552†	156.3	2.0	0.0106 µg/L	0.0106 ppb	13:07:54
3	Sc 361.383	1943459.0	1943459.0	101.14 %		13:09:25
3	Y 371.029	1350552.5	1350552.5	100.94 %		13:09:25
3	Ag 328.068†	-545.8	28.2	0.2354 µg/L	0.2354 ppb	13:09:30
3	As 188.979†	-3.3	-0.1	-0.1265 µg/L	-0.1265 ppb	13:09:50
3	B 249.677†	437.2	75.7	3.5929 µg/L	3.5929 ppb	13:09:30
3	Ba 233.527†	-15.2	16.0	0.3612 µg/L	0.3612 ppb	13:09:50
3	Be 313.107†	-1380.1	163.2	0.0991 µg/L	0.0991 ppb	13:09:30
3	Cd 226.502†	-161.1	20.4	0.4932 µg/L	0.4932 ppb	13:09:50
3	Co 228.616†	21.9	2.6	0.1136 µg/L	0.1136 ppb	13:09:50
3	Cr 267.716†	94.1	18.4	0.4125 µg/L	0.4125 ppb	13:09:30
3	Cu 324.752†	3517.4	-111.4	-0.7483 µg/L	-0.7483 ppb	13:09:30
3	Mn 257.610†	-610.5	179.3	0.5766 µg/L	0.5766 ppb	13:09:30
3	Mo 202.031†	16.6	8.4	0.8348 µg/L	0.8348 ppb	13:09:50
3	Ni 231.604†	380.7	9.5	0.5406 µg/L	0.5406 ppb	13:09:50
3	P 214.914†	297.7	-12.7	-21.628 µg/L	-21.628 ppb	13:09:50
3	Pb 220.353†	47.9	-8.7	-2.2951 µg/L	-2.2951 ppb	13:09:50
3	S 181.975 Axial†	23.2	-0.6	-1.9626 µg/L	-1.9626 ppb	13:09:50
3	Sb 206.836†	29.9	2.0	1.7911 µg/L	1.7911 ppb	13:09:50
3	Se 196.026†	23.6	2.8	2.8672 µg/L	2.8672 ppb	13:09:50
3	SiO2†	2316.2	-45.8	-8.6534 µg/L	-8.6534 ppb	13:09:30
3	Si 251.611†	382.8	-19.3	-1.3668 µg/L	-1.3668 ppb	13:09:50
3	Sn 189.927†	-9.8	-11.6	-4.6131 µg/L	-4.6131 ppb	13:09:50
3	Ti 334.940†	-649.1	41.0	0.0983 µg/L	0.0983 ppb	13:09:30
3	Tl 190.801†	-39.5	-3.0	-3.0211 µg/L	-3.0211 ppb	13:09:50
3	U 409.014†	-58.9	-28.1	-2.5282 µg/L	-2.5282 ppb	13:09:30
3	V 292.402†	115.6	17.4	0.2105 µg/L	0.2105 ppb	13:09:30
3	Zn 213.857†	576.6	-20.5	-0.4784 µg/L	-0.4784 ppb	13:09:50

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941855.3	101.05 %		0.107			0.11%
Sc RADIAL	104083.4	104 %		0.2			0.24%
Y 371.029	1350243.0	100.91 %		0.077			0.08%
Ag 328.068†	32.3	0.2698 µg/L		0.03802	0.2698 ppb	0.03802	14.09%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	21.7	10.226 µg/L		3.5616	10.226 ppb	3.5616	34.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.9	1.3384 µg/L		1.50007	1.3384 ppb	1.50007	112.08%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	65.4	3.1060 µg/L		0.63307	3.1060 ppb	0.63307	20.38%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.0	0.2481 µg/L		0.09911	0.2481 ppb	0.09911	39.94%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	172.7	0.1049 µg/L		0.02672	0.1049 ppb	0.02672	25.48%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-14.2	-4.5871 µg/L		2.71155	-4.5871 ppb	2.71155	59.11%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	14.2	0.3439 µg/L		0.13147	0.3439 ppb	0.13147	38.23%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.0	-0.0010 µg/L		0.20885	-0.0010 ppb	0.20885	>999.9%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	26.1	0.5847 µg/L	0.44745	0.5847 ppb	0.44745	76.52%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-144.4	-0.9738 µg/L	0.27683	-0.9738 ppb	0.27683	28.43%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.7	26.762 µg/L	20.3034	26.762 ppb	20.3034	75.87%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	15.3	7.5176 µg/L	33.20343	7.5176 ppb	33.20343	441.67%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.1	11.590 µg/L	22.8931	11.590 ppb	22.8931	197.52%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	173.3	0.5564 µg/L	0.07276	0.5564 ppb	0.07276	13.08%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.5	0.8450 µg/L	0.30772	0.8450 ppb	0.30772	36.42%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	2224.6	975.87 µg/L	8.586	975.87 ppb	8.586	0.88%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	8.1	0.4596 µg/L	0.39890	0.4596 ppb	0.39890	86.80%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-11.1	-18.882 µg/L	5.4127	-18.882 ppb	5.4127	28.67%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-7.2	-1.8825 µg/L	2.62015	-1.8825 ppb	2.62015	139.18%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.7	-5.5011 µg/L	3.29720	-5.5011 ppb	3.29720	59.94%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	1.2	1.0716 µg/L	0.98665	1.0716 ppb	0.98665	92.08%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.2	2.2351 µg/L	1.15081	2.2351 ppb	1.15081	51.49%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-34.7	-6.5594 µg/L	2.36175	-6.5594 ppb	2.36175	36.01%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-26.9	-1.9077 µg/L	0.46867	-1.9077 ppb	0.46867	24.57%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-4.3	-1.7065 µg/L	2.53208	-1.7065 ppb	2.53208	148.38%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	18.3	0.0991 µg/L	0.08911	0.0991 ppb	0.08911	89.93%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	46.5	0.1112 µg/L	0.08264	0.1112 ppb	0.08264	74.31%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.4	-1.4075 µg/L	2.18429	-1.4075 ppb	2.18429	155.19%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-26.8	-2.4033 µg/L	2.32725	-2.4033 ppb	2.32725	96.84%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	25.4	0.3106 µg/L	0.16130	0.3106 ppb	0.16130	51.92%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-17.0	-0.3964 µg/L	0.08844	-0.3964 ppb	0.08844	22.31%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 13:48:06

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	104521.7	104521.7	104 %		13:48:44
1	Al 396.153Radial†	11234.2	11185.8	5272.1 µg/L	5272.1 ppb	13:48:44
1	Ca 317.933Radial†	16935.0	15871.0	5119.0 µg/L	5119.0 ppb	13:48:44
1	Fe 238.204 Radial†	555.4	519.4	5104.2 µg/L	5104.2 ppb	13:49:04
1	K 766.490 Radial†	11871.8	11073.6	5453.1 µg/L	5453.1 ppb	13:48:44
1	Mg 279.077 IEC†	485.4	456.6	5004.2 µg/L	5004.2 ppb	13:49:04
1	Na 589.592 Radial†	27925.2	26598.1	11668 µg/L	11668 ppb	13:48:44
1	Sr 421.552†	102816.2	98560.2	532.55 µg/L	532.55 ppb	13:48:44
1	Sc 361.383	1916831.2	1916831.2	99.751 %		13:50:04
1	Y 371.029	1329054.1	1329054.1	99.329 %		13:50:04
1	Ag 328.068†	61697.9	62419.7	516.54 µg/L	516.54 ppb	13:50:09
1	As 188.979†	363.3	367.4	548.57 µg/L	548.57 ppb	13:50:29
1	B 249.677†	11275.3	10946.9	520.20 µg/L	520.20 ppb	13:50:09
1	Ba 233.527†	23423.8	23513.3	529.97 µg/L	529.97 ppb	13:50:09
1	Be 313.107†	863664.9	867347.5	526.76 µg/L	526.76 ppb	13:50:04
1	Cd 226.502†	21541.7	21775.1	529.59 µg/L	529.59 ppb	13:50:09
1	Co 228.616†	12086.8	12097.9	531.05 µg/L	531.05 ppb	13:50:09
1	Cr 267.716†	23952.5	23937.7	535.50 µg/L	535.50 ppb	13:50:09
1	Cu 324.752†	81060.8	77673.9	527.44 µg/L	527.44 ppb	13:50:09
1	Mn 257.610†	166307.5	167505.4	537.15 µg/L	537.15 ppb	13:50:04
1	Mo 202.031†	5454.4	5460.0	539.84 µg/L	539.84 ppb	13:50:29
1	Ni 231.604†	9725.0	9382.4	532.52 µg/L	532.52 ppb	13:50:09
1	P 214.914†	1882.8	1580.5	2647.5 µg/L	2647.5 ppb	13:50:29
1	Pb 220.353†	2093.3	2042.4	540.04 µg/L	540.04 ppb	13:50:29
1	S 181.975 Axial†	351.4	328.7	1045.4 µg/L	1045.4 ppb	13:50:29
1	Sb 206.836†	617.4	591.4	537.23 µg/L	537.23 ppb	13:50:29
1	Se 196.026†	557.9	538.7	541.62 µg/L	541.62 ppb	13:50:29
1	SiO2†	31576.8	29319.7	5540.6 µg/L	5540.6 ppb	13:50:09
1	Si 251.611†	36884.6	36578.9	2589.7 µg/L	2589.7 ppb	13:50:09
1	Sn 189.927†	1375.1	1376.6	535.29 µg/L	535.29 ppb	13:50:29
1	Ti 334.940†	214414.9	215632.6	519.77 µg/L	519.77 ppb	13:50:04
1	Tl 190.801†	485.4	522.7	534.04 µg/L	534.04 ppb	13:50:29
1	U 409.014†	5843.7	5888.4	527.18 µg/L	527.18 ppb	13:50:09
1	V 292.402†	43478.2	43489.7	535.42 µg/L	535.42 ppb	13:50:09
1	Zn 213.857†	23416.1	22883.9	526.45 µg/L	526.45 ppb	13:50:09
2	Sc RADIAL	104261.4	104261.4	104 %		13:49:09
2	Al 396.153Radial†	11128.8	11111.4	5237.1 µg/L	5237.1 ppb	13:49:09
2	Ca 317.933Radial†	16841.8	15821.8	5103.1 µg/L	5103.1 ppb	13:49:09
2	Fe 238.204 Radial†	556.3	521.6	5125.8 µg/L	5125.8 ppb	13:49:29
2	K 766.490 Radial†	11866.0	11096.6	5464.4 µg/L	5464.4 ppb	13:49:09
2	Mg 279.077 IEC†	486.5	458.8	5027.9 µg/L	5027.9 ppb	13:49:29
2	Na 589.592 Radial†	27880.7	26622.2	11678 µg/L	11678 ppb	13:49:09
2	Sr 421.552†	102348.8	98356.9	531.45 µg/L	531.45 ppb	13:49:09
2	Sc 361.383	1919137.0	1919137.0	99.871 %		13:50:36
2	Y 371.029	1332259.5	1332259.5	99.569 %		13:50:36
2	Ag 328.068†	61555.7	62203.0	514.76 µg/L	514.76 ppb	13:50:42
2	As 188.979†	357.6	361.2	539.41 µg/L	539.41 ppb	13:51:02
2	B 249.677†	11282.1	10940.1	519.87 µg/L	519.87 ppb	13:50:42
2	Ba 233.527†	23439.5	23500.9	529.69 µg/L	529.69 ppb	13:50:42
2	Be 313.107†	864443.1	867086.4	526.60 µg/L	526.60 ppb	13:50:36
2	Cd 226.502†	21512.5	21719.9	528.24 µg/L	528.24 ppb	13:50:42
2	Co 228.616†	12070.5	12066.9	529.69 µg/L	529.69 ppb	13:50:42
2	Cr 267.716†	23974.9	23931.2	535.36 µg/L	535.36 ppb	13:50:42
2	Cu 324.752†	80972.9	77488.2	526.18 µg/L	526.18 ppb	13:50:42
2	Mn 257.610†	166389.3	167387.0	536.77 µg/L	536.77 ppb	13:50:36
2	Mo 202.031†	5397.5	5396.5	533.56 µg/L	533.56 ppb	13:51:02
2	Ni 231.604†	9730.0	9375.7	532.15 µg/L	532.15 ppb	13:50:42
2	P 214.914†	1866.2	1561.5	2615.3 µg/L	2615.3 ppb	13:51:02
2	Pb 220.353†	2069.8	2016.3	533.15 µg/L	533.15 ppb	13:51:02

2	S 181.975 Axial†	355.6	332.5	1057.5 µg/L	1057.5 ppb	13:51:02
2	Sb 206.836†	612.3	585.5	531.78 µg/L	531.78 ppb	13:51:02
2	Se 196.026†	561.5	541.7	544.61 µg/L	544.61 ppb	13:51:02
2	SiO2†	31607.1	29311.9	5539.2 µg/L	5539.2 ppb	13:50:42
2	Si 251.611†	36933.0	36582.9	2590.0 µg/L	2590.0 ppb	13:50:42
2	Sn 189.927†	1368.6	1368.4	532.06 µg/L	532.06 ppb	13:51:02
2	Ti 334.940†	214700.8	215660.6	519.83 µg/L	519.83 ppb	13:50:36
2	Tl 190.801†	483.8	520.5	531.78 µg/L	531.78 ppb	13:51:02
2	U 409.014†	5814.7	5852.3	523.94 µg/L	523.94 ppb	13:50:42
2	V 292.402†	43431.7	43390.9	534.16 µg/L	534.16 ppb	13:50:42
2	Zn 213.857†	23356.6	22796.1	524.41 µg/L	524.41 ppb	13:50:42
3	Sc RADIAL	104469.2	104469.2	104 %		13:49:35
3	Al 396.153Radial†	11116.8	11078.5	5222.8 µg/L	5222.8 ppb	13:49:35
3	Ca 317.933Radial†	16896.9	15842.6	5109.8 µg/L	5109.8 ppb	13:49:35
3	Fe 238.204 Radial†	556.3	520.6	5115.4 µg/L	5115.4 ppb	13:49:55
3	K 766.490 Radial†	11966.0	11169.9	5500.5 µg/L	5500.5 ppb	13:49:35
3	Mg 279.077 IEC†	490.7	461.9	5061.3 µg/L	5061.3 ppb	13:49:55
3	Na 589.592 Radial†	27889.0	26576.9	11658 µg/L	11658 ppb	13:49:35
3	Sr 421.552†	102277.9	98092.8	530.02 µg/L	530.02 ppb	13:49:35
3	Sc 361.383	1915481.1	1915481.1	99.681 %		13:51:09
3	Y 371.029	1328227.1	1328227.1	99.268 %		13:51:09
3	Ag 328.068†	60091.3	60851.6	503.48 µg/L	503.48 ppb	13:51:14
3	As 188.979†	319.5	323.7	483.26 µg/L	483.26 ppb	13:51:34
3	B 249.677†	10963.8	10642.3	505.62 µg/L	505.62 ppb	13:51:14
3	Ba 233.527†	22336.1	22438.7	505.75 µg/L	505.75 ppb	13:51:14
3	Be 313.107†	835363.0	839565.2	509.88 µg/L	509.88 ppb	13:51:09
3	Cd 226.502†	20530.7	20776.1	505.26 µg/L	505.26 ppb	13:51:14
3	Co 228.616†	11431.2	11448.7	502.50 µg/L	502.50 ppb	13:51:14
3	Cr 267.716†	22441.1	22438.4	501.96 µg/L	501.96 ppb	13:51:14
3	Cu 324.752†	77338.8	73997.3	502.52 µg/L	502.52 ppb	13:51:14
3	Mn 257.610†	161002.5	162301.0	520.45 µg/L	520.45 ppb	13:51:09
3	Mo 202.031†	4782.9	4790.2	473.64 µg/L	473.64 ppb	13:51:34
3	Ni 231.604†	9252.6	8915.3	506.02 µg/L	506.02 ppb	13:51:14
3	P 214.914†	1713.3	1411.8	2361.1 µg/L	2361.1 ppb	13:51:34
3	Pb 220.353†	1888.1	1838.0	485.95 µg/L	485.95 ppb	13:51:34
3	S 181.975 Axial†	320.9	298.4	948.84 µg/L	948.84 ppb	13:51:34
3	Sb 206.836†	557.1	531.3	482.22 µg/L	482.22 ppb	13:51:34
3	Se 196.026†	522.3	503.4	506.87 µg/L	506.87 ppb	13:51:34
3	SiO2†	30481.0	28242.6	5337.1 µg/L	5337.1 ppb	13:51:14
3	Si 251.611†	35635.2	35351.5	2502.8 µg/L	2502.8 ppb	13:51:14
3	Sn 189.927†	1179.1	1181.0	458.37 µg/L	458.37 ppb	13:51:34
3	Ti 334.940†	207356.5	208703.1	503.05 µg/L	503.05 ppb	13:51:09
3	Tl 190.801†	458.6	496.2	507.05 µg/L	507.05 ppb	13:51:34
3	U 409.014†	5499.6	5547.4	496.59 µg/L	496.59 ppb	13:51:14
3	V 292.402†	41236.6	41271.7	507.75 µg/L	507.75 ppb	13:51:14
3	Zn 213.857†	22265.9	21746.6	500.25 µg/L	500.25 ppb	13:51:14

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1917149.8	99.768 %	0.0962			0.10%
Sc RADIAL	104417.4	104 %	0.1			0.13%
Y 371.029	1329846.9	99.389 %	0.1592			0.16%
Ag 328.068†	61824.8	511.59 µg/L	7.079	511.59 ppb	7.079	1.38%
QC value within limits for Ag 328.068 Recovery = 102.32%						
Al 396.153Radial†	11125.2	5244.0 µg/L	25.39	5244.0 ppb	25.39	0.48%
QC value within limits for Al 396.153Radial Recovery = 104.88%						
As 188.979†	350.8	523.74 µg/L	35.359	523.74 ppb	35.359	6.75%
QC value within limits for As 188.979 Recovery = 104.75%						
B 249.677†	10843.1	515.23 µg/L	8.324	515.23 ppb	8.324	1.62%
QC value within limits for B 249.677 Recovery = 103.05%						
Ba 233.527†	23151.0	521.80 µg/L	13.907	521.80 ppb	13.907	2.67%
QC value within limits for Ba 233.527 Recovery = 104.36%						
Be 313.107†	857999.7	521.08 µg/L	9.696	521.08 ppb	9.696	1.86%
QC value within limits for Be 313.107 Recovery = 104.22%						
Ca 317.933Radial†	15845.1	5110.6 µg/L	7.96	5110.6 ppb	7.96	0.16%
QC value within limits for Ca 317.933Radial Recovery = 102.21%						
Cd 226.502†	21423.7	521.03 µg/L	13.674	521.03 ppb	13.674	2.62%
QC value within limits for Cd 226.502 Recovery = 104.21%						
Co 228.616†	11871.2	521.08 µg/L	16.105	521.08 ppb	16.105	3.09%

QC value within limits for Co 228.616 Recovery = 104.22%						
Cr 267.716†	23435.8	524.27 µg/L	19.321	524.27 ppb	19.321	3.69%
QC value within limits for Cr 267.716 Recovery = 104.85%						
Cu 324.752†	76386.4	518.71 µg/L	14.038	518.71 ppb	14.038	2.71%
QC value within limits for Cu 324.752 Recovery = 103.74%						
Fe 238.204 Radial†	520.6	5115.1 µg/L	10.78	5115.1 ppb	10.78	0.21%
QC value within limits for Fe 238.204 Radial Recovery = 102.30%						
K 766.490 Radial†	11113.4	5472.7 µg/L	24.76	5472.7 ppb	24.76	0.45%
QC value within limits for K 766.490 Radial Recovery = 109.45%						
Mg 279.077 IEC†	459.1	5031.1 µg/L	28.70	5031.1 ppb	28.70	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 100.62%						
Mn 257.610†	165731.1	531.46 µg/L	9.530	531.46 ppb	9.530	1.79%
QC value within limits for Mn 257.610 Recovery = 106.29%						
Mo 202.031†	5215.6	515.68 µg/L	36.544	515.68 ppb	36.544	7.09%
QC value within limits for Mo 202.031 Recovery = 103.14%						
Na 589.592 Radial†	26599.1	11668 µg/L	9.9	11668 ppb	9.9	0.09%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 116.68%						
Ni 231.604†	9224.5	523.56 µg/L	15.194	523.56 ppb	15.194	2.90%
QC value within limits for Ni 231.604 Recovery = 104.71%						
P 214.914†	1517.9	2541.3 µg/L	156.92	2541.3 ppb	156.92	6.17%
QC value within limits for P 214.914 Recovery = 101.65%						
Pb 220.353†	1965.6	519.71 µg/L	29.444	519.71 ppb	29.444	5.67%
QC value within limits for Pb 220.353 Recovery = 103.94%						
S 181.975 Axial†	319.9	1017.2 µg/L	59.54	1017.2 ppb	59.54	5.85%
QC value within limits for S 181.975 Axial Recovery = 101.72%						
Sb 206.836†	569.4	517.08 µg/L	30.311	517.08 ppb	30.311	5.86%
QC value within limits for Sb 206.836 Recovery = 103.42%						
Se 196.026†	527.9	531.03 µg/L	20.982	531.03 ppb	20.982	3.95%
QC value within limits for Se 196.026 Recovery = 106.21%						
SiO2†	28958.1	5472.3 µg/L	117.09	5472.3 ppb	117.09	2.14%
QC value within limits for SiO2 Recovery = 102.33%						
Si 251.611†	36171.1	2560.9 µg/L	50.25	2560.9 ppb	50.25	1.96%
QC value within limits for Si 251.611 Recovery = 102.43%						
Sn 189.927†	1308.7	508.57 µg/L	43.508	508.57 ppb	43.508	8.56%
QC value within limits for Sn 189.927 Recovery = 101.71%						
Sr 421.552†	98336.7	531.34 µg/L	1.266	531.34 ppb	1.266	0.24%
QC value within limits for Sr 421.552 Recovery = 106.27%						
Ti 334.940†	213332.1	514.22 µg/L	9.671	514.22 ppb	9.671	1.88%
QC value within limits for Ti 334.940 Recovery = 102.84%						
Tl 190.801†	513.1	524.29 µg/L	14.972	524.29 ppb	14.972	2.86%
QC value within limits for Tl 190.801 Recovery = 104.86%						
U 409.014†	5762.7	515.90 µg/L	16.808	515.90 ppb	16.808	3.26%
QC value within limits for U 409.014 Recovery = 103.18%						
V 292.402†	42717.4	525.77 µg/L	15.625	525.77 ppb	15.625	2.97%
QC value within limits for V 292.402 Recovery = 105.15%						
Zn 213.857†	22475.5	517.04 µg/L	14.573	517.04 ppb	14.573	2.82%
QC value within limits for Zn 213.857 Recovery = 103.41%						
QC Failed. Continue with analysis.						



Sequence No.: 10

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/5/2010 13:51:43

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	104624.2	104624.2	104 %		13:52:16
1	Al 396.153Radial†	74.2	471.5	222.49 µg/L	222.49 ppb	13:52:16
1	Ca 317.933Radial†	1046.2	615.9	198.64 µg/L	198.64 ppb	13:52:36
1	Fe 238.204 Radial†	31.0	15.9	156.49 µg/L	156.49 ppb	13:52:36
1	K 766.490 Radial†	709.9	356.9	175.77 µg/L	175.77 ppb	13:52:16
1	Mg 279.077 IEC†	38.2	27.3	298.52 µg/L	298.52 ppb	13:52:36
1	Na 589.592 Radial†	2879.9	2550.5	1118.8 µg/L	1118.8 ppb	13:52:16
1	Sr 421.552†	1242.2	1042.3	5.6320 µg/L	5.6320 ppb	13:52:16
1	Sc 361.383	1894892.7	1894892.7	98.609 %		13:53:35
1	Y 371.029	1321643.2	1321643.2	98.776 %		13:53:35
1	Ag 328.068†	127.8	697.5	5.7795 µg/L	5.7795 ppb	13:53:40
1	As 188.979†	18.7	22.1	33.113 µg/L	33.113 ppb	13:54:00
1	B 249.677†	1449.2	1113.1	53.006 µg/L	53.006 ppb	13:54:00
1	Ba 233.527†	206.9	240.9	5.4305 µg/L	5.4305 ppb	13:54:00
1	Be 313.107†	7040.6	8667.7	5.2640 µg/L	5.2640 ppb	13:53:40
1	Cd 226.502†	32.2	212.3	5.1524 µg/L	5.1524 ppb	13:54:00
1	Co 228.616†	133.1	115.9	5.0902 µg/L	5.0902 ppb	13:54:00
1	Cr 267.716†	324.1	254.1	5.6846 µg/L	5.6846 ppb	13:54:00
1	Cu 324.752†	5048.4	1530.4	10.403 µg/L	10.403 ppb	13:53:40
1	Mn 257.610†	2876.3	3699.8	11.854 µg/L	11.854 ppb	13:54:00
1	Mo 202.031†	117.7	111.4	11.015 µg/L	11.015 ppb	13:54:00
1	Ni 231.604†	466.9	106.6	6.0505 µg/L	6.0505 ppb	13:54:00
1	P 214.914†	392.6	91.1	154.52 µg/L	154.52 ppb	13:54:00
1	Pb 220.353†	87.6	32.7	8.6169 µg/L	8.6169 ppb	13:54:00
1	S 181.975 Axial†	52.6	29.8	94.878 µg/L	94.878 ppb	13:54:00
1	Sb 206.836†	45.0	18.0	16.423 µg/L	16.423 ppb	13:54:00
1	Se 196.026†	44.6	24.7	24.556 µg/L	24.556 ppb	13:54:00
1	SiO2†	3569.2	1283.6	242.56 µg/L	242.56 ppb	13:53:40
1	Si 251.611†	1855.8	1484.2	105.08 µg/L	105.08 ppb	13:54:00
1	Sn 189.927†	28.8	27.3	10.568 µg/L	10.568 ppb	13:54:00
1	Ti 334.940†	1560.0	2264.7	5.4418 µg/L	5.4418 ppb	13:53:40
1	Tl 190.801†	-15.3	20.5	20.915 µg/L	20.915 ppb	13:54:00
1	U 409.014†	562.2	600.2	53.809 µg/L	53.809 ppb	13:53:40
1	V 292.402†	571.9	483.1	6.0166 µg/L	6.0166 ppb	13:53:40
1	Zn 213.857†	1067.5	491.9	11.329 µg/L	11.329 ppb	13:54:00
2	Sc RADIAL	104070.1	104070.1	104 %		13:52:42
2	Al 396.153Radial†	47.6	446.2	210.53 µg/L	210.53 ppb	13:52:42
2	Ca 317.933Radial†	1043.8	618.9	199.61 µg/L	199.61 ppb	13:53:02
2	Fe 238.204 Radial†	29.2	14.4	141.64 µg/L	141.64 ppb	13:53:02
2	K 766.490 Radial†	739.6	389.2	191.64 µg/L	191.64 ppb	13:52:42
2	Mg 279.077 IEC†	40.4	29.5	323.50 µg/L	323.50 ppb	13:53:02
2	Na 589.592 Radial†	2905.3	2589.7	1136.0 µg/L	1136.0 ppb	13:52:42
2	Sr 421.552†	1225.7	1032.7	5.5800 µg/L	5.5800 ppb	13:52:42
2	Sc 361.383	1883723.0	1883723.0	98.028 %		13:54:06
2	Y 371.029	1312202.0	1312202.0	98.070 %		13:54:06
2	Ag 328.068†	69.1	638.4	5.2897 µg/L	5.2897 ppb	13:54:11
2	As 188.979†	18.1	21.7	32.472 µg/L	32.472 ppb	13:54:32
2	B 249.677†	1446.4	1118.9	53.290 µg/L	53.290 ppb	13:54:32
2	Ba 233.527†	203.4	238.5	5.3766 µg/L	5.3766 ppb	13:54:32
2	Be 313.107†	7077.1	8747.3	5.3123 µg/L	5.3123 ppb	13:54:11
2	Cd 226.502†	31.6	211.9	5.1437 µg/L	5.1437 ppb	13:54:32
2	Co 228.616†	136.7	120.4	5.2902 µg/L	5.2902 ppb	13:54:32
2	Cr 267.716†	343.6	275.9	6.1722 µg/L	6.1722 ppb	13:54:32
2	Cu 324.752†	5081.4	1594.4	10.834 µg/L	10.834 ppb	13:54:11
2	Mn 257.610†	2853.3	3693.6	11.832 µg/L	11.832 ppb	13:54:32
2	Mo 202.031†	123.0	117.5	11.617 µg/L	11.617 ppb	13:54:32
2	Ni 231.604†	474.6	117.2	6.6562 µg/L	6.6562 ppb	13:54:32
2	P 214.914†	405.8	107.0	181.54 µg/L	181.54 ppb	13:54:32
2	Pb 220.353†	85.5	31.1	8.1970 µg/L	8.1970 ppb	13:54:32

2	S 181.975 Axial†	57.5	35.1	111.57 µg/L	111.57 ppb	13:54:32
2	Sb 206.836†	43.4	16.7	15.201 µg/L	15.201 ppb	13:54:32
2	Se 196.026†	61.7	42.3	41.819 µg/L	41.819 ppb	13:54:32
2	SiO2†	3521.2	1256.1	237.37 µg/L	237.37 ppb	13:54:11
2	Si 251.611†	1850.1	1489.5	105.46 µg/L	105.46 ppb	13:54:32
2	Sn 189.927†	27.2	25.9	10.014 µg/L	10.014 ppb	13:54:32
2	Ti 334.940†	1531.5	2245.0	5.3924 µg/L	5.3924 ppb	13:54:11
2	Tl 190.801†	-9.3	26.6	27.056 µg/L	27.056 ppb	13:54:32
2	U 409.014†	593.4	635.5	56.977 µg/L	56.977 ppb	13:54:11
2	V 292.402†	530.0	443.7	5.5487 µg/L	5.5487 ppb	13:54:11
2	Zn 213.857†	1057.9	488.5	11.246 µg/L	11.246 ppb	13:54:32
3	Sc RADIAL	104206.5	104206.5	104 %		13:53:07
3	Al 396.153Radial†	63.3	461.3	217.69 µg/L	217.69 ppb	13:53:07
3	Ca 317.933Radial†	1052.4	625.8	201.84 µg/L	201.84 ppb	13:53:27
3	Fe 238.204 Radial†	32.7	17.7	173.65 µg/L	173.65 ppb	13:53:27
3	K 766.490 Radial†	703.8	353.8	174.23 µg/L	174.23 ppb	13:53:07
3	Mg 279.077 IEC†	40.8	29.9	327.61 µg/L	327.61 ppb	13:53:27
3	Na 589.592 Radial†	2862.0	2544.3	1116.1 µg/L	1116.1 ppb	13:53:07
3	Sr 421.552†	1231.2	1036.5	5.6003 µg/L	5.6003 ppb	13:53:07
3	Sc 361.383	1896763.8	1896763.8	98.707 %		13:54:37
3	Y 371.029	1323053.4	1323053.4	98.881 %		13:54:37
3	Ag 328.068†	42.6	611.0	5.0624 µg/L	5.0624 ppb	13:54:43
3	As 188.979†	18.3	21.7	32.528 µg/L	32.528 ppb	13:55:03
3	B 249.677†	1385.1	1046.7	49.829 µg/L	49.829 ppb	13:55:03
3	Ba 233.527†	199.1	232.8	5.2468 µg/L	5.2468 ppb	13:55:03
3	Be 313.107†	6857.8	8475.4	5.1472 µg/L	5.1472 ppb	13:54:43
3	Cd 226.502†	17.0	196.8	4.7743 µg/L	4.7743 ppb	13:55:03
3	Co 228.616†	118.7	101.1	4.4417 µg/L	4.4417 ppb	13:55:03
3	Cr 267.716†	307.9	237.3	5.3089 µg/L	5.3089 ppb	13:55:03
3	Cu 324.752†	5055.9	1532.9	10.423 µg/L	10.423 ppb	13:54:43
3	Mn 257.610†	2556.5	3373.0	10.805 µg/L	10.805 ppb	13:55:03
3	Mo 202.031†	106.8	100.3	9.9167 µg/L	9.9167 ppb	13:55:03
3	Ni 231.604†	468.1	107.3	6.0955 µg/L	6.0955 ppb	13:55:03
3	P 214.914†	386.6	84.7	143.48 µg/L	143.48 ppb	13:55:03
3	Pb 220.353†	87.3	32.3	8.5125 µg/L	8.5125 ppb	13:55:03
3	S 181.975 Axial†	57.7	34.9	111.06 µg/L	111.06 ppb	13:55:03
3	Sb 206.836†	42.5	15.5	14.123 µg/L	14.123 ppb	13:55:03
3	Se 196.026†	52.3	32.4	32.183 µg/L	32.183 ppb	13:55:03
3	SiO2†	3516.7	1226.8	231.84 µg/L	231.84 ppb	13:54:43
3	Si 251.611†	1754.5	1379.7	97.683 µg/L	97.683 ppb	13:55:03
3	Sn 189.927†	27.1	25.5	9.8431 µg/L	9.8431 ppb	13:55:03
3	Ti 334.940†	1506.5	2209.0	5.3051 µg/L	5.3051 ppb	13:54:43
3	Tl 190.801†	-19.2	16.6	16.942 µg/L	16.942 ppb	13:55:03
3	U 409.014†	513.4	550.3	49.322 µg/L	49.322 ppb	13:54:43
3	V 292.402†	477.1	386.5	4.8215 µg/L	4.8215 ppb	13:54:43
3	Zn 213.857†	1017.9	440.6	10.137 µg/L	10.137 ppb	13:55:03

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1891793.2	98.448 %	0.3669			0.37%
Sc RADIAL	104300.3	104 %	0.3			0.28%
Y 371.029	1318966.2	98.575 %	0.4410			0.45%
Ag 328.068†	649.0	5.3772 µg/L	0.36647	5.3772 ppb	0.36647	6.82%
QC value within limits for Ag 328.068 Recovery = 107.54%						
Al 396.153Radial†	459.7	216.90 µg/L	6.022	216.90 ppb	6.022	2.78%
QC value within limits for Al 396.153Radial Recovery = 108.45%						
As 188.979†	21.9	32.704 µg/L	0.3551	32.704 ppb	0.3551	1.09%
QC value within limits for As 188.979 Recovery = 109.01%						
B 249.677†	1092.9	52.042 µg/L	1.9214	52.042 ppb	1.9214	3.69%
QC value within limits for B 249.677 Recovery = 104.08%						
Ba 233.527†	237.4	5.3513 µg/L	0.09443	5.3513 ppb	0.09443	1.76%
QC value within limits for Ba 233.527 Recovery = 107.03%						
Be 313.107†	8630.1	5.2412 µg/L	0.08491	5.2412 ppb	0.08491	1.62%
QC value within limits for Be 313.107 Recovery = 104.82%						
Ca 317.933Radial†	620.2	200.03 µg/L	1.643	200.03 ppb	1.643	0.82%
QC value within limits for Ca 317.933Radial Recovery = 100.01%						
Cd 226.502†	207.0	5.0235 µg/L	0.21584	5.0235 ppb	0.21584	4.30%
QC value within limits for Cd 226.502 Recovery = 100.47%						
Co 228.616†	112.5	4.9407 µg/L	0.44357	4.9407 ppb	0.44357	8.98%

Cr 267.716†	255.8	5.7219 µg/L	0.43284	5.7219 ppb	0.43284	7.56%
QC value within limits for Cr 267.716 Recovery = 114.44%						
Cu 324.752†	1552.6	10.553 µg/L	0.2433	10.553 ppb	0.2433	2.31%
QC value within limits for Cu 324.752 Recovery = 105.53%						
Fe 238.204 Radial†	16.0	157.26 µg/L	16.018	157.26 ppb	16.018	10.19%
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 157.26%						
K 766.490 Radial†	366.6	180.55 µg/L	9.635	180.55 ppb	9.635	5.34%
QC value within limits for K 766.490 Radial Recovery = 120.37%						
Mg 279.077 IEC†	28.9	316.54 µg/L	15.747	316.54 ppb	15.747	4.97%
QC value within limits for Mg 279.077 IEC Recovery = 105.51%						
Mn 257.610†	3588.8	11.497 µg/L	0.5993	11.497 ppb	0.5993	5.21%
QC value within limits for Mn 257.610 Recovery = 114.97%						
Mo 202.031†	109.7	10.849 µg/L	0.8620	10.849 ppb	0.8620	7.94%
QC value within limits for Mo 202.031 Recovery = 108.49%						
Na 589.592 Radial†	2561.5	1123.7 µg/L	10.79	1123.7 ppb	10.79	0.96%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 374.55%						
Ni 231.604†	110.4	6.2674 µg/L	0.33749	6.2674 ppb	0.33749	5.38%
QC value within limits for Ni 231.604 Recovery = 125.35%						
P 214.914†	94.2	159.85 µg/L	19.584	159.85 ppb	19.584	12.25%
QC value within limits for P 214.914 Recovery = 106.56%						
Pb 220.353†	32.0	8.4421 µg/L	0.21861	8.4421 ppb	0.21861	2.59%
QC value within limits for Pb 220.353 Recovery = 84.42%						
S 181.975 Axial†	33.3	105.84 µg/L	9.495	105.84 ppb	9.495	8.97%
QC value within limits for S 181.975 Axial Recovery = 105.84%						
Sb 206.836†	16.7	15.249 µg/L	1.1508	15.249 ppb	1.1508	7.55%
QC value greater than the upper limit for Sb 206.836 Recovery = 152.49%						
Se 196.026†	33.2	32.853 µg/L	8.6510	32.853 ppb	8.6510	26.33%
QC value within limits for Se 196.026 Recovery = 109.51%						
SiO2†	1255.5	237.26 µg/L	5.364	237.26 ppb	5.364	2.26%
QC value within limits for SiO2 Recovery = 111.39%						
Si 251.611†	1451.2	102.74 µg/L	4.383	102.74 ppb	4.383	4.27%
QC value within limits for Si 251.611 Recovery = 102.74%						
Sn 189.927†	26.2	10.142 µg/L	0.3790	10.142 ppb	0.3790	3.74%
QC value within limits for Sn 189.927 Recovery = 101.42%						
Sr 421.552†	1037.2	5.6041 µg/L	0.02623	5.6041 ppb	0.02623	0.47%
QC value within limits for Sr 421.552 Recovery = 112.08%						
Ti 334.940†	2239.6	5.3798 µg/L	0.06918	5.3798 ppb	0.06918	1.29%
QC value within limits for Ti 334.940 Recovery = 107.60%						
Tl 190.801†	21.3	21.638 µg/L	5.0957	21.638 ppb	5.0957	23.55%
QC value within limits for Tl 190.801 Recovery = 108.19%						
U 409.014†	595.3	53.369 µg/L	3.8461	53.369 ppb	3.8461	7.21%
QC value within limits for U 409.014 Recovery = 106.74%						
V 292.402†	437.8	5.4623 µg/L	0.60225	5.4623 ppb	0.60225	11.03%
QC value within limits for V 292.402 Recovery = 109.25%						
Zn 213.857†	473.7	10.904 µg/L	0.6657	10.904 ppb	0.6657	6.10%
QC value within limits for Zn 213.857 Recovery = 109.04%						

QC Failed. Continue with analysis.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 13:55:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	101143.3	101143.3	101 %		13:55:44
1	Al 396.153Radial†	-373.6	29.8	14.058 µg/L	14.058 ppb	13:55:44
1	Ca 317.933Radial†	380.8	-9.8	-3.1670 µg/L	-3.1670 ppb	13:56:04
1	Fe 238.204 Radial†	15.8	1.9	18.474 µg/L	18.474 ppb	13:56:04
1	K 766.490 Radial†	312.1	-14.3	-7.0627 µg/L	-7.0627 ppb	13:55:44
1	Mg 279.077 IEC†	8.4	-1.1	-11.689 µg/L	-11.689 ppb	13:56:04
1	Na 589.592 Radial†	1930.1	1703.2	747.16 µg/L	747.16 ppb	13:55:44
1	Sr 421.552†	167.4	17.0	0.0916 µg/L	0.0916 ppb	13:55:44
1	Sc 361.383	1901222.2	1901222.2	98.939 %		13:57:03
1	Y 371.029	1324068.1	1324068.1	98.957 %		13:57:03
1	Ag 328.068†	-546.4	15.6	0.1302 µg/L	0.1302 ppb	13:57:08
1	As 188.979†	-1.2	1.9	2.9190 µg/L	2.9190 ppb	13:57:28
1	B 249.677†	407.9	55.6	2.6452 µg/L	2.6452 ppb	13:57:28
1	Ba 233.527†	-27.0	3.8	0.0860 µg/L	0.0860 ppb	13:57:28
1	Be 313.107†	-1352.1	161.2	0.0979 µg/L	0.0979 ppb	13:57:08
1	Cd 226.502†	-171.8	6.1	0.1473 µg/L	0.1473 ppb	13:57:28
1	Co 228.616†	20.9	2.0	0.0876 µg/L	0.0876 ppb	13:57:28
1	Cr 267.716†	115.0	41.7	0.9318 µg/L	0.9318 ppb	13:57:28
1	Cu 324.752†	3452.8	-99.3	-0.6698 µg/L	-0.6698 ppb	13:57:08
1	Mn 257.610†	-611.6	164.8	0.5303 µg/L	0.5303 ppb	13:57:28
1	Mo 202.031†	8.2	0.3	0.0304 µg/L	0.0304 ppb	13:57:28
1	Ni 231.604†	395.5	32.8	1.8649 µg/L	1.8649 ppb	13:57:28
1	P 214.914†	308.2	4.4	7.5894 µg/L	7.5894 ppb	13:57:28
1	Pb 220.353†	48.9	-6.7	-1.7564 µg/L	-1.7564 ppb	13:57:28
1	S 181.975 Axial†	22.6	-0.7	-2.2059 µg/L	-2.2059 ppb	13:57:28
1	Sb 206.836†	28.3	1.0	0.9308 µg/L	0.9308 ppb	13:57:28
1	Se 196.026†	25.0	4.8	4.7448 µg/L	4.7448 ppb	13:57:28
1	SiO2†	2302.7	-8.5	-1.6050 µg/L	-1.6050 ppb	13:57:28
1	Si 251.611†	403.9	10.4	0.7366 µg/L	0.7366 ppb	13:57:28
1	Sn 189.927†	-3.3	-5.3	-2.1061 µg/L	-2.1061 ppb	13:57:28
1	Ti 334.940†	-599.6	76.7	0.1859 µg/L	0.1859 ppb	13:57:08
1	Tl 190.801†	-31.8	3.9	3.9909 µg/L	3.9909 ppb	13:57:28
1	U 409.014†	-8.1	21.9	1.9645 µg/L	1.9645 ppb	13:57:08
1	V 292.402†	105.2	9.5	0.1162 µg/L	0.1162 ppb	13:57:08
1	Zn 213.857†	587.8	3.5	0.0743 µg/L	0.0743 ppb	13:57:28
2	Sc RADIAL	101075.5	101075.5	101 %		13:56:10
2	Al 396.153Radial†	-358.9	44.0	20.800 µg/L	20.800 ppb	13:56:10
2	Ca 317.933Radial†	383.8	-6.6	-2.1228 µg/L	-2.1228 ppb	13:56:30
2	Fe 238.204 Radial†	15.9	2.1	20.415 µg/L	20.415 ppb	13:56:30
2	K 766.490 Radial†	307.9	-18.3	-8.9989 µg/L	-8.9989 ppb	13:56:10
2	Mg 279.077 IEC†	6.2	-3.2	-35.176 µg/L	-35.176 ppb	13:56:30
2	Na 589.592 Radial†	1906.0	1680.6	737.24 µg/L	737.24 ppb	13:56:10
2	Sr 421.552†	164.4	14.1	0.0763 µg/L	0.0763 ppb	13:56:10
2	Sc 361.383	1917557.6	1917557.6	99.789 %		13:57:34
2	Y 371.029	1334667.9	1334667.9	99.749 %		13:57:34
2	Ag 328.068†	-520.5	46.3	0.3839 µg/L	0.3839 ppb	13:57:39
2	As 188.979†	0.6	3.7	5.6206 µg/L	5.6206 ppb	13:58:00
2	B 249.677†	420.6	64.9	3.0854 µg/L	3.0854 ppb	13:58:00
2	Ba 233.527†	-26.1	4.9	0.1112 µg/L	0.1112 ppb	13:58:00
2	Be 313.107†	-1333.8	191.1	0.1161 µg/L	0.1161 ppb	13:57:39
2	Cd 226.502†	-179.4	-0.1	-0.0024 µg/L	-0.0024 ppb	13:58:00
2	Co 228.616†	22.3	3.2	0.1417 µg/L	0.1417 ppb	13:58:00
2	Cr 267.716†	119.4	45.1	1.0077 µg/L	1.0077 ppb	13:58:00
2	Cu 324.752†	3466.3	-115.6	-0.7796 µg/L	-0.7796 ppb	13:57:39
2	Mn 257.610†	-628.2	153.4	0.4955 µg/L	0.4955 ppb	13:58:00
2	Mo 202.031†	8.8	0.9	0.0854 µg/L	0.0854 ppb	13:58:00
2	Ni 231.604†	398.7	32.6	1.8532 µg/L	1.8532 ppb	13:58:00
2	P 214.914†	312.6	6.3	10.739 µg/L	10.739 ppb	13:58:00
2	Pb 220.353†	46.1	-10.0	-2.6293 µg/L	-2.6293 ppb	13:58:00

2	S 181.975 Axial†	22.9	-0.6	-1.8026 µg/L	-1.8026 ppb	13:58:00
2	Sb 206.836†	22.2	-5.3	-4.8184 µg/L	-4.8184 ppb	13:58:00
2	Se 196.026†	13.9	-6.6	-6.3790 µg/L	-6.3790 ppb	13:58:00
2	SiO2†	2307.1	-24.0	-4.5303 µg/L	-4.5303 ppb	13:58:00
2	Si 251.611†	422.8	25.9	1.8330 µg/L	1.8330 ppb	13:58:00
2	Sn 189.927†	0.1	-1.8	-0.7283 µg/L	-0.7283 ppb	13:58:00
2	Ti 334.940†	-641.4	40.0	0.0993 µg/L	0.0993 ppb	13:57:39
2	Tl 190.801†	-37.9	-1.9	-1.9440 µg/L	-1.9440 ppb	13:58:00
2	U 409.014†	3.3	33.4	2.9968 µg/L	2.9968 ppb	13:57:39
2	V 292.402†	121.5	24.8	0.3049 µg/L	0.3049 ppb	13:57:39
2	Zn 213.857†	591.8	2.5	0.0511 µg/L	0.0511 ppb	13:58:00
3	Sc RADIAL	101926.1	101926.1	102 %		13:56:35
3	Al 396.153Radial†	-382.9	23.4	11.060 µg/L	11.060 ppb	13:56:35
3	Ca 317.933Radial†	380.2	-13.3	-4.3056 µg/L	-4.3056 ppb	13:56:55
3	Fe 238.204 Radial†	17.6	3.6	34.885 µg/L	34.885 ppb	13:56:55
3	K 766.490 Radial†	324.6	-4.4	-2.1552 µg/L	-2.1552 ppb	13:56:35
3	Mg 279.077 IEC†	12.2	2.7	29.046 µg/L	29.046 ppb	13:56:55
3	Na 589.592 Radial†	1926.8	1685.4	739.31 µg/L	739.31 ppb	13:56:35
3	Sr 421.552†	199.5	47.3	0.2557 µg/L	0.2557 ppb	13:56:35
3	Sc 361.383	1895903.1	1895903.1	98.662 %		13:58:05
3	Y 371.029	1321456.3	1321456.3	98.762 %		13:58:05
3	Ag 328.068†	-645.0	-85.8	-0.7034 µg/L	-0.7034 ppb	13:58:11
3	As 188.979†	-2.1	1.1	1.6093 µg/L	1.6093 ppb	13:58:31
3	B 249.677†	414.2	63.3	2.9989 µg/L	2.9989 ppb	13:58:31
3	Ba 233.527†	-20.3	10.5	0.2355 µg/L	0.2355 ppb	13:58:31
3	Be 313.107†	-1242.9	268.0	0.1628 µg/L	0.1628 ppb	13:58:11
3	Cd 226.502†	-174.7	2.6	0.0593 µg/L	0.0593 ppb	13:58:31
3	Co 228.616†	23.7	4.9	0.2150 µg/L	0.2150 ppb	13:58:31
3	Cr 267.716†	91.4	18.0	0.4031 µg/L	0.4031 ppb	13:58:31
3	Cu 324.752†	3481.6	-60.4	-0.4029 µg/L	-0.4029 ppb	13:58:11
3	Mn 257.610†	-631.5	142.9	0.4584 µg/L	0.4584 ppb	13:58:31
3	Mo 202.031†	11.2	3.3	0.3298 µg/L	0.3298 ppb	13:58:31
3	Ni 231.604†	370.5	8.6	0.4888 µg/L	0.4888 ppb	13:58:31
3	P 214.914†	308.2	5.4	9.1785 µg/L	9.1785 ppb	13:58:31
3	Pb 220.353†	57.6	2.3	0.6094 µg/L	0.6094 ppb	13:58:31
3	S 181.975 Axial†	17.7	-5.6	-17.683 µg/L	-17.683 ppb	13:58:31
3	Sb 206.836†	27.2	-0.0	-0.0123 µg/L	-0.0123 ppb	13:58:31
3	Se 196.026†	13.3	-7.1	-6.8781 µg/L	-6.8781 ppb	13:58:31
3	SiO2†	2310.6	6.0	1.1381 µg/L	1.1381 ppb	13:58:31
3	Si 251.611†	406.1	13.9	0.9815 µg/L	0.9815 ppb	13:58:31
3	Sn 189.927†	0.4	-1.5	-0.6313 µg/L	-0.6313 ppb	13:58:31
3	Ti 334.940†	-663.6	10.1	0.0221 µg/L	0.0221 ppb	13:58:11
3	Tl 190.801†	-39.8	-4.2	-4.2896 µg/L	-4.2896 ppb	13:58:31
3	U 409.014†	-32.2	-2.4	-0.2232 µg/L	-0.2232 ppb	13:58:11
3	V 292.402†	81.9	-13.9	-0.1724 µg/L	-0.1724 ppb	13:58:11
3	Zn 213.857†	598.8	16.3	0.3728 µg/L	0.3728 ppb	13:58:31

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1904894.3	99.130 %	0.5872			0.59%
Sc RADIAL	101381.7	101 %	0.5			0.47%
Y 371.029	1326730.8	99.156 %	0.5229			0.53%
Ag 328.068†	-8.0	-0.0631 µg/L	0.56886	-0.0631 ppb	0.56886	901.14%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	32.4	15.306 µg/L	4.9882	15.306 ppb	4.9882	32.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.3	3.3830 µg/L	2.04552	3.3830 ppb	2.04552	60.47%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	61.3	2.9098 µg/L	0.23321	2.9098 ppb	0.23321	8.01%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.4	0.1442 µg/L	0.08007	0.1442 ppb	0.08007	55.51%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	206.8	0.1256 µg/L	0.03351	0.1256 ppb	0.03351	26.68%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-9.9	-3.1985 µg/L	1.09178	-3.1985 ppb	1.09178	34.13%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	2.9	0.0681 µg/L	0.07526	0.0681 ppb	0.07526	110.54%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.4	0.1481 µg/L	0.06394	0.1481 ppb	0.06394	43.17%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	34.9	0.7809 µg/L	0.32938	0.7809 ppb	0.32938	42.18%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-91.8	-0.6174 µg/L	0.19372	-0.6174 ppb	0.19372	31.38%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.5	24.591 µg/L	8.9677	24.591 ppb	8.9677	36.47%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-12.3	-6.0723 µg/L	3.52774	-6.0723 ppb	3.52774	58.10%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.5	-5.9396 µg/L	32.49516	-5.9396 ppb	32.49516	547.09%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	153.7	0.4947 µg/L	0.03595	0.4947 ppb	0.03595	7.27%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.5	0.1485 µg/L	0.15936	0.1485 ppb	0.15936	107.30%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	1689.7	741.24 µg/L	5.232	741.24 ppb	5.232	0.71%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	24.7	1.4023 µg/L	0.79118	1.4023 ppb	0.79118	56.42%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	5.4	9.1690 µg/L	1.57487	9.1690 ppb	1.57487	17.18%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.8	-1.2588 µg/L	1.67572	-1.2588 ppb	1.67572	133.12%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.3	-7.2304 µg/L	9.05425	-7.2304 ppb	9.05425	125.22%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.4	-1.3000 µg/L	3.08332	-1.3000 ppb	3.08332	237.18%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.0	-2.8374 µg/L	6.57115	-2.8374 ppb	6.57115	231.59%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-8.8	-1.6657 µg/L	2.83469	-1.6657 ppb	2.83469	170.18%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	16.7	1.1837 µg/L	0.57546	1.1837 ppb	0.57546	48.62%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-2.9	-1.1553 µg/L	0.82490	-1.1553 ppb	0.82490	71.40%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	26.1	0.1412 µg/L	0.09944	0.1412 ppb	0.09944	70.42%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	42.3	0.1024 µg/L	0.08197	0.1024 ppb	0.08197	80.03%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.7	-0.7476 µg/L	4.26796	-0.7476 ppb	4.26796	570.91%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	17.6	1.5794 µg/L	1.64418	1.5794 ppb	1.64418	104.10%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	6.8	0.0829 µg/L	0.24041	0.0829 ppb	0.24041	290.03%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	7.4	0.1661 µg/L	0.17942	0.1661 ppb	0.17942	108.04%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 13  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/5/2010 14:02:08  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	105600.5	105600.5	105 %			14:02:42
1	Al 396.153Radial†	11038.2	10889.4	5132.5 µg/L		5132.5 ppb	14:02:42
1	Ca 317.933Radial†	16674.7	15457.5	4985.6 µg/L		4985.6 ppb	14:02:42
1	Fe 238.204 Radial†	547.1	506.1	4973.7 µg/L		4973.7 ppb	14:03:02
1	K 766.490 Radial†	11666.6	10762.2	5299.8 µg/L		5299.8 ppb	14:02:42
1	Mg 279.077 IEC†	484.8	451.2	4945.1 µg/L		4945.1 ppb	14:03:02
1	Na 589.592 Radial†	27681.2	26092.4	11446 µg/L		11446 ppb	14:02:42
1	Sr 421.552†	101880.9	96663.1	522.30 µg/L		522.30 ppb	14:02:42
1	Sc 361.383	1942732.1	1942732.1	101.10 %			14:04:02
1	Y 371.029	1348831.2	1348831.2	100.81 %			14:04:02
1	Ag 328.068†	60733.1	60640.8	501.82 µg/L		501.82 ppb	14:04:08
1	As 188.979†	351.6	351.0	524.12 µg/L		524.12 ppb	14:04:28
1	B 249.677†	11054.8	10578.1	502.66 µg/L		502.66 ppb	14:04:08
1	Ba 233.527†	23005.7	22786.7	513.60 µg/L		513.60 ppb	14:04:08
1	Be 313.107†	852917.3	845173.5	513.29 µg/L		513.29 ppb	14:04:02
1	Cd 226.502†	21192.1	21141.4	514.17 µg/L		514.17 ppb	14:04:08
1	Co 228.616†	11888.2	11739.9	515.34 µg/L		515.34 ppb	14:04:08
1	Cr 267.716†	23554.3	23223.7	519.53 µg/L		519.53 ppb	14:04:08
1	Cu 324.752†	79849.7	75392.5	511.95 µg/L		511.95 ppb	14:04:08
1	Mn 257.610†	164015.4	163015.4	522.74 µg/L		522.74 ppb	14:04:02
1	Mo 202.031†	5368.3	5301.9	524.21 µg/L		524.21 ppb	14:04:28
1	Ni 231.604†	9541.5	9070.9	514.84 µg/L		514.84 ppb	14:04:08
1	P 214.914†	1857.4	1530.2	2563.1 µg/L		2563.1 ppb	14:04:28
1	Pb 220.353†	2044.4	1966.0	519.87 µg/L		519.87 ppb	14:04:28
1	S 181.975 Axial†	350.1	322.8	1026.5 µg/L		1026.5 ppb	14:04:28
1	Sb 206.836†	597.6	563.5	512.00 µg/L		512.00 ppb	14:04:28
1	Se 196.026†	551.3	524.8	527.56 µg/L		527.56 ppb	14:04:28
1	SiO2†	31036.7	28363.4	5359.9 µg/L		5359.9 ppb	14:04:08
1	Si 251.611†	36281.1	35489.0	2512.6 µg/L		2512.6 ppb	14:04:08
1	Sn 189.927†	1348.6	1332.0	517.92 µg/L		517.92 ppb	14:04:28
1	Ti 334.940†	212083.6	210460.9	507.30 µg/L		507.30 ppb	14:04:02
1	Tl 190.801†	476.6	507.5	518.56 µg/L		518.56 ppb	14:04:28
1	U 409.014†	5709.9	5678.0	508.33 µg/L		508.33 ppb	14:04:08
1	V 292.402†	42815.2	42252.8	520.18 µg/L		520.18 ppb	14:04:08
1	Zn 213.857†	23060.6	22219.3	511.16 µg/L		511.16 ppb	14:04:08
2	Sc RADIAL	106408.3	106408.3	106 %			14:03:08
2	Al 396.153Radial†	11107.3	10874.9	5125.5 µg/L		5125.5 ppb	14:03:08
2	Ca 317.933Radial†	16769.7	15426.8	4975.7 µg/L		4975.7 ppb	14:03:08
2	Fe 238.204 Radial†	550.9	505.8	4970.1 µg/L		4970.1 ppb	14:03:28
2	K 766.490 Radial†	11718.5	10727.0	5282.4 µg/L		5282.4 ppb	14:03:08
2	Mg 279.077 IEC†	488.9	451.7	4949.8 µg/L		4949.8 ppb	14:03:28
2	Na 589.592 Radial†	27781.6	25987.4	11400 µg/L		11400 ppb	14:03:08
2	Sr 421.552†	102048.3	96086.0	519.18 µg/L		519.18 ppb	14:03:08
2	Sc 361.383	1931889.7	1931889.7	100.53 %			14:04:35
2	Y 371.029	1338798.9	1338798.9	100.06 %			14:04:35
2	Ag 328.068†	61163.8	61406.3	508.16 µg/L		508.16 ppb	14:04:40
2	As 188.979†	353.8	355.1	530.32 µg/L		530.32 ppb	14:05:00
2	B 249.677†	11212.0	10795.8	513.05 µg/L		513.05 ppb	14:04:40
2	Ba 233.527†	23221.0	23128.5	521.30 µg/L		521.30 ppb	14:04:40
2	Be 313.107†	847394.1	844414.4	512.83 µg/L		512.83 ppb	14:04:35
2	Cd 226.502†	21355.0	21421.1	520.98 µg/L		520.98 ppb	14:04:40
2	Co 228.616†	12018.8	11935.8	523.95 µg/L		523.95 ppb	14:04:40
2	Cr 267.716†	23671.5	23471.0	525.06 µg/L		525.06 ppb	14:04:40
2	Cu 324.752†	80578.6	76560.8	519.87 µg/L		519.87 ppb	14:04:40
2	Mn 257.610†	162968.9	162884.9	522.32 µg/L		522.32 ppb	14:04:35
2	Mo 202.031†	5379.7	5343.1	528.27 µg/L		528.27 ppb	14:05:00
2	Ni 231.604†	9633.8	9215.6	523.06 µg/L		523.06 ppb	14:04:40
2	P 214.914†	1861.8	1544.9	2587.5 µg/L		2587.5 ppb	14:05:00
2	Pb 220.353†	2061.3	1994.2	527.31 µg/L		527.31 ppb	14:05:00

2	S 181.975 Axial†	345.5	320.1	1017.9 µg/L	1017.9 ppb	14:05:00
2	Sb 206.836†	595.3	564.5	512.89 µg/L	512.89 ppb	14:05:00
2	Se 196.026†	551.9	528.4	531.07 µg/L	531.07 ppb	14:05:00
2	SiO2†	31392.0	28889.0	5459.2 µg/L	5459.2 ppb	14:04:40
2	Si 251.611†	36633.3	36040.7	2551.6 µg/L	2551.6 ppb	14:04:40
2	Sn 189.927†	1346.7	1337.6	520.11 µg/L	520.11 ppb	14:05:00
2	Ti 334.940†	210554.5	210117.2	506.47 µg/L	506.47 ppb	14:04:35
2	Tl 190.801†	481.1	514.6	525.70 µg/L	525.70 ppb	14:05:00
2	U 409.014†	5816.0	5815.2	520.64 µg/L	520.64 ppb	14:04:40
2	V 292.402†	43209.2	42882.4	527.92 µg/L	527.92 ppb	14:04:40
2	Zn 213.857†	23229.8	22515.6	517.98 µg/L	517.98 ppb	14:04:40
3	Sc RADIAL	105304.4	105304.4	105 %		14:03:33
3	Al 396.153Radial†	10953.1	10837.8	5109.3 µg/L	5109.3 ppb	14:03:33
3	Ca 317.933Radial†	16581.9	15413.7	4971.5 µg/L	4971.5 ppb	14:03:33
3	Fe 238.204 Radial†	550.3	510.7	5017.6 µg/L	5017.6 ppb	14:03:53
3	K 766.490 Radial†	11685.1	10811.0	5323.8 µg/L	5323.8 ppb	14:03:33
3	Mg 279.077 IEC†	482.2	450.1	4931.5 µg/L	4931.5 ppb	14:03:53
3	Na 589.592 Radial†	27622.0	26110.0	11454 µg/L	11454 ppb	14:03:33
3	Sr 421.552†	101187.2	96274.3	520.20 µg/L	520.20 ppb	14:03:33
3	Sc 361.383	1934757.7	1934757.7	100.68 %		14:05:07
3	Y 371.029	1343459.6	1343459.6	100.41 %		14:05:07
3	Ag 328.068†	59226.9	59392.4	491.42 µg/L	491.42 ppb	14:05:12
3	As 188.979†	318.7	319.7	477.34 µg/L	477.34 ppb	14:05:33
3	B 249.677†	10829.3	10399.1	494.06 µg/L	494.06 ppb	14:05:12
3	Ba 233.527†	22078.7	21959.7	494.95 µg/L	494.95 ppb	14:05:12
3	Be 313.107†	825173.8	821095.6	498.67 µg/L	498.67 ppb	14:05:07
3	Cd 226.502†	20313.8	20355.4	495.03 µg/L	495.03 ppb	14:05:12
3	Co 228.616†	11330.5	11234.5	493.10 µg/L	493.10 ppb	14:05:12
3	Cr 267.716†	22165.4	21940.2	490.82 µg/L	490.82 ppb	14:05:12
3	Cu 324.752†	76161.7	72055.1	489.34 µg/L	489.34 ppb	14:05:12
3	Mn 257.610†	158750.4	158454.9	508.12 µg/L	508.12 ppb	14:05:07
3	Mo 202.031†	4747.0	4706.8	465.39 µg/L	465.39 ppb	14:05:33
3	Ni 231.604†	9121.5	8692.6	493.38 µg/L	493.38 ppb	14:05:12
3	P 214.914†	1703.4	1384.8	2316.4 µg/L	2316.4 ppb	14:05:33
3	Pb 220.353†	1861.1	1792.4	473.90 µg/L	473.90 ppb	14:05:33
3	S 181.975 Axial†	320.4	294.7	937.18 µg/L	937.18 ppb	14:05:33
3	Sb 206.836†	547.3	516.0	468.39 µg/L	468.39 ppb	14:05:33
3	Se 196.026†	501.4	477.4	481.13 µg/L	481.13 ppb	14:05:33
3	SiO2†	30110.2	27569.7	5209.9 µg/L	5209.9 ppb	14:05:12
3	Si 251.611†	35045.6	34409.7	2436.2 µg/L	2436.2 ppb	14:05:12
3	Sn 189.927†	1179.1	1169.1	453.84 µg/L	453.84 ppb	14:05:33
3	Ti 334.940†	204412.3	203706.3	491.01 µg/L	491.01 ppb	14:05:07
3	Tl 190.801†	451.8	484.8	495.42 µg/L	495.42 ppb	14:05:33
3	U 409.014†	5405.0	5398.4	483.25 µg/L	483.25 ppb	14:05:12
3	V 292.402†	40697.5	40324.1	496.10 µg/L	496.10 ppb	14:05:12
3	Zn 213.857†	21990.1	21250.0	488.84 µg/L	488.84 ppb	14:05:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1936459.8	100.77 %	0.292			0.29%
Sc RADIAL	105771.1	105 %	0.6			0.54%
Y 371.029	1343696.6	100.42 %	0.375			0.37%
Ag 328.068†	60479.8	500.47 µg/L	8.453	500.47 ppb	8.453	1.69%
QC value within limits for Ag 328.068 Recovery = 100.09%						
Al 396.153Radial†	10867.4	5122.4 µg/L	11.90	5122.4 ppb	11.90	0.23%
QC value within limits for Al 396.153Radial Recovery = 102.45%						
As 188.979†	342.0	510.59 µg/L	28.968	510.59 ppb	28.968	5.67%
QC value within limits for As 188.979 Recovery = 102.12%						
B 249.677†	10591.0	503.26 µg/L	9.511	503.26 ppb	9.511	1.89%
QC value within limits for B 249.677 Recovery = 100.65%						
Ba 233.527†	22625.0	509.95 µg/L	13.550	509.95 ppb	13.550	2.66%
QC value within limits for Ba 233.527 Recovery = 101.99%						
Be 313.107†	836894.5	508.26 µg/L	8.312	508.26 ppb	8.312	1.64%
QC value within limits for Be 313.107 Recovery = 101.65%						
Ca 317.933Radial†	15432.6	4977.6 µg/L	7.25	4977.6 ppb	7.25	0.15%
QC value within limits for Ca 317.933Radial Recovery = 99.55%						
Cd 226.502†	20972.6	510.06 µg/L	13.457	510.06 ppb	13.457	2.64%
QC value within limits for Cd 226.502 Recovery = 102.01%						
Co 228.616†	11636.7	510.80 µg/L	15.915	510.80 ppb	15.915	3.12%



Cr	267.716†	22878.3	511.80 µg/L	18.382	511.80 ppb	18.382	3.59%
	QC value within limits for Co 228.616 Recovery = 102.16%						
Cu	324.752†	74669.5	507.05 µg/L	15.844	507.05 ppb	15.844	3.12%
	QC value within limits for Cu 324.752 Recovery = 101.41%						
Fe	238.204 Radial†	507.5	4987.2 µg/L	26.46	4987.2 ppb	26.46	0.53%
	QC value within limits for Fe 238.204 Radial Recovery = 99.74%						
K	766.490 Radial†	10766.7	5302.0 µg/L	20.79	5302.0 ppb	20.79	0.39%
	QC value within limits for K 766.490 Radial Recovery = 106.04%						
Mg	279.077 IEC†	451.0	4942.1 µg/L	9.52	4942.1 ppb	9.52	0.19%
	QC value within limits for Mg 279.077 IEC Recovery = 98.84%						
Mn	257.610†	161451.7	517.73 µg/L	8.324	517.73 ppb	8.324	1.61%
	QC value within limits for Mn 257.610 Recovery = 103.55%						
Mo	202.031†	5117.3	505.96 µg/L	35.192	505.96 ppb	35.192	6.96%
	QC value within limits for Mo 202.031 Recovery = 101.19%						
Na	589.592 Radial†	26063.3	11433 µg/L	29.1	11433 ppb	29.1	0.25%
	QC value greater than the upper limit for Na 589.592 Radial Recovery = 114.33%						
Ni	231.604†	8993.0	510.42 µg/L	15.324	510.42 ppb	15.324	3.00%
	QC value within limits for Ni 231.604 Recovery = 102.08%						
P	214.914†	1486.6	2489.0 µg/L	149.97	2489.0 ppb	149.97	6.03%
	QC value within limits for P 214.914 Recovery = 99.56%						
Pb	220.353†	1917.5	507.02 µg/L	28.931	507.02 ppb	28.931	5.71%
	QC value within limits for Pb 220.353 Recovery = 101.40%						
S	181.975 Axial†	312.5	993.88 µg/L	49.293	993.88 ppb	49.293	4.96%
	QC value within limits for S 181.975 Axial Recovery = 99.39%						
Sb	206.836†	548.0	497.76 µg/L	25.439	497.76 ppb	25.439	5.11%
	QC value within limits for Sb 206.836 Recovery = 99.55%						
Se	196.026†	510.2	513.26 µg/L	27.875	513.26 ppb	27.875	5.43%
	QC value within limits for Se 196.026 Recovery = 102.65%						
SiO2†		28274.0	5343.0 µg/L	125.52	5343.0 ppb	125.52	2.35%
	QC value within limits for SiO2 Recovery = 99.92%						
Si	251.611†	35313.1	2500.1 µg/L	58.73	2500.1 ppb	58.73	2.35%
	QC value within limits for Si 251.611 Recovery = 100.01%						
Sn	189.927†	1279.6	497.29 µg/L	37.646	497.29 ppb	37.646	7.57%
	QC value within limits for Sn 189.927 Recovery = 99.46%						
Sr	421.552†	96341.1	520.56 µg/L	1.590	520.56 ppb	1.590	0.31%
	QC value within limits for Sr 421.552 Recovery = 104.11%						
Ti	334.940†	208094.8	501.59 µg/L	9.175	501.59 ppb	9.175	1.83%
	QC value within limits for Ti 334.940 Recovery = 100.32%						
Tl	190.801†	502.3	513.23 µg/L	15.826	513.23 ppb	15.826	3.08%
	QC value within limits for Tl 190.801 Recovery = 102.65%						
U	409.014†	5630.5	504.07 µg/L	19.054	504.07 ppb	19.054	3.78%
	QC value within limits for U 409.014 Recovery = 100.81%						
V	292.402†	41819.8	514.73 µg/L	16.591	514.73 ppb	16.591	3.22%
	QC value within limits for V 292.402 Recovery = 102.95%						
Zn	213.857†	21995.0	505.99 µg/L	15.243	505.99 ppb	15.243	3.01%
	QC value within limits for Zn 213.857 Recovery = 101.20%						
QC Failed. Continue with analysis.							

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/5/2010 14:05:42  
 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	102803.1	102803.1	102 %		14:06:13
1	Al 396.153Radial†	-398.9	11.0	5.1993 µg/L	5.1993 ppb	14:06:13
1	Ca 317.933Radial†	383.7	-13.1	-4.2164 µg/L	-4.2164 ppb	14:06:33
1	Fe 238.204 Radial†	17.0	2.8	27.785 µg/L	27.785 ppb	14:06:33
1	K 766.490 Radial†	322.1	-9.5	-4.6832 µg/L	-4.6832 ppb	14:06:13
1	Mg 279.077 IEC†	11.1	1.4	15.550 µg/L	15.550 ppb	14:06:33
1	Na 589.592 Radial†	1838.6	1583.0	694.43 µg/L	694.43 ppb	14:06:13
1	Sr 421.552†	182.1	28.6	0.1546 µg/L	0.1546 ppb	14:06:13
1	Sc 361.383	1944049.5	1944049.5	101.17 %		14:07:32
1	Y 371.029	1353306.9	1353306.9	101.14 %		14:07:32
1	Ag 328.068†	-491.0	82.6	0.6796 µg/L	0.6796 ppb	14:07:37
1	As 188.979†	1.5	4.7	7.0728 µg/L	7.0728 ppb	14:07:57
1	B 249.677†	435.3	73.7	3.4998 µg/L	3.4998 ppb	14:07:37
1	Ba 233.527†	-21.1	10.2	0.2292 µg/L	0.2292 ppb	14:07:57
1	Be 313.107†	-1369.9	173.7	0.1055 µg/L	0.1055 ppb	14:07:37
1	Cd 226.502†	-178.7	3.0	0.0705 µg/L	0.0705 ppb	14:07:57
1	Co 228.616†	24.9	5.6	0.2438 µg/L	0.2438 ppb	14:07:57
1	Cr 267.716†	98.1	22.4	0.5005 µg/L	0.5005 ppb	14:07:37
1	Cu 324.752†	3527.2	-102.7	-0.6907 µg/L	-0.6907 ppb	14:07:37
1	Mn 257.610†	-657.4	133.1	0.4276 µg/L	0.4276 ppb	14:07:37
1	Mo 202.031†	3.6	-4.4	-0.4382 µg/L	-0.4382 ppb	14:07:57
1	Ni 231.604†	367.0	-4.2	-0.2361 µg/L	-0.2361 ppb	14:07:57
1	P 214.914†	313.2	2.5	4.4050 µg/L	4.4050 ppb	14:07:57
1	Pb 220.353†	46.1	-10.6	-2.7864 µg/L	-2.7864 ppb	14:07:57
1	S 181.975 Axial†	21.1	-2.7	-8.6507 µg/L	-8.6507 ppb	14:07:57
1	Sb 206.836†	25.6	-2.3	-2.0695 µg/L	-2.0695 ppb	14:07:57
1	Se 196.026†	19.1	-1.7	-1.6079 µg/L	-1.6079 ppb	14:07:57
1	SiO2†	2382.9	19.4	3.6696 µg/L	3.6696 ppb	14:07:37
1	Si 251.611†	425.0	22.3	1.5786 µg/L	1.5786 ppb	14:07:57
1	Sn 189.927†	7.0	5.0	1.9163 µg/L	1.9163 ppb	14:07:57
1	Ti 334.940†	-659.9	30.5	0.0722 µg/L	0.0722 ppb	14:07:37
1	Tl 190.801†	-36.9	-0.4	-0.4240 µg/L	-0.4240 ppb	14:07:57
1	U 409.014†	-28.2	2.3	0.2002 µg/L	0.2002 ppb	14:07:37
1	V 292.402†	91.0	-6.9	-0.0914 µg/L	-0.0914 ppb	14:07:37
1	Zn 213.857†	581.7	-15.6	-0.3624 µg/L	-0.3624 ppb	14:07:57
2	Sc RADIAL	103173.7	103173.7	103 %		14:06:39
2	Al 396.153Radial†	-394.5	16.7	7.8748 µg/L	7.8748 ppb	14:06:39
2	Ca 317.933Radial†	386.4	-11.8	-3.8068 µg/L	-3.8068 ppb	14:06:59
2	Fe 238.204 Radial†	16.0	1.8	17.371 µg/L	17.371 ppb	14:06:59
2	K 766.490 Radial†	293.8	-38.2	-18.810 µg/L	-18.810 ppb	14:06:39
2	Mg 279.077 IEC†	12.5	2.8	30.150 µg/L	30.150 ppb	14:06:59
2	Na 589.592 Radial†	1769.5	1509.4	662.11 µg/L	662.11 ppb	14:06:39
2	Sr 421.552†	197.6	43.1	0.2327 µg/L	0.2327 ppb	14:06:39
2	Sc 361.383	1945654.3	1945654.3	101.25 %		14:08:03
2	Y 371.029	1354252.7	1354252.7	101.21 %		14:08:03
2	Ag 328.068†	-492.7	81.3	0.6751 µg/L	0.6751 ppb	14:08:08
2	As 188.979†	0.5	3.7	5.5066 µg/L	5.5066 ppb	14:08:29
2	B 249.677†	446.6	84.5	4.0221 µg/L	4.0221 ppb	14:08:08
2	Ba 233.527†	-17.4	13.9	0.3140 µg/L	0.3140 ppb	14:08:29
2	Be 313.107†	-1354.2	190.3	0.1156 µg/L	0.1156 ppb	14:08:08
2	Cd 226.502†	-166.8	14.9	0.3617 µg/L	0.3617 ppb	14:08:29
2	Co 228.616†	21.8	2.5	0.1095 µg/L	0.1095 ppb	14:08:29
2	Cr 267.716†	84.0	8.4	0.1875 µg/L	0.1875 ppb	14:08:08
2	Cu 324.752†	3464.1	-167.9	-1.1350 µg/L	-1.1350 ppb	14:08:08
2	Mn 257.610†	-647.6	143.3	0.4587 µg/L	0.4587 ppb	14:08:08
2	Mo 202.031†	15.0	6.8	0.6724 µg/L	0.6724 ppb	14:08:29
2	Ni 231.604†	378.7	7.1	0.4055 µg/L	0.4055 ppb	14:08:29
2	P 214.914†	300.6	-10.2	-17.248 µg/L	-17.248 ppb	14:08:29
2	Pb 220.353†	47.5	-9.2	-2.4236 µg/L	-2.4236 ppb	14:08:29

2	S 181.975 Axial†	20.8	-3.0	-9.6094 µg/L	-9.6094 ppb	14:08:29
2	Sb 206.836†	30.4	2.5	2.2427 µg/L	2.2427 ppb	14:08:29
2	Se 196.026†	24.8	3.9	3.9014 µg/L	3.9014 ppb	14:08:29
2	SiO2†	2369.0	3.7	0.7081 µg/L	0.7081 ppb	14:08:08
2	Si 251.611†	403.8	1.0	0.0719 µg/L	0.0719 ppb	14:08:29
2	Sn 189.927†	2.7	0.7	0.2728 µg/L	0.2728 ppb	14:08:29
2	Ti 334.940†	-641.4	49.3	0.1165 µg/L	0.1165 ppb	14:08:08
2	Tl 190.801†	-39.5	-2.9	-2.9374 µg/L	-2.9374 ppb	14:08:29
2	U 409.014†	21.8	51.7	4.6365 µg/L	4.6365 ppb	14:08:08
2	V 292.402†	177.4	78.3	0.9621 µg/L	0.9621 ppb	14:08:08
2	Zn 213.857†	592.7	-5.3	-0.1250 µg/L	-0.1250 ppb	14:08:29
3	Sc RADIAL	103130.1	103130.1	103 %		14:07:04
3	Al 396.153Radial†	-369.7	40.6	19.179 µg/L	19.179 ppb	14:07:04
3	Ca 317.933Radial†	382.7	-15.2	-4.9016 µg/L	-4.9016 ppb	14:07:24
3	Fe 238.204 Radial†	15.7	1.5	15.155 µg/L	15.155 ppb	14:07:24
3	K 766.490 Radial†	310.7	-21.7	-10.673 µg/L	-10.673 ppb	14:07:04
3	Mg 279.077 IEC†	10.6	0.9	10.131 µg/L	10.131 ppb	14:07:24
3	Na 589.592 Radial†	1804.8	1544.5	677.51 µg/L	677.51 ppb	14:07:04
3	Sr 421.552†	187.2	33.0	0.1785 µg/L	0.1785 ppb	14:07:04
3	Sc 361.383	1930579.5	1930579.5	100.47 %		14:08:34
3	Y 371.029	1344290.3	1344290.3	100.47 %		14:08:34
3	Ag 328.068†	-575.4	-4.8	-0.0371 µg/L	-0.0371 ppb	14:08:40
3	As 188.979†	-5.2	-2.0	-3.0121 µg/L	-3.0121 ppb	14:09:00
3	B 249.677†	438.2	79.6	3.7869 µg/L	3.7869 ppb	14:08:40
3	Ba 233.527†	-32.2	-0.9	-0.0204 µg/L	-0.0204 ppb	14:09:00
3	Be 313.107†	-1381.0	153.2	0.0931 µg/L	0.0931 ppb	14:08:40
3	Cd 226.502†	-175.6	4.9	0.1175 µg/L	0.1175 ppb	14:09:00
3	Co 228.616†	25.4	6.1	0.2704 µg/L	0.2704 ppb	14:09:00
3	Cr 267.716†	99.8	24.8	0.5539 µg/L	0.5539 ppb	14:08:40
3	Cu 324.752†	3481.1	-124.2	-0.8390 µg/L	-0.8390 ppb	14:08:40
3	Mn 257.610†	-648.1	137.9	0.4424 µg/L	0.4424 ppb	14:08:40
3	Mo 202.031†	15.8	7.8	0.7679 µg/L	0.7679 ppb	14:09:00
3	Ni 231.604†	380.0	11.3	0.6444 µg/L	0.6444 ppb	14:09:00
3	P 214.914†	309.3	0.9	1.5330 µg/L	1.5330 ppb	14:09:00
3	Pb 220.353†	57.7	1.3	0.3507 µg/L	0.3507 ppb	14:09:00
3	S 181.975 Axial†	23.5	-0.1	-0.3293 µg/L	-0.3293 ppb	14:09:00
3	Sb 206.836†	26.5	-1.2	-1.1018 µg/L	-1.1018 ppb	14:09:00
3	Se 196.026†	24.9	4.2	4.2074 µg/L	4.2074 ppb	14:09:00
3	SiO2†	2364.5	17.6	3.3293 µg/L	3.3293 ppb	14:08:40
3	Si 251.611†	391.5	-8.1	-0.5754 µg/L	-0.5754 ppb	14:09:00
3	Sn 189.927†	-2.9	-4.8	-1.9029 µg/L	-1.9029 ppb	14:09:00
3	Ti 334.940†	-632.0	53.6	0.1284 µg/L	0.1284 ppb	14:08:40
3	Tl 190.801†	-37.9	-1.6	-1.6503 µg/L	-1.6503 ppb	14:09:00
3	U 409.014†	-54.2	-23.8	-2.1335 µg/L	-2.1335 ppb	14:08:40
3	V 292.402†	112.8	15.4	0.1901 µg/L	0.1901 ppb	14:08:40
3	Zn 213.857†	584.7	-8.6	-0.2031 µg/L	-0.2031 ppb	14:09:00

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1940094.4	100.96 %	0.431			0.43%
Sc RADIAL	103035.6	103 %	0.2			0.20%
Y 371.029	1350616.6	100.94 %	0.411			0.41%
Ag 328.068†	53.0	0.4392 µg/L	0.41253	0.4392 ppb	0.41253	93.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	22.8	10.751 µg/L	7.4204	10.751 ppb	7.4204	69.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.1	3.1891 µg/L	5.42719	3.1891 ppb	5.42719	170.18%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	79.3	3.7696 µg/L	0.26158	3.7696 ppb	0.26158	6.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.7	0.1743 µg/L	0.17380	0.1743 ppb	0.17380	99.73%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	172.4	0.1047 µg/L	0.01129	0.1047 ppb	0.01129	10.78%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-13.4	-4.3083 µg/L	0.55314	-4.3083 ppb	0.55314	12.84%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.6	0.1832 µg/L	0.15635	0.1832 ppb	0.15635	85.33%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.7	0.2079 µg/L	0.08624	0.2079 ppb	0.08624	41.48%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	18.5	0.4139 µg/L	0.19792	0.4139 ppb	0.19792	47.81%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-131.6	-0.8882 µg/L	0.22618	-0.8882 ppb	0.22618	25.46%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.0	20.104 µg/L	6.7439	20.104 ppb	6.7439	33.55%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-23.1	-11.389 µg/L	7.0906	-11.389 ppb	7.0906	62.26%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.7	18.610 µg/L	10.3542	18.610 ppb	10.3542	55.64%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	138.1	0.4429 µg/L	0.01556	0.4429 ppb	0.01556	3.51%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.4	0.3340 µg/L	0.67050	0.3340 ppb	0.67050	200.74%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	1545.6	678.02 µg/L	16.163	678.02 ppb	16.163	2.38%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	4.8	0.2712 µg/L	0.45535	0.2712 ppb	0.45535	167.88%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.3	-3.7700 µg/L	11.76039	-3.7700 ppb	11.76039	311.94%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.1	-1.6198 µg/L	1.71609	-1.6198 ppb	1.71609	105.95%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.9	-6.1965 µg/L	5.10369	-6.1965 ppb	5.10369	82.36%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.3	-0.3095 µg/L	2.26263	-0.3095 ppb	2.26263	731.00%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.2	2.1670 µg/L	3.27272	2.1670 ppb	3.27272	151.03%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	13.6	2.5690 µg/L	1.62055	2.5690 ppb	1.62055	63.08%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	5.1	0.3584 µg/L	1.10520	0.3584 ppb	1.10520	308.41%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.3	0.0954 µg/L	1.91578	0.0954 ppb	1.91578	>999.9%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	34.9	0.1886 µg/L	0.04001	0.1886 ppb	0.04001	21.22%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	44.5	0.1057 µg/L	0.02963	0.1057 ppb	0.02963	28.03%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.7	-1.6706 µg/L	1.25681	-1.6706 ppb	1.25681	75.23%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	10.1	0.9011 µg/L	3.43902	0.9011 ppb	3.43902	381.67%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	28.9	0.3536 µg/L	0.54548	0.3536 ppb	0.54548	154.26%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-9.9	-0.2301 µg/L	0.12097	-0.2301 ppb	0.12097	52.56%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 14:14:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	105089.6	105089.6	105 %		14:15:09
1	Al 396.153Radial†	10996.5	10900.6	5137.6 µg/L	5137.6 ppb	14:15:09
1	Ca 317.933Radial†	16682.6	15542.0	5012.9 µg/L	5012.9 ppb	14:15:09
1	Fe 238.204 Radial†	550.3	511.7	5028.3 µg/L	5028.3 ppb	14:15:29
1	K 766.490 Radial†	11754.2	10899.7	5367.5 µg/L	5367.5 ppb	14:15:09
1	Mg 279.077 IEC†	485.5	454.2	4977.0 µg/L	4977.0 ppb	14:15:29
1	Na 589.592 Radial†	27380.2	25932.9	11376 µg/L	11376 ppb	14:15:09
1	Sr 421.552†	101211.8	96494.8	521.39 µg/L	521.39 ppb	14:15:09
1	Sc 361.383	1939079.3	1939079.3	100.91 %		14:16:30
1	Y 371.029	1344054.7	1344054.7	100.45 %		14:16:30
1	Ag 328.068†	61243.6	61259.9	506.95 µg/L	506.95 ppb	14:16:35
1	As 188.979†	351.6	351.7	525.09 µg/L	525.09 ppb	14:16:55
1	B 249.677†	11216.6	10759.0	511.27 µg/L	511.27 ppb	14:16:35
1	Ba 233.527†	23235.5	23057.3	519.69 µg/L	519.69 ppb	14:16:35
1	Be 313.107†	856085.5	849902.3	516.16 µg/L	516.16 ppb	14:16:30
1	Cd 226.502†	21443.4	21430.0	521.19 µg/L	521.19 ppb	14:16:35
1	Co 228.616†	11994.6	11867.4	520.94 µg/L	520.94 ppb	14:16:35
1	Cr 267.716†	23781.2	23492.4	525.54 µg/L	525.54 ppb	14:16:35
1	Cu 324.752†	80237.4	75925.5	515.57 µg/L	515.57 ppb	14:16:35
1	Mn 257.610†	164797.1	164095.7	526.21 µg/L	526.21 ppb	14:16:30
1	Mo 202.031†	5421.4	5364.5	530.40 µg/L	530.40 ppb	14:16:55
1	Ni 231.604†	9655.7	9201.9	522.28 µg/L	522.28 ppb	14:16:35
1	P 214.914†	1871.2	1547.3	2592.1 µg/L	2592.1 ppb	14:16:55
1	Pb 220.353†	2053.7	1979.1	523.34 µg/L	523.34 ppb	14:16:55
1	S 181.975 Axial†	348.2	321.6	1022.6 µg/L	1022.6 ppb	14:16:55
1	Sb 206.836†	599.2	566.2	514.44 µg/L	514.44 ppb	14:16:55
1	Se 196.026†	559.9	534.3	537.01 µg/L	537.01 ppb	14:16:55
1	SiO2†	31329.6	28711.5	5425.7 µg/L	5425.7 ppb	14:16:35
1	Si 251.611†	36525.7	35798.9	2534.5 µg/L	2534.5 ppb	14:16:35
1	Sn 189.927†	1365.5	1351.3	525.44 µg/L	525.44 ppb	14:16:55
1	Ti 334.940†	212624.4	211392.0	509.54 µg/L	509.54 ppb	14:16:30
1	Tl 190.801†	482.7	514.4	525.54 µg/L	525.54 ppb	14:16:55
1	U 409.014†	5759.7	5737.9	513.70 µg/L	513.70 ppb	14:16:35
1	V 292.402†	43197.1	42711.1	525.83 µg/L	525.83 ppb	14:16:35
1	Zn 213.857†	23198.5	22398.9	515.28 µg/L	515.28 ppb	14:16:35
2	Sc RADIAL	105571.7	105571.7	105 %		14:15:35
2	Al 396.153Radial†	11022.5	10877.3	5126.7 µg/L	5126.7 ppb	14:15:35
2	Ca 317.933Radial†	16663.6	15451.3	4983.6 µg/L	4983.6 ppb	14:15:35
2	Fe 238.204 Radial†	555.5	514.2	5053.2 µg/L	5053.2 ppb	14:15:55
2	K 766.490 Radial†	11726.3	10822.0	5329.2 µg/L	5329.2 ppb	14:15:35
2	Mg 279.077 IEC†	489.2	455.6	4992.4 µg/L	4992.4 ppb	14:15:55
2	Na 589.592 Radial†	27474.2	25902.8	11363 µg/L	11363 ppb	14:15:35
2	Sr 421.552†	101300.0	96137.5	519.46 µg/L	519.46 ppb	14:15:35
2	Sc 361.383	1925792.9	1925792.9	100.22 %		14:17:02
2	Y 371.029	1336635.4	1336635.4	99.896 %		14:17:02
2	Ag 328.068†	61249.4	61684.4	510.46 µg/L	510.46 ppb	14:17:07
2	As 188.979†	354.2	356.6	532.51 µg/L	532.51 ppb	14:17:27
2	B 249.677†	11203.3	10822.4	514.29 µg/L	514.29 ppb	14:17:07
2	Ba 233.527†	23180.5	23161.3	522.04 µg/L	522.04 ppb	14:17:07
2	Be 313.107†	849281.7	848966.4	515.59 µg/L	515.59 ppb	14:17:02
2	Cd 226.502†	21424.3	21557.4	524.29 µg/L	524.29 ppb	14:17:07
2	Co 228.616†	11955.4	11910.3	522.82 µg/L	522.82 ppb	14:17:07
2	Cr 267.716†	23814.8	23688.6	529.93 µg/L	529.93 ppb	14:17:07
2	Cu 324.752†	80422.6	76658.9	520.55 µg/L	520.55 ppb	14:17:07
2	Mn 257.610†	163129.8	163558.7	524.49 µg/L	524.49 ppb	14:17:02
2	Mo 202.031†	5357.3	5337.7	527.75 µg/L	527.75 ppb	14:17:27
2	Ni 231.604†	9649.6	9261.8	525.68 µg/L	525.68 ppb	14:17:07
2	P 214.914†	1856.3	1545.3	2588.0 µg/L	2588.0 ppb	14:17:27
2	Pb 220.353†	2032.8	1972.3	521.50 µg/L	521.50 ppb	14:17:27

2	S 181.975 Axial†	347.0	322.7	1026.2 µg/L	1026.2 ppb	14:17:27
2	Sb 206.836†	603.4	574.5	521.81 µg/L	521.81 ppb	14:17:27
2	Se 196.026†	547.7	525.9	528.88 µg/L	528.88 ppb	14:17:27
2	SiO2†	31314.0	28910.1	5463.2 µg/L	5463.2 ppb	14:17:07
2	Si 251.611†	36566.4	36089.2	2555.1 µg/L	2555.1 ppb	14:17:07
2	Sn 189.927†	1343.3	1338.5	520.36 µg/L	520.36 ppb	14:17:27
2	Ti 334.940†	210984.1	211208.9	509.10 µg/L	509.10 ppb	14:17:02
2	Tl 190.801†	480.4	515.5	526.60 µg/L	526.60 ppb	14:17:27
2	U 409.014†	5773.5	5791.2	518.47 µg/L	518.47 ppb	14:17:07
2	V 292.402†	43182.7	42992.1	529.24 µg/L	529.24 ppb	14:17:07
2	Zn 213.857†	23182.8	22541.9	518.57 µg/L	518.57 ppb	14:17:07
3	Sc RADIAL	105345.4	105345.4	105 %		14:16:00
3	Al 396.153Radial†	11028.6	10905.7	5141.4 µg/L	5141.4 ppb	14:16:00
3	Ca 317.933Radial†	16792.7	15608.3	5034.2 µg/L	5034.2 ppb	14:16:00
3	Fe 238.204 Radial†	550.4	510.6	5016.5 µg/L	5016.5 ppb	14:16:20
3	K 766.490 Radial†	11644.2	10767.7	5302.5 µg/L	5302.5 ppb	14:16:00
3	Mg 279.077 IEC†	488.4	455.8	4994.3 µg/L	4994.3 ppb	14:16:20
3	Na 589.592 Radial†	27611.7	26089.9	11445 µg/L	11445 ppb	14:16:00
3	Sr 421.552†	101753.1	96775.7	522.91 µg/L	522.91 ppb	14:16:00
3	Sc 361.383	1928579.1	1928579.1	100.36 %		14:17:34
3	Y 371.029	1338270.5	1338270.5	100.02 %		14:17:34
3	Ag 328.068†	59063.5	59418.0	491.61 µg/L	491.61 ppb	14:17:40
3	As 188.979†	311.9	313.9	468.61 µg/L	468.61 ppb	14:18:00
3	B 249.677†	10751.8	10356.4	492.02 µg/L	492.02 ppb	14:17:40
3	Ba 233.527†	21963.5	21915.3	493.95 µg/L	493.95 ppb	14:17:40
3	Be 313.107†	826254.1	824797.6	500.92 µg/L	500.92 ppb	14:17:34
3	Cd 226.502†	20037.0	20144.3	489.89 µg/L	489.89 ppb	14:17:40
3	Co 228.616†	11227.6	11167.9	490.17 µg/L	490.17 ppb	14:17:40
3	Cr 267.716†	21949.2	21795.4	487.58 µg/L	487.58 ppb	14:17:40
3	Cu 324.752†	76309.3	72444.5	491.97 µg/L	491.97 ppb	14:17:40
3	Mn 257.610†	159076.8	159285.2	510.78 µg/L	510.78 ppb	14:17:34
3	Mo 202.031†	4715.5	4690.5	463.77 µg/L	463.77 ppb	14:18:00
3	Ni 231.604†	9065.6	8665.9	491.86 µg/L	491.86 ppb	14:17:40
3	P 214.914†	1687.9	1374.8	2299.0 µg/L	2299.0 ppb	14:18:00
3	Pb 220.353†	1845.5	1782.7	471.33 µg/L	471.33 ppb	14:18:00
3	S 181.975 Axial†	319.2	294.5	936.60 µg/L	936.60 ppb	14:18:00
3	Sb 206.836†	546.0	516.4	468.76 µg/L	468.76 ppb	14:18:00
3	Se 196.026†	501.6	479.3	482.91 µg/L	482.91 ppb	14:18:00
3	SiO2†	30003.8	27559.5	5208.0 µg/L	5208.0 ppb	14:17:40
3	Si 251.611†	35019.8	34495.5	2442.2 µg/L	2442.2 ppb	14:17:40
3	Sn 189.927†	1160.7	1154.6	448.13 µg/L	448.13 ppb	14:18:00
3	Ti 334.940†	205295.0	205236.3	494.69 µg/L	494.69 ppb	14:17:34
3	Tl 190.801†	447.3	481.8	492.42 µg/L	492.42 ppb	14:18:00
3	U 409.014†	5373.2	5383.9	481.94 µg/L	481.94 ppb	14:17:40
3	V 292.402†	40381.3	40138.5	493.82 µg/L	493.82 ppb	14:17:40
3	Zn 213.857†	21873.6	21203.9	487.77 µg/L	487.77 ppb	14:17:40

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1931150.4	100.50 %	0.365			0.36%
Sc RADIAL	105335.6	105 %	0.2			0.23%
Y 371.029	1339653.5	100.12 %	0.291			0.29%
Ag 328.068†	60787.4	503.01 µg/L	10.022	503.01 ppb	10.022	1.99%
QC value within limits for Ag 328.068 Recovery = 100.60%						
Al 396.153Radial†	10894.5	5135.2 µg/L	7.64	5135.2 ppb	7.64	0.15%
QC value within limits for Al 396.153Radial Recovery = 102.70%						
As 188.979†	340.7	508.74 µg/L	34.951	508.74 ppb	34.951	6.87%
QC value within limits for As 188.979 Recovery = 101.75%						
B 249.677†	10645.9	505.86 µg/L	12.081	505.86 ppb	12.081	2.39%
QC value within limits for B 249.677 Recovery = 101.17%						
Ba 233.527†	22711.3	511.89 µg/L	15.588	511.89 ppb	15.588	3.05%
QC value within limits for Ba 233.527 Recovery = 102.38%						
Be 313.107†	841222.1	510.89 µg/L	8.643	510.89 ppb	8.643	1.69%
QC value within limits for Be 313.107 Recovery = 102.18%						
Ca 317.933Radial†	15533.9	5010.2 µg/L	25.42	5010.2 ppb	25.42	0.51%
QC value within limits for Ca 317.933Radial Recovery = 100.20%						
Cd 226.502†	21043.9	511.79 µg/L	19.029	511.79 ppb	19.029	3.72%
QC value within limits for Cd 226.502 Recovery = 102.36%						
Co 228.616†	11648.6	511.31 µg/L	18.333	511.31 ppb	18.333	3.59%

Cr	267.716†	22992.1	514.35 µg/L	23.287	514.35 ppb	23.287	4.53%
Cu	324.752†	75009.6	509.36 µg/L	15.264	509.36 ppb	15.264	3.00%
Fe	238.204 Radial†	512.2	5032.7 µg/L	18.71	5032.7 ppb	18.71	0.37%
K	766.490 Radial†	10829.8	5333.1 µg/L	32.67	5333.1 ppb	32.67	0.61%
Mg	279.077 IEC†	455.2	4987.9 µg/L	9.49	4987.9 ppb	9.49	0.19%
Mn	257.610†	162313.2	520.49 µg/L	8.455	520.49 ppb	8.455	1.62%
Mo	202.031†	5130.9	507.31 µg/L	37.724	507.31 ppb	37.724	7.44%
Na	589.592 Radial†	25975.2	11394 µg/L	44.1	11394 ppb	44.1	0.39%
Ni	231.604†	9043.2	513.27 µg/L	18.620	513.27 ppb	18.620	3.63%
P	214.914†	1489.1	2493.0 µg/L	168.07	2493.0 ppb	168.07	6.74%
Pb	220.353†	1911.4	505.39 µg/L	29.510	505.39 ppb	29.510	5.84%
S	181.975 Axial†	312.9	995.12 µg/L	50.714	995.12 ppb	50.714	5.10%
Sb	206.836†	552.4	501.67 µg/L	28.741	501.67 ppb	28.741	5.73%
Se	196.026†	513.1	516.27 µg/L	29.176	516.27 ppb	29.176	5.65%
SiO2†		28393.7	5365.6 µg/L	137.80	5365.6 ppb	137.80	2.57%
Si	251.611†	35461.2	2510.6 µg/L	60.10	2510.6 ppb	60.10	2.39%
Sn	189.927†	1281.5	497.98 µg/L	43.247	497.98 ppb	43.247	8.68%
Sr	421.552†	96469.3	521.25 µg/L	1.729	521.25 ppb	1.729	0.33%
Ti	334.940†	209279.1	504.44 µg/L	8.447	504.44 ppb	8.447	1.67%
Tl	190.801†	503.9	514.85 µg/L	19.437	514.85 ppb	19.437	3.78%
U	409.014†	5637.7	504.70 µg/L	19.855	504.70 ppb	19.855	3.93%
V	292.402†	41947.3	516.30 µg/L	19.541	516.30 ppb	19.541	3.78%
Zn	213.857†	22048.2	507.20 µg/L	16.914	507.20 ppb	16.914	3.33%

QC value within limits for Co 228.616 Recovery = 102.26%

QC value within limits for Cr 267.716 Recovery = 102.87%

QC value within limits for Cu 324.752 Recovery = 101.87%

QC value within limits for Fe 238.204 Radial Recovery = 100.65%

QC value within limits for K 766.490 Radial Recovery = 106.66%

QC value within limits for Mg 279.077 IEC Recovery = 99.76%

QC value within limits for Mn 257.610 Recovery = 104.10%

QC value within limits for Mo 202.031 Recovery = 101.46%

QC value greater than the upper limit for Na 589.592 Radial Recovery = 113.94%

QC value within limits for Ni 231.604 Recovery = 102.65%

QC value within limits for P 214.914 Recovery = 99.72%

QC value within limits for Pb 220.353 Recovery = 101.08%

QC value within limits for S 181.975 Axial Recovery = 99.51%

QC value within limits for Sb 206.836 Recovery = 100.33%

QC value within limits for Se 196.026 Recovery = 103.25%

QC value within limits for SiO2 Recovery = 100.34%

QC value within limits for Si 251.611 Recovery = 100.42%

QC value within limits for Sn 189.927 Recovery = 99.60%

QC value within limits for Sr 421.552 Recovery = 104.25%

QC value within limits for Ti 334.940 Recovery = 100.89%

QC value within limits for Tl 190.801 Recovery = 102.97%

QC value within limits for U 409.014 Recovery = 100.94%

QC value within limits for V 292.402 Recovery = 103.26%

QC value within limits for Zn 213.857 Recovery = 101.44%

QC Failed. Continue with analysis.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 14:18:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	102039.4	102039.4	102 %		14:18:40
1	Al 396.153Radial†	-361.8	44.6	21.048 µg/L	21.048 ppb	14:18:40
1	Ca 317.933Radial†	392.6	-1.5	-0.4786 µg/L	-0.4786 ppb	14:19:00
1	Fe 238.204 Radial†	16.8	2.7	26.770 µg/L	26.770 ppb	14:19:00
1	K 766.490 Radial†	371.3	41.2	20.302 µg/L	20.302 ppb	14:18:40
1	Mg 279.077 IEC†	6.3	-3.2	-35.427 µg/L	-35.427 ppb	14:19:00
1	Na 589.592 Radial†	1774.0	1533.0	672.46 µg/L	672.46 ppb	14:18:40
1	Sr 421.552†	164.7	12.8	0.0693 µg/L	0.0693 ppb	14:18:40
1	Sc 361.383	1931506.5	1931506.5	100.51 %		14:19:59
1	Y 371.029	1346788.3	1346788.3	100.65 %		14:19:59
1	Ag 328.068†	-568.3	2.5	0.0230 µg/L	0.0230 ppb	14:20:04
1	As 188.979†	-3.4	-0.2	-0.3211 µg/L	-0.3211 ppb	14:20:24
1	B 249.677†	455.4	96.5	4.5874 µg/L	4.5874 ppb	14:20:04
1	Ba 233.527†	-22.3	8.9	0.2013 µg/L	0.2013 ppb	14:20:24
1	Be 313.107†	-1267.8	266.5	0.1618 µg/L	0.1618 ppb	14:20:04
1	Cd 226.502†	-170.9	9.6	0.2307 µg/L	0.2307 ppb	14:20:24
1	Co 228.616†	27.7	8.5	0.3712 µg/L	0.3712 ppb	14:20:24
1	Cr 267.716†	99.6	24.5	0.5475 µg/L	0.5475 ppb	14:20:04
1	Cu 324.752†	3468.3	-138.6	-0.9346 µg/L	-0.9346 ppb	14:20:04
1	Mn 257.610†	-631.7	154.5	0.4994 µg/L	0.4994 ppb	14:20:04
1	Mo 202.031†	5.9	-2.1	-0.2107 µg/L	-0.2107 ppb	14:20:24
1	Ni 231.604†	375.1	6.3	0.3571 µg/L	0.3571 ppb	14:20:24
1	P 214.914†	316.1	7.4	12.734 µg/L	12.734 ppb	14:20:24
1	Pb 220.353†	58.3	1.9	0.5052 µg/L	0.5052 ppb	14:20:24
1	S 181.975 Axial†	18.8	-4.8	-15.299 µg/L	-15.299 ppb	14:20:24
1	Sb 206.836†	33.8	6.0	5.4210 µg/L	5.4210 ppb	14:20:24
1	Se 196.026†	18.9	-1.8	-1.6357 µg/L	-1.6357 ppb	14:20:24
1	SiO2†	2325.7	-22.2	-4.1905 µg/L	-4.1905 ppb	14:20:04
1	Si 251.611†	401.0	1.2	0.0848 µg/L	0.0848 ppb	14:20:24
1	Sn 189.927†	-1.5	-3.4	-1.3595 µg/L	-1.3595 ppb	14:20:24
1	Ti 334.940†	-593.8	92.0	0.2246 µg/L	0.2246 ppb	14:20:04
1	Tl 190.801†	-36.6	-0.4	-0.3770 µg/L	-0.3770 ppb	14:20:24
1	U 409.014†	-7.0	23.2	2.0752 µg/L	2.0752 ppb	14:20:04
1	V 292.402†	102.0	4.6	0.0531 µg/L	0.0531 ppb	14:20:04
1	Zn 213.857†	582.0	-11.6	-0.2681 µg/L	-0.2681 ppb	14:20:24
2	Sc RADIAL	102897.4	102897.4	103 %		14:19:06
2	Al 396.153Radial†	-383.5	26.4	12.439 µg/L	12.439 ppb	14:19:06
2	Ca 317.933Radial†	377.8	-19.2	-6.1780 µg/L	-6.1780 ppb	14:19:26
2	Fe 238.204 Radial†	18.0	3.8	37.087 µg/L	37.087 ppb	14:19:26
2	K 766.490 Radial†	312.8	-18.9	-9.3186 µg/L	-9.3186 ppb	14:19:06
2	Mg 279.077 IEC†	12.2	2.5	27.335 µg/L	27.335 ppb	14:19:26
2	Na 589.592 Radial†	1770.5	1515.0	664.58 µg/L	664.58 ppb	14:19:06
2	Sr 421.552†	130.1	-22.3	-0.1203 µg/L	-0.1203 ppb	14:19:06
2	Sc 361.383	1914202.8	1914202.8	99.614 %		14:20:30
2	Y 371.029	1331925.8	1331925.8	99.544 %		14:20:30
2	Ag 328.068†	-512.5	53.4	0.4442 µg/L	0.4442 ppb	14:20:35
2	As 188.979†	-4.0	-0.8	-1.2104 µg/L	-1.2104 ppb	14:20:56
2	B 249.677†	415.6	60.6	2.8729 µg/L	2.8729 ppb	14:20:35
2	Ba 233.527†	-18.9	12.1	0.2734 µg/L	0.2734 ppb	14:20:56
2	Be 313.107†	-1335.5	187.2	0.1136 µg/L	0.1136 ppb	14:20:35
2	Cd 226.502†	-187.8	-8.9	-0.2200 µg/L	-0.2200 ppb	14:20:56
2	Co 228.616†	26.3	7.3	0.3236 µg/L	0.3236 ppb	14:20:56
2	Cr 267.716†	104.6	30.4	0.6807 µg/L	0.6807 ppb	14:20:35
2	Cu 324.752†	3510.9	-64.7	-0.4314 µg/L	-0.4314 ppb	14:20:35
2	Mn 257.610†	-630.1	150.4	0.4827 µg/L	0.4827 ppb	14:20:35
2	Mo 202.031†	20.8	12.9	1.2719 µg/L	1.2719 ppb	14:20:56
2	Ni 231.604†	381.2	15.8	0.8961 µg/L	0.8961 ppb	14:20:56
2	P 214.914†	313.0	7.2	12.286 µg/L	12.286 ppb	14:20:56
2	Pb 220.353†	43.1	-12.9	-3.3919 µg/L	-3.3919 ppb	14:20:56



2	S 181.975 Axial†	21.7	-1.8	-5.7056 µg/L	-5.7056 ppb	14:20:56
2	Sb 206.836†	28.7	1.2	1.1142 µg/L	1.1142 ppb	14:20:56
2	Se 196.026†	22.3	1.8	1.8613 µg/L	1.8613 ppb	14:20:56
2	SiO2†	2314.6	-12.4	-2.3423 µg/L	-2.3423 ppb	14:20:35
2	Si 251.611†	390.0	-6.3	-0.4450 µg/L	-0.4450 ppb	14:20:56
2	Sn 189.927†	-5.3	-7.2	-2.8824 µg/L	-2.8824 ppb	14:20:56
2	Ti 334.940†	-594.6	85.8	0.2047 µg/L	0.2047 ppb	14:20:35
2	Tl 190.801†	-35.5	0.4	0.4604 µg/L	0.4604 ppb	14:20:56
2	U 409.014†	1.2	31.4	2.8095 µg/L	2.8095 ppb	14:20:35
2	V 292.402†	132.3	35.9	0.4458 µg/L	0.4458 ppb	14:20:35
2	Zn 213.857†	575.8	-12.6	-0.2984 µg/L	-0.2984 ppb	14:20:56
3	Sc RADIAL	102339.1	102339.1	102 %		14:19:31
3	Al 396.153Radial†	-414.7	-6.2	-2.9483 µg/L	-2.9483 ppb	14:19:31
3	Ca 317.933Radial†	376.4	-18.5	-5.9737 µg/L	-5.9737 ppb	14:19:51
3	Fe 238.204 Radial†	17.5	3.4	33.739 µg/L	33.739 ppb	14:19:51
3	K 766.490 Radial†	304.6	-25.3	-12.440 µg/L	-12.440 ppb	14:19:31
3	Mg 279.077 IEC†	10.8	1.2	13.284 µg/L	13.284 ppb	14:19:51
3	Na 589.592 Radial†	1756.8	1511.0	662.82 µg/L	662.82 ppb	14:19:31
3	Sr 421.552†	140.1	-11.7	-0.0633 µg/L	-0.0633 ppb	14:19:31
3	Sc 361.383	1931160.0	1931160.0	100.50 %		14:21:01
3	Y 371.029	1344798.8	1344798.8	100.51 %		14:21:01
3	Ag 328.068†	-562.3	8.4	0.0700 µg/L	0.0700 ppb	14:21:07
3	As 188.979†	-3.8	-0.6	-0.9316 µg/L	-0.9316 ppb	14:21:27
3	B 249.677†	402.3	43.7	2.0688 µg/L	2.0688 ppb	14:21:07
3	Ba 233.527†	-19.7	11.5	0.2576 µg/L	0.2576 ppb	14:21:27
3	Be 313.107†	-1431.6	103.2	0.0626 µg/L	0.0626 ppb	14:21:07
3	Cd 226.502†	-177.1	3.5	0.0806 µg/L	0.0806 ppb	14:21:27
3	Co 228.616†	22.6	3.4	0.1506 µg/L	0.1506 ppb	14:21:27
3	Cr 267.716†	107.8	32.7	0.7314 µg/L	0.7314 ppb	14:21:07
3	Cu 324.752†	3457.7	-148.5	-1.0005 µg/L	-1.0005 ppb	14:21:07
3	Mn 257.610†	-624.5	161.6	0.5193 µg/L	0.5193 ppb	14:21:07
3	Mo 202.031†	18.0	9.9	0.9824 µg/L	0.9824 ppb	14:21:27
3	Ni 231.604†	372.2	3.5	0.1964 µg/L	0.1964 ppb	14:21:27
3	P 214.914†	301.4	-7.2	-12.200 µg/L	-12.200 ppb	14:21:27
3	Pb 220.353†	50.1	-6.3	-1.6447 µg/L	-1.6447 ppb	14:21:27
3	S 181.975 Axial†	23.6	-0.1	-0.2466 µg/L	-0.2466 ppb	14:21:27
3	Sb 206.836†	33.4	5.6	5.0823 µg/L	5.0823 ppb	14:21:27
3	Se 196.026†	25.3	4.6	4.6150 µg/L	4.6150 ppb	14:21:27
3	SiO2†	2349.4	1.9	0.3553 µg/L	0.3553 ppb	14:21:07
3	Si 251.611†	399.8	0.1	0.0049 µg/L	0.0049 ppb	14:21:27
3	Sn 189.927†	-5.1	-7.0	-2.8047 µg/L	-2.8047 ppb	14:21:27
3	Ti 334.940†	-559.3	126.2	0.3031 µg/L	0.3031 ppb	14:21:07
3	Tl 190.801†	-40.9	-4.7	-4.7124 µg/L	-4.7124 ppb	14:21:27
3	U 409.014†	-53.7	-23.3	-2.0960 µg/L	-2.0960 ppb	14:21:07
3	V 292.402†	80.5	-16.8	-0.2041 µg/L	-0.2041 ppb	14:21:07
3	Zn 213.857†	585.8	-7.7	-0.1798 µg/L	-0.1798 ppb	14:21:27

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1925623.1	100.21 %	0.515			0.51%
Sc RADIAL	102425.3	102 %	0.4			0.43%
Y 371.029	1341171.0	100.24 %	0.603			0.60%
Ag 328.068†	21.4	0.1791 µg/L	0.23083	0.1791 ppb	0.23083	128.92%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	21.6	10.180 µg/L	12.1569	10.180 ppb	12.1569	119.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.5	-0.8210 µg/L	0.45482	-0.8210 ppb	0.45482	55.40%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	66.9	3.1764 µg/L	1.28644	3.1764 ppb	1.28644	40.50%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.8	0.2441 µg/L	0.03788	0.2441 ppb	0.03788	15.52%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	185.6	0.1127 µg/L	0.04962	0.1127 ppb	0.04962	44.03%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-13.1	-4.2101 µg/L	3.23322	-4.2101 ppb	3.23322	76.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.4	0.0304 µg/L	0.22950	0.0304 ppb	0.22950	754.56%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.4	0.2818 µg/L	0.11611	0.2818 ppb	0.11611	41.21%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	29.2	0.6532 µg/L	0.09496	0.6532 ppb	0.09496	14.54%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-117.3	-0.7888 µg/L	0.31131	-0.7888 ppb	0.31131	39.47%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.3	32.532 µg/L	5.2632	32.532 ppb	5.2632	16.18%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-1.0	-0.4854 µg/L	18.07003	-0.4854 ppb	18.07003	>999.9%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.2	1.7308 µg/L	32.93783	1.7308 ppb	32.93783	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	155.5	0.5005 µg/L	0.01829	0.5005 ppb	0.01829	3.66%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	6.9	0.6812 µg/L	0.78587	0.6812 ppb	0.78587	115.36%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	1519.6	666.62 µg/L	5.138	666.62 ppb	5.138	0.77%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	8.5	0.4832 µg/L	0.36648	0.4832 ppb	0.36648	75.84%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	2.5	4.2736 µg/L	14.26791	4.2736 ppb	14.26791	333.87%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-5.7	-1.5105 µg/L	1.95202	-1.5105 ppb	1.95202	129.23%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.2	-7.0836 µg/L	7.62003	-7.0836 ppb	7.62003	107.57%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.3	3.8725 µg/L	2.39473	3.8725 ppb	2.39473	61.84%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.5	1.6136 µg/L	3.13271	1.6136 ppb	3.13271	194.15%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-10.9	-2.0592 µg/L	2.28607	-2.0592 ppb	2.28607	111.02%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-1.7	-0.1185 µg/L	0.28564	-0.1185 ppb	0.28564	241.15%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-5.9	-2.3489 µg/L	0.85767	-2.3489 ppb	0.85767	36.51%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-7.1	-0.0381 µg/L	0.09729	-0.0381 ppb	0.09729	255.33%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	101.3	0.2441 µg/L	0.05205	0.2441 ppb	0.05205	21.32%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.5	-1.5430 µg/L	2.77653	-1.5430 ppb	2.77653	179.94%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	10.4	0.9296 µg/L	2.64579	0.9296 ppb	2.64579	284.63%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	7.9	0.0983 µg/L	0.32732	0.0983 ppb	0.32732	333.08%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-10.6	-0.2488 µg/L	0.06161	-0.2488 ppb	0.06161	24.77%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
QC Failed. Continue with analysis.							

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Analysis Begun

Start Time: 3/5/2010 14:22:17

Plasma On Time: 3/3/2010 20:44:45

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\030510G.sif

Batch ID:

Results Data Set: 030510B

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 401

Sample ID: 246554004|951752|5

Date Collected: 3/5/2010 14:22:18

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: 246554004|951752|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	103251.2	103251.2	103 %		14:22:54
1	Al 396.153Radial†	4810.6	5075.7	2397.3 µg/L	2397.3 ppb	14:22:54
1	Ca 317.933Radial†	3902.6	3405.2	1098.3 µg/L	1098.3 ppb	14:22:54
1	Fe 238.204 Radial†	1455.7	1401.0	13737 µg/L	13737 ppb	14:23:15
1	K 766.490 Radial†	1956.8	1577.8	776.97 µg/L	776.97 ppb	14:22:54
1	Mg 279.077 IEC†	63.1	51.9	554.16 µg/L	554.16 ppb	14:23:15
1	Na 589.592 Radial†	2976.4	2681.0	1176.1 µg/L	1176.1 ppb	14:22:54
1	Sr 421.552†	899.9	725.5	3.9199 µg/L	3.9199 ppb	14:22:54
1	Sc 361.383	1939572.0	1939572.0	100.93 %		14:24:13
1	Y 371.029	1369832.4	1369832.4	102.38 %		14:24:13
1	Ag 328.068†	-690.8	-116.5	0.1538 µg/L	0.1538 ppb	14:24:19
1	As 188.979†	0.0	3.2	3.0317 µg/L	3.0317 ppb	14:24:39
1	B 249.677†	525.3	163.9	0.6533 µg/L	0.6533 ppb	14:24:19
1	Ba 233.527†	1460.3	1477.9	33.265 µg/L	33.265 ppb	14:24:39
1	Be 313.107†	1142.3	2659.5	1.3484 µg/L	1.3484 ppb	14:24:19
1	Cd 226.502†	-95.5	85.0	0.5169 µg/L	0.5169 ppb	14:24:39
1	Co 228.616†	87.8	67.9	1.5210 µg/L	1.5210 ppb	14:24:39
1	Cr 267.716†	264.2	187.2	4.1906 µg/L	4.1906 ppb	14:24:19
1	Cu 324.752†	3652.8	29.8	2.7843 µg/L	2.7843 ppb	14:24:19
1	Mn 257.610†	134397.5	133936.1	430.30 µg/L	430.30 ppb	14:24:19
1	Mo 202.031†	27.1	18.8	2.3825 µg/L	2.3825 ppb	14:24:39
1	Ni 231.604†	398.3	27.7	1.7513 µg/L	1.7513 ppb	14:24:39
1	P 214.914†	378.1	67.6	104.93 µg/L	104.93 ppb	14:24:39
1	Pb 220.353†	92.4	35.4	9.7895 µg/L	9.7895 ppb	14:24:39
1	S 181.975 Axial†	20.0	-3.7	-11.804 µg/L	-11.804 ppb	14:24:39
1	Sb 206.836†	25.1	-2.7	-2.5152 µg/L	-2.5152 ppb	14:24:39
1	Se 196.026†	12.6	-8.1	35.179 µg/L	35.179 ppb	14:24:39
1	SiO2†	51975.2	49158.0	9289.5 µg/L	9289.5 ppb	14:24:19
1	Si 251.611†	62050.8	61078.5	4324.3 µg/L	4324.3 ppb	14:24:19
1	Sn 189.927†	6.1	4.1	-14.238 µg/L	-14.238 ppb	14:24:39
1	Ti 334.940†	293021.0	290990.7	701.81 µg/L	701.81 ppb	14:24:13
1	Tl 190.801†	-45.4	-9.0	0.5336 µg/L	0.5336 ppb	14:24:39
1	U 409.014†	-326.2	-293.0	-28.263 µg/L	-28.263 ppb	14:24:19
1	V 292.402†	780.9	676.8	5.7244 µg/L	5.7244 ppb	14:24:19
1	Zn 213.857†	4302.7	3672.2	84.386 µg/L	84.386 ppb	14:24:19
2	Sc RADIAL	103202.0	103202.0	103 %		14:23:20
2	Al 396.153Radial†	4889.4	5154.6	2434.5 µg/L	2434.5 ppb	14:23:20
2	Ca 317.933Radial†	3897.8	3402.4	1097.4 µg/L	1097.4 ppb	14:23:20
2	Fe 238.204 Radial†	1449.2	1395.4	13682 µg/L	13682 ppb	14:23:40
2	K 766.490 Radial†	1911.4	1534.5	755.67 µg/L	755.67 ppb	14:23:20
2	Mg 279.077 IEC†	61.3	50.2	534.63 µg/L	534.63 ppb	14:23:40
2	Na 589.592 Radial†	2961.1	2667.6	1170.2 µg/L	1170.2 ppb	14:23:20
2	Sr 421.552†	915.9	741.5	4.0064 µg/L	4.0064 ppb	14:23:20
2	Sc 361.383	1935413.5	1935413.5	100.72 %		14:24:45
2	Y 371.029	1365221.1	1365221.1	102.03 %		14:24:45
2	Ag 328.068†	-672.0	-99.4	0.2902 µg/L	0.2902 ppb	14:24:50
2	As 188.979†	1.8	4.9	5.5812 µg/L	5.5812 ppb	14:25:11

2	B 249.677†	511.6	151.4	0.0882 µg/L	0.0882 ppb	14:24:50
2	Ba 233.527†	1456.5	1477.2	33.250 µg/L	33.250 ppb	14:25:11
2	Be 313.107†	1216.9	2736.0	1.3944 µg/L	1.3944 ppb	14:24:50
2	Cd 226.502†	-104.1	76.3	0.3103 µg/L	0.3103 ppb	14:25:11
2	Co 228.616†	85.3	65.6	1.4183 µg/L	1.4183 ppb	14:25:11
2	Cr 267.716†	296.1	219.5	4.9118 µg/L	4.9118 ppb	14:24:50
2	Cu 324.752†	3620.0	5.0	2.6061 µg/L	2.6061 ppb	14:24:50
2	Mn 257.610†	134111.7	133938.4	430.31 µg/L	430.31 ppb	14:24:50
2	Mo 202.031†	21.7	13.6	1.8597 µg/L	1.8597 ppb	14:25:11
2	Ni 231.604†	394.1	24.4	1.5623 µg/L	1.5623 ppb	14:25:11
2	P 214.914†	374.3	64.6	99.818 µg/L	99.818 ppb	14:25:11
2	Pb 220.353†	87.0	30.3	8.4554 µg/L	8.4554 ppb	14:25:11
2	S 181.975 Axial†	23.1	-0.6	-1.8555 µg/L	-1.8555 ppb	14:25:11
2	Sb 206.836†	25.3	-2.5	-2.2865 µg/L	-2.2865 ppb	14:25:11
2	Se 196.026†	12.3	-8.3	34.807 µg/L	34.807 ppb	14:25:11
2	SiO2†	51768.1	49063.0	9271.6 µg/L	9271.6 ppb	14:24:50
2	Si 251.611†	61847.5	61008.8	4319.3 µg/L	4319.3 ppb	14:24:50
2	Sn 189.927†	-1.9	-3.9	-17.309 µg/L	-17.309 ppb	14:25:11
2	Ti 334.940†	292854.7	291449.3	702.92 µg/L	702.92 ppb	14:24:45
2	Tl 190.801†	-48.7	-12.3	-2.8349 µg/L	-2.8349 ppb	14:25:11
2	U 409.014†	-418.2	-385.1	-36.509 µg/L	-36.509 ppb	14:24:50
2	V 292.402†	775.1	672.7	5.6731 µg/L	5.6731 ppb	14:24:50
2	Zn 213.857†	4274.6	3653.5	83.956 µg/L	83.956 ppb	14:24:50
3	Sc RADIAL	102975.7	102975.7	103 %		14:23:45
3	Al 396.153Radial†	4805.1	5082.8	2400.7 µg/L	2400.7 ppb	14:23:45
3	Ca 317.933Radial†	3873.3	3386.8	1092.4 µg/L	1092.4 ppb	14:23:45
3	Fe 238.204 Radial†	1457.6	1406.7	13792 µg/L	13792 ppb	14:24:05
3	K 766.490 Radial†	2026.9	1651.2	813.10 µg/L	813.10 ppb	14:23:45
3	Mg 279.077 IEC†	64.9	53.8	574.55 µg/L	574.55 ppb	14:24:05
3	Na 589.592 Radial†	2959.2	2672.0	1172.1 µg/L	1172.1 ppb	14:23:45
3	Sr 421.552†	837.6	667.1	3.6044 µg/L	3.6044 ppb	14:23:45
3	Sc 361.383	1941784.2	1941784.2	101.05 %		14:25:17
3	Y 371.029	1370114.2	1370114.2	102.40 %		14:25:17
3	Ag 328.068†	-684.6	-109.6	0.2096 µg/L	0.2096 ppb	14:25:22
3	As 188.979†	-2.1	1.2	-0.1038 µg/L	-0.1038 ppb	14:25:42
3	B 249.677†	542.3	180.0	1.3963 µg/L	1.3963 ppb	14:25:22
3	Ba 233.527†	1330.3	1347.5	30.331 µg/L	30.331 ppb	14:25:42
3	Be 313.107†	1255.5	2770.3	1.4183 µg/L	1.4183 ppb	14:25:22
3	Cd 226.502†	-104.1	76.7	0.3083 µg/L	0.3083 ppb	14:25:42
3	Co 228.616†	79.5	59.6	1.1703 µg/L	1.1703 ppb	14:25:42
3	Cr 267.716†	286.3	208.8	4.6728 µg/L	4.6728 ppb	14:25:22
3	Cu 324.752†	3629.8	2.9	2.6124 µg/L	2.6124 ppb	14:25:22
3	Mn 257.610†	130145.9	129577.0	416.32 µg/L	416.32 ppb	14:25:22
3	Mo 202.031†	23.9	15.7	2.0714 µg/L	2.0714 ppb	14:25:42
3	Ni 231.604†	414.7	43.5	2.6451 µg/L	2.6451 ppb	14:25:42
3	P 214.914†	364.7	53.9	81.408 µg/L	81.408 ppb	14:25:42
3	Pb 220.353†	92.2	35.1	9.7068 µg/L	9.7068 ppb	14:25:42
3	S 181.975 Axial†	22.5	-1.3	-4.1841 µg/L	-4.1841 ppb	14:25:42
3	Sb 206.836†	24.7	-3.2	-2.9135 µg/L	-2.9135 ppb	14:25:42
3	Se 196.026†	-0.2	-20.7	22.960 µg/L	22.960 ppb	14:25:42
3	SiO2†	50632.0	47770.2	9027.3 µg/L	9027.3 ppb	14:25:22
3	Si 251.611†	60438.5	59412.9	4206.4 µg/L	4206.4 ppb	14:25:22
3	Sn 189.927†	-2.1	-4.0	-17.494 µg/L	-17.494 ppb	14:25:42
3	Ti 334.940†	290450.8	288116.4	694.88 µg/L	694.88 ppb	14:25:17
3	Tl 190.801†	-45.9	-9.4	0.0072 µg/L	0.0072 ppb	14:25:42
3	U 409.014†	-312.0	-278.6	-26.978 µg/L	-26.978 ppb	14:25:22
3	V 292.402†	716.0	611.7	4.9196 µg/L	4.9196 ppb	14:25:22
3	Zn 213.857†	4193.0	3558.8	81.751 µg/L	81.751 ppb	14:25:22

Mean Data: 246554004|951752|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1938923.2	100.90 %		0.168			0.17%
Sc RADIAL	103143.0	103 %		0.1			0.14%
Y 371.029	1368389.2	102.27 %		0.205			0.20%
Ag 328.068†	-108.5	0.2178 µg/L		0.06858	0.2178 ppb	0.06858	31.48%
Al 396.153Radial†	5104.4	2410.8 µg/L		20.61	2410.8 ppb	20.61	0.85%
As 188.979†	3.1	2.8364 µg/L		2.84754	2.8364 ppb	2.84754	100.39%
B 249.677†	165.1	0.7126 µg/L		0.65606	0.7126 ppb	0.65606	92.07%
Ba 233.527†	1434.2	32.282 µg/L		1.6899	32.282 ppb	1.6899	5.23%

Be 313.107†	2721.9	1.3870 µg/L	0.03554	1.3870 ppb	0.03554	2.56%
Ca 317.933Radial†	3398.1	1096.0 µg/L	3.20	1096.0 ppb	3.20	0.29%
Cd 226.502†	79.3	0.3785 µg/L	0.11989	0.3785 ppb	0.11989	31.68%
Co 228.616†	64.4	1.3699 µg/L	0.18032	1.3699 ppb	0.18032	13.16%
Cr 267.716†	205.2	4.5917 µg/L	0.36734	4.5917 ppb	0.36734	8.00%
Cu 324.752†	12.6	2.6676 µg/L	0.10113	2.6676 ppb	0.10113	3.79%
Fe 238.204 Radial†	1401.0	13737 µg/L	55.3	13737 ppb	55.3	0.40%
K 766.490 Radial†	1587.8	781.91 µg/L	29.031	781.91 ppb	29.031	3.71%
Mg 279.077 IEC†	52.0	554.45 µg/L	19.963	554.45 ppb	19.963	3.60%
Mn 257.610†	132483.8	425.64 µg/L	8.072	425.64 ppb	8.072	1.90%
Mo 202.031†	16.0	2.1045 µg/L	0.26293	2.1045 ppb	0.26293	12.49%
Na 589.592 Radial†	2673.6	1172.8 µg/L	3.01	1172.8 ppb	3.01	0.26%
Ni 231.604†	31.9	1.9862 µg/L	0.57834	1.9862 ppb	0.57834	29.12%
P 214.914†	62.0	95.387 µg/L	12.3730	95.387 ppb	12.3730	12.97%
Pb 220.353†	33.6	9.3172 µg/L	0.74752	9.3172 ppb	0.74752	8.02%
S 181.975 Axial†	-1.9	-5.9478 µg/L	5.20332	-5.9478 ppb	5.20332	87.48%
Sb 206.836†	-2.8	-2.5718 µg/L	0.31726	-2.5718 ppb	0.31726	12.34%
Se 196.026†	-12.4	30.982 µg/L	6.9500	30.982 ppb	6.9500	22.43%
SiO2†	48663.7	9196.1 µg/L	146.51	9196.1 ppb	146.51	1.59%
Si 251.611†	60500.1	4283.3 µg/L	66.70	4283.3 ppb	66.70	1.56%
Sn 189.927†	-1.2	-16.347 µg/L	1.8289	-16.347 ppb	1.8289	11.19%
Sr 421.552†	711.3	3.8436 µg/L	0.21158	3.8436 ppb	0.21158	5.50%
Ti 334.940†	290185.5	699.87 µg/L	4.359	699.87 ppb	4.359	0.62%
Tl 190.801†	-10.2	-0.7647 µg/L	1.81204	-0.7647 ppb	1.81204	236.97%
U 409.014†	-318.9	-30.583 µg/L	5.1722	-30.583 ppb	5.1722	16.91%
V 292.402†	653.7	5.4390 µg/L	0.45055	5.4390 ppb	0.45055	8.28%
Zn 213.857†	3628.2	83.365 µg/L	1.4136	83.365 ppb	1.4136	1.70%

Sequence No.: 2  
 Sample ID: 246554005|951752|5  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 402  
 Date Collected: 3/5/2010 14:25:51  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246554005|951752|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	102865.4	102865.4	103 %		14:26:23
1	Al 396.153Radial†	14431.5	14478.5	6838.4 µg/L	6838.4 ppb	14:26:23
1	Ca 317.933Radial†	5202.9	4687.8	1512.0 µg/L	1512.0 ppb	14:26:43
1	Fe 238.204 Radial†	1828.3	1769.8	17353 µg/L	17353 ppb	14:26:43
1	K 766.490 Radial†	2058.1	1683.7	829.14 µg/L	829.14 ppb	14:26:23
1	Mg 279.077 IEC†	117.3	105.0	1131.6 µg/L	1131.6 ppb	14:26:43
1	Na 589.592 Radial†	2023.1	1761.9	772.89 µg/L	772.89 ppb	14:26:23
1	Sr 421.552†	1672.6	1482.5	8.0104 µg/L	8.0104 ppb	14:26:23
1	Sc 361.383	1948634.4	1948634.4	101.41 %		14:27:42
1	Y 371.029	1376854.6	1376854.6	102.90 %		14:27:42
1	Ag 328.068†	-719.6	-141.7	0.2608 µg/L	0.2608 ppb	14:27:47
1	As 188.979†	-0.6	2.6	1.5242 µg/L	1.5242 ppb	14:28:07
1	B 249.677†	571.3	206.8	0.8165 µg/L	0.8165 ppb	14:27:47
1	Ba 233.527†	1703.7	1711.1	38.523 µg/L	38.523 ppb	14:28:07
1	Be 313.107†	3900.5	5374.2	2.9931 µg/L	2.9931 ppb	14:27:47
1	Cd 226.502†	-86.8	94.0	0.3298 µg/L	0.3298 ppb	14:28:07
1	Co 228.616†	86.8	66.5	1.4347 µg/L	1.4347 ppb	14:28:07
1	Cr 267.716†	326.6	247.5	5.5411 µg/L	5.5411 ppb	14:28:07
1	Cu 324.752†	3909.4	266.0	5.0654 µg/L	5.0654 ppb	14:27:47
1	Mn 257.610†	144209.0	142992.3	459.52 µg/L	459.52 ppb	14:27:42
1	Mo 202.031†	23.2	14.9	2.1285 µg/L	2.1285 ppb	14:28:07
1	Ni 231.604†	434.5	61.6	3.7202 µg/L	3.7202 ppb	14:28:07
1	P 214.914†	398.6	86.0	134.43 µg/L	134.43 ppb	14:28:07
1	Pb 220.353†	72.2	15.0	4.8117 µg/L	4.8117 ppb	14:28:07
1	S 181.975 Axial†	26.1	2.2	7.1007 µg/L	7.1007 ppb	14:28:07
1	Sb 206.836†	23.6	-4.3	-3.9299 µg/L	-3.9299 ppb	14:28:07
1	Se 196.026†	7.2	-13.5	40.920 µg/L	40.920 ppb	14:28:07
1	SiO2†	70433.1	67120.5	12684 µg/L	12684 ppb	14:27:47
1	Si 251.611†	85157.4	83578.7	5917.3 µg/L	5917.3 ppb	14:27:47
1	Sn 189.927†	-7.6	-9.5	-23.732 µg/L	-23.732 ppb	14:28:07
1	Ti 334.940†	299477.4	296007.5	713.87 µg/L	713.87 ppb	14:27:42
1	Tl 190.801†	-45.4	-8.7	1.5728 µg/L	1.5728 ppb	14:28:07
1	U 409.014†	-408.6	-372.8	-35.946 µg/L	-35.946 ppb	14:27:47
1	V 292.402†	1234.7	1120.6	10.465 µg/L	10.465 ppb	14:27:47
1	Zn 213.857†	4349.5	3698.6	84.781 µg/L	84.781 ppb	14:28:07
2	Sc RADIAL	103787.3	103787.3	103 %		14:26:48
2	Al 396.153Radial†	14577.8	14494.9	6846.1 µg/L	6846.1 ppb	14:26:48
2	Ca 317.933Radial†	5261.2	4699.2	1515.7 µg/L	1515.7 ppb	14:27:08
2	Fe 238.204 Radial†	1850.5	1775.4	17408 µg/L	17408 ppb	14:27:08
2	K 766.490 Radial†	2091.5	1698.2	836.28 µg/L	836.28 ppb	14:26:48
2	Mg 279.077 IEC†	113.3	100.1	1078.0 µg/L	1078.0 ppb	14:27:08
2	Na 589.592 Radial†	2051.7	1772.0	777.32 µg/L	777.32 ppb	14:26:48
2	Sr 421.552†	1727.6	1521.2	8.2196 µg/L	8.2196 ppb	14:26:48
2	Sc 361.383	1935265.6	1935265.6	100.71 %		14:28:14
2	Y 371.029	1366957.2	1366957.2	102.16 %		14:28:14
2	Ag 328.068†	-839.0	-265.2	-0.7506 µg/L	-0.7506 ppb	14:28:19
2	As 188.979†	2.2	5.4	5.7033 µg/L	5.7033 ppb	14:28:39
2	B 249.677†	552.2	191.8	0.0696 µg/L	0.0696 ppb	14:28:19
2	Ba 233.527†	1685.7	1704.9	38.382 µg/L	38.382 ppb	14:28:39
2	Be 313.107†	3930.1	5430.2	3.0266 µg/L	3.0266 ppb	14:28:19
2	Cd 226.502†	-81.3	98.9	0.4421 µg/L	0.4421 ppb	14:28:39
2	Co 228.616†	83.8	64.1	1.3250 µg/L	1.3250 ppb	14:28:39
2	Cr 267.716†	326.4	249.6	5.5880 µg/L	5.5880 ppb	14:28:39
2	Cu 324.752†	3936.3	319.4	5.4372 µg/L	5.4372 ppb	14:28:19
2	Mn 257.610†	143320.5	143092.5	459.85 µg/L	459.85 ppb	14:28:14
2	Mo 202.031†	25.7	17.6	2.3969 µg/L	2.3969 ppb	14:28:39
2	Ni 231.604†	436.3	66.3	3.9922 µg/L	3.9922 ppb	14:28:39
2	P 214.914†	396.4	86.6	135.33 µg/L	135.33 ppb	14:28:39
2	Pb 220.353†	71.1	14.5	4.6678 µg/L	4.6678 ppb	14:28:39

2	S 181.975 Axial†	26.5	2.8	8.9006 µg/L	8.9006 ppb	14:28:39
2	Sb 206.836†	22.8	-5.0	-4.5414 µg/L	-4.5414 ppb	14:28:39
2	Se 196.026†	9.8	-10.9	43.715 µg/L	43.715 ppb	14:28:39
2	SiO2†	70351.0	67518.8	12759 µg/L	12759 ppb	14:28:19
2	Si 251.611†	84951.5	83954.5	5943.9 µg/L	5943.9 ppb	14:28:19
2	Sn 189.927†	-6.0	-7.9	-23.182 µg/L	-23.182 ppb	14:28:39
2	Ti 334.940†	297961.6	296542.4	715.17 µg/L	715.17 ppb	14:28:14
2	Tl 190.801†	-41.3	-4.9	5.3957 µg/L	5.3957 ppb	14:28:39
2	U 409.014†	-373.4	-340.6	-33.066 µg/L	-33.066 ppb	14:28:19
2	V 292.402†	1209.9	1104.5	10.263 µg/L	10.263 ppb	14:28:19
2	Zn 213.857†	4332.9	3711.7	85.083 µg/L	85.083 ppb	14:28:39
3	Sc RADIAL	102915.5	102915.5	103 %		14:27:13
3	Al 396.153Radial†	14468.3	14507.6	6852.1 µg/L	6852.1 ppb	14:27:13
3	Ca 317.933Radial†	5256.1	4737.3	1527.9 µg/L	1527.9 ppb	14:27:33
3	Fe 238.204 Radial†	1836.6	1777.0	17423 µg/L	17423 ppb	14:27:33
3	K 766.490 Radial†	2093.6	1717.4	845.73 µg/L	845.73 ppb	14:27:13
3	Mg 279.077 IEC†	117.5	105.1	1132.8 µg/L	1132.8 ppb	14:27:33
3	Na 589.592 Radial†	2050.2	1787.4	784.08 µg/L	784.08 ppb	14:27:13
3	Sr 421.552†	1693.0	1501.6	8.1137 µg/L	8.1137 ppb	14:27:13
3	Sc 361.383	1932922.7	1932922.7	100.59 %		14:28:46
3	Y 371.029	1362894.6	1362894.6	101.86 %		14:28:46
3	Ag 328.068†	-833.9	-261.1	-0.7214 µg/L	-0.7214 ppb	14:28:51
3	As 188.979†	-0.6	2.6	1.5973 µg/L	1.5973 ppb	14:29:12
3	B 249.677†	498.5	139.0	-2.4533 µg/L	-2.4533 ppb	14:28:51
3	Ba 233.527†	1514.5	1536.7	34.596 µg/L	34.596 ppb	14:29:12
3	Be 313.107†	3755.9	5261.7	2.9285 µg/L	2.9285 ppb	14:28:51
3	Cd 226.502†	-88.0	92.1	0.2751 µg/L	0.2751 ppb	14:29:12
3	Co 228.616†	88.0	68.4	1.5369 µg/L	1.5369 ppb	14:29:12
3	Cr 267.716†	306.6	230.3	5.1558 µg/L	5.1558 ppb	14:29:12
3	Cu 324.752†	3870.7	258.8	5.0300 µg/L	5.0300 ppb	14:28:51
3	Mn 257.610†	140964.2	140922.4	452.89 µg/L	452.89 ppb	14:28:46
3	Mo 202.031†	26.7	18.6	2.4993 µg/L	2.4993 ppb	14:29:12
3	Ni 231.604†	420.2	50.9	3.1123 µg/L	3.1123 ppb	14:29:12
3	P 214.914†	402.0	92.6	145.71 µg/L	145.71 ppb	14:29:12
3	Pb 220.353†	79.2	22.6	6.8075 µg/L	6.8075 ppb	14:29:12
3	S 181.975 Axial†	22.7	-1.0	-3.2091 µg/L	-3.2091 ppb	14:29:12
3	Sb 206.836†	23.2	-4.5	-4.1540 µg/L	-4.1540 ppb	14:29:12
3	Se 196.026†	14.3	-6.3	48.191 µg/L	48.191 ppb	14:29:12
3	SiO2†	67893.9	65160.7	12314 µg/L	12314 ppb	14:28:51
3	Si 251.611†	82100.7	81222.6	5750.5 µg/L	5750.5 ppb	14:28:51
3	Sn 189.927†	-8.5	-10.4	-24.168 µg/L	-24.168 ppb	14:29:12
3	Ti 334.940†	292942.9	291911.7	703.99 µg/L	703.99 ppb	14:28:46
3	Tl 190.801†	-51.9	-15.6	-5.4614 µg/L	-5.4614 ppb	14:29:12
3	U 409.014†	-384.1	-351.7	-34.067 µg/L	-34.067 ppb	14:28:51
3	V 292.402†	1140.9	1037.3	9.4398 µg/L	9.4398 ppb	14:28:51
3	Zn 213.857†	3922.2	3308.6	75.745 µg/L	75.745 ppb	14:29:12

Mean Data: 246554005|951752|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1938940.9	100.90 %	0.441			0.44%
Sc RADIAL	103189.4	103 %	0.5			0.50%
Y 371.029	1368902.1	102.31 %	0.537			0.52%
Ag 328.068†	-222.7	-0.4037 µg/L	0.57568	-0.4037 ppb	0.57568	142.59%
Al 396.153Radial†	14493.7	6845.5 µg/L	6.87	6845.5 ppb	6.87	0.10%
As 188.979†	3.5	2.9416 µg/L	2.39202	2.9416 ppb	2.39202	81.32%
B 249.677†	179.2	-0.5224 µg/L	1.71343	-0.5224 ppb	1.71343	327.98%
Ba 233.527†	1650.9	37.167 µg/L	2.2275	37.167 ppb	2.2275	5.99%
Be 313.107†	5355.4	2.9827 µg/L	0.04988	2.9827 ppb	0.04988	1.67%
Ca 317.933Radial†	4708.1	1518.5 µg/L	8.35	1518.5 ppb	8.35	0.55%
Cd 226.502†	95.0	0.3490 µg/L	0.08514	0.3490 ppb	0.08514	24.40%
Co 228.616†	66.3	1.4322 µg/L	0.10595	1.4322 ppb	0.10595	7.40%
Cr 267.716†	242.4	5.4283 µg/L	0.23717	5.4283 ppb	0.23717	4.37%
Cu 324.752†	281.4	5.1775 µg/L	0.22558	5.1775 ppb	0.22558	4.36%
Fe 238.204 Radial†	1774.0	17395 µg/L	36.9	17395 ppb	36.9	0.21%
K 766.490 Radial†	1699.8	837.05 µg/L	8.324	837.05 ppb	8.324	0.99%
Mg 279.077 IEC†	103.4	1114.1 µg/L	31.29	1114.1 ppb	31.29	2.81%
Mn 257.610†	142335.7	457.42 µg/L	3.928	457.42 ppb	3.928	0.86%
Mo 202.031†	17.0	2.3416 µg/L	0.19147	2.3416 ppb	0.19147	8.18%
Na 589.592 Radial†	1773.8	778.10 µg/L	5.632	778.10 ppb	5.632	0.72%

Ni 231.604†	59.6	3.6082 µg/L	0.45049	3.6082 ppb	0.45049	12.49%
P 214.914†	88.4	138.49 µg/L	6.272	138.49 ppb	6.272	4.53%
Pb 220.353†	17.4	5.4290 µg/L	1.19596	5.4290 ppb	1.19596	22.03%
S 181.975 Axial†	1.3	4.2641 µg/L	6.53421	4.2641 ppb	6.53421	153.24%
Sb 206.836†	-4.6	-4.2084 µg/L	0.30938	-4.2084 ppb	0.30938	7.35%
Se 196.026†	-10.2	44.275 µg/L	3.6675	44.275 ppb	3.6675	8.28%
SiO2†	66600.0	12586 µg/L	238.5	12586 ppb	238.5	1.90%
Si 251.611†	82918.6	5870.5 µg/L	104.84	5870.5 ppb	104.84	1.79%
Sn 189.927†	-9.2	-23.694 µg/L	0.4939	-23.694 ppb	0.4939	2.08%
Sr 421.552†	1501.8	8.1146 µg/L	0.10461	8.1146 ppb	0.10461	1.29%
Ti 334.940†	294820.5	711.01 µg/L	6.111	711.01 ppb	6.111	0.86%
Tl 190.801†	-9.7	0.5024 µg/L	5.50716	0.5024 ppb	5.50716	>999.9%
U 409.014†	-355.1	-34.360 µg/L	1.4620	-34.360 ppb	1.4620	4.25%
V 292.402†	1087.5	10.056 µg/L	0.5432	10.056 ppb	0.5432	5.40%
Zn 213.857†	3573.0	81.870 µg/L	5.3061	81.870 ppb	5.3061	6.48%



Sequence No.: 3  
 Sample ID: 246554006|951752|5  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 403  
 Date Collected: 3/5/2010 14:29:20  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246554006|951752|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	102425.2	102425.2	102 %		14:29:51
1	Al 396.153Radial†	3565.1	3893.2	1838.8 µg/L	1838.8 ppb	14:29:51
1	Ca 317.933Radial†	2211.9	1779.4	573.93 µg/L	573.93 ppb	14:30:11
1	Fe 238.204 Radial†	1503.1	1458.8	14304 µg/L	14304 ppb	14:30:11
1	K 766.490 Radial†	1998.5	1634.0	804.63 µg/L	804.63 ppb	14:29:51
1	Mg 279.077 IEC†	30.3	20.3	207.27 µg/L	207.27 ppb	14:30:11
1	Na 589.592 Radial†	3432.9	3151.6	1382.5 µg/L	1382.5 ppb	14:29:51
1	Sr 421.552†	806.0	640.6	3.4612 µg/L	3.4612 ppb	14:29:51
1	Sc 361.383	1917375.4	1917375.4	99.779 %		14:31:11
1	Y 371.029	1352085.3	1352085.3	101.05 %		14:31:11
1	Ag 328.068†	-709.0	-142.7	-0.0190 µg/L	-0.0190 ppb	14:31:16
1	As 188.979†	-0.6	2.6	2.0948 µg/L	2.0948 ppb	14:31:36
1	B 249.677†	498.0	142.5	-0.6437 µg/L	-0.6437 ppb	14:31:36
1	Ba 233.527†	996.7	1030.0	23.187 µg/L	23.187 ppb	14:31:36
1	Be 313.107†	244.2	1772.5	0.7825 µg/L	0.7825 ppb	14:31:16
1	Cd 226.502†	-109.2	70.3	0.1016 µg/L	0.1016 ppb	14:31:36
1	Co 228.616†	85.0	66.1	1.2946 µg/L	1.2946 ppb	14:31:36
1	Cr 267.716†	790.8	718.0	16.057 µg/L	16.057 ppb	14:31:36
1	Cu 324.752†	3514.0	-67.4	2.2321 µg/L	2.2321 ppb	14:31:16
1	Mn 257.610†	146132.2	147238.2	473.02 µg/L	473.02 ppb	14:31:11
1	Mo 202.031†	27.6	19.7	2.4869 µg/L	2.4869 ppb	14:31:36
1	Ni 231.604†	526.7	161.0	9.3291 µg/L	9.3291 ppb	14:31:36
1	P 214.914†	397.3	91.2	144.57 µg/L	144.57 ppb	14:31:36
1	Pb 220.353†	66.6	10.6	3.2119 µg/L	3.2119 ppb	14:31:36
1	S 181.975 Axial†	27.4	4.0	12.628 µg/L	12.628 ppb	14:31:36
1	Sb 206.836†	26.6	-0.9	-0.9793 µg/L	-0.9793 ppb	14:31:36
1	Se 196.026†	12.1	-8.4	36.999 µg/L	36.999 ppb	14:31:36
1	SiO2†	52343.9	50123.7	9472.0 µg/L	9472.0 ppb	14:31:16
1	Si 251.611†	62588.3	62328.8	4412.8 µg/L	4412.8 ppb	14:31:16
1	Sn 189.927†	0.6	-1.4	-17.030 µg/L	-17.030 ppb	14:31:36
1	Ti 334.940†	318949.0	320336.8	772.61 µg/L	772.61 ppb	14:31:11
1	Tl 190.801†	-47.3	-11.3	-0.8957 µg/L	-0.8957 ppb	14:31:36
1	U 409.014†	-293.7	-264.2	-25.725 µg/L	-25.725 ppb	14:31:16
1	V 292.402†	750.7	655.5	5.3884 µg/L	5.3884 ppb	14:31:16
1	Zn 213.857†	4236.8	3655.6	83.960 µg/L	83.960 ppb	14:31:36
2	Sc RADIAL	102801.9	102801.9	102 %		14:30:17
2	Al 396.153Radial†	3599.6	3914.0	1848.6 µg/L	1848.6 ppb	14:30:17
2	Ca 317.933Radial†	2217.9	1777.3	573.24 µg/L	573.24 ppb	14:30:37
2	Fe 238.204 Radial†	1505.7	1456.0	14276 µg/L	14276 ppb	14:30:37
2	K 766.490 Radial†	2021.2	1648.9	812.00 µg/L	812.00 ppb	14:30:17
2	Mg 279.077 IEC†	34.4	24.2	249.80 µg/L	249.80 ppb	14:30:37
2	Na 589.592 Radial†	3419.4	3126.1	1371.3 µg/L	1371.3 ppb	14:30:17
2	Sr 421.552†	794.7	626.6	3.3858 µg/L	3.3858 ppb	14:30:17
2	Sc 361.383	1922234.9	1922234.9	100.03 %		14:31:43
2	Y 371.029	1357041.0	1357041.0	101.42 %		14:31:43
2	Ag 328.068†	-691.9	-123.8	0.1343 µg/L	0.1343 ppb	14:31:48
2	As 188.979†	-1.0	2.2	1.4105 µg/L	1.4105 ppb	14:32:08
2	B 249.677†	492.9	136.1	-0.9322 µg/L	-0.9322 ppb	14:32:08
2	Ba 233.527†	993.0	1023.8	23.048 µg/L	23.048 ppb	14:32:08
2	Be 313.107†	187.6	1715.3	0.7472 µg/L	0.7472 ppb	14:31:48
2	Cd 226.502†	-105.7	74.0	0.1950 µg/L	0.1950 ppb	14:32:08
2	Co 228.616†	75.6	56.5	0.8697 µg/L	0.8697 ppb	14:32:08
2	Cr 267.716†	798.3	723.4	16.179 µg/L	16.179 ppb	14:32:08
2	Cu 324.752†	3498.2	-92.1	2.0595 µg/L	2.0595 ppb	14:31:48
2	Mn 257.610†	146959.0	147694.4	474.48 µg/L	474.48 ppb	14:31:43
2	Mo 202.031†	25.2	17.2	2.2447 µg/L	2.2447 ppb	14:32:08
2	Ni 231.604†	521.0	153.9	8.9266 µg/L	8.9266 ppb	14:32:08
2	P 214.914†	397.4	90.2	142.91 µg/L	142.91 ppb	14:32:08
2	Pb 220.353†	68.8	12.7	3.7680 µg/L	3.7680 ppb	14:32:08

2	S 181.975 Axial†	24.0	0.5	1.5801 µg/L	1.5801 ppb	14:32:08
2	Sb 206.836†	26.0	-1.6	-1.5803 µg/L	-1.5803 ppb	14:32:08
2	Se 196.026†	7.9	-12.7	32.703 µg/L	32.703 ppb	14:32:08
2	SiO2†	52722.5	50369.6	9518.5 µg/L	9518.5 ppb	14:31:48
2	Si 251.611†	63007.5	62589.4	4431.3 µg/L	4431.3 ppb	14:31:48
2	Sn 189.927†	-4.1	-6.0	-18.809 µg/L	-18.809 ppb	14:32:08
2	Ti 334.940†	320384.9	320964.0	774.12 µg/L	774.12 ppb	14:31:43
2	Tl 190.801†	-50.3	-14.2	-3.8387 µg/L	-3.8387 ppb	14:32:08
2	U 409.014†	-400.1	-369.8	-35.189 µg/L	-35.189 ppb	14:31:48
2	V 292.402†	759.9	662.7	5.4707 µg/L	5.4707 ppb	14:31:48
2	Zn 213.857†	4222.0	3630.0	83.369 µg/L	83.369 ppb	14:32:08
3	Sc RADIAL	101918.1	101918.1	102 %		14:30:42
3	Al 396.153Radial†	3574.0	3919.2	1851.1 µg/L	1851.1 ppb	14:30:42
3	Ca 317.933Radial†	2214.5	1792.7	578.22 µg/L	578.22 ppb	14:31:02
3	Fe 238.204 Radial†	1500.5	1463.7	14351 µg/L	14351 ppb	14:31:02
3	K 766.490 Radial†	1978.4	1623.9	799.69 µg/L	799.69 ppb	14:30:42
3	Mg 279.077 IEC†	32.7	22.8	234.19 µg/L	234.19 ppb	14:31:02
3	Na 589.592 Radial†	3355.5	3092.2	1356.4 µg/L	1356.4 ppb	14:30:42
3	Sr 421.552†	801.4	639.9	3.4577 µg/L	3.4577 ppb	14:30:42
3	Sc 361.383	1917980.3	1917980.3	99.811 %		14:32:15
3	Y 371.029	1350694.6	1350694.6	100.95 %		14:32:15
3	Ag 328.068†	-710.0	-143.5	-0.0248 µg/L	-0.0248 ppb	14:32:20
3	As 188.979†	-1.1	2.1	1.3042 µg/L	1.3042 ppb	14:32:40
3	B 249.677†	468.5	112.8	-2.0867 µg/L	-2.0867 ppb	14:32:40
3	Ba 233.527†	901.4	934.2	21.032 µg/L	21.032 ppb	14:32:40
3	Be 313.107†	139.8	1667.9	0.7230 µg/L	0.7230 ppb	14:32:20
3	Cd 226.502†	-105.9	73.5	0.1755 µg/L	0.1755 ppb	14:32:40
3	Co 228.616†	70.8	51.9	0.6898 µg/L	0.6898 ppb	14:32:40
3	Cr 267.716†	720.4	647.2	14.475 µg/L	14.475 ppb	14:32:40
3	Cu 324.752†	3519.5	-63.0	2.2709 µg/L	2.2709 ppb	14:32:20
3	Mn 257.610†	144858.1	145915.4	468.78 µg/L	468.78 ppb	14:32:15
3	Mo 202.031†	21.2	13.2	1.8529 µg/L	1.8529 ppb	14:32:40
3	Ni 231.604†	514.6	148.7	8.6305 µg/L	8.6305 ppb	14:32:40
3	P 214.914†	391.0	84.7	133.42 µg/L	133.42 ppb	14:32:40
3	Pb 220.353†	70.1	14.1	4.1425 µg/L	4.1425 ppb	14:32:40
3	S 181.975 Axial†	30.1	6.7	21.160 µg/L	21.160 ppb	14:32:40
3	Sb 206.836†	23.0	-4.5	-4.2486 µg/L	-4.2486 ppb	14:32:40
3	Se 196.026†	14.5	-6.0	39.502 µg/L	39.502 ppb	14:32:40
3	SiO2†	51308.8	49070.1	9272.9 µg/L	9272.9 ppb	14:32:20
3	Si 251.611†	61316.3	61034.7	4321.2 µg/L	4321.2 ppb	14:32:20
3	Sn 189.927†	-0.0	-2.0	-17.322 µg/L	-17.322 ppb	14:32:40
3	Ti 334.940†	314696.2	315975.1	762.09 µg/L	762.09 ppb	14:32:15
3	Tl 190.801†	-44.7	-8.7	1.6356 µg/L	1.6356 ppb	14:32:40
3	U 409.014†	-475.3	-446.1	-42.044 µg/L	-42.044 ppb	14:32:20
3	V 292.402†	716.7	621.2	4.9359 µg/L	4.9359 ppb	14:32:20
3	Zn 213.857†	3885.3	3302.1	75.770 µg/L	75.770 ppb	14:32:40

## Mean Data: 246554006|951752|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1919196.9	99.874 %	0.1378			0.14%
Sc RADIAL	102381.7	102 %	0.4			0.43%
Y 371.029	1353273.6	101.14 %	0.249			0.25%
Ag 328.068†	-136.7	0.0302 µg/L	0.09024	0.0302 ppb	0.09024	299.26%
Al 396.153Radial†	3908.8	1846.1 µg/L	6.52	1846.1 ppb	6.52	0.35%
As 188.979†	2.3	1.6032 µg/L	0.42904	1.6032 ppb	0.42904	26.76%
B 249.677†	130.5	-1.2209 µg/L	0.76360	-1.2209 ppb	0.76360	62.55%
Ba 233.527†	996.0	22.422 µg/L	1.2058	22.422 ppb	1.2058	5.38%
Be 313.107†	1718.6	0.7509 µg/L	0.02994	0.7509 ppb	0.02994	3.99%
Ca 317.933Radial†	1783.1	575.13 µg/L	2.700	575.13 ppb	2.700	0.47%
Cd 226.502†	72.6	0.1574 µg/L	0.04928	0.1574 ppb	0.04928	31.32%
Co 228.616†	58.2	0.9514 µg/L	0.31058	0.9514 ppb	0.31058	32.65%
Cr 267.716†	696.2	15.570 µg/L	0.9506	15.570 ppb	0.9506	6.11%
Cu 324.752†	-74.2	2.1875 µg/L	0.11255	2.1875 ppb	0.11255	5.15%
Fe 238.204 Radial†	1459.5	14310 µg/L	38.1	14310 ppb	38.1	0.27%
K 766.490 Radial†	1635.6	805.44 µg/L	6.196	805.44 ppb	6.196	0.77%
Mg 279.077 IEC†	22.4	230.42 µg/L	21.514	230.42 ppb	21.514	9.34%
Mn 257.610†	146949.4	472.09 µg/L	2.961	472.09 ppb	2.961	0.63%
Mo 202.031†	16.7	2.1948 µg/L	0.31989	2.1948 ppb	0.31989	14.57%
Na 589.592 Radial†	3123.3	1370.1 µg/L	13.07	1370.1 ppb	13.07	0.95%

Ni 231.604†	154.5	8.9620 µg/L	0.35065	8.9620 ppb	0.35065	3.91%
P 214.914†	88.7	140.30 µg/L	6.019	140.30 ppb	6.019	4.29%
Pb 220.353†	12.5	3.7075 µg/L	0.46829	3.7075 ppb	0.46829	12.63%
S 181.975 Axial†	3.7	11.789 µg/L	9.8170	11.789 ppb	9.8170	83.27%
Sb 206.836†	-2.3	-2.2694 µg/L	1.74020	-2.2694 ppb	1.74020	76.68%
Se 196.026†	-9.0	36.401 µg/L	3.4390	36.401 ppb	3.4390	9.45%
SiO2†	49854.4	9421.1 µg/L	130.45	9421.1 ppb	130.45	1.38%
Si 251.611†	61984.3	4388.4 µg/L	58.95	4388.4 ppb	58.95	1.34%
Sn 189.927†	-3.1	-17.720 µg/L	0.9543	-17.720 ppb	0.9543	5.39%
Sr 421.552†	635.7	3.4349 µg/L	0.04252	3.4349 ppb	0.04252	1.24%
Ti 334.940†	319092.0	769.60 µg/L	6.554	769.60 ppb	6.554	0.85%
Tl 190.801†	-11.4	-1.0329 µg/L	2.73973	-1.0329 ppb	2.73973	265.23%
U 409.014†	-360.0	-34.319 µg/L	8.1945	-34.319 ppb	8.1945	23.88%
V 292.402†	646.5	5.2650 µg/L	0.28795	5.2650 ppb	0.28795	5.47%
Zn 213.857†	3529.2	81.033 µg/L	4.5677	81.033 ppb	4.5677	5.64%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/5/2010 14:32:49

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	105248.1	105248.1	105 %		14:33:26
1	Al 396.153Radial†	10997.1	10885.4	5130.4 µg/L	5130.4 ppb	14:33:26
1	Ca 317.933Radial†	16564.6	15405.6	4968.9 µg/L	4968.9 ppb	14:33:26
1	Fe 238.204 Radial†	553.9	514.4	5054.8 µg/L	5054.8 ppb	14:33:46
1	K 766.490 Radial†	11763.0	10891.2	5363.3 µg/L	5363.3 ppb	14:33:26
1	Mg 279.077 IEC†	484.0	452.0	4953.9 µg/L	4953.9 ppb	14:33:46
1	Na 589.592 Radial†	27577.2	26081.4	11441 µg/L	11441 ppb	14:33:26
1	Sr 421.552†	101993.4	97094.5	524.63 µg/L	524.63 ppb	14:33:26
1	Sc 361.383	1928642.2	1928642.2	100.37 %		14:34:46
1	Y 371.029	1338349.0	1338349.0	100.02 %		14:34:46
1	Ag 328.068†	61515.9	61859.6	511.90 µg/L	511.90 ppb	14:34:51
1	As 188.979†	355.2	357.1	533.24 µg/L	533.24 ppb	14:35:11
1	B 249.677†	11171.3	10774.0	511.98 µg/L	511.98 ppb	14:34:51
1	Ba 233.527†	23129.6	23076.4	520.13 µg/L	520.13 ppb	14:34:51
1	Be 313.107†	851819.9	850243.4	516.37 µg/L	516.37 ppb	14:34:46
1	Cd 226.502†	21428.5	21530.1	523.62 µg/L	523.62 ppb	14:34:51
1	Co 228.616†	11956.1	11893.5	522.08 µg/L	522.08 ppb	14:34:51
1	Cr 267.716†	23798.2	23636.9	528.77 µg/L	528.77 ppb	14:34:51
1	Cu 324.752†	80653.8	76770.6	521.30 µg/L	521.30 ppb	14:34:51
1	Mn 257.610†	163862.0	164047.8	526.06 µg/L	526.06 ppb	14:34:46
1	Mo 202.031†	5409.1	5381.4	532.07 µg/L	532.07 ppb	14:35:11
1	Ni 231.604†	9638.8	9236.7	524.26 µg/L	524.26 ppb	14:34:51
1	P 214.914†	1871.5	1557.6	2609.1 µg/L	2609.1 ppb	14:35:11
1	Pb 220.353†	2055.1	1991.5	526.59 µg/L	526.59 ppb	14:35:11
1	S 181.975 Axial†	360.8	335.9	1068.3 µg/L	1068.3 ppb	14:35:11
1	Sb 206.836†	602.0	572.3	519.90 µg/L	519.90 ppb	14:35:11
1	Se 196.026†	547.3	524.7	527.76 µg/L	527.76 ppb	14:35:11
1	SiO2†	31322.5	28872.4	5456.1 µg/L	5456.1 ppb	14:34:51
1	Si 251.611†	36564.7	36033.7	2551.1 µg/L	2551.1 ppb	14:34:51
1	Sn 189.927†	1357.1	1350.3	525.00 µg/L	525.00 ppb	14:35:11
1	Ti 334.940†	211996.1	211906.2	510.78 µg/L	510.78 ppb	14:34:46
1	Tl 190.801†	484.4	518.7	529.91 µg/L	529.91 ppb	14:35:11
1	U 409.014†	5791.1	5800.2	519.28 µg/L	519.28 ppb	14:34:51
1	V 292.402†	43322.6	43067.8	530.20 µg/L	530.20 ppb	14:34:51
1	Zn 213.857†	23285.1	22609.6	520.14 µg/L	520.14 ppb	14:34:51
2	Sc RADIAL	105066.2	105066.2	105 %		14:33:51
2	Al 396.153Radial†	11008.2	10914.1	5144.0 µg/L	5144.0 ppb	14:33:51
2	Ca 317.933Radial†	16636.1	15501.3	4999.7 µg/L	4999.7 ppb	14:33:51
2	Fe 238.204 Radial†	553.2	514.6	5056.4 µg/L	5056.4 ppb	14:34:11
2	K 766.490 Radial†	11719.0	10868.6	5352.2 µg/L	5352.2 ppb	14:33:51
2	Mg 279.077 IEC†	484.5	453.3	4968.1 µg/L	4968.1 ppb	14:34:11
2	Na 589.592 Radial†	27703.2	26247.2	11514 µg/L	11514 ppb	14:33:51
2	Sr 421.552†	102389.0	97640.7	527.58 µg/L	527.58 ppb	14:33:51
2	Sc 361.383	1935296.9	1935296.9	100.71 %		14:35:18
2	Y 371.029	1344596.0	1344596.0	100.49 %		14:35:18
2	Ag 328.068†	61437.7	61571.1	509.53 µg/L	509.53 ppb	14:35:24
2	As 188.979†	355.7	356.4	532.12 µg/L	532.12 ppb	14:35:44
2	B 249.677†	11179.6	10744.0	510.54 µg/L	510.54 ppb	14:35:24
2	Ba 233.527†	23221.8	23088.7	520.41 µg/L	520.41 ppb	14:35:24
2	Be 313.107†	856828.6	852298.3	517.62 µg/L	517.62 ppb	14:35:18
2	Cd 226.502†	21424.6	21452.8	521.74 µg/L	521.74 ppb	14:35:24
2	Co 228.616†	11968.3	11864.6	520.81 µg/L	520.81 ppb	14:35:24
2	Cr 267.716†	23878.3	23634.9	528.73 µg/L	528.73 ppb	14:35:24
2	Cu 324.752†	80519.2	76360.7	518.53 µg/L	518.53 ppb	14:35:24
2	Mn 257.610†	164599.9	164219.1	526.61 µg/L	526.61 ppb	14:35:18
2	Mo 202.031†	5392.0	5345.9	528.55 µg/L	528.55 ppb	14:35:44
2	Ni 231.604†	9638.2	9203.1	522.35 µg/L	522.35 ppb	14:35:24
2	P 214.914†	1869.3	1549.1	2594.7 µg/L	2594.7 ppb	14:35:44
2	Pb 220.353†	2065.9	1995.2	527.58 µg/L	527.58 ppb	14:35:44

2	S 181.975 Axial†	355.5	329.5	1047.8 µg/L	1047.8 ppb	14:35:44
2	Sb 206.836†	608.1	576.2	523.37 µg/L	523.37 ppb	14:35:44
2	Se 196.026†	557.9	533.4	536.31 µg/L	536.31 ppb	14:35:44
2	SiO2†	31345.7	28788.2	5440.2 µg/L	5440.2 ppb	14:35:24
2	Si 251.611†	36638.5	35981.7	2547.5 µg/L	2547.5 ppb	14:35:24
2	Sn 189.927†	1354.8	1343.3	522.26 µg/L	522.26 ppb	14:35:44
2	Ti 334.940†	212948.6	212125.7	511.31 µg/L	511.31 ppb	14:35:18
2	Tl 190.801†	483.3	515.9	527.10 µg/L	527.10 ppb	14:35:44
2	U 409.014†	5773.7	5763.0	515.95 µg/L	515.95 ppb	14:35:24
2	V 292.402†	43359.9	42956.5	528.81 µg/L	528.81 ppb	14:35:24
2	Zn 213.857†	23208.8	22454.1	516.55 µg/L	516.55 ppb	14:35:24
3	Sc RADIAL	105142.6	105142.6	105 %		14:34:17
3	Al 396.153Radial†	11054.6	10950.8	5162.7 µg/L	5162.7 ppb	14:34:17
3	Ca 317.933Radial†	16724.8	15574.3	5023.3 µg/L	5023.3 ppb	14:34:17
3	Fe 238.204 Radial†	553.8	514.8	5057.9 µg/L	5057.9 ppb	14:34:37
3	K 766.490 Radial†	11679.5	10822.8	5329.6 µg/L	5329.6 ppb	14:34:17
3	Mg 279.077 IEC†	490.5	458.7	5025.6 µg/L	5025.6 ppb	14:34:37
3	Na 589.592 Radial†	27672.6	26198.7	11493 µg/L	11493 ppb	14:34:17
3	Sr 421.552†	102434.3	97612.9	527.43 µg/L	527.43 ppb	14:34:17
3	Sc 361.383	1936642.9	1936642.9	100.78 %		14:35:51
3	Y 371.029	1343957.3	1343957.3	100.44 %		14:35:51
3	Ag 328.068†	59411.8	59518.6	492.46 µg/L	492.46 ppb	14:35:56
3	As 188.979†	317.0	317.7	474.31 µg/L	474.31 ppb	14:36:16
3	B 249.677†	10843.8	10403.0	494.22 µg/L	494.22 ppb	14:35:56
3	Ba 233.527†	22077.7	21937.4	494.45 µg/L	494.45 ppb	14:35:56
3	Be 313.107†	831627.2	826701.1	502.07 µg/L	502.07 ppb	14:35:51
3	Cd 226.502†	20332.0	20353.8	494.98 µg/L	494.98 ppb	14:35:56
3	Co 228.616†	11294.1	11187.4	491.02 µg/L	491.02 ppb	14:35:56
3	Cr 267.716†	22074.5	21828.7	488.33 µg/L	488.33 ppb	14:35:56
3	Cu 324.752†	76675.2	72491.0	492.30 µg/L	492.30 ppb	14:35:56
3	Mn 257.610†	160185.3	159725.1	512.19 µg/L	512.19 ppb	14:35:51
3	Mo 202.031†	4735.0	4690.3	463.76 µg/L	463.76 ppb	14:36:16
3	Ni 231.604†	9127.0	8689.2	493.19 µg/L	493.19 ppb	14:35:56
3	P 214.914†	1704.8	1384.5	2315.5 µg/L	2315.5 ppb	14:36:16
3	Pb 220.353†	1871.7	1801.1	476.19 µg/L	476.19 ppb	14:36:16
3	S 181.975 Axial†	324.7	298.6	949.61 µg/L	949.61 ppb	14:36:16
3	Sb 206.836†	540.6	508.8	461.91 µg/L	461.91 ppb	14:36:16
3	Se 196.026†	514.4	489.8	493.37 µg/L	493.37 ppb	14:36:16
3	SiO2†	30193.0	27622.7	5219.9 µg/L	5219.9 ppb	14:35:56
3	Si 251.611†	35219.6	34548.5	2446.0 µg/L	2446.0 ppb	14:35:56
3	Sn 189.927†	1170.4	1159.4	449.98 µg/L	449.98 ppb	14:36:16
3	Ti 334.940†	206294.8	205376.6	495.03 µg/L	495.03 ppb	14:35:51
3	Tl 190.801†	448.0	480.6	491.20 µg/L	491.20 ppb	14:36:16
3	U 409.014†	5457.5	5445.3	487.44 µg/L	487.44 ppb	14:35:56
3	V 292.402†	40817.8	40404.1	497.06 µg/L	497.06 ppb	14:35:56
3	Zn 213.857†	22015.5	21254.0	488.92 µg/L	488.92 ppb	14:35:56

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1933527.3	100.62 %	0.223			0.22%
Sc RADIAL	105152.3	105 %	0.1			0.09%
Y 371.029	1342300.8	100.32 %	0.257			0.26%
Ag 328.068†	60983.1	504.63 µg/L	10.605	504.63 ppb	10.605	2.10%
QC value within limits for Ag 328.068 Recovery = 100.93%						
Al 396.153Radial†	10916.7	5145.7 µg/L	16.21	5145.7 ppb	16.21	0.32%
QC value within limits for Al 396.153Radial Recovery = 102.91%						
As 188.979†	343.7	513.23 µg/L	33.706	513.23 ppb	33.706	6.57%
QC value within limits for As 188.979 Recovery = 102.65%						
B 249.677†	10640.3	505.58 µg/L	9.864	505.58 ppb	9.864	1.95%
QC value within limits for B 249.677 Recovery = 101.12%						
Ba 233.527†	22700.8	511.66 µg/L	14.909	511.66 ppb	14.909	2.91%
QC value within limits for Ba 233.527 Recovery = 102.33%						
Be 313.107†	843081.0	512.02 µg/L	8.637	512.02 ppb	8.637	1.69%
QC value within limits for Be 313.107 Recovery = 102.40%						
Ca 317.933Radial†	15493.7	4997.3 µg/L	27.30	4997.3 ppb	27.30	0.55%
QC value within limits for Ca 317.933Radial Recovery = 99.95%						
Cd 226.502†	21112.2	513.45 µg/L	16.020	513.45 ppb	16.020	3.12%
QC value within limits for Cd 226.502 Recovery = 102.69%						
Co 228.616†	11648.5	511.31 µg/L	17.575	511.31 ppb	17.575	3.44%

QC value within limits for Co 228.616	Recovery = 102.26%			
Cr 267.716†	23033.5	515.27 µg/L	23.338	4.53%
QC value within limits for Cr 267.716	Recovery = 103.05%			
Cu 324.752†	75207.4	510.71 µg/L	16.006	3.13%
QC value within limits for Cu 324.752	Recovery = 102.14%			
Fe 238.204 Radial†	514.6	5056.3 µg/L	1.53	0.03%
QC value within limits for Fe 238.204 Radial	Recovery = 101.13%			
K 766.490 Radial†	10860.9	5348.4 µg/L	17.17	0.32%
QC value within limits for K 766.490 Radial	Recovery = 106.97%			
Mg 279.077 IEC†	454.7	4982.5 µg/L	37.95	0.76%
QC value within limits for Mg 279.077 IEC	Recovery = 99.65%			
Mn 257.610†	162664.0	521.62 µg/L	8.169	1.57%
QC value within limits for Mn 257.610	Recovery = 104.32%			
Mo 202.031†	5139.2	508.13 µg/L	38.464	7.57%
QC value within limits for Mo 202.031	Recovery = 101.63%			
Na 589.592 Radial†	26175.8	11482 µg/L	37.4	0.33%
QC value greater than the upper limit for Na 589.592 Radial	Recovery = 114.82%			
Ni 231.604†	9043.0	513.27 µg/L	17.415	3.39%
QC value within limits for Ni 231.604	Recovery = 102.65%			
P 214.914†	1497.1	2506.4 µg/L	165.50	6.60%
QC value within limits for P 214.914	Recovery = 100.26%			
Pb 220.353†	1929.3	510.12 µg/L	29.390	5.76%
QC value within limits for Pb 220.353	Recovery = 102.02%			
S 181.975 Axial†	321.3	1021.9 µg/L	63.45	6.21%
QC value within limits for S 181.975 Axial	Recovery = 102.19%			
Sb 206.836†	552.4	501.73 µg/L	34.524	6.88%
QC value within limits for Sb 206.836	Recovery = 100.35%			
Se 196.026†	516.0	519.15 µg/L	22.727	4.38%
QC value within limits for Se 196.026	Recovery = 103.83%			
SiO2†	28427.8	5372.1 µg/L	131.99	2.46%
QC value within limits for SiO2	Recovery = 100.46%			
Si 251.611†	35521.3	2514.9 µg/L	59.68	2.37%
QC value within limits for Si 251.611	Recovery = 100.59%			
Sn 189.927†	1284.3	499.08 µg/L	42.548	8.53%
QC value within limits for Sn 189.927	Recovery = 99.82%			
Sr 421.552†	97449.4	526.55 µg/L	1.662	0.32%
QC value within limits for Sr 421.552	Recovery = 105.31%			
Ti 334.940†	209802.9	505.71 µg/L	9.252	1.83%
QC value within limits for Ti 334.940	Recovery = 101.14%			
Tl 190.801†	505.1	516.07 µg/L	21.585	4.18%
QC value within limits for Tl 190.801	Recovery = 103.21%			
U 409.014†	5669.5	507.55 µg/L	17.501	3.45%
QC value within limits for U 409.014	Recovery = 101.51%			
V 292.402†	42142.8	518.69 µg/L	18.745	3.61%
QC value within limits for V 292.402	Recovery = 103.74%			
Zn 213.857†	22105.9	508.54 µg/L	17.087	3.36%
QC value within limits for Zn 213.857	Recovery = 101.71%			
QC Failed. Continue with analysis.				

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/5/2010 14:36:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	104150.5	104150.5	104 %		14:36:56
1	Al 396.153Radial†	-410.4	5.0	2.3477 µg/L	2.3477 ppb	14:36:56
1	Ca 317.933Radial†	388.6	-13.2	-4.2652 µg/L	-4.2652 ppb	14:37:16
1	Fe 238.204 Radial†	16.7	2.4	23.392 µg/L	23.392 ppb	14:37:16
1	K 766.490 Radial†	325.4	-10.5	-5.1612 µg/L	-5.1612 ppb	14:36:56
1	Mg 279.077 IEC†	8.2	-1.5	-16.392 µg/L	-16.392 ppb	14:37:16
1	Na 589.592 Radial†	1627.3	1356.2	594.93 µg/L	594.93 ppb	14:36:56
1	Sr 421.552†	135.0	-19.1	-0.1031 µg/L	-0.1031 ppb	14:36:56
1	Sc 361.383	1935667.5	1935667.5	100.73 %		14:38:15
1	Y 371.029	1347360.7	1347360.7	100.70 %		14:38:15
1	Ag 328.068†	-507.8	63.7	0.5275 µg/L	0.5275 ppb	14:38:20
1	As 188.979†	-3.1	0.1	0.1500 µg/L	0.1500 ppb	14:38:40
1	B 249.677†	420.7	61.0	2.8990 µg/L	2.8990 ppb	14:38:20
1	Ba 233.527†	-28.7	2.6	0.0589 µg/L	0.0589 ppb	14:38:40
1	Be 313.107†	-1444.4	93.8	0.0570 µg/L	0.0570 ppb	14:38:20
1	Cd 226.502†	-181.4	-0.5	-0.0134 µg/L	-0.0134 ppb	14:38:40
1	Co 228.616†	12.7	-6.5	-0.2840 µg/L	-0.2840 ppb	14:38:40
1	Cr 267.716†	112.0	36.6	0.8186 µg/L	0.8186 ppb	14:38:20
1	Cu 324.752†	3489.9	-124.7	-0.8406 µg/L	-0.8406 ppb	14:38:20
1	Mn 257.610†	-651.7	136.0	0.4385 µg/L	0.4385 ppb	14:38:20
1	Mo 202.031†	17.4	9.3	0.9194 µg/L	0.9194 ppb	14:38:40
1	Ni 231.604†	380.5	10.8	0.6145 µg/L	0.6145 ppb	14:38:40
1	P 214.914†	303.6	-5.6	-9.5886 µg/L	-9.5886 ppb	14:38:40
1	Pb 220.353†	50.2	-6.3	-1.6458 µg/L	-1.6458 ppb	14:38:40
1	S 181.975 Axial†	21.7	-2.0	-6.4711 µg/L	-6.4711 ppb	14:38:40
1	Sb 206.836†	25.4	-2.4	-2.1444 µg/L	-2.1444 ppb	14:38:40
1	Se 196.026†	19.9	-0.8	-0.7105 µg/L	-0.7105 ppb	14:38:40
1	SiO2†	2396.1	42.7	8.0754 µg/L	8.0754 ppb	14:38:20
1	Si 251.611†	389.3	-11.3	-0.8003 µg/L	-0.8003 ppb	14:38:40
1	Sn 189.927†	-3.4	-5.3	-2.1143 µg/L	-2.1143 ppb	14:38:40
1	Ti 334.940†	-656.3	31.2	0.0766 µg/L	0.0766 ppb	14:38:20
1	Tl 190.801†	-40.2	-3.8	-3.8484 µg/L	-3.8484 ppb	14:38:40
1	U 409.014†	-50.8	-20.3	-1.8243 µg/L	-1.8243 ppb	14:38:20
1	V 292.402†	127.7	29.9	0.3671 µg/L	0.3671 ppb	14:38:20
1	Zn 213.857†	594.3	-0.6	-0.0155 µg/L	-0.0155 ppb	14:38:40
2	Sc RADIAL	103801.2	103801.2	103 %		14:37:22
2	Al 396.153Radial†	-367.4	45.2	21.341 µg/L	21.341 ppb	14:37:22
2	Ca 317.933Radial†	388.4	-12.1	-3.9164 µg/L	-3.9164 ppb	14:37:42
2	Fe 238.204 Radial†	18.5	4.1	40.375 µg/L	40.375 ppb	14:37:42
2	K 766.490 Radial†	341.2	5.9	2.9051 µg/L	2.9051 ppb	14:37:22
2	Mg 279.077 IEC†	9.3	-0.4	-4.8949 µg/L	-4.8949 ppb	14:37:42
2	Na 589.592 Radial†	1706.6	1438.1	630.86 µg/L	630.86 ppb	14:37:22
2	Sr 421.552†	170.4	15.6	0.0841 µg/L	0.0841 ppb	14:37:22
2	Sc 361.383	1931084.3	1931084.3	100.49 %		14:38:46
2	Y 371.029	1345500.4	1345500.4	100.56 %		14:38:46
2	Ag 328.068†	-527.1	43.4	0.3574 µg/L	0.3574 ppb	14:38:51
2	As 188.979†	-4.1	-0.9	-1.2914 µg/L	-1.2914 ppb	14:39:12
2	B 249.677†	401.4	42.9	2.0246 µg/L	2.0246 ppb	14:38:51
2	Ba 233.527†	-32.0	-0.8	-0.0186 µg/L	-0.0186 ppb	14:39:12
2	Be 313.107†	-1291.4	242.7	0.1473 µg/L	0.1473 ppb	14:38:51
2	Cd 226.502†	-181.4	-0.8	-0.0244 µg/L	-0.0244 ppb	14:39:12
2	Co 228.616†	25.4	6.2	0.2712 µg/L	0.2712 ppb	14:39:12
2	Cr 267.716†	81.7	6.8	0.1507 µg/L	0.1507 ppb	14:38:51
2	Cu 324.752†	3501.5	-104.8	-0.7029 µg/L	-0.7029 ppb	14:38:51
2	Mn 257.610†	-660.7	125.5	0.4051 µg/L	0.4051 ppb	14:38:51
2	Mo 202.031†	15.9	7.8	0.7754 µg/L	0.7754 ppb	14:39:12
2	Ni 231.604†	375.2	6.4	0.3650 µg/L	0.3650 ppb	14:39:12
2	P 214.914†	308.3	-0.3	-0.4962 µg/L	-0.4962 ppb	14:39:12
2	Pb 220.353†	57.7	1.3	0.3543 µg/L	0.3543 ppb	14:39:12

2	S 181.975 Axial†	22.9	-0.7	-2.3614 µg/L	-2.3614 ppb	14:39:12
2	Sb 206.836†	24.6	-3.1	-2.7663 µg/L	-2.7663 ppb	14:39:12
2	Se 196.026†	20.7	0.0	0.1531 µg/L	0.1531 ppb	14:39:12
2	SiO2†	2369.4	21.9	4.1315 µg/L	4.1315 ppb	14:38:51
2	Si 251.611†	396.4	-3.3	-0.2345 µg/L	-0.2345 ppb	14:39:12
2	Sn 189.927†	-4.6	-6.5	-2.6066 µg/L	-2.6066 ppb	14:39:12
2	Ti 334.940†	-531.7	153.6	0.3708 µg/L	0.3708 ppb	14:38:51
2	Tl 190.801†	-34.0	2.3	2.3119 µg/L	2.3119 ppb	14:39:12
2	U 409.014†	-15.6	14.6	1.3080 µg/L	1.3080 ppb	14:38:51
2	V 292.402†	70.9	-26.3	-0.3208 µg/L	-0.3208 ppb	14:38:51
2	Zn 213.857†	584.3	-9.2	-0.2158 µg/L	-0.2158 ppb	14:39:12
3	Sc RADIAL	103852.1	103852.1	103 %		14:37:47
3	Al 396.153Radial†	-397.6	16.2	7.6529 µg/L	7.6529 ppb	14:37:47
3	Ca 317.933Radial†	383.6	-16.9	-5.4637 µg/L	-5.4637 ppb	14:38:07
3	Fe 238.204 Radial†	18.2	3.9	37.848 µg/L	37.848 ppb	14:38:07
3	K 766.490 Radial†	290.2	-43.6	-21.471 µg/L	-21.471 ppb	14:37:47
3	Mg 279.077 IEC†	11.8	2.0	22.181 µg/L	22.181 ppb	14:38:07
3	Na 589.592 Radial†	1676.3	1408.1	617.67 µg/L	617.67 ppb	14:37:47
3	Sr 421.552†	164.1	9.5	0.0511 µg/L	0.0511 ppb	14:37:47
3	Sc 361.383	1945303.8	1945303.8	101.23 %		14:39:17
3	Y 371.029	1356455.8	1356455.8	101.38 %		14:39:17
3	Ag 328.068†	-538.6	35.9	0.2982 µg/L	0.2982 ppb	14:39:23
3	As 188.979†	-5.5	-2.3	-3.4006 µg/L	-3.4006 ppb	14:39:43
3	B 249.677†	383.0	21.7	1.0177 µg/L	1.0177 ppb	14:39:23
3	Ba 233.527†	-22.2	9.2	0.2064 µg/L	0.2064 ppb	14:39:43
3	Be 313.107†	-1436.5	108.8	0.0660 µg/L	0.0660 ppb	14:39:23
3	Cd 226.502†	-182.4	-0.5	-0.0151 µg/L	-0.0151 ppb	14:39:43
3	Co 228.616†	24.3	4.9	0.2154 µg/L	0.2154 ppb	14:39:43
3	Cr 267.716†	138.5	62.3	1.3920 µg/L	1.3920 ppb	14:39:23
3	Cu 324.752†	3544.3	-88.0	-0.5894 µg/L	-0.5894 ppb	14:39:23
3	Mn 257.610†	-661.5	129.5	0.4161 µg/L	0.4161 ppb	14:39:23
3	Mo 202.031†	18.1	9.9	0.9829 µg/L	0.9829 ppb	14:39:43
3	Ni 231.604†	384.1	12.6	0.7145 µg/L	0.7145 ppb	14:39:43
3	P 214.914†	303.5	-7.2	-12.302 µg/L	-12.302 ppb	14:39:43
3	Pb 220.353†	48.6	-8.1	-2.1408 µg/L	-2.1408 ppb	14:39:43
3	S 181.975 Axial†	21.7	-2.1	-6.6911 µg/L	-6.6911 ppb	14:39:43
3	Sb 206.836†	28.7	0.8	0.7301 µg/L	0.7301 ppb	14:39:43
3	Se 196.026†	15.8	-5.0	-4.7989 µg/L	-4.7989 ppb	14:39:43
3	SiO2†	2340.8	-23.7	-4.4741 µg/L	-4.4741 ppb	14:39:23
3	Si 251.611†	393.8	-8.8	-0.6210 µg/L	-0.6210 ppb	14:39:43
3	Sn 189.927†	-3.9	-5.8	-2.3177 µg/L	-2.3177 ppb	14:39:43
3	Ti 334.940†	-608.6	81.5	0.1948 µg/L	0.1948 ppb	14:39:23
3	Tl 190.801†	-37.9	-1.3	-1.3342 µg/L	-1.3342 ppb	14:39:43
3	U 409.014†	40.6	70.2	6.2936 µg/L	6.2936 ppb	14:39:23
3	V 292.402†	106.7	8.5	0.1138 µg/L	0.1138 ppb	14:39:23
3	Zn 213.857†	581.9	-15.8	-0.3707 µg/L	-0.3707 ppb	14:39:43

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1937351.9	100.82 %	0.378			0.37%
Sc RADIAL	103934.6	104 %	0.2			0.18%
Y 371.029	1349772.3	100.88 %	0.438			0.43%
Ag 328.068†	47.7	0.3944 µg/L	0.11902	0.3944 ppb	0.11902	30.18%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	22.2	10.447 µg/L	9.8001	10.447 ppb	9.8001	93.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.5140 µg/L	1.78574	-1.5140 ppb	1.78574	117.95%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	41.9	1.9805 µg/L	0.94143	1.9805 ppb	0.94143	47.54%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.7	0.0823 µg/L	0.11431	0.0823 ppb	0.11431	138.98%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	148.4	0.0901 µg/L	0.04974	0.0901 ppb	0.04974	55.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-14.1	-4.5484 µg/L	0.81161	-4.5484 ppb	0.81161	17.84%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-0.6	-0.0177 µg/L	0.00590	-0.0177 ppb	0.00590	33.44%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.5	0.0675 µg/L	0.30573	0.0675 ppb	0.30573	452.85%



QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† 35.2 0.7871 µg/L 0.62123 0.7871 ppb 0.62123 78.92%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -105.8 -0.7110 µg/L 0.12582 -0.7110 ppb 0.12582 17.70%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 3.5 33.872 µg/L 9.1630 33.872 ppb 9.1630 27.05%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† -16.1 -7.9091 µg/L 12.41838 -7.9091 ppb 12.41838 157.01%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 0.0 0.2982 µg/L 19.80373 0.2982 ppb 19.80373 >999.9%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† 130.3 0.4199 µg/L 0.01702 0.4199 ppb 0.01702 4.05%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† 9.0 0.8926 µg/L 0.10631 0.8926 ppb 0.10631 11.91%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† 1400.8 614.49 µg/L 18.178 614.49 ppb 18.178 2.96%

QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 9.9 0.5646 µg/L 0.18000 0.5646 ppb 0.18000 31.88%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -4.4 -7.4621 µg/L 6.18331 -7.4621 ppb 6.18331 82.86%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -4.3 -1.1441 µg/L 1.32103 -1.1441 ppb 1.32103 115.46%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† -1.6 -5.1745 µg/L 2.43874 -5.1745 ppb 2.43874 47.13%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† -1.5 -1.3935 µg/L 1.86527 -1.3935 ppb 1.86527 133.85%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -1.9 -1.7854 µg/L 2.64521 -1.7854 ppb 2.64521 148.16%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2† 13.6 2.5776 µg/L 6.41739 2.5776 ppb 6.41739 248.97%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611† -7.8 -0.5519 µg/L 0.28915 -0.5519 ppb 0.28915 52.39%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† -5.9 -2.3462 µg/L 0.24741 -2.3462 ppb 0.24741 10.55%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 2.0 0.0107 µg/L 0.09996 0.0107 ppb 0.09996 933.66%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† 88.8 0.2141 µg/L 0.14803 0.2141 ppb 0.14803 69.15%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -1.0 -0.9569 µg/L 3.09744 -0.9569 ppb 3.09744 323.71%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 21.5 1.9258 µg/L 4.09402 1.9258 ppb 4.09402 212.59%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† 4.0 0.0534 µg/L 0.34794 0.0534 ppb 0.34794 651.95%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† -8.5 -0.2007 µg/L 0.17805 -0.2007 ppb 0.17805 88.73%

QC value within limits for Zn 213.857 Recovery = Not calculated

QC Failed. Continue with analysis.

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Saturday, March 06, 2010 12:09:34

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.661

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	4777.6	4777.599	78.513	1.6
Mg	24.0	48634.0	48634.045	234.209	0.5
Co	58.9	90810.3	90810.329	749.980	0.8
Rh	102.9	182759.1	182759.120	2080.782	1.1
In	114.9	251410.0	251410.017	1585.778	0.6
Pb	208.0	269712.7	269712.731	1579.796	0.6
[> Ba	137.9	240159.5	240159.536	2766.790	1.2
[ Ba++	69.0	3561.9	0.015	0.000	2.0
[> Ce	139.9	293604.7	293604.702	1492.439	0.5
[ CeO	155.9	6296.5	0.021	0.000	1.8
Bkgd	220.0	22.2	22.200	3.915	17.6

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.50	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	6.5	5313.7
Co	59	17	7.3	86868.6
In	115	17	8.0	235041.8

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	585	2050	0.658
Be	9.0	9.0	2046	2075	0.619
Mg	24.0	24.0	5699	2080	0.646
Mg	25.0	25.0	5927	2080	0.613
Mg	26.0	25.9	6172	2080	0.645
Co	58.9	59.0	14193	2110	0.623
Rh	102.9	102.9	24880	2160	0.639
In	114.9	114.9	27795	2180	0.649
Ce	139.9	139.9	33866	2200	0.642
Pb	206.0	206.0	49948	2295	0.612
Pb	207.0	207.0	50159	2240	0.638
Pb	208.0	208.0	50451	2265	0.700
U	238.1	238.1	57734	2275	0.727

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, March 06, 2010 17:56:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\Blank.588

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		25	
[>	Sc	45		ug/L		1073161	
[	Ni	60		ug/L		112	
[>	Ge	74		ug/L		435356	
	As	75		ug/L		163	
	Se	77		ug/L		11458	
	Se	82		ug/L		25	
[	Kr	83		ug/L		147	
[>	Lu	175		ug/L		535992	
[	Tl	205		ug/L		1624	

Sample ID: Blank

Report Date/Time: Saturday, March 06, 2010 17:57:36

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Simple Linear	
Sc	45Linear Thru Zero	
Ni	60Simple Linear	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Simple Linear	

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, March 06, 2010 18:00:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI soil.mth

Dataset File: c:\elandata\Dataset\100305\Standard 1.589

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	1.021	5043	0.005
>	Sc	45		ug/L		1067474	1067473.727
[	Ni	60	10.000	ug/L	4.061	16253	0.015
>	Ge	74		ug/L		436222	436221.876
	As	75	10.000	ug/L	5.664	13156	0.030
	Se	77		ug/L		9892	-0.004
	Se	82	10.000	ug/L	1.740	1279	0.003
[	Kr	83		ug/L		147	0.000
>	Lu	175		ug/L		546650	546650.026
[	Tl	205	10.000	ug/L	4.343	259921	0.473

Sample ID: Standard 1

Report Date/Time: Saturday, March 06, 2010 18:01:10

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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



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, March 06, 2010 18:04:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: c:\elandata\Dataset\100305\Standard 2.590

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.035	ug/L	5.273	48800	0.049
>	Sc	45		ug/L		1002681	1002680.729
[	Ni	60	100.015	ug/L	5.940	153943	0.154
[>	Ge	74		ug/L		409153	409152.890
	As	75	100.048	ug/L	5.622	127982	0.313
	Se	77		ug/L		17889	0.017
	Se	82	100.063	ug/L	7.654	12557	0.031
[	Kr	83		ug/L		175	0.000
[>	Lu	175		ug/L		522527	522527.390
[	Tl	205	99.820	ug/L	5.365	2087026	3.997

Sample ID: Standard 2

Report Date/Time: Saturday, March 06, 2010 18:04:45

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
[	Ni	60					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, March 06, 2010 18:07:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 1.591

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.560	ug/L	1.619	25940	0.025
[>	Sc	45		ug/L		1032477	1032476.981
[	Ni	60	51.640	ug/L	3.161	81999	0.079
[>	Ge	74		ug/L		428050	428049.617
[	As	75	48.276	ug/L	1.124	64779	0.151
[	Se	77		ug/L		13478	0.005
[	Se	82	50.928	ug/L	3.071	6712	0.016
[	Kr	83		ug/L		137	-0.000
[>	Lu	175		ug/L		538453	538452.589
[	Tl	205	54.046	ug/L	1.125	1166816	2.164

Sample ID: QC Std 1

Report Date/Time: Saturday, March 06, 2010 18:08:21

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	103.119					
>	Sc	45		96.2				
[	Ni	60	103.279					
>	Ge	74		98.3				
	As	75	96.551					
	Se	77						
	Se	82	101.856					
[	Kr	83						
>	Lu	175		100.5				
[	Tl	205	108.091					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, March 06, 2010 18:11:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 2.592

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.006	ug/L	159.410	27	0.000
[>	Sc	45		ug/L		1050468	1050467.661
[	Ni	60	0.001	ug/L	186.948	112	0.000
[>	Ge	74		ug/L		420487	420486.781
	As	75	0.081	ug/L	262.355	263	0.000
	Se	77		ug/L		11568	0.001
	Se	82	0.005	ug/L	3351.771	25	0.000
[	Kr	83		ug/L		149	0.000
[>	Lu	175		ug/L		529230	529230.381
[	Tl	205	0.078	ug/L	10.194	3252	0.003

Sample ID: QC Std 2

Report Date/Time: Saturday, March 06, 2010 18:12:01

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			97.9			
[	Ni	60						
[>	Ge	74			96.6			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			98.7			
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, March 06, 2010 18:14:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 3.593

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.542	ug/L	0.582	306	0.000
>	Sc	45		ug/L		1067728	1067728.134
[	Ni	60	2.107	ug/L	2.459	3567	0.003
[>	Ge	74		ug/L		431604	431604.329
	As	75	5.421	ug/L	6.738	7477	0.017
	Se	77		ug/L		9582	-0.004
	Se	82	5.572	ug/L	4.657	763	0.002
[	Kr	83		ug/L		130	-0.000
[>	Lu	175		ug/L		542770	542770.048
[	Tl	205	1.272	ug/L	2.923	29272	0.051

Sample ID: QC Std 3

Report Date/Time: Saturday, March 06, 2010 18:15:37

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	108.394				
[>	Sc	45		99.5			
[	Ni	60	105.358				
[>	Ge	74		99.1			
	As	75	108.425				
	Se	77					
	Se	82	111.449				
[	Kr	83					
[>	Lu	175		101.3			
[	Tl	205	127.163				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, March 06, 2010 18:18:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 4.594

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.094	ug/L	24.005	64	0.000
> Sc	45		ug/L		928184	928183.974
[ Ni	60	3.237	ug/L	4.381	4712	0.005
[> Ge	74		ug/L		386748	386747.813
As	75	0.028	ug/L	1757.525	181	0.000
Se	77		ug/L		8850	-0.003
Se	82	-1.655	ug/L	39.731	-174	-0.001
[ Kr	83		ug/L		355	0.001
[> Lu	175		ug/L		502256	502255.959
[ Tl	205	0.002	ug/L	125.303	1568	0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, March 06, 2010 18:19:14

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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	
Ti	205Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			86.5			
[	Ni	60	97.787					
[>	Ge	74			88.8			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			93.7			
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, March 06, 2010 18:22:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 5.595

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.207	ug/L	2.158	8478	0.009
[>	Sc	45		ug/L		904159	904158.700
[	Ni	60	22.827	ug/L	0.712	31803	0.035
[>	Ge	74		ug/L		378821	378820.753
	As	75	20.493	ug/L	5.018	24417	0.064
	Se	77		ug/L		11943	0.005
	Se	82	19.154	ug/L	2.160	2248	0.006
[	Kr	83		ug/L		361	0.001
[>	Lu	175		ug/L		483500	483500.050
[	Tl	205	21.682	ug/L	0.414	421222	0.868

Sample ID: QC Std 5

Report Date/Time: Saturday, March 06, 2010 18:22:51

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	96.036				
>	Sc	45		84.3			
[	Ni	60	97.926				
[>	Ge	74		87.0			
	As	75	102.463				
	Se	77					
	Se	82	95.771				
[	Kr	83					
[>	Lu	175		90.2			
[	Tl	205	108.411				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 06, 2010 18:25:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 6.596

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.638	ug/L	0.767	24957	0.025
>	Sc	45		ug/L		991662	991661.665
[	Ni	60	51.424	ug/L	0.761	78449	0.079
[ >	Ge	74		ug/L		412309	412309.236
	As	75	47.888	ug/L	2.456	61904	0.150
	Se	77		ug/L		13238	0.006
	Se	82	49.313	ug/L	1.498	6261	0.015
[	Kr	83		ug/L		148	0.000
[ >	Lu	175		ug/L		532439	532439.195
[	Tl	205	53.718	ug/L	1.484	1146718	2.151

Sample ID: QC Std 6

Report Date/Time: Saturday, March 06, 2010 18:26:29

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	103.275				
>	Sc	45		92.4			
[	Ni	60	102.847				
[>	Ge	74		94.7			
	As	75	95.776				
	Se	77					
	Se	82	98.626				
[	Kr	83					
[>	Lu	175		99.3			
[	Tl	205	107.435				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 06, 2010 18:29:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 7.597

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.011		ug/L	59.338	29	0.000
[>	Sc	45			ug/L		1018947	1018946.596
[	Ni	60	-0.004		ug/L	335.527	100	-0.000
[>	Ge	74			ug/L		420237	420237.374
	As	75	-0.282		ug/L	130.987	-213	-0.001
	Se	77			ug/L		11789	0.002
	Se	82	-0.103		ug/L	122.112	11	-0.000
[	Kr	83			ug/L		132	-0.000
[>	Lu	175			ug/L		539064	539064.361
[	Tl	205	0.086		ug/L	2.545	3493	0.003

Sample ID: QC Std 7

Report Date/Time: Saturday, March 06, 2010 18:30:09

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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	0.9998



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		94.9			
[	Ni	60					
[>	Ge	74		96.5			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		100.6			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041611

Sample Date/Time: Saturday, March 06, 2010 18:33:06

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 952553|2|ba|

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: c:\elandata\Dataset\100305\1202041611.598

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
{	Be	9	-0.017	ug/L	25.729	15	-0.000
>	Sc	45		ug/L		1056304	1056304.422
	Ni	60	0.041	ug/L	21.710	177	0.000
[>	Ge	74		ug/L		420629	420628.753
	As	75	0.160	ug/L	294.154	375	0.001
	Se	77		ug/L		6499	-0.011
	Se	82	0.463	ug/L	34.915	84	0.000
	Kr	83		ug/L		143	0.000
[>	Lu	175		ug/L		543392	543392.175
	Tl	205	0.018	ug/L	27.433	2037	0.001

Sample ID: 1202041611

Report Date/Time: Saturday, March 06, 2010 18:33:44

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		98.4			
[	Ni	60					
[>	Ge	74		96.6			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		101.4			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041616

Sample Date/Time: Saturday, March 06, 2010 18:36:42

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 952553|40|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\1202041616.599

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	20.141	ug/L	3.302	9953	0.010
[>	Sc	45		ug/L		1012982	1012981.942
[	Ni	60	35.644	ug/L	4.130	55549	0.055
[>	Ge	74		ug/L		419345	419344.825
	As	75	26.970	ug/L	3.067	35535	0.084
	Se	77		ug/L		14637	0.009
!	Se	82	73.282	ug/L	2.052	9452	0.022
[	Kr	83		ug/L		150	0.000
[>	Lu	175		ug/L		535132	535131.934
[	Tl	205	36.045	ug/L	0.907	773904	1.443

Sample ID: 1202041616

Report Date/Time: Saturday, March 06, 2010 18:37:19

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
[>	Sc	45			94.4			
[	Ni	60						
[>	Ge	74			96.3			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			99.8			
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246554001

Sample Date/Time: Saturday, March 06, 2010 18:40:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|ba|

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100305\246554001.600

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	1.089	ug/L	4.318	558	0.001
] > Sc	45		ug/L		1008999	1008999.128
[ Ni	60	5.733	ug/L	2.554	8993	0.009
[ > Ge	74		ug/L		406231	406230.693
As	75	1.544	ug/L	9.945	2114	0.005
Se	77		ug/L		5347	-0.013
Se	82	0.232	ug/L	143.890	53	0.000
[ Kr	83		ug/L		267	0.000
[ > Lu	175		ug/L		566549	566548.857
[ Tl	205	0.053	ug/L	0.673	2912	0.002

Sample ID: 246554001

Report Date/Time: Saturday, March 06, 2010 18:40:56

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
] >	Sc	45		94.0			
[	Ni	60					
] >	Ge	74		93.3			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
] >	Lu	175		105.7			
[	Tl	205					

### QC Out Of Limits

Measurement Type    Analyte                      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041612

Sample Date/Time: Saturday, March 06, 2010 18:43:54

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 952553|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\1202041612.601

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.149	ug/L	7.451	591	0.001
[>	Sc	45		ug/L		1015614	1015613.821
[	Ni	60	5.095	ug/L	0.736	8055	0.008
[>	Ge	74		ug/L		409849	409848.656
[	As	75	1.766	ug/L	17.289	2418	0.006
[	Se	77		ug/L		5370	-0.013
[	Se	82	0.265	ug/L	56.277	57	0.000
[	Kr	83		ug/L		283	0.000
[>	Lu	175		ug/L		574928	574928.154
[	Tl	205	0.022	ug/L	14.541	2237	0.001

Sample ID: 1202041612

Report Date/Time: Saturday, March 06, 2010 18:44:32

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.6			
[	Ni	60					
[>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		107.3			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041614

Sample Date/Time: Saturday, March 06, 2010 18:47:31

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 952553|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\1202041614.602

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	24.733	ug/L	1.741	12137	0.012
> Sc	45		ug/L		1005966	1005966.313
[ Ni	60	29.576	ug/L	1.994	45810	0.045
[> Ge	74		ug/L		404492	404492.344
As	75	39.034	ug/L	1.260	49526	0.122
Se	77		ug/L		5876	-0.012
Se	82	9.556	ug/L	3.874	1209	0.003
[ Kr	83		ug/L		293	0.000
[> Lu	175		ug/L		577770	577769.645
[ Tl	205	48.894	ug/L	1.648	1132676	1.958

Sample ID: 1202041614

Report Date/Time: Saturday, March 06, 2010 18:48:10

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
[>	Sc	45			93.7			
[	Ni	60						
[>	Ge	74			92.9			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			107.8			
[	Tl	205						

### QC Out Of Limits

Measurement Type    Analyte    Mass    Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202041615

Sample Date/Time: Saturday, March 06, 2010 18:51:09

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 952553|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\1202041615.603

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	23.637	ug/L	1.361	11330	0.012
[>	Sc	45		ug/L		982618	982617.699
[	Ni	60	27.774	ug/L	1.443	42024	0.043
[>	Ge	74		ug/L		392335	392335.056
[	As	75	37.215	ug/L	0.816	45809	0.116
[	Se	77		ug/L		5886	-0.011
[	Se	82	8.863	ug/L	7.249	1089	0.003
[	Kr	83		ug/L		261	0.000
[>	Lu	175		ug/L		559519	559519.161
[	Tl	205	48.685	ug/L	0.271	1092352	1.949

Sample ID: 1202041615

Report Date/Time: Saturday, March 06, 2010 18:51:48

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			91.6		
[	Ni	60					
[>	Ge	74			90.1		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			104.4		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041613

Sample Date/Time: Saturday, March 06, 2010 18:54:47

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 952553|10|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\1202041613.604

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.201	ug/L	19.179	116	0.000
>	Sc	45		ug/L		961425	961424.962
[	Ni	60	1.155	ug/L	2.776	1806	0.002
>	Ge	74		ug/L		397923	397922.733
	As	75	0.397	ug/L	73.565	641	0.001
	Se	77		ug/L		6672	-0.010
	Se	82	-0.057	ug/L	269.719	16	-0.000
[	Kr	83		ug/L		147	0.000
>	Lu	175		ug/L		529884	529884.414
[	Tl	205	-0.006	ug/L	25.977	1468	-0.000

Sample ID: 1202041613

Report Date/Time: Saturday, March 06, 2010 18:55:26

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		89.6			
[	Ni	60					
[>	Ge	74		91.4			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		98.9			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 06, 2010 18:58:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 6.605

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.554	ug/L	1.176	23348	0.025
[>	Sc	45		ug/L		947651	947651.423
[	Ni	60	52.012	ug/L	0.994	75824	0.080
[>	Ge	74		ug/L		402836	402836.042
	As	75	48.306	ug/L	1.966	61006	0.151
	Se	77		ug/L		13355	0.007
	Se	82	50.048	ug/L	1.727	6208	0.015
[	Kr	83		ug/L		134	-0.000
[>	Lu	175		ug/L		510962	510961.696
[	Tl	205	53.607	ug/L	1.141	1098292	2.146

Sample ID: QC Std 6

Report Date/Time: Saturday, March 06, 2010 18:59:04

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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	0.9998



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	101.108					
[>	Sc	45		88.3				
[	Ni	60	104.025					
[>	Ge	74		92.5				
	As	75	96.613					
	Se	77						
	Se	82	100.097					
[	Kr	83						
[>	Lu	175		95.3				
[	Tl	205	107.214					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 06, 2010 19:02:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 7.606

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.016	ug/L	70.664	30	0.000
[>	Sc	45		ug/L		968415	968415.018
[	Ni	60	-0.001	ug/L	443.201	99	-0.000
[>	Ge	74		ug/L		407114	407114.488
[	As	75	0.024	ug/L	2962.483	185	0.000
[	Se	77		ug/L		11542	0.002
[	Se	82	-0.056	ug/L	467.351	17	-0.000
[	Kr	83		ug/L		130	-0.000
[>	Lu	175		ug/L		512827	512827.397
[	Tl	205	0.055	ug/L	6.143	2679	0.002

Sample ID: QC Std 7

Report Date/Time: Saturday, March 06, 2010 19:02:44

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		90.2				
[	Ni	60						
[>	Ge	74		93.5				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						
[>	Lu	175		95.7				
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246554002

Sample Date/Time: Saturday, March 06, 2010 19:05:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\246554002.607

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.754	ug/L	2.977	1925	0.002
>	Sc	45		ug/L		1040253	1040252.869
[	Ni	60	28.662	ug/L	1.317	45912	0.044
[>	Ge	74		ug/L		384974	384974.365
	As	75	8.947	ug/L	7.616	10905	0.028
	Se	77		ug/L		4846	-0.014
	Se	82	-0.673	ug/L	10.042	-57	-0.000
[	Kr	83		ug/L		311	0.000
[>	Lu	175		ug/L		528629	528628.870
[	Tl	205	0.639	ug/L	2.639	15123	0.026

Sample ID: 246554002

Report Date/Time: Saturday, March 06, 2010 19:06:19

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			96.9		
[	Ni	60					
[>	Ge	74			88.4		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			98.6		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte      MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246554003

Sample Date/Time: Saturday, March 06, 2010 19:09:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|ba|

Method File: c:\elandata\MethodVanI soil.mth

Dataset File: c:\elandata\Dataset\100305\246554003.608

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	6.516	ug/L	3.245	3161	0.003
[>	Sc	45		ug/L		989329	989329.173
[	Ni	60	21.401	ug/L	1.610	32626	0.033
[>	Ge	74		ug/L		375963	375962.713
	As	75	5.441	ug/L	2.964	6539	0.017
	Se	77		ug/L		4501	-0.014
	Se	82	0.390	ug/L	8.336	67	0.000
[	Kr	83		ug/L		313	0.000
[>	Lu	175		ug/L		560306	560305.731
[	Tl	205	0.295	ug/L	1.733	8313	0.012

Sample ID: 246554003

Report Date/Time: Saturday, March 06, 2010 19:09:56

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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	0.9998

Sample ID: 246554003

Report Date/Time: Saturday, March 06, 2010 19:09:56

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### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		92.2			
[	Ni	60					
[>	Ge	74		86.4			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		104.5			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246554004

Sample Date/Time: Saturday, March 06, 2010 19:12:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\246554004.609

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	2.344	ug/L	1.995	1099	0.001
[> Sc	45		ug/L		944013	944013.216
[ Ni	60	3.429	ug/L	2.083	5072	0.005
[> Ge	74		ug/L		377643	377643.335
[ As	75	1.278	ug/L	34.248	1650	0.004
[ Se	77		ug/L		4552	-0.014
[ Se	82	0.193	ug/L	68.772	44	0.000
[ Kr	83		ug/L		242	0.000
[> Lu	175		ug/L		552380	552380.392
[ Tl	205	0.000	ug/L	5846.622	1675	0.000

Sample ID: 246554004

Report Date/Time: Saturday, March 06, 2010 19:13:32

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			88.0			
[	Ni	60						
[>	Ge	74			86.7			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			103.1			
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246554005

Sample Date/Time: Saturday, March 06, 2010 19:16:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|baj

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: c:\elandata\Dataset\100305\246554005.610

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.312	ug/L	1.744	3453	0.004
>	Sc	45		ug/L		963642	963641.762
[	Ni	60	9.309	ug/L	1.376	13882	0.014
[>	Ge	74		ug/L		375365	375364.580
	As	75	5.839	ug/L	4.344	6995	0.018
	Se	77		ug/L		4623	-0.014
	Se	82	0.271	ug/L	99.179	53	0.000
[	Kr	83		ug/L		270	0.000
[>	Lu	175		ug/L		551824	551824.461
[	Tl	205	0.159	ug/L	3.675	5182	0.006

Sample ID: 246554005

Report Date/Time: Saturday, March 06, 2010 19:17:10

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45			89.8			
[	Ni	60						
[>	Ge	74			86.2			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			103.0			
[	Tl	205						

### 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#5 - Summary Report

Sample ID: 246554006

Sample Date/Time: Saturday, March 06, 2010 19:20:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952553|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100305\246554006.611

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.084	ug/L	5.299	527	0.001
[>	Sc	45		ug/L		956306	956306.002
[	Ni	60	5.584	ug/L	1.170	8304	0.009
[>	Ge	74		ug/L		384107	384107.357
[	As	75	1.738	ug/L	9.319	2232	0.005
[	Se	77		ug/L		4717	-0.014
[	Se	82	0.248	ug/L	39.601	51	0.000
[	Kr	83		ug/L		251	0.000
[>	Lu	175		ug/L		552962	552962.321
[	Tl	205	0.025	ug/L	7.653	2225	0.001

Sample ID: 246554006

Report Date/Time: Saturday, March 06, 2010 19:20:48

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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			89.1		
[	Ni	60					
[>	Ge	74			88.2		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			103.2		
[	Tl	205					

### 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#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, March 06, 2010 19:23:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 6.612

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.376	ug/L	2.072	22782	0.026
[>	Sc	45		ug/L		892611	892611.223
[	Ni	60	52.338	ug/L	1.616	71860	0.080
[>	Ge	74		ug/L		382320	382319.915
	As	75	47.248	ug/L	0.957	56638	0.148
	Se	77		ug/L		12496	0.006
	Se	82	49.617	ug/L	0.510	5842	0.015
[	Kr	83		ug/L		142	0.000
[>	Lu	175		ug/L		504574	504573.947
[	Tl	205	53.577	ug/L	2.639	1083671	2.145

Sample ID: QC Std 6

Report Date/Time: Saturday, March 06, 2010 19:24:26

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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	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	104.753				
[>	Sc	45		83.2			
[	Ni	60	104.675				
[>	Ge	74		87.8			
[	As	75	94.497				
[	Se	77					
[	Se	82	99.235				
[	Kr	83					
[>	Lu	175		94.1			
[	Tl	205	107.154				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, March 06, 2010 19:27:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 7.613

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.025		ug/L	31.594	32	0.000
[>	Sc	45			ug/L		911539	911538.731
[	Ni	60	0.008		ug/L	151.556	106	0.000
[>	Ge	74			ug/L		375828	375828.399
[	As	75	-0.135		ug/L	280.009	-19	-0.000
[	Se	77			ug/L		10720	0.002
[	Se	82	0.055		ug/L	61.020	28	0.000
[	Kr	83			ug/L		117	-0.000
[>	Lu	175			ug/L		495285	495284.658
[	Tl	205	0.052		ug/L	14.565	2525	0.002

Sample ID: QC Std 7

Report Date/Time: Saturday, March 06, 2010 19:28:05

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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	0.9998



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			84.9			
[	Ni	60						
[>	Ge	74			86.3			
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						
[>	Lu	175			92.4			
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL  
 Method Description: 7471A, ILM04 ANALYST JXL1  
 Element: Hg

Date: 02/22/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 022210S1.SIF Results Data Set Name: 022210S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/22/2010  
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0042	0.0042	09:53:13	No
2			0.0041	0.0041	09:53:49	No
Mean:			0.0042			
SD :			0.0001			
%RSD:			1.8219			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/22/2010  
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0021	0.0063	09:55:11	No
2			0.0021	0.0063	09:55:46	No
Mean:			0.0021			
SD :			0.0000			
%RSD:			0.4391			

[Hg] Standard number 1 applied. [0.200]  
 Correlation Coefficient: 1.00000 Slope: 0.01061  
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/22/2010  
 Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0047	0.0089	09:57:09	No
2			0.0047	0.0089	09:57:44	No
Mean:			0.0047			
SD :			0.0000			
%RSD:			0.7879			

[Hg] Standard number 2 applied. [0.500]  
 Correlation Coefficient: 0.99831 Slope: 0.00935  
 Intercept : 0.00009

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/22/2010  
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0185	0.0227	09:59:09	No
2			0.0184	0.0226	09:59:44	No
Mean:			0.0185			
SD :			0.0000			
%RSD:			0.2349			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99990  
Intercept : 0.00013

Slope: 0.00918

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/22/2010  
Sample ID: S5.0

-----

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0463	0.0505	10:01:09	No
2			0.0451	0.0492	10:01:44	No
Mean:			0.0457			
SD :			0.0009			
%RSD:			1.8939			

[Hg] Standard number 4 applied. [5.000]  
Correlation Coefficient: 0.99998 Slope: 0.00911  
Intercept : 0.00017

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/22/2010  
Sample ID: S10

-----

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0879	0.0921	10:03:10	No
2			0.0870	0.0912	10:03:45	No
Mean:			0.0874			
SD :			0.0006			
%RSD:			0.7154			

[Hg] Standard number 5 applied. [10.00]  
Correlation Coefficient: 0.99977 Slope: 0.00876  
Intercept : 0.00056

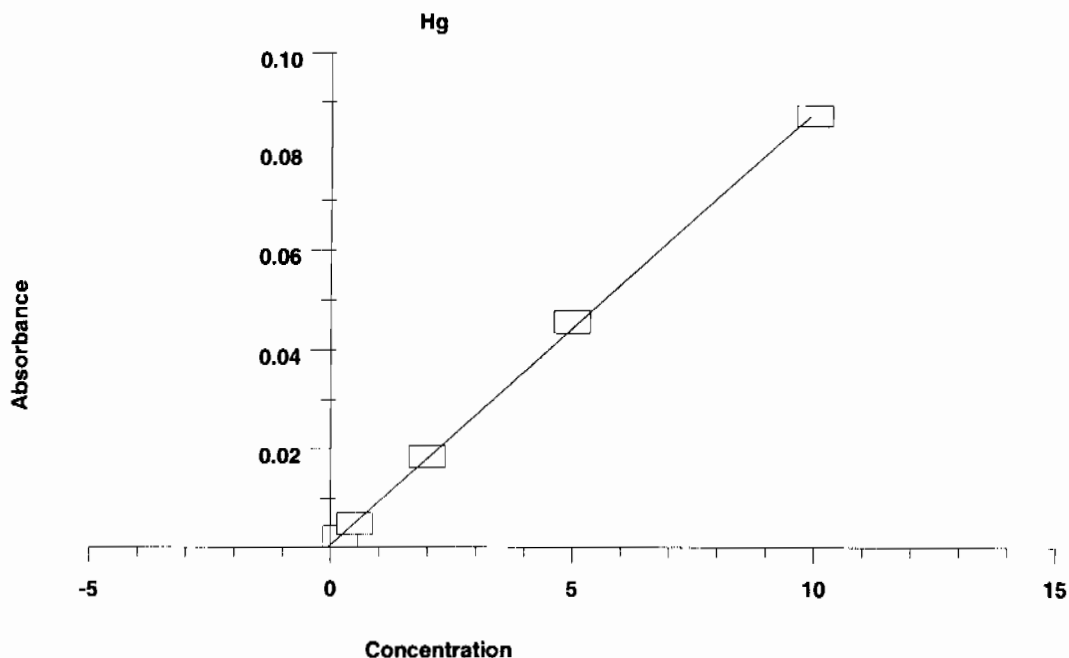
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Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0042	---	----	----	----
S0.2	0.0021	0.200	0.178	0.0000	0.4
S0.5	0.0047	0.500	0.473	0.0000	0.8
S2.0	0.0185	2.000	2.045	0.0000	0.2
S5.0	0.0457	5.000	5.149	0.0009	1.9
S10	0.0874	10.000	9.918	0.0006	0.7
Calib Blank	0.0042	---	----	----	----

Correlation Coefficient: 0.99977 Slope: 0.00876 Intercept: 0.0006

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=====  
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/22/2010  
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.210	5.210	0.0462	0.0504	10:05:13	No
2	5.225	5.225	0.0463	0.0505	10:05:48	No
Mean:	5.217	5.217	0.0463			
SD :	0.0103	0.0103	0.0001			
%RSD:	0.2	0.2	0.1948			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/22/2010  
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0004	0.0046	10:07:11	No
2	-0.019	-0.019	0.0004	0.0046	10:07:46	No
Mean:	-0.017	-0.017	0.0004			
SD :	0.0036	0.0036	0.0000			
%RSD:	21.9	21.9	7.6552			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/22/2010  
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.263	0.263	0.0029	0.0071	10:09:09	No
2	0.245	0.245	0.0027	0.0069	10:09:44	No
Mean:	0.254	0.254	0.0028			
SD :	0.0128	0.0128	0.0001			
%RSD:	5.0	5.0	4.0289			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/22/2010

Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.088	5.088	0.0451	0.0493	10:11:09	No
2	4.998	4.998	0.0443	0.0485	10:11:43	No
Mean:	5.043	5.043	0.0447			
SD :	0.0639	0.0639	0.0006			
%RSD:	1.3	1.3	1.2504			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/22/2010

Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0007	0.0049	10:13:11	No
2	0.016	0.016	0.0007	0.0049	10:13:46	No
Mean:	0.019	0.019	0.0007			
SD :	0.0032	0.0032	0.0000			
%RSD:	17.0	17.0	3.8413			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/22/2010

Sample ID: 1202039421|i|951617|MB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0001	0.0042	10:15:12	No
2	-0.069	-0.069	0.0000	0.0041	10:15:47	No
Mean:	-0.063	-0.063	0.0000			
SD :	0.0079	0.0079	0.0001			
%RSD:	12.5	12.5	1951.9436			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/22/2010

Sample ID: 1202039422|i|10|LCS

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.031	4.031	0.0359	0.0401	10:17:11	No
2	3.979	3.979	0.0354	0.0396	10:17:47	No
Mean:	4.005	4.005	0.0356			
SD :	0.0363	0.0363	0.0003			
%RSD:	0.9	0.9	0.8915			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/22/2010

Sample ID: 246437001|i||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0006	0.0048	10:19:12	No
2	0.006	0.006	0.0006	0.0048	10:19:48	No
Mean:	0.006	0.006	0.0006			
SD :	0.0003	0.0003	0.0000			
%RSD:	4.7	4.7	0.3954			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/22/2010

Sample ID: 246437002|i||

%RSD: 5.0 5.0 3.0182

=====  
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/22/2010  
 Sample ID: 246437008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.078	0.078	0.0012	0.0054	10:33:01	No
2	0.047	0.047	0.0010	0.0052	10:33:36	No
Mean:	0.062	0.062	0.0011			
SD :	0.0224	0.0224	0.0002			
%RSD:	35.9	35.9	17.7130			

=====  
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.083	5.083	0.0451	0.0493	10:35:01	No
2	5.012	5.012	0.0445	0.0486	10:35:36	No
Mean:	5.048	5.048	0.0448			
SD :	0.0506	0.0506	0.0004			
%RSD:	1.0	1.0	0.9905			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0004	0.0046	10:37:04	No
2	-0.023	-0.023	0.0004	0.0045	10:37:39	No
Mean:	-0.018	-0.018	0.0004			
SD :	0.0063	0.0063	0.0001			
%RSD:	34.9	34.9	13.7523			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/22/2010  
 Sample ID: 246437009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0005	0.0046	10:39:04	No
2	-0.034	-0.034	0.0003	0.0044	10:39:39	No
Mean:	-0.023	-0.023	0.0004			
SD :	0.0165	0.0165	0.0001			
%RSD:	72.9	72.9	39.8679			

=====  
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/22/2010  
 Sample ID: 246437010|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0009	0.0051	10:41:02	No
2	0.028	0.028	0.0008	0.0050	10:41:38	No
Mean:	0.034	0.034	0.0009			
SD :	0.0074	0.0074	0.0001			
%RSD:	22.1	22.1	7.5957			

=====  
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/22/2010  
 Sample ID: 246437011|i|||

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.058      0.058      0.0011    0.0052    10:43:02  No
2      0.057      0.057      0.0011    0.0052    10:43:37  No
Mean:   0.057      0.057      0.0011
SD :    0.0008      0.0008      0.0000
%RSD:   1.3        1.3        0.6303
-----

```

```

=====
Element: Hg      Seq. No.: 27      AS Loc.: 25      Date: 02/22/2010
Sample ID: 246437012|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.043      0.043      0.0009    0.0051    10:45:00  No
2      0.032      0.032      0.0008    0.0050    10:45:35  No
Mean:   0.037      0.037      0.0009
SD :    0.0084      0.0084      0.0001
%RSD:   22.3       22.3       8.2448
-----

```

```

=====
Element: Hg      Seq. No.: 28      AS Loc.: 26      Date: 02/22/2010
Sample ID: 246437013|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.070      0.070      0.0012    0.0054    10:46:59  No
2      0.054      0.054      0.0010    0.0052    10:47:34  No
Mean:   0.062      0.062      0.0011
SD :    0.0112      0.0112      0.0001
%RSD:   18.0       18.0       8.8715
-----

```

```

=====
Element: Hg      Seq. No.: 29      AS Loc.: 27      Date: 02/22/2010
Sample ID: 246437014|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.104      0.104      0.0015    0.0057    10:48:59  No
2      0.072      0.072      0.0012    0.0054    10:49:34  No
Mean:   0.088      0.088      0.0013
SD :    0.0228      0.0228      0.0002
%RSD:   26.0       26.0      15.0339
-----

```

```

=====
Element: Hg      Seq. No.: 30      AS Loc.: 28      Date: 02/22/2010
Sample ID: 246554001|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      -0.136     -0.136     -0.0006    0.0036    10:51:00  No
2      -0.144     -0.144     -0.0007    0.0035    10:51:35  No
Mean:   -0.140     -0.140     -0.0007
SD :    0.0052      0.0052      0.0000
%RSD:   3.7        3.7        6.8103
-----

```

```

=====
Element: Hg      Seq. No.: 31      AS Loc.: 29      Date: 02/22/2010
Sample ID: 1202039423|i|||DUP
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      -0.070     -0.070     -0.0001    0.0041    10:53:01  No
2      -0.075     -0.075     -0.0001    0.0041    10:53:37  No
Mean:   -0.073     -0.073     -0.0001
SD :    0.0033      0.0033      0.0000
-----

```

%RSD: 4.6 4.6 37.4717

=====  
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/22/2010  
 Sample ID: 1202039424|i||MS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	2.039	2.039	0.0184	0.0226	10:55:03	No
2	2.016	2.016	0.0182	0.0224	10:55:38	No
Mean:	2.028	2.028	0.0183			
SD :	0.0164	0.0164	0.0001			
%RSD:	0.8	0.8	0.7820			

=====  
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/22/2010  
 Sample ID: 1202039426|i||MSD

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.977	1.977	0.0179	0.0221	10:57:05	No
2	2.002	2.002	0.0181	0.0223	10:57:39	No
Mean:	1.990	1.990	0.0180			
SD :	0.0174	0.0174	0.0002			
%RSD:	0.9	0.9	0.8454			

=====  
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.952	4.952	0.0439	0.0481	10:59:06	No
2	5.054	5.054	0.0448	0.0490	10:59:40	No
Mean:	5.003	5.003	0.0444			
SD :	0.0723	0.0723	0.0006			
%RSD:	1.4	1.4	1.4261			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.050	-0.050	0.0001	0.0043	11:01:07	No
2	-0.060	-0.060	0.0000	0.0042	11:01:42	No
Mean:	-0.055	-0.055	0.0001			
SD :	0.0073	0.0073	0.0001			
%RSD:	13.3	13.3	79.7483			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/22/2010  
 Sample ID: 1202039425|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.203	-0.203	-0.0012	0.0030	11:03:06	No
2	-0.226	-0.226	-0.0014	0.0028	11:03:40	No
Mean:	-0.214	-0.214	-0.0013			
SD :	0.0163	0.0163	0.0001			
%RSD:	7.6	7.6	10.8425			

=====  
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/22/2010  
 Sample ID: 246554002|i|||



```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      0.175      0.175     0.0021    0.0063    11:05:01  No
2      0.165      0.165     0.0020    0.0062    11:05:36  No
Mean:   0.170      0.170     0.0020
SD :    0.0067     0.0067     0.0001
%RSD:   3.9        3.9        2.8429
-----

```

```

=====
Element: Hg      Seq. No.: 38      AS Loc.: 34      Date: 02/22/2010
Sample ID: 246554003|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      0.086      0.086     0.0013    0.0055    11:06:56  No
2      0.085      0.085     0.0013    0.0055    11:07:31  No
Mean:   0.085      0.085     0.0013
SD :    0.0009     0.0009     0.0000
%RSD:   1.0        1.0        0.5974
-----

```

```

=====
Element: Hg      Seq. No.: 39      AS Loc.: 35      Date: 02/22/2010
Sample ID: 246554004|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1     -0.033     -0.033     0.0003    0.0045    11:08:51  No
2     -0.033     -0.033     0.0003    0.0045    11:09:26  No
Mean:  -0.033     -0.033     0.0003
SD :    0.0004     0.0004     0.0000
%RSD:   1.3        1.3        1.4136
-----

```

```

=====
Element: Hg      Seq. No.: 40      AS Loc.: 36      Date: 02/22/2010
Sample ID: 246554005|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1     -0.006     -0.006     0.0005    0.0047    11:10:48  No
2     -0.016     -0.016     0.0004    0.0046    11:11:23  No
Mean:  -0.011     -0.011     0.0005
SD :    0.0066     0.0066     0.0001
%RSD:  59.3        59.3       12.5622
-----

```

```

=====
Element: Hg      Seq. No.: 41      AS Loc.: 37      Date: 02/22/2010
Sample ID: 246554006|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1     -0.084     -0.084    -0.0002    0.0040    11:12:45  No
2     -0.087     -0.087    -0.0002    0.0040    11:13:19  No
Mean:  -0.085     -0.085    -0.0002
SD :    0.0024     0.0024     0.0000
%RSD:   2.8        2.8       11.0004
-----

```

```

=====
Element: Hg      Seq. No.: 42      AS Loc.: 38      Date: 02/22/2010
Sample ID: 1202047296|i||954952|MB
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1     -0.106     -0.106    -0.0004    0.0038    11:14:41  No
2     -0.111     -0.111    -0.0004    0.0038    11:15:17  No
Mean:  -0.108     -0.108    -0.0004
SD :    0.0037     0.0037     0.0000
-----

```

%RSD: 3.4 3.4 8.3826

=====  
 Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/22/2010  
 Sample ID: 1202047297|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	3.329	3.329	0.0297	0.0339	11:16:40	No
2	3.217	3.217	0.0287	0.0329	11:17:15	No
Mean:	3.273	3.273	0.0292			
SD :	0.0792	0.0792	0.0007			
%RSD:	2.4	2.4	2.3734			

=====  
 Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/22/2010  
 Sample ID: 246735001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0014	0.0056	11:18:39	No
2	0.098	0.098	0.0014	0.0056	11:19:14	No
Mean:	0.097	0.097	0.0014			
SD :	0.0015	0.0015	0.0000			
%RSD:	1.6	1.6	0.9508			

=====  
 Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/22/2010  
 Sample ID: 246735002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.167	0.167	0.0020	0.0062	11:20:38	No
2	0.165	0.165	0.0020	0.0062	11:21:13	No
Mean:	0.166	0.166	0.0020			
SD :	0.0012	0.0012	0.0000			
%RSD:	0.7	0.7	0.5369			

=====  
 Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.075	5.075	0.0450	0.0492	11:22:38	No
2	5.054	5.054	0.0448	0.0490	11:23:13	No
Mean:	5.065	5.065	0.0449			
SD :	0.0149	0.0149	0.0001			
%RSD:	0.3	0.3	0.2912			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	0.0002	0.0043	11:24:40	No
2	-0.069	-0.069	0.0000	0.0041	11:25:15	No
Mean:	-0.058	-0.058	0.0001			
SD :	0.0165	0.0165	0.0001			
%RSD:	28.7	28.7	257.8852			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/22/2010  
 Sample ID: 246735003|i|||

# Miscellaneous

# Prep LogBook

Analyst: LYH1 Verified by: \_\_\_\_\_

Batch: 951751

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202039765		SW846 3050B	18-FEB-2010 09:00	<2	0.501 g	50 mL	99.8004	.501	g
LCS	1202039766		SW846 3050B	18-FEB-2010 09:00	<2	0.52 g	50 mL	96.15385	.25	mL
SAMPLE	246554001		SW846 3050B	18-FEB-2010 09:00	<2	0.508 g	50 mL	98.4252	.25	mL
DUP	1202039767	246554001	SW846 3050B	18-FEB-2010 09:00	<2	0.51 g	50 mL	98.03922	.25	mL
MS	1202039768	246554001	SW846 3050B	18-FEB-2010 09:00	<2	0.5 g	50 mL	100	.25	mL
MSD	1202039770	246554001	SW846 3050B	18-FEB-2010 09:00	<2	0.512 g	50 mL	97.65625	.25	mL
SDILT	1202039769	246554001	SW846 3050B	18-FEB-2010 09:00	<2	0.508 g	50 mL	98.4252	.25	mL
SAMPLE	246554002		SW846 3050B	18-FEB-2010 09:00	<2	0.511 g	50 mL	97.84736	.25	mL
SAMPLE	246554003		SW846 3050B	18-FEB-2010 09:00	<2	0.505 g	50 mL	99.0099	.25	mL
SAMPLE	246554004		SW846 3050B	18-FEB-2010 09:00	<2	0.526 g	50 mL	95.05703	.25	mL
SAMPLE	246554005		SW846 3050B	18-FEB-2010 09:00	<2	0.517 g	50 mL	96.7118	.25	mL
SAMPLE	246554006		SW846 3050B	18-FEB-2010 09:00	<2	0.504 g	50 mL	99.20635	.25	mL

Comments:

Reagent/Solvent Lot ID	Amount	Description
1265209	10 mL	HYDROCHLORIC ACID
1234886	1.25 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: BCDI  
 Batch: 952552  
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202041611		SW846 3050B	21-FEB-2010 09:36	0.535 g	50 mL	93.45794	.505	g
LCS	1202041616		SW846 3050B	21-FEB-2010 09:36	0.505 g	50 mL	99.0099	.5	mL
SAMPLE	246554001		SW846 3050B	21-FEB-2010 09:36	0.516 g	50 mL	96.89922	.5	mL
DUP	1202041612	246554001	SW846 3050B	21-FEB-2010 09:36	0.507 g	50 mL	98.61933	.5	mL
SDILT	1202041613	246554001	SW846 3050B	21-FEB-2010 09:36	0.516 g	50 mL	96.89922	.5	mL
MS	1202041614	246554001	SW846 3050B	21-FEB-2010 09:36	0.529 g	50 mL	94.51796	.5	mL
MSD	1202041615	246554001	SW846 3050B	21-FEB-2010 09:36	0.524 g	50 mL	95.41985	.5	mL
SAMPLE	246554002		SW846 3050B	21-FEB-2010 09:36	0.521 g	50 mL	95.96929	.5	mL
SAMPLE	246554003		SW846 3050B	21-FEB-2010 09:36	0.507 g	50 mL	98.61933	.5	mL
SAMPLE	246554004		SW846 3050B	21-FEB-2010 09:36	0.526 g	50 mL	95.05703	.5	mL
SAMPLE	246554005		SW846 3050B	21-FEB-2010 09:36	0.554 g	50 mL	90.25271	.5	mL
SAMPLE	246554006		SW846 3050B	21-FEB-2010 09:36	0.533 g	50 mL	93.80863	.5	mL

Comments: The QC sample is a clumpy soil with rocks.

Reagent/Solvent Lot ID	Amount	Description
1250038-02	1.5 mL	Hydrogen Peroxide 30%
1268732	5 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: TXB3  
 Batch: 951616  
 Lab SOP: GL-MA-E-010 REV# 23

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202039421		SW846 7471A Prep	19-FEB-2010 16:05	0.564 g	30 mL	53.19149		g
LCS	1202039422		SW846 7471A Prep	19-FEB-2010 16:05	0.209 g	30 mL	143.54067	.209	mL
SAMPLE	246437001		SW846 7471A Prep	19-FEB-2010 16:05	0.574 g	30 mL	52.26481		mL
SAMPLE	246437002		SW846 7471A Prep	19-FEB-2010 16:05	0.526 g	30 mL	57.03422		mL
SAMPLE	246437003		SW846 7471A Prep	19-FEB-2010 16:05	0.563 g	30 mL	53.28597		mL
SAMPLE	246437004		SW846 7471A Prep	19-FEB-2010 16:05	0.551 g	30 mL	54.44646		mL
SAMPLE	246437005		SW846 7471A Prep	19-FEB-2010 16:05	0.535 g	30 mL	56.07477		mL
SAMPLE	246437006		SW846 7471A Prep	19-FEB-2010 16:05	0.521 g	30 mL	57.58157		mL
SAMPLE	246437007		SW846 7471A Prep	19-FEB-2010 16:05	0.523 g	30 mL	57.36138		mL
SAMPLE	246437008		SW846 7471A Prep	19-FEB-2010 16:05	0.522 g	30 mL	57.47126		mL
SAMPLE	246437009		SW846 7471A Prep	19-FEB-2010 16:05	0.528 g	30 mL	56.81818		mL
SAMPLE	246437010		SW846 7471A Prep	19-FEB-2010 16:05	0.514 g	30 mL	58.36576		mL
SAMPLE	246437011		SW846 7471A Prep	19-FEB-2010 16:05	0.516 g	30 mL	58.13953		mL
SAMPLE	246437012		SW846 7471A Prep	19-FEB-2010 16:05	0.547 g	30 mL	54.84461		mL
SAMPLE	246437013		SW846 7471A Prep	19-FEB-2010 16:05	0.53 g	30 mL	56.60377		mL
SAMPLE	246437014		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505		mL
SAMPLE	246554001		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505		mL
DUP	1202039423	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.5 g	30 mL	60		mL
MS	1202039424	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.595 g	30 mL	50.42017		mL
MSD	1202039426	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.521 g	30 mL	57.58157		mL
SDILT	1202039425	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505		mL
SAMPLE	246554002		SW846 7471A Prep	19-FEB-2010 16:05	0.505 g	30 mL	59.40594		mL
SAMPLE	246554003		SW846 7471A Prep	19-FEB-2010 16:05	0.538 g	30 mL	55.76208		mL
SAMPLE	246554004		SW846 7471A Prep	19-FEB-2010 16:05	0.575 g	30 mL	52.17391		mL
SAMPLE	246554005		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505		mL
SAMPLE	246554006		SW846 7471A Prep	19-FEB-2010 16:05	0.563 g	30 mL	53.28597		mL

Comments Sample 246554001 is a rocky dry brown soil.  
 Digestion Start Date: 19-FEB-10 16:05  
 Digestion End Date: 19-FEB-10 16:35

GEL Laboratories LLC

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Prep LogBook

1255532-C		
WHG100219-07	Hg reducing agent	2 mL
WHG100219-08	Mercury Working Standard 1st Source CAL S 0.2/CRA	30 uL
WHG100219-11	Mercury Working Standard 1st Source CAL S 0.5	75 uL
WHG100219-09	Mercury Working 1st Source CAL S 10.0	1.5 mL
WHG100219-10	Mercury Working 1st Source CAL S 2.0	300 uL
WHG100219-12	Mercury Working 1st Source CAL S 5.0/CCV	750 uL
	Mercury Working 2nd Source S 5.0/ICV	750 uL

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 05-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> ICP	<b>Test / Method:</b> SW846 3050B/6010B	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 951752	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246554(10-1665)</b>			
<b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed RPD for DUP Failed Recovery for LCS/LCSD Failed Recovery for MSD/PSD			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>			
1. Failed Recovery for MS/PS: QC 1202039768MS 2. Failed RPD for DUP: QC 1202039767DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1202039770MSD 4. Failed Recovery for LCS/LCSD: QC 1202039766LCS 5. Failed Recovery for MSD/PSD: QC 1202039770MSD		1. The matrix spike recovery failed outside of the control limits for aluminum,barium,potassium and sodium 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 aluminum,barium,calcium,chromium,iron,magnesium,potassium, sodium,vanadium and zinc 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. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for barium and manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. 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. 5. The matrix spike duplicate recovery failed outside of the control limits for aluminum,potassium and sodium 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-MAR-10

**Data Validator/Group Leader:**

Christopher Louviere 08-MAR-10



# Standard Logbook

**Serial ID:** UHG1167639-01      **Opened:** 13-AUG-09      **Amount :** 125 mL  
**Name:** MHGSTOCK1      **Received:** 13-AUG-09      **Catalog Number :** PLHG4-2Y  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 15-37HG  
**Employee:** Bryan Davis      **Solvent :** 10% HNO3  
**Supplier:** Spex  
**Description:** Mercury Source Standard #1 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

**Serial ID:** UHG1167641-02      **Opened:** 13-AUG-09      **Amount :** 100 mL  
**Name:** MHGSTOCK2      **Received:** 13-AUG-09      **Catalog Number :** AHG1KN-100  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 4905530  
**Employee:** Bryan Davis      **Solvent :** 3% HNO3  
**Supplier:** Ricca Chemical Company  
**Description:** Mercury Source Standard #2 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

**Serial ID:** UI031809A      **Opened:** 18-MAR-09      **Catalog Number :** 540  
**Name:** METALSOILSRM      **Received:** 18-MAR-09      **Lot Number :** D061-540  
**Type:** Source Material      **Expires:** 10-OCT-10  
**Employee:** Jamie Johnson  
**Supplier:** ERA  
**Description:** Metals LCS Soil SRM  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

# Standard Logbook

**Serial ID:** UI062540-I      **Opened:** 12-JUN-09      **Amount :** 80 g  
**Name:** ICP SOIL SRM      **Received:** 12-JUN-09      **Lot Number :** D062-540  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICP/Hg  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

**Serial ID:** UI062540-MS      **Opened:** 12-JUN-09      **Lot Number :** D062-540  
**Name:** ICPMS SOIL SRM      **Received:** 12-JUN-09  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICPMS  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

**Serial ID:** 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:** UI090828-42      **Opened:** 16-SEP-09      **Amount :** 500 mL  
**Name:** TRACE ICP Na-1000SOUR      **Received:** 27-AUG-09      **Catalog Number :** 060011-02-03  
**Type:** Source Material      **Expires:** 01-MAR-10      **Lot Number :** 1017098  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** 02SI  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

# Standard Logbook

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR.HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091015-A      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

**Serial ID:** UI091015-B      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 02si  
**Description:** ICP-MS Spike for Soil Products  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

# Standard Logbook

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRNMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091217-06      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master A      **Received:** 17-DEC-09      **Catalog Number :** 160055-01  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018209  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2SI  
**Description:** ICPMS ICV/CCV SOLN A - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

**Serial ID:** UI091217-07      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master B      **Received:** 17-DEC-09      **Catalog Number :** 160054-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018210  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2SI  
**Description:** ICPMS ICV/CCV Soln B - 10ppm  
**Comments:** None



# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

**Serial ID:** UI091217-08      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

# Standard Logbook

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master C  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

**Serial ID:** UI100205-01      **Opened:** 05-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

**Serial ID:** UI100205-06      **Opened:** 05-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

**Serial ID:** UI100210-48      **Opened:** 11-FEB-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSEA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-10      **Lot Number :** 1018807  
**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:** UI100211-40      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

**Serial ID:** UI100211-41      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI

# Standard Logbook

**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:** UI100217-48      **Opened:** 04-MAR-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 17-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-11      **Lot Number :** 1018878  
**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:** UI100219-11      **Opened:** 19-FEB-10      **Amount :** 1000 mL  
**Name:** ICP-MS ICSA Master A      **Received:** 19-FEB-10      **Catalog Number :** 160013-01-01L  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018321  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3  
**Supplier:** 02SI

**Description:** ICP-MS ICSA Master A

**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

**Serial ID:** UI100226-40      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

**Serial ID:** UI100226-41      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

**Serial ID:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCalSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

# Standard Logbook

**Serial ID:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

**Serial ID:** IHG100219-01      **Opened:** 19-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 19-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 20-FEB-10      **Solvent :** 1mL HNO3 + Type1 H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** IHG100219-02      **Opened:** 19-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 20-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L

# Standard Logbook

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: WHG100219-07      Opened: 19-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCALS0.2CRA      Received: 19-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 26-FEB-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.
IHG100219-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100219-08      Opened: 19-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCALS0.5      Received: 19-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 26-FEB-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.
IHG100219-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100219-09      Opened: 19-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCALS2.0      Received: 19-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 26-FEB-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.
IHG100219-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100219-10      Opened: 19-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCALS5.0CCV      Received: 19-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 26-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL  
 Description: Mercury Working 1st Source CAL S 5.0/CCV  
 Comments: None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100219-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

**Serial ID:** WHG100219-11      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS10.0      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-FEB-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.
IHG100219-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

**Serial ID:** WHG100219-12      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKS5.0ICV      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-FEB-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.
IHG100219-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

**Serial ID:** WHG100219-14      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGSOILMSSPIKE      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-FEB-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:** WI100226-42      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.1 PPM CALIBRATION STD.  
**Comments:** None



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100226-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100226-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100226-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100226-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100226-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100226-43      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

**Serial ID:** WI100226-44      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

**Serial ID:** WI100226-45      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

# Standard Logbook

**Serial ID:** WI100226-46      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

# Standard Logbook

**Serial ID:** WI100226-47      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL & 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WI100305-43      **Opened:** 05-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1263028  
**Employee:** Helen Camello  
**Supplier:** GEL

# Standard Logbook

**Description:** TRACE ICP O.5/CCV CALIBRATION STD.

**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
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:** WI100305-47

**Opened:** 05-MAR-10

**Balance Id :** 216

**Name:** PQL Working Standard

**Received:** 30-JUN-09

**Pipet Id :** 3581809

**Type:** Working

**Expires:** 06-MAR-10

**Solvent :** 3%HCL &1%HNO3-1276974

**Employee:** Helen Carnello

**Supplier:** 02si

**Description:** PQL Working Standard

**Comments:** None

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100306-04      **Opened:** 06-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 06-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 07-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100306-04A      **Opened:** 06-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 06-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100306-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l



## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100306-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100306-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100306-05      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 06-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100306-06      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 06-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100306-07      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 06-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 07-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

# Standard Logbook

**Serial ID:** WMS100306-08      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 06-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

## Standard Logbook

Serial ID: 100202      Opened: 02-FEB-10      Lot Number : 200930201  
Name: I-HCL      Received: 02-FEB-10  
Type: Reagent/Solvent      Expires: 02-FEB-11  
Employee: Francena Armstrong  
Supplier: J.T. BAKER  
Description: HYDROCHLORIC ACID  
Comments: None

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Serial ID: 1100721TCLP      Opened: 16-APR-09      Lot Number : H02026 L  
Name: I-HNO3      Received: 02-APR-09  
Type: Reagent/Solvent      Expires: 02-APR-10  
Employee: Clifford Postell  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

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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

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Serial ID: 1228372-A      Opened: 12-NOV-09      Lot Number : 49215936  
Name: B-NH2OH.HCl-MER      Received: 12-NOV-09  
Type: Reagent/Solvent      Expires: 12-NOV-10  
Employee: Tara Griffin  
Supplier: Fisher Scientific  
Description: Hydroxylamine Hydrochloride  
Comments: None

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Serial ID: 1234886      Opened: 27-NOV-09      Lot Number : H20053 L  
Name: I-HNO3      Received: 27-NOV-09  
Type: Reagent/Solvent      Expires: 27-NOV-10  
Employee: Bryan Davis  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

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# Standard Logbook

**Serial ID:** 1250038-02      **Opened:** 04-JAN-10      **Lot Number :** ZU74081198 mL  
**Name:** B-H2O2      **Received:** 04-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 04-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** EM SCIENCE  
**Description:** Hydrogen Peroxide 30%  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

**Serial ID:** 1257474-1      **Opened:** 20-JAN-10      **Instrument Id :** MERCURY  
**Name:** B-HNO3-MER      **Received:** 20-JAN-10      **Lot Number :** H20053  
**Type:** Reagent/Solvent      **Expires:** 20-JAN-11  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt Chemicals  
**Description:** NITRIC ACID  
**Comments:** None

**Serial ID:** 1264796-A      **Opened:** 04-FEB-10      **Lot Number :** 200930201  
**Name:** B-HCl-MER      **Received:** 04-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 04-FEB-11  
**Employee:** Tara Griffin  
**Supplier:** Aristar  
**Description:** Hydrochloric Acid Conc.  
**Comments:** None

**Serial ID:** 1264984-C      **Opened:** 04-FEB-10      **Balance Id :** BAL-002  
**Name:** B-KMnO4-MER      **Received:** 04-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% KMnO4 solution  
**Comments:** None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1265209      Opened: 04-FEB-10      Lot Number : J02039  
 Name: I-HCL      Received: 04-FEB-10      Preservative\_Id : 5 none  
 Type: Reagent/Solvent      Expires: 04-FEB-11  
 Employee: Bryan Davis  
 Supplier: J.T. BAKER  
 Description: HYDROCHLORIC ACID  
 Comments: None

Serial ID: 1268732      Opened: 11-FEB-10      Lot Number : H12022 L  
 Name: I-HNO3      Received: 11-FEB-10  
 Type: Reagent/Solvent      Expires: 11-FEB-11  
 Employee: Bryan Davis  
 Supplier: BAKER  
 Description: Nitric Acid CONC.  
 Comments: None

Serial ID: 1272839      Opened: 22-FEB-10      Amount : 20 L  
 Name: B-ICP-RINSE SOLN      Received: 12-FEB-10      Lot Number : H04040+G34050  
 Type: Reagent/Solvent      Expires: 28-FEB-10      Solvent : 3%HCL+1%HNO3  
 Employee: Helen Camello  
 Supplier: GEL  
 Description: 3%HCL+1%HNO3 RINSE SOLN.  
 Comments: None

Serial ID: 1276824      Opened: 01-MAR-10      Solvent : Type I Water  
 Name: B-2%HNO3/1%HCl-ICPMS      Received: 01-MAR-10  
 Type: Reagent/Solvent      Expires: 08-MAR-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.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

## Standard Logbook

Serial ID: 1276974      Opened: 01-MAR-10      Amount : 20 L  
Name: B-ICP-RINSE SOLN      Received: 25-FEB-10      Lot Number : H04040+G34050  
Type: Reagent/Solvent      Expires: 07-MAR-10      Solvent : 3%HCL+1%HNO3  
Employee: Helen Camello  
Supplier: GEL  
Description: 3%HCL+1%HNO3 RINSE SOLN  
Comments: None

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# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665-1**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246555001	RE15-10-8234
1202039897	Method Blank (MB) ICP
1202039898	Laboratory Control Sample (LCS)
1202039901	246555001(RE15-10-8234L) Serial Dilution (SD)
1202039899	246555001(RE15-10-8234D) Sample Duplicate (DUP)
1202039900	246555001(RE15-10-8234S) Matrix Spike (MS)
1202041618	Method Blank (MB) ICP-MS
1202041619	Laboratory Control Sample (LCS)
1202041622	246690001(CAMO-10-9388L) Serial Dilution (SD)
1202041620	246690001(CAMO-10-9388D) Sample Duplicate (DUP)
1202041621	246690001(CAMO-10-9388S) Matrix Spike (MS)
1202039439	Method Blank (MB) CVAA
1202039440	Laboratory Control Sample (LCS)
1202039443	246571001(RE46-10-11505L) Serial Dilution (SD)
1202039441	246571001(RE46-10-11505D) Sample Duplicate (DUP)
1202039442	246571001(RE46-10-11505S) Matrix Spike (MS)

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

**Method/Analysis Information**

<b>Analytical Batch:</b>	951818, 952556 and 951627
<b>Prep Batch :</b>	951817, 952554 and 951624
<b>Standard Operating Procedures:</b>	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
<b>Analytical Method:</b>	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
<b>Prep Method :</b>	SW846 3005A and SW846 7470A Prep

## **Preparation/Analytical Method Verification**

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

### **System Configuration**

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

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 3607 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

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

### **Calibration Information**

#### **Instrument Calibration**

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

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits, with the exception of magnesium.

#### **ICSA/ICSAB Statement**

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

#### **Continuing Calibration Blank (CCB) Requirements**

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

**Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria, with the exception of magnesium in CCV14. The bracketed sample was a non-detect, thus the data was not impacted.

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

The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 246555001 (RE15-10-8234)-ICP, 246690001 (CAMO-10-9388)-ICP-MS and 246571001 (RE46-10-11505)-CVAA.

**Matrix Spike (MS) Recovery Statement**

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

**Duplicate Relative Percent Difference (RPD) Statement**

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of RL is used to evaluate the DUP results. All applicable analytes met these requirements.

**Serial Dilution % Difference Statement**

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

**Technical Information****Holding Time Specifications**

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

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information****Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

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

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**


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

**Review Validation:**

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

**The following data validator verified the information presented in this case**

**narrative:**

**Reviewer:**  **Date:** 3/8/10

# Sample Data Summary



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1665-1 GEL Work Order: 246555

**The Qualifiers in this report are defined as follows:**

- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



3/8/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1665-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246555001

BASIS: As Received

DATE COLLECTED 04-FEB-10

CLIENT ID: RE15-10-8234

LEVEL: Low

DATE RECEIVED 09-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/07/10 15:09	100307-11	952556
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-70-2	Calcium	68.9	ug/L	J	50	200	200	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/26/10 02:06	022510-1	951818
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/07/10 15:09	100307-11	952556
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/17/10 11:20	021710W2-12	951627
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-09-7	Potassium	207	ug/L		50	150	150	1	P	HSC	02/26/10 02:06	022510-1	951818
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 16:23	022610-2	951818
7440-23-5	Sodium	102	ug/L	J	100	300	300	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-28-0	Thallium	0.354	ug/L	J	0.3	1	1	1	MS	BAJ	03/07/10 01:04	100306-3	952556
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 02:06	022510-1	951818
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/26/10 02:06	022510-1	951818

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
951627	951624	SW846 7470A Prep	20	mL	20	mL	02/16/10	TXB3
951818	951817	SW846 3005A	50	mL	50	mL	02/21/10	BCD1
952556	952554	SW846 3005A	50	mL	50	mL	02/17/10	FGA

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.23	ug/L	5	ug/L	104.6	90.0 – 110.0	AV	17-FEB-10 09:48	021710W2-12
	Aluminum	5520	ug/L	5000	ug/L	110.5	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Arsenic	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Barium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Calcium	5410	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Chromium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Cobalt	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Copper	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Iron	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Potassium	2630	ug/L	2500	ug/L	105.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Selenium	2650	ug/L	2500	ug/L	106.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Sodium	2380	ug/L	2500	ug/L	95.2	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	25-FEB-10 12:50	022510-1
	Silver	250	ug/L	250	ug/L	99.8	90.0 – 110.0	P	26-FEB-10 08:57	022610-2
	Antimony	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	07-MAR-10 00:10	100306-3
	Cadmium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	07-MAR-10 00:10	100306-3
	Lead	55.1	ug/L	50	ug/L	110.1	90.0 – 110.0	MS	07-MAR-10 00:10	100306-3
	Thallium	55	ug/L	50	ug/L	109.9	90.0 – 110.0	MS	07-MAR-10 00:10	100306-3
	Beryllium	53.5	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	07-MAR-10 14:53	100307-11
	Manganese	54.1	ug/L	50	ug/L	108.3	90.0 – 110.0	MS	07-MAR-10 14:53	100307-11
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	17-FEB-10 09:54	021710W2-12
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 13:38	022510-1
	Arsenic	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	25-FEB-10 13:38	022510-1
	Barium	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	25-FEB-10 13:38	022510-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	25-FEB-10 13:38	022510-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	25-FEB-10 13:38	022510-1

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	479	ug/L	500	ug/L	95.8	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Copper	473	ug/L	500	ug/L	94.6	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Nickel	479	ug/L	500	ug/L	95.8	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Potassium	5200	ug/L	5000	ug/L	104	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Selenium	499	ug/L	500	ug/L	99.8	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Sodium	10000	ug/L	10000	ug/L	100.3	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Vanadium	481	ug/L	500	ug/L	96.3	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Zinc	475	ug/L	500	ug/L	95.1	90.0 ~ 110.0	P	25-FEB-10 13:38	022510-1
	Silver	482	ug/L	500	ug/L	96.4	90.0 ~ 110.0	P	26-FEB-10 09:45	022610-2
	Antimony	52.4	ug/L	50	ug/L	104.9	90.0 ~ 110.0	MS	07-MAR-10 00:40	100306-3
	Cadmium	51.7	ug/L	50	ug/L	103.4	90.0 ~ 110.0	MS	07-MAR-10 00:40	100306-3
	Lead	53.4	ug/L	50	ug/L	106.8	90.0 ~ 110.0	MS	07-MAR-10 00:40	100306-3
	Thallium	52.8	ug/L	50	ug/L	105.5	90.0 ~ 110.0	MS	07-MAR-10 00:40	100306-3
	Beryllium	53.2	ug/L	50	ug/L	106.3	90.0 ~ 110.0	MS	07-MAR-10 15:02	100307-11
	Manganese	54.7	ug/L	50	ug/L	109.3	90.0 ~ 110.0	MS	07-MAR-10 15:02	100307-11
CCV02										
	Mercury	5.09	ug/L	5	ug/L	101.7	80.0 ~ 120.0	AV	17-FEB-10 10:17	021710W2-12
	Aluminum	5060	ug/L	5000	ug/L	101.1	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Arsenic	483	ug/L	500	ug/L	96.5	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Barium	475	ug/L	500	ug/L	94.9	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Calcium	5360	ug/L	5000	ug/L	107.3	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Chromium	474	ug/L	500	ug/L	94.8	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Cobalt	475	ug/L	500	ug/L	94.9	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Copper	470	ug/L	500	ug/L	94	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Nickel	476	ug/L	500	ug/L	95.3	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 ~ 110.0	P	25-FEB-10 14:08	022510-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Selenium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-FEB-10 14:08	022510-1
	Sodium	10600	ug/L	10000	ug/L	105.8	90.0 – 110.0	P	25-FEB-10 14:08	022510-1
	Vanadium	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	25-FEB-10 14:08	022510-1
	Zinc	469	ug/L	500	ug/L	93.8	90.0 – 110.0	P	25-FEB-10 14:08	022510-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	26-FEB-10 10:16	022610-2
	Antimony	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	07-MAR-10 01:34	100306-3
	Cadmium	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	07-MAR-10 01:34	100306-3
	Lead	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	07-MAR-10 01:34	100306-3
	Thallium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	07-MAR-10 01:34	100306-3
	Beryllium	52.2	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	07-MAR-10 15:17	100307-11
	Manganese	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	07-MAR-10 15:17	100307-11
CCV03	Mercury	4.91	ug/L	5	ug/L	98.2	80.0 – 120.0	AV	17-FEB-10 10:40	021710W2-12
	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Arsenic	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Barium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Chromium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Cobalt	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Copper	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Magnesium	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Nickel	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Potassium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Selenium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	25-FEB-10 15:31	022510-1
	Silver	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	26-FEB-10 11:39	022610-2
	Antimony	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	07-MAR-10 02:21	100306-3

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	07-MAR-10 02:21	100306-3
	Lead	53.1	ug/L	50	ug/L	106.2	90.0 - 110.0	MS	07-MAR-10 02:21	100306-3
	Thallium	52.7	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	07-MAR-10 02:21	100306-3
	Beryllium	54.7	ug/L	50	ug/L	109.4	90.0 - 110.0	MS	07-MAR-10 15:31	100307-11
	Manganese	53.3	ug/L	50	ug/L	106.6	90.0 - 110.0	MS	07-MAR-10 15:31	100307-11
CCV04										
	Mercury	4.9	ug/L	5	ug/L	98.1	80.0 - 120.0	AV	17-FEB-10 11:03	021710W2-12
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Arsenic	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Calcium	5090	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Copper	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Iron	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Selenium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	26-FEB-10 12:38	022610-2
CCV05										
	Mercury	4.91	ug/L	5	ug/L	98.2	80.0 - 120.0	AV	17-FEB-10 11:26	021710W2-12
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Arsenic	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Barium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Chromium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	25-FEB-10 17:18	022510-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Copper	471	ug/L	500	ug/L	94.3	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Nickel	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Selenium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Sodium	9830	ug/L	10000	ug/L	98.3	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Vanadium	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	25-FEB-10 17:18	022510-1
	Silver	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	26-FEB-10 13:26	022610-2
CCV06										
	Mercury	4.74	ug/L	5	ug/L	94.8	80.0 - 120.0	AV	17-FEB-10 11:49	021710W2-12
	Aluminum	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Arsenic	485	ug/L	500	ug/L	97	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Barium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Cobalt	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Copper	474	ug/L	500	ug/L	94.7	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Iron	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Nickel	485	ug/L	500	ug/L	97	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Potassium	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Selenium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Vanadium	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Zinc	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	25-FEB-10 18:28	022510-1
	Silver	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	26-FEB-10 14:58	022610-2



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV07										
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Arsenic	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Barium	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Calcium	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Chromium	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Cobalt	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Nickel	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Selenium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Vanadium	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	25-FEB-10 19:29	022510-1
	Silver	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	26-FEB-10 15:19	022610-2
CCV08										
	Aluminum	5120	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Arsenic	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Chromium	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Copper	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Magnesium	5410	ug/L	5000	ug/L	108.3	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Nickel	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Potassium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Selenium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Sodium	10300	ug/L	10000	ug/L	102.7	90.0 - 110.0	P	25-FEB-10 20:12	022510-1

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 20:12	022510-1
	Silver	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	26-FEB-10 15:55	022610-2
CCV09										
	Aluminum	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Arsenic	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Chromium	488	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Iron	4850	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Magnesium	5270	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Nickel	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Selenium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Sodium	8800	ug/L	10000	ug/L	88	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Vanadium	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	25-FEB-10 21:27	022510-1
	Silver	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	26-FEB-10 16:50	022610-2
CCV10										
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Arsenic	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Barium	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Chromium	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Copper	480	ug/L	500	ug/L	96	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Magnesium	5480	ug/L	5000	ug/L	109.7	90.0 - 110.0	P	25-FEB-10 22:30	022510-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Nickel	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Selenium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Vanadium	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	25-FEB-10 22:30	022510-1
CCV11	Aluminum	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Arsenic	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Barium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Calcium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Chromium	490	ug/L	500	ug/L	98	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Cobalt	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Magnesium	5380	ug/L	5000	ug/L	107.7	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Selenium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Sodium	9330	ug/L	10000	ug/L	93.3	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Vanadium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-FEB-10 23:32	022510-1
CCV12	Aluminum	5400	ug/L	5000	ug/L	108.1	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Arsenic	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Calcium	5340	ug/L	5000	ug/L	106.7	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Copper	490	ug/L	500	ug/L	98	90.0 - 110.0	P	26-FEB-10 00:35	022510-1

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV13	Iron	4970	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Magnesium	5370	ug/L	5000	ug/L	107.4	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Nickel	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Potassium	5200	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Selenium	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Sodium	9580	ug/L	10000	ug/L	95.8	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	26-FEB-10 00:35	022510-1
CCV13	Aluminum	5390	ug/L	5000	ug/L	107.8	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Arsenic	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Calcium	5380	ug/L	5000	ug/L	107.6	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Chromium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Copper	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Iron	5130	ug/L	5000	ug/L	102.5	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Magnesium	5450	ug/L	5000	ug/L	109	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Nickel	510	ug/L	500	ug/L	102	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Potassium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Selenium	520	ug/L	500	ug/L	103.9	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	26-FEB-10 01:38	022510-1
CCV14	Aluminum	5380	ug/L	5000	ug/L	107.7	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Arsenic	518	ug/L	500	ug/L	103.7	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Barium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Calcium	5430	ug/L	5000	ug/L	108.5	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	26-FEB-10 02:34	022510-1

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**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

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SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

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<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Copper	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Magnesium	5610	ug/L	5000	ug/L	112.2	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Nickel	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Potassium	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Selenium	529	ug/L	500	ug/L	105.8	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Sodium	9720	ug/L	10000	ug/L	97.2	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	26-FEB-10 02:34	022510-1
	Zinc	510	ug/L	500	ug/L	102	90.0 - 110.0	P	26-FEB-10 02:34	022510-1

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.176	ug/L	.2	ug/L	88	70.0 - 130.0	AV	17-FEB-10 09:52	021710W2-12
	Lead	2.38	ug/L	2	ug/L	119.2	70.0 - 130.0	MS	07-MAR-10 00:22	100306-3
	Thallium	1.28	ug/L	1	ug/L	128	70.0 - 130.0	MS	07-MAR-10 00:22	100306-3
	Cadmium	1.12	ug/L	1	ug/L	111.7	70.0 - 130.0	MS	07-MAR-10 00:22	100306-3
	Antimony	3.1	ug/L	3	ug/L	103.3	70.0 - 130.0	MS	07-MAR-10 00:22	100306-3
	Manganese	5.96	ug/L	5	ug/L	119.2	70.0 - 130.0	MS	07-MAR-10 14:57	100307-11
	Beryllium	.555	ug/L	.5	ug/L	111	70.0 - 130.0	MS	07-MAR-10 14:57	100307-11
PQL01										
	Iron	96.6	ug/L	100	ug/L	96.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Magnesium	401	ug/L	300	ug/L	133.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Nickel	4.93	ug/L	5	ug/L	98.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Potassium	155	ug/L	150	ug/L	103.1	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Sodium	272	ug/L	300	ug/L	90.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Arsenic	29.1	ug/L	30	ug/L	97.1	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Barium	5.14	ug/L	5	ug/L	102.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Chromium	4.73	ug/L	5	ug/L	94.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Aluminum	206	ug/L	200	ug/L	103	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Cobalt	4.94	ug/L	5	ug/L	98.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Copper	9.72	ug/L	10	ug/L	97.2	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Vanadium	4.95	ug/L	5	ug/L	99	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Zinc	11.5	ug/L	10	ug/L	114.9	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Calcium	213	ug/L	200	ug/L	106.3	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Selenium	30.7	ug/L	30	ug/L	102.4	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Silver	4.64	ug/L	5	ug/L	92.8	70.0 - 130.0	P	26-FEB-10 09:11	022610-2

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 09:50	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 12:57	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 12:57	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 12:57	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 12:57	022510-1
	Iron	-42.67	+/-100	J	30.0	100	LIQ	P	25-FEB-10 12:57	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 12:57	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 12:57	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 12:57	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 12:57	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 12:57	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 09:04	022610-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	07-MAR-10 00:16	100306-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-MAR-10 00:16	100306-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-MAR-10 00:16	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	07-MAR-10 00:16	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	07-MAR-10 14:55	100307-11
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-MAR-10 14:55	100307-11
CCB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 09:56	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 13:45	022510-1
	Arsenic	11.14	+/-30	J	5.0	30.0	LIQ	P	25-FEB-10 13:45	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 13:45	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1

SW846

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 13:45	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 13:45	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 13:45	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Potassium	117.82	+/-150	J	50.0	150	LIQ	P	25-FEB-10 13:45	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 13:45	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 13:45	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 13:45	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 09:52	022610-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	07-MAR-10 00:46	100306-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-MAR-10 00:46	100306-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-MAR-10 00:46	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	07-MAR-10 00:46	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	07-MAR-10 15:04	100307-11
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-MAR-10 15:04	100307-11
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 10:19	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 14:15	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 14:15	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 14:15	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 14:15	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 14:15	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 14:15	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 14:15	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 14:15	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 14:15	022510-1



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 14:15	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 10:22	022610-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	07-MAR-10 01:39	100306-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-MAR-10 01:39	100306-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-MAR-10 01:39	100306-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	07-MAR-10 01:39	100306-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	07-MAR-10 15:19	100307-11
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-MAR-10 15:19	100307-11
<b>CCB03</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 10:42	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 15:38	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 15:38	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 15:38	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 15:38	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 15:38	022510-1
	Magnesium	112.52	+/-300	J	85.0	300	LIQ	P	25-FEB-10 15:38	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 15:38	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 15:38	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 15:38	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 15:38	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 11:46	022610-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	07-MAR-10 02:27	100306-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	07-MAR-10 02:27	100306-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	07-MAR-10 02:27	100306-3
	Thallium	0.416	+/-1	J	0.3	1.0	LIQ	MS	07-MAR-10 02:27	100306-3

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB04	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	07-MAR-10 15:33	100307-11
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	07-MAR-10 15:33	100307-11
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 11:05	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 16:53	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 16:53	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 16:53	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 16:53	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 16:53	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 16:53	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 16:53	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 16:53	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 16:53	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 16:53	022510-1
CCB05	Silver	1.54	+/-5	J	1.0	5.0	LIQ	P	26-FEB-10 12:45	022610-2
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 11:28	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 17:25	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 17:25	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 17:25	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 17:25	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 17:25	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 17:25	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 17:25	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 17:25	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 17:25	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 17:25	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 13:33	022610-2
<b>CCB06</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 11:51	021710W2-12
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 18:35	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 18:35	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 18:35	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 18:35	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 18:35	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 18:35	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 18:35	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 18:35	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 18:35	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 18:35	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 15:05	022610-2
<b>CCB07</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 19:36	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 19:36	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 19:36	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 19:36	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 19:36	022510-1
	Magnesium	117.05	+/-300	J	85.0	300	LIQ	P	25-FEB-10 19:36	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 19:36	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 19:36	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 19:36	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 19:36	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 15:26	022610-2
CCB08	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 20:19	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 20:19	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 20:19	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 20:19	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 20:19	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 20:19	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 20:19	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 20:19	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 20:19	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 20:19	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 16:02	022610-2
CCB09	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 21:34	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 21:34	022510-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 21:34	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 21:34	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 21:34	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 21:34	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 21:34	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 21:34	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 21:34	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 21:34	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 16:57	022610-2
CCB10	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 22:37	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 22:37	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 22:37	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 22:37	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 22:37	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 22:37	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 22:37	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 22:37	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 22:37	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 22:37	022510-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB11										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 23:39	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 23:39	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 23:39	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 23:39	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 23:39	022510-1
	Magnesium	100.89	+/-300	J	85.0	300	LIQ	P	25-FEB-10 23:39	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 23:39	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 23:39	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 23:39	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 23:39	022510-1
CCB12										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-FEB-10 00:42	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 00:42	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-FEB-10 00:42	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-FEB-10 00:42	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-FEB-10 00:42	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-FEB-10 00:42	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Potassium	56.05	+/-150	J	50.0	150	LIQ	P	26-FEB-10 00:42	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 00:42	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-FEB-10 00:42	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-FEB-10 00:42	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB13	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-FEB-10 01:45	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 01:45	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-FEB-10 01:45	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-FEB-10 01:45	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-FEB-10 01:45	022510-1
	Magnesium	101.5	+/-300	J	85.0	300	LIQ	P	26-FEB-10 01:45	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-FEB-10 01:45	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 01:45	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-FEB-10 01:45	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-FEB-10 01:45	022510-1
CCB14	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-FEB-10 02:41	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 02:41	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 02:41	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-FEB-10 02:41	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 02:41	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 02:41	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-FEB-10 02:41	022510-1
	Iron	-35.84	+/-100	J	30.0	100	LIQ	P	26-FEB-10 02:41	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-FEB-10 02:41	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-FEB-10 02:41	022510-1
	Potassium	50.93	+/-150	J	50.0	150	LIQ	P	26-FEB-10 02:41	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 02:41	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-FEB-10 02:41	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 02:41	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-FEB-10 02:41	022510-1

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

SDG NO. 10-1665-1

Contract: LANL01004

Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202039439	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202039897	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Potassium	50	ug/L	+/-150	U	P	50	150
	Silver	1	ug/L	+/-5	U	P	1	5
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
	Sodium	100	ug/L	+/-300	U	P	100	300
	Selenium	5	ug/L	+/-30	U	P	5	30
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Iron	-34.8	ug/L	+/-100	J	P	30	100
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
1202041618	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1



## METALS

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## Interference Check Sample

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	531000	ug/L	500000	ug/L	106	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Arsenic	9.55	ug/L					25-FEB-10 13:11	022510-1
	Barium	0.543	ug/L					25-FEB-10 13:11	022510-1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Chromium	-0.041	ug/L					25-FEB-10 13:11	022510-1
	Cobalt	-1.44	ug/L					25-FEB-10 13:11	022510-1
	Copper	2.08	ug/L					25-FEB-10 13:11	022510-1
	Iron	187000	ug/L	200000	ug/L	93.5	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Magnesium	500000	ug/L	500000	ug/L	100	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Nickel	3.15	ug/L					25-FEB-10 13:11	022510-1
	Potassium	-183.0	ug/L					25-FEB-10 13:11	022510-1
	Selenium	-48.8	ug/L					25-FEB-10 13:11	022510-1
	Sodium	22.8	ug/L					25-FEB-10 13:11	022510-1
	Vanadium	-1.23	ug/L					25-FEB-10 13:11	022510-1
	Zinc	-2.74	ug/L					25-FEB-10 13:11	022510-1
ICSAB01									
	Aluminum	524000	ug/L	500000	ug/L	105	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Arsenic	514	ug/L	500	ug/L	103	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Barium	485	ug/L	500	ug/L	97.1	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Calcium	487000	ug/L	500000	ug/L	97.3	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Chromium	473	ug/L	500	ug/L	94.6	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Cobalt	431	ug/L	500	ug/L	86.2	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Copper	536	ug/L	500	ug/L	107	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Iron	188000	ug/L	200000	ug/L	93.8	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Magnesium	498000	ug/L	500000	ug/L	99.5	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Nickel	437	ug/L	500	ug/L	87.3	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Potassium	5400	ug/L	5000	ug/L	108	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Selenium	2470	ug/L	2500	ug/L	98.9	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Sodium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	25-FEB-10 13:18	022510-1

## METALS

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## Interference Check Sample

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

ICS:

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<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>
	Vanadium	498	ug/L	500	ug/L	99.7	80.0 - 120.0	25-FEB-10 13:18	022510-1
	Zinc	482	ug/L	500	ug/L	96.5	80.0 - 120.0	25-FEB-10 13:18	022510-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.108	ug/L					07-MAR-10 14:59	100307-11
	Manganese	6.21	ug/L					07-MAR-10 14:59	100307-11
ICSAB01	Beryllium	19.9	ug/L	20	ug/L	99.2	80.0 - 120.0	07-MAR-10 15:00	100307-11
	Manganese	28.4	ug/L	25.8	ug/L	110	80.0 - 120.0	07-MAR-10 15:00	100307-11

**METALS**  
-4-  
**Interference Check Sample**

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Silver	-0.637	ug/L					26-FEB-10 09:18	022610-2
ICSAB01	Silver	265	ug/L	250	ug/L	106	80.0 - 120.0	26-FEB-10 09:25	022610-2

## METALS

-4-

## Interference Check Sample

SDG No: 10-1665-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Antimony	0.045	ug/L					07-MAR-10 00:28	100306-3
	Cadmium	0.541	ug/L					07-MAR-10 00:28	100306-3
	Lead	0.22	ug/L					07-MAR-10 00:28	100306-3
	Thallium	0.015	ug/L					07-MAR-10 00:28	100306-3
ICSAB01									
	Antimony	22.3	ug/L	20	ug/L	112	80.0 - 120.0	07-MAR-10 00:34	100306-3
	Cadmium	20.4	ug/L	20.44	ug/L	99.5	80.0 - 120.0	07-MAR-10 00:34	100306-3
	Lead	21.3	ug/L	20.19	ug/L	106	80.0 - 120.0	07-MAR-10 00:34	100306-3
	Thallium	21.7	ug/L	20	ug/L	108	80.0 - 120.0	07-MAR-10 00:34	100306-3

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665-1 Client ID RE46-10-11505S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246571001 Spike ID: 1202039442

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	1.95		0.066	U	2	97.7		AV

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665-1 Client ID RE15-10-8234S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246555001 Spike ID: 1202039900

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5600		68	U	5000	112		P
Arsenic	ug/L	75-125	511		5	U	500	102		P
Barium	ug/L	75-125	510		1	U	500	102		P
Calcium	ug/L	75-125	5500		68.9	J	5000	109		P
Chromium	ug/L	75-125	501		1	U	500	100		P
Cobalt	ug/L	75-125	487		1	U	500	97.4		P
Copper	ug/L	75-125	503		3	U	500	100		P
Iron	ug/L	75-125	5060		30	U	5000	101		P
Magnesium	ug/L	75-125	5640		85	U	5000	113		P
Nickel	ug/L	75-125	503		1.5	U	500	101		P
Potassium	ug/L	75-125	5540		207		5000	107		P
Selenium	ug/L	75-125	508		5	U	500	102		P
Silver	ug/L	75-125	452		1	U	500	90.4		P
Sodium	ug/L	75-125	5080		102	J	5000	99.5		P
Vanadium	ug/L	75-125	507		1	U	500	101		P
Zinc	ug/L	75-125	495		3.3	U	500	98.4		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1665-1 Client ID: CAMO-10-9388S

Contract: ESHL01000 Level: Low

Matrix: GROUND WATER % Solids:

Sample ID: 246690001 Spike ID: 1202041621

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	193		0.5	U	200	96.5		MS
Beryllium	ug/L	75-125	53.7		0.1	U	50	107		MS
Cadmium	ug/L	75-125	10.4		0.11	U	10	104		MS
Lead	ug/L	75-125	41.3		0.5	U	40	103		MS
Manganese	ug/L	75-125	66.2		13.7		50	105		MS
Thallium	ug/L	75-125	87.6		0.3	U	100	87.6		MS



## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-11505D

Sample ID: 246571001

Duplicate ID: 1202039441

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066 U		0.066 U				AV

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8234D

Sample ID: 246555001

Duplicate ID: 1202039899

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L	+/-200	68.9 J		54.2 J		23.9		P
Chromium	ug/L		1 U		1 U				P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		30 U		30 U				P
Magnesium	ug/L		85 U		121 J		200		P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	207		220		6.19		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L		102 J		100 U		200		P
Vanadium	ug/L		1 U		1 U				P
Zinc	ug/L		3.3 U		3.3 U				P

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1665-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: CAMO-10-9388D

Sample ID: 246690001

Duplicate ID: 1202041620

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5 U		0.5 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		0.5 U		0.5 U				MS
Manganese	ug/L	+/-5	13.7		14		2.44		MS
Thallium	ug/L		0.3 U		0.3 U				MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665-1

Contract: LANL01004

Aqueous LCS Source: GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202039440	Mercury	ug/L	2	1.98		99.1	80-120	AV

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202039898								
	Aluminum	ug/L	5000	5530		111	80-120	P
	Arsenic	ug/L	500	512		102	80-120	P
	Barium	ug/L	500	510		102	80-120	P
	Calcium	ug/L	5000	5380		108	80-120	P
	Chromium	ug/L	500	505		101	80-120	P
	Cobalt	ug/L	500	488		97.6	80-120	P
	Copper	ug/L	500	504		101	80-120	P
	Iron	ug/L	5000	5030		101	80-120	P
	Magnesium	ug/L	5000	5460		109	80-120	P
	Nickel	ug/L	500	506		101	80-120	P
	Potassium	ug/L	5000	5280		106	80-120	P
	Selenium	ug/L	500	511		102	80-120	P
	Silver	ug/L	500	447		89.4	80-120	P
	Sodium	ug/L	5000	4890		97.8	80-120	P
	Vanadium	ug/L	500	511		102	80-120	P
	Zinc	ug/L	500	498		99.6	80-120	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1665-1

Contract: LANL01004

Aqueous LCS Source: O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202041619								
	Antimony	ug/L	50	51.6		103	80-120	MS
	Beryllium	ug/L	50	54		108	80-120	MS
	Cadmium	ug/L	50	49.1		98.3	80-120	MS
	Lead	ug/L	50	51.2		102	80-120	MS
	Manganese	ug/L	50	55.7		111	80-120	MS
	Thallium	ug/L	50	48.8		97.7	80-120	MS

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1665-1 Client ID RE46-10-11505L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246571001 Serial Dilution ID: 1202039443

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

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1665-1 Client ID RE15-10-8234L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246555001 Serial Dilution ID: 1202039901

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	68.9	J	250	U	100			P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	476	J				P
Nickel	1.5	U	7.5	U				P
Potassium	207		360	J	73.9			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	102	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P



## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1665-1 Client ID CAMO-10-9388L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246690001 Serial Dilution ID: 1202041622

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	13.7		14.1	J	2.55			MS
Thallium	.3	U	3.33	J				MS

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**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

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SDG No: 10-1665-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

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<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	951817						
1202039897	MB for batch 951817	MB	W	21-FEB-10	50mL	50mL	
1202039898	LCS for batch 951817	LCS	W	21-FEB-10	50mL	50mL	
1202039900	RE15-10-8234S	MS	W	21-FEB-10	50mL	50mL	
1202039899	RE15-10-8234D	DUP	W	21-FEB-10	50mL	50mL	
246555001	RE15-10-8234	SAMPLE	W	21-FEB-10	50mL	50mL	

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SW846

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1665-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

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<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	952554						
1202041618	MB for batch 952554	MB	G	17-FEB-10	50mL	50mL	
1202041619	LCS for batch 952554	LCS	G	17-FEB-10	50mL	50mL	
1202041621	CAMO-10-9388S	MS	G	17-FEB-10	50mL	50mL	
1202041620	CAMO-10-9388D	DUP	G	17-FEB-10	50mL	50mL	
246555001	RE15-10-8234	SAMPLE	W	17-FEB-10	50mL	50mL	

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SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1665-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

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<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	951624						
1202039439	MB for batch 951624	MB	W	16-FEB-10	20mL	20mL	
1202039440	LCS for batch 951624	LCS	W	16-FEB-10	20mL	20mL	
1202039442	RE46-10-11505S	MS	W	16-FEB-10	20mL	20mL	
1202039441	RE46-10-11505D	DUP	W	16-FEB-10	20mL	20mL	
246555001	RE15-10-8234	SAMPLE	W	16-FEB-10	20mL	20mL	

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 06-MAR-10

End Date: 07-MAR-10

Client Sdg: 10-1665-1

Method: MS

Data File: 100306-3

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	V	Zn
S0.0	1	23:53		X				X						X									X		
S10	1	23:58		X				X						X									X		
S100	1	00:04		X				X						X									X		
ICV01	1	00:10		X				X						X									X		
ICB01	1	00:16		X				X						X									X		
CRDL01	1	00:22		X				X						X									X		
ICSA01	1	00:28		X				X						X									X		
ICSAB01	1	00:34		X				X						X									X		
CCV01	1	00:40		X				X						X									X		
CCB01	1	00:46		X				X						X									X		
1202041618	1	00:52		X				X						X									X		
1202041619	1	00:58		X				X						X									X		
246555001	1	01:04		X				X						X									X		
ZZZZZZ	1	01:10																							
ZZZZZZ	1	01:16																							
ZZZZZZ	1	01:22																							
ZZZZZZ	1	01:28																							
CCV02	1	01:34		X				X						X									X		
CCB02	1	01:39		X				X						X									X		
ZZZZZZ	1	01:45																							
ZZZZZZ	1	01:51																							
ZZZZZZ	1	01:57																							
1202041620	1	02:03		X				X						X									X		
1202041621	1	02:09		X				X						X									X		
1202041622	5	02:15		X				X						X									X		
CCV03	1	02:21		X				X						X									X		
CCB03	1	02:27		X				X						X									X		

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 07-MAR-10

End Date: 07-MAR-10

Client Sdg: 10-1665-1

Method: MS

Data File: 100307-11

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	14:48					X									X									
S10	1	14:50					X									X									
S100	1	14:52					X									X									
ICV01	1	14:53					X									X									
ICB01	1	14:55					X									X									
CRDL01	1	14:57					X									X									
ICSA01	1	14:59					X									X									
ICSAB01	1	15:00					X									X									
CCV01	1	15:02					X									X									
CCB01	1	15:04					X									X									
1202041618	1	15:05					X									X									
1202041619	1	15:07					X									X									
246555001	1	15:09					X									X									
ZZZZZZ	1	15:11																							
ZZZZZZ	1	15:12																							
ZZZZZZ	1	15:14																							
ZZZZZZ	1	15:16																							
CCV02	1	15:17					X									X									
CCB02	1	15:19					X									X									
ZZZZZZ	1	15:21																							
ZZZZZZ	1	15:23																							
ZZZZZZ	1	15:24																							
1202041620	1	15:26					X									X									
1202041621	1	15:28					X									X									
1202041622	5	15:30					X									X									
CCV03	1	15:31					X									X									
CCB03	1	15:33					X									X									

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 25-FEB-10

End Date: 26-FEB-10

Client Sdg: 10-1665-1

Method: P

Data File: 022510-1

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	Ti	V	Zn
S0.0	1	12:17	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
S0.1	1	12:24			X	X				X	X	X						X	X	X				X	X
S0.5	1	12:31	X		X	X			X	X	X	X			X			X	X	X				X	X
SCAL	1	12:38	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
S10	1	12:45	X						X				X		X							X			
ICV01	1	12:50	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ICB01	1	12:57	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
PQL01	1	13:04	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ICSA01	1	13:11	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ICSAB01	1	13:18	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
LR01	1	13:25	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
LR02	1	13:31	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCV01	1	13:38	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB01	1	13:45	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
LR03	1	13:55	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
LR04	1	14:01	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCV02	1	14:08	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB02	1	14:15	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ZZZZZZ	1	14:23																							
ZZZZZZ	1	14:29																							
ZZZZZZ	1	14:36																							
ZZZZZZ	1	14:43																							
ZZZZZZ	1	14:50																							
ZZZZZZ	5	14:57																							
ZZZZZZ	1	15:04																							
ZZZZZZ	1	15:10																							
ZZZZZZ	1	15:17																							
ZZZZZZ	1	15:24																							
CCV03	1	15:31	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB03	1	15:38	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ZZZZZZ	1	15:45																							
ZZZZZZ	1	15:52																							
ZZZZZZ	1	15:59																							
ZZZZZZ	1	16:06																							
ZZZZZZ	1	16:12																							
ZZZZZZ	1	16:19																							
ZZZZZZ	1	16:26																							
ZZZZZZ	1	16:33																							
ZZZZZZ	1	16:39																							
CCV04	1	16:46	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time																	
CCB04	1	16:53	X		X	X			X	X	X	X	X	X			X	X	X
CCV05	1	17:18	X		X	X			X	X	X	X	X	X			X	X	X
CCB05	1	17:25	X		X	X			X	X	X	X	X	X			X	X	X
ZZZZZZ	10	17:33																	
ZZZZZZ	10	17:40																	
ZZZZZZ	10	17:47																	
ZZZZZZ	50	17:54																	
ZZZZZZ	10	18:00																	
ZZZZZZ	10	18:07																	
ZZZZZZ	10	18:14																	
ZZZZZZ	10	18:21																	
CCV06	1	18:28	X		X	X			X	X	X	X	X	X			X	X	X
CCB06	1	18:35	X		X	X			X	X	X	X	X	X			X	X	X
ZZZZZZ	10	18:41																	
ZZZZZZ	10	18:48																	
ZZZZZZ	10	18:55																	
ZZZZZZ	10	19:02																	
ZZZZZZ	10	19:09																	
ZZZZZZ	10	19:16																	
ZZZZZZ	10	19:23																	
CCV07	1	19:29	X		X	X			X	X	X	X	X	X			X	X	X
CCB07	1	19:36	X		X	X			X	X	X	X	X	X			X	X	X
ZZZZZZ	100	19:43																	
ZZZZZZ	100	19:50																	
ZZZZZZ	100	19:58																	
ZZZZZZ	500	20:05																	
CCV08	1	20:12	X		X	X			X	X	X	X	X	X			X	X	X
CCB08	1	20:19	X		X	X			X	X	X	X	X	X			X	X	X
ZZZZZZ	1	20:25																	
ZZZZZZ	1	20:32																	
ZZZZZZ	100	20:39																	
ZZZZZZ	100	20:46																	
ZZZZZZ	100	20:53																	
ZZZZZZ	500	21:00																	
ZZZZZZ	100	21:07																	
ZZZZZZ	10	21:13																	
ZZZZZZ	10	21:20																	
CCV09	1	21:27	X		X	X			X	X	X	X	X	X			X	X	X
CCB09	1	21:34	X		X	X			X	X	X	X	X	X			X	X	X
ZZZZZZ	1	21:41																	



**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	V	Zn
ZZZZZZ	1	21:48																							
ZZZZZZ	1	21:55																							
ZZZZZZ	1	22:02																							
ZZZZZZ	1	22:09																							
ZZZZZZ	1	22:16																							
ZZZZZZ	5	22:23																							
CCV10	1	22:30	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB10	1	22:37	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ZZZZZZ	1	22:44																							
ZZZZZZ	1	22:51																							
ZZZZZZ	1	22:57																							
ZZZZZZ	1	23:04																							
ZZZZZZ	1	23:11																							
ZZZZZZ	5	23:18																							
ZZZZZZ	1	23:25																							
CCV11	1	23:32	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB11	1	23:39	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ZZZZZZ	1	23:46																							
ZZZZZZ	1	23:53																							
ZZZZZZ	1	00:00																							
ZZZZZZ	1	00:07																							
ZZZZZZ	1	00:14																							
ZZZZZZ	1	00:21																							
ZZZZZZ	1	00:28																							
CCV12	1	00:35	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB12	1	00:42	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
ZZZZZZ	1	00:49																							
ZZZZZZ	1	00:56																							
ZZZZZZ	5	01:03																							
ZZZZZZ	1	01:10																							
ZZZZZZ	1	01:17																							
ZZZZZZ	1	01:24																							
ZZZZZZ	1	01:31																							
CCV13	1	01:38	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
CCB13	1	01:45	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
1202039897	1	01:52	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
1202039898	1	01:59	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
246555001	1	02:06	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
1202039899	1	02:13	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X
1202039900	1	02:20	X		X	X			X	X	X	X	X		X			X	X	X		X		X	X

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time																								
1202039901	5	02:27	X		X	X				X	X	X	X	X		X			X	X	X		X		X	X
CCV14	1	02:34	X		X	X				X	X	X	X	X		X			X	X	X		X		X	X
CCB14	1	02:41	X		X	X				X	X	X	X	X		X			X	X	X		X		X	X

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 26-FEB-10

End Date: 26-FEB-10

Client Sdg: 10-1665-1

Method: P

Data File: 022610-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	08:24																			X				
S0.1	1	08:31																			X				
S0.5	1	08:37																			X				
SCAL	1	08:44																			X				
S10	1	08:52																							
ICV01	1	08:57																			X				
ICB01	1	09:04																			X				
PQL01	1	09:11																			X				
ICSA01	1	09:18																			X				
ICSAB01	1	09:25																			X				
LR01	1	09:32																			X				
LR02	1	09:38																			X				
CCV01	1	09:45																			X				
CCB01	1	09:52																			X				
LR03	1	10:02																			X				
LR04	1	10:09																			X				
CCV02	1	10:16																			X				
CCB02	1	10:22																			X				
ZZZZZZ	1	10:30																							
ZZZZZZ	1	10:37																							
ZZZZZZ	1	10:43																							
ZZZZZZ	1	10:50																							
ZZZZZZ	1	10:57																							
ZZZZZZ	1	11:04																							
ZZZZZZ	1	11:11																							
ZZZZZZ	1	11:18																							
ZZZZZZ	1	11:25																							
ZZZZZZ	1	11:32																							
CCV03	1	11:39																			X				
CCB03	1	11:46																			X				
ZZZZZZ	1	11:57																							
ZZZZZZ	1	12:04																							
ZZZZZZ	1	12:10																							
ZZZZZZ	1	12:17																							
ZZZZZZ	1	12:24																							
ZZZZZZ	5	12:31																							
CCV04	1	12:38																			X				
CCB04	1	12:45																			X				
ZZZZZZ	1	12:52																							
ZZZZZZ	1	12:58																							



Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 17-FEB-10

End Date: 17-FEB-10

Client Sdg: 10-1665-1

Method: AV

Data File: 021710W2-12

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	09:36															X								
S0.2	1	09:38															X								
S0.5	1	09:40															X								
S2.0	1	09:42															X								
S5.0	1	09:44															X								
S10.0	1	09:46															X								
ICV01	1	09:48															X								
ICB01	1	09:50															X								
CRDL01	1	09:52															X								
CCV01	1	09:54															X								
CCB01	1	09:56															X								
ZZZZZZ	1	09:57																							
ZZZZZZ	1	09:59																							
ZZZZZZ	1	10:01																							
ZZZZZZ	1	10:03																							
ZZZZZZ	1	10:05																							
ZZZZZZ	1	10:07																							
ZZZZZZ	1	10:09																							
ZZZZZZ	1	10:11																							
ZZZZZZ	1	10:13																							
ZZZZZZ	5	10:15																							
CCV02	1	10:17															X								
CCB02	1	10:19															X								
ZZZZZZ	1	10:20																							
ZZZZZZ	1	10:22																							
ZZZZZZ	1	10:24																							
ZZZZZZ	1	10:26																							
ZZZZZZ	1	10:28																							
ZZZZZZ	1	10:30																							
ZZZZZZ	1	10:32																							
ZZZZZZ	1	10:34																							
ZZZZZZ	1	10:36																							
ZZZZZZ	1	10:38																							
CCV03	1	10:40															X								
CCB03	1	10:42															X								
ZZZZZZ	1	10:44																							
ZZZZZZ	1	10:45																							
ZZZZZZ	5	10:47																							
ZZZZZZ	1	10:49																							
ZZZZZZ	1	10:51																							

Samp No.	D/F	Run Time
ZZZZZZ	1	10:53
ZZZZZZ	1	10:55
ZZZZZZ	1	10:57
ZZZZZZ	1	10:59
ZZZZZZ	1	11:01
CCV04	1	11:03
CCB04	1	11:05
ZZZZZZ	5	11:07
ZZZZZZ	1	11:09
ZZZZZZ	1	11:11
ZZZZZZ	1	11:12
ZZZZZZ	1	11:14
1202039439	1	11:16
1202039440	1	11:18
246555001	1	11:20
ZZZZZZ	1	11:22
1202039441	1	11:24
CCV05	1	11:26
CCB05	1	11:28
1202039442	1	11:30
1202039443	5	11:32
ZZZZZZ	1	11:34
ZZZZZZ	1	11:36
ZZZZZZ	1	11:38
ZZZZZZ	1	11:39
ZZZZZZ	1	11:41
ZZZZZZ	5	11:43
ZZZZZZ	1	11:45
ZZZZZZ	1	11:47
CCV06	1	11:49
CCB06	1	11:51

# Standards

**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1665-1

**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>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Vanadium		3.0	10
	Zinc		3.0	10



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**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1665-1

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

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

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1665-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		(nm)	ug/L	ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1665-1**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1665-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1665-1**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000



**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1665-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-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
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1665-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10

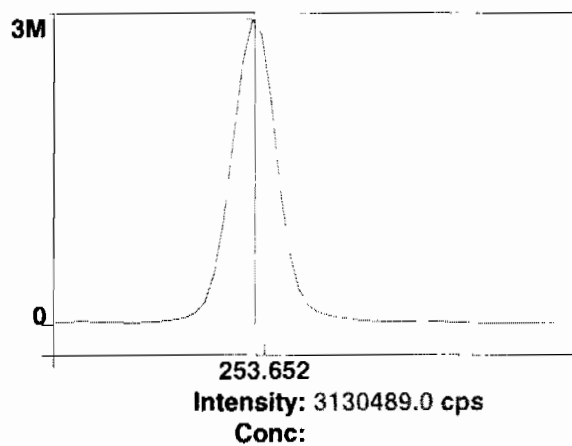
# Raw Data

Method: Hg\_ReAlign  
Result: 030810

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

=====  
Analysis Begun

Start Time: 2/25/2010 12:17:29

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022510.sif

Batch ID:

Results Data Set: 022510

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

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/25/2010 12:17:29

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

-----  
Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3863.0	3863.0	100 %	12:19:42
1	Y RADIAL	4433.2	4433.2	99.58 %	12:19:22
1	Al 396.153Radial†	-101.8	-101.6	[0.00] ug/L	12:19:22
1	Ca 317.933Radial†	15.9	15.9	[0.00] ug/L	12:19:42
1	Fe 238.204 Radial†	13.3	13.2	[0.00] ug/L	12:19:42
1	K 766.490 Radial†	2816.1	2811.7	[0.00] ug/L	12:19:22
1	Mg 279.077 IEC†	0.7	0.7	[0.00] ug/L	12:19:42
1	Na 589.592 Radial†	-900.1	-898.6	[0.00] ug/L	12:19:22
1	Sr 421.552†	27.0	27.0	[0.00] ug/L	12:19:22
1	Sc 361.383	880399.5	880399.5	100.04 %	12:20:38
1	Y 371.029	761132.7	761132.7	100.07 %	12:20:38
1	Ag 328.068†	208.2	208.1	[0.00] ug/L	12:20:38
1	As 188.979†	-19.3	-19.3	[0.00] ug/L	12:20:59
1	B 249.677†	-241.1	-241.0	[0.00] ug/L	12:20:59
1	Ba 233.527†	3.9	3.9	[0.00] ug/L	12:20:59
1	Be 313.107†	-3561.3	-3560.0	[0.00] ug/L	12:20:38
1	Cd 226.502†	-178.2	-178.2	[0.00] ug/L	12:20:59
1	Co 228.616†	-62.9	-62.9	[0.00] ug/L	12:20:59
1	Cr 267.716†	78.5	78.4	[0.00] ug/L	12:20:59
1	Cu 324.752†	5965.4	5963.2	[0.00] ug/L	12:20:38
1	Mn 257.610†	483.8	483.7	[0.00] ug/L	12:20:59
1	Mo 202.031†	7.5	7.5	[0.00] ug/L	12:20:59
1	Ni 231.604†	95.3	95.3	[0.00] ug/L	12:20:59
1	P 214.914†	207.0	206.9	[0.00] ug/L	12:20:59
1	Pb 220.353†	60.8	60.7	[0.00] ug/L	12:20:59
1	S 181.975 Axial†	40.5	40.5	[0.00] ug/L	12:20:59
1	Sb 206.836†	37.5	37.5	[0.00] ug/L	12:20:59
1	Se 196.026†	-25.9	-25.8	[0.00] ug/L	12:20:59
1	Si 251.611†	568.7	568.5	[0.00] ug/L	12:20:59
1	Sn 189.927†	10.9	10.9	[0.00] ug/L	12:20:59
1	Ti 334.940†	-1416.0	-1415.5	[0.00] ug/L	12:20:38
1	Tl 190.801†	-19.8	-19.8	[0.00] ug/L	12:20:59
1	U 409.014†	-2793.3	-2792.2	[0.00] ug/L	12:20:38
1	V 292.402†	-1416.6	-1416.0	[0.00] ug/L	12:20:38
1	Zn 213.857†	741.5	741.2	[0.00] ug/L	12:20:59
1	SiO2†	592.2	592.0	[0.00] ug/L	12:21:54
2	Sc Radial	3860.4	3860.4	100 %	12:20:07
2	Y RADIAL	4567.4	4567.4	102.6 %	12:19:47
2	Al 396.153Radial†	-111.4	-111.3	[0.00] ug/L	12:19:47
2	Ca 317.933Radial†	21.1	21.1	[0.00] ug/L	12:20:07
2	Fe 238.204 Radial†	11.6	11.6	[0.00] ug/L	12:20:07
2	K 766.490 Radial†	2716.4	2714.0	[0.00] ug/L	12:19:47
2	Mg 279.077 IEC†	-0.3	-0.3	[0.00] ug/L	12:20:07
2	Na 589.592 Radial†	-889.6	-888.8	[0.00] ug/L	12:19:47
2	Sr 421.552†	0.7	0.7	[0.00] ug/L	12:19:47
2	Sc 361.383	876161.3	876161.3	99.556 %	12:21:04
2	Y 371.029	755204.3	755204.3	99.286 %	12:21:04

2	Ag 328.068†	232.2	233.3	[0.00]	ug/L	12:21:04
2	As 188.979†	-20.5	-20.6	[0.00]	ug/L	12:21:24
2	B 249.677†	-265.9	-267.1	[0.00]	ug/L	12:21:24
2	Ba 233.527†	23.5	23.6	[0.00]	ug/L	12:21:24
2	Be 313.107†	-3567.2	-3583.2	[0.00]	ug/L	12:21:04
2	Cd 226.502†	-170.3	-171.1	[0.00]	ug/L	12:21:24
2	Co 228.616†	-67.7	-68.0	[0.00]	ug/L	12:21:24
2	Cr 267.716†	80.2	80.6	[0.00]	ug/L	12:21:24
2	Cu 324.752†	5955.3	5981.9	[0.00]	ug/L	12:21:04
2	Mn 257.610†	488.5	490.7	[0.00]	ug/L	12:21:24
2	Mo 202.031†	-1.9	-1.9	[0.00]	ug/L	12:21:24
2	Ni 231.604†	81.0	81.4	[0.00]	ug/L	12:21:24
2	P 214.914†	213.0	214.0	[0.00]	ug/L	12:21:24
2	Pb 220.353†	60.0	60.3	[0.00]	ug/L	12:21:24
2	S 181.975 Axial†	35.9	36.0	[0.00]	ug/L	12:21:24
2	Sb 206.836†	43.6	43.8	[0.00]	ug/L	12:21:24
2	Se 196.026†	-26.4	-26.5	[0.00]	ug/L	12:21:24
2	Si 251.611†	542.0	544.5	[0.00]	ug/L	12:21:24
2	Sn 189.927†	11.3	11.4	[0.00]	ug/L	12:21:24
2	Ti 334.940†	-1403.6	-1409.9	[0.00]	ug/L	12:21:04
2	Tl 190.801†	-27.1	-27.2	[0.00]	ug/L	12:21:24
2	U 409.014†	-3037.6	-3051.1	[0.00]	ug/L	12:21:04
2	V 292.402†	-1469.7	-1476.3	[0.00]	ug/L	12:21:04
2	Zn 213.857†	740.3	743.6	[0.00]	ug/L	12:21:24
2	SiO2†	578.0	580.6	[0.00]	ug/L	12:22:00
3	Sc Radial	3847.5	3847.5	99.8	%	12:20:32
3	Y RADIAL	4354.5	4354.5	97.82	%	12:20:12
3	Al 396.153Radial†	-131.9	-132.2	[0.00]	ug/L	12:20:12
3	Ca 317.933Radial†	19.0	19.0	[0.00]	ug/L	12:20:32
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	ug/L	12:20:32
3	K 766.490 Radial†	2762.7	2769.5	[0.00]	ug/L	12:20:12
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	12:20:32
3	Na 589.592 Radial†	-915.4	-917.6	[0.00]	ug/L	12:20:12
3	Sr 421.552†	-1.4	-1.4	[0.00]	ug/L	12:20:12
3	Sc 361.383	883658.1	883658.1	100.41	%	12:21:29
3	Y 371.029	765568.9	765568.9	100.65	%	12:21:29
3	Ag 328.068†	262.2	261.1	[0.00]	ug/L	12:21:29
3	As 188.979†	-20.0	-19.9	[0.00]	ug/L	12:21:49
3	B 249.677†	-327.3	-325.9	[0.00]	ug/L	12:21:49
3	Ba 233.527†	5.6	5.6	[0.00]	ug/L	12:21:49
3	Be 313.107†	-3545.9	-3531.6	[0.00]	ug/L	12:21:29
3	Cd 226.502†	-180.0	-179.3	[0.00]	ug/L	12:21:49
3	Co 228.616†	-63.9	-63.7	[0.00]	ug/L	12:21:49
3	Cr 267.716†	96.7	96.3	[0.00]	ug/L	12:21:49
3	Cu 324.752†	5944.3	5920.2	[0.00]	ug/L	12:21:29
3	Mn 257.610†	460.5	458.6	[0.00]	ug/L	12:21:49
3	Mo 202.031†	8.5	8.4	[0.00]	ug/L	12:21:49
3	Ni 231.604†	72.0	71.7	[0.00]	ug/L	12:21:49
3	P 214.914†	197.4	196.6	[0.00]	ug/L	12:21:49
3	Pb 220.353†	62.8	62.5	[0.00]	ug/L	12:21:49
3	S 181.975 Axial†	31.1	31.0	[0.00]	ug/L	12:21:49
3	Sb 206.836†	35.9	35.8	[0.00]	ug/L	12:21:49
3	Se 196.026†	-21.9	-21.8	[0.00]	ug/L	12:21:49
3	Si 251.611†	583.6	581.2	[0.00]	ug/L	12:21:49
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	12:21:49
3	Ti 334.940†	-1410.0	-1404.3	[0.00]	ug/L	12:21:29
3	Tl 190.801†	-35.4	-35.3	[0.00]	ug/L	12:21:49
3	U 409.014†	-2873.9	-2862.2	[0.00]	ug/L	12:21:29
3	V 292.402†	-1519.9	-1513.7	[0.00]	ug/L	12:21:29
3	Zn 213.857†	736.5	733.5	[0.00]	ug/L	12:21:49
3	SiO2†	594.5	592.1	[0.00]	ug/L	12:22:05

-----  
Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	880073.0	3759.05	0.43%	100.00 %
Sc Radial	3857.0	8.33	0.22%	100 %
Y 371.029	760635.3	5200.16	0.68%	100.00 %
Y RADIAL	4451.7	107.66	2.42%	100.0 %
Ag 328.068†	234.2	26.52	11.32%	[0.00] ug/L

Al 396.153Radial†	-115.1	15.65	13.60%	[0.00]	ug/L
As 188.979†	-19.9	0.64	3.22%	[0.00]	ug/L
B 249.677†	-278.0	43.52	15.65%	[0.00]	ug/L
Ba 233.527†	11.0	10.92	98.84%	[0.00]	ug/L
Be 313.107†	-3558.2	25.85	0.73%	[0.00]	ug/L
Ca 317.933Radial†	18.7	2.61	13.97%	[0.00]	ug/L
Cd 226.502†	-176.2	4.44	2.52%	[0.00]	ug/L
Co 228.616†	-64.8	2.74	4.22%	[0.00]	ug/L
Cr 267.716†	85.1	9.76	11.47%	[0.00]	ug/L
Cu 324.752†	5955.1	31.63	0.53%	[0.00]	ug/L
Fe 238.204 Radial†	11.7	1.50	12.87%	[0.00]	ug/L
K 766.490 Radial†	2765.1	49.02	1.77%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	1.72	146.81%	[0.00]	ug/L
Mn 257.610†	477.7	16.86	3.53%	[0.00]	ug/L
Mo 202.031†	4.7	5.74	122.92%	[0.00]	ug/L
Na 589.592 Radial†	-901.7	14.66	1.63%	[0.00]	ug/L
Ni 231.604†	82.8	11.86	14.32%	[0.00]	ug/L
P 214.914†	205.8	8.74	4.25%	[0.00]	ug/L
Pb 220.353†	61.2	1.20	1.96%	[0.00]	ug/L
S 181.975 Axial†	35.8	4.76	13.27%	[0.00]	ug/L
Sb 206.836†	39.0	4.22	10.82%	[0.00]	ug/L
Se 196.026†	-24.7	2.56	10.34%	[0.00]	ug/L
Si 251.611†	564.7	18.66	3.30%	[0.00]	ug/L
Sn 189.927†	9.4	3.01	31.95%	[0.00]	ug/L
Sr 421.552†	8.7	15.83	180.99%	[0.00]	ug/L
Ti 334.940†	-1409.9	5.58	0.40%	[0.00]	ug/L
Tl 190.801†	-27.4	7.75	28.25%	[0.00]	ug/L
U 409.014†	-2901.9	133.92	4.61%	[0.00]	ug/L
V 292.402†	-1468.7	49.29	3.36%	[0.00]	ug/L
Zn 213.857†	739.4	5.26	0.71%	[0.00]	ug/L
SiO2†	588.2	6.60	1.12%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/25/2010 12:24:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3996.7	3996.7	104 %	12:26:27
1	Y RADIAL	4411.5	4411.5	99.10 %	12:26:27
1	K 766.490 Radial†	7718.5	4683.6	[1000] ug/L	12:26:07
1	Sr 421.552†	14526.4	14009.7	[100] ug/L	12:26:27
1	Sc 361.383	921764.2	921764.2	104.74 %	12:27:24
1	Y 371.029	774346.2	774346.2	101.80 %	12:27:24
1	Ag 328.068†	21403.4	20201.1	[100] ug/L	12:27:29
1	As 188.979†	192.8	204.0	[100] ug/L	12:27:49
1	B 249.677†	3460.2	3581.7	[100] ug/L	12:27:29
1	Ba 233.527†	12498.7	11922.3	[100] ug/L	12:27:29
1	Be 313.107†	262851.0	254520.5	[100] ug/L	12:27:24
1	Cd 226.502†	8249.2	8052.3	[100] ug/L	12:27:29
1	Co 228.616†	4589.3	4446.5	[100] ug/L	12:27:49
1	Cr 267.716†	8841.0	8356.0	[100] ug/L	12:27:29
1	Cu 324.752†	37712.1	30051.3	[100] ug/L	12:27:29
1	Mn 257.610†	87168.5	82748.3	[100] ug/L	12:27:29
1	Mo 202.031†	1343.2	1277.8	[100] ug/L	12:27:49
1	Ni 231.604†	3912.9	3653.1	[100] ug/L	12:27:49
1	P 214.914†	1011.4	759.8	[500] ug/L	12:27:49
1	Pb 220.353†	866.3	765.9	[100] ug/L	12:27:49
1	S 181.975 Axial†	170.1	126.6	[200] ug/L	12:27:49
1	Sb 206.836†	315.0	261.7	[100] ug/L	12:27:49
1	Se 196.026†	129.1	148.0	[100] ug/L	12:27:49
1	Si 251.611†	15482.3	14217.3	[500] ug/L	12:27:29
1	Sn 189.927†	550.6	516.3	[100] ug/L	12:27:49
1	Ti 334.940†	60602.8	59271.7	[100] ug/L	12:27:29
1	Tl 190.801†	278.0	292.9	[100] ug/L	12:27:49
1	U 409.014†	717.2	3586.6	[100] ug/L	12:27:24
1	V 292.402†	12383.5	13292.1	[100] ug/L	12:27:29
1	Zn 213.857†	10624.8	9404.8	[100] ug/L	12:27:29
1	SiO2†	15603.5	14309.5	[1069.5] ug/L	12:28:55
2	Sc Radial	3937.0	3937.0	102 %	12:26:52
2	Y RADIAL	4360.1	4360.1	97.94 %	12:26:52
2	K 766.490 Radial†	7980.5	5053.2	[1000] ug/L	12:26:32
2	Sr 421.552†	14327.3	14027.3	[100] ug/L	12:26:52
2	Sc 361.383	922629.0	922629.0	104.84 %	12:27:54
2	Y 371.029	774609.2	774609.2	101.84 %	12:27:54
2	Ag 328.068†	21598.8	20368.4	[100] ug/L	12:27:59
2	As 188.979†	195.4	206.3	[100] ug/L	12:28:19
2	B 249.677†	3489.7	3606.7	[100] ug/L	12:27:59
2	Ba 233.527†	12569.5	11978.7	[100] ug/L	12:27:59
2	Be 313.107†	263659.5	255056.5	[100] ug/L	12:27:54
2	Cd 226.502†	8398.3	8187.1	[100] ug/L	12:27:59
2	Co 228.616†	4551.9	4406.8	[100] ug/L	12:28:19
2	Cr 267.716†	8909.1	8413.0	[100] ug/L	12:27:59
2	Cu 324.752†	37970.2	30263.8	[100] ug/L	12:27:59
2	Mn 257.610†	88128.9	83586.3	[100] ug/L	12:27:59
2	Mo 202.031†	1342.3	1275.7	[100] ug/L	12:28:19
2	Ni 231.604†	3884.7	3622.7	[100] ug/L	12:28:19
2	P 214.914†	1013.0	760.4	[500] ug/L	12:28:19
2	Pb 220.353†	860.1	759.2	[100] ug/L	12:28:19
2	S 181.975 Axial†	170.7	126.9	[200] ug/L	12:28:19
2	Sb 206.836†	305.5	252.4	[100] ug/L	12:28:19
2	Se 196.026†	124.3	143.3	[100] ug/L	12:28:19
2	Si 251.611†	15581.0	14297.6	[500] ug/L	12:27:59
2	Sn 189.927†	545.1	510.5	[100] ug/L	12:28:19
2	Ti 334.940†	61248.0	59832.9	[100] ug/L	12:27:59
2	Tl 190.801†	265.1	280.3	[100] ug/L	12:28:19
2	U 409.014†	891.9	3752.6	[100] ug/L	12:27:54



2	V 292.402†	12572.2	13461.0	[100]	ug/L	12:27:59
2	Zn 213.857†	10711.0	9477.5	[100]	ug/L	12:27:59
2	SiO2†	15621.0	14312.3	[1069.5]	ug/L	12:29:00
3	Sc Radial	3955.0	3955.0	103	%	12:27:17
3	Y RADIAL	4388.0	4388.0	98.57	%	12:27:17
3	K 766.490 Radial†	7936.9	4975.1	[1000]	ug/L	12:26:57
3	Sr 421.552†	14365.6	14000.8	[100]	ug/L	12:27:17
3	Sc 361.383	913005.5	913005.5	103.74	%	12:28:25
3	Y 371.029	765538.5	765538.5	100.64	%	12:28:25
3	Ag 328.068†	21712.9	20695.5	[100]	ug/L	12:28:30
3	As 188.979†	203.0	215.6	[100]	ug/L	12:28:50
3	B 249.677†	3510.3	3661.7	[100]	ug/L	12:28:30
3	Ba 233.527†	12749.1	12278.2	[100]	ug/L	12:28:30
3	Be 313.107†	260377.4	254543.7	[100]	ug/L	12:28:25
3	Cd 226.502†	8441.8	8313.5	[100]	ug/L	12:28:30
3	Co 228.616†	4569.3	4469.4	[100]	ug/L	12:28:50
3	Cr 267.716†	8935.8	8528.3	[100]	ug/L	12:28:30
3	Cu 324.752†	38476.6	31133.6	[100]	ug/L	12:28:30
3	Mn 257.610†	88881.0	85197.4	[100]	ug/L	12:28:30
3	Mo 202.031†	1356.8	1303.2	[100]	ug/L	12:28:50
3	Ni 231.604†	3881.5	3658.7	[100]	ug/L	12:28:50
3	P 214.914†	1001.0	759.0	[500]	ug/L	12:28:50
3	Pb 220.353†	870.2	777.6	[100]	ug/L	12:28:50
3	S 181.975 Axial†	178.2	136.0	[200]	ug/L	12:28:50
3	Sb 206.836†	316.6	266.2	[100]	ug/L	12:28:50
3	Se 196.026†	121.7	142.1	[100]	ug/L	12:28:50
3	Si 251.611†	15690.2	14559.6	[500]	ug/L	12:28:30
3	Sn 189.927†	547.8	518.6	[100]	ug/L	12:28:50
3	Ti 334.940†	61734.4	60917.5	[100]	ug/L	12:28:30
3	Tl 190.801†	274.4	292.0	[100]	ug/L	12:28:50
3	U 409.014†	805.7	3678.5	[100]	ug/L	12:28:25
3	V 292.402†	12683.6	13694.8	[100]	ug/L	12:28:30
3	Zn 213.857†	10835.1	9704.9	[100]	ug/L	12:28:30
3	SiO2†	15685.3	14531.3	[1069.5]	ug/L	12:29:05

## Mean Data: S0.1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	919132.9	5324.05	0.58%	104.44	%
Sc Radial	3962.9	30.64	0.77%	103	%
Y 371.029	771498.0	5162.73	0.67%	101.43	%
Y RADIAL	4386.5	25.72	0.59%	98.54	%
Ag 328.068†	20421.7	251.46	1.23%	[100]	ug/L
As 188.979†	208.6	6.16	2.95%	[100]	ug/L
B 249.677†	3616.7	40.92	1.13%	[100]	ug/L
Ba 233.527†	12059.7	191.28	1.59%	[100]	ug/L
Be 313.107†	254706.9	302.97	0.12%	[100]	ug/L
Cd 226.502†	8184.3	130.64	1.60%	[100]	ug/L
Co 228.616†	4440.9	31.68	0.71%	[100]	ug/L
Cr 267.716†	8432.5	87.79	1.04%	[100]	ug/L
Cu 324.752†	30482.9	573.44	1.88%	[100]	ug/L
K 766.490 Radial†	4904.0	194.83	3.97%	[1000]	ug/L
Mn 257.610†	83844.0	1244.72	1.48%	[100]	ug/L
Mo 202.031†	1285.6	15.26	1.19%	[100]	ug/L
Ni 231.604†	3644.8	19.34	0.53%	[100]	ug/L
P 214.914†	759.8	0.70	0.09%	[500]	ug/L
Pb 220.353†	767.6	9.33	1.21%	[100]	ug/L
S 181.975 Axial†	129.8	5.33	4.10%	[200]	ug/L
Sb 206.836†	260.1	7.06	2.71%	[100]	ug/L
Se 196.026†	144.5	3.12	2.16%	[100]	ug/L
Si 251.611†	14358.2	178.97	1.25%	[500]	ug/L
Sn 189.927†	515.1	4.15	0.81%	[100]	ug/L
Sr 421.552†	14012.6	13.45	0.10%	[100]	ug/L
Ti 334.940†	60007.4	836.69	1.39%	[100]	ug/L
Tl 190.801†	288.4	6.99	2.42%	[100]	ug/L
U 409.014†	3672.6	83.13	2.26%	[100]	ug/L
V 292.402†	13482.6	202.25	1.50%	[100]	ug/L
Zn 213.857†	9529.0	156.55	1.64%	[100]	ug/L
SiO2†	14384.4	127.28	0.88%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/25/2010 12:31:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3815.9	3815.9	98.9 %	12:33:28
1	Y RADIAL	4273.1	4273.1	95.99 %	12:33:08
1	Al 396.153Radial†	5270.3	5442.1	[5000] ug/L	12:33:08
1	Ca 317.933Radial†	2362.7	2369.5	[5000] ug/L	12:33:28
1	K 766.490 Radial†	28474.2	26015.9	[5000] ug/L	12:33:08
1	Mg 279.077 IEC†	96.2	96.0	[5000] ug/L	12:33:28
1	Sr 421.552†	70971.0	71726.8	[500] ug/L	12:33:08
1	Sc 361.383	909073.5	909073.5	103.30 %	12:34:26
1	Y 371.029	755222.6	755222.6	99.288 %	12:34:26
1	Ag 328.068†	108576.0	104878.1	[500] ug/L	12:34:31
1	As 188.979†	1099.8	1084.6	[500] ug/L	12:34:51
1	B 249.677†	20107.1	19743.7	[500] ug/L	12:34:31
1	Ba 233.527†	63954.8	61903.5	[500] ug/L	12:34:31
1	Be 313.107†	1320359.0	1281796.3	[500] ug/L	12:34:26
1	Cd 226.502†	43069.5	41871.7	[500] ug/L	12:34:31
1	Co 228.616†	23930.0	23231.4	[500] ug/L	12:34:31
1	Cr 267.716†	44886.0	43369.0	[500] ug/L	12:34:31
1	Cu 324.752†	171029.0	159617.9	[500] ug/L	12:34:31
1	Mn 257.610†	435290.4	420926.4	[500] ug/L	12:34:26
1	Mo 202.031†	6740.4	6520.7	[500] ug/L	12:34:51
1	Ni 231.604†	19830.5	19115.1	[500] ug/L	12:34:31
1	P 214.914†	4309.5	3966.3	[2500] ug/L	12:34:51
1	Pb 220.353†	4033.9	3844.1	[500] ug/L	12:34:51
1	S 181.975 Axial†	745.4	685.8	[1000] ug/L	12:34:51
1	Sb 206.836†	1446.9	1361.7	[500] ug/L	12:34:51
1	Se 196.026†	733.5	734.9	[500] ug/L	12:34:51
1	Si 251.611†	78117.1	75060.3	[2500] ug/L	12:34:31
1	Sn 189.927†	2755.5	2658.1	[500] ug/L	12:34:51
1	Ti 334.940†	317468.0	308750.3	[500] ug/L	12:34:31
1	Tl 190.801†	1526.1	1504.8	[500] ug/L	12:34:51
1	U 409.014†	15013.4	17436.4	[500] ug/L	12:34:31
1	V 292.402†	70392.7	69615.8	[500] ug/L	12:34:31
1	Zn 213.857†	50458.4	48109.3	[500] ug/L	12:34:31
1	SiO2†	76580.7	73549.4	[5347.5] ug/L	12:35:58
2	Sc Radial	3837.8	3837.8	99.5 %	12:33:53
2	Y RADIAL	4236.0	4236.0	95.15 %	12:33:33
2	Al 396.153Radial†	5207.1	5348.2	[5000] ug/L	12:33:33
2	Ca 317.933Radial†	2351.6	2344.7	[5000] ug/L	12:33:53
2	K 766.490 Radial†	27888.0	25262.3	[5000] ug/L	12:33:33
2	Mg 279.077 IEC†	100.2	99.5	[5000] ug/L	12:33:53
2	Sr 421.552†	69303.4	69641.1	[500] ug/L	12:33:33
2	Sc 361.383	900648.1	900648.1	102.34 %	12:34:57
2	Y 371.029	747540.3	747540.3	98.278 %	12:34:57
2	Ag 328.068†	107323.5	104637.6	[500] ug/L	12:35:02
2	As 188.979†	1099.6	1094.4	[500] ug/L	12:35:22
2	B 249.677†	19798.2	19624.0	[500] ug/L	12:35:02
2	Ba 233.527†	63354.3	61896.0	[500] ug/L	12:35:02
2	Be 313.107†	1341770.2	1314675.9	[500] ug/L	12:34:57
2	Cd 226.502†	42812.2	42010.3	[500] ug/L	12:35:02
2	Co 228.616†	23624.5	23149.6	[500] ug/L	12:35:02
2	Cr 267.716†	44408.7	43309.1	[500] ug/L	12:35:02
2	Cu 324.752†	168474.8	158670.9	[500] ug/L	12:35:02
2	Mn 257.610†	442284.4	431702.8	[500] ug/L	12:34:57
2	Mo 202.031†	6757.9	6598.9	[500] ug/L	12:35:22
2	Ni 231.604†	19702.1	19169.2	[500] ug/L	12:35:02
2	P 214.914†	4328.7	4024.0	[2500] ug/L	12:35:22
2	Pb 220.353†	4064.7	3910.7	[500] ug/L	12:35:22
2	S 181.975 Axial†	733.3	680.7	[1000] ug/L	12:35:22
2	Sb 206.836†	1426.3	1354.7	[500] ug/L	12:35:22

2	Se 196.026†	722.6	730.8	[500]	ug/L	12:35:22
2	Si 251.611†	77199.6	74871.3	[2500]	ug/L	12:35:02
2	Sn 189.927†	2764.5	2691.9	[500]	ug/L	12:35:22
2	Ti 334.940†	313638.3	307883.1	[500]	ug/L	12:35:02
2	Tl 190.801†	1533.1	1525.5	[500]	ug/L	12:35:22
2	U 409.014†	14833.2	17396.2	[500]	ug/L	12:35:02
2	V 292.402†	69582.3	69461.4	[500]	ug/L	12:35:02
2	Zn 213.857†	50065.1	48181.9	[500]	ug/L	12:35:02
2	SiO2†	77056.7	74708.1	[5347.5]	ug/L	12:36:03
3	Sc Radial	3880.2	3880.2	101	%	12:34:18
3	Y RADIAL	4406.4	4406.4	98.98	%	12:33:58
3	Al 396.153Radial†	5270.8	5354.2	[5000]	ug/L	12:33:58
3	Ca 317.933Radial†	2374.3	2341.3	[5000]	ug/L	12:34:18
3	K 766.490 Radial†	28524.3	25588.1	[5000]	ug/L	12:33:58
3	Mg 279.077 IEC†	102.5	100.8	[5000]	ug/L	12:34:18
3	Sr 421.552†	70910.1	70475.9	[500]	ug/L	12:33:58
3	Sc 361.383	902117.6	902117.6	102.50	%	12:35:28
3	Y 371.029	748965.4	748965.4	98.466	%	12:35:28
3	Ag 328.068†	107987.3	105114.3	[500]	ug/L	12:35:33
3	As 188.979†	1101.7	1094.7	[500]	ug/L	12:35:53
3	B 249.677†	19923.8	19714.9	[500]	ug/L	12:35:33
3	Ba 233.527†	63787.9	62218.1	[500]	ug/L	12:35:33
3	Be 313.107†	1323920.3	1295126.6	[500]	ug/L	12:35:28
3	Cd 226.502†	42964.4	42090.7	[500]	ug/L	12:35:33
3	Co 228.616†	23840.8	23323.0	[500]	ug/L	12:35:33
3	Cr 267.716†	44608.0	43432.8	[500]	ug/L	12:35:33
3	Cu 324.752†	169488.4	159391.6	[500]	ug/L	12:35:33
3	Mn 257.610†	436662.0	425513.9	[500]	ug/L	12:35:28
3	Mo 202.031†	6746.8	6577.2	[500]	ug/L	12:35:53
3	Ni 231.604†	19817.3	19250.3	[500]	ug/L	12:35:33
3	P 214.914†	4289.0	3978.4	[2500]	ug/L	12:35:53
3	Pb 220.353†	4030.4	3870.7	[500]	ug/L	12:35:53
3	S 181.975 Axial†	740.7	686.8	[1000]	ug/L	12:35:53
3	Sb 206.836†	1438.6	1364.4	[500]	ug/L	12:35:53
3	Se 196.026†	733.5	740.3	[500]	ug/L	12:35:53
3	Si 251.611†	77722.8	75258.8	[2500]	ug/L	12:35:33
3	Sn 189.927†	2749.7	2673.1	[500]	ug/L	12:35:53
3	Ti 334.940†	315604.6	309302.2	[500]	ug/L	12:35:33
3	Tl 190.801†	1510.3	1500.9	[500]	ug/L	12:35:53
3	U 409.014†	14830.6	17370.1	[500]	ug/L	12:35:33
3	V 292.402†	69999.6	69757.8	[500]	ug/L	12:35:33
3	Zn 213.857†	50312.8	48343.9	[500]	ug/L	12:35:33
3	SiO2†	77192.6	74718.0	[5347.5]	ug/L	12:36:09

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Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	903946.4	4500.55	0.50%	102.71 %
Sc Radial	3844.6	32.74	0.85%	99.7 %
Y 371.029	750576.1	4086.60	0.54%	98.678 %
Y RADIAL	4305.2	89.63	2.08%	96.71 %
Ag 328.068†	104876.7	238.39	0.23%	[500] ug/L
Al 396.153Radial†	5381.5	52.57	0.98%	[5000] ug/L
As 188.979†	1091.2	5.74	0.53%	[500] ug/L
B 249.677†	19694.2	62.49	0.32%	[500] ug/L
Ba 233.527†	62005.9	183.86	0.30%	[500] ug/L
Be 313.107†	1297199.6	16537.56	1.27%	[500] ug/L
Ca 317.933Radial†	2351.8	15.36	0.65%	[5000] ug/L
Cd 226.502†	41990.9	110.76	0.26%	[500] ug/L
Co 228.616†	23234.7	86.75	0.37%	[500] ug/L
Cr 267.716†	43370.3	61.86	0.14%	[500] ug/L
Cu 324.752†	159226.8	494.55	0.31%	[500] ug/L
K 766.490 Radial†	25622.1	377.93	1.48%	[5000] ug/L
Mg 279.077 IEC†	98.8	2.45	2.48%	[5000] ug/L
Mn 257.610†	426047.7	5407.96	1.27%	[500] ug/L
Mo 202.031†	6565.6	40.35	0.61%	[500] ug/L
Ni 231.604†	19178.2	68.06	0.35%	[500] ug/L
P 214.914†	3989.6	30.47	0.76%	[2500] ug/L
Pb 220.353†	3875.2	33.54	0.87%	[500] ug/L
S 181.975 Axial†	684.4	3.25	0.47%	[1000] ug/L

Sb 206.836†	1360.3	5.04	0.37%	[500] ug/L
Se 196.026†	735.3	4.78	0.65%	[500] ug/L
Si 251.611†	75063.5	193.81	0.26%	[2500] ug/L
Sn 189.927†	2674.4	16.90	0.63%	[500] ug/L
Sr 421.552†	70614.6	1049.72	1.49%	[500] ug/L
Ti 334.940†	308645.2	715.33	0.23%	[500] ug/L
Tl 190.801†	1510.4	13.22	0.88%	[500] ug/L
U 409.014†	17400.9	33.40	0.19%	[500] ug/L
V 292.402†	69611.7	148.23	0.21%	[500] ug/L
Zn 213.857†	48211.7	120.14	0.25%	[500] ug/L
SiO2†	74325.2	671.84	0.90%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/25/2010 12:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	3808.4	3808.4	98.7 %		12:40:32
1	Y RADIAL	4299.5	4299.5	96.58 %		12:40:12
1	Al 396.153Radial†	10748.7	11000.8	[10000] ug/L		12:40:12
1	Ca 317.933Radial†	4773.6	4815.8	[10000] ug/L		12:40:12
1	Fe 238.204 Radial†	642.1	638.7	[10000] ug/L		12:40:32
1	K 766.490 Radial†	54727.0	52659.5	[10000] ug/L		12:40:12
1	Mg 279.077 IEC†	197.2	198.5	[10000] ug/L		12:40:32
1	Na 589.592 Radial†	31596.4	32900.8	[10000] ug/L		12:40:12
1	Sr 421.552†	143041.0	144855.5	[1000] ug/L		12:40:12
1	Sc 361.383	865537.0	865537.0	98.348 %		12:41:35
1	Y 371.029	733545.9	733545.9	96.439 %		12:41:35
1	Ag 328.068†	213787.7	217143.9	[1000] ug/L		12:41:35
1	As 188.979†	2209.9	2266.9	[1000] ug/L		12:41:55
1	B 249.677†	40255.2	41209.3	[1000] ug/L		12:41:35
1	Ba 233.527†	126205.4	128313.9	[1000] ug/L		12:41:35
1	Be 313.107†	2632289.2	2680054.4	[1000] ug/L		12:41:30
1	Cd 226.502†	85209.0	86816.3	[1000] ug/L		12:41:35
1	Co 228.616†	47185.3	48042.6	[1000] ug/L		12:41:35
1	Cr 267.716†	88600.0	90002.8	[1000] ug/L		12:41:35
1	Cu 324.752†	332064.5	331686.1	[1000] ug/L		12:41:35
1	Mn 257.610†	863783.8	877812.7	[1000] ug/L		12:41:30
1	Mo 202.031†	13404.2	13624.7	[1000] ug/L		12:41:55
1	Ni 231.604†	38923.9	39494.8	[1000] ug/L		12:41:35
1	P 214.914†	8447.6	8383.7	[5000] ug/L		12:41:55
1	Pb 220.353†	8063.5	8137.8	[1000] ug/L		12:41:55
1	S 181.975 Axial†	1434.4	1422.7	[2000] ug/L		12:41:55
1	Sb 206.836†	2844.1	2852.8	[1000] ug/L		12:41:55
1	Se 196.026†	1478.1	1527.6	[1000] ug/L		12:41:55
1	Si 251.611†	153849.1	155868.2	[5000] ug/L		12:41:35
1	Sn 189.927†	5468.5	5551.0	[1000] ug/L		12:41:55
1	Ti 334.940†	628706.2	640674.6	[1000] ug/L		12:41:35
1	Tl 190.801†	3043.6	3122.2	[1000] ug/L		12:41:55
1	U 409.014†	32570.8	36019.7	[1000] ug/L		12:41:35
1	V 292.402†	140700.8	144532.5	[1000] ug/L		12:41:35
1	Zn 213.857†	98914.5	99836.2	[1000] ug/L		12:41:35
1	SiO2†	153891.4	155887.7	[10695] ug/L		12:43:04
2	Sc Radial	3791.3	3791.3	98.3 %		12:40:57
2	Y RADIAL	4275.5	4275.5	96.04 %		12:40:37
2	Al 396.153Radial†	10639.9	10939.2	[10000] ug/L		12:40:37
2	Ca 317.933Radial†	4752.5	4816.2	[10000] ug/L		12:40:37
2	Fe 238.204 Radial†	639.9	639.3	[10000] ug/L		12:40:57
2	K 766.490 Radial†	54149.5	52322.3	[10000] ug/L		12:40:37
2	Mg 279.077 IEC†	198.9	201.2	[10000] ug/L		12:40:57
2	Na 589.592 Radial†	31096.3	32536.6	[10000] ug/L		12:40:37
2	Sr 421.552†	141512.6	143954.7	[1000] ug/L		12:40:37
2	Sc 361.383	858880.8	858880.8	97.592 %		12:42:07
2	Y 371.029	724636.9	724636.9	95.267 %		12:42:07
2	Ag 328.068†	211388.0	216369.7	[1000] ug/L		12:42:07
2	As 188.979†	2193.0	2267.0	[1000] ug/L		12:42:27
2	B 249.677†	39871.5	41133.3	[1000] ug/L		12:42:07
2	Ba 233.527†	124842.6	127912.0	[1000] ug/L		12:42:07
2	Be 313.107†	2643274.2	2712053.0	[1000] ug/L		12:42:01
2	Cd 226.502†	84171.8	86424.9	[1000] ug/L		12:42:07
2	Co 228.616†	46623.3	47838.6	[1000] ug/L		12:42:07
2	Cr 267.716†	87574.9	89650.6	[1000] ug/L		12:42:07
2	Cu 324.752†	328101.6	330242.1	[1000] ug/L		12:42:07
2	Mn 257.610†	869143.4	890111.1	[1000] ug/L		12:42:01
2	Mo 202.031†	13414.2	13740.6	[1000] ug/L		12:42:27
2	Ni 231.604†	38507.3	39374.6	[1000] ug/L		12:42:07

2	P 214.914†	8424.5	8426.5	[5000]	ug/L	12:42:27
2	Pb 220.353†	8076.4	8214.5	[1000]	ug/L	12:42:27
2	S 181.975 Axial†	1442.7	1442.4	[2000]	ug/L	12:42:27
2	Sb 206.836†	2843.0	2874.1	[1000]	ug/L	12:42:27
2	Se 196.026†	1478.9	1540.1	[1000]	ug/L	12:42:27
2	Si 251.611†	151986.3	155171.7	[5000]	ug/L	12:42:07
2	Sn 189.927†	5497.4	5623.6	[1000]	ug/L	12:42:27
2	Ti 334.940†	621431.0	638174.2	[1000]	ug/L	12:42:07
2	Tl 190.801†	3030.9	3133.2	[1000]	ug/L	12:42:27
2	U 409.014†	32352.1	36052.2	[1000]	ug/L	12:42:07
2	V 292.402†	139014.6	143913.4	[1000]	ug/L	12:42:07
2	Zn 213.857†	98021.1	99700.2	[1000]	ug/L	12:42:07
2	SiO2†	152854.1	156037.5	[10695]	ug/L	12:43:09
3	Sc Radial	3798.6	3798.6	98.5	%	12:41:22
3	Y RADIAL	4291.5	4291.5	96.40	%	12:41:02
3	Al 396.153Radial†	10724.6	11004.3	[10000]	ug/L	12:41:02
3	Ca 317.933Radial†	4765.6	4820.1	[10000]	ug/L	12:41:02
3	Fe 238.204 Radial†	639.3	637.4	[10000]	ug/L	12:41:22
3	K 766.490 Radial†	54339.7	52409.1	[10000]	ug/L	12:41:02
3	Mg 279.077 IEC†	199.0	200.9	[10000]	ug/L	12:41:22
3	Na 589.592 Radial†	31138.9	32518.7	[10000]	ug/L	12:41:02
3	Sr 421.552†	142255.3	144431.0	[1000]	ug/L	12:41:02
3	Sc 361.383	863416.3	863416.3	98.107	%	12:42:38
3	Y 371.029	730824.4	730824.4	96.081	%	12:42:38
3	Ag 328.068†	212621.8	216489.4	[1000]	ug/L	12:42:38
3	As 188.979†	2204.5	2267.0	[1000]	ug/L	12:42:58
3	B 249.677†	40203.0	41256.6	[1000]	ug/L	12:42:38
3	Ba 233.527†	125631.2	128043.8	[1000]	ug/L	12:42:38
3	Be 313.107†	2647845.5	2702484.8	[1000]	ug/L	12:42:33
3	Cd 226.502†	84783.5	86595.3	[1000]	ug/L	12:42:38
3	Co 228.616†	46929.5	47899.7	[1000]	ug/L	12:42:38
3	Cr 267.716†	88024.9	89637.9	[1000]	ug/L	12:42:38
3	Cu 324.752†	330297.0	330713.9	[1000]	ug/L	12:42:38
3	Mn 257.610†	869497.7	885794.0	[1000]	ug/L	12:42:33
3	Mo 202.031†	13465.8	13720.9	[1000]	ug/L	12:42:58
3	Ni 231.604†	38723.4	39387.6	[1000]	ug/L	12:42:38
3	P 214.914†	8447.1	8404.3	[5000]	ug/L	12:42:58
3	Pb 220.353†	8065.7	8160.1	[1000]	ug/L	12:42:58
3	S 181.975 Axial†	1439.2	1431.1	[2000]	ug/L	12:42:58
3	Sb 206.836†	2851.6	2867.6	[1000]	ug/L	12:42:58
3	Se 196.026†	1484.4	1537.8	[1000]	ug/L	12:42:58
3	Si 251.611†	153082.1	155470.6	[5000]	ug/L	12:42:38
3	Sn 189.927†	5523.7	5620.9	[1000]	ug/L	12:42:58
3	Ti 334.940†	625737.3	639218.6	[1000]	ug/L	12:42:38
3	Tl 190.801†	3058.4	3144.8	[1000]	ug/L	12:42:58
3	U 409.014†	32562.2	36092.3	[1000]	ug/L	12:42:38
3	V 292.402†	140010.9	144180.6	[1000]	ug/L	12:42:38
3	Zn 213.857†	98551.7	99713.5	[1000]	ug/L	12:42:38
3	SiO2†	152217.1	154565.4	[10695]	ug/L	12:43:14

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	862611.4	3400.33	0.39%	98.016	%
Sc Radial	3799.5	8.59	0.23%	98.5	%
Y 371.029	729669.1	4565.49	0.63%	95.929	%
Y RADIAL	4288.8	12.19	0.28%	96.34	%
Ag 328.068†	216667.7	416.77	0.19%	[1000]	ug/L
Al 396.153Radial†	10981.4	36.61	0.33%	[10000]	ug/L
As 188.979†	2267.0	0.05	0.00%	[1000]	ug/L
B 249.677†	41199.7	62.17	0.15%	[1000]	ug/L
Ba 233.527†	128089.9	204.86	0.16%	[1000]	ug/L
Be 313.107†	2698197.4	16424.47	0.61%	[1000]	ug/L
Ca 317.933Radial†	4817.4	2.40	0.05%	[10000]	ug/L
Cd 226.502†	86612.2	196.23	0.23%	[1000]	ug/L
Co 228.616†	47926.9	104.71	0.22%	[1000]	ug/L
Cr 267.716†	89763.8	207.11	0.23%	[1000]	ug/L
Cu 324.752†	330880.7	736.33	0.22%	[1000]	ug/L
Fe 238.204 Radial†	638.5	0.97	0.15%	[10000]	ug/L
K 766.490 Radial†	52463.6	175.10	0.33%	[10000]	ug/L

Mg 279.077 IEC†	200.2	1.44	0.72%	[10000]	ug/L
Mn 257.610†	884572.6	6239.51	0.71%	[1000]	ug/L
Mo 202.031†	13695.4	62.01	0.45%	[1000]	ug/L
Na 589.592 Radial†	32652.0	215.63	0.66%	[10000]	ug/L
Ni 231.604†	39419.0	65.99	0.17%	[1000]	ug/L
P 214.914†	8404.8	21.43	0.26%	[5000]	ug/L
Pb 220.353†	8170.8	39.46	0.48%	[1000]	ug/L
S 181.975 Axial†	1432.1	9.92	0.69%	[2000]	ug/L
Sb 206.836†	2864.8	10.91	0.38%	[1000]	ug/L
Se 196.026†	1535.2	6.61	0.43%	[1000]	ug/L
Si 251.611†	155503.5	349.42	0.22%	[5000]	ug/L
Sn 189.927†	5598.5	41.17	0.74%	[1000]	ug/L
Sr 421.552†	144413.7	450.65	0.31%	[1000]	ug/L
Ti 334.940†	639355.8	1255.85	0.20%	[1000]	ug/L
Tl 190.801†	3133.4	11.34	0.36%	[1000]	ug/L
U 409.014†	36054.7	36.36	0.10%	[1000]	ug/L
V 292.402†	144208.8	310.51	0.22%	[1000]	ug/L
Zn 213.857†	99750.0	74.99	0.08%	[1000]	ug/L
SiO2†	155496.9	810.12	0.52%	[10695]	ug/L

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

Autosampler Location: 5  
 Date Collected: 2/25/2010 12:45:26  
 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	3844.6	3844.6	99.7 %	12:47:39
1	Y RADIAL	4222.1	4222.1	94.84 %	12:47:39
1	Al 396.153Radial†	53274.2	53560.6	[50000] ug/L	12:47:19
1	Ca 317.933Radial†	23013.9	23069.3	[50000] ug/L	12:47:19
1	Fe 238.204 Radial†	1244.5	1236.8	[20000] ug/L	12:47:39
1	Mg 279.077 IEC†	943.8	945.6	[50000] ug/L	12:47:39
1	Na 589.592 Radial†	63855.3	64962.3	[20000] ug/L	12:47:19
1	Sc 361.383	893028.0	893028.0	101.47 %	12:48:36
1	Y 371.029	734538.4	734538.4	96.569 %	12:48:36
2	Sc Radial	3811.3	3811.3	98.8 %	12:48:04
2	Y RADIAL	4182.4	4182.4	93.95 %	12:48:04
2	Al 396.153Radial†	52033.4	52771.9	[50000] ug/L	12:47:44
2	Ca 317.933Radial†	22452.6	22702.9	[50000] ug/L	12:47:44
2	Fe 238.204 Radial†	1220.0	1222.9	[20000] ug/L	12:48:04
2	Mg 279.077 IEC†	937.2	947.3	[50000] ug/L	12:48:04
2	Na 589.592 Radial†	61735.0	63376.4	[20000] ug/L	12:47:44
2	Sc 361.383	882359.1	882359.1	100.26 %	12:48:42
2	Y 371.029	726086.3	726086.3	95.458 %	12:48:42
3	Sc Radial	3845.7	3845.7	99.7 %	12:48:29
3	Y RADIAL	4207.0	4207.0	94.50 %	12:48:29
3	Al 396.153Radial†	52784.0	53054.1	[50000] ug/L	12:48:09
3	Ca 317.933Radial†	22806.9	22855.2	[50000] ug/L	12:48:09
3	Fe 238.204 Radial†	1231.6	1223.6	[20000] ug/L	12:48:29
3	Mg 279.077 IEC†	940.4	942.0	[50000] ug/L	12:48:29
3	Na 589.592 Radial†	62627.9	63713.6	[20000] ug/L	12:48:09
3	Sc 361.383	889473.5	889473.5	101.07 %	12:48:48
3	Y 371.029	731482.8	731482.8	96.167 %	12:48:48

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	888286.8	5432.52	0.61%	100.93 %
Sc Radial	3833.9	19.54	0.51%	99.4 %
Y 371.029	730702.5	4279.75	0.59%	96.065 %
Y RADIAL	4203.8	20.07	0.48%	94.43 %
Al 396.153Radial†	53128.9	399.58	0.75%	[50000] ug/L
Ca 317.933Radial†	22875.8	184.05	0.80%	[50000] ug/L
Fe 238.204 Radial†	1227.8	7.85	0.64%	[20000] ug/L
Mg 279.077 IEC†	945.0	2.72	0.29%	[50000] ug/L
Na 589.592 Radial†	64017.4	835.48	1.31%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	215.2	0.00000	0.999908	
Al 396.153Radial	3	Lin Thru 0	0.0	1.064	0.00000	0.999979	
As 188.979	3	Lin Thru 0	0.0	2.249	0.00000	0.999867	
B 249.677	3	Lin Thru 0	0.0	40.80	0.00000	0.999792	
Ba 233.527	3	Lin Thru 0	0.0	127.2	0.00000	0.999908	
Be 313.107	3	Lin Thru 0	0.0	2676	0.00000	0.999871	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4586	0.00000	0.999946	
Cd 226.502	3	Lin Thru 0	0.0	86.05	0.00000	0.999916	
Co 228.616	3	Lin Thru 0	0.0	47.61	0.00000	0.999908	
Cr 267.716	3	Lin Thru 0	0.0	89.12	0.00000	0.999897	
Cu 324.752	3	Lin Thru 0	0.0	328.2	0.00000	0.999866	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0619	0.00000	0.999874	
K 766.490 Radial	3	Lin Thru 0	0.0	5.219	0.00000	0.999942	



Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0189	0.00000	0.999927
Mn 257.610	3	Lin Thru 0	0.0	877.8	0.00000	0.999883
Mo 202.031	3	Lin Thru 0	0.0	13.58	0.00000	0.999852
Na 589.592 Radia	2	Lin Thru 0	0.0	3.214	0.00000	0.999968
Ni 231.604	3	Lin Thru 0	0.0	39.18	0.00000	0.999922
P 214.914	3	Lin Thru 0	0.0	1.663	0.00000	0.999762
Pb 220.353	3	Lin Thru 0	0.0	8.083	0.00000	0.999775
S 181.975 Axial	3	Lin Thru 0	0.0	0.7092	0.00000	0.999814
Sb 206.836	3	Lin Thru 0	0.0	2.834	0.00000	0.999767
Se 196.026	3	Lin Thru 0	0.0	1.522	0.00000	0.999847
Si 251.611	3	Lin Thru 0	0.0	30.87	0.00000	0.999884
Sn 189.927	3	Lin Thru 0	0.0	5.545	0.00000	0.999819
Sr 421.552	3	Lin Thru 0	0.0	143.7	0.00000	0.999959
Ti 334.940	3	Lin Thru 0	0.0	634.7	0.00000	0.999892
Tl 190.801	3	Lin Thru 0	0.0	3.109	0.00000	0.999875
U 409.014	3	Lin Thru 0	0.0	35.81	0.00000	0.999900
V 292.402	3	Lin Thru 0	0.0	143.1	0.00000	0.999890
Zn 213.857	3	Lin Thru 0	0.0	99.05	0.00000	0.999905
SiO2	3	Lin Thru 0	0.0	14.40	0.00000	0.999826

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/25/2010 12:50:59

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	3787.2	3787.2	98.2 %		12:53:12
1	Y RADIAL	4280.9	4280.9	96.16 %		12:52:52
1	Al 396.153Radial†	5715.9	5936.3	5553.3 ug/L	5553.3 ppb	12:52:52
1	Ca 317.933Radial†	2447.2	2473.7	5394.4 ug/L	5394.4 ppb	12:53:12
1	Fe 238.204 Radial†	327.0	321.3	5208.4 ug/L	5208.4 ppb	12:53:12
1	K 766.490 Radial†	16243.6	13777.8	2636.1 ug/L	2636.1 ppb	12:52:52
1	Mg 279.077 IEC†	101.3	102.0	5381.0 ug/L	5381.0 ppb	12:53:12
1	Na 589.592 Radial†	6673.1	7697.7	2395.3 ug/L	2395.3 ppb	12:52:52
1	Sr 421.552†	75430.1	76811.2	534.31 ug/L	534.31 ppb	12:52:52
1	Sc 361.383	913785.7	913785.7	103.83 %		12:54:10
1	Y 371.029	759719.5	759719.5	99.880 %		12:54:10
1	Ag 328.068†	55833.2	53539.1	251.92 ug/L	251.92 ppb	12:54:10
1	As 188.979†	1112.4	1091.2	489.46 ug/L	489.46 ppb	12:54:30
1	B 249.677†	21795.9	21269.7	518.98 ug/L	518.98 ppb	12:54:10
1	Ba 233.527†	69195.7	66631.8	524.99 ug/L	524.99 ppb	12:54:10
1	Be 313.107†	702109.3	679764.3	255.10 ug/L	255.10 ppb	12:54:10
1	Cd 226.502†	44823.0	43345.5	503.58 ug/L	503.58 ppb	12:54:30
1	Co 228.616†	25647.3	24766.0	520.34 ug/L	520.34 ppb	12:54:30
1	Cr 267.716†	46283.5	44490.8	500.22 ug/L	500.22 ppb	12:54:10
1	Cu 324.752†	183346.3	170626.9	519.89 ug/L	519.89 ppb	12:54:10
1	Mn 257.610†	459402.6	441975.9	503.82 ug/L	503.82 ppb	12:54:10
1	Mo 202.031†	7431.0	7152.2	527.26 ug/L	527.26 ppb	12:54:30
1	Ni 231.604†	20024.2	19202.6	489.74 ug/L	489.74 ppb	12:54:30
1	P 214.914†	4716.9	4337.1	2507.2 ug/L	2507.2 ppb	12:54:30
1	Pb 220.353†	4416.1	4192.0	520.28 ug/L	520.28 ppb	12:54:30
1	S 181.975 Axial†	1836.8	1733.2	2442.7 ug/L	2442.7 ppb	12:54:30
1	Sb 206.836†	1475.4	1382.0	506.56 ug/L	506.56 ppb	12:54:30
1	Se 196.026†	4149.3	4021.0	2660.3 ug/L	2660.3 ppb	12:54:30
1	Si 251.611†	156519.8	150180.5	4858.7 ug/L	4858.7 ppb	12:54:10
1	Sn 189.927†	3044.2	2922.4	527.66 ug/L	527.66 ppb	12:54:30
1	Ti 334.940†	322705.7	312209.9	491.82 ug/L	491.82 ppb	12:54:10
1	Tl 190.801†	1658.3	1624.6	525.81 ug/L	525.81 ppb	12:54:30
1	U 409.014†	14690.8	17050.7	474.41 ug/L	474.41 ppb	12:54:10
1	V 292.402†	71767.5	70588.4	500.12 ug/L	500.12 ppb	12:54:10
1	Zn 213.857†	51846.5	49194.2	492.04 ug/L	492.04 ppb	12:54:10
1	SiO2†	156150.9	149801.7	10386 ug/L	10386 ppb	12:55:27
2	Sc Radial	3776.4	3776.4	97.9 %		12:53:37
2	Y RADIAL	4279.7	4279.7	96.14 %		12:53:17
2	Al 396.153Radial†	5650.6	5886.2	5506.4 ug/L	5506.4 ppb	12:53:17
2	Ca 317.933Radial†	2452.7	2486.4	5422.1 ug/L	5422.1 ppb	12:53:37
2	Fe 238.204 Radial†	324.4	319.7	5181.4 ug/L	5181.4 ppb	12:53:37
2	K 766.490 Radial†	16093.5	13671.7	2615.8 ug/L	2615.8 ppb	12:53:17
2	Mg 279.077 IEC†	99.9	100.8	5320.4 ug/L	5320.4 ppb	12:53:37
2	Na 589.592 Radial†	6606.3	7648.8	2380.0 ug/L	2380.0 ppb	12:53:17
2	Sr 421.552†	74450.1	76029.1	528.87 ug/L	528.87 ppb	12:53:17
2	Sc 361.383	915363.3	915363.3	104.01 %		12:54:36
2	Y 371.029	761399.8	761399.8	100.10 %		12:54:36
2	Ag 328.068†	56102.2	53705.1	252.68 ug/L	252.68 ppb	12:54:36
2	As 188.979†	1129.9	1106.3	496.17 ug/L	496.17 ppb	12:54:56
2	B 249.677†	21989.5	21419.7	522.67 ug/L	522.67 ppb	12:54:36
2	Ba 233.527†	69182.7	66504.4	523.99 ug/L	523.99 ppb	12:54:36
2	Be 313.107†	704685.7	681075.9	255.59 ug/L	255.59 ppb	12:54:36
2	Cd 226.502†	44811.3	43259.9	502.59 ug/L	502.59 ppb	12:54:56
2	Co 228.616†	25631.0	24707.7	519.11 ug/L	519.11 ppb	12:54:56
2	Cr 267.716†	46424.9	44550.0	500.88 ug/L	500.88 ppb	12:54:36
2	Cu 324.752†	184186.0	171129.9	521.42 ug/L	521.42 ppb	12:54:36
2	Mn 257.610†	460311.5	442087.2	503.95 ug/L	503.95 ppb	12:54:36
2	Mo 202.031†	7414.9	7124.4	525.21 ug/L	525.21 ppb	12:54:56
2	Ni 231.604†	20010.1	19155.9	488.55 ug/L	488.55 ppb	12:54:56

2	P 214.914†	4688.2	4301.6	2485.6 ug/L	2485.6 ppb	12:54:56
2	Pb 220.353†	4408.8	4177.7	518.50 ug/L	518.50 ppb	12:54:56
2	S 181.975 Axial†	1836.8	1730.1	2438.4 ug/L	2438.4 ppb	12:54:56
2	Sb 206.836†	1484.6	1388.4	508.78 ug/L	508.78 ppb	12:54:56
2	Se 196.026†	4153.1	4017.7	2658.1 ug/L	2658.1 ppb	12:54:56
2	Si 251.611†	157101.6	150480.0	4868.4 ug/L	4868.4 ppb	12:54:36
2	Sn 189.927†	3050.8	2923.8	527.92 ug/L	527.92 ppb	12:54:56
2	Ti 334.940†	323603.6	312537.4	492.35 ug/L	492.35 ppb	12:54:36
2	Tl 190.801†	1655.0	1618.6	523.91 ug/L	523.91 ppb	12:54:56
2	U 409.014†	14732.2	17066.0	474.85 ug/L	474.85 ppb	12:54:36
2	V 292.402†	71862.6	70560.7	499.90 ug/L	499.90 ppb	12:54:36
2	Zn 213.857†	51865.3	49126.2	491.36 ug/L	491.36 ppb	12:54:36
2	SiO2†	156137.2	149529.4	10367 ug/L	10367 ppb	12:55:32
3	Sc Radial	3713.3	3713.3	96.3 %		12:54:02
3	Y RADIAL	4164.7	4164.7	93.55 %		12:53:42
3	Al 396.153Radial†	5560.7	5891.0	5510.9 ug/L	5510.9 ppb	12:53:42
3	Ca 317.933Radial†	2401.3	2475.5	5398.5 ug/L	5398.5 ppb	12:54:02
3	Fe 238.204 Radial†	329.3	330.4	5354.4 ug/L	5354.4 ppb	12:54:02
3	K 766.490 Radial†	15891.4	13741.2	2629.1 ug/L	2629.1 ppb	12:53:42
3	Mg 279.077 IEC†	100.0	102.7	5421.2 ug/L	5421.2 ppb	12:54:02
3	Na 589.592 Radial†	6440.8	7591.7	2362.3 ug/L	2362.3 ppb	12:53:42
3	Sr 421.552†	72780.2	75587.5	525.79 ug/L	525.79 ppb	12:53:42
3	Sc 361.383	912594.3	912594.3	103.70 %		12:55:02
3	Y 371.029	760061.1	760061.1	99.925 %		12:55:02
3	Ag 328.068†	55908.1	53681.6	252.63 ug/L	252.63 ppb	12:55:02
3	As 188.979†	1118.2	1098.3	492.63 ug/L	492.63 ppb	12:55:22
3	B 249.677†	21817.8	21318.3	520.16 ug/L	520.16 ppb	12:55:02
3	Ba 233.527†	69017.4	66546.9	524.33 ug/L	524.33 ppb	12:55:02
3	Be 313.107†	702397.1	680924.6	255.53 ug/L	255.53 ppb	12:55:02
3	Cd 226.502†	44434.4	43027.1	499.86 ug/L	499.86 ppb	12:55:22
3	Co 228.616†	25383.2	24543.5	515.65 ug/L	515.65 ppb	12:55:22
3	Cr 267.716†	46254.2	44520.8	500.57 ug/L	500.57 ppb	12:55:02
3	Cu 324.752†	183319.8	170831.9	520.52 ug/L	520.52 ppb	12:55:02
3	Mn 257.610†	458440.7	441626.0	503.43 ug/L	503.43 ppb	12:55:02
3	Mo 202.031†	7370.8	7103.5	523.68 ug/L	523.68 ppb	12:55:22
3	Ni 231.604†	19840.5	19050.6	485.87 ug/L	485.87 ppb	12:55:22
3	P 214.914†	4657.5	4285.8	2476.1 ug/L	2476.1 ppb	12:55:22
3	Pb 220.353†	4372.0	4155.0	515.67 ug/L	515.67 ppb	12:55:22
3	S 181.975 Axial†	1819.2	1718.5	2422.1 ug/L	2422.1 ppb	12:55:22
3	Sb 206.836†	1463.6	1372.4	503.07 ug/L	503.07 ppb	12:55:22
3	Se 196.026†	4108.5	3986.9	2638.3 ug/L	2638.3 ppb	12:55:22
3	Si 251.611†	156318.5	150183.2	4858.8 ug/L	4858.8 ppb	12:55:02
3	Sn 189.927†	3026.3	2909.0	525.23 ug/L	525.23 ppb	12:55:22
3	Ti 334.940†	322101.2	312032.7	491.54 ug/L	491.54 ppb	12:55:02
3	Tl 190.801†	1644.2	1613.0	522.11 ug/L	522.11 ppb	12:55:22
3	U 409.014†	14665.8	17045.0	474.24 ug/L	474.24 ppb	12:55:02
3	V 292.402†	71773.4	70684.4	500.72 ug/L	500.72 ppb	12:55:02
3	Zn 213.857†	51710.8	49128.6	491.38 ug/L	491.38 ppb	12:55:02
3	SiO2†	155733.1	149595.2	10372 ug/L	10372 ppb	12:55:38

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913914.4	103.85 %	0.158			0.15%
Sc Radial	3759.0	97.5 %	1.04			1.06%
Y 371.029	760393.4	99.968 %	0.1168			0.12%
Y RADIAL	4241.8	95.28 %	1.500			1.57%
Ag 328.068†	53641.9	252.41 ug/L	0.426	252.41 ppb	0.426	0.17%
QC value within limits for Ag 328.068 Recovery = 100.96%						
Al 396.153Radial†	5904.5	5523.5 ug/L	25.90	5523.5 ppb	25.90	0.47%
QC value greater than the upper limit for Al 396.153Radial Recovery = 110.47%						
As 188.979†	1098.6	492.75 ug/L	3.355	492.75 ppb	3.355	0.68%
QC value within limits for As 188.979 Recovery = 98.55%						
B 249.677†	21335.9	520.60 ug/L	1.881	520.60 ppb	1.881	0.36%
QC value within limits for B 249.677 Recovery = 104.12%						
Ba 233.527†	66561.0	524.44 ug/L	0.510	524.44 ppb	0.510	0.10%
QC value within limits for Ba 233.527 Recovery = 104.89%						
Be 313.107†	680588.3	255.41 ug/L	0.268	255.41 ppb	0.268	0.11%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2478.5	5405.0 ug/L	14.97	5405.0 ppb	14.97	0.28%

QC value within limits for Ca 317.933 Radial Recovery = 108.10%

Cd 226.502†	43210.8	502.01 ug/L	1.925	502.01 ppb	1.925	0.38%
QC value within limits for Cd 226.502 Recovery = 100.40%						
Co 228.616†	24672.4	518.37 ug/L	2.428	518.37 ppb	2.428	0.47%
QC value within limits for Co 228.616 Recovery = 103.67%						
Cr 267.716†	44520.5	500.56 ug/L	0.331	500.56 ppb	0.331	0.07%
QC value within limits for Cr 267.716 Recovery = 100.11%						
Cu 324.752†	170862.9	520.61 ug/L	0.769	520.61 ppb	0.769	0.15%
QC value within limits for Cu 324.752 Recovery = 104.12%						
Fe 238.204 Radial†	323.8	5248.1 ug/L	93.10	5248.1 ppb	93.10	1.77%
QC value within limits for Fe 238.204 Radial Recovery = 104.96%						
K 766.490 Radial†	13730.2	2627.0 ug/L	10.33	2627.0 ppb	10.33	0.39%
QC value within limits for K 766.490 Radial Recovery = 105.08%						
Mg 279.077 IEC†	101.8	5374.2 ug/L	50.71	5374.2 ppb	50.71	0.94%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%						
Mn 257.610†	441896.4	503.73 ug/L	0.267	503.73 ppb	0.267	0.05%
QC value within limits for Mn 257.610 Recovery = 100.75%						
Mo 202.031†	7126.7	525.39 ug/L	1.796	525.39 ppb	1.796	0.34%
QC value within limits for Mo 202.031 Recovery = 105.08%						
Na 589.592 Radial†	7646.1	2379.2 ug/L	16.52	2379.2 ppb	16.52	0.69%
QC value within limits for Na 589.592 Radial Recovery = 95.17%						
Ni 231.604†	19136.4	488.05 ug/L	1.985	488.05 ppb	1.985	0.41%
QC value within limits for Ni 231.604 Recovery = 97.61%						
P 214.914†	4308.2	2489.6 ug/L	15.96	2489.6 ppb	15.96	0.64%
QC value within limits for P 214.914 Recovery = 99.59%						
Pb 220.353†	4174.9	518.15 ug/L	2.326	518.15 ppb	2.326	0.45%
QC value within limits for Pb 220.353 Recovery = 103.63%						
S 181.975 Axial†	1727.3	2434.4 ug/L	10.90	2434.4 ppb	10.90	0.45%
QC value within limits for S 181.975 Axial Recovery = 97.38%						
Sb 206.836†	1380.9	506.14 ug/L	2.876	506.14 ppb	2.876	0.57%
QC value within limits for Sb 206.836 Recovery = 101.23%						
Se 196.026†	4008.5	2652.2 ug/L	12.09	2652.2 ppb	12.09	0.46%
QC value within limits for Se 196.026 Recovery = 106.09%						
Si 251.611†	150281.3	4862.0 ug/L	5.58	4862.0 ppb	5.58	0.11%
QC value within limits for Si 251.611 Recovery = 97.24%						
Sn 189.927†	2918.4	526.94 ug/L	1.483	526.94 ppb	1.483	0.28%
QC value within limits for Sn 189.927 Recovery = 105.39%						
Sr 421.552†	76142.6	529.66 ug/L	4.311	529.66 ppb	4.311	0.81%
QC value within limits for Sr 421.552 Recovery = 105.93%						
Ti 334.940†	312260.0	491.90 ug/L	0.409	491.90 ppb	0.409	0.08%
QC value within limits for Ti 334.940 Recovery = 98.38%						
Tl 190.801†	1618.7	523.94 ug/L	1.849	523.94 ppb	1.849	0.35%
QC value within limits for Tl 190.801 Recovery = 104.79%						
U 409.014†	17053.9	474.50 ug/L	0.312	474.50 ppb	0.312	0.07%
QC value within limits for U 409.014 Recovery = 94.90%						
V 292.402†	70611.2	500.25 ug/L	0.424	500.25 ppb	0.424	0.08%
QC value within limits for V 292.402 Recovery = 100.05%						
Zn 213.857†	49149.7	491.59 ug/L	0.386	491.59 ppb	0.386	0.08%
QC value within limits for Zn 213.857 Recovery = 98.32%						
SiO2†	149642.1	10375 ug/L	9.8	10375 ppb	9.8	0.09%
QC value within limits for SiO2 Recovery = 97.01%						

QC Failed. Continue with analysis.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/25/2010 12:57:48

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	3864.4	3864.4	100 %		13:00:01
1	Y RADIAL	4333.3	4333.3	97.34 %		12:59:41
1	Al 396.153Radial†	-114.9	0.4	0.4047 ug/L	0.4047 ppb	12:59:41
1	Ca 317.933Radial†	18.1	-0.7	-1.4345 ug/L	-1.4345 ppb	13:00:01
1	Fe 238.204 Radial†	8.6	-3.1	-50.577 ug/L	-50.577 ppb	13:00:01
1	K 766.490 Radial†	2812.4	42.0	8.0380 ug/L	8.0380 ppb	12:59:41
1	Mg 279.077 IEC†	1.7	0.5	26.336 ug/L	26.336 ppb	13:00:01
1	Na 589.592 Radial†	-864.9	38.4	11.962 ug/L	11.962 ppb	12:59:41
1	Sr 421.552†	12.8	4.0	0.0279 ug/L	0.0279 ppb	12:59:41
1	Sc 361.383	903426.7	903426.7	102.65 %		13:00:58
1	Y 371.029	759979.1	759979.1	99.914 %		13:00:58
1	Ag 328.068†	312.6	70.4	0.3161 ug/L	0.3161 ppb	13:00:58
1	As 188.979†	-22.9	-2.4	-1.0673 ug/L	-1.0673 ppb	13:01:18
1	B 249.677†	-163.6	118.6	2.9153 ug/L	2.9153 ppb	13:01:18
1	Ba 233.527†	2.9	-8.2	-0.0658 ug/L	-0.0658 ppb	13:01:18
1	Be 313.107†	-3630.0	22.1	0.0078 ug/L	0.0078 ppb	13:00:58
1	Cd 226.502†	-180.6	0.3	0.0076 ug/L	0.0076 ppb	13:01:18
1	Co 228.616†	-67.6	-1.0	-0.0193 ug/L	-0.0193 ppb	13:01:18
1	Cr 267.716†	64.6	-22.2	-0.2514 ug/L	-0.2514 ppb	13:01:18
1	Cu 324.752†	6040.2	-71.0	-0.2162 ug/L	-0.2162 ppb	13:00:58
1	Mn 257.610†	496.9	6.4	0.0012 ug/L	0.0012 ppb	13:01:18
1	Mo 202.031†	6.1	1.3	0.0918 ug/L	0.0918 ppb	13:01:18
1	Ni 231.604†	78.3	-6.5	-0.1664 ug/L	-0.1664 ppb	13:01:18
1	P 214.914†	205.3	-5.8	-3.3911 ug/L	-3.3911 ppb	13:01:18
1	Pb 220.353†	26.4	-35.4	-4.3757 ug/L	-4.3757 ppb	13:01:18
1	S 181.975 Axial†	43.4	6.4	9.0514 ug/L	9.0514 ppb	13:01:18
1	Sb 206.836†	30.1	-9.7	-3.4076 ug/L	-3.4076 ppb	13:01:18
1	Se 196.026†	-23.4	1.9	1.1192 ug/L	1.1192 ppb	13:01:18
1	Si 251.611†	581.9	2.2	0.0691 ug/L	0.0691 ppb	13:01:18
1	Sn 189.927†	8.4	-1.2	-0.2146 ug/L	-0.2146 ppb	13:01:18
1	Ti 334.940†	-1585.8	-134.9	-0.2126 ug/L	-0.2126 ppb	13:00:58
1	Tl 190.801†	-33.6	-5.3	-1.7107 ug/L	-1.7107 ppb	13:01:18
1	U 409.014†	-3169.7	-185.9	-5.1858 ug/L	-5.1858 ppb	13:00:58
1	V 292.402†	-1492.6	14.7	0.1022 ug/L	0.1022 ppb	13:00:58
1	Zn 213.857†	991.4	226.3	2.2935 ug/L	2.2935 ppb	13:01:18
1	SiO2†	638.3	33.5	2.3257 ug/L	2.3257 ppb	13:02:14
2	Sc Radial	3835.8	3835.8	99.5 %		13:00:26
2	Y RADIAL	4369.6	4369.6	98.16 %		13:00:06
2	Al 396.153Radial†	-106.5	8.0	7.4720 ug/L	7.4720 ppb	13:00:06
2	Ca 317.933Radial†	12.7	-5.9	-12.883 ug/L	-12.883 ppb	13:00:26
2	Fe 238.204 Radial†	8.0	-3.6	-58.396 ug/L	-58.396 ppb	13:00:26
2	K 766.490 Radial†	2770.3	20.5	3.9467 ug/L	3.9467 ppb	13:00:06
2	Mg 279.077 IEC†	2.4	1.3	66.800 ug/L	66.800 ppb	13:00:26
2	Na 589.592 Radial†	-962.1	-65.7	-20.454 ug/L	-20.454 ppb	13:00:06
2	Sr 421.552†	26.1	17.5	0.1217 ug/L	0.1217 ppb	13:00:06
2	Sc 361.383	895507.8	895507.8	101.75 %		13:01:23
2	Y 371.029	754233.9	754233.9	99.158 %		13:01:23
2	Ag 328.068†	160.1	-76.8	-0.3725 ug/L	-0.3725 ppb	13:01:23
2	As 188.979†	-22.0	-1.7	-0.7867 ug/L	-0.7867 ppb	13:01:43
2	B 249.677†	-148.3	132.3	3.2511 ug/L	3.2511 ppb	13:01:43
2	Ba 233.527†	5.1	-6.0	-0.0496 ug/L	-0.0496 ppb	13:01:43
2	Be 313.107†	-3647.0	-25.9	-0.0099 ug/L	-0.0099 ppb	13:01:23
2	Cd 226.502†	-169.3	9.8	0.1200 ug/L	0.1200 ppb	13:01:43
2	Co 228.616†	-64.5	1.4	0.0324 ug/L	0.0324 ppb	13:01:43
2	Cr 267.716†	81.9	-4.6	-0.0562 ug/L	-0.0562 ppb	13:01:43
2	Cu 324.752†	5918.8	-138.4	-0.4226 ug/L	-0.4226 ppb	13:01:23
2	Mn 257.610†	504.3	18.0	0.0120 ug/L	0.0120 ppb	13:01:43
2	Mo 202.031†	13.2	8.3	0.6044 ug/L	0.6044 ppb	13:01:43
2	Ni 231.604†	101.3	16.8	0.4275 ug/L	0.4275 ppb	13:01:43

2	P 214.914†	208.6	-0.8	-0.3650 ug/L	-0.3650 ppb	13:01:43
2	Pb 220.353†	-3.3	-64.5	-7.9643 ug/L	-7.9643 ppb	13:01:43
2	S 181.975 Axial†	37.1	0.6	0.8137 ug/L	0.8137 ppb	13:01:43
2	Sb 206.836†	42.3	2.5	0.9066 ug/L	0.9066 ppb	13:01:43
2	Se 196.026†	-23.8	1.4	0.7220 ug/L	0.7220 ppb	13:01:43
2	Si 251.611†	599.4	24.4	0.7817 ug/L	0.7817 ppb	13:01:43
2	Sn 189.927†	8.6	-0.9	-0.1666 ug/L	-0.1666 ppb	13:01:43
2	Ti 334.940†	-1488.5	-52.9	-0.0889 ug/L	-0.0889 ppb	13:01:23
2	Tl 190.801†	-33.6	-5.6	-1.8005 ug/L	-1.8005 ppb	13:01:43
2	U 409.014†	-3087.8	-132.7	-3.6995 ug/L	-3.6995 ppb	13:01:23
2	V 292.402†	-1527.3	-32.3	-0.2140 ug/L	-0.2140 ppb	13:01:23
2	Zn 213.857†	997.1	240.5	2.4342 ug/L	2.4342 ppb	13:01:43
2	SiO2†	628.5	29.5	2.0302 ug/L	2.0302 ppb	13:02:19
3	Sc Radial	3871.2	3871.2	100 %		13:00:51
3	Y RADIAL	4314.0	4314.0	96.91 %		13:00:31
3	Al 396.153Radial†	-120.0	-4.5	-4.2645 ug/L	-4.2645 ppb	13:00:31
3	Ca 317.933Radial†	14.5	-4.2	-9.1832 ug/L	-9.1832 ppb	13:00:51
3	Fe 238.204 Radial†	10.5	-1.2	-19.042 ug/L	-19.042 ppb	13:00:51
3	K 766.490 Radial†	2693.2	-81.8	-15.657 ug/L	-15.657 ppb	13:00:31
3	Mg 279.077 IEC†	-0.9	-2.1	-110.80 ug/L	-110.80 ppb	13:00:51
3	Na 589.592 Radial†	-932.9	-27.8	-8.6403 ug/L	-8.6403 ppb	13:00:31
3	Sr 421.552†	72.9	63.9	0.4447 ug/L	0.4447 ppb	13:00:31
3	Sc 361.383	910445.1	910445.1	103.45 %		13:01:49
3	Y 371.029	767542.4	767542.4	100.91 %		13:01:49
3	Ag 328.068†	306.2	61.8	0.2821 ug/L	0.2821 ppb	13:01:49
3	As 188.979†	-28.2	-7.3	-3.2559 ug/L	-3.2559 ppb	13:02:09
3	B 249.677†	-184.1	100.1	2.4564 ug/L	2.4564 ppb	13:02:09
3	Ba 233.527†	11.8	0.3	0.0022 ug/L	0.0022 ppb	13:02:09
3	Be 313.107†	-3689.4	-8.1	-0.0031 ug/L	-0.0031 ppb	13:01:49
3	Cd 226.502†	-179.3	2.9	0.0356 ug/L	0.0356 ppb	13:02:09
3	Co 228.616†	-67.5	-0.4	-0.0069 ug/L	-0.0069 ppb	13:02:09
3	Cr 267.716†	76.4	-11.2	-0.1275 ug/L	-0.1275 ppb	13:02:09
3	Cu 324.752†	6052.4	-104.7	-0.3197 ug/L	-0.3197 ppb	13:01:49
3	Mn 257.610†	483.3	-10.5	-0.0093 ug/L	-0.0093 ppb	13:02:09
3	Mo 202.031†	12.4	7.3	0.5369 ug/L	0.5369 ppb	13:02:09
3	Ni 231.604†	80.0	-5.5	-0.1401 ug/L	-0.1401 ppb	13:02:09
3	P 214.914†	206.0	-6.7	-3.9068 ug/L	-3.9068 ppb	13:02:09
3	Pb 220.353†	-1.3	-62.4	-7.7165 ug/L	-7.7165 ppb	13:02:09
3	S 181.975 Axial†	40.0	2.8	4.0137 ug/L	4.0137 ppb	13:02:09
3	Sb 206.836†	37.6	-2.7	-0.9114 ug/L	-0.9114 ppb	13:02:09
3	Se 196.026†	-35.7	-9.8	-6.4957 ug/L	-6.4957 ppb	13:02:09
3	Si 251.611†	586.0	1.7	0.0491 ug/L	0.0491 ppb	13:02:09
3	Sn 189.927†	21.7	11.6	2.0872 ug/L	2.0872 ppb	13:02:09
3	Ti 334.940†	-1476.1	-17.0	-0.0187 ug/L	-0.0187 ppb	13:01:49
3	Tl 190.801†	-28.1	0.3	0.0940 ug/L	0.0940 ppb	13:02:09
3	U 409.014†	-3013.7	-11.3	-0.3119 ug/L	-0.3119 ppb	13:01:49
3	V 292.402†	-1506.5	12.5	0.0950 ug/L	0.0950 ppb	13:01:49
3	Zn 213.857†	990.0	217.5	2.1998 ug/L	2.1998 ppb	13:02:09
3	SiO2†	605.8	-2.7	-0.2002 ug/L	-0.2002 ppb	13:02:24

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903126.6	102.62 %	0.849			0.83%
Sc Radial	3857.1	100 %	0.5			0.49%
Y 371.029	760585.1	99.993 %	0.8775			0.88%
Y RADIAL	4338.9	97.47 %	0.634			0.65%
Ag 328.068†	18.5	0.0752 ug/L	0.38811	0.0752 ppb	0.38811	515.88%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.3	1.2041 ug/L	5.90893	1.2041 ppb	5.90893	490.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.8	-1.7033 ug/L	1.35190	-1.7033 ppb	1.35190	79.37%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	117.0	2.8743 ug/L	0.39894	2.8743 ppb	0.39894	13.88%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-4.6	-0.0378 ug/L	0.03553	-0.0378 ppb	0.03553	94.08%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-4.0	-0.0017 ug/L	0.00890	-0.0017 ppb	0.00890	516.93%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.6	-7.8334 ug/L	5.84221	-7.8334 ppb	5.84221	74.58%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	4.4	0.0544 ug/L	0.05853	0.0544 ppb	0.05853 107.55%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.0	0.0021 ug/L	0.02698	0.0021 ppb	0.02698 >999.9%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-12.7	-0.1450 ug/L	0.09874	-0.1450 ppb	0.09874 68.09%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-104.7	-0.3195 ug/L	0.10318	-0.3195 ppb	0.10318 32.29%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-2.6	-42.672 ug/L	20.8341	-42.672 ppb	20.8341 48.82%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-6.4	-1.2241 ug/L	12.66554	-1.2241 ppb	12.66554 >999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.1	-5.8890 ug/L	93.08322	-5.8890 ppb	93.08322 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	4.6	0.0013 ug/L	0.01066	0.0013 ppb	0.01066 825.47%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	5.6	0.4110 ug/L	0.27851	0.4110 ppb	0.27851 67.76%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-18.4	-5.7109 ug/L	16.40515	-5.7109 ppb	16.40515 287.26%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	1.6	0.0403 ug/L	0.33556	0.0403 ppb	0.33556 831.71%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-4.4	-2.5543 ug/L	1.91347	-2.5543 ppb	1.91347 74.91%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-54.1	-6.6855 ug/L	2.00419	-6.6855 ppb	2.00419 29.98%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	3.3	4.6263 ug/L	4.15289	4.6263 ppb	4.15289 89.77%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-3.3	-1.1374 ug/L	2.16596	-1.1374 ppb	2.16596 190.42%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-2.2	-1.5515 ug/L	4.28639	-1.5515 ppb	4.28639 276.27%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	9.4	0.3000 ug/L	0.41734	0.3000 ppb	0.41734 139.12%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	3.1	0.5687 ug/L	1.31527	0.5687 ppb	1.31527 231.29%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	28.5	0.1981 ug/L	0.21867	0.1981 ppb	0.21867 110.38%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-68.3	-0.1068 ug/L	0.09816	-0.1068 ppb	0.09816 91.95%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-3.5	-1.1391 ug/L	1.06882	-1.1391 ppb	1.06882 93.83%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-110.0	-3.0657 ug/L	2.49799	-3.0657 ppb	2.49799 81.48%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-1.7	-0.0056 ug/L	0.18052	-0.0056 ppb	0.18052 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	228.1	2.3092 ug/L	0.11796	2.3092 ppb	0.11796 5.11%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	20.1	1.3852 ug/L	1.38096	1.3852 ppb	1.38096 99.69%
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: 2/25/2010 13:04:35

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	3821.9	3821.9	99.1 %		13:06:48
1	Y RADIAL	4386.9	4386.9	98.54 %		13:06:28
1	Al 396.153Radial†	120.3	236.5	221.72 ug/L	221.72 ppb	13:06:28
1	Ca 317.933Radial†	116.5	98.9	215.62 ug/L	215.62 ppb	13:06:48
1	Fe 238.204 Radial†	17.8	6.3	102.00 ug/L	102.00 ppb	13:06:48
1	K 766.490 Radial†	3621.3	889.5	170.22 ug/L	170.22 ppb	13:06:28
1	Mg 279.077 IEC†	8.8	7.7	406.41 ug/L	406.41 ppb	13:06:48
1	Na 589.592 Radial†	-6.4	895.3	278.57 ug/L	278.57 ppb	13:06:28
1	Sr 421.552†	718.5	716.3	4.9814 ug/L	4.9814 ppb	13:06:28
1	Sc 361.383	902846.8	902846.8	102.59 %		13:07:45
1	Y 371.029	758909.8	758909.8	99.773 %		13:07:45
1	Ag 328.068†	1352.6	1084.3	5.0463 ug/L	5.0463 ppb	13:07:45
1	As 188.979†	50.4	69.0	30.748 ug/L	30.748 ppb	13:08:05
1	B 249.677†	1702.1	1937.2	47.450 ug/L	47.450 ppb	13:07:45
1	Ba 233.527†	679.9	651.7	5.1348 ug/L	5.1348 ppb	13:08:05
1	Be 313.107†	10117.4	13420.4	5.0258 ug/L	5.0258 ppb	13:07:45
1	Cd 226.502†	271.8	441.1	5.1279 ug/L	5.1279 ppb	13:08:05
1	Co 228.616†	178.5	238.8	5.0287 ug/L	5.0287 ppb	13:08:05
1	Cr 267.716†	526.0	427.6	4.7956 ug/L	4.7956 ppb	13:08:05
1	Cu 324.752†	9386.2	3194.3	9.7122 ug/L	9.7122 ppb	13:07:45
1	Mn 257.610†	10009.0	9278.8	10.564 ug/L	10.564 ppb	13:07:45
1	Mo 202.031†	147.5	139.1	10.259 ug/L	10.259 ppb	13:08:05
1	Ni 231.604†	292.7	202.5	5.1652 ug/L	5.1652 ppb	13:08:05
1	P 214.914†	452.2	235.0	139.44 ug/L	139.44 ppb	13:08:05
1	Pb 220.353†	100.0	36.3	4.5433 ug/L	4.5433 ppb	13:08:05
1	S 181.975 Axial†	109.1	70.5	99.410 ug/L	99.410 ppb	13:08:05
1	Sb 206.836†	62.2	21.6	7.9731 ug/L	7.9731 ppb	13:08:05
1	Se 196.026†	22.6	46.7	31.053 ug/L	31.053 ppb	13:08:05
1	Si 251.611†	3803.8	3143.1	101.70 ug/L	101.70 ppb	13:07:45
1	Sn 189.927†	63.8	52.7	9.5440 ug/L	9.5440 ppb	13:08:05
1	Ti 334.940†	1836.2	3199.7	5.0152 ug/L	5.0152 ppb	13:07:45
1	Tl 190.801†	31.4	58.0	18.722 ug/L	18.722 ppb	13:08:05
1	U 409.014†	-1266.7	1667.1	46.531 ug/L	46.531 ppb	13:07:45
1	V 292.402†	-886.8	604.3	4.4412 ug/L	4.4412 ppb	13:07:45
1	Zn 213.857†	2091.9	1299.7	13.060 ug/L	13.060 ppb	13:08:05
1	SiO2†	3861.4	3175.8	220.21 ug/L	220.21 ppb	13:09:02
2	Sc Radial	3915.0	3915.0	102 %		13:07:14
2	Y RADIAL	4311.1	4311.1	96.84 %		13:06:53
2	Al 396.153Radial†	95.7	209.4	196.25 ug/L	196.25 ppb	13:06:53
2	Ca 317.933Radial†	119.3	98.9	215.58 ug/L	215.58 ppb	13:07:14
2	Fe 238.204 Radial†	15.9	4.0	64.447 ug/L	64.447 ppb	13:07:14
2	K 766.490 Radial†	3573.8	755.8	144.61 ug/L	144.61 ppb	13:06:53
2	Mg 279.077 IEC†	9.6	8.3	436.57 ug/L	436.57 ppb	13:07:14
2	Na 589.592 Radial†	-55.8	846.7	263.48 ug/L	263.48 ppb	13:06:53
2	Sr 421.552†	695.5	676.4	4.7042 ug/L	4.7042 ppb	13:06:53
2	Sc 361.383	894126.4	894126.4	101.60 %		13:08:11
2	Y 371.029	751832.7	751832.7	98.843 %		13:08:11
2	Ag 328.068†	1403.6	1147.4	5.3299 ug/L	5.3299 ppb	13:08:11
2	As 188.979†	44.7	63.9	28.441 ug/L	28.441 ppb	13:08:31
2	B 249.677†	1723.2	1974.1	48.359 ug/L	48.359 ppb	13:08:11
2	Ba 233.527†	682.3	660.6	5.2044 ug/L	5.2044 ppb	13:08:31
2	Be 313.107†	9942.7	13344.7	4.9973 ug/L	4.9973 ppb	13:08:11
2	Cd 226.502†	268.0	440.0	5.1188 ug/L	5.1188 ppb	13:08:31
2	Co 228.616†	183.5	245.5	5.1708 ug/L	5.1708 ppb	13:08:31
2	Cr 267.716†	511.7	418.5	4.6906 ug/L	4.6906 ppb	13:08:31
2	Cu 324.752†	9274.2	3173.3	9.6463 ug/L	9.6463 ppb	13:08:11
2	Mn 257.610†	9833.1	9200.9	10.471 ug/L	10.471 ppb	13:08:11
2	Mo 202.031†	154.6	147.5	10.870 ug/L	10.870 ppb	13:08:31
2	Ni 231.604†	274.5	187.4	4.7793 ug/L	4.7793 ppb	13:08:31



2	P 214.914†	446.6	233.8	138.79 ug/L	138.79 ppb	13:08:31
2	Pb 220.353†	104.2	41.4	5.1749 ug/L	5.1749 ppb	13:08:31
2	S 181.975 Axial†	107.2	69.7	98.259 ug/L	98.259 ppb	13:08:31
2	Sb 206.836†	60.2	20.2	7.5393 ug/L	7.5393 ppb	13:08:31
2	Se 196.026†	26.2	50.5	33.411 ug/L	33.411 ppb	13:08:31
2	Si 251.611†	3711.0	3088.0	99.904 ug/L	99.904 ppb	13:08:11
2	Sn 189.927†	74.3	63.7	11.522 ug/L	11.522 ppb	13:08:31
2	Ti 334.940†	1765.9	3148.0	4.9314 ug/L	4.9314 ppb	13:08:11
2	Tl 190.801†	36.5	63.4	20.449 ug/L	20.449 ppb	13:08:31
2	U 409.014†	-1267.4	1654.4	46.181 ug/L	46.181 ppb	13:08:11
2	V 292.402†	-811.2	670.2	4.9160 ug/L	4.9160 ppb	13:08:11
2	Zn 213.857†	1886.8	1117.7	11.230 ug/L	11.230 ppb	13:08:31
2	SiO2†	3823.2	3174.9	220.13 ug/L	220.13 ppb	13:09:07
3	Sc Radial	3814.9	3814.9	98.9 %		13:07:39
3	Y RADIAL	4340.8	4340.8	97.51 %		13:07:19
3	Al 396.153Radial†	97.2	213.3	199.94 ug/L	199.94 ppb	13:07:19
3	Ca 317.933Radial†	112.1	94.7	206.51 ug/L	206.51 ppb	13:07:39
3	Fe 238.204 Radial†	19.1	7.6	123.28 ug/L	123.28 ppb	13:07:39
3	K 766.490 Radial†	3506.5	780.1	149.27 ug/L	149.27 ppb	13:07:19
3	Mg 279.077 IEC†	7.9	6.8	361.03 ug/L	361.03 ppb	13:07:39
3	Na 589.592 Radial†	-23.5	877.9	273.18 ug/L	273.18 ppb	13:07:19
3	Sr 421.552†	738.7	738.1	5.1332 ug/L	5.1332 ppb	13:07:19
3	Sc 361.383	901053.1	901053.1	102.38 %		13:08:36
3	Y 371.029	758912.2	758912.2	99.773 %		13:08:36
3	Ag 328.068†	1427.6	1160.2	5.4126 ug/L	5.4126 ppb	13:08:36
3	As 188.979†	44.5	63.4	28.240 ug/L	28.240 ppb	13:08:56
3	B 249.677†	1714.3	1952.4	47.820 ug/L	47.820 ppb	13:08:36
3	Ba 233.527†	671.0	644.3	5.0799 ug/L	5.0799 ppb	13:08:56
3	Be 313.107†	10136.8	13459.0	5.0402 ug/L	5.0402 ppb	13:08:36
3	Cd 226.502†	268.8	438.8	5.0975 ug/L	5.0975 ppb	13:08:56
3	Co 228.616†	158.2	219.4	4.6205 ug/L	4.6205 ppb	13:08:56
3	Cr 267.716†	516.2	419.1	4.7042 ug/L	4.7042 ppb	13:08:56
3	Cu 324.752†	9396.3	3222.4	9.8010 ug/L	9.8010 ppb	13:08:36
3	Mn 257.610†	9914.9	9206.4	10.486 ug/L	10.486 ppb	13:08:36
3	Mo 202.031†	151.9	143.6	10.592 ug/L	10.592 ppb	13:08:56
3	Ni 231.604†	279.3	190.1	4.8474 ug/L	4.8474 ppb	13:08:56
3	P 214.914†	458.2	241.7	143.48 ug/L	143.48 ppb	13:08:56
3	Pb 220.353†	81.1	18.0	2.2765 ug/L	2.2765 ppb	13:08:56
3	S 181.975 Axial†	116.8	78.2	110.23 ug/L	110.23 ppb	13:08:56
3	Sb 206.836†	64.3	23.8	8.7659 ug/L	8.7659 ppb	13:08:56
3	Se 196.026†	17.2	41.6	27.724 ug/L	27.724 ppb	13:08:56
3	Si 251.611†	3778.5	3125.8	101.13 ug/L	101.13 ppb	13:08:36
3	Sn 189.927†	66.3	55.3	10.007 ug/L	10.007 ppb	13:08:56
3	Ti 334.940†	1834.2	3201.4	5.0218 ug/L	5.0218 ppb	13:08:36
3	Tl 190.801†	38.6	65.1	21.016 ug/L	21.016 ppb	13:08:56
3	U 409.014†	-1393.2	1541.1	43.009 ug/L	43.009 ppb	13:08:36
3	V 292.402†	-729.2	756.5	5.4984 ug/L	5.4984 ppb	13:08:36
3	Zn 213.857†	1794.6	1013.4	10.168 ug/L	10.168 ppb	13:08:56
3	SiO2†	3768.8	3092.9	214.44 ug/L	214.44 ppb	13:09:12

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899342.1	102.19 %	0.523			0.51%
Sc Radial	3850.6	99.8 %	1.45			1.45%
Y 371.029	756551.6	99.463 %	0.5373			0.54%
Y RADIAL	4346.3	97.63 %	0.858			0.88%
Ag 328.068†	1130.6	5.2629 ug/L	0.19210	5.2629 ppb	0.19210	3.65%
QC value within limits for Ag 328.068 Recovery = 105.26%						
Al 396.153Radial†	219.7	205.97 ug/L	13.762	205.97 ppb	13.762	6.68%
QC value within limits for Al 396.153Radial Recovery = 102.99%						
As 188.979†	65.4	29.143 ug/L	1.3936	29.143 ppb	1.3936	4.78%
QC value within limits for As 188.979 Recovery = 97.14%						
B 249.677†	1954.6	47.876 ug/L	0.4573	47.876 ppb	0.4573	0.96%
QC value within limits for B 249.677 Recovery = 95.75%						
Ba 233.527†	652.2	5.1397 ug/L	0.06238	5.1397 ppb	0.06238	1.21%
QC value within limits for Ba 233.527 Recovery = 102.79%						
Be 313.107†	13408.0	5.0211 ug/L	0.02184	5.0211 ppb	0.02184	0.43%
QC value within limits for Be 313.107 Recovery = 100.42%						
Ca 317.933Radial†	97.5	212.57 ug/L	5.247	212.57 ppb	5.247	2.47%

QC value within limits for Ca 317.933 Radial Recovery = 106.29%							
Cd 226.502†	440.0	5.1147 ug/L	0.01558	5.1147 ppb	0.01558	0.30%	
QC value within limits for Cd 226.502 Recovery = 102.29%							
Co 228.616†	234.6	4.9400 ug/L	0.28568	4.9400 ppb	0.28568	5.78%	
QC value within limits for Co 228.616 Recovery = 98.80%							
Cr 267.716†	421.7	4.7301 ug/L	0.05710	4.7301 ppb	0.05710	1.21%	
QC value within limits for Cr 267.716 Recovery = 94.60%							
Cu 324.752†	3196.7	9.7198 ug/L	0.07762	9.7198 ppb	0.07762	0.80%	
QC value within limits for Cu 324.752 Recovery = 97.20%							
Fe 238.204 Radial†	6.0	96.577 ug/L	29.7902	96.577 ppb	29.7902	30.85%	
QC value within limits for Fe 238.204 Radial Recovery = 96.58%							
K 766.490 Radial†	808.5	154.70 ug/L	13.639	154.70 ppb	13.639	8.82%	
QC value within limits for K 766.490 Radial Recovery = 103.13%							
Mg 279.077 IEC†	7.6	401.34 ug/L	38.026	401.34 ppb	38.026	9.47%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 133.78%							
Mn 257.610†	9228.7	10.507 ug/L	0.0503	10.507 ppb	0.0503	0.48%	
QC value within limits for Mn 257.610 Recovery = 105.07%							
Mo 202.031†	143.4	10.574 ug/L	0.3062	10.574 ppb	0.3062	2.90%	
QC value within limits for Mo 202.031 Recovery = 105.74%							
Na 589.592 Radial†	873.3	271.74 ug/L	7.649	271.74 ppb	7.649	2.81%	
QC value within limits for Na 589.592 Radial Recovery = 90.58%							
Ni 231.604†	193.3	4.9306 ug/L	0.20596	4.9306 ppb	0.20596	4.18%	
QC value within limits for Ni 231.604 Recovery = 98.61%							
P 214.914†	236.8	140.57 ug/L	2.539	140.57 ppb	2.539	1.81%	
QC value within limits for P 214.914 Recovery = 93.71%							
Pb 220.353†	31.9	3.9982 ug/L	1.52417	3.9982 ppb	1.52417	38.12%	
QC value less than the lower limit for Pb 220.353 Recovery = 39.98%							
S 181.975 Axial†	72.8	102.63 ug/L	6.605	102.63 ppb	6.605	6.44%	
QC value within limits for S 181.975 Axial Recovery = 102.63%							
Sb 206.836†	21.9	8.0928 ug/L	0.62200	8.0928 ppb	0.62200	7.69%	
QC value within limits for Sb 206.836 Recovery = 80.93%							
Se 196.026†	46.3	30.729 ug/L	2.8573	30.729 ppb	2.8573	9.30%	
QC value within limits for Se 196.026 Recovery = 102.43%							
Si 251.611†	3119.0	100.91 ug/L	0.916	100.91 ppb	0.916	0.91%	
QC value within limits for Si 251.611 Recovery = 100.91%							
Sn 189.927†	57.3	10.358 ug/L	1.0347	10.358 ppb	1.0347	9.99%	
QC value within limits for Sn 189.927 Recovery = 103.58%							
Sr 421.552†	710.3	4.9396 ug/L	0.21754	4.9396 ppb	0.21754	4.40%	
QC value within limits for Sr 421.552 Recovery = 98.79%							
Ti 334.940†	3183.0	4.9894 ug/L	0.05037	4.9894 ppb	0.05037	1.01%	
QC value within limits for Ti 334.940 Recovery = 99.79%							
Tl 190.801†	62.2	20.063 ug/L	1.1948	20.063 ppb	1.1948	5.96%	
QC value within limits for Tl 190.801 Recovery = 100.31%							
U 409.014†	1620.9	45.240 ug/L	1.9398	45.240 ppb	1.9398	4.29%	
QC value within limits for U 409.014 Recovery = 90.48%							
V 292.402†	677.0	4.9519 ug/L	0.52953	4.9519 ppb	0.52953	10.69%	
QC value within limits for V 292.402 Recovery = 99.04%							
Zn 213.857†	1143.6	11.486 ug/L	1.4627	11.486 ppb	1.4627	12.73%	
QC value within limits for Zn 213.857 Recovery = 114.86%							
SiO2†	3147.9	218.26 ug/L	3.308	218.26 ppb	3.308	1.52%	
QC value within limits for SiO2 Recovery = 102.47%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/25/2010 13:11:23

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	3516.8	3516.8	91.2 %		13:13:36
1	Y RADIAL	3851.0	3851.0	86.51 %		13:13:36
1	Al 396.153Radial†	512124.4	561772.4	527950 ug/L	527950 ppb	13:13:16
1	Ca 317.933Radial†	205043.0	224856.1	490350 ug/L	490350 ppb	13:13:16
1	Fe 238.204 Radial†	10540.7	11548.5	186630 ug/L	186630 ppb	13:13:36
1	K 766.490 Radial†	2375.9	-159.3	-194.54 ug/L	-194.54 ppb	13:13:16
1	Mg 279.077 IEC†	8643.7	9478.5	500000 ug/L	500000 ppb	13:13:36
1	Na 589.592 Radial†	-763.4	64.4	20.041 ug/L	20.041 ppb	13:13:36
1	Sr 421.552†	507.6	548.0	0.1505 ug/L	0.1505 ppb	13:13:36
1	Sc 361.383	776594.5	776594.5	88.242 %		13:14:34
1	Y 371.029	636459.0	636459.0	83.675 %		13:14:34
1	Ag 328.068†	-9986.1	-11550.9	-2.9488 ug/L	-2.9488 ppb	13:14:34
1	As 188.979†	-82.9	-74.0	10.658 ug/L	10.658 ppb	13:14:54
1	B 249.677†	547.8	898.8	-8.2804 ug/L	-8.2804 ppb	13:14:34
1	Ba 233.527†	-566.1	-652.6	0.5857 ug/L	0.5857 ppb	13:14:54
1	Be 313.107†	-4021.8	-999.4	-0.4230 ug/L	-0.4230 ppb	13:14:34
1	Cd 226.502†	1198.7	1534.6	-1.4332 ug/L	-1.4332 ppb	13:14:54
1	Co 228.616†	-18.3	44.2	-1.7674 ug/L	-1.7674 ppb	13:14:54
1	Cr 267.716†	-1328.4	-1590.6	-0.0936 ug/L	-0.0936 ppb	13:14:54
1	Cu 324.752†	3059.0	-2488.5	2.2700 ug/L	2.2700 ppb	13:14:34
1	Mn 257.610†	1007.3	663.8	-1.2626 ug/L	-1.2626 ppb	13:14:34
1	Mo 202.031†	-256.3	-295.2	-1.4175 ug/L	-1.4175 ppb	13:14:54
1	Ni 231.604†	182.2	123.7	3.1551 ug/L	3.1551 ppb	13:14:54
1	P 214.914†	168.3	-15.1	-26.963 ug/L	-26.963 ppb	13:14:54
1	Pb 220.353†	-748.0	-908.8	-15.831 ug/L	-15.831 ppb	13:14:54
1	S 181.975 Axial†	62.7	35.2	-49.369 ug/L	-49.369 ppb	13:14:54
1	Sb 206.836†	80.9	52.7	0.8027 ug/L	0.8027 ppb	13:14:54
1	Se 196.026†	-858.5	-948.2	-46.155 ug/L	-46.155 ppb	13:14:54
1	Si 251.611†	499.4	1.3	0.3081 ug/L	0.3081 ppb	13:14:54
1	Sn 189.927†	-354.7	-411.4	2.2179 ug/L	2.2179 ppb	13:14:54
1	Ti 334.940†	-13483.9	-13870.7	3.0447 ug/L	3.0447 ppb	13:14:34
1	Tl 190.801†	-74.8	-57.3	-18.649 ug/L	-18.649 ppb	13:14:54
1	U 409.014†	-1061.1	1699.3	26.217 ug/L	26.217 ppb	13:14:34
1	V 292.402†	825.6	2404.3	-0.9114 ug/L	-0.9114 ppb	13:14:54
1	Zn 213.857†	2867.4	2510.1	-2.5985 ug/L	-2.5985 ppb	13:14:54
1	SiO2†	544.0	28.3	2.5577 ug/L	2.5577 ppb	13:15:50
2	Sc Radial	3499.3	3499.3	90.7 %		13:14:02
2	Y RADIAL	3852.6	3852.6	86.54 %		13:14:02
2	Al 396.153Radial†	516438.1	569344.8	535070 ug/L	535070 ppb	13:13:42
2	Ca 317.933Radial†	206409.9	227491.0	496100 ug/L	496100 ppb	13:13:42
2	Fe 238.204 Radial†	10509.1	11571.7	187000 ug/L	187000 ppb	13:14:02
2	K 766.490 Radial†	2376.8	-145.3	-193.77 ug/L	-193.77 ppb	13:13:42
2	Mg 279.077 IEC†	8605.7	9484.2	500290 ug/L	500290 ppb	13:14:02
2	Na 589.592 Radial†	-773.8	48.8	15.184 ug/L	15.184 ppb	13:14:02
2	Sr 421.552†	504.3	547.1	0.1015 ug/L	0.1015 ppb	13:14:02
2	Sc 361.383	778719.7	778719.7	88.484 %		13:14:59
2	Y 371.029	637401.9	637401.9	83.799 %		13:14:59
2	Ag 328.068†	-10017.8	-11555.8	-2.9304 ug/L	-2.9304 ppb	13:14:59
2	As 188.979†	-77.7	-67.9	13.490 ug/L	13.490 ppb	13:15:19
2	B 249.677†	514.9	859.9	-9.2953 ug/L	-9.2953 ppb	13:14:59
2	Ba 233.527†	-582.0	-668.8	0.4696 ug/L	0.4696 ppb	13:15:19
2	Be 313.107†	-4011.7	-975.6	-0.4132 ug/L	-0.4132 ppb	13:14:59
2	Cd 226.502†	1206.1	1539.3	-1.4176 ug/L	-1.4176 ppb	13:15:19
2	Co 228.616†	3.2	68.5	-1.2577 ug/L	-1.2577 ppb	13:15:19
2	Cr 267.716†	-1316.7	-1573.2	0.1391 ug/L	0.1391 ppb	13:15:19
2	Cu 324.752†	3036.9	-2522.9	2.1882 ug/L	2.1882 ppb	13:14:59
2	Mn 257.610†	974.1	623.2	-1.2840 ug/L	-1.2840 ppb	13:14:59
2	Mo 202.031†	-228.2	-262.6	1.0788 ug/L	1.0788 ppb	13:15:19
2	Ni 231.604†	197.2	140.1	3.5751 ug/L	3.5751 ppb	13:15:19

2	P 214.914†	167.3	-16.7	-26.390 ug/L	-26.390 ppb	13:15:19
2	Pb 220.353†	-745.3	-903.5	-13.650 ug/L	-13.650 ppb	13:15:19
2	S 181.975 Axial†	67.6	40.6	-43.037 ug/L	-43.037 ppb	13:15:19
2	Sb 206.836†	77.5	48.6	-0.7479 ug/L	-0.7479 ppb	13:15:19
2	Se 196.026†	-865.2	-953.1	-48.312 ug/L	-48.312 ppb	13:15:19
2	Si 251.611†	491.8	-8.9	-0.0490 ug/L	-0.0490 ppb	13:15:19
2	Sn 189.927†	-339.1	-392.7	6.5805 ug/L	6.5805 ppb	13:15:19
2	Ti 334.940†	-13286.3	-13605.7	4.2113 ug/L	4.2113 ppb	13:14:59
2	Tl 190.801†	-81.6	-64.8	-21.064 ug/L	-21.064 ppb	13:15:19
2	U 409.014†	-1253.7	1484.9	20.186 ug/L	20.186 ppb	13:14:59
2	V 292.402†	812.8	2387.3	-1.0569 ug/L	-1.0569 ppb	13:15:19
2	Zn 213.857†	2860.5	2493.4	-2.8254 ug/L	-2.8254 ppb	13:15:19
2	SiO2†	503.9	-18.7	-0.7710 ug/L	-0.7710 ppb	13:15:55
3	Sc Radial	3514.5	3514.5	91.1 %		13:14:27
3	Y RADIAL	3875.9	3875.9	87.07 %		13:14:27
3	Al 396.153Radial†	513660.9	563821.6	529880 ug/L	529880 ppb	13:14:07
3	Ca 317.933Radial†	204750.2	224680.2	489970 ug/L	489970 ppb	13:14:07
3	Fe 238.204 Radial†	10586.5	11606.3	187560 ug/L	187560 ppb	13:14:27
3	K 766.490 Radial†	2531.0	12.5	-161.50 ug/L	-161.50 ppb	13:14:07
3	Mg 279.077 IEC†	8656.8	9499.0	501080 ug/L	501080 ppb	13:14:27
3	Na 589.592 Radial†	-724.1	107.0	33.293 ug/L	33.293 ppb	13:14:27
3	Sr 421.552†	493.8	533.1	0.0503 ug/L	0.0503 ppb	13:14:27
3	Sc 361.383	784074.2	784074.2	89.092 %		13:15:25
3	Y 371.029	643503.1	643503.1	84.601 %		13:15:25
3	Ag 328.068†	-9896.1	-11341.9	-1.6837 ug/L	-1.6837 ppb	13:15:25
3	As 188.979†	-96.5	-88.3	4.5092 ug/L	4.5092 ppb	13:15:45
3	B 249.677†	537.4	881.2	-8.8657 ug/L	-8.8657 ppb	13:15:25
3	Ba 233.527†	-576.0	-657.5	0.5737 ug/L	0.5737 ppb	13:15:45
3	Be 313.107†	-3936.2	-859.8	-0.3706 ug/L	-0.3706 ppb	13:15:25
3	Cd 226.502†	1189.0	1510.7	-1.8081 ug/L	-1.8081 ppb	13:15:45
3	Co 228.616†	2.4	67.5	-1.2857 ug/L	-1.2857 ppb	13:15:45
3	Cr 267.716†	-1354.4	-1605.3	-0.1691 ug/L	-0.1691 ppb	13:15:45
3	Cu 324.752†	2927.7	-2668.9	1.7728 ug/L	1.7728 ppb	13:15:25
3	Mn 257.610†	753.9	368.5	-1.5509 ug/L	-1.5509 ppb	13:15:25
3	Mo 202.031†	-232.5	-265.7	0.8201 ug/L	0.8201 ppb	13:15:45
3	Ni 231.604†	169.0	106.9	2.7270 ug/L	2.7270 ppb	13:15:45
3	P 214.914†	170.5	-14.4	-26.645 ug/L	-26.645 ppb	13:15:45
3	Pb 220.353†	-736.1	-887.5	-12.890 ug/L	-12.890 ppb	13:15:45
3	S 181.975 Axial†	80.5	54.6	-22.371 ug/L	-22.371 ppb	13:15:45
3	Sb 206.836†	50.8	18.0	-11.378 ug/L	-11.378 ppb	13:15:45
3	Se 196.026†	-878.3	-961.1	-51.778 ug/L	-51.778 ppb	13:15:45
3	Si 251.611†	502.4	-0.8	0.2152 ug/L	0.2152 ppb	13:15:45
3	Sn 189.927†	-335.7	-386.2	6.6395 ug/L	6.6395 ppb	13:15:45
3	Ti 334.940†	-13538.4	-13786.1	3.0410 ug/L	3.0410 ppb	13:15:25
3	Tl 190.801†	-61.8	-41.9	-13.683 ug/L	-13.683 ppb	13:15:45
3	U 409.014†	-1255.9	1492.2	20.327 ug/L	20.327 ppb	13:15:25
3	V 292.402†	743.6	2303.3	-1.7123 ug/L	-1.7123 ppb	13:15:45
3	Zn 213.857†	2889.4	2503.7	-2.7992 ug/L	-2.7992 ppb	13:15:45
3	SiO2†	485.2	-43.6	-2.4972 ug/L	-2.4972 ppb	13:16:00

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	779796.2	88.606 %	0.4380			0.49%
Sc Radial	3510.2	91.0 %	0.25			0.27%
Y 371.029	639121.3	84.025 %	0.5027			0.60%
Y RADIAL	3859.8	86.70 %	0.313			0.36%
Ag 328.068†	-11482.9	-2.5209 ug/L	0.72516	-2.5209 ppb	0.72516	28.77%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	564979.6	530970 ug/L	3680.9	530970 ppb	3680.9	0.69%
QC value within limits for Al 396.153Radial Recovery = 106.19%						
As 188.979†	-76.7	9.5526 ug/L	4.59153	9.5526 ppb	4.59153	48.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	880.0	-8.8138 ug/L	0.50947	-8.8138 ppb	0.50947	5.78%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-659.6	0.5430 ug/L	0.06381	0.5430 ppb	0.06381	11.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-945.0	-0.4023 ug/L	0.02789	-0.4023 ppb	0.02789	6.93%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	225675.8	492140 ug/L	3433.5	492140 ppb	3433.5	0.70%

QC value within limits for Ca 317.933 Radial Recovery = 98.43%

Cd 226.502†	1528.2	-1.5529 ug/L	0.22109	-1.5529 ppb	0.22109	14.24%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	60.0	-1.4369 ug/L	0.28653	-1.4369 ppb	0.28653	19.94%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1589.7	-0.0412 ug/L	0.16064	-0.0412 ppb	0.16064	389.71%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2560.1	2.0770 ug/L	0.26659	2.0770 ppb	0.26659	12.84%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	11575.5	187060 ug/L	470.0	187060 ppb	470.0	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 93.53%						
K 766.490 Radial†	-97.4	-183.27 ug/L	18.859	-183.27 ppb	18.859	10.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	9487.2	500450 ug/L	557.7	500450 ppb	557.7	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 100.09%						
Mn 257.610†	551.8	-1.3658 ug/L	0.16064	-1.3658 ppb	0.16064	11.76%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-274.5	0.1605 ug/L	1.37265	0.1605 ppb	1.37265	855.35%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	73.4	22.839 ug/L	9.3736	22.839 ppb	9.3736	41.04%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	123.6	3.1524 ug/L	0.42404	3.1524 ppb	0.42404	13.45%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-15.4	-26.666 ug/L	0.2870	-26.666 ppb	0.2870	1.08%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-899.9	-14.124 ug/L	1.5267	-14.124 ppb	1.5267	10.81%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	43.4	-38.259 ug/L	14.1188	-38.259 ppb	14.1188	36.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	39.8	-3.7744 ug/L	6.63034	-3.7744 ppb	6.63034	175.67%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-954.1	-48.748 ug/L	2.8368	-48.748 ppb	2.8368	5.82%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-2.8	0.1581 ug/L	0.18527	0.1581 ppb	0.18527	117.17%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-396.7	5.1459 ug/L	2.53597	5.1459 ppb	2.53597	49.28%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	542.7	0.1008 ug/L	0.05013	0.1008 ppb	0.05013	49.75%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13754.1	3.4324 ug/L	0.67461	3.4324 ppb	0.67461	19.65%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-54.7	-17.798 ug/L	3.7633	-17.798 ppb	3.7633	21.14%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1558.8	22.243 ug/L	3.4419	22.243 ppb	3.4419	15.47%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2365.0	-1.2268 ug/L	0.42663	-1.2268 ppb	0.42663	34.77%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2502.4	-2.7411 ug/L	0.12411	-2.7411 ppb	0.12411	4.53%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-11.3	-0.2368 ug/L	2.56942	-0.2368 ppb	2.56942	>999.9%
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: 2/25/2010 13:18:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3513.3	3513.3	91.1	%		13:20:25
1	Y RADIAL	3875.0	3875.0	87.05	%		13:20:25
1	Al 396.153Radial†	512153.2	562373.6	528490	ug/L	528490 ppb	13:20:05
1	Ca 317.933Radial†	205399.9	225476.0	491700	ug/L	491700 ppb	13:20:05
1	Fe 238.204 Radial†	10618.9	11646.1	188220	ug/L	188220 ppb	13:20:25
1	K 766.490 Radial†	29267.8	29366.1	5459.0	ug/L	5459.0 ppb	13:20:05
1	Mg 279.077 IEC†	8604.2	9444.8	498220	ug/L	498220 ppb	13:20:25
1	Na 589.592 Radial†	14934.8	17297.6	5382.4	ug/L	5382.4 ppb	13:20:05
1	Sr 421.552†	65939.7	72382.1	499.86	ug/L	499.86 ppb	13:20:05
1	Sc 361.383	782319.6	782319.6	88.893	%		13:21:23
1	Y 371.029	640245.9	640245.9	84.173	%		13:21:23
1	Ag 328.068†	40921.5	45800.6	265.64	ug/L	265.64 ppb	13:21:23
1	As 188.979†	919.7	1054.6	516.11	ug/L	516.11 ppb	13:21:43
1	B 249.677†	18984.2	21634.3	498.44	ug/L	498.44 ppb	13:21:23
1	Ba 233.527†	54226.9	60991.7	486.26	ug/L	486.26 ppb	13:21:23
1	Be 313.107†	572334.6	647408.0	242.99	ug/L	242.99 ppb	13:21:23
1	Cd 226.502†	35907.0	40569.8	452.39	ug/L	452.39 ppb	13:21:43
1	Co 228.616†	18357.4	20716.0	432.50	ug/L	432.50 ppb	13:21:43
1	Cr 267.716†	36131.0	40560.6	473.53	ug/L	473.53 ppb	13:21:23
1	Cu 324.752†	158733.5	172612.7	535.60	ug/L	535.60 ppb	13:21:23
1	Mn 257.610†	371879.7	417869.7	474.27	ug/L	474.27 ppb	13:21:23
1	Mo 202.031†	5594.1	6288.4	483.63	ug/L	483.63 ppb	13:21:43
1	Ni 231.604†	15368.0	17205.5	438.83	ug/L	438.83 ppb	13:21:43
1	P 214.914†	3884.8	4164.4	2384.1	ug/L	2384.1 ppb	13:21:43
1	Pb 220.353†	2597.2	2860.5	451.33	ug/L	451.33 ppb	13:21:43
1	S 181.975 Axial†	1714.1	1892.4	2569.2	ug/L	2569.2 ppb	13:21:43
1	Sb 206.836†	1392.5	1527.4	538.68	ug/L	538.68 ppb	13:21:43
1	Se 196.026†	2548.1	2891.2	2483.4	ug/L	2483.4 ppb	13:21:43
1	Si 251.611†	141887.6	159052.2	5146.9	ug/L	5146.9 ppb	13:21:23
1	Sn 189.927†	2039.2	2284.6	488.53	ug/L	488.53 ppb	13:21:43
1	Ti 334.940†	272124.4	307537.2	509.42	ug/L	509.42 ppb	13:21:23
1	Tl 190.801†	1200.9	1378.4	446.79	ug/L	446.79 ppb	13:21:43
1	U 409.014†	13691.8	18304.5	488.66	ug/L	488.66 ppb	13:21:23
1	V 292.402†	63473.7	72873.6	498.15	ug/L	498.15 ppb	13:21:23
1	Zn 213.857†	45960.0	50963.4	482.83	ug/L	482.83 ppb	13:21:23
1	SiO2†	142505.8	159724.1	11077	ug/L	11077 ppb	13:22:41
2	Sc Radial	3546.1	3546.1	91.9	%		13:20:50
2	Y RADIAL	3889.8	3889.8	87.38	%		13:20:50
2	Al 396.153Radial†	509339.0	554108.6	520730	ug/L	520730 ppb	13:20:30
2	Ca 317.933Radial†	203931.3	221791.7	483670	ug/L	483670 ppb	13:20:30
2	Fe 238.204 Radial†	10648.6	11570.5	187000	ug/L	187000 ppb	13:20:50
2	K 766.490 Radial†	29106.3	28893.1	5371.1	ug/L	5371.1 ppb	13:20:30
2	Mg 279.077 IEC†	8651.7	9409.0	496330	ug/L	496330 ppb	13:20:50
2	Na 589.592 Radial†	14773.9	16970.9	5280.7	ug/L	5280.7 ppb	13:20:30
2	Sr 421.552†	65581.6	71322.5	492.55	ug/L	492.55 ppb	13:20:30
2	Sc 361.383	784901.8	784901.8	89.186	%		13:21:49
2	Y 371.029	641411.4	641411.4	84.326	%		13:21:49
2	Ag 328.068†	40951.6	45682.9	264.82	ug/L	264.82 ppb	13:21:49
2	As 188.979†	915.0	1045.9	511.97	ug/L	511.97 ppb	13:22:09
2	B 249.677†	19121.4	21717.9	500.69	ug/L	500.69 ppb	13:21:49
2	Ba 233.527†	54324.6	60900.5	485.51	ug/L	485.51 ppb	13:21:49
2	Be 313.107†	574294.3	647487.1	243.02	ug/L	243.02 ppb	13:21:49
2	Cd 226.502†	35980.5	40519.4	451.93	ug/L	451.93 ppb	13:22:09
2	Co 228.616†	18395.5	20690.8	431.98	ug/L	431.98 ppb	13:22:09
2	Cr 267.716†	36164.0	40463.9	472.33	ug/L	472.33 ppb	13:21:49
2	Cu 324.752†	159413.3	172787.4	536.07	ug/L	536.07 ppb	13:21:49
2	Mn 257.610†	372746.1	417464.8	473.77	ug/L	473.77 ppb	13:21:49
2	Mo 202.031†	5603.7	6278.4	482.71	ug/L	482.71 ppb	13:22:09
2	Ni 231.604†	15376.2	17157.8	437.61	ug/L	437.61 ppb	13:22:09

2	P 214.914†	3878.4	4142.8	2370.0 ug/L	2370.0 ppb	13:22:09
2	Pb 220.353†	2591.9	2845.0	447.82 ug/L	447.82 ppb	13:22:09
2	S 181.975 Axial†	1716.5	1888.8	2565.5 ug/L	2565.5 ppb	13:22:09
2	Sb 206.836†	1414.0	1546.5	545.60 ug/L	545.60 ppb	13:22:09
2	Se 196.026†	2547.1	2880.7	2472.8 ug/L	2472.8 ppb	13:22:09
2	Si 251.611†	142214.6	158893.7	5141.8 ug/L	5141.8 ppb	13:21:49
2	Sn 189.927†	2046.2	2284.9	487.23 ug/L	487.23 ppb	13:22:09
2	Ti 334.940†	272971.9	307480.3	508.40 ug/L	508.40 ppb	13:21:49
2	Tl 190.801†	1184.6	1355.7	439.48 ug/L	439.48 ppb	13:22:09
2	U 409.014†	13809.4	18385.7	491.07 ug/L	491.07 ppb	13:21:49
2	V 292.402†	63754.3	72953.4	498.84 ug/L	498.84 ppb	13:21:49
2	Zn 213.857†	46053.9	50898.5	482.36 ug/L	482.36 ppb	13:21:49
2	SiO2†	142304.4	158971.0	11024 ug/L	11024 ppb	13:22:46
3	Sc Radial	3521.8	3521.8	91.3 %		13:21:16
3	Y RADIAL	3862.6	3862.6	86.77 %		13:21:16
3	Al 396.153Radial†	507164.7	555553.4	522080 ug/L	522080 ppb	13:20:56
3	Ca 317.933Radial†	202842.9	222131.5	484410 ug/L	484410 ppb	13:20:56
3	Fe 238.204 Radial†	10603.7	11601.4	187500 ug/L	187500 ppb	13:21:16
3	K 766.490 Radial†	28957.6	28948.8	5381.5 ug/L	5381.5 ppb	13:20:56
3	Mg 279.077 IEC†	8626.6	9446.5	498310 ug/L	498310 ppb	13:21:16
3	Na 589.592 Radial†	14654.6	16951.2	5274.6 ug/L	5274.6 ppb	13:20:56
3	Sr 421.552†	64941.8	71114.5	491.10 ug/L	491.10 ppb	13:20:56
3	Sc 361.383	785255.2	785255.2	89.226 %		13:22:15
3	Y 371.029	643966.9	643966.9	84.662 %		13:22:15
3	Ag 328.068†	41141.5	45875.1	265.86 ug/L	265.86 ppb	13:22:15
3	As 188.979†	920.8	1051.9	514.74 ug/L	514.74 ppb	13:22:35
3	B 249.677†	19147.3	21737.3	501.10 ug/L	501.10 ppb	13:22:15
3	Ba 233.527†	54245.1	60784.0	484.61 ug/L	484.61 ppb	13:22:15
3	Be 313.107†	575688.4	648759.7	243.50 ug/L	243.50 ppb	13:22:15
3	Cd 226.502†	35725.2	40215.1	448.34 ug/L	448.34 ppb	13:22:35
3	Co 228.616†	18229.5	20495.5	427.87 ug/L	427.87 ppb	13:22:35
3	Cr 267.716†	36244.9	40536.3	473.19 ug/L	473.19 ppb	13:22:15
3	Cu 324.752†	159459.1	172758.3	536.01 ug/L	536.01 ppb	13:22:15
3	Mn 257.610†	372233.6	416702.3	472.87 ug/L	472.87 ppb	13:22:15
3	Mo 202.031†	5576.8	6245.5	480.33 ug/L	480.33 ppb	13:22:35
3	Ni 231.604†	15236.2	16993.1	433.41 ug/L	433.41 ppb	13:22:35
3	P 214.914†	3857.4	4117.3	2354.6 ug/L	2354.6 ppb	13:22:35
3	Pb 220.353†	2569.2	2818.2	444.74 ug/L	444.74 ppb	13:22:35
3	S 181.975 Axial†	1700.4	1869.9	2538.6 ug/L	2538.6 ppb	13:22:35
3	Sb 206.836†	1398.1	1527.9	538.89 ug/L	538.89 ppb	13:22:35
3	Se 196.026†	2533.6	2864.2	2463.5 ug/L	2463.5 ppb	13:22:35
3	Si 251.611†	142070.7	158660.7	5134.2 ug/L	5134.2 ppb	13:22:15
3	Sn 189.927†	2028.4	2264.0	483.55 ug/L	483.55 ppb	13:22:35
3	Ti 334.940†	272791.7	307140.6	507.81 ug/L	507.81 ppb	13:22:15
3	Tl 190.801†	1170.4	1339.1	434.15 ug/L	434.15 ppb	13:22:35
3	U 409.014†	13885.1	18463.6	493.19 ug/L	493.19 ppb	13:22:15
3	V 292.402†	63705.0	72866.0	498.16 ug/L	498.16 ppb	13:22:15
3	Zn 213.857†	46002.3	50817.6	481.49 ug/L	481.49 ppb	13:22:15
3	SiO2†	142989.0	159666.4	11073 ug/L	11073 ppb	13:22:51

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	784158.8	89.102 %	0.1821			0.20%
Sc Radial	3527.0	91.4 %	0.44			0.48%
Y 371.029	641874.7	84.387 %	0.2502			0.30%
Y RADIAL	3875.8	87.06 %	0.307			0.35%
Ag 328.068†	45786.2	265.44 ug/L	0.544	265.44 ppb	0.544	0.20%
QC value within limits for Ag 328.068 Recovery = 106.18%						
Al 396.153Radial†	557345.2	523770 ug/L	4148.4	523770 ppb	4148.4	0.79%
QC value within limits for Al 396.153Radial Recovery = 104.75%						
As 188.979†	1050.8	514.27 ug/L	2.109	514.27 ppb	2.109	0.41%
QC value within limits for As 188.979 Recovery = 102.85%						
B 249.677†	21696.5	500.08 ug/L	1.430	500.08 ppb	1.430	0.29%
QC value within limits for B 249.677 Recovery = 100.02%						
Ba 233.527†	60892.1	485.46 ug/L	0.828	485.46 ppb	0.828	0.17%
QC value within limits for Ba 233.527 Recovery = 97.09%						
Be 313.107†	647884.9	243.17 ug/L	0.283	243.17 ppb	0.283	0.12%
QC value within limits for Be 313.107 Recovery = 97.27%						
Ca 317.933Radial†	223133.1	486590 ug/L	4440.3	486590 ppb	4440.3	0.91%

QC value within limits for Ca 317.933Radial Recovery = 97.32%							
Cd	226.502†	40434.8	450.89 ug/L	2.217	450.89 ppb	2.217	0.49%
QC value within limits for Cd 226.502 Recovery = 90.18%							
Co	228.616†	20634.1	430.78 ug/L	2.537	430.78 ppb	2.537	0.59%
QC value within limits for Co 228.616 Recovery = 86.16%							
Cr	267.716†	40520.3	473.02 ug/L	0.619	473.02 ppb	0.619	0.13%
QC value within limits for Cr 267.716 Recovery = 94.60%							
Cu	324.752†	172719.5	535.89 ug/L	0.253	535.89 ppb	0.253	0.05%
QC value within limits for Cu 324.752 Recovery = 107.18%							
Fe	238.204 Radial†	11606.0	187570 ug/L	613.8	187570 ppb	613.8	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 93.78%							
K	766.490 Radial†	29069.3	5403.8 ug/L	48.02	5403.8 ppb	48.02	0.89%
QC value within limits for K 766.490 Radial Recovery = 108.08%							
Mg	279.077 IEC†	9433.4	497620 ug/L	1117.1	497620 ppb	1117.1	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 99.52%							
Mn	257.610†	417345.6	473.64 ug/L	0.712	473.64 ppb	0.712	0.15%
QC value within limits for Mn 257.610 Recovery = 94.73%							
Mo	202.031†	6270.8	482.22 ug/L	1.705	482.22 ppb	1.705	0.35%
QC value within limits for Mo 202.031 Recovery = 96.44%							
Na	589.592 Radial†	17073.2	5312.6 ug/L	60.55	5312.6 ppb	60.55	1.14%
QC value within limits for Na 589.592 Radial Recovery = 106.25%							
Ni	231.604†	17118.8	436.61 ug/L	2.842	436.61 ppb	2.842	0.65%
QC value within limits for Ni 231.604 Recovery = 87.32%							
P	214.914†	4141.5	2369.6 ug/L	14.74	2369.6 ppb	14.74	0.62%
QC value within limits for P 214.914 Recovery = 94.78%							
Pb	220.353†	2841.2	447.96 ug/L	3.300	447.96 ppb	3.300	0.74%
QC value within limits for Pb 220.353 Recovery = 89.59%							
S	181.975 Axial†	1883.7	2557.8 ug/L	16.71	2557.8 ppb	16.71	0.65%
QC value within limits for S 181.975 Axial Recovery = 102.31%							
Sb	206.836†	1533.9	541.06 ug/L	3.935	541.06 ppb	3.935	0.73%
QC value within limits for Sb 206.836 Recovery = 108.21%							
Se	196.026†	2878.7	2473.2 ug/L	9.99	2473.2 ppb	9.99	0.40%
QC value within limits for Se 196.026 Recovery = 98.93%							
Si	251.611†	158868.9	5141.0 ug/L	6.36	5141.0 ppb	6.36	0.12%
QC value within limits for Si 251.611 Recovery = 102.82%							
Sn	189.927†	2277.8	486.44 ug/L	2.581	486.44 ppb	2.581	0.53%
QC value within limits for Sn 189.927 Recovery = 97.29%							
Sr	421.552†	71606.3	494.51 ug/L	4.697	494.51 ppb	4.697	0.95%
QC value within limits for Sr 421.552 Recovery = 98.90%							
Ti	334.940†	307386.0	508.54 ug/L	0.815	508.54 ppb	0.815	0.16%
QC value within limits for Ti 334.940 Recovery = 101.71%							
Tl	190.801†	1357.7	440.14 ug/L	6.344	440.14 ppb	6.344	1.44%
QC value within limits for Tl 190.801 Recovery = 88.03%							
U	409.014†	18384.6	490.97 ug/L	2.264	490.97 ppb	2.264	0.46%
QC value within limits for U 409.014 Recovery = 98.19%							
V	292.402†	72897.6	498.38 ug/L	0.395	498.38 ppb	0.395	0.08%
QC value within limits for V 292.402 Recovery = 99.68%							
Zn	213.857†	50893.2	482.23 ug/L	0.675	482.23 ppb	0.675	0.14%
QC value within limits for Zn 213.857 Recovery = 96.45%							
SiO2†		159453.8	11058 ug/L	29.1	11058 ppb	29.1	0.26%
QC value within limits for SiO2 Recovery = 103.39%							

All analyte(s) passed QC.



Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 2/25/2010 13:25:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3553.2	3553.2	92.1 %		13:27:14
1	Y RADIAL	3936.1	3936.1	88.42 %		13:27:14
1	Al 396.153Radial†	492600.4	534834.6	502640 ug/L	502640 ppb	13:26:54
1	Ca 317.933Radial†	197343.5	214198.4	467110 ug/L	467110 ppb	13:26:54
1	Fe 238.204 Radial†	24241.3	26302.3	425050 ug/L	425050 ppb	13:27:14
1	K 766.490 Radial†	3394.9	920.1	-172.35 ug/L	-172.35 ppb	13:26:54
1	Mg 279.077 IEC†	8333.3	9044.7	476850 ug/L	476850 ppb	13:27:14
1	Na 589.592 Radial†	1459646.4	1585353.1	493300 ug/L	493300 ppb	13:26:54
1	Sr 421.552†	718.4	771.1	1.8765 ug/L	1.8765 ppb	13:27:14
1	Sc 361.383	759227.4	759227.4	86.269 %		13:28:12
1	Y 371.029	625373.1	625373.1	82.217 %		13:28:12
1	Ag 328.068†	-22970.0	-26860.2	-11.287 ug/L	-11.287 ppb	13:28:12
1	As 188.979†	-196.9	-208.3	6.9407 ug/L	6.9407 ppb	13:28:33
1	B 249.677†	1658.2	2200.2	-15.121 ug/L	-15.121 ppb	13:28:12
1	Ba 233.527†	-1635.3	-1906.6	-1.9879 ug/L	-1.9879 ppb	13:28:33
1	Be 313.107†	-9559.3	-7522.6	-2.8413 ug/L	-2.8413 ppb	13:28:12
1	Cd 226.502†	3059.6	3722.8	1.9587 ug/L	1.9587 ppb	13:28:33
1	Co 228.616†	227.6	328.6	0.6923 ug/L	0.6923 ppb	13:28:33
1	Cr 267.716†	-1168.4	-1439.5	19.025 ug/L	19.025 ppb	13:28:33
1	Cu 324.752†	388.9	-5504.3	-1.6594 ug/L	-1.6594 ppb	13:28:12
1	Mn 257.610†	-20250.1	-23951.0	-4.8206 ug/L	-4.8206 ppb	13:28:12
1	Mo 202.031†	-495.0	-578.4	-4.0496 ug/L	-4.0496 ppb	13:28:33
1	Ni 231.604†	279.7	241.4	6.1571 ug/L	6.1571 ppb	13:28:33
1	P 214.914†	537.7	417.5	36.648 ug/L	36.648 ppb	13:28:33
1	Pb 220.353†	-462.4	-597.2	-8.6933 ug/L	-8.6933 ppb	13:28:33
1	S 181.975 Axial†	74.2	50.1	-23.512 ug/L	-23.512 ppb	13:28:33
1	Sb 206.836†	69.5	41.5	-5.5938 ug/L	-5.5938 ppb	13:28:33
1	Se 196.026†	-1947.4	-2232.6	-146.42 ug/L	-146.42 ppb	13:28:33
1	Si 251.611†	-446.5	-1082.2	-34.535 ug/L	-34.535 ppb	13:28:33
1	Sn 189.927†	-369.0	-437.1	-20.247 ug/L	-20.247 ppb	13:28:33
1	Ti 334.940†	-8581.5	-8537.5	4.3615 ug/L	4.3615 ppb	13:28:12
1	Tl 190.801†	-97.4	-85.5	-27.821 ug/L	-27.821 ppb	13:28:33
1	U 409.014†	409715.3	477831.2	13295 ug/L	13295 ppb	13:28:12
1	V 292.402†	2472.0	4334.2	2.5441 ug/L	2.5441 ppb	13:28:33
1	Zn 213.857†	5262.5	5360.6	-9.5081 ug/L	-9.5081 ppb	13:28:33
1	SiO2†	-402.7	-1055.0	-72.082 ug/L	-72.082 ppb	13:29:29
2	Sc Radial	3479.0	3479.0	90.2 %		13:27:40
2	Y RADIAL	3870.2	3870.2	86.94 %		13:27:40
2	Al 396.153Radial†	485998.8	538908.2	506460 ug/L	506460 ppb	13:27:20
2	Ca 317.933Radial†	194518.3	215630.3	470230 ug/L	470230 ppb	13:27:20
2	Fe 238.204 Radial†	24330.3	26961.6	435710 ug/L	435710 ppb	13:27:40
2	K 766.490 Radial†	3211.8	795.6	-197.73 ug/L	-197.73 ppb	13:27:20
2	Mg 279.077 IEC†	8383.0	9292.5	489920 ug/L	489920 ppb	13:27:40
2	Na 589.592 Radial†	1432846.8	1589399.7	494560 ug/L	494560 ppb	13:27:20
2	Sr 421.552†	716.8	785.9	1.9560 ug/L	1.9560 ppb	13:27:40
2	Sc 361.383	762018.1	762018.1	86.586 %		13:28:38
2	Y 371.029	627331.4	627331.4	82.475 %		13:28:38
2	Ag 328.068†	-23087.7	-26898.7	-8.2606 ug/L	-8.2606 ppb	13:28:38
2	As 188.979†	-197.6	-208.3	9.4042 ug/L	9.4042 ppb	13:28:58
2	B 249.677†	1465.5	1970.6	-22.476 ug/L	-22.476 ppb	13:28:38
2	Ba 233.527†	-1578.4	-1833.9	-1.0955 ug/L	-1.0955 ppb	13:28:58
2	Be 313.107†	-9615.9	-7547.4	-2.8506 ug/L	-2.8506 ppb	13:28:38
2	Cd 226.502†	3045.1	3693.1	0.5176 ug/L	0.5176 ppb	13:28:58
2	Co 228.616†	204.5	301.0	-0.0414 ug/L	-0.0414 ppb	13:28:58
2	Cr 267.716†	-1154.1	-1418.0	20.266 ug/L	20.266 ppb	13:28:58
2	Cu 324.752†	311.4	-5595.4	-1.3871 ug/L	-1.3871 ppb	13:28:38
2	Mn 257.610†	-20473.3	-24122.8	-4.4986 ug/L	-4.4986 ppb	13:28:38
2	Mo 202.031†	-498.9	-580.8	-3.3624 ug/L	-3.3624 ppb	13:28:58
2	Ni 231.604†	257.0	214.0	5.4567 ug/L	5.4567 ppb	13:28:58

2	P 214.914†	539.1	416.8	28.649 ug/L	28.649 ppb	13:28:58
2	Pb 220.353†	-499.5	-638.1	-14.069 ug/L	-14.069 ppb	13:28:58
2	S 181.975 Axial†	75.6	51.5	-22.271 ug/L	-22.271 ppb	13:28:58
2	Sb 206.836†	74.3	46.8	-4.0260 ug/L	-4.0260 ppb	13:28:58
2	Se 196.026†	-1943.4	-2219.7	-104.75 ug/L	-104.75 ppb	13:28:58
2	Si 251.611†	-481.4	-1120.7	-35.778 ug/L	-35.778 ppb	13:28:58
2	Sn 189.927†	-386.2	-455.5	-23.609 ug/L	-23.609 ppb	13:28:58
2	Ti 334.940†	-8630.8	-8558.0	3.6686 ug/L	3.6686 ppb	13:28:38
2	Tl 190.801†	-96.4	-83.9	-27.320 ug/L	-27.320 ppb	13:28:58
2	U 409.014†	412016.4	478749.4	13319 ug/L	13319 ppb	13:28:38
2	V 292.402†	2289.2	4112.6	-0.2566 ug/L	-0.2566 ppb	13:28:58
2	Zn 213.857†	5235.9	5307.6	-11.633 ug/L	-11.633 ppb	13:28:58
2	SiO2†	-611.4	-1294.4	-88.699 ug/L	-88.699 ppb	13:29:35
3	Sc Radial	3474.7	3474.7	90.1 %		13:28:05
3	Y RADIAL	3838.0	3838.0	86.22 %		13:28:05
3	Al 396.153Radial†	497415.3	552258.1	519010 ug/L	519010 ppb	13:27:45
3	Ca 317.933Radial†	198416.2	220228.1	480260 ug/L	480260 ppb	13:27:45
3	Fe 238.204 Radial†	24271.8	26930.6	435210 ug/L	435210 ppb	13:28:05
3	K 766.490 Radial†	3083.1	657.3	-231.38 ug/L	-231.38 ppb	13:27:45
3	Mg 279.077 IEC†	8348.4	9265.8	488510 ug/L	488510 ppb	13:28:05
3	Na 589.592 Radial†	1459207.4	1620657.3	504290 ug/L	504290 ppb	13:27:45
3	Sr 421.552†	722.0	792.7	1.9286 ug/L	1.9286 ppb	13:28:05
3	Sc 361.383	765983.5	765983.5	87.036 %		13:29:04
3	Y 371.029	631124.3	631124.3	82.973 %		13:29:04
3	Ag 328.068†	-23102.6	-26777.8	-7.9701 ug/L	-7.9701 ppb	13:29:04
3	As 188.979†	-186.5	-194.3	15.541 ug/L	15.541 ppb	13:29:24
3	B 249.677†	1456.9	1951.9	-22.854 ug/L	-22.854 ppb	13:29:04
3	Ba 233.527†	-1608.7	-1859.3	-1.3101 ug/L	-1.3101 ppb	13:29:24
3	Be 313.107†	-9655.8	-7535.8	-2.8387 ug/L	-2.8387 ppb	13:29:04
3	Cd 226.502†	3082.1	3717.3	0.8469 ug/L	0.8469 ppb	13:29:24
3	Co 228.616†	224.8	323.2	0.4282 ug/L	0.4282 ppb	13:29:24
3	Cr 267.716†	-1066.0	-1309.8	21.441 ug/L	21.441 ppb	13:29:24
3	Cu 324.752†	152.4	-5780.0	-1.9635 ug/L	-1.9635 ppb	13:29:04
3	Mn 257.610†	-21111.3	-24733.4	-5.1862 ug/L	-5.1862 ppb	13:29:04
3	Mo 202.031†	-474.9	-550.3	-1.0305 ug/L	-1.0305 ppb	13:29:24
3	Ni 231.604†	266.6	223.5	5.6989 ug/L	5.6989 ppb	13:29:24
3	P 214.914†	531.4	404.8	25.080 ug/L	25.080 ppb	13:29:24
3	Pb 220.353†	-488.7	-622.6	-9.3415 ug/L	-9.3415 ppb	13:29:24
3	S 181.975 Axial†	92.1	69.9	1.3203 ug/L	1.3203 ppb	13:29:24
3	Sb 206.836†	50.5	19.0	-14.053 ug/L	-14.053 ppb	13:29:24
3	Se 196.026†	-1967.7	-2236.1	-117.18 ug/L	-117.18 ppb	13:29:24
3	Si 251.611†	-424.3	-1052.2	-33.588 ug/L	-33.588 ppb	13:29:24
3	Sn 189.927†	-366.5	-430.5	-17.291 ug/L	-17.291 ppb	13:29:24
3	Ti 334.940†	-6826.0	-6432.8	8.4862 ug/L	8.4862 ppb	13:29:04
3	Tl 190.801†	-105.3	-93.5	-30.379 ug/L	-30.379 ppb	13:29:24
3	U 409.014†	413463.7	477949.0	13297 ug/L	13297 ppb	13:29:04
3	V 292.402†	2325.6	4140.7	-0.0295 ug/L	-0.0295 ppb	13:29:24
3	Zn 213.857†	5266.7	5311.7	-11.517 ug/L	-11.517 ppb	13:29:24
3	SiO2†	-346.5	-986.3	-67.374 ug/L	-67.374 ppb	13:29:40

## Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	762409.7	86.630 %		0.3858			0.45%
Sc Radial	3502.3	90.8 %		1.14			1.26%
Y 371.029	627942.9	82.555 %		0.3844			0.47%
Y RADIAL	3881.5	87.19 %		1.123			1.29%
Ag 328.068†	-26845.6	-9.1726 ug/L		1.83698	-9.1726 ppb	1.83698	20.03%
Al 396.153Radial†	542000.3	509370 ug/L		8565.3	509370 ppb	8565.3	1.68%
QC value within limits for Al 396.153Radial Recovery = 101.87%							
As 188.979†	-203.6	10.629 ug/L		4.4290	10.629 ppb	4.4290	41.67%
B 249.677†	2040.9	-20.150 ug/L		4.3598	-20.150 ppb	4.3598	21.64%
Ba 233.527†	-1866.6	-1.4645 ug/L		0.46579	-1.4645 ppb	0.46579	31.80%
Be 313.107†	-7535.3	-2.8435 ug/L		0.00628	-2.8435 ppb	0.00628	0.22%
Ca 317.933Radial†	216685.6	472530 ug/L		6870.1	472530 ppb	6870.1	1.45%
QC value within limits for Ca 317.933Radial Recovery = 94.51%							
Cd 226.502†	3711.0	1.1077 ug/L		0.75513	1.1077 ppb	0.75513	68.17%
Co 228.616†	317.6	0.3597 ug/L		0.37163	0.3597 ppb	0.37163	103.32%
Cr 267.716†	-1389.1	20.244 ug/L		1.2086	20.244 ppb	1.2086	5.97%
Cu 324.752†	-5626.6	-1.6700 ug/L		0.28835	-1.6700 ppb	0.28835	17.27%

Fe 238.204 Radial†	26731.5	431990 ug/L	6011.9	431990 ppb	6011.9	1.39%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.40%						
K 766.490 Radial†	791.0	-200.48 ug/L	29.611	-200.48 ppb	29.611	14.77%
Mg 279.077 IEC†	9201.0	485090 ug/L	7171.9	485090 ppb	7171.9	1.48%
QC value within limits for Mg 279.077 IEC Recovery = 97.02%						
Mn 257.610†	-24269.1	-4.8351 ug/L	0.34403	-4.8351 ppb	0.34403	7.12%
Mo 202.031†	-569.8	-2.8142 ug/L	1.58245	-2.8142 ppb	1.58245	56.23%
Na 589.592 Radial†	1598470.0	497390 ug/L	6012.0	497390 ppb	6012.0	1.21%
QC value within limits for Na 589.592 Radial Recovery = 99.48%						
Ni 231.604†	226.3	5.7709 ug/L	0.35568	5.7709 ppb	0.35568	6.16%
P 214.914†	413.0	30.126 ug/L	5.9240	30.126 ppb	5.9240	19.66%
Pb 220.353†	-619.3	-10.701 ug/L	2.9345	-10.701 ppb	2.9345	27.42%
S 181.975 Axial†	57.2	-14.821 ug/L	13.9926	-14.821 ppb	13.9926	94.41%
Sb 206.836†	35.8	-7.8908 ug/L	5.39357	-7.8908 ppb	5.39357	68.35%
Se 196.026†	-2229.5	-122.78 ug/L	21.394	-122.78 ppb	21.394	17.42%
Si 251.611†	-1085.0	-34.633 ug/L	1.0983	-34.633 ppb	1.0983	3.17%
Sn 189.927†	-441.0	-20.382 ug/L	3.1614	-20.382 ppb	3.1614	15.51%
Sr 421.552†	783.2	1.9204 ug/L	0.04041	1.9204 ppb	0.04041	2.10%
Ti 334.940†	-7842.8	5.5054 ug/L	2.60456	5.5054 ppb	2.60456	47.31%
Tl 190.801†	-87.6	-28.506 ug/L	1.6410	-28.506 ppb	1.6410	5.76%
U 409.014†	478176.5	13303 ug/L	13.5	13303 ppb	13.5	0.10%
QC value less than the lower limit for U 409.014 Recovery = 88.69%						
V 292.402†	4195.8	0.7527 ug/L	1.55559	0.7527 ppb	1.55559	206.68%
Zn 213.857†	5326.7	-10.886 ug/L	1.1947	-10.886 ppb	1.1947	10.97%
SiO2†	-1111.9	-76.052 ug/L	11.2029	-76.052 ppb	11.2029	14.73%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/25/2010 13:31:50

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	3745.6	3745.6	97.1 %		13:34:07
1	Y RADIAL	4258.4	4258.4	95.66 %		13:33:47
1	Al 396.153Radial†	374.7	500.9	13.549 ug/L	13.549 ppb	13:33:47
1	Ca 317.933Radial†	28.9	11.1	24.262 ug/L	24.262 ppb	13:34:07
1	Fe 238.204 Radial†	-3.7	-15.4	22.052 ug/L	22.052 ppb	13:34:07
1	K 766.490 Radial†	1555288.4	1598762.3	306290 ug/L	306290 ppb	13:33:42
1	Mg 279.077 IEC†	-1.4	-2.6	-37.682 ug/L	-37.682 ppb	13:34:07
1	Na 589.592 Radial†	-77.4	822.0	255.79 ug/L	255.79 ppb	13:33:47
1	Sr 421.552†	1358065.6	1398432.3	9728.4 ug/L	9728.4 ppb	13:33:42
1	Sc 361.383	873121.5	873121.5	99.210 %		13:35:24
1	Y 371.029	716222.2	716222.2	94.161 %		13:35:24
1	Ag 328.068†	-7965.4	-8263.0	0.7196 ug/L	0.7196 ppb	13:35:30
1	As 188.979†	20905.5	21091.9	9441.5 ug/L	9441.5 ppb	13:35:30
1	B 249.677†	195748.5	197585.0	4816.8 ug/L	4816.8 ppb	13:35:24
1	Ba 233.527†	1622778.9	1635687.8	12878 ug/L	12878 ppb	13:35:24
1	Be 313.107†	7434417.6	7497165.9	2823.5 ug/L	2823.5 ppb	13:35:18
1	Cd 226.502†	802451.8	809016.8	9407.4 ug/L	9407.4 ppb	13:35:24
1	Co 228.616†	428579.8	432056.8	9072.3 ug/L	9072.3 ppb	13:35:30
1	Cr 267.716†	2043521.3	2059705.9	23125 ug/L	23125 ppb	13:35:24
1	Cu 324.752†	6418716.2	6463864.5	19694 ug/L	19694 ppb	13:35:18
1	Mn 257.610†	8086458.7	8150362.4	9285.4 ug/L	9285.4 ppb	13:35:18
1	Mo 202.031†	126986.1	127992.4	9427.3 ug/L	9427.3 ppb	13:35:30
1	Ni 231.604†	360639.7	363428.2	9269.3 ug/L	9269.3 ppb	13:35:30
1	P 214.914†	29735.8	29766.8	14085 ug/L	14085 ppb	13:35:30
1	Pb 220.353†	191021.2	192480.8	23824 ug/L	23824 ppb	13:35:30
1	S 181.975 Axial†	36268.2	36521.1	51494 ug/L	51494 ppb	13:35:30
1	Sb 206.836†	29445.8	29641.2	10811 ug/L	10811 ppb	13:35:30
1	Se 196.026†	14845.1	14988.1	9878.1 ug/L	9878.1 ppb	13:35:30
1	Si 251.611†	1408402.7	1419051.2	45855 ug/L	45855 ppb	13:35:24
1	Sn 189.927†	55544.9	55977.7	10094 ug/L	10094 ppb	13:35:30
1	Ti 334.940†	6180044.6	6230657.6	9808.9 ug/L	9808.9 ppb	13:35:18
1	Tl 190.801†	28770.7	29027.2	9404.1 ug/L	9404.1 ppb	13:35:30
1	U 409.014†	-1725.3	1162.8	-19.221 ug/L	-19.221 ppb	13:35:30
1	V 292.402†	1375858.4	1388281.1	9812.8 ug/L	9812.8 ppb	13:35:24
1	Zn 213.857†	1348023.5	1358016.5	13624 ug/L	13624 ppb	13:35:24
1	SiO2†	1431326.8	1442134.3	99867 ug/L	99867 ppb	13:36:15
2	Sc Radial	3758.0	3758.0	97.4 %		13:34:38
2	Y RADIAL	4267.2	4267.2	95.86 %		13:34:18
2	Al 396.153Radial†	402.4	528.1	33.337 ug/L	33.337 ppb	13:34:18
2	Ca 317.933Radial†	24.0	5.9	12.955 ug/L	12.955 ppb	13:34:38
2	Fe 238.204 Radial†	-4.7	-16.5	8.6177 ug/L	8.6177 ppb	13:34:38
2	K 766.490 Radial†	1588055.8	1627095.3	311720 ug/L	311720 ppb	13:34:13
2	Mg 279.077 IEC†	-0.8	-2.0	-3.5043 ug/L	-3.5043 ppb	13:34:38
2	Na 589.592 Radial†	-55.8	844.4	262.75 ug/L	262.75 ppb	13:34:18
2	Sr 421.552†	1382697.5	1419087.4	9872.1 ug/L	9872.1 ppb	13:34:13
2	Sc 361.383	863117.3	863117.3	98.073 %		13:35:44
2	Y 371.029	708663.3	708663.3	93.167 %		13:35:44
2	Ag 328.068†	-7871.5	-8260.3	0.7549 ug/L	0.7549 ppb	13:35:49
2	As 188.979†	20961.0	21392.7	9575.9 ug/L	9575.9 ppb	13:35:49
2	B 249.677†	193293.8	197369.0	4811.2 ug/L	4811.2 ppb	13:35:44
2	Ba 233.527†	1603606.3	1635097.6	12874 ug/L	12874 ppb	13:35:44
2	Be 313.107†	7433521.2	7583108.8	2855.9 ug/L	2855.9 ppb	13:35:38
2	Cd 226.502†	792297.7	808038.3	9396.1 ug/L	9396.1 ppb	13:35:44
2	Co 228.616†	429817.6	438326.1	9204.0 ug/L	9204.0 ppb	13:35:49
2	Cr 267.716†	2021588.8	2061217.2	23142 ug/L	23142 ppb	13:35:44
2	Cu 324.752†	6426601.6	6546895.2	19947 ug/L	19947 ppb	13:35:38
2	Mn 257.610†	8079678.8	8237924.0	9385.1 ug/L	9385.1 ppb	13:35:38
2	Mo 202.031†	127118.8	129611.4	9546.5 ug/L	9546.5 ppb	13:35:49
2	Ni 231.604†	361723.3	368746.5	9404.9 ug/L	9404.9 ppb	13:35:49

2	P 214.914†	29729.0	30107.2	14241 ug/L	14241 ppb	13:35:49
2	Pb 220.353†	191583.0	195285.4	24171 ug/L	24171 ppb	13:35:49
2	S 181.975 Axial†	36380.7	37059.6	52253 ug/L	52253 ppb	13:35:49
2	Sb 206.836†	29419.2	29958.1	10928 ug/L	10928 ppb	13:35:49
2	Se 196.026†	14828.2	15144.2	9981.0 ug/L	9981.0 ppb	13:35:49
2	Si 251.611†	1389637.4	1416371.7	45767 ug/L	45767 ppb	13:35:44
2	Sn 189.927†	55775.0	56861.3	10254 ug/L	10254 ppb	13:35:49
2	Ti 334.940†	6179428.2	6302231.1	9921.6 ug/L	9921.6 ppb	13:35:38
2	Tl 190.801†	28803.9	29397.2	9524.0 ug/L	9524.0 ppb	13:35:49
2	U 409.014†	-1883.7	981.2	-24.329 ug/L	-24.329 ppb	13:35:49
2	V 292.402†	1360920.2	1389123.8	9820.2 ug/L	9820.2 ppb	13:35:44
2	Zn 213.857†	1332244.0	1357676.1	13619 ug/L	13619 ppb	13:35:44
2	SiO2†	1420583.7	1447902.4	100260 ug/L	100260 ppb	13:36:21
3	Sc Radial	3709.4	3709.4	96.2 %		13:35:08
3	Y RADIAL	4174.0	4174.0	93.76 %		13:34:48
3	Al 396.153Radial†	382.4	512.7	24.604 ug/L	24.604 ppb	13:34:48
3	Ca 317.933Radial†	25.7	8.1	17.634 ug/L	17.634 ppb	13:35:08
3	Fe 238.204 Radial†	-4.8	-16.6	2.7442 ug/L	2.7442 ppb	13:35:08
3	K 766.490 Radial†	1541290.5	1599850.3	306500 ug/L	306500 ppb	13:34:43
3	Mg 279.077 IEC†	0.2	-1.0	46.326 ug/L	46.326 ppb	13:35:08
3	Na 589.592 Radial†	-187.9	706.3	219.77 ug/L	219.77 ppb	13:34:48
3	Sr 421.552†	1339097.5	1392368.8	9686.2 ug/L	9686.2 ppb	13:34:43
3	Sc 361.383	879758.2	879758.2	99.964 %		13:36:04
3	Y 371.029	722260.2	722260.2	94.955 %		13:36:04
3	Ag 328.068†	-7837.9	-8074.9	1.5741 ug/L	1.5741 ppb	13:36:09
3	As 188.979†	21206.9	21234.4	9504.4 ug/L	9504.4 ppb	13:36:09
3	B 249.677†	197619.5	197968.2	4826.2 ug/L	4826.2 ppb	13:36:04
3	Ba 233.527†	1630861.1	1631433.6	12845 ug/L	12845 ppb	13:36:04
3	Be 313.107†	7475497.2	7481730.5	2817.6 ug/L	2817.6 ppb	13:35:58
3	Cd 226.502†	806322.3	806787.1	9381.5 ug/L	9381.5 ppb	13:36:04
3	Co 228.616†	432264.3	432483.8	9081.3 ug/L	9081.3 ppb	13:36:09
3	Cr 267.716†	2056218.3	2056869.0	23093 ug/L	23093 ppb	13:36:04
3	Cu 324.752†	6446101.2	6442452.8	19629 ug/L	19629 ppb	13:35:58
3	Mn 257.610†	8101328.3	8103749.6	9232.3 ug/L	9232.3 ppb	13:35:58
3	Mo 202.031†	127958.4	127999.5	9427.8 ug/L	9427.8 ppb	13:36:09
3	Ni 231.604†	363511.8	363559.1	9272.6 ug/L	9272.6 ppb	13:36:09
3	P 214.914†	29891.5	29696.4	14056 ug/L	14056 ppb	13:36:09
3	Pb 220.353†	192609.6	192617.4	23841 ug/L	23841 ppb	13:36:09
3	S 181.975 Axial†	36613.2	36590.4	51591 ug/L	51591 ppb	13:36:09
3	Sb 206.836†	29777.3	29748.9	10850 ug/L	10850 ppb	13:36:09
3	Se 196.026†	15045.7	15075.8	9935.7 ug/L	9935.7 ppb	13:36:09
3	Si 251.611†	1420445.8	1420389.3	45898 ug/L	45898 ppb	13:36:04
3	Sn 189.927†	56045.0	56055.6	10109 ug/L	10109 ppb	13:36:09
3	Ti 334.940†	6196874.8	6200502.2	9761.4 ug/L	9761.4 ppb	13:35:58
3	Tl 190.801†	29089.9	29127.7	9435.8 ug/L	9435.8 ppb	13:36:09
3	U 409.014†	-1573.3	1328.0	-14.534 ug/L	-14.534 ppb	13:36:09
3	V 292.402†	1385967.9	1387932.5	9810.4 ug/L	9810.4 ppb	13:36:04
3	Zn 213.857†	1355057.0	1354802.4	13592 ug/L	13592 ppb	13:36:04
3	SiO2†	1423284.7	1423205.8	98553 ug/L	98553 ppb	13:36:27

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	871999.0	99.083 %	0.9519			0.96%
Sc Radial	3737.7	96.9 %	0.66			0.68%
Y 371.029	715715.3	94.094 %	0.8956			0.95%
Y RADIAL	4233.2	95.09 %	1.156			1.22%
Ag 328.068†	-8199.4	1.0162 ug/L	0.48351	1.0162 ppb	0.48351	47.58%
Al 396.153Radial†	513.9	23.830 ug/L	9.9170	23.830 ppb	9.9170	41.62%
As 188.979†	21239.7	9507.3 ug/L	67.28	9507.3 ppb	67.28	0.71%
QC value within limits for As 188.979 Recovery = 95.07%						
B 249.677†	197640.7	4818.1 ug/L	7.59	4818.1 ppb	7.59	0.16%
QC value within limits for B 249.677 Recovery = 96.36%						
Ba 233.527†	1634073.0	12866 ug/L	18.1	12866 ppb	18.1	0.14%
QC value less than the lower limit for Ba 233.527 Recovery = 85.77%						
Be 313.107†	7520668.4	2832.3 ug/L	20.59	2832.3 ppb	20.59	0.73%
QC value within limits for Be 313.107 Recovery = 94.41%						
Ca 317.933Radial†	8.4	18.284 ug/L	5.6812	18.284 ppb	5.6812	31.07%
Cd 226.502†	807947.4	9395.0 ug/L	12.99	9395.0 ppb	12.99	0.14%
QC value within limits for Cd 226.502 Recovery = 93.95%						

Co 228.616†	434288.9	9119.2 ug/L	73.57	9119.2 ppb	73.57	0.81%
QC value within limits for Co 228.616 Recovery = 91.19%						
Cr 267.716†	2059264.0	23120 ug/L	24.8	23120 ppb	24.8	0.11%
QC value within limits for Cr 267.716 Recovery = 92.48%						
Cu 324.752†	6484404.2	19757 ug/L	168.1	19757 ppb	168.1	0.85%
QC value within limits for Cu 324.752 Recovery = 98.78%						
Fe 238.204 Radial†	-16.2	11.138 ug/L	9.8975	11.138 ppb	9.8975	88.86%
K 766.490 Radial†	1608569.3	308170 ug/L	3075.5	308170 ppb	3075.5	1.00%
QC value within limits for K 766.490 Radial Recovery = 102.72%						
Mg 279.077 IEC†	-1.9	1.7131 ug/L	42.24636	1.7131 ppb	42.24636	>999.9%
Mn 257.610†	8164012.0	9300.9 ug/L	77.61	9300.9 ppb	77.61	0.83%
QC value within limits for Mn 257.610 Recovery = 93.01%						
Mo 202.031†	128534.4	9467.2 ug/L	68.69	9467.2 ppb	68.69	0.73%
QC value within limits for Mo 202.031 Recovery = 94.67%						
Na 589.592 Radial†	790.9	246.10 ug/L	23.070	246.10 ppb	23.070	9.37%
Ni 231.604†	365244.6	9315.6 ug/L	77.37	9315.6 ppb	77.37	0.83%
QC value within limits for Ni 231.604 Recovery = 93.16%						
P 214.914†	29856.8	14127 ug/L	99.6	14127 ppb	99.6	0.70%
QC value within limits for P 214.914 Recovery = 94.18%						
Pb 220.353†	193461.2	23945 ug/L	195.7	23945 ppb	195.7	0.82%
QC value within limits for Pb 220.353 Recovery = 95.78%						
S 181.975 Axial†	36723.7	51779 ug/L	413.0	51779 ppb	413.0	0.80%
QC value within limits for S 181.975 Axial Recovery = 103.56%						
Sb 206.836†	29782.7	10863 ug/L	59.4	10863 ppb	59.4	0.55%
QC value within limits for Sb 206.836 Recovery = 108.63%						
Se 196.026†	15069.4	9931.6 ug/L	51.58	9931.6 ppb	51.58	0.52%
QC value within limits for Se 196.026 Recovery = 99.32%						
Si 251.611†	1418604.1	45840 ug/L	67.1	45840 ppb	67.1	0.15%
QC value within limits for Si 251.611 Recovery = 91.68%						
Sn 189.927†	56298.2	10152 ug/L	88.2	10152 ppb	88.2	0.87%
QC value within limits for Sn 189.927 Recovery = 101.52%						
Sr 421.552†	1403296.2	9762.2 ug/L	97.45	9762.2 ppb	97.45	1.00%
QC value within limits for Sr 421.552 Recovery = 97.62%						
Ti 334.940†	6244463.6	9830.6 ug/L	82.32	9830.6 ppb	82.32	0.84%
QC value within limits for Ti 334.940 Recovery = 98.31%						
Tl 190.801†	29184.1	9454.6 ug/L	62.10	9454.6 ppb	62.10	0.66%
QC value within limits for Tl 190.801 Recovery = 94.55%						
U 409.014†	1157.4	-19.361 ug/L	4.8990	-19.361 ppb	4.8990	25.30%
V 292.402†	1388445.8	9814.5 ug/L	5.11	9814.5 ppb	5.11	0.05%
QC value within limits for V 292.402 Recovery = 98.14%						
Zn 213.857†	1356831.7	13612 ug/L	17.5	13612 ppb	17.5	0.13%
QC value within limits for Zn 213.857 Recovery = 90.75%						
SiO2†	1437747.5	99561 ug/L	895.7	99561 ppb	895.7	0.90%
QC value within limits for SiO2 Recovery = 93.05%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 13:38:38

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	3790.4	3790.4	98.3 %		13:40:50
1	Y RADIAL	4282.6	4282.6	96.20 %		13:40:30
1	Al 396.153Radial†	5206.3	5412.8	5063.9 ug/L	5063.9 ppb	13:40:30
1	Ca 317.933Radial†	2323.1	2345.2	5114.3 ug/L	5114.3 ppb	13:40:50
1	Fe 238.204 Radial†	313.9	307.7	4987.0 ug/L	4987.0 ppb	13:40:50
1	K 766.490 Radial†	29590.4	27344.6	5232.6 ug/L	5232.6 ppb	13:40:30
1	Mg 279.077 IEC†	99.4	99.9	5273.8 ug/L	5273.8 ppb	13:40:50
1	Na 589.592 Radial†	31137.3	32585.4	10139 ug/L	10139 ppb	13:40:30
1	Sr 421.552†	70101.9	71323.4	496.13 ug/L	496.13 ppb	13:40:30
1	Sc 361.383	916114.7	916114.7	104.10 %		13:41:48
1	Y 371.029	759809.7	759809.7	99.891 %		13:41:48
1	Ag 328.068†	106763.5	102329.1	478.51 ug/L	478.51 ppb	13:41:53
1	As 188.979†	1147.6	1122.3	503.20 ug/L	503.20 ppb	13:42:13
1	B 249.677†	21047.9	20497.8	500.22 ug/L	500.22 ppb	13:41:53
1	Ba 233.527†	63031.3	60540.5	477.06 ug/L	477.06 ppb	13:41:53
1	Be 313.107†	1334110.2	1285181.9	481.26 ug/L	481.26 ppb	13:41:48
1	Cd 226.502†	42804.8	41297.0	479.79 ug/L	479.79 ppb	13:41:53
1	Co 228.616†	23550.7	22689.0	476.62 ug/L	476.62 ppb	13:41:53
1	Cr 267.716†	44265.5	42438.9	477.15 ug/L	477.15 ppb	13:41:53
1	Cu 324.752†	167584.4	155036.2	472.38 ug/L	472.38 ppb	13:41:53
1	Mn 257.610†	441588.5	423737.9	483.02 ug/L	483.02 ppb	13:41:48
1	Mo 202.031†	6713.1	6444.3	475.10 ug/L	475.10 ppb	13:42:13
1	Ni 231.604†	19598.8	18745.0	478.09 ug/L	478.09 ppb	13:41:53
1	P 214.914†	4307.5	3932.3	2272.8 ug/L	2272.8 ppb	13:42:13
1	Pb 220.353†	4107.0	3884.2	482.02 ug/L	482.02 ppb	13:42:13
1	S 181.975 Axial†	744.6	679.5	957.07 ug/L	957.07 ppb	13:42:13
1	Sb 206.836†	1470.9	1374.1	501.94 ug/L	501.94 ppb	13:42:13
1	Se 196.026†	741.0	736.5	500.97 ug/L	500.97 ppb	13:42:13
1	Si 251.611†	77222.0	73619.2	2379.1 ug/L	2379.1 ppb	13:41:53
1	Sn 189.927†	2767.6	2649.3	478.36 ug/L	478.36 ppb	13:42:13
1	Ti 334.940†	311314.9	300477.1	473.32 ug/L	473.32 ppb	13:41:53
1	Tl 190.801†	1529.1	1496.4	484.56 ug/L	484.56 ppb	13:42:13
1	U 409.014†	14449.1	16782.5	467.00 ug/L	467.00 ppb	13:41:53
1	V 292.402†	69091.3	67841.8	480.24 ug/L	480.24 ppb	13:41:53
1	Zn 213.857†	50208.7	47493.9	475.04 ug/L	475.04 ppb	13:41:53
1	SiO2†	77219.9	73593.7	5096.5 ug/L	5096.5 ppb	13:43:20
2	Sc Radial	3821.8	3821.8	99.1 %		13:41:15
2	Y RADIAL	4288.7	4288.7	96.34 %		13:40:55
2	Al 396.153Radial†	5232.5	5395.7	5047.5 ug/L	5047.5 ppb	13:40:55
2	Ca 317.933Radial†	2345.4	2348.3	5121.0 ug/L	5121.0 ppb	13:41:15
2	Fe 238.204 Radial†	315.7	306.9	4973.9 ug/L	4973.9 ppb	13:41:15
2	K 766.490 Radial†	29660.8	27168.8	5198.9 ug/L	5198.9 ppb	13:40:55
2	Mg 279.077 IEC†	95.9	95.6	5045.5 ug/L	5045.5 ppb	13:41:15
2	Na 589.592 Radial†	31014.1	32201.3	10020 ug/L	10020 ppb	13:40:55
2	Sr 421.552†	70200.0	70837.5	492.75 ug/L	492.75 ppb	13:40:55
2	Sc 361.383	904548.9	904548.9	102.78 %		13:42:19
2	Y 371.029	750200.0	750200.0	98.628 %		13:42:19
2	Ag 328.068†	106718.7	103596.8	484.41 ug/L	484.41 ppb	13:42:24
2	As 188.979†	1153.1	1141.8	511.92 ug/L	511.92 ppb	13:42:44
2	B 249.677†	21032.0	20740.9	506.16 ug/L	506.16 ppb	13:42:24
2	Ba 233.527†	63115.8	61396.9	483.81 ug/L	483.81 ppb	13:42:24
2	Be 313.107†	1304528.8	1272788.1	476.65 ug/L	476.65 ppb	13:42:19
2	Cd 226.502†	42788.8	41807.2	485.72 ug/L	485.72 ppb	13:42:24
2	Co 228.616†	23690.4	23114.2	485.55 ug/L	485.55 ppb	13:42:24
2	Cr 267.716†	44225.9	42944.1	482.83 ug/L	482.83 ppb	13:42:24
2	Cu 324.752†	167673.7	157181.6	478.91 ug/L	478.91 ppb	13:42:24
2	Mn 257.610†	432797.9	420609.2	479.47 ug/L	479.47 ppb	13:42:19
2	Mo 202.031†	6723.9	6537.3	481.95 ug/L	481.95 ppb	13:42:44
2	Ni 231.604†	19611.1	18997.6	484.53 ug/L	484.53 ppb	13:42:24

2	P 214.914†	4312.5	3990.0	2306.2 ug/L	2306.2 ppb	13:42:44
2	Pb 220.353†	4100.3	3928.2	487.47 ug/L	487.47 ppb	13:42:44
2	S 181.975 Axial†	750.0	693.8	977.32 ug/L	977.32 ppb	13:42:44
2	Sb 206.836†	1480.4	1401.3	511.76 ug/L	511.76 ppb	13:42:44
2	Se 196.026†	736.5	741.3	504.05 ug/L	504.05 ppb	13:42:44
2	Si 251.611†	77219.4	74565.2	2409.7 ug/L	2409.7 ppb	13:42:24
2	Sn 189.927†	2757.7	2673.6	482.76 ug/L	482.76 ppb	13:42:44
2	Ti 334.940†	311832.3	304804.4	480.15 ug/L	480.15 ppb	13:42:24
2	Tl 190.801†	1515.3	1501.7	486.26 ug/L	486.26 ppb	13:42:44
2	U 409.014†	14503.1	17012.5	473.41 ug/L	473.41 ppb	13:42:24
2	V 292.402†	69144.9	68742.6	486.63 ug/L	486.63 ppb	13:42:24
2	Zn 213.857†	50137.3	48041.2	480.52 ug/L	480.52 ppb	13:42:24
2	SiO2†	76754.0	74088.9	5130.7 ug/L	5130.7 ppb	13:43:25
3	Sc Radial	3826.5	3826.5	99.2 %		13:41:40
3	Y RADIAL	4257.3	4257.3	95.63 %		13:41:20
3	Al 396.153Radial†	5192.1	5348.5	5003.7 ug/L	5003.7 ppb	13:41:20
3	Ca 317.933Radial†	2360.3	2360.4	5147.5 ug/L	5147.5 ppb	13:41:40
3	Fe 238.204 Radial†	320.6	311.5	5047.5 ug/L	5047.5 ppb	13:41:40
3	K 766.490 Radial†	29510.6	26980.7	5162.9 ug/L	5162.9 ppb	13:41:20
3	Mg 279.077 IEC†	101.0	100.6	5310.8 ug/L	5310.8 ppb	13:41:40
3	Na 589.592 Radial†	30745.0	31891.8	9923.6 ug/L	9923.6 ppb	13:41:20
3	Sr 421.552†	69836.2	70384.1	489.60 ug/L	489.60 ppb	13:41:20
3	Sc 361.383	921894.5	921894.5	104.75 %		13:42:50
3	Y 371.029	765386.9	765386.9	100.62 %		13:42:50
3	Ag 328.068†	106637.3	101565.5	474.97 ug/L	474.97 ppb	13:42:55
3	As 188.979†	1136.9	1105.3	495.61 ug/L	495.61 ppb	13:43:15
3	B 249.677†	21019.3	20343.8	496.45 ug/L	496.45 ppb	13:42:55
3	Ba 233.527†	63000.6	60131.6	473.84 ug/L	473.84 ppb	13:42:55
3	Be 313.107†	1334145.6	1277180.6	478.27 ug/L	478.27 ppb	13:42:50
3	Cd 226.502†	42764.9	41001.1	476.34 ug/L	476.34 ppb	13:42:55
3	Co 228.616†	23582.9	22577.9	474.29 ug/L	474.29 ppb	13:42:55
3	Cr 267.716†	44260.4	42167.5	474.11 ug/L	474.11 ppb	13:42:55
3	Cu 324.752†	167221.0	153679.9	468.25 ug/L	468.25 ppb	13:42:55
3	Mn 257.610†	440866.9	420389.4	479.21 ug/L	479.21 ppb	13:42:50
3	Mo 202.031†	6715.2	6405.9	472.28 ug/L	472.28 ppb	13:43:15
3	Ni 231.604†	19597.2	18625.4	475.04 ug/L	475.04 ppb	13:42:55
3	P 214.914†	4325.7	3923.7	2268.3 ug/L	2268.3 ppb	13:43:15
3	Pb 220.353†	4108.4	3860.9	479.11 ug/L	479.11 ppb	13:43:15
3	S 181.975 Axial†	737.0	667.8	940.57 ug/L	940.57 ppb	13:43:15
3	Sb 206.836†	1449.6	1344.8	491.53 ug/L	491.53 ppb	13:43:15
3	Se 196.026†	731.3	722.8	492.14 ug/L	492.14 ppb	13:43:15
3	Si 251.611†	77030.2	72971.0	2358.1 ug/L	2358.1 ppb	13:42:55
3	Sn 189.927†	2775.4	2640.1	476.71 ug/L	476.71 ppb	13:43:15
3	Ti 334.940†	311294.3	298582.4	470.34 ug/L	470.34 ppb	13:42:55
3	Tl 190.801†	1522.1	1480.5	479.43 ug/L	479.43 ppb	13:43:15
3	U 409.014†	14396.6	16645.3	463.17 ug/L	463.17 ppb	13:42:55
3	V 292.402†	69123.9	67456.8	477.50 ug/L	477.50 ppb	13:42:55
3	Zn 213.857†	50046.9	47037.1	470.45 ug/L	470.45 ppb	13:42:55
3	SiO2†	77888.0	73766.4	5108.6 ug/L	5108.6 ppb	13:43:31

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914186.1	103.88 %	1.004			0.97%
Sc Radial	3812.9	98.9 %	0.51			0.51%
Y 371.029	758465.5	99.715 %	1.0100			1.01%
Y RADIAL	4276.2	96.06 %	0.373			0.39%
Ag 328.068†	102497.1	479.30 ug/L	4.772	479.30 ppb	4.772	1.00%
QC value within limits for Ag 328.068 Recovery = 95.86%						
Al 396.153Radial†	5385.7	5038.3 ug/L	31.13	5038.3 ppb	31.13	0.62%
QC value within limits for Al 396.153Radial Recovery = 100.77%						
As 188.979†	1123.1	503.58 ug/L	8.162	503.58 ppb	8.162	1.62%
QC value within limits for As 188.979 Recovery = 100.72%						
B 249.677†	20527.5	500.94 ug/L	4.897	500.94 ppb	4.897	0.98%
QC value within limits for B 249.677 Recovery = 100.19%						
Ba 233.527†	60689.6	478.24 ug/L	5.085	478.24 ppb	5.085	1.06%
QC value within limits for Ba 233.527 Recovery = 95.65%						
Be 313.107†	1278383.6	478.73 ug/L	2.342	478.73 ppb	2.342	0.49%
QC value within limits for Be 313.107 Recovery = 95.75%						
Ca 317.933Radial†	2351.3	5127.6 ug/L	17.52	5127.6 ppb	17.52	0.34%



QC value within limits for Ca 317.933 Radial Recovery = 102.55%

Cd 226.502†	41368.4	480.62 ug/L	4.746	480.62 ppb	4.746	0.99%
QC value within limits for Cd 226.502 Recovery = 96.12%						
Co 228.616†	22793.7	478.82 ug/L	5.947	478.82 ppb	5.947	1.24%
QC value within limits for Co 228.616 Recovery = 95.76%						
Cr 267.716†	42516.8	478.03 ug/L	4.424	478.03 ppb	4.424	0.93%
QC value within limits for Cr 267.716 Recovery = 95.61%						
Cu 324.752†	155299.2	473.18 ug/L	5.375	473.18 ppb	5.375	1.14%
QC value within limits for Cu 324.752 Recovery = 94.64%						
Fe 238.204 Radial†	308.7	5002.8 ug/L	39.26	5002.8 ppb	39.26	0.78%
QC value within limits for Fe 238.204 Radial Recovery = 100.06%						
K 766.490 Radial†	27164.7	5198.1 ug/L	34.82	5198.1 ppb	34.82	0.67%
QC value within limits for K 766.490 Radial Recovery = 103.96%						
Mg 279.077 IEC†	98.7	5210.1 ug/L	143.70	5210.1 ppb	143.70	2.76%
QC value within limits for Mg 279.077 IEC Recovery = 104.20%						
Mn 257.610†	421578.8	480.57 ug/L	2.130	480.57 ppb	2.130	0.44%
QC value within limits for Mn 257.610 Recovery = 96.11%						
Mo 202.031†	6462.5	476.44 ug/L	4.974	476.44 ppb	4.974	1.04%
QC value within limits for Mo 202.031 Recovery = 95.29%						
Na 589.592 Radial†	32226.2	10028 ug/L	108.1	10028 ppb	108.1	1.08%
QC value within limits for Na 589.592 Radial Recovery = 100.28%						
Ni 231.604†	18789.3	479.22 ug/L	4.847	479.22 ppb	4.847	1.01%
QC value within limits for Ni 231.604 Recovery = 95.84%						
P 214.914†	3948.6	2282.5 ug/L	20.72	2282.5 ppb	20.72	0.91%
QC value within limits for P 214.914 Recovery = 91.30%						
Pb 220.353†	3891.1	482.86 ug/L	4.248	482.86 ppb	4.248	0.88%
QC value within limits for Pb 220.353 Recovery = 96.57%						
S 181.975 Axial†	680.3	958.32 ug/L	18.405	958.32 ppb	18.405	1.92%
QC value within limits for S 181.975 Axial Recovery = 95.83%						
Sb 206.836†	1373.4	501.75 ug/L	10.114	501.75 ppb	10.114	2.02%
QC value within limits for Sb 206.836 Recovery = 100.35%						
Se 196.026†	733.6	499.05 ug/L	6.179	499.05 ppb	6.179	1.24%
QC value within limits for Se 196.026 Recovery = 99.81%						
Si 251.611†	73718.5	2382.3 ug/L	25.91	2382.3 ppb	25.91	1.09%
QC value within limits for Si 251.611 Recovery = 95.29%						
Sn 189.927†	2654.3	479.28 ug/L	3.128	479.28 ppb	3.128	0.65%
QC value within limits for Sn 189.927 Recovery = 95.86%						
Sr 421.552†	70848.3	492.83 ug/L	3.268	492.83 ppb	3.268	0.66%
QC value within limits for Sr 421.552 Recovery = 98.57%						
Ti 334.940†	301288.0	474.60 ug/L	5.031	474.60 ppb	5.031	1.06%
QC value within limits for Ti 334.940 Recovery = 94.92%						
Tl 190.801†	1492.9	483.41 ug/L	3.557	483.41 ppb	3.557	0.74%
QC value within limits for Tl 190.801 Recovery = 96.68%						
U 409.014†	16813.4	467.86 ug/L	5.175	467.86 ppb	5.175	1.11%
QC value within limits for U 409.014 Recovery = 93.57%						
V 292.402†	68013.7	481.46 ug/L	4.685	481.46 ppb	4.685	0.97%
QC value within limits for V 292.402 Recovery = 96.29%						
Zn 213.857†	47524.1	475.34 ug/L	5.043	475.34 ppb	5.043	1.06%
QC value within limits for Zn 213.857 Recovery = 95.07%						
SiO2†	73816.3	5111.9 ug/L	17.34	5111.9 ppb	17.34	0.34%
QC value within limits for SiO2 Recovery = 95.59%						

All analyte(s) passed QC.

## =====

## Analytical Sequence

Method: General Eng.2AX

Seq.	Loc.	ID	Status
1	8	S0	Applied
2	2	S0.1	Applied
3	3	S0.5	Applied
4	4	SCAL	Applied
5	5	S10	Applied
6	9	ICV	QC Failed
7	10	ICB	QC Passed
8	11	PQL	QC Failed
9	13	ICSA	QC Passed
10	14	ICSAB	QC Passed
11	15	LR1	QC Failed
12	16	LR2	QC Failed
13	7	CCV	QC Passed
14	8	CCB	QC Passed

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 13:45:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3921.6	3921.6	102 %		13:47:53
1	Y RADIAL	4517.7	4517.7	101.5 %		13:47:33
1	Al 396.153Radial†	-114.4	2.6	2.3499 ug/L	2.3499 ppb	13:47:33
1	Ca 317.933Radial†	21.8	2.8	6.0275 ug/L	6.0275 ppb	13:47:53
1	Fe 238.204 Radial†	11.0	-0.9	-14.020 ug/L	-14.020 ppb	13:47:53
1	K 766.490 Radial†	3360.7	540.2	103.47 ug/L	103.47 ppb	13:47:33
1	Mg 279.077 IEC†	1.9	0.7	34.871 ug/L	34.871 ppb	13:47:53
1	Na 589.592 Radial†	-794.9	119.9	37.303 ug/L	37.303 ppb	13:47:33
1	Sr 421.552†	50.1	40.5	0.2818 ug/L	0.2818 ppb	13:47:33
1	Sc 361.383	900421.0	900421.0	102.31 %		13:48:50
1	Y 371.029	758138.7	758138.7	99.672 %		13:48:50
1	Ag 328.068†	230.1	-9.3	-0.0406 ug/L	-0.0406 ppb	13:48:50
1	As 188.979†	4.8	24.6	10.928 ug/L	10.928 ppb	13:49:10
1	B 249.677†	521.4	787.6	19.307 ug/L	19.307 ppb	13:48:50
1	Ba 233.527†	26.1	14.5	0.1132 ug/L	0.1132 ppb	13:49:10
1	Be 313.107†	-3553.0	85.5	0.0320 ug/L	0.0320 ppb	13:48:50
1	Cd 226.502†	-114.8	64.0	0.7438 ug/L	0.7438 ppb	13:49:10
1	Co 228.616†	-70.4	-3.9	-0.0796 ug/L	-0.0796 ppb	13:49:10
1	Cr 267.716†	98.6	11.3	0.1287 ug/L	0.1287 ppb	13:49:10
1	Cu 324.752†	6171.2	76.6	0.2374 ug/L	0.2374 ppb	13:48:50
1	Mn 257.610†	514.4	25.1	0.0257 ug/L	0.0257 ppb	13:49:10
1	Mo 202.031†	19.9	14.8	1.0873 ug/L	1.0873 ppb	13:49:10
1	Ni 231.604†	86.7	2.0	0.0501 ug/L	0.0501 ppb	13:49:10
1	P 214.914†	211.3	0.7	0.4016 ug/L	0.4016 ppb	13:49:10
1	Pb 220.353†	62.4	-0.2	-0.0243 ug/L	-0.0243 ppb	13:49:10
1	S 181.975 Axial†	51.9	14.8	20.936 ug/L	20.936 ppb	13:49:10
1	Sb 206.836†	56.4	16.2	5.7446 ug/L	5.7446 ppb	13:49:10
1	Se 196.026†	-23.6	1.6	1.0374 ug/L	1.0374 ppb	13:49:10
1	Si 251.611†	660.7	81.0	2.6117 ug/L	2.6117 ppb	13:49:10
1	Sn 189.927†	18.1	8.3	1.4976 ug/L	1.4976 ppb	13:49:10
1	Ti 334.940†	-1433.6	8.7	0.0154 ug/L	0.0154 ppb	13:48:50
1	Tl 190.801†	-30.5	-2.4	-0.7627 ug/L	-0.7627 ppb	13:49:10
1	U 409.014†	-3279.6	-303.7	-8.4785 ug/L	-8.4785 ppb	13:48:50
1	V 292.402†	-1498.9	3.7	0.0278 ug/L	0.0278 ppb	13:48:50
1	Zn 213.857†	892.4	132.8	1.3417 ug/L	1.3417 ppb	13:49:10
1	SiO2†	649.5	46.6	3.2035 ug/L	3.2035 ppb	13:50:06
2	Sc Radial	3897.8	3897.8	101 %		13:48:18
2	Y RADIAL	4482.0	4482.0	100.7 %		13:47:58
2	Al 396.153Radial†	-106.0	10.2	9.5528 ug/L	9.5528 ppb	13:47:58
2	Ca 317.933Radial†	25.0	6.0	13.151 ug/L	13.151 ppb	13:48:18
2	Fe 238.204 Radial†	12.1	0.3	4.6055 ug/L	4.6055 ppb	13:48:18
2	K 766.490 Radial†	3449.4	648.3	124.19 ug/L	124.19 ppb	13:47:58
2	Mg 279.077 IEC†	1.1	-0.1	-6.1782 ug/L	-6.1782 ppb	13:48:18
2	Na 589.592 Radial†	-880.2	30.7	9.5675 ug/L	9.5675 ppb	13:47:58
2	Sr 421.552†	23.8	14.8	0.1028 ug/L	0.1028 ppb	13:47:58
2	Sc 361.383	892824.5	892824.5	101.45 %		13:49:16
2	Y 371.029	752703.7	752703.7	98.957 %		13:49:16
2	Ag 328.068†	321.0	82.2	0.3888 ug/L	0.3888 ppb	13:49:16
2	As 188.979†	5.5	25.3	11.256 ug/L	11.256 ppb	13:49:36
2	B 249.677†	394.0	666.4	16.332 ug/L	16.332 ppb	13:49:16
2	Ba 233.527†	24.8	13.4	0.1056 ug/L	0.1056 ppb	13:49:36
2	Be 313.107†	-3527.2	81.4	0.0304 ug/L	0.0304 ppb	13:49:16
2	Cd 226.502†	-111.5	66.3	0.7693 ug/L	0.7693 ppb	13:49:36
2	Co 228.616†	-61.9	3.8	0.0828 ug/L	0.0828 ppb	13:49:36
2	Cr 267.716†	86.5	0.2	0.0052 ug/L	0.0052 ppb	13:49:36
2	Cu 324.752†	5998.8	-41.9	-0.1242 ug/L	-0.1242 ppb	13:49:16
2	Mn 257.610†	528.0	42.7	0.0494 ug/L	0.0494 ppb	13:49:36
2	Mo 202.031†	17.7	12.7	0.9382 ug/L	0.9382 ppb	13:49:36
2	Ni 231.604†	93.0	8.9	0.2275 ug/L	0.2275 ppb	13:49:36

2	P 214.914†	205.5	-3.2	-1.8924 ug/L	-1.8924 ppb	13:49:36
2	Pb 220.353†	48.2	-13.6	-1.6824 ug/L	-1.6824 ppb	13:49:36
2	S 181.975 Axial†	39.8	3.4	4.8180 ug/L	4.8180 ppb	13:49:36
2	Sb 206.836†	58.1	18.3	6.5025 ug/L	6.5025 ppb	13:49:36
2	Se 196.026†	-23.3	1.8	1.1679 ug/L	1.1679 ppb	13:49:36
2	Si 251.611†	696.6	122.0	3.9399 ug/L	3.9399 ppb	13:49:36
2	Sn 189.927†	25.1	15.3	2.7598 ug/L	2.7598 ppb	13:49:36
2	Ti 334.940†	-1439.5	-9.1	-0.0094 ug/L	-0.0094 ppb	13:49:16
2	Tl 190.801†	-25.8	2.0	0.6358 ug/L	0.6358 ppb	13:49:36
2	U 409.014†	-3162.5	-215.5	-6.0183 ug/L	-6.0183 ppb	13:49:16
2	V 292.402†	-1473.6	16.2	0.1140 ug/L	0.1140 ppb	13:49:16
2	Zn 213.857†	871.0	119.1	1.2006 ug/L	1.2006 ppb	13:49:36
2	SiO2†	659.5	61.8	4.2680 ug/L	4.2680 ppb	13:50:11
3	Sc Radial	3887.9	3887.9	101 %		13:48:44
3	Y RADIAL	4557.5	4557.5	102.4 %		13:48:23
3	Al 396.153Radial†	-110.4	5.6	5.1570 ug/L	5.1570 ppb	13:48:23
3	Ca 317.933Radial†	23.5	4.6	10.053 ug/L	10.053 ppb	13:48:44
3	Fe 238.204 Radial†	10.7	-1.0	-16.790 ug/L	-16.790 ppb	13:48:44
3	K 766.490 Radial†	3449.2	656.6	125.79 ug/L	125.79 ppb	13:48:23
3	Mg 279.077 IEC†	1.0	-0.1	-7.4965 ug/L	-7.4965 ppb	13:48:44
3	Na 589.592 Radial†	-811.0	97.2	30.233 ug/L	30.233 ppb	13:48:23
3	Sr 421.552†	48.8	39.7	0.2758 ug/L	0.2758 ppb	13:48:23
3	Sc 361.383	905298.4	905298.4	102.87 %		13:49:41
3	Y 371.029	763531.6	763531.6	100.38 %		13:49:41
3	Ag 328.068†	252.2	11.0	0.0444 ug/L	0.0444 ppb	13:49:41
3	As 188.979†	5.5	25.3	11.245 ug/L	11.245 ppb	13:50:01
3	B 249.677†	431.1	697.1	17.088 ug/L	17.088 ppb	13:49:41
3	Ba 233.527†	23.4	11.7	0.0919 ug/L	0.0919 ppb	13:50:01
3	Be 313.107†	-3560.6	96.9	0.0362 ug/L	0.0362 ppb	13:49:41
3	Cd 226.502†	-112.8	66.5	0.7747 ug/L	0.7747 ppb	13:50:01
3	Co 228.616†	-65.7	1.0	0.0244 ug/L	0.0244 ppb	13:50:01
3	Cr 267.716†	87.2	-0.4	-0.0066 ug/L	-0.0066 ppb	13:50:01
3	Cu 324.752†	6151.4	24.9	0.0737 ug/L	0.0737 ppb	13:49:41
3	Mn 257.610†	520.8	28.7	0.0313 ug/L	0.0313 ppb	13:50:01
3	Mo 202.031†	22.8	17.5	1.2844 ug/L	1.2844 ppb	13:50:01
3	Ni 231.604†	75.3	-9.6	-0.2448 ug/L	-0.2448 ppb	13:50:01
3	P 214.914†	200.9	-10.5	-6.3225 ug/L	-6.3225 ppb	13:50:01
3	Pb 220.353†	66.3	3.3	0.4136 ug/L	0.4136 ppb	13:50:01
3	S 181.975 Axial†	47.4	10.3	14.475 ug/L	14.475 ppb	13:50:01
3	Sb 206.836†	52.0	11.5	4.1182 ug/L	4.1182 ppb	13:50:01
3	Se 196.026†	-23.4	2.0	1.2784 ug/L	1.2784 ppb	13:50:01
3	Si 251.611†	667.6	84.3	2.7136 ug/L	2.7136 ppb	13:50:01
3	Sn 189.927†	23.2	13.2	2.3765 ug/L	2.3765 ppb	13:50:01
3	Ti 334.940†	-1437.9	12.0	0.0200 ug/L	0.0200 ppb	13:49:41
3	Tl 190.801†	-33.3	-5.0	-1.5954 ug/L	-1.5954 ppb	13:50:01
3	U 409.014†	-2908.3	74.6	2.0861 ug/L	2.0861 ppb	13:49:41
3	V 292.402†	-1504.9	5.7	0.0644 ug/L	0.0644 ppb	13:49:41
3	Zn 213.857†	878.6	114.7	1.1618 ug/L	1.1618 ppb	13:50:01
3	SiO2†	714.8	106.7	7.3698 ug/L	7.3698 ppb	13:50:16

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899514.6	102.21 %	0.714			0.70%
Sc Radial	3902.5	101 %	0.4			0.44%
Y 371.029	758124.7	99.670 %	0.7118			0.71%
Y RADIAL	4519.1	101.5 %	0.85			0.84%
Ag 328.068†	28.0	0.1308 ug/L	0.22736	0.1308 ppb	0.22736	173.76%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	6.1	5.6866 ug/L	3.63051	5.6866 ppb	3.63051	63.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	25.1	11.143 ug/L	0.1861	11.143 ppb	0.1861	1.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	717.0	17.576 ug/L	1.5464	17.576 ppb	1.5464	8.80%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.2	0.1036 ug/L	0.01081	0.1036 ppb	0.01081	10.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	87.9	0.0329 ug/L	0.00303	0.0329 ppb	0.00303	9.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.5	9.7439 ug/L	3.57168	9.7439 ppb	3.57168	36.66%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	65.6	0.7626 ug/L	0.01648	0.7626 ppb	0.01648	2.16%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.3	0.0092 ug/L	0.08227	0.0092 ppb	0.08227	897.23%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.7	0.0424 ug/L	0.07495	0.0424 ppb	0.07495	176.73%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	19.8	0.0623 ug/L	0.18104	0.0623 ppb	0.18104	290.59%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.5	-8.7346 ug/L	11.63557	-8.7346 ppb	11.63557	133.21%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	615.0	117.82 ug/L	12.450	117.82 ppb	12.450	10.57%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.1	7.0654 ug/L	24.08932	7.0654 ppb	24.08932	340.95%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	32.2	0.0355 ug/L	0.01237	0.0355 ppb	0.01237	34.88%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	15.0	1.1033 ug/L	0.17367	1.1033 ppb	0.17367	15.74%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	82.6	25.701 ug/L	14.4122	25.701 ppb	14.4122	56.08%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.4	0.0109 ug/L	0.23856	0.0109 ppb	0.23856	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-4.4	-2.6044 ug/L	3.41812	-2.6044 ppb	3.41812	131.24%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-3.5	-0.4310 ug/L	1.10563	-0.4310 ppb	1.10563	256.52%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	9.5	13.409 ug/L	8.1115	13.409 ppb	8.1115	60.49%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	15.3	5.4551 ug/L	1.21823	5.4551 ppb	1.21823	22.33%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.8	1.1612 ug/L	0.12065	1.1612 ppb	0.12065	10.39%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	95.8	3.0884 ug/L	0.73918	3.0884 ppb	0.73918	23.93%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	12.2	2.2113 ug/L	0.64713	2.2113 ppb	0.64713	29.27%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	31.7	0.2201 ug/L	0.10168	0.2201 ppb	0.10168	46.19%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	3.9	0.0087 ug/L	0.01582	0.0087 ppb	0.01582	182.53%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.8	-0.5741 ug/L	1.12750	-0.5741 ppb	1.12750	196.39%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-148.2	-4.1369 ug/L	5.52787	-4.1369 ppb	5.52787	133.62%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	8.5	0.0687 ug/L	0.04328	0.0687 ppb	0.04328	62.97%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	122.2	1.2347 ug/L	0.09466	1.2347 ppb	0.09466	7.67%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	71.7	4.9471 ug/L	2.16457	4.9471 ppb	2.16457	43.75%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

=====  
Analysis Begun

Start Time: 2/25/2010 13:55:01

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022510.sif

Batch ID:

Results Data Set: 022510

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

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/25/2010 11:39:31

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

=====

Sequence No.: 1

Autosampler Location: 36

Sample ID: LR1

Date Collected: 2/25/2010 13:55:02

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	3816.7	3816.7	99.0 %		13:57:15
1	Y RADIAL	4397.6	4397.6	98.78 %		13:56:55
1	Al 396.153Radial†	-139.4	-25.8	-22.943 ug/L	-22.943 ppb	13:56:55

1	Ca 317.933Radial†	9.1	-9.5	-20.737 ug/L	-20.737 ppb	13:57:15
1	Fe 238.204 Radial†	23840.6	24080.2	389140 ug/L	389140 ppb	13:56:55
1	K 766.490 Radial†	3035.6	302.5	58.023 ug/L	58.023 ppb	13:56:55
1	Mg 279.077 IEC†	10.0	9.0	66.777 ug/L	66.777 ppb	13:57:15
1	Na 589.592 Radial†	-935.0	-43.1	-13.420 ug/L	-13.420 ppb	13:56:55
1	Sr 421.552†	139.4	132.1	0.9191 ug/L	0.9191 ppb	13:56:55
1	Sc 361.383	881329.5	881329.5	100.14 %		13:58:13
1	Y 371.029	738732.3	738732.3	97.120 %		13:58:13
1	Ag 328.068†	-23689.6	-23890.0	0.5324 ug/L	0.5324 ppb	13:58:13
1	As 188.979†	-199.5	-179.2	11.549 ug/L	11.549 ppb	13:58:33
1	B 249.677†	1764.0	2039.5	-13.259 ug/L	-13.259 ppb	13:58:13
1	Ba 233.527†	-1857.5	-1865.9	-2.7512 ug/L	-2.7512 ppb	13:58:13
1	Be 313.107†	-8430.4	-4860.1	-1.8060 ug/L	-1.8060 ppb	13:58:13
1	Cd 226.502†	2838.7	3010.8	-3.2482 ug/L	-3.2482 ppb	13:58:13
1	Co 228.616†	781.8	845.5	12.064 ug/L	12.064 ppb	13:58:33
1	Cr 267.716†	-253.7	-338.4	29.275 ug/L	29.275 ppb	13:58:13
1	Cu 324.752†	64.5	-5890.7	-2.9150 ug/L	-2.9150 ppb	13:58:13
1	Mn 257.610†	-32601.6	-33032.8	0.7820 ug/L	0.7820 ppb	13:58:13
1	Mo 202.031†	-351.9	-356.1	3.9820 ug/L	3.9820 ppb	13:58:13
1	Ni 231.604†	197.9	114.8	2.9199 ug/L	2.9199 ppb	13:58:33
1	P 214.914†	715.0	508.1	-4.3556 ug/L	-4.3556 ppb	13:58:33
1	Pb 220.353†	298.3	236.7	-12.844 ug/L	-12.844 ppb	13:58:33
1	S 181.975 Axial†	52.3	16.4	23.145 ug/L	23.145 ppb	13:58:33
1	Sb 206.836†	21.9	-17.2	-10.967 ug/L	-10.967 ppb	13:58:33
1	Se 196.026†	-1790.4	-1763.2	54.982 ug/L	54.982 ppb	13:58:33
1	Si 251.611†	-709.0	-1272.7	-40.907 ug/L	-40.907 ppb	13:58:13
1	Sn 189.927†	-33.4	-42.8	-30.065 ug/L	-30.065 ppb	13:58:33
1	Ti 334.940†	1355.9	2763.9	-0.0993 ug/L	-0.0993 ppb	13:58:13
1	Tl 190.801†	-64.6	-37.1	-12.212 ug/L	-12.212 ppb	13:58:33
1	U 409.014†	357563.8	359955.8	10007 ug/L	10007 ppb	13:58:13
1	V 292.402†	3473.1	4936.8	-3.3158 ug/L	-3.3158 ppb	13:58:13
1	Zn 213.857†	4428.7	3682.9	-21.049 ug/L	-21.049 ppb	13:58:33
1	SiO2†	-725.6	-1312.8	-90.432 ug/L	-90.432 ppb	13:59:30
2	Sc Radial	3787.3	3787.3	98.2 %		13:57:40
2	Y RADIAL	4358.4	4358.4	97.90 %		13:57:20
2	Al 396.153Radial†	-136.5	-24.0	-21.103 ug/L	-21.103 ppb	13:57:20
2	Ca 317.933Radial†	12.7	-5.7	-12.492 ug/L	-12.492 ppb	13:57:40
2	Fe 238.204 Radial†	23731.4	24156.0	390370 ug/L	390370 ppb	13:57:20
2	K 766.490 Radial†	2882.7	170.7	32.759 ug/L	32.759 ppb	13:57:20
2	Mg 279.077 IEC†	11.7	10.7	158.29 ug/L	158.29 ppb	13:57:40
2	Na 589.592 Radial†	-920.2	-35.4	-11.027 ug/L	-11.027 ppb	13:57:20
2	Sr 421.552†	150.2	144.2	1.0031 ug/L	1.0031 ppb	13:57:20
2	Sc 361.383	888834.6	888834.6	101.00 %		13:58:39
2	Y 371.029	744730.9	744730.9	97.909 %		13:58:39
2	Ag 328.068†	-23818.7	-23818.1	1.2475 ug/L	1.2475 ppb	13:58:39
2	As 188.979†	-189.3	-167.6	17.043 ug/L	17.043 ppb	13:58:59
2	B 249.677†	1900.0	2159.3	-10.518 ug/L	-10.518 ppb	13:58:39
2	Ba 233.527†	-1877.7	-1870.2	-2.7443 ug/L	-2.7443 ppb	13:58:39
2	Be 313.107†	-8535.6	-4893.2	-1.8183 ug/L	-1.8183 ppb	13:58:39
2	Cd 226.502†	2790.1	2938.8	-4.2115 ug/L	-4.2115 ppb	13:58:39
2	Co 228.616†	746.6	804.1	11.169 ug/L	11.169 ppb	13:58:59
2	Cr 267.716†	-259.8	-342.4	29.349 ug/L	29.349 ppb	13:58:39
2	Cu 324.752†	118.8	-5837.4	-2.6890 ug/L	-2.6890 ppb	13:58:39
2	Mn 257.610†	-32694.5	-32849.9	1.1075 ug/L	1.1075 ppb	13:58:39
2	Mo 202.031†	-395.3	-396.0	1.1340 ug/L	1.1340 ppb	13:58:39
2	Ni 231.604†	213.0	128.2	3.2603 ug/L	3.2603 ppb	13:58:59
2	P 214.914†	727.9	514.9	-1.2910 ug/L	-1.2910 ppb	13:58:59
2	Pb 220.353†	282.0	218.1	-15.287 ug/L	-15.287 ppb	13:58:59
2	S 181.975 Axial†	50.6	14.2	20.064 ug/L	20.064 ppb	13:58:59
2	Sb 206.836†	21.1	-18.1	-11.326 ug/L	-11.326 ppb	13:58:59
2	Se 196.026†	-1756.9	-1714.8	90.543 ug/L	90.543 ppb	13:58:59
2	Si 251.611†	-763.8	-1321.0	-42.434 ug/L	-42.434 ppb	13:58:39
2	Sn 189.927†	-19.9	-29.1	-27.661 ug/L	-27.661 ppb	13:58:59
2	Ti 334.940†	1391.8	2788.0	-0.0686 ug/L	-0.0686 ppb	13:58:39
2	Tl 190.801†	-56.3	-28.3	-9.3943 ug/L	-9.3943 ppb	13:58:59
2	U 409.014†	360681.4	360027.9	10009 ug/L	10009 ppb	13:58:39
2	V 292.402†	3727.2	5159.2	-1.9767 ug/L	-1.9767 ppb	13:58:39
2	Zn 213.857†	4389.0	3606.3	-22.009 ug/L	-22.009 ppb	13:58:59
2	SiO2†	-650.9	-1232.7	-84.790 ug/L	-84.790 ppb	13:59:35
3	Sc Radial	3799.6	3799.6	98.5 %		13:58:06
3	Y RADIAL	4366.4	4366.4	98.08 %		13:57:45

3	Al 396.153Radial†	-121.8	-8.6	-6.8083 ug/L	-6.8083 ppb	13:57:45
3	Ca 317.933Radial†	10.9	-7.7	-16.691 ug/L	-16.691 ppb	13:58:06
3	Fe 238.204 Radial†	23731.6	24078.4	389120 ug/L	389120 ppb	13:57:45
3	K 766.490 Radial†	2912.0	190.9	36.631 ug/L	36.631 ppb	13:57:45
3	Mg 279.077 IEC†	8.8	7.8	1.9668 ug/L	1.9668 ppb	13:58:06
3	Na 589.592 Radial†	-922.7	-35.0	-10.877 ug/L	-10.877 ppb	13:57:45
3	Sr 421.552†	155.7	149.3	1.0386 ug/L	1.0386 ppb	13:57:45
3	Sc 361.383	889833.9	889833.9	101.11 %		13:59:05
3	Y 371.029	744818.3	744818.3	97.921 %		13:59:05
3	Ag 328.068†	-23790.0	-23763.2	1.1319 ug/L	1.1319 ppb	13:59:05
3	As 188.979†	-193.0	-170.9	15.234 ug/L	15.234 ppb	13:59:25
3	B 249.677†	1797.8	2056.1	-12.845 ug/L	-12.845 ppb	13:59:05
3	Ba 233.527†	-1788.2	-1779.6	-2.0717 ug/L	-2.0717 ppb	13:59:05
3	Be 313.107†	-8541.2	-4889.3	-1.8171 ug/L	-1.8171 ppb	13:59:05
3	Cd 226.502†	2858.4	3003.2	-3.3377 ug/L	-3.3377 ppb	13:59:05
3	Co 228.616†	753.8	810.4	11.326 ug/L	11.326 ppb	13:59:25
3	Cr 267.716†	-222.4	-305.1	29.655 ug/L	29.655 ppb	13:59:05
3	Cu 324.752†	186.5	-5770.7	-2.5405 ug/L	-2.5405 ppb	13:59:05
3	Mn 257.610†	-32510.7	-32631.7	1.2386 ug/L	1.2386 ppb	13:59:05
3	Mo 202.031†	-358.7	-359.5	3.7301 ug/L	3.7301 ppb	13:59:05
3	Ni 231.604†	199.6	114.6	2.9142 ug/L	2.9142 ppb	13:59:25
3	P 214.914†	721.5	507.8	-4.5740 ug/L	-4.5740 ppb	13:59:25
3	Pb 220.353†	289.0	224.6	-14.327 ug/L	-14.327 ppb	13:59:25
3	S 181.975 Axial†	61.9	25.4	35.841 ug/L	35.841 ppb	13:59:25
3	Sb 206.836†	22.3	-16.9	-10.855 ug/L	-10.855 ppb	13:59:25
3	Se 196.026†	-1756.0	-1712.0	88.530 ug/L	88.530 ppb	13:59:25
3	Si 251.611†	-739.1	-1295.7	-41.649 ug/L	-41.649 ppb	13:59:05
3	Sn 189.927†	-24.0	-33.2	-28.326 ug/L	-28.326 ppb	13:59:25
3	Ti 334.940†	1326.2	2721.5	-0.1520 ug/L	-0.1520 ppb	13:59:05
3	Tl 190.801†	-65.4	-37.2	-12.260 ug/L	-12.260 ppb	13:59:25
3	U 409.014†	360329.2	359278.5	9988.2 ug/L	9988.2 ppb	13:59:05
3	V 292.402†	3641.2	5070.0	-2.4225 ug/L	-2.4225 ppb	13:59:05
3	Zn 213.857†	4395.0	3607.4	-21.808 ug/L	-21.808 ppb	13:59:25
3	SiO2†	-686.3	-1266.9	-87.240 ug/L	-87.240 ppb	13:59:40

## Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	886666.0	100.75 %	0.528			0.52%
Sc Radial	3801.2	98.6 %	0.38			0.39%
Y 371.029	742760.5	97.650 %	0.4587			0.47%
Y RADIAL	4374.1	98.26 %	0.465			0.47%
Ag 328.068†	-23823.8	0.9706 ug/L	0.38386	0.9706 ppb	0.38386	39.55%
Al 396.153Radial†	-19.4	-16.951 ug/L	8.8324	-16.951 ppb	8.8324	52.10%
As 188.979†	-172.6	14.609 ug/L	2.7998	14.609 ppb	2.7998	19.17%
B 249.677†	2085.0	-12.207 ug/L	1.4776	-12.207 ppb	1.4776	12.10%
Ba 233.527†	-1838.6	-2.5224 ug/L	0.39029	-2.5224 ppb	0.39029	15.47%
Be 313.107†	-4880.9	-1.8138 ug/L	0.00676	-1.8138 ppb	0.00676	0.37%
Ca 317.933Radial†	-7.6	-16.640 ug/L	4.1231	-16.640 ppb	4.1231	24.78%
Cd 226.502†	2984.3	-3.5991 ug/L	0.53220	-3.5991 ppb	0.53220	14.79%
Co 228.616†	820.0	11.519 ug/L	0.4781	11.519 ppb	0.4781	4.15%
Cr 267.716†	-328.6	29.426 ug/L	0.2016	29.426 ppb	0.2016	0.69%
Cu 324.752†	-5832.9	-2.7148 ug/L	0.18858	-2.7148 ppb	0.18858	6.95%
Fe 238.204 Radial†	24104.8	389540 ug/L	715.6	389540 ppb	715.6	0.18%
K 766.490 Radial†	221.4	42.471 ug/L	13.6067	42.471 ppb	13.6067	32.04%
Mg 279.077 IEC†	9.2	75.678 ug/L	78.5407	75.678 ppb	78.5407	103.78%
Mn 257.610†	-32838.2	1.0427 ug/L	0.23514	1.0427 ppb	0.23514	22.55%
Mo 202.031†	-370.5	2.9487 ug/L	1.57661	2.9487 ppb	1.57661	53.47%
Na 589.592 Radial†	-37.8	-11.775 ug/L	1.4268	-11.775 ppb	1.4268	12.12%
Ni 231.604†	119.2	3.0315 ug/L	0.19818	3.0315 ppb	0.19818	6.54%
P 214.914†	510.3	-3.4069 ug/L	1.83564	-3.4069 ppb	1.83564	53.88%
Pb 220.353†	226.5	-14.153 ug/L	1.2307	-14.153 ppb	1.2307	8.70%
S 181.975 Axial†	18.7	26.350 ug/L	8.3625	26.350 ppb	8.3625	31.74%
Sb 206.836†	-17.4	-11.049 ug/L	0.2457	-11.049 ppb	0.2457	2.22%
Se 196.026†	-1730.0	78.018 ug/L	19.9755	78.018 ppb	19.9755	25.60%
Si 251.611†	-1296.5	-41.663 ug/L	0.7637	-41.663 ppb	0.7637	1.83%
Sn 189.927†	-35.0	-28.684 ug/L	1.2412	-28.684 ppb	1.2412	4.33%
Sr 421.552†	141.9	0.9870 ug/L	0.06136	0.9870 ppb	0.06136	6.22%
Ti 334.940†	2757.8	-0.1066 ug/L	0.04218	-0.1066 ppb	0.04218	39.55%
Tl 190.801†	-34.2	-11.289 ug/L	1.6409	-11.289 ppb	1.6409	14.54%



U 409.014†	359754.1	10001 ug/L	11.5	10001 ppb	11.5	0.11%
V 292.402†	5055.3	-2.5717 ug/L	0.68190	-2.5717 ppb	0.68190	26.52%
Zn 213.857†	3632.2	-21.622 ug/L	0.5061	-21.622 ppb	0.5061	2.34%
SiO2†	-1270.8	-87.487 ug/L	2.8290	-87.487 ppb	2.8290	3.23%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 2/25/2010 14:01:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4403.2	4403.2	114 %		14:03:45
1	Y RADIAL	4900.7	4900.7	110.1 %		14:03:45
1	Al 396.153Radial†	-119.5	10.4	9.7096 ug/L	9.7096 ppb	14:03:45
1	Ca 317.933Radial†	18.0	-2.9	-6.4170 ug/L	-6.4170 ppb	14:04:05
1	Fe 238.204 Radial†	12.1	-1.1	-17.618 ug/L	-17.618 ppb	14:04:05
1	K 766.490 Radial†	3047.6	-95.6	-18.320 ug/L	-18.320 ppb	14:03:45
1	Mg 279.077 IEC†	0.8	-0.5	-25.000 ug/L	-25.000 ppb	14:04:05
1	Na 589.592 Radial†	-906.7	107.4	33.429 ug/L	33.429 ppb	14:03:45
1	Sr 421.552†	46.8	32.3	0.2245 ug/L	0.2245 ppb	14:03:45
1	Sc 361.383	911543.9	911543.9	103.58 %		14:05:02
1	Y 371.029	768995.6	768995.6	101.10 %		14:05:02
1	Ag 328.068†	323.1	77.8	0.3594 ug/L	0.3594 ppb	14:05:07
1	As 188.979†	-12.0	8.4	3.7109 ug/L	3.7109 ppb	14:05:27
1	B 249.677†	-38.0	241.3	5.9293 ug/L	5.9293 ppb	14:05:27
1	Ba 233.527†	1250815.2	1207619.9	9492.3 ug/L	9492.3 ppb	14:05:02
1	Be 313.107†	-3508.7	170.7	0.0638 ug/L	0.0638 ppb	14:05:07
1	Cd 226.502†	-130.7	50.1	0.5829 ug/L	0.5829 ppb	14:05:27
1	Co 228.616†	-285.3	-210.6	0.1485 ug/L	0.1485 ppb	14:05:27
1	Cr 267.716†	81.4	-6.5	-0.0733 ug/L	-0.0733 ppb	14:05:27
1	Cu 324.752†	5966.6	-194.5	-0.5928 ug/L	-0.5928 ppb	14:05:07
1	Mn 257.610†	513.8	18.4	0.0202 ug/L	0.0202 ppb	14:05:27
1	Mo 202.031†	15.2	10.0	0.7375 ug/L	0.7375 ppb	14:05:27
1	Ni 231.604†	66.2	-18.8	-0.4779 ug/L	-0.4779 ppb	14:05:27
1	P 214.914†	206.7	-6.2	-3.5895 ug/L	-3.5895 ppb	14:05:27
1	Pb 220.353†	36.7	-25.8	-3.1799 ug/L	-3.1799 ppb	14:05:27
1	S 181.975 Axial†	43.1	5.7	8.0818 ug/L	8.0818 ppb	14:05:27
1	Sb 206.836†	39.9	-0.4	-0.1266 ug/L	-0.1266 ppb	14:05:27
1	Se 196.026†	-24.5	1.0	0.6337 ug/L	0.6337 ppb	14:05:27
1	Si 251.611†	619.8	33.7	1.0812 ug/L	1.0812 ppb	14:05:27
1	Sn 189.927†	15.4	5.5	0.9852 ug/L	0.9852 ppb	14:05:27
1	Ti 334.940†	-1446.1	13.7	0.0233 ug/L	0.0233 ppb	14:05:07
1	Tl 190.801†	-28.6	-0.2	-0.0438 ug/L	-0.0438 ppb	14:05:27
1	U 409.014†	-3049.9	-42.7	-1.1914 ug/L	-1.1914 ppb	14:05:02
1	V 292.402†	-1441.0	77.5	0.5515 ug/L	0.5515 ppb	14:05:07
1	Zn 213.857†	1017.7	243.1	2.4608 ug/L	2.4608 ppb	14:05:27
1	SiO2†	661.5	50.5	3.4838 ug/L	3.4838 ppb	14:06:33
2	Sc Radial	4038.8	4038.8	105 %		14:04:10
2	Y RADIAL	4530.4	4530.4	101.8 %		14:04:10
2	Al 396.153Radial†	-97.5	22.0	20.609 ug/L	20.609 ppb	14:04:10
2	Ca 317.933Radial†	23.8	4.0	8.8098 ug/L	8.8098 ppb	14:04:30
2	Fe 238.204 Radial†	10.6	-1.5	-24.640 ug/L	-24.640 ppb	14:04:30
2	K 766.490 Radial†	3021.8	120.7	23.112 ug/L	23.112 ppb	14:04:10
2	Mg 279.077 IEC†	3.8	2.4	128.58 ug/L	128.58 ppb	14:04:30
2	Na 589.592 Radial†	-846.5	93.3	29.031 ug/L	29.031 ppb	14:04:10
2	Sr 421.552†	-13.1	-21.3	-0.1479 ug/L	-0.1479 ppb	14:04:10
2	Sc 361.383	920825.7	920825.7	104.63 %		14:05:33
2	Y 371.029	775725.2	775725.2	101.98 %		14:05:33
2	Ag 328.068†	249.6	4.4	0.0102 ug/L	0.0102 ppb	14:05:38
2	As 188.979†	-10.3	10.1	4.4894 ug/L	4.4894 ppb	14:05:58
2	B 249.677†	-71.0	210.1	5.1659 ug/L	5.1659 ppb	14:05:58
2	Ba 233.527†	1260388.6	1204596.9	9468.5 ug/L	9468.5 ppb	14:05:33
2	Be 313.107†	-3672.5	48.3	0.0182 ug/L	0.0182 ppb	14:05:38
2	Cd 226.502†	-130.4	51.5	0.6026 ug/L	0.6026 ppb	14:05:58
2	Co 228.616†	-278.2	-201.0	0.3388 ug/L	0.3388 ppb	14:05:58
2	Cr 267.716†	95.5	6.1	0.0650 ug/L	0.0650 ppb	14:05:58
2	Cu 324.752†	6051.5	-171.5	-0.5267 ug/L	-0.5267 ppb	14:05:38
2	Mn 257.610†	509.8	9.6	0.0033 ug/L	0.0033 ppb	14:05:58
2	Mo 202.031†	15.9	10.6	0.7753 ug/L	0.7753 ppb	14:05:58
2	Ni 231.604†	97.0	10.0	0.2567 ug/L	0.2567 ppb	14:05:58

2	P 214.914†	202.8	-11.9	-7.0405 ug/L	-7.0405 ppb	14:05:58
2	Pb 220.353†	18.3	-43.7	-5.3955 ug/L	-5.3955 ppb	14:05:58
2	S 181.975 Axial†	43.4	5.7	7.9635 ug/L	7.9635 ppb	14:05:58
2	Sb 206.836†	36.9	-3.8	-1.2911 ug/L	-1.2911 ppb	14:05:58
2	Se 196.026†	-28.6	-2.6	-1.7791 ug/L	-1.7791 ppb	14:05:58
2	Si 251.611†	614.3	22.4	0.7170 ug/L	0.7170 ppb	14:05:58
2	Sn 189.927†	16.7	6.6	1.1896 ug/L	1.1896 ppb	14:05:58
2	Ti 334.940†	-1420.7	52.1	0.0704 ug/L	0.0704 ppb	14:05:38
2	Tl 190.801†	-29.5	-0.7	-0.2133 ug/L	-0.2133 ppb	14:05:58
2	U 409.014†	-2835.2	192.1	5.3673 ug/L	5.3673 ppb	14:05:33
2	V 292.402†	-1471.0	62.8	0.4658 ug/L	0.4658 ppb	14:05:38
2	Zn 213.857†	1009.9	225.7	2.2818 ug/L	2.2818 ppb	14:05:58
2	SiO2†	647.5	30.6	2.1023 ug/L	2.1023 ppb	14:06:38
3	Sc Radial	3944.9	3944.9	102 %		14:04:36
3	Y RADIAL	4420.4	4420.4	99.30 %		14:04:36
3	Al 396.153Radial†	-127.0	-9.1	-8.4911 ug/L	-8.4911 ppb	14:04:36
3	Ca 317.933Radial†	27.1	7.8	17.105 ug/L	17.105 ppb	14:04:56
3	Fe 238.204 Radial†	12.2	0.2	3.3843 ug/L	3.3843 ppb	14:04:56
3	K 766.490 Radial†	2981.3	149.7	28.685 ug/L	28.685 ppb	14:04:36
3	Mg 279.077 IEC†	2.3	1.1	58.425 ug/L	58.425 ppb	14:04:56
3	Na 589.592 Radial†	-947.4	-24.6	-7.6621 ug/L	-7.6621 ppb	14:04:36
3	Sr 421.552†	21.5	12.3	0.0852 ug/L	0.0852 ppb	14:04:36
3	Sc 361.383	922407.0	922407.0	104.81 %		14:06:03
3	Y 371.029	777523.1	777523.1	102.22 %		14:06:03
3	Ag 328.068†	232.5	-12.3	-0.0617 ug/L	-0.0617 ppb	14:06:08
3	As 188.979†	-8.3	12.0	5.3228 ug/L	5.3228 ppb	14:06:28
3	B 249.677†	-61.7	219.2	5.3837 ug/L	5.3837 ppb	14:06:28
3	Ba 233.527†	1245409.9	1188240.5	9340.0 ug/L	9340.0 ppb	14:06:03
3	Be 313.107†	-3576.9	145.5	0.0546 ug/L	0.0546 ppb	14:06:08
3	Cd 226.502†	-118.8	62.8	0.7307 ug/L	0.7307 ppb	14:06:28
3	Co 228.616†	-284.4	-206.5	0.1588 ug/L	0.1588 ppb	14:06:28
3	Cr 267.716†	81.3	-7.5	-0.0868 ug/L	-0.0868 ppb	14:06:28
3	Cu 324.752†	6098.8	-136.2	-0.4182 ug/L	-0.4182 ppb	14:06:08
3	Mn 257.610†	491.0	-9.2	-0.0126 ug/L	-0.0126 ppb	14:06:28
3	Mo 202.031†	-2.0	-6.6	-0.4852 ug/L	-0.4852 ppb	14:06:28
3	Ni 231.604†	62.6	-23.0	-0.5848 ug/L	-0.5848 ppb	14:06:28
3	P 214.914†	211.4	-4.1	-2.4025 ug/L	-2.4025 ppb	14:06:28
3	Pb 220.353†	41.9	-21.2	-2.6292 ug/L	-2.6292 ppb	14:06:28
3	S 181.975 Axial†	41.2	3.5	4.9609 ug/L	4.9609 ppb	14:06:28
3	Sb 206.836†	44.1	3.0	1.0736 ug/L	1.0736 ppb	14:06:28
3	Se 196.026†	-25.2	0.7	0.4744 ug/L	0.4744 ppb	14:06:28
3	Si 251.611†	594.7	2.7	0.0941 ug/L	0.0941 ppb	14:06:28
3	Sn 189.927†	15.0	4.9	0.8864 ug/L	0.8864 ppb	14:06:28
3	Ti 334.940†	-1398.4	75.7	0.1140 ug/L	0.1140 ppb	14:06:08
3	Tl 190.801†	-28.8	-0.0	0.0111 ug/L	0.0111 ppb	14:06:28
3	U 409.014†	-2804.5	226.0	6.3119 ug/L	6.3119 ppb	14:06:03
3	V 292.402†	-1544.6	-5.0	-0.0290 ug/L	-0.0290 ppb	14:06:08
3	Zn 213.857†	1021.1	234.8	2.3743 ug/L	2.3743 ppb	14:06:28
3	SiO2†	604.2	-11.7	-0.8013 ug/L	-0.8013 ppb	14:06:43

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	918258.9	104.34 %		0.667				0.64%
Sc Radial	4129.0	107 %		6.3				5.86%
Y 371.029	774081.3	101.77 %		0.591				0.58%
Y RADIAL	4617.2	103.7 %		5.65				5.45%
Ag 328.068†	23.3	0.1026 ug/L		0.22523	0.1026 ppb		0.22523	219.50%
Al 396.153Radial†	7.8	7.2759 ug/L		14.70201	7.2759 ppb		14.70201	202.06%
As 188.979†	10.1	4.5077 ug/L		0.80614	4.5077 ppb		0.80614	17.88%
B 249.677†	223.5	5.4930 ug/L		0.39327	5.4930 ppb		0.39327	7.16%
Ba 233.527†	1200152.4	9433.6 ug/L		81.95	9433.6 ppb		81.95	0.87%
Be 313.107†	121.5	0.0456 ug/L		0.02412	0.0456 ppb		0.02412	52.93%
Ca 317.933Radial†	3.0	6.4992 ug/L		11.92986	6.4992 ppb		11.92986	183.56%
Cd 226.502†	54.8	0.6387 ug/L		0.08024	0.6387 ppb		0.08024	12.56%
Co 228.616†	-206.0	0.2153 ug/L		0.10701	0.2153 ppb		0.10701	49.69%
Cr 267.716†	-2.6	-0.0317 ug/L		0.08403	-0.0317 ppb		0.08403	265.15%
Cu 324.752†	-167.4	-0.5126 ug/L		0.08813	-0.5126 ppb		0.08813	17.20%
Fe 238.204 Radial†	-0.8	-12.958 ug/L		14.5816	-12.958 ppb		14.5816	112.53%
K 766.490 Radial†	58.3	11.159 ug/L		25.6812	11.159 ppb		25.6812	230.13%

Mg 279.077 IEC†	1.0	54.002 ug/L	76.8852	54.002 ppb	76.8852	142.38%
Mn 257.610†	6.2	0.0036 ug/L	0.01639	0.0036 ppb	0.01639	449.97%
Mo 202.031†	4.7	0.3425 ug/L	0.71706	0.3425 ppb	0.71706	209.34%
Na 589.592 Radial†	58.7	18.266 ug/L	22.5619	18.266 ppb	22.5619	123.52%
Ni 231.604†	-10.6	-0.2686 ug/L	0.45813	-0.2686 ppb	0.45813	170.54%
P 214.914†	-7.4	-4.3442 ug/L	2.40932	-4.3442 ppb	2.40932	55.46%
Pb 220.353†	-30.2	-3.7349 ug/L	1.46427	-3.7349 ppb	1.46427	39.21%
S 181.975 Axial†	5.0	7.0021 ug/L	1.76869	7.0021 ppb	1.76869	25.26%
Sb 206.836†	-0.4	-0.1147 ug/L	1.18240	-0.1147 ppb	1.18240	>999.9%
Se 196.026†	-0.3	-0.2237 ug/L	1.34940	-0.2237 ppb	1.34940	603.27%
Si 251.611†	19.6	0.6308 ug/L	0.49913	0.6308 ppb	0.49913	79.13%
Sn 189.927†	5.6	1.0204 ug/L	0.15460	1.0204 ppb	0.15460	15.15%
Sr 421.552†	7.8	0.0539 ug/L	0.18816	0.0539 ppb	0.18816	348.93%
Ti 334.940†	47.2	0.0693 ug/L	0.04537	0.0693 ppb	0.04537	65.51%
Tl 190.801†	-0.3	-0.0820 ug/L	0.11701	-0.0820 ppb	0.11701	142.71%
U 409.014†	125.1	3.4959 ug/L	4.08670	3.4959 ppb	4.08670	116.90%
V 292.402†	45.1	0.3294 ug/L	0.31334	0.3294 ppb	0.31334	95.12%
Zn 213.857†	234.6	2.3723 ug/L	0.08953	2.3723 ppb	0.08953	3.77%
SiO2†	23.1	1.5949 ug/L	2.18718	1.5949 ppb	2.18718	137.13%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 14:08:55

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	3878.2	3878.2	101 %		14:11:08
1	Y RADIAL	4371.2	4371.2	98.19 %		14:10:48
1	Al 396.153Radial†	5250.9	5337.3	4993.2 ug/L	4993.2 ppb	14:10:48
1	Ca 317.933Radial†	2366.9	2335.3	5092.6 ug/L	5092.6 ppb	14:11:08
1	Fe 238.204 Radial†	322.7	309.3	5012.5 ug/L	5012.5 ppb	14:11:08
1	K 766.490 Radial†	28785.8	25863.4	4948.7 ug/L	4948.7 ppb	14:10:48
1	Mg 279.077 IEC†	98.7	97.0	5119.9 ug/L	5119.9 ppb	14:11:08
1	Na 589.592 Radial†	32999.6	33720.9	10493 ug/L	10493 ppb	14:10:48
1	Sr 421.552†	72250.2	71846.6	499.77 ug/L	499.77 ppb	14:10:48
1	Sc 361.383	922334.5	922334.5	104.80 %		14:12:05
1	Y 371.029	765696.2	765696.2	100.67 %		14:12:05
1	Ag 328.068†	105655.8	100580.5	470.36 ug/L	470.36 ppb	14:12:10
1	As 188.979†	1091.7	1061.6	476.13 ug/L	476.13 ppb	14:12:31
1	B 249.677†	19737.3	19110.9	466.25 ug/L	466.25 ppb	14:12:10
1	Ba 233.527†	62386.8	59517.2	469.00 ug/L	469.00 ppb	14:12:10
1	Be 313.107†	1341490.9	1283581.8	480.65 ug/L	480.65 ppb	14:12:05
1	Cd 226.502†	42109.4	40356.2	468.85 ug/L	468.85 ppb	14:12:10
1	Co 228.616†	23336.1	22331.7	469.12 ug/L	469.12 ppb	14:12:10
1	Cr 267.716†	43688.4	41601.5	467.75 ug/L	467.75 ppb	14:12:10
1	Cu 324.752†	165981.8	152421.4	464.41 ug/L	464.41 ppb	14:12:10
1	Mn 257.610†	442228.4	421487.8	480.47 ug/L	480.47 ppb	14:12:05
1	Mo 202.031†	6667.2	6357.1	468.68 ug/L	468.68 ppb	14:12:31
1	Ni 231.604†	19416.9	18444.5	470.42 ug/L	470.42 ppb	14:12:10
1	P 214.914†	4280.0	3878.1	2241.7 ug/L	2241.7 ppb	14:12:31
1	Pb 220.353†	3984.1	3740.4	464.20 ug/L	464.20 ppb	14:12:31
1	S 181.975 Axial†	734.1	664.6	936.14 ug/L	936.14 ppb	14:12:31
1	Sb 206.836†	1421.7	1317.6	481.74 ug/L	481.74 ppb	14:12:31
1	Se 196.026†	719.8	711.6	484.60 ug/L	484.60 ppb	14:12:31
1	Si 251.611†	76057.9	72008.2	2327.0 ug/L	2327.0 ppb	14:12:10
1	Sn 189.927†	2731.7	2597.1	468.96 ug/L	468.96 ppb	14:12:31
1	Ti 334.940†	308172.0	295461.4	465.43 ug/L	465.43 ppb	14:12:10
1	Tl 190.801†	1520.6	1478.4	478.73 ug/L	478.73 ppb	14:12:31
1	U 409.014†	14568.1	16802.4	467.58 ug/L	467.58 ppb	14:12:10
1	V 292.402†	68375.4	66711.1	472.26 ug/L	472.26 ppb	14:12:10
1	Zn 213.857†	49313.7	46314.7	463.19 ug/L	463.19 ppb	14:12:10
1	SiO2†	76564.8	72468.4	5018.5 ug/L	5018.5 ppb	14:13:38
2	Sc Radial	3515.4	3515.4	91.1 %		14:11:33
2	Y RADIAL	4401.4	4401.4	98.87 %		14:11:13
2	Al 396.153Radial†	4848.8	5434.9	5084.5 ug/L	5084.5 ppb	14:11:13
2	Ca 317.933Radial†	2454.7	2674.5	5832.4 ug/L	5832.4 ppb	14:11:33
2	Fe 238.204 Radial†	337.7	358.8	5812.8 ug/L	5812.8 ppb	14:11:33
2	K 766.490 Radial†	26678.3	26505.1	5071.3 ug/L	5071.3 ppb	14:11:13
2	Mg 279.077 IEC†	101.4	110.1	5809.0 ug/L	5809.0 ppb	14:11:33
2	Na 589.592 Radial†	30386.2	34240.1	10654 ug/L	10654 ppb	14:11:13
2	Sr 421.552†	66778.6	73257.8	509.58 ug/L	509.58 ppb	14:11:13
2	Sc 361.383	908111.5	908111.5	103.19 %		14:12:36
2	Y 371.029	753785.4	753785.4	99.099 %		14:12:36
2	Ag 328.068†	106298.0	102781.8	480.86 ug/L	480.86 ppb	14:12:41
2	As 188.979†	1093.5	1079.7	484.43 ug/L	484.43 ppb	14:13:02
2	B 249.677†	19863.7	19528.4	476.32 ug/L	476.32 ppb	14:12:41
2	Ba 233.527†	62792.9	60843.1	479.47 ug/L	479.47 ppb	14:12:41
2	Be 313.107†	1318537.7	1281385.3	479.85 ug/L	479.85 ppb	14:12:36
2	Cd 226.502†	42446.3	41311.9	479.88 ug/L	479.88 ppb	14:12:41
2	Co 228.616†	23484.3	22824.1	479.45 ug/L	479.45 ppb	14:12:41
2	Cr 267.716†	43961.8	42519.3	478.13 ug/L	478.13 ppb	14:12:41
2	Cu 324.752†	166839.1	155732.7	474.54 ug/L	474.54 ppb	14:12:41
2	Mn 257.610†	435755.4	421823.5	480.90 ug/L	480.90 ppb	14:12:36
2	Mo 202.031†	6720.4	6508.2	479.88 ug/L	479.88 ppb	14:13:02
2	Ni 231.604†	19611.8	18923.5	482.64 ug/L	482.64 ppb	14:12:41

2	P 214.914†	4319.4	3980.2	2300.5 ug/L	2300.5 ppb	14:13:02
2	Pb 220.353†	4019.3	3834.0	475.74 ug/L	475.74 ppb	14:13:02
2	S 181.975 Axial†	740.9	682.2	960.97 ug/L	960.97 ppb	14:13:02
2	Sb 206.836†	1430.7	1347.5	492.70 ug/L	492.70 ppb	14:13:02
2	Se 196.026†	724.7	727.1	497.32 ug/L	497.32 ppb	14:13:02
2	Si 251.611†	76491.5	73565.1	2377.3 ug/L	2377.3 ppb	14:12:41
2	Sn 189.927†	2758.5	2663.9	481.08 ug/L	481.08 ppb	14:13:02
2	Ti 334.940†	309963.1	301802.7	475.46 ug/L	475.46 ppb	14:12:41
2	Tl 190.801†	1512.0	1492.8	483.38 ug/L	483.38 ppb	14:13:02
2	U 409.014†	14476.4	16931.3	471.06 ug/L	471.06 ppb	14:12:41
2	V 292.402†	68782.2	68127.2	482.20 ug/L	482.20 ppb	14:12:41
2	Zn 213.857†	49649.6	47377.2	473.71 ug/L	473.71 ppb	14:12:41
2	SiO2†	75671.1	72746.5	5037.5 ug/L	5037.5 ppb	14:13:43
3	Sc Radial	3853.6	3853.6	99.9 %		14:11:58
3	Y RADIAL	4352.3	4352.3	97.77 %		14:11:38
3	Al 396.153Radial†	5324.7	5444.4	5093.4 ug/L	5093.4 ppb	14:11:38
3	Ca 317.933Radial†	2384.5	2367.9	5163.7 ug/L	5163.7 ppb	14:11:58
3	Fe 238.204 Radial†	328.5	317.1	5138.1 ug/L	5138.1 ppb	14:11:58
3	K 766.490 Radial†	28809.9	26069.9	4988.2 ug/L	4988.2 ppb	14:11:38
3	Mg 279.077 IEC†	103.2	102.1	5386.5 ug/L	5386.5 ppb	14:11:58
3	Na 589.592 Radial†	33075.6	34006.1	10581 ug/L	10581 ppb	14:11:38
3	Sr 421.552†	73032.9	73087.8	508.41 ug/L	508.41 ppb	14:11:38
3	Sc 361.383	913347.6	913347.6	103.78 %		14:13:07
3	Y 371.029	757937.7	757937.7	99.645 %		14:13:07
3	Ag 328.068†	106128.5	102027.9	477.15 ug/L	477.15 ppb	14:13:13
3	As 188.979†	1107.1	1086.7	487.38 ug/L	487.38 ppb	14:13:33
3	B 249.677†	19878.5	19432.3	474.09 ug/L	474.09 ppb	14:13:13
3	Ba 233.527†	62624.9	60332.3	475.43 ug/L	475.43 ppb	14:13:13
3	Be 313.107†	1324169.2	1279486.0	479.13 ug/L	479.13 ppb	14:13:07
3	Cd 226.502†	42247.5	40884.6	474.98 ug/L	474.98 ppb	14:13:13
3	Co 228.616†	23400.7	22613.0	475.03 ug/L	475.03 ppb	14:13:13
3	Cr 267.716†	43972.7	42285.6	475.44 ug/L	475.44 ppb	14:13:13
3	Cu 324.752†	166772.6	154741.7	471.48 ug/L	471.48 ppb	14:13:13
3	Mn 257.610†	436917.8	420522.6	479.37 ug/L	479.37 ppb	14:13:07
3	Mo 202.031†	6743.5	6493.1	478.71 ug/L	478.71 ppb	14:13:33
3	Ni 231.604†	19450.4	18659.0	475.89 ug/L	475.89 ppb	14:13:13
3	P 214.914†	4303.9	3941.3	2278.3 ug/L	2278.3 ppb	14:13:33
3	Pb 220.353†	4036.3	3828.0	475.07 ug/L	475.07 ppb	14:13:33
3	S 181.975 Axial†	740.3	677.5	954.26 ug/L	954.26 ppb	14:13:33
3	Sb 206.836†	1445.4	1353.7	494.84 ug/L	494.84 ppb	14:13:33
3	Se 196.026†	722.6	721.0	491.25 ug/L	491.25 ppb	14:13:33
3	Si 251.611†	76279.7	72936.0	2356.9 ug/L	2356.9 ppb	14:13:13
3	Sn 189.927†	2762.5	2652.4	478.93 ug/L	478.93 ppb	14:13:33
3	Ti 334.940†	309664.8	299793.2	472.24 ug/L	472.24 ppb	14:13:13
3	Tl 190.801†	1510.3	1482.7	480.14 ug/L	480.14 ppb	14:13:33
3	U 409.014†	14490.3	16864.3	469.27 ug/L	469.27 ppb	14:13:13
3	V 292.402†	68739.6	67704.0	479.32 ug/L	479.32 ppb	14:13:13
3	Zn 213.857†	49496.4	46953.8	469.58 ug/L	469.58 ppb	14:13:13
3	SiO2†	76319.6	72951.0	5051.8 ug/L	5051.8 ppb	14:13:48

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914597.9	103.92 %	0.817			0.79%
Sc Radial	3749.1	97.2 %	5.26			5.41%
Y 371.029	759139.8	99.803 %	0.7948			0.80%
Y RADIAL	4375.0	98.28 %	0.557			0.57%
Ag 328.068†	101796.7	476.12 ug/L	5.326	476.12 ppb	5.326	1.12%
QC value within limits for Ag 328.068 Recovery = 95.22%						
Al 396.153Radial†	5405.5	5057.0 ug/L	55.44	5057.0 ppb	55.44	1.10%
QC value within limits for Al 396.153Radial Recovery = 101.14%						
As 188.979†	1076.0	482.65 ug/L	5.832	482.65 ppb	5.832	1.21%
QC value within limits for As 188.979 Recovery = 96.53%						
B 249.677†	19357.2	472.22 ug/L	5.290	472.22 ppb	5.290	1.12%
QC value within limits for B 249.677 Recovery = 94.44%						
Ba 233.527†	60230.9	474.63 ug/L	5.279	474.63 ppb	5.279	1.11%
QC value within limits for Ba 233.527 Recovery = 94.93%						
Be 313.107†	1281484.4	479.88 ug/L	0.758	479.88 ppb	0.758	0.16%
QC value within limits for Be 313.107 Recovery = 95.98%						
Ca 317.933Radial†	2459.2	5362.9 ug/L	408.16	5362.9 ppb	408.16	7.61%

QC value within limits for Ca 317.933 Radial Recovery = 107.26%

Cd 226.502†	40850.9	474.57 ug/L	5.527	474.57 ppb	5.527	1.16%
QC value within limits for Cd 226.502 Recovery = 94.91%						
Co 228.616†	22589.6	474.53 ug/L	5.187	474.53 ppb	5.187	1.09%
QC value within limits for Co 228.616 Recovery = 94.91%						
Cr 267.716†	42135.5	473.77 ug/L	5.391	473.77 ppb	5.391	1.14%
QC value within limits for Cr 267.716 Recovery = 94.75%						
Cu 324.752†	154298.6	470.14 ug/L	5.196	470.14 ppb	5.196	1.11%
QC value within limits for Cu 324.752 Recovery = 94.03%						
Fe 238.204 Radial†	328.4	5321.2 ug/L	430.38	5321.2 ppb	430.38	8.09%
QC value within limits for Fe 238.204 Radial Recovery = 106.42%						
K 766.490 Radial†	26146.2	5002.7 ug/L	62.59	5002.7 ppb	62.59	1.25%
QC value within limits for K 766.490 Radial Recovery = 100.05%						
Mg 279.077 IEC†	103.1	5438.5 ug/L	347.45	5438.5 ppb	347.45	6.39%
QC value within limits for Mg 279.077 IEC Recovery = 108.77%						
Mn 257.610†	421278.0	480.25 ug/L	0.789	480.25 ppb	0.789	0.16%
QC value within limits for Mn 257.610 Recovery = 96.05%						
Mo 202.031†	6452.8	475.76 ug/L	6.158	475.76 ppb	6.158	1.29%
QC value within limits for Mo 202.031 Recovery = 95.15%						
Na 589.592 Radial†	33989.0	10576 ug/L	80.9	10576 ppb	80.9	0.76%
QC value within limits for Na 589.592 Radial Recovery = 105.76%						
Ni 231.604†	18675.7	476.32 ug/L	6.121	476.32 ppb	6.121	1.29%
QC value within limits for Ni 231.604 Recovery = 95.26%						
P 214.914†	3933.2	2273.5 ug/L	29.73	2273.5 ppb	29.73	1.31%
QC value within limits for P 214.914 Recovery = 90.94%						
Pb 220.353†	3800.8	471.67 ug/L	6.481	471.67 ppb	6.481	1.37%
QC value within limits for Pb 220.353 Recovery = 94.33%						
S 181.975 Axial†	674.8	950.46 ug/L	12.844	950.46 ppb	12.844	1.35%
QC value within limits for S 181.975 Axial Recovery = 95.05%						
Sb 206.836†	1339.6	489.76 ug/L	7.030	489.76 ppb	7.030	1.44%
QC value within limits for Sb 206.836 Recovery = 97.95%						
Se 196.026†	719.9	491.06 ug/L	6.361	491.06 ppb	6.361	1.30%
QC value within limits for Se 196.026 Recovery = 98.21%						
Si 251.611†	72836.4	2353.7 ug/L	25.30	2353.7 ppb	25.30	1.07%
QC value within limits for Si 251.611 Recovery = 94.15%						
Sn 189.927†	2637.8	476.32 ug/L	6.471	476.32 ppb	6.471	1.36%
QC value within limits for Sn 189.927 Recovery = 95.26%						
Sr 421.552†	72730.7	505.92 ug/L	5.357	505.92 ppb	5.357	1.06%
QC value within limits for Sr 421.552 Recovery = 101.18%						
Ti 334.940†	299019.1	471.04 ug/L	5.121	471.04 ppb	5.121	1.09%
QC value within limits for Ti 334.940 Recovery = 94.21%						
Tl 190.801†	1484.6	480.75 ug/L	2.384	480.75 ppb	2.384	0.50%
QC value within limits for Tl 190.801 Recovery = 96.15%						
U 409.014†	16866.0	469.30 ug/L	1.742	469.30 ppb	1.742	0.37%
QC value within limits for U 409.014 Recovery = 93.86%						
V 292.402†	67514.1	477.92 ug/L	5.114	477.92 ppb	5.114	1.07%
QC value within limits for V 292.402 Recovery = 95.58%						
Zn 213.857†	46881.9	468.83 ug/L	5.298	468.83 ppb	5.298	1.13%
QC value within limits for Zn 213.857 Recovery = 93.77%						
SiO2†	72722.0	5035.9 ug/L	16.67	5035.9 ppb	16.67	0.33%
QC value within limits for SiO2 Recovery = 94.17%						

All analyte(s) passed QC.

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

Autosampler Location: 8  
 Date Collected: 2/25/2010 14:15:59  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3875.6	3875.6	100 %			14:18:11
1	Y RADIAL	4377.8	4377.8	98.34 %			14:17:51
1	Al 396.153Radial†	-113.7	1.9	1.7357 ug/L		1.7357 ppb	14:17:51
1	Ca 317.933Radial†	25.9	7.1	15.504 ug/L		15.504 ppb	14:18:11
1	Fe 238.204 Radial†	13.4	1.6	26.121 ug/L		26.121 ppb	14:18:11
1	K 766.490 Radial†	2981.1	201.7	38.628 ug/L		38.628 ppb	14:17:51
1	Mg 279.077 IEC†	4.7	3.5	184.34 ug/L		184.34 ppb	14:18:11
1	Na 589.592 Radial†	-845.5	60.2	18.738 ug/L		18.738 ppb	14:17:51
1	Sr 421.552†	39.7	30.8	0.2141 ug/L		0.2141 ppb	14:17:51
1	Sc 361.383	941381.5	941381.5	106.97 %			14:19:08
1	Y 371.029	792706.6	792706.6	104.22 %			14:19:08
1	Ag 328.068†	263.6	12.3	0.0604 ug/L		0.0604 ppb	14:19:13
1	As 188.979†	-14.3	6.5	2.9136 ug/L		2.9136 ppb	14:19:33
1	B 249.677†	-62.0	220.1	5.3899 ug/L		5.3899 ppb	14:19:33
1	Ba 233.527†	16.4	4.3	0.0369 ug/L		0.0369 ppb	14:19:33
1	Be 313.107†	-3530.7	257.4	0.0965 ug/L		0.0965 ppb	14:19:13
1	Cd 226.502†	-153.3	32.8	0.3806 ug/L		0.3806 ppb	14:19:33
1	Co 228.616†	-70.2	-0.8	-0.0154 ug/L		-0.0154 ppb	14:19:33
1	Cr 267.716†	76.6	-13.5	-0.1518 ug/L		-0.1518 ppb	14:19:33
1	Cu 324.752†	6033.2	-314.9	-0.9637 ug/L		-0.9637 ppb	14:19:13
1	Mn 257.610†	497.7	-12.4	-0.0191 ug/L		-0.0191 ppb	14:19:33
1	Mo 202.031†	18.4	12.6	0.9277 ug/L		0.9277 ppb	14:19:33
1	Ni 231.604†	71.0	-16.4	-0.4192 ug/L		-0.4192 ppb	14:19:33
1	P 214.914†	205.1	-14.1	-8.3008 ug/L		-8.3008 ppb	14:19:33
1	Pb 220.353†	3.0	-58.4	-7.2179 ug/L		-7.2179 ppb	14:19:33
1	S 181.975 Axial†	40.3	1.8	2.5914 ug/L		2.5914 ppb	14:19:33
1	Sb 206.836†	43.6	1.7	0.6194 ug/L		0.6194 ppb	14:19:33
1	Se 196.026†	-15.1	10.6	7.0724 ug/L		7.0724 ppb	14:19:33
1	Si 251.611†	592.9	-10.4	-0.3498 ug/L		-0.3498 ppb	14:19:33
1	Sn 189.927†	6.4	-3.5	-0.6249 ug/L		-0.6249 ppb	14:19:33
1	Ti 334.940†	-1423.4	79.2	0.1073 ug/L		0.1073 ppb	14:19:13
1	Tl 190.801†	-36.2	-6.4	-2.0672 ug/L		-2.0672 ppb	14:19:33
1	U 409.014†	-2706.5	371.6	10.374 ug/L		10.374 ppb	14:19:08
1	V 292.402†	-1416.6	144.4	1.0412 ug/L		1.0412 ppb	14:19:13
1	Zn 213.857†	784.0	-6.5	-0.0657 ug/L		-0.0657 ppb	14:19:33
1	SiO2†	548.7	-75.3	-5.2523 ug/L		-5.2523 ppb	14:20:39
2	Sc Radial	3910.7	3910.7	101 %			14:18:37
2	Y RADIAL	4439.5	4439.5	99.73 %			14:18:17
2	Al 396.153Radial†	-123.2	-6.4	-6.0793 ug/L		-6.0793 ppb	14:18:17
2	Ca 317.933Radial†	27.2	8.1	17.762 ug/L		17.762 ppb	14:18:37
2	Fe 238.204 Radial†	13.6	1.7	27.502 ug/L		27.502 ppb	14:18:37
2	K 766.490 Radial†	2980.2	174.2	33.373 ug/L		33.373 ppb	14:18:17
2	Mg 279.077 IEC†	2.4	1.2	63.600 ug/L		63.600 ppb	14:18:37
2	Na 589.592 Radial†	-956.3	-41.4	-12.896 ug/L		-12.896 ppb	14:18:17
2	Sr 421.552†	40.2	30.9	0.2146 ug/L		0.2146 ppb	14:18:17
2	Sc 361.383	920185.7	920185.7	104.56 %			14:19:39
2	Y 371.029	773906.6	773906.6	101.74 %			14:19:39
2	Ag 328.068†	258.4	13.0	0.0686 ug/L		0.0686 ppb	14:19:44
2	As 188.979†	-13.8	6.8	3.0112 ug/L		3.0112 ppb	14:20:04
2	B 249.677†	-57.7	222.8	5.4567 ug/L		5.4567 ppb	14:20:04
2	Ba 233.527†	21.3	9.3	0.0750 ug/L		0.0750 ppb	14:20:04
2	Be 313.107†	-3675.2	43.2	0.0161 ug/L		0.0161 ppb	14:19:44
2	Cd 226.502†	-164.9	18.5	0.2124 ug/L		0.2124 ppb	14:20:04
2	Co 228.616†	-65.8	1.9	0.0418 ug/L		0.0418 ppb	14:20:04
2	Cr 267.716†	79.3	-9.3	-0.1016 ug/L		-0.1016 ppb	14:20:04
2	Cu 324.752†	6099.4	-121.6	-0.3701 ug/L		-0.3701 ppb	14:19:44
2	Mn 257.610†	474.0	-24.3	-0.0276 ug/L		-0.0276 ppb	14:20:04
2	Mo 202.031†	14.1	8.8	0.6487 ug/L		0.6487 ppb	14:20:04
2	Ni 231.604†	76.7	-9.4	-0.2402 ug/L		-0.2402 ppb	14:20:04



2	P 214.914†	207.3	-7.5	-4.4808 ug/L	-4.4808 ppb	14:20:04
2	Pb 220.353†	16.2	-45.7	-5.6497 ug/L	-5.6497 ppb	14:20:04
2	S 181.975 Axial†	34.3	-3.1	-4.3134 ug/L	-4.3134 ppb	14:20:04
2	Sb 206.836†	41.6	0.8	0.2870 ug/L	0.2870 ppb	14:20:04
2	Se 196.026†	-31.1	-5.0	-3.1999 ug/L	-3.1999 ppb	14:20:04
2	Si 251.611†	586.5	-3.8	-0.1300 ug/L	-0.1300 ppb	14:20:04
2	Sn 189.927†	11.7	1.8	0.3239 ug/L	0.3239 ppb	14:20:04
2	Ti 334.940†	-1477.8	-3.5	-0.0092 ug/L	-0.0092 ppb	14:19:44
2	Tl 190.801†	-29.5	-0.8	-0.2625 ug/L	-0.2625 ppb	14:20:04
2	U 409.014†	-2959.4	71.5	1.9939 ug/L	1.9939 ppb	14:19:39
2	V 292.402†	-1480.7	52.5	0.3772 ug/L	0.3772 ppb	14:19:44
2	Zn 213.857†	770.4	-2.6	-0.0284 ug/L	-0.0284 ppb	14:20:04
2	SiO2†	614.5	-0.5	-0.0531 ug/L	-0.0531 ppb	14:20:44
3	Sc Radial	3948.4	3948.4	102 %		14:19:02
3	Y RADIAL	4468.9	4468.9	100.4 %		14:18:42
3	Al 396.153Radial†	-120.8	-2.9	-2.7898 ug/L	-2.7898 ppb	14:18:42
3	Ca 317.933Radial†	21.3	2.1	4.6845 ug/L	4.6845 ppb	14:19:02
3	Fe 238.204 Radial†	11.4	-0.5	-8.5000 ug/L	-8.5000 ppb	14:19:02
3	K 766.490 Radial†	3032.3	197.0	37.727 ug/L	37.727 ppb	14:18:42
3	Mg 279.077 IEC†	1.1	-0.1	-4.0850 ug/L	-4.0850 ppb	14:19:02
3	Na 589.592 Radial†	-869.4	52.5	16.325 ug/L	16.325 ppb	14:18:42
3	Sr 421.552†	17.4	8.2	0.0571 ug/L	0.0571 ppb	14:18:42
3	Sc 361.383	936346.5	936346.5	106.39 %		14:20:09
3	Y 371.029	787511.1	787511.1	103.53 %		14:20:09
3	Ag 328.068†	356.1	100.6	0.4637 ug/L	0.4637 ppb	14:20:14
3	As 188.979†	-26.5	-5.0	-2.2276 ug/L	-2.2276 ppb	14:20:34
3	B 249.677†	-45.3	235.5	5.7724 ug/L	5.7724 ppb	14:20:34
3	Ba 233.527†	23.5	11.0	0.0876 ug/L	0.0876 ppb	14:20:34
3	Be 313.107†	-3544.5	226.8	0.0849 ug/L	0.0849 ppb	14:20:14
3	Cd 226.502†	-165.4	20.8	0.2428 ug/L	0.2428 ppb	14:20:34
3	Co 228.616†	-64.2	4.5	0.0955 ug/L	0.0955 ppb	14:20:34
3	Cr 267.716†	69.9	-19.4	-0.2195 ug/L	-0.2195 ppb	14:20:34
3	Cu 324.752†	6018.6	-298.3	-0.9111 ug/L	-0.9111 ppb	14:20:14
3	Mn 257.610†	488.6	-18.4	-0.0217 ug/L	-0.0217 ppb	14:20:34
3	Mo 202.031†	12.0	6.6	0.4887 ug/L	0.4887 ppb	14:20:34
3	Ni 231.604†	77.9	-9.6	-0.2454 ug/L	-0.2454 ppb	14:20:34
3	P 214.914†	208.9	-9.5	-5.4977 ug/L	-5.4977 ppb	14:20:34
3	Pb 220.353†	-17.8	-78.0	-9.6423 ug/L	-9.6423 ppb	14:20:34
3	S 181.975 Axial†	38.9	0.7	1.0472 ug/L	1.0472 ppb	14:20:34
3	Sb 206.836†	48.4	6.5	2.3077 ug/L	2.3077 ppb	14:20:34
3	Se 196.026†	-26.9	-0.5	-0.3619 ug/L	-0.3619 ppb	14:20:34
3	Si 251.611†	588.2	-11.9	-0.3904 ug/L	-0.3904 ppb	14:20:34
3	Sn 189.927†	12.8	2.6	0.4768 ug/L	0.4768 ppb	14:20:34
3	Ti 334.940†	-1447.5	49.4	0.0774 ug/L	0.0774 ppb	14:20:14
3	Tl 190.801†	-39.6	-9.7	-3.1343 ug/L	-3.1343 ppb	14:20:34
3	U 409.014†	-2960.0	119.8	3.3460 ug/L	3.3460 ppb	14:20:09
3	V 292.402†	-1496.3	62.4	0.4501 ug/L	0.4501 ppb	14:20:14
3	Zn 213.857†	777.3	-8.9	-0.0856 ug/L	-0.0856 ppb	14:20:34
3	SiO2†	637.6	11.1	0.7575 ug/L	0.7575 ppb	14:20:49

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932637.9	105.97 %	1.258			1.19%
Sc Radial	3911.6	101 %	0.9			0.93%
Y 371.029	784708.1	103.16 %	1.276			1.24%
Y RADIAL	4428.7	99.48 %	1.045			1.05%
Ag 328.068†	42.0	0.1976 ug/L	0.23053	0.1976 ppb	0.23053	116.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.5	-2.3778 ug/L	3.92375	-2.3778 ppb	3.92375	165.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.8	1.2324 ug/L	2.99683	1.2324 ppb	2.99683	243.17%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	226.1	5.5397 ug/L	0.20431	5.5397 ppb	0.20431	3.69%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.2	0.0665 ug/L	0.02640	0.0665 ppb	0.02640	39.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	175.8	0.0658 ug/L	0.04344	0.0658 ppb	0.04344	65.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	12.650 ug/L	6.9901	12.650 ppb	6.9901	55.26%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	24.0	0.2786 ug/L	0.08966	0.2786 ppb	0.08966	32.18%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	1.9	0.0406 ug/L	0.05545	0.0406 ppb	0.05545	136.48%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-14.1	-0.1576 ug/L	0.05915	-0.1576 ppb	0.05915	37.53%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-244.9	-0.7483 ug/L	0.32855	-0.7483 ppb	0.32855	43.91%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.9	15.041 ug/L	20.3988	15.041 ppb	20.3988	135.62%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	190.9	36.576 ug/L	2.8103	36.576 ppb	2.8103	7.68%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.5	81.285 ug/L	95.4504	81.285 ppb	95.4504	117.43%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-18.4	-0.0228 ug/L	0.00438	-0.0228 ppb	0.00438	19.25%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	9.3	0.6884 ug/L	0.22219	0.6884 ppb	0.22219	32.28%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	23.7	7.3888 ug/L	17.60869	7.3888 ppb	17.60869	238.32%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-11.8	-0.3016 ug/L	0.10190	-0.3016 ppb	0.10190	33.79%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-10.4	-6.0931 ug/L	1.97836	-6.0931 ppb	1.97836	32.47%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-60.7	-7.5033 ug/L	2.01156	-7.5033 ppb	2.01156	26.81%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-0.2	-0.2249 ug/L	3.62395	-0.2249 ppb	3.62395	>999.9%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	3.0	1.0714 ug/L	1.08356	1.0714 ppb	1.08356	101.14%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	1.7	1.1702 ug/L	5.30476	1.1702 ppb	5.30476	453.33%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-8.7	-0.2900 ug/L	0.14009	-0.2900 ppb	0.14009	48.30%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	0.3	0.0586 ug/L	0.59684	0.0586 ppb	0.59684	>999.9%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	23.3	0.1619 ug/L	0.09078	0.1619 ppb	0.09078	56.06%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	41.7	0.0585 ug/L	0.06047	0.0585 ppb	0.06047	103.37%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-5.7	-1.8213 ug/L	1.45160	-1.8213 ppb	1.45160	79.70%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	187.6	5.2380 ug/L	4.49905	5.2380 ppb	4.49905	85.89%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	86.4	0.6228 ug/L	0.36413	0.6228 ppb	0.36413	58.46%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-6.0	-0.0599 ug/L	0.02900	-0.0599 ppb	0.02900	48.41%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-21.6	-1.5160 ug/L	3.26102	-1.5160 ppb	3.26102	215.11%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 15:31:25

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	3822.3	3822.3	99.1 %		15:33:38
1	Y RADIAL	4351.8	4351.8	97.75 %		15:33:18
1	Al 396.153Radial†	5337.8	5501.3	5146.9 ug/L	5146.9 ppb	15:33:18
1	Ca 317.933Radial†	2364.4	2367.1	5162.1 ug/L	5162.1 ppb	15:33:38
1	Fe 238.204 Radial†	318.4	309.7	5018.7 ug/L	5018.7 ppb	15:33:38
1	K 766.490 Radial†	28887.8	26384.9	5048.6 ug/L	5048.6 ppb	15:33:18
1	Mg 279.077 IEC†	97.7	97.4	5140.8 ug/L	5140.8 ppb	15:33:38
1	Na 589.592 Radial†	32248.3	33442.7	10406 ug/L	10406 ppb	15:33:18
1	Sr 421.552†	72101.0	72746.6	506.03 ug/L	506.03 ppb	15:33:18
1	Sc 361.383	915184.9	915184.9	103.99 %		15:34:35
1	Y 371.029	756963.9	756963.9	99.517 %		15:34:35
1	Ag 328.068†	107515.4	103156.3	482.37 ug/L	482.37 ppb	15:34:41
1	As 188.979†	1098.9	1076.6	482.94 ug/L	482.94 ppb	15:35:01
1	B 249.677†	19719.4	19240.9	469.39 ug/L	469.39 ppb	15:34:41
1	Ba 233.527†	63882.9	61421.0	483.99 ug/L	483.99 ppb	15:34:41
1	Be 313.107†	1339358.4	1291530.9	483.65 ug/L	483.65 ppb	15:34:35
1	Cd 226.502†	43218.4	41736.5	484.90 ug/L	484.90 ppb	15:34:41
1	Co 228.616†	23905.6	23053.3	484.27 ug/L	484.27 ppb	15:34:41
1	Cr 267.716†	44626.2	42829.0	481.54 ug/L	481.54 ppb	15:34:41
1	Cu 324.752†	168851.2	156418.0	476.59 ug/L	476.59 ppb	15:34:41
1	Mn 257.610†	444457.5	426927.7	486.67 ug/L	486.67 ppb	15:34:35
1	Mo 202.031†	6761.0	6496.9	478.98 ug/L	478.98 ppb	15:35:01
1	Ni 231.604†	19841.0	18997.0	484.51 ug/L	484.51 ppb	15:34:41
1	P 214.914†	4371.4	3997.9	2311.4 ug/L	2311.4 ppb	15:35:01
1	Pb 220.353†	4017.0	3801.7	471.83 ug/L	471.83 ppb	15:35:01
1	S 181.975 Axial†	763.9	698.7	984.24 ug/L	984.24 ppb	15:35:01
1	Sb 206.836†	1451.8	1357.1	496.10 ug/L	496.10 ppb	15:35:01
1	Se 196.026†	739.0	735.4	500.33 ug/L	500.33 ppb	15:35:01
1	Si 251.611†	77977.2	74420.9	2405.0 ug/L	2405.0 ppb	15:34:41
1	Sn 189.927†	2785.6	2669.3	481.98 ug/L	481.98 ppb	15:35:01
1	Ti 334.940†	314897.8	304226.3	479.24 ug/L	479.24 ppb	15:34:41
1	Tl 190.801†	1530.4	1499.1	485.46 ug/L	485.46 ppb	15:35:01
1	U 409.014†	14549.7	16893.3	470.08 ug/L	470.08 ppb	15:34:41
1	V 292.402†	69573.1	68372.5	483.99 ug/L	483.99 ppb	15:34:41
1	Zn 213.857†	50505.0	47827.9	478.36 ug/L	478.36 ppb	15:34:41
1	SiO2†	77661.6	74093.9	5131.1 ug/L	5131.1 ppb	15:36:08
2	Sc Radial	3837.0	3837.0	99.5 %		15:34:03
2	Y RADIAL	4298.4	4298.4	96.56 %		15:33:43
2	Al 396.153Radial†	5301.6	5444.2	5093.0 ug/L	5093.0 ppb	15:33:43
2	Ca 317.933Radial†	2379.2	2372.9	5174.6 ug/L	5174.6 ppb	15:34:03
2	Fe 238.204 Radial†	320.0	310.0	5024.7 ug/L	5024.7 ppb	15:34:03
2	K 766.490 Radial†	28576.1	25959.7	4967.2 ug/L	4967.2 ppb	15:33:43
2	Mg 279.077 IEC†	100.7	100.0	5277.9 ug/L	5277.9 ppb	15:34:03
2	Na 589.592 Radial†	31729.4	32796.1	10205 ug/L	10205 ppb	15:33:43
2	Sr 421.552†	71294.3	71656.4	498.45 ug/L	498.45 ppb	15:33:43
2	Sc 361.383	901218.9	901218.9	102.40 %		15:35:06
2	Y 371.029	745740.2	745740.2	98.042 %		15:35:06
2	Ag 328.068†	107564.6	104806.5	490.06 ug/L	490.06 ppb	15:35:12
2	As 188.979†	1098.6	1092.7	490.12 ug/L	490.12 ppb	15:35:32
2	B 249.677†	19777.2	19591.2	477.95 ug/L	477.95 ppb	15:35:12
2	Ba 233.527†	63697.6	62192.0	490.07 ug/L	490.07 ppb	15:35:12
2	Be 313.107†	1320165.1	1292747.4	484.12 ug/L	484.12 ppb	15:35:06
2	Cd 226.502†	43218.3	42380.4	492.38 ug/L	492.38 ppb	15:35:12
2	Co 228.616†	23909.6	23413.4	491.84 ug/L	491.84 ppb	15:35:12
2	Cr 267.716†	44553.3	43422.8	488.20 ug/L	488.20 ppb	15:35:12
2	Cu 324.752†	168849.9	158933.0	484.24 ug/L	484.24 ppb	15:35:12
2	Mn 257.610†	438621.3	427851.9	487.71 ug/L	487.71 ppb	15:35:06
2	Mo 202.031†	6738.8	6576.1	484.81 ug/L	484.81 ppb	15:35:32
2	Ni 231.604†	19797.6	19250.3	490.97 ug/L	490.97 ppb	15:35:12

2	P 214.914†	4356.9	4048.8	2340.6 ug/L	2340.6 ppb	15:35:32
2	Pb 220.353†	4044.6	3888.5	482.57 ug/L	482.57 ppb	15:35:32
2	S 181.975 Axial†	746.1	692.8	975.87 ug/L	975.87 ppb	15:35:32
2	Sb 206.836†	1464.2	1390.8	508.23 ug/L	508.23 ppb	15:35:32
2	Se 196.026†	730.5	738.1	502.12 ug/L	502.12 ppb	15:35:32
2	Si 251.611†	77874.9	75482.9	2439.3 ug/L	2439.3 ppb	15:35:12
2	Sn 189.927†	2789.9	2715.0	490.23 ug/L	490.23 ppb	15:35:32
2	Ti 334.940†	314150.0	308188.8	485.47 ug/L	485.47 ppb	15:35:12
2	Tl 190.801†	1521.0	1512.8	489.86 ug/L	489.86 ppb	15:35:32
2	U 409.014†	14669.1	17226.8	479.38 ug/L	479.38 ppb	15:35:12
2	V 292.402†	69478.7	69317.2	490.69 ug/L	490.69 ppb	15:35:12
2	Zn 213.857†	50465.8	48542.2	485.52 ug/L	485.52 ppb	15:35:12
2	SiO2†	77722.7	75310.9	5215.4 ug/L	5215.4 ppb	15:36:13
3	Sc Radial	3813.7	3813.7	98.9 %		15:34:28
3	Y RADIAL	4348.2	4348.2	97.68 %		15:34:08
3	Al 396.153Radial†	5356.1	5531.9	5175.5 ug/L	5175.5 ppb	15:34:08
3	Ca 317.933Radial†	2369.4	2377.6	5184.9 ug/L	5184.9 ppb	15:34:28
3	Fe 238.204 Radial†	322.8	314.8	5101.2 ug/L	5101.2 ppb	15:34:28
3	K 766.490 Radial†	29032.7	26596.7	5089.2 ug/L	5089.2 ppb	15:34:08
3	Mg 279.077 IEC†	100.0	99.9	5273.6 ug/L	5273.6 ppb	15:34:28
3	Na 589.592 Radial†	31923.5	33187.0	10327 ug/L	10327 ppb	15:34:08
3	Sr 421.552†	72090.5	72898.6	507.09 ug/L	507.09 ppb	15:34:08
3	Sc 361.383	909996.9	909996.9	103.40 %		15:35:37
3	Y 371.029	754076.8	754076.8	99.138 %		15:35:37
3	Ag 328.068†	107489.9	103721.1	485.03 ug/L	485.03 ppb	15:35:43
3	As 188.979†	1111.9	1095.2	491.23 ug/L	491.23 ppb	15:36:03
3	B 249.677†	19788.0	19415.3	473.64 ug/L	473.64 ppb	15:35:43
3	Ba 233.527†	63758.5	61650.8	485.81 ug/L	485.81 ppb	15:35:43
3	Be 313.107†	1331413.0	1291189.7	483.53 ug/L	483.53 ppb	15:35:37
3	Cd 226.502†	43208.3	41963.6	487.53 ug/L	487.53 ppb	15:35:43
3	Co 228.616†	23890.1	23169.3	486.71 ug/L	486.71 ppb	15:35:43
3	Cr 267.716†	44633.7	43080.9	484.37 ug/L	484.37 ppb	15:35:43
3	Cu 324.752†	168445.2	156951.0	478.21 ug/L	478.21 ppb	15:35:43
3	Mn 257.610†	440858.9	425884.2	485.48 ug/L	485.48 ppb	15:35:37
3	Mo 202.031†	6771.0	6543.7	482.43 ug/L	482.43 ppb	15:36:03
3	Ni 231.604†	19806.7	19072.6	486.44 ug/L	486.44 ppb	15:35:43
3	P 214.914†	4374.0	4024.3	2327.0 ug/L	2327.0 ppb	15:36:03
3	Pb 220.353†	4028.7	3835.0	475.96 ug/L	475.96 ppb	15:36:03
3	S 181.975 Axial†	763.3	702.4	989.35 ug/L	989.35 ppb	15:36:03
3	Sb 206.836†	1471.0	1383.6	505.61 ug/L	505.61 ppb	15:36:03
3	Se 196.026†	742.7	743.0	505.58 ug/L	505.58 ppb	15:36:03
3	Si 251.611†	77755.0	74633.5	2411.9 ug/L	2411.9 ppb	15:35:43
3	Sn 189.927†	2808.5	2706.7	488.73 ug/L	488.73 ppb	15:36:03
3	Ti 334.940†	314432.7	305502.9	481.24 ug/L	481.24 ppb	15:35:43
3	Tl 190.801†	1536.3	1513.2	489.97 ug/L	489.97 ppb	15:36:03
3	U 409.014†	14666.7	17086.3	475.46 ug/L	475.46 ppb	15:35:43
3	V 292.402†	69728.2	68904.0	487.75 ug/L	487.75 ppb	15:35:43
3	Zn 213.857†	50484.2	48084.7	480.93 ug/L	480.93 ppb	15:35:43
3	SiO2†	76951.4	73832.7	5112.9 ug/L	5112.9 ppb	15:36:18

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908800.2	103.26 %		0.802			0.78%
Sc Radial	3824.3	99.2 %		0.31			0.31%
Y 371.029	752260.3	98.899 %		0.7662			0.77%
Y RADIAL	4332.8	97.33 %		0.670			0.69%
Ag 328.068†	103894.6	485.82 ug/L		3.905	485.82 ppb	3.905	0.80%
QC value within limits for Ag 328.068 Recovery = 97.16%							
Al 396.153Radial†	5492.5	5138.4 ug/L		41.89	5138.4 ppb	41.89	0.82%
QC value within limits for Al 396.153Radial Recovery = 102.77%							
As 188.979†	1088.2	488.10 ug/L		4.502	488.10 ppb	4.502	0.92%
QC value within limits for As 188.979 Recovery = 97.62%							
B 249.677†	19415.8	473.66 ug/L		4.282	473.66 ppb	4.282	0.90%
QC value within limits for B 249.677 Recovery = 94.73%							
Ba 233.527†	61754.6	486.62 ug/L		3.118	486.62 ppb	3.118	0.64%
QC value within limits for Ba 233.527 Recovery = 97.32%							
Be 313.107†	1291822.7	483.77 ug/L		0.312	483.77 ppb	0.312	0.06%
QC value within limits for Be 313.107 Recovery = 96.75%							
Ca 317.933Radial†	2372.5	5173.9 ug/L		11.42	5173.9 ppb	11.42	0.22%

QC value within limits for Ca 317.933 Radial Recovery = 103.48%

Cd 226.502†	42026.8	488.27 ug/L	3.799	488.27 ppb	3.799	0.78%
QC value within limits for Cd 226.502 Recovery = 97.65%						
Co 228.616†	23212.0	487.61 ug/L	3.861	487.61 ppb	3.861	0.79%
QC value within limits for Co 228.616 Recovery = 97.52%						
Cr 267.716†	43110.9	484.70 ug/L	3.347	484.70 ppb	3.347	0.69%
QC value within limits for Cr 267.716 Recovery = 96.94%						
Cu 324.752†	157434.0	479.68 ug/L	4.035	479.68 ppb	4.035	0.84%
QC value within limits for Cu 324.752 Recovery = 95.94%						
Fe 238.204 Radial†	311.5	5048.2 ug/L	45.97	5048.2 ppb	45.97	0.91%
QC value within limits for Fe 238.204 Radial Recovery = 100.96%						
K 766.490 Radial†	26313.8	5035.0 ug/L	62.13	5035.0 ppb	62.13	1.23%
QC value within limits for K 766.490 Radial Recovery = 100.70%						
Mg 279.077 IEC†	99.1	5230.8 ug/L	77.95	5230.8 ppb	77.95	1.49%
QC value within limits for Mg 279.077 IEC Recovery = 104.62%						
Mn 257.610†	426888.0	486.62 ug/L	1.118	486.62 ppb	1.118	0.23%
QC value within limits for Mn 257.610 Recovery = 97.32%						
Mo 202.031†	6538.9	482.08 ug/L	2.930	482.08 ppb	2.930	0.61%
QC value within limits for Mo 202.031 Recovery = 96.42%						
Na 589.592 Radial†	33141.9	10313 ug/L	101.3	10313 ppb	101.3	0.98%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	19106.6	487.31 ug/L	3.316	487.31 ppb	3.316	0.68%
QC value within limits for Ni 231.604 Recovery = 97.46%						
P 214.914†	4023.7	2326.3 ug/L	14.61	2326.3 ppb	14.61	0.63%
QC value within limits for P 214.914 Recovery = 93.05%						
Pb 220.353†	3841.7	476.78 ug/L	5.416	476.78 ppb	5.416	1.14%
QC value within limits for Pb 220.353 Recovery = 95.36%						
S 181.975 Axial†	698.0	983.15 ug/L	6.806	983.15 ppb	6.806	0.69%
QC value within limits for S 181.975 Axial Recovery = 98.32%						
Sb 206.836†	1377.2	503.31 ug/L	6.383	503.31 ppb	6.383	1.27%
QC value within limits for Sb 206.836 Recovery = 100.66%						
Se 196.026†	738.8	502.68 ug/L	2.673	502.68 ppb	2.673	0.53%
QC value within limits for Se 196.026 Recovery = 100.54%						
Si 251.611†	74845.7	2418.7 ug/L	18.17	2418.7 ppb	18.17	0.75%
QC value within limits for Si 251.611 Recovery = 96.75%						
Sn 189.927†	2697.0	486.98 ug/L	4.394	486.98 ppb	4.394	0.90%
QC value within limits for Sn 189.927 Recovery = 97.40%						
Sr 421.552†	72433.9	503.86 ug/L	4.714	503.86 ppb	4.714	0.94%
QC value within limits for Sr 421.552 Recovery = 100.77%						
Ti 334.940†	305972.7	481.98 ug/L	3.179	481.98 ppb	3.179	0.66%
QC value within limits for Ti 334.940 Recovery = 96.40%						
Tl 190.801†	1508.4	488.43 ug/L	2.574	488.43 ppb	2.574	0.53%
QC value within limits for Tl 190.801 Recovery = 97.69%						
U 409.014†	17068.8	474.97 ug/L	4.667	474.97 ppb	4.667	0.98%
QC value within limits for U 409.014 Recovery = 94.99%						
V 292.402†	68864.6	487.48 ug/L	3.355	487.48 ppb	3.355	0.69%
QC value within limits for V 292.402 Recovery = 97.50%						
Zn 213.857†	48151.6	481.60 ug/L	3.627	481.60 ppb	3.627	0.75%
QC value within limits for Zn 213.857 Recovery = 96.32%						
SiO2†	74412.5	5153.1 ug/L	54.71	5153.1 ppb	54.71	1.06%
QC value within limits for SiO2 Recovery = 96.37%						

All analyte(s) passed QC.

Sequence No.: 16  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/25/2010 15:38:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3830.8	3830.8	99.3 %		15:40:41
1	Y RADIAL	4328.3	4328.3	97.23 %		15:40:21
1	Al 396.153Radial†	-130.5	-16.3	-15.417 ug/L	-15.417 ppb	15:40:21
1	Ca 317.933Radial†	23.2	4.6	10.136 ug/L	10.136 ppb	15:40:41
1	Fe 238.204 Radial†	11.3	-0.3	-4.7671 ug/L	-4.7671 ppb	15:40:41
1	K 766.490 Radial†	2839.5	93.9	17.973 ug/L	17.973 ppb	15:40:21
1	Mg 279.077 IEC†	2.3	1.1	59.322 ug/L	59.322 ppb	15:40:41
1	Na 589.592 Radial†	-854.8	41.0	12.757 ug/L	12.757 ppb	15:40:21
1	Sr 421.552†	26.8	18.3	0.1270 ug/L	0.1270 ppb	15:40:21
1	Sc 361.383	916923.8	916923.8	104.19 %		15:41:38
1	Y 371.029	768910.2	768910.2	101.09 %		15:41:38
1	Ag 328.068†	303.6	57.2	0.2629 ug/L	0.2629 ppb	15:41:43
1	As 188.979†	-13.3	7.1	3.1672 ug/L	3.1672 ppb	15:42:03
1	B 249.677†	-382.0	-88.6	-2.1729 ug/L	-2.1729 ppb	15:42:03
1	Ba 233.527†	3.4	-7.8	-0.0607 ug/L	-0.0607 ppb	15:42:03
1	Be 313.107†	-3778.9	-68.8	-0.0258 ug/L	-0.0258 ppb	15:41:43
1	Cd 226.502†	-176.1	7.2	0.0842 ug/L	0.0842 ppb	15:42:03
1	Co 228.616†	-49.9	17.0	0.3601 ug/L	0.3601 ppb	15:42:03
1	Cr 267.716†	79.2	-9.1	-0.1030 ug/L	-0.1030 ppb	15:42:03
1	Cu 324.752†	5999.9	-196.4	-0.6001 ug/L	-0.6001 ppb	15:41:43
1	Mn 257.610†	484.3	-12.9	-0.0176 ug/L	-0.0176 ppb	15:42:03
1	Mo 202.031†	24.5	18.9	1.3905 ug/L	1.3905 ppb	15:42:03
1	Ni 231.604†	77.4	-8.5	-0.2177 ug/L	-0.2177 ppb	15:42:03
1	P 214.914†	206.6	-7.5	-4.4024 ug/L	-4.4024 ppb	15:42:03
1	Pb 220.353†	-44.3	-103.7	-12.826 ug/L	-12.826 ppb	15:42:03
1	S 181.975 Axial†	50.7	12.9	18.146 ug/L	18.146 ppb	15:42:03
1	Sb 206.836†	43.7	2.9	1.0542 ug/L	1.0542 ppb	15:42:03
1	Se 196.026†	-21.3	4.3	2.8369 ug/L	2.8369 ppb	15:42:03
1	Si 251.611†	614.1	24.7	0.7824 ug/L	0.7824 ppb	15:42:03
1	Sn 189.927†	11.8	1.9	0.3413 ug/L	0.3413 ppb	15:42:03
1	Ti 334.940†	-1487.5	-17.8	-0.0328 ug/L	-0.0328 ppb	15:41:43
1	Tl 190.801†	-34.8	-6.0	-1.9212 ug/L	-1.9212 ppb	15:42:03
1	U 409.014†	-2916.7	102.4	2.8609 ug/L	2.8609 ppb	15:41:38
1	V 292.402†	-1496.8	32.1	0.2511 ug/L	0.2511 ppb	15:41:43
1	Zn 213.857†	796.0	24.5	0.2507 ug/L	0.2507 ppb	15:42:03
1	SiO2†	616.4	3.4	0.1984 ug/L	0.1984 ppb	15:43:09
2	Sc Radial	3830.3	3830.3	99.3 %		15:41:06
2	Y RADIAL	4387.9	4387.9	98.57 %		15:40:46
2	Al 396.153Radial†	-131.5	-17.4	-16.354 ug/L	-16.354 ppb	15:40:46
2	Ca 317.933Radial†	22.1	3.6	7.8009 ug/L	7.8009 ppb	15:41:06
2	Fe 238.204 Radial†	9.9	-1.7	-26.953 ug/L	-26.953 ppb	15:41:06
2	K 766.490 Radial†	2812.0	66.5	12.744 ug/L	12.744 ppb	15:40:46
2	Mg 279.077 IEC†	4.3	3.2	168.69 ug/L	168.69 ppb	15:41:06
2	Na 589.592 Radial†	-902.9	-7.5	-2.3304 ug/L	-2.3304 ppb	15:40:46
2	Sr 421.552†	45.0	36.6	0.2547 ug/L	0.2547 ppb	15:40:46
2	Sc 361.383	922108.3	922108.3	104.78 %		15:42:08
2	Y 371.029	773456.1	773456.1	101.69 %		15:42:08
2	Ag 328.068†	242.4	-2.8	-0.0221 ug/L	-0.0221 ppb	15:42:13
2	As 188.979†	-25.7	-4.6	-2.0610 ug/L	-2.0610 ppb	15:42:33
2	B 249.677†	-419.8	-122.7	-3.0022 ug/L	-3.0022 ppb	15:42:33
2	Ba 233.527†	21.0	9.0	0.0703 ug/L	0.0703 ppb	15:42:33
2	Be 313.107†	-3663.2	62.1	0.0231 ug/L	0.0231 ppb	15:42:13
2	Cd 226.502†	-189.6	-4.8	-0.0529 ug/L	-0.0529 ppb	15:42:33
2	Co 228.616†	-60.9	6.7	0.1440 ug/L	0.1440 ppb	15:42:33
2	Cr 267.716†	82.0	-6.9	-0.0799 ug/L	-0.0799 ppb	15:42:33
2	Cu 324.752†	6015.6	-213.7	-0.6533 ug/L	-0.6533 ppb	15:42:13
2	Mn 257.610†	465.3	-33.6	-0.0479 ug/L	-0.0479 ppb	15:42:33
2	Mo 202.031†	18.9	13.3	0.9798 ug/L	0.9798 ppb	15:42:33
2	Ni 231.604†	78.3	-8.1	-0.2058 ug/L	-0.2058 ppb	15:42:33

2	P 214.914†	218.4	2.6	1.7338 ug/L	1.7338 ppb	15:42:33
2	Pb 220.353†	-27.8	-87.7	-10.846 ug/L	-10.846 ppb	15:42:33
2	S 181.975 Axial†	51.5	13.3	18.761 ug/L	18.761 ppb	15:42:33
2	Sb 206.836†	27.9	-12.4	-4.3566 ug/L	-4.3566 ppb	15:42:33
2	Se 196.026†	-27.5	-1.5	-1.0994 ug/L	-1.0994 ppb	15:42:33
2	Si 251.611†	604.0	11.7	0.3669 ug/L	0.3669 ppb	15:42:33
2	Sn 189.927†	7.1	-2.6	-0.4728 ug/L	-0.4728 ppb	15:42:33
2	Ti 334.940†	-1509.9	-31.2	-0.0624 ug/L	-0.0624 ppb	15:42:13
2	Tl 190.801†	-29.2	-0.5	-0.1490 ug/L	-0.1490 ppb	15:42:33
2	U 409.014†	-2987.7	50.3	1.4084 ug/L	1.4084 ppb	15:42:08
2	V 292.402†	-1523.1	15.0	0.1286 ug/L	0.1286 ppb	15:42:13
2	Zn 213.857†	793.0	17.4	0.1817 ug/L	0.1817 ppb	15:42:33
2	SiO2†	580.4	-34.2	-2.4032 ug/L	-2.4032 ppb	15:43:14
3	Sc Radial	3858.4	3858.4	100 %		15:41:31
3	Y RADIAL	4398.9	4398.9	98.81 %		15:41:11
3	Al 396.153Radial†	-123.5	-8.4	-7.8996 ug/L	-7.8996 ppb	15:41:11
3	Ca 317.933Radial†	16.6	-2.0	-4.4358 ug/L	-4.4358 ppb	15:41:31
3	Fe 238.204 Radial†	10.3	-1.4	-22.360 ug/L	-22.360 ppb	15:41:31
3	K 766.490 Radial†	2802.3	36.2	6.9312 ug/L	6.9312 ppb	15:41:11
3	Mg 279.077 IEC†	3.2	2.1	109.54 ug/L	109.54 ppb	15:41:31
3	Na 589.592 Radial†	-899.3	2.7	0.8554 ug/L	0.8554 ppb	15:41:11
3	Sr 421.552†	15.9	7.1	0.0496 ug/L	0.0496 ppb	15:41:11
3	Sc 361.383	936425.3	936425.3	106.40 %		15:42:39
3	Y 371.029	786015.7	786015.7	103.34 %		15:42:39
3	Ag 328.068†	228.6	-19.3	-0.0998 ug/L	-0.0998 ppb	15:42:44
3	As 188.979†	-18.1	3.0	1.3085 ug/L	1.3085 ppb	15:43:04
3	B 249.677†	-383.2	-82.2	-2.0109 ug/L	-2.0109 ppb	15:43:04
3	Ba 233.527†	10.5	-1.2	-0.0091 ug/L	-0.0091 ppb	15:43:04
3	Be 313.107†	-3640.8	136.6	0.0510 ug/L	0.0510 ppb	15:42:44
3	Cd 226.502†	-182.6	4.5	0.0561 ug/L	0.0561 ppb	15:43:04
3	Co 228.616†	-52.3	15.7	0.3316 ug/L	0.3316 ppb	15:43:04
3	Cr 267.716†	61.0	-27.8	-0.3157 ug/L	-0.3157 ppb	15:43:04
3	Cu 324.752†	5969.5	-344.9	-1.0551 ug/L	-1.0551 ppb	15:42:44
3	Mn 257.610†	473.9	-32.3	-0.0435 ug/L	-0.0435 ppb	15:43:04
3	Mo 202.031†	17.4	11.7	0.8585 ug/L	0.8585 ppb	15:43:04
3	Ni 231.604†	77.3	-10.2	-0.2601 ug/L	-0.2601 ppb	15:43:04
3	P 214.914†	216.0	-2.9	-1.4951 ug/L	-1.4951 ppb	15:43:04
3	Pb 220.353†	-25.2	-84.9	-10.497 ug/L	-10.497 ppb	15:43:04
3	S 181.975 Axial†	42.2	3.8	5.3594 ug/L	5.3594 ppb	15:43:04
3	Sb 206.836†	42.7	1.1	0.4039 ug/L	0.4039 ppb	15:43:04
3	Se 196.026†	-29.9	-3.4	-2.2779 ug/L	-2.2779 ppb	15:43:04
3	Si 251.611†	614.5	12.8	0.4035 ug/L	0.4035 ppb	15:43:04
3	Sn 189.927†	8.1	-1.8	-0.3300 ug/L	-0.3300 ppb	15:43:04
3	Ti 334.940†	-1491.8	7.9	0.0005 ug/L	0.0005 ppb	15:42:44
3	Tl 190.801†	-22.9	5.9	1.8994 ug/L	1.8994 ppb	15:43:04
3	U 409.014†	-2867.8	206.6	5.7731 ug/L	5.7731 ppb	15:42:39
3	V 292.402†	-1510.7	48.9	0.3701 ug/L	0.3701 ppb	15:42:44
3	Zn 213.857†	792.6	5.5	0.0619 ug/L	0.0619 ppb	15:43:04
3	SiO2†	561.4	-60.6	-4.2275 ug/L	-4.2275 ppb	15:43:19

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925152.5	105.12 %	1.148			1.09%
Sc Radial	3839.8	99.6 %	0.42			0.42%
Y 371.029	776127.3	102.04 %	1.165			1.14%
Y RADIAL	4371.7	98.20 %	0.853			0.87%
Ag 328.068†	11.7	0.0470 ug/L	0.19095	0.0470 ppb	0.19095	406.53%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-14.0	-13.224 ug/L	4.6344	-13.224 ppb	4.6344	35.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	0.8049 ug/L	2.65022	0.8049 ppb	2.65022	329.26%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-97.8	-2.3953 ug/L	0.53177	-2.3953 ppb	0.53177	22.20%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.0	0.0002 ug/L	0.06598	0.0002 ppb	0.06598	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	43.3	0.0161 ug/L	0.03887	0.0161 ppb	0.03887	241.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.1	4.5002 ug/L	7.82640	4.5002 ppb	7.82640	173.91%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	2.3	0.0291 ug/L	0.07239	0.0291 ppb	0.07239	248.51%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.1	0.2786 ug/L	0.11739	0.2786 ppb	0.11739	42.14%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-14.6	-0.1662 ug/L	0.12998	-0.1662 ppb	0.12998	78.20%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-251.6	-0.7695 ug/L	0.24877	-0.7695 ppb	0.24877	32.33%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-18.027 ug/L	11.7105	-18.027 ppb	11.7105	64.96%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	65.5	12.549 ug/L	5.5235	12.549 ppb	5.5235	44.01%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.1	112.52 ug/L	54.744	112.52 ppb	54.744	48.65%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-26.3	-0.0363 ug/L	0.01638	-0.0363 ppb	0.01638	45.10%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	14.6	1.0763 ug/L	0.27881	1.0763 ppb	0.27881	25.91%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	12.1	3.7608 ug/L	7.95233	3.7608 ppb	7.95233	211.46%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-8.9	-0.2279 ug/L	0.02852	-0.2279 ppb	0.02852	12.52%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-2.6	-1.3879 ug/L	3.06951	-1.3879 ppb	3.06951	221.16%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-92.1	-11.389 ug/L	1.2563	-11.389 ppb	1.2563	11.03%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	10.0	14.089 ug/L	7.5662	14.089 ppb	7.5662	53.70%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.8	-0.9662 ug/L	2.95413	-0.9662 ppb	2.95413	305.76%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.2	-0.1801 ug/L	2.67843	-0.1801 ppb	2.67843	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	16.4	0.5176 ug/L	0.23004	0.5176 ppb	0.23004	44.44%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.9	-0.1538 ug/L	0.43468	-0.1538 ppb	0.43468	282.54%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	20.7	0.1437 ug/L	0.10357	0.1437 ppb	0.10357	72.06%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13.7	-0.0316 ug/L	0.03147	-0.0316 ppb	0.03147	99.71%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0569 ug/L	1.91195	-0.0569 ppb	1.91195	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	119.8	3.3475 ug/L	2.22267	3.3475 ppb	2.22267	66.40%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	32.0	0.2499 ug/L	0.12073	0.2499 ppb	0.12073	48.30%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	15.8	0.1647 ug/L	0.09556	0.1647 ppb	0.09556	58.01%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-30.5	-2.1441 ug/L	2.22429	-2.1441 ppb	2.22429	103.74%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						



Sequence No.: 26

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 16:46:44

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	3853.1	3853.1	99.9 %		16:48:37
1	Y RADIAL	4262.5	4262.5	95.75 %		16:48:37
1	Al 396.153Radial†	5279.2	5399.5	5050.8 ug/L	5050.8 ppb	16:48:37
1	Ca 317.933Radial†	2359.8	2343.4	5110.4 ug/L	5110.4 ppb	16:48:57
1	Fe 238.204 Radial†	317.2	305.8	4957.4 ug/L	4957.4 ppb	16:48:57
1	K 766.490 Radial†	28601.3	25864.8	4949.2 ug/L	4949.2 ppb	16:48:37
1	Mg 279.077 IEC†	98.7	97.6	5151.2 ug/L	5151.2 ppb	16:48:57
1	Na 589.592 Radial†	30236.2	31168.1	9698.4 ug/L	9698.4 ppb	16:48:37
1	Sr 421.552†	69411.4	69472.0	483.25 ug/L	483.25 ppb	16:48:37
1	Sc 361.383	905210.8	905210.8	102.86 %		16:49:54
1	Y 371.029	750007.9	750007.9	98.603 %		16:49:54
1	Ag 328.068†	108672.9	105420.9	492.91 ug/L	492.91 ppb	16:49:59
1	As 188.979†	1120.4	1109.2	497.47 ug/L	497.47 ppb	16:50:19
1	B 249.677†	19881.3	19607.2	478.35 ug/L	478.35 ppb	16:49:59
1	Ba 233.527†	64433.8	62633.4	493.54 ug/L	493.54 ppb	16:49:59
1	Be 313.107†	1343973.2	1310209.2	490.65 ug/L	490.65 ppb	16:49:54
1	Cd 226.502†	43760.4	42721.4	496.36 ug/L	496.36 ppb	16:49:59
1	Co 228.616†	24180.2	23573.6	495.20 ug/L	495.20 ppb	16:49:59
1	Cr 267.716†	45123.2	43785.0	492.27 ug/L	492.27 ppb	16:49:59
1	Cu 324.752†	170453.3	159764.7	486.77 ug/L	486.77 ppb	16:49:59
1	Mn 257.610†	444674.7	431848.3	492.27 ug/L	492.27 ppb	16:49:54
1	Mo 202.031†	6805.2	6611.5	487.42 ug/L	487.42 ppb	16:50:19
1	Ni 231.604†	20098.8	19457.9	496.27 ug/L	496.27 ppb	16:49:59
1	P 214.914†	4413.8	4085.4	2362.2 ug/L	2362.2 ppb	16:50:19
1	Pb 220.353†	4071.4	3897.2	483.64 ug/L	483.64 ppb	16:50:19
1	S 181.975 Axial†	762.9	705.9	994.32 ug/L	994.32 ppb	16:50:19
1	Sb 206.836†	1469.1	1389.3	507.81 ug/L	507.81 ppb	16:50:19
1	Se 196.026†	739.8	744.0	505.79 ug/L	505.79 ppb	16:50:19
1	Si 251.611†	78661.6	75912.5	2453.2 ug/L	2453.2 ppb	16:49:59
1	Sn 189.927†	2821.7	2733.9	493.63 ug/L	493.63 ppb	16:50:19
1	Ti 334.940†	317401.0	309996.6	488.32 ug/L	488.32 ppb	16:49:59
1	Tl 190.801†	1512.1	1497.6	485.00 ug/L	485.00 ppb	16:50:19
1	U 409.014†	14779.0	17270.4	480.60 ug/L	480.60 ppb	16:49:59
1	V 292.402†	70354.6	69869.5	494.59 ug/L	494.59 ppb	16:49:59
1	Zn 213.857†	51065.2	48907.7	489.18 ug/L	489.18 ppb	16:49:59
1	SiO2†	77599.5	74856.4	5183.8 ug/L	5183.8 ppb	16:51:27
2	Sc Radial	3946.8	3946.8	102 %		16:49:02
2	Y RADIAL	4312.7	4312.7	96.88 %		16:49:02
2	Al 396.153Radial†	5385.6	5378.0	5030.5 ug/L	5030.5 ppb	16:49:02
2	Ca 317.933Radial†	2371.6	2298.9	5013.3 ug/L	5013.3 ppb	16:49:22
2	Fe 238.204 Radial†	312.8	294.0	4766.2 ug/L	4766.2 ppb	16:49:22
2	K 766.490 Radial†	28820.3	25399.1	4860.0 ug/L	4860.0 ppb	16:49:02
2	Mg 279.077 IEC†	98.7	95.3	5030.2 ug/L	5030.2 ppb	16:49:22
2	Na 589.592 Radial†	30812.9	31013.0	9650.1 ug/L	9650.1 ppb	16:49:02
2	Sr 421.552†	70878.0	69255.6	481.75 ug/L	481.75 ppb	16:49:02
2	Sc 361.383	899258.0	899258.0	102.18 %		16:50:25
2	Y 371.029	744528.8	744528.8	97.882 %		16:50:25
2	Ag 328.068†	107458.4	104931.7	490.57 ug/L	490.57 ppb	16:50:30
2	As 188.979†	1106.3	1102.6	494.46 ug/L	494.46 ppb	16:50:50
2	B 249.677†	19490.3	19352.5	472.14 ug/L	472.14 ppb	16:50:30
2	Ba 233.527†	63694.7	62324.8	491.11 ug/L	491.11 ppb	16:50:30
2	Be 313.107†	1333663.7	1308769.2	490.11 ug/L	490.11 ppb	16:50:25
2	Cd 226.502†	43252.3	42505.8	493.87 ug/L	493.87 ppb	16:50:30
2	Co 228.616†	23884.6	23439.8	492.41 ug/L	492.41 ppb	16:50:30
2	Cr 267.716†	44576.0	43539.9	489.50 ug/L	489.50 ppb	16:50:30
2	Cu 324.752†	168055.0	158514.6	482.95 ug/L	482.95 ppb	16:50:30
2	Mn 257.610†	442291.4	432377.8	492.85 ug/L	492.85 ppb	16:50:25
2	Mo 202.031†	6796.1	6646.5	489.97 ug/L	489.97 ppb	16:50:50
2	Ni 231.604†	19914.9	19407.3	494.98 ug/L	494.98 ppb	16:50:30

2	P 214.914†	4376.0	4076.8	2357.9 ug/L	2357.9 ppb	16:50:50
2	Pb 220.353†	4061.8	3914.0	485.75 ug/L	485.75 ppb	16:50:50
2	S 181.975 Axial†	752.4	700.5	986.76 ug/L	986.76 ppb	16:50:50
2	Sb 206.836†	1472.3	1401.9	512.31 ug/L	512.31 ppb	16:50:50
2	Se 196.026†	734.6	743.7	505.00 ug/L	505.00 ppb	16:50:50
2	Si 251.611†	77540.8	75321.8	2434.1 ug/L	2434.1 ppb	16:50:30
2	Sn 189.927†	2800.8	2731.7	493.22 ug/L	493.22 ppb	16:50:50
2	Ti 334.940†	313396.9	308120.7	485.36 ug/L	485.36 ppb	16:50:30
2	Tl 190.801†	1517.5	1512.6	489.83 ug/L	489.83 ppb	16:50:50
2	U 409.014†	14624.4	17214.3	479.06 ug/L	479.06 ppb	16:50:30
2	V 292.402†	69521.4	69506.9	492.12 ug/L	492.12 ppb	16:50:30
2	Zn 213.857†	50397.9	48583.3	485.95 ug/L	485.95 ppb	16:50:30
2	SiO2†	77164.0	74929.5	5188.8 ug/L	5188.8 ppb	16:51:32
3	Sc Radial	3866.7	3866.7	100 %		16:49:27
3	Y RADIAL	4272.7	4272.7	95.98 %		16:49:27
3	Al 396.153Radial†	5350.4	5451.9	5100.1 ug/L	5100.1 ppb	16:49:27
3	Ca 317.933Radial†	2379.2	2354.6	5134.7 ug/L	5134.7 ppb	16:49:47
3	Fe 238.204 Radial†	315.9	303.4	4918.2 ug/L	4918.2 ppb	16:49:47
3	K 766.490 Radial†	28866.9	26029.0	4980.6 ug/L	4980.6 ppb	16:49:27
3	Mg 279.077 IEC†	98.4	97.0	5117.2 ug/L	5117.2 ppb	16:49:47
3	Na 589.592 Radial†	30432.2	31257.1	9726.1 ug/L	9726.1 ppb	16:49:27
3	Sr 421.552†	70254.6	70068.6	487.40 ug/L	487.40 ppb	16:49:27
3	Sc 361.383	905125.5	905125.5	102.85 %		16:50:56
3	Y 371.029	750418.5	750418.5	98.657 %		16:50:56
3	Ag 328.068†	107818.8	104600.4	489.08 ug/L	489.08 ppb	16:51:01
3	As 188.979†	1097.2	1086.7	487.43 ug/L	487.43 ppb	16:51:21
3	B 249.677†	19693.2	19426.1	473.93 ug/L	473.93 ppb	16:51:01
3	Ba 233.527†	63993.3	62211.0	490.22 ug/L	490.22 ppb	16:51:01
3	Be 313.107†	1343247.2	1309626.4	490.42 ug/L	490.42 ppb	16:50:56
3	Cd 226.502†	43462.5	42435.7	493.04 ug/L	493.04 ppb	16:51:01
3	Co 228.616†	23986.8	23387.8	491.30 ug/L	491.30 ppb	16:51:01
3	Cr 267.716†	44869.0	43542.0	489.54 ug/L	489.54 ppb	16:51:01
3	Cu 324.752†	168790.2	158163.2	481.89 ug/L	481.89 ppb	16:51:01
3	Mn 257.610†	443560.8	430806.0	491.08 ug/L	491.08 ppb	16:50:56
3	Mo 202.031†	6797.4	6604.6	486.90 ug/L	486.90 ppb	16:51:21
3	Ni 231.604†	19956.1	19320.9	492.78 ug/L	492.78 ppb	16:51:01
3	P 214.914†	4400.1	4072.5	2355.4 ug/L	2355.4 ppb	16:51:21
3	Pb 220.353†	4067.4	3893.7	483.23 ug/L	483.23 ppb	16:51:21
3	S 181.975 Axial†	754.8	698.0	983.25 ug/L	983.25 ppb	16:51:21
3	Sb 206.836†	1481.4	1401.4	512.06 ug/L	512.06 ppb	16:51:21
3	Se 196.026†	738.3	742.6	504.74 ug/L	504.74 ppb	16:51:21
3	Si 251.611†	77927.3	75205.7	2430.3 ug/L	2430.3 ppb	16:51:01
3	Sn 189.927†	2813.1	2725.9	492.18 ug/L	492.18 ppb	16:51:21
3	Ti 334.940†	315096.6	307785.1	484.84 ug/L	484.84 ppb	16:51:01
3	Tl 190.801†	1517.7	1503.1	486.77 ug/L	486.77 ppb	16:51:21
3	U 409.014†	14583.5	17081.7	475.34 ug/L	475.34 ppb	16:51:01
3	V 292.402†	70069.7	69599.0	492.69 ug/L	492.69 ppb	16:51:01
3	Zn 213.857†	50641.2	48500.1	485.10 ug/L	485.10 ppb	16:51:01
3	SiO2†	76011.8	73319.7	5077.1 ug/L	5077.1 ppb	16:51:37

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903198.1	102.63 %	0.388			0.38%
Sc Radial	3888.9	101 %	1.3			1.30%
Y 371.029	748318.4	98.381 %	0.4323			0.44%
Y RADIAL	4282.6	96.20 %	0.597			0.62%
Ag 328.068†	104984.3	490.85 ug/L	1.930	490.85 ppb	1.930	0.39%
QC value within limits for Ag 328.068 Recovery = 98.17%						
Al 396.153Radial†	5409.8	5060.5 ug/L	35.79	5060.5 ppb	35.79	0.71%
QC value within limits for Al 396.153Radial Recovery = 101.21%						
As 188.979†	1099.5	493.12 ug/L	5.150	493.12 ppb	5.150	1.04%
QC value within limits for As 188.979 Recovery = 98.62%						
B 249.677†	19462.0	474.81 ug/L	3.194	474.81 ppb	3.194	0.67%
QC value within limits for B 249.677 Recovery = 94.96%						
Ba 233.527†	62389.7	491.62 ug/L	1.722	491.62 ppb	1.722	0.35%
QC value within limits for Ba 233.527 Recovery = 98.32%						
Be 313.107†	1309534.9	490.39 ug/L	0.274	490.39 ppb	0.274	0.06%
QC value within limits for Be 313.107 Recovery = 98.08%						
Ca 317.933Radial†	2332.3	5086.1 ug/L	64.26	5086.1 ppb	64.26	1.26%

QC value within limits for Ca 317.933 Radial Recovery = 101.72%

Cd 226.502†	42554.3	494.42 ug/L	1.727	494.42 ppb	1.727	0.35%
QC value within limits for Cd 226.502 Recovery = 98.88%						
Co 228.616†	23467.1	492.97 ug/L	2.008	492.97 ppb	2.008	0.41%
QC value within limits for Co 228.616 Recovery = 98.59%						
Cr 267.716†	43622.3	490.43 ug/L	1.588	490.43 ppb	1.588	0.32%
QC value within limits for Cr 267.716 Recovery = 98.09%						
Cu 324.752†	158814.2	483.87 ug/L	2.566	483.87 ppb	2.566	0.53%
QC value within limits for Cu 324.752 Recovery = 96.77%						
Fe 238.204 Radial†	301.1	4880.6 ug/L	100.98	4880.6 ppb	100.98	2.07%
QC value within limits for Fe 238.204 Radial Recovery = 97.61%						
K 766.490 Radial†	25764.3	4930.0 ug/L	62.57	4930.0 ppb	62.57	1.27%
QC value within limits for K 766.490 Radial Recovery = 98.60%						
Mg 279.077 IEC†	96.6	5099.5 ug/L	62.40	5099.5 ppb	62.40	1.22%
QC value within limits for Mg 279.077 IEC Recovery = 101.99%						
Mn 257.610†	431677.4	492.06 ug/L	0.906	492.06 ppb	0.906	0.18%
QC value within limits for Mn 257.610 Recovery = 98.41%						
Mo 202.031†	6620.8	488.10 ug/L	1.646	488.10 ppb	1.646	0.34%
QC value within limits for Mo 202.031 Recovery = 97.62%						
Na 589.592 Radial†	31146.1	9691.5 ug/L	38.44	9691.5 ppb	38.44	0.40%
QC value within limits for Na 589.592 Radial Recovery = 96.92%						
Ni 231.604†	19395.4	494.68 ug/L	1.766	494.68 ppb	1.766	0.36%
QC value within limits for Ni 231.604 Recovery = 98.94%						
P 214.914†	4078.2	2358.5 ug/L	3.41	2358.5 ppb	3.41	0.14%
QC value within limits for P 214.914 Recovery = 94.34%						
Pb 220.353†	3901.6	484.21 ug/L	1.351	484.21 ppb	1.351	0.28%
QC value within limits for Pb 220.353 Recovery = 96.84%						
S 181.975 Axial†	701.5	988.11 ug/L	5.655	988.11 ppb	5.655	0.57%
QC value within limits for S 181.975 Axial Recovery = 98.81%						
Sb 206.836†	1397.5	510.73 ug/L	2.530	510.73 ppb	2.530	0.50%
QC value within limits for Sb 206.836 Recovery = 102.15%						
Se 196.026†	743.4	505.18 ug/L	0.544	505.18 ppb	0.544	0.11%
QC value within limits for Se 196.026 Recovery = 101.04%						
Si 251.611†	75480.0	2439.2 ug/L	12.28	2439.2 ppb	12.28	0.50%
QC value within limits for Si 251.611 Recovery = 97.57%						
Sn 189.927†	2730.5	493.01 ug/L	0.744	493.01 ppb	0.744	0.15%
QC value within limits for Sn 189.927 Recovery = 98.60%						
Sr 421.552†	69598.7	484.13 ug/L	2.929	484.13 ppb	2.929	0.60%
QC value within limits for Sr 421.552 Recovery = 96.83%						
Ti 334.940†	308634.1	486.17 ug/L	1.875	486.17 ppb	1.875	0.39%
QC value within limits for Ti 334.940 Recovery = 97.23%						
Tl 190.801†	1504.4	487.20 ug/L	2.442	487.20 ppb	2.442	0.50%
QC value within limits for Tl 190.801 Recovery = 97.44%						
U 409.014†	17188.8	478.33 ug/L	2.704	478.33 ppb	2.704	0.57%
QC value within limits for U 409.014 Recovery = 95.67%						
V 292.402†	69658.5	493.13 ug/L	1.293	493.13 ppb	1.293	0.26%
QC value within limits for V 292.402 Recovery = 98.63%						
Zn 213.857†	48663.7	486.75 ug/L	2.153	486.75 ppb	2.153	0.44%
QC value within limits for Zn 213.857 Recovery = 97.35%						
SiO2†	74368.5	5149.9 ug/L	63.08	5149.9 ppb	63.08	1.22%
QC value within limits for SiO2 Recovery = 96.31%						

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 16:53:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3747.2	3747.2	97.2 %		16:56:00
1	Y RADIAL	4313.4	4313.4	96.89 %		16:55:40
1	Al 396.153Radial†	-102.3	9.7	9.1086 ug/L	9.1086 ppb	16:55:40
1	Ca 317.933Radial†	24.4	6.4	14.053 ug/L	14.053 ppb	16:56:00
1	Fe 238.204 Radial†	9.8	-1.6	-25.339 ug/L	-25.339 ppb	16:56:00
1	K 766.490 Radial†	2782.1	98.5	18.863 ug/L	18.863 ppb	16:55:40
1	Mg 279.077 IEC†	2.8	1.7	89.185 ug/L	89.185 ppb	16:56:00
1	Na 589.592 Radial†	-895.0	-19.6	-6.0896 ug/L	-6.0896 ppb	16:55:40
1	Sr 421.552†	55.7	48.6	0.3380 ug/L	0.3380 ppb	16:55:40
1	Sc 361.383	919369.4	919369.4	104.47 %		16:56:57
1	Y 371.029	771783.1	771783.1	101.47 %		16:56:57
1	Ag 328.068†	263.4	17.9	0.0712 ug/L	0.0712 ppb	16:57:02
1	As 188.979†	-20.7	0.1	0.0238 ug/L	0.0238 ppb	16:57:22
1	B 249.677†	-499.7	-200.3	-4.9059 ug/L	-4.9059 ppb	16:57:22
1	Ba 233.527†	10.6	-0.9	-0.0091 ug/L	-0.0091 ppb	16:57:22
1	Be 313.107†	-3592.0	119.8	0.0446 ug/L	0.0446 ppb	16:57:02
1	Cd 226.502†	-192.0	-7.6	-0.0851 ug/L	-0.0851 ppb	16:57:22
1	Co 228.616†	-60.2	7.2	0.1549 ug/L	0.1549 ppb	16:57:22
1	Cr 267.716†	76.7	-11.7	-0.1358 ug/L	-0.1358 ppb	16:57:22
1	Cu 324.752†	6084.7	-130.4	-0.4004 ug/L	-0.4004 ppb	16:57:02
1	Mn 257.610†	519.1	19.2	0.0157 ug/L	0.0157 ppb	16:57:22
1	Mo 202.031†	20.7	15.1	1.1112 ug/L	1.1112 ppb	16:57:22
1	Ni 231.604†	73.3	-12.7	-0.3232 ug/L	-0.3232 ppb	16:57:22
1	P 214.914†	217.7	2.5	1.6228 ug/L	1.6228 ppb	16:57:22
1	Pb 220.353†	-27.2	-87.2	-10.777 ug/L	-10.777 ppb	16:57:22
1	S 181.975 Axial†	46.1	8.3	11.641 ug/L	11.641 ppb	16:57:22
1	Sb 206.836†	47.0	6.0	2.1289 ug/L	2.1289 ppb	16:57:22
1	Se 196.026†	-27.2	-1.3	-0.9618 ug/L	-0.9618 ppb	16:57:22
1	Si 251.611†	594.8	4.7	0.1382 ug/L	0.1382 ppb	16:57:22
1	Sn 189.927†	7.3	-2.4	-0.4324 ug/L	-0.4324 ppb	16:57:22
1	Ti 334.940†	-1528.4	-53.2	-0.0904 ug/L	-0.0904 ppb	16:57:02
1	Tl 190.801†	-27.8	0.9	0.2755 ug/L	0.2755 ppb	16:57:22
1	U 409.014†	-2924.9	101.9	2.8495 ug/L	2.8495 ppb	16:56:57
1	V 292.402†	-1601.7	-64.5	-0.4239 ug/L	-0.4239 ppb	16:57:02
1	Zn 213.857†	757.7	-14.2	-0.1365 ug/L	-0.1365 ppb	16:57:22
1	SiO2†	604.5	-9.6	-0.6935 ug/L	-0.6935 ppb	16:58:28
2	Sc Radial	3755.2	3755.2	97.4 %		16:56:25
2	Y RADIAL	4279.1	4279.1	96.12 %		16:56:05
2	Al 396.153Radial†	-122.6	-10.9	-10.288 ug/L	-10.288 ppb	16:56:05
2	Ca 317.933Radial†	22.6	4.5	9.8277 ug/L	9.8277 ppb	16:56:25
2	Fe 238.204 Radial†	10.7	-0.7	-11.497 ug/L	-11.497 ppb	16:56:25
2	K 766.490 Radial†	2877.2	190.1	36.414 ug/L	36.414 ppb	16:56:05
2	Mg 279.077 IEC†	1.5	0.4	21.323 ug/L	21.323 ppb	16:56:25
2	Na 589.592 Radial†	-860.1	18.3	5.6924 ug/L	5.6924 ppb	16:56:05
2	Sr 421.552†	5.8	-2.8	-0.0195 ug/L	-0.0195 ppb	16:56:05
2	Sc 361.383	918565.8	918565.8	104.37 %		16:57:27
2	Y 371.029	771672.6	771672.6	101.45 %		16:57:27
2	Ag 328.068†	297.0	50.4	0.2246 ug/L	0.2246 ppb	16:57:32
2	As 188.979†	-21.0	-0.2	-0.0799 ug/L	-0.0799 ppb	16:57:52
2	B 249.677†	-491.5	-192.9	-4.7256 ug/L	-4.7256 ppb	16:57:52
2	Ba 233.527†	11.0	-0.5	-0.0057 ug/L	-0.0057 ppb	16:57:52
2	Be 313.107†	-3623.7	86.4	0.0321 ug/L	0.0321 ppb	16:57:32
2	Cd 226.502†	-177.5	6.1	0.0727 ug/L	0.0727 ppb	16:57:52
2	Co 228.616†	-72.1	-4.2	-0.0858 ug/L	-0.0858 ppb	16:57:52
2	Cr 267.716†	89.5	0.7	0.0037 ug/L	0.0037 ppb	16:57:52
2	Cu 324.752†	5941.8	-262.3	-0.8023 ug/L	-0.8023 ppb	16:57:32
2	Mn 257.610†	479.9	-17.9	-0.0224 ug/L	-0.0224 ppb	16:57:52
2	Mo 202.031†	16.5	11.1	0.8166 ug/L	0.8166 ppb	16:57:52
2	Ni 231.604†	74.7	-11.2	-0.2868 ug/L	-0.2868 ppb	16:57:52

2	P 214.914†	222.9	7.8	4.8500 ug/L	4.8500 ppb	16:57:52
2	Pb 220.353†	-20.2	-80.5	-9.9607 ug/L	-9.9607 ppb	16:57:52
2	S 181.975 Axial†	37.2	-0.2	-0.3407 ug/L	-0.3407 ppb	16:57:52
2	Sb 206.836†	41.7	0.9	0.3314 ug/L	0.3314 ppb	16:57:52
2	Se 196.026†	-31.2	-5.2	-3.4409 ug/L	-3.4409 ppb	16:57:52
2	Si 251.611†	593.3	3.7	0.1095 ug/L	0.1095 ppb	16:57:52
2	Sn 189.927†	9.2	-0.6	-0.1002 ug/L	-0.1002 ppb	16:57:52
2	Ti 334.940†	-1511.5	-38.3	-0.0626 ug/L	-0.0626 ppb	16:57:32
2	Tl 190.801†	-23.6	4.8	1.5420 ug/L	1.5420 ppb	16:57:52
2	U 409.014†	-2871.2	151.0	4.2173 ug/L	4.2173 ppb	16:57:27
2	V 292.402†	-1626.5	-89.6	-0.6042 ug/L	-0.6042 ppb	16:57:32
2	Zn 213.857†	758.6	-12.6	-0.1225 ug/L	-0.1225 ppb	16:57:52
2	SiO2†	598.7	-14.6	-1.0368 ug/L	-1.0368 ppb	16:58:33
3	Sc Radial	3770.8	3770.8	97.8 %		16:56:50
3	Y RADIAL	4230.5	4230.5	95.03 %		16:56:30
3	Al 396.153Radial†	-130.4	-18.3	-17.241 ug/L	-17.241 ppb	16:56:30
3	Ca 317.933Radial†	17.8	-0.5	-1.1191 ug/L	-1.1191 ppb	16:56:50
3	Fe 238.204 Radial†	8.3	-3.2	-51.849 ug/L	-51.849 ppb	16:56:50
3	K 766.490 Radial†	2775.6	73.9	14.170 ug/L	14.170 ppb	16:56:30
3	Mg 279.077 IEC†	1.9	0.8	40.777 ug/L	40.777 ppb	16:56:50
3	Na 589.592 Radial†	-908.9	-28.0	-8.7045 ug/L	-8.7045 ppb	16:56:30
3	Sr 421.552†	33.5	25.5	0.1776 ug/L	0.1776 ppb	16:56:30
3	Sc 361.383	924614.4	924614.4	105.06 %		16:57:57
3	Y 371.029	776500.8	776500.8	102.09 %		16:57:57
3	Ag 328.068†	233.0	-12.4	-0.0743 ug/L	-0.0743 ppb	16:58:03
3	As 188.979†	-25.7	-4.6	-2.0498 ug/L	-2.0498 ppb	16:58:23
3	B 249.677†	-488.0	-186.5	-4.5612 ug/L	-4.5612 ppb	16:58:23
3	Ba 233.527†	3.8	-7.4	-0.0595 ug/L	-0.0595 ppb	16:58:23
3	Be 313.107†	-3509.3	218.0	0.0814 ug/L	0.0814 ppb	16:58:03
3	Cd 226.502†	-197.0	-11.3	-0.1261 ug/L	-0.1261 ppb	16:58:23
3	Co 228.616†	-75.9	-7.4	-0.1540 ug/L	-0.1540 ppb	16:58:23
3	Cr 267.716†	70.5	-18.0	-0.2072 ug/L	-0.2072 ppb	16:58:23
3	Cu 324.752†	5982.6	-260.7	-0.7984 ug/L	-0.7984 ppb	16:58:03
3	Mn 257.610†	510.5	8.3	0.0026 ug/L	0.0026 ppb	16:58:23
3	Mo 202.031†	10.0	4.8	0.3502 ug/L	0.3502 ppb	16:58:23
3	Ni 231.604†	76.3	-10.2	-0.2604 ug/L	-0.2604 ppb	16:58:23
3	P 214.914†	213.3	-2.8	-1.4635 ug/L	-1.4635 ppb	16:58:23
3	Pb 220.353†	-38.8	-98.1	-12.133 ug/L	-12.133 ppb	16:58:23
3	S 181.975 Axial†	44.9	6.9	9.7132 ug/L	9.7132 ppb	16:58:23
3	Sb 206.836†	33.4	-7.3	-2.5585 ug/L	-2.5585 ppb	16:58:23
3	Se 196.026†	-20.8	5.0	3.1038 ug/L	3.1038 ppb	16:58:23
3	Si 251.611†	591.1	-2.1	-0.0737 ug/L	-0.0737 ppb	16:58:23
3	Sn 189.927†	8.8	-1.0	-0.1839 ug/L	-0.1839 ppb	16:58:23
3	Ti 334.940†	-1500.4	-18.2	-0.0331 ug/L	-0.0331 ppb	16:58:03
3	Tl 190.801†	-35.8	-6.6	-2.1210 ug/L	-2.1210 ppb	16:58:23
3	U 409.014†	-2963.4	81.2	2.2748 ug/L	2.2748 ppb	16:57:57
3	V 292.402†	-1502.8	38.3	0.2855 ug/L	0.2855 ppb	16:58:03
3	Zn 213.857†	749.4	-26.1	-0.2531 ug/L	-0.2531 ppb	16:58:23
3	SiO2†	614.7	-3.1	-0.2244 ug/L	-0.2244 ppb	16:58:38

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920849.9	104.63 %	0.373			0.36%
Sc Radial	3757.8	97.4 %	0.31			0.32%
Y 371.029	773318.8	101.67 %	0.362			0.36%
Y RADIAL	4274.3	96.02 %	0.935			0.97%
Ag 328.068†	18.7	0.0739 ug/L	0.14949	0.0739 ppb	0.14949	202.41%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.5	-6.1402 ug/L	13.65593	-6.1402 ppb	13.65593	222.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.6	-0.7020 ug/L	1.16843	-0.7020 ppb	1.16843	166.45%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-193.2	-4.7309 ug/L	0.17237	-4.7309 ppb	0.17237	3.64%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.0	-0.0248 ug/L	0.03012	-0.0248 ppb	0.03012	121.45%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	141.4	0.0527 ug/L	0.02561	0.0527 ppb	0.02561	48.60%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.5	7.5872 ug/L	7.83026	7.5872 ppb	7.83026	103.20%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-4.3	-0.0462 ug/L	0.10495	-0.0462 ppb	0.10495 227.30%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-1.5	-0.0283 ug/L	0.16229	-0.0283 ppb	0.16229 574.13%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-9.7	-0.1131 ug/L	0.10724	-0.1131 ppb	0.10724 94.82%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-217.8	-0.6670 ug/L	0.23091	-0.6670 ppb	0.23091 34.62%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-1.8	-29.562 ug/L	20.5045	-29.562 ppb	20.5045 69.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	120.8	23.149 ug/L	11.7246	23.149 ppb	11.7246 50.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.0	50.428 ug/L	34.9452	50.428 ppb	34.9452 69.30%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	3.2	-0.0013 ug/L	0.01936	-0.0013 ppb	0.01936 >999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	10.3	0.7593 ug/L	0.38374	0.7593 ppb	0.38374 50.54%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-9.8	-3.0339 ug/L	7.66948	-3.0339 ppb	7.66948 252.79%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-11.4	-0.2902 ug/L	0.03154	-0.2902 ppb	0.03154 10.87%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	2.5	1.6698 ug/L	3.15700	1.6698 ppb	3.15700 189.07%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-88.6	-10.957 ug/L	1.0975	-10.957 ppb	1.0975 10.02%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	5.0	7.0044 ug/L	6.43371	7.0044 ppb	6.43371 91.85%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-0.1	-0.0328 ug/L	2.36482	-0.0328 ppb	2.36482 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.5	-0.4330 ug/L	3.30421	-0.4330 ppb	3.30421 763.18%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	2.1	0.0580 ug/L	0.11496	0.0580 ppb	0.11496 198.20%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-1.3	-0.2388 ug/L	0.17280	-0.2388 ppb	0.17280 72.35%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	23.8	0.1654 ug/L	0.17909	0.1654 ppb	0.17909 108.30%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-36.6	-0.0620 ug/L	0.02863	-0.0620 ppb	0.02863 46.15%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-0.3	-0.1012 ug/L	1.86029	-0.1012 ppb	1.86029 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	111.4	3.1139 ug/L	0.99786	3.1139 ppb	0.99786 32.05%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-38.6	-0.2475 ug/L	0.47034	-0.2475 ppb	0.47034 190.01%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-17.6	-0.1707 ug/L	0.07172	-0.1707 ppb	0.07172 42.01%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	-9.1	-0.6516 ug/L	0.40781	-0.6516 ppb	0.40781 62.59%
QC value within limits for SiO2 Recovery = Not calculated					

QC Failed. Continue with analysis.

=====  
Analysis Begun

Start Time: 2/25/2010 17:18:17

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022510A.sif

Batch ID:

Results Data Set: 022510

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

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/25/2010 17:18:18

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3759.9	3759.9	97.5 %		17:20:30
1	Y RADIAL	4167.7	4167.7	93.62 %		17:20:10
1	Al 396.153Radial†	5281.2	5532.6	5176.2 ug/L	5176.2 ppb	17:20:10
1	Ca 317.933Radial†	2351.6	2393.6	5219.9 ug/L	5219.9 ppb	17:20:30
1	Fe 238.204 Radial†	311.4	307.7	4987.7 ug/L	4987.7 ppb	17:20:30
1	K 766.490 Radial†	28550.6	26522.5	5075.1 ug/L	5075.1 ppb	17:20:10
1	Mg 279.077 IEC†	100.7	102.1	5387.5 ug/L	5387.5 ppb	17:20:30
1	Na 589.592 Radial†	30388.3	32074.4	9980.4 ug/L	9980.4 ppb	17:20:10
1	Sr 421.552†	69841.4	71635.5	498.30 ug/L	498.30 ppb	17:20:10
1	Sc 361.383	914458.0	914458.0	103.91 %		17:21:27
1	Y 371.029	757770.0	757770.0	99.623 %		17:21:27
1	Ag 328.068†	107233.7	102967.3	481.48 ug/L	481.48 ppb	17:21:32
1	As 188.979†	1094.3	1073.1	481.33 ug/L	481.33 ppb	17:21:52
1	B 249.677†	19503.0	19047.7	464.66 ug/L	464.66 ppb	17:21:32
1	Ba 233.527†	63282.1	60891.6	479.83 ug/L	479.83 ppb	17:21:32
1	Be 313.107†	1337680.4	1290939.9	483.42 ug/L	483.42 ppb	17:21:27
1	Cd 226.502†	43119.1	41673.9	484.17 ug/L	484.17 ppb	17:21:32
1	Co 228.616†	23812.2	22981.6	482.77 ug/L	482.77 ppb	17:21:32
1	Cr 267.716†	44414.7	42659.5	479.63 ug/L	479.63 ppb	17:21:32
1	Cu 324.752†	167479.3	155226.7	472.96 ug/L	472.96 ppb	17:21:32
1	Mn 257.610†	442670.2	425547.5	485.08 ug/L	485.08 ppb	17:21:27
1	Mo 202.031†	6776.4	6516.9	480.45 ug/L	480.45 ppb	17:21:52
1	Ni 231.604†	19771.8	18945.6	483.20 ug/L	483.20 ppb	17:21:32
1	P 214.914†	4368.7	3998.6	2312.6 ug/L	2312.6 ppb	17:21:52
1	Pb 220.353†	4040.9	3827.8	475.07 ug/L	475.07 ppb	17:21:52
1	S 181.975 Axial†	761.0	696.6	981.19 ug/L	981.19 ppb	17:21:52
1	Sb 206.836†	1443.9	1350.5	493.86 ug/L	493.86 ppb	17:21:52
1	Se 196.026†	738.1	735.1	500.05 ug/L	500.05 ppb	17:21:52
1	Si 251.611†	78050.8	74551.2	2409.2 ug/L	2409.2 ppb	17:21:32
1	Sn 189.927†	2799.4	2684.7	484.78 ug/L	484.78 ppb	17:21:52
1	Ti 334.940†	312777.2	302426.2	476.39 ug/L	476.39 ppb	17:21:32
1	Tl 190.801†	1511.3	1481.9	479.90 ug/L	479.90 ppb	17:21:52
1	U 409.014†	14350.5	16712.7	465.05 ug/L	465.05 ppb	17:21:32
1	V 292.402†	69341.2	68202.6	482.83 ug/L	482.83 ppb	17:21:32
1	Zn 213.857†	50721.0	48074.3	480.87 ug/L	480.87 ppb	17:21:32
1	SiO2†	78865.2	75311.5	5215.6 ug/L	5215.6 ppb	17:23:00
2	Sc Radial	3803.1	3803.1	98.6 %		17:20:55
2	Y RADIAL	4078.3	4078.3	91.61 %		17:20:35
2	Al 396.153Radial†	5075.3	5262.3	4921.9 ug/L	4921.9 ppb	17:20:35
2	Ca 317.933Radial†	2363.7	2378.6	5187.0 ug/L	5187.0 ppb	17:20:55
2	Fe 238.204 Radial†	318.7	311.5	5048.7 ug/L	5048.7 ppb	17:20:55
2	K 766.490 Radial†	27589.7	25215.5	4824.9 ug/L	4824.9 ppb	17:20:35
2	Mg 279.077 IEC†	100.2	100.5	5302.0 ug/L	5302.0 ppb	17:20:55
2	Na 589.592 Radial†	29174.5	30489.5	9487.2 ug/L	9487.2 ppb	17:20:35
2	Sr 421.552†	67143.1	68085.4	473.61 ug/L	473.61 ppb	17:20:35
2	Sc 361.383	904863.7	904863.7	102.82 %		17:21:58
2	Y 371.029	749364.8	749364.8	98.518 %		17:21:58

2	Ag 328.068†	106066.9	102926.8	481.31 ug/L	481.31 ppb	17:22:03
2	As 188.979†	1108.8	1098.3	492.53 ug/L	492.53 ppb	17:22:23
2	B 249.677†	19277.0	19026.8	464.14 ug/L	464.14 ppb	17:22:03
2	Ba 233.527†	62857.0	61123.9	481.65 ug/L	481.65 ppb	17:22:03
2	Be 313.107†	1323255.3	1290560.1	483.28 ug/L	483.28 ppb	17:21:58
2	Cd 226.502†	42837.6	41840.2	486.10 ug/L	486.10 ppb	17:22:03
2	Co 228.616†	23599.2	23017.5	483.54 ug/L	483.54 ppb	17:22:03
2	Cr 267.716†	44171.1	42875.9	482.06 ug/L	482.06 ppb	17:22:03
2	Cu 324.752†	165127.0	154647.9	471.20 ug/L	471.20 ppb	17:22:03
2	Mn 257.610†	438992.1	426487.3	486.16 ug/L	486.16 ppb	17:21:58
2	Mo 202.031†	6806.3	6615.2	487.70 ug/L	487.70 ppb	17:22:23
2	Ni 231.604†	19638.1	19017.3	485.03 ug/L	485.03 ppb	17:22:03
2	P 214.914†	4414.7	4087.9	2366.7 ug/L	2366.7 ppb	17:22:23
2	Pb 220.353†	4059.6	3887.2	482.38 ug/L	482.38 ppb	17:22:23
2	S 181.975 Axial†	759.2	702.6	989.73 ug/L	989.73 ppb	17:22:23
2	Sb 206.836†	1456.0	1377.1	503.54 ug/L	503.54 ppb	17:22:23
2	Se 196.026†	743.1	747.5	508.37 ug/L	508.37 ppb	17:22:23
2	Si 251.611†	77250.4	74569.2	2409.7 ug/L	2409.7 ppb	17:22:03
2	Sn 189.927†	2826.0	2739.2	494.59 ug/L	494.59 ppb	17:22:23
2	Ti 334.940†	309305.5	302241.3	476.11 ug/L	476.11 ppb	17:22:03
2	Tl 190.801†	1527.0	1512.6	489.77 ug/L	489.77 ppb	17:22:23
2	U 409.014†	14028.5	16546.0	460.38 ug/L	460.38 ppb	17:22:03
2	V 292.402†	68392.5	67987.5	481.41 ug/L	481.41 ppb	17:22:03
2	Zn 213.857†	50271.0	48154.2	481.66 ug/L	481.66 ppb	17:22:03
2	SiO2†	78197.8	75467.2	5226.2 ug/L	5226.2 ppb	17:23:05
3	Sc Radial	3784.4	3784.4	98.1 %		17:21:20
3	Y RADIAL	4304.8	4304.8	96.70 %		17:21:00
3	Al 396.153Radial†	5301.4	5518.1	5162.5 ug/L	5162.5 ppb	17:21:00
3	Ca 317.933Radial†	2342.4	2368.6	5165.3 ug/L	5165.3 ppb	17:21:20
3	Fe 238.204 Radial†	312.2	306.5	4967.2 ug/L	4967.2 ppb	17:21:20
3	K 766.490 Radial†	28619.1	26402.5	5052.1 ug/L	5052.1 ppb	17:21:00
3	Mg 279.077 IEC†	97.4	98.1	5174.1 ug/L	5174.1 ppb	17:21:20
3	Na 589.592 Radial†	30738.2	32228.9	10028 ug/L	10028 ppb	17:21:00
3	Sr 421.552†	70709.5	72055.9	501.23 ug/L	501.23 ppb	17:21:00
3	Sc 361.383	910747.9	910747.9	103.49 %		17:22:29
3	Y 371.029	753330.4	753330.4	99.040 %		17:22:29
3	Ag 328.068†	106252.3	102439.4	479.02 ug/L	479.02 ppb	17:22:34
3	As 188.979†	1114.5	1096.8	491.85 ug/L	491.85 ppb	17:22:55
3	B 249.677†	19363.0	18988.9	463.23 ug/L	463.23 ppb	17:22:34
3	Ba 233.527†	62843.9	60716.2	478.44 ug/L	478.44 ppb	17:22:34
3	Be 313.107†	1329133.4	1287925.0	482.29 ug/L	482.29 ppb	17:22:29
3	Cd 226.502†	42815.2	41549.3	482.72 ug/L	482.72 ppb	17:22:34
3	Co 228.616†	23597.9	22868.0	480.40 ug/L	480.40 ppb	17:22:34
3	Cr 267.716†	44054.6	42485.7	477.68 ug/L	477.68 ppb	17:22:34
3	Cu 324.752†	165677.2	154141.9	469.65 ug/L	469.65 ppb	17:22:34
3	Mn 257.610†	440896.7	425569.2	485.11 ug/L	485.11 ppb	17:22:29
3	Mo 202.031†	6788.9	6555.6	483.30 ug/L	483.30 ppb	17:22:55
3	Ni 231.604†	19644.5	18900.0	482.04 ug/L	482.04 ppb	17:22:34
3	P 214.914†	4391.1	4037.4	2336.7 ug/L	2336.7 ppb	17:22:55
3	Pb 220.353†	4043.1	3845.8	477.31 ug/L	477.31 ppb	17:22:55
3	S 181.975 Axial†	764.2	702.6	989.67 ug/L	989.67 ppb	17:22:55
3	Sb 206.836†	1460.5	1372.3	501.66 ug/L	501.66 ppb	17:22:55
3	Se 196.026†	734.8	734.8	499.78 ug/L	499.78 ppb	17:22:55
3	Si 251.611†	77357.7	74187.5	2397.4 ug/L	2397.4 ppb	17:22:34
3	Sn 189.927†	2809.1	2705.1	488.44 ug/L	488.44 ppb	17:22:55
3	Ti 334.940†	309902.2	300874.3	473.96 ug/L	473.96 ppb	17:22:34
3	Tl 190.801†	1525.2	1501.3	486.13 ug/L	486.13 ppb	17:22:55
3	U 409.014†	14282.1	16703.0	464.78 ug/L	464.78 ppb	17:22:34
3	V 292.402†	68712.9	67867.2	480.53 ug/L	480.53 ppb	17:22:34
3	Zn 213.857†	50258.8	47826.5	478.38 ug/L	478.38 ppb	17:22:34
3	SiO2†	78510.1	75277.6	5213.2 ug/L	5213.2 ppb	17:23:10

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	910023.2	103.40 %	0.550			0.53%
Sc Radial	3782.5	98.1 %	0.56			0.57%
Y 371.029	753488.4	99.060 %	0.5528			0.56%
Y RADIAL	4183.6	93.98 %	2.563			2.73%
Ag 328.068†	102777.9	480.60 ug/L	1.378	480.60 ppb	1.378	0.29%



QC value within limits for Ag 328.068 Recovery = 96.12%						
Al 396.153Radial†	5437.7	5086.8 ug/L	143.05	5086.8 ppb	143.05	2.81%
QC value within limits for Al 396.153Radial Recovery = 101.74%						
As 188.979†	1089.4	488.57 ug/L	6.280	488.57 ppb	6.280	1.29%
QC value within limits for As 188.979 Recovery = 97.71%						
B 249.677†	19021.1	464.01 ug/L	0.725	464.01 ppb	0.725	0.16%
QC value within limits for B 249.677 Recovery = 92.80%						
Ba 233.527†	60910.5	479.97 ug/L	1.610	479.97 ppb	1.610	0.34%
QC value within limits for Ba 233.527 Recovery = 95.99%						
Be 313.107†	1289808.3	483.00 ug/L	0.617	483.00 ppb	0.617	0.13%
QC value within limits for Be 313.107 Recovery = 96.60%						
Ca 317.933Radial†	2380.3	5190.7 ug/L	27.45	5190.7 ppb	27.45	0.53%
QC value within limits for Ca 317.933Radial Recovery = 103.81%						
Cd 226.502†	41687.8	484.33 ug/L	1.692	484.33 ppb	1.692	0.35%
QC value within limits for Cd 226.502 Recovery = 96.87%						
Co 228.616†	22955.7	482.24 ug/L	1.639	482.24 ppb	1.639	0.34%
QC value within limits for Co 228.616 Recovery = 96.45%						
Cr 267.716†	42673.7	479.79 ug/L	2.199	479.79 ppb	2.199	0.46%
QC value within limits for Cr 267.716 Recovery = 95.96%						
Cu 324.752†	154672.2	471.27 ug/L	1.654	471.27 ppb	1.654	0.35%
QC value within limits for Cu 324.752 Recovery = 94.25%						
Fe 238.204 Radial†	308.6	5001.2 ug/L	42.43	5001.2 ppb	42.43	0.85%
QC value within limits for Fe 238.204 Radial Recovery = 100.02%						
K 766.490 Radial†	26046.8	4984.0 ug/L	138.31	4984.0 ppb	138.31	2.78%
QC value within limits for K 766.490 Radial Recovery = 99.68%						
Mg 279.077 IEC†	100.2	5287.9 ug/L	107.42	5287.9 ppb	107.42	2.03%
QC value within limits for Mg 279.077 IEC Recovery = 105.76%						
Mn 257.610†	425868.0	485.45 ug/L	0.615	485.45 ppb	0.615	0.13%
QC value within limits for Mn 257.610 Recovery = 97.09%						
Mo 202.031†	6562.6	483.81 ug/L	3.649	483.81 ppb	3.649	0.75%
QC value within limits for Mo 202.031 Recovery = 96.76%						
Na 589.592 Radial†	31597.6	9832.0 ug/L	299.58	9832.0 ppb	299.58	3.05%
QC value within limits for Na 589.592 Radial Recovery = 98.32%						
Ni 231.604†	18954.3	483.43 ug/L	1.508	483.43 ppb	1.508	0.31%
QC value within limits for Ni 231.604 Recovery = 96.69%						
P 214.914†	4041.3	2338.7 ug/L	27.08	2338.7 ppb	27.08	1.16%
QC value within limits for P 214.914 Recovery = 93.55%						
Pb 220.353†	3853.6	478.25 ug/L	3.744	478.25 ppb	3.744	0.78%
QC value within limits for Pb 220.353 Recovery = 95.65%						
S 181.975 Axial†	700.6	986.86 ug/L	4.915	986.86 ppb	4.915	0.50%
QC value within limits for S 181.975 Axial Recovery = 98.69%						
Sb 206.836†	1366.7	499.69 ug/L	5.136	499.69 ppb	5.136	1.03%
QC value within limits for Sb 206.836 Recovery = 99.94%						
Se 196.026†	739.1	502.73 ug/L	4.883	502.73 ppb	4.883	0.97%
QC value within limits for Se 196.026 Recovery = 100.55%						
Si 251.611†	74436.0	2405.4 ug/L	6.97	2405.4 ppb	6.97	0.29%
QC value within limits for Si 251.611 Recovery = 96.22%						
Sn 189.927†	2709.7	489.27 ug/L	4.958	489.27 ppb	4.958	1.01%
QC value within limits for Sn 189.927 Recovery = 97.85%						
Sr 421.552†	70592.3	491.05 ug/L	15.174	491.05 ppb	15.174	3.09%
QC value within limits for Sr 421.552 Recovery = 98.21%						
Ti 334.940†	301847.3	475.49 ug/L	1.330	475.49 ppb	1.330	0.28%
QC value within limits for Ti 334.940 Recovery = 95.10%						
Tl 190.801†	1498.6	485.26 ug/L	4.991	485.26 ppb	4.991	1.03%
QC value within limits for Tl 190.801 Recovery = 97.05%						
U 409.014†	16653.9	463.40 ug/L	2.622	463.40 ppb	2.622	0.57%
QC value within limits for U 409.014 Recovery = 92.68%						
V 292.402†	68019.1	481.59 ug/L	1.161	481.59 ppb	1.161	0.24%
QC value within limits for V 292.402 Recovery = 96.32%						
Zn 213.857†	48018.4	480.30 ug/L	1.709	480.30 ppb	1.709	0.36%
QC value within limits for Zn 213.857 Recovery = 96.06%						
SiO2†	75352.1	5218.3 ug/L	6.94	5218.3 ppb	6.94	0.13%
QC value within limits for SiO2 Recovery = 97.58%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 17:25:20

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	3750.3	3750.3	97.2 %		17:27:32
1	Y RADIAL	4212.8	4212.8	94.63 %		17:27:12
1	Al 396.153Radial†	-138.8	-27.7	-26.055 ug/L	-26.055 ppb	17:27:12
1	Ca 317.933Radial†	16.8	-1.4	-3.0199 ug/L	-3.0199 ppb	17:27:32
1	Fe 238.204 Radial†	12.4	1.1	18.076 ug/L	18.076 ppb	17:27:32
1	K 766.490 Radial†	2863.2	179.5	34.396 ug/L	34.396 ppb	17:27:12
1	Mg 279.077 IEC†	1.7	0.6	29.971 ug/L	29.971 ppb	17:27:32
1	Na 589.592 Radial†	-917.6	-42.0	-13.057 ug/L	-13.057 ppb	17:27:12
1	Sr 421.552†	-24.4	-33.8	-0.2352 ug/L	-0.2352 ppb	17:27:12
1	Sc 361.383	912422.9	912422.9	103.68 %		17:28:29
1	Y 371.029	767919.6	767919.6	100.96 %		17:28:29
1	Ag 328.068†	222.4	-19.7	-0.0856 ug/L	-0.0856 ppb	17:28:34
1	As 188.979†	-19.0	1.6	0.7337 ug/L	0.7337 ppb	17:28:54
1	B 249.677†	-429.1	-135.9	-3.3334 ug/L	-3.3334 ppb	17:28:54
1	Ba 233.527†	6.7	-4.6	-0.0354 ug/L	-0.0354 ppb	17:28:54
1	Be 313.107†	-3543.0	140.9	0.0525 ug/L	0.0525 ppb	17:28:34
1	Cd 226.502†	-177.8	4.7	0.0519 ug/L	0.0519 ppb	17:28:54
1	Co 228.616†	-65.9	1.3	0.0296 ug/L	0.0296 ppb	17:28:54
1	Cr 267.716†	74.5	-13.2	-0.1468 ug/L	-0.1468 ppb	17:28:54
1	Cu 324.752†	5918.7	-246.3	-0.7493 ug/L	-0.7493 ppb	17:28:34
1	Mn 257.610†	466.4	-27.8	-0.0311 ug/L	-0.0311 ppb	17:28:54
1	Mo 202.031†	17.2	12.0	0.8816 ug/L	0.8816 ppb	17:28:54
1	Ni 231.604†	65.7	-19.4	-0.4948 ug/L	-0.4948 ppb	17:28:54
1	P 214.914†	221.6	8.0	4.9258 ug/L	4.9258 ppb	17:28:54
1	Pb 220.353†	-28.3	-88.5	-10.951 ug/L	-10.951 ppb	17:28:54
1	S 181.975 Axial†	36.4	-0.7	-0.9719 ug/L	-0.9719 ppb	17:28:54
1	Sb 206.836†	44.0	3.4	1.2561 ug/L	1.2561 ppb	17:28:54
1	Se 196.026†	-25.7	-0.1	0.0127 ug/L	0.0127 ppb	17:28:54
1	Si 251.611†	587.3	1.7	0.0454 ug/L	0.0454 ppb	17:28:54
1	Sn 189.927†	19.5	9.4	1.6966 ug/L	1.6966 ppb	17:28:54
1	Ti 334.940†	-1494.5	-31.7	-0.0526 ug/L	-0.0526 ppb	17:28:34
1	Tl 190.801†	-34.1	-5.4	-1.7467 ug/L	-1.7467 ppb	17:28:54
1	U 409.014†	-3015.3	-6.5	-0.1846 ug/L	-0.1846 ppb	17:28:29
1	V 292.402†	-1520.9	1.7	0.0222 ug/L	0.0222 ppb	17:28:34
1	Zn 213.857†	692.1	-71.9	-0.7246 ug/L	-0.7246 ppb	17:28:54
1	SiO2†	573.2	-35.4	-2.4794 ug/L	-2.4794 ppb	17:30:00
2	Sc Radial	3840.8	3840.8	99.6 %		17:27:57
2	Y RADIAL	4294.5	4294.5	96.47 %		17:27:37
2	Al 396.153Radial†	-133.9	-19.4	-18.198 ug/L	-18.198 ppb	17:27:37
2	Ca 317.933Radial†	16.8	-1.8	-3.9098 ug/L	-3.9098 ppb	17:27:57
2	Fe 238.204 Radial†	9.6	-2.0	-32.093 ug/L	-32.093 ppb	17:27:57
2	K 766.490 Radial†	2868.2	115.3	22.091 ug/L	22.091 ppb	17:27:37
2	Mg 279.077 IEC†	5.0	3.8	200.78 ug/L	200.78 ppb	17:27:57
2	Na 589.592 Radial†	-965.3	-67.6	-21.050 ug/L	-21.050 ppb	17:27:37
2	Sr 421.552†	65.4	56.9	0.3959 ug/L	0.3959 ppb	17:27:37
2	Sc 361.383	924671.0	924671.0	105.07 %		17:28:59
2	Y 371.029	777041.0	777041.0	102.16 %		17:28:59
2	Ag 328.068†	281.6	33.8	0.1469 ug/L	0.1469 ppb	17:29:04
2	As 188.979†	-29.2	-7.9	-3.5234 ug/L	-3.5234 ppb	17:29:24
2	B 249.677†	-467.4	-166.8	-4.0851 ug/L	-4.0851 ppb	17:29:24
2	Ba 233.527†	-10.8	-21.3	-0.1669 ug/L	-0.1669 ppb	17:29:24
2	Be 313.107†	-3680.3	55.4	0.0202 ug/L	0.0202 ppb	17:29:04
2	Cd 226.502†	-175.8	8.9	0.1065 ug/L	0.1065 ppb	17:29:24
2	Co 228.616†	-52.5	14.9	0.3138 ug/L	0.3138 ppb	17:29:24
2	Cr 267.716†	76.7	-12.1	-0.1393 ug/L	-0.1393 ppb	17:29:24
2	Cu 324.752†	6062.7	-184.9	-0.5669 ug/L	-0.5669 ppb	17:29:04
2	Mn 257.610†	483.0	-18.0	-0.0318 ug/L	-0.0318 ppb	17:29:24
2	Mo 202.031†	1.8	-3.0	-0.2232 ug/L	-0.2232 ppb	17:29:24
2	Ni 231.604†	57.3	-28.3	-0.7213 ug/L	-0.7213 ppb	17:29:24

2	P 214.914†	207.4	-8.4	-4.9271 ug/L	-4.9271 ppb	17:29:24
2	Pb 220.353†	-37.1	-96.5	-11.937 ug/L	-11.937 ppb	17:29:24
2	S 181.975 Axial†	48.5	10.3	14.578 ug/L	14.578 ppb	17:29:24
2	Sb 206.836†	34.7	-5.9	-2.0922 ug/L	-2.0922 ppb	17:29:24
2	Se 196.026†	-31.3	-5.1	-3.4326 ug/L	-3.4326 ppb	17:29:24
2	Si 251.611†	553.8	-37.7	-1.2172 ug/L	-1.2172 ppb	17:29:24
2	Sn 189.927†	13.0	3.0	0.5353 ug/L	0.5353 ppb	17:29:24
2	Ti 334.940†	-1642.8	-153.7	-0.2605 ug/L	-0.2605 ppb	17:29:04
2	Tl 190.801†	-30.8	-1.8	-0.5949 ug/L	-0.5949 ppb	17:29:24
2	U 409.014†	-2915.6	126.9	3.5481 ug/L	3.5481 ppb	17:28:59
2	V 292.402†	-1454.1	84.8	0.6047 ug/L	0.6047 ppb	17:29:04
2	Zn 213.857†	701.3	-72.0	-0.7169 ug/L	-0.7169 ppb	17:29:24
2	SiO2†	588.9	-27.7	-1.9167 ug/L	-1.9167 ppb	17:30:05
3	Sc Radial	3835.1	3835.1	99.4 %		17:28:22
3	Y RADIAL	4312.0	4312.0	96.86 %		17:28:02
3	Al 396.153Radial†	-134.1	-19.8	-18.604 ug/L	-18.604 ppb	17:28:02
3	Ca 317.933Radial†	19.2	0.7	1.4863 ug/L	1.4863 ppb	17:28:22
3	Fe 238.204 Radial†	10.4	-1.2	-19.730 ug/L	-19.730 ppb	17:28:22
3	K 766.490 Radial†	2828.6	79.6	15.267 ug/L	15.267 ppb	17:28:02
3	Mg 279.077 IEC†	0.7	-0.4	-22.271 ug/L	-22.271 ppb	17:28:22
3	Na 589.592 Radial†	-969.5	-73.3	-22.819 ug/L	-22.819 ppb	17:28:02
3	Sr 421.552†	-0.4	-9.1	-0.0636 ug/L	-0.0636 ppb	17:28:02
3	Sc 361.383	913095.5	913095.5	103.75 %		17:29:29
3	Y 371.029	766831.1	766831.1	100.81 %		17:29:29
3	Ag 328.068†	287.4	42.9	0.1888 ug/L	0.1888 ppb	17:29:34
3	As 188.979†	-15.6	4.9	2.1781 ug/L	2.1781 ppb	17:29:54
3	B 249.677†	-452.7	-158.4	-3.8780 ug/L	-3.8780 ppb	17:29:54
3	Ba 233.527†	-6.2	-17.0	-0.1346 ug/L	-0.1346 ppb	17:29:54
3	Be 313.107†	-3590.0	98.1	0.0368 ug/L	0.0368 ppb	17:29:34
3	Cd 226.502†	-173.5	9.0	0.1070 ug/L	0.1070 ppb	17:29:54
3	Co 228.616†	-66.4	0.8	0.0185 ug/L	0.0185 ppb	17:29:54
3	Cr 267.716†	68.0	-19.6	-0.2235 ug/L	-0.2235 ppb	17:29:54
3	Cu 324.752†	5891.0	-277.2	-0.8480 ug/L	-0.8480 ppb	17:29:34
3	Mn 257.610†	468.7	-25.9	-0.0306 ug/L	-0.0306 ppb	17:29:54
3	Mo 202.031†	8.4	3.4	0.2499 ug/L	0.2499 ppb	17:29:54
3	Ni 231.604†	82.3	-3.5	-0.0882 ug/L	-0.0882 ppb	17:29:54
3	P 214.914†	200.2	-12.8	-7.5278 ug/L	-7.5278 ppb	17:29:54
3	Pb 220.353†	-39.8	-99.5	-12.316 ug/L	-12.316 ppb	17:29:54
3	S 181.975 Axial†	39.5	2.2	3.1674 ug/L	3.1674 ppb	17:29:54
3	Sb 206.836†	35.8	-4.5	-1.5817 ug/L	-1.5817 ppb	17:29:54
3	Se 196.026†	-24.9	0.8	0.4430 ug/L	0.4430 ppb	17:29:54
3	Si 251.611†	563.4	-21.7	-0.7061 ug/L	-0.7061 ppb	17:29:54
3	Sn 189.927†	14.9	5.0	0.8982 ug/L	0.8982 ppb	17:29:54
3	Ti 334.940†	-1425.2	36.2	0.0572 ug/L	0.0572 ppb	17:29:34
3	Tl 190.801†	-32.6	-4.0	-1.2699 ug/L	-1.2699 ppb	17:29:54
3	U 409.014†	-2848.0	156.9	4.3831 ug/L	4.3831 ppb	17:29:29
3	V 292.402†	-1556.3	-31.4	-0.2046 ug/L	-0.2046 ppb	17:29:34
3	Zn 213.857†	695.3	-69.2	-0.6944 ug/L	-0.6944 ppb	17:29:54
3	SiO2†	586.1	-23.3	-1.6263 ug/L	-1.6263 ppb	17:30:10

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916729.8	104.17 %		0.782			0.75%
Sc Radial	3808.7	98.7 %		1.31			1.33%
Y 371.029	770597.2	101.31 %		0.737			0.73%
Y RADIAL	4273.1	95.99 %		1.190			1.24%
Ag 328.068†	19.0	0.0834 ug/L		0.14783	0.0834 ppb	0.14783	177.35%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-22.3	-20.952 ug/L		4.4234	-20.952 ppb	4.4234	21.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.4	-0.2039 ug/L		2.96411	-0.2039 ppb	2.96411	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-153.7	-3.7655 ug/L		0.38826	-3.7655 ppb	0.38826	10.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-14.3	-0.1123 ug/L		0.06855	-0.1123 ppb	0.06855	61.03%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	98.2	0.0365 ug/L		0.01618	0.0365 ppb	0.01618	44.34%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.8	-1.8145 ug/L		2.89295	-1.8145 ppb	2.89295	159.44%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	7.5	0.0884 ug/L	0.03168	0.0884 ppb	0.03168	35.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.7	0.1206 ug/L	0.16738	0.1206 ppb	0.16738	138.77%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-15.0	-0.1699 ug/L	0.04659	-0.1699 ppb	0.04659	27.43%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-236.1	-0.7214 ug/L	0.14262	-0.7214 ppb	0.14262	19.77%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.7	-11.249 ug/L	26.1379	-11.249 ppb	26.1379	232.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	124.8	23.918 ug/L	9.6942	23.918 ppb	9.6942	40.53%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.3	69.492 ug/L	116.6578	69.492 ppb	116.6578	167.87%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-23.9	-0.0312 ug/L	0.00063	-0.0312 ppb	0.00063	2.02%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.1	0.3028 ug/L	0.55429	0.3028 ppb	0.55429	183.08%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-61.0	-18.975 ug/L	5.2010	-18.975 ppb	5.2010	27.41%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-17.0	-0.4348 ug/L	0.32077	-0.4348 ppb	0.32077	73.78%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.4	-2.5097 ug/L	6.56930	-2.5097 ppb	6.56930	261.76%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-94.8	-11.734 ug/L	0.7045	-11.734 ppb	0.7045	6.00%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.0	5.5911 ug/L	8.05329	5.5911 ppb	8.05329	144.04%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.4	-0.8059 ug/L	1.80390	-0.8059 ppb	1.80390	223.83%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.5	-0.9923 ug/L	2.12430	-0.9923 ppb	2.12430	214.08%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-19.2	-0.6260 ug/L	0.63515	-0.6260 ppb	0.63515	101.47%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	1.0434 ug/L	0.59409	1.0434 ppb	0.59409	56.94%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	4.6	0.0323 ug/L	0.32630	0.0323 ppb	0.32630	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-49.7	-0.0853 ug/L	0.16139	-0.0853 ppb	0.16139	189.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.7	-1.2038 ug/L	0.57873	-1.2038 ppb	0.57873	48.07%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	92.4	2.5822 ug/L	2.43222	2.5822 ppb	2.43222	94.19%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	18.4	0.1408 ug/L	0.41750	0.1408 ppb	0.41750	296.57%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-71.1	-0.7120 ug/L	0.01567	-0.7120 ppb	0.01567	2.20%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-28.8	-2.0075 ug/L	0.43377	-2.0075 ppb	0.43377	21.61%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 18:28:04

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	3778.1	3778.1	98.0 %		18:30:16
1	Y RADIAL	4206.8	4206.8	94.50 %		18:29:56
1	Al 396.153Radial†	5397.5	5625.2	5263.4 ug/L	5263.4 ppb	18:29:56
1	Ca 317.933Radial†	2379.1	2410.1	5255.7 ug/L	5255.7 ppb	18:30:16
1	Fe 238.204 Radial†	318.4	313.3	5078.1 ug/L	5078.1 ppb	18:30:16
1	K 766.490 Radial†	28870.4	26707.6	5110.4 ug/L	5110.4 ppb	18:29:56
1	Mg 279.077 IEC†	100.3	101.3	5343.2 ug/L	5343.2 ppb	18:30:16
1	Na 589.592 Radial†	31659.1	33221.2	10337 ug/L	10337 ppb	18:29:56
1	Sr 421.552†	72072.4	73567.2	511.74 ug/L	511.74 ppb	18:29:56
1	Sc 361.383	916641.6	916641.6	104.16 %		18:31:13
1	Y 371.029	759235.4	759235.4	99.816 %		18:31:13
1	Ag 328.068†	106847.1	102350.3	478.63 ug/L	478.63 ppb	18:31:19
1	As 188.979†	1101.6	1077.6	483.31 ug/L	483.31 ppb	18:31:39
1	B 249.677†	19355.3	18861.1	460.09 ug/L	460.09 ppb	18:31:19
1	Ba 233.527†	63062.1	60535.3	477.02 ug/L	477.02 ppb	18:31:19
1	Be 313.107†	1334948.5	1285250.1	481.29 ug/L	481.29 ppb	18:31:13
1	Cd 226.502†	42850.2	41316.9	480.01 ug/L	480.01 ppb	18:31:19
1	Co 228.616†	23596.9	22720.3	477.29 ug/L	477.29 ppb	18:31:19
1	Cr 267.716†	44305.4	42452.8	477.32 ug/L	477.32 ppb	18:31:19
1	Cu 324.752†	166549.2	153949.8	469.07 ug/L	469.07 ppb	18:31:19
1	Mn 257.610†	441402.3	423315.3	482.55 ug/L	482.55 ppb	18:31:13
1	Mo 202.031†	6749.4	6475.5	477.41 ug/L	477.41 ppb	18:31:39
1	Ni 231.604†	19710.9	18841.8	480.56 ug/L	480.56 ppb	18:31:19
1	P 214.914†	4341.1	3962.1	2291.4 ug/L	2291.4 ppb	18:31:39
1	Pb 220.353†	4021.5	3799.9	471.62 ug/L	471.62 ppb	18:31:39
1	S 181.975 Axial†	746.8	681.2	959.43 ug/L	959.43 ppb	18:31:39
1	Sb 206.836†	1438.3	1341.9	490.72 ug/L	490.72 ppb	18:31:39
1	Se 196.026†	735.7	731.1	497.68 ug/L	497.68 ppb	18:31:39
1	Si 251.611†	77486.6	73830.6	2385.9 ug/L	2385.9 ppb	18:31:19
1	Sn 189.927†	2793.7	2672.8	482.64 ug/L	482.64 ppb	18:31:39
1	Ti 334.940†	310922.3	299928.3	472.47 ug/L	472.47 ppb	18:31:19
1	Tl 190.801†	1522.9	1489.6	482.36 ug/L	482.36 ppb	18:31:39
1	U 409.014†	14237.5	16571.4	461.10 ug/L	461.10 ppb	18:31:19
1	V 292.402†	68899.5	67619.5	478.70 ug/L	478.70 ppb	18:31:19
1	Zn 213.857†	50402.3	47652.1	476.61 ug/L	476.61 ppb	18:31:19
1	SiO2†	78407.2	74691.0	5172.6 ug/L	5172.6 ppb	18:32:46
2	Sc Radial	3845.3	3845.3	99.7 %		18:30:41
2	Y RADIAL	4225.8	4225.8	94.93 %		18:30:21
2	Al 396.153Radial†	5236.5	5367.4	5021.1 ug/L	5021.1 ppb	18:30:21
2	Ca 317.933Radial†	2360.1	2348.6	5121.7 ug/L	5121.7 ppb	18:30:41
2	Fe 238.204 Radial†	314.2	303.5	4919.4 ug/L	4919.4 ppb	18:30:41
2	K 766.490 Radial†	28313.9	25634.9	4905.1 ug/L	4905.1 ppb	18:30:21
2	Mg 279.077 IEC†	98.6	97.8	5158.7 ug/L	5158.7 ppb	18:30:41
2	Na 589.592 Radial†	30402.1	31396.1	9769.3 ug/L	9769.3 ppb	18:30:21
2	Sr 421.552†	69795.6	69998.9	486.92 ug/L	486.92 ppb	18:30:21
2	Sc 361.383	912662.5	912662.5	103.70 %		18:31:44
2	Y 371.029	756660.4	756660.4	99.477 %		18:31:44
2	Ag 328.068†	107347.1	103279.7	482.92 ug/L	482.92 ppb	18:31:50
2	As 188.979†	1089.0	1070.0	479.93 ug/L	479.93 ppb	18:32:10
2	B 249.677†	19570.5	19149.7	467.18 ug/L	467.18 ppb	18:31:50
2	Ba 233.527†	63261.3	60991.3	480.61 ug/L	480.61 ppb	18:31:50
2	Be 313.107†	1341954.8	1297594.3	485.91 ug/L	485.91 ppb	18:31:44
2	Cd 226.502†	42975.2	41616.9	483.52 ug/L	483.52 ppb	18:31:50
2	Co 228.616†	23772.9	22988.8	482.92 ug/L	482.92 ppb	18:31:50
2	Cr 267.716†	44507.8	42833.4	481.58 ug/L	481.58 ppb	18:31:50
2	Cu 324.752†	167404.3	155471.5	473.70 ug/L	473.70 ppb	18:31:50
2	Mn 257.610†	442229.7	425960.8	485.55 ug/L	485.55 ppb	18:31:44
2	Mo 202.031†	6743.6	6498.1	479.06 ug/L	479.06 ppb	18:32:10
2	Ni 231.604†	19814.9	19024.6	485.22 ug/L	485.22 ppb	18:31:50

2	P 214.914†	4336.8	3976.1	2299.0 ug/L	2299.0 ppb	18:32:10
2	Pb 220.353†	3998.6	3794.6	470.94 ug/L	470.94 ppb	18:32:10
2	S 181.975 Axial†	759.6	696.7	981.34 ug/L	981.34 ppb	18:32:10
2	Sb 206.836†	1433.5	1343.3	491.27 ug/L	491.27 ppb	18:32:10
2	Se 196.026†	726.9	725.7	493.64 ug/L	493.64 ppb	18:32:10
2	Si 251.611†	77885.5	74539.7	2408.9 ug/L	2408.9 ppb	18:31:50
2	Sn 189.927†	2793.7	2684.5	484.73 ug/L	484.73 ppb	18:32:10
2	Ti 334.940†	312399.8	302654.5	476.76 ug/L	476.76 ppb	18:31:50
2	Tl 190.801†	1515.7	1489.0	482.18 ug/L	482.18 ppb	18:32:10
2	U 409.014†	14409.5	16796.8	467.40 ug/L	467.40 ppb	18:31:50
2	V 292.402†	69350.0	68342.4	483.80 ug/L	483.80 ppb	18:31:50
2	Zn 213.857†	50536.4	47992.4	480.04 ug/L	480.04 ppb	18:31:50
2	SiO2†	76934.7	73599.3	5096.8 ug/L	5096.8 ppb	18:32:51
3	Sc Radial	3791.5	3791.5	98.3 %		18:31:06
3	Y RADIAL	4386.1	4386.1	98.53 %		18:30:46
3	Al 396.153Radial†	5374.6	5582.5	5222.9 ug/L	5222.9 ppb	18:30:46
3	Ca 317.933Radial†	2349.1	2371.0	5170.6 ug/L	5170.6 ppb	18:31:06
3	Fe 238.204 Radial†	318.1	311.9	5055.2 ug/L	5055.2 ppb	18:31:06
3	K 766.490 Radial†	28980.6	26716.1	5112.1 ug/L	5112.1 ppb	18:30:46
3	Mg 279.077 IEC†	101.9	102.5	5408.0 ug/L	5408.0 ppb	18:31:06
3	Na 589.592 Radial†	31328.9	32771.7	10197 ug/L	10197 ppb	18:30:46
3	Sr 421.552†	71710.7	72940.5	507.38 ug/L	507.38 ppb	18:30:46
3	Sc 361.383	908768.9	908768.9	103.26 %		18:32:15
3	Y 371.029	752900.6	752900.6	98.983 %		18:32:15
3	Ag 328.068†	107603.5	103971.6	486.18 ug/L	486.18 ppb	18:32:21
3	As 188.979†	1112.6	1097.4	492.17 ug/L	492.17 ppb	18:32:41
3	B 249.677†	19633.3	19291.4	470.61 ug/L	470.61 ppb	18:32:21
3	Ba 233.527†	63602.3	61582.9	485.27 ug/L	485.27 ppb	18:32:21
3	Be 313.107†	1338902.0	1300182.2	486.89 ug/L	486.89 ppb	18:32:15
3	Cd 226.502†	43278.3	42087.9	488.98 ug/L	488.98 ppb	18:32:21
3	Co 228.616†	23853.4	23165.0	486.63 ug/L	486.63 ppb	18:32:21
3	Cr 267.716†	44626.3	43132.0	484.94 ug/L	484.94 ppb	18:32:21
3	Cu 324.752†	168143.5	156879.0	477.99 ug/L	477.99 ppb	18:32:21
3	Mn 257.610†	442730.1	428272.5	488.19 ug/L	488.19 ppb	18:32:15
3	Mo 202.031†	6802.8	6583.3	485.35 ug/L	485.35 ppb	18:32:41
3	Ni 231.604†	19876.0	19165.5	488.82 ug/L	488.82 ppb	18:32:21
3	P 214.914†	4391.5	4047.0	2340.8 ug/L	2340.8 ppb	18:32:41
3	Pb 220.353†	4046.6	3857.6	478.78 ug/L	478.78 ppb	18:32:41
3	S 181.975 Axial†	758.4	698.6	983.98 ug/L	983.98 ppb	18:32:41
3	Sb 206.836†	1441.1	1356.6	496.16 ug/L	496.16 ppb	18:32:41
3	Se 196.026†	746.6	747.8	508.58 ug/L	508.58 ppb	18:32:41
3	Si 251.611†	78358.9	75319.9	2434.1 ug/L	2434.1 ppb	18:32:21
3	Sn 189.927†	2812.2	2713.9	490.04 ug/L	490.04 ppb	18:32:41
3	Ti 334.940†	313631.0	305137.4	480.65 ug/L	480.65 ppb	18:32:21
3	Tl 190.801†	1544.3	1523.0	493.15 ug/L	493.15 ppb	18:32:41
3	U 409.014†	14417.5	16864.1	469.26 ug/L	469.26 ppb	18:32:21
3	V 292.402†	69547.7	68820.4	487.21 ug/L	487.21 ppb	18:32:21
3	Zn 213.857†	51009.0	48658.8	486.72 ug/L	486.72 ppb	18:32:21
3	SiO2†	77139.1	74115.0	5132.4 ug/L	5132.4 ppb	18:32:56

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912691.0	103.71 %	0.447			0.43%
Sc Radial	3805.0	98.7 %	0.92			0.93%
Y 371.029	756265.5	99.426 %	0.4188			0.42%
Y RADIAL	4272.9	95.98 %	2.212			2.30%
Ag 328.068†	103200.6	482.58 ug/L	3.789	482.58 ppb	3.789	0.79%
QC value within limits for Ag 328.068 Recovery = 96.52%						
Al 396.153Radial†	5525.0	5169.1 ug/L	129.79	5169.1 ppb	129.79	2.51%
QC value within limits for Al 396.153Radial Recovery = 103.38%						
As 188.979†	1081.7	485.14 ug/L	6.322	485.14 ppb	6.322	1.30%
QC value within limits for As 188.979 Recovery = 97.03%						
B 249.677†	19100.7	465.96 ug/L	5.365	465.96 ppb	5.365	1.15%
QC value within limits for B 249.677 Recovery = 93.19%						
Ba 233.527†	61036.5	480.97 ug/L	4.138	480.97 ppb	4.138	0.86%
QC value within limits for Ba 233.527 Recovery = 96.19%						
Be 313.107†	1294342.2	484.69 ug/L	2.990	484.69 ppb	2.990	0.62%
QC value within limits for Be 313.107 Recovery = 96.94%						
Ca 317.933Radial†	2376.6	5182.6 ug/L	67.83	5182.6 ppb	67.83	1.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.65%

Cd 226.502†	41673.9	484.17 ug/L	4.520	484.17 ppb	4.520	0.93%
QC value within limits for Cd 226.502 Recovery = 96.83%						
Co 228.616†	22958.1	482.28 ug/L	4.704	482.28 ppb	4.704	0.98%
QC value within limits for Co 228.616 Recovery = 96.46%						
Cr 267.716†	42806.1	481.28 ug/L	3.823	481.28 ppb	3.823	0.79%
QC value within limits for Cr 267.716 Recovery = 96.26%						
Cu 324.752†	155433.4	473.59 ug/L	4.461	473.59 ppb	4.461	0.94%
QC value within limits for Cu 324.752 Recovery = 94.72%						
Fe 238.204 Radial†	309.6	5017.6 ug/L	85.77	5017.6 ppb	85.77	1.71%
QC value within limits for Fe 238.204 Radial Recovery = 100.35%						
K 766.490 Radial†	26352.9	5042.5 ug/L	119.00	5042.5 ppb	119.00	2.36%
QC value within limits for K 766.490 Radial Recovery = 100.85%						
Mg 279.077 IEC†	100.5	5303.3 ug/L	129.32	5303.3 ppb	129.32	2.44%
QC value within limits for Mg 279.077 IEC Recovery = 106.07%						
Mn 257.610†	425849.5	485.43 ug/L	2.823	485.43 ppb	2.823	0.58%
QC value within limits for Mn 257.610 Recovery = 97.09%						
Mo 202.031†	6519.0	480.61 ug/L	4.190	480.61 ppb	4.190	0.87%
QC value within limits for Mo 202.031 Recovery = 96.12%						
Na 589.592 Radial†	32463.0	10101 ug/L	295.9	10101 ppb	295.9	2.93%
QC value within limits for Na 589.592 Radial Recovery = 101.01%						
Ni 231.604†	19010.7	484.87 ug/L	4.140	484.87 ppb	4.140	0.85%
QC value within limits for Ni 231.604 Recovery = 96.97%						
P 214.914†	3995.1	2310.4 ug/L	26.56	2310.4 ppb	26.56	1.15%
QC value within limits for P 214.914 Recovery = 92.42%						
Pb 220.353†	3817.4	473.78 ug/L	4.342	473.78 ppb	4.342	0.92%
QC value within limits for Pb 220.353 Recovery = 94.76%						
S 181.975 Axial†	692.1	974.91 ug/L	13.478	974.91 ppb	13.478	1.38%
QC value within limits for S 181.975 Axial Recovery = 97.49%						
Sb 206.836†	1347.3	492.72 ug/L	2.996	492.72 ppb	2.996	0.61%
QC value within limits for Sb 206.836 Recovery = 98.54%						
Se 196.026†	734.9	499.97 ug/L	7.726	499.97 ppb	7.726	1.55%
QC value within limits for Se 196.026 Recovery = 99.99%						
Si 251.611†	74563.4	2409.6 ug/L	24.08	2409.6 ppb	24.08	1.00%
QC value within limits for Si 251.611 Recovery = 96.38%						
Sn 189.927†	2690.4	485.80 ug/L	3.814	485.80 ppb	3.814	0.79%
QC value within limits for Sn 189.927 Recovery = 97.16%						
Sr 421.552†	72168.9	502.01 ug/L	13.253	502.01 ppb	13.253	2.64%
QC value within limits for Sr 421.552 Recovery = 100.40%						
Ti 334.940†	302573.4	476.63 ug/L	4.094	476.63 ppb	4.094	0.86%
QC value within limits for Ti 334.940 Recovery = 95.33%						
Tl 190.801†	1500.5	485.89 ug/L	6.281	485.89 ppb	6.281	1.29%
QC value within limits for Tl 190.801 Recovery = 97.18%						
U 409.014†	16744.1	465.92 ug/L	4.277	465.92 ppb	4.277	0.92%
QC value within limits for U 409.014 Recovery = 93.18%						
V 292.402†	68260.7	483.23 ug/L	4.283	483.23 ppb	4.283	0.89%
QC value within limits for V 292.402 Recovery = 96.65%						
Zn 213.857†	48101.1	481.12 ug/L	5.138	481.12 ppb	5.138	1.07%
QC value within limits for Zn 213.857 Recovery = 96.22%						
SiO2†	74135.1	5133.9 ug/L	37.94	5133.9 ppb	37.94	0.74%
QC value within limits for SiO2 Recovery = 96.01%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 18:35:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3898.4	3898.4	101 %		18:37:18
1	Y RADIAL	4466.5	4466.5	100.3 %		18:36:58
1	Al 396.153Radial†	-135.7	-19.2	-18.088 ug/L	-18.088 ppb	18:36:58
1	Ca 317.933Radial†	15.5	-3.3	-7.2136 ug/L	-7.2136 ppb	18:37:18
1	Fe 238.204 Radial†	10.9	-0.9	-14.366 ug/L	-14.366 ppb	18:37:18
1	K 766.490 Radial†	2872.5	76.9	14.759 ug/L	14.759 ppb	18:36:58
1	Mg 279.077 IEC†	-0.5	-1.6	-86.911 ug/L	-86.911 ppb	18:37:18
1	Na 589.592 Radial†	-1029.1	-116.5	-36.248 ug/L	-36.248 ppb	18:36:58
1	Sr 421.552†	-7.4	-16.0	-0.1115 ug/L	-0.1115 ppb	18:36:58
1	Sc 361.383	831176.7	831176.7	94.444 %		18:38:15
1	Y 371.029	700343.2	700343.2	92.073 %		18:38:15
1	Ag 328.068†	299.5	82.9	0.3948 ug/L	0.3948 ppb	18:38:15
1	As 188.979†	-19.9	-1.2	-0.5332 ug/L	-0.5332 ppb	18:38:35
1	B 249.677†	-490.8	-241.7	-5.9205 ug/L	-5.9205 ppb	18:38:35
1	Ba 233.527†	16.1	6.0	0.0448 ug/L	0.0448 ppb	18:38:35
1	Be 313.107†	-3464.1	-109.7	-0.0418 ug/L	-0.0418 ppb	18:38:15
1	Cd 226.502†	-190.1	-25.0	-0.2937 ug/L	-0.2937 ppb	18:38:35
1	Co 228.616†	-65.4	-4.4	-0.0909 ug/L	-0.0909 ppb	18:38:35
1	Cr 267.716†	72.9	-7.9	-0.0826 ug/L	-0.0826 ppb	18:38:35
1	Cu 324.752†	5901.8	293.9	0.9063 ug/L	0.9063 ppb	18:38:15
1	Mn 257.610†	488.3	39.3	0.0469 ug/L	0.0469 ppb	18:38:35
1	Mo 202.031†	6.8	2.5	0.1836 ug/L	0.1836 ppb	18:38:35
1	Ni 231.604†	74.7	-3.7	-0.0956 ug/L	-0.0956 ppb	18:38:35
1	P 214.914†	197.8	3.6	2.0004 ug/L	2.0004 ppb	18:38:35
1	Pb 220.353†	-39.6	-103.1	-12.759 ug/L	-12.759 ppb	18:38:35
1	S 181.975 Axial†	38.1	4.5	6.2925 ug/L	6.2925 ppb	18:38:35
1	Sb 206.836†	40.7	4.1	1.4603 ug/L	1.4603 ppb	18:38:35
1	Se 196.026†	-26.4	-3.2	-2.1305 ug/L	-2.1305 ppb	18:38:35
1	Si 251.611†	574.3	43.4	1.4037 ug/L	1.4037 ppb	18:38:35
1	Sn 189.927†	14.9	6.3	1.1404 ug/L	1.1404 ppb	18:38:35
1	Ti 334.940†	-1537.5	-218.0	-0.3281 ug/L	-0.3281 ppb	18:38:15
1	Tl 190.801†	-28.6	-2.8	-0.9168 ug/L	-0.9168 ppb	18:38:35
1	U 409.014†	-3452.7	-754.0	-21.052 ug/L	-21.052 ppb	18:38:15
1	V 292.402†	-1501.2	-120.8	-0.8810 ug/L	-0.8810 ppb	18:38:15
1	Zn 213.857†	693.2	-5.5	-0.0535 ug/L	-0.0535 ppb	18:38:35
1	SiO2†	588.8	35.3	2.4430 ug/L	2.4430 ppb	18:39:31
2	Sc Radial	3847.1	3847.1	99.7 %		18:37:43
2	Y RADIAL	4457.8	4457.8	100.1 %		18:37:23
2	Al 396.153Radial†	-97.8	17.1	16.011 ug/L	16.011 ppb	18:37:23
2	Ca 317.933Radial†	15.9	-2.7	-5.9532 ug/L	-5.9532 ppb	18:37:43
2	Fe 238.204 Radial†	8.0	-3.6	-58.816 ug/L	-58.816 ppb	18:37:43
2	K 766.490 Radial†	2892.8	135.2	25.909 ug/L	25.909 ppb	18:37:23
2	Mg 279.077 IEC†	0.7	-0.5	-26.689 ug/L	-26.689 ppb	18:37:43
2	Na 589.592 Radial†	-984.1	-84.9	-26.418 ug/L	-26.418 ppb	18:37:23
2	Sr 421.552†	-10.4	-19.1	-0.1330 ug/L	-0.1330 ppb	18:37:23
2	Sc 361.383	912177.4	912177.4	103.65 %		18:38:40
2	Y 371.029	769834.7	769834.7	101.21 %		18:38:40
2	Ag 328.068†	289.0	44.7	0.1904 ug/L	0.1904 ppb	18:38:40
2	As 188.979†	-19.5	1.2	0.5000 ug/L	0.5000 ppb	18:39:00
2	B 249.677†	-503.0	-207.3	-5.0726 ug/L	-5.0726 ppb	18:39:00
2	Ba 233.527†	-7.9	-18.7	-0.1482 ug/L	-0.1482 ppb	18:39:00
2	Be 313.107†	-3560.5	123.1	0.0458 ug/L	0.0458 ppb	18:38:40
2	Cd 226.502†	-183.7	-1.0	-0.0058 ug/L	-0.0058 ppb	18:39:00
2	Co 228.616†	-55.6	11.2	0.2369 ug/L	0.2369 ppb	18:39:00
2	Cr 267.716†	49.4	-37.5	-0.4259 ug/L	-0.4259 ppb	18:39:00
2	Cu 324.752†	6038.5	-129.1	-0.3967 ug/L	-0.3967 ppb	18:38:40
2	Mn 257.610†	462.9	-31.0	-0.0401 ug/L	-0.0401 ppb	18:39:00
2	Mo 202.031†	11.3	6.2	0.4555 ug/L	0.4555 ppb	18:39:00
2	Ni 231.604†	68.8	-16.4	-0.4196 ug/L	-0.4196 ppb	18:39:00



2	P 214.914†	204.7	-8.3	-4.8524 ug/L	-4.8524 ppb	18:39:00
2	Pb 220.353†	-26.4	-86.7	-10.712 ug/L	-10.712 ppb	18:39:00
2	S 181.975 Axial†	44.5	7.1	9.9883 ug/L	9.9883 ppb	18:39:00
2	Sb 206.836†	39.4	-1.0	-0.3331 ug/L	-0.3331 ppb	18:39:00
2	Se 196.026†	-28.4	-2.7	-1.9540 ug/L	-1.9540 ppb	18:39:00
2	Si 251.611†	555.4	-28.9	-0.9414 ug/L	-0.9414 ppb	18:39:00
2	Sn 189.927†	8.4	-1.3	-0.2383 ug/L	-0.2383 ppb	18:39:00
2	Ti 334.940†	-1515.2	-52.0	-0.0805 ug/L	-0.0805 ppb	18:38:40
2	Tl 190.801†	-30.4	-1.9	-0.6055 ug/L	-0.6055 ppb	18:39:00
2	U 409.014†	-2997.6	9.8	0.2813 ug/L	0.2813 ppb	18:38:40
2	V 292.402†	-1482.2	38.7	0.2854 ug/L	0.2854 ppb	18:38:40
2	Zn 213.857†	686.8	-76.8	-0.7633 ug/L	-0.7633 ppb	18:39:00
2	SiO2†	613.2	3.4	0.2230 ug/L	0.2230 ppb	18:39:36
3	Sc Radial	3756.5	3756.5	97.4 %		18:38:08
3	Y RADIAL	4331.9	4331.9	97.31 %		18:37:48
3	Al 396.153Radial†	-139.4	-28.1	-26.435 ug/L	-26.435 ppb	18:37:48
3	Ca 317.933Radial†	18.4	0.2	0.4720 ug/L	0.4720 ppb	18:38:08
3	Fe 238.204 Radial†	10.4	-1.0	-15.976 ug/L	-15.976 ppb	18:38:08
3	K 766.490 Radial†	2922.9	236.0	45.234 ug/L	45.234 ppb	18:37:48
3	Mg 279.077 IEC†	-0.2	-1.4	-74.069 ug/L	-74.069 ppb	18:38:08
3	Na 589.592 Radial†	-1102.9	-230.7	-71.788 ug/L	-71.788 ppb	18:37:48
3	Sr 421.552†	11.6	3.1	0.0218 ug/L	0.0218 ppb	18:37:48
3	Sc 361.383	893997.1	893997.1	101.58 %		18:39:05
3	Y 371.029	754116.7	754116.7	99.143 %		18:39:05
3	Ag 328.068†	280.6	42.1	0.1931 ug/L	0.1931 ppb	18:39:05
3	As 188.979†	-32.5	-12.1	-5.3755 ug/L	-5.3755 ppb	18:39:25
3	B 249.677†	-484.2	-198.6	-4.8659 ug/L	-4.8659 ppb	18:39:25
3	Ba 233.527†	18.0	6.6	0.0509 ug/L	0.0509 ppb	18:39:25
3	Be 313.107†	-3501.3	111.5	0.0411 ug/L	0.0411 ppb	18:39:05
3	Cd 226.502†	-204.1	-24.7	-0.2864 ug/L	-0.2864 ppb	18:39:25
3	Co 228.616†	-62.5	3.4	0.0730 ug/L	0.0730 ppb	18:39:25
3	Cr 267.716†	58.3	-27.8	-0.3117 ug/L	-0.3117 ppb	18:39:25
3	Cu 324.752†	5819.6	-226.1	-0.6874 ug/L	-0.6874 ppb	18:39:05
3	Mn 257.610†	453.4	-31.3	-0.0342 ug/L	-0.0342 ppb	18:39:25
3	Mo 202.031†	14.3	9.4	0.6891 ug/L	0.6891 ppb	18:39:25
3	Ni 231.604†	86.2	2.1	0.0530 ug/L	0.0530 ppb	18:39:25
3	P 214.914†	201.4	-7.5	-4.3934 ug/L	-4.3934 ppb	18:39:25
3	Pb 220.353†	-21.5	-82.4	-10.193 ug/L	-10.193 ppb	18:39:25
3	S 181.975 Axial†	37.2	0.8	1.0692 ug/L	1.0692 ppb	18:39:25
3	Sb 206.836†	39.3	-0.3	-0.0973 ug/L	-0.0973 ppb	18:39:25
3	Se 196.026†	-25.0	0.1	0.0126 ug/L	0.0126 ppb	18:39:25
3	Si 251.611†	576.7	3.0	0.0875 ug/L	0.0875 ppb	18:39:25
3	Sn 189.927†	9.6	0.0	0.0029 ug/L	0.0029 ppb	18:39:25
3	Ti 334.940†	-1593.9	-159.1	-0.2425 ug/L	-0.2425 ppb	18:39:05
3	Tl 190.801†	-26.6	1.3	0.4120 ug/L	0.4120 ppb	18:39:25
3	U 409.014†	-3112.2	-161.9	-4.5186 ug/L	-4.5186 ppb	18:39:05
3	V 292.402†	-1538.3	-45.7	-0.3166 ug/L	-0.3166 ppb	18:39:05
3	Zn 213.857†	692.0	-58.2	-0.5849 ug/L	-0.5849 ppb	18:39:25
3	SiO2†	585.2	-12.1	-0.8619 ug/L	-0.8619 ppb	18:39:41

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	879117.1	99.891 %		4.8293			4.83%
Sc Radial	3834.0	99.4 %		1.86			1.87%
Y 371.029	741431.5	97.475 %		4.7909			4.91%
Y RADIAL	4418.7	99.26 %		1.692			1.70%
Ag 328.068†	56.6	0.2594 ug/L		0.11722	0.2594 ppb	0.11722	45.19%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-10.1	-9.5039 ug/L		22.48761	-9.5039 ppb	22.48761	236.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.0	-1.8029 ug/L		3.13683	-1.8029 ppb	3.13683	173.99%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-215.9	-5.2863 ug/L		0.55884	-5.2863 ppb	0.55884	10.57%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.0	-0.0175 ug/L		0.11320	-0.0175 ppb	0.11320	647.44%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	41.6	0.0150 ug/L		0.04924	0.0150 ppb	0.04924	327.40%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.9	-4.2316 ug/L		4.12189	-4.2316 ppb	4.12189	97.41%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502† -16.9 -0.1953 ug/L 0.16413 -0.1953 ppb 0.16413 84.04%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 3.4 0.0730 ug/L 0.16391 0.0730 ppb 0.16391 224.57%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† -24.4 -0.2734 ug/L 0.17479 -0.2734 ppb 0.17479 63.93%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -20.5 -0.0592 ug/L 0.84873 -0.0592 ppb 0.84873 >999.9%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† -1.8 -29.719 ug/L 25.2111 -29.719 ppb 25.2111 84.83%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† 149.4 28.634 ug/L 15.4191 28.634 ppb 15.4191 53.85%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† -1.2 -62.557 ug/L 31.7186 -62.557 ppb 31.7186 50.70%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† -7.7 -0.0091 ug/L 0.04862 -0.0091 ppb 0.04862 533.14%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† 6.0 0.4428 ug/L 0.25299 0.4428 ppb 0.25299 57.14%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† -144.0 -44.818 ug/L 23.8683 -44.818 ppb 23.8683 53.26%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† -6.0 -0.1541 ug/L 0.24165 -0.1541 ppb 0.24165 156.83%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -4.1 -2.4152 ug/L 3.83087 -2.4152 ppb 3.83087 158.62%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -90.7 -11.221 ug/L 1.3566 -11.221 ppb 1.3566 12.09%

QC value less than the lower limit for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 4.1 5.7833 ug/L 4.48131 5.7833 ppb 4.48131 77.49%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 0.9 0.3433 ug/L 0.97451 0.3433 ppb 0.97451 283.83%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -1.9 -1.3573 ug/L 1.18967 -1.3573 ppb 1.18967 87.65%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 5.8 0.1833 ug/L 1.17549 0.1833 ppb 1.17549 641.33%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† 1.7 0.3016 ug/L 0.73631 0.3016 ppb 0.73631 244.10%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† -10.7 -0.0742 ug/L 0.08386 -0.0742 ppb 0.08386 112.94%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -143.1 -0.2171 ug/L 0.12576 -0.2171 ppb 0.12576 57.94%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -1.1 -0.3701 ug/L 0.69495 -0.3701 ppb 0.69495 187.77%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† -302.0 -8.4297 ug/L 11.19148 -8.4297 ppb 11.19148 132.76%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† -42.6 -0.3041 ug/L 0.58329 -0.3041 ppb 0.58329 191.82%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† -46.8 -0.4672 ug/L 0.36927 -0.4672 ppb 0.36927 79.03%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 8.8 0.6013 ug/L 1.68464 0.6013 ppb 1.68464 280.15%

QC value within limits for SiO2 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 18  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 2/25/2010 19:29:54  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3802.8	3802.8	98.6 %		19:32:06
1	Y RADIAL	4201.4	4201.4	94.38 %		19:31:46
1	Al 396.153Radial†	5290.7	5481.2	5127.8 ug/L	5127.8 ppb	19:31:46
1	Ca 317.933Radial†	2371.6	2386.7	5204.8 ug/L	5204.8 ppb	19:32:06
1	Fe 238.204 Radial†	320.9	313.8	5085.6 ug/L	5085.6 ppb	19:32:06
1	K 766.490 Radial†	28379.1	26018.6	4978.5 ug/L	4978.5 ppb	19:31:46
1	Mg 279.077 IEC†	101.6	101.9	5377.6 ug/L	5377.6 ppb	19:32:06
1	Na 589.592 Radial†	30511.1	31847.7	9909.9 ug/L	9909.9 ppb	19:31:46
1	Sr 421.552†	70390.7	71385.3	496.56 ug/L	496.56 ppb	19:31:46
1	Sc 361.383	909417.0	909417.0	103.33 %		19:33:03
1	Y 371.029	754060.2	754060.2	99.136 %		19:33:03
1	Ag 328.068†	108068.2	104347.0	487.94 ug/L	487.94 ppb	19:33:08
1	As 188.979†	1101.2	1085.6	486.95 ug/L	486.95 ppb	19:33:28
1	B 249.677†	19612.5	19257.7	469.78 ug/L	469.78 ppb	19:33:08
1	Ba 233.527†	63749.4	61681.4	486.05 ug/L	486.05 ppb	19:33:08
1	Be 313.107†	1344715.0	1304883.4	488.65 ug/L	488.65 ppb	19:33:03
1	Cd 226.502†	43190.4	41973.0	487.64 ug/L	487.64 ppb	19:33:08
1	Co 228.616†	23903.1	23196.6	487.28 ug/L	487.28 ppb	19:33:08
1	Cr 267.716†	44754.4	43225.2	485.99 ug/L	485.99 ppb	19:33:08
1	Cu 324.752†	169288.0	157870.5	481.01 ug/L	481.01 ppb	19:33:08
1	Mn 257.610†	442664.6	427903.5	487.77 ug/L	487.77 ppb	19:33:03
1	Mo 202.031†	6788.6	6564.9	483.99 ug/L	483.99 ppb	19:33:28
1	Ni 231.604†	19894.4	19169.7	488.92 ug/L	488.92 ppb	19:33:08
1	P 214.914†	4358.3	4011.9	2319.0 ug/L	2319.0 ppb	19:33:28
1	Pb 220.353†	4034.7	3843.3	476.98 ug/L	476.98 ppb	19:33:28
1	S 181.975 Axial†	751.6	691.5	974.06 ug/L	974.06 ppb	19:33:28
1	Sb 206.836†	1458.0	1372.0	501.55 ug/L	501.55 ppb	19:33:28
1	Se 196.026†	732.9	734.0	499.62 ug/L	499.62 ppb	19:33:28
1	Si 251.611†	78397.3	75303.0	2433.5 ug/L	2433.5 ppb	19:33:08
1	Sn 189.927†	2805.0	2705.0	488.43 ug/L	488.43 ppb	19:33:28
1	Ti 334.940†	315061.3	306305.1	482.50 ug/L	482.50 ppb	19:33:08
1	Tl 190.801†	1536.8	1514.6	490.45 ug/L	490.45 ppb	19:33:28
1	U 409.014†	14480.0	16914.6	470.66 ug/L	470.66 ppb	19:33:08
1	V 292.402†	69802.9	69019.2	488.57 ug/L	488.57 ppb	19:33:08
1	Zn 213.857†	51023.2	48637.4	486.49 ug/L	486.49 ppb	19:33:08
1	SiO2†	77982.0	74877.6	5185.4 ug/L	5185.4 ppb	19:34:36
2	Sc Radial	3773.8	3773.8	97.8 %		19:32:31
2	Y RADIAL	4258.8	4258.8	95.67 %		19:32:11
2	Al 396.153Radial†	5293.9	5525.6	5169.3 ug/L	5169.3 ppb	19:32:11
2	Ca 317.933Radial†	2357.0	2390.2	5212.5 ug/L	5212.5 ppb	19:32:31
2	Fe 238.204 Radial†	311.5	306.7	4971.0 ug/L	4971.0 ppb	19:32:31
2	K 766.490 Radial†	28254.7	26112.2	4996.4 ug/L	4996.4 ppb	19:32:11
2	Mg 279.077 IEC†	101.8	102.8	5425.9 ug/L	5425.9 ppb	19:32:31
2	Na 589.592 Radial†	30575.8	32151.2	10004 ug/L	10004 ppb	19:32:11
2	Sr 421.552†	70438.3	71981.5	500.71 ug/L	500.71 ppb	19:32:11
2	Sc 361.383	904914.2	904914.2	102.82 %		19:33:34
2	Y 371.029	750313.6	750313.6	98.643 %		19:33:34
2	Ag 328.068†	106598.5	103438.0	483.68 ug/L	483.68 ppb	19:33:39
2	As 188.979†	1105.9	1095.5	491.25 ug/L	491.25 ppb	19:33:59
2	B 249.677†	19302.1	19050.2	464.73 ug/L	464.73 ppb	19:33:39
2	Ba 233.527†	62915.2	61177.0	482.08 ug/L	482.08 ppb	19:33:39
2	Be 313.107†	1332072.3	1299063.2	486.46 ug/L	486.46 ppb	19:33:34
2	Cd 226.502†	42702.7	41706.6	484.55 ug/L	484.55 ppb	19:33:39
2	Co 228.616†	23603.2	23020.1	483.59 ug/L	483.59 ppb	19:33:39
2	Cr 267.716†	44183.5	42885.5	482.17 ug/L	482.17 ppb	19:33:39
2	Cu 324.752†	166157.0	155640.7	474.22 ug/L	474.22 ppb	19:33:39
2	Mn 257.610†	438788.2	426265.1	485.89 ug/L	485.89 ppb	19:33:34
2	Mo 202.031†	6788.7	6597.7	486.40 ug/L	486.40 ppb	19:33:59
2	Ni 231.604†	19636.2	19014.4	484.96 ug/L	484.96 ppb	19:33:39

2	P 214.914†	4371.8	4045.9	2340.9 ug/L	2340.9 ppb	19:33:59
2	Pb 220.353†	4055.8	3883.3	481.96 ug/L	481.96 ppb	19:33:59
2	S 181.975 Axial†	754.3	697.7	982.80 ug/L	982.80 ppb	19:33:59
2	Sb 206.836†	1456.7	1377.7	503.68 ug/L	503.68 ppb	19:33:59
2	Se 196.026†	726.8	731.6	497.68 ug/L	497.68 ppb	19:33:59
2	Si 251.611†	77277.1	74591.0	2410.4 ug/L	2410.4 ppb	19:33:39
2	Sn 189.927†	2811.4	2724.8	492.00 ug/L	492.00 ppb	19:33:59
2	Ti 334.940†	309943.2	302844.7	477.05 ug/L	477.05 ppb	19:33:39
2	Tl 190.801†	1542.8	1527.9	494.69 ug/L	494.69 ppb	19:33:59
2	U 409.014†	14282.6	16792.4	467.27 ug/L	467.27 ppb	19:33:39
2	V 292.402†	69042.1	68615.5	485.81 ug/L	485.81 ppb	19:33:39
2	Zn 213.857†	50325.0	48204.1	482.17 ug/L	482.17 ppb	19:33:39
2	SiO2†	78766.1	76015.6	5264.3 ug/L	5264.3 ppb	19:34:41
3	Sc Radial	3760.2	3760.2	97.5 %		19:32:56
3	Y RADIAL	4220.7	4220.7	94.81 %		19:32:36
3	Al 396.153Radial†	5243.4	5493.3	5139.4 ug/L	5139.4 ppb	19:32:36
3	Ca 317.933Radial†	2360.5	2402.5	5239.2 ug/L	5239.2 ppb	19:32:56
3	Fe 238.204 Radial†	315.6	312.0	5056.8 ug/L	5056.8 ppb	19:32:56
3	K 766.490 Radial†	28235.1	26196.3	5012.6 ug/L	5012.6 ppb	19:32:36
3	Mg 279.077 IEC†	101.3	102.8	5422.0 ug/L	5422.0 ppb	19:32:56
3	Na 589.592 Radial†	30047.5	31722.0	9870.8 ug/L	9870.8 ppb	19:32:36
3	Sr 421.552†	69590.7	71371.9	496.47 ug/L	496.47 ppb	19:32:36
3	Sc 361.383	919450.8	919450.8	104.47 %		19:34:05
3	Y 371.029	761515.3	761515.3	100.12 %		19:34:05
3	Ag 328.068†	107919.4	103063.3	481.95 ug/L	481.95 ppb	19:34:10
3	As 188.979†	1116.3	1088.5	488.17 ug/L	488.17 ppb	19:34:30
3	B 249.677†	19726.9	19160.0	467.41 ug/L	467.41 ppb	19:34:10
3	Ba 233.527†	63803.4	61059.8	481.15 ug/L	481.15 ppb	19:34:10
3	Be 313.107†	1353304.9	1298904.5	486.40 ug/L	486.40 ppb	19:34:05
3	Cd 226.502†	43303.0	41624.6	483.59 ug/L	483.59 ppb	19:34:10
3	Co 228.616†	23913.3	22954.0	482.19 ug/L	482.19 ppb	19:34:10
3	Cr 267.716†	44791.8	42788.4	481.08 ug/L	481.08 ppb	19:34:10
3	Cu 324.752†	168430.1	155261.6	473.07 ug/L	473.07 ppb	19:34:10
3	Mn 257.610†	446017.2	426437.7	486.10 ug/L	486.10 ppb	19:34:05
3	Mo 202.031†	6783.6	6488.4	478.35 ug/L	478.35 ppb	19:34:30
3	Ni 231.604†	19918.9	18983.1	484.16 ug/L	484.16 ppb	19:34:10
3	P 214.914†	4351.3	3959.1	2288.8 ug/L	2288.8 ppb	19:34:30
3	Pb 220.353†	4029.3	3795.5	471.06 ug/L	471.06 ppb	19:34:30
3	S 181.975 Axial†	754.8	686.6	967.17 ug/L	967.17 ppb	19:34:30
3	Sb 206.836†	1451.3	1350.1	493.63 ug/L	493.63 ppb	19:34:30
3	Se 196.026†	733.0	726.3	494.49 ug/L	494.49 ppb	19:34:30
3	Si 251.611†	78444.4	74520.1	2408.2 ug/L	2408.2 ppb	19:34:10
3	Sn 189.927†	2805.6	2676.0	483.20 ug/L	483.20 ppb	19:34:30
3	Ti 334.940†	314013.0	301974.5	475.68 ug/L	475.68 ppb	19:34:10
3	Tl 190.801†	1531.3	1493.1	483.51 ug/L	483.51 ppb	19:34:30
3	U 409.014†	14492.6	16773.8	466.74 ug/L	466.74 ppb	19:34:10
3	V 292.402†	69629.7	68116.3	482.19 ug/L	482.19 ppb	19:34:10
3	Zn 213.857†	51087.0	48159.6	481.71 ug/L	481.71 ppb	19:34:10
3	SiO2†	77777.3	73858.1	5114.8 ug/L	5114.8 ppb	19:34:46

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911260.7	103.54 %	0.846			0.82%
Sc Radial	3778.9	98.0 %	0.56			0.57%
Y 371.029	755296.4	99.298 %	0.7497			0.75%
Y RADIAL	4226.9	94.95 %	0.657			0.69%
Ag 328.068†	103616.1	484.52 ug/L	3.087	484.52 ppb	3.087	0.64%
QC value within limits for Ag 328.068 Recovery = 96.90%						
Al 396.153Radial†	5500.0	5145.5 ug/L	21.43	5145.5 ppb	21.43	0.42%
QC value within limits for Al 396.153Radial Recovery = 102.91%						
As 188.979†	1089.8	488.79 ug/L	2.218	488.79 ppb	2.218	0.45%
QC value within limits for As 188.979 Recovery = 97.76%						
B 249.677†	19156.0	467.31 ug/L	2.529	467.31 ppb	2.529	0.54%
QC value within limits for B 249.677 Recovery = 93.46%						
Ba 233.527†	61306.1	483.09 ug/L	2.603	483.09 ppb	2.603	0.54%
QC value within limits for Ba 233.527 Recovery = 96.62%						
Be 313.107†	1300950.4	487.17 ug/L	1.281	487.17 ppb	1.281	0.26%
QC value within limits for Be 313.107 Recovery = 97.43%						
Ca 317.933Radial†	2393.2	5218.8 ug/L	18.08	5218.8 ppb	18.08	0.35%

QC value within limits for Ca 317.933 Radial Recovery = 104.38%

Cd 226.502†	41768.1	485.26 ug/L	2.115	485.26 ppb	2.115	0.44%
QC value within limits for Cd 226.502 Recovery = 97.05%						
Co 228.616†	23056.9	484.36 ug/L	2.632	484.36 ppb	2.632	0.54%
QC value within limits for Co 228.616 Recovery = 96.87%						
Cr 267.716†	42966.3	483.08 ug/L	2.580	483.08 ppb	2.580	0.53%
QC value within limits for Cr 267.716 Recovery = 96.62%						
Cu 324.752†	156257.6	476.10 ug/L	4.296	476.10 ppb	4.296	0.90%
QC value within limits for Cu 324.752 Recovery = 95.22%						
Fe 238.204 Radial†	310.8	5037.8 ug/L	59.61	5037.8 ppb	59.61	1.18%
QC value within limits for Fe 238.204 Radial Recovery = 100.76%						
K 766.490 Radial†	26109.0	4995.9 ug/L	17.04	4995.9 ppb	17.04	0.34%
QC value within limits for K 766.490 Radial Recovery = 99.92%						
Mg 279.077 IEC†	102.5	5408.5 ug/L	26.83	5408.5 ppb	26.83	0.50%
QC value within limits for Mg 279.077 IEC Recovery = 108.17%						
Mn 257.610†	426868.8	486.59 ug/L	1.031	486.59 ppb	1.031	0.21%
QC value within limits for Mn 257.610 Recovery = 97.32%						
Mo 202.031†	6550.3	482.92 ug/L	4.130	482.92 ppb	4.130	0.86%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	31907.0	9928.3 ug/L	68.66	9928.3 ppb	68.66	0.69%
QC value within limits for Na 589.592 Radial Recovery = 99.28%						
Ni 231.604†	19055.7	486.01 ug/L	2.548	486.01 ppb	2.548	0.52%
QC value within limits for Ni 231.604 Recovery = 97.20%						
P 214.914†	4005.6	2316.2 ug/L	26.17	2316.2 ppb	26.17	1.13%
QC value within limits for P 214.914 Recovery = 92.65%						
Pb 220.353†	3840.7	476.67 ug/L	5.455	476.67 ppb	5.455	1.14%
QC value within limits for Pb 220.353 Recovery = 95.33%						
S 181.975 Axial†	692.0	974.68 ug/L	7.830	974.68 ppb	7.830	0.80%
QC value within limits for S 181.975 Axial Recovery = 97.47%						
Sb 206.836†	1366.6	499.62 ug/L	5.295	499.62 ppb	5.295	1.06%
QC value within limits for Sb 206.836 Recovery = 99.92%						
Se 196.026†	730.6	497.26 ug/L	2.590	497.26 ppb	2.590	0.52%
QC value within limits for Se 196.026 Recovery = 99.45%						
Si 251.611†	74804.7	2417.4 ug/L	14.01	2417.4 ppb	14.01	0.58%
QC value within limits for Si 251.611 Recovery = 96.70%						
Sn 189.927†	2701.9	487.88 ug/L	4.425	487.88 ppb	4.425	0.91%
QC value within limits for Sn 189.927 Recovery = 97.58%						
Sr 421.552†	71579.5	497.91 ug/L	2.422	497.91 ppb	2.422	0.49%
QC value within limits for Sr 421.552 Recovery = 99.58%						
Ti 334.940†	303708.1	478.41 ug/L	3.608	478.41 ppb	3.608	0.75%
QC value within limits for Ti 334.940 Recovery = 95.68%						
Tl 190.801†	1511.9	489.55 ug/L	5.644	489.55 ppb	5.644	1.15%
QC value within limits for Tl 190.801 Recovery = 97.91%						
U 409.014†	16826.9	468.22 ug/L	2.126	468.22 ppb	2.126	0.45%
QC value within limits for U 409.014 Recovery = 93.64%						
V 292.402†	68583.7	485.52 ug/L	3.200	485.52 ppb	3.200	0.66%
QC value within limits for V 292.402 Recovery = 97.10%						
Zn 213.857†	48333.7	483.46 ug/L	2.637	483.46 ppb	2.637	0.55%
QC value within limits for Zn 213.857 Recovery = 96.69%						
SiO2†	74917.1	5188.2 ug/L	74.82	5188.2 ppb	74.82	1.44%
QC value within limits for SiO2 Recovery = 97.02%						

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 19:36:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3878.7	3878.7	101 %		19:39:08
1	Y RADIAL	4405.2	4405.2	98.95 %		19:38:48
1	Al 396.153Radial†	-122.1	-6.4	-6.0090 ug/L	-6.0090 ppb	19:38:48
1	Ca 317.933Radial†	16.0	-2.7	-5.9692 ug/L	-5.9692 ppb	19:39:08
1	Fe 238.204 Radial†	14.4	2.7	43.454 ug/L	43.454 ppb	19:39:08
1	K 766.490 Radial†	2779.4	-1.2	-0.1979 ug/L	-0.1979 ppb	19:38:48
1	Mg 279.077 IEC†	4.6	3.4	180.98 ug/L	180.98 ppb	19:39:08
1	Na 589.592 Radial†	-1134.8	-226.8	-70.560 ug/L	-70.560 ppb	19:38:48
1	Sr 421.552†	26.3	17.4	0.1210 ug/L	0.1210 ppb	19:38:48
1	Sc 361.383	901502.4	901502.4	102.43 %		19:40:05
1	Y 371.029	758893.5	758893.5	99.771 %		19:40:05
1	Ag 328.068†	361.5	118.8	0.5630 ug/L	0.5630 ppb	19:40:10
1	As 188.979†	-23.1	-2.6	-1.1664 ug/L	-1.1664 ppb	19:40:30
1	B 249.677†	-501.9	-212.0	-5.2032 ug/L	-5.2032 ppb	19:40:30
1	Ba 233.527†	10.2	-1.1	-0.0078 ug/L	-0.0078 ppb	19:40:30
1	Be 313.107†	-3523.3	118.7	0.0442 ug/L	0.0442 ppb	19:40:10
1	Cd 226.502†	-187.5	-6.9	-0.0841 ug/L	-0.0841 ppb	19:40:30
1	Co 228.616†	-61.0	5.3	0.1131 ug/L	0.1131 ppb	19:40:30
1	Cr 267.716†	85.4	-1.7	-0.0164 ug/L	-0.0164 ppb	19:40:30
1	Cu 324.752†	5951.1	-145.5	-0.4420 ug/L	-0.4420 ppb	19:40:10
1	Mn 257.610†	449.9	-38.4	-0.0469 ug/L	-0.0469 ppb	19:40:30
1	Mo 202.031†	16.2	11.2	0.8246 ug/L	0.8246 ppb	19:40:30
1	Ni 231.604†	82.5	-2.3	-0.0584 ug/L	-0.0584 ppb	19:40:30
1	P 214.914†	199.4	-11.1	-6.6333 ppb	-6.6333 ppb	19:40:30
1	Pb 220.353†	-29.8	-90.3	-11.173 ug/L	-11.173 ppb	19:40:30
1	S 181.975 Axial†	40.3	3.5	4.8925 ug/L	4.8925 ppb	19:40:30
1	Sb 206.836†	40.9	1.0	0.3553 ug/L	0.3553 ppb	19:40:30
1	Se 196.026†	-22.6	2.7	1.8986 ug/L	1.8986 ppb	19:40:30
1	Si 251.611†	581.5	3.0	0.0870 ug/L	0.0870 ppb	19:40:30
1	Sn 189.927†	10.8	1.1	0.1957 ug/L	0.1957 ppb	19:40:30
1	Ti 334.940†	-1500.8	-55.2	-0.1035 ug/L	-0.1035 ppb	19:40:10
1	Tl 190.801†	-28.2	-0.1	-0.0204 ug/L	-0.0204 ppb	19:40:30
1	U 409.014†	-2896.3	74.4	2.0729 ug/L	2.0729 ppb	19:40:05
1	V 292.402†	-1526.9	-21.9	-0.1402 ug/L	-0.1402 ppb	19:40:10
1	Zn 213.857†	686.1	-69.6	-0.7083 ug/L	-0.7083 ppb	19:40:30
1	SiO2†	549.0	-52.3	-3.6509 ug/L	-3.6509 ppb	19:41:36
2	Sc Radial	3880.7	3880.7	101 %		19:39:33
2	Y RADIAL	4438.6	4438.6	99.70 %		19:39:13
2	Al 396.153Radial†	-130.3	-14.5	-13.647 ug/L	-13.647 ppb	19:39:13
2	Ca 317.933Radial†	18.1	-0.7	-1.5386 ug/L	-1.5386 ppb	19:39:33
2	Fe 238.204 Radial†	11.1	-0.6	-10.357 ug/L	-10.357 ppb	19:39:33
2	K 766.490 Radial†	2795.7	13.5	2.6079 ug/L	2.6079 ppb	19:39:13
2	Mg 279.077 IEC†	3.3	2.1	113.01 ug/L	113.01 ppb	19:39:33
2	Na 589.592 Radial†	-1024.8	-116.8	-36.351 ug/L	-36.351 ppb	19:39:13
2	Sr 421.552†	7.2	-1.6	-0.0109 ug/L	-0.0109 ppb	19:39:13
2	Sc 361.383	933036.7	933036.7	106.02 %		19:40:35
2	Y 371.029	784592.9	784592.9	103.15 %		19:40:35
2	Ag 328.068†	262.1	13.1	0.0560 ug/L	0.0560 ppb	19:40:40
2	As 188.979†	-25.4	-4.0	-1.7775 ug/L	-1.7775 ppb	19:41:00
2	B 249.677†	-513.7	-206.5	-5.0600 ug/L	-5.0600 ppb	19:41:00
2	Ba 233.527†	10.3	-1.3	-0.0095 ug/L	-0.0095 ppb	19:41:00
2	Be 313.107†	-3592.4	169.8	0.0632 ug/L	0.0632 ppb	19:40:40
2	Cd 226.502†	-190.0	-3.0	-0.0327 ug/L	-0.0327 ppb	19:41:00
2	Co 228.616†	-75.1	-6.0	-0.1235 ug/L	-0.1235 ppb	19:41:00
2	Cr 267.716†	72.8	-16.4	-0.1863 ug/L	-0.1863 ppb	19:41:00
2	Cu 324.752†	5990.2	-305.0	-0.9321 ug/L	-0.9321 ppb	19:40:40
2	Mn 257.610†	459.7	-44.1	-0.0559 ug/L	-0.0559 ppb	19:41:00
2	Mo 202.031†	15.7	10.2	0.7473 ug/L	0.7473 ppb	19:41:00
2	Ni 231.604†	98.6	10.2	0.2605 ug/L	0.2605 ppb	19:41:00

2	P 214.914†	207.7	-9.9	-5.7600 ug/L	-5.7600 ppb	19:41:00
2	Pb 220.353†	-35.5	-94.7	-11.712 ug/L	-11.712 ppb	19:41:00
2	S 181.975 Axial†	46.9	8.4	11.904 ug/L	11.904 ppb	19:41:00
2	Sb 206.836†	50.0	8.1	2.8735 ug/L	2.8735 ppb	19:41:00
2	Se 196.026†	-27.8	-1.5	-0.9871 ug/L	-0.9871 ppb	19:41:00
2	Si 251.611†	583.7	-14.2	-0.4683 ug/L	-0.4683 ppb	19:41:00
2	Sn 189.927†	5.2	-4.5	-0.8165 ug/L	-0.8165 ppb	19:41:00
2	Ti 334.940†	-1562.4	-63.8	-0.1118 ug/L	-0.1118 ppb	19:40:40
2	Tl 190.801†	-26.4	2.5	0.8144 ug/L	0.8144 ppb	19:41:00
2	U 409.014†	-2915.0	152.4	4.2561 ug/L	4.2561 ppb	19:40:35
2	V 292.402†	-1490.5	62.8	0.4611 ug/L	0.4611 ppb	19:40:40
2	Zn 213.857†	705.2	-74.3	-0.7486 ug/L	-0.7486 ppb	19:41:00
2	SiO2†	555.8	-63.9	-4.4595 ug/L	-4.4595 ppb	19:41:41
3	Sc Radial	3859.0	3859.0	100 %		19:39:58
3	Y RADIAL	4431.4	4431.4	99.54 %		19:39:38
3	Al 396.153Radial†	-171.9	-56.7	-53.303 ug/L	-53.303 ppb	19:39:38
3	Ca 317.933Radial†	13.3	-5.3	-11.652 ug/L	-11.652 ppb	19:39:58
3	Fe 238.204 Radial†	11.3	-0.3	-5.5633 ug/L	-5.5633 ppb	19:39:58
3	K 766.490 Radial†	2827.0	60.5	11.613 ug/L	11.613 ppb	19:39:38
3	Mg 279.077 IEC†	2.3	1.1	57.156 ug/L	57.156 ppb	19:39:58
3	Na 589.592 Radial†	-1083.1	-180.8	-56.273 ug/L	-56.273 ppb	19:39:38
3	Sr 421.552†	40.2	31.4	0.2186 ug/L	0.2186 ppb	19:39:38
3	Sc 361.383	920166.0	920166.0	104.56 %		19:41:06
3	Y 371.029	773019.8	773019.8	101.63 %		19:41:06
3	Ag 328.068†	342.1	93.0	0.4305 ug/L	0.4305 ppb	19:41:11
3	As 188.979†	-22.8	-1.9	-0.8331 ug/L	-0.8331 ppb	19:41:31
3	B 249.677†	-480.4	-181.4	-4.4469 ug/L	-4.4469 ppb	19:41:31
3	Ba 233.527†	3.0	-8.1	-0.0638 ug/L	-0.0638 ppb	19:41:31
3	Be 313.107†	-3645.9	71.2	0.0262 ug/L	0.0262 ppb	19:41:11
3	Cd 226.502†	-189.8	-5.3	-0.0610 ug/L	-0.0610 ppb	19:41:31
3	Co 228.616†	-54.5	12.7	0.2677 ug/L	0.2677 ppb	19:41:31
3	Cr 267.716†	76.4	-12.0	-0.1357 ug/L	-0.1357 ppb	19:41:31
3	Cu 324.752†	6016.6	-200.7	-0.6122 ug/L	-0.6122 ppb	19:41:11
3	Mn 257.610†	439.5	-57.3	-0.0682 ug/L	-0.0682 ppb	19:41:31
3	Mo 202.031†	7.1	2.1	0.1549 ug/L	0.1549 ppb	19:41:31
3	Ni 231.604†	78.0	-8.2	-0.2092 ug/L	-0.2092 ppb	19:41:31
3	P 214.914†	195.7	-18.6	-11.099 ug/L	-11.099 ppb	19:41:31
3	Pb 220.353†	-36.9	-96.5	-11.948 ug/L	-11.948 ppb	19:41:31
3	S 181.975 Axial†	35.6	-1.8	-2.5061 ug/L	-2.5061 ppb	19:41:31
3	Sb 206.836†	42.0	1.2	0.3919 ug/L	0.3919 ppb	19:41:31
3	Se 196.026†	-22.2	3.5	2.2963 ug/L	2.2963 ppb	19:41:31
3	Si 251.611†	570.4	-19.2	-0.6242 ug/L	-0.6242 ppb	19:41:31
3	Sn 189.927†	2.1	-7.4	-1.3447 ug/L	-1.3447 ppb	19:41:31
3	Ti 334.940†	-1573.8	-95.4	-0.1568 ug/L	-0.1568 ppb	19:41:11
3	Tl 190.801†	-26.6	2.0	0.6376 ug/L	0.6376 ppb	19:41:31
3	U 409.014†	-3001.7	30.9	0.8647 ug/L	0.8647 ppb	19:41:06
3	V 292.402†	-1516.4	18.4	0.1342 ug/L	0.1342 ppb	19:41:11
3	Zn 213.857†	684.9	-84.4	-0.8493 ug/L	-0.8493 ppb	19:41:31
3	SiO2†	537.9	-73.8	-5.1252 ug/L	-5.1252 ppb	19:41:46

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	918235.0	104.34 %	1.802			1.73%
Sc Radial	3872.8	100 %	0.3			0.31%
Y 371.029	772168.7	101.52 %	1.692			1.67%
Y RADIAL	4425.1	99.40 %	0.395			0.40%
Ag 328.068†	75.0	0.3498 ug/L	0.26295	0.3498 ppb	0.26295	75.16%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-25.8	-24.320 ug/L	25.3890	-24.320 ppb	25.3890	104.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.8	-1.2590 ug/L	0.47897	-1.2590 ppb	0.47897	38.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-200.0	-4.9034 ug/L	0.40176	-4.9034 ppb	0.40176	8.19%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.5	-0.0270 ug/L	0.03190	-0.0270 ppb	0.03190	118.02%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	119.9	0.0445 ug/L	0.01849	0.0445 ppb	0.01849	41.51%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.9	-6.3864 ug/L	5.06940	-6.3864 ppb	5.06940	79.38%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-5.1	-0.0592 ug/L	0.02574	-0.0592 ppb	0.02574	43.45%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.0	0.0858 ug/L	0.19706	0.0858 ppb	0.19706	229.74%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-10.1	-0.1128 ug/L	0.08721	-0.1128 ppb	0.08721	77.30%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-217.0	-0.6621 ug/L	0.24884	-0.6621 ppb	0.24884	37.58%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.6	9.1778 ug/L	29.78058	9.1778 ppb	29.78058	324.49%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	24.3	4.6742 ug/L	6.17052	4.6742 ppb	6.17052	132.01%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.2	117.05 ug/L	62.012	117.05 ppb	62.012	52.98%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-46.6	-0.0570 ug/L	0.01070	-0.0570 ppb	0.01070	18.77%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	7.8	0.5756 ug/L	0.36638	0.5756 ppb	0.36638	63.65%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-174.8	-54.395 ug/L	17.1816	-54.395 ppb	17.1816	31.59%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.1	-0.0024 ug/L	0.23984	-0.0024 ppb	0.23984	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-13.2	-7.8308 ug/L	2.86385	-7.8308 ppb	2.86385	36.57%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-93.8	-11.611 ug/L	0.3975	-11.611 ppb	0.3975	3.42%	
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.4	4.7634 ug/L	7.20586	4.7634 ppb	7.20586	151.28%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.4	1.2069 ug/L	1.44343	1.2069 ppb	1.44343	119.60%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.6	1.0693 ug/L	1.79192	1.0693 ppb	1.79192	167.58%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-10.1	-0.3351 ug/L	0.37383	-0.3351 ppb	0.37383	111.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.6	-0.6551 ug/L	0.78278	-0.6551 ppb	0.78278	119.48%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	15.7	0.1096 ug/L	0.11518	0.1096 ppb	0.11518	105.10%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-71.5	-0.1240 ug/L	0.02868	-0.1240 ppb	0.02868	23.12%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.5	0.4772 ug/L	0.43988	0.4772 ppb	0.43988	92.18%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	85.9	2.3979 ug/L	1.71890	2.3979 ppb	1.71890	71.68%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	19.7	0.1517 ug/L	0.30101	0.1517 ppb	0.30101	198.42%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-76.1	-0.7687 ug/L	0.07263	-0.7687 ppb	0.07263	9.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-63.3	-4.4119 ug/L	0.73831	-4.4119 ppb	0.73831	16.73%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							



Sequence No.: 24

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 20:12:07

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	3825.6	3825.6	99.2 %		20:14:19
1	Y RADIAL	4330.6	4330.6	97.28 %		20:13:59
1	Al 396.153Radial†	5348.8	5507.7	5152.5 ug/L	5152.5 ppb	20:13:59
1	Ca 317.933Radial†	2415.5	2416.6	5270.1 ug/L	5270.1 ppb	20:14:19
1	Fe 238.204 Radial†	323.0	314.0	5089.3 ug/L	5089.3 ppb	20:14:19
1	K 766.490 Radial†	28923.3	26395.3	5050.5 ug/L	5050.5 ppb	20:13:59
1	Mg 279.077 IEC†	102.9	102.6	5411.8 ug/L	5411.8 ppb	20:14:19
1	Na 589.592 Radial†	31989.8	33153.7	10316 ug/L	10316 ppb	20:13:59
1	Sr 421.552†	71504.7	72082.0	501.41 ug/L	501.41 ppb	20:13:59
1	Sc 361.383	917650.0	917650.0	104.27 %		20:15:16
1	Y 371.029	759416.7	759416.7	99.840 %		20:15:16
1	Ag 328.068†	108269.9	103602.2	484.49 ug/L	484.49 ppb	20:15:22
1	As 188.979†	1139.0	1112.3	498.79 ug/L	498.79 ppb	20:15:42
1	B 249.677†	19723.8	19194.2	468.22 ug/L	468.22 ppb	20:15:22
1	Ba 233.527†	64524.0	61870.7	487.54 ug/L	487.54 ppb	20:15:22
1	Be 313.107†	1359187.9	1307088.5	489.46 ug/L	489.46 ppb	20:15:16
1	Cd 226.502†	44047.9	42420.4	492.84 ug/L	492.84 ppb	20:15:22
1	Co 228.616†	24244.7	23316.8	489.82 ug/L	489.82 ppb	20:15:22
1	Cr 267.716†	45252.3	43314.2	487.00 ug/L	487.00 ppb	20:15:22
1	Cu 324.752†	168163.3	155322.1	473.26 ug/L	473.26 ppb	20:15:22
1	Mn 257.610†	448851.5	429993.7	490.15 ug/L	490.15 ppb	20:15:16
1	Mo 202.031†	6900.8	6613.6	487.58 ug/L	487.58 ppb	20:15:42
1	Ni 231.604†	20168.8	19260.1	491.23 ug/L	491.23 ppb	20:15:22
1	P 214.914†	4476.4	4087.2	2366.0 ug/L	2366.0 ppb	20:15:42
1	Pb 220.353†	4156.3	3924.9	487.09 ug/L	487.09 ppb	20:15:42
1	S 181.975 Axial†	769.0	701.7	988.36 ug/L	988.36 ppb	20:15:42
1	Sb 206.836†	1477.7	1378.2	504.00 ug/L	504.00 ppb	20:15:42
1	Se 196.026†	762.4	755.9	514.05 ug/L	514.05 ppb	20:15:42
1	Si 251.611†	78934.0	75137.0	2428.1 ug/L	2428.1 ppb	20:15:22
1	Sn 189.927†	2894.4	2766.5	499.52 ug/L	499.52 ppb	20:15:42
1	Ti 334.940†	315522.9	304012.4	478.90 ug/L	478.90 ppb	20:15:22
1	Tl 190.801†	1542.4	1506.7	487.88 ug/L	487.88 ppb	20:15:42
1	U 409.014†	14193.1	16513.8	459.47 ug/L	459.47 ppb	20:15:22
1	V 292.402†	70242.5	68834.8	487.32 ug/L	487.32 ppb	20:15:22
1	Zn 213.857†	51690.0	48833.9	488.47 ug/L	488.47 ppb	20:15:22
1	SiO2†	79211.6	75379.8	5220.1 ug/L	5220.1 ppb	20:16:49
2	Sc Radial	3841.0	3841.0	99.6 %		20:14:44
2	Y RADIAL	4289.4	4289.4	96.35 %		20:14:24
2	Al 396.153Radial†	5256.1	5393.0	5045.0 ug/L	5045.0 ppb	20:14:24
2	Ca 317.933Radial†	2434.0	2425.4	5289.1 ug/L	5289.1 ppb	20:14:44
2	Fe 238.204 Radial†	326.3	316.0	5120.8 ug/L	5120.8 ppb	20:14:44
2	K 766.490 Radial†	28628.5	25982.4	4971.5 ug/L	4971.5 ppb	20:14:24
2	Mg 279.077 IEC†	102.7	101.9	5379.2 ug/L	5379.2 ppb	20:14:44
2	Na 589.592 Radial†	31728.0	32761.5	10194 ug/L	10194 ppb	20:14:24
2	Sr 421.552†	70784.6	71070.0	494.37 ug/L	494.37 ppb	20:14:24
2	Sc 361.383	919370.5	919370.5	104.47 %		20:15:47
2	Y 371.029	762469.1	762469.1	100.24 %		20:15:47
2	Ag 328.068†	109000.3	104107.0	486.85 ug/L	486.85 ppb	20:15:53
2	As 188.979†	1116.9	1089.0	488.49 ug/L	488.49 ppb	20:16:13
2	B 249.677†	20007.4	19430.2	473.99 ug/L	473.99 ppb	20:15:53
2	Ba 233.527†	64903.4	62118.1	489.49 ug/L	489.49 ppb	20:15:53
2	Be 313.107†	1363112.1	1308405.5	489.96 ug/L	489.96 ppb	20:15:47
2	Cd 226.502†	44283.9	42567.2	494.54 ug/L	494.54 ppb	20:15:53
2	Co 228.616†	24352.4	23376.3	491.05 ug/L	491.05 ppb	20:15:53
2	Cr 267.716†	45578.2	43544.9	489.59 ug/L	489.59 ppb	20:15:53
2	Cu 324.752†	169574.6	156371.2	476.45 ug/L	476.45 ppb	20:15:53
2	Mn 257.610†	448188.3	428553.2	488.52 ug/L	488.52 ppb	20:15:47
2	Mo 202.031†	6828.7	6532.2	481.59 ug/L	481.59 ppb	20:16:13
2	Ni 231.604†	20360.2	19407.1	494.98 ug/L	494.98 ppb	20:15:53

2	P 214.914†	4413.0	4018.5	2323.8 ug/L	2323.8 ppb	20:16:13
2	Pb 220.353†	4100.8	3864.4	479.56 ug/L	479.56 ppb	20:16:13
2	S 181.975 Axial†	767.3	698.7	984.15 ug/L	984.15 ppb	20:16:13
2	Sb 206.836†	1461.2	1359.8	497.21 ug/L	497.21 ppb	20:16:13
2	Se 196.026†	739.2	732.3	498.61 ug/L	498.61 ppb	20:16:13
2	Si 251.611†	79458.7	75497.6	2439.9 ug/L	2439.9 ppb	20:15:53
2	Sn 189.927†	2837.2	2706.5	488.71 ug/L	488.71 ppb	20:16:13
2	Ti 334.940†	317791.3	305617.6	481.43 ug/L	481.43 ppb	20:15:53
2	Tl 190.801†	1524.8	1487.0	481.55 ug/L	481.55 ppb	20:16:13
2	U 409.014†	14317.8	16607.7	462.08 ug/L	462.08 ppb	20:15:53
2	V 292.402†	70733.3	69178.5	489.63 ug/L	489.63 ppb	20:15:53
2	Zn 213.857†	51932.5	48973.3	489.84 ug/L	489.84 ppb	20:15:53
2	SiO2†	78632.4	74683.1	5171.9 ug/L	5171.9 ppb	20:16:54
3	Sc Radial	3837.5	3837.5	99.5 %		20:15:09
3	Y RADIAL	4321.3	4321.3	97.07 %		20:14:49
3	Al 396.153Radial†	5389.7	5532.0	5175.6 ug/L	5175.6 ppb	20:14:49
3	Ca 317.933Radial†	2425.3	2418.9	5274.9 ug/L	5274.9 ppb	20:15:09
3	Fe 238.204 Radial†	325.0	315.0	5104.5 ug/L	5104.5 ppb	20:15:09
3	K 766.490 Radial†	29151.6	26534.2	5077.2 ug/L	5077.2 ppb	20:14:49
3	Mg 279.077 IEC†	104.0	103.3	5451.8 ug/L	5451.8 ppb	20:15:09
3	Na 589.592 Radial†	32061.5	33125.5	10307 ug/L	10307 ppb	20:14:49
3	Sr 421.552†	71961.4	72317.2	503.04 ug/L	503.04 ppb	20:14:49
3	Sc 361.383	925454.1	925454.1	105.16 %		20:16:19
3	Y 371.029	766455.3	766455.3	100.77 %		20:16:19
3	Ag 328.068†	108729.0	103163.2	482.44 ug/L	482.44 ppb	20:16:24
3	As 188.979†	1129.8	1094.3	490.78 ug/L	490.78 ppb	20:16:44
3	B 249.677†	19904.1	19206.1	468.52 ug/L	468.52 ppb	20:16:24
3	Ba 233.527†	64747.1	61561.1	485.10 ug/L	485.10 ppb	20:16:24
3	Be 313.107†	1375757.6	1311853.4	491.24 ug/L	491.24 ppb	20:16:19
3	Cd 226.502†	44202.3	42211.0	490.40 ug/L	490.40 ppb	20:16:24
3	Co 228.616†	24270.1	23144.8	486.20 ug/L	486.20 ppb	20:16:24
3	Cr 267.716†	45435.1	43122.0	484.84 ug/L	484.84 ppb	20:16:24
3	Cu 324.752†	169205.4	154953.1	472.13 ug/L	472.13 ppb	20:16:24
3	Mn 257.610†	452710.0	430033.0	490.20 ug/L	490.20 ppb	20:16:19
3	Mo 202.031†	6876.3	6534.5	481.76 ug/L	481.76 ppb	20:16:44
3	Ni 231.604†	20284.1	19206.7	489.87 ug/L	489.87 ppb	20:16:24
3	P 214.914†	4467.6	4042.7	2339.3 ug/L	2339.3 ppb	20:16:44
3	Pb 220.353†	4145.7	3881.2	481.67 ug/L	481.67 ppb	20:16:44
3	S 181.975 Axial†	765.6	692.2	975.08 ug/L	975.08 ppb	20:16:44
3	Sb 206.836†	1471.6	1360.5	497.47 ug/L	497.47 ppb	20:16:44
3	Se 196.026†	745.1	733.3	499.22 ug/L	499.22 ppb	20:16:44
3	Si 251.611†	79202.4	74753.9	2415.8 ug/L	2415.8 ppb	20:16:24
3	Sn 189.927†	2864.2	2714.3	490.12 ug/L	490.12 ppb	20:16:44
3	Ti 334.940†	316872.6	302744.2	476.90 ug/L	476.90 ppb	20:16:24
3	Tl 190.801†	1558.7	1509.7	488.84 ug/L	488.84 ppb	20:16:44
3	U 409.014†	14443.6	16637.2	462.91 ug/L	462.91 ppb	20:16:24
3	V 292.402†	70712.6	68713.8	486.40 ug/L	486.40 ppb	20:16:24
3	Zn 213.857†	51818.5	48538.0	485.49 ug/L	485.49 ppb	20:16:24
3	SiO2†	79163.8	74693.7	5172.7 ug/L	5172.7 ppb	20:16:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920824.9	104.63 %	0.466			0.45%
Sc Radial	3834.7	99.4 %	0.21			0.21%
Y 371.029	762780.4	100.28 %	0.464			0.46%
Y RADIAL	4313.8	96.90 %	0.485			0.50%
Ag 328.068†	103624.1	484.59 ug/L	2.204	484.59 ppb	2.204	0.45%
QC value within limits for Ag 328.068 Recovery = 96.92%						
Al 396.153Radial†	5477.6	5124.4 ug/L	69.69	5124.4 ppb	69.69	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.49%						
As 188.979†	1098.6	492.69 ug/L	5.408	492.69 ppb	5.408	1.10%
QC value within limits for As 188.979 Recovery = 98.54%						
B 249.677†	19276.8	470.24 ug/L	3.252	470.24 ppb	3.252	0.69%
QC value within limits for B 249.677 Recovery = 94.05%						
Ba 233.527†	61850.0	487.38 ug/L	2.197	487.38 ppb	2.197	0.45%
QC value within limits for Ba 233.527 Recovery = 97.48%						
Be 313.107†	1309115.8	490.22 ug/L	0.916	490.22 ppb	0.916	0.19%
QC value within limits for Be 313.107 Recovery = 98.04%						
Ca 317.933Radial†	2420.3	5278.0 ug/L	9.91	5278.0 ppb	9.91	0.19%

QC value within limits for Ca 317.933 Radial Recovery = 105.56%

Cd 226.502†	42399.5	492.59 ug/L	2.081	492.59 ppb	2.081	0.42%
QC value within limits for Cd 226.502 Recovery = 98.52%						
Co 228.616†	23279.3	489.03 ug/L	2.522	489.03 ppb	2.522	0.52%
QC value within limits for Co 228.616 Recovery = 97.81%						
Cr 267.716†	43327.0	487.14 ug/L	2.379	487.14 ppb	2.379	0.49%
QC value within limits for Cr 267.716 Recovery = 97.43%						
Cu 324.752†	155548.8	473.95 ug/L	2.242	473.95 ppb	2.242	0.47%
QC value within limits for Cu 324.752 Recovery = 94.79%						
Fe 238.204 Radial†	315.0	5104.9 ug/L	15.77	5104.9 ppb	15.77	0.31%
QC value within limits for Fe 238.204 Radial Recovery = 102.10%						
K 766.490 Radial†	26304.0	5033.1 ug/L	54.96	5033.1 ppb	54.96	1.09%
QC value within limits for K 766.490 Radial Recovery = 100.66%						
Mg 279.077 IEC†	102.6	5414.3 ug/L	36.35	5414.3 ppb	36.35	0.67%
QC value within limits for Mg 279.077 IEC Recovery = 108.29%						
Mn 257.610†	429526.6	489.62 ug/L	0.958	489.62 ppb	0.958	0.20%
QC value within limits for Mn 257.610 Recovery = 97.92%						
Mo 202.031†	6560.1	483.64 ug/L	3.412	483.64 ppb	3.412	0.71%
QC value within limits for Mo 202.031 Recovery = 96.73%						
Na 589.592 Radial†	33013.6	10273 ug/L	68.1	10273 ppb	68.1	0.66%
QC value within limits for Na 589.592 Radial Recovery = 102.73%						
Ni 231.604†	19291.3	492.02 ug/L	2.647	492.02 ppb	2.647	0.54%
QC value within limits for Ni 231.604 Recovery = 98.40%						
P 214.914†	4049.5	2343.0 ug/L	21.30	2343.0 ppb	21.30	0.91%
QC value within limits for P 214.914 Recovery = 93.72%						
Pb 220.353†	3890.2	482.78 ug/L	3.883	482.78 ppb	3.883	0.80%
QC value within limits for Pb 220.353 Recovery = 96.56%						
S 181.975 Axial†	697.5	982.53 ug/L	6.789	982.53 ppb	6.789	0.69%
QC value within limits for S 181.975 Axial Recovery = 98.25%						
Sb 206.836†	1366.1	499.56 ug/L	3.850	499.56 ppb	3.850	0.77%
QC value within limits for Sb 206.836 Recovery = 99.91%						
Se 196.026†	740.5	503.96 ug/L	8.744	503.96 ppb	8.744	1.73%
QC value within limits for Se 196.026 Recovery = 100.79%						
Si 251.611†	75129.5	2427.9 ug/L	12.05	2427.9 ppb	12.05	0.50%
QC value within limits for Si 251.611 Recovery = 97.12%						
Sn 189.927†	2729.1	492.78 ug/L	5.882	492.78 ppb	5.882	1.19%
QC value within limits for Sn 189.927 Recovery = 98.56%						
Sr 421.552†	71823.1	499.61 ug/L	4.610	499.61 ppb	4.610	0.92%
QC value within limits for Sr 421.552 Recovery = 99.92%						
Ti 334.940†	304124.7	479.08 ug/L	2.272	479.08 ppb	2.272	0.47%
QC value within limits for Ti 334.940 Recovery = 95.82%						
Tl 190.801†	1501.1	486.09 ug/L	3.959	486.09 ppb	3.959	0.81%
QC value within limits for Tl 190.801 Recovery = 97.22%						
U 409.014†	16586.2	461.49 ug/L	1.799	461.49 ppb	1.799	0.39%
QC value within limits for U 409.014 Recovery = 92.30%						
V 292.402†	68909.1	487.78 ug/L	1.665	487.78 ppb	1.665	0.34%
QC value within limits for V 292.402 Recovery = 97.56%						
Zn 213.857†	48781.7	487.93 ug/L	2.226	487.93 ppb	2.226	0.46%
QC value within limits for Zn 213.857 Recovery = 97.59%						
SiO2†	74918.9	5188.3 ug/L	27.62	5188.3 ppb	27.62	0.53%
QC value within limits for SiO2 Recovery = 97.02%						

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 20:19:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3895.3	3895.3	101 %		20:21:21
1	Y RADIAL	4448.0	4448.0	99.92 %		20:21:01
1	Al 396.153Radial†	-143.7	-27.2	-25.586 ug/L	-25.586 ppb	20:21:01
1	Ca 317.933Radial†	14.6	-4.2	-9.1851 ug/L	-9.1851 ppb	20:21:21
1	Fe 238.204 Radial†	10.3	-1.5	-24.559 ug/L	-24.559 ppb	20:21:21
1	K 766.490 Radial†	2977.0	182.6	34.993 ug/L	34.993 ppb	20:21:01
1	Mg 279.077 IEC†	-0.2	-1.3	-70.451 ug/L	-70.451 ppb	20:21:21
1	Na 589.592 Radial†	-890.5	19.9	6.2034 ug/L	6.2034 ppb	20:21:01
1	Sr 421.552†	26.8	17.8	0.1236 ug/L	0.1236 ppb	20:21:01
1	Sc 361.383	908132.9	908132.9	103.19 %		20:22:18
1	Y 371.029	765943.2	765943.2	100.70 %		20:22:18
1	Ag 328.068†	345.2	100.4	0.4628 ug/L	0.4628 ppb	20:22:18
1	As 188.979†	-24.7	-4.0	-1.8091 ug/L	-1.8091 ppb	20:22:38
1	B 249.677†	-497.4	-204.0	-4.9956 ug/L	-4.9956 ppb	20:22:38
1	Ba 233.527†	19.5	7.8	0.0600 ug/L	0.0600 ppb	20:22:38
1	Be 313.107†	-3569.4	99.1	0.0365 ug/L	0.0365 ppb	20:22:18
1	Cd 226.502†	-181.1	0.7	0.0095 ug/L	0.0095 ppb	20:22:38
1	Co 228.616†	-78.1	-10.9	-0.2253 ug/L	-0.2253 ppb	20:22:38
1	Cr 267.716†	69.5	-17.7	-0.1993 ug/L	-0.1993 ppb	20:22:38
1	Cu 324.752†	5967.4	-172.1	-0.5223 ug/L	-0.5223 ppb	20:22:18
1	Mn 257.610†	464.3	-27.7	-0.0311 ug/L	-0.0311 ppb	20:22:38
1	Mo 202.031†	16.8	11.6	0.8546 ug/L	0.8546 ppb	20:22:38
1	Ni 231.604†	88.6	3.1	0.0793 ug/L	0.0793 ppb	20:22:38
1	P 214.914†	224.6	11.9	7.2764 ug/L	7.2764 ppb	20:22:38
1	Pb 220.353†	-21.8	-82.3	-10.187 ug/L	-10.187 ppb	20:22:38
1	S 181.975 Axial†	32.9	-4.0	-5.5874 ug/L	-5.5874 ppb	20:22:38
1	Sb 206.836†	44.0	3.6	1.2996 ug/L	1.2996 ppb	20:22:38
1	Se 196.026†	-27.9	-2.3	-1.5879 ug/L	-1.5879 ppb	20:22:38
1	Si 251.611†	585.7	2.9	0.0822 ug/L	0.0822 ppb	20:22:38
1	Sn 189.927†	13.2	3.4	0.6072 ug/L	0.6072 ppb	20:22:38
1	Ti 334.940†	-1609.1	-149.5	-0.2284 ug/L	-0.2284 ppb	20:22:18
1	Tl 190.801†	-24.5	3.7	1.1828 ug/L	1.1828 ppb	20:22:38
1	U 409.014†	-3214.3	-213.1	-5.9482 ug/L	-5.9482 ppb	20:22:18
1	V 292.402†	-1558.9	-42.0	-0.2901 ug/L	-0.2901 ppb	20:22:18
1	Zn 213.857†	696.2	-64.8	-0.6503 ug/L	-0.6503 ppb	20:22:38
1	SiO2†	573.0	-32.9	-2.3078 ug/L	-2.3078 ppb	20:23:34
2	Sc Radial	3833.8	3833.8	99.4 %		20:21:46
2	Y RADIAL	4364.2	4364.2	98.03 %		20:21:26
2	Al 396.153Radial†	-143.1	-28.9	-27.162 ug/L	-27.162 ppb	20:21:26
2	Ca 317.933Radial†	15.5	-3.1	-6.7397 ug/L	-6.7397 ppb	20:21:46
2	Fe 238.204 Radial†	13.0	1.4	23.202 ug/L	23.202 ppb	20:21:46
2	K 766.490 Radial†	2998.9	252.0	48.276 ug/L	48.276 ppb	20:21:26
2	Mg 279.077 IEC†	1.6	0.5	25.238 ug/L	25.238 ppb	20:21:46
2	Na 589.592 Radial†	-903.3	-7.1	-2.2145 ug/L	-2.2145 ppb	20:21:26
2	Sr 421.552†	27.1	18.5	0.1290 ug/L	0.1290 ppb	20:21:26
2	Sc 361.383	902723.7	902723.7	102.57 %		20:22:43
2	Y 371.029	762370.1	762370.1	100.23 %		20:22:43
2	Ag 328.068†	278.0	36.9	0.1791 ug/L	0.1791 ppb	20:22:43
2	As 188.979†	-13.4	6.8	3.0469 ug/L	3.0469 ppb	20:23:03
2	B 249.677†	-454.8	-165.3	-4.0558 ug/L	-4.0558 ppb	20:23:03
2	Ba 233.527†	26.4	14.7	0.1153 ug/L	0.1153 ppb	20:23:03
2	Be 313.107†	-3503.2	142.9	0.0531 ug/L	0.0531 ppb	20:22:43
2	Cd 226.502†	-194.3	-13.2	-0.1562 ug/L	-0.1562 ppb	20:23:03
2	Co 228.616†	-72.2	-5.5	-0.1179 ug/L	-0.1179 ppb	20:23:03
2	Cr 267.716†	66.1	-20.6	-0.2289 ug/L	-0.2289 ppb	20:23:03
2	Cu 324.752†	5860.7	-241.4	-0.7330 ug/L	-0.7330 ppb	20:22:43
2	Mn 257.610†	492.3	2.3	0.0039 ug/L	0.0039 ppb	20:23:03
2	Mo 202.031†	-5.4	-9.9	-0.7304 ug/L	-0.7304 ppb	20:23:03
2	Ni 231.604†	98.1	12.9	0.3288 ug/L	0.3288 ppb	20:23:03

2	P 214.914†	196.3	-14.4	-8.5403 ug/L	-8.5403 ppb	20:23:03
2	Pb 220.353†	-31.2	-91.6	-11.345 ug/L	-11.345 ppb	20:23:03
2	S 181.975 Axial†	44.9	7.9	11.185 ug/L	11.185 ppb	20:23:03
2	Sb 206.836†	36.0	-3.9	-1.3852 ug/L	-1.3852 ppb	20:23:03
2	Se 196.026†	-32.9	-7.4	-4.7801 ug/L	-4.7801 ppb	20:23:03
2	Si 251.611†	575.7	-3.4	-0.1022 ug/L	-0.1022 ppb	20:23:03
2	Sn 189.927†	15.7	5.8	1.0518 ug/L	1.0518 ppb	20:23:03
2	Ti 334.940†	-1537.9	-89.4	-0.1427 ug/L	-0.1427 ppb	20:22:43
2	Tl 190.801†	-36.7	-8.4	-2.6904 ug/L	-2.6904 ppb	20:23:03
2	U 409.014†	-3072.8	-93.8	-2.6227 ug/L	-2.6227 ppb	20:22:43
2	V 292.402†	-1563.9	-55.9	-0.4087 ug/L	-0.4087 ppb	20:22:43
2	Zn 213.857†	694.6	-62.3	-0.6336 ug/L	-0.6336 ppb	20:23:03
2	SiO2†	588.8	-14.2	-0.9630 ug/L	-0.9630 ppb	20:23:39
3	Sc Radial	3877.6	3877.6	101 %		20:22:11
3	Y RADIAL	4386.3	4386.3	98.53 %		20:21:51
3	Al 396.153Radial†	-122.4	-6.7	-6.3320 ug/L	-6.3320 ppb	20:21:51
3	Ca 317.933Radial†	22.7	3.9	8.4957 ug/L	8.4957 ppb	20:22:11
3	Fe 238.204 Radial†	13.0	1.3	20.480 ug/L	20.480 ppb	20:22:11
3	K 766.490 Radial†	3011.5	230.4	44.145 ug/L	44.145 ppb	20:21:51
3	Mg 279.077 IEC†	0.6	-0.6	-31.699 ug/L	-31.699 ppb	20:22:11
3	Na 589.592 Radial†	-904.7	1.8	0.5641 ug/L	0.5641 ppb	20:21:51
3	Sr 421.552†	8.5	-0.2	-0.0018 ug/L	-0.0018 ppb	20:21:51
3	Sc 361.383	914908.7	914908.7	103.96 %		20:23:08
3	Y 371.029	772315.1	772315.1	101.54 %		20:23:08
3	Ag 328.068†	334.8	87.9	0.4158 ug/L	0.4158 ppb	20:23:08
3	As 188.979†	-21.3	-0.6	-0.2673 ug/L	-0.2673 ppb	20:23:28
3	B 249.677†	-499.4	-202.4	-4.9635 ug/L	-4.9635 ppb	20:23:28
3	Ba 233.527†	21.2	9.4	0.0743 ug/L	0.0743 ppb	20:23:28
3	Be 313.107†	-3574.7	119.7	0.0446 ug/L	0.0446 ppb	20:23:08
3	Cd 226.502†	-191.8	-8.3	-0.0992 ug/L	-0.0992 ppb	20:23:28
3	Co 228.616†	-69.0	-1.5	-0.0298 ug/L	-0.0298 ppb	20:23:28
3	Cr 267.716†	69.3	-18.5	-0.2045 ug/L	-0.2045 ppb	20:23:28
3	Cu 324.752†	6008.6	-175.3	-0.5322 ug/L	-0.5322 ppb	20:23:08
3	Mn 257.610†	488.1	-8.1	-0.0060 ug/L	-0.0060 ppb	20:23:28
3	Mo 202.031†	14.7	9.5	0.6999 ug/L	0.6999 ppb	20:23:28
3	Ni 231.604†	71.1	-14.4	-0.3679 ug/L	-0.3679 ppb	20:23:28
3	P 214.914†	203.1	-10.4	-6.1578 ug/L	-6.1578 ppb	20:23:28
3	Pb 220.353†	-40.6	-100.3	-12.407 ug/L	-12.407 ppb	20:23:28
3	S 181.975 Axial†	28.8	-8.1	-11.465 ug/L	-11.465 ppb	20:23:28
3	Sb 206.836†	46.1	5.3	1.9088 ug/L	1.9088 ppb	20:23:28
3	Se 196.026†	-27.6	-1.9	-1.1563 ug/L	-1.1563 ppb	20:23:28
3	Si 251.611†	566.8	-19.5	-0.6416 ug/L	-0.6416 ppb	20:23:28
3	Sn 189.927†	17.2	7.1	1.2878 ug/L	1.2878 ppb	20:23:28
3	Ti 334.940†	-1486.2	-19.7	-0.0266 ug/L	-0.0266 ppb	20:23:08
3	Tl 190.801†	-31.2	-2.6	-0.8304 ug/L	-0.8304 ppb	20:23:28
3	U 409.014†	-3074.7	-55.8	-1.5602 ug/L	-1.5602 ppb	20:23:08
3	V 292.402†	-1525.7	1.1	0.0112 ug/L	0.0112 ppb	20:23:08
3	Zn 213.857†	706.1	-60.2	-0.6080 ug/L	-0.6080 ppb	20:23:28
3	SiO2†	576.2	-33.9	-2.3752 ug/L	-2.3752 ppb	20:23:44

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908588.5	103.24 %		0.694			0.67%
Sc Radial	3868.9	100 %		0.8			0.82%
Y 371.029	766876.1	100.82 %		0.662			0.66%
Y RADIAL	4399.5	98.83 %		0.975			0.99%
Ag 328.068†	75.0	0.3526 ug/L		0.15208	0.3526 ppb	0.15208	43.13%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-20.9	-19.693 ug/L		11.5979	-19.693 ppb	11.5979	58.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.7	0.3235 ug/L		2.48131	0.3235 ppb	2.48131	767.04%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-190.6	-4.6716 ug/L		0.53356	-4.6716 ppb	0.53356	11.42%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.6	0.0832 ug/L		0.02866	0.0832 ppb	0.02866	34.45%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	120.6	0.0447 ug/L		0.00829	0.0447 ppb	0.00829	18.52%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.1	-2.4764 ug/L		9.58041	-2.4764 ppb	9.58041	386.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-6.9	-0.0820 ug/L	0.08418	-0.0820 ppb	0.08418	102.67%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-6.0	-0.1244 ug/L	0.09790	-0.1244 ppb	0.09790	78.73%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-18.9	-0.2109 ug/L	0.01579	-0.2109 ppb	0.01579	7.49%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-196.3	-0.5958 ug/L	0.11888	-0.5958 ppb	0.11888	19.95%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.4	6.3741 ug/L	26.82379	6.3741 ppb	26.82379	420.82%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	221.7	42.471 ug/L	6.7980	42.471 ppb	6.7980	16.01%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.5	-25.637 ug/L	48.1318	-25.637 ppb	48.1318	187.74%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-11.2	-0.0111 ug/L	0.01806	-0.0111 ppb	0.01806	163.26%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.7	0.2747 ug/L	0.87390	0.2747 ppb	0.87390	318.15%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	4.9	1.5177 ug/L	4.28922	1.5177 ppb	4.28922	282.62%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.5	0.0134 ug/L	0.35302	0.0134 ppb	0.35302	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-4.3	-2.4739 ug/L	8.52761	-2.4739 ppb	8.52761	344.71%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-91.4	-11.313 ug/L	1.1102	-11.313 ppb	1.1102	9.81%	
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.4	-1.9556 ug/L	11.75374	-1.9556 ppb	11.75374	601.03%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	1.7	0.6077 ug/L	1.75258	0.6077 ppb	1.75258	288.37%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.8	-2.5081 ug/L	1.97942	-2.5081 ppb	1.97942	78.92%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-6.7	-0.2205 ug/L	0.37610	-0.2205 ppb	0.37610	170.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.5	0.9822 ug/L	0.34560	0.9822 ppb	0.34560	35.18%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	12.0	0.0836 ug/L	0.07399	0.0836 ppb	0.07399	88.51%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-86.2	-0.1326 ug/L	0.10128	-0.1326 ppb	0.10128	76.41%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-2.4	-0.7793 ug/L	1.93709	-0.7793 ppb	1.93709	248.56%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-120.9	-3.3770 ug/L	2.28919	-3.3770 ppb	2.28919	67.79%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-32.3	-0.2292 ug/L	0.21648	-0.2292 ppb	0.21648	94.45%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-62.4	-0.6306 ug/L	0.02130	-0.6306 ppb	0.02130	3.38%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-27.0	-1.8820 ug/L	0.79661	-1.8820 ppb	0.79661	42.33%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 35  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 2/25/2010 21:27:24  
 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	3731.6	3731.6	96.8 %		21:29:36
1	Y RADIAL	4254.5	4254.5	95.57 %		21:29:16
1	Al 396.153Radial†	5411.6	5708.4	5341.5 ug/L	5341.5 ppb	21:29:16
1	Ca 317.933Radial†	2335.7	2395.5	5223.9 ug/L	5223.9 ppb	21:29:36
1	Fe 238.204 Radial†	300.8	299.2	4849.6 ug/L	4849.6 ppb	21:29:36
1	K 766.490 Radial†	28575.3	26770.0	5122.9 ug/L	5122.9 ppb	21:29:16
1	Mg 279.077 IEC†	99.0	101.2	5338.8 ug/L	5338.8 ppb	21:29:36
1	Na 589.592 Radial†	26789.2	28590.7	8896.4 ug/L	8896.4 ppb	21:29:16
1	Sr 421.552†	66970.6	69211.3	481.44 ug/L	481.44 ppb	21:29:16
1	Sc 361.383	933487.5	933487.5	106.07 %		21:30:33
1	Y 371.029	771625.9	771625.9	101.44 %		21:30:33
1	Ag 328.068†	109563.0	103059.6	481.88 ug/L	481.88 ppb	21:30:39
1	As 188.979†	1141.1	1095.7	491.35 ug/L	491.35 ppb	21:30:59
1	B 249.677†	20133.4	19259.3	469.87 ug/L	469.87 ppb	21:30:39
1	Ba 233.527†	65008.4	61277.5	482.86 ug/L	482.86 ppb	21:30:39
1	Be 313.107†	1390190.0	1314201.0	492.11 ug/L	492.11 ppb	21:30:33
1	Cd 226.502†	44400.8	42036.4	488.40 ug/L	488.40 ppb	21:30:39
1	Co 228.616†	24405.3	23073.6	484.71 ug/L	484.71 ppb	21:30:39
1	Cr 267.716†	45703.0	43002.7	483.47 ug/L	483.47 ppb	21:30:39
1	Cu 324.752†	171098.9	155353.4	473.34 ug/L	473.34 ppb	21:30:39
1	Mn 257.610†	457550.0	430891.1	491.16 ug/L	491.16 ppb	21:30:33
1	Mo 202.031†	6912.6	6512.4	480.11 ug/L	480.11 ppb	21:30:59
1	Ni 231.604†	20371.7	19123.3	487.74 ug/L	487.74 ppb	21:30:39
1	P 214.914†	4459.8	3998.8	2312.9 ug/L	2312.9 ppb	21:30:59
1	Pb 220.353†	4134.1	3836.3	476.18 ug/L	476.18 ppb	21:30:59
1	S 181.975 Axial†	771.6	691.6	974.10 ug/L	974.10 ppb	21:30:59
1	Sb 206.836†	1467.1	1344.2	491.67 ug/L	491.67 ppb	21:30:59
1	Se 196.026†	758.9	740.2	502.94 ug/L	502.94 ppb	21:30:59
1	Si 251.611†	80068.6	74922.3	2421.2 ug/L	2421.2 ppb	21:30:39
1	Sn 189.927†	2883.7	2709.3	489.21 ug/L	489.21 ppb	21:30:59
1	Ti 334.940†	319284.1	302424.5	476.40 ug/L	476.40 ppb	21:30:39
1	Tl 190.801†	1569.1	1506.8	487.91 ug/L	487.91 ppb	21:30:59
1	U 409.014†	14498.6	16570.9	461.09 ug/L	461.09 ppb	21:30:39
1	V 292.402†	71017.1	68422.2	484.37 ug/L	484.37 ppb	21:30:39
1	Zn 213.857†	52213.1	48486.0	485.02 ug/L	485.02 ppb	21:30:39
1	SiO2†	80208.9	75031.1	5196.1 ug/L	5196.1 ppb	21:32:06
2	Sc Radial	3771.0	3771.0	97.8 %		21:30:01
2	Y RADIAL	4275.1	4275.1	96.03 %		21:29:41
2	Al 396.153Radial†	5416.4	5654.9	5291.1 ug/L	5291.1 ppb	21:29:41
2	Ca 317.933Radial†	2364.0	2399.2	5232.0 ug/L	5232.0 ppb	21:30:01
2	Fe 238.204 Radial†	305.5	300.8	4874.9 ug/L	4874.9 ppb	21:30:01
2	K 766.490 Radial†	28742.2	26632.4	5096.6 ug/L	5096.6 ppb	21:29:41
2	Mg 279.077 IEC†	98.4	99.4	5247.4 ug/L	5247.4 ppb	21:30:01
2	Na 589.592 Radial†	26815.1	28328.2	8814.7 ug/L	8814.7 ppb	21:29:41
2	Sr 421.552†	67231.8	68755.9	478.27 ug/L	478.27 ppb	21:29:41
2	Sc 361.383	929164.8	929164.8	105.58 %		21:31:04
2	Y 371.029	769162.0	769162.0	101.12 %		21:31:04
2	Ag 328.068†	108785.0	102803.2	480.70 ug/L	480.70 ppb	21:31:10
2	As 188.979†	1130.1	1090.3	488.93 ug/L	488.93 ppb	21:31:30
2	B 249.677†	19875.5	19103.4	466.04 ug/L	466.04 ppb	21:31:10
2	Ba 233.527†	64807.6	61372.5	483.61 ug/L	483.61 ppb	21:31:10
2	Be 313.107†	1385662.5	1316010.1	492.79 ug/L	492.79 ppb	21:31:04
2	Cd 226.502†	44187.0	42028.6	488.30 ug/L	488.30 ppb	21:31:10
2	Co 228.616†	24291.3	23072.8	484.70 ug/L	484.70 ppb	21:31:10
2	Cr 267.716†	45445.2	42959.0	482.99 ug/L	482.99 ppb	21:31:10
2	Cu 324.752†	169338.8	154436.8	470.55 ug/L	470.55 ppb	21:31:10
2	Mn 257.610†	455158.7	430633.0	490.87 ug/L	490.87 ppb	21:31:04
2	Mo 202.031†	6907.6	6537.9	481.99 ug/L	481.99 ppb	21:31:30
2	Ni 231.604†	20266.9	19113.4	487.48 ug/L	487.48 ppb	21:31:10

2	P 214.914†	4471.1	4029.1	2331.6 ug/L	2331.6 ppb	21:31:30
2	Pb 220.353†	4139.9	3860.0	479.10 ug/L	479.10 ppb	21:31:30
2	S 181.975 Axial†	765.2	689.0	970.43 ug/L	970.43 ppb	21:31:30
2	Sb 206.836†	1469.9	1353.2	494.91 ug/L	494.91 ppb	21:31:30
2	Se 196.026†	746.4	731.7	497.47 ug/L	497.47 ppb	21:31:30
2	Si 251.611†	79354.7	74597.3	2410.7 ug/L	2410.7 ppb	21:31:10
2	Sn 189.927†	2871.5	2710.3	489.40 ug/L	489.40 ppb	21:31:30
2	Ti 334.940†	316896.4	301563.3	475.05 ug/L	475.05 ppb	21:31:10
2	Tl 190.801†	1567.9	1512.5	489.75 ug/L	489.75 ppb	21:31:30
2	U 409.014†	14145.0	16299.5	453.51 ug/L	453.51 ppb	21:31:10
2	V 292.402†	70686.9	68420.9	484.37 ug/L	484.37 ppb	21:31:10
2	Zn 213.857†	51910.4	48428.3	484.43 ug/L	484.43 ppb	21:31:10
2	SiO2†	79453.6	74667.5	5170.9 ug/L	5170.9 ppb	21:32:11
3	Sc Radial	3722.4	3722.4	96.5 %		21:30:26
3	Y RADIAL	4135.7	4135.7	92.90 %		21:30:06
3	Al 396.153Radial†	5253.2	5558.2	5199.8 ug/L	5199.8 ppb	21:30:06
3	Ca 317.933Radial†	2337.8	2403.7	5241.8 ug/L	5241.8 ppb	21:30:26
3	Fe 238.204 Radial†	297.8	296.9	4812.2 ug/L	4812.2 ppb	21:30:26
3	K 766.490 Radial†	27881.2	26124.2	4999.2 ug/L	4999.2 ppb	21:30:06
3	Mg 279.077 IEC†	96.8	99.1	5231.7 ug/L	5231.7 ppb	21:30:26
3	Na 589.592 Radial†	26093.2	27938.3	8693.4 ug/L	8693.4 ppb	21:30:06
3	Sr 421.552†	65106.6	67451.8	469.20 ug/L	469.20 ppb	21:30:06
3	Sc 361.383	917108.8	917108.8	104.21 %		21:31:35
3	Y 371.029	759601.7	759601.7	99.864 %		21:31:35
3	Ag 328.068†	110214.9	105529.9	493.38 ug/L	493.38 ppb	21:31:41
3	As 188.979†	1142.6	1116.4	500.60 ug/L	500.60 ppb	21:32:01
3	B 249.677†	20284.7	19743.5	481.71 ug/L	481.71 ppb	21:31:41
3	Ba 233.527†	65559.6	62901.0	495.65 ug/L	495.65 ppb	21:31:41
3	Be 313.107†	1366871.0	1315230.6	492.52 ug/L	492.52 ppb	21:31:35
3	Cd 226.502†	44834.5	43200.1	501.94 ug/L	501.94 ppb	21:31:41
3	Co 228.616†	24593.8	23665.5	497.14 ug/L	497.14 ppb	21:31:41
3	Cr 267.716†	46107.6	44160.5	496.47 ug/L	496.47 ppb	21:31:41
3	Cu 324.752†	171674.1	158786.2	483.79 ug/L	483.79 ppb	21:31:41
3	Mn 257.610†	448961.6	430353.4	490.54 ug/L	490.54 ppb	21:31:35
3	Mo 202.031†	6940.4	6655.4	490.64 ug/L	490.64 ppb	21:32:01
3	Ni 231.604†	20556.0	19643.1	501.00 ug/L	501.00 ppb	21:31:41
3	P 214.914†	4502.3	4114.6	2380.6 ug/L	2380.6 ppb	21:32:01
3	Pb 220.353†	4157.7	3928.7	487.60 ug/L	487.60 ppb	21:32:01
3	S 181.975 Axial†	776.4	709.2	998.98 ug/L	998.98 ppb	21:32:01
3	Sb 206.836†	1493.4	1394.0	509.69 ug/L	509.69 ppb	21:32:01
3	Se 196.026†	770.5	764.1	518.58 ug/L	518.58 ppb	21:32:01
3	Si 251.611†	80628.4	76807.6	2482.2 ug/L	2482.2 ppb	21:31:41
3	Sn 189.927†	2906.6	2779.8	501.94 ug/L	501.94 ppb	21:32:01
3	Ti 334.940†	320888.2	309339.6	487.29 ug/L	487.29 ppb	21:31:41
3	Tl 190.801†	1555.2	1519.8	492.13 ug/L	492.13 ppb	21:32:01
3	U 409.014†	14604.2	16916.3	470.71 ug/L	470.71 ppb	21:31:41
3	V 292.402†	71490.9	70072.6	496.05 ug/L	496.05 ppb	21:31:41
3	Zn 213.857†	52659.8	49793.8	498.12 ug/L	498.12 ppb	21:31:41
3	SiO2†	79087.9	75305.8	5214.9 ug/L	5214.9 ppb	21:32:16

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926587.0	105.29 %	0.964			0.92%
Sc Radial	3741.7	97.0 %	0.67			0.69%
Y 371.029	766796.5	100.81 %	0.835			0.83%
Y RADIAL	4221.8	94.84 %	1.690			1.78%
Ag 328.068†	103797.6	485.32 ug/L	7.008	485.32 ppb	7.008	1.44%
QC value within limits for Ag 328.068 Recovery = 97.06%						
Al 396.153Radial†	5640.5	5277.4 ug/L	71.84	5277.4 ppb	71.84	1.36%
QC value within limits for Al 396.153Radial Recovery = 105.55%						
As 188.979†	1100.8	493.62 ug/L	6.160	493.62 ppb	6.160	1.25%
QC value within limits for As 188.979 Recovery = 98.72%						
B 249.677†	19368.8	472.54 ug/L	8.167	472.54 ppb	8.167	1.73%
QC value within limits for B 249.677 Recovery = 94.51%						
Ba 233.527†	61850.4	487.37 ug/L	7.176	487.37 ppb	7.176	1.47%
QC value within limits for Ba 233.527 Recovery = 97.47%						
Be 313.107†	1315147.2	492.48 ug/L	0.339	492.48 ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 98.50%						
Ca 317.933Radial†	2399.4	5232.5 ug/L	8.96	5232.5 ppb	8.96	0.17%



QC value within limits for Ca 317.933 Radial Recovery = 104.65%							
Cd 226.502†	42421.7	492.88 ug/L	7.844	492.88 ppb	7.844	1.59%	
QC value within limits for Cd 226.502 Recovery = 98.58%							
Co 228.616†	23270.6	488.85 ug/L	7.182	488.85 ppb	7.182	1.47%	
QC value within limits for Co 228.616 Recovery = 97.77%							
Cr 267.716†	43374.1	487.65 ug/L	7.650	487.65 ppb	7.650	1.57%	
QC value within limits for Cr 267.716 Recovery = 97.53%							
Cu 324.752†	156192.1	475.89 ug/L	6.980	475.89 ppb	6.980	1.47%	
QC value within limits for Cu 324.752 Recovery = 95.18%							
Fe 238.204 Radial†	298.9	4845.5 ug/L	31.56	4845.5 ppb	31.56	0.65%	
QC value within limits for Fe 238.204 Radial Recovery = 96.91%							
K 766.490 Radial†	26508.9	5072.9 ug/L	65.15	5072.9 ppb	65.15	1.28%	
QC value within limits for K 766.490 Radial Recovery = 101.46%							
Mg 279.077 IEC†	99.9	5272.6 ug/L	57.82	5272.6 ppb	57.82	1.10%	
QC value within limits for Mg 279.077 IEC Recovery = 105.45%							
Mn 257.610†	430625.9	490.86 ug/L	0.306	490.86 ppb	0.306	0.06%	
QC value within limits for Mn 257.610 Recovery = 98.17%							
Mo 202.031†	6568.6	484.25 ug/L	5.617	484.25 ppb	5.617	1.16%	
QC value within limits for Mo 202.031 Recovery = 96.85%							
Na 589.592 Radial†	28285.7	8801.5 ug/L	102.14	8801.5 ppb	102.14	1.16%	
QC value less than the lower limit for Na 589.592 Radial Recovery = 88.02%							
Ni 231.604†	19293.2	492.07 ug/L	7.728	492.07 ppb	7.728	1.57%	
QC value within limits for Ni 231.604 Recovery = 98.41%							
P 214.914†	4047.5	2341.7 ug/L	34.97	2341.7 ppb	34.97	1.49%	
QC value within limits for P 214.914 Recovery = 93.67%							
Pb 220.353†	3875.0	480.96 ug/L	5.932	480.96 ppb	5.932	1.23%	
QC value within limits for Pb 220.353 Recovery = 96.19%							
S 181.975 Axial†	696.6	981.17 ug/L	15.531	981.17 ppb	15.531	1.58%	
QC value within limits for S 181.975 Axial Recovery = 98.12%							
Sb 206.836†	1363.8	498.76 ug/L	9.607	498.76 ppb	9.607	1.93%	
QC value within limits for Sb 206.836 Recovery = 99.75%							
Se 196.026†	745.3	506.33 ug/L	10.955	506.33 ppb	10.955	2.16%	
QC value within limits for Se 196.026 Recovery = 101.27%							
Si 251.611†	75442.4	2438.0 ug/L	38.60	2438.0 ppb	38.60	1.58%	
QC value within limits for Si 251.611 Recovery = 97.52%							
Sn 189.927†	2733.1	493.52 ug/L	7.294	493.52 ppb	7.294	1.48%	
QC value within limits for Sn 189.927 Recovery = 98.70%							
Sr 421.552†	68473.0	476.30 ug/L	6.353	476.30 ppb	6.353	1.33%	
QC value within limits for Sr 421.552 Recovery = 95.26%							
Ti 334.940†	304442.4	479.58 ug/L	6.714	479.58 ppb	6.714	1.40%	
QC value within limits for Ti 334.940 Recovery = 95.92%							
Tl 190.801†	1513.0	489.93 ug/L	2.112	489.93 ppb	2.112	0.43%	
QC value within limits for Tl 190.801 Recovery = 97.99%							
U 409.014†	16595.5	461.77 ug/L	8.620	461.77 ppb	8.620	1.87%	
QC value within limits for U 409.014 Recovery = 92.35%							
V 292.402†	68971.9	488.27 ug/L	6.746	488.27 ppb	6.746	1.38%	
QC value within limits for V 292.402 Recovery = 97.65%							
Zn 213.857†	48902.7	489.19 ug/L	7.742	489.19 ppb	7.742	1.58%	
QC value within limits for Zn 213.857 Recovery = 97.84%							
SiO2†	75001.5	5194.0 ug/L	22.12	5194.0 ppb	22.12	0.43%	
QC value within limits for SiO2 Recovery = 97.13%							
QC Failed. Continue with analysis.							

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 21:34:26

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	3887.2	3887.2	101 %		21:36:38
1	Y RADIAL	4394.7	4394.7	98.72 %		21:36:18
1	Al 396.153Radial†	-115.4	0.6	0.5308 ug/L	0.5308 ppb	21:36:18
1	Ca 317.933Radial†	15.3	-3.5	-7.5784 ug/L	-7.5784 ppb	21:36:38
1	Fe 238.204 Radial†	9.7	-2.1	-33.244 ug/L	-33.244 ppb	21:36:38
1	K 766.490 Radial†	2826.7	39.7	7.6355 ug/L	7.6355 ppb	21:36:18
1	Mg 279.077 IEC†	0.8	-0.3	-18.102 ug/L	-18.102 ppb	21:36:38
1	Na 589.592 Radial†	-1151.2	-240.6	-74.857 ug/L	-74.857 ppb	21:36:18
1	Sr 421.552†	41.1	32.0	0.2227 ug/L	0.2227 ppb	21:36:18
1	Sc 361.383	905557.6	905557.6	102.90 %		21:37:35
1	Y 371.029	764697.5	764697.5	100.53 %		21:37:35
1	Ag 328.068†	185.8	-53.6	-0.2537 ug/L	-0.2537 ppb	21:37:35
1	As 188.979†	-25.8	-5.1	-2.2969 ug/L	-2.2969 ppb	21:37:55
1	B 249.677†	-470.7	-179.5	-4.3938 ug/L	-4.3938 ppb	21:37:55
1	Ba 233.527†	-0.0	-11.0	-0.0879 ug/L	-0.0879 ppb	21:37:55
1	Be 313.107†	-3592.7	66.7	0.0246 ug/L	0.0246 ppb	21:37:35
1	Cd 226.502†	-176.0	5.1	0.0612 ug/L	0.0612 ppb	21:37:55
1	Co 228.616†	-63.4	3.2	0.0695 ug/L	0.0695 ppb	21:37:55
1	Cr 267.716†	66.5	-20.5	-0.2303 ug/L	-0.2303 ppb	21:37:55
1	Cu 324.752†	5957.3	-165.5	-0.5021 ug/L	-0.5021 ppb	21:37:35
1	Mn 257.610†	481.0	-10.2	-0.0142 ug/L	-0.0142 ppb	21:37:55
1	Mo 202.031†	11.2	6.2	0.4550 ug/L	0.4550 ppb	21:37:55
1	Ni 231.604†	80.1	-4.9	-0.1250 ug/L	-0.1250 ppb	21:37:55
1	P 214.914†	182.9	-28.0	-16.727 ug/L	-16.727 ppb	21:37:55
1	Pb 220.353†	-46.2	-106.1	-13.123 ug/L	-13.123 ppb	21:37:55
1	S 181.975 Axial†	39.5	2.6	3.6143 ug/L	3.6143 ppb	21:37:55
1	Sb 206.836†	33.1	-6.9	-2.4179 ug/L	-2.4179 ppb	21:37:55
1	Se 196.026†	-32.2	-6.6	-4.4303 ug/L	-4.4303 ppb	21:37:55
1	Si 251.611†	582.0	0.9	0.0239 ug/L	0.0239 ppb	21:37:55
1	Sn 189.927†	6.5	-3.2	-0.5678 ug/L	-0.5678 ppb	21:37:55
1	Ti 334.940†	-1533.6	-80.5	-0.1232 ug/L	-0.1232 ppb	21:37:35
1	Tl 190.801†	-28.5	-0.3	-0.0969 ug/L	-0.0969 ppb	21:37:55
1	U 409.014†	-3244.0	-250.9	-7.0012 ug/L	-7.0012 ppb	21:37:35
1	V 292.402†	-1518.3	-6.9	-0.0502 ug/L	-0.0502 ppb	21:37:35
1	Zn 213.857†	717.5	-42.2	-0.4193 ug/L	-0.4193 ppb	21:37:55
1	SiO2†	596.4	-8.6	-0.6122 ug/L	-0.6122 ppb	21:38:51
2	Sc Radial	3840.1	3840.1	99.6 %		21:37:03
2	Y RADIAL	4356.7	4356.7	97.87 %		21:36:43
2	Al 396.153Radial†	-107.3	7.3	6.8209 ug/L	6.8209 ppb	21:36:43
2	Ca 317.933Radial†	14.9	-3.7	-8.0241 ug/L	-8.0241 ppb	21:37:03
2	Fe 238.204 Radial†	9.5	-2.1	-34.627 ug/L	-34.627 ppb	21:37:03
2	K 766.490 Radial†	2989.2	237.3	45.486 ug/L	45.486 ppb	21:36:43
2	Mg 279.077 IEC†	-1.6	-2.8	-148.16 ug/L	-148.16 ppb	21:37:03
2	Na 589.592 Radial†	-1103.1	-206.3	-64.193 ug/L	-64.193 ppb	21:36:43
2	Sr 421.552†	30.3	21.7	0.1507 ug/L	0.1507 ppb	21:36:43
2	Sc 361.383	913468.7	913468.7	103.79 %		21:38:00
2	Y 371.029	772655.7	772655.7	101.58 %		21:38:00
2	Ag 328.068†	368.8	121.2	0.5555 ug/L	0.5555 ppb	21:38:00
2	As 188.979†	-24.5	-3.7	-1.6524 ug/L	-1.6524 ppb	21:38:20
2	B 249.677†	-484.9	-189.1	-4.6295 ug/L	-4.6295 ppb	21:38:20
2	Ba 233.527†	1.5	-9.6	-0.0773 ug/L	-0.0773 ppb	21:38:20
2	Be 313.107†	-3486.3	199.4	0.0742 ug/L	0.0742 ppb	21:38:00
2	Cd 226.502†	-186.5	-3.5	-0.0381 ug/L	-0.0381 ppb	21:38:20
2	Co 228.616†	-67.2	0.1	0.0052 ug/L	0.0052 ppb	21:38:20
2	Cr 267.716†	68.8	-18.8	-0.2126 ug/L	-0.2126 ppb	21:38:20
2	Cu 324.752†	6016.1	-158.9	-0.4831 ug/L	-0.4831 ppb	21:38:00
2	Mn 257.610†	485.0	-10.4	-0.0092 ug/L	-0.0092 ppb	21:38:20
2	Mo 202.031†	13.5	8.4	0.6134 ug/L	0.6134 ppb	21:38:20
2	Ni 231.604†	71.3	-14.1	-0.3592 ug/L	-0.3592 ppb	21:38:20

2	P 214.914†	205.5	-7.8	-4.5476 ug/L	-4.5476 ppb	21:38:20
2	Pb 220.353†	-54.5	-113.7	-14.061 ug/L	-14.061 ppb	21:38:20
2	S 181.975 Axial†	43.6	6.2	8.6742 ug/L	8.6742 ppb	21:38:20
2	Sb 206.836†	40.5	0.0	0.0256 ug/L	0.0256 ppb	21:38:20
2	Se 196.026†	-36.5	-10.4	-6.9547 ug/L	-6.9547 ppb	21:38:20
2	Si 251.611†	594.2	7.8	0.2443 ug/L	0.2443 ppb	21:38:20
2	Sn 189.927†	12.7	2.8	0.5106 ug/L	0.5106 ppb	21:38:20
2	Ti 334.940†	-1537.0	-70.9	-0.0983 ug/L	-0.0983 ppb	21:38:00
2	Tl 190.801†	-24.1	4.2	1.3508 ug/L	1.3508 ppb	21:38:20
2	U 409.014†	-3204.8	-185.8	-5.1832 ug/L	-5.1832 ppb	21:38:00
2	V 292.402†	-1573.4	-47.2	-0.3285 ug/L	-0.3285 ppb	21:38:00
2	Zn 213.857†	701.4	-63.6	-0.6344 ug/L	-0.6344 ppb	21:38:20
2	SiO2†	616.1	5.4	0.3578 ug/L	0.3578 ppb	21:38:56
3	Sc Radial	3836.2	3836.2	99.5 %		21:37:28
3	Y RADIAL	4334.3	4334.3	97.36 %		21:37:08
3	Al 396.153Radial†	-139.2	-24.9	-23.435 ug/L	-23.435 ppb	21:37:08
3	Ca 317.933Radial†	16.3	-2.3	-5.0728 ug/L	-5.0728 ppb	21:37:28
3	Fe 238.204 Radial†	11.0	-0.7	-10.517 ug/L	-10.517 ppb	21:37:28
3	K 766.490 Radial†	2874.0	124.5	23.868 ug/L	23.868 ppb	21:37:08
3	Mg 279.077 IEC†	2.3	1.1	60.132 ug/L	60.132 ppb	21:37:28
3	Na 589.592 Radial†	-1077.2	-181.4	-56.436 ug/L	-56.436 ppb	21:37:08
3	Sr 421.552†	47.6	39.1	0.2718 ug/L	0.2718 ppb	21:37:08
3	Sc 361.383	909046.8	909046.8	103.29 %		21:38:25
3	Y 371.029	767432.0	767432.0	100.89 %		21:38:25
3	Ag 328.068†	278.8	35.8	0.1675 ug/L	0.1675 ppb	21:38:25
3	As 188.979†	-24.9	-4.2	-1.8595 ug/L	-1.8595 ppb	21:38:46
3	B 249.677†	-484.5	-191.1	-4.6818 ug/L	-4.6818 ppb	21:38:46
3	Ba 233.527†	-1.9	-12.9	-0.1018 ug/L	-0.1018 ppb	21:38:46
3	Be 313.107†	-3605.8	67.4	0.0248 ug/L	0.0248 ppb	21:38:25
3	Cd 226.502†	-189.4	-7.2	-0.0836 ug/L	-0.0836 ppb	21:38:46
3	Co 228.616†	-53.9	12.7	0.2695 ug/L	0.2695 ppb	21:38:46
3	Cr 267.716†	78.2	-9.4	-0.1041 ug/L	-0.1041 ppb	21:38:46
3	Cu 324.752†	5876.9	-265.5	-0.8060 ug/L	-0.8060 ppb	21:38:25
3	Mn 257.610†	467.7	-24.9	-0.0318 ug/L	-0.0318 ppb	21:38:46
3	Mo 202.031†	20.0	14.7	1.0803 ug/L	1.0803 ppb	21:38:46
3	Ni 231.604†	74.1	-11.0	-0.2814 ug/L	-0.2814 ppb	21:38:46
3	P 214.914†	209.4	-3.1	-1.6752 ug/L	-1.6752 ppb	21:38:46
3	Pb 220.353†	-36.3	-96.3	-11.912 ug/L	-11.912 ppb	21:38:46
3	S 181.975 Axial†	42.4	5.2	7.3154 ug/L	7.3154 ppb	21:38:46
3	Sb 206.836†	39.8	-0.5	-0.1384 ug/L	-0.1384 ppb	21:38:46
3	Se 196.026†	-26.1	-0.6	-0.4096 ug/L	-0.4096 ppb	21:38:46
3	Si 251.611†	586.6	3.2	0.0908 ug/L	0.0908 ppb	21:38:46
3	Sn 189.927†	15.0	5.1	0.9186 ug/L	0.9186 ppb	21:38:46
3	Ti 334.940†	-1581.2	-120.9	-0.1932 ug/L	-0.1932 ppb	21:38:25
3	Tl 190.801†	-37.9	-9.3	-2.9926 ug/L	-2.9926 ppb	21:38:46
3	U 409.014†	-3236.8	-231.8	-6.4715 ug/L	-6.4715 ppb	21:38:25
3	V 292.402†	-1549.4	-31.3	-0.2127 ug/L	-0.2127 ppb	21:38:25
3	Zn 213.857†	690.2	-71.2	-0.7148 ug/L	-0.7148 ppb	21:38:46
3	SiO2†	627.9	19.7	1.3390 ug/L	1.3390 ppb	21:39:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909357.7	103.33 %		0.450			0.44%
Sc Radial	3854.5	99.9 %		0.74			0.74%
Y 371.029	768261.8	101.00 %		0.532			0.53%
Y RADIAL	4361.9	97.98 %		0.686			0.70%
Ag 328.068†	34.5	0.1564 ug/L		0.40472	0.1564 ppb	0.40472	258.69%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.7	-5.3610 ug/L		15.96516	-5.3610 ppb	15.96516	297.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.3	-1.9363 ug/L		0.32904	-1.9363 ppb	0.32904	16.99%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-186.6	-4.5684 ug/L		0.15343	-4.5684 ppb	0.15343	3.36%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-11.2	-0.0890 ug/L		0.01228	-0.0890 ppb	0.01228	13.79%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	111.1	0.0412 ug/L		0.02861	0.0412 ppb	0.02861	69.44%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-3.2	-6.8917 ug/L		1.59095	-6.8917 ppb	1.59095	23.08%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0202 ug/L	0.07409	-0.0202 ppb	0.07409	367.46%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.3	0.1147 ug/L	0.13788	0.1147 ppb	0.13788	120.19%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-16.2	-0.1824 ug/L	0.06833	-0.1824 ppb	0.06833	37.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-196.6	-0.5971 ug/L	0.18119	-0.5971 ppb	0.18119	30.35%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.6	-26.129 ug/L	13.5384	-26.129 ppb	13.5384	51.81%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	133.8	25.663 ug/L	18.9891	25.663 ppb	18.9891	73.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.7	-35.378 ug/L	105.2172	-35.378 ppb	105.2172	297.41%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-15.2	-0.0184 ug/L	0.01187	-0.0184 ppb	0.01187	64.43%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.8	0.7162 ug/L	0.32511	0.7162 ppb	0.32511	45.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-209.4	-65.162 ug/L	9.2488	-65.162 ppb	9.2488	14.19%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-10.0	-0.2552 ug/L	0.11930	-0.2552 ppb	0.11930	46.75%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-13.0	-7.6498 ug/L	7.99091	-7.6498 ppb	7.99091	104.46%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-105.4	-13.032 ug/L	1.0772	-13.032 ppb	1.0772	8.27%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.6	6.5347 ug/L	2.61874	6.5347 ppb	2.61874	40.07%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.4	-0.8436 ug/L	1.36588	-0.8436 ppb	1.36588	161.91%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-5.9	-3.9316 ug/L	3.30090	-3.9316 ppb	3.30090	83.96%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	4.0	0.1197 ug/L	0.11300	0.1197 ppb	0.11300	94.42%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.6	0.2871 ug/L	0.76803	0.2871 ppb	0.76803	267.47%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	30.9	0.2151 ug/L	0.06092	0.2151 ppb	0.06092	28.33%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-90.8	-0.1382 ug/L	0.04917	-0.1382 ppb	0.04917	35.57%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.8	-0.5796 ug/L	2.21158	-0.5796 ppb	2.21158	381.60%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-222.8	-6.2186 ug/L	0.93504	-6.2186 ppb	0.93504	15.04%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-28.4	-0.1971 ug/L	0.13982	-0.1971 ppb	0.13982	70.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-59.0	-0.5895 ug/L	0.15281	-0.5895 ppb	0.15281	25.92%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	5.5	0.3615 ug/L	0.97561	0.3615 ppb	0.97561	269.84%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 44

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 22:30:11

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	3798.5	3798.5	98.5 %		22:32:23
1	Y RADIAL	4326.8	4326.8	97.19 %		22:32:03
1	Al 396.153Radial†	5456.2	5655.3	5290.9 ug/L	5290.9 ppb	22:32:03
1	Ca 317.933Radial†	2400.9	2419.2	5275.6 ug/L	5275.6 ppb	22:32:23
1	Fe 238.204 Radial†	316.2	309.4	5014.2 ug/L	5014.2 ppb	22:32:23
1	K 766.490 Radial†	29028.8	26710.7	5111.2 ug/L	5111.2 ppb	22:32:03
1	Mg 279.077 IEC†	105.9	106.4	5614.4 ug/L	5614.4 ppb	22:32:23
1	Na 589.592 Radial†	29933.4	31296.1	9738.2 ug/L	9738.2 ppb	22:32:03
1	Sr 421.552†	70722.8	71803.2	499.47 ug/L	499.47 ppb	22:32:03
1	Sc 361.383	923827.9	923827.9	104.97 %		22:33:20
1	Y 371.029	767174.5	767174.5	100.86 %		22:33:20
1	Ag 328.068†	109931.0	104490.2	488.60 ug/L	488.60 ppb	22:33:25
1	As 188.979†	1151.2	1116.6	500.69 ug/L	500.69 ppb	22:33:45
1	B 249.677†	20269.7	19587.7	477.87 ug/L	477.87 ppb	22:33:25
1	Ba 233.527†	65078.3	61985.0	488.44 ug/L	488.44 ppb	22:33:25
1	Be 313.107†	1382512.7	1320591.6	494.51 ug/L	494.51 ppb	22:33:20
1	Cd 226.502†	44556.1	42622.0	495.19 ug/L	495.19 ppb	22:33:25
1	Co 228.616†	24417.9	23326.3	490.03 ug/L	490.03 ppb	22:33:25
1	Cr 267.716†	46002.0	43738.2	491.75 ug/L	491.75 ppb	22:33:25
1	Cu 324.752†	171128.9	157068.7	478.57 ug/L	478.57 ppb	22:33:25
1	Mn 257.610†	452094.6	430204.6	490.38 ug/L	490.38 ppb	22:33:20
1	Mo 202.031†	7016.9	6679.9	492.46 ug/L	492.46 ppb	22:33:45
1	Ni 231.604†	20483.0	19430.1	495.56 ug/L	495.56 ppb	22:33:25
1	P 214.914†	4517.5	4097.7	2371.3 ug/L	2371.3 ppb	22:33:45
1	Pb 220.353†	4184.8	3925.4	487.20 ug/L	487.20 ppb	22:33:45
1	S 181.975 Axial†	781.9	709.0	998.70 ug/L	998.70 ppb	22:33:45
1	Sb 206.836†	1503.2	1392.9	509.32 ug/L	509.32 ppb	22:33:45
1	Se 196.026†	756.7	745.6	507.06 ug/L	507.06 ppb	22:33:45
1	Si 251.611†	79905.5	75556.2	2441.6 ug/L	2441.6 ppb	22:33:25
1	Sn 189.927†	2920.7	2773.0	500.70 ug/L	500.70 ppb	22:33:45
1	Ti 334.940†	319752.1	306017.7	482.04 ug/L	482.04 ppb	22:33:25
1	Tl 190.801†	1572.6	1525.6	493.97 ug/L	493.97 ppb	22:33:45
1	U 409.014†	14557.4	16769.8	466.61 ug/L	466.61 ppb	22:33:25
1	V 292.402†	71449.3	69534.0	492.30 ug/L	492.30 ppb	22:33:25
1	Zn 213.857†	52383.7	49163.2	491.77 ug/L	491.77 ppb	22:33:25
1	SiO2†	80567.1	76163.0	5274.4 ug/L	5274.4 ppb	22:34:53
2	Sc Radial	3833.0	3833.0	99.4 %		22:32:48
2	Y RADIAL	4353.2	4353.2	97.79 %		22:32:28
2	Al 396.153Radial†	5471.2	5620.5	5258.4 ug/L	5258.4 ppb	22:32:28
2	Ca 317.933Radial†	2418.6	2415.1	5266.6 ug/L	5266.6 ppb	22:32:48
2	Fe 238.204 Radial†	315.2	305.5	4951.3 ug/L	4951.3 ppb	22:32:48
2	K 766.490 Radial†	28926.6	26342.5	5040.7 ug/L	5040.7 ppb	22:32:28
2	Mg 279.077 IEC†	104.2	103.7	5470.3 ug/L	5470.3 ppb	22:32:48
2	Na 589.592 Radial†	30127.8	31218.0	9713.9 ug/L	9713.9 ppb	22:32:28
2	Sr 421.552†	70893.1	71328.1	496.16 ug/L	496.16 ppb	22:32:28
2	Sc 361.383	921618.0	921618.0	104.72 %		22:33:51
2	Y 371.029	764505.5	764505.5	100.51 %		22:33:51
2	Ag 328.068†	110009.3	104816.1	490.10 ug/L	490.10 ppb	22:33:56
2	As 188.979†	1147.3	1115.5	500.22 ug/L	500.22 ppb	22:34:16
2	B 249.677†	20324.2	19686.1	480.29 ug/L	480.29 ppb	22:33:56
2	Ba 233.527†	65164.7	62216.2	490.26 ug/L	490.26 ppb	22:33:56
2	Be 313.107†	1381450.0	1322734.8	495.32 ug/L	495.32 ppb	22:33:51
2	Cd 226.502†	44445.3	42618.0	495.15 ug/L	495.15 ppb	22:33:56
2	Co 228.616†	24471.6	23433.3	492.27 ug/L	492.27 ppb	22:33:56
2	Cr 267.716†	45985.0	43826.9	492.74 ug/L	492.74 ppb	22:33:56
2	Cu 324.752†	171683.3	157989.0	481.37 ug/L	481.37 ppb	22:33:56
2	Mn 257.610†	452525.3	431648.6	492.02 ug/L	492.02 ppb	22:33:51
2	Mo 202.031†	6959.0	6640.6	489.56 ug/L	489.56 ppb	22:34:16
2	Ni 231.604†	20491.9	19485.3	496.97 ug/L	496.97 ppb	22:33:56

2	P 214.914†	4487.4	4079.4	2359.7 ug/L	2359.7 ppb	22:34:16
2	Pb 220.353†	4164.8	3915.9	486.01 ug/L	486.01 ppb	22:34:16
2	S 181.975 Axial†	781.4	710.4	1000.6 ug/L	1000.6 ppb	22:34:16
2	Sb 206.836†	1480.4	1374.6	502.78 ug/L	502.78 ppb	22:34:16
2	Se 196.026†	764.7	755.0	512.99 ug/L	512.99 ppb	22:34:16
2	Si 251.611†	80081.9	75907.2	2453.0 ug/L	2453.0 ppb	22:33:56
2	Sn 189.927†	2902.8	2762.5	498.81 ug/L	498.81 ppb	22:34:16
2	Ti 334.940†	320428.1	307393.6	484.21 ug/L	484.21 ppb	22:33:56
2	Tl 190.801†	1573.8	1530.3	495.52 ug/L	495.52 ppb	22:34:16
2	U 409.014†	14655.3	16896.5	470.15 ug/L	470.15 ppb	22:33:56
2	V 292.402†	71389.4	69640.0	493.01 ug/L	493.01 ppb	22:33:56
2	Zn 213.857†	52414.8	49312.6	493.27 ug/L	493.27 ppb	22:33:56
2	SiO2†	79384.1	75217.4	5208.8 ug/L	5208.8 ppb	22:34:58
3	Sc Radial	3798.6	3798.6	98.5 %		22:33:13
3	Y RADIAL	4273.4	4273.4	95.99 %		22:32:53
3	Al 396.153Radial†	5427.2	5625.6	5262.9 ug/L	5262.9 ppb	22:32:53
3	Ca 317.933Radial†	2411.2	2429.6	5298.3 ug/L	5298.3 ppb	22:33:13
3	Fe 238.204 Radial†	317.9	311.1	5042.6 ug/L	5042.6 ppb	22:33:13
3	K 766.490 Radial†	28616.2	26290.7	5030.8 ug/L	5030.8 ppb	22:32:53
3	Mg 279.077 IEC†	101.3	101.7	5364.9 ug/L	5364.9 ppb	22:33:13
3	Na 589.592 Radial†	29554.7	30910.4	9618.2 ug/L	9618.2 ppb	22:32:53
3	Sr 421.552†	69822.1	70885.9	493.09 ug/L	493.09 ppb	22:32:53
3	Sc 361.383	914471.6	914471.6	103.91 %		22:34:22
3	Y 371.029	759375.7	759375.7	99.834 %		22:34:22
3	Ag 328.068†	109087.6	104750.0	489.82 ug/L	489.82 ppb	22:34:27
3	As 188.979†	1146.3	1123.1	503.59 ug/L	503.59 ppb	22:34:47
3	B 249.677†	20108.9	19630.5	478.92 ug/L	478.92 ppb	22:34:27
3	Ba 233.527†	64629.2	62187.1	490.03 ug/L	490.03 ppb	22:34:27
3	Be 313.107†	1365049.8	1317260.5	493.27 ug/L	493.27 ppb	22:34:22
3	Cd 226.502†	44076.5	42594.7	494.87 ug/L	494.87 ppb	22:34:27
3	Co 228.616†	24174.3	23329.8	490.10 ug/L	490.10 ppb	22:34:27
3	Cr 267.716†	45667.2	43864.3	493.17 ug/L	493.17 ppb	22:34:27
3	Cu 324.752†	169891.1	157545.4	480.03 ug/L	480.03 ppb	22:34:27
3	Mn 257.610†	447008.8	429716.5	489.84 ug/L	489.84 ppb	22:34:22
3	Mo 202.031†	6974.6	6707.5	494.50 ug/L	494.50 ppb	22:34:47
3	Ni 231.604†	20278.8	19433.2	495.64 ug/L	495.64 ppb	22:34:27
3	P 214.914†	4504.3	4129.0	2389.8 ug/L	2389.8 ppb	22:34:47
3	Pb 220.353†	4177.1	3958.8	491.33 ug/L	491.33 ppb	22:34:47
3	S 181.975 Axial†	789.0	723.5	1019.1 ug/L	1019.1 ppb	22:34:47
3	Sb 206.836†	1487.6	1392.6	509.28 ug/L	509.28 ppb	22:34:47
3	Se 196.026†	766.5	762.4	518.16 ug/L	518.16 ppb	22:34:47
3	Si 251.611†	79284.5	75737.4	2447.5 ug/L	2447.5 ppb	22:34:27
3	Sn 189.927†	2904.4	2785.8	503.01 ug/L	503.01 ppb	22:34:47
3	Ti 334.940†	317484.4	306951.8	483.53 ug/L	483.53 ppb	22:34:27
3	Tl 190.801†	1578.1	1546.2	500.61 ug/L	500.61 ppb	22:34:47
3	U 409.014†	14250.6	16616.4	462.32 ug/L	462.32 ppb	22:34:27
3	V 292.402†	70808.7	69613.9	492.86 ug/L	492.86 ppb	22:34:27
3	Zn 213.857†	51930.3	49237.4	492.51 ug/L	492.51 ppb	22:34:27
3	SiO2†	79768.2	76179.4	5275.5 ug/L	5275.5 ppb	22:35:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	919972.5	104.53 %	0.556			0.53%
Sc Radial	3810.0	98.8 %	0.52			0.52%
Y 371.029	763685.2	100.40 %	0.521			0.52%
Y RADIAL	4317.8	96.99 %	0.913			0.94%
Ag 328.068†	104685.5	489.51 ug/L	0.796	489.51 ppb	0.796	0.16%
QC value within limits for Ag 328.068 Recovery = 97.90%						
Al 396.153Radial†	5633.8	5270.7 ug/L	17.62	5270.7 ppb	17.62	0.33%
QC value within limits for Al 396.153Radial Recovery = 105.41%						
As 188.979†	1118.4	501.50 ug/L	1.824	501.50 ppb	1.824	0.36%
QC value within limits for As 188.979 Recovery = 100.30%						
B 249.677†	19634.8	479.03 ug/L	1.211	479.03 ppb	1.211	0.25%
QC value within limits for B 249.677 Recovery = 95.81%						
Ba 233.527†	62129.4	489.58 ug/L	0.990	489.58 ppb	0.990	0.20%
QC value within limits for Ba 233.527 Recovery = 97.92%						
Be 313.107†	1320195.6	494.37 ug/L	1.031	494.37 ppb	1.031	0.21%
QC value within limits for Be 313.107 Recovery = 98.87%						
Ca 317.933Radial†	2421.3	5280.2 ug/L	16.36	5280.2 ppb	16.36	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 105.60%

Cd 226.502†	42611.6	495.07 ug/L	0.175	495.07 ppb	0.175	0.04%
QC value within limits for Cd 226.502 Recovery = 99.01%						
Co 228.616†	23363.1	490.80 ug/L	1.271	490.80 ppb	1.271	0.26%
QC value within limits for Co 228.616 Recovery = 98.16%						
Cr 267.716†	43809.8	492.55 ug/L	0.728	492.55 ppb	0.728	0.15%
QC value within limits for Cr 267.716 Recovery = 98.51%						
Cu 324.752†	157534.4	479.99 ug/L	1.400	479.99 ppb	1.400	0.29%
QC value within limits for Cu 324.752 Recovery = 96.00%						
Fe 238.204 Radial†	308.7	5002.7 ug/L	46.70	5002.7 ppb	46.70	0.93%
QC value within limits for Fe 238.204 Radial Recovery = 100.05%						
K 766.490 Radial†	26448.0	5060.9 ug/L	43.86	5060.9 ppb	43.86	0.87%
QC value within limits for K 766.490 Radial Recovery = 101.22%						
Mg 279.077 IEC†	103.9	5483.2 ug/L	125.23	5483.2 ppb	125.23	2.28%
QC value within limits for Mg 279.077 IEC Recovery = 109.66%						
Mn 257.610†	430523.2	490.75 ug/L	1.139	490.75 ppb	1.139	0.23%
QC value within limits for Mn 257.610 Recovery = 98.15%						
Mo 202.031†	6676.0	492.17 ug/L	2.480	492.17 ppb	2.480	0.50%
QC value within limits for Mo 202.031 Recovery = 98.43%						
Na 589.592 Radial†	31141.5	9690.1 ug/L	63.45	9690.1 ppb	63.45	0.65%
QC value within limits for Na 589.592 Radial Recovery = 96.90%						
Ni 231.604†	19449.5	496.06 ug/L	0.791	496.06 ppb	0.791	0.16%
QC value within limits for Ni 231.604 Recovery = 99.21%						
P 214.914†	4102.0	2373.6 ug/L	15.19	2373.6 ppb	15.19	0.64%
QC value within limits for P 214.914 Recovery = 94.94%						
Pb 220.353†	3933.4	488.18 ug/L	2.788	488.18 ppb	2.788	0.57%
QC value within limits for Pb 220.353 Recovery = 97.64%						
S 181.975 Axial†	714.3	1006.2 ug/L	11.29	1006.2 ppb	11.29	1.12%
QC value within limits for S 181.975 Axial Recovery = 100.62%						
Sb 206.836†	1386.7	507.13 ug/L	3.768	507.13 ppb	3.768	0.74%
QC value within limits for Sb 206.836 Recovery = 101.43%						
Se 196.026†	754.3	512.74 ug/L	5.550	512.74 ppb	5.550	1.08%
QC value within limits for Se 196.026 Recovery = 102.55%						
Si 251.611†	75733.6	2447.4 ug/L	5.70	2447.4 ppb	5.70	0.23%
QC value within limits for Si 251.611 Recovery = 97.90%						
Sn 189.927†	2773.7	500.84 ug/L	2.102	500.84 ppb	2.102	0.42%
QC value within limits for Sn 189.927 Recovery = 100.17%						
Sr 421.552†	71339.0	496.24 ug/L	3.192	496.24 ppb	3.192	0.64%
QC value within limits for Sr 421.552 Recovery = 99.25%						
Ti 334.940†	306787.7	483.26 ug/L	1.114	483.26 ppb	1.114	0.23%
QC value within limits for Ti 334.940 Recovery = 96.65%						
Tl 190.801†	1534.0	496.70 ug/L	3.477	496.70 ppb	3.477	0.70%
QC value within limits for Tl 190.801 Recovery = 99.34%						
U 409.014†	16760.9	466.36 ug/L	3.923	466.36 ppb	3.923	0.84%
QC value within limits for U 409.014 Recovery = 93.27%						
V 292.402†	69596.0	492.72 ug/L	0.376	492.72 ppb	0.376	0.08%
QC value within limits for V 292.402 Recovery = 98.54%						
Zn 213.857†	49237.7	492.52 ug/L	0.752	492.52 ppb	0.752	0.15%
QC value within limits for Zn 213.857 Recovery = 98.50%						
SiO2†	75853.3	5252.9 ug/L	38.17	5252.9 ppb	38.17	0.73%
QC value within limits for SiO2 Recovery = 98.23%						

All analyte(s) passed QC.

Sequence No.: 45  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/25/2010 22:37:13  
 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	3844.5	3844.5	99.7 %		22:39:25
1	Y RADIAL	4418.7	4418.7	99.26 %		22:39:05
1	Al 396.153Radial†	-118.0	-3.3	-3.1194 ug/L	-3.1194 ppb	22:39:05
1	Ca 317.933Radial†	12.9	-5.7	-12.508 ug/L	-12.508 ppb	22:39:25
1	Fe 238.204 Radial†	12.5	0.9	14.008 ug/L	14.008 ppb	22:39:25
1	K 766.490 Radial†	2866.8	111.0	21.301 ug/L	21.301 ppb	22:39:05
1	Mg 279.077 IEC†	3.7	2.6	135.51 ug/L	135.51 ppb	22:39:25
1	Na 589.592 Radial†	-1097.5	-199.4	-62.039 ug/L	-62.039 ppb	22:39:05
1	Sr 421.552†	34.8	26.2	0.1824 ug/L	0.1824 ppb	22:39:05
1	Sc 361.383	922955.6	922955.6	104.87 %		22:40:22
1	Y 371.029	775741.2	775741.2	101.99 %		22:40:22
1	Ag 328.068†	396.0	143.5	0.6743 ug/L	0.6743 ppb	22:40:27
1	As 188.979†	-14.3	6.3	2.8047 ug/L	2.8047 ppb	22:40:47
1	B 249.677†	-378.6	-83.0	-2.0358 ug/L	-2.0358 ppb	22:40:47
1	Ba 233.527†	30.4	17.9	0.1402 ug/L	0.1402 ppb	22:40:47
1	Be 313.107†	-3481.4	238.6	0.0892 ug/L	0.0892 ppb	22:40:27
1	Cd 226.502†	-198.9	-13.4	-0.1586 ug/L	-0.1586 ppb	22:40:47
1	Co 228.616†	-62.6	5.2	0.1103 ug/L	0.1103 ppb	22:40:47
1	Cr 267.716†	64.9	-23.2	-0.2574 ug/L	-0.2574 ppb	22:40:47
1	Cu 324.752†	6075.0	-162.4	-0.4905 ug/L	-0.4905 ppb	22:40:27
1	Mn 257.610†	484.5	-15.7	-0.0221 ug/L	-0.0221 ppb	22:40:47
1	Mo 202.031†	14.0	8.6	0.6366 ug/L	0.6366 ppb	22:40:47
1	Ni 231.604†	94.1	7.0	0.1779 ug/L	0.1779 ppb	22:40:47
1	P 214.914†	199.5	-15.6	-9.2618 ug/L	-9.2618 ppb	22:40:47
1	Pb 220.353†	-30.9	-90.6	-11.213 ug/L	-11.213 ppb	22:40:47
1	S 181.975 Axial†	44.5	6.6	9.2586 ug/L	9.2586 ppb	22:40:47
1	Sb 206.836†	35.8	-4.9	-1.7082 ug/L	-1.7082 ppb	22:40:47
1	Se 196.026†	-23.4	2.4	1.6361 ug/L	1.6361 ppb	22:40:47
1	Si 251.611†	595.8	3.4	0.1009 ug/L	0.1009 ppb	22:40:47
1	Sn 189.927†	13.2	3.2	0.5687 ug/L	0.5687 ppb	22:40:47
1	Ti 334.940†	-1467.3	10.8	0.0072 ug/L	0.0072 ppb	22:40:27
1	Tl 190.801†	-29.3	-0.5	-0.1476 ug/L	-0.1476 ppb	22:40:47
1	U 409.014†	-3285.8	-231.2	-6.4584 ug/L	-6.4584 ppb	22:40:22
1	V 292.402†	-1620.6	-76.6	-0.5380 ug/L	-0.5380 ppb	22:40:27
1	Zn 213.857†	705.2	-67.0	-0.6791 ug/L	-0.6791 ppb	22:40:47
1	SiO2†	634.1	16.5	1.1254 ug/L	1.1254 ppb	22:41:53
2	Sc Radial	3819.9	3819.9	99.0 %		22:39:50
2	Y RADIAL	4322.4	4322.4	97.10 %		22:39:30
2	Al 396.153Radial†	-133.1	-19.4	-18.205 ug/L	-18.205 ppb	22:39:30
2	Ca 317.933Radial†	16.1	-2.4	-5.2388 ug/L	-5.2388 ppb	22:39:50
2	Fe 238.204 Radial†	14.4	2.8	45.627 ug/L	45.627 ppb	22:39:50
2	K 766.490 Radial†	2961.1	224.7	43.084 ug/L	43.084 ppb	22:39:30
2	Mg 279.077 IEC†	3.0	1.8	95.795 ug/L	95.795 ppb	22:39:50
2	Na 589.592 Radial†	-1111.1	-220.1	-68.502 ug/L	-68.502 ppb	22:39:30
2	Sr 421.552†	36.2	27.8	0.1933 ug/L	0.1933 ppb	22:39:30
2	Sc 361.383	927821.9	927821.9	105.43 %		22:40:52
2	Y 371.029	781566.9	781566.9	102.75 %		22:40:52
2	Ag 328.068†	226.5	-19.4	-0.0788 ug/L	-0.0788 ppb	22:40:57
2	As 188.979†	-21.8	-0.8	-0.3256 ug/L	-0.3256 ppb	22:41:18
2	B 249.677†	-389.9	-91.9	-2.2599 ug/L	-2.2599 ppb	22:41:18
2	Ba 233.527†	20.3	8.3	0.0670 ug/L	0.0670 ppb	22:41:18
2	Be 313.107†	-3555.5	185.8	0.0692 ug/L	0.0692 ppb	22:40:57
2	Cd 226.502†	-199.0	-12.6	-0.1500 ug/L	-0.1500 ppb	22:41:18
2	Co 228.616†	-48.5	18.9	0.3963 ug/L	0.3963 ppb	22:41:18
2	Cr 267.716†	66.8	-21.7	-0.2413 ug/L	-0.2413 ppb	22:41:18
2	Cu 324.752†	6027.1	-238.2	-0.7263 ug/L	-0.7263 ppb	22:40:57
2	Mn 257.610†	491.5	-11.5	-0.0125 ug/L	-0.0125 ppb	22:41:18
2	Mo 202.031†	9.4	4.3	0.3182 ug/L	0.3182 ppb	22:41:18
2	Ni 231.604†	96.1	8.4	0.2133 ug/L	0.2133 ppb	22:41:18



2	P 214.914†	188.2	-27.3	-16.297 ug/L	-16.297 ppb	22:41:18
2	Pb 220.353†	-51.1	-109.7	-13.573 ug/L	-13.573 ppb	22:41:18
2	S 181.975 Axial†	31.8	-5.7	-8.0218 ug/L	-8.0218 ppb	22:41:18
2	Sb 206.836†	20.3	-19.7	-6.9488 ug/L	-6.9488 ppb	22:41:18
2	Se 196.026†	-31.5	-5.1	-3.2295 ug/L	-3.2295 ppb	22:41:18
2	Si 251.611†	604.1	8.3	0.2642 ug/L	0.2642 ppb	22:41:18
2	Sn 189.927†	11.0	1.0	0.1797 ug/L	0.1797 ppb	22:41:18
2	Ti 334.940†	-1535.9	-47.0	-0.0847 ug/L	-0.0847 ppb	22:40:57
2	Tl 190.801†	-40.5	-11.0	-3.5380 ug/L	-3.5380 ppb	22:41:18
2	U 409.014†	-2865.0	184.3	5.1407 ug/L	5.1407 ppb	22:40:52
2	V 292.402†	-1501.5	44.5	0.3202 ug/L	0.3202 ppb	22:40:57
2	Zn 213.857†	719.8	-56.7	-0.5798 ug/L	-0.5798 ppb	22:41:18
2	SiO2†	632.8	12.0	0.8270 ug/L	0.8270 ppb	22:41:58
3	Sc Radial	3771.9	3771.9	97.8 %		22:40:16
3	Y RADIAL	4401.1	4401.1	98.86 %		22:39:56
3	Al 396.153Radial†	-147.0	-35.2	-33.109 ug/L	-33.109 ppb	22:39:56
3	Ca 317.933Radial†	14.7	-3.6	-7.9433 ug/L	-7.9433 ppb	22:40:16
3	Fe 238.204 Radial†	9.7	-1.8	-28.445 ug/L	-28.445 ppb	22:40:16
3	K 766.490 Radial†	2861.1	160.6	30.796 ug/L	30.796 ppb	22:39:56
3	Mg 279.077 IEC†	0.3	-0.8	-43.519 ug/L	-43.519 ppb	22:40:16
3	Na 589.592 Radial†	-1092.3	-215.3	-66.995 ug/L	-66.995 ppb	22:39:56
3	Sr 421.552†	32.4	24.4	0.1696 ug/L	0.1696 ppb	22:39:56
3	Sc 361.383	933434.1	933434.1	106.06 %		22:41:23
3	Y 371.029	785762.3	785762.3	103.30 %		22:41:23
3	Ag 328.068†	327.1	74.2	0.3394 ug/L	0.3394 ppb	22:41:28
3	As 188.979†	-25.3	-3.9	-1.7402 ug/L	-1.7402 ppb	22:41:48
3	B 249.677†	-417.5	-115.6	-2.8296 ug/L	-2.8296 ppb	22:41:48
3	Ba 233.527†	25.7	13.2	0.1028 ug/L	0.1028 ppb	22:41:48
3	Be 313.107†	-3611.2	153.4	0.0569 ug/L	0.0569 ppb	22:41:28
3	Cd 226.502†	-191.3	-4.2	-0.0466 ug/L	-0.0466 ppb	22:41:48
3	Co 228.616†	-58.8	9.4	0.1994 ug/L	0.1994 ppb	22:41:48
3	Cr 267.716†	59.0	-29.5	-0.3320 ug/L	-0.3320 ppb	22:41:48
3	Cu 324.752†	5958.8	-336.9	-1.0255 ug/L	-1.0255 ppb	22:41:28
3	Mn 257.610†	501.3	-5.0	-0.0067 ug/L	-0.0067 ppb	22:41:48
3	Mo 202.031†	10.0	4.8	0.3484 ug/L	0.3484 ppb	22:41:48
3	Ni 231.604†	76.3	-10.8	-0.2763 ug/L	-0.2763 ppb	22:41:48
3	P 214.914†	196.8	-20.3	-11.971 ug/L	-11.971 ppb	22:41:48
3	Pb 220.353†	-54.2	-112.3	-13.895 ug/L	-13.895 ppb	22:41:48
3	S 181.975 Axial†	48.5	9.9	13.905 ug/L	13.905 ppb	22:41:48
3	Sb 206.836†	43.2	1.7	0.6274 ug/L	0.6274 ppb	22:41:48
3	Se 196.026†	-25.1	1.1	0.6420 ug/L	0.6420 ppb	22:41:48
3	Si 251.611†	580.6	-17.3	-0.5650 ug/L	-0.5650 ppb	22:41:48
3	Sn 189.927†	16.6	6.2	1.1223 ug/L	1.1223 ppb	22:41:48
3	Ti 334.940†	-1625.7	-122.9	-0.1890 ug/L	-0.1890 ppb	22:41:28
3	Tl 190.801†	-17.0	11.4	3.6784 ug/L	3.6784 ppb	22:41:48
3	U 409.014†	-3251.7	-164.0	-4.5752 ug/L	-4.5752 ppb	22:41:23
3	V 292.402†	-1583.8	-24.6	-0.1718 ug/L	-0.1718 ppb	22:41:28
3	Zn 213.857†	705.7	-74.1	-0.7402 ug/L	-0.7402 ppb	22:41:48
3	SiO2†	676.4	49.5	3.4265 ug/L	3.4265 ppb	22:42:03

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	928070.5	105.45 %	0.596			0.57%
Sc Radial	3812.1	98.8 %	0.96			0.97%
Y 371.029	781023.4	102.68 %	0.662			0.64%
Y RADIAL	4380.7	98.41 %	1.152			1.17%
Ag 328.068†	66.1	0.3116 ug/L	0.37733	0.3116 ppb	0.37733	121.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-19.3	-18.145 ug/L	14.9951	-18.145 ppb	14.9951	82.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.6	0.2463 ug/L	2.32582	0.2463 ppb	2.32582	944.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-96.8	-2.3751 ug/L	0.40927	-2.3751 ppb	0.40927	17.23%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.1	0.1033 ug/L	0.03660	0.1033 ppb	0.03660	35.42%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	192.6	0.0718 ug/L	0.01629	0.0718 ppb	0.01629	22.70%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.9	-8.5632 ug/L	3.67378	-8.5632 ppb	3.67378	42.90%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-10.1	-0.1184 ug/L	0.06233	-0.1184 ppb	0.06233 52.66%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	11.1	0.2353 ug/L	0.14638	0.2353 ppb	0.14638 62.21%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-24.8	-0.2769 ug/L	0.04838	-0.2769 ppb	0.04838 17.47%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-245.9	-0.7474 ug/L	0.26814	-0.7474 ppb	0.26814 35.87%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.6	10.397 ug/L	37.1681	10.397 ppb	37.1681 357.50%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	165.5	31.727 ug/L	10.9214	31.727 ppb	10.9214 34.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.2	62.594 ug/L	94.0175	62.594 ppb	94.0175 150.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	-10.7	-0.0138 ug/L	0.00776	-0.0138 ppb	0.00776 56.41%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	5.9	0.4344 ug/L	0.17576	0.4344 ppb	0.17576 40.46%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-211.6	-65.845 ug/L	3.3814	-65.845 ppb	3.3814 5.14%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	1.5	0.0383 ug/L	0.27304	0.0383 ppb	0.27304 713.18%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-21.0	-12.510 ug/L	3.5486	-12.510 ppb	3.5486 28.37%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-104.2	-12.894 ug/L	1.4643	-12.894 ppb	1.4643 11.36%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	3.6	5.0471 ug/L	11.55394	5.0471 ppb	11.55394 228.92%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-7.6	-2.6765 ug/L	3.87984	-2.6765 ppb	3.87984 144.96%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.5	-0.3171 ug/L	2.57072	-0.3171 ppb	2.57072 810.61%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	-1.9	-0.0666 ug/L	0.43923	-0.0666 ppb	0.43923 659.15%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	3.5	0.6236 ug/L	0.47369	0.6236 ppb	0.47369 75.96%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	26.1	0.1818 ug/L	0.01190	0.1818 ppb	0.01190 6.55%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-53.0	-0.0889 ug/L	0.09817	-0.0889 ppb	0.09817 110.46%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-0.0	-0.0024 ug/L	3.61036	-0.0024 ppb	3.61036 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-70.3	-1.9643 ug/L	6.22476	-1.9643 ppb	6.22476 316.90%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-18.9	-0.1299 ug/L	0.43066	-0.1299 ppb	0.43066 331.59%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-65.9	-0.6664 ug/L	0.08095	-0.6664 ppb	0.08095 12.15%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	26.0	1.7930 ug/L	1.42253	1.7930 ppb	1.42253 79.34%
QC value within limits for SiO2 Recovery = Not calculated					
QC Failed. Continue with analysis.					

Sequence No.: 53  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 2/25/2010 23:32:57  
 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	3798.8	3798.8	98.5 %		23:35:09
1	Y RADIAL	4279.4	4279.4	96.13 %		23:34:49
1	Al 396.153Radial†	5485.9	5684.9	5318.9 ug/L	5318.9 ppb	23:34:49
1	Ca 317.933Radial†	2400.9	2419.0	5275.1 ug/L	5275.1 ppb	23:35:09
1	Fe 238.204 Radial†	309.9	302.9	4910.1 ug/L	4910.1 ppb	23:35:09
1	K 766.490 Radial†	28823.1	26499.2	5070.8 ug/L	5070.8 ppb	23:34:49
1	Mg 279.077 IEC†	100.4	100.8	5317.9 ug/L	5317.9 ppb	23:35:09
1	Na 589.592 Radial†	28827.6	30170.5	9388.0 ug/L	9388.0 ppb	23:34:49
1	Sr 421.552†	69318.0	70370.1	489.50 ug/L	489.50 ppb	23:34:49
1	Sc 361.383	925430.7	925430.7	105.15 %		23:36:07
1	Y 371.029	767480.3	767480.3	100.90 %		23:36:07
1	Ag 328.068†	111076.5	105398.2	492.80 ug/L	492.80 ppb	23:36:12
1	As 188.979†	1157.8	1120.9	502.65 ug/L	502.65 ppb	23:36:32
1	B 249.677†	20578.9	19848.3	484.26 ug/L	484.26 ppb	23:36:12
1	Ba 233.527†	65972.6	62728.1	494.29 ug/L	494.29 ppb	23:36:12
1	Be 313.107†	1391278.5	1326646.6	496.79 ug/L	496.79 ppb	23:36:07
1	Cd 226.502†	44969.3	42941.4	498.92 ug/L	498.92 ppb	23:36:12
1	Co 228.616†	24724.6	23577.6	495.29 ug/L	495.29 ppb	23:36:12
1	Cr 267.716†	46303.7	43949.1	494.11 ug/L	494.11 ppb	23:36:12
1	Cu 324.752†	173777.0	159304.7	485.37 ug/L	485.37 ppb	23:36:12
1	Mn 257.610†	455440.8	432640.9	493.16 ug/L	493.16 ppb	23:36:07
1	Mo 202.031†	6991.5	6644.2	489.82 ug/L	489.82 ppb	23:36:32
1	Ni 231.604†	20649.7	19554.8	498.75 ug/L	498.75 ppb	23:36:12
1	P 214.914†	4530.9	4103.0	2373.3 ug/L	2373.3 ppb	23:36:32
1	Pb 220.353†	4201.2	3934.1	488.29 ug/L	488.29 ppb	23:36:32
1	S 181.975 Axial†	777.0	703.1	990.36 ug/L	990.36 ppb	23:36:32
1	Sb 206.836†	1491.1	1379.0	504.39 ug/L	504.39 ppb	23:36:32
1	Se 196.026†	762.7	750.1	509.67 ug/L	509.67 ppb	23:36:32
1	Si 251.611†	81088.5	76549.4	2473.8 ug/L	2473.8 ppb	23:36:12
1	Sn 189.927†	2935.0	2781.7	502.28 ug/L	502.28 ppb	23:36:32
1	Ti 334.940†	323703.5	309247.9	487.15 ug/L	487.15 ppb	23:36:12
1	Tl 190.801†	1552.6	1503.9	487.04 ug/L	487.04 ppb	23:36:32
1	U 409.014†	14871.6	17044.6	474.29 ug/L	474.29 ppb	23:36:12
1	V 292.402†	72133.4	70066.7	496.00 ug/L	496.00 ppb	23:36:12
1	Zn 213.857†	52976.9	49641.0	496.58 ug/L	496.58 ppb	23:36:12
1	SiO2†	80173.0	75655.3	5239.2 ug/L	5239.2 ppb	23:37:39
2	Sc Radial	3799.0	3799.0	98.5 %		23:35:34
2	Y RADIAL	4252.6	4252.6	95.53 %		23:35:14
2	Al 396.153Radial†	5434.9	5632.9	5269.6 ug/L	5269.6 ppb	23:35:14
2	Ca 317.933Radial†	2402.3	2420.3	5278.1 ug/L	5278.1 ppb	23:35:34
2	Fe 238.204 Radial†	310.7	303.8	4923.6 ug/L	4923.6 ppb	23:35:34
2	K 766.490 Radial†	28579.5	26250.7	5023.2 ug/L	5023.2 ppb	23:35:14
2	Mg 279.077 IEC†	102.7	103.1	5442.9 ug/L	5442.9 ppb	23:35:34
2	Na 589.592 Radial†	28516.0	29853.0	9289.2 ug/L	9289.2 ppb	23:35:14
2	Sr 421.552†	68839.4	69881.5	486.10 ug/L	486.10 ppb	23:35:14
2	Sc 361.383	915670.2	915670.2	104.04 %		23:36:38
2	Y 371.029	759352.8	759352.8	99.831 %		23:36:38
2	Ag 328.068†	109734.6	105234.5	492.04 ug/L	492.04 ppb	23:36:43
2	As 188.979†	1166.2	1140.8	511.45 ug/L	511.45 ppb	23:37:03
2	B 249.677†	20202.7	19695.4	480.52 ug/L	480.52 ppb	23:36:43
2	Ba 233.527†	64963.9	62427.3	491.92 ug/L	491.92 ppb	23:36:43
2	Be 313.107†	1374995.7	1325100.2	496.21 ug/L	496.21 ppb	23:36:38
2	Cd 226.502†	44313.0	42766.5	496.88 ug/L	496.88 ppb	23:36:43
2	Co 228.616†	24338.3	23457.0	492.79 ug/L	492.79 ppb	23:36:43
2	Cr 267.716†	45796.2	43930.8	493.90 ug/L	493.90 ppb	23:36:43
2	Cu 324.752†	171109.8	158502.7	482.93 ug/L	482.93 ppb	23:36:43
2	Mn 257.610†	451271.9	433250.8	493.85 ug/L	493.85 ppb	23:36:38
2	Mo 202.031†	7056.1	6777.1	499.61 ug/L	499.61 ppb	23:37:03
2	Ni 231.604†	20365.6	19491.1	497.12 ug/L	497.12 ppb	23:36:43

2	P 214.914†	4566.2	4182.8	2421.8 ug/L	2421.8 ppb	23:37:03
2	Pb 220.353†	4225.8	4000.4	496.50 ug/L	496.50 ppb	23:37:03
2	S 181.975 Axial†	791.2	724.6	1020.7 ug/L	1020.7 ppb	23:37:03
2	Sb 206.836†	1509.8	1412.1	516.37 ug/L	516.37 ppb	23:37:03
2	Se 196.026†	762.1	757.2	514.42 ug/L	514.42 ppb	23:37:03
2	Si 251.611†	79836.8	76168.4	2461.4 ug/L	2461.4 ppb	23:36:43
2	Sn 189.927†	2945.0	2821.1	509.38 ug/L	509.38 ppb	23:37:03
2	Ti 334.940†	318740.5	307759.2	484.79 ug/L	484.79 ppb	23:36:43
2	Tl 190.801†	1568.2	1534.7	496.92 ug/L	496.92 ppb	23:37:03
2	U 409.014†	14773.0	17100.6	475.85 ug/L	475.85 ppb	23:36:43
2	V 292.402†	71151.3	69853.9	494.66 ug/L	494.66 ppb	23:36:43
2	Zn 213.857†	52219.5	49450.0	494.66 ug/L	494.66 ppb	23:36:43
2	SiO2†	80313.9	76603.4	5304.8 ug/L	5304.8 ppb	23:37:44
3	Sc Radial	3791.9	3791.9	98.3 %		23:35:59
3	Y RADIAL	4263.4	4263.4	95.77 %		23:35:39
3	Al 396.153Radial†	5433.2	5641.6	5278.4 ug/L	5278.4 ppb	23:35:39
3	Ca 317.933Radial†	2387.7	2410.0	5255.6 ug/L	5255.6 ppb	23:35:59
3	Fe 238.204 Radial†	313.3	307.0	4975.9 ug/L	4975.9 ppb	23:35:59
3	K 766.490 Radial†	28758.8	26487.4	5068.6 ug/L	5068.6 ppb	23:35:39
3	Mg 279.077 IEC†	101.6	102.2	5391.0 ug/L	5391.0 ppb	23:35:59
3	Na 589.592 Radial†	28508.8	29899.9	9303.8 ug/L	9303.8 ppb	23:35:39
3	Sr 421.552†	69087.5	70264.7	488.77 ug/L	488.77 ppb	23:35:39
3	Sc 361.383	935730.9	935730.9	106.32 %		23:37:09
3	Y 371.029	776974.5	776974.5	102.15 %		23:37:09
3	Ag 328.068†	109272.5	102538.8	479.49 ug/L	479.49 ppb	23:37:14
3	As 188.979†	1159.4	1110.4	497.86 ug/L	497.86 ppb	23:37:34
3	B 249.677†	20096.1	19178.7	467.89 ug/L	467.89 ppb	23:37:14
3	Ba 233.527†	64491.4	60644.3	477.88 ug/L	477.88 ppb	23:37:14
3	Be 313.107†	1406984.2	1326854.0	496.83 ug/L	496.83 ppb	23:37:09
3	Cd 226.502†	44051.1	41607.1	483.39 ug/L	483.39 ppb	23:37:14
3	Co 228.616†	24235.0	22858.3	480.21 ug/L	480.21 ppb	23:37:14
3	Cr 267.716†	45644.4	42844.4	481.71 ug/L	481.71 ppb	23:37:14
3	Cu 324.752†	170238.4	154157.4	469.70 ug/L	469.70 ppb	23:37:14
3	Mn 257.610†	458741.1	430977.2	491.26 ug/L	491.26 ppb	23:37:09
3	Mo 202.031†	7018.1	6596.0	486.28 ug/L	486.28 ppb	23:37:34
3	Ni 231.604†	20224.8	18939.0	483.04 ug/L	483.04 ppb	23:37:14
3	P 214.914†	4524.7	4049.8	2344.2 ug/L	2344.2 ppb	23:37:34
3	Pb 220.353†	4183.1	3873.1	480.72 ug/L	480.72 ppb	23:37:34
3	S 181.975 Axial†	779.4	697.2	982.01 ug/L	982.01 ppb	23:37:34
3	Sb 206.836†	1492.5	1364.7	499.10 ug/L	499.10 ppb	23:37:34
3	Se 196.026†	773.3	752.0	511.13 ug/L	511.13 ppb	23:37:34
3	Si 251.611†	79396.1	74108.9	2394.8 ug/L	2394.8 ppb	23:37:14
3	Sn 189.927†	2912.3	2729.7	492.89 ug/L	492.89 ppb	23:37:34
3	Ti 334.940†	317161.3	299706.2	472.12 ug/L	472.12 ppb	23:37:14
3	Tl 190.801†	1566.3	1500.6	485.91 ug/L	485.91 ppb	23:37:34
3	U 409.014†	14394.4	16440.0	457.43 ug/L	457.43 ppb	23:37:14
3	V 292.402†	70908.4	68159.4	482.60 ug/L	482.60 ppb	23:37:14
3	Zn 213.857†	52039.6	48204.8	482.19 ug/L	482.19 ppb	23:37:14
3	SiO2†	80855.5	75457.9	5225.6 ug/L	5225.6 ppb	23:37:50

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925610.6	105.17 %	1.140			1.08%
Sc Radial	3796.6	98.4 %	0.11			0.11%
Y 371.029	767935.9	100.96 %	1.160			1.15%
Y RADIAL	4265.1	95.81 %	0.302			0.32%
Ag 328.068†	104390.5	488.11 ug/L	7.472	488.11 ppb	7.472	1.53%
QC value within limits for Ag 328.068 Recovery = 97.62%						
Al 396.153Radial†	5653.1	5288.9 ug/L	26.32	5288.9 ppb	26.32	0.50%
QC value within limits for Al 396.153Radial Recovery = 105.78%						
As 188.979†	1124.1	503.99 ug/L	6.894	503.99 ppb	6.894	1.37%
QC value within limits for As 188.979 Recovery = 100.80%						
B 249.677†	19574.1	477.56 ug/L	8.581	477.56 ppb	8.581	1.80%
QC value within limits for B 249.677 Recovery = 95.51%						
Ba 233.527†	61933.2	488.03 ug/L	8.868	488.03 ppb	8.868	1.82%
QC value within limits for Ba 233.527 Recovery = 97.61%						
Be 313.107†	1326200.3	496.61 ug/L	0.350	496.61 ppb	0.350	0.07%
QC value within limits for Be 313.107 Recovery = 99.32%						
Ca 317.933Radial†	2416.4	5269.6 ug/L	12.22	5269.6 ppb	12.22	0.23%

QC value within limits for Ca 317.933 Radial Recovery = 105.39%

Cd 226.502†	42438.4	493.07 ug/L	8.438	493.07 ppb	8.438	1.71%
QC value within limits for Cd 226.502 Recovery = 98.61%						
Co 228.616†	23297.6	489.43 ug/L	8.085	489.43 ppb	8.085	1.65%
QC value within limits for Co 228.616 Recovery = 97.89%						
Cr 267.716†	43574.8	489.91 ug/L	7.101	489.91 ppb	7.101	1.45%
QC value within limits for Cr 267.716 Recovery = 97.98%						
Cu 324.752†	157321.6	479.33 ug/L	8.431	479.33 ppb	8.431	1.76%
QC value within limits for Cu 324.752 Recovery = 95.87%						
Fe 238.204 Radial†	304.6	4936.6 ug/L	34.72	4936.6 ppb	34.72	0.70%
QC value within limits for Fe 238.204 Radial Recovery = 98.73%						
K 766.490 Radial†	26412.4	5054.2 ug/L	26.85	5054.2 ppb	26.85	0.53%
QC value within limits for K 766.490 Radial Recovery = 101.08%						
Mg 279.077 IEC†	102.0	5383.9 ug/L	62.84	5383.9 ppb	62.84	1.17%
QC value within limits for Mg 279.077 IEC Recovery = 107.68%						
Mn 257.610†	432289.6	492.76 ug/L	1.337	492.76 ppb	1.337	0.27%
QC value within limits for Mn 257.610 Recovery = 98.55%						
Mo 202.031†	6672.4	491.90 ug/L	6.908	491.90 ppb	6.908	1.40%
QC value within limits for Mo 202.031 Recovery = 98.38%						
Na 589.592 Radial†	29974.5	9327.0 ug/L	53.32	9327.0 ppb	53.32	0.57%
QC value within limits for Na 589.592 Radial Recovery = 93.27%						
Ni 231.604†	19328.3	492.97 ug/L	8.638	492.97 ppb	8.638	1.75%
QC value within limits for Ni 231.604 Recovery = 98.59%						
P 214.914†	4111.9	2379.7 ug/L	39.20	2379.7 ppb	39.20	1.65%
QC value within limits for P 214.914 Recovery = 95.19%						
Pb 220.353†	3935.9	488.50 ug/L	7.891	488.50 ppb	7.891	1.62%
QC value within limits for Pb 220.353 Recovery = 97.70%						
S 181.975 Axial†	708.3	997.69 ug/L	20.362	997.69 ppb	20.362	2.04%
QC value within limits for S 181.975 Axial Recovery = 99.77%						
Sb 206.836†	1385.3	506.62 ug/L	8.850	506.62 ppb	8.850	1.75%
QC value within limits for Sb 206.836 Recovery = 101.32%						
Se 196.026†	753.1	511.74 ug/L	2.435	511.74 ppb	2.435	0.48%
QC value within limits for Se 196.026 Recovery = 102.35%						
Si 251.611†	75608.9	2443.3 ug/L	42.48	2443.3 ppb	42.48	1.74%
QC value within limits for Si 251.611 Recovery = 97.73%						
Sn 189.927†	2777.5	501.52 ug/L	8.269	501.52 ppb	8.269	1.65%
QC value within limits for Sn 189.927 Recovery = 100.30%						
Sr 421.552†	70172.1	488.12 ug/L	1.789	488.12 ppb	1.789	0.37%
QC value within limits for Sr 421.552 Recovery = 97.62%						
Ti 334.940†	305571.1	481.35 ug/L	8.084	481.35 ppb	8.084	1.68%
QC value within limits for Ti 334.940 Recovery = 96.27%						
Tl 190.801†	1513.1	489.96 ug/L	6.056	489.96 ppb	6.056	1.24%
QC value within limits for Tl 190.801 Recovery = 97.99%						
U 409.014†	16861.7	469.19 ug/L	10.216	469.19 ppb	10.216	2.18%
QC value within limits for U 409.014 Recovery = 93.84%						
V 292.402†	69360.0	491.09 ug/L	7.376	491.09 ppb	7.376	1.50%
QC value within limits for V 292.402 Recovery = 98.22%						
Zn 213.857†	49098.6	491.15 ug/L	7.812	491.15 ppb	7.812	1.59%
QC value within limits for Zn 213.857 Recovery = 98.23%						
SiO2†	75905.6	5256.5 ug/L	42.33	5256.5 ppb	42.33	0.81%
QC value within limits for SiO2 Recovery = 98.30%						

All analyte(s) passed QC.

Sequence No.: 54  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/25/2010 23:39:59  
 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	3847.0	3847.0	99.7 %		23:42:11
1	Y RADIAL	4477.2	4477.2	100.6 %		23:41:51
1	Al 396.153Radial†	-102.2	12.6	11.806 ug/L	11.806 ppb	23:41:51
1	Ca 317.933Radial†	16.4	-2.3	-4.9479 ug/L	-4.9479 ppb	23:42:11
1	Fe 238.204 Radial†	9.0	-2.7	-43.536 ug/L	-43.536 ppb	23:42:11
1	K 766.490 Radial†	2926.2	168.8	32.364 ug/L	32.364 ppb	23:41:51
1	Mg 279.077 IEC†	4.9	3.8	198.35 ug/L	198.35 ppb	23:42:11
1	Na 589.592 Radial†	-1135.1	-236.4	-73.555 ug/L	-73.555 ppb	23:41:51
1	Sr 421.552†	37.9	29.3	0.2039 ug/L	0.2039 ppb	23:41:51
1	Sc 361.383	904261.3	904261.3	102.75 %		23:43:08
1	Y 371.029	765539.2	765539.2	100.64 %		23:43:08
1	Ag 328.068†	360.0	116.2	0.5293 ug/L	0.5293 ppb	23:43:08
1	As 188.979†	-20.6	-0.2	-0.0826 ug/L	-0.0826 ppb	23:43:28
1	B 249.677†	-391.7	-103.2	-2.5222 ug/L	-2.5222 ppb	23:43:28
1	Ba 233.527†	23.4	11.7	0.0892 ug/L	0.0892 ppb	23:43:28
1	Be 313.107†	-3493.0	158.7	0.0590 ug/L	0.0590 ppb	23:43:08
1	Cd 226.502†	-178.4	2.6	0.0331 ug/L	0.0331 ppb	23:43:28
1	Co 228.616†	-57.6	8.8	0.1872 ug/L	0.1872 ppb	23:43:28
1	Cr 267.716†	61.4	-25.3	-0.2865 ug/L	-0.2865 ppb	23:43:28
1	Cu 324.752†	5918.5	-194.9	-0.5924 ug/L	-0.5924 ppb	23:43:08
1	Mn 257.610†	500.0	9.0	-0.0022 ug/L	-0.0022 ppb	23:43:28
1	Mo 202.031†	10.8	5.8	0.4234 ug/L	0.4234 ppb	23:43:28
1	Ni 231.604†	84.4	-0.7	-0.0174 ug/L	-0.0174 ppb	23:43:28
1	P 214.914†	199.5	-11.6	-6.8329 ug/L	-6.8329 ppb	23:43:28
1	Pb 220.353†	-46.0	-105.9	-13.097 ug/L	-13.097 ppb	23:43:28
1	S 181.975 Axial†	41.0	4.1	5.7106 ug/L	5.7106 ppb	23:43:28
1	Sb 206.836†	41.1	1.0	0.3667 ug/L	0.3667 ppb	23:43:28
1	Se 196.026†	-29.0	-3.5	-2.4414 ug/L	-2.4414 ppb	23:43:28
1	Si 251.611†	601.9	21.1	0.6773 ug/L	0.6773 ppb	23:43:28
1	Sn 189.927†	17.8	7.9	1.4264 ug/L	1.4264 ppb	23:43:28
1	Ti 334.940†	-1545.1	-93.9	-0.1618 ug/L	-0.1618 ppb	23:43:08
1	Tl 190.801†	-24.6	3.5	1.1152 ug/L	1.1152 ppb	23:43:28
1	U 409.014†	-3224.2	-236.1	-6.5869 ug/L	-6.5869 ppb	23:43:08
1	V 292.402†	-1605.0	-93.4	-0.6486 ug/L	-0.6486 ppb	23:43:08
1	Zn 213.857†	707.6	-50.8	-0.5054 ug/L	-0.5054 ppb	23:43:28
1	SiO2†	658.4	52.5	3.6353 ug/L	3.6353 ppb	23:44:24
2	Sc Radial	3823.2	3823.2	99.1 %		23:42:36
2	Y RADIAL	4350.1	4350.1	97.72 %		23:42:16
2	Al 396.153Radial†	-133.6	-19.7	-18.535 ug/L	-18.535 ppb	23:42:16
2	Ca 317.933Radial†	12.3	-6.3	-13.637 ug/L	-13.637 ppb	23:42:36
2	Fe 238.204 Radial†	14.6	3.0	48.792 ug/L	48.792 ppb	23:42:36
2	K 766.490 Radial†	3036.9	298.7	57.255 ug/L	57.255 ppb	23:42:16
2	Mg 279.077 IEC†	4.6	3.5	184.15 ug/L	184.15 ppb	23:42:36
2	Na 589.592 Radial†	-1126.6	-234.9	-73.096 ug/L	-73.096 ppb	23:42:16
2	Sr 421.552†	45.8	37.5	0.2607 ug/L	0.2607 ppb	23:42:16
2	Sc 361.383	898593.2	898593.2	102.10 %		23:43:33
2	Y 371.029	761101.9	761101.9	100.06 %		23:43:33
2	Ag 328.068†	313.2	72.5	0.3601 ug/L	0.3601 ppb	23:43:33
2	As 188.979†	-29.2	-8.7	-3.8394 ug/L	-3.8394 ppb	23:43:53
2	B 249.677†	-361.3	-75.8	-1.8670 ug/L	-1.8670 ppb	23:43:53
2	Ba 233.527†	13.8	2.4	0.0204 ug/L	0.0204 ppb	23:43:53
2	Be 313.107†	-3512.6	118.0	0.0438 ug/L	0.0438 ppb	23:43:33
2	Cd 226.502†	-192.0	-11.8	-0.1442 ug/L	-0.1442 ppb	23:43:53
2	Co 228.616†	-47.1	18.7	0.3952 ug/L	0.3952 ppb	23:43:53
2	Cr 267.716†	64.9	-21.5	-0.2331 ug/L	-0.2331 ppb	23:43:53
2	Cu 324.752†	5914.0	-163.0	-0.4885 ug/L	-0.4885 ppb	23:43:33
2	Mn 257.610†	490.4	2.6	0.0002 ug/L	0.0002 ppb	23:43:53
2	Mo 202.031†	16.9	11.9	0.8780 ug/L	0.8780 ppb	23:43:53
2	Ni 231.604†	90.4	5.8	0.1474 ug/L	0.1474 ppb	23:43:53

2	P 214.914†	199.3	-10.7	-6.3421 ug/L	-6.3421 ppb	23:43:53
2	Pb 220.353†	-27.1	-87.8	-10.865 ug/L	-10.865 ppb	23:43:53
2	S 181.975 Axial†	36.4	-0.2	-0.3182 ug/L	-0.3182 ppb	23:43:53
2	Sb 206.836†	34.3	-5.4	-1.8667 ug/L	-1.8667 ppb	23:43:53
2	Se 196.026†	-23.1	2.1	1.5133 ug/L	1.5133 ppb	23:43:53
2	Si 251.611†	611.2	33.9	1.0879 ug/L	1.0879 ppb	23:43:53
2	Sn 189.927†	17.3	7.5	1.3445 ug/L	1.3445 ppb	23:43:53
2	Ti 334.940†	-1521.3	-80.1	-0.1386 ug/L	-0.1386 ppb	23:43:33
2	Tl 190.801†	-23.8	4.1	1.3150 ug/L	1.3150 ppb	23:43:53
2	U 409.014†	-3327.8	-357.3	-9.9829 ug/L	-9.9829 ppb	23:43:33
2	V 292.402†	-1513.1	-13.2	-0.1024 ug/L	-0.1024 ppb	23:43:33
2	Zn 213.857†	731.5	-23.1	-0.2403 ug/L	-0.2403 ppb	23:43:53
2	SiO2†	638.8	37.4	2.5756 ug/L	2.5756 ppb	23:44:29
3	Sc Radial	3805.7	3805.7	98.7 %		23:43:01
3	Y RADIAL	4295.9	4295.9	96.50 %		23:42:41
3	Al 396.153Radial†	-125.6	-12.2	-11.533 ug/L	-11.533 ppb	23:42:41
3	Ca 317.933Radial†	18.4	-0.0	-0.0771 ug/L	-0.0771 ppb	23:43:01
3	Fe 238.204 Radial†	11.3	-0.2	-3.0830 ug/L	-3.0830 ppb	23:43:01
3	K 766.490 Radial†	2888.5	162.4	31.136 ug/L	31.136 ppb	23:42:41
3	Mg 279.077 IEC†	-0.3	-1.5	-79.825 ug/L	-79.825 ppb	23:43:01
3	Na 589.592 Radial†	-1137.7	-251.4	-78.212 ug/L	-78.212 ppb	23:42:41
3	Sr 421.552†	33.7	25.4	0.1770 ug/L	0.1770 ppb	23:42:41
3	Sc 361.383	900286.5	900286.5	102.30 %		23:43:58
3	Y 371.029	762594.9	762594.9	100.26 %		23:43:58
3	Ag 328.068†	420.7	177.1	0.8294 ug/L	0.8294 ppb	23:43:58
3	As 188.979†	-25.0	-4.5	-2.0016 ug/L	-2.0016 ppb	23:44:18
3	B 249.677†	-385.4	-98.7	-2.4181 ug/L	-2.4181 ppb	23:44:18
3	Ba 233.527†	35.6	23.8	0.1857 ug/L	0.1857 ppb	23:44:18
3	Be 313.107†	-3468.2	167.9	0.0624 ug/L	0.0624 ppb	23:43:58
3	Cd 226.502†	-178.7	1.5	0.0159 ug/L	0.0159 ppb	23:44:18
3	Co 228.616†	-73.2	-6.7	-0.1387 ug/L	-0.1387 ppb	23:44:18
3	Cr 267.716†	67.9	-18.7	-0.2064 ug/L	-0.2064 ppb	23:44:18
3	Cu 324.752†	5946.0	-142.6	-0.4279 ug/L	-0.4279 ppb	23:43:58
3	Mn 257.610†	498.3	9.4	0.0137 ug/L	0.0137 ppb	23:44:18
3	Mo 202.031†	11.9	6.9	0.5094 ug/L	0.5094 ppb	23:44:18
3	Ni 231.604†	94.8	9.9	0.2526 ug/L	0.2526 ppb	23:44:18
3	P 214.914†	204.2	-6.2	-3.6153 ug/L	-3.6153 ppb	23:44:18
3	Pb 220.353†	-45.8	-105.9	-13.107 ug/L	-13.107 ppb	23:44:18
3	S 181.975 Axial†	39.1	2.4	3.4145 ug/L	3.4145 ppb	23:44:18
3	Sb 206.836†	43.0	3.1	1.0875 ug/L	1.0875 ppb	23:44:18
3	Se 196.026†	-31.4	-6.0	-3.9395 ug/L	-3.9395 ppb	23:44:18
3	Si 251.611†	623.1	44.4	1.4328 ug/L	1.4328 ppb	23:44:18
3	Sn 189.927†	8.8	-0.8	-0.1514 ug/L	-0.1514 ppb	23:44:18
3	Ti 334.940†	-1539.0	-94.6	-0.1372 ug/L	-0.1372 ppb	23:43:58
3	Tl 190.801†	-29.0	-0.9	-0.2790 ug/L	-0.2790 ppb	23:44:18
3	U 409.014†	-3406.7	-428.4	-11.961 ug/L	-11.961 ppb	23:43:58
3	V 292.402†	-1588.1	-83.7	-0.6016 ug/L	-0.6016 ppb	23:43:58
3	Zn 213.857†	708.5	-46.9	-0.4740 ug/L	-0.4740 ppb	23:44:18
3	SiO2†	641.8	39.1	2.7028 ug/L	2.7028 ppb	23:44:34

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901047.0	102.38 %	0.331			0.32%
Sc Radial	3825.3	99.2 %	0.54			0.54%
Y 371.029	763078.7	100.32 %	0.297			0.30%
Y RADIAL	4374.4	98.26 %	2.090			2.13%
Ag 328.068†	121.9	0.5729 ug/L	0.23768	0.5729 ppb	0.23768	41.49%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.4	-6.0875 ug/L	15.88639	-6.0875 ppb	15.88639	260.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.4	-1.9745 ug/L	1.87855	-1.9745 ppb	1.87855	95.14%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-92.6	-2.2691 ug/L	0.35206	-2.2691 ppb	0.35206	15.52%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.6	0.0985 ug/L	0.08300	0.0985 ppb	0.08300	84.31%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	148.2	0.0551 ug/L	0.00988	0.0551 ppb	0.00988	17.95%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.9	-6.2207 ug/L	6.86906	-6.2207 ppb	6.86906	110.42%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	-2.6	-0.0317 ug/L	0.09780	-0.0317 ppb	0.09780 308.16%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	7.0	0.1479 ug/L	0.26910	0.1479 ppb	0.26910 181.98%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-21.9	-0.2420 ug/L	0.04080	-0.2420 ppb	0.04080 16.86%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-166.8	-0.5030 ug/L	0.08320	-0.5030 ppb	0.08320 16.54%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	0.0	0.7242 ug/L	46.28173	0.7242 ppb	46.28173 >999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	209.9	40.252 ug/L	14.7382	40.252 ppb	14.7382 36.62%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	1.9	100.89 ug/L	156.665	100.89 ppb	156.665 155.28%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	7.0	0.0039 ug/L	0.00856	0.0039 ppb	0.00856 218.97%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	8.2	0.6036 ug/L	0.24150	0.6036 ppb	0.24150 40.01%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	-240.9	-74.955 ug/L	2.8306	-74.955 ppb	2.8306 3.78%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	5.0	0.1275 ug/L	0.13610	0.1275 ppb	0.13610 106.71%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-9.5	-5.5968 ug/L	1.73347	-5.5968 ppb	1.73347 30.97%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-99.9	-12.356 ug/L	1.2913	-12.356 ppb	1.2913 10.45%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	2.1	2.9357 ug/L	3.04281	2.9357 ppb	3.04281 103.65%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	-0.5	-0.1375 ug/L	1.54031	-0.1375 ppb	1.54031 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-2.5	-1.6225 ug/L	2.81710	-1.6225 ppb	2.81710 173.63%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	33.1	1.0660 ug/L	0.37826	1.0660 ppb	0.37826 35.48%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	4.8	0.8731 ug/L	0.88823	0.8731 ppb	0.88823 101.73%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	30.7	0.2138 ug/L	0.04270	0.2138 ppb	0.04270 19.97%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	-89.5	-0.1459 ug/L	0.01386	-0.1459 ppb	0.01386 9.50%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	2.2	0.7170 ug/L	0.86839	0.7170 ppb	0.86839 121.11%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	-340.6	-9.5102 ug/L	2.71787	-9.5102 ppb	2.71787 28.58%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	-63.5	-0.4509 ug/L	0.30267	-0.4509 ppb	0.30267 67.13%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	-40.2	-0.4066 ug/L	0.14487	-0.4066 ppb	0.14487 35.63%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		43.0	2.9712 ug/L	0.57857	2.9712 ppb	0.57857 19.47%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						



Sequence No.: 62

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 00:35:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3797.5	3797.5	98.5 %			00:37:53
1	Y RADIAL	4192.3	4192.3	94.17 %			00:37:33
1	Al 396.153Radial†	5625.5	5828.6	5453.7 ug/L		5453.7 ppb	00:37:33
1	Ca 317.933Radial†	2403.1	2422.0	5281.8 ug/L		5281.8 ppb	00:37:53
1	Fe 238.204 Radial†	309.8	303.0	4911.5 ug/L		4911.5 ppb	00:37:53
1	K 766.490 Radial†	29605.5	27303.8	5224.8 ug/L		5224.8 ppb	00:37:33
1	Mg 279.077 IEC†	99.7	100.0	5279.4 ug/L		5279.4 ppb	00:37:53
1	Na 589.592 Radial†	29730.4	31097.3	9676.4 ug/L		9676.4 ppb	00:37:33
1	Sr 421.552†	71321.2	72428.7	503.82 ug/L		503.82 ppb	00:37:33
1	Sc 361.383	930563.7	930563.7	105.74 %			00:38:50
1	Y 371.029	771515.6	771515.6	101.43 %			00:38:50
1	Ag 328.068†	113049.6	106681.5	498.78 ug/L		498.78 ppb	00:38:55
1	As 188.979†	1162.6	1119.4	502.00 ug/L		502.00 ppb	00:39:15
1	B 249.677†	20705.6	19860.1	484.55 ug/L		484.55 ppb	00:38:55
1	Ba 233.527†	66749.6	63116.8	497.36 ug/L		497.36 ppb	00:38:55
1	Be 313.107†	1420675.1	1347150.0	504.46 ug/L		504.46 ppb	00:38:50
1	Cd 226.502†	45515.5	43222.1	502.18 ug/L		502.18 ppb	00:38:55
1	Co 228.616†	25015.6	23723.1	498.35 ug/L		498.35 ppb	00:38:55
1	Cr 267.716†	46913.2	44282.7	497.86 ug/L		497.86 ppb	00:38:55
1	Cu 324.752†	176684.0	161142.4	490.97 ug/L		490.97 ppb	00:38:55
1	Mn 257.610†	465564.6	439826.2	501.34 ug/L		501.34 ppb	00:38:50
1	Mo 202.031†	7089.6	6700.2	493.95 ug/L		493.95 ppb	00:39:15
1	Ni 231.604†	20900.8	19684.0	502.04 ug/L		502.04 ppb	00:38:55
1	P 214.914†	4552.8	4099.9	2370.3 ug/L		2370.3 ppb	00:39:15
1	Pb 220.353†	4207.6	3918.1	486.34 ug/L		486.34 ppb	00:39:15
1	S 181.975 Axial†	789.4	710.7	1001.1 ug/L		1001.1 ppb	00:39:15
1	Sb 206.836†	1509.0	1388.1	507.65 ug/L		507.65 ppb	00:39:15
1	Se 196.026†	777.5	760.1	516.23 ug/L		516.23 ppb	00:39:15
1	Si 251.611†	82468.2	77428.9	2502.3 ug/L		2502.3 ppb	00:38:55
1	Sn 189.927†	2945.3	2776.1	501.27 ug/L		501.27 ppb	00:39:15
1	Ti 334.940†	328399.1	311990.6	491.47 ug/L		491.47 ppb	00:38:55
1	Tl 190.801†	1590.7	1531.8	496.05 ug/L		496.05 ppb	00:39:15
1	U 409.014†	15265.0	17338.6	482.49 ug/L		482.49 ppb	00:38:55
1	V 292.402†	73226.7	70722.3	500.64 ug/L		500.64 ppb	00:38:55
1	Zn 213.857†	53693.8	50041.0	500.59 ug/L		500.59 ppb	00:38:55
1	SiO2†	82824.2	77742.1	5384.0 ug/L		5384.0 ppb	00:40:23
2	Sc Radial	3787.4	3787.4	98.2 %			00:38:18
2	Y RADIAL	4248.7	4248.7	95.44 %			00:37:58
2	Al 396.153Radial†	5425.7	5640.4	5276.6 ug/L		5276.6 ppb	00:37:58
2	Ca 317.933Radial†	2426.8	2452.7	5348.6 ug/L		5348.6 ppb	00:38:18
2	Fe 238.204 Radial†	311.8	305.8	4957.0 ug/L		4957.0 ppb	00:38:18
2	K 766.490 Radial†	28871.3	26636.6	5097.1 ug/L		5097.1 ppb	00:37:58
2	Mg 279.077 IEC†	99.2	99.8	5268.6 ug/L		5268.6 ppb	00:38:18
2	Na 589.592 Radial†	28702.5	30131.5	9375.8 ug/L		9375.8 ppb	00:37:58
2	Sr 421.552†	69124.0	70385.1	489.60 ug/L		489.60 ppb	00:37:58
2	Sc 361.383	922222.1	922222.1	104.79 %			00:39:21
2	Y 371.029	764854.8	764854.8	100.55 %			00:39:21
2	Ag 328.068†	110491.2	105207.1	491.92 ug/L		491.92 ppb	00:39:26
2	As 188.979†	1160.8	1127.7	505.60 ug/L		505.60 ppb	00:39:46
2	B 249.677†	20130.3	19488.3	475.44 ug/L		475.44 ppb	00:39:26
2	Ba 233.527†	65276.1	62281.7	490.78 ug/L		490.78 ppb	00:39:26
2	Be 313.107†	1406865.9	1346124.9	504.06 ug/L		504.06 ppb	00:39:21
2	Cd 226.502†	44532.4	42673.3	495.80 ug/L		495.80 ppb	00:39:26
2	Co 228.616†	24437.5	23385.4	491.28 ug/L		491.28 ppb	00:39:26
2	Cr 267.716†	46037.1	43847.9	492.98 ug/L		492.98 ppb	00:39:26
2	Cu 324.752†	171696.8	157894.5	481.08 ug/L		481.08 ppb	00:39:26
2	Mn 257.610†	461194.9	439638.9	501.14 ug/L		501.14 ppb	00:39:21
2	Mo 202.031†	7114.3	6784.5	500.16 ug/L		500.16 ppb	00:39:46
2	Ni 231.604†	20565.8	19543.0	498.45 ug/L		498.45 ppb	00:39:26

2	P 214.914†	4578.1	4163.0	2410.2 ug/L	2410.2 ppb	00:39:46
2	Pb 220.353†	4232.9	3978.2	493.76 ug/L	493.76 ppb	00:39:46
2	S 181.975 Axial†	789.4	717.5	1010.6 ug/L	1010.6 ppb	00:39:46
2	Sb 206.836†	1525.5	1416.8	518.03 ug/L	518.03 ppb	00:39:46
2	Se 196.026†	769.2	758.8	515.56 ug/L	515.56 ppb	00:39:46
2	Si 251.611†	80452.8	76211.1	2462.8 ug/L	2462.8 ppb	00:39:26
2	Sn 189.927†	2968.3	2823.2	509.78 ug/L	509.78 ppb	00:39:46
2	Ti 334.940†	320915.3	307658.1	484.66 ug/L	484.66 ppb	00:39:26
2	Tl 190.801†	1606.6	1560.6	505.29 ug/L	505.29 ppb	00:39:46
2	U 409.014†	14751.4	16979.0	472.46 ug/L	472.46 ppb	00:39:26
2	V 292.402†	71640.9	69835.4	494.52 ug/L	494.52 ppb	00:39:26
2	Zn 213.857†	52417.0	49281.9	492.96 ug/L	492.96 ppb	00:39:26
2	SiO2†	81183.7	76885.1	5324.3 ug/L	5324.3 ppb	00:40:28
3	Sc Radial	3760.4	3760.4	97.5 %		00:38:43
3	Y RADIAL	4306.8	4306.8	96.75 %		00:38:23
3	Al 396.153Radial†	5595.6	5854.4	5477.6 ug/L	5477.6 ppb	00:38:23
3	Ca 317.933Radial†	2423.3	2466.8	5379.5 ug/L	5379.5 ppb	00:38:43
3	Fe 238.204 Radial†	314.0	310.4	5031.7 ug/L	5031.7 ppb	00:38:43
3	K 766.490 Radial†	29520.7	27513.6	5265.0 ug/L	5265.0 ppb	00:38:23
3	Mg 279.077 IEC†	103.8	105.3	5558.5 ug/L	5558.5 ppb	00:38:43
3	Na 589.592 Radial†	29492.9	31151.8	9693.3 ug/L	9693.3 ppb	00:38:23
3	Sr 421.552†	70879.1	72690.3	505.64 ug/L	505.64 ppb	00:38:23
3	Sc 361.383	926357.4	926357.4	105.26 %		00:39:52
3	Y 371.029	769201.3	769201.3	101.13 %		00:39:52
3	Ag 328.068†	114202.9	108262.8	506.19 ug/L	506.19 ppb	00:39:57
3	As 188.979†	1181.7	1142.6	512.37 ug/L	512.37 ppb	00:40:17
3	B 249.677†	21167.7	20388.1	497.44 ug/L	497.44 ppb	00:39:57
3	Ba 233.527†	67605.7	64216.8	506.03 ug/L	506.03 ppb	00:39:57
3	Be 313.107†	1415658.9	1348485.3	504.98 ug/L	504.98 ppb	00:39:52
3	Cd 226.502†	46145.1	44015.7	511.40 ug/L	511.40 ppb	00:39:57
3	Co 228.616†	25328.3	24127.6	506.85 ug/L	506.85 ppb	00:39:57
3	Cr 267.716†	47621.9	45157.5	507.69 ug/L	507.69 ppb	00:39:57
3	Cu 324.752†	178268.2	163406.1	497.87 ug/L	497.87 ppb	00:39:57
3	Mn 257.610†	462566.2	438976.9	500.38 ug/L	500.38 ppb	00:39:52
3	Mo 202.031†	7174.7	6811.6	502.16 ug/L	502.16 ppb	00:40:17
3	Ni 231.604†	21213.2	20070.5	511.90 ug/L	511.90 ppb	00:39:57
3	P 214.914†	4622.3	4185.5	2420.4 ug/L	2420.4 ppb	00:40:17
3	Pb 220.353†	4285.7	4010.4	497.77 ug/L	497.77 ppb	00:40:17
3	S 181.975 Axial†	798.7	722.9	1018.3 ug/L	1018.3 ppb	00:40:17
3	Sb 206.836†	1526.6	1411.3	516.16 ug/L	516.16 ppb	00:40:17
3	Se 196.026†	780.3	766.1	520.58 ug/L	520.58 ppb	00:40:17
3	Si 251.611†	83211.0	78488.7	2536.5 ug/L	2536.5 ppb	00:39:57
3	Sn 189.927†	2985.5	2826.9	510.45 ug/L	510.45 ppb	00:40:17
3	Ti 334.940†	332267.4	317075.9	499.47 ug/L	499.47 ppb	00:39:57
3	Tl 190.801†	1628.2	1574.3	509.72 ug/L	509.72 ppb	00:40:17
3	U 409.014†	15311.5	17448.4	485.52 ug/L	485.52 ppb	00:39:57
3	V 292.402†	74290.6	72047.4	510.00 ug/L	510.00 ppb	00:39:57
3	Zn 213.857†	54397.1	50939.7	509.57 ug/L	509.57 ppb	00:39:57
3	SiO2†	82128.7	77437.0	5362.6 ug/L	5362.6 ppb	00:40:33

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926381.1	105.26 %	0.474			0.45%
Sc Radial	3781.8	98.1 %	0.50			0.51%
Y 371.029	768523.9	101.04 %	0.445			0.44%
Y RADIAL	4249.3	95.45 %	1.286			1.35%
Ag 328.068†	106717.1	498.96 ug/L	7.139	498.96 ppb	7.139	1.43%
QC value within limits for Ag 328.068 Recovery = 99.79%						
Al 396.153Radial†	5774.5	5402.6 ug/L	109.80	5402.6 ppb	109.80	2.03%
QC value within limits for Al 396.153Radial Recovery = 108.05%						
As 188.979†	1129.9	506.66 ug/L	5.264	506.66 ppb	5.264	1.04%
QC value within limits for As 188.979 Recovery = 101.33%						
B 249.677†	19912.2	485.81 ug/L	11.054	485.81 ppb	11.054	2.28%
QC value within limits for B 249.677 Recovery = 97.16%						
Ba 233.527†	63205.1	498.05 ug/L	7.648	498.05 ppb	7.648	1.54%
QC value within limits for Ba 233.527 Recovery = 99.61%						
Be 313.107†	1347253.4	504.50 ug/L	0.459	504.50 ppb	0.459	0.09%
QC value within limits for Be 313.107 Recovery = 100.90%						
Ca 317.933Radial†	2447.2	5336.6 ug/L	49.93	5336.6 ppb	49.93	0.94%

QC value within limits for Ca 317.933 Radial Recovery = 106.73%

Cd	226.502†	43303.7	503.13 ug/L	7.844	503.13 ppb	7.844	1.56%
QC value within limits for Cd 226.502 Recovery = 100.63%							
Co	228.616†	23745.4	498.83 ug/L	7.792	498.83 ppb	7.792	1.56%
QC value within limits for Co 228.616 Recovery = 99.77%							
Cr	267.716†	44429.3	499.51 ug/L	7.497	499.51 ppb	7.497	1.50%
QC value within limits for Cr 267.716 Recovery = 99.90%							
Cu	324.752†	160814.3	489.97 ug/L	8.439	489.97 ppb	8.439	1.72%
QC value within limits for Cu 324.752 Recovery = 97.99%							
Fe	238.204 Radial†	306.4	4966.7 ug/L	60.73	4966.7 ppb	60.73	1.22%
QC value within limits for Fe 238.204 Radial Recovery = 99.33%							
K	766.490 Radial†	27151.4	5195.6 ug/L	87.67	5195.6 ppb	87.67	1.69%
QC value within limits for K 766.490 Radial Recovery = 103.91%							
Mg	279.077 IEC†	101.7	5368.8 ug/L	164.34	5368.8 ppb	164.34	3.06%
QC value within limits for Mg 279.077 IEC Recovery = 107.38%							
Mn	257.610†	439480.6	500.95 ug/L	0.509	500.95 ppb	0.509	0.10%
QC value within limits for Mn 257.610 Recovery = 100.19%							
Mo	202.031†	6765.4	498.76 ug/L	4.282	498.76 ppb	4.282	0.86%
QC value within limits for Mo 202.031 Recovery = 99.75%							
Na	589.592 Radial†	30793.5	9581.8 ug/L	178.62	9581.8 ppb	178.62	1.86%
QC value within limits for Na 589.592 Radial Recovery = 95.82%							
Ni	231.604†	19765.8	504.13 ug/L	6.965	504.13 ppb	6.965	1.38%
QC value within limits for Ni 231.604 Recovery = 100.83%							
P	214.914†	4149.5	2400.3 ug/L	26.49	2400.3 ppb	26.49	1.10%
QC value within limits for P 214.914 Recovery = 96.01%							
Pb	220.353†	3968.9	492.62 ug/L	5.801	492.62 ppb	5.801	1.18%
QC value within limits for Pb 220.353 Recovery = 98.52%							
S	181.975 Axial†	717.0	1010.0 ug/L	8.63	1010.0 ppb	8.63	0.85%
QC value within limits for S 181.975 Axial Recovery = 101.00%							
Sb	206.836†	1405.4	513.95 ug/L	5.535	513.95 ppb	5.535	1.08%
QC value within limits for Sb 206.836 Recovery = 102.79%							
Se	196.026†	761.6	517.46 ug/L	2.728	517.46 ppb	2.728	0.53%
QC value within limits for Se 196.026 Recovery = 103.49%							
Si	251.611†	77376.2	2500.5 ug/L	36.91	2500.5 ppb	36.91	1.48%
QC value within limits for Si 251.611 Recovery = 100.02%							
Sn	189.927†	2808.8	507.17 ug/L	5.115	507.17 ppb	5.115	1.01%
QC value within limits for Sn 189.927 Recovery = 101.43%							
Sr	421.552†	71834.7	499.69 ug/L	8.781	499.69 ppb	8.781	1.76%
QC value within limits for Sr 421.552 Recovery = 99.94%							
Ti	334.940†	312241.6	491.86 ug/L	7.412	491.86 ppb	7.412	1.51%
QC value within limits for Ti 334.940 Recovery = 98.37%							
Tl	190.801†	1555.6	503.69 ug/L	6.977	503.69 ppb	6.977	1.39%
QC value within limits for Tl 190.801 Recovery = 100.74%							
U	409.014†	17255.3	480.16 ug/L	6.838	480.16 ppb	6.838	1.42%
QC value within limits for U 409.014 Recovery = 96.03%							
V	292.402†	70868.3	501.72 ug/L	7.796	501.72 ppb	7.796	1.55%
QC value within limits for V 292.402 Recovery = 100.34%							
Zn	213.857†	50087.5	501.04 ug/L	8.318	501.04 ppb	8.318	1.66%
QC value within limits for Zn 213.857 Recovery = 100.21%							
SiO2†		77354.7	5357.0 ug/L	30.23	5357.0 ppb	30.23	0.56%
QC value within limits for SiO2 Recovery = 100.18%							

All analyte(s) passed QC.

Sequence No.: 63  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 00:42:43  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3779.3	3779.3	98.0 %		00:44:56
1	Y RADIAL	4326.4	4326.4	97.19 %		00:44:36
1	Al 396.153Radial†	-116.6	-3.9	-3.7317 ug/L	-3.7317 ppb	00:44:36
1	Ca 317.933Radial†	24.1	5.9	12.931 ug/L	12.931 ppb	00:44:56
1	Fe 238.204 Radial†	12.1	0.7	11.407 ug/L	11.407 ppb	00:44:56
1	K 766.490 Radial†	3107.4	406.2	77.831 ug/L	77.831 ppb	00:44:36
1	Mg 279.077 IEC†	-0.9	-2.1	-108.49 ug/L	-108.49 ppb	00:44:56
1	Na 589.592 Radial†	-1008.3	-127.3	-39.617 ug/L	-39.617 ppb	00:44:36
1	Sr 421.552†	68.6	61.2	0.4260 ug/L	0.4260 ppb	00:44:36
1	Sc 361.383	948215.8	948215.8	107.74 %		00:45:53
1	Y 371.029	796239.1	796239.1	104.68 %		00:45:53
1	Ag 328.068†	310.5	54.1	0.2495 ug/L	0.2495 ppb	00:45:58
1	As 188.979†	-27.8	-5.9	-2.6247 ug/L	-2.6247 ppb	00:46:18
1	B 249.677†	-434.7	-125.5	-3.0785 ug/L	-3.0785 ppb	00:46:18
1	Ba 233.527†	9.1	-2.6	-0.0202 ug/L	-0.0202 ppb	00:46:18
1	Be 313.107†	-3623.8	194.9	0.0733 ug/L	0.0733 ppb	00:45:58
1	Cd 226.502†	-184.4	5.0	0.0585 ug/L	0.0585 ppb	00:46:18
1	Co 228.616†	-52.0	16.6	0.3507 ug/L	0.3507 ppb	00:46:18
1	Cr 267.716†	93.4	1.6	0.0163 ug/L	0.0163 ppb	00:46:18
1	Cu 324.752†	6078.6	-313.4	-0.9577 ug/L	-0.9577 ppb	00:45:58
1	Mn 257.610†	490.8	-22.2	-0.0197 ug/L	-0.0197 ppb	00:46:18
1	Mo 202.031†	20.3	14.2	1.0471 ug/L	1.0471 ppb	00:46:18
1	Ni 231.604†	86.1	-2.9	-0.0738 ug/L	-0.0738 ppb	00:46:18
1	P 214.914†	199.1	-21.0	-12.457 ug/L	-12.457 ppb	00:46:18
1	Pb 220.353†	-35.9	-94.5	-11.688 ug/L	-11.688 ppb	00:46:18
1	S 181.975 Axial†	38.5	-0.1	-0.1496 ug/L	-0.1496 ppb	00:46:18
1	Sb 206.836†	48.3	5.8	2.0734 ug/L	2.0734 ppb	00:46:18
1	Se 196.026†	-22.5	3.9	2.5819 ug/L	2.5819 ppb	00:46:18
1	Si 251.611†	842.2	217.0	7.0163 ug/L	7.0163 ppb	00:46:18
1	Sn 189.927†	13.1	2.8	0.5005 ug/L	0.5005 ppb	00:46:18
1	Ti 334.940†	-1369.4	138.9	0.2267 ug/L	0.2267 ppb	00:45:58
1	Tl 190.801†	-25.2	4.1	1.3181 ug/L	1.3181 ppb	00:46:18
1	U 409.014†	-2881.1	227.8	6.3611 ug/L	6.3611 ppb	00:45:53
1	V 292.402†	-1575.8	6.2	0.0660 ug/L	0.0660 ppb	00:45:58
1	Zn 213.857†	782.6	-13.0	-0.1316 ug/L	-0.1316 ppb	00:46:18
1	SiO2†	761.4	118.5	8.1961 ug/L	8.1961 ppb	00:47:24
2	Sc Radial	3740.8	3740.8	97.0 %		00:45:21
2	Y RADIAL	4315.8	4315.8	96.95 %		00:45:01
2	Al 396.153Radial†	-126.4	-15.3	-14.365 ug/L	-14.365 ppb	00:45:01
2	Ca 317.933Radial†	24.5	6.6	14.339 ug/L	14.339 ppb	00:45:21
2	Fe 238.204 Radial†	9.3	-2.0	-33.030 ug/L	-33.030 ppb	00:45:21
2	K 766.490 Radial†	2966.9	294.0	56.347 ug/L	56.347 ppb	00:45:01
2	Mg 279.077 IEC†	2.6	1.5	78.296 ug/L	78.296 ppb	00:45:21
2	Na 589.592 Radial†	-1088.1	-220.2	-68.523 ug/L	-68.523 ppb	00:45:01
2	Sr 421.552†	-13.9	-23.1	-0.1608 ug/L	-0.1608 ppb	00:45:01
2	Sc 361.383	915570.7	915570.7	104.03 %		00:46:23
2	Y 371.029	771114.7	771114.7	101.38 %		00:46:23
2	Ag 328.068†	340.2	92.8	0.4169 ug/L	0.4169 ppb	00:46:28
2	As 188.979†	-16.5	4.1	1.8129 ug/L	1.8129 ppb	00:46:48
2	B 249.677†	-433.5	-138.7	-3.3941 ug/L	-3.3941 ppb	00:46:48
2	Ba 233.527†	13.1	1.5	0.0103 ug/L	0.0103 ppb	00:46:48
2	Be 313.107†	-3700.8	0.9	0.0004 ug/L	0.0004 ppb	00:46:28
2	Cd 226.502†	-177.9	5.2	0.0639 ug/L	0.0639 ppb	00:46:48
2	Co 228.616†	-69.6	-2.1	-0.0424 ug/L	-0.0424 ppb	00:46:48
2	Cr 267.716†	83.8	-4.5	-0.0556 ug/L	-0.0556 ppb	00:46:48
2	Cu 324.752†	6177.4	-17.2	-0.0558 ug/L	-0.0558 ppb	00:46:28
2	Mn 257.610†	510.0	12.5	0.0078 ug/L	0.0078 ppb	00:46:48
2	Mo 202.031†	11.7	6.6	0.4851 ug/L	0.4851 ppb	00:46:48
2	Ni 231.604†	87.0	0.9	0.0220 ug/L	0.0220 ppb	00:46:48

2	P 214.914†	199.1	-14.4	-8.6622 ug/L	-8.6622 ppb	00:46:48
2	Pb 220.353†	-43.3	-102.8	-12.714 ug/L	-12.714 ppb	00:46:48
2	S 181.975 Axial†	40.7	3.3	4.6732 ug/L	4.6732 ppb	00:46:48
2	Sb 206.836†	37.7	-2.8	-0.9835 ug/L	-0.9835 ppb	00:46:48
2	Se 196.026†	-20.2	5.4	3.4233 ug/L	3.4233 ppb	00:46:48
2	Si 251.611†	758.3	164.2	5.3118 ug/L	5.3118 ppb	00:46:48
2	Sn 189.927†	3.8	-5.7	-1.0275 ug/L	-1.0275 ppb	00:46:48
2	Ti 334.940†	-1461.0	5.5	0.0029 ug/L	0.0029 ppb	00:46:28
2	Tl 190.801†	-37.3	-8.4	-2.7113 ug/L	-2.7113 ppb	00:46:48
2	U 409.014†	-2905.3	109.2	3.0533 ug/L	3.0533 ppb	00:46:23
2	V 292.402†	-1585.4	-55.2	-0.3667 ug/L	-0.3667 ppb	00:46:28
2	Zn 213.857†	774.5	5.1	0.0560 ug/L	0.0560 ppb	00:46:48
2	SiO2†	788.0	169.2	11.735 ug/L	11.735 ppb	00:47:29
3	Sc Radial	3875.6	3875.6	100 %		00:45:46
3	Y RADIAL	4313.8	4313.8	96.90 %		00:45:26
3	Al 396.153Radial†	-111.2	4.4	4.1549 ug/L	4.1549 ppb	00:45:26
3	Ca 317.933Radial†	25.4	6.6	14.371 ug/L	14.371 ppb	00:45:46
3	Fe 238.204 Radial†	9.6	-2.1	-34.599 ug/L	-34.599 ppb	00:45:46
3	K 766.490 Radial†	2956.6	177.3	33.982 ug/L	33.982 ppb	00:45:26
3	Mg 279.077 IEC†	2.8	1.6	86.469 ug/L	86.469 ppb	00:45:46
3	Na 589.592 Radial†	-1017.6	-111.1	-34.559 ug/L	-34.559 ppb	00:45:26
3	Sr 421.552†	48.5	39.5	0.2747 ug/L	0.2747 ppb	00:45:26
3	Sc 361.383	916011.1	916011.1	104.08 %		00:46:54
3	Y 371.029	770857.6	770857.6	101.34 %		00:46:54
3	Ag 328.068†	340.2	92.7	0.4195 ug/L	0.4195 ppb	00:46:59
3	As 188.979†	-20.3	0.4	0.1604 ug/L	0.1604 ppb	00:47:19
3	B 249.677†	-463.0	-166.8	-4.0838 ug/L	-4.0838 ppb	00:47:19
3	Ba 233.527†	13.2	1.6	0.0117 ug/L	0.0117 ppb	00:47:19
3	Be 313.107†	-3590.7	108.5	0.0402 ug/L	0.0402 ppb	00:46:59
3	Cd 226.502†	-179.9	3.4	0.0427 ug/L	0.0427 ppb	00:47:19
3	Co 228.616†	-62.2	5.1	0.1087 ug/L	0.1087 ppb	00:47:19
3	Cr 267.716†	89.0	0.4	0.0008 ug/L	0.0008 ppb	00:47:19
3	Cu 324.752†	6020.4	-170.9	-0.5231 ug/L	-0.5231 ppb	00:46:59
3	Mn 257.610†	528.5	30.1	0.0273 ug/L	0.0273 ppb	00:47:19
3	Mo 202.031†	10.5	5.4	0.3933 ug/L	0.3933 ppb	00:47:19
3	Ni 231.604†	87.3	1.1	0.0270 ug/L	0.0270 ppb	00:47:19
3	P 214.914†	197.2	-16.3	-9.6638 ug/L	-9.6638 ppb	00:47:19
3	Pb 220.353†	-52.0	-111.2	-13.747 ug/L	-13.747 ppb	00:47:19
3	S 181.975 Axial†	44.9	7.3	10.239 ug/L	10.239 ppb	00:47:19
3	Sb 206.836†	52.5	11.4	4.0576 ug/L	4.0576 ppb	00:47:19
3	Se 196.026†	-31.0	-5.0	-3.4076 ug/L	-3.4076 ppb	00:47:19
3	Si 251.611†	747.5	153.5	4.9663 ug/L	4.9663 ppb	00:47:19
3	Sn 189.927†	18.2	8.1	1.4631 ug/L	1.4631 ppb	00:47:19
3	Ti 334.940†	-1574.8	-103.2	-0.1681 ug/L	-0.1681 ppb	00:46:59
3	Tl 190.801†	-27.0	1.5	0.4874 ug/L	0.4874 ppb	00:47:19
3	U 409.014†	-2985.2	33.8	0.9468 ug/L	0.9468 ppb	00:46:54
3	V 292.402†	-1516.6	11.6	0.0952 ug/L	0.0952 ppb	00:46:59
3	Zn 213.857†	765.2	-4.3	-0.0373 ug/L	-0.0373 ppb	00:47:19
3	SiO2†	782.5	163.6	11.348 ug/L	11.348 ppb	00:47:34

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926599.2	105.29 %		2.127			2.02%
Sc Radial	3798.6	98.5 %		1.80			1.83%
Y 371.029	779403.8	102.47 %		1.917			1.87%
Y RADIAL	4318.7	97.01 %		0.153			0.16%
Ag 328.068†	79.9	0.3620 ug/L		0.09737	0.3620 ppb	0.09737	26.90%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-4.9	-4.6473 ug/L		9.29391	-4.6473 ppb	9.29391	199.98%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.5	-0.2171 ug/L		2.24272	-0.2171 ppb	2.24272	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-143.7	-3.5188 ug/L		0.51413	-3.5188 ppb	0.51413	14.61%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.2	0.0006 ug/L		0.01800	0.0006 ppb	0.01800	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	101.4	0.0379 ug/L		0.03653	0.0379 ppb	0.03653	96.25%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.4	13.880 ug/L		0.8220	13.880 ppb	0.8220	5.92%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	4.5	0.0550 ug/L	0.01102	0.0550 ppb	0.01102	20.01%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.5	0.1390 ug/L	0.19825	0.1390 ppb	0.19825	142.63%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-0.9	-0.0128 ug/L	0.03781	-0.0128 ppb	0.03781	294.69%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-167.2	-0.5122 ug/L	0.45106	-0.5122 ppb	0.45106	88.07%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.2	-18.741 ug/L	26.1208	-18.741 ppb	26.1208	139.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	292.5	56.054 ug/L	21.9262	56.054 ppb	21.9262	39.12%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.4	18.760 ug/L	110.2732	18.760 ppb	110.2732	587.81%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	6.8	0.0051 ug/L	0.02362	0.0051 ppb	0.02362	460.27%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.7	0.6418 ug/L	0.35396	0.6418 ppb	0.35396	55.15%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-152.9	-47.566 ug/L	18.3246	-47.566 ppb	18.3246	38.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.3	-0.0082 ug/L	0.05679	-0.0082 ppb	0.05679	689.69%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-17.3	-10.261 ug/L	1.9668	-10.261 ppb	1.9668	19.17%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-102.8	-12.716 ug/L	1.0293	-12.716 ppb	1.0293	8.09%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.5	4.9208 ug/L	5.19858	4.9208 ppb	5.19858	105.65%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.8	1.7158 ug/L	2.53954	1.7158 ppb	2.53954	148.01%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.4	0.8659 ug/L	3.72475	0.8659 ppb	3.72475	430.16%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	178.2	5.7648 ug/L	1.09755	5.7648 ppb	1.09755	19.04%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.7	0.3120 ug/L	1.25598	0.3120 ppb	1.25598	402.53%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	25.9	0.1800 ug/L	0.30465	0.1800 ppb	0.30465	169.30%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	13.7	0.0205 ug/L	0.19796	0.0205 ppb	0.19796	966.63%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.9	-0.3019 ug/L	2.12748	-0.3019 ppb	2.12748	704.59%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	123.6	3.4537 ug/L	2.72924	3.4537 ppb	2.72924	79.02%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-12.5	-0.0685 ug/L	0.25869	-0.0685 ppb	0.25869	377.70%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-4.1	-0.0376 ug/L	0.09382	-0.0376 ppb	0.09382	249.28%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	150.4	10.426 ug/L	1.9411	10.426 ppb	1.9411	18.62%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 71  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/26/2010 01:38:23  
 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	3785.2	3785.2	98.1 %		01:40:35
1	Y RADIAL	4333.7	4333.7	97.35 %		01:40:15
1	Al 396.153Radial†	5592.2	5813.3	5438.8 ug/L	5438.8 ppb	01:40:15
1	Ca 317.933Radial†	2445.0	2472.7	5392.3 ug/L	5392.3 ppb	01:40:35
1	Fe 238.204 Radial†	320.2	314.6	5099.9 ug/L	5099.9 ppb	01:40:35
1	K 766.490 Radial†	29477.6	27271.5	5218.4 ug/L	5218.4 ppb	01:40:15
1	Mg 279.077 IEC†	104.3	105.1	5548.6 ug/L	5548.6 ppb	01:40:35
1	Na 589.592 Radial†	31174.7	32667.5	10165 ug/L	10165 ppb	01:40:15
1	Sr 421.552†	72857.7	74230.6	516.35 ug/L	516.35 ppb	01:40:15
1	Sc 361.383	906121.3	906121.3	102.96 %		01:41:33
1	Y 371.029	751853.8	751853.8	98.846 %		01:41:33
1	Ag 328.068†	112025.1	108570.6	507.64 ug/L	507.64 ppb	01:41:38
1	As 188.979†	1163.4	1149.9	515.63 ug/L	515.63 ppb	01:41:58
1	B 249.677†	20431.2	20121.9	490.91 ug/L	490.91 ppb	01:41:38
1	Ba 233.527†	65936.8	64030.2	504.56 ug/L	504.56 ppb	01:41:38
1	Be 313.107†	1382153.7	1345979.0	504.04 ug/L	504.04 ppb	01:41:33
1	Cd 226.502†	45008.0	43890.4	509.94 ug/L	509.94 ppb	01:41:38
1	Co 228.616†	24785.0	24137.3	507.05 ug/L	507.05 ppb	01:41:38
1	Cr 267.716†	46582.8	45158.6	507.71 ug/L	507.71 ppb	01:41:38
1	Cu 324.752†	174489.6	163518.5	498.21 ug/L	498.21 ppb	01:41:38
1	Mn 257.610†	453715.4	440194.7	501.77 ug/L	501.77 ppb	01:41:33
1	Mo 202.031†	7067.0	6859.1	505.67 ug/L	505.67 ppb	01:41:58
1	Ni 231.604†	20723.2	20044.7	511.24 ug/L	511.24 ppb	01:41:38
1	P 214.914†	4535.4	4199.3	2428.5 ug/L	2428.5 ppb	01:41:58
1	Pb 220.353†	4246.2	4062.9	504.26 ug/L	504.26 ppb	01:41:58
1	S 181.975 Axial†	776.9	718.7	1012.4 ug/L	1012.4 ppb	01:41:58
1	Sb 206.836†	1517.5	1434.8	524.57 ug/L	524.57 ppb	01:41:58
1	Se 196.026†	767.2	769.9	523.34 ug/L	523.34 ppb	01:41:58
1	Si 251.611†	81271.9	78370.8	2532.6 ug/L	2532.6 ppb	01:41:38
1	Sn 189.927†	2936.9	2843.1	513.35 ug/L	513.35 ppb	01:41:58
1	Ti 334.940†	325436.8	317491.3	500.12 ug/L	500.12 ppb	01:41:38
1	Tl 190.801†	1578.9	1561.0	505.46 ug/L	505.46 ppb	01:41:58
1	U 409.014†	14995.7	17466.4	486.02 ug/L	486.02 ppb	01:41:38
1	V 292.402†	72681.2	72060.6	510.13 ug/L	510.13 ppb	01:41:38
1	Zn 213.857†	53142.5	50875.4	508.92 ug/L	508.92 ppb	01:41:38
1	SiO2†	82721.4	79755.2	5523.4 ug/L	5523.4 ppb	01:43:06
2	Sc Radial	3793.0	3793.0	98.3 %		01:41:01
2	Y RADIAL	4280.4	4280.4	96.15 %		01:40:41
2	Al 396.153Radial†	5520.0	5728.1	5358.8 ug/L	5358.8 ppb	01:40:41
2	Ca 317.933Radial†	2440.5	2462.9	5371.0 ug/L	5371.0 ppb	01:41:01
2	Fe 238.204 Radial†	322.0	315.8	5118.1 ug/L	5118.1 ppb	01:41:01
2	K 766.490 Radial†	29209.9	26937.1	5154.5 ug/L	5154.5 ppb	01:40:41
2	Mg 279.077 IEC†	101.5	102.0	5382.9 ug/L	5382.9 ppb	01:41:01
2	Na 589.592 Radial†	30323.2	31735.9	9875.1 ug/L	9875.1 ppb	01:40:41
2	Sr 421.552†	71500.1	72696.3	505.68 ug/L	505.68 ppb	01:40:41
2	Sc 361.383	908841.6	908841.6	103.27 %		01:42:04
2	Y 371.029	754417.1	754417.1	99.182 %		01:42:04
2	Ag 328.068†	112006.8	108227.2	506.05 ug/L	506.05 ppb	01:42:09
2	As 188.979†	1147.3	1130.9	507.20 ug/L	507.20 ppb	01:42:29
2	B 249.677†	20431.3	20062.6	489.46 ug/L	489.46 ppb	01:42:09
2	Ba 233.527†	66138.4	64033.8	504.59 ug/L	504.59 ppb	01:42:09
2	Be 313.107†	1384068.3	1343815.0	503.23 ug/L	503.23 ppb	01:42:04
2	Cd 226.502†	44970.1	43722.8	507.99 ug/L	507.99 ppb	01:42:09
2	Co 228.616†	24726.0	24008.2	504.34 ug/L	504.34 ppb	01:42:09
2	Cr 267.716†	46527.9	44970.0	505.60 ug/L	505.60 ppb	01:42:09
2	Cu 324.752†	174396.8	162921.3	496.40 ug/L	496.40 ppb	01:42:09
2	Mn 257.610†	453942.5	439095.7	500.53 ug/L	500.53 ppb	01:42:04
2	Mo 202.031†	7059.3	6831.2	503.61 ug/L	503.61 ppb	01:42:29
2	Ni 231.604†	20698.2	19960.2	509.08 ug/L	509.08 ppb	01:42:09

2	P 214.914†	4521.3	4172.4	2412.7 ug/L	2412.7 ppb	01:42:29
2	Pb 220.353†	4212.3	4017.8	498.65 ug/L	498.65 ppb	01:42:29
2	S 181.975 Axial†	776.1	715.7	1008.1 ug/L	1008.1 ppb	01:42:29
2	Sb 206.836†	1499.0	1412.5	516.58 ug/L	516.58 ppb	01:42:29
2	Se 196.026†	761.8	762.5	518.48 ug/L	518.48 ppb	01:42:29
2	Si 251.611†	81241.8	78105.4	2524.1 ug/L	2524.1 ppb	01:42:09
2	Sn 189.927†	2922.1	2820.2	509.23 ug/L	509.23 ppb	01:42:29
2	Ti 334.940†	325544.1	316649.2	498.81 ug/L	498.81 ppb	01:42:09
2	Tl 190.801†	1581.7	1559.1	504.85 ug/L	504.85 ppb	01:42:29
2	U 409.014†	15103.8	17527.6	487.73 ug/L	487.73 ppb	01:42:09
2	V 292.402†	72640.2	71809.5	508.35 ug/L	508.35 ppb	01:42:09
2	Zn 213.857†	53009.0	50591.6	506.06 ug/L	506.06 ppb	01:42:09
2	SiO2†	81770.6	78594.0	5442.9 ug/L	5442.9 ppb	01:43:11
3	Sc Radial	3768.3	3768.3	97.7 %		01:41:26
3	Y RADIAL	4293.3	4293.3	96.44 %		01:41:06
3	Al 396.153Radial†	5491.8	5736.1	5366.3 ug/L	5366.3 ppb	01:41:06
3	Ca 317.933Radial†	2424.5	2462.9	5370.9 ug/L	5370.9 ppb	01:41:26
3	Fe 238.204 Radial†	322.3	318.2	5158.0 ug/L	5158.0 ppb	01:41:26
3	K 766.490 Radial†	29149.4	27070.2	5179.9 ug/L	5179.9 ppb	01:41:06
3	Mg 279.077 IEC†	101.6	102.8	5424.6 ug/L	5424.6 ppb	01:41:26
3	Na 589.592 Radial†	30459.7	32078.0	9981.5 ug/L	9981.5 ppb	01:41:06
3	Sr 421.552†	71465.0	73137.7	508.75 ug/L	508.75 ppb	01:41:06
3	Sc 361.383	908166.0	908166.0	103.19 %		01:42:35
3	Y 371.029	755844.7	755844.7	99.370 %		01:42:35
3	Ag 328.068†	111734.9	108044.3	505.21 ug/L	505.21 ppb	01:42:40
3	As 188.979†	1156.5	1140.7	511.55 ug/L	511.55 ppb	01:43:00
3	B 249.677†	20413.0	20059.6	489.37 ug/L	489.37 ppb	01:42:40
3	Ba 233.527†	65984.1	63931.9	503.79 ug/L	503.79 ppb	01:42:40
3	Be 313.107†	1389807.3	1350373.6	505.68 ug/L	505.68 ppb	01:42:35
3	Cd 226.502†	44860.9	43649.3	507.13 ug/L	507.13 ppb	01:42:40
3	Co 228.616†	24732.2	24032.0	504.84 ug/L	504.84 ppb	01:42:40
3	Cr 267.716†	46588.0	45061.8	506.63 ug/L	506.63 ppb	01:42:40
3	Cu 324.752†	173956.7	162620.5	495.48 ug/L	495.48 ppb	01:42:40
3	Mn 257.610†	453995.3	439473.8	500.96 ug/L	500.96 ppb	01:42:35
3	Mo 202.031†	7056.5	6833.6	503.79 ug/L	503.79 ppb	01:43:00
3	Ni 231.604†	20688.8	19966.0	509.23 ug/L	509.23 ppb	01:42:40
3	P 214.914†	4526.9	4181.1	2418.0 ug/L	2418.0 ppb	01:43:00
3	Pb 220.353†	4190.1	3999.3	496.37 ug/L	496.37 ppb	01:43:00
3	S 181.975 Axial†	784.7	724.6	1020.7 ug/L	1020.7 ppb	01:43:00
3	Sb 206.836†	1503.8	1418.3	518.62 ug/L	518.62 ppb	01:43:00
3	Se 196.026†	759.1	760.3	517.21 ug/L	517.21 ppb	01:43:00
3	Si 251.611†	81200.1	78123.6	2524.7 ug/L	2524.7 ppb	01:42:40
3	Sn 189.927†	2919.9	2820.2	509.22 ug/L	509.22 ppb	01:43:00
3	Ti 334.940†	324688.9	316054.9	497.87 ug/L	497.87 ppb	01:42:40
3	Tl 190.801†	1597.0	1575.0	509.95 ug/L	509.95 ppb	01:43:00
3	U 409.014†	14897.1	17338.1	482.43 ug/L	482.43 ppb	01:42:40
3	V 292.402†	72521.9	71747.2	507.90 ug/L	507.90 ppb	01:42:40
3	Zn 213.857†	53033.3	50653.3	506.68 ug/L	506.68 ppb	01:42:40
3	SiO2†	80717.4	77632.3	5376.1 ug/L	5376.1 ppb	01:43:16

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907709.6	103.14 %	0.161			0.16%
Sc Radial	3782.2	98.1 %	0.33			0.33%
Y 371.029	754038.5	99.133 %	0.2659			0.27%
Y RADIAL	4302.5	96.65 %	0.624			0.65%
Ag 328.068†	108280.7	506.30 ug/L	1.236	506.30 ppb	1.236	0.24%
QC value within limits for Ag 328.068 Recovery = 101.26%						
Al 396.153Radial†	5759.2	5388.0 ug/L	44.20	5388.0 ppb	44.20	0.82%
QC value within limits for Al 396.153Radial Recovery = 107.76%						
As 188.979†	1140.5	511.46 ug/L	4.212	511.46 ppb	4.212	0.82%
QC value within limits for As 188.979 Recovery = 102.29%						
B 249.677†	20081.3	489.91 ug/L	0.861	489.91 ppb	0.861	0.18%
QC value within limits for B 249.677 Recovery = 97.98%						
Ba 233.527†	63998.7	504.31 ug/L	0.455	504.31 ppb	0.455	0.09%
QC value within limits for Ba 233.527 Recovery = 100.86%						
Be 313.107†	1346722.5	504.32 ug/L	1.247	504.32 ppb	1.247	0.25%
QC value within limits for Be 313.107 Recovery = 100.86%						
Ca 317.933Radial†	2466.2	5378.1 ug/L	12.30	5378.1 ppb	12.30	0.23%



QC value within limits for Ca 317.933 Radial Recovery = 107.56%

Cd 226.502†	43754.2	508.35 ug/L	1.440	508.35 ppb	1.440	0.28%
QC value within limits for Cd 226.502 Recovery = 101.67%						
Co 228.616†	24059.2	505.41 ug/L	1.444	505.41 ppb	1.444	0.29%
QC value within limits for Co 228.616 Recovery = 101.08%						
Cr 267.716†	45063.4	506.65 ug/L	1.059	506.65 ppb	1.059	0.21%
QC value within limits for Cr 267.716 Recovery = 101.33%						
Cu 324.752†	163020.1	496.70 ug/L	1.390	496.70 ppb	1.390	0.28%
QC value within limits for Cu 324.752 Recovery = 99.34%						
Fe 238.204 Radial†	316.2	5125.3 ug/L	29.74	5125.3 ppb	29.74	0.58%
QC value within limits for Fe 238.204 Radial Recovery = 102.51%						
K 766.490 Radial†	27092.9	5184.3 ug/L	32.20	5184.3 ppb	32.20	0.62%
QC value within limits for K 766.490 Radial Recovery = 103.69%						
Mg 279.077 IEC†	103.3	5452.1 ug/L	86.20	5452.1 ppb	86.20	1.58%
QC value within limits for Mg 279.077 IEC Recovery = 109.04%						
Mn 257.610†	439588.1	501.09 ug/L	0.631	501.09 ppb	0.631	0.13%
QC value within limits for Mn 257.610 Recovery = 100.22%						
Mo 202.031†	6841.3	504.36 ug/L	1.140	504.36 ppb	1.140	0.23%
QC value within limits for Mo 202.031 Recovery = 100.87%						
Na 589.592 Radial†	32160.5	10007 ug/L	146.6	10007 ppb	146.6	1.47%
QC value within limits for Na 589.592 Radial Recovery = 100.07%						
Ni 231.604†	19990.3	509.85 ug/L	1.203	509.85 ppb	1.203	0.24%
QC value within limits for Ni 231.604 Recovery = 101.97%						
P 214.914†	4184.2	2419.8 ug/L	8.07	2419.8 ppb	8.07	0.33%
QC value within limits for P 214.914 Recovery = 96.79%						
Pb 220.353†	4026.7	499.76 ug/L	4.061	499.76 ppb	4.061	0.81%
QC value within limits for Pb 220.353 Recovery = 99.95%						
S 181.975 Axial†	719.7	1013.7 ug/L	6.39	1013.7 ppb	6.39	0.63%
QC value within limits for S 181.975 Axial Recovery = 101.37%						
Sb 206.836†	1421.9	519.92 ug/L	4.154	519.92 ppb	4.154	0.80%
QC value within limits for Sb 206.836 Recovery = 103.98%						
Se 196.026†	764.2	519.68 ug/L	3.233	519.68 ppb	3.233	0.62%
QC value within limits for Se 196.026 Recovery = 103.94%						
Si 251.611†	78199.9	2527.1 ug/L	4.79	2527.1 ppb	4.79	0.19%
QC value within limits for Si 251.611 Recovery = 101.09%						
Sn 189.927†	2827.8	510.60 ug/L	2.384	510.60 ppb	2.384	0.47%
QC value within limits for Sn 189.927 Recovery = 102.12%						
Sr 421.552†	73354.8	510.26 ug/L	5.495	510.26 ppb	5.495	1.08%
QC value within limits for Sr 421.552 Recovery = 102.05%						
Ti 334.940†	316731.8	498.93 ug/L	1.132	498.93 ppb	1.132	0.23%
QC value within limits for Ti 334.940 Recovery = 99.79%						
Tl 190.801†	1565.0	506.75 ug/L	2.787	506.75 ppb	2.787	0.55%
QC value within limits for Tl 190.801 Recovery = 101.35%						
U 409.014†	17444.1	485.39 ug/L	2.703	485.39 ppb	2.703	0.56%
QC value within limits for U 409.014 Recovery = 97.08%						
V 292.402†	71872.4	508.79 ug/L	1.180	508.79 ppb	1.180	0.23%
QC value within limits for V 292.402 Recovery = 101.76%						
Zn 213.857†	50706.8	507.22 ug/L	1.500	507.22 ppb	1.500	0.30%
QC value within limits for Zn 213.857 Recovery = 101.44%						
SiO2†	78660.5	5447.5 ug/L	73.77	5447.5 ppb	73.77	1.35%
QC value within limits for SiO2 Recovery = 101.87%						

All analyte(s) passed QC.

Sequence No.: 72  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 01:45:26  
 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	3794.4	3794.4	98.4 %		01:47:39
1	Y RADIAL	4405.4	4405.4	98.96 %		01:47:19
1	Al 396.153Radial†	-136.1	-23.3	-21.915 ug/L	-21.915 ppb	01:47:19
1	Ca 317.933Radial†	21.2	2.9	6.2722 ug/L	6.2722 ppb	01:47:39
1	Fe 238.204 Radial†	10.3	-1.2	-19.942 ug/L	-19.942 ppb	01:47:39
1	K 766.490 Radial†	2836.3	118.0	22.621 ug/L	22.621 ppb	01:47:19
1	Mg 279.077 IEC†	1.9	0.7	37.767 ug/L	37.767 ppb	01:47:39
1	Na 589.592 Radial†	-1033.8	-149.1	-46.402 ug/L	-46.402 ppb	01:47:19
1	Sr 421.552†	33.7	25.5	0.1771 ug/L	0.1771 ppb	01:47:19
1	Sc 361.383	912537.1	912537.1	103.69 %		01:48:35
1	Y 371.029	767209.1	767209.1	100.86 %		01:48:35
1	Ag 328.068†	334.4	88.3	0.4042 ug/L	0.4042 ppb	01:48:40
1	As 188.979†	-17.9	2.7	1.1820 ug/L	1.1820 ppb	01:49:00
1	B 249.677†	-448.5	-154.6	-3.7849 ug/L	-3.7849 ppb	01:49:00
1	Ba 233.527†	25.1	13.2	0.1022 ug/L	0.1022 ppb	01:49:00
1	Be 313.107†	-3486.3	196.0	0.0733 ug/L	0.0733 ppb	01:48:40
1	Cd 226.502†	-189.1	-6.2	-0.0703 ug/L	-0.0703 ppb	01:49:00
1	Co 228.616†	-72.2	-4.8	-0.0991 ug/L	-0.0991 ppb	01:49:00
1	Cr 267.716†	86.0	-2.1	-0.0255 ug/L	-0.0255 ppb	01:49:00
1	Cu 324.752†	5839.9	-323.0	-0.9842 ug/L	-0.9842 ppb	01:48:40
1	Mn 257.610†	518.6	22.5	0.0221 ug/L	0.0221 ppb	01:49:00
1	Mo 202.031†	8.8	3.8	0.2802 ug/L	0.2802 ppb	01:49:00
1	Ni 231.604†	93.3	7.2	0.1837 ug/L	0.1837 ppb	01:49:00
1	P 214.914†	203.0	-10.0	-5.8216 ug/L	-5.8216 ppb	01:49:00
1	Pb 220.353†	-35.9	-95.8	-11.855 ug/L	-11.855 ppb	01:49:00
1	S 181.975 Axial†	40.7	3.4	4.8441 ug/L	4.8441 ppb	01:49:00
1	Sb 206.836†	32.8	-7.4	-2.6079 ug/L	-2.6079 ppb	01:49:00
1	Se 196.026†	-26.3	-0.6	-0.4463 ug/L	-0.4463 ppb	01:49:00
1	Si 251.611†	657.2	69.1	2.2355 ug/L	2.2355 ppb	01:49:00
1	Sn 189.927†	9.8	-0.0	0.0005 ug/L	0.0005 ppb	01:49:00
1	Ti 334.940†	-1453.8	7.8	0.0109 ug/L	0.0109 ppb	01:48:40
1	Tl 190.801†	-33.7	-5.0	-1.6168 ug/L	-1.6168 ppb	01:49:00
1	U 409.014†	-3074.6	-63.4	-1.7674 ug/L	-1.7674 ppb	01:48:35
1	V 292.402†	-1570.6	-46.0	-0.3174 ug/L	-0.3174 ppb	01:48:40
1	Zn 213.857†	771.1	4.2	0.0455 ug/L	0.0455 ppb	01:49:00
1	SiO2†	616.3	6.1	0.4189 ug/L	0.4189 ppb	01:50:06
2	Sc Radial	3761.9	3761.9	97.5 %		01:48:04
2	Y RADIAL	4312.7	4312.7	96.88 %		01:47:44
2	Al 396.153Radial†	-95.0	17.6	16.554 ug/L	16.554 ppb	01:47:44
2	Ca 317.933Radial†	27.5	9.5	20.826 ug/L	20.826 ppb	01:48:04
2	Fe 238.204 Radial†	12.2	0.8	13.558 ug/L	13.558 ppb	01:48:04
2	K 766.490 Radial†	2990.9	301.5	57.780 ug/L	57.780 ppb	01:47:44
2	Mg 279.077 IEC†	3.1	2.0	104.81 ug/L	104.81 ppb	01:48:04
2	Na 589.592 Radial†	-1109.5	-235.8	-73.387 ug/L	-73.387 ppb	01:47:44
2	Sr 421.552†	24.7	16.6	0.1150 ug/L	0.1150 ppb	01:47:44
2	Sc 361.383	919445.6	919445.6	104.47 %		01:49:06
2	Y 371.029	773969.5	773969.5	101.75 %		01:49:06
2	Ag 328.068†	341.6	92.8	0.4355 ug/L	0.4355 ppb	01:49:11
2	As 188.979†	-22.9	-2.0	-0.8828 ug/L	-0.8828 ppb	01:49:31
2	B 249.677†	-453.2	-155.7	-3.8195 ug/L	-3.8195 ppb	01:49:31
2	Ba 233.527†	27.2	15.0	0.1182 ug/L	0.1182 ppb	01:49:31
2	Be 313.107†	-3512.8	195.9	0.0731 ug/L	0.0731 ppb	01:49:11
2	Cd 226.502†	-195.6	-11.0	-0.1290 ug/L	-0.1290 ppb	01:49:31
2	Co 228.616†	-62.4	5.1	0.1080 ug/L	0.1080 ppb	01:49:31
2	Cr 267.716†	90.4	1.4	0.0176 ug/L	0.0176 ppb	01:49:31
2	Cu 324.752†	6041.1	-172.7	-0.5250 ug/L	-0.5250 ppb	01:49:11
2	Mn 257.610†	527.3	27.0	0.0278 ug/L	0.0278 ppb	01:49:31
2	Mo 202.031†	13.1	7.9	0.5817 ug/L	0.5817 ppb	01:49:31
2	Ni 231.604†	102.5	15.4	0.3920 ug/L	0.3920 ppb	01:49:31

2	P 214.914†	197.1	-17.1	-10.208 ug/L	-10.208 ppb	01:49:31
2	Pb 220.353†	-39.9	-99.4	-12.294 ug/L	-12.294 ppb	01:49:31
2	S 181.975 Axial†	39.2	1.7	2.4283 ug/L	2.4283 ppb	01:49:31
2	Sb 206.836†	34.2	-6.3	-2.1997 ug/L	-2.1997 ppb	01:49:31
2	Se 196.026†	-27.0	-1.1	-0.6796 ug/L	-0.6796 ppb	01:49:31
2	Si 251.611†	626.8	35.3	1.1356 ug/L	1.1356 ppb	01:49:31
2	Sn 189.927†	14.1	4.0	0.7332 ug/L	0.7332 ppb	01:49:31
2	Ti 334.940†	-1508.2	-33.8	-0.0587 ug/L	-0.0587 ppb	01:49:11
2	Tl 190.801†	-32.8	-4.0	-1.2828 ug/L	-1.2828 ppb	01:49:31
2	U 409.014†	-3056.8	-24.1	-0.6738 ug/L	-0.6738 ppb	01:49:06
2	V 292.402†	-1538.6	-4.0	-0.0209 ug/L	-0.0209 ppb	01:49:11
2	Zn 213.857†	774.2	1.6	0.0119 ug/L	0.0119 ppb	01:49:31
2	SiO2†	645.0	29.2	2.0084 ug/L	2.0084 ppb	01:50:12
3	Sc Radial	3761.7	3761.7	97.5 %		01:48:29
3	Y RADIAL	4371.8	4371.8	98.21 %		01:48:09
3	Al 396.153Radial†	-141.0	-29.5	-27.791 ug/L	-27.791 ppb	01:48:09
3	Ca 317.933Radial†	20.0	1.8	3.9291 ug/L	3.9291 ppb	01:48:29
3	Fe 238.204 Radial†	11.7	0.3	4.9785 ug/L	4.9785 ppb	01:48:29
3	K 766.490 Radial†	2972.8	283.0	54.243 ug/L	54.243 ppb	01:48:09
3	Mg 279.077 IEC†	4.1	3.1	161.93 ug/L	161.93 ppb	01:48:29
3	Na 589.592 Radial†	-1096.5	-222.6	-69.265 ug/L	-69.265 ppb	01:48:09
3	Sr 421.552†	28.6	20.6	0.1433 ug/L	0.1433 ppb	01:48:09
3	Sc 361.383	926815.5	926815.5	105.31 %		01:49:36
3	Y 371.029	780456.3	780456.3	102.61 %		01:49:36
3	Ag 328.068†	300.5	51.2	0.2338 ug/L	0.2338 ppb	01:49:41
3	As 188.979†	-20.4	0.6	0.2438 ug/L	0.2438 ppb	01:50:01
3	B 249.677†	-472.7	-170.9	-4.1890 ug/L	-4.1890 ppb	01:50:01
3	Ba 233.527†	17.9	5.9	0.0461 ug/L	0.0461 ppb	01:50:01
3	Be 313.107†	-3457.9	274.7	0.1021 ug/L	0.1021 ppb	01:49:41
3	Cd 226.502†	-206.0	-19.4	-0.2252 ug/L	-0.2252 ppb	01:50:01
3	Co 228.616†	-66.0	2.2	0.0490 ug/L	0.0490 ppb	01:50:01
3	Cr 267.716†	88.6	-1.0	-0.0134 ug/L	-0.0134 ppb	01:50:01
3	Cu 324.752†	6007.3	-250.7	-0.7666 ug/L	-0.7666 ppb	01:49:41
3	Mn 257.610†	513.2	9.6	0.0048 ug/L	0.0048 ppb	01:50:01
3	Mo 202.031†	17.7	12.1	0.8948 ug/L	0.8948 ppb	01:50:01
3	Ni 231.604†	76.1	-10.5	-0.2678 ug/L	-0.2678 ppb	01:50:01
3	P 214.914†	199.5	-16.4	-9.6935 ug/L	-9.6935 ppb	01:50:01
3	Pb 220.353†	-37.0	-96.3	-11.918 ug/L	-11.918 ppb	01:50:01
3	S 181.975 Axial†	38.7	0.9	1.2331 ug/L	1.2331 ppb	01:50:01
3	Sb 206.836†	35.2	-5.6	-1.9451 ug/L	-1.9451 ppb	01:50:01
3	Se 196.026†	-28.6	-2.4	-1.5906 ug/L	-1.5906 ppb	01:50:01
3	Si 251.611†	634.6	37.8	1.2151 ug/L	1.2151 ppb	01:50:01
3	Sn 189.927†	12.9	2.9	0.5183 ug/L	0.5183 ppb	01:50:01
3	Ti 334.940†	-1631.8	-139.6	-0.2351 ug/L	-0.2351 ppb	01:49:41
3	Tl 190.801†	-30.9	-1.9	-0.6139 ug/L	-0.6139 ppb	01:50:01
3	U 409.014†	-2854.6	191.2	5.3392 ug/L	5.3392 ppb	01:49:36
3	V 292.402†	-1591.4	-42.4	-0.2707 ug/L	-0.2707 ppb	01:49:41
3	Zn 213.857†	771.3	-7.0	-0.0688 ug/L	-0.0688 ppb	01:50:01
3	SiO2†	680.7	58.2	4.0156 ug/L	4.0156 ppb	01:50:17

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	919599.4	104.49 %		0.811			0.78%
Sc Radial	3772.7	97.8 %		0.49			0.50%
Y 371.029	773878.3	101.74 %		0.871			0.86%
Y RADIAL	4363.3	98.01 %		1.054			1.07%
Ag 328.068†	77.4	0.3578 ug/L		0.10852	0.3578 ppb	0.10852	30.33%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-11.7	-11.050 ug/L		24.0864	-11.050 ppb	24.0864	217.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.4	0.1810 ug/L		1.03385	0.1810 ppb	1.03385	571.21%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-160.4	-3.9312 ug/L		0.22400	-3.9312 ppb	0.22400	5.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.4	0.0888 ug/L		0.03787	0.0888 ppb	0.03787	42.63%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	222.2	0.0828 ug/L		0.01674	0.0828 ppb	0.01674	20.21%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.7	10.342 ug/L		9.1542	10.342 ppb	9.1542	88.51%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-12.2	-0.1415 ug/L	0.07823	-0.1415 ppb	0.07823 55.29%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.8	0.0193 ug/L	0.10672	0.0193 ppb	0.10672 552.58%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-0.6	-0.0071 ug/L	0.02228	-0.0071 ppb	0.02228 313.64%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-248.8	-0.7586 ug/L	0.22971	-0.7586 ppb	0.22971 30.28%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.0	-0.4687 ug/L	17.40163	-0.4687 ppb	17.40163 >999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	234.2	44.882 ug/L	19.3589	44.882 ppb	19.3589 43.13%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.9	101.50 ug/L	62.148	101.50 ppb	62.148 61.23%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	19.7	0.0182 ug/L	0.01199	0.0182 ppb	0.01199 65.73%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	7.9	0.5856 ug/L	0.30735	0.5856 ppb	0.30735 52.49%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-202.5	-63.018 ug/L	14.5365	-63.018 ppb	14.5365 23.07%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	4.0	0.1026 ug/L	0.33727	0.1026 ppb	0.33727 328.69%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-14.5	-8.5745 ug/L	2.39798	-8.5745 ppb	2.39798 27.97%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-97.2	-12.023 ug/L	0.2374	-12.023 ppb	0.2374 1.97%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	2.0	2.8352 ug/L	1.83951	2.8352 ppb	1.83951 64.88%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-6.4	-2.2509 ug/L	0.33437	-2.2509 ppb	0.33437 14.86%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-1.4	-0.9055 ug/L	0.60467	-0.9055 ppb	0.60467 66.78%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	47.4	1.5288 ug/L	0.61339	1.5288 ppb	0.61339 40.12%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	2.3	0.4173 ug/L	0.37661	0.4173 ppb	0.37661 90.24%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	20.9	0.1452 ug/L	0.03110	0.1452 ppb	0.03110 21.43%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-55.2	-0.0943 ug/L	0.12677	-0.0943 ppb	0.12677 134.45%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-3.6	-1.1712 ug/L	0.51067	-1.1712 ppb	0.51067 43.60%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	34.6	0.9660 ug/L	3.82655	0.9660 ppb	3.82655 396.13%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-30.8	-0.2030 ug/L	0.15941	-0.2030 ppb	0.15941 78.52%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-0.4	-0.0038 ug/L	0.05874	-0.0038 ppb	0.05874 >999.9%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	31.2	2.1476 ug/L	1.80239	2.1476 ppb	1.80239 83.92%
QC value within limits for SiO2 Recovery = Not calculated					
QC Failed. Continue with analysis.					

Sequence No.: 73  
 Sample ID: 1202039897|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 94  
 Date Collected: 2/26/2010 01:52:27  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039897|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3873.2	3873.2	100 %		01:54:40
1	Y RADIAL	4428.4	4428.4	99.48 %		01:54:20
1	Al 396.153Radial†	-100.0	15.5	14.511 ug/L	14.511 ppb	01:54:20
1	Ca 317.933Radial†	21.5	2.7	5.8990 ug/L	5.8990 ppb	01:54:40
1	Fe 238.204 Radial†	8.0	-3.7	-59.712 ug/L	-59.712 ppb	01:54:40
1	K 766.490 Radial†	2854.9	77.8	14.930 ug/L	14.930 ppb	01:54:20
1	Mg 279.077 IEC†	-0.2	-1.4	-73.296 ug/L	-73.296 ppb	01:54:40
1	Na 589.592 Radial†	-1094.5	-188.2	-58.556 ug/L	-58.556 ppb	01:54:20
1	Sr 421.552†	63.0	54.0	0.3753 ug/L	0.3753 ppb	01:54:20
1	Sc 361.383	870812.3	870812.3	98.948 %		01:55:37
1	Y 371.029	752095.8	752095.8	98.877 %		01:55:37
1	Ag 328.068†	194.1	-38.0	-0.1870 ug/L	-0.1870 ppb	01:55:37
1	As 188.979†	-19.8	-0.1	-0.0751 ug/L	-0.0751 ppb	01:55:57
1	B 249.677†	-527.2	-254.8	-6.2351 ug/L	-6.2351 ppb	01:55:57
1	Ba 233.527†	15.2	4.4	0.0327 ug/L	0.0327 ppb	01:55:57
1	Be 313.107†	-3580.3	-60.1	-0.0224 ug/L	-0.0224 ppb	01:55:37
1	Cd 226.502†	-189.4	-15.2	-0.1729 ug/L	-0.1729 ppb	01:55:57
1	Co 228.616†	-57.6	6.7	0.1436 ug/L	0.1436 ppb	01:55:57
1	Cr 267.716†	90.0	5.9	0.0639 ug/L	0.0639 ppb	01:55:57
1	Cu 324.752†	5998.9	107.6	0.3299 ug/L	0.3299 ppb	01:55:37
1	Mn 257.610†	472.2	-0.5	-0.0034 ug/L	-0.0034 ppb	01:55:57
1	Mo 202.031†	19.1	14.6	1.0728 ug/L	1.0728 ppb	01:55:57
1	Ni 231.604†	78.6	-3.4	-0.0864 ug/L	-0.0864 ppb	01:55:57
1	P 214.914†	201.9	-1.8	-1.0903 ug/L	-1.0903 ppb	01:55:57
1	Pb 220.353†	-36.3	-97.9	-12.101 ug/L	-12.101 ppb	01:55:57
1	S 181.975 Axial†	34.1	-1.4	-1.9571 ug/L	-1.9571 ppb	01:55:57
1	Sb 206.836†	42.2	3.6	1.2942 ug/L	1.2942 ppb	01:55:57
1	Se 196.026†	-27.8	-3.3	-2.3597 ug/L	-2.3597 ppb	01:55:57
1	Si 251.611†	710.9	153.7	4.9656 ug/L	4.9656 ppb	01:55:57
1	Sn 189.927†	11.7	2.4	0.4331 ug/L	0.4331 ppb	01:55:57
1	Ti 334.940†	-1370.2	25.1	0.0504 ug/L	0.0504 ppb	01:55:37
1	Tl 190.801†	-34.6	-7.6	-2.4358 ug/L	-2.4358 ppb	01:55:57
1	U 409.014†	-3200.1	-332.2	-9.2704 ug/L	-9.2704 ppb	01:55:37
1	V 292.402†	-1436.0	17.5	0.1267 ug/L	0.1267 ppb	01:55:37
1	Zn 213.857†	809.8	79.0	0.8063 ug/L	0.8063 ppb	01:55:57
1	SiO2†	710.1	129.4	8.9551 ug/L	8.9551 ppb	01:56:53
2	Sc Radial	3873.7	3873.7	100 %		01:55:05
2	Y RADIAL	4322.1	4322.1	97.09 %		01:54:45
2	Al 396.153Radial†	-121.5	-5.9	-5.5732 ug/L	-5.5732 ppb	01:54:45
2	Ca 317.933Radial†	12.1	-6.6	-14.469 ug/L	-14.469 ppb	01:55:05
2	Fe 238.204 Radial†	9.0	-2.7	-43.279 ug/L	-43.279 ppb	01:55:05
2	K 766.490 Radial†	2864.9	87.5	16.793 ug/L	16.793 ppb	01:54:45
2	Mg 279.077 IEC†	-0.8	-2.0	-105.53 ug/L	-105.53 ppb	01:55:05
2	Na 589.592 Radial†	-1099.2	-192.8	-59.991 ug/L	-59.991 ppb	01:54:45
2	Sr 421.552†	37.0	28.1	0.1955 ug/L	0.1955 ppb	01:54:45
2	Sc 361.383	883151.5	883151.5	100.35 %		01:56:02
2	Y 371.029	770395.6	770395.6	101.28 %		01:56:02
2	Ag 328.068†	244.5	9.5	0.0375 ug/L	0.0375 ppb	01:56:02
2	As 188.979†	-18.4	1.6	0.6926 ug/L	0.6926 ppb	01:56:22
2	B 249.677†	-558.8	-278.8	-6.8274 ug/L	-6.8274 ppb	01:56:22
2	Ba 233.527†	-9.1	-20.1	-0.1590 ug/L	-0.1590 ppb	01:56:22
2	Be 313.107†	-3606.7	-35.9	-0.0134 ug/L	-0.0134 ppb	01:56:02
2	Cd 226.502†	-203.3	-26.4	-0.3040 ug/L	-0.3040 ppb	01:56:22
2	Co 228.616†	-59.0	6.1	0.1301 ug/L	0.1301 ppb	01:56:22
2	Cr 267.716†	71.0	-14.4	-0.1622 ug/L	-0.1622 ppb	01:56:22
2	Cu 324.752†	5993.9	17.9	0.0567 ug/L	0.0567 ppb	01:56:02
2	Mn 257.610†	465.0	-14.3	-0.0163 ug/L	-0.0163 ppb	01:56:22
2	Mo 202.031†	16.0	11.3	0.8257 ug/L	0.8257 ppb	01:56:22
2	Ni 231.604†	77.0	-6.1	-0.1546 ug/L	-0.1546 ppb	01:56:22

2	P 214.914†	215.5	8.9	5.3772 ug/L	5.3772 ppb	01:56:22
2	Pb 220.353†	-60.1	-121.0	-14.968 ug/L	-14.968 ppb	01:56:22
2	S 181.975 Axial†	42.8	6.8	9.6216 ug/L	9.6216 ppb	01:56:22
2	Sb 206.836†	38.6	-0.5	-0.1694 ug/L	-0.1694 ppb	01:56:22
2	Se 196.026†	-27.0	-2.2	-1.5707 ug/L	-1.5707 ppb	01:56:22
2	Si 251.611†	723.0	155.7	5.0342 ug/L	5.0342 ppb	01:56:22
2	Sn 189.927†	8.7	-0.8	-0.1377 ug/L	-0.1377 ppb	01:56:22
2	Ti 334.940†	-1401.4	13.4	0.0314 ug/L	0.0314 ppb	01:56:02
2	Tl 190.801†	-29.9	-2.4	-0.7711 ug/L	-0.7711 ppb	01:56:22
2	U 409.014†	-3203.8	-290.8	-8.1142 ug/L	-8.1142 ppb	01:56:02
2	V 292.402†	-1473.4	0.4	0.0034 ug/L	0.0034 ppb	01:56:02
2	Zn 213.857†	818.1	75.8	0.7731 ug/L	0.7731 ppb	01:56:22
2	SiO2†	753.0	162.2	11.238 ug/L	11.238 ppb	01:56:58
3	Sc Radial	3802.9	3802.9	98.6 %		01:55:30
3	Y RADIAL	4417.8	4417.8	99.24 %		01:55:10
3	Al 396.153Radial†	-106.9	6.7	6.2472 ug/L	6.2472 ppb	01:55:10
3	Ca 317.933Radial†	15.2	-3.3	-7.1501 ug/L	-7.1501 ppb	01:55:30
3	Fe 238.204 Radial†	11.4	-0.1	-1.3608 ug/L	-1.3608 ppb	01:55:30
3	K 766.490 Radial†	2794.2	68.9	13.226 ug/L	13.226 ppb	01:55:10
3	Mg 279.077 IEC†	1.1	-0.0	-0.7458 ug/L	-0.7458 ppb	01:55:30
3	Na 589.592 Radial†	-1116.0	-230.1	-71.611 ug/L	-71.611 ppb	01:55:10
3	Sr 421.552†	31.1	22.8	0.1590 ug/L	0.1590 ppb	01:55:10
3	Sc 361.383	893840.4	893840.4	101.56 %		01:56:28
3	Y 371.029	785139.2	785139.2	103.22 %		01:56:28
3	Ag 328.068†	283.1	44.5	0.2126 ug/L	0.2126 ppb	01:56:28
3	As 188.979†	-21.4	-1.1	-0.4966 ug/L	-0.4966 ppb	01:56:48
3	B 249.677†	-563.9	-277.2	-6.7950 ug/L	-6.7950 ppb	01:56:48
3	Ba 233.527†	33.6	22.0	0.1730 ug/L	0.1730 ppb	01:56:48
3	Be 313.107†	-3578.2	35.1	0.0128 ug/L	0.0128 ppb	01:56:28
3	Cd 226.502†	-194.1	-14.9	-0.1748 ug/L	-0.1748 ppb	01:56:48
3	Co 228.616†	-62.5	3.3	0.0723 ug/L	0.0723 ppb	01:56:48
3	Cr 267.716†	60.6	-25.5	-0.2830 ug/L	-0.2830 ppb	01:56:48
3	Cu 324.752†	6058.0	9.5	0.0331 ug/L	0.0331 ppb	01:56:28
3	Mn 257.610†	475.6	-9.4	-0.0109 ug/L	-0.0109 ppb	01:56:48
3	Mo 202.031†	13.5	8.6	0.6359 ug/L	0.6359 ppb	01:56:48
3	Ni 231.604†	86.9	2.8	0.0710 ug/L	0.0710 ppb	01:56:48
3	P 214.914†	213.1	4.0	2.4038 ug/L	2.4038 ppb	01:56:48
3	Pb 220.353†	-58.7	-119.0	-14.719 ug/L	-14.719 ppb	01:56:48
3	S 181.975 Axial†	35.2	-1.2	-1.6392 ug/L	-1.6392 ppb	01:56:48
3	Sb 206.836†	24.0	-15.4	-5.4040 ug/L	-5.4040 ppb	01:56:48
3	Se 196.026†	-12.8	12.2	8.0023 ug/L	8.0023 ppb	01:56:48
3	Si 251.611†	707.7	132.1	4.2724 ug/L	4.2724 ppb	01:56:48
3	Sn 189.927†	11.0	1.4	0.2494 ug/L	0.2494 ppb	01:56:48
3	Ti 334.940†	-1524.6	-91.3	-0.1413 ug/L	-0.1413 ppb	01:56:28
3	Tl 190.801†	-33.0	-5.1	-1.6321 ug/L	-1.6321 ppb	01:56:48
3	U 409.014†	-3218.6	-267.2	-7.4591 ug/L	-7.4591 ppb	01:56:28
3	V 292.402†	-1496.8	-5.0	-0.0398 ug/L	-0.0398 ppb	01:56:28
3	Zn 213.857†	802.3	50.5	0.5090 ug/L	0.5090 ppb	01:56:48
3	SiO2†	717.5	118.3	8.1926 ug/L	8.1926 ppb	01:57:03

Mean Data: 1202039897|951818|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	882601.4	100.29 %		1.309			1.31%
Sc Radial	3849.9	99.8 %		1.06			1.06%
Y 371.029	769210.2	101.13 %		2.176			2.15%
Y RADIAL	4389.5	98.60 %		1.315			1.33%
Ag 328.068†	5.3	0.0211 ug/L		0.20031	0.0211 ppb	0.20031	951.37%
Al 396.153Radial†	5.4	5.0615 ug/L		10.09424	5.0615 ppb	10.09424	199.43%
As 188.979†	0.1	0.0403 ug/L		0.60292	0.0403 ppb	0.60292	>999.9%
B 249.677†	-270.3	-6.6192 ug/L		0.33301	-6.6192 ppb	0.33301	5.03%
Ba 233.527†	2.1	0.0155 ug/L		0.16665	0.0155 ppb	0.16665	>999.9%
Be 313.107†	-20.3	-0.0076 ug/L		0.01827	-0.0076 ppb	0.01827	238.96%
Ca 317.933Radial†	-2.4	-5.2400 ug/L		10.31746	-5.2400 ppb	10.31746	196.90%
Cd 226.502†	-18.9	-0.2172 ug/L		0.07515	-0.2172 ppb	0.07515	34.59%
Co 228.616†	5.4	0.1153 ug/L		0.03789	0.1153 ppb	0.03789	32.85%
Cr 267.716†	-11.3	-0.1271 ug/L		0.17607	-0.1271 ppb	0.17607	138.56%
Cu 324.752†	45.0	0.1399 ug/L		0.16494	0.1399 ppb	0.16494	117.90%
Fe 238.204 Radial†	-2.2	-34.784 ug/L		30.0886	-34.784 ppb	30.0886	86.50%
K 766.490 Radial†	78.1	14.983 ug/L		1.7844	14.983 ppb	1.7844	11.91%

Mg 279.077 IEC†	-1.1	-59.856 ug/L	53.6672	-59.856 ppb	53.6672	89.66%
Mn 257.610†	-8.1	-0.0102 ug/L	0.00644	-0.0102 ppb	0.00644	63.17%
Mo 202.031†	11.5	0.8448 ug/L	0.21907	0.8448 ppb	0.21907	25.93%
Na 589.592 Radial†	-203.7	-63.386 ug/L	7.1593	-63.386 ppb	7.1593	11.29%
Ni 231.604†	-2.2	-0.0567 ug/L	0.11572	-0.0567 ppb	0.11572	204.20%
P 214.914†	3.7	2.2302 ug/L	3.23725	2.2302 ppb	3.23725	145.15%
Pb 220.353†	-112.7	-13.929 ug/L	1.5883	-13.929 ppb	1.5883	11.40%
S 181.975 Axial†	1.4	2.0084 ug/L	6.59514	2.0084 ppb	6.59514	328.37%
Sb 206.836†	-4.1	-1.4264 ug/L	3.52155	-1.4264 ppb	3.52155	246.88%
Se 196.026†	2.2	1.3573 ug/L	5.76823	1.3573 ppb	5.76823	424.98%
Si 251.611†	147.2	4.7574 ug/L	0.42144	4.7574 ppb	0.42144	8.86%
Sn 189.927†	1.0	0.1816 ug/L	0.29135	0.1816 ppb	0.29135	160.45%
Sr 421.552†	35.0	0.2433 ug/L	0.11583	0.2433 ppb	0.11583	47.61%
Ti 334.940†	-17.6	-0.0199 ug/L	0.10561	-0.0199 ppb	0.10561	531.82%
Tl 190.801†	-5.0	-1.6130 ug/L	0.83253	-1.6130 ppb	0.83253	51.61%
U 409.014†	-296.7	-8.2813 ug/L	0.91711	-8.2813 ppb	0.91711	11.07%
V 292.402†	4.3	0.0301 ug/L	0.08643	0.0301 ppb	0.08643	287.24%
Zn 213.857†	68.4	0.6961 ug/L	0.16288	0.6961 ppb	0.16288	23.40%
SiO2†	136.6	9.4620 ug/L	1.58489	9.4620 ppb	1.58489	16.75%

Sequence No.: 74

Sample ID: 1202039898|951818|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 95

Date Collected: 2/26/2010 01:59:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039898|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3779.0	3779.0	98.0 %			02:01:28
1	Y RADIAL	4376.9	4376.9	98.32 %			02:01:08
1	Al 396.153Radial†	5701.4	5934.0	5552.4 ug/L		5552.4 ppb	02:01:08
1	Ca 317.933Radial†	2439.7	2471.4	5389.4 ug/L		5389.4 ppb	02:01:28
1	Fe 238.204 Radial†	315.5	310.4	5030.0 ug/L		5030.0 ppb	02:01:28
1	K 766.490 Radial†	29816.4	27666.4	5296.1 ug/L		5296.1 ppb	02:01:08
1	Mg 279.077 IEC†	101.0	101.9	5378.8 ug/L		5378.8 ppb	02:01:28
1	Na 589.592 Radial†	14515.2	15716.3	4890.3 ug/L		4890.3 ppb	02:01:08
1	Sr 421.552†	72100.8	73579.4	511.82 ug/L		511.82 ppb	02:01:08
1	Sc 361.383	923536.9	923536.9	104.94 %			02:02:27
1	Y 371.029	765946.5	765946.5	100.70 %			02:02:27
1	Ag 328.068†	60320.1	57247.2	269.13 ug/L		269.13 ppb	02:02:27
1	As 188.979†	1172.3	1137.1	510.02 ug/L		510.02 ppb	02:02:47
1	B 249.677†	20436.0	19752.2	481.92 ug/L		481.92 ppb	02:02:27
1	Ba 233.527†	68023.2	64810.8	510.70 ug/L		510.70 ppb	02:02:27
1	Be 313.107†	1392462.0	1330487.5	498.28 ug/L		498.28 ppb	02:02:27
1	Cd 226.502†	44005.3	42110.5	489.26 ug/L		489.26 ppb	02:02:47
1	Co 228.616†	24197.3	23123.4	485.73 ug/L		485.73 ppb	02:02:47
1	Cr 267.716†	47231.8	44923.9	505.07 ug/L		505.07 ppb	02:02:27
1	Cu 324.752†	179696.1	165284.0	503.59 ug/L		503.59 ppb	02:02:27
1	Mn 257.610†	468025.8	445521.7	507.84 ug/L		507.84 ppb	02:02:27
1	Mo 202.031†	7153.6	6812.2	502.21 ug/L		502.21 ppb	02:02:47
1	Ni 231.604†	20809.7	19747.6	503.67 ug/L		503.67 ppb	02:02:47
1	P 214.914†	1220.6	957.4	477.99 ug/L		477.99 ppb	02:02:47
1	Pb 220.353†	4307.1	4043.2	501.84 ug/L		501.84 ppb	02:02:47
1	S 181.975 Axial†	3838.7	3622.2	5106.1 ug/L		5106.1 ppb	02:02:47
1	Sb 206.836†	1572.3	1459.3	533.25 ug/L		533.25 ppb	02:02:47
1	Se 196.026†	752.6	741.9	504.70 ug/L		504.70 ppb	02:02:47
1	Si 251.611†	160143.5	152042.0	4919.3 ug/L		4919.3 ppb	02:02:27
1	Sn 189.927†	3053.5	2900.3	523.69 ug/L		523.69 ppb	02:02:47
1	Ti 334.940†	339166.8	324614.6	511.36 ug/L		511.36 ppb	02:02:27
1	Tl 190.801†	1624.3	1575.3	510.26 ug/L		510.26 ppb	02:02:47
1	U 409.014†	15414.4	17590.8	489.51 ug/L		489.51 ppb	02:02:27
1	V 292.402†	74275.3	72248.5	511.40 ug/L		511.40 ppb	02:02:27
1	Zn 213.857†	52974.2	49741.6	497.52 ug/L		497.52 ppb	02:02:27
1	SiO2†	160936.9	152774.6	10593 ug/L		10593 ppb	02:03:47
2	Sc Radial	3739.3	3739.3	96.9 %			02:01:53
2	Y RADIAL	4255.6	4255.6	95.60 %			02:01:33
2	Al 396.153Radial†	5662.0	5955.2	5572.3 ug/L		5572.3 ppb	02:01:33
2	Ca 317.933Radial†	2414.5	2471.8	5390.3 ug/L		5390.3 ppb	02:01:53
2	Fe 238.204 Radial†	313.1	311.3	5044.6 ug/L		5044.6 ppb	02:01:53
2	K 766.490 Radial†	29559.8	27724.7	5307.3 ug/L		5307.3 ppb	02:01:33
2	Mg 279.077 IEC†	103.0	105.0	5543.3 ug/L		5543.3 ppb	02:01:53
2	Na 589.592 Radial†	14524.3	15883.0	4942.2 ug/L		4942.2 ppb	02:01:33
2	Sr 421.552†	71623.4	73867.9	513.83 ug/L		513.83 ppb	02:01:33
2	Sc 361.383	928925.3	928925.3	105.55 %			02:02:54
2	Y 371.029	771492.8	771492.8	101.43 %			02:02:54
2	Ag 328.068†	60550.7	57132.2	268.60 ug/L		268.60 ppb	02:02:54
2	As 188.979†	1181.8	1139.5	511.12 ug/L		511.12 ppb	02:03:14
2	B 249.677†	20499.5	19699.4	480.62 ug/L		480.62 ppb	02:02:54
2	Ba 233.527†	68114.7	64521.5	508.42 ug/L		508.42 ppb	02:02:54
2	Be 313.107†	1400869.8	1330756.0	498.38 ug/L		498.38 ppb	02:02:54
2	Cd 226.502†	44244.2	42093.6	489.06 ug/L		489.06 ppb	02:03:14
2	Co 228.616†	24335.8	23120.8	485.68 ug/L		485.68 ppb	02:03:14
2	Cr 267.716†	47330.1	44755.9	503.19 ug/L		503.19 ppb	02:02:54
2	Cu 324.752†	180937.8	165467.2	504.15 ug/L		504.15 ppb	02:02:54
2	Mn 257.610†	469010.1	443867.1	505.95 ug/L		505.95 ppb	02:02:54
2	Mo 202.031†	7203.4	6819.9	502.77 ug/L		502.77 ppb	02:03:14
2	Ni 231.604†	20948.9	19764.4	504.10 ug/L		504.10 ppb	02:03:14



2	P 214.914†	1219.7	949.8	473.32 ug/L	473.32 ppb	02:03:14
2	Pb 220.353†	4316.8	4028.6	500.03 ug/L	500.03 ppb	02:03:14
2	S 181.975 Axial†	3847.3	3609.1	5087.7 ug/L	5087.7 ppb	02:03:14
2	Sb 206.836†	1590.4	1467.7	536.25 ug/L	536.25 ppb	02:03:14
2	Se 196.026†	762.0	746.6	507.86 ug/L	507.86 ppb	02:03:14
2	Si 251.611†	160918.7	151891.3	4914.4 ug/L	4914.4 ppb	02:02:54
2	Sn 189.927†	3076.3	2905.1	524.54 ug/L	524.54 ppb	02:03:14
2	Ti 334.940†	340229.9	323747.0	509.98 ug/L	509.98 ppb	02:02:54
2	Tl 190.801†	1635.1	1576.5	510.65 ug/L	510.65 ppb	02:03:14
2	U 409.014†	15500.4	17587.1	489.41 ug/L	489.41 ppb	02:02:54
2	V 292.402†	74563.4	72110.8	510.45 ug/L	510.45 ppb	02:02:54
2	Zn 213.857†	53208.8	49671.1	496.80 ug/L	496.80 ppb	02:02:54
2	SiO2†	161444.5	152365.9	10565 ug/L	10565 ppb	02:03:53
3	Sc Radial	3766.1	3766.1	97.6 %		02:02:18
3	Y RADIAL	4221.9	4221.9	94.84 %		02:01:58
3	Al 396.153Radial†	5579.0	5828.6	5453.0 ug/L	5453.0 ppb	02:01:58
3	Ca 317.933Radial†	2420.7	2460.4	5365.5 ug/L	5365.5 ppb	02:02:18
3	Fe 238.204 Radial†	313.8	309.7	5018.9 ug/L	5018.9 ppb	02:02:18
3	K 766.490 Radial†	29334.2	27276.7	5221.5 ug/L	5221.5 ppb	02:01:58
3	Mg 279.077 IEC†	102.2	103.5	5460.1 ug/L	5460.1 ppb	02:02:18
3	Na 589.592 Radial†	14295.1	15541.6	4836.0 ug/L	4836.0 ppb	02:01:58
3	Sr 421.552†	70636.4	72331.4	503.14 ug/L	503.14 ppb	02:01:58
3	Sc 361.383	921887.6	921887.6	104.75 %		02:03:22
3	Y 371.029	765564.7	765564.7	100.65 %		02:03:22
3	Ag 328.068†	60098.9	57138.8	268.63 ug/L	268.63 ppb	02:03:22
3	As 188.979†	1179.5	1145.9	513.94 ug/L	513.94 ppb	02:03:42
3	B 249.677†	20437.2	19788.2	482.78 ug/L	482.78 ppb	02:03:22
3	Ba 233.527†	68027.4	64930.8	511.64 ug/L	511.64 ppb	02:03:22
3	Be 313.107†	1394077.6	1334403.7	499.74 ug/L	499.74 ppb	02:03:22
3	Cd 226.502†	44521.4	42678.2	495.86 ug/L	495.86 ppb	02:03:42
3	Co 228.616†	24486.6	23440.8	492.42 ug/L	492.42 ppb	02:03:42
3	Cr 267.716†	47233.4	45005.9	506.00 ug/L	506.00 ppb	02:03:22
3	Cu 324.752†	179382.1	165290.6	503.61 ug/L	503.61 ppb	02:03:22
3	Mn 257.610†	467601.0	445914.0	508.28 ug/L	508.28 ppb	02:03:22
3	Mo 202.031†	7247.3	6913.9	509.70 ug/L	509.70 ppb	02:03:42
3	Ni 231.604†	21072.6	20034.0	510.98 ug/L	510.98 ppb	02:03:42
3	P 214.914†	1214.9	953.9	476.01 ug/L	476.01 ppb	02:03:42
3	Pb 220.353†	4363.7	4104.6	509.43 ug/L	509.43 ppb	02:03:42
3	S 181.975 Axial†	3875.8	3664.1	5165.3 ug/L	5165.3 ppb	02:03:42
3	Sb 206.836†	1600.4	1488.8	543.99 ug/L	543.99 ppb	02:03:42
3	Se 196.026†	777.7	767.2	521.31 ug/L	521.31 ppb	02:03:42
3	Si 251.611†	160072.4	152247.2	4925.9 ug/L	4925.9 ppb	02:03:22
3	Sn 189.927†	3107.4	2957.1	533.91 ug/L	533.91 ppb	02:03:42
3	Ti 334.940†	338409.8	324470.2	511.12 ug/L	511.12 ppb	02:03:22
3	Tl 190.801†	1655.4	1607.7	520.68 ug/L	520.68 ppb	02:03:42
3	U 409.014†	15164.3	17378.3	483.57 ug/L	483.57 ppb	02:03:22
3	V 292.402†	74287.2	72386.4	512.46 ug/L	512.46 ppb	02:03:22
3	Zn 213.857†	53113.4	49964.8	499.73 ug/L	499.73 ppb	02:03:22
3	SiO2†	161947.5	154013.7	10679 ug/L	10679 ppb	02:03:58

Mean Data: 1202039898|951818|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	924783.3	105.08 %	0.418			0.40%
Sc Radial	3761.5	97.5 %	0.52			0.54%
Y 371.029	767668.0	100.92 %	0.436			0.43%
Y RADIAL	4284.8	96.25 %	1.830			1.90%
Ag 328.068†	57172.7	268.79 ug/L	0.298	268.79 ppb	0.298	0.11%
Al 396.153Radial†	5905.9	5525.9 ug/L	63.93	5525.9 ppb	63.93	1.16%
As 188.979†	1140.8	511.70 ug/L	2.024	511.70 ppb	2.024	0.40%
B 249.677†	19746.6	481.77 ug/L	1.088	481.77 ppb	1.088	0.23%
Ba 233.527†	64754.4	510.25 ug/L	1.655	510.25 ppb	1.655	0.32%
Be 313.107†	1331882.4	498.80 ug/L	0.818	498.80 ppb	0.818	0.16%
Ca 317.933Radial†	2467.9	5381.7 ug/L	14.06	5381.7 ppb	14.06	0.26%
Cd 226.502†	42294.1	491.39 ug/L	3.870	491.39 ppb	3.870	0.79%
Co 228.616†	23228.4	487.94 ug/L	3.874	487.94 ppb	3.874	0.79%
Cr 267.716†	44895.2	504.75 ug/L	1.431	504.75 ppb	1.431	0.28%
Cu 324.752†	165347.3	503.78 ug/L	0.316	503.78 ppb	0.316	0.06%
Fe 238.204 Radial†	310.4	5031.2 ug/L	12.90	5031.2 ppb	12.90	0.26%
K 766.490 Radial†	27555.9	5275.0 ug/L	46.65	5275.0 ppb	46.65	0.88%

Mg 279.077 IEC†	103.5	5460.7 ug/L	82.26	5460.7 ppb	82.26	1.51%
Mn 257.610†	445100.9	507.36 ug/L	1.239	507.36 ppb	1.239	0.24%
Mo 202.031†	6848.7	504.89 ug/L	4.169	504.89 ppb	4.169	0.83%
Na 589.592 Radial†	15713.6	4889.5 ug/L	53.12	4889.5 ppb	53.12	1.09%
Ni 231.604†	19848.7	506.25 ug/L	4.100	506.25 ppb	4.100	0.81%
P 214.914†	953.7	475.77 ug/L	2.344	475.77 ppb	2.344	0.49%
Pb 220.353†	4058.8	503.77 ug/L	4.985	503.77 ppb	4.985	0.99%
S 181.975 Axial†	3631.8	5119.7 ug/L	40.55	5119.7 ppb	40.55	0.79%
Sb 206.836†	1471.9	537.83 ug/L	5.545	537.83 ppb	5.545	1.03%
Se 196.026†	751.9	511.29 ug/L	8.822	511.29 ppb	8.822	1.73%
Si 251.611†	152060.2	4919.9 ug/L	5.74	4919.9 ppb	5.74	0.12%
Sn 189.927†	2920.8	527.38 ug/L	5.674	527.38 ppb	5.674	1.08%
Sr 421.552†	73259.6	509.60 ug/L	5.681	509.60 ppb	5.681	1.11%
Ti 334.940†	324277.3	510.82 ug/L	0.738	510.82 ppb	0.738	0.14%
Tl 190.801†	1586.5	513.86 ug/L	5.904	513.86 ppb	5.904	1.15%
U 409.014†	17518.7	487.50 ug/L	3.397	487.50 ppb	3.397	0.70%
V 292.402†	72248.5	511.43 ug/L	1.007	511.43 ppb	1.007	0.20%
Zn 213.857†	49792.5	498.02 ug/L	1.525	498.02 ppb	1.525	0.31%
SiO2†	153051.4	10612 ug/L	59.5	10612 ppb	59.5	0.56%

Sequence No.: 75

Sample ID: 246555001|951818|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 96

Date Collected: 2/26/2010 02:06:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246555001|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3860.9	3860.9	100 %		02:08:22
1	Y RADIAL	4444.9	4444.9	99.85 %		02:08:02
1	Al 396.153Radial†	-144.0	-28.8	-27.144 ug/L	-27.144 ppb	02:08:02
1	Ca 317.933Radial†	50.4	31.7	69.074 ug/L	69.074 ppb	02:08:22
1	Fe 238.204 Radial†	13.6	1.9	31.367 ug/L	31.367 ppb	02:08:22
1	K 766.490 Radial†	3900.3	1131.2	216.66 ug/L	216.66 ppb	02:08:02
1	Mg 279.077 IEC†	1.7	0.5	28.810 ug/L	28.810 ppb	02:08:22
1	Na 589.592 Radial†	-562.8	339.5	105.64 ug/L	105.64 ppb	02:08:02
1	Sr 421.552†	89.2	80.4	0.5589 ug/L	0.5589 ppb	02:08:02
1	Sc 361.383	940783.3	940783.3	106.90 %		02:09:18
1	Y 371.029	788530.2	788530.2	103.67 %		02:09:18
1	Ag 328.068†	345.1	88.7	0.4213 ug/L	0.4213 ppb	02:09:24
1	As 188.979†	-25.4	-3.8	-1.6974 ug/L	-1.6974 ppb	02:09:44
1	B 249.677†	610.8	849.4	20.813 ug/L	20.813 ppb	02:09:24
1	Ba 233.527†	34.0	20.7	0.1651 ug/L	0.1651 ppb	02:09:44
1	Be 313.107†	-3696.2	100.6	0.0381 ug/L	0.0381 ppb	02:09:24
1	Cd 226.502†	-185.8	2.4	0.0254 ug/L	0.0254 ppb	02:09:44
1	Co 228.616†	-65.6	3.5	0.0744 ug/L	0.0744 ppb	02:09:44
1	Cr 267.716†	118.9	26.1	0.2960 ug/L	0.2960 ppb	02:09:44
1	Cu 324.752†	7182.9	764.2	2.3292 ug/L	2.3292 ppb	02:09:24
1	Mn 257.610†	782.3	254.1	0.2915 ug/L	0.2915 ppb	02:09:44
1	Mo 202.031†	18.9	13.0	0.9604 ug/L	0.9604 ppb	02:09:44
1	Ni 231.604†	99.3	10.1	0.2583 ug/L	0.2583 ppb	02:09:44
1	P 214.914†	211.9	-7.6	-5.0564 ug/L	-5.0564 ppb	02:09:44
1	Pb 220.353†	-31.8	-91.0	-11.261 ug/L	-11.261 ppb	02:09:44
1	S 181.975 Axial†	56.1	16.7	23.522 ug/L	23.522 ppb	02:09:44
1	Sb 206.836†	28.1	-12.7	-4.4742 ug/L	-4.4742 ppb	02:09:44
1	Se 196.026†	-27.5	-0.9	-0.5221 ug/L	-0.5221 ppb	02:09:44
1	Si 251.611†	49930.8	46143.9	1494.8 ug/L	1494.8 ppb	02:09:24
1	Sn 189.927†	10.0	-0.0	0.0036 ug/L	0.0036 ppb	02:09:44
1	Ti 334.940†	-1351.0	146.1	0.2361 ug/L	0.2361 ppb	02:09:24
1	Tl 190.801†	-28.5	0.8	0.2644 ug/L	0.2644 ppb	02:09:44
1	U 409.014†	-3031.5	66.0	1.8380 ug/L	1.8380 ppb	02:09:18
1	V 292.402†	-1492.3	72.7	0.5205 ug/L	0.5205 ppb	02:09:24
1	Zn 213.857†	1066.4	258.1	2.5966 ug/L	2.5966 ppb	02:09:44
1	SiO2†	49061.4	45307.2	3145.5 ug/L	3145.5 ppb	02:10:50
2	Sc Radial	3913.9	3913.9	101 %		02:08:47
2	Y RADIAL	4495.4	4495.4	101.0 %		02:08:27
2	Al 396.153Radial†	-116.4	0.4	0.2983 ug/L	0.2983 ppb	02:08:27
2	Ca 317.933Radial†	51.0	31.6	68.836 ug/L	68.836 ppb	02:08:47
2	Fe 238.204 Radial†	9.0	-2.8	-45.839 ug/L	-45.839 ppb	02:08:47
2	K 766.490 Radial†	3882.0	1060.4	203.11 ug/L	203.11 ppb	02:08:27
2	Mg 279.077 IEC†	-2.1	-3.2	-170.87 ug/L	-170.87 ppb	02:08:47
2	Na 589.592 Radial†	-601.3	309.1	96.193 ug/L	96.193 ppb	02:08:27
2	Sr 421.552†	68.8	59.1	0.4105 ug/L	0.4105 ppb	02:08:27
2	Sc 361.383	940763.9	940763.9	106.90 %		02:09:49
2	Y 371.029	789309.6	789309.6	103.77 %		02:09:49
2	Ag 328.068†	289.3	36.5	0.1545 ug/L	0.1545 ppb	02:09:54
2	As 188.979†	-25.5	-3.9	-1.7533 ug/L	-1.7533 ppb	02:10:14
2	B 249.677†	581.5	822.0	20.155 ug/L	20.155 ppb	02:09:54
2	Ba 233.527†	36.3	22.9	0.1790 ug/L	0.1790 ppb	02:10:14
2	Be 313.107†	-3603.2	187.5	0.0704 ug/L	0.0704 ppb	02:09:54
2	Cd 226.502†	-174.8	12.7	0.1525 ug/L	0.1525 ppb	02:10:14
2	Co 228.616†	-69.4	-0.0	0.0026 ug/L	0.0026 ppb	02:10:14
2	Cr 267.716†	92.5	1.4	0.0111 ug/L	0.0111 ppb	02:10:14
2	Cu 324.752†	7075.4	663.8	2.0196 ug/L	2.0196 ppb	02:09:54
2	Mn 257.610†	771.6	244.2	0.2806 ug/L	0.2806 ppb	02:10:14
2	Mo 202.031†	23.5	17.3	1.2717 ug/L	1.2717 ppb	02:10:14
2	Ni 231.604†	101.9	12.5	0.3201 ug/L	0.3201 ppb	02:10:14

2	P 214.914†	211.8	-7.6	-4.9569 ug/L	-4.9569 ppb	02:10:14
2	Pb 220.353†	-43.0	-101.5	-12.543 ug/L	-12.543 ppb	02:10:14
2	S 181.975 Axial†	47.6	8.7	12.249 ug/L	12.249 ppb	02:10:14
2	Sb 206.836†	33.0	-8.2	-2.8590 ug/L	-2.8590 ppb	02:10:14
2	Se 196.026†	-25.5	0.9	0.4313 ug/L	0.4313 ppb	02:10:14
2	Si 251.611†	49131.9	45397.5	1470.7 ug/L	1470.7 ppb	02:09:54
2	Sn 189.927†	11.0	0.9	0.1757 ug/L	0.1757 ppb	02:10:14
2	Ti 334.940†	-1415.5	85.7	0.1578 ug/L	0.1578 ppb	02:09:54
2	Tl 190.801†	-27.9	1.4	0.4365 ug/L	0.4365 ppb	02:10:14
2	U 409.014†	-3063.1	36.4	1.0219 ug/L	1.0219 ppb	02:09:49
2	V 292.402†	-1538.8	29.2	0.2269 ug/L	0.2269 ppb	02:09:54
2	Zn 213.857†	1051.2	243.9	2.4645 ug/L	2.4645 ppb	02:10:14
2	SiO2†	49396.8	45621.9	3167.4 ug/L	3167.4 ppb	02:10:55
3	Sc Radial	3855.8	3855.8	100.0 %		02:09:12
3	Y RADIAL	4373.0	4373.0	98.23 %		02:08:52
3	Al 396.153Radial†	-101.6	13.4	12.557 ug/L	12.557 ppb	02:08:52
3	Ca 317.933Radial†	50.2	31.5	68.728 ug/L	68.728 ppb	02:09:12
3	Fe 238.204 Radial†	10.8	-0.9	-14.631 ug/L	-14.631 ppb	02:09:12
3	K 766.490 Radial†	3809.3	1045.4	200.22 ug/L	200.22 ppb	02:08:52
3	Mg 279.077 IEC†	1.4	0.2	10.616 ug/L	10.616 ppb	02:09:12
3	Na 589.592 Radial†	-571.0	330.5	102.84 ug/L	102.84 ppb	02:08:52
3	Sr 421.552†	72.0	63.3	0.4397 ug/L	0.4397 ppb	02:08:52
3	Sc 361.383	941682.4	941682.4	107.00 %		02:10:19
3	Y 371.029	790312.2	790312.2	103.90 %		02:10:19
3	Ag 328.068†	243.2	-6.9	-0.0348 ug/L	-0.0348 ppb	02:10:24
3	As 188.979†	-27.1	-5.4	-2.4217 ug/L	-2.4217 ppb	02:10:44
3	B 249.677†	559.0	800.5	19.621 ug/L	19.621 ppb	02:10:24
3	Ba 233.527†	23.6	11.0	0.0870 ug/L	0.0870 ppb	02:10:44
3	Be 313.107†	-3627.5	168.0	0.0631 ug/L	0.0631 ppb	02:10:24
3	Cd 226.502†	-192.2	-3.5	-0.0388 ug/L	-0.0388 ppb	02:10:44
3	Co 228.616†	-66.3	2.9	0.0623 ug/L	0.0623 ppb	02:10:44
3	Cr 267.716†	127.7	34.2	0.3837 ug/L	0.3837 ppb	02:10:44
3	Cu 324.752†	7143.5	721.0	2.1967 ug/L	2.1967 ppb	02:10:24
3	Mn 257.610†	776.1	247.6	0.2802 ug/L	0.2802 ppb	02:10:44
3	Mo 202.031†	12.5	7.0	0.5189 ug/L	0.5189 ppb	02:10:44
3	Ni 231.604†	94.9	5.9	0.1505 ug/L	0.1505 ppb	02:10:44
3	P 214.914†	214.6	-5.3	-3.5921 ug/L	-3.5921 ppb	02:10:44
3	Pb 220.353†	-42.7	-101.1	-12.503 ug/L	-12.503 ppb	02:10:44
3	S 181.975 Axial†	54.3	14.9	21.018 ug/L	21.018 ppb	02:10:44
3	Sb 206.836†	48.9	6.7	2.3840 ug/L	2.3840 ppb	02:10:44
3	Se 196.026†	-25.4	1.0	0.6319 ug/L	0.6319 ppb	02:10:44
3	Si 251.611†	49507.9	45704.1	1480.6 ug/L	1480.6 ppb	02:10:24
3	Sn 189.927†	13.9	3.6	0.6603 ug/L	0.6603 ppb	02:10:44
3	Ti 334.940†	-1406.5	95.4	0.1592 ug/L	0.1592 ppb	02:10:24
3	Tl 190.801†	-33.0	-3.4	-1.0894 ug/L	-1.0894 ppb	02:10:44
3	U 409.014†	-3157.3	-48.9	-1.3636 ug/L	-1.3636 ppb	02:10:19
3	V 292.402†	-1517.8	50.2	0.3572 ug/L	0.3572 ppb	02:10:24
3	Zn 213.857†	1052.1	243.8	2.4599 ug/L	2.4599 ppb	02:10:44
3	SiO2†	49133.1	45330.4	3147.2 ug/L	3147.2 ppb	02:11:00

Mean Data: 246555001|951818|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	941076.5	106.93 %		0.060			0.06%
Sc Radial	3876.9	101 %		0.8			0.83%
Y 371.029	789384.0	103.78 %		0.117			0.11%
Y RADIAL	4437.8	99.69 %		1.381			1.39%
Ag 328.068†	39.4	0.1804 ug/L		0.22912	0.1804 ppb	0.22912	127.03%
Al 396.153Radial†	-5.0	-4.7627 ug/L		20.32860	-4.7627 ppb	20.32860	426.83%
As 188.979†	-4.4	-1.9575 ug/L		0.40300	-1.9575 ppb	0.40300	20.59%
B 249.677†	824.0	20.196 ug/L		0.5967	20.196 ppb	0.5967	2.95%
Ba 233.527†	18.2	0.1437 ug/L		0.04962	0.1437 ppb	0.04962	34.53%
Be 313.107†	152.1	0.0572 ug/L		0.01693	0.0572 ppb	0.01693	29.60%
Ca 317.933Radial†	31.6	68.880 ug/L		0.1771	68.880 ppb	0.1771	0.26%
Cd 226.502†	3.9	0.0464 ug/L		0.09734	0.0464 ppb	0.09734	209.95%
Co 228.616†	2.1	0.0464 ug/L		0.03844	0.0464 ppb	0.03844	82.79%
Cr 267.716†	20.6	0.2303 ug/L		0.19480	0.2303 ppb	0.19480	84.60%
Cu 324.752†	716.4	2.1818 ug/L		0.15529	2.1818 ppb	0.15529	7.12%
Fe 238.204 Radial†	-0.6	-9.7010 ug/L		38.83847	-9.7010 ppb	38.83847	400.35%
K 766.490 Radial†	1079.0	206.67 ug/L		8.778	206.67 ppb	8.778	4.25%

Mg 279.077 IEC†	-0.8	-43.813 ug/L	110.4065	-43.813 ppb	110.4065	251.99%
Mn 257.610†	248.7	0.2841 ug/L	0.00636	0.2841 ppb	0.00636	2.24%
Mo 202.031†	12.4	0.9170 ug/L	0.37826	0.9170 ppb	0.37826	41.25%
Na 589.592 Radial†	326.4	101.56 ug/L	4.850	101.56 ppb	4.850	4.78%
Ni 231.604†	9.5	0.2430 ug/L	0.08586	0.2430 ppb	0.08586	35.34%
P 214.914†	-6.8	-4.5351 ug/L	0.81817	-4.5351 ppb	0.81817	18.04%
Pb 220.353†	-97.8	-12.102 ug/L	0.7288	-12.102 ppb	0.7288	6.02%
S 181.975 Axial†	13.4	18.930 ug/L	5.9197	18.930 ppb	5.9197	31.27%
Sb 206.836†	-4.7	-1.6497 ug/L	3.58545	-1.6497 ppb	3.58545	217.33%
Se 196.026†	0.3	0.1803 ug/L	0.61658	0.1803 ppb	0.61658	341.90%
Si 251.611†	45748.5	1482.0 ug/L	12.16	1482.0 ppb	12.16	0.82%
Sn 189.927†	1.5	0.2799 ug/L	0.34050	0.2799 ppb	0.34050	121.66%
Sr 421.552†	67.6	0.4697 ug/L	0.07861	0.4697 ppb	0.07861	16.74%
Ti 334.940†	109.1	0.1844 ug/L	0.04486	0.1844 ppb	0.04486	24.33%
Tl 190.801†	-0.4	-0.1295 ug/L	0.83575	-0.1295 ppb	0.83575	645.41%
U 409.014†	17.8	0.4988 ug/L	1.66362	0.4988 ppb	1.66362	333.56%
V 292.402†	50.7	0.3682 ug/L	0.14715	0.3682 ppb	0.14715	39.96%
Zn 213.857†	248.6	2.5070 ug/L	0.07763	2.5070 ppb	0.07763	3.10%
SiO2†	45419.8	3153.4 ug/L	12.17	3153.4 ppb	12.17	0.39%

Sequence No.: 76

Sample ID: 1202039899|951818|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 97

Date Collected: 2/26/2010 02:13:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039899|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3823.8	3823.8	99.1 %			02:15:25
1	Y RADIAL	4355.4	4355.4	97.84 %			02:15:05
1	Al 396.153Radial†	-102.7	11.5	10.788 ug/L		10.788 ppb	02:15:05
1	Ca 317.933Radial†	39.8	21.5	46.799 ug/L		46.799 ppb	02:15:25
1	Fe 238.204 Radial†	11.4	-0.2	-2.6830 ug/L		-2.6830 ppb	02:15:25
1	K 766.490 Radial†	3939.0	1208.1	231.40 ug/L		231.40 ppb	02:15:05
1	Mg 279.077 IEC†	3.5	2.4	124.47 ug/L		124.47 ppb	02:15:25
1	Na 589.592 Radial†	-559.6	337.3	104.95 ug/L		104.95 ppb	02:15:05
1	Sr 421.552†	62.7	54.5	0.3785 ug/L		0.3785 ppb	02:15:05
1	Sc 361.383	950774.2	950774.2	108.03 %			02:16:21
1	Y 371.029	796834.9	796834.9	104.76 %			02:16:21
1	Ag 328.068†	272.0	17.6	0.0823 ug/L		0.0823 ppb	02:16:26
1	As 188.979†	-25.2	-3.4	-1.5087 ug/L		-1.5087 ppb	02:16:47
1	B 249.677†	572.0	807.5	19.791 ug/L		19.791 ppb	02:16:26
1	Ba 233.527†	48.5	33.8	0.2653 ug/L		0.2653 ppb	02:16:47
1	Be 313.107†	-3624.5	203.3	0.0765 ug/L		0.0765 ppb	02:16:26
1	Cd 226.502†	-196.3	-5.6	-0.0646 ug/L		-0.0646 ppb	02:16:47
1	Co 228.616†	-59.2	10.1	0.2120 ug/L		0.2120 ppb	02:16:47
1	Cr 267.716†	88.6	-3.1	-0.0342 ug/L		-0.0342 ppb	02:16:47
1	Cu 324.752†	7170.7	682.4	2.0806 ug/L		2.0806 ppb	02:16:26
1	Mn 257.610†	716.4	185.4	0.2059 ug/L		0.2059 ppb	02:16:47
1	Mo 202.031†	12.0	6.5	0.4756 ug/L		0.4756 ppb	02:16:47
1	Ni 231.604†	111.0	20.0	0.5102 ug/L		0.5102 ppb	02:16:47
1	P 214.914†	238.3	14.8	8.4756 ug/L		8.4756 ppb	02:16:47
1	Pb 220.353†	-40.5	-98.6	-12.200 ug/L		-12.200 ppb	02:16:47
1	S 181.975 Axial†	51.9	12.2	17.237 ug/L		17.237 ppb	02:16:47
1	Sb 206.836†	33.9	-7.6	-2.7078 ug/L		-2.7078 ppb	02:16:47
1	Se 196.026†	-23.3	3.2	2.0652 ug/L		2.0652 ppb	02:16:47
1	Si 251.611†	49462.4	45219.6	1464.9 ug/L		1464.9 ppb	02:16:26
1	Sn 189.927†	1.9	-7.7	-1.3741 ug/L		-1.3741 ppb	02:16:47
1	Ti 334.940†	-1349.6	160.6	0.2506 ug/L		0.2506 ppb	02:16:26
1	Tl 190.801†	-30.3	-0.6	-0.1877 ug/L		-0.1877 ppb	02:16:47
1	U 409.014†	-3258.1	-114.0	-3.1816 ug/L		-3.1816 ppb	02:16:21
1	V 292.402†	-1611.4	-22.9	-0.1569 ug/L		-0.1569 ppb	02:16:26
1	Zn 213.857†	940.2	130.8	1.3151 ug/L		1.3151 ppb	02:16:47
1	SiO2†	49181.5	44936.1	3119.8 ug/L		3119.8 ppb	02:17:53
2	Sc Radial	3754.6	3754.6	97.3 %			02:15:50
2	Y RADIAL	4376.6	4376.6	98.31 %			02:15:30
2	Al 396.153Radial†	-134.1	-22.7	-21.319 ug/L		-21.319 ppb	02:15:30
2	Ca 317.933Radial†	42.0	24.4	53.254 ug/L		53.254 ppb	02:15:50
2	Fe 238.204 Radial†	9.9	-1.5	-24.670 ug/L		-24.670 ppb	02:15:50
2	K 766.490 Radial†	3907.4	1248.8	239.22 ug/L		239.22 ppb	02:15:30
2	Mg 279.077 IEC†	1.3	0.1	7.4232 ug/L		7.4232 ppb	02:15:50
2	Na 589.592 Radial†	-662.0	221.6	68.962 ug/L		68.962 ppb	02:15:30
2	Sr 421.552†	37.4	29.7	0.2061 ug/L		0.2061 ppb	02:15:30
2	Sc 361.383	950453.9	950453.9	108.00 %			02:16:52
2	Y 371.029	796864.2	796864.2	104.76 %			02:16:52
2	Ag 328.068†	239.0	-12.9	-0.0686 ug/L		-0.0686 ppb	02:16:57
2	As 188.979†	-22.2	-0.6	-0.2940 ug/L		-0.2940 ppb	02:17:17
2	B 249.677†	531.8	770.5	18.887 ug/L		18.887 ppb	02:16:57
2	Ba 233.527†	42.9	28.7	0.2260 ug/L		0.2260 ppb	02:17:17
2	Be 313.107†	-3677.0	153.5	0.0577 ug/L		0.0577 ppb	02:16:57
2	Cd 226.502†	-199.0	-8.1	-0.0907 ug/L		-0.0907 ppb	02:17:17
2	Co 228.616†	-63.8	5.8	0.1219 ug/L		0.1219 ppb	02:17:17
2	Cr 267.716†	102.3	9.6	0.1053 ug/L		0.1053 ppb	02:17:17
2	Cu 324.752†	7104.4	623.2	1.8959 ug/L		1.8959 ppb	02:16:57
2	Mn 257.610†	744.7	211.9	0.2387 ug/L		0.2387 ppb	02:17:17
2	Mo 202.031†	9.5	4.1	0.3005 ug/L		0.3005 ppb	02:17:17
2	Ni 231.604†	91.5	1.9	0.0488 ug/L		0.0488 ppb	02:17:17

2	P 214.914†	225.0	2.6	1.1789 ug/L	1.1789 ppb	02:17:17
2	Pb 220.353†	-63.9	-120.3	-14.889 ug/L	-14.889 ppb	02:17:17
2	S 181.975 Axial†	57.3	17.2	24.319 ug/L	24.319 ppb	02:17:17
2	Sb 206.836†	26.1	-14.8	-5.2355 ug/L	-5.2355 ppb	02:17:17
2	Se 196.026†	-28.5	-1.6	-1.1449 ug/L	-1.1449 ppb	02:17:17
2	Si 251.611†	48881.1	44696.7	1448.0 ug/L	1448.0 ppb	02:16:57
2	Sn 189.927†	6.7	-3.2	-0.5616 ug/L	-0.5616 ppb	02:17:17
2	Ti 334.940†	-1429.9	85.9	0.1406 ug/L	0.1406 ppb	02:16:57
2	Tl 190.801†	-30.9	-1.1	-0.3679 ug/L	-0.3679 ppb	02:17:17
2	U 409.014†	-3027.8	98.2	2.7459 ug/L	2.7459 ppb	02:16:52
2	V 292.402†	-1514.4	66.5	0.4774 ug/L	0.4774 ppb	02:16:57
2	Zn 213.857†	957.9	147.5	1.4900 ug/L	1.4900 ppb	02:17:17
2	SiO2†	49721.8	45451.7	3155.6 ug/L	3155.6 ppb	02:17:58
3	Sc Radial	3838.7	3838.7	99.5 %		02:16:15
3	Y RADIAL	4391.5	4391.5	98.65 %		02:15:55
3	Al 396.153Radial†	-107.3	7.2	6.7554 ug/L	6.7554 ppb	02:15:55
3	Ca 317.933Radial†	47.1	28.7	62.508 ug/L	62.508 ppb	02:16:15
3	Fe 238.204 Radial†	10.2	-1.4	-22.965 ug/L	-22.965 ppb	02:16:15
3	K 766.490 Radial†	3734.3	987.0	189.03 ug/L	189.03 ppb	02:15:55
3	Mg 279.077 IEC†	5.5	4.4	232.27 ug/L	232.27 ppb	02:16:15
3	Na 589.592 Radial†	-563.3	335.7	104.45 ug/L	104.45 ppb	02:15:55
3	Sr 421.552†	39.2	30.6	0.2126 ug/L	0.2126 ppb	02:15:55
3	Sc 361.383	931265.9	931265.9	105.82 %		02:17:22
3	Y 371.029	780583.6	780583.6	102.62 %		02:17:22
3	Ag 328.068†	275.7	26.4	0.1117 ug/L	0.1117 ppb	02:17:27
3	As 188.979†	-23.5	-2.3	-1.0282 ug/L	-1.0282 ppb	02:17:47
3	B 249.677†	550.8	798.5	19.574 ug/L	19.574 ppb	02:17:27
3	Ba 233.527†	43.9	30.4	0.2383 ug/L	0.2383 ppb	02:17:47
3	Be 313.107†	-3689.4	71.7	0.0270 ug/L	0.0270 ppb	02:17:27
3	Cd 226.502†	-198.7	-11.6	-0.1318 ug/L	-0.1318 ppb	02:17:47
3	Co 228.616†	-66.1	2.3	0.0512 ug/L	0.0512 ppb	02:17:47
3	Cr 267.716†	92.8	2.6	0.0259 ug/L	0.0259 ppb	02:17:47
3	Cu 324.752†	7198.6	847.7	2.5802 ug/L	2.5802 ppb	02:17:27
3	Mn 257.610†	715.5	198.5	0.2144 ug/L	0.2144 ppb	02:17:47
3	Mo 202.031†	14.9	9.4	0.6905 ug/L	0.6905 ppb	02:17:47
3	Ni 231.604†	95.0	7.0	0.1778 ug/L	0.1778 ppb	02:17:47
3	P 214.914†	205.8	-11.4	-7.3220 ug/L	-7.3220 ppb	02:17:47
3	Pb 220.353†	-38.8	-97.9	-12.100 ug/L	-12.100 ppb	02:17:47
3	S 181.975 Axial†	51.7	13.0	18.334 ug/L	18.334 ppb	02:17:47
3	Sb 206.836†	31.3	-9.5	-3.3137 ug/L	-3.3137 ppb	02:17:47
3	Se 196.026†	-30.4	-4.0	-2.6708 ug/L	-2.6708 ppb	02:17:47
3	Si 251.611†	49267.5	45994.5	1490.0 ug/L	1490.0 ppb	02:17:27
3	Sn 189.927†	14.1	3.9	0.7100 ug/L	0.7100 ppb	02:17:47
3	Ti 334.940†	-1423.5	64.7	0.0901 ug/L	0.0901 ppb	02:17:27
3	Tl 190.801†	-39.8	-10.1	-3.2591 ug/L	-3.2591 ppb	02:17:47
3	U 409.014†	-2964.3	100.5	2.8092 ug/L	2.8092 ppb	02:17:22
3	V 292.402†	-1574.7	-19.5	-0.1132 ug/L	-0.1132 ppb	02:17:27
3	Zn 213.857†	947.0	155.5	1.5682 ug/L	1.5682 ppb	02:17:47
3	SiO2†	49144.4	45854.6	3183.5 ug/L	3183.5 ppb	02:18:03

Mean Data: 1202039899|951818|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	944164.7	107.28	%	1.269				1.18%
Sc Radial	3805.7	98.7	%	1.16				1.18%
Y 371.029	791427.6	104.05	%	1.235				1.19%
Y RADIAL	4374.5	98.27	%	0.407				0.41%
Ag 328.068†	10.4	0.0418	ug/L	0.09672	0.0418	ppb	0.09672	231.21%
Al 396.153Radial†	-1.3	-1.2584	ug/L	17.48967	-1.2584	ppb	17.48967	>999.9%
As 188.979†	-2.1	-0.9436	ug/L	0.61173	-0.9436	ppb	0.61173	64.83%
B 249.677†	792.1	19.417	ug/L	0.4717	19.417	ppb	0.4717	2.43%
Ba 233.527†	31.0	0.2432	ug/L	0.02007	0.2432	ppb	0.02007	8.25%
Be 313.107†	142.8	0.0537	ug/L	0.02499	0.0537	ppb	0.02499	46.51%
Ca 317.933Radial†	24.8	54.187	ug/L	7.8957	54.187	ppb	7.8957	14.57%
Cd 226.502†	-8.4	-0.0957	ug/L	0.03389	-0.0957	ppb	0.03389	35.41%
Co 228.616†	6.1	0.1283	ug/L	0.08060	0.1283	ppb	0.08060	62.80%
Cr 267.716†	3.0	0.0323	ug/L	0.06996	0.0323	ppb	0.06996	216.36%
Cu 324.752†	717.8	2.1856	ug/L	0.35401	2.1856	ppb	0.35401	16.20%
Fe 238.204 Radial†	-1.0	-16.773	ug/L	12.2317	-16.773	ppb	12.2317	72.93%
K 766.490 Radial†	1148.0	219.88	ug/L	27.004	219.88	ppb	27.004	12.28%

Mg 279.077 IEC†	2.3	121.39 ug/L	112.457	121.39 ppb	112.457	92.64%
Mn 257.610†	198.6	0.2197 ug/L	0.01701	0.2197 ppb	0.01701	7.75%
Mo 202.031†	6.6	0.4888 ug/L	0.19534	0.4888 ppb	0.19534	39.96%
Na 589.592 Radial†	298.2	92.789 ug/L	20.6359	92.789 ppb	20.6359	22.24%
Ni 231.604†	9.6	0.2456 ug/L	0.23804	0.2456 ppb	0.23804	96.91%
P 214.914†	2.0	0.7775 ug/L	7.90644	0.7775 ppb	7.90644	>999.9%
Pb 220.353†	-105.6	-13.063 ug/L	1.5822	-13.063 ppb	1.5822	12.11%
S 181.975 Axial†	14.2	19.964 ug/L	3.8118	19.964 ppb	3.8118	19.09%
Sb 206.836†	-10.6	-3.7523 ug/L	1.31970	-3.7523 ppb	1.31970	35.17%
Se 196.026†	-0.8	-0.5835 ug/L	2.41739	-0.5835 ppb	2.41739	414.30%
Si 251.611†	45303.6	1467.6 ug/L	21.15	1467.6 ppb	21.15	1.44%
Sn 189.927†	-2.3	-0.4086 ug/L	1.05045	-0.4086 ppb	1.05045	257.12%
Sr 421.552†	38.3	0.2657 ug/L	0.09773	0.2657 ppb	0.09773	36.78%
Ti 334.940†	103.7	0.1605 ug/L	0.08209	0.1605 ppb	0.08209	51.16%
Tl 190.801†	-4.0	-1.2716 ug/L	1.72365	-1.2716 ppb	1.72365	135.56%
U 409.014†	28.3	0.7911 ug/L	3.44064	0.7911 ppb	3.44064	434.89%
V 292.402†	8.0	0.0691 ug/L	0.35428	0.0691 ppb	0.35428	512.80%
Zn 213.857†	144.6	1.4578 ug/L	0.12960	1.4578 ppb	0.12960	8.89%
SiO2†	45414.1	3153.0 ug/L	31.96	3153.0 ppb	31.96	1.01%



Sequence No.: 77  
 Sample ID: 1202039900|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 98  
 Date Collected: 2/26/2010 02:20:14  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039900|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3773.2	3773.2	97.8 %		02:22:28
1	Y RADIAL	4275.8	4275.8	96.05 %		02:22:08
1	Al 396.153Radial†	5574.0	5812.8	5438.5 ug/L	5438.5 ppb	02:22:08
1	Ca 317.933Radial†	2444.9	2480.5	5409.3 ug/L	5409.3 ppb	02:22:28
1	Fe 238.204 Radial†	310.4	305.6	4953.1 ug/L	4953.1 ppb	02:22:28
1	K 766.490 Radial†	30287.6	28195.1	5397.4 ug/L	5397.4 ppb	02:22:08
1	Mg 279.077 IEC†	105.9	107.1	5652.2 ug/L	5652.2 ppb	02:22:28
1	Na 589.592 Radial†	14710.8	15939.1	4959.7 ug/L	4959.7 ppb	02:22:08
1	Sr 421.552†	70710.0	72271.4	502.72 ug/L	502.72 ppb	02:22:08
1	Sc 361.383	926971.2	926971.2	105.33 %		02:23:26
1	Y 371.029	769491.4	769491.4	101.16 %		02:23:26
1	Ag 328.068†	58596.6	55397.9	260.49 ug/L	260.49 ppb	02:23:26
1	As 188.979†	1179.1	1139.4	510.98 ug/L	510.98 ppb	02:23:47
1	B 249.677†	21266.6	20468.7	499.48 ug/L	499.48 ppb	02:23:26
1	Ba 233.527†	67648.8	64215.2	506.00 ug/L	506.00 ppb	02:23:26
1	Be 313.107†	1383347.4	1316918.0	493.19 ug/L	493.19 ppb	02:23:26
1	Cd 226.502†	44095.4	42040.7	488.45 ug/L	488.45 ppb	02:23:47
1	Co 228.616†	24367.0	23199.1	487.34 ug/L	487.34 ppb	02:23:47
1	Cr 267.716†	46812.8	44359.3	498.72 ug/L	498.72 ppb	02:23:26
1	Cu 324.752†	179213.9	164191.8	500.26 ug/L	500.26 ppb	02:23:26
1	Mn 257.610†	463788.3	439846.2	501.36 ug/L	501.36 ppb	02:23:26
1	Mo 202.031†	7177.8	6809.9	502.04 ug/L	502.04 ppb	02:23:47
1	Ni 231.604†	20887.8	19748.3	503.69 ug/L	503.69 ppb	02:23:47
1	P 214.914†	1218.9	951.4	475.10 ug/L	475.10 ppb	02:23:47
1	Pb 220.353†	4302.6	4023.8	499.42 ug/L	499.42 ppb	02:23:47
1	S 181.975 Axial†	3864.2	3632.9	5121.3 ug/L	5121.3 ppb	02:23:47
1	Sb 206.836†	1570.4	1452.0	530.67 ug/L	530.67 ppb	02:23:47
1	Se 196.026†	762.6	748.8	508.97 ug/L	508.97 ppb	02:23:47
1	Si 251.611†	207083.1	196041.4	6344.7 ug/L	6344.7 ppb	02:23:26
1	Sn 189.927†	3067.8	2903.2	524.21 ug/L	524.21 ppb	02:23:47
1	Ti 334.940†	335520.5	319955.4	504.00 ug/L	504.00 ppb	02:23:26
1	Tl 190.801†	1627.8	1572.8	509.40 ug/L	509.40 ppb	02:23:47
1	U 409.014†	15261.3	17391.1	483.95 ug/L	483.95 ppb	02:23:26
1	V 292.402†	73522.4	71271.3	504.58 ug/L	504.58 ppb	02:23:26
1	Zn 213.857†	52510.6	49114.5	491.21 ug/L	491.21 ppb	02:23:26
1	SiO2†	208597.4	197455.6	13695 ug/L	13695 ppb	02:24:47
2	Sc Radial	3680.9	3680.9	95.4 %		02:22:53
2	Y RADIAL	4301.6	4301.6	96.63 %		02:22:33
2	Al 396.153Radial†	5713.0	6101.3	5709.6 ug/L	5709.6 ppb	02:22:33
2	Ca 317.933Radial†	2493.4	2594.0	5656.9 ug/L	5656.9 ppb	02:22:53
2	Fe 238.204 Radial†	318.3	321.9	5216.2 ug/L	5216.2 ppb	02:22:53
2	K 766.490 Radial†	30854.9	29565.8	5659.8 ug/L	5659.8 ppb	02:22:33
2	Mg 279.077 IEC†	106.6	110.5	5831.4 ug/L	5831.4 ppb	02:22:53
2	Na 589.592 Radial†	15086.8	16710.2	5199.6 ug/L	5199.6 ppb	02:22:33
2	Sr 421.552†	72116.8	75557.8	525.59 ug/L	525.59 ppb	02:22:33
2	Sc 361.383	920744.7	920744.7	104.62 %		02:23:54
2	Y 371.029	763650.8	763650.8	100.40 %		02:23:54
2	Ag 328.068†	58683.0	55856.7	262.72 ug/L	262.72 ppb	02:23:54
2	As 188.979†	1174.5	1142.6	512.49 ug/L	512.49 ppb	02:24:14
2	B 249.677†	21550.3	20876.4	509.43 ug/L	509.43 ppb	02:23:54
2	Ba 233.527†	68044.0	65027.3	512.40 ug/L	512.40 ppb	02:23:54
2	Be 313.107†	1389583.4	1331760.1	498.75 ug/L	498.75 ppb	02:23:54
2	Cd 226.502†	44077.5	42306.7	491.52 ug/L	491.52 ppb	02:24:14
2	Co 228.616†	24362.7	23351.3	490.53 ug/L	490.53 ppb	02:24:14
2	Cr 267.716†	46988.3	44827.6	504.01 ug/L	504.01 ppb	02:23:54
2	Cu 324.752†	179783.8	165887.2	505.44 ug/L	505.44 ppb	02:23:54
2	Mn 257.610†	466375.9	445297.2	507.58 ug/L	507.58 ppb	02:23:54
2	Mo 202.031†	7155.2	6834.5	503.86 ug/L	503.86 ppb	02:24:14
2	Ni 231.604†	20884.6	19879.3	507.03 ug/L	507.03 ppb	02:24:14

2	P 214.914†	1226.0	966.0	482.73 ug/L	482.73 ppb	02:24:14
2	Pb 220.353†	4329.8	4077.3	506.08 ug/L	506.08 ppb	02:24:14
2	S 181.975 Axial†	3856.5	3650.3	5145.8 ug/L	5145.8 ppb	02:24:14
2	Sb 206.836†	1577.3	1468.6	536.62 ug/L	536.62 ppb	02:24:14
2	Se 196.026†	759.0	750.2	510.73 ug/L	510.73 ppb	02:24:14
2	Si 251.611†	208184.3	198423.5	6421.8 ug/L	6421.8 ppb	02:23:54
2	Sn 189.927†	3066.2	2921.4	527.51 ug/L	527.51 ppb	02:24:14
2	Ti 334.940†	336788.3	323321.4	509.32 ug/L	509.32 ppb	02:23:54
2	Tl 190.801†	1626.1	1581.7	512.29 ug/L	512.29 ppb	02:24:14
2	U 409.014†	15174.7	17406.3	484.33 ug/L	484.33 ppb	02:23:54
2	V 292.402†	73716.6	71929.0	509.16 ug/L	509.16 ppb	02:23:54
2	Zn 213.857†	52867.9	49793.1	497.99 ug/L	497.99 ppb	02:23:54
2	SiO2†	209061.8	199238.7	13819 ug/L	13819 ppb	02:24:52
3	Sc Radial	3760.1	3760.1	97.5 %		02:23:18
3	Y RADIAL	4238.0	4238.0	95.20 %		02:22:58
3	Al 396.153Radial†	5777.6	6041.6	5653.7 ug/L	5653.7 ppb	02:22:58
3	Ca 317.933Radial†	2450.6	2495.0	5441.0 ug/L	5441.0 ppb	02:23:18
3	Fe 238.204 Radial†	312.3	308.7	5003.3 ug/L	5003.3 ppb	02:23:18
3	K 766.490 Radial†	31080.0	29115.9	5573.8 ug/L	5573.8 ppb	02:22:58
3	Mg 279.077 IEC†	101.8	103.3	5449.4 ug/L	5449.4 ppb	02:23:18
3	Na 589.592 Radial†	15005.4	16293.8	5070.1 ug/L	5070.1 ppb	02:22:58
3	Sr 421.552†	72902.4	74772.4	520.12 ug/L	520.12 ppb	02:22:58
3	Sc 361.383	937626.1	937626.1	106.54 %		02:24:21
3	Y 371.029	775818.5	775818.5	102.00 %		02:24:21
3	Ag 328.068†	60109.1	56185.3	264.18 ug/L	264.18 ppb	02:24:21
3	As 188.979†	1186.1	1133.3	508.31 ug/L	508.31 ppb	02:24:41
3	B 249.677†	21840.6	20778.0	507.07 ug/L	507.07 ppb	02:24:21
3	Ba 233.527†	68988.9	64743.2	510.16 ug/L	510.16 ppb	02:24:21
3	Be 313.107†	1407799.5	1324944.5	496.20 ug/L	496.20 ppb	02:24:21
3	Cd 226.502†	44260.6	41720.0	484.72 ug/L	484.72 ppb	02:24:41
3	Co 228.616†	24473.4	23036.0	483.90 ug/L	483.90 ppb	02:24:41
3	Cr 267.716†	47627.0	44618.5	501.64 ug/L	501.64 ppb	02:24:21
3	Cu 324.752†	182810.3	165634.0	504.66 ug/L	504.66 ppb	02:24:21
3	Mn 257.610†	473300.0	443770.3	505.84 ug/L	505.84 ppb	02:24:21
3	Mo 202.031†	7210.5	6763.2	498.60 ug/L	498.60 ppb	02:24:41
3	Ni 231.604†	20938.3	19570.3	499.15 ug/L	499.15 ppb	02:24:41
3	P 214.914†	1230.7	949.3	472.96 ug/L	472.96 ppb	02:24:41
3	Pb 220.353†	4342.6	4014.9	498.35 ug/L	498.35 ppb	02:24:41
3	S 181.975 Axial†	3855.3	3582.8	5050.6 ug/L	5050.6 ppb	02:24:41
3	Sb 206.836†	1571.5	1436.1	524.93 ug/L	524.93 ppb	02:24:41
3	Se 196.026†	763.1	741.0	503.98 ug/L	503.98 ppb	02:24:41
3	Si 251.611†	211323.2	197787.1	6401.3 ug/L	6401.3 ppb	02:24:21
3	Sn 189.927†	3083.9	2885.2	520.97 ug/L	520.97 ppb	02:24:41
3	Ti 334.940†	342242.8	322645.2	508.26 ug/L	508.26 ppb	02:24:21
3	Tl 190.801†	1641.9	1568.5	508.08 ug/L	508.08 ppb	02:24:41
3	U 409.014†	15428.9	17383.7	483.73 ug/L	483.73 ppb	02:24:21
3	V 292.402†	74803.5	71680.6	507.38 ug/L	507.38 ppb	02:24:21
3	Zn 213.857†	53486.8	49464.2	494.75 ug/L	494.75 ppb	02:24:21
3	SiO2†	210831.0	197301.6	13685 ug/L	13685 ppb	02:24:57

Mean Data: 1202039900|951818|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	928447.3	105.50 %	0.970			0.92%
Sc Radial	3738.0	96.9 %	1.29			1.34%
Y 371.029	769653.6	101.19 %	0.800			0.79%
Y RADIAL	4271.8	95.96 %	0.718			0.75%
Ag 328.068†	55813.3	262.46 ug/L	1.856	262.46 ppb	1.856	0.71%
Al 396.153Radial†	5985.2	5600.6 ug/L	143.12	5600.6 ppb	143.12	2.56%
As 188.979†	1138.4	510.60 ug/L	2.117	510.60 ppb	2.117	0.41%
B 249.677†	20707.7	505.33 ug/L	5.195	505.33 ppb	5.195	1.03%
Ba 233.527†	64661.9	509.52 ug/L	3.248	509.52 ppb	3.248	0.64%
Be 313.107†	1324540.9	496.05 ug/L	2.782	496.05 ppb	2.782	0.56%
Ca 317.933Radial†	2523.2	5502.4 ug/L	134.75	5502.4 ppb	134.75	2.45%
Cd 226.502†	42022.5	488.23 ug/L	3.406	488.23 ppb	3.406	0.70%
Co 228.616†	23195.5	487.25 ug/L	3.316	487.25 ppb	3.316	0.68%
Cr 267.716†	44601.8	501.46 ug/L	2.648	501.46 ppb	2.648	0.53%
Cu 324.752†	165237.7	503.45 ug/L	2.792	503.45 ppb	2.792	0.55%
Fe 238.204 Radial†	312.1	5057.5 ug/L	139.69	5057.5 ppb	139.69	2.76%
K 766.490 Radial†	28958.9	5543.7 ug/L	133.78	5543.7 ppb	133.78	2.41%

Mg 279.077 IEC†	107.0	5644.3 ug/L	191.15	5644.3 ppb	191.15	3.39%
Mn 257.610†	442971.2	504.93 ug/L	3.213	504.93 ppb	3.213	0.64%
Mo 202.031†	6802.5	501.50 ug/L	2.674	501.50 ppb	2.674	0.53%
Na 589.592 Radial†	16314.4	5076.4 ug/L	120.09	5076.4 ppb	120.09	2.37%
Ni 231.604†	19732.6	503.29 ug/L	3.956	503.29 ppb	3.956	0.79%
P 214.914†	955.6	476.93 ug/L	5.137	476.93 ppb	5.137	1.08%
Pb 220.353†	4038.7	501.28 ug/L	4.186	501.28 ppb	4.186	0.84%
S 181.975 Axial†	3622.0	5105.9 ug/L	49.41	5105.9 ppb	49.41	0.97%
Sb 206.836†	1452.2	530.74 ug/L	5.849	530.74 ppb	5.849	1.10%
Se 196.026†	746.6	507.90 ug/L	3.504	507.90 ppb	3.504	0.69%
Si 251.611†	197417.3	6389.3 ug/L	39.95	6389.3 ppb	39.95	0.63%
Sn 189.927†	2903.2	524.23 ug/L	3.274	524.23 ppb	3.274	0.62%
Sr 421.552†	74200.5	516.14 ug/L	11.938	516.14 ppb	11.938	2.31%
Ti 334.940†	321974.0	507.20 ug/L	2.815	507.20 ppb	2.815	0.56%
Tl 190.801†	1574.4	509.92 ug/L	2.156	509.92 ppb	2.156	0.42%
U 409.014†	17393.7	484.01 ug/L	0.304	484.01 ppb	0.304	0.06%
V 292.402†	71627.0	507.04 ug/L	2.308	507.04 ppb	2.308	0.46%
Zn 213.857†	49457.3	494.65 ug/L	3.393	494.65 ppb	3.393	0.69%
SiO2†	197998.7	13733 ug/L	74.7	13733 ppb	74.7	0.54%

Sequence No.: 78

Sample ID: 1202039901|951818|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 99

Date Collected: 2/26/2010 02:27:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039901|951818|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3777.0	3777.0	97.9 %		02:29:23
1	Y RADIAL	4361.7	4361.7	97.98 %		02:29:03
1	Al 396.153Radial†	-118.1	-5.5	-5.2710 ug/L	-5.2710 ppb	02:29:03
1	Ca 317.933Radial†	26.8	8.7	18.952 ug/L	18.952 ppb	02:29:23
1	Fe 238.204 Radial†	9.3	-2.2	-35.834 ug/L	-35.834 ppb	02:29:23
1	K 766.490 Radial†	3045.9	345.3	66.145 ug/L	66.145 ppb	02:29:03
1	Mg 279.077 IEC†	3.7	2.6	138.32 ug/L	138.32 ppb	02:29:23
1	Na 589.592 Radial†	-855.8	27.8	8.6443 ug/L	8.6443 ppb	02:29:03
1	Sr 421.552†	32.6	24.6	0.1707 ug/L	0.1707 ppb	02:29:03
1	Sc 361.383	933473.0	933473.0	106.07 %		02:30:19
1	Y 371.029	784788.9	784788.9	103.18 %		02:30:19
1	Ag 328.068†	293.1	42.2	0.1813 ug/L	0.1813 ppb	02:30:24
1	As 188.979†	-28.7	-7.1	-3.1635 ug/L	-3.1635 ppb	02:30:44
1	B 249.677†	-195.4	93.8	2.3047 ug/L	2.3047 ppb	02:30:44
1	Ba 233.527†	23.1	10.7	0.0821 ug/L	0.0821 ppb	02:30:44
1	Be 313.107†	-3527.6	232.4	0.0867 ug/L	0.0867 ppb	02:30:24
1	Cd 226.502†	-196.0	-8.6	-0.0951 ug/L	-0.0951 ppb	02:30:44
1	Co 228.616†	-57.7	10.5	0.2237 ug/L	0.2237 ppb	02:30:44
1	Cr 267.716†	83.5	-6.4	-0.0768 ug/L	-0.0768 ppb	02:30:44
1	Cu 324.752†	6792.4	448.8	1.3642 ug/L	1.3642 ppb	02:30:24
1	Mn 257.610†	620.0	106.8	0.1125 ug/L	0.1125 ppb	02:30:44
1	Mo 202.031†	24.6	18.5	1.3631 ug/L	1.3631 ppb	02:30:44
1	Ni 231.604†	108.3	19.3	0.4920 ug/L	0.4920 ppb	02:30:44
1	P 214.914†	210.5	-7.4	-4.6821 ug/L	-4.6821 ppb	02:30:44
1	Pb 220.353†	-46.0	-104.5	-12.925 ug/L	-12.925 ppb	02:30:44
1	S 181.975 Axial†	35.2	-2.6	-3.6824 ug/L	-3.6824 ppb	02:30:44
1	Sb 206.836†	33.0	-7.9	-2.7496 ug/L	-2.7496 ppb	02:30:44
1	Se 196.026†	-24.2	1.9	1.1406 ug/L	1.1406 ppb	02:30:44
1	Si 251.611†	10165.3	9019.0	292.16 ug/L	292.16 ppb	02:30:24
1	Sn 189.927†	10.7	0.6	0.1211 ug/L	0.1211 ppb	02:30:44
1	Ti 334.940†	-1548.2	-49.7	-0.0881 ug/L	-0.0881 ppb	02:30:24
1	Tl 190.801†	-35.7	-6.2	-2.0073 ug/L	-2.0073 ppb	02:30:44
1	U 409.014†	-2993.1	80.0	2.2375 ug/L	2.2375 ppb	02:30:19
1	V 292.402†	-1615.1	-54.0	-0.3455 ug/L	-0.3455 ppb	02:30:24
1	Zn 213.857†	917.5	125.5	1.2678 ug/L	1.2678 ppb	02:30:44
1	SiO2†	9987.2	8827.7	612.85 ug/L	612.85 ppb	02:31:50
2	Sc Radial	3784.4	3784.4	98.1 %		02:29:48
2	Y RADIAL	4239.0	4239.0	95.22 %		02:29:28
2	Al 396.153Radial†	-138.6	-26.2	-24.687 ug/L	-24.687 ppb	02:29:28
2	Ca 317.933Radial†	27.5	9.4	20.462 ug/L	20.462 ppb	02:29:48
2	Fe 238.204 Radial†	8.2	-3.3	-52.905 ug/L	-52.905 ppb	02:29:48
2	K 766.490 Radial†	3117.9	412.6	79.045 ug/L	79.045 ppb	02:29:28
2	Mg 279.077 IEC†	2.6	1.5	80.386 ug/L	80.386 ppb	02:29:48
2	Na 589.592 Radial†	-924.4	-40.5	-12.593 ug/L	-12.593 ppb	02:29:28
2	Sr 421.552†	37.2	29.2	0.2031 ug/L	0.2031 ppb	02:29:28
2	Sc 361.383	935322.8	935322.8	106.28 %		02:30:50
2	Y 371.029	784615.0	784615.0	103.15 %		02:30:50
2	Ag 328.068†	334.8	80.9	0.3558 ug/L	0.3558 ppb	02:30:55
2	As 188.979†	-18.4	2.6	1.1449 ug/L	1.1449 ppb	02:31:15
2	B 249.677†	-205.8	84.4	2.0770 ug/L	2.0770 ppb	02:31:15
2	Ba 233.527†	15.8	3.9	0.0282 ug/L	0.0282 ppb	02:31:15
2	Be 313.107†	-3579.9	189.8	0.0707 ug/L	0.0707 ppb	02:30:55
2	Cd 226.502†	-206.8	-18.4	-0.2072 ug/L	-0.2072 ppb	02:31:15
2	Co 228.616†	-62.8	5.8	0.1244 ug/L	0.1244 ppb	02:31:15
2	Cr 267.716†	83.2	-6.8	-0.0827 ug/L	-0.0827 ppb	02:31:15
2	Cu 324.752†	6705.7	354.5	1.0756 ug/L	1.0756 ppb	02:30:55
2	Mn 257.610†	606.2	92.7	0.0972 ug/L	0.0972 ppb	02:31:15
2	Mo 202.031†	17.0	11.3	0.8274 ug/L	0.8274 ppb	02:31:15
2	Ni 231.604†	110.4	21.1	0.5375 ug/L	0.5375 ppb	02:31:15

2	P 214.914†	212.7	-5.7	-3.5741 ug/L	-3.5741 ppb	02:31:15
2	Pb 220.353†	-37.5	-96.5	-11.932 ug/L	-11.932 ppb	02:31:15
2	S 181.975 Axial†	46.3	7.7	10.871 ug/L	10.871 ppb	02:31:15
2	Sb 206.836†	33.5	-7.5	-2.5990 ug/L	-2.5990 ppb	02:31:15
2	Se 196.026†	-17.1	8.7	5.5386 ug/L	5.5386 ppb	02:31:15
2	Si 251.611†	10127.2	8964.2	290.39 ug/L	290.39 ppb	02:30:55
2	Sn 189.927†	15.2	4.9	0.8950 ug/L	0.8950 ppb	02:31:15
2	Ti 334.940†	-1562.5	-60.3	-0.1002 ug/L	-0.1002 ppb	02:30:55
2	Tl 190.801†	-21.2	7.5	2.4052 ug/L	2.4052 ppb	02:31:15
2	U 409.014†	-2968.9	108.3	3.0311 ug/L	3.0311 ppb	02:30:50
2	V 292.402†	-1602.1	-38.8	-0.2440 ug/L	-0.2440 ppb	02:30:55
2	Zn 213.857†	926.7	132.5	1.3404 ug/L	1.3404 ppb	02:31:15
2	SiO2†	10210.9	9019.5	626.18 ug/L	626.18 ppb	02:31:55
3	Sc Radial	3804.5	3804.5	98.6 %		02:30:13
3	Y RADIAL	4318.9	4318.9	97.02 %		02:29:53
3	Al 396.153Radial†	-111.4	2.1	1.9297 ug/L	1.9297 ppb	02:29:53
3	Ca 317.933Radial†	31.8	13.5	29.472 ug/L	29.472 ppb	02:30:13
3	Fe 238.204 Radial†	9.2	-2.4	-38.245 ug/L	-38.245 ppb	02:30:13
3	K 766.490 Radial†	3091.6	369.1	70.724 ug/L	70.724 ppb	02:29:53
3	Mg 279.077 IEC†	2.4	1.3	66.523 ug/L	66.523 ppb	02:30:13
3	Na 589.592 Radial†	-976.0	-87.7	-27.301 ug/L	-27.301 ppb	02:29:53
3	Sr 421.552†	12.7	4.1	0.0285 ug/L	0.0285 ppb	02:29:53
3	Sc 361.383	928758.8	928758.8	105.53 %		02:31:20
3	Y 371.029	779947.9	779947.9	102.54 %		02:31:20
3	Ag 328.068†	438.6	181.4	0.8324 ug/L	0.8324 ppb	02:31:25
3	As 188.979†	-26.8	-5.5	-2.4362 ug/L	-2.4362 ppb	02:31:45
3	B 249.677†	-242.7	48.0	1.1821 ug/L	1.1821 ppb	02:31:45
3	Ba 233.527†	31.6	18.9	0.1471 ug/L	0.1471 ppb	02:31:45
3	Be 313.107†	-3598.3	148.6	0.0555 ug/L	0.0555 ppb	02:31:25
3	Cd 226.502†	-198.3	-11.7	-0.1324 ug/L	-0.1324 ppb	02:31:45
3	Co 228.616†	-50.9	16.7	0.3520 ug/L	0.3520 ppb	02:31:45
3	Cr 267.716†	88.8	-0.9	-0.0133 ug/L	-0.0133 ppb	02:31:45
3	Cu 324.752†	6785.4	474.6	1.4455 ug/L	1.4455 ppb	02:31:25
3	Mn 257.610†	601.9	92.7	0.0991 ug/L	0.0991 ppb	02:31:45
3	Mo 202.031†	13.8	8.4	0.6162 ug/L	0.6162 ppb	02:31:45
3	Ni 231.604†	105.8	17.4	0.4445 ug/L	0.4445 ppb	02:31:45
3	P 214.914†	207.5	-9.2	-5.7660 ug/L	-5.7660 ppb	02:31:45
3	Pb 220.353†	-33.1	-92.5	-11.444 ug/L	-11.444 ppb	02:31:45
3	S 181.975 Axial†	41.9	3.9	5.4962 ug/L	5.4962 ppb	02:31:45
3	Sb 206.836†	28.4	-12.1	-4.2584 ug/L	-4.2584 ppb	02:31:45
3	Se 196.026†	-29.3	-3.0	-2.1200 ug/L	-2.1200 ppb	02:31:45
3	Si 251.611†	10064.9	8972.6	290.66 ug/L	290.66 ppb	02:31:25
3	Sn 189.927†	9.9	-0.0	0.0058 ug/L	0.0058 ppb	02:31:45
3	Ti 334.940†	-1491.6	-3.5	-0.0059 ug/L	-0.0059 ppb	02:31:25
3	Tl 190.801†	-23.5	5.1	1.6493 ug/L	1.6493 ppb	02:31:45
3	U 409.014†	-3158.0	-90.6	-2.5246 ug/L	-2.5246 ppb	02:31:20
3	V 292.402†	-1572.2	-21.1	-0.1365 ug/L	-0.1365 ppb	02:31:25
3	Zn 213.857†	909.8	122.6	1.2388 ug/L	1.2388 ppb	02:31:45
3	SiO2†	10198.1	9075.3	630.06 ug/L	630.06 ppb	02:32:00

Mean Data: 1202039901|951818|5

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	932518.2	105.96	%	0.385			0.36%
Sc Radial	3788.7	98.2	%	0.37			0.38%
Y 371.029	783117.3	102.96	%	0.361			0.35%
Y RADIAL	4306.6	96.74	%	1.399			1.45%
Ag 328.068†	101.5	0.4565	ug/L	0.33700	0.4565 ppb	0.33700	73.82%
Al 396.153Radial†	-9.9	-9.3426	ug/L	13.76732	-9.3426 ppb	13.76732	147.36%
As 188.979†	-3.3	-1.4849	ug/L	2.30636	-1.4849 ppb	2.30636	155.32%
B 249.677†	75.4	1.8546	ug/L	0.59346	1.8546 ppb	0.59346	32.00%
Ba 233.527†	11.2	0.0858	ug/L	0.05955	0.0858 ppb	0.05955	69.40%
Be 313.107†	190.3	0.0710	ug/L	0.01558	0.0710 ppb	0.01558	21.96%
Ca 317.933Radial†	10.5	22.962	ug/L	5.6885	22.962 ppb	5.6885	24.77%
Cd 226.502†	-12.9	-0.1449	ug/L	0.05708	-0.1449 ppb	0.05708	39.40%
Co 228.616†	11.0	0.2334	ug/L	0.11415	0.2334 ppb	0.11415	48.92%
Cr 267.716†	-4.7	-0.0576	ug/L	0.03845	-0.0576 ppb	0.03845	66.77%
Cu 324.752†	426.0	1.2951	ug/L	0.19436	1.2951 ppb	0.19436	15.01%
Fe 238.204 Radial†	-2.6	-42.328	ug/L	9.2393	-42.328 ppb	9.2393	21.83%
K 766.490 Radial†	375.7	71.972	ug/L	6.5398	71.972 ppb	6.5398	9.09%

Mg 279.077 IEC†	1.8	95.078 ug/L	38.0890	95.078 ppb	38.0890	40.06%
Mn 257.610†	97.4	0.1029 ug/L	0.00838	0.1029 ppb	0.00838	8.14%
Mo 202.031†	12.7	0.9356 ug/L	0.38500	0.9356 ppb	0.38500	41.15%
Na 589.592 Radial†	-33.5	-10.417 ug/L	18.0711	-10.417 ppb	18.0711	173.48%
Ni 231.604†	19.3	0.4913 ug/L	0.04652	0.4913 ppb	0.04652	9.47%
P 214.914†	-7.4	-4.6741 ug/L	1.09596	-4.6741 ppb	1.09596	23.45%
Pb 220.353†	-97.8	-12.100 ug/L	0.7547	-12.100 ppb	0.7547	6.24%
S 181.975 Axial†	3.0	4.2283 ug/L	7.35915	4.2283 ppb	7.35915	174.04%
Sb 206.836†	-9.1	-3.2023 ug/L	0.91769	-3.2023 ppb	0.91769	28.66%
Se 196.026†	2.5	1.5197 ug/L	3.84338	1.5197 ppb	3.84338	252.90%
Si 251.611†	8985.3	291.07 ug/L	0.952	291.07 ppb	0.952	0.33%
Sn 189.927†	1.9	0.3406 ug/L	0.48356	0.3406 ppb	0.48356	141.96%
Sr 421.552†	19.3	0.1341 ug/L	0.09288	0.1341 ppb	0.09288	69.27%
Ti 334.940†	-37.9	-0.0647 ug/L	0.05130	-0.0647 ppb	0.05130	79.25%
Tl 190.801†	2.1	0.6824 ug/L	2.35980	0.6824 ppb	2.35980	345.82%
U 409.014†	32.6	0.9147 ug/L	3.00481	0.9147 ppb	3.00481	328.51%
V 292.402†	-37.9	-0.2420 ug/L	0.10450	-0.2420 ppb	0.10450	43.18%
Zn 213.857†	126.9	1.2823 ug/L	0.05233	1.2823 ppb	0.05233	4.08%
SiO2†	8974.2	623.03 ug/L	9.028	623.03 ppb	9.028	1.45%

Sequence No.: 79  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/26/2010 02:34:12  
 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	3711.1	3711.1	96.2 %		02:36:24
1	Y RADIAL	4243.5	4243.5	95.32 %		02:36:04
1	Al 396.153Radial†	5521.6	5853.8	5476.9 ug/L	5476.9 ppb	02:36:04
1	Ca 317.933Radial†	2419.4	2495.8	5442.8 ug/L	5442.8 ppb	02:36:24
1	Fe 238.204 Radial†	316.4	317.2	5140.5 ug/L	5140.5 ppb	02:36:24
1	K 766.490 Radial†	29238.6	27622.9	5285.8 ug/L	5285.8 ppb	02:36:04
1	Mg 279.077 IEC†	107.8	110.9	5851.9 ug/L	5851.9 ppb	02:36:24
1	Na 589.592 Radial†	29833.9	31908.3	9928.7 ug/L	9928.7 ppb	02:36:04
1	Sr 421.552†	70481.8	73243.5	509.49 ug/L	509.49 ppb	02:36:04
1	Sc 361.383	921997.6	921997.6	104.76 %		02:37:21
1	Y 371.029	763729.3	763729.3	100.41 %		02:37:21
1	Ag 328.068†	111071.8	105787.1	494.68 ug/L	494.68 ppb	02:37:26
1	As 188.979†	1173.0	1139.6	510.98 ug/L	510.98 ppb	02:37:46
1	B 249.677†	20473.5	19820.6	483.54 ug/L	483.54 ppb	02:37:26
1	Ba 233.527†	65985.0	62973.5	496.23 ug/L	496.23 ppb	02:37:26
1	Be 313.107†	1424393.6	1363182.6	510.44 ug/L	510.44 ppb	02:37:21
1	Cd 226.502†	45112.9	43237.7	502.34 ug/L	502.34 ppb	02:37:26
1	Co 228.616†	24841.6	23776.8	499.50 ug/L	499.50 ppb	02:37:26
1	Cr 267.716†	46437.3	44240.6	497.41 ug/L	497.41 ppb	02:37:26
1	Cu 324.752†	173266.3	159432.6	485.77 ug/L	485.77 ppb	02:37:26
1	Mn 257.610†	467640.9	445898.9	508.26 ug/L	508.26 ppb	02:37:21
1	Mo 202.031†	7173.5	6842.6	504.45 ug/L	504.45 ppb	02:37:46
1	Ni 231.604†	20738.2	19712.4	502.76 ug/L	502.76 ppb	02:37:26
1	P 214.914†	4633.7	4217.2	2441.8 ug/L	2441.8 ppb	02:37:46
1	Pb 220.353†	4288.9	4032.7	500.53 ug/L	500.53 ppb	02:37:46
1	S 181.975 Axial†	810.8	738.1	1039.7 ug/L	1039.7 ppb	02:37:46
1	Sb 206.836†	1529.2	1420.7	519.54 ug/L	519.54 ppb	02:37:46
1	Se 196.026†	785.2	774.2	526.30 ug/L	526.30 ppb	02:37:46
1	Si 251.611†	81193.4	76936.7	2486.2 ug/L	2486.2 ppb	02:37:26
1	Sn 189.927†	2987.2	2842.0	513.17 ug/L	513.17 ppb	02:37:46
1	Ti 334.940†	323707.7	310398.1	488.94 ug/L	488.94 ppb	02:37:26
1	Tl 190.801†	1607.6	1561.9	505.76 ug/L	505.76 ppb	02:37:46
1	U 409.014†	14773.0	17003.1	473.10 ug/L	473.10 ppb	02:37:26
1	V 292.402†	72132.7	70321.4	497.95 ug/L	497.95 ppb	02:37:26
1	Zn 213.857†	53068.7	49916.1	499.30 ug/L	499.30 ppb	02:37:26
1	SiO2†	80733.4	76474.1	5295.7 ug/L	5295.7 ppb	02:38:54
2	Sc Radial	3784.0	3784.0	98.1 %		02:36:49
2	Y RADIAL	4215.6	4215.6	94.70 %		02:36:29
2	Al 396.153Radial†	5470.0	5690.5	5323.0 ug/L	5323.0 ppb	02:36:29
2	Ca 317.933Radial†	2453.0	2481.6	5411.7 ug/L	5411.7 ppb	02:36:49
2	Fe 238.204 Radial†	323.1	317.7	5148.8 ug/L	5148.8 ppb	02:36:49
2	K 766.490 Radial†	29047.7	26842.4	5136.4 ug/L	5136.4 ppb	02:36:29
2	Mg 279.077 IEC†	104.4	105.2	5551.6 ug/L	5551.6 ppb	02:36:49
2	Na 589.592 Radial†	29563.6	31035.0	9657.0 ug/L	9657.0 ppb	02:36:29
2	Sr 421.552†	70096.9	71438.9	496.93 ug/L	496.93 ppb	02:36:29
2	Sc 361.383	904492.7	904492.7	102.77 %		02:37:52
2	Y 371.029	749091.3	749091.3	98.482 %		02:37:52
2	Ag 328.068†	112781.5	109502.4	512.01 ug/L	512.01 ppb	02:37:57
2	As 188.979†	1181.0	1169.0	524.20 ug/L	524.20 ppb	02:38:17
2	B 249.677†	20899.5	20613.3	502.91 ug/L	502.91 ppb	02:37:57
2	Ba 233.527†	67017.8	65197.4	513.75 ug/L	513.75 ppb	02:37:57
2	Be 313.107†	1395296.3	1361184.1	509.73 ug/L	509.73 ppb	02:37:52
2	Cd 226.502†	45732.9	44674.4	519.05 ug/L	519.05 ppb	02:37:57
2	Co 228.616†	25218.1	24602.1	516.83 ug/L	516.83 ppb	02:37:57
2	Cr 267.716†	47090.2	45733.7	514.18 ug/L	514.18 ppb	02:37:57
2	Cu 324.752†	175769.7	165069.1	502.94 ug/L	502.94 ppb	02:37:57
2	Mn 257.610†	458814.6	445949.8	508.33 ug/L	508.33 ppb	02:37:52
2	Mo 202.031†	7172.5	6974.1	514.14 ug/L	514.14 ppb	02:38:17
2	Ni 231.604†	20963.8	20315.0	518.13 ug/L	518.13 ppb	02:37:57

2	P 214.914†	4657.2	4325.6	2503.6 ug/L	2503.6 ppb	02:38:17
2	Pb 220.353†	4297.4	4120.2	511.33 ug/L	511.33 ppb	02:38:17
2	S 181.975 Axial†	802.4	744.9	1049.3 ug/L	1049.3 ppb	02:38:17
2	Sb 206.836†	1528.2	1448.0	529.56 ug/L	529.56 ppb	02:38:17
2	Se 196.026†	792.8	796.1	540.74 ug/L	540.74 ppb	02:38:17
2	Si 251.611†	82308.1	79521.3	2569.8 ug/L	2569.8 ppb	02:37:57
2	Sn 189.927†	2997.5	2907.1	524.91 ug/L	524.91 ppb	02:38:17
2	Ti 334.940†	328315.4	320861.4	505.43 ug/L	505.43 ppb	02:37:57
2	Tl 190.801†	1614.3	1598.2	517.45 ug/L	517.45 ppb	02:38:17
2	U 409.014†	14938.0	17436.6	485.17 ug/L	485.17 ppb	02:37:57
2	V 292.402†	73241.6	72732.9	514.93 ug/L	514.93 ppb	02:37:57
2	Zn 213.857†	53753.1	51562.4	515.79 ug/L	515.79 ppb	02:37:57
2	SiO2†	81431.1	78644.4	5446.1 ug/L	5446.1 ppb	02:38:59
3	Sc Radial	3775.5	3775.5	97.9 %		02:37:14
3	Y RADIAL	4181.2	4181.2	93.92 %		02:36:54
3	Al 396.153Radial†	5489.6	5723.2	5354.0 ug/L	5354.0 ppb	02:36:54
3	Ca 317.933Radial†	2452.6	2486.9	5423.2 ug/L	5423.2 ppb	02:37:14
3	Fe 238.204 Radial†	320.9	316.1	5124.3 ug/L	5124.3 ppb	02:37:14
3	K 766.490 Radial†	29318.0	27185.6	5202.2 ug/L	5202.2 ppb	02:36:54
3	Mg 279.077 IEC†	101.9	102.9	5430.4 ug/L	5430.4 ppb	02:37:14
3	Na 589.592 Radial†	29236.4	30768.9	9574.2 ug/L	9574.2 ppb	02:36:54
3	Sr 421.552†	69748.9	71245.2	495.59 ug/L	495.59 ppb	02:36:54
3	Sc 361.383	909924.8	909924.8	103.39 %		02:38:23
3	Y 371.029	754174.3	754174.3	99.151 %		02:38:23
3	Ag 328.068†	113310.8	109359.2	511.34 ug/L	511.34 ppb	02:38:28
3	As 188.979†	1177.7	1159.0	519.74 ug/L	519.74 ppb	02:38:48
3	B 249.677†	20973.2	20563.2	501.70 ug/L	501.70 ppb	02:38:28
3	Ba 233.527†	67294.2	65075.4	512.79 ug/L	512.79 ppb	02:38:28
3	Be 313.107†	1405596.1	1363041.1	510.43 ug/L	510.43 ppb	02:38:23
3	Cd 226.502†	45886.3	44557.1	517.69 ug/L	517.69 ppb	02:38:28
3	Co 228.616†	25257.8	24494.0	514.54 ug/L	514.54 ppb	02:38:28
3	Cr 267.716†	47273.5	45637.5	513.10 ug/L	513.10 ppb	02:38:28
3	Cu 324.752†	176232.5	164495.8	501.19 ug/L	501.19 ppb	02:38:28
3	Mn 257.610†	461555.7	445935.7	508.32 ug/L	508.32 ppb	02:38:23
3	Mo 202.031†	7111.6	6873.7	506.74 ug/L	506.74 ppb	02:38:48
3	Ni 231.604†	21087.1	20312.5	518.07 ug/L	518.07 ppb	02:38:28
3	P 214.914†	4564.8	4209.2	2433.9 ug/L	2433.9 ppb	02:38:48
3	Pb 220.353†	4257.8	4056.9	503.50 ug/L	503.50 ppb	02:38:48
3	S 181.975 Axial†	795.6	733.6	1033.4 ug/L	1033.4 ppb	02:38:48
3	Sb 206.836†	1520.0	1431.2	523.32 ug/L	523.32 ppb	02:38:48
3	Se 196.026†	766.0	765.6	520.57 ug/L	520.57 ppb	02:38:48
3	Si 251.611†	82698.0	79420.2	2566.6 ug/L	2566.6 ppb	02:38:28
3	Sn 189.927†	2959.1	2852.6	515.08 ug/L	515.08 ppb	02:38:48
3	Ti 334.940†	330072.1	320653.3	505.12 ug/L	505.12 ppb	02:38:28
3	Tl 190.801†	1594.7	1569.8	508.32 ug/L	508.32 ppb	02:38:48
3	U 409.014†	14979.5	17390.0	483.87 ug/L	483.87 ppb	02:38:28
3	V 292.402†	73637.3	72690.2	514.53 ug/L	514.53 ppb	02:38:28
3	Zn 213.857†	53999.8	51488.8	515.06 ug/L	515.06 ppb	02:38:28
3	SiO2†	81897.3	78622.3	5444.7 ug/L	5444.7 ppb	02:39:04

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912138.4	103.64 %	1.018			0.98%
Sc Radial	3756.9	97.4 %	1.03			1.06%
Y 371.029	755665.0	99.347 %	0.9771			0.98%
Y RADIAL	4213.4	94.65 %	0.701			0.74%
Ag 328.068†	108216.2	506.01 ug/L	9.815	506.01 ppb	9.815	1.94%
QC value within limits for Ag 328.068 Recovery = 101.20%						
Al 396.153Radial†	5755.8	5384.6 ug/L	81.38	5384.6 ppb	81.38	1.51%
QC value within limits for Al 396.153Radial Recovery = 107.69%						
As 188.979†	1155.9	518.31 ug/L	6.724	518.31 ppb	6.724	1.30%
QC value within limits for As 188.979 Recovery = 103.66%						
B 249.677†	20332.4	496.05 ug/L	10.853	496.05 ppb	10.853	2.19%
QC value within limits for B 249.677 Recovery = 99.21%						
Ba 233.527†	64415.4	507.59 ug/L	9.849	507.59 ppb	9.849	1.94%
QC value within limits for Ba 233.527 Recovery = 101.52%						
Be 313.107†	1362469.2	510.20 ug/L	0.405	510.20 ppb	0.405	0.08%
QC value within limits for Be 313.107 Recovery = 102.04%						
Ca 317.933Radial†	2488.1	5425.9 ug/L	15.71	5425.9 ppb	15.71	0.29%



QC value within limits for Ca 317.933 Radial Recovery = 108.52%

Cd 226.502†	44156.4	513.03 ug/L	9.278	513.03 ppb	9.278	1.81%
QC value within limits for Cd 226.502 Recovery = 102.61%						
Co 228.616†	24291.0	510.29 ug/L	9.411	510.29 ppb	9.411	1.84%
QC value within limits for Co 228.616 Recovery = 102.06%						
Cr 267.716†	45203.9	508.23 ug/L	9.387	508.23 ppb	9.387	1.85%
QC value within limits for Cr 267.716 Recovery = 101.65%						
Cu 324.752†	162999.2	496.64 ug/L	9.448	496.64 ppb	9.448	1.90%
QC value within limits for Cu 324.752 Recovery = 99.33%						
Fe 238.204 Radial†	317.0	5137.9 ug/L	12.44	5137.9 ppb	12.44	0.24%
QC value within limits for Fe 238.204 Radial Recovery = 102.76%						
K 766.490 Radial†	27216.9	5208.1 ug/L	74.89	5208.1 ppb	74.89	1.44%
QC value within limits for K 766.490 Radial Recovery = 104.16%						
Mg 279.077 IEC†	106.3	5611.3 ug/L	216.96	5611.3 ppb	216.96	3.87%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 112.23%						
Mn 257.610†	445928.1	508.30 ug/L	0.038	508.30 ppb	0.038	0.01%
QC value within limits for Mn 257.610 Recovery = 101.66%						
Mo 202.031†	6896.8	508.45 ug/L	5.065	508.45 ppb	5.065	1.00%
QC value within limits for Mo 202.031 Recovery = 101.69%						
Na 589.592 Radial†	31237.4	9719.9 ug/L	185.47	9719.9 ppb	185.47	1.91%
QC value within limits for Na 589.592 Radial Recovery = 97.20%						
Ni 231.604†	20113.3	512.99 ug/L	8.855	512.99 ppb	8.855	1.73%
QC value within limits for Ni 231.604 Recovery = 102.60%						
P 214.914†	4250.7	2459.8 ug/L	38.19	2459.8 ppb	38.19	1.55%
QC value within limits for P 214.914 Recovery = 98.39%						
Pb 220.353†	4069.9	505.12 ug/L	5.582	505.12 ppb	5.582	1.11%
QC value within limits for Pb 220.353 Recovery = 101.02%						
S 181.975 Axial†	738.9	1040.8 ug/L	8.00	1040.8 ppb	8.00	0.77%
QC value within limits for S 181.975 Axial Recovery = 104.08%						
Sb 206.836†	1433.3	524.14 ug/L	5.059	524.14 ppb	5.059	0.97%
QC value within limits for Sb 206.836 Recovery = 104.83%						
Se 196.026†	778.6	529.20 ug/L	10.392	529.20 ppb	10.392	1.96%
QC value within limits for Se 196.026 Recovery = 105.84%						
Si 251.611†	78626.0	2540.9 ug/L	47.38	2540.9 ppb	47.38	1.86%
QC value within limits for Si 251.611 Recovery = 101.64%						
Sn 189.927†	2867.2	517.72 ug/L	6.302	517.72 ppb	6.302	1.22%
QC value within limits for Sn 189.927 Recovery = 103.54%						
Sr 421.552†	71975.9	500.67 ug/L	7.667	500.67 ppb	7.667	1.53%
QC value within limits for Sr 421.552 Recovery = 100.13%						
Ti 334.940†	317304.3	499.83 ug/L	9.434	499.83 ppb	9.434	1.89%
QC value within limits for Ti 334.940 Recovery = 99.97%						
Tl 190.801†	1576.6	510.51 ug/L	6.144	510.51 ppb	6.144	1.20%
QC value within limits for Tl 190.801 Recovery = 102.10%						
U 409.014†	17276.6	480.71 ug/L	6.623	480.71 ppb	6.623	1.38%
QC value within limits for U 409.014 Recovery = 96.14%						
V 292.402†	71914.8	509.14 ug/L	9.687	509.14 ppb	9.687	1.90%
QC value within limits for V 292.402 Recovery = 101.83%						
Zn 213.857†	50989.1	510.05 ug/L	9.320	510.05 ppb	9.320	1.83%
QC value within limits for Zn 213.857 Recovery = 102.01%						
SiO2†	77913.6	5395.5 ug/L	86.46	5395.5 ppb	86.46	1.60%
QC value within limits for SiO2 Recovery = 100.90%						

QC Failed. Continue with analysis.

Sequence No.: 80

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 02:41:15

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	3750.9	3750.9	97.2 %		02:43:28
1	Y RADIAL	4374.0	4374.0	98.25 %		02:43:08
1	Al 396.153Radial†	-116.9	-5.1	-4.8527 ug/L	-4.8527 ppb	02:43:08
1	Ca 317.933Radial†	28.2	10.3	22.519 ug/L	22.519 ppb	02:43:28
1	Fe 238.204 Radial†	10.2	-1.2	-19.771 ug/L	-19.771 ppb	02:43:28
1	K 766.490 Radial†	2853.7	169.3	32.451 ug/L	32.451 ppb	02:43:08
1	Mg 279.077 IEC†	1.0	-0.1	-5.8713 ug/L	-5.8713 ppb	02:43:28
1	Na 589.592 Radial†	-1010.9	-137.8	-42.883 ug/L	-42.883 ppb	02:43:08
1	Sr 421.552†	78.7	72.2	0.5020 ug/L	0.5020 ppb	02:43:08
1	Sc 361.383	931602.0	931602.0	105.86 %		02:44:24
1	Y 371.029	781766.0	781766.0	102.78 %		02:44:24
1	Ag 328.068†	391.0	135.2	0.6258 ug/L	0.6258 ppb	02:44:29
1	As 188.979†	-27.3	-5.9	-2.6326 ug/L	-2.6326 ppb	02:44:49
1	B 249.677†	-336.3	-39.7	-0.9693 ug/L	-0.9693 ppb	02:44:49
1	Ba 233.527†	20.9	8.7	0.0694 ug/L	0.0694 ppb	02:44:49
1	Be 313.107†	-3650.2	110.0	0.0409 ug/L	0.0409 ppb	02:44:29
1	Cd 226.502†	-191.0	-4.3	-0.0476 ug/L	-0.0476 ppb	02:44:49
1	Co 228.616†	-78.5	-9.3	-0.1948 ug/L	-0.1948 ppb	02:44:49
1	Cr 267.716†	88.5	-1.5	-0.0173 ug/L	-0.0173 ppb	02:44:49
1	Cu 324.752†	6070.5	-220.3	-0.6721 ug/L	-0.6721 ppb	02:44:29
1	Mn 257.610†	509.4	3.6	0.0024 ug/L	0.0024 ppb	02:44:49
1	Mo 202.031†	10.6	5.3	0.3904 ug/L	0.3904 ppb	02:44:49
1	Ni 231.604†	86.8	-0.8	-0.0200 ug/L	-0.0200 ppb	02:44:49
1	P 214.914†	197.5	-19.2	-11.405 ug/L	-11.405 ppb	02:44:49
1	Pb 220.353†	-44.1	-102.9	-12.721 ug/L	-12.721 ppb	02:44:49
1	S 181.975 Axial†	39.3	1.3	1.8557 ug/L	1.8557 ppb	02:44:49
1	Sb 206.836†	37.9	-3.2	-1.1281 ug/L	-1.1281 ppb	02:44:49
1	Se 196.026†	-27.4	-1.2	-0.8178 ug/L	-0.8178 ppb	02:44:49
1	Si 251.611†	662.4	61.0	1.9718 ug/L	1.9718 ppb	02:44:49
1	Sn 189.927†	4.5	-5.2	-0.9348 ug/L	-0.9348 ppb	02:44:49
1	Ti 334.940†	-1533.7	-39.0	-0.0577 ug/L	-0.0577 ppb	02:44:29
1	Tl 190.801†	-35.5	-6.1	-1.9488 ug/L	-1.9488 ppb	02:44:49
1	U 409.014†	-3092.7	-19.7	-0.5492 ug/L	-0.5492 ppb	02:44:24
1	V 292.402†	-1427.0	120.6	0.8498 ug/L	0.8498 ppb	02:44:29
1	Zn 213.857†	788.0	5.0	0.0545 ug/L	0.0545 ppb	02:44:49
1	SiO2†	654.6	30.2	2.0857 ug/L	2.0857 ppb	02:45:55
2	Sc Radial	3768.4	3768.4	97.7 %		02:43:53
2	Y RADIAL	4331.2	4331.2	97.29 %		02:43:33
2	Al 396.153Radial†	-98.2	14.5	13.595 ug/L	13.595 ppb	02:43:33
2	Ca 317.933Radial†	18.3	0.0	0.0121 ug/L	0.0121 ppb	02:43:53
2	Fe 238.204 Radial†	9.3	-2.2	-34.956 ug/L	-34.956 ppb	02:43:53
2	K 766.490 Radial†	2967.3	271.9	52.121 ug/L	52.121 ppb	02:43:33
2	Mg 279.077 IEC†	-0.8	-2.0	-106.60 ug/L	-106.60 ppb	02:43:53
2	Na 589.592 Radial†	-1055.3	-178.4	-55.514 ug/L	-55.514 ppb	02:43:33
2	Sr 421.552†	37.8	30.0	0.2084 ug/L	0.2084 ppb	02:43:33
2	Sc 361.383	922466.5	922466.5	104.82 %		02:44:55
2	Y 371.029	775062.2	775062.2	101.90 %		02:44:55
2	Ag 328.068†	346.7	96.6	0.4384 ug/L	0.4384 ppb	02:45:00
2	As 188.979†	-20.3	0.5	0.2153 ug/L	0.2153 ppb	02:45:20
2	B 249.677†	-357.6	-63.1	-1.5429 ug/L	-1.5429 ppb	02:45:20
2	Ba 233.527†	24.7	12.5	0.0969 ug/L	0.0969 ppb	02:45:20
2	Be 313.107†	-3456.7	260.4	0.0971 ug/L	0.0971 ppb	02:45:00
2	Cd 226.502†	-189.3	-4.4	-0.0479 ug/L	-0.0479 ppb	02:45:20
2	Co 228.616†	-45.7	21.2	0.4498 ug/L	0.4498 ppb	02:45:20
2	Cr 267.716†	85.8	-3.3	-0.0398 ug/L	-0.0398 ppb	02:45:20
2	Cu 324.752†	6038.4	-194.2	-0.5926 ug/L	-0.5926 ppb	02:45:00
2	Mn 257.610†	510.7	9.6	0.0118 ug/L	0.0118 ppb	02:45:20
2	Mo 202.031†	26.6	20.7	1.5249 ug/L	1.5249 ppb	02:45:20
2	Ni 231.604†	108.3	20.5	0.5241 ug/L	0.5241 ppb	02:45:20

2	P 214.914†	198.9	-16.1	-9.5269 ug/L	-9.5269 ppb	02:45:20
2	Pb 220.353†	-53.4	-112.2	-13.864 ug/L	-13.864 ppb	02:45:20
2	S 181.975 Axial†	39.3	1.6	2.2881 ug/L	2.2881 ppb	02:45:20
2	Sb 206.836†	36.3	-4.4	-1.5271 ug/L	-1.5271 ppb	02:45:20
2	Se 196.026†	-33.7	-7.4	-4.9496 ug/L	-4.9496 ppb	02:45:20
2	Si 251.611†	659.2	64.2	2.0619 ug/L	2.0619 ppb	02:45:20
2	Sn 189.927†	9.4	-0.4	-0.0715 ug/L	-0.0715 ppb	02:45:20
2	Ti 334.940†	-1548.5	-67.5	-0.0970 ug/L	-0.0970 ppb	02:45:00
2	Tl 190.801†	-30.0	-1.2	-0.3767 ug/L	-0.3767 ppb	02:45:20
2	U 409.014†	-3096.9	-52.7	-1.4682 ug/L	-1.4682 ppb	02:44:55
2	V 292.402†	-1570.2	-29.3	-0.1827 ug/L	-0.1827 ppb	02:45:00
2	Zn 213.857†	784.5	9.0	0.0936 ug/L	0.0936 ppb	02:45:20
2	SiO2†	651.2	33.1	2.2566 ug/L	2.2566 ppb	02:46:01
3	Sc Radial	3762.4	3762.4	97.5 %		02:44:18
3	Y RADIAL	4221.3	4221.3	94.83 %		02:43:58
3	Al 396.153Radial†	-147.8	-36.5	-34.315 ug/L	-34.315 ppb	02:43:58
3	Ca 317.933Radial†	22.8	4.7	10.255 ug/L	10.255 ppb	02:44:18
3	Fe 238.204 Radial†	8.2	-3.3	-52.778 ug/L	-52.778 ppb	02:44:18
3	K 766.490 Radial†	3044.5	356.0	68.219 ug/L	68.219 ppb	02:43:58
3	Mg 279.077 IEC†	1.8	0.7	36.078 ug/L	36.078 ppb	02:44:18
3	Na 589.592 Radial†	-1057.0	-181.9	-56.592 ug/L	-56.592 ppb	02:43:58
3	Sr 421.552†	48.9	41.4	0.2881 ug/L	0.2881 ppb	02:43:58
3	Sc 361.383	936927.1	936927.1	106.46 %		02:45:25
3	Y 371.029	787232.9	787232.9	103.50 %		02:45:25
3	Ag 328.068†	315.0	61.8	0.2732 ug/L	0.2732 ppb	02:45:30
3	As 188.979†	-19.6	1.5	0.6733 ug/L	0.6733 ppb	02:45:50
3	B 249.677†	-377.2	-76.3	-1.8606 ug/L	-1.8606 ppb	02:45:50
3	Ba 233.527†	14.0	2.1	0.0159 ug/L	0.0159 ppb	02:45:50
3	Be 313.107†	-3567.3	207.4	0.0774 ug/L	0.0774 ppb	02:45:30
3	Cd 226.502†	-198.9	-10.6	-0.1183 ug/L	-0.1183 ppb	02:45:50
3	Co 228.616†	-72.2	-3.0	-0.0617 ug/L	-0.0617 ppb	02:45:50
3	Cr 267.716†	86.8	-3.6	-0.0445 ug/L	-0.0445 ppb	02:45:50
3	Cu 324.752†	5932.9	-382.2	-1.1666 ug/L	-1.1666 ppb	02:45:30
3	Mn 257.610†	508.2	-0.3	-0.0071 ug/L	-0.0071 ppb	02:45:50
3	Mo 202.031†	10.2	5.0	0.3607 ug/L	0.3607 ppb	02:45:50
3	Ni 231.604†	74.8	-12.6	-0.3204 ug/L	-0.3204 ppb	02:45:50
3	P 214.914†	201.6	-16.4	-9.6103 ug/L	-9.6103 ppb	02:45:50
3	Pb 220.353†	-54.5	-112.3	-13.897 ug/L	-13.897 ppb	02:45:50
3	S 181.975 Axial†	40.1	1.8	2.5618 ug/L	2.5618 ppb	02:45:50
3	Sb 206.836†	45.8	4.0	1.4550 ug/L	1.4550 ppb	02:45:50
3	Se 196.026†	-32.2	-5.5	-3.7798 ug/L	-3.7798 ppb	02:45:50
3	Si 251.611†	650.3	46.1	1.4886 ug/L	1.4886 ppb	02:45:50
3	Sn 189.927†	17.8	7.3	1.3197 ug/L	1.3197 ppb	02:45:50
3	Ti 334.940†	-1523.6	-21.3	-0.0346 ug/L	-0.0346 ppb	02:45:30
3	Tl 190.801†	-24.3	4.6	1.4885 ug/L	1.4885 ppb	02:45:50
3	U 409.014†	-3133.1	-41.1	-1.1415 ug/L	-1.1415 ppb	02:45:25
3	V 292.402†	-1502.9	57.0	0.4097 ug/L	0.4097 ppb	02:45:30
3	Zn 213.857†	782.8	-4.2	-0.0304 ug/L	-0.0304 ppb	02:45:50
3	SiO2†	661.6	33.2	2.2984 ug/L	2.2984 ppb	02:46:06

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	930331.9	105.71 %		0.831			0.79%
Sc Radial	3760.6	97.5 %		0.23			0.24%
Y 371.029	781353.7	102.72 %		0.801			0.78%
Y RADIAL	4308.9	96.79 %		1.769			1.83%
Ag 328.068†	97.8	0.4458 ug/L		0.17642	0.4458 ppb	0.17642	39.57%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-9.0	-8.5243 ug/L		24.16474	-8.5243 ppb	24.16474	283.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.3	-0.5813 ug/L		1.79114	-0.5813 ppb	1.79114	308.11%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-59.7	-1.4576 ug/L		0.45169	-1.4576 ppb	0.45169	30.99%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	7.8	0.0607 ug/L		0.04121	0.0607 ppb	0.04121	67.84%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	192.6	0.0718 ug/L		0.02847	0.0718 ppb	0.02847	39.65%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	5.0	10.929 ug/L		11.2683	10.929 ppb	11.2683	103.11%

Cd 226.502†	QC value within limits for Ca 317.933 Radial	Recovery = Not calculated			
	-6.4	-0.0712 ug/L	0.04074	-0.0712 ppb	0.04074 57.18%
Co 228.616†	QC value within limits for Cd 226.502	Recovery = Not calculated			
	3.0	0.0644 ug/L	0.34031	0.0644 ppb	0.34031 528.06%
Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-2.8	-0.0339 ug/L	0.01453	-0.0339 ppb	0.01453 42.92%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	-265.6	-0.8104 ug/L	0.31100	-0.8104 ppb	0.31100 38.37%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	-2.2	-35.835 ug/L	16.5208	-35.835 ppb	16.5208 46.10%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	265.7	50.930 ug/L	17.9134	50.930 ppb	17.9134 35.17%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.5	-25.463 ug/L	73.3268	-25.463 ppb	73.3268 287.97%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	4.3	0.0024 ug/L	0.00943	0.0024 ppb	0.00943 398.89%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	10.3	0.7587 ug/L	0.66374	0.7587 ppb	0.66374 87.49%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-166.0	-51.663 ug/L	7.6230	-51.663 ppb	7.6230 14.76%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	2.4	0.0612 ug/L	0.42811	0.0612 ppb	0.42811 699.27%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-17.2	-10.181 ug/L	1.0608	-10.181 ppb	1.0608 10.42%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-109.1	-13.494 ug/L	0.6696	-13.494 ppb	0.6696 4.96%
S 181.975 Axial†	QC value less than the lower limit for Pb 220.353	Recovery = Not calculated			
	1.6	2.2352 ug/L	0.35604	2.2352 ppb	0.35604 15.93%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	-1.2	-0.4001 ug/L	1.61888	-0.4001 ppb	1.61888 404.66%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-4.7	-3.1824 ug/L	2.12972	-3.1824 ppb	2.12972 66.92%
Si 251.611†	QC value within limits for Se 196.026	Recovery = Not calculated			
	57.1	1.8408 ug/L	0.30832	1.8408 ppb	0.30832 16.75%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	0.6	0.1045 ug/L	1.13750	0.1045 ppb	1.13750 >999.9%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	47.9	0.3329 ug/L	0.15180	0.3329 ppb	0.15180 45.60%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	-42.6	-0.0631 ug/L	0.03154	-0.0631 ppb	0.03154 50.00%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	-0.9	-0.2790 ug/L	1.72073	-0.2790 ppb	1.72073 616.76%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-37.9	-1.0530 ug/L	0.46585	-1.0530 ppb	0.46585 44.24%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	49.4	0.3589 ug/L	0.51812	0.3589 ppb	0.51812 144.35%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	3.3	0.0392 ug/L	0.06342	0.0392 ppb	0.06342 161.70%
SiO2†	QC value within limits for Zn 213.857	Recovery = Not calculated			
	32.2	2.2136 ug/L	0.11270	2.2136 ppb	0.11270 5.09%
	QC value within limits for SiO2	Recovery = Not calculated			
	QC Failed. Continue with analysis.				

2/26/2010 08:23:16 Hg ReAlign... Actual peak offset (nm): -0.009  
Drift (nm): 0.000 Slit adjustment: 0

## Analysis Begun

Start Time: 2/26/2010 08:24:02 Plasma On Time: 00:00:00  
Logged In Analyst: Optima3 Technique: ICP Continuous  
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022610.sif

Batch ID:

Results Data Set: 022610

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

## Method Loaded

Method Name: General Eng.2AX

IEC File: 011110.iec

Method Description:

Method Last Saved: 2/25/2010 13:59:42

MSF File:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Sample ID: S0

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 08:24:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	3734.0	3734.0	0.000 %	08:26:17
1	Y RADIAL	4283.7	4283.7	0.000 %	08:25:57
1	Al 396.153Radial†	-115.2	-115.2	[0.00] ug/L	08:25:57
1	Ca 317.933Radial†	14.8	14.8	[0.00] ug/L	08:26:17
1	Fe 238.204 Radial†	8.7	8.7	[0.00] ug/L	08:26:17
1	K 766.490 Radial†	3032.4	3033.2	[0.00] ug/L	08:25:57
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	08:26:17
1	Na 589.592 Radial†	-1042.2	-1042.5	[0.00] ug/L	08:25:57
1	Sr 421.552†	19.9	19.9	[0.00] ug/L	08:25:57
1	Sc 361.383	948591.5	948591.5	0.0000 %	08:27:13
1	Y 371.029	803746.8	803746.8	0.0000 %	08:27:13
1	Ag 328.068†	418.3	415.6	[0.00] ug/L	08:27:18
1	As 188.979†	-20.3	-20.2	[0.00] ug/L	08:27:38
1	B 249.677†	-767.0	-762.1	[0.00] ug/L	08:27:38
1	Ba 233.527†	15.5	15.4	[0.00] ug/L	08:27:38
1	Be 313.107†	-3856.0	-3831.1	[0.00] ug/L	08:27:18
1	Cd 226.502†	-187.5	-186.3	[0.00] ug/L	08:27:38
1	Co 228.616†	-72.9	-72.4	[0.00] ug/L	08:27:38
1	Cr 267.716†	69.8	69.4	[0.00] ug/L	08:27:38
1	Cu 324.752†	6275.4	6234.9	[0.00] ug/L	08:27:18
1	Mn 257.610†	497.8	494.5	[0.00] ug/L	08:27:38
1	Mo 202.031†	12.8	12.7	[0.00] ug/L	08:27:38
1	Ni 231.604†	81.5	80.9	[0.00] ug/L	08:27:38
1	P 214.914†	209.5	208.1	[0.00] ug/L	08:27:38
1	Pb 220.353†	8.8	8.7	[0.00] ug/L	08:27:38
1	S 181.975 Axial†	42.6	42.3	[0.00] ug/L	08:27:38
1	Sb 206.836†	31.1	30.9	[0.00] ug/L	08:27:38
1	Se 196.026†	-21.6	-21.5	[0.00] ug/L	08:27:38
1	Si 251.611†	606.3	602.4	[0.00] ug/L	08:27:38
1	Sn 189.927†	14.8	14.7	[0.00] ug/L	08:27:38
1	Ti 334.940†	-1600.3	-1590.0	[0.00] ug/L	08:27:18
1	Tl 190.801†	-35.3	-35.1	[0.00] ug/L	08:27:38
1	U 409.014†	-3298.6	-3277.3	[0.00] ug/L	08:27:13
1	V 292.402†	-1638.0	-1627.5	[0.00] ug/L	08:27:18
1	Zn 213.857†	647.6	643.5	[0.00] ug/L	08:27:38
1	SiO2†	610.2	606.3	[0.00] ug/L	08:28:44
2	Sc Radial	3731.7	3731.7	0.000 %	08:26:42
2	Y RADIAL	4215.8	4215.8	0.000 %	08:26:22
2	Al 396.153Radial†	-155.9	-156.0	[0.00] ug/L	08:26:22
2	Ca 317.933Radial†	13.6	13.6	[0.00] ug/L	08:26:42
2	Fe 238.204 Radial†	11.3	11.3	[0.00] ug/L	08:26:42
2	K 766.490 Radial†	2963.9	2966.6	[0.00] ug/L	08:26:22
2	Mg 279.077 IEC†	3.0	3.0	[0.00] ug/L	08:26:42
2	Na 589.592 Radial†	-1057.7	-1058.7	[0.00] ug/L	08:26:22
2	Sr 421.552†	34.3	34.3	[0.00] ug/L	08:26:22
2	Sc 361.383	938830.1	938830.1	0.0000 %	08:27:44
2	Y 371.029	795441.5	795441.5	0.0000 %	08:27:44
2	Ag 328.068†	355.9	357.3	[0.00] ug/L	08:27:49
2	As 188.979†	-27.5	-27.6	[0.00] ug/L	08:28:09
2	B 249.677†	-728.7	-731.6	[0.00] ug/L	08:28:09
2	Ba 233.527†	14.9	14.9	[0.00] ug/L	08:28:09
2	Be 313.107†	-3787.9	-3802.6	[0.00] ug/L	08:27:49
2	Cd 226.502†	-176.7	-177.4	[0.00] ug/L	08:28:09
2	Co 228.616†	-52.0	-52.2	[0.00] ug/L	08:28:09
2	Cr 267.716†	66.2	66.5	[0.00] ug/L	08:28:09
2	Cu 324.752†	6360.3	6384.9	[0.00] ug/L	08:27:49
2	Mn 257.610†	470.7	472.5	[0.00] ug/L	08:28:09
2	Mo 202.031†	13.2	13.2	[0.00] ug/L	08:28:09
2	Ni 231.604†	86.4	86.7	[0.00] ug/L	08:28:09
2	P 214.914†	204.3	205.1	[0.00] ug/L	08:28:09
2	Pb 220.353†	-0.4	-0.4	[0.00] ug/L	08:28:09
2	S 181.975 Axial†	39.4	39.5	[0.00] ug/L	08:28:09
2	Sb 206.836†	33.8	33.9	[0.00] ug/L	08:28:09
2	Se 196.026†	-26.4	-26.5	[0.00] ug/L	08:28:09
2	Si 251.611†	617.9	620.3	[0.00] ug/L	08:28:09
2	Sn 189.927†	11.2	11.2	[0.00] ug/L	08:28:09
2	Ti 334.940†	-1679.6	-1686.1	[0.00] ug/L	08:27:49
2	Tl 190.801†	-31.1	-31.3	[0.00] ug/L	08:28:09
2	U 409.014†	-3284.8	-3297.5	[0.00] ug/L	08:27:44
2	V 292.402†	-1602.9	-1609.1	[0.00] ug/L	08:27:49

2	Zn 213.857†	658.8	661.4	[0.00]	ug/L	08:28:09
2	SiO2†	614.4	616.8	[0.00]	ug/L	08:28:49
3	Sc Radial	3739.6	3739.6	0.000	%	08:27:07
3	Y RADIAL	4246.0	4246.0	0.000	%	08:26:47
3	Al 396.153Radial†	-148.6	-148.4	[0.00]	ug/L	08:26:47
3	Ca 317.933Radial†	13.5	13.5	[0.00]	ug/L	08:27:07
3	Fe 238.204 Radial†	11.1	11.1	[0.00]	ug/L	08:27:07
3	K 766.490 Radial†	3025.1	3021.5	[0.00]	ug/L	08:26:47
3	Mg 279.077 IEC†	2.5	2.5	[0.00]	ug/L	08:27:07
3	Na 589.592 Radial†	-1003.4	-1002.2	[0.00]	ug/L	08:26:47
3	Sr 421.552†	35.7	35.6	[0.00]	ug/L	08:26:47
3	Sc 361.383	939973.9	939973.9	0.0000	%	08:28:14
3	Y 371.029	796696.0	796696.0	0.0000	%	08:28:14
3	Ag 328.068†	335.4	336.3	[0.00]	ug/L	08:28:19
3	As 188.979†	-31.4	-31.5	[0.00]	ug/L	08:28:39
3	B 249.677†	-706.6	-708.5	[0.00]	ug/L	08:28:39
3	Ba 233.527†	14.9	14.9	[0.00]	ug/L	08:28:39
3	Be 313.107†	-3846.9	-3857.1	[0.00]	ug/L	08:28:19
3	Cd 226.502†	-181.9	-182.3	[0.00]	ug/L	08:28:39
3	Co 228.616†	-68.8	-68.9	[0.00]	ug/L	08:28:39
3	Cr 267.716†	70.8	70.9	[0.00]	ug/L	08:28:39
3	Cu 324.752†	6195.8	6212.2	[0.00]	ug/L	08:28:19
3	Mn 257.610†	476.0	477.3	[0.00]	ug/L	08:28:39
3	Mo 202.031†	10.1	10.1	[0.00]	ug/L	08:28:39
3	Ni 231.604†	58.7	58.9	[0.00]	ug/L	08:28:39
3	P 214.914†	218.0	218.6	[0.00]	ug/L	08:28:39
3	Pb 220.353†	6.6	6.6	[0.00]	ug/L	08:28:39
3	S 181.975 Axial†	42.5	42.6	[0.00]	ug/L	08:28:39
3	Sb 206.836†	30.1	30.2	[0.00]	ug/L	08:28:39
3	Se 196.026†	-28.2	-28.3	[0.00]	ug/L	08:28:39
3	Si 251.611†	598.5	600.1	[0.00]	ug/L	08:28:39
3	Sn 189.927†	22.8	22.8	[0.00]	ug/L	08:28:39
3	Ti 334.940†	-1658.5	-1662.9	[0.00]	ug/L	08:28:19
3	Tl 190.801†	-43.6	-43.7	[0.00]	ug/L	08:28:39
3	U 409.014†	-3321.9	-3330.7	[0.00]	ug/L	08:28:14
3	V 292.402†	-1676.1	-1680.6	[0.00]	ug/L	08:28:19
3	Zn 213.857†	654.3	656.0	[0.00]	ug/L	08:28:39
3	SiO2†	617.3	618.9	[0.00]	ug/L	08:28:55

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Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	942465.2	5336.32	0.57%	0.0000 %
Sc Radial	3735.1	4.04	0.11%	0.000 %
Y 371.029	798628.1	4477.09	0.56%	0.0000 %
Y RADIAL	4248.5	34.03	0.80%	0.000 %
Ag 328.068†	369.7	41.08	11.11%	[0.00] ug/L
Al 396.153Radial†	-139.9	21.70	15.51%	[0.00] ug/L
As 188.979†	-26.4	5.75	21.75%	[0.00] ug/L
B 249.677†	-734.0	26.86	3.66%	[0.00] ug/L
Ba 233.527†	15.1	0.27	1.76%	[0.00] ug/L
Be 313.107†	-3830.2	27.27	0.71%	[0.00] ug/L
Ca 317.933Radial†	14.0	0.71	5.06%	[0.00] ug/L
Cd 226.502†	-182.0	4.47	2.45%	[0.00] ug/L
Co 228.616†	-64.5	10.83	16.79%	[0.00] ug/L
Cr 267.716†	68.9	2.26	3.28%	[0.00] ug/L
Cu 324.752†	6277.3	93.87	1.50%	[0.00] ug/L
Fe 238.204 Radial†	10.3	1.45	14.03%	[0.00] ug/L
K 766.490 Radial†	3007.1	35.55	1.18%	[0.00] ug/L
Mg 279.077 IEC†	2.5	0.57	23.31%	[0.00] ug/L
Mn 257.610†	481.4	11.59	2.41%	[0.00] ug/L
Mo 202.031†	12.0	1.67	13.86%	[0.00] ug/L
Na 589.592 Radial†	-1034.4	29.11	2.81%	[0.00] ug/L
Ni 231.604†	75.5	14.70	19.47%	[0.00] ug/L
P 214.914†	210.6	7.08	3.36%	[0.00] ug/L
Pb 220.353†	5.0	4.76	95.46%	[0.00] ug/L
S 181.975 Axial†	41.5	1.71	4.11%	[0.00] ug/L
Sb 206.836†	31.7	1.97	6.22%	[0.00] ug/L
Se 196.026†	-25.4	3.51	13.82%	[0.00] ug/L
Si 251.611†	607.6	11.07	1.82%	[0.00] ug/L

Sn 189.927†	16.3	5.95	36.60%	[0.00]	ug/L
Sr 421.552†	30.0	8.72	29.11%	[0.00]	ug/L
Ti 334.940†	-1646.3	50.17	3.05%	[0.00]	ug/L
Tl 190.801†	-36.7	6.39	17.41%	[0.00]	ug/L
U 409.014†	-3301.8	26.97	0.82%	[0.00]	ug/L
V 292.402†	-1639.0	37.13	2.27%	[0.00]	ug/L
Zn 213.857†	653.6	9.20	1.41%	[0.00]	ug/L
SiO2†	614.0	6.76	1.10%	[0.00]	ug/L



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

Autosampler Location: 2  
 Date Collected: 2/26/2010 08:31:05  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	3818.6	3818.6	102 %		08:33:17
1	Y RADIAL	4217.4	4217.4	99.27 %		08:33:17
1	K 766.490 Radial†	7884.1	4704.6	[1000] ug/L		08:32:57
1	Sr 421.552†	12963.5	12650.2	[100] ug/L		08:33:17
1	Sc 361.383	937112.5	937112.5	99.432 %		08:34:14
1	Y 371.029	791270.6	791270.6	99.079 %		08:34:14
1	Ag 328.068†	22003.2	21759.2	[100] ug/L		08:34:14
1	As 188.979†	208.3	235.9	[100] ug/L		08:34:34
1	B 249.677†	3174.6	3926.8	[100] ug/L		08:34:34
1	Ba 233.527†	13008.5	13067.7	[100] ug/L		08:34:14
1	Be 313.107†	270769.6	276146.4	[100] ug/L		08:34:14
1	Cd 226.502†	8700.1	8931.8	[100] ug/L		08:34:34
1	Co 228.616†	4779.2	4871.0	[100] ug/L		08:34:34
1	Cr 267.716†	9406.2	9391.0	[100] ug/L		08:34:14
1	Cu 324.752†	38914.3	32859.3	[100] ug/L		08:34:14
1	Mn 257.610†	91442.4	91483.3	[100] ug/L		08:34:14
1	Mo 202.031†	1396.0	1391.9	[100] ug/L		08:34:34
1	Ni 231.604†	4161.8	4110.0	[100] ug/L		08:34:34
1	P 214.914†	1061.5	856.9	[500] ug/L		08:34:34
1	Pb 220.353†	857.1	857.0	[100] ug/L		08:34:34
1	S 181.975 Axial†	188.8	148.3	[200] ug/L		08:34:34
1	Sb 206.836†	310.4	280.5	[100] ug/L		08:34:34
1	Se 196.026†	127.8	154.0	[100] ug/L		08:34:34
1	Si 251.611†	16057.2	15541.3	[500] ug/L		08:34:14
1	Sn 189.927†	587.5	574.6	[100] ug/L		08:34:34
1	Ti 334.940†	62761.8	64766.6	[100] ug/L		08:34:14
1	Tl 190.801†	287.1	325.5	[100] ug/L		08:34:34
1	U 409.014†	636.9	3942.4	[100] ug/L		08:34:14
1	V 292.402†	12976.7	14689.9	[100] ug/L		08:34:14
1	Zn 213.857†	10600.1	10007.0	[100] ug/L		08:34:34
1	SiO2†	15994.4	15471.8	[1069.5] ug/L		08:35:31
2	Sc Radial	3800.9	3800.9	102 %		08:33:42
2	Y RADIAL	4201.8	4201.8	98.90 %		08:33:42
2	K 766.490 Radial†	8043.0	4896.7	[1000] ug/L		08:33:22
2	Sr 421.552†	12926.6	12672.9	[100] ug/L		08:33:42
2	Sc 361.383	942402.8	942402.8	99.993 %		08:34:40
2	Y 371.029	796071.0	796071.0	99.680 %		08:34:40
2	Ag 328.068†	22216.1	21847.9	[100] ug/L		08:34:40
2	As 188.979†	205.1	231.6	[100] ug/L		08:35:00
2	B 249.677†	3262.1	3996.4	[100] ug/L		08:35:00
2	Ba 233.527†	13116.9	13102.7	[100] ug/L		08:34:40
2	Be 313.107†	273436.1	277284.5	[100] ug/L		08:34:40
2	Cd 226.502†	8839.0	9021.6	[100] ug/L		08:35:00
2	Co 228.616†	4877.9	4942.7	[100] ug/L		08:35:00
2	Cr 267.716†	9467.5	9399.2	[100] ug/L		08:34:40
2	Cu 324.752†	39098.8	32824.0	[100] ug/L		08:34:40
2	Mn 257.610†	92073.9	91598.6	[100] ug/L		08:34:40
2	Mo 202.031†	1412.8	1400.8	[100] ug/L		08:35:00
2	Ni 231.604†	4260.3	4185.1	[100] ug/L		08:35:00
2	P 214.914†	1078.7	868.2	[500] ug/L		08:35:00
2	Pb 220.353†	871.8	866.8	[100] ug/L		08:35:00
2	S 181.975 Axial†	191.6	150.1	[200] ug/L		08:35:00
2	Sb 206.836†	333.4	301.8	[100] ug/L		08:35:00
2	Se 196.026†	129.0	154.5	[100] ug/L		08:35:00
2	Si 251.611†	16205.5	15598.9	[500] ug/L		08:34:40
2	Sn 189.927†	597.7	581.5	[100] ug/L		08:35:00
2	Ti 334.940†	63227.6	64878.1	[100] ug/L		08:34:40
2	Tl 190.801†	301.9	338.6	[100] ug/L		08:35:00
2	U 409.014†	600.2	3902.0	[100] ug/L		08:34:40

2	V 292.402†	13044.1	14684.0	[100]	ug/L	08:34:40
2	Zn 213.857†	10782.1	10129.2	[100]	ug/L	08:35:00
2	SiO2†	16085.0	15472.1	[1069.5]	ug/L	08:35:37
3	Sc Radial	3830.1	3830.1	103	%	08:34:07
3	Y RADIAL	4259.1	4259.1	100.2	%	08:34:07
3	K 766.490 Radial†	8120.7	4912.3	[1000]	ug/L	08:33:47
3	Sr 421.552†	13095.5	12740.9	[100]	ug/L	08:34:07
3	Sc 361.383	925538.5	925538.5	98.204	%	08:35:06
3	Y 371.029	781380.0	781380.0	97.840	%	08:35:06
3	Ag 328.068†	21864.7	21894.8	[100]	ug/L	08:35:06
3	As 188.979†	208.0	238.3	[100]	ug/L	08:35:26
3	B 249.677†	3241.5	4034.8	[100]	ug/L	08:35:26
3	Ba 233.527†	12931.6	13153.0	[100]	ug/L	08:35:06
3	Be 313.107†	267949.5	276680.1	[100]	ug/L	08:35:06
3	Cd 226.502†	8774.7	9117.1	[100]	ug/L	08:35:26
3	Co 228.616†	4849.1	5002.4	[100]	ug/L	08:35:26
3	Cr 267.716†	9279.2	9379.9	[100]	ug/L	08:35:06
3	Cu 324.752†	38457.6	32883.6	[100]	ug/L	08:35:06
3	Mn 257.610†	90686.4	91863.4	[100]	ug/L	08:35:06
3	Mo 202.031†	1416.8	1430.7	[100]	ug/L	08:35:26
3	Ni 231.604†	4228.6	4230.4	[100]	ug/L	08:35:26
3	P 214.914†	1066.4	875.3	[500]	ug/L	08:35:26
3	Pb 220.353†	871.2	882.1	[100]	ug/L	08:35:26
3	S 181.975 Axial†	183.1	145.0	[200]	ug/L	08:35:26
3	Sb 206.836†	334.0	308.5	[100]	ug/L	08:35:26
3	Se 196.026†	127.9	155.6	[100]	ug/L	08:35:26
3	Si 251.611†	15907.4	15590.7	[500]	ug/L	08:35:06
3	Sn 189.927†	586.9	581.4	[100]	ug/L	08:35:26
3	Ti 334.940†	62116.2	64898.5	[100]	ug/L	08:35:06
3	Tl 190.801†	289.2	331.2	[100]	ug/L	08:35:26
3	U 409.014†	608.4	3921.4	[100]	ug/L	08:35:06
3	V 292.402†	12677.6	14548.5	[100]	ug/L	08:35:06
3	Zn 213.857†	10694.0	10236.0	[100]	ug/L	08:35:26
3	SiO2†	16180.2	15862.1	[1069.5]	ug/L	08:35:42

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	935018.0	8625.04	0.92%	99.210	%
Sc Radial	3816.5	14.70	0.39%	102	%
Y 371.029	789573.8	7491.05	0.95%	98.866	%
Y RADIAL	4226.1	29.62	0.70%	99.47	%
Ag 328.068†	21834.0	68.89	0.32%	[100]	ug/L
As 188.979†	235.2	3.41	1.45%	[100]	ug/L
B 249.677†	3986.0	54.77	1.37%	[100]	ug/L
Ba 233.527†	13107.8	42.89	0.33%	[100]	ug/L
Be 313.107†	276703.6	569.40	0.21%	[100]	ug/L
Cd 226.502†	9023.5	92.68	1.03%	[100]	ug/L
Co 228.616†	4938.7	65.75	1.33%	[100]	ug/L
Cr 267.716†	9390.0	9.66	0.10%	[100]	ug/L
Cu 324.752†	32855.6	29.98	0.09%	[100]	ug/L
K 766.490 Radial†	4837.8	115.66	2.39%	[1000]	ug/L
Mn 257.610†	91648.4	194.93	0.21%	[100]	ug/L
Mo 202.031†	1407.8	20.31	1.44%	[100]	ug/L
Ni 231.604†	4175.2	60.78	1.46%	[100]	ug/L
P 214.914†	866.8	9.26	1.07%	[500]	ug/L
Pb 220.353†	868.7	12.65	1.46%	[100]	ug/L
S 181.975 Axial†	147.8	2.59	1.76%	[200]	ug/L
Sb 206.836†	296.9	14.61	4.92%	[100]	ug/L
Se 196.026†	154.7	0.86	0.56%	[100]	ug/L
Si 251.611†	15577.0	31.20	0.20%	[500]	ug/L
Sn 189.927†	579.1	3.98	0.69%	[100]	ug/L
Sr 421.552†	12688.0	47.20	0.37%	[100]	ug/L
Ti 334.940†	64847.7	71.03	0.11%	[100]	ug/L
Tl 190.801†	331.7	6.60	1.99%	[100]	ug/L
U 409.014†	3921.9	20.17	0.51%	[100]	ug/L
V 292.402†	14640.8	80.03	0.55%	[100]	ug/L
Zn 213.857†	10124.1	114.59	1.13%	[100]	ug/L
SiO2†	15602.0	225.27	1.44%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/26/2010 08:37:52

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	3643.8	3643.8	97.6	%	08:40:04
1	Y RADIAL	4192.6	4192.6	98.68	%	08:39:44
1	Al 396.153Radial†	5283.3	5555.6	[5000]	ug/L	08:39:44
1	Ca 317.933Radial†	2320.0	2364.2	[5000]	ug/L	08:40:04
1	K 766.490 Radial†	28309.5	26011.8	[5000]	ug/L	08:39:44
1	Mg 279.077 IEC†	94.3	94.2	[5000]	ug/L	08:40:04
1	Sr 421.552†	64572.5	66160.7	[500]	ug/L	08:39:44
1	Sc 361.383	927004.0	927004.0	98.359	%	08:41:02
1	Y 371.029	774996.2	774996.2	97.041	%	08:41:02
1	Ag 328.068†	108742.5	110186.5	[500]	ug/L	08:41:07
1	As 188.979†	1178.0	1224.1	[500]	ug/L	08:41:27
1	B 249.677†	19833.0	20897.9	[500]	ug/L	08:41:07
1	Ba 233.527†	64009.2	65061.7	[500]	ug/L	08:41:07
1	Be 313.107†	1397465.5	1424603.6	[500]	ug/L	08:41:07
1	Cd 226.502†	44869.9	45800.3	[500]	ug/L	08:41:07
1	Co 228.616†	24123.7	24590.6	[500]	ug/L	08:41:07
1	Cr 267.716†	45915.0	46611.8	[500]	ug/L	08:41:07
1	Cu 324.752†	167212.7	163724.2	[500]	ug/L	08:41:07
1	Mn 257.610†	452831.1	459902.3	[500]	ug/L	08:41:02
1	Mo 202.031†	7091.5	7197.8	[500]	ug/L	08:41:27
1	Ni 231.604†	20477.2	20743.2	[500]	ug/L	08:41:07
1	P 214.914†	4632.7	4499.3	[2500]	ug/L	08:41:27
1	Pb 220.353†	4328.4	4395.6	[500]	ug/L	08:41:27
1	S 181.975 Axial†	797.6	769.4	[1000]	ug/L	08:41:27
1	Sb 206.836†	1507.6	1501.1	[500]	ug/L	08:41:27
1	Se 196.026†	796.6	835.3	[500]	ug/L	08:41:27
1	Si 251.611†	78834.4	79541.6	[2500]	ug/L	08:41:07
1	Sn 189.927†	2997.9	3031.6	[500]	ug/L	08:41:27
1	Ti 334.940†	312618.9	319479.3	[500]	ug/L	08:41:07
1	Tl 190.801†	1608.3	1671.8	[500]	ug/L	08:41:27
1	U 409.014†	14065.3	17601.7	[500]	ug/L	08:41:07
1	V 292.402†	71029.7	73853.4	[500]	ug/L	08:41:07
1	Zn 213.857†	51986.9	52200.4	[500]	ug/L	08:41:07
1	SiO2†	81076.4	81814.7	[5347.5]	ug/L	08:42:34
2	Sc Radial	3680.4	3680.4	98.5	%	08:40:29
2	Y RADIAL	4114.8	4114.8	96.85	%	08:40:09
2	Al 396.153Radial†	5218.3	5435.8	[5000]	ug/L	08:40:09
2	Ca 317.933Radial†	2349.6	2370.5	[5000]	ug/L	08:40:29
2	K 766.490 Radial†	28191.5	25603.5	[5000]	ug/L	08:40:09
2	Mg 279.077 IEC†	95.8	94.8	[5000]	ug/L	08:40:29
2	Sr 421.552†	64193.9	65118.4	[500]	ug/L	08:40:09
2	Sc 361.383	931661.2	931661.2	98.854	%	08:41:33
2	Y 371.029	777979.1	777979.1	97.414	%	08:41:33
2	Ag 328.068†	110453.8	111364.9	[500]	ug/L	08:41:38
2	As 188.979†	1170.5	1210.5	[500]	ug/L	08:41:58
2	B 249.677†	20342.9	21312.9	[500]	ug/L	08:41:38
2	Ba 233.527†	65374.1	66117.1	[500]	ug/L	08:41:38
2	Be 313.107†	1408027.5	1428185.9	[500]	ug/L	08:41:33
2	Cd 226.502†	45731.0	46443.4	[500]	ug/L	08:41:38
2	Co 228.616†	24589.0	24938.7	[500]	ug/L	08:41:38
2	Cr 267.716†	46661.5	47133.7	[500]	ug/L	08:41:38
2	Cu 324.752†	169902.5	165595.4	[500]	ug/L	08:41:38
2	Mn 257.610†	456459.4	461271.2	[500]	ug/L	08:41:33
2	Mo 202.031†	7050.4	7120.1	[500]	ug/L	08:41:58
2	Ni 231.604†	20844.8	21011.1	[500]	ug/L	08:41:38
2	P 214.914†	4613.6	4456.4	[2500]	ug/L	08:41:58
2	Pb 220.353†	4280.4	4325.0	[500]	ug/L	08:41:58
2	S 181.975 Axial†	798.7	766.4	[1000]	ug/L	08:41:58
2	Sb 206.836†	1520.4	1506.3	[500]	ug/L	08:41:58

2	Se 196.026†	770.9	805.2	[500]	ug/L	08:41:58
2	Si 251.611†	80324.4	80648.2	[2500]	ug/L	08:41:38
2	Sn 189.927†	2979.4	2997.7	[500]	ug/L	08:41:58
2	Ti 334.940†	318118.6	323454.0	[500]	ug/L	08:41:38
2	Tl 190.801†	1596.4	1651.6	[500]	ug/L	08:41:58
2	U 409.014†	14314.4	17782.2	[500]	ug/L	08:41:38
2	V 292.402†	72161.4	74637.3	[500]	ug/L	08:41:38
2	Zn 213.857†	53067.7	53029.5	[500]	ug/L	08:41:38
2	SiO2†	81037.4	81363.2	[5347.5]	ug/L	08:42:39
3	Sc Radial	3654.7	3654.7	97.8	%	08:40:54
3	Y RADIAL	4150.6	4150.6	97.70	%	08:40:34
3	Al 396.153Radial†	5257.2	5512.7	[5000]	ug/L	08:40:34
3	Ca 317.933Radial†	2331.8	2369.1	[5000]	ug/L	08:40:54
3	K 766.490 Radial†	28263.8	25878.4	[5000]	ug/L	08:40:34
3	Mg 279.077 IEC†	95.0	94.7	[5000]	ug/L	08:40:54
3	Sr 421.552†	64529.8	65919.2	[500]	ug/L	08:40:34
3	Sc 361.383	923603.3	923603.3	97.999	%	08:42:04
3	Y 371.029	771159.5	771159.5	96.561	%	08:42:04
3	Ag 328.068†	109922.6	111797.7	[500]	ug/L	08:42:09
3	As 188.979†	1189.3	1240.0	[500]	ug/L	08:42:29
3	B 249.677†	20252.7	21400.3	[500]	ug/L	08:42:09
3	Ba 233.527†	64967.2	66278.9	[500]	ug/L	08:42:09
3	Be 313.107†	1390045.9	1422263.7	[500]	ug/L	08:42:04
3	Cd 226.502†	45400.1	46509.2	[500]	ug/L	08:42:09
3	Co 228.616†	24425.9	24989.2	[500]	ug/L	08:42:09
3	Cr 267.716†	46394.7	47273.2	[500]	ug/L	08:42:09
3	Cu 324.752†	169136.2	166313.0	[500]	ug/L	08:42:09
3	Mn 257.610†	452042.1	460792.3	[500]	ug/L	08:42:04
3	Mo 202.031†	7111.7	7244.9	[500]	ug/L	08:42:29
3	Ni 231.604†	20767.1	21115.7	[500]	ug/L	08:42:09
3	P 214.914†	4637.8	4521.9	[2500]	ug/L	08:42:29
3	Pb 220.353†	4309.6	4392.6	[500]	ug/L	08:42:29
3	S 181.975 Axial†	800.3	775.2	[1000]	ug/L	08:42:29
3	Sb 206.836†	1513.2	1512.4	[500]	ug/L	08:42:29
3	Se 196.026†	795.6	837.2	[500]	ug/L	08:42:29
3	Si 251.611†	79819.6	80842.0	[2500]	ug/L	08:42:09
3	Sn 189.927†	2982.1	3026.7	[500]	ug/L	08:42:29
3	Ti 334.940†	316680.9	324794.6	[500]	ug/L	08:42:09
3	Tl 190.801†	1607.4	1676.9	[500]	ug/L	08:42:29
3	U 409.014†	14357.3	17952.3	[500]	ug/L	08:42:09
3	V 292.402†	71695.0	74798.2	[500]	ug/L	08:42:09
3	Zn 213.857†	52793.4	53217.9	[500]	ug/L	08:42:09
3	SiO2†	81165.9	82209.4	[5347.5]	ug/L	08:42:44

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Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	927422.8	4045.26	0.44%	98.404 %
Sc Radial	3659.6	18.78	0.51%	98.0 %
Y 371.029	774711.6	3418.67	0.44%	97.005 %
Y RADIAL	4152.7	38.93	0.94%	97.74 %
Ag 328.068†	111116.4	833.85	0.75%	[500] ug/L
Al 396.153Radial†	5501.4	60.71	1.10%	[5000] ug/L
As 188.979†	1224.9	14.79	1.21%	[500] ug/L
B 249.677†	21203.7	268.44	1.27%	[500] ug/L
Ba 233.527†	65819.2	661.00	1.00%	[500] ug/L
Be 313.107†	1425017.7	2982.71	0.21%	[500] ug/L
Ca 317.933Radial†	2368.0	3.32	0.14%	[5000] ug/L
Cd 226.502†	46251.0	391.69	0.85%	[500] ug/L
Co 228.616†	24839.5	217.03	0.87%	[500] ug/L
Cr 267.716†	47006.2	348.62	0.74%	[500] ug/L
Cu 324.752†	165210.9	1336.57	0.81%	[500] ug/L
K 766.490 Radial†	25831.2	208.19	0.81%	[5000] ug/L
Mg 279.077 IEC†	94.6	0.31	0.33%	[5000] ug/L
Mn 257.610†	460655.3	694.66	0.15%	[500] ug/L
Mo 202.031†	7187.6	63.02	0.88%	[500] ug/L
Ni 231.604†	20956.7	192.12	0.92%	[500] ug/L
P 214.914†	4492.5	33.24	0.74%	[2500] ug/L
Pb 220.353†	4371.1	39.93	0.91%	[500] ug/L
S 181.975 Axial†	770.3	4.44	0.58%	[1000] ug/L

Sb 206.836†	1506.6	5.66	0.38%	[500]	ug/L
Se 196.026†	825.9	17.94	2.17%	[500]	ug/L
Si 251.611†	80344.0	701.58	0.87%	[2500]	ug/L
Sn 189.927†	3018.7	18.32	0.61%	[500]	ug/L
Sr 421.552†	65732.8	545.57	0.83%	[500]	ug/L
Ti 334.940†	322576.0	2764.26	0.86%	[500]	ug/L
Tl 190.801†	1666.8	13.40	0.80%	[500]	ug/L
U 409.014†	17778.8	175.34	0.99%	[500]	ug/L
V 292.402†	74429.6	505.45	0.68%	[500]	ug/L
Zn 213.857†	52815.9	541.34	1.02%	[500]	ug/L
SiO2†	81795.8	423.43	0.52%	[5347.5]	ug/L

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

Autosampler Location: 4  
 Date Collected: 2/26/2010 08:44:55  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Analysis Time
1	Sc Radial	3643.3	3643.3	97.5 %	08:47:08
1	Y RADIAL	4085.5	4085.5	96.16 %	08:46:48
1	Al 396.153Radial†	10411.9	10814.1	[10000] ug/L	08:46:48
1	Ca 317.933Radial†	4647.5	4750.6	[10000] ug/L	08:46:48
1	Fe 238.204 Radial†	581.3	585.6	[10000] ug/L	08:47:08
1	K 766.490 Radial†	52950.1	51277.4	[10000] ug/L	08:46:48
1	Mg 279.077 IEC†	193.5	195.9	[10000] ug/L	08:47:08
1	Na 589.592 Radial†	26341.7	28039.9	[10000] ug/L	08:46:48
1	Sr 421.552†	127262.8	130439.8	[1000] ug/L	08:46:48
1	Sc 361.383	866614.4	866614.4	91.952 %	08:48:11
1	Y 371.029	757651.6	757651.6	94.869 %	08:48:11
1	Ag 328.068†	219129.3	237939.0	[1000] ug/L	08:48:11
1	As 188.979†	2311.9	2540.7	[1000] ug/L	08:48:31
1	B 249.677†	41292.2	45640.3	[1000] ug/L	08:48:11
1	Ba 233.527†	129062.9	140344.1	[1000] ug/L	08:48:11
1	Be 313.107†	2740505.8	2984200.0	[1000] ug/L	08:48:06
1	Cd 226.502†	90191.7	98267.7	[1000] ug/L	08:48:11
1	Co 228.616†	48505.1	52815.1	[1000] ug/L	08:48:11
1	Cr 267.716†	92425.4	100446.0	[1000] ug/L	08:48:11
1	Cu 324.752†	334921.4	357958.2	[1000] ug/L	08:48:11
1	Mn 257.610†	881750.7	958444.9	[1000] ug/L	08:48:06
1	Mo 202.031†	13906.5	15111.6	[1000] ug/L	08:48:31
1	Ni 231.604†	40919.6	44425.6	[1000] ug/L	08:48:11
1	P 214.914†	8913.6	9483.1	[5000] ug/L	08:48:31
1	Pb 220.353†	8476.9	9213.9	[1000] ug/L	08:48:31
1	S 181.975 Axial†	1521.0	1612.7	[2000] ug/L	08:48:31
1	Sb 206.836†	2938.3	3163.8	[1000] ug/L	08:48:31
1	Se 196.026†	1554.0	1715.4	[1000] ug/L	08:48:31
1	Si 251.611†	157444.9	170617.8	[5000] ug/L	08:48:11
1	Sn 189.927†	5867.6	6364.9	[1000] ug/L	08:48:31
1	Ti 334.940†	634105.3	691252.0	[1000] ug/L	08:48:11
1	Tl 190.801†	3149.6	3462.0	[1000] ug/L	08:48:31
1	U 409.014†	32382.9	38519.1	[1000] ug/L	08:48:11
1	V 292.402†	145657.3	160045.0	[1000] ug/L	08:48:11
1	Zn 213.857†	103188.7	111566.7	[1000] ug/L	08:48:11
1	SiO2†	156037.4	169080.6	[10695] ug/L	08:49:40
2	Sc Radial	3649.6	3649.6	97.7 %	08:47:33
2	Y RADIAL	4130.6	4130.6	97.22 %	08:47:13
2	Al 396.153Radial†	10480.2	10865.7	[10000] ug/L	08:47:13
2	Ca 317.933Radial†	4651.8	4746.9	[10000] ug/L	08:47:13
2	Fe 238.204 Radial†	582.3	585.6	[10000] ug/L	08:47:33
2	K 766.490 Radial†	53256.3	51497.6	[10000] ug/L	08:47:13
2	Mg 279.077 IEC†	191.7	193.7	[10000] ug/L	08:47:33
2	Na 589.592 Radial†	26501.4	28157.0	[10000] ug/L	08:47:13
2	Sr 421.552†	128555.5	131539.0	[1000] ug/L	08:47:13
2	Sc 361.383	868836.9	868836.9	92.188 %	08:48:43
2	Y 371.029	756913.8	756913.8	94.777 %	08:48:43
2	Ag 328.068†	219355.6	237574.8	[1000] ug/L	08:48:43
2	As 188.979†	2333.8	2558.0	[1000] ug/L	08:49:03
2	B 249.677†	41584.2	45842.3	[1000] ug/L	08:48:43
2	Ba 233.527†	129448.0	140402.8	[1000] ug/L	08:48:43
2	Be 313.107†	2742787.6	2979051.2	[1000] ug/L	08:48:37
2	Cd 226.502†	90418.1	98262.5	[1000] ug/L	08:48:43
2	Co 228.616†	48711.4	52903.9	[1000] ug/L	08:48:43
2	Cr 267.716†	92654.3	100437.2	[1000] ug/L	08:48:43
2	Cu 324.752†	335955.9	358148.7	[1000] ug/L	08:48:43
2	Mn 257.610†	886945.5	961626.9	[1000] ug/L	08:48:37
2	Mo 202.031†	13972.0	15144.0	[1000] ug/L	08:49:03
2	Ni 231.604†	41100.1	44507.6	[1000] ug/L	08:48:43

2	P 214.914†	8938.3	9485.1	[5000]	ug/L	08:49:03
2	Pb 220.353†	8505.9	9221.7	[1000]	ug/L	08:49:03
2	S 181.975 Axial†	1496.4	1581.7	[2000]	ug/L	08:49:03
2	Sb 206.836†	2966.1	3185.8	[1000]	ug/L	08:49:03
2	Se 196.026†	1564.2	1722.1	[1000]	ug/L	08:49:03
2	Si 251.611†	158451.6	171271.7	[5000]	ug/L	08:48:43
2	Sn 189.927†	5881.1	6363.2	[1000]	ug/L	08:49:03
2	Ti 334.940†	636876.9	692494.3	[1000]	ug/L	08:48:43
2	Tl 190.801†	3146.4	3449.7	[1000]	ug/L	08:49:03
2	U 409.014†	32775.4	38854.8	[1000]	ug/L	08:48:43
2	V 292.402†	145909.7	159913.7	[1000]	ug/L	08:48:43
2	Zn 213.857†	103479.6	111595.2	[1000]	ug/L	08:48:43
2	SiO2†	155667.6	168245.4	[10695]	ug/L	08:49:45
3	Sc Radial	3664.4	3664.4	98.1	%	08:47:58
3	Y RADIAL	4068.8	4068.8	95.77	%	08:47:38
3	Al 396.153Radial†	10290.9	10629.3	[10000]	ug/L	08:47:38
3	Ca 317.933Radial†	4580.1	4654.5	[10000]	ug/L	08:47:38
3	Fe 238.204 Radial†	588.8	589.8	[10000]	ug/L	08:47:58
3	K 766.490 Radial†	52485.9	50491.3	[10000]	ug/L	08:47:38
3	Mg 279.077 IEC†	195.7	197.0	[10000]	ug/L	08:47:58
3	Na 589.592 Radial†	25898.3	27432.4	[10000]	ug/L	08:47:38
3	Sr 421.552†	125999.0	128399.7	[1000]	ug/L	08:47:38
3	Sc 361.383	863224.5	863224.5	91.592	%	08:49:14
3	Y 371.029	750249.6	750249.6	93.942	%	08:49:14
3	Ag 328.068†	217020.0	236571.9	[1000]	ug/L	08:49:14
3	As 188.979†	2280.9	2516.7	[1000]	ug/L	08:49:34
3	B 249.677†	41003.3	45501.3	[1000]	ug/L	08:49:14
3	Ba 233.527†	128110.2	139855.1	[1000]	ug/L	08:49:14
3	Be 313.107†	2800264.4	3061148.1	[1000]	ug/L	08:49:09
3	Cd 226.502†	89324.2	97705.9	[1000]	ug/L	08:49:14
3	Co 228.616†	48175.9	52662.7	[1000]	ug/L	08:49:14
3	Cr 267.716†	91714.8	100065.0	[1000]	ug/L	08:49:14
3	Cu 324.752†	331699.3	355870.6	[1000]	ug/L	08:49:14
3	Mn 257.610†	903939.3	986436.0	[1000]	ug/L	08:49:09
3	Mo 202.031†	13806.6	15061.9	[1000]	ug/L	08:49:34
3	Ni 231.604†	40580.8	44230.4	[1000]	ug/L	08:49:14
3	P 214.914†	8802.0	9399.4	[5000]	ug/L	08:49:34
3	Pb 220.353†	8386.2	9151.0	[1000]	ug/L	08:49:34
3	S 181.975 Axial†	1495.6	1591.4	[2000]	ug/L	08:49:34
3	Sb 206.836†	2938.5	3176.6	[1000]	ug/L	08:49:34
3	Se 196.026†	1537.9	1704.5	[1000]	ug/L	08:49:34
3	Si 251.611†	156224.8	169958.0	[5000]	ug/L	08:49:14
3	Sn 189.927†	5809.9	6327.0	[1000]	ug/L	08:49:34
3	Ti 334.940†	629596.3	689037.1	[1000]	ug/L	08:49:14
3	Tl 190.801†	3109.8	3432.0	[1000]	ug/L	08:49:34
3	U 409.014†	32338.7	38609.1	[1000]	ug/L	08:49:14
3	V 292.402†	144402.9	159297.6	[1000]	ug/L	08:49:14
3	Zn 213.857†	102130.1	110851.6	[1000]	ug/L	08:49:14
3	SiO2†	155595.3	169264.4	[10695]	ug/L	08:49:50

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Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	866225.3	2826.36	0.33%	91.911	%
Sc Radial	3652.4	10.85	0.30%	97.8	%
Y 371.029	754938.4	4077.30	0.54%	94.529	%
Y RADIAL	4095.0	31.94	0.78%	96.39	%
Ag 328.068†	237361.9	708.01	0.30%	[1000]	ug/L
Al 396.153Radial†	10769.7	124.33	1.15%	[10000]	ug/L
As 188.979†	2538.5	20.77	0.82%	[1000]	ug/L
B 249.677†	45661.3	171.45	0.38%	[1000]	ug/L
Ba 233.527†	140200.7	300.70	0.21%	[1000]	ug/L
Be 313.107†	3008133.1	45984.44	1.53%	[1000]	ug/L
Ca 317.933Radial†	4717.3	54.48	1.15%	[10000]	ug/L
Cd 226.502†	98078.7	322.89	0.33%	[1000]	ug/L
Co 228.616†	52793.9	121.96	0.23%	[1000]	ug/L
Cr 267.716†	100316.1	217.50	0.22%	[1000]	ug/L
Cu 324.752†	357325.8	1263.84	0.35%	[1000]	ug/L
Fe 238.204 Radial†	587.0	2.46	0.42%	[10000]	ug/L
K 766.490 Radial†	51088.7	528.98	1.04%	[10000]	ug/L

Mg 279.077 IEC†	195.5	1.66	0.85%	[10000]	ug/L
Mn 257.610†	968835.9	15324.92	1.58%	[1000]	ug/L
Mo 202.031†	15105.8	41.33	0.27%	[1000]	ug/L
Na 589.592 Radial†	27876.4	389.00	1.40%	[10000]	ug/L
Ni 231.604†	44387.9	142.36	0.32%	[1000]	ug/L
P 214.914†	9455.9	48.93	0.52%	[5000]	ug/L
Pb 220.353†	9195.5	38.74	0.42%	[1000]	ug/L
S 181.975 Axial†	1595.3	15.84	0.99%	[2000]	ug/L
Sb 206.836†	3175.4	11.01	0.35%	[1000]	ug/L
Se 196.026†	1714.0	8.90	0.52%	[1000]	ug/L
Si 251.611†	170615.8	656.84	0.38%	[5000]	ug/L
Sn 189.927†	6351.7	21.42	0.34%	[1000]	ug/L
Sr 421.552†	130126.2	1592.99	1.22%	[1000]	ug/L
Ti 334.940†	690927.8	1751.27	0.25%	[1000]	ug/L
Tl 190.801†	3447.9	15.06	0.44%	[1000]	ug/L
U 409.014†	38661.0	173.75	0.45%	[1000]	ug/L
V 292.402†	159752.1	399.08	0.25%	[1000]	ug/L
Zn 213.857†	111337.9	421.37	0.38%	[1000]	ug/L
SiO2†	168863.5	543.09	0.32%	[10695]	ug/L



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

Autosampler Location: 5  
 Date Collected: 2/26/2010 08:52:02  
 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	3676.9	3676.9	98.4 %	08:54:15
1	Y RADIAL	4033.6	4033.6	94.94 %	08:54:15
1	Al 396.153Radial†	51451.8	52405.6	[50000] ug/L	08:53:55
1	Ca 317.933Radial†	21953.1	22286.4	[50000] ug/L	08:53:55
1	Fe 238.204 Radial†	1110.1	1117.3	[20000] ug/L	08:54:15
1	Mg 279.077 IEC†	910.5	922.5	[50000] ug/L	08:54:15
1	Na 589.592 Radial†	52984.0	54856.6	[20000] ug/L	08:53:55
1	Sc 361.383	898773.5	898773.5	95.364 %	08:55:12
1	Y 371.029	746673.7	746673.7	93.495 %	08:55:12
2	Sc Radial	3689.9	3689.9	98.8 %	08:54:40
2	Y RADIAL	4036.2	4036.2	95.00 %	08:54:40
2	Al 396.153Radial†	51603.7	52375.3	[50000] ug/L	08:54:20
2	Ca 317.933Radial†	22076.5	22332.8	[50000] ug/L	08:54:20
2	Fe 238.204 Radial†	1113.4	1116.7	[20000] ug/L	08:54:40
2	Mg 279.077 IEC†	908.4	917.1	[50000] ug/L	08:54:40
2	Na 589.592 Radial†	52793.1	54473.8	[20000] ug/L	08:54:20
2	Sc 361.383	899535.7	899535.7	95.445 %	08:55:18
2	Y 371.029	747338.4	747338.4	93.578 %	08:55:18
3	Sc Radial	3672.1	3672.1	98.3 %	08:55:05
3	Y RADIAL	4028.0	4028.0	94.81 %	08:55:05
3	Al 396.153Radial†	53532.4	54591.2	[50000] ug/L	08:54:45
3	Ca 317.933Radial†	22711.7	23087.6	[50000] ug/L	08:54:45
3	Fe 238.204 Radial†	1108.0	1116.7	[20000] ug/L	08:55:05
3	Mg 279.077 IEC†	904.2	917.3	[50000] ug/L	08:55:05
3	Na 589.592 Radial†	54305.1	56271.7	[20000] ug/L	08:54:45
3	Sc 361.383	901444.4	901444.4	95.648 %	08:55:24
3	Y 371.029	749439.5	749439.5	93.841 %	08:55:24

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	899917.9	1375.88	0.15%	95.486 %
Sc Radial	3679.6	9.23	0.25%	98.5 %
Y 371.029	747817.2	1443.75	0.19%	93.638 %
Y RADIAL	4032.6	4.22	0.10%	94.92 %
Al 396.153Radial†	53124.0	1270.69	2.39%	[50000] ug/L
Ca 317.933Radial†	22568.9	449.75	1.99%	[50000] ug/L
Fe 238.204 Radial†	1116.9	0.37	0.03%	[20000] ug/L
Mg 279.077 IEC†	919.0	3.05	0.33%	[50000] ug/L
Na 589.592 Radial†	55200.7	947.05	1.72%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	234.2	0.00000	0.999651	
Al 396.153Radial	3	Lin Thru 0	0.0	1.063	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	2.519	0.00000	0.999884	
B 249.677	3	Lin Thru 0	0.0	44.97	0.00000	0.999533	
Ba 233.527	3	Lin Thru 0	0.0	138.4	0.00000	0.999685	
Be 313.107	3	Lin Thru 0	0.0	2975	0.00000	0.999756	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4524	0.00000	0.999952	
Cd 226.502	3	Lin Thru 0	0.0	96.91	0.00000	0.999718	
Co 228.616	3	Lin Thru 0	0.0	52.15	0.00000	0.999706	
Cr 267.716	3	Lin Thru 0	0.0	99.01	0.00000	0.999668	
Cu 324.752	3	Lin Thru 0	0.0	351.8	0.00000	0.999519	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0564	0.00000	0.999795	
K 766.490 Radial	3	Lin Thru 0	0.0	5.118	0.00000	0.999978	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0184	0.00000	0.999922
Mn 257.610	3	Lin Thru 0	0.0	959.0	0.00000	0.999797
Mo 202.031	3	Lin Thru 0	0.0	14.95	0.00000	0.999797
Na 589.592 Radia	2	Lin Thru 0	0.0	2.766	0.00000	0.999992
Ni 231.604	3	Lin Thru 0	0.0	43.88	0.00000	0.999738
P 214.914	3	Lin Thru 0	0.0	1.871	0.00000	0.999777
Pb 220.353	3	Lin Thru 0	0.0	9.102	0.00000	0.999795
S 181.975 Axial	3	Lin Thru 0	0.0	0.7917	0.00000	0.999888
Sb 206.836	3	Lin Thru 0	0.0	3.142	0.00000	0.999777
Se 196.026	3	Lin Thru 0	0.0	1.700	0.00000	0.999861
Si 251.611	3	Lin Thru 0	0.0	33.71	0.00000	0.999702
Sn 189.927	3	Lin Thru 0	0.0	6.285	0.00000	0.999777
Sr 421.552	3	Lin Thru 0	0.0	130.4	0.00000	0.999989
Ti 334.940	3	Lin Thru 0	0.0	681.5	0.00000	0.999633
Tl 190.801	3	Lin Thru 0	0.0	3.424	0.00000	0.999908
U 409.014	3	Lin Thru 0	0.0	38.05	0.00000	0.999469
V 292.402	3	Lin Thru 0	0.0	157.5	0.00000	0.999601
Zn 213.857	3	Lin Thru 0	0.0	110.1	0.00000	0.999761
SiO2	3	Lin Thru 0	0.0	15.68	0.00000	0.999902

Sequence No.: 6  
 Sample ID: ICV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 9  
 Date Collected: 2/26/2010 08:57:35  
 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	3671.0	3671.0	98.3 %		08:59:48
1	Y RADIAL	4109.8	4109.8	96.73 %		08:59:28
1	Al 396.153Radial†	5419.5	5654.1	5291.7 ug/L	5291.7 ppb	08:59:28
1	Ca 317.933Radial†	2378.8	2406.4	5319.7 ug/L	5319.7 ppb	08:59:48
1	Fe 238.204 Radial†	306.9	301.9	5366.8 ug/L	5366.8 ppb	08:59:48
1	K 766.490 Radial†	15755.5	13023.7	2541.0 ug/L	2541.0 ppb	08:59:28
1	Mg 279.077 IEC†	103.1	102.4	5557.7 ug/L	5557.7 ppb	08:59:48
1	Na 589.592 Radial†	5943.9	7082.2	2560.9 ug/L	2560.9 ppb	08:59:28
1	Sr 421.552†	69534.7	70719.9	542.43 ug/L	542.43 ppb	08:59:28
1	Sc 361.383	923746.0	923746.0	98.014 %		09:00:45
1	Y 371.029	775461.0	775461.0	97.099 %		09:00:45
1	Ag 328.068†	57014.9	57800.6	249.96 ug/L	249.96 ppb	09:00:45
1	As 188.979†	1132.9	1182.3	473.54 ug/L	473.54 ppb	09:01:05
1	B 249.677†	21676.6	22849.9	505.84 ug/L	505.84 ppb	09:00:45
1	Ba 233.527†	68425.3	69796.8	505.45 ug/L	505.45 ppb	09:00:45
1	Be 313.107†	731820.5	750480.7	253.39 ug/L	253.39 ppb	09:00:45
1	Cd 226.502†	45094.8	46190.7	476.48 ug/L	476.48 ppb	09:01:05
1	Co 228.616†	25160.4	25734.8	493.62 ug/L	493.62 ppb	09:01:05
1	Cr 267.716†	46919.5	47801.3	483.79 ug/L	483.79 ppb	09:00:45
1	Cu 324.752†	179462.7	176822.1	502.70 ug/L	502.70 ppb	09:00:45
1	Mn 257.610†	470111.4	479156.5	499.95 ug/L	499.95 ppb	09:00:45
1	Mo 202.031†	7650.9	7793.9	521.71 ug/L	521.71 ppb	09:01:05
1	Ni 231.604†	20734.0	21078.7	480.12 ug/L	480.12 ppb	09:01:05
1	P 214.914†	4713.1	4597.9	2359.2 ug/L	2359.2 ppb	09:01:05
1	Pb 220.353†	4423.1	4507.7	496.88 ug/L	496.88 ppb	09:01:05
1	S 181.975 Axial†	1903.1	1900.2	2399.0 ug/L	2399.0 ppb	09:01:05
1	Sb 206.836†	1515.1	1514.1	500.63 ug/L	500.63 ppb	09:01:05
1	Se 196.026†	4092.2	4200.6	2488.6 ug/L	2488.6 ppb	09:01:05
1	Si 251.611†	156175.7	158732.9	4703.0 ug/L	4703.0 ppb	09:00:45
1	Sn 189.927†	3201.5	3250.1	517.77 ug/L	517.77 ppb	09:01:05
1	Ti 334.940†	326853.2	335123.0	491.61 ug/L	491.61 ppb	09:00:45
1	Tl 190.801†	1673.2	1743.8	512.62 ug/L	512.62 ppb	09:01:05
1	U 409.014†	14768.1	18369.2	481.08 ug/L	481.08 ppb	09:00:45
1	V 292.402†	74568.7	77718.8	500.42 ug/L	500.42 ppb	09:00:45
1	Zn 213.857†	53582.1	54014.3	485.94 ug/L	485.94 ppb	09:00:45
1	SiO2†	156538.5	159096.7	10131 ug/L	10131 ppb	09:02:03
2	Sc Radial	3629.0	3629.0	97.2 %		09:00:13
2	Y RADIAL	4173.5	4173.5	98.23 %		08:59:53
2	Al 396.153Radial†	5482.3	5782.5	5412.5 ug/L	5412.5 ppb	08:59:53
2	Ca 317.933Radial†	2355.4	2410.3	5328.2 ug/L	5328.2 ppb	09:00:13
2	Fe 238.204 Radial†	298.5	296.8	5276.4 ug/L	5276.4 ppb	09:00:13
2	K 766.490 Radial†	15703.3	13155.4	2566.8 ug/L	2566.8 ppb	08:59:53
2	Mg 279.077 IEC†	98.8	99.2	5384.5 ug/L	5384.5 ppb	09:00:13
2	Na 589.592 Radial†	5879.7	7086.1	2562.3 ug/L	2562.3 ppb	08:59:53
2	Sr 421.552†	69896.3	71909.9	551.56 ug/L	551.56 ppb	08:59:53
2	Sc 361.383	923431.2	923431.2	97.980 %		09:01:11
2	Y 371.029	774046.6	774046.6	96.922 %		09:01:11
2	Ag 328.068†	56947.9	57752.0	249.72 ug/L	249.72 ppb	09:01:11
2	As 188.979†	1126.0	1175.6	470.86 ug/L	470.86 ppb	09:01:31
2	B 249.677†	21670.1	22850.8	505.88 ug/L	505.88 ppb	09:01:11
2	Ba 233.527†	68307.5	69700.4	504.75 ug/L	504.75 ppb	09:01:11
2	Be 313.107†	729050.1	747907.6	252.53 ug/L	252.53 ppb	09:01:11
2	Cd 226.502†	44962.3	46071.1	475.26 ug/L	475.26 ppb	09:01:31
2	Co 228.616†	25130.9	25713.4	493.21 ug/L	493.21 ppb	09:01:31
2	Cr 267.716†	46829.2	47725.5	483.01 ug/L	483.01 ppb	09:01:11
2	Cu 324.752†	179312.1	176730.8	502.43 ug/L	502.43 ppb	09:01:11
2	Mn 257.610†	469386.9	478580.5	499.35 ug/L	499.35 ppb	09:01:11
2	Mo 202.031†	7651.4	7797.1	521.92 ug/L	521.92 ppb	09:01:31
2	Ni 231.604†	20718.6	21070.2	479.92 ug/L	479.92 ppb	09:01:31

2	P 214.914†	4708.5	4594.9	2357.7 ug/L	2357.7 ppb	09:01:31
2	Pb 220.353†	4397.9	4483.5	494.26 ug/L	494.26 ppb	09:01:31
2	S 181.975 Axial†	1901.9	1899.6	2398.2 ug/L	2398.2 ppb	09:01:31
2	Sb 206.836†	1512.8	1512.3	500.04 ug/L	500.04 ppb	09:01:31
2	Se 196.026†	4083.3	4192.8	2483.8 ug/L	2483.8 ppb	09:01:31
2	Si 251.611†	155964.3	158571.5	4698.2 ug/L	4698.2 ppb	09:01:11
2	Sn 189.927†	3199.6	3249.3	517.65 ug/L	517.65 ppb	09:01:31
2	Ti 334.940†	326945.2	335330.6	491.93 ug/L	491.93 ppb	09:01:11
2	Tl 190.801†	1676.7	1748.0	513.86 ug/L	513.86 ppb	09:01:31
2	U 409.014†	14845.5	18453.3	483.30 ug/L	483.30 ppb	09:01:11
2	V 292.402†	74353.5	77525.1	499.21 ug/L	499.21 ppb	09:01:11
2	Zn 213.857†	53365.3	53811.7	484.11 ug/L	484.11 ppb	09:01:11
2	SiO2†	156926.6	159547.3	10160 ug/L	10160 ppb	09:02:08
3	Sc Radial	3673.0	3673.0	98.3 %		09:00:38
3	Y RADIAL	4141.2	4141.2	97.47 %		09:00:18
3	Al 396.153Radial†	5487.4	5720.1	5353.6 ug/L	5353.6 ppb	09:00:18
3	Ca 317.933Radial†	2379.3	2405.6	5317.7 ug/L	5317.7 ppb	09:00:38
3	Fe 238.204 Radial†	306.8	301.6	5361.4 ug/L	5361.4 ppb	09:00:38
3	K 766.490 Radial†	15707.0	12965.6	2529.7 ug/L	2529.7 ppb	09:00:18
3	Mg 279.077 IEC†	102.7	102.0	5535.0 ug/L	5535.0 ppb	09:00:38
3	Na 589.592 Radial†	5932.2	7066.9	2555.3 ug/L	2555.3 ppb	09:00:18
3	Sr 421.552†	69560.5	70707.3	542.33 ug/L	542.33 ppb	09:00:18
3	Sc 361.383	920076.0	920076.0	97.624 %		09:01:37
3	Y 371.029	774125.9	774125.9	96.932 %		09:01:37
3	Ag 328.068†	56548.4	57554.8	248.91 ug/L	248.91 ppb	09:01:37
3	As 188.979†	1142.3	1196.6	479.17 ug/L	479.17 ppb	09:01:57
3	B 249.677†	21561.5	22820.2	505.17 ug/L	505.17 ppb	09:01:37
3	Ba 233.527†	67838.0	69473.7	503.12 ug/L	503.12 ppb	09:01:37
3	Be 313.107†	727810.4	749351.2	253.01 ug/L	253.01 ppb	09:01:37
3	Cd 226.502†	45208.6	46490.7	479.58 ug/L	479.58 ppb	09:01:57
3	Co 228.616†	25229.2	25907.7	496.95 ug/L	496.95 ppb	09:01:57
3	Cr 267.716†	46633.8	47699.6	482.76 ug/L	482.76 ppb	09:01:37
3	Cu 324.752†	178691.4	176762.3	502.52 ug/L	502.52 ppb	09:01:37
3	Mn 257.610†	466125.2	476986.4	497.69 ug/L	497.69 ppb	09:01:37
3	Mo 202.031†	7691.7	7866.9	526.60 ug/L	526.60 ppb	09:01:57
3	Ni 231.604†	20846.6	21278.4	484.67 ug/L	484.67 ppb	09:01:57
3	P 214.914†	4733.6	4638.2	2380.8 ug/L	2380.8 ppb	09:01:57
3	Pb 220.353†	4443.4	4546.5	501.17 ug/L	501.17 ppb	09:01:57
3	S 181.975 Axial†	1909.8	1914.8	2417.4 ug/L	2417.4 ppb	09:01:57
3	Sb 206.836†	1521.0	1526.3	504.70 ug/L	504.70 ppb	09:01:57
3	Se 196.026†	4108.7	4234.1	2508.4 ug/L	2508.4 ppb	09:01:57
3	Si 251.611†	155195.3	158364.2	4692.0 ug/L	4692.0 ppb	09:01:37
3	Sn 189.927†	3225.4	3287.6	523.74 ug/L	523.74 ppb	09:01:57
3	Ti 334.940†	324953.5	334507.2	490.71 ug/L	490.71 ppb	09:01:37
3	Tl 190.801†	1688.5	1766.3	519.18 ug/L	519.18 ppb	09:01:57
3	U 409.014†	14722.1	18382.1	481.42 ug/L	481.42 ppb	09:01:37
3	V 292.402†	74116.5	77559.1	499.47 ug/L	499.47 ppb	09:01:37
3	Zn 213.857†	53048.6	53685.9	482.93 ug/L	482.93 ppb	09:01:37
3	SiO2†	157368.7	160584.1	10226 ug/L	10226 ppb	09:02:13

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	922417.7	97.873 %	0.2158			0.22%
Sc Radial	3657.6	97.9 %	0.66			0.68%
Y 371.029	774544.5	96.984 %	0.0995			0.10%
Y RADIAL	4141.5	97.48 %	0.750			0.77%
Ag 328.068†	57702.5	249.53 ug/L	0.553	249.53 ppb	0.553	0.22%
QC value within limits for Ag 328.068 Recovery = 99.81%						
Al 396.153Radial†	5718.9	5352.6 ug/L	60.39	5352.6 ppb	60.39	1.13%
QC value within limits for Al 396.153Radial Recovery = 107.05%						
As 188.979†	1184.8	474.52 ug/L	4.242	474.52 ppb	4.242	0.89%
QC value within limits for As 188.979 Recovery = 94.90%						
B 249.677†	22840.3	505.63 ug/L	0.397	505.63 ppb	0.397	0.08%
QC value within limits for B 249.677 Recovery = 101.13%						
Ba 233.527†	69657.0	504.44 ug/L	1.199	504.44 ppb	1.199	0.24%
QC value within limits for Ba 233.527 Recovery = 100.89%						
Be 313.107†	749246.5	252.98 ug/L	0.433	252.98 ppb	0.433	0.17%
QC value within limits for Be 313.107 Recovery = 101.19%						
Ca 317.933Radial†	2407.4	5321.9 ug/L	5.57	5321.9 ppb	5.57	0.10%

QC value within limits for Ca 317.933 Radial Recovery = 106.44%									
Cd	226.502†	46250.8	477.11 ug/L	2.228	477.11 ppb	2.228	0.47%		
QC value within limits for Cd 226.502 Recovery = 95.42%									
Co	228.616†	25785.3	494.60 ug/L	2.050	494.60 ppb	2.050	0.41%		
QC value within limits for Co 228.616 Recovery = 98.92%									
Cr	267.716†	47742.2	483.18 ug/L	0.536	483.18 ppb	0.536	0.11%		
QC value within limits for Cr 267.716 Recovery = 96.64%									
Cu	324.752†	176771.7	502.55 ug/L	0.135	502.55 ppb	0.135	0.03%		
QC value within limits for Cu 324.752 Recovery = 100.51%									
Fe	238.204 Radial†	300.1	5334.9 ug/L	50.72	5334.9 ppb	50.72	0.95%		
QC value within limits for Fe 238.204 Radial Recovery = 106.70%									
K	766.490 Radial†	13048.2	2545.8 ug/L	18.99	2545.8 ppb	18.99	0.75%		
QC value within limits for K 766.490 Radial Recovery = 101.83%									
Mg	279.077 IEC†	101.2	5492.4 ug/L	94.15	5492.4 ppb	94.15	1.71%		
QC value within limits for Mg 279.077 IEC Recovery = 109.85%									
Mn	257.610†	478241.1	498.99 ug/L	1.172	498.99 ppb	1.172	0.23%		
QC value within limits for Mn 257.610 Recovery = 99.80%									
Mo	202.031†	7819.3	523.41 ug/L	2.761	523.41 ppb	2.761	0.53%		
QC value within limits for Mo 202.031 Recovery = 104.68%									
Na	589.592 Radial†	7078.4	2559.5 ug/L	3.66	2559.5 ppb	3.66	0.14%		
QC value within limits for Na 589.592 Radial Recovery = 102.38%									
Ni	231.604†	21142.4	481.57 ug/L	2.684	481.57 ppb	2.684	0.56%		
QC value within limits for Ni 231.604 Recovery = 96.31%									
P	214.914†	4610.3	2365.9 ug/L	12.92	2365.9 ppb	12.92	0.55%		
QC value within limits for P 214.914 Recovery = 94.64%									
Pb	220.353†	4512.6	497.44 ug/L	3.490	497.44 ppb	3.490	0.70%		
QC value within limits for Pb 220.353 Recovery = 99.49%									
S	181.975 Axial†	1904.8	2404.9 ug/L	10.86	2404.9 ppb	10.86	0.45%		
QC value within limits for S 181.975 Axial Recovery = 96.19%									
Sb	206.836†	1517.6	501.79 ug/L	2.540	501.79 ppb	2.540	0.51%		
QC value within limits for Sb 206.836 Recovery = 100.36%									
Se	196.026†	4209.2	2493.6 ug/L	13.00	2493.6 ppb	13.00	0.52%		
QC value within limits for Se 196.026 Recovery = 99.74%									
Si	251.611†	158556.2	4697.7 ug/L	5.52	4697.7 ppb	5.52	0.12%		
QC value within limits for Si 251.611 Recovery = 93.95%									
Sn	189.927†	3262.4	519.72 ug/L	3.483	519.72 ppb	3.483	0.67%		
QC value within limits for Sn 189.927 Recovery = 103.94%									
Sr	421.552†	71112.4	545.44 ug/L	5.298	545.44 ppb	5.298	0.97%		
QC value within limits for Sr 421.552 Recovery = 109.09%									
Ti	334.940†	334986.9	491.42 ug/L	0.633	491.42 ppb	0.633	0.13%		
QC value within limits for Ti 334.940 Recovery = 98.28%									
Tl	190.801†	1752.7	515.22 ug/L	3.483	515.22 ppb	3.483	0.68%		
QC value within limits for Tl 190.801 Recovery = 103.04%									
U	409.014†	18401.6	481.93 ug/L	1.197	481.93 ppb	1.197	0.25%		
QC value within limits for U 409.014 Recovery = 96.39%									
V	292.402†	77601.0	499.70 ug/L	0.637	499.70 ppb	0.637	0.13%		
QC value within limits for V 292.402 Recovery = 99.94%									
Zn	213.857†	53837.3	484.33 ug/L	1.516	484.33 ppb	1.516	0.31%		
QC value within limits for Zn 213.857 Recovery = 96.87%									
SiO2†		159742.7	10172 ug/L	48.6	10172 ppb	48.6	0.48%		
QC value within limits for SiO2 Recovery = 95.11%									
All analyte(s) passed QC.									

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/26/2010 09:04:24

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	3704.2	3704.2	99.2 %		09:06:37
1	Y RADIAL	4363.7	4363.7	102.7 %		09:06:17
1	Al 396.153Radial†	-143.6	-4.9	-4.6103 ug/L	-4.6103 ppb	09:06:17
1	Ca 317.933Radial†	15.8	1.9	4.2949 ug/L	4.2949 ppb	09:06:37
1	Fe 238.204 Radial†	11.0	0.8	14.050 ug/L	14.050 ppb	09:06:37
1	K 766.490 Radial†	2943.8	-38.7	-7.5827 ug/L	-7.5827 ppb	09:06:17
1	Mg 279.077 IEC†	2.5	0.0	2.2684 ug/L	2.2684 ppb	09:06:37
1	Na 589.592 Radial†	-947.7	78.9	28.519 ug/L	28.519 ppb	09:06:17
1	Sr 421.552†	44.1	14.6	0.1116 ug/L	0.1116 ppb	09:06:17
1	Sc 361.383	932157.0	932157.0	98.906 %		09:07:34
1	Y 371.029	790544.7	790544.7	98.988 %		09:07:34
1	Ag 328.068†	438.4	73.5	0.3164 ug/L	0.3164 ppb	09:07:39
1	As 188.979†	-25.8	0.3	0.1384 ug/L	0.1384 ppb	09:07:59
1	B 249.677†	-213.6	518.1	11.517 ug/L	11.517 ppb	09:07:59
1	Ba 233.527†	-0.7	-15.8	-0.1123 ug/L	-0.1123 ppb	09:07:59
1	Be 313.107†	-3755.8	32.9	0.0110 ug/L	0.0110 ppb	09:07:39
1	Cd 226.502†	-194.6	-14.7	-0.1514 ug/L	-0.1514 ppb	09:07:59
1	Co 228.616†	-53.7	10.3	0.1968 ug/L	0.1968 ppb	09:07:59
1	Cr 267.716†	69.4	1.3	0.0130 ug/L	0.0130 ppb	09:07:59
1	Cu 324.752†	6241.6	33.3	0.0924 ug/L	0.0924 ppb	09:07:39
1	Mn 257.610†	507.9	32.1	0.0348 ug/L	0.0348 ppb	09:07:59
1	Mo 202.031†	12.9	1.0	0.0698 ug/L	0.0698 ppb	09:07:59
1	Ni 231.604†	120.5	46.3	1.0557 ug/L	1.0557 ppb	09:07:59
1	P 214.914†	219.5	11.2	5.9800 ug/L	5.9800 ppb	09:07:59
1	Pb 220.353†	-34.2	-39.5	-4.3460 ug/L	-4.3460 ppb	09:07:59
1	S 181.975 Axial†	39.7	-1.3	-1.6833 ug/L	-1.6833 ppb	09:07:59
1	Sb 206.836†	46.2	15.0	4.7873 ug/L	4.7873 ppb	09:07:59
1	Se 196.026†	-26.3	-1.1	-0.6308 ug/L	-0.6308 ppb	09:07:59
1	Si 251.611†	624.3	23.6	0.6986 ug/L	0.6986 ppb	09:07:59
1	Sn 189.927†	17.2	1.1	0.1729 ug/L	0.1729 ppb	09:07:59
1	Ti 334.940†	-1652.2	-24.1	-0.0374 ug/L	-0.0374 ppb	09:07:39
1	Tl 190.801†	-28.1	8.3	2.4147 ug/L	2.4147 ppb	09:07:59
1	U 409.014†	-3062.3	205.7	5.4041 ug/L	5.4041 ppb	09:07:34
1	V 292.402†	-1519.8	102.4	0.6596 ug/L	0.6596 ppb	09:07:39
1	Zn 213.857†	660.8	14.5	0.1224 ug/L	0.1224 ppb	09:07:59
1	SiO2†	670.8	64.3	4.0954 ug/L	4.0954 ppb	09:09:05
2	Sc Radial	3680.6	3680.6	98.5 %		09:07:02
2	Y RADIAL	4205.6	4205.6	98.99 %		09:06:42
2	Al 396.153Radial†	-127.8	10.2	9.5542 ug/L	9.5542 ppb	09:06:42
2	Ca 317.933Radial†	14.0	0.3	0.6002 ug/L	0.6002 ppb	09:07:02
2	Fe 238.204 Radial†	9.1	-1.1	-18.852 ug/L	-18.852 ppb	09:07:02
2	K 766.490 Radial†	3100.0	138.8	27.121 ug/L	27.121 ppb	09:06:42
2	Mg 279.077 IEC†	2.7	0.3	13.641 ug/L	13.641 ppb	09:07:02
2	Na 589.592 Radial†	-1012.6	6.9	2.4789 ug/L	2.4789 ppb	09:06:42
2	Sr 421.552†	22.6	-7.0	-0.0539 ug/L	-0.0539 ppb	09:06:42
2	Sc 361.383	927432.6	927432.6	98.405 %		09:08:04
2	Y 371.029	787645.9	787645.9	98.625 %		09:08:04
2	Ag 328.068†	299.2	-65.7	-0.2854 ug/L	-0.2854 ppb	09:08:09
2	As 188.979†	-16.1	10.1	4.0054 ug/L	4.0054 ppb	09:08:29
2	B 249.677†	-265.5	464.2	10.326 ug/L	10.326 ppb	09:08:29
2	Ba 233.527†	-5.1	-20.3	-0.1469 ug/L	-0.1469 ppb	09:08:29
2	Be 313.107†	-3719.1	50.9	0.0172 ug/L	0.0172 ppb	09:08:09
2	Cd 226.502†	-197.3	-18.5	-0.1891 ug/L	-0.1891 ppb	09:08:29
2	Co 228.616†	-70.3	-7.0	-0.1331 ug/L	-0.1331 ppb	09:08:29
2	Cr 267.716†	78.9	11.2	0.1119 ug/L	0.1119 ppb	09:08:29
2	Cu 324.752†	6143.2	-34.6	-0.0990 ug/L	-0.0990 ppb	09:08:09
2	Mn 257.610†	479.4	5.7	0.0035 ug/L	0.0035 ppb	09:08:29
2	Mo 202.031†	13.8	2.0	0.1347 ug/L	0.1347 ppb	09:08:29
2	Ni 231.604†	92.3	18.3	0.4163 ug/L	0.4163 ppb	09:08:29

2	P 214.914†	209.0	1.7	0.9592 ug/L	0.9592 ppb	09:08:29
2	Pb 220.353†	-9.4	-14.5	-1.5877 ug/L	-1.5877 ppb	09:08:29
2	S 181.975 Axial†	34.3	-6.6	-8.3561 ug/L	-8.3561 ppb	09:08:29
2	Sb 206.836†	48.5	17.6	5.6106 ug/L	5.6106 ppb	09:08:29
2	Se 196.026†	-28.6	-3.6	-2.2019 ug/L	-2.2019 ppb	09:08:29
2	Si 251.611†	623.0	25.4	0.7533 ug/L	0.7533 ppb	09:08:29
2	Sn 189.927†	15.3	-0.7	-0.1174 ug/L	-0.1174 ppb	09:08:29
2	Ti 334.940†	-1599.3	21.1	0.0301 ug/L	0.0301 ppb	09:08:09
2	Tl 190.801†	-27.3	8.9	2.6077 ug/L	2.6077 ppb	09:08:29
2	U 409.014†	-3267.1	-18.2	-0.4770 ug/L	-0.4770 ppb	09:08:04
2	V 292.402†	-1590.5	22.8	0.1486 ug/L	0.1486 ppb	09:08:09
2	Zn 213.857†	634.6	-8.7	-0.0786 ug/L	-0.0786 ppb	09:08:29
2	SiO2†	676.2	73.2	4.6651 ug/L	4.6651 ppb	09:09:10
3	Sc Radial	3698.9	3698.9	99.0 %		09:07:27
3	Y RADIAL	4174.2	4174.2	98.25 %		09:07:07
3	Al 396.153Radial†	-134.4	4.2	3.9413 ug/L	3.9413 ppb	09:07:07
3	Ca 317.933Radial†	15.6	1.8	4.0415 ug/L	4.0415 ppb	09:07:27
3	Fe 238.204 Radial†	9.6	-0.6	-11.242 ug/L	-11.242 ppb	09:07:27
3	K 766.490 Radial†	2974.0	-4.0	-0.7834 ug/L	-0.7834 ppb	09:07:07
3	Mg 279.077 IEC†	2.4	-0.0	-1.1250 ug/L	-1.1250 ppb	09:07:27
3	Na 589.592 Radial†	-1026.9	-2.5	-0.9007 ug/L	-0.9007 ppb	09:07:07
3	Sr 421.552†	6.0	-23.9	-0.1836 ug/L	-0.1836 ppb	09:07:07
3	Sc 361.383	951541.6	951541.6	100.96 %		09:08:34
3	Y 371.029	807260.0	807260.0	101.08 %		09:08:34
3	Ag 328.068†	404.2	30.6	0.1226 ug/L	0.1226 ppb	09:08:39
3	As 188.979†	-18.5	8.0	3.1910 ug/L	3.1910 ppb	09:08:59
3	B 249.677†	-256.7	479.8	10.671 ug/L	10.671 ppb	09:08:59
3	Ba 233.527†	11.7	-3.5	-0.0247 ug/L	-0.0247 ppb	09:08:59
3	Be 313.107†	-3704.3	161.2	0.0544 ug/L	0.0544 ppb	09:08:39
3	Cd 226.502†	-207.4	-23.5	-0.2390 ug/L	-0.2390 ppb	09:08:59
3	Co 228.616†	-57.0	8.0	0.1550 ug/L	0.1550 ppb	09:08:59
3	Cr 267.716†	73.0	3.4	0.0306 ug/L	0.0306 ppb	09:08:59
3	Cu 324.752†	6182.7	-153.6	-0.4413 ug/L	-0.4413 ppb	09:08:39
3	Mn 257.610†	494.9	8.7	0.0080 ug/L	0.0080 ppb	09:08:59
3	Mo 202.031†	17.7	5.5	0.3674 ug/L	0.3674 ppb	09:08:59
3	Ni 231.604†	108.6	32.0	0.7293 ug/L	0.7293 ppb	09:08:59
3	P 214.914†	198.9	-13.6	-7.1763 ug/L	-7.1763 ppb	09:08:59
3	Pb 220.353†	-6.0	-11.0	-1.2023 ug/L	-1.2023 ppb	09:08:59
3	S 181.975 Axial†	42.4	0.5	0.6247 ug/L	0.6247 ppb	09:08:59
3	Sb 206.836†	47.9	15.7	5.0228 ug/L	5.0228 ppb	09:08:59
3	Se 196.026†	-30.8	-5.1	-3.0133 ug/L	-3.0133 ppb	09:08:59
3	Si 251.611†	626.9	13.3	0.3905 ug/L	0.3905 ppb	09:08:59
3	Sn 189.927†	19.9	3.4	0.5428 ug/L	0.5428 ppb	09:08:59
3	Ti 334.940†	-1612.8	48.9	0.0692 ug/L	0.0692 ppb	09:08:39
3	Tl 190.801†	-35.0	2.0	0.5876 ug/L	0.5876 ppb	09:08:59
3	U 409.014†	-3058.1	272.9	7.1727 ug/L	7.1727 ppb	09:08:34
3	V 292.402†	-1602.4	51.9	0.3502 ug/L	0.3502 ppb	09:08:39
3	Zn 213.857†	652.0	-7.9	-0.0739 ug/L	-0.0739 ppb	09:08:59
3	SiO2†	654.3	34.1	2.1653 ug/L	2.1653 ppb	09:09:15

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937043.7	99.425 %		1.3556			1.36%
Sc Radial	3694.6	98.9 %		0.33			0.34%
Y 371.029	795150.2	99.565 %		1.3257			1.33%
Y RADIAL	4247.8	99.98 %		2.391			2.39%
Ag 328.068†	12.8	0.0512 ug/L		0.30719	0.0512 ppb	0.30719	599.70%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.2	2.9618 ug/L		7.13286	2.9618 ppb	7.13286	240.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	6.2	2.4449 ug/L		2.03860	2.4449 ppb	2.03860	83.38%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	487.4	10.838 ug/L		0.6129	10.838 ppb	0.6129	5.66%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-13.2	-0.0946 ug/L		0.06298	-0.0946 ppb	0.06298	66.57%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	81.7	0.0275 ug/L		0.02346	0.0275 ppb	0.02346	85.27%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.3	2.9789 ug/L		2.06388	2.9789 ppb	2.06388	69.28%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-18.9	-0.1932 ug/L	0.04393	-0.1932 ppb	0.04393	22.74%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.8	0.0729 ug/L	0.17961	0.0729 ppb	0.17961	246.42%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	5.3	0.0518 ug/L	0.05279	0.0518 ppb	0.05279	101.81%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-51.6	-0.1493 ug/L	0.27036	-0.1493 ppb	0.27036	181.08%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.3	-5.3481 ug/L	17.22441	-5.3481 ppb	17.22441	322.07%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	32.0	6.2515 ug/L	18.39013	6.2515 ppb	18.39013	294.17%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.1	4.9280 ug/L	7.73374	4.9280 ppb	7.73374	156.94%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	15.5	0.0154 ug/L	0.01691	0.0154 ppb	0.01691	109.52%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.9	0.1906 ug/L	0.15652	0.1906 ppb	0.15652	82.10%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	27.7	10.033 ug/L	16.0990	10.033 ppb	16.0990	160.47%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	32.2	0.7338 ug/L	0.31974	0.7338 ppb	0.31974	43.57%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.2	-0.0790 ug/L	6.63930	-0.0790 ppb	6.63930	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-21.7	-2.3787 ug/L	1.71465	-2.3787 ppb	1.71465	72.08%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.5	-3.1382 ug/L	4.66382	-3.1382 ppb	4.66382	148.61%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	16.1	5.1402 ug/L	0.42403	5.1402 ppb	0.42403	8.25%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.3	-1.9487 ug/L	1.21123	-1.9487 ppb	1.21123	62.16%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	20.8	0.6141 ug/L	0.19564	0.6141 ppb	0.19564	31.86%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.2	0.1995 ug/L	0.33089	0.1995 ppb	0.33089	165.89%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-5.5	-0.0420 ug/L	0.14798	-0.0420 ppb	0.14798	352.56%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	15.3	0.0206 ug/L	0.05393	0.0206 ppb	0.05393	261.18%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	6.4	1.8700 ug/L	1.11477	1.8700 ppb	1.11477	59.61%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	153.4	4.0333 ug/L	4.00485	4.0333 ppb	4.00485	99.30%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	59.0	0.3861 ug/L	0.25738	0.3861 ppb	0.25738	66.65%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-0.7	-0.0101 ug/L	0.11473	-0.0101 ppb	0.11473	>999.9%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	57.2	3.6419 ug/L	1.31017	3.6419 ppb	1.31017	35.97%	
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: 2/26/2010 09:11:26

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	3726.6	3726.6	99.8 %		09:13:40
1	Y RADIAL	4196.7	4196.7	98.78 %		09:13:20
1	Al 396.153Radial†	77.0	217.1	203.72 ug/L	203.72 ppb	09:13:20
1	Ca 317.933Radial†	107.9	94.2	208.33 ug/L	208.33 ppb	09:13:40
1	Fe 238.204 Radial†	13.7	3.4	61.044 ug/L	61.044 ppb	09:13:40
1	K 766.490 Radial†	3790.0	791.6	154.46 ug/L	154.46 ppb	09:13:20
1	Mg 279.077 IEC†	7.2	4.7	255.74 ug/L	255.74 ppb	09:13:40
1	Na 589.592 Radial†	-190.6	843.4	304.95 ug/L	304.95 ppb	09:13:20
1	Sr 421.552†	684.9	656.5	5.0340 ug/L	5.0340 ppb	09:13:20
1	Sc 361.383	943663.2	943663.2	100.13 %		09:14:37
1	Y 371.029	799443.9	799443.9	100.10 %		09:14:37
1	Ag 328.068†	1483.7	1112.1	4.7416 ug/L	4.7416 ppb	09:14:42
1	As 188.979†	46.1	72.4	28.784 ug/L	28.784 ppb	09:15:02
1	B 249.677†	1684.4	2416.3	53.709 ug/L	53.709 ppb	09:14:42
1	Ba 233.527†	676.3	660.4	4.7825 ug/L	4.7825 ppb	09:15:02
1	Be 313.107†	10349.8	14166.9	4.7731 ug/L	4.7731 ppb	09:14:42
1	Cd 226.502†	254.2	435.9	4.5044 ug/L	4.5044 ppb	09:15:02
1	Co 228.616†	167.6	231.9	4.4563 ug/L	4.4563 ppb	09:15:02
1	Cr 267.716†	540.7	471.1	4.7501 ug/L	4.7501 ppb	09:15:02
1	Cu 324.752†	9571.1	3281.6	9.3042 ug/L	9.3042 ppb	09:14:42
1	Mn 257.610†	10037.3	9543.2	9.9468 ug/L	9.9468 ppb	09:14:42
1	Mo 202.031†	145.1	132.9	8.8956 ug/L	8.8956 ppb	09:15:02
1	Ni 231.604†	297.6	221.7	5.0498 ug/L	5.0498 ppb	09:15:02
1	P 214.914†	456.4	245.2	129.25 ug/L	129.25 ppb	09:15:02
1	Pb 220.353†	48.4	43.3	4.8145 ug/L	4.8145 ppb	09:15:02
1	S 181.975 Axial†	112.4	70.8	89.325 ug/L	89.325 ppb	09:15:02
1	Sb 206.836†	75.6	43.9	14.264 ug/L	14.264 ppb	09:15:02
1	Se 196.026†	17.2	42.6	25.273 ug/L	25.273 ppb	09:15:02
1	Si 251.611†	3774.9	3162.5	93.718 ug/L	93.718 ppb	09:14:42
1	Sn 189.927†	65.6	49.2	7.8641 ug/L	7.8641 ppb	09:15:02
1	Ti 334.940†	1624.9	3269.1	4.7799 ug/L	4.7799 ppb	09:14:42
1	Tl 190.801†	33.4	70.0	20.500 ug/L	20.500 ppb	09:15:02
1	U 409.014†	-1371.1	1932.5	50.770 ug/L	50.770 ppb	09:14:37
1	V 292.402†	-902.7	737.5	4.8952 ug/L	4.8952 ppb	09:14:42
1	Zn 213.857†	1717.0	1061.2	9.5820 ug/L	9.5820 ppb	09:15:02
1	SiO2†	3860.8	3241.9	206.49 ug/L	206.49 ppb	09:16:08
2	Sc Radial	3771.3	3771.3	101 %		09:14:05
2	Y RADIAL	4378.7	4378.7	103.1 %		09:13:45
2	Al 396.153Radial†	77.6	216.7	203.36 ug/L	203.36 ppb	09:13:45
2	Ca 317.933Radial†	111.0	96.0	212.23 ug/L	212.23 ppb	09:14:05
2	Fe 238.204 Radial†	16.3	5.8	102.11 ug/L	102.11 ppb	09:14:05
2	K 766.490 Radial†	3755.6	712.4	138.99 ug/L	138.99 ppb	09:13:45
2	Mg 279.077 IEC†	8.8	6.2	338.70 ug/L	338.70 ppb	09:14:05
2	Na 589.592 Radial†	-147.7	888.2	321.16 ug/L	321.16 ppb	09:13:45
2	Sr 421.552†	703.5	666.8	5.1130 ug/L	5.1130 ppb	09:13:45
2	Sc 361.383	966831.0	966831.0	102.59 %		09:15:07
2	Y 371.029	819246.8	819246.8	102.58 %		09:15:07
2	Ag 328.068†	1523.5	1115.3	4.7692 ug/L	4.7692 ppb	09:15:12
2	As 188.979†	53.2	78.3	31.109 ug/L	31.109 ppb	09:15:32
2	B 249.677†	1672.9	2364.8	52.557 ug/L	52.557 ppb	09:15:12
2	Ba 233.527†	670.9	638.9	4.6295 ug/L	4.6295 ppb	09:15:32
2	Be 313.107†	10219.2	13791.9	4.6465 ug/L	4.6465 ppb	09:15:12
2	Cd 226.502†	277.8	452.8	4.6755 ug/L	4.6755 ppb	09:15:32
2	Co 228.616†	173.6	233.7	4.4934 ug/L	4.4934 ppb	09:15:32
2	Cr 267.716†	529.6	447.3	4.5140 ug/L	4.5140 ppb	09:15:32
2	Cu 324.752†	9463.1	2947.3	8.3556 ug/L	8.3556 ppb	09:15:12
2	Mn 257.610†	9892.3	9161.6	9.5496 ug/L	9.5496 ppb	09:15:12
2	Mo 202.031†	158.1	142.1	9.5121 ug/L	9.5121 ppb	09:15:32
2	Ni 231.604†	301.9	218.7	4.9827 ug/L	4.9827 ppb	09:15:32

2	P 214.914†	467.0	244.6	129.09 ug/L	129.09 ppb	09:15:32
2	Pb 220.353†	65.3	58.7	6.4992 ug/L	6.4992 ppb	09:15:32
2	S 181.975 Axial†	121.2	76.7	96.781 ug/L	96.781 ppb	09:15:32
2	Sb 206.836†	76.9	43.3	14.096 ug/L	14.096 ppb	09:15:32
2	Se 196.026†	9.8	35.0	20.942 ug/L	20.942 ppb	09:15:32
2	Si 251.611†	3776.0	3073.2	91.062 ug/L	91.062 ppb	09:15:12
2	Sn 189.927†	72.5	54.4	8.6863 ug/L	8.6863 ppb	09:15:32
2	Ti 334.940†	1504.4	3112.8	4.5441 ug/L	4.5441 ppb	09:15:12
2	Tl 190.801†	36.6	72.4	21.193 ug/L	21.193 ppb	09:15:32
2	U 409.014†	-1380.4	1956.2	51.390 ug/L	51.390 ppb	09:15:07
2	V 292.402†	-861.4	799.3	5.2935 ug/L	5.2935 ppb	09:15:12
2	Zn 213.857†	1713.3	1016.5	9.1718 ug/L	9.1718 ppb	09:15:32
2	SiO2†	3834.3	3123.7	198.93 ug/L	198.93 ppb	09:16:13
3	Sc Radial	3804.4	3804.4	102 %		09:14:30
3	Y RADIAL	4295.9	4295.9	101.1 %		09:14:10
3	Al 396.153Radial†	97.0	235.1	220.60 ug/L	220.60 ppb	09:14:10
3	Ca 317.933Radial†	118.1	101.9	225.37 ug/L	225.37 ppb	09:14:30
3	Fe 238.204 Radial†	14.9	4.3	75.876 ug/L	75.876 ppb	09:14:30
3	K 766.490 Radial†	3668.4	594.4	115.94 ug/L	115.94 ppb	09:14:10
3	Mg 279.077 IEC†	5.4	2.9	155.32 ug/L	155.32 ppb	09:14:30
3	Na 589.592 Radial†	-204.7	833.4	301.37 ug/L	301.37 ppb	09:14:10
3	Sr 421.552†	681.6	639.2	4.9012 ug/L	4.9012 ppb	09:14:10
3	Sc 361.383	940466.7	940466.7	99.788 %		09:15:37
3	Y 371.029	798445.8	798445.8	99.977 %		09:15:37
3	Ag 328.068†	1401.5	1034.8	4.4125 ug/L	4.4125 ppb	09:15:42
3	As 188.979†	48.8	75.3	29.925 ug/L	29.925 ppb	09:16:02
3	B 249.677†	1729.3	2467.0	54.834 ug/L	54.834 ppb	09:15:42
3	Ba 233.527†	678.2	664.6	4.8134 ug/L	4.8134 ppb	09:16:02
3	Be 313.107†	10521.1	14373.7	4.8427 ug/L	4.8427 ppb	09:15:42
3	Cd 226.502†	259.1	441.6	4.5630 ug/L	4.5630 ppb	09:16:02
3	Co 228.616†	175.9	240.7	4.6272 ug/L	4.6272 ppb	09:16:02
3	Cr 267.716†	534.6	466.8	4.7068 ug/L	4.7068 ppb	09:16:02
3	Cu 324.752†	9622.3	3365.4	9.5411 ug/L	9.5411 ppb	09:15:42
3	Mn 257.610†	10008.2	9548.1	9.9575 ug/L	9.9575 ppb	09:15:42
3	Mo 202.031†	150.2	138.5	9.2710 ug/L	9.2710 ppb	09:16:02
3	Ni 231.604†	281.4	206.5	4.7030 ug/L	4.7030 ppb	09:16:02
3	P 214.914†	471.6	262.0	138.16 ug/L	138.16 ppb	09:16:02
3	Pb 220.353†	53.5	48.6	5.4003 ug/L	5.4003 ppb	09:16:02
3	S 181.975 Axial†	117.9	76.6	96.748 ug/L	96.748 ppb	09:16:02
3	Sb 206.836†	63.6	32.1	10.540 ug/L	10.540 ppb	09:16:02
3	Se 196.026†	32.3	57.8	34.256 ug/L	34.256 ppb	09:16:02
3	Si 251.611†	3823.9	3224.4	95.549 ug/L	95.549 ppb	09:15:42
3	Sn 189.927†	71.3	55.2	8.8225 ug/L	8.8225 ppb	09:16:02
3	Ti 334.940†	1628.4	3278.2	4.8020 ug/L	4.8020 ppb	09:15:42
3	Tl 190.801†	44.6	81.4	23.821 ug/L	23.821 ppb	09:16:02
3	U 409.014†	-1217.6	2081.7	54.691 ug/L	54.691 ppb	09:15:37
3	V 292.402†	-903.2	734.0	4.8813 ug/L	4.8813 ppb	09:15:42
3	Zn 213.857†	1717.5	1067.5	9.6391 ug/L	9.6391 ppb	09:16:02
3	SiO2†	3769.9	3163.9	201.51 ug/L	201.51 ppb	09:16:18

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	950320.3	100.83 %	1.527			1.51%
Sc Radial	3767.4	101 %	1.0			1.04%
Y 371.029	805712.1	100.89 %	1.469			1.46%
Y RADIAL	4290.5	101.0 %	2.14			2.12%
Ag 328.068†	1087.4	4.6411 ug/L	0.19846	4.6411 ppb	0.19846	4.28%
QC value within limits for Ag 328.068 Recovery = 92.82%						
Al 396.153Radial†	223.0	209.23 ug/L	9.854	209.23 ppb	9.854	4.71%
QC value within limits for Al 396.153Radial Recovery = 104.61%						
As 188.979†	75.3	29.940 ug/L	1.1625	29.940 ppb	1.1625	3.88%
QC value within limits for As 188.979 Recovery = 99.80%						
B 249.677†	2416.0	53.700 ug/L	1.1387	53.700 ppb	1.1387	2.12%
QC value within limits for B 249.677 Recovery = 107.40%						
Ba 233.527†	654.6	4.7418 ug/L	0.09847	4.7418 ppb	0.09847	2.08%
QC value within limits for Ba 233.527 Recovery = 94.84%						
Be 313.107†	14110.9	4.7541 ug/L	0.09943	4.7541 ppb	0.09943	2.09%
QC value within limits for Be 313.107 Recovery = 95.08%						
Ca 317.933Radial†	97.4	215.31 ug/L	8.925	215.31 ppb	8.925	4.15%

QC value within limits for Ca 317.933 Radial Recovery = 107.65%

Cd 226.502†	443.4	4.5810 ug/L	0.08694	4.5810 ppb	0.08694	1.90%
QC value within limits for Cd 226.502 Recovery = 91.62%						
Co 228.616†	235.5	4.5256 ug/L	0.08986	4.5256 ppb	0.08986	1.99%
QC value within limits for Co 228.616 Recovery = 90.51%						
Cr 267.716†	461.7	4.6570 ug/L	0.12571	4.6570 ppb	0.12571	2.70%
QC value within limits for Cr 267.716 Recovery = 93.14%						
Cu 324.752†	3198.1	9.0670 ug/L	0.62735	9.0670 ppb	0.62735	6.92%
QC value within limits for Cu 324.752 Recovery = 90.67%						
Fe 238.204 Radial†	4.5	79.676 ug/L	20.7937	79.676 ppb	20.7937	26.10%
QC value within limits for Fe 238.204 Radial Recovery = 79.68%						
K 766.490 Radial†	699.5	136.46 ug/L	19.388	136.46 ppb	19.388	14.21%
QC value within limits for K 766.490 Radial Recovery = 90.97%						
Mg 279.077 IEC†	4.6	249.92 ug/L	91.828	249.92 ppb	91.828	36.74%
QC value within limits for Mg 279.077 IEC Recovery = 83.31%						
Mn 257.610†	9417.6	9.8180 ug/L	0.23247	9.8180 ppb	0.23247	2.37%
QC value within limits for Mn 257.610 Recovery = 98.18%						
Mo 202.031†	137.8	9.2262 ug/L	0.31072	9.2262 ppb	0.31072	3.37%
QC value within limits for Mo 202.031 Recovery = 92.26%						
Na 589.592 Radial†	855.0	309.16 ug/L	10.546	309.16 ppb	10.546	3.41%
QC value within limits for Na 589.592 Radial Recovery = 103.05%						
Ni 231.604†	215.6	4.9118 ug/L	0.18395	4.9118 ppb	0.18395	3.74%
QC value within limits for Ni 231.604 Recovery = 98.24%						
P 214.914†	250.6	132.17 ug/L	5.193	132.17 ppb	5.193	3.93%
QC value within limits for P 214.914 Recovery = 88.11%						
Pb 220.353†	50.2	5.5713 ug/L	0.85527	5.5713 ppb	0.85527	15.35%
QC value less than the lower limit for Pb 220.353 Recovery = 55.71%						
S 181.975 Axial†	74.7	94.285 ug/L	4.2953	94.285 ppb	4.2953	4.56%
QC value within limits for S 181.975 Axial Recovery = 94.28%						
Sb 206.836†	39.7	12.967 ug/L	2.1030	12.967 ppb	2.1030	16.22%
QC value within limits for Sb 206.836 Recovery = 129.67%						
Se 196.026†	45.1	26.824 ug/L	6.7914	26.824 ppb	6.7914	25.32%
QC value within limits for Se 196.026 Recovery = 89.41%						
Si 251.611†	3153.4	93.443 ug/L	2.2560	93.443 ppb	2.2560	2.41%
QC value within limits for Si 251.611 Recovery = 93.44%						
Sn 189.927†	52.9	8.4576 ug/L	0.51849	8.4576 ppb	0.51849	6.13%
QC value within limits for Sn 189.927 Recovery = 84.58%						
Sr 421.552†	654.1	5.0161 ug/L	0.10700	5.0161 ppb	0.10700	2.13%
QC value within limits for Sr 421.552 Recovery = 100.32%						
Ti 334.940†	3220.0	4.7087 ug/L	0.14295	4.7087 ppb	0.14295	3.04%
QC value within limits for Ti 334.940 Recovery = 94.17%						
Tl 190.801†	74.6	21.838 ug/L	1.7518	21.838 ppb	1.7518	8.02%
QC value within limits for Tl 190.801 Recovery = 109.19%						
U 409.014†	1990.1	52.284 ug/L	2.1074	52.284 ppb	2.1074	4.03%
QC value within limits for U 409.014 Recovery = 104.57%						
V 292.402†	756.9	5.0233 ug/L	0.23412	5.0233 ppb	0.23412	4.66%
QC value within limits for V 292.402 Recovery = 100.47%						
Zn 213.857†	1048.4	9.4643 ug/L	0.25493	9.4643 ppb	0.25493	2.69%
QC value within limits for Zn 213.857 Recovery = 94.64%						
SiO2†	3176.5	202.31 ug/L	3.840	202.31 ppb	3.840	1.90%
QC value within limits for SiO2 Recovery = 94.98%						

QC Failed. Continue with analysis.

Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 13  
 Date Collected: 2/26/2010 09:18:29  
 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	3343.4	3343.4	89.5 %		09:20:42
1	Y RADIAL	3699.5	3699.5	87.08 %		09:20:42
1	Al 396.153Radial†	505103.8	564419.4	530770 ug/L	530770 ppb	09:20:22
1	Ca 317.933Radial†	200005.4	223423.2	493900 ug/L	493900 ppb	09:20:22
1	Fe 238.204 Radial†	9646.2	10766.0	190830 ug/L	190830 ppb	09:20:42
1	K 766.490 Radial†	2512.8	-200.0	-204.29 ug/L	-204.29 ppb	09:20:22
1	Mg 279.077 IEC†	8253.0	9217.4	499960 ug/L	499960 ppb	09:20:42
1	Na 589.592 Radial†	-766.1	178.6	64.567 ug/L	64.567 ppb	09:20:42
1	Sr 421.552†	462.0	486.2	0.0412 ug/L	0.0412 ppb	09:20:42
1	Sc 361.383	776323.6	776323.6	82.372 %		09:21:40
1	Y 371.029	642938.6	642938.6	80.505 %		09:21:40
1	Ag 328.068†	-9948.4	-12447.1	-1.1720 ug/L	-1.1720 ppb	09:21:40
1	As 188.979†	-84.1	-75.7	14.540 ug/L	14.540 ppb	09:22:00
1	B 249.677†	228.8	1011.8	-8.4925 ug/L	-8.4925 ppb	09:21:40
1	Ba 233.527†	-535.8	-665.5	1.0289 ug/L	1.0289 ppb	09:22:00
1	Be 313.107†	-4033.4	-1066.4	-0.4055 ug/L	-0.4055 ppb	09:21:40
1	Cd 226.502†	1184.4	1619.9	-2.9879 ug/L	-2.9879 ppb	09:22:00
1	Co 228.616†	-19.8	40.5	-1.9757 ug/L	-1.9757 ppb	09:22:00
1	Cr 267.716†	-1523.7	-1918.7	-1.2221 ug/L	-1.2221 ppb	09:22:00
1	Cu 324.752†	2797.4	-2881.2	1.8932 ug/L	1.8932 ppb	09:21:40
1	Mn 257.610†	215.1	-220.3	-1.8319 ug/L	-1.8319 ppb	09:21:40
1	Mo 202.031†	-235.5	-298.0	0.7636 ug/L	0.7636 ppb	09:22:00
1	Ni 231.604†	190.6	155.8	3.5511 ug/L	3.5511 ppb	09:22:00
1	P 214.914†	170.7	-3.5	-22.268 ug/L	-22.268 ppb	09:22:00
1	Pb 220.353†	-853.6	-1041.3	-17.625 ug/L	-17.625 ppb	09:22:00
1	S 181.975 Axial†	34.4	0.2	-99.183 ug/L	-99.183 ppb	09:22:00
1	Sb 206.836†	84.4	70.8	4.6548 ug/L	4.6548 ppb	09:22:00
1	Se 196.026†	-918.6	-1089.7	-50.845 ug/L	-50.845 ppb	09:22:00
1	Si 251.611†	467.3	-40.3	-0.9495 ug/L	-0.9495 ppb	09:22:00
1	Sn 189.927†	-365.2	-459.6	3.6558 ug/L	3.6558 ppb	09:22:00
1	Ti 334.940†	-12992.7	-14127.0	4.6577 ug/L	4.6577 ppb	09:21:40
1	Tl 190.801†	-85.3	-66.8	-19.717 ug/L	-19.717 ppb	09:22:00
1	U 409.014†	-1778.1	1143.3	8.3345 ug/L	8.3345 ppb	09:21:40
1	V 292.402†	438.8	2171.7	-4.5387 ug/L	-4.5387 ppb	09:22:00
1	Zn 213.857†	3023.5	3016.9	-1.1745 ug/L	-1.1745 ppb	09:22:00
1	SiO2†	458.2	-57.7	-3.1391 ug/L	-3.1391 ppb	09:22:56
2	Sc Radial	3321.7	3321.7	88.9 %		09:21:08
2	Y RADIAL	3687.4	3687.4	86.79 %		09:21:08
2	Al 396.153Radial†	507049.8	570295.4	536300 ug/L	536300 ppb	09:20:48
2	Ca 317.933Radial†	200377.8	225302.2	498050 ug/L	498050 ppb	09:20:48
2	Fe 238.204 Radial†	9616.2	10802.6	191480 ug/L	191480 ppb	09:21:08
2	K 766.490 Radial†	2630.4	-49.3	-176.24 ug/L	-176.24 ppb	09:20:48
2	Mg 279.077 IEC†	8197.9	9215.7	499870 ug/L	499870 ppb	09:21:08
2	Na 589.592 Radial†	-754.1	186.4	67.414 ug/L	67.414 ppb	09:21:08
2	Sr 421.552†	479.5	509.2	0.1869 ug/L	0.1869 ppb	09:21:08
2	Sc 361.383	781627.7	781627.7	82.934 %		09:22:05
2	Y 371.029	648412.7	648412.7	81.191 %		09:22:05
2	Ag 328.068†	-9873.2	-12274.5	-0.2933 ug/L	-0.2933 ppb	09:22:05
2	As 188.979†	-70.8	-58.9	21.323 ug/L	21.323 ppb	09:22:25
2	B 249.677†	242.6	1026.6	-8.2698 ug/L	-8.2698 ppb	09:22:05
2	Ba 233.527†	-542.2	-668.9	1.0241 ug/L	1.0241 ppb	09:22:25
2	Be 313.107†	-3991.7	-982.8	-0.3786 ug/L	-0.3786 ppb	09:22:05
2	Cd 226.502†	1206.8	1637.1	-2.8773 ug/L	-2.8773 ppb	09:22:25
2	Co 228.616†	-10.8	51.6	-1.7759 ug/L	-1.7759 ppb	09:22:25
2	Cr 267.716†	-1520.6	-1902.4	-0.9962 ug/L	-0.9962 ppb	09:22:25
2	Cu 324.752†	2775.5	-2930.7	1.7858 ug/L	1.7858 ppb	09:22:05
2	Mn 257.610†	71.7	-395.0	-1.9462 ug/L	-1.9462 ppb	09:22:05
2	Mo 202.031†	-254.2	-318.6	-0.5144 ug/L	-0.5144 ppb	09:22:25
2	Ni 231.604†	178.1	139.2	3.1725 ug/L	3.1725 ppb	09:22:25

2	P 214.914†	149.7	-30.1	-35.620 ug/L	-35.620 ppb	09:22:25
2	Pb 220.353†	-859.2	-1041.0	-16.450 ug/L	-16.450 ppb	09:22:25
2	S 181.975 Axial†	48.1	16.5	-79.645 ug/L	-79.645 ppb	09:22:25
2	Sb 206.836†	83.1	68.5	3.7844 ug/L	3.7844 ppb	09:22:25
2	Se 196.026†	-915.8	-1078.8	-42.423 ug/L	-42.423 ppb	09:22:25
2	Si 251.611†	442.3	-74.3	-1.9418 ug/L	-1.9418 ppb	09:22:25
2	Sn 189.927†	-352.1	-440.8	7.3523 ug/L	7.3523 ppb	09:22:25
2	Ti 334.940†	-13380.8	-14487.8	4.6917 ug/L	4.6917 ppb	09:22:05
2	Tl 190.801†	-80.1	-59.9	-17.699 ug/L	-17.699 ppb	09:22:25
2	U 409.014†	-1722.7	1224.6	10.399 ug/L	10.399 ppb	09:22:05
2	V 292.402†	449.6	2181.1	-4.5904 ug/L	-4.5904 ppb	09:22:25
2	Zn 213.857†	3038.0	3009.5	-1.3366 ug/L	-1.3366 ppb	09:22:25
2	SiO2†	481.8	-33.1	-1.5310 ug/L	-1.5310 ppb	09:23:01
3	Sc Radial	3312.4	3312.4	88.7 %		09:21:33
3	Y RADIAL	3654.0	3654.0	86.01 %		09:21:33
3	Al 396.153Radial†	493027.2	556091.3	522940 ug/L	522940 ppb	09:21:13
3	Ca 317.933Radial†	194769.6	219613.7	485480 ug/L	485480 ppb	09:21:13
3	Fe 238.204 Radial†	9556.5	10765.8	190830 ug/L	190830 ppb	09:21:33
3	K 766.490 Radial†	2626.9	-45.0	-171.19 ug/L	-171.19 ppb	09:21:13
3	Mg 279.077 IEC†	8138.4	9174.7	497640 ug/L	497640 ppb	09:21:33
3	Na 589.592 Radial†	-733.0	207.9	75.167 ug/L	75.167 ppb	09:21:33
3	Sr 421.552†	453.5	481.4	0.0674 ug/L	0.0674 ppb	09:21:33
3	Sc 361.383	782137.5	782137.5	82.988 %		09:22:31
3	Y 371.029	648496.6	648496.6	81.201 %		09:22:31
3	Ag 328.068†	-9903.3	-12303.1	-0.4468 ug/L	-0.4468 ppb	09:22:31
3	As 188.979†	-89.2	-81.0	12.397 ug/L	12.397 ppb	09:22:51
3	B 249.677†	176.6	946.8	-9.9394 ug/L	-9.9394 ppb	09:22:31
3	Ba 233.527†	-569.9	-701.8	0.7669 ug/L	0.7669 ppb	09:22:51
3	Be 313.107†	-4004.6	-995.2	-0.3838 ug/L	-0.3838 ppb	09:22:31
3	Cd 226.502†	1191.0	1617.2	-3.0156 ug/L	-3.0156 ppb	09:22:51
3	Co 228.616†	2.4	67.4	-1.4624 ug/L	-1.4624 ppb	09:22:51
3	Cr 267.716†	-1489.8	-1864.1	-0.6727 ug/L	-0.6727 ppb	09:22:51
3	Cu 324.752†	2771.0	-2938.3	1.7282 ug/L	1.7282 ppb	09:22:31
3	Mn 257.610†	50.0	-421.2	-1.9469 ug/L	-1.9469 ppb	09:22:31
3	Mo 202.031†	-254.8	-319.1	-0.7510 ug/L	-0.7510 ppb	09:22:51
3	Ni 231.604†	163.2	121.1	2.7594 ug/L	2.7594 ppb	09:22:51
3	P 214.914†	158.1	-20.1	-33.076 ug/L	-33.076 ppb	09:22:51
3	Pb 220.353†	-813.8	-985.6	-13.260 ug/L	-13.260 ppb	09:22:51
3	S 181.975 Axial†	59.7	30.5	-59.529 ug/L	-59.529 ppb	09:22:51
3	Sb 206.836†	73.6	57.0	0.5014 ug/L	0.5014 ppb	09:22:51
3	Se 196.026†	-924.2	-1088.2	-49.888 ug/L	-49.888 ppb	09:22:51
3	Si 251.611†	469.4	-42.0	-0.9828 ug/L	-0.9828 ppb	09:22:51
3	Sn 189.927†	-351.0	-439.2	5.4084 ug/L	5.4084 ppb	09:22:51
3	Ti 334.940†	-13632.2	-14780.3	2.7566 ug/L	2.7566 ppb	09:22:31
3	Tl 190.801†	-86.6	-67.7	-19.983 ug/L	-19.983 ppb	09:22:51
3	U 409.014†	-1641.9	1323.3	13.066 ug/L	13.066 ppb	09:22:31
3	V 292.402†	455.9	2188.3	-4.4877 ug/L	-4.4877 ppb	09:22:51
3	Zn 213.857†	2991.5	2951.0	-1.7670 ug/L	-1.7670 ppb	09:22:51
3	SiO2†	449.7	-72.1	-4.0188 ug/L	-4.0188 ppb	09:23:06

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	780029.6	82.765 %		0.3416			0.41%
Sc Radial	3325.8	89.0 %		0.43			0.48%
Y 371.029	646616.0	80.966 %		0.3988			0.49%
Y RADIAL	3680.3	86.63 %		0.554			0.64%
Ag 328.068†	-12341.6	-0.6374 ug/L		0.46932	-0.6374 ppb	0.46932	73.64%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	563602.0	530010 ug/L		6711.8	530010 ppb	6711.8	1.27%
QC value within limits for Al 396.153Radial Recovery = 106.00%							
As 188.979†	-71.9	16.087 ug/L		4.6599	16.087 ppb	4.6599	28.97%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	995.1	-8.9006 ug/L		0.90652	-8.9006 ppb	0.90652	10.19%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-678.7	0.9400 ug/L		0.14991	0.9400 ppb	0.14991	15.95%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-1014.8	-0.3893 ug/L		0.01428	-0.3893 ppb	0.01428	3.67%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	222779.7	492480 ug/L		6407.0	492480 ppb	6407.0	1.30%

QC value within limits for Ca 317.933 Radial Recovery = 98.50%

Cd 226.502† 1624.7 -2.9603 ug/L 0.07321 -2.9603 ppb 0.07321 2.47%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 53.2 -1.7380 ug/L 0.25871 -1.7380 ppb 0.25871 14.89%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† -1895.1 -0.9637 ug/L 0.27611 -0.9637 ppb 0.27611 28.65%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -2916.8 1.8024 ug/L 0.08377 1.8024 ppb 0.08377 4.65%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 10778.1 191050 ug/L 375.8 191050 ppb 375.8 0.20%

QC value within limits for Fe 238.204 Radial Recovery = 95.52%

K 766.490 Radial† -98.1 -183.90 ug/L 17.831 -183.90 ppb 17.831 9.70%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 9202.6 499160 ug/L 1312.4 499160 ppb 1312.4 0.26%

QC value within limits for Mg 279.077 IEC Recovery = 99.83%

Mn 257.610† -345.5 -1.9083 ug/L 0.06619 -1.9083 ppb 0.06619 3.47%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† -311.9 -0.1672 ug/L 0.81480 -0.1672 ppb 0.81480 487.21%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† 191.0 69.049 ug/L 5.4859 69.049 ppb 5.4859 7.94%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 138.7 3.1610 ug/L 0.39598 3.1610 ppb 0.39598 12.53%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -17.9 -30.321 ug/L 7.0893 -30.321 ppb 7.0893 23.38%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -1022.6 -15.779 ug/L 2.2589 -15.779 ppb 2.2589 14.32%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 15.7 -79.452 ug/L 19.8280 -79.452 ppb 19.8280 24.96%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 65.4 2.9802 ug/L 2.19040 2.9802 ppb 2.19040 73.50%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -1085.6 -47.718 ug/L 4.6113 -47.718 ppb 4.6113 9.66%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† -52.2 -1.2914 ug/L 0.56355 -1.2914 ppb 0.56355 43.64%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† -446.5 5.4722 ug/L 1.84903 5.4722 ppb 1.84903 33.79%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 492.2 0.0985 ug/L 0.07768 0.0985 ppb 0.07768 78.87%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -14465.0 4.0353 ug/L 1.10755 4.0353 ppb 1.10755 27.45%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -64.8 -19.133 ug/L 1.2490 -19.133 ppb 1.2490 6.53%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 1230.4 10.600 ug/L 2.3721 10.600 ppb 2.3721 22.38%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† 2180.4 -4.5389 ug/L 0.05135 -4.5389 ppb 0.05135 1.13%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† 2992.5 -1.4260 ug/L 0.30618 -1.4260 ppb 0.30618 21.47%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† -54.3 -2.8963 ug/L 1.26155 -2.8963 ppb 1.26155 43.56%

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: 2/26/2010 09:25:18  
 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	3367.3	3367.3	90.2 %		09:27:30
1	Y RADIAL	3731.9	3731.9	87.84 %		09:27:30
1	Al 396.153Radial†	490906.4	544664.5	512170 ug/L	512170 ppb	09:27:10
1	Ca 317.933Radial†	195649.0	217004.4	479710 ug/L	479710 ppb	09:27:10
1	Fe 238.204 Radial†	9775.2	10832.5	192020 ug/L	192020 ppb	09:27:30
1	K 766.490 Radial†	28230.8	28307.1	5367.4 ug/L	5367.4 ppb	09:27:10
1	Mg 279.077 IEC†	8310.5	9215.7	499870 ug/L	499870 ppb	09:27:30
1	Na 589.592 Radial†	12748.1	15174.9	5487.1 ug/L	5487.1 ppb	09:27:10
1	Sr 421.552†	59281.7	65726.7	500.59 ug/L	500.59 ppb	09:27:10
1	Sc 361.383	788068.3	788068.3	83.618 %		09:28:28
1	Y 371.029	652284.8	652284.8	81.676 %		09:28:28
1	Ag 328.068†	41463.8	49217.6	264.27 ug/L	264.27 ppb	09:28:28
1	As 188.979†	987.1	1206.9	527.07 ug/L	527.07 ppb	09:28:48
1	B 249.677†	18967.7	23417.9	488.34 ug/L	488.34 ppb	09:28:28
1	Ba 233.527†	54931.3	65678.2	481.41 ug/L	481.41 ppb	09:28:28
1	Be 313.107†	591352.9	711039.9	240.11 ug/L	240.11 ppb	09:28:28
1	Cd 226.502†	37285.1	44772.0	442.54 ug/L	442.54 ppb	09:28:48
1	Co 228.616†	18654.6	22373.9	426.36 ug/L	426.36 ppb	09:28:48
1	Cr 267.716†	37369.2	44621.6	469.43 ug/L	469.43 ppb	09:28:28
1	Cu 324.752†	158606.8	183403.4	531.27 ug/L	531.27 ppb	09:28:28
1	Mn 257.610†	375609.5	448716.8	466.42 ug/L	466.42 ppb	09:28:28
1	Mo 202.031†	5753.6	6868.8	479.98 ug/L	479.98 ppb	09:28:48
1	Ni 231.604†	15945.7	18994.3	432.65 ug/L	432.65 ppb	09:28:48
1	P 214.914†	4030.8	4609.9	2336.9 ug/L	2336.9 ppb	09:28:48
1	Pb 220.353†	2579.5	3079.8	431.86 ug/L	431.86 ppb	09:28:48
1	S 181.975 Axial†	1757.4	2060.2	2506.1 ug/L	2506.1 ppb	09:28:48
1	Sb 206.836†	1394.8	1636.4	520.84 ug/L	520.84 ppb	09:28:48
1	Se 196.026†	2602.0	3137.3	2440.4 ug/L	2440.4 ppb	09:28:48
1	Si 251.611†	143494.2	170999.8	5067.7 ug/L	5067.7 ppb	09:28:28
1	Sn 189.927†	2147.0	2551.4	480.16 ug/L	480.16 ppb	09:28:48
1	Ti 334.940†	272762.2	327847.6	504.17 ug/L	504.17 ppb	09:28:28
1	Tl 190.801†	1238.2	1517.5	446.57 ug/L	446.57 ppb	09:28:48
1	U 409.014†	13325.1	19237.6	482.69 ug/L	482.69 ppb	09:28:28
1	V 292.402†	65089.2	79480.3	493.16 ug/L	493.16 ppb	09:28:28
1	Zn 213.857†	47255.5	55860.0	475.04 ug/L	475.04 ppb	09:28:28
1	SiO2†	144885.0	172656.7	10998 ug/L	10998 ppb	09:29:46
2	Sc Radial	3345.2	3345.2	89.6 %		09:27:56
2	Y RADIAL	3698.4	3698.4	87.05 %		09:27:56
2	Al 396.153Radial†	486572.8	543427.3	511010 ug/L	511010 ppb	09:27:36
2	Ca 317.933Radial†	193257.3	215769.3	476980 ug/L	476980 ppb	09:27:36
2	Fe 238.204 Radial†	9711.9	10833.6	192040 ug/L	192040 ppb	09:27:56
2	K 766.490 Radial†	27897.4	28142.0	5336.1 ug/L	5336.1 ppb	09:27:36
2	Mg 279.077 IEC†	8264.2	9225.0	500370 ug/L	500370 ppb	09:27:56
2	Na 589.592 Radial†	12585.4	15086.8	5455.2 ug/L	5455.2 ppb	09:27:36
2	Sr 421.552†	58434.4	65215.5	496.69 ug/L	496.69 ppb	09:27:36
2	Sc 361.383	785455.5	785455.5	83.341 %		09:28:54
2	Y 371.029	651133.4	651133.4	81.531 %		09:28:54
2	Ag 328.068†	41416.0	49325.2	264.76 ug/L	264.76 ppb	09:28:54
2	As 188.979†	950.0	1166.3	510.95 ug/L	510.95 ppb	09:29:14
2	B 249.677†	18854.9	23357.9	487.01 ug/L	487.01 ppb	09:28:54
2	Ba 233.527†	54465.7	65338.1	478.95 ug/L	478.95 ppb	09:28:54
2	Be 313.107†	588509.5	709980.6	239.75 ug/L	239.75 ppb	09:28:54
2	Cd 226.502†	37048.3	44636.1	441.13 ug/L	441.13 ppb	09:29:14
2	Co 228.616†	18511.9	22276.9	424.49 ug/L	424.49 ppb	09:29:14
2	Cr 267.716†	37064.4	44404.5	467.23 ug/L	467.23 ppb	09:28:54
2	Cu 324.752†	157757.7	183015.5	530.17 ug/L	530.17 ppb	09:28:54
2	Mn 257.610†	372618.3	446621.9	464.22 ug/L	464.22 ppb	09:28:54
2	Mo 202.031†	5687.5	6812.4	476.18 ug/L	476.18 ppb	09:29:14
2	Ni 231.604†	15771.6	18848.8	429.34 ug/L	429.34 ppb	09:29:14

2	P 214.914†	4000.3	4589.4	2325.7 ug/L	2325.7 ppb	09:29:14
2	Pb 220.353†	2530.0	3030.7	426.17 ug/L	426.17 ppb	09:29:14
2	S 181.975 Axial†	1752.2	2061.0	2507.3 ug/L	2507.3 ppb	09:29:14
2	Sb 206.836†	1409.2	1659.2	527.97 ug/L	527.97 ppb	09:29:14
2	Se 196.026†	2596.8	3141.3	2442.9 ug/L	2442.9 ppb	09:29:14
2	Si 251.611†	142461.0	170330.8	5047.9 ug/L	5047.9 ppb	09:28:54
2	Sn 189.927†	2111.0	2516.7	474.15 ug/L	474.15 ppb	09:29:14
2	Ti 334.940†	271063.5	326894.5	502.37 ug/L	502.37 ppb	09:28:54
2	Tl 190.801†	1211.1	1489.8	438.48 ug/L	438.48 ppb	09:29:14
2	U 409.014†	13471.1	19465.7	488.69 ug/L	488.69 ppb	09:28:54
2	V 292.402†	64620.2	79176.6	491.20 ug/L	491.20 ppb	09:28:54
2	Zn 213.857†	46864.9	55579.4	472.51 ug/L	472.51 ppb	09:28:54
2	SiO2†	145376.1	173822.3	11072 ug/L	11072 ppb	09:29:51
3	Sc Radial	3353.9	3353.9	89.8 %		09:28:21
3	Y RADIAL	3707.3	3707.3	87.26 %		09:28:21
3	Al 396.153Radial†	501725.0	558890.7	525550 ug/L	525550 ppb	09:28:01
3	Ca 317.933Radial†	199236.0	221867.2	490460 ug/L	490460 ppb	09:28:01
3	Fe 238.204 Radial†	9733.5	10829.4	191970 ug/L	191970 ppb	09:28:21
3	K 766.490 Radial†	28722.6	28980.1	5495.3 ug/L	5495.3 ppb	09:28:01
3	Mg 279.077 IEC†	8260.4	9196.8	498840 ug/L	498840 ppb	09:28:21
3	Na 589.592 Radial†	13037.5	15553.8	5624.1 ug/L	5624.1 ppb	09:28:01
3	Sr 421.552†	60613.9	67473.2	513.90 ug/L	513.90 ppb	09:28:01
3	Sc 361.383	801238.5	801238.5	85.015 %		09:29:20
3	Y 371.029	662658.5	662658.5	82.975 %		09:29:20
3	Ag 328.068†	42322.3	49412.3	264.92 ug/L	264.92 ppb	09:29:20
3	As 188.979†	944.3	1137.2	499.42 ug/L	499.42 ppb	09:29:40
3	B 249.677†	19337.6	23480.1	489.76 ug/L	489.76 ppb	09:29:20
3	Ba 233.527†	55649.6	65443.3	479.70 ug/L	479.70 ppb	09:29:20
3	Be 313.107†	601512.6	711365.8	240.22 ug/L	240.22 ppb	09:29:20
3	Cd 226.502†	37274.7	44026.8	434.85 ug/L	434.85 ppb	09:29:40
3	Co 228.616†	18647.8	21999.1	419.15 ug/L	419.15 ppb	09:29:40
3	Cr 267.716†	37851.7	44454.6	467.73 ug/L	467.73 ppb	09:29:20
3	Cu 324.752†	162102.0	184396.8	534.09 ug/L	534.09 ppb	09:29:20
3	Mn 257.610†	381470.0	448226.6	465.95 ug/L	465.95 ppb	09:29:20
3	Mo 202.031†	5750.5	6752.0	472.29 ug/L	472.29 ppb	09:29:40
3	Ni 231.604†	15869.3	18591.0	423.46 ug/L	423.46 ppb	09:29:40
3	P 214.914†	4010.8	4507.1	2284.7 ug/L	2284.7 ppb	09:29:40
3	Pb 220.353†	2586.9	3037.9	430.17 ug/L	430.17 ppb	09:29:40
3	S 181.975 Axial†	1762.2	2031.3	2467.1 ug/L	2467.1 ppb	09:29:40
3	Sb 206.836†	1407.5	1623.9	516.25 ug/L	516.25 ppb	09:29:40
3	Se 196.026†	2599.8	3083.5	2408.5 ug/L	2408.5 ppb	09:29:40
3	Si 251.611†	145976.1	171098.3	5070.7 ug/L	5070.7 ppb	09:29:20
3	Sn 189.927†	2157.8	2521.9	477.38 ug/L	477.38 ppb	09:29:40
3	Ti 334.940†	277215.2	327723.6	505.51 ug/L	505.51 ppb	09:29:20
3	Tl 190.801†	1230.6	1484.1	436.86 ug/L	436.86 ppb	09:29:40
3	U 409.014†	13843.2	19585.0	491.84 ug/L	491.84 ppb	09:29:20
3	V 292.402†	65973.0	79240.5	491.53 ug/L	491.53 ppb	09:29:20
3	Zn 213.857†	47980.0	55783.4	474.41 ug/L	474.41 ppb	09:29:20
3	SiO2†	142710.8	167251.1	10653 ug/L	10653 ppb	09:29:56

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	791587.4	83.991 %	0.8976			1.07%
Sc Radial	3355.5	89.8 %	0.30			0.33%
Y 371.029	655358.9	82.061 %	0.7948			0.97%
Y RADIAL	3712.5	87.38 %	0.408			0.47%
Ag 328.068†	49318.4	264.65 ug/L	0.341	264.65 ppb	0.341	0.13%
QC value within limits for Ag 328.068 Recovery = 105.86%						
Al 396.153Radial†	548994.2	516240 ug/L	8080.9	516240 ppb	8080.9	1.57%
QC value within limits for Al 396.153Radial Recovery = 103.25%						
As 188.979†	1170.1	512.48 ug/L	13.889	512.48 ppb	13.889	2.71%
QC value within limits for As 188.979 Recovery = 102.50%						
B 249.677†	23418.7	488.37 ug/L	1.372	488.37 ppb	1.372	0.28%
QC value within limits for B 249.677 Recovery = 97.67%						
Ba 233.527†	65486.5	480.02 ug/L	1.260	480.02 ppb	1.260	0.26%
QC value within limits for Ba 233.527 Recovery = 96.00%						
Be 313.107†	710795.5	240.03 ug/L	0.245	240.03 ppb	0.245	0.10%
QC value within limits for Be 313.107 Recovery = 96.01%						
Ca 317.933Radial†	218213.6	482380 ug/L	7126.4	482380 ppb	7126.4	1.48%



QC value within limits for Ca 317.933 Radial Recovery = 96.48%

Cd 226.502†	44478.3	439.50 ug/L	4.094	439.50 ppb	4.094	0.93%
QC value within limits for Cd 226.502 Recovery = 87.90%						
Co 228.616†	22216.6	423.33 ug/L	3.738	423.33 ppb	3.738	0.88%
QC value within limits for Co 228.616 Recovery = 84.67%						
Cr 267.716†	44493.5	468.13 ug/L	1.151	468.13 ppb	1.151	0.25%
QC value within limits for Cr 267.716 Recovery = 93.63%						
Cu 324.752†	183605.2	531.84 ug/L	2.022	531.84 ppb	2.022	0.38%
QC value within limits for Cu 324.752 Recovery = 106.37%						
Fe 238.204 Radial†	10831.8	192010 ug/L	38.3	192010 ppb	38.3	0.02%
QC value within limits for Fe 238.204 Radial Recovery = 96.01%						
K 766.490 Radial†	28476.4	5399.6 ug/L	84.33	5399.6 ppb	84.33	1.56%
QC value within limits for K 766.490 Radial Recovery = 107.99%						
Mg 279.077 IEC†	9212.5	499700 ug/L	780.5	499700 ppb	780.5	0.16%
QC value within limits for Mg 279.077 IEC Recovery = 99.94%						
Mn 257.610†	447855.1	465.53 ug/L	1.160	465.53 ppb	1.160	0.25%
QC value within limits for Mn 257.610 Recovery = 93.11%						
Mo 202.031†	6811.1	476.15 ug/L	3.842	476.15 ppb	3.842	0.81%
QC value within limits for Mo 202.031 Recovery = 95.23%						
Na 589.592 Radial†	15271.8	5522.2 ug/L	89.73	5522.2 ppb	89.73	1.62%
QC value within limits for Na 589.592 Radial Recovery = 110.44%						
Ni 231.604†	18811.3	428.48 ug/L	4.653	428.48 ppb	4.653	1.09%
QC value within limits for Ni 231.604 Recovery = 85.70%						
P 214.914†	4568.8	2315.8 ug/L	27.49	2315.8 ppb	27.49	1.19%
QC value within limits for P 214.914 Recovery = 92.63%						
Pb 220.353†	3049.5	429.40 ug/L	2.923	429.40 ppb	2.923	0.68%
QC value within limits for Pb 220.353 Recovery = 85.88%						
S 181.975 Axial†	2050.8	2493.5 ug/L	22.85	2493.5 ppb	22.85	0.92%
QC value within limits for S 181.975 Axial Recovery = 99.74%						
Sb 206.836†	1639.9	521.69 ug/L	5.905	521.69 ppb	5.905	1.13%
QC value within limits for Sb 206.836 Recovery = 104.34%						
Se 196.026†	3120.7	2430.6 ug/L	19.19	2430.6 ppb	19.19	0.79%
QC value within limits for Se 196.026 Recovery = 97.22%						
Si 251.611†	170809.6	5062.1 ug/L	12.40	5062.1 ppb	12.40	0.24%
QC value within limits for Si 251.611 Recovery = 101.24%						
Sn 189.927†	2530.0	477.23 ug/L	3.008	477.23 ppb	3.008	0.63%
QC value within limits for Sn 189.927 Recovery = 95.45%						
Sr 421.552†	66138.5	503.73 ug/L	9.028	503.73 ppb	9.028	1.79%
QC value within limits for Sr 421.552 Recovery = 100.75%						
Ti 334.940†	327488.5	504.02 ug/L	1.580	504.02 ppb	1.580	0.31%
QC value within limits for Ti 334.940 Recovery = 100.80%						
Tl 190.801†	1497.2	440.64 ug/L	5.203	440.64 ppb	5.203	1.18%
QC value within limits for Tl 190.801 Recovery = 88.13%						
U 409.014†	19429.5	487.74 ug/L	4.644	487.74 ppb	4.644	0.95%
QC value within limits for U 409.014 Recovery = 97.55%						
V 292.402†	79299.1	491.96 ug/L	1.049	491.96 ppb	1.049	0.21%
QC value within limits for V 292.402 Recovery = 98.39%						
Zn 213.857†	55741.0	473.99 ug/L	1.315	473.99 ppb	1.315	0.28%
QC value within limits for Zn 213.857 Recovery = 94.80%						
SiO2†	171243.3	10908 ug/L	223.5	10908 ppb	223.5	2.05%
QC value within limits for SiO2 Recovery = 101.99%						

All analyte(s) passed QC.

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

Autosampler Location: 15  
 Date Collected: 2/26/2010 09:32:06  
 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	3340.7	3340.7	89.4 %		09:34:19
1	Y RADIAL	3724.9	3724.9	87.67 %		09:34:19
1	Al 396.153Radial†	491507.5	549671.7	516910 ug/L	516910 ppb	09:33:59
1	Ca 317.933Radial†	196305.9	219466.6	485150 ug/L	485150 ppb	09:33:59
1	Fe 238.204 Radial†	22532.3	25182.0	446360 ug/L	446360 ppb	09:34:19
1	K 766.490 Radial†	3093.2	451.2	-281.84 ug/L	-281.84 ppb	09:33:59
1	Mg 279.077 IEC†	8139.8	9098.2	493230 ug/L	493230 ppb	09:34:19
1	Na 589.592 Radial†	1316617.6	1473083.9	532650 ug/L	532650 ppb	09:33:59
1	Sr 421.552†	1510.9	1659.3	9.1053 ug/L	9.1053 ppb	09:34:19
1	Sc 361.383	773326.2	773326.2	82.054 %		09:35:17
1	Y 371.029	642167.7	642167.7	80.409 %		09:35:17
1	Ag 328.068†	-23144.4	-28576.2	-2.9375 ug/L	-2.9375 ppb	09:35:17
1	As 188.979†	-196.8	-213.4	19.813 ug/L	19.813 ppb	09:35:37
1	B 249.677†	921.5	1857.0	-31.210 ug/L	-31.210 ppb	09:35:17
1	Ba 233.527†	-1549.1	-1903.0	-0.1205 ug/L	-0.1205 ppb	09:35:37
1	Be 313.107†	-10345.9	-8778.5	-2.9896 ug/L	-2.9896 ppb	09:35:17
1	Cd 226.502†	3045.7	3893.8	-3.1520 ug/L	-3.1520 ppb	09:35:37
1	Co 228.616†	223.3	336.7	-0.0504 ug/L	-0.0504 ppb	09:35:37
1	Cr 267.716†	-1326.9	-1686.1	19.810 ug/L	19.810 ppb	09:35:37
1	Cu 324.752†	-79.4	-6374.1	-2.3717 ug/L	-2.3717 ppb	09:35:17
1	Mn 257.610†	-22082.0	-27393.2	-4.6645 ug/L	-4.6645 ppb	09:35:17
1	Mo 202.031†	-496.8	-617.5	-0.8736 ug/L	-0.8736 ppb	09:35:37
1	Ni 231.604†	281.4	267.4	6.0899 ug/L	6.0899 ppb	09:35:37
1	P 214.914†	556.4	467.5	22.089 ug/L	22.089 ppb	09:35:37
1	Pb 220.353†	-630.3	-773.1	-18.840 ug/L	-18.840 ppb	09:35:37
1	S 181.975 Axial†	75.3	50.2	-33.443 ug/L	-33.443 ppb	09:35:37
1	Sb 206.836†	79.0	64.6	-0.2468 ug/L	-0.2468 ppb	09:35:37
1	Se 196.026†	-2123.9	-2563.0	-120.19 ug/L	-120.19 ppb	09:35:37
1	Si 251.611†	-571.5	-1304.1	-38.182 ug/L	-38.182 ppb	09:35:37
1	Sn 189.927†	-372.0	-469.7	-14.162 ug/L	-14.162 ppb	09:35:37
1	Ti 334.940†	-10890.3	-11625.9	1.4464 ug/L	1.4464 ppb	09:35:17
1	Tl 190.801†	-110.3	-97.8	-28.898 ug/L	-28.898 ppb	09:35:37
1	U 409.014†	441530.1	541401.7	14178 ug/L	14178 ppb	09:35:17
1	V 292.402†	1376.6	3316.7	-7.7421 ug/L	-7.7421 ppb	09:35:37
1	Zn 213.857†	5317.3	5826.7	-13.904 ug/L	-13.904 ppb	09:35:37
1	SiO2†	-628.9	-1380.4	-86.900 ug/L	-86.900 ppb	09:36:34
2	Sc Radial	3302.4	3302.4	88.4 %		09:34:45
2	Y RADIAL	3676.7	3676.7	86.54 %		09:34:45
2	Al 396.153Radial†	485793.9	549577.9	516820 ug/L	516820 ppb	09:34:25
2	Ca 317.933Radial†	193804.7	219181.2	484520 ug/L	484520 ppb	09:34:25
2	Fe 238.204 Radial†	22358.1	25276.9	448050 ug/L	448050 ppb	09:34:45
2	K 766.490 Radial†	3136.7	540.6	-263.71 ug/L	-263.71 ppb	09:34:25
2	Mg 279.077 IEC†	8088.1	9145.3	495780 ug/L	495780 ppb	09:34:45
2	Na 589.592 Radial†	1298657.8	1469830.1	531480 ug/L	531480 ppb	09:34:25
2	Sr 421.552†	1483.5	1647.9	9.0223 ug/L	9.0223 ppb	09:34:45
2	Sc 361.383	765733.8	765733.8	81.248 %		09:35:43
2	Y 371.029	636924.4	636924.4	79.752 %		09:35:43
2	Ag 328.068†	-22743.4	-28362.3	-1.4705 ug/L	-1.4705 ppb	09:35:43
2	As 188.979†	-200.5	-220.4	17.418 ug/L	17.418 ppb	09:36:03
2	B 249.677†	833.6	1760.0	-33.639 ug/L	-33.639 ppb	09:35:43
2	Ba 233.527†	-1497.5	-1858.3	0.2540 ug/L	0.2540 ppb	09:36:03
2	Be 313.107†	-10182.4	-8702.2	-2.9655 ug/L	-2.9655 ppb	09:35:43
2	Cd 226.502†	3059.9	3948.2	-2.7710 ug/L	-2.7710 ppb	09:36:03
2	Co 228.616†	204.7	316.5	-0.4674 ug/L	-0.4674 ppb	09:36:03
2	Cr 267.716†	-1340.0	-1718.2	19.659 ug/L	19.659 ppb	09:36:03
2	Cu 324.752†	-11.8	-6291.8	-2.0294 ug/L	-2.0294 ppb	09:35:43
2	Mn 257.610†	-21689.2	-27176.5	-4.3768 ug/L	-4.3768 ppb	09:35:43
2	Mo 202.031†	-529.7	-664.0	-3.8586 ug/L	-3.8586 ppb	09:36:03
2	Ni 231.604†	305.9	301.0	6.8571 ug/L	6.8571 ppb	09:36:03

2	P 214.914†	555.4	473.0	23.593 ug/L	23.593 ppb	09:36:03
2	Pb 220.353†	-617.8	-765.4	-18.207 ug/L	-18.207 ppb	09:36:03
2	S 181.975 Axial†	77.0	53.2	-29.638 ug/L	-29.638 ppb	09:36:03
2	Sb 206.836†	67.6	51.6	-4.4947 ug/L	-4.4947 ppb	09:36:03
2	Se 196.026†	-2139.6	-2608.0	-141.39 ug/L	-141.39 ppb	09:36:03
2	Si 251.611†	-580.1	-1321.7	-38.665 ug/L	-38.665 ppb	09:36:03
2	Sn 189.927†	-380.9	-485.0	-16.819 ug/L	-16.819 ppb	09:36:03
2	Ti 334.940†	-11144.7	-12070.6	0.5159 ug/L	0.5159 ppb	09:35:43
2	Tl 190.801†	-109.0	-97.5	-28.823 ug/L	-28.823 ppb	09:36:03
2	U 409.014†	436125.2	540084.7	14143 ug/L	14143 ppb	09:35:43
2	V 292.402†	1343.4	3292.5	-8.2010 ug/L	-8.2010 ppb	09:36:03
2	Zn 213.857†	5309.4	5881.1	-13.666 ug/L	-13.666 ppb	09:36:03
2	SiO2†	-636.9	-1397.9	-87.931 ug/L	-87.931 ppb	09:36:39
3	Sc Radial	3319.4	3319.4	88.9 %		09:35:10
3	Y RADIAL	3690.9	3690.9	86.87 %		09:35:10
3	Al 396.153Radial†	485641.6	546596.2	514010 ug/L	514010 ppb	09:34:50
3	Ca 317.933Radial†	193386.8	217589.8	481000 ug/L	481000 ppb	09:34:50
3	Fe 238.204 Radial†	22294.9	25076.5	444490 ug/L	444490 ppb	09:35:10
3	K 766.490 Radial†	3050.3	425.2	-283.64 ug/L	-283.64 ppb	09:34:50
3	Mg 279.077 IEC†	8043.2	9047.9	490500 ug/L	490500 ppb	09:35:10
3	Na 589.592 Radial†	1296207.0	1459559.6	527760 ug/L	527760 ppb	09:34:50
3	Sr 421.552†	1484.1	1640.0	8.9885 ug/L	8.9885 ppb	09:35:10
3	Sc 361.383	772280.6	772280.6	81.943 %		09:36:09
3	Y 371.029	641034.0	641034.0	80.267 %		09:36:09
3	Ag 328.068†	-22991.0	-28427.1	-2.7789 ug/L	-2.7789 ppb	09:36:09
3	As 188.979†	-197.1	-214.2	19.064 ug/L	19.064 ppb	09:36:29
3	B 249.677†	872.1	1798.3	-32.212 ug/L	-32.212 ppb	09:36:09
3	Ba 233.527†	-1561.6	-1920.9	-0.3047 ug/L	-0.3047 ppb	09:36:29
3	Be 313.107†	-10305.3	-8746.0	-2.9814 ug/L	-2.9814 ppb	09:36:09
3	Cd 226.502†	3031.4	3881.5	-3.0953 ug/L	-3.0953 ppb	09:36:29
3	Co 228.616†	212.9	324.4	-0.2600 ug/L	-0.2600 ppb	09:36:29
3	Cr 267.716†	-1368.2	-1738.6	19.121 ug/L	19.121 ppb	09:36:29
3	Cu 324.752†	-94.9	-6393.2	-2.4991 ug/L	-2.4991 ppb	09:36:09
3	Mn 257.610†	-21970.0	-27292.9	-4.6331 ug/L	-4.6331 ppb	09:36:09
3	Mo 202.031†	-514.1	-639.5	-2.5375 ug/L	-2.5375 ppb	09:36:29
3	Ni 231.604†	263.9	246.5	5.6140 ug/L	5.6140 ppb	09:36:29
3	P 214.914†	520.0	423.9	-0.4070 ug/L	-0.4070 ppb	09:36:29
3	Pb 220.353†	-620.9	-762.8	-18.161 ug/L	-18.161 ppb	09:36:29
3	S 181.975 Axial†	78.8	54.7	-27.288 ug/L	-27.288 ppb	09:36:29
3	Sb 206.836†	62.1	44.1	-6.7153 ug/L	-6.7153 ppb	09:36:29
3	Se 196.026†	-2113.1	-2553.3	-120.30 ug/L	-120.30 ppb	09:36:29
3	Si 251.611†	-536.6	-1262.5	-36.929 ug/L	-36.929 ppb	09:36:29
3	Sn 189.927†	-384.9	-485.9	-17.381 ug/L	-17.381 ppb	09:36:29
3	Ti 334.940†	-11553.2	-12452.8	-0.0799 ug/L	-0.0799 ppb	09:36:09
3	Tl 190.801†	-92.1	-75.7	-22.473 ug/L	-22.473 ppb	09:36:29
3	U 409.014†	439482.5	539631.5	14132 ug/L	14132 ppb	09:36:09
3	V 292.402†	1448.8	3407.1	-7.0570 ug/L	-7.0570 ppb	09:36:29
3	Zn 213.857†	5306.8	5822.7	-13.657 ug/L	-13.657 ppb	09:36:29
3	SiO2†	-586.9	-1330.2	-83.660 ug/L	-83.660 ppb	09:36:44

## Mean Data: LRL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	770446.8	81.748 %	0.4366			0.53%
Sc Radial	3320.9	88.9 %	0.51			0.58%
Y 371.029	640042.1	80.143 %	0.3454			0.43%
Y RADIAL	3697.5	87.03 %	0.583			0.67%
Ag 328.068†	-28455.2	-2.3956 ug/L	0.80510	-2.3956 ppb	0.80510	33.61%
Al 396.153Radial†	548615.3	515910 ug/L	1644.9	515910 ppb	1644.9	0.32%
QC value within limits for Al 396.153Radial Recovery = 103.18%						
As 188.979†	-216.0	18.765 ug/L	1.2254	18.765 ppb	1.2254	6.53%
B 249.677†	1805.1	-32.354 ug/L	1.2209	-32.354 ppb	1.2209	3.77%
Ba 233.527†	-1894.1	-0.0571 ug/L	0.28469	-0.0571 ppb	0.28469	498.97%
Be 313.107†	-8742.2	-2.9788 ug/L	0.01229	-2.9788 ppb	0.01229	0.41%
Ca 317.933Radial†	218745.9	483560 ug/L	2235.6	483560 ppb	2235.6	0.46%
QC value within limits for Ca 317.933Radial Recovery = 96.71%						
Cd 226.502†	3907.8	-3.0061 ug/L	0.20559	-3.0061 ppb	0.20559	6.84%
Co 228.616†	325.8	-0.2592 ug/L	0.20849	-0.2592 ppb	0.20849	80.42%
Cr 267.716†	-1714.3	19.530 ug/L	0.3623	19.530 ppb	0.3623	1.86%
Cu 324.752†	-6353.0	-2.3001 ug/L	0.24288	-2.3001 ppb	0.24288	10.56%

Fe 238.204 Radial†	25178.5	446300 ug/L	1777.1	446300 ppb	1777.1	0.40%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.26%						
K 766.490 Radial†	472.3	-276.40 ug/L	11.023	-276.40 ppb	11.023	3.99%
Mg 279.077 IEC†	9097.2	493170 ug/L	2640.2	493170 ppb	2640.2	0.54%
QC value within limits for Mg 279.077 IEC Recovery = 98.63%						
Mn 257.610†	-27287.5	-4.5581 ug/L	0.15781	-4.5581 ppb	0.15781	3.46%
Mo 202.031†	-640.3	-2.4232 ug/L	1.49574	-2.4232 ppb	1.49574	61.73%
Na 589.592 Radial†	1467491.2	530630 ug/L	2552.5	530630 ppb	2552.5	0.48%
QC value within limits for Na 589.592 Radial Recovery = 106.13%						
Ni 231.604†	271.6	6.1870 ug/L	0.62719	6.1870 ppb	0.62719	10.14%
P 214.914†	454.8	15.092 ug/L	13.4433	15.092 ppb	13.4433	89.08%
Pb 220.353†	-767.1	-18.402 ug/L	0.3792	-18.402 ppb	0.3792	2.06%
S 181.975 Axial†	52.7	-30.123 ug/L	3.1057	-30.123 ppb	3.1057	10.31%
Sb 206.836†	53.4	-3.8189 ug/L	3.28678	-3.8189 ppb	3.28678	86.07%
Se 196.026†	-2574.8	-127.29 ug/L	12.207	-127.29 ppb	12.207	9.59%
Si 251.611†	-1296.1	-37.925 ug/L	0.8958	-37.925 ppb	0.8958	2.36%
Sn 189.927†	-480.2	-16.121 ug/L	1.7194	-16.121 ppb	1.7194	10.67%
Sr 421.552†	1649.1	9.0387 ug/L	0.06008	9.0387 ppb	0.06008	0.66%
Ti 334.940†	-12049.8	0.6275 ug/L	0.76927	0.6275 ppb	0.76927	122.60%
Tl 190.801†	-90.3	-26.731 ug/L	3.6880	-26.731 ppb	3.6880	13.80%
U 409.014†	540372.7	14151 ug/L	24.1	14151 ppb	24.1	0.17%
QC value within limits for U 409.014 Recovery = 94.34%						
V 292.402†	3338.8	-7.6667 ug/L	0.57573	-7.6667 ppb	0.57573	7.51%
Zn 213.857†	5843.5	-13.742 ug/L	0.1399	-13.742 ppb	0.1399	1.02%
SiO2†	-1369.5	-86.164 ug/L	2.2290	-86.164 ppb	2.2290	2.59%

QC Failed. Continue with analysis.

Sequence No.: 12  
 Sample ID: LR2  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 16  
 Date Collected: 2/26/2010 09:38:54  
 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	3537.7	3537.7	94.7 %		09:41:12
1	Y RADIAL	4017.8	4017.8	94.57 %		09:40:52
1	Al 396.153Radial†	382.8	544.1	59.844 ug/L	59.844 ppb	09:40:52
1	Ca 317.933Radial†	28.5	16.1	35.628 ug/L	35.628 ppb	09:41:12
1	Fe 238.204 Radial†	-2.5	-12.9	36.012 ug/L	36.012 ppb	09:41:12
1	K 766.490 Radial†	1498366.4	1578948.0	308490 ug/L	308490 ppb	09:40:47
1	Mg 279.077 IEC†	-3.0	-5.6	-206.80 ug/L	-206.80 ppb	09:41:12
1	Na 589.592 Radial†	-383.9	629.1	227.47 ug/L	227.47 ppb	09:40:52
1	Sr 421.552†	1254055.3	1323984.8	10156 ug/L	10156 ppb	09:40:47
1	Sc 361.383	879042.9	879042.9	93.271 %		09:42:30
1	Y 371.029	728666.3	728666.3	91.240 %		09:42:30
1	Ag 328.068†	-7222.5	-8113.3	4.1706 ug/L	4.1706 ppb	09:42:35
1	As 188.979†	22026.1	23641.7	9444.6 ug/L	9444.6 ppb	09:42:35
1	B 249.677†	200063.5	215232.0	4760.9 ug/L	4760.9 ppb	09:42:30
1	Ba 233.527†	1731798.3	1856731.0	13434 ug/L	13434 ppb	09:42:30
1	Be 313.107†	7658975.0	8215394.1	2783.4 ug/L	2783.4 ppb	09:42:23
1	Cd 226.502†	840535.7	901361.6	9307.0 ug/L	9307.0 ppb	09:42:30
1	Co 228.616†	431579.9	462782.6	8872.0 ug/L	8872.0 ppb	09:42:35
1	Cr 267.716†	2127920.9	2281379.8	23054 ug/L	23054 ppb	09:42:30
1	Cu 324.752†	6384505.4	6838864.9	19442 ug/L	19442 ppb	09:42:23
1	Mn 257.610†	8127715.2	8713641.9	9086.3 ug/L	9086.3 ppb	09:42:23
1	Mo 202.031†	129939.9	139303.0	9316.2 ug/L	9316.2 ppb	09:42:35
1	Ni 231.604†	383910.2	411533.5	9374.1 ug/L	9374.1 ppb	09:42:30
1	P 214.914†	29705.7	31638.3	13136 ug/L	13136 ppb	09:42:35
1	Pb 220.353†	196436.2	210604.0	23151 ug/L	23151 ppb	09:42:35
1	S 181.975 Axial†	36403.1	38988.1	49243 ug/L	49243 ppb	09:42:35
1	Sb 206.836†	28780.4	30825.2	10155 ug/L	10155 ppb	09:42:35
1	Se 196.026†	15137.3	16254.9	9587.6 ug/L	9587.6 ppb	09:42:35
1	Si 251.611†	1420517.8	1522399.4	45053 ug/L	45053 ppb	09:42:30
1	Sn 189.927†	56357.7	60407.6	9611.6 ug/L	9611.6 ppb	09:42:35
1	Ti 334.940†	6111277.5	6553847.6	9608.4 ug/L	9608.4 ppb	09:42:23
1	Tl 190.801†	29352.9	31507.3	9267.7 ug/L	9267.7 ppb	09:42:35
1	U 409.014†	-2147.1	999.8	-25.260 ug/L	-25.260 ppb	09:42:35
1	V 292.402†	1411568.0	1515050.6	9733.3 ug/L	9733.3 ppb	09:42:30
1	Zn 213.857†	1396299.7	1496388.0	13502 ug/L	13502 ppb	09:42:30
1	SiO2†	1438721.1	1541909.7	98072 ug/L	98072 ppb	09:43:22
2	Sc Radial	3478.0	3478.0	93.1 %		09:41:43
2	Y RADIAL	4021.3	4021.3	94.65 %		09:41:23
2	Al 396.153Radial†	388.9	557.5	71.154 ug/L	71.154 ppb	09:41:23
2	Ca 317.933Radial†	27.1	15.1	33.375 ug/L	33.375 ppb	09:41:43
2	Fe 238.204 Radial†	-8.8	-19.8	-84.723 ug/L	-84.723 ppb	09:41:43
2	K 766.490 Radial†	1468175.7	1573679.5	307460 ug/L	307460 ppb	09:41:18
2	Mg 279.077 IEC†	-3.1	-5.8	-217.56 ug/L	-217.56 ppb	09:41:43
2	Na 589.592 Radial†	-393.3	612.1	221.33 ug/L	221.33 ppb	09:41:23
2	Sr 421.552†	1227557.2	1318254.4	10112 ug/L	10112 ppb	09:41:18
2	Sc 361.383	876413.6	876413.6	92.992 %		09:42:50
2	Y 371.029	726602.1	726602.1	90.981 %		09:42:50
2	Ag 328.068†	-7465.4	-8397.8	2.9539 ug/L	2.9539 ppb	09:42:55
2	As 188.979†	21998.2	23682.6	9460.2 ug/L	9460.2 ppb	09:42:55
2	B 249.677†	199346.8	215104.8	4757.9 ug/L	4757.9 ppb	09:42:50
2	Ba 233.527†	1728060.6	1858282.0	13445 ug/L	13445 ppb	09:42:50
2	Be 313.107†	7580694.2	8155848.9	2763.3 ug/L	2763.3 ppb	09:42:43
2	Cd 226.502†	839091.2	902511.9	9318.9 ug/L	9318.9 ppb	09:42:50
2	Co 228.616†	432048.7	464674.9	8908.5 ug/L	8908.5 ppb	09:42:55
2	Cr 267.716†	2124807.5	2284876.1	23090 ug/L	23090 ppb	09:42:50
2	Cu 324.752†	6330236.2	6801041.7	19334 ug/L	19334 ppb	09:42:43
2	Mn 257.610†	8056299.9	8662987.3	9033.4 ug/L	9033.4 ppb	09:42:43
2	Mo 202.031†	129923.3	139703.0	9343.0 ug/L	9343.0 ppb	09:42:55
2	Ni 231.604†	382917.7	411701.1	9377.9 ug/L	9377.9 ppb	09:42:50

2	P 214.914†	29812.7	31849.0	13271 ug/L	13271 ppb	09:42:55
2	Pb 220.353†	196521.8	211327.8	23231 ug/L	23231 ppb	09:42:55
2	S 181.975 Axial†	36498.6	39207.9	49521 ug/L	49521 ppb	09:42:55
2	Sb 206.836†	28785.5	30923.3	10188 ug/L	10188 ppb	09:42:55
2	Se 196.026†	15193.8	16364.3	9651.6 ug/L	9651.6 ppb	09:42:55
2	Si 251.611†	1416274.5	1522405.4	45053 ug/L	45053 ppb	09:42:50
2	Sn 189.927†	56458.1	60696.8	9657.6 ug/L	9657.6 ppb	09:42:55
2	Ti 334.940†	6053958.9	6511866.1	9546.8 ug/L	9546.8 ppb	09:42:43
2	Tl 190.801†	29449.0	31705.2	9324.5 ug/L	9324.5 ppb	09:42:55
2	U 409.014†	-2050.9	1096.3	-22.788 ug/L	-22.788 ppb	09:42:55
2	V 292.402†	1408697.0	1516503.5	9743.0 ug/L	9743.0 ppb	09:42:50
2	Zn 213.857†	1393553.0	1497925.5	13516 ug/L	13516 ppb	09:42:50
2	SiO2†	1444570.4	1552827.4	98767 ug/L	98767 ppb	09:43:29
3	Sc Radial	3548.0	3548.0	95.0 %		09:42:13
3	Y RADIAL	4011.9	4011.9	94.43 %		09:41:53
3	Al 396.153Radial†	377.4	537.1	52.474 ug/L	52.474 ppb	09:41:53
3	Ca 317.933Radial†	30.5	18.2	40.221 ug/L	40.221 ppb	09:42:13
3	Fe 238.204 Radial†	-4.8	-15.4	-6.1045 ug/L	-6.1045 ppb	09:42:13
3	K 766.490 Radial†	1493546.5	1569293.7	306600 ug/L	306600 ppb	09:41:48
3	Mg 279.077 IEC†	-2.4	-5.0	-175.01 ug/L	-175.01 ppb	09:42:13
3	Na 589.592 Radial†	-473.7	535.8	193.74 ug/L	193.74 ppb	09:41:53
3	Sr 421.552†	1252373.3	1318380.7	10113 ug/L	10113 ppb	09:41:48
3	Sc 361.383	885209.6	885209.6	93.925 %		09:43:10
3	Y 371.029	732635.1	732635.1	91.737 %		09:43:10
3	Ag 328.068†	-7417.5	-8267.0	3.6165 ug/L	3.6165 ppb	09:43:15
3	As 188.979†	22342.6	23814.2	9512.1 ug/L	9512.1 ppb	09:43:15
3	B 249.677†	202684.2	216527.9	4789.6 ug/L	4789.6 ppb	09:43:10
3	Ba 233.527†	1751365.4	1864629.1	13491 ug/L	13491 ppb	09:43:10
3	Be 313.107†	7621023.3	8117783.3	2750.4 ug/L	2750.4 ppb	09:43:03
3	Cd 226.502†	853433.8	908816.2	9384.0 ug/L	9384.0 ppb	09:43:10
3	Co 228.616†	436236.8	464517.3	8905.5 ug/L	8905.5 ppb	09:43:15
3	Cr 267.716†	2153599.8	2292826.3	23170 ug/L	23170 ppb	09:43:10
3	Cu 324.752†	6361646.5	6766842.1	19237 ug/L	19237 ppb	09:43:03
3	Mn 257.610†	8114006.4	8638341.1	9007.7 ug/L	9007.7 ppb	09:43:03
3	Mo 202.031†	131101.8	139569.4	9334.0 ug/L	9334.0 ppb	09:43:15
3	Ni 231.604†	389026.3	414113.1	9432.9 ug/L	9432.9 ppb	09:43:10
3	P 214.914†	30200.0	31942.7	13341 ug/L	13341 ppb	09:43:15
3	Pb 220.353†	198833.5	211689.2	23271 ug/L	23271 ppb	09:43:15
3	S 181.975 Axial†	37025.9	39379.3	49737 ug/L	49737 ppb	09:43:15
3	Sb 206.836†	29115.3	30966.8	10202 ug/L	10202 ppb	09:43:15
3	Se 196.026†	15353.0	16371.4	9656.1 ug/L	9656.1 ppb	09:43:15
3	Si 251.611†	1437562.0	1529936.3	45276 ug/L	45276 ppb	09:43:10
3	Sn 189.927†	57216.3	60900.9	9690.1 ug/L	9690.1 ppb	09:43:15
3	Ti 334.940†	6088155.8	6483585.7	9505.2 ug/L	9505.2 ppb	09:43:03
3	Tl 190.801†	29687.5	31644.4	9306.3 ug/L	9306.3 ppb	09:43:15
3	U 409.014†	-2159.6	1002.5	-25.442 ug/L	-25.442 ppb	09:43:15
3	V 292.402†	1425684.3	1519537.0	9762.1 ug/L	9762.1 ppb	09:43:10
3	Zn 213.857†	1414121.3	1504933.4	13580 ug/L	13580 ppb	09:43:10
3	SiO2†	1461182.8	1555078.5	98911 ug/L	98911 ppb	09:43:37

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	880222.1	93.396 %		0.4791				0.51%
Sc Radial	3521.3	94.3 %		1.01				1.07%
Y 371.029	729301.2	91.319 %		0.3839				0.42%
Y RADIAL	4017.0	94.55 %		0.113				0.12%
Ag 328.068†	-8259.4	3.5803 ug/L		0.60917	3.5803 ppb	0.60917		17.01%
Al 396.153Radial†	546.2	61.157 ug/L		9.4088	61.157 ppb	9.4088		15.38%
As 188.979†	23712.8	9472.3 ug/L		35.35	9472.3 ppb	35.35		0.37%
QC value within limits for As 188.979 Recovery = 94.72%								
B 249.677†	215621.5	4769.5 ug/L		17.49	4769.5 ppb	17.49		0.37%
QC value within limits for B 249.677 Recovery = 95.39%								
Ba 233.527†	1859880.7	13457 ug/L		30.3	13457 ppb	30.3		0.22%
QC value less than the lower limit for Ba 233.527 Recovery = 89.71%								
Be 313.107†	8163008.8	2765.7 ug/L		16.66	2765.7 ppb	16.66		0.60%
QC value within limits for Be 313.107 Recovery = 92.19%								
Ca 317.933Radial†	16.5	36.408 ug/L		3.4890	36.408 ppb	3.4890		9.58%
Cd 226.502†	904229.9	9336.6 ug/L		41.43	9336.6 ppb	41.43		0.44%
QC value within limits for Cd 226.502 Recovery = 93.37%								

Co 228.616†	463991.6	8895.4 ug/L	20.25	8895.4 ppb	20.25	0.23%
QC value less than the lower limit for Co 228.616 Recovery = 88.95%						
Cr 267.716†	2286360.7	23105 ug/L	59.3	23105 ppb	59.3	0.26%
QC value within limits for Cr 267.716 Recovery = 92.42%						
Cu 324.752†	6802249.6	19338 ug/L	102.4	19338 ppb	102.4	0.53%
QC value within limits for Cu 324.752 Recovery = 96.69%						
Fe 238.204 Radial†	-16.0	-18.272 ug/L	61.2800	-18.272 ppb	61.2800	335.38%
K 766.490 Radial†	1573973.7	307520 ug/L	944.5	307520 ppb	944.5	0.31%
QC value within limits for K 766.490 Radial Recovery = 102.51%						
Mg 279.077 IEC†	-5.5	-199.79 ug/L	22.124	-199.79 ppb	22.124	11.07%
Mn 257.610†	8671656.7	9042.5 ug/L	40.04	9042.5 ppb	40.04	0.44%
QC value within limits for Mn 257.610 Recovery = 90.42%						
Mo 202.031†	139525.1	9331.1 ug/L	13.62	9331.1 ppb	13.62	0.15%
QC value within limits for Mo 202.031 Recovery = 93.31%						
Na 589.592 Radial†	592.3	214.18 ug/L	17.967	214.18 ppb	17.967	8.39%
Ni 231.604†	412449.2	9395.0 ug/L	32.89	9395.0 ppb	32.89	0.35%
QC value within limits for Ni 231.604 Recovery = 93.95%						
P 214.914†	31810.0	13249 ug/L	103.8	13249 ppb	103.8	0.78%
QC value less than the lower limit for P 214.914 Recovery = 88.33%						
Pb 220.353†	211207.0	23218 ug/L	60.8	23218 ppb	60.8	0.26%
QC value within limits for Pb 220.353 Recovery = 92.87%						
S 181.975 Axial†	39191.8	49500 ug/L	247.7	49500 ppb	247.7	0.50%
QC value within limits for S 181.975 Axial Recovery = 99.00%						
Sb 206.836†	30905.1	10182 ug/L	24.2	10182 ppb	24.2	0.24%
QC value within limits for Sb 206.836 Recovery = 101.82%						
Se 196.026†	16330.2	9631.8 ug/L	38.32	9631.8 ppb	38.32	0.40%
QC value within limits for Se 196.026 Recovery = 96.32%						
Si 251.611†	1524913.7	45127 ug/L	129.0	45127 ppb	129.0	0.29%
QC value within limits for Si 251.611 Recovery = 90.25%						
Sn 189.927†	60668.4	9653.1 ug/L	39.44	9653.1 ppb	39.44	0.41%
QC value within limits for Sn 189.927 Recovery = 96.53%						
Sr 421.552†	1320206.6	10127 ug/L	25.1	10127 ppb	25.1	0.25%
QC value within limits for Sr 421.552 Recovery = 101.27%						
Ti 334.940†	6516433.1	9553.5 ug/L	51.90	9553.5 ppb	51.90	0.54%
QC value within limits for Ti 334.940 Recovery = 95.53%						
Tl 190.801†	31619.0	9299.5 ug/L	29.02	9299.5 ppb	29.02	0.31%
QC value within limits for Tl 190.801 Recovery = 92.99%						
U 409.014†	1032.9	-24.497 ug/L	1.4825	-24.497 ppb	1.4825	6.05%
V 292.402†	1517030.4	9746.2 ug/L	14.66	9746.2 ppb	14.66	0.15%
QC value within limits for V 292.402 Recovery = 97.46%						
Zn 213.857†	1499749.0	13533 ug/L	41.3	13533 ppb	41.3	0.31%
QC value within limits for Zn 213.857 Recovery = 90.22%						
SiO2†	1549938.6	98583 ug/L	448.8	98583 ppb	448.8	0.46%
QC value within limits for SiO2 Recovery = 92.13%						
QC Failed. Continue with analysis.						

Sequence No.: 13  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/26/2010 09:45:46  
 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	3693.0	3693.0	98.9 %		09:47:58
1	Y RADIAL	4236.8	4236.8	99.72 %		09:47:38
1	Al 396.153Radial†	5347.4	5548.3	5193.8 ug/L	5193.8 ppb	09:47:38
1	Ca 317.933Radial†	2369.5	2382.6	5267.0 ug/L	5267.0 ppb	09:47:58
1	Fe 238.204 Radial†	300.5	293.6	5217.8 ug/L	5217.8 ppb	09:47:58
1	K 766.490 Radial†	30218.0	27555.5	5377.2 ug/L	5377.2 ppb	09:47:38
1	Mg 279.077 IEC†	104.4	103.1	5596.3 ug/L	5596.3 ppb	09:47:58
1	Na 589.592 Radial†	28651.8	30013.0	10852 ug/L	10852 ppb	09:47:38
1	Sr 421.552†	67595.5	68336.4	524.15 ug/L	524.15 ppb	09:47:38
1	Sc 361.383	927987.7	927987.7	98.464 %		09:48:57
1	Y 371.029	775013.2	775013.2	97.043 %		09:48:57
1	Ag 328.068†	110684.4	112041.5	481.47 ug/L	481.47 ppb	09:48:57
1	As 188.979†	1232.7	1278.4	511.70 ug/L	511.70 ppb	09:49:17
1	B 249.677†	21945.3	23021.7	509.72 ug/L	509.72 ppb	09:48:57
1	Ba 233.527†	65769.7	66780.7	483.63 ug/L	483.63 ppb	09:48:57
1	Be 313.107†	1405819.0	1431581.3	482.34 ug/L	482.34 ppb	09:48:57
1	Cd 226.502†	45516.5	46408.6	478.74 ug/L	478.74 ppb	09:49:17
1	Co 228.616†	24689.8	25139.5	482.13 ug/L	482.13 ppb	09:49:17
1	Cr 267.716†	46985.3	47649.4	482.23 ug/L	482.23 ppb	09:48:57
1	Cu 324.752†	171291.0	167686.0	476.73 ug/L	476.73 ppb	09:48:57
1	Mn 257.610†	457060.5	463709.6	483.82 ug/L	483.82 ppb	09:48:57
1	Mo 202.031†	7216.1	7316.6	489.78 ug/L	489.78 ppb	09:49:17
1	Ni 231.604†	20969.5	21221.2	483.37 ug/L	483.37 ppb	09:49:17
1	P 214.914†	4715.8	4578.8	2353.9 ug/L	2353.9 ppb	09:49:17
1	Pb 220.353†	4428.5	4492.6	495.15 ug/L	495.15 ppb	09:49:17
1	S 181.975 Axial†	812.9	784.0	989.28 ug/L	989.28 ppb	09:49:17
1	Sb 206.836†	1555.0	1547.6	510.17 ug/L	510.17 ppb	09:49:17
1	Se 196.026†	795.0	832.8	507.47 ug/L	507.47 ppb	09:49:17
1	Si 251.611†	80922.6	81577.4	2414.3 ug/L	2414.3 ppb	09:48:57
1	Sn 189.927†	3040.2	3071.4	489.33 ug/L	489.33 ppb	09:49:17
1	Ti 334.940†	327009.2	333757.1	489.61 ug/L	489.61 ppb	09:48:57
1	Tl 190.801†	1626.0	1688.0	496.33 ug/L	496.33 ppb	09:49:17
1	U 409.014†	13712.7	17228.4	451.12 ug/L	451.12 ppb	09:48:57
1	V 292.402†	72457.1	75226.5	484.11 ug/L	484.11 ppb	09:48:57
1	Zn 213.857†	53646.3	53829.6	484.30 ug/L	484.30 ppb	09:48:57
1	SiO2†	82732.0	83408.7	5305.5 ug/L	5305.5 ppb	09:50:18
2	Sc Radial	3724.8	3724.8	99.7 %		09:48:24
2	Y RADIAL	4160.7	4160.7	97.93 %		09:48:04
2	Al 396.153Radial†	5296.2	5450.7	5102.2 ug/L	5102.2 ppb	09:48:04
2	Ca 317.933Radial†	2384.7	2377.3	5255.4 ug/L	5255.4 ppb	09:48:24
2	Fe 238.204 Radial†	300.4	290.9	5170.8 ug/L	5170.8 ppb	09:48:24
2	K 766.490 Radial†	29802.6	26878.0	5244.9 ug/L	5244.9 ppb	09:48:04
2	Mg 279.077 IEC†	99.2	97.0	5265.2 ug/L	5265.2 ppb	09:48:24
2	Na 589.592 Radial†	27933.8	29045.5	10503 ug/L	10503 ppb	09:48:04
2	Sr 421.552†	66498.3	66652.3	511.23 ug/L	511.23 ppb	09:48:04
2	Sc 361.383	935018.9	935018.9	99.210 %		09:49:25
2	Y 371.029	782782.0	782782.0	98.016 %		09:49:25
2	Ag 328.068†	111642.8	112162.2	481.98 ug/L	481.98 ppb	09:49:25
2	As 188.979†	1231.7	1267.9	507.52 ug/L	507.52 ppb	09:49:45
2	B 249.677†	22147.9	23058.3	510.55 ug/L	510.55 ppb	09:49:25
2	Ba 233.527†	66113.6	66625.0	482.50 ug/L	482.50 ppb	09:49:25
2	Be 313.107†	1419872.0	1435009.8	483.49 ug/L	483.49 ppb	09:49:25
2	Cd 226.502†	45515.6	46060.0	475.15 ug/L	475.15 ppb	09:49:45
2	Co 228.616†	24631.3	24892.0	477.38 ug/L	477.38 ppb	09:49:45
2	Cr 267.716†	47349.9	47658.0	482.31 ug/L	482.31 ppb	09:49:25
2	Cu 324.752†	172911.8	168011.5	477.65 ug/L	477.65 ppb	09:49:25
2	Mn 257.610†	459522.0	462700.1	482.78 ug/L	482.78 ppb	09:49:25
2	Mo 202.031†	7220.7	7266.1	486.40 ug/L	486.40 ppb	09:49:45
2	Ni 231.604†	20921.7	21012.8	478.62 ug/L	478.62 ppb	09:49:45



2	P 214.914†	4697.8	4524.5	2324.7 ug/L	2324.7 ppb	09:49:45
2	Pb 220.353†	4422.8	4453.1	490.78 ug/L	490.78 ppb	09:49:45
2	S 181.975 Axial†	818.7	783.7	988.90 ug/L	988.90 ppb	09:49:45
2	Sb 206.836†	1537.1	1517.7	500.48 ug/L	500.48 ppb	09:49:45
2	Se 196.026†	796.3	828.1	504.53 ug/L	504.53 ppb	09:49:45
2	Si 251.611†	81487.9	81529.3	2412.9 ug/L	2412.9 ppb	09:49:25
2	Sn 189.927†	3026.9	3034.8	483.50 ug/L	483.50 ppb	09:49:45
2	Ti 334.940†	329408.3	333677.9	489.52 ug/L	489.52 ppb	09:49:25
2	Tl 190.801†	1605.8	1655.2	486.77 ug/L	486.77 ppb	09:49:45
2	U 409.014†	13783.2	17194.8	450.24 ug/L	450.24 ppb	09:49:25
2	V 292.402†	73047.5	75268.2	484.32 ug/L	484.32 ppb	09:49:25
2	Zn 213.857†	53968.1	53744.3	483.56 ug/L	483.56 ppb	09:49:25
2	SiO2†	81928.1	81966.5	5213.7 ug/L	5213.7 ppb	09:50:23
3	Sc Radial	3655.5	3655.5	97.9 %		09:48:49
3	Y RADIAL	4202.1	4202.1	98.91 %		09:48:29
3	Al 396.153Radial†	5310.8	5566.3	5210.8 ug/L	5210.8 ppb	09:48:29
3	Ca 317.933Radial†	2348.4	2385.6	5273.7 ug/L	5273.7 ppb	09:48:49
3	Fe 238.204 Radial†	299.3	295.5	5252.0 ug/L	5252.0 ppb	09:48:49
3	K 766.490 Radial†	29936.3	27580.9	5382.1 ug/L	5382.1 ppb	09:48:29
3	Mg 279.077 IEC†	100.3	100.0	5426.9 ug/L	5426.9 ppb	09:48:49
3	Na 589.592 Radial†	28427.2	30080.6	10877 ug/L	10877 ppb	09:48:29
3	Sr 421.552†	67252.4	68686.6	526.84 ug/L	526.84 ppb	09:48:29
3	Sc 361.383	936456.0	936456.0	99.362 %		09:49:52
3	Y 371.029	782959.6	782959.6	98.038 %		09:49:52
3	Ag 328.068†	111979.9	112328.8	482.72 ug/L	482.72 ppb	09:49:52
3	As 188.979†	1232.4	1266.7	507.08 ug/L	507.08 ppb	09:50:12
3	B 249.677†	22247.5	23124.3	512.00 ug/L	512.00 ppb	09:49:52
3	Ba 233.527†	66479.0	66890.5	484.43 ug/L	484.43 ppb	09:49:52
3	Be 313.107†	1426805.7	1439791.7	485.10 ug/L	485.10 ppb	09:49:52
3	Cd 226.502†	45767.0	46242.7	477.03 ug/L	477.03 ppb	09:50:12
3	Co 228.616†	24813.3	25037.0	480.16 ug/L	480.16 ppb	09:50:12
3	Cr 267.716†	47527.4	47763.5	483.38 ug/L	483.38 ppb	09:49:52
3	Cu 324.752†	173988.4	168827.5	479.98 ug/L	479.98 ppb	09:49:52
3	Mn 257.610†	461832.7	464314.9	484.47 ug/L	484.47 ppb	09:49:52
3	Mo 202.031†	7252.2	7286.7	487.79 ug/L	487.79 ppb	09:50:12
3	Ni 231.604†	21063.3	21123.0	481.14 ug/L	481.14 ppb	09:50:12
3	P 214.914†	4737.4	4557.1	2341.7 ug/L	2341.7 ppb	09:50:12
3	Pb 220.353†	4461.2	4484.9	494.29 ug/L	494.29 ppb	09:50:12
3	S 181.975 Axial†	818.8	782.5	987.36 ug/L	987.36 ppb	09:50:12
3	Sb 206.836†	1559.8	1538.1	507.08 ug/L	507.08 ppb	09:50:12
3	Se 196.026†	798.8	829.3	505.52 ug/L	505.52 ppb	09:50:12
3	Si 251.611†	81956.8	81875.1	2423.1 ug/L	2423.1 ppb	09:49:52
3	Sn 189.927†	3058.7	3062.1	487.85 ug/L	487.85 ppb	09:50:12
3	Ti 334.940†	330731.6	334500.2	490.71 ug/L	490.71 ppb	09:49:52
3	Tl 190.801†	1627.4	1674.5	492.42 ug/L	492.42 ppb	09:50:12
3	U 409.014†	13923.5	17314.7	453.38 ug/L	453.38 ppb	09:49:52
3	V 292.402†	73461.5	75572.0	486.27 ug/L	486.27 ppb	09:49:52
3	Zn 213.857†	54170.6	53864.6	484.62 ug/L	484.62 ppb	09:49:52
3	SiO2†	80153.6	80053.9	5091.7 ug/L	5091.7 ppb	09:50:28

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	933154.2	99.012 %	0.4808			0.49%
Sc Radial	3691.1	98.8 %	0.93			0.94%
Y 371.029	780251.6	97.699 %	0.5682			0.58%
Y RADIAL	4199.8	98.85 %	0.897			0.91%
Ag 328.068†	112177.5	482.05 ug/L	0.626	482.05 ppb	0.626	0.13%
QC value within limits for Ag 328.068 Recovery = 96.41%						
Al 396.153Radial†	5521.8	5169.0 ug/L	58.40	5169.0 ppb	58.40	1.13%
QC value within limits for Al 396.153Radial Recovery = 103.38%						
As 188.979†	1271.0	508.77 ug/L	2.549	508.77 ppb	2.549	0.50%
QC value within limits for As 188.979 Recovery = 101.75%						
B 249.677†	23068.1	510.76 ug/L	1.155	510.76 ppb	1.155	0.23%
QC value within limits for B 249.677 Recovery = 102.15%						
Ba 233.527†	66765.4	483.52 ug/L	0.967	483.52 ppb	0.967	0.20%
QC value within limits for Ba 233.527 Recovery = 96.70%						
Be 313.107†	1435460.9	483.64 ug/L	1.388	483.64 ppb	1.388	0.29%
QC value within limits for Be 313.107 Recovery = 96.73%						
Ca 317.933Radial†	2381.9	5265.3 ug/L	9.26	5265.3 ppb	9.26	0.18%

QC value within limits for Ca 317.933 Radial Recovery = 105.31%

Cd	226.502†	46237.1	476.97 ug/L	1.798	476.97 ppb	1.798	0.38%
QC value within limits for Cd 226.502 Recovery = 95.39%							
Co	228.616†	25022.8	479.89 ug/L	2.389	479.89 ppb	2.389	0.50%
QC value within limits for Co 228.616 Recovery = 95.98%							
Cr	267.716†	47690.3	482.64 ug/L	0.646	482.64 ppb	0.646	0.13%
QC value within limits for Cr 267.716 Recovery = 96.53%							
Cu	324.752†	168175.0	478.12 ug/L	1.672	478.12 ppb	1.672	0.35%
QC value within limits for Cu 324.752 Recovery = 95.62%							
Fe	238.204 Radial†	293.3	5213.5 ug/L	40.77	5213.5 ppb	40.77	0.78%
QC value within limits for Fe 238.204 Radial Recovery = 104.27%							
K	766.490 Radial†	27338.1	5334.7 ug/L	77.81	5334.7 ppb	77.81	1.46%
QC value within limits for K 766.490 Radial Recovery = 106.69%							
Mg	279.077 IEC†	100.1	5429.5 ug/L	165.54	5429.5 ppb	165.54	3.05%
QC value within limits for Mg 279.077 IEC Recovery = 108.59%							
Mn	257.610†	463574.8	483.69 ug/L	0.851	483.69 ppb	0.851	0.18%
QC value within limits for Mn 257.610 Recovery = 96.74%							
Mo	202.031†	7289.8	487.99 ug/L	1.700	487.99 ppb	1.700	0.35%
QC value within limits for Mo 202.031 Recovery = 97.60%							
Na	589.592 Radial†	29713.0	10744 ug/L	209.4	10744 ppb	209.4	1.95%
QC value within limits for Na 589.592 Radial Recovery = 107.44%							
Ni	231.604†	21119.0	481.04 ug/L	2.375	481.04 ppb	2.375	0.49%
QC value within limits for Ni 231.604 Recovery = 96.21%							
P	214.914†	4553.5	2340.1 ug/L	14.67	2340.1 ppb	14.67	0.63%
QC value within limits for P 214.914 Recovery = 93.60%							
Pb	220.353†	4476.9	493.41 ug/L	2.315	493.41 ppb	2.315	0.47%
QC value within limits for Pb 220.353 Recovery = 98.68%							
S	181.975 Axial†	783.4	988.51 ug/L	1.018	988.51 ppb	1.018	0.10%
QC value within limits for S 181.975 Axial Recovery = 98.85%							
Sb	206.836†	1534.5	505.91 ug/L	4.950	505.91 ppb	4.950	0.98%
QC value within limits for Sb 206.836 Recovery = 101.18%							
Se	196.026†	830.1	505.84 ug/L	1.499	505.84 ppb	1.499	0.30%
QC value within limits for Se 196.026 Recovery = 101.17%							
Si	251.611†	81660.6	2416.8 ug/L	5.56	2416.8 ppb	5.56	0.23%
QC value within limits for Si 251.611 Recovery = 96.67%							
Sn	189.927†	3056.1	486.90 ug/L	3.030	486.90 ppb	3.030	0.62%
QC value within limits for Sn 189.927 Recovery = 97.38%							
Sr	421.552†	67891.8	520.74 ug/L	8.343	520.74 ppb	8.343	1.60%
QC value within limits for Sr 421.552 Recovery = 104.15%							
Ti	334.940†	333978.4	489.95 ug/L	0.665	489.95 ppb	0.665	0.14%
QC value within limits for Ti 334.940 Recovery = 97.99%							
Tl	190.801†	1672.6	491.84 ug/L	4.805	491.84 ppb	4.805	0.98%
QC value within limits for Tl 190.801 Recovery = 98.37%							
U	409.014†	17246.0	451.58 ug/L	1.620	451.58 ppb	1.620	0.36%
QC value within limits for U 409.014 Recovery = 90.32%							
V	292.402†	75355.6	484.90 ug/L	1.190	484.90 ppb	1.190	0.25%
QC value within limits for V 292.402 Recovery = 96.98%							
Zn	213.857†	53812.8	484.16 ug/L	0.544	484.16 ppb	0.544	0.11%
QC value within limits for Zn 213.857 Recovery = 96.83%							
SiO2†		81809.7	5203.6 ug/L	107.29	5203.6 ppb	107.29	2.06%
QC value within limits for SiO2 Recovery = 97.31%							

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 09:52:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3748.1	3748.1	100 %		09:54:50
1	Y RADIAL	4269.1	4269.1	100.5 %		09:54:30
1	Al 396.153Radial†	-127.5	12.8	12.090 ug/L	12.090 ppb	09:54:30
1	Ca 317.933Radial†	18.1	4.0	8.9280 ug/L	8.9280 ppb	09:54:50
1	Fe 238.204 Radial†	8.8	-1.6	-28.607 ug/L	-28.607 ppb	09:54:50
1	K 766.490 Radial†	3667.9	648.1	126.61 ug/L	126.61 ppb	09:54:30
1	Mg 279.077 IEC†	2.2	-0.3	-16.520 ug/L	-16.520 ppb	09:54:50
1	Na 589.592 Radial†	-981.4	56.5	20.417 ug/L	20.417 ppb	09:54:30
1	Sr 421.552†	82.5	52.2	0.4005 ug/L	0.4005 ppb	09:54:30
1	Sc 361.383	941759.1	941759.1	99.925 %		09:55:47
1	Y 371.029	798247.3	798247.3	99.952 %		09:55:47
1	Ag 328.068†	422.4	53.0	0.2163 ug/L	0.2163 ppb	09:55:52
1	As 188.979†	5.6	32.0	12.712 ug/L	12.712 ppb	09:56:12
1	B 249.677†	541.0	1275.4	28.367 ug/L	28.367 ppb	09:55:52
1	Ba 233.527†	38.9	23.8	0.1704 ug/L	0.1704 ppb	09:56:12
1	Be 313.107†	-3771.9	55.5	0.0189 ug/L	0.0189 ppb	09:55:52
1	Cd 226.502†	-119.6	62.3	0.6461 ug/L	0.6461 ppb	09:56:12
1	Co 228.616†	-62.9	1.5	0.0293 ug/L	0.0293 ppb	09:56:12
1	Cr 267.716†	112.2	43.3	0.4343 ug/L	0.4343 ppb	09:55:52
1	Cu 324.752†	6394.8	122.2	0.3461 ug/L	0.3461 ppb	09:55:52
1	Mn 257.610†	541.3	60.2	0.0607 ug/L	0.0607 ppb	09:56:12
1	Mo 202.031†	9.8	-2.2	-0.1515 ug/L	-0.1515 ppb	09:56:12
1	Ni 231.604†	88.2	12.8	0.2912 ug/L	0.2912 ppb	09:56:12
1	P 214.914†	204.6	-5.8	-3.1560 ug/L	-3.1560 ppb	09:56:12
1	Pb 220.353†	-8.6	-13.6	-1.4877 ug/L	-1.4877 ppb	09:56:12
1	S 181.975 Axial†	48.1	6.6	8.3345 ug/L	8.3345 ppb	09:56:12
1	Sb 206.836†	57.9	26.3	8.3934 ug/L	8.3934 ppb	09:56:12
1	Se 196.026†	-22.3	3.1	1.7149 ug/L	1.7149 ppb	09:56:12
1	Si 251.611†	759.8	152.8	4.5343 ug/L	4.5343 ppb	09:56:12
1	Sn 189.927†	24.6	8.3	1.3284 ug/L	1.3284 ppb	09:56:12
1	Ti 334.940†	-1569.6	75.6	0.1133 ug/L	0.1133 ppb	09:55:52
1	Tl 190.801†	-27.5	9.2	2.6861 ug/L	2.6861 ppb	09:56:12
1	U 409.014†	-3305.7	-6.4	-0.1648 ug/L	-0.1648 ppb	09:55:47
1	V 292.402†	-1691.5	-53.7	-0.3398 ug/L	-0.3398 ppb	09:55:52
1	Zn 213.857†	840.6	187.7	1.7059 ug/L	1.7059 ppb	09:56:12
1	SiO2†	795.3	181.9	11.604 ug/L	11.604 ppb	09:57:18
2	Sc Radial	3755.5	3755.5	101 %		09:55:15
2	Y RADIAL	4278.3	4278.3	100.7 %		09:54:55
2	Al 396.153Radial†	-141.7	-1.1	-1.0642 ug/L	-1.0642 ppb	09:54:55
2	Ca 317.933Radial†	18.5	4.4	9.7762 ug/L	9.7762 ppb	09:55:15
2	Fe 238.204 Radial†	11.0	0.6	11.388 ug/L	11.388 ppb	09:55:15
2	K 766.490 Radial†	3741.3	713.9	139.47 ug/L	139.47 ppb	09:54:55
2	Mg 279.077 IEC†	3.9	1.4	75.059 ug/L	75.059 ppb	09:55:15
2	Na 589.592 Radial†	-943.7	95.9	34.671 ug/L	34.671 ppb	09:54:55
2	Sr 421.552†	29.5	-0.6	-0.0045 ug/L	-0.0045 ppb	09:54:55
2	Sc 361.383	944879.4	944879.4	100.26 %		09:56:17
2	Y 371.029	803020.2	803020.2	100.55 %		09:56:17
2	Ag 328.068†	402.4	31.7	0.1371 ug/L	0.1371 ppb	09:56:22
2	As 188.979†	2.7	29.1	11.538 ug/L	11.538 ppb	09:56:42
2	B 249.677†	456.7	1189.6	26.451 ug/L	26.451 ppb	09:56:22
2	Ba 233.527†	2.9	-12.2	-0.0869 ug/L	-0.0869 ppb	09:56:42
2	Be 313.107†	-3746.4	93.5	0.0317 ug/L	0.0317 ppb	09:56:22
2	Cd 226.502†	-123.3	59.0	0.6087 ug/L	0.6087 ppb	09:56:42
2	Co 228.616†	-60.6	4.1	0.0807 ug/L	0.0807 ppb	09:56:42
2	Cr 267.716†	124.7	55.5	0.5605 ug/L	0.5605 ppb	09:56:22
2	Cu 324.752†	6426.2	132.4	0.3751 ug/L	0.3751 ppb	09:56:22
2	Mn 257.610†	536.1	53.2	0.0536 ug/L	0.0536 ppb	09:56:42
2	Mo 202.031†	29.6	17.5	1.1741 ug/L	1.1741 ppb	09:56:42
2	Ni 231.604†	77.2	1.5	0.0339 ug/L	0.0339 ppb	09:56:42

2	P 214.914†	204.8	-6.4	-3.4835 ug/L	-3.4835 ppb	09:56:42
2	Pb 220.353†	-4.1	-9.0	-0.9918 ug/L	-0.9918 ppb	09:56:42
2	S 181.975 Axial†	47.5	5.9	7.4228 ug/L	7.4228 ppb	09:56:42
2	Sb 206.836†	60.5	28.7	9.1736 ug/L	9.1736 ppb	09:56:42
2	Se 196.026†	-28.2	-2.7	-1.5347 ug/L	-1.5347 ppb	09:56:42
2	Si 251.611†	735.4	125.9	3.7198 ug/L	3.7198 ppb	09:56:42
2	Sn 189.927†	25.2	8.9	1.4134 ug/L	1.4134 ppb	09:56:42
2	Ti 334.940†	-1571.4	79.0	0.1093 ug/L	0.1093 ppb	09:56:22
2	Tl 190.801†	-34.0	2.7	0.7940 ug/L	0.7940 ppb	09:56:42
2	U 409.014†	-3179.8	130.2	3.4180 ug/L	3.4180 ppb	09:56:17
2	V 292.402†	-1600.1	43.0	0.2955 ug/L	0.2955 ppb	09:56:22
2	Zn 213.857†	823.9	168.2	1.5248 ug/L	1.5248 ppb	09:56:42
2	SiO2†	789.2	173.2	11.012 ug/L	11.012 ppb	09:57:23
3	Sc Radial	3762.0	3762.0	101 %		09:55:40
3	Y RADIAL	4311.9	4311.9	101.5 %		09:55:20
3	Al 396.153Radial†	-119.3	21.5	20.155 ug/L	20.155 ppb	09:55:20
3	Ca 317.933Radial†	17.5	3.4	7.4758 ug/L	7.4758 ppb	09:55:40
3	Fe 238.204 Radial†	11.6	1.2	21.040 ug/L	21.040 ppb	09:55:40
3	K 766.490 Radial†	3580.4	547.6	106.99 ug/L	106.99 ppb	09:55:20
3	Mg 279.077 IEC†	-1.1	-3.6	-194.27 ug/L	-194.27 ppb	09:55:40
3	Na 589.592 Radial†	-951.4	89.8	32.485 ug/L	32.485 ppb	09:55:20
3	Sr 421.552†	46.0	15.7	0.1206 ug/L	0.1206 ppb	09:55:20
3	Sc 361.383	944898.2	944898.2	100.26 %		09:56:47
3	Y 371.029	802480.7	802480.7	100.48 %		09:56:47
3	Ag 328.068†	424.0	53.2	0.2328 ug/L	0.2328 ppb	09:56:52
3	As 188.979†	-4.6	21.9	8.6837 ug/L	8.6837 ppb	09:57:12
3	B 249.677†	448.3	1181.1	26.262 ug/L	26.262 ppb	09:56:52
3	Ba 233.527†	40.0	24.8	0.1797 ug/L	0.1797 ppb	09:57:12
3	Be 313.107†	-3673.8	165.9	0.0558 ug/L	0.0558 ppb	09:56:52
3	Cd 226.502†	-130.8	51.6	0.5300 ug/L	0.5300 ppb	09:57:12
3	Co 228.616†	-57.0	7.7	0.1474 ug/L	0.1474 ppb	09:57:12
3	Cr 267.716†	137.0	67.7	0.6853 ug/L	0.6853 ppb	09:56:52
3	Cu 324.752†	6267.4	-26.1	-0.0734 ug/L	-0.0734 ppb	09:56:52
3	Mn 257.610†	508.1	25.4	0.0365 ug/L	0.0365 ppb	09:57:12
3	Mo 202.031†	17.8	5.7	0.3828 ug/L	0.3828 ppb	09:57:12
3	Ni 231.604†	71.4	-4.4	-0.0992 ug/L	-0.0992 ppb	09:57:12
3	P 214.914†	207.6	-3.6	-1.9026 ug/L	-1.9026 ppb	09:57:12
3	Pb 220.353†	4.9	-0.1	-0.0049 ug/L	-0.0049 ppb	09:57:12
3	S 181.975 Axial†	46.2	4.5	5.7426 ug/L	5.7426 ppb	09:57:12
3	Sb 206.836†	57.9	26.0	8.3095 ug/L	8.3095 ppb	09:57:12
3	Se 196.026†	-26.8	-1.3	-0.6772 ug/L	-0.6772 ppb	09:57:12
3	Si 251.611†	760.3	150.7	4.4664 ug/L	4.4664 ppb	09:57:12
3	Sn 189.927†	22.2	5.8	0.9298 ug/L	0.9298 ppb	09:57:12
3	Ti 334.940†	-1660.2	-9.6	0.0023 ug/L	0.0023 ppb	09:56:52
3	Tl 190.801†	-29.4	7.3	2.1331 ug/L	2.1331 ppb	09:57:12
3	U 409.014†	-3281.9	28.4	0.7424 ug/L	0.7424 ppb	09:56:47
3	V 292.402†	-1647.3	-4.0	-0.0256 ug/L	-0.0256 ppb	09:56:52
3	Zn 213.857†	807.0	151.3	1.3710 ug/L	1.3710 ppb	09:57:12
3	SiO2†	755.3	139.4	8.8796 ug/L	8.8796 ppb	09:57:28

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943845.6	100.15 %		0.192			0.19%
Sc Radial	3755.2	101 %		0.2			0.19%
Y 371.029	801249.4	100.33 %		0.327			0.33%
Y RADIAL	4286.5	100.9 %		0.53			0.53%
Ag 328.068†	46.0	0.1954 ug/L		0.05119	0.1954 ppb	0.05119	26.20%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	11.1	10.393 ug/L		10.7107	10.393 ppb	10.7107	103.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	27.7	10.978 ug/L		2.0715	10.978 ppb	2.0715	18.87%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1215.4	27.026 ug/L		1.1646	27.026 ppb	1.1646	4.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	12.1	0.0877 ug/L		0.15130	0.0877 ppb	0.15130	172.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	105.0	0.0354 ug/L		0.01871	0.0354 ppb	0.01871	52.77%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.9	8.7267 ug/L		1.16333	8.7267 ppb	1.16333	13.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	57.6	0.5949 ug/L	0.05925	0.5949 ppb	0.05925	9.96%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	4.4	0.0858 ug/L	0.05922	0.0858 ppb	0.05922	69.02%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	55.5	0.5600 ug/L	0.12553	0.5600 ppb	0.12553	22.41%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	76.2	0.2159 ug/L	0.25098	0.2159 ppb	0.25098	116.22%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	0.1	1.2734 ug/L	26.32383	1.2734 ppb	26.32383	>999.9%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	636.5	124.35 ug/L	16.357	124.35 ppb	16.357	13.15%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-0.8	-45.245 ug/L	136.9446	-45.245 ppb	136.9446	302.67%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	46.3	0.0503 ug/L	0.01242	0.0503 ppb	0.01242	24.72%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	7.0	0.4685 ug/L	0.66693	0.4685 ppb	0.66693	142.37%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	80.7	29.191 ug/L	7.6768	29.191 ppb	7.6768	26.30%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	3.3	0.0753 ug/L	0.19849	0.0753 ppb	0.19849	263.62%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	-5.3	-2.8474 ug/L	0.83443	-2.8474 ppb	0.83443	29.31%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	-7.6	-0.8282 ug/L	0.75480	-0.8282 ppb	0.75480	91.14%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	5.7	7.1666 ug/L	1.31480	7.1666 ppb	1.31480	18.35%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	27.0	8.6255 ug/L	0.47653	8.6255 ppb	0.47653	5.52%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-0.3	-0.1656 ug/L	1.68410	-0.1656 ppb	1.68410	>999.9%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	143.1	4.2401 ug/L	0.45191	4.2401 ppb	0.45191	10.66%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	7.7	1.2239 ug/L	0.25820	1.2239 ppb	0.25820	21.10%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	22.5	0.1722 ug/L	0.20735	0.1722 ppb	0.20735	120.41%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	48.3	0.0750 ug/L	0.06300	0.0750 ppb	0.06300	84.01%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	6.4	1.8711 ug/L	0.97286	1.8711 ppb	0.97286	51.99%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	50.7	1.3319 ug/L	1.86272	1.3319 ppb	1.86272	139.86%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	-4.9	-0.0233 ug/L	0.31767	-0.0233 ppb	0.31767	>999.9%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	169.0	1.5339 ug/L	0.16765	1.5339 ppb	0.16765	10.93%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	164.8	10.498 ug/L	1.4329	10.498 ppb	1.4329	13.65%			
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/26/2010 10:02:14

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022610.sif

Batch ID:

Results Data Set: 022610

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

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/26/2010 08:28:56

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 36

Sample ID: LRI

Date Collected: 2/26/2010 10:02:15

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: LRI

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3622.7	3622.7	97.0 %		10:04:28
1	Y RADIAL	4145.2	4145.2	97.57 %		10:04:08
1	Al 396.153Radial†	-139.2	-3.6	-2.2385 ug/L	-2.2385 ppb	10:04:08

1	Ca 317.933Radial†	24.5	11.3	24.957 ug/L	24.957 ppb	10:04:28
1	Fe 238.204 Radial†	21135.7	21781.0	386080 ug/L	386080 ppb	10:04:08
1	K 766.490 Radial†	3247.9	341.5	66.753 ug/L	66.753 ppb	10:04:08
1	Mg 279.077 IEC†	9.2	7.1	-21.472 ug/L	-21.472 ppb	10:04:28
1	Na 589.592 Radial†	-936.9	68.5	24.757 ug/L	24.757 ppb	10:04:08
1	Sr 421.552†	100.4	73.6	0.5644 ug/L	0.5644 ppb	10:04:08
1	Sc 361.383	914476.7	914476.7	97.030 %		10:05:26
1	Y 371.029	769961.5	769961.5	96.411 %		10:05:26
1	Ag 328.068†	-26532.9	-27714.6	0.4886 ug/L	0.4886 ppb	10:05:26
1	As 188.979†	-209.4	-189.4	15.316 ug/L	15.316 ppb	10:05:46
1	B 249.677†	1839.7	2630.1	-4.2571 ug/L	-4.2571 ppb	10:05:26
1	Ba 233.527†	-1836.7	-1908.0	-1.9240 ug/L	-1.9240 ppb	10:05:26
1	Be 313.107†	-3612.9	106.8	0.0355 ug/L	0.0355 ppb	10:05:26
1	Cd 226.502†	3115.8	3393.2	-4.8503 ug/L	-4.8503 ppb	10:05:26
1	Co 228.616†	735.9	822.9	10.145 ug/L	10.145 ppb	10:05:46
1	Cr 267.716†	-596.9	-684.1	29.853 ug/L	29.853 ppb	10:05:26
1	Cu 324.752†	-2067.0	-8407.6	-3.5046 ug/L	-3.5046 ppb	10:05:26
1	Mn 257.610†	-35748.0	-37323.5	-0.8036 ug/L	-0.8036 ppb	10:05:26
1	Mo 202.031†	-335.6	-357.9	6.0372 ug/L	6.0372 ppb	10:05:26
1	Ni 231.604†	166.8	96.4	2.1881 ug/L	2.1881 ppb	10:05:46
1	P 214.914†	689.3	499.8	-39.204 ug/L	-39.204 ppb	10:05:46
1	Pb 220.353†	201.2	202.3	-19.546 ug/L	-19.546 ppb	10:05:46
1	S 181.975 Axial†	46.9	6.8	8.6468 ug/L	8.6468 ppb	10:05:46
1	Sb 206.836†	21.1	-9.9	-7.9049 ug/L	-7.9049 ppb	10:05:46
1	Se 196.026†	-1863.3	-1894.9	89.727 ug/L	89.727 ppb	10:05:46
1	Si 251.611†	-591.8	-1217.5	-35.828 ug/L	-35.828 ppb	10:05:26
1	Sn 189.927†	-22.8	-39.8	-28.489 ug/L	-28.489 ppb	10:05:46
1	Ti 334.940†	-1716.4	-122.6	-0.2357 ug/L	-0.2357 ppb	10:05:26
1	Tl 190.801†	-55.9	-21.0	-6.4720 ug/L	-6.4720 ppb	10:05:46
1	U 409.014†	-650.1	2631.9	25.171 ug/L	25.171 ppb	10:05:26
1	V 292.402†	6247.2	8077.4	-5.1353 ug/L	-5.1353 ppb	10:05:26
1	Zn 213.857†	4220.5	3696.1	-24.196 ug/L	-24.196 ppb	10:05:46
1	SiO2†	-674.9	-1309.6	-82.858 ug/L	-82.858 ppb	10:06:43
2	Sc Radial	3616.8	3616.8	96.8 %		10:04:53
2	Y RADIAL	3996.9	3996.9	94.08 %		10:04:33
2	Al 396.153Radial†	-141.8	-6.6	-5.0559 ug/L	-5.0559 ppb	10:04:33
2	Ca 317.933Radial†	16.0	2.5	5.5985 ug/L	5.5985 ppb	10:04:53
2	Fe 238.204 Radial†	20415.6	21072.9	373530 ug/L	373530 ppb	10:04:33
2	K 766.490 Radial†	3116.8	211.6	41.376 ug/L	41.376 ppb	10:04:33
2	Mg 279.077 IEC†	9.8	7.7	27.289 ug/L	27.289 ppb	10:04:53
2	Na 589.592 Radial†	-965.3	37.5	13.570 ug/L	13.570 ppb	10:04:33
2	Sr 421.552†	106.2	79.8	0.6117 ug/L	0.6117 ppb	10:04:33
2	Sc 361.383	903291.3	903291.3	95.843 %		10:05:52
2	Y 371.029	761484.8	761484.8	95.349 %		10:05:52
2	Ag 328.068†	-26252.8	-27761.1	-3.5603 ug/L	-3.5603 ppb	10:05:52
2	As 188.979†	-220.4	-203.6	6.7533 ug/L	6.7533 ppb	10:06:12
2	B 249.677†	1736.9	2546.3	-4.0819 ug/L	-4.0819 ppb	10:05:52
2	Ba 233.527†	-1875.8	-1972.2	-2.7694 ug/L	-2.7694 ppb	10:05:52
2	Be 313.107†	-3637.5	35.0	0.0114 ug/L	0.0114 ppb	10:05:52
2	Cd 226.502†	3081.2	3396.9	-3.5177 ug/L	-3.5177 ppb	10:05:52
2	Co 228.616†	719.6	815.3	10.181 ug/L	10.181 ppb	10:06:12
2	Cr 267.716†	-653.4	-750.7	27.990 ug/L	27.990 ppb	10:05:52
2	Cu 324.752†	-2034.9	-8400.5	-4.1437 ug/L	-4.1437 ppb	10:05:52
2	Mn 257.610†	-35157.0	-37163.2	-1.8775 ug/L	-1.8775 ppb	10:05:52
2	Mo 202.031†	-331.3	-357.7	5.0723 ug/L	5.0723 ppb	10:05:52
2	Ni 231.604†	168.5	100.3	2.2762 ug/L	2.2762 ppb	10:06:12
2	P 214.914†	675.2	493.9	-32.243 ug/L	-32.243 ppb	10:06:12
2	Pb 220.353†	221.0	225.6	-15.637 ug/L	-15.637 ppb	10:06:12
2	S 181.975 Axial†	51.2	12.0	15.104 ug/L	15.104 ppb	10:06:12
2	Sb 206.836†	38.6	8.6	-1.8909 ug/L	-1.8909 ppb	10:06:12
2	Se 196.026†	-1868.7	-1924.3	33.290 ug/L	33.290 ppb	10:06:12
2	Si 251.611†	-580.6	-1213.4	-35.706 ug/L	-35.706 ppb	10:05:52
2	Sn 189.927†	-26.8	-44.2	-28.483 ug/L	-28.483 ppb	10:06:12
2	Ti 334.940†	-1683.7	-110.4	-0.2190 ug/L	-0.2190 ppb	10:05:52
2	Tl 190.801†	-48.7	-14.1	-4.4664 ug/L	-4.4664 ppb	10:06:12
2	U 409.014†	-977.6	2281.8	17.404 ug/L	17.404 ppb	10:05:52
2	V 292.402†	6170.5	8077.1	-3.3256 ug/L	-3.3256 ppb	10:05:52
2	Zn 213.857†	4194.7	3723.0	-22.074 ug/L	-22.074 ppb	10:06:12
2	SiO2†	-607.3	-1247.6	-78.909 ug/L	-78.909 ppb	10:06:48
3	Sc Radial	3583.3	3583.3	95.9 %		10:05:19
3	Y RADIAL	4130.3	4130.3	97.22 %		10:04:59

3	Al 396.153Radial†	-134.7	-0.6	0.6412 ug/L	0.6412 ppb	10:04:59
3	Ca 317.933Radial†	15.8	2.6	5.6446 ug/L	5.6446 ppb	10:05:19
3	Fe 238.204 Radial†	21048.9	21930.1	388720 ug/L	388720 ppb	10:04:59
3	K 766.490 Radial†	3124.1	249.3	48.756 ug/L	48.756 ppb	10:04:59
3	Mg 279.077 IEC†	10.3	8.3	43.314 ug/L	43.314 ppb	10:05:19
3	Na 589.592 Radial†	-994.2	-1.8	-0.6561 ug/L	-0.6561 ppb	10:04:59
3	Sr 421.552†	112.9	87.7	0.6728 ug/L	0.6728 ppb	10:04:59
3	Sc 361.383	916835.1	916835.1	97.281 %		10:06:18
3	Y 371.029	772458.6	772458.6	96.723 %		10:06:18
3	Ag 328.068†	-26727.2	-27844.1	0.7516 ug/L	0.7516 ppb	10:06:18
3	As 188.979†	-213.5	-193.1	14.473 ug/L	14.473 ppb	10:06:38
3	B 249.677†	1718.5	2500.6	-7.5655 ug/L	-7.5655 ppb	10:06:18
3	Ba 233.527†	-1903.5	-1971.8	-2.3075 ug/L	-2.3075 ppb	10:06:18
3	Be 313.107†	-3647.1	81.1	0.0271 ug/L	0.0271 ppb	10:06:18
3	Cd 226.502†	3081.0	3349.1	-5.5802 ug/L	-5.5802 ppb	10:06:18
3	Co 228.616†	732.5	817.5	10.003 ug/L	10.003 ppb	10:06:38
3	Cr 267.716†	-707.2	-795.9	28.977 ug/L	28.977 ppb	10:06:18
3	Cu 324.752†	-2355.1	-8698.3	-4.1851 ug/L	-4.1851 ppb	10:06:18
3	Mn 257.610†	-35956.5	-37443.1	-0.6700 ug/L	-0.6700 ppb	10:06:18
3	Mo 202.031†	-339.5	-361.0	6.0317 ug/L	6.0317 ppb	10:06:18
3	Ni 231.604†	172.0	101.3	2.2993 ug/L	2.2993 ppb	10:06:38
3	P 214.914†	692.7	501.4	-40.280 ug/L	-40.280 ppb	10:06:38
3	Pb 220.353†	212.4	213.3	-18.625 ug/L	-18.625 ppb	10:06:38
3	S 181.975 Axial†	51.9	11.8	14.957 ug/L	14.957 ppb	10:06:38
3	Sb 206.836†	30.5	-0.3	-4.8944 ug/L	-4.8944 ppb	10:06:38
3	Se 196.026†	-1881.7	-1908.9	89.749 ug/L	89.749 ppb	10:06:38
3	Si 251.611†	-689.5	-1316.4	-38.757 ug/L	-38.757 ppb	10:06:18
3	Sn 189.927†	-26.3	-43.3	-29.205 ug/L	-29.205 ppb	10:06:38
3	Ti 334.940†	-1643.9	-43.5	-0.1226 ug/L	-0.1226 ppb	10:06:18
3	Tl 190.801†	-35.7	-0.1	-0.3648 ug/L	-0.3648 ppb	10:06:38
3	U 409.014†	-1050.8	2221.7	14.092 ug/L	14.092 ppb	10:06:18
3	V 292.402†	6052.6	7860.9	-6.9173 ug/L	-6.9173 ppb	10:06:18
3	Zn 213.857†	4176.6	3639.7	-25.103 ug/L	-25.103 ppb	10:06:38
3	SiO2†	-571.5	-1201.5	-75.957 ug/L	-75.957 ppb	10:06:53

## Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911534.4	96.718 %	0.7677			0.79%
Sc Radial	3607.6	96.6 %	0.57			0.59%
Y 371.029	767968.3	96.161 %	0.7202			0.75%
Y RADIAL	4090.8	96.29 %	1.923			2.00%
Ag 328.068†	-27773.3	-0.7734 ug/L	2.41711	-0.7734 ppb	2.41711	312.54%
Al 396.153Radial†	-3.6	-2.2177 ug/L	2.84860	-2.2177 ppb	2.84860	128.45%
As 188.979†	-195.4	12.181 ug/L	4.7190	12.181 ppb	4.7190	38.74%
B 249.677†	2559.0	-5.3015 ug/L	1.96268	-5.3015 ppb	1.96268	37.02%
Ba 233.527†	-1950.7	-2.3336 ug/L	0.42334	-2.3336 ppb	0.42334	18.14%
Be 313.107†	74.3	0.0247 ug/L	0.01223	0.0247 ppb	0.01223	49.57%
Ca 317.933Radial†	5.5	12.067 ug/L	11.1632	12.067 ppb	11.1632	92.51%
Cd 226.502†	3379.7	-4.6494 ug/L	1.04582	-4.6494 ppb	1.04582	22.49%
Co 228.616†	818.6	10.110 ug/L	0.0940	10.110 ppb	0.0940	0.93%
Cr 267.716†	-743.6	28.940 ug/L	0.9319	28.940 ppb	0.9319	3.22%
Cu 324.752†	-8502.1	-3.9444 ug/L	0.38146	-3.9444 ppb	0.38146	9.67%
Fe 238.204 Radial†	21594.7	382780 ug/L	8118.3	382780 ppb	8118.3	2.12%
K 766.490 Radial†	267.5	52.295 ug/L	13.0533	52.295 ppb	13.0533	24.96%
Mg 279.077 IEC†	7.7	16.377 ug/L	33.7437	16.377 ppb	33.7437	206.04%
Mn 257.610†	-37309.9	-1.1170 ug/L	0.66199	-1.1170 ppb	0.66199	59.26%
Mo 202.031†	-358.9	5.7138 ug/L	0.55555	5.7138 ppb	0.55555	9.72%
Na 589.592 Radial†	34.7	12.557 ug/L	12.7369	12.557 ppb	12.7369	101.43%
Ni 231.604†	99.3	2.2545 ug/L	0.05865	2.2545 ppb	0.05865	2.60%
P 214.914†	498.4	-37.242 ug/L	4.3625	-37.242 ppb	4.3625	11.71%
Pb 220.353†	213.7	-17.936 ug/L	2.0434	-17.936 ppb	2.0434	11.39%
S 181.975 Axial†	10.2	12.903 ug/L	3.6863	12.903 ppb	3.6863	28.57%
Sb 206.836†	-0.6	-4.8967 ug/L	3.00696	-4.8967 ppb	3.00696	61.41%
Se 196.026†	-1909.4	70.922 ug/L	32.5903	70.922 ppb	32.5903	45.95%
Si 251.611†	-1249.1	-36.764 ug/L	1.7274	-36.764 ppb	1.7274	4.70%
Sn 189.927†	-42.4	-28.725 ug/L	0.4153	-28.725 ppb	0.4153	1.45%
Sr 421.552†	80.4	0.6163 ug/L	0.05437	0.6163 ppb	0.05437	8.82%
Ti 334.940†	-92.2	-0.1924 ug/L	0.06108	-0.1924 ppb	0.06108	31.74%
Tl 190.801†	-11.7	-3.7678 ug/L	3.11297	-3.7678 ppb	3.11297	82.62%



U 409.014†	2378.4	18.889 ug/L	5.6869	18.889 ppb	5.6869	30.11%
V 292.402†	8005.1	-5.1261 ug/L	1.79590	-5.1261 ppb	1.79590	35.03%
Zn 213.857†	3686.3	-23.791 ug/L	1.5548	-23.791 ppb	1.5548	6.54%
SiO2†	-1252.9	-79.242 ug/L	3.4624	-79.242 ppb	3.4624	4.37%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 2/26/2010 10:09:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3784.4	3784.4	101 %		10:11:18
1	Y RADIAL	4327.1	4327.1	101.8 %		10:10:58
1	Al 396.153Radial†	-160.7	-18.8	-17.616 ug/L	-17.616 ppb	10:10:58
1	Ca 317.933Radial†	23.2	8.9	19.668 ug/L	19.668 ppb	10:11:18
1	Fe 238.204 Radial†	3.8	-6.6	27.795 ug/L	27.795 ppb	10:11:18
1	K 766.490 Radial†	3374.7	323.7	63.235 ug/L	63.235 ppb	10:10:58
1	Mg 279.077 IEC†	4.7	2.2	119.14 ug/L	119.14 ppb	10:11:18
1	Na 589.592 Radial†	-1059.5	-11.3	-4.0802 ug/L	-4.0802 ppb	10:10:58
1	Sr 421.552†	43.4	12.9	0.0989 ug/L	0.0989 ppb	10:10:58
1	Sc 361.383	942355.0	942355.0	99.988 %		10:12:15
1	Y 371.029	796638.4	796638.4	99.751 %		10:12:15
1	Ag 328.068†	326.2	-43.5	-0.2243 ug/L	-0.2243 ppb	10:12:20
1	As 188.979†	-7.8	18.6	7.3552 ug/L	7.3552 ppb	10:12:40
1	B 249.677†	502.8	1236.9	13.701 ug/L	13.701 ppb	10:12:20
1	Ba 233.527†	1310553.9	1310692.1	9468.3 ug/L	9468.3 ppb	10:12:15
1	Be 313.107†	-3646.2	183.6	0.0616 ug/L	0.0616 ppb	10:12:20
1	Cd 226.502†	-166.1	15.9	0.1789 ug/L	0.1789 ppb	10:12:40
1	Co 228.616†	252308.2	252402.2	4844.6 ug/L	4844.6 ppb	10:12:15
1	Cr 267.716†	140.2	71.3	0.7073 ug/L	0.7073 ppb	10:12:20
1	Cu 324.752†	5496.7	-780.0	-2.2263 ug/L	-2.2263 ppb	10:12:20
1	Mn 257.610†	460.2	-21.2	-0.0385 ug/L	-0.0385 ppb	10:12:40
1	Mo 202.031†	2.6	-9.4	-0.6363 ug/L	-0.6363 ppb	10:12:40
1	Ni 231.604†	204.7	129.2	0.0221 ug/L	0.0221 ppb	10:12:40
1	P 214.914†	17251.1	17042.5	9108.1 ug/L	9108.1 ppb	10:12:20
1	Pb 220.353†	-15.4	-20.4	-2.2313 ug/L	-2.2313 ppb	10:12:40
1	S 181.975 Axial†	44.7	3.2	3.9967 ug/L	3.9967 ppb	10:12:40
1	Sb 206.836†	34.4	2.7	0.8720 ug/L	0.8720 ppb	10:12:40
1	Se 196.026†	-29.9	-4.5	-2.9874 ug/L	-2.9874 ppb	10:12:40
1	Si 251.611†	631.6	24.0	0.7207 ug/L	0.7207 ppb	10:12:40
1	Sn 189.927†	19.1	2.8	0.4558 ug/L	0.4558 ppb	10:12:40
1	Ti 334.940†	-1683.9	-37.8	-0.0648 ug/L	-0.0648 ppb	10:12:20
1	Tl 190.801†	44.8	81.5	2.5968 ug/L	2.5968 ppb	10:12:40
1	U 409.014†	-3129.7	171.8	4.5269 ug/L	4.5269 ppb	10:12:15
1	V 292.402†	-1594.3	44.5	0.3017 ug/L	0.3017 ppb	10:12:20
1	Zn 213.857†	716.1	62.6	0.5702 ug/L	0.5702 ppb	10:12:40
1	SiO2†	654.6	40.7	2.6095 ug/L	2.6095 ppb	10:13:46
2	Sc Radial	3743.4	3743.4	100 %		10:11:43
2	Y RADIAL	4274.5	4274.5	100.6 %		10:11:23
2	Al 396.153Radial†	-128.6	11.5	10.861 ug/L	10.861 ppb	10:11:23
2	Ca 317.933Radial†	22.0	8.0	17.580 ug/L	17.580 ppb	10:11:43
2	Fe 238.204 Radial†	0.4	-10.0	-32.241 ug/L	-32.241 ppb	10:11:43
2	K 766.490 Radial†	3241.7	227.4	44.428 ug/L	44.428 ppb	10:11:23
2	Mg 279.077 IEC†	4.0	1.6	84.821 ug/L	84.821 ppb	10:11:43
2	Na 589.592 Radial†	-1062.6	-25.8	-9.3279 ug/L	-9.3279 ppb	10:11:23
2	Sr 421.552†	15.5	-14.5	-0.1114 ug/L	-0.1114 ppb	10:11:23
2	Sc 361.383	951378.7	951378.7	100.95 %		10:12:45
2	Y 371.029	804196.3	804196.3	100.70 %		10:12:45
2	Ag 328.068†	344.8	-28.2	-0.1739 ug/L	-0.1739 ppb	10:12:51
2	As 188.979†	-15.9	10.6	4.1761 ug/L	4.1761 ppb	10:13:11
2	B 249.677†	580.7	1309.3	15.350 ug/L	15.350 ppb	10:12:51
2	Ba 233.527†	1319711.9	1307332.5	9444.0 ug/L	9444.0 ppb	10:12:45
2	Be 313.107†	-3726.7	138.5	0.0465 ug/L	0.0465 ppb	10:12:51
2	Cd 226.502†	-172.5	11.1	0.1356 ug/L	0.1356 ppb	10:13:11
2	Co 228.616†	254220.0	251902.8	4835.0 ug/L	4835.0 ppb	10:12:45
2	Cr 267.716†	129.3	59.2	0.5811 ug/L	0.5811 ppb	10:12:51
2	Cu 324.752†	5572.7	-756.8	-2.1622 ug/L	-2.1622 ppb	10:12:51
2	Mn 257.610†	459.8	-26.0	-0.0480 ug/L	-0.0480 ppb	10:13:11
2	Mo 202.031†	7.3	-4.8	-0.3350 ug/L	-0.3350 ppb	10:13:11
2	Ni 231.604†	205.3	127.9	-0.0017 ug/L	-0.0017 ppb	10:13:11

2	P 214.914†	17255.3	16883.0	9022.9 ug/L	9022.9 ppb	10:12:51
2	Pb 220.353†	-7.3	-12.2	-1.3212 ug/L	-1.3212 ppb	10:13:11
2	S 181.975 Axial†	52.4	10.4	13.183 ug/L	13.183 ppb	10:13:11
2	Sb 206.836†	38.6	6.5	2.0739 ug/L	2.0739 ppb	10:13:11
2	Se 196.026†	-23.2	2.4	0.8814 ug/L	0.8814 ppb	10:13:11
2	Si 251.611†	646.4	32.7	0.9746 ug/L	0.9746 ppb	10:13:11
2	Sn 189.927†	15.5	-0.9	-0.1340 ug/L	-0.1340 ppb	10:13:11
2	Ti 334.940†	-1662.7	-0.8	-0.0069 ug/L	-0.0069 ppb	10:12:51
2	Tl 190.801†	51.8	88.0	4.5444 ug/L	4.5444 ppb	10:13:11
2	U 409.014†	-3247.9	84.3	2.2349 ug/L	2.2349 ppb	10:12:45
2	V 292.402†	-1545.5	108.0	0.7126 ug/L	0.7126 ppb	10:12:51
2	Zn 213.857†	733.3	72.8	0.6721 ug/L	0.6721 ppb	10:13:11
2	SiO2†	641.5	21.5	1.3780 ug/L	1.3780 ppb	10:13:51
3	Sc Radial	3776.9	3776.9	101 %		10:12:08
3	Y RADIAL	4305.4	4305.4	101.3 %		10:11:48
3	Al 396.153Radial†	-154.4	-12.8	-12.016 ug/L	-12.016 ppb	10:11:48
3	Ca 317.933Radial†	22.3	8.1	17.918 ug/L	17.918 ppb	10:12:08
3	Fe 238.204 Radial†	4.3	-6.0	36.313 ug/L	36.313 ppb	10:12:08
3	K 766.490 Radial†	3197.2	154.7	30.228 ug/L	30.228 ppb	10:11:48
3	Mg 279.077 IEC†	0.2	-2.3	-124.93 ug/L	-124.93 ppb	10:12:08
3	Na 589.592 Radial†	-1110.5	-63.8	-23.071 ug/L	-23.071 ppb	10:11:48
3	Sr 421.552†	58.3	27.7	0.2124 ug/L	0.2124 ppb	10:11:48
3	Sc 361.383	941267.9	941267.9	99.873 %		10:13:16
3	Y 371.029	797185.6	797185.6	99.819 %		10:13:16
3	Ag 328.068†	286.1	-83.2	-0.3922 ug/L	-0.3922 ppb	10:13:21
3	As 188.979†	-18.6	7.8	3.0585 ug/L	3.0585 ppb	10:13:41
3	B 249.677†	553.2	1288.0	14.959 ug/L	14.959 ppb	10:13:21
3	Ba 233.527†	1299754.7	1301392.9	9401.1 ug/L	9401.1 ppb	10:13:16
3	Be 313.107†	-3621.8	203.9	0.0688 ug/L	0.0688 ppb	10:13:21
3	Cd 226.502†	-173.6	8.1	0.0985 ug/L	0.0985 ppb	10:13:41
3	Co 228.616†	249776.1	250158.3	4801.5 ug/L	4801.5 ppb	10:13:16
3	Cr 267.716†	112.9	44.1	0.4338 ug/L	0.4338 ppb	10:13:21
3	Cu 324.752†	5584.6	-685.7	-1.9580 ug/L	-1.9580 ppb	10:13:21
3	Mn 257.610†	451.3	-29.5	-0.0363 ug/L	-0.0363 ppb	10:13:41
3	Mo 202.031†	-0.7	-12.7	-0.8601 ug/L	-0.8601 ppb	10:13:41
3	Ni 231.604†	233.5	158.3	0.7119 ug/L	0.7119 ppb	10:13:41
3	P 214.914†	17285.0	17096.4	9136.8 ug/L	9136.8 ppb	10:13:21
3	Pb 220.353†	-10.9	-15.9	-1.7406 ug/L	-1.7406 ppb	10:13:41
3	S 181.975 Axial†	43.7	2.2	2.8377 ug/L	2.8377 ppb	10:13:41
3	Sb 206.836†	38.0	6.4	2.0374 ug/L	2.0374 ppb	10:13:41
3	Se 196.026†	-21.4	4.0	2.0344 ug/L	2.0344 ppb	10:13:41
3	Si 251.611†	624.4	17.6	0.5328 ug/L	0.5328 ppb	10:13:41
3	Sn 189.927†	20.4	4.2	0.6717 ug/L	0.6717 ppb	10:13:41
3	Ti 334.940†	-1576.4	67.9	0.1097 ug/L	0.1097 ppb	10:13:21
3	Tl 190.801†	47.3	84.0	3.5347 ug/L	3.5347 ppb	10:13:41
3	U 409.014†	-3086.5	211.4	5.5681 ug/L	5.5681 ppb	10:13:16
3	V 292.402†	-1602.3	34.7	0.2320 ug/L	0.2320 ppb	10:13:21
3	Zn 213.857†	737.0	84.3	0.7615 ug/L	0.7615 ppb	10:13:41
3	SiO2†	719.5	106.4	6.8080 ug/L	6.8080 ppb	10:13:56

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	945000.5	100.27 %		0.589			0.59%
Sc Radial	3768.2	101 %		0.6			0.58%
Y 371.029	799340.1	100.09 %		0.528			0.53%
Y RADIAL	4302.3	101.3 %		0.62			0.61%
Ag 328.068†	-51.6	-0.2635 ug/L		0.11429	-0.2635 ppb	0.11429	43.38%
Al 396.153Radial†	-6.7	-6.2572 ug/L		15.08675	-6.2572 ppb	15.08675	241.11%
As 188.979†	12.3	4.8633 ug/L		2.22926	4.8633 ppb	2.22926	45.84%
B 249.677†	1278.1	14.670 ug/L		0.8616	14.670 ppb	0.8616	5.87%
Ba 233.527†	1306472.5	9437.8 ug/L		34.02	9437.8 ppb	34.02	0.36%
Be 313.107†	175.3	0.0590 ug/L		0.01134	0.0590 ppb	0.01134	19.23%
Ca 317.933Radial†	8.3	18.389 ug/L		1.1203	18.389 ppb	1.1203	6.09%
Cd 226.502†	11.7	0.1377 ug/L		0.04029	0.1377 ppb	0.04029	29.27%
Co 228.616†	251487.8	4827.0 ug/L		22.61	4827.0 ppb	22.61	0.47%
Cr 267.716†	58.2	0.5740 ug/L		0.13687	0.5740 ppb	0.13687	23.84%
Cu 324.752†	-740.9	-2.1155 ug/L		0.14006	-2.1155 ppb	0.14006	6.62%
Fe 238.204 Radial†	-7.5	10.622 ug/L		37.3643	10.622 ppb	37.3643	351.76%
K 766.490 Radial†	235.3	45.964 ug/L		16.5570	45.964 ppb	16.5570	36.02%

Mg 279.077 IEC†	0.5	26.345 ug/L	132.1227	26.345 ppb	132.1227	501.51%
Mn 257.610†	-25.6	-0.0409 ug/L	0.00622	-0.0409 ppb	0.00622	15.19%
Mo 202.031†	-9.0	-0.6105 ug/L	0.26350	-0.6105 ppb	0.26350	43.17%
Na 589.592 Radial†	-33.6	-12.160 ug/L	9.8070	-12.160 ppb	9.8070	80.65%
Ni 231.604†	138.5	0.2441 ug/L	0.40531	0.2441 ppb	0.40531	166.04%
P 214.914†	17007.3	9089.3 ug/L	59.26	9089.3 ppb	59.26	0.65%
Pb 220.353†	-16.2	-1.7644 ug/L	0.45548	-1.7644 ppb	0.45548	25.82%
S 181.975 Axial†	5.3	6.6726 ug/L	5.66810	6.6726 ppb	5.66810	84.95%
Sb 206.836†	5.2	1.6611 ug/L	0.68360	1.6611 ppb	0.68360	41.15%
Se 196.026†	0.7	-0.0239 ug/L	2.63044	-0.0239 ppb	2.63044	>999.9%
Si 251.611†	24.8	0.7427 ug/L	0.22171	0.7427 ppb	0.22171	29.85%
Sn 189.927†	2.0	0.3312 ug/L	0.41702	0.3312 ppb	0.41702	125.93%
Sr 421.552†	8.7	0.0666 ug/L	0.16426	0.0666 ppb	0.16426	246.46%
Ti 334.940†	9.8	0.0127 ug/L	0.08886	0.0127 ppb	0.08886	699.58%
Tl 190.801†	84.5	3.5586 ug/L	0.97404	3.5586 ppb	0.97404	27.37%
U 409.014†	155.9	4.1100 ug/L	1.70524	4.1100 ppb	1.70524	41.49%
V 292.402†	62.4	0.4154 ug/L	0.25966	0.4154 ppb	0.25966	62.50%
Zn 213.857†	73.3	0.6679 ug/L	0.09570	0.6679 ppb	0.09570	14.33%
SiO2†	56.2	3.5985 ug/L	2.84689	3.5985 ppb	2.84689	79.11%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 10:16:08

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	3696.0	3696.0	99.0 %		10:18:20
1	Y RADIAL	4196.8	4196.8	98.78 %		10:18:00
1	Al 396.153Radial†	5301.8	5497.7	5146.7 ug/L	5146.7 ppb	10:18:00
1	Ca 317.933Radial†	2353.6	2364.5	5227.1 ug/L	5227.1 ppb	10:18:20
1	Fe 238.204 Radial†	294.9	287.7	5114.2 ug/L	5114.2 ppb	10:18:20
1	K 766.490 Radial†	28790.4	26087.6	5090.5 ug/L	5090.5 ppb	10:18:00
1	Mg 279.077 IEC†	100.1	98.7	5354.6 ug/L	5354.6 ppb	10:18:20
1	Na 589.592 Radial†	27934.2	29263.9	10582 ug/L	10582 ppb	10:18:00
1	Sr 421.552†	66747.0	67422.7	517.14 ug/L	517.14 ppb	10:18:00
1	Sc 361.383	936053.9	936053.9	99.320 %		10:19:19
1	Y 371.029	782759.3	782759.3	98.013 %		10:19:19
1	Ag 328.068†	111177.7	111569.5	479.41 ug/L	479.41 ppb	10:19:19
1	As 188.979†	1183.1	1217.6	487.55 ug/L	487.55 ppb	10:19:39
1	B 249.677†	20797.8	21674.2	479.80 ug/L	479.80 ppb	10:19:19
1	Ba 233.527†	65809.8	66245.5	479.75 ug/L	479.75 ppb	10:19:19
1	Be 313.107†	1408016.3	1421490.4	478.94 ug/L	478.94 ppb	10:19:19
1	Cd 226.502†	44860.4	45349.7	467.82 ug/L	467.82 ppb	10:19:39
1	Co 228.616†	24399.1	24630.8	472.36 ug/L	472.36 ppb	10:19:39
1	Cr 267.716†	47023.1	47276.2	478.44 ug/L	478.44 ppb	10:19:19
1	Cu 324.752†	172249.3	167151.8	475.21 ug/L	475.21 ppb	10:19:19
1	Mn 257.610†	456954.7	459603.1	479.54 ug/L	479.54 ppb	10:19:19
1	Mo 202.031†	7141.8	7178.7	480.55 ug/L	480.55 ppb	10:19:39
1	Ni 231.604†	20739.4	20805.9	473.91 ug/L	473.91 ppb	10:19:39
1	P 214.914†	4650.2	4471.4	2296.8 ug/L	2296.8 ppb	10:19:39
1	Pb 220.353†	4328.0	4352.7	479.76 ug/L	479.76 ppb	10:19:39
1	S 181.975 Axial†	796.7	760.7	959.78 ug/L	959.78 ppb	10:19:39
1	Sb 206.836†	1499.1	1477.7	487.47 ug/L	487.47 ppb	10:19:39
1	Se 196.026†	771.5	802.2	489.12 ug/L	489.12 ppb	10:19:39
1	Si 251.611†	80981.8	80928.9	2395.1 ug/L	2395.1 ppb	10:19:19
1	Sn 189.927†	2968.7	2972.8	473.64 ug/L	473.64 ppb	10:19:39
1	Ti 334.940†	327792.0	331683.5	486.58 ug/L	486.58 ppb	10:19:19
1	Tl 190.801†	1594.2	1641.8	482.83 ug/L	482.83 ppb	10:19:39
1	U 409.014†	13967.7	17365.2	454.73 ug/L	454.73 ppb	10:19:19
1	V 292.402†	72732.6	74869.8	481.74 ug/L	481.74 ppb	10:19:19
1	Zn 213.857†	53348.8	53060.6	477.39 ug/L	477.39 ppb	10:19:19
1	SiO2†	80648.9	80587.3	5125.9 ug/L	5125.9 ppb	10:20:39
2	Sc Radial	3678.7	3678.7	98.5 %		10:18:45
2	Y RADIAL	4141.3	4141.3	97.48 %		10:18:25
2	Al 396.153Radial†	5259.4	5479.9	5129.8 ug/L	5129.8 ppb	10:18:25
2	Ca 317.933Radial†	2338.1	2360.0	5217.0 ug/L	5217.0 ppb	10:18:45
2	Fe 238.204 Radial†	296.5	290.7	5167.8 ug/L	5167.8 ppb	10:18:45
2	K 766.490 Radial†	28381.6	25809.8	5036.2 ug/L	5036.2 ppb	10:18:25
2	Mg 279.077 IEC†	99.2	98.3	5334.2 ug/L	5334.2 ppb	10:18:45
2	Na 589.592 Radial†	27562.0	29019.2	10493 ug/L	10493 ppb	10:18:25
2	Sr 421.552†	65724.5	66702.6	511.62 ug/L	511.62 ppb	10:18:25
2	Sc 361.383	929256.6	929256.6	98.599 %		10:19:46
2	Y 371.029	778859.0	778859.0	97.525 %		10:19:46
2	Ag 328.068†	110254.3	111451.7	478.92 ug/L	478.92 ppb	10:19:46
2	As 188.979†	1192.0	1235.4	494.60 ug/L	494.60 ppb	10:20:06
2	B 249.677†	20562.6	21588.9	477.88 ug/L	477.88 ppb	10:19:46
2	Ba 233.527†	65232.0	66144.1	479.02 ug/L	479.02 ppb	10:19:46
2	Be 313.107†	1398827.6	1422540.9	479.29 ug/L	479.29 ppb	10:19:46
2	Cd 226.502†	44965.1	45786.2	472.32 ug/L	472.32 ppb	10:20:06
2	Co 228.616†	24388.1	24799.3	475.60 ug/L	475.60 ppb	10:20:06
2	Cr 267.716†	46749.5	47345.1	479.14 ug/L	479.14 ppb	10:19:46
2	Cu 324.752†	170616.7	166764.5	474.10 ug/L	474.10 ppb	10:19:46
2	Mn 257.610†	453258.4	459219.7	479.15 ug/L	479.15 ppb	10:19:46
2	Mo 202.031†	7154.2	7243.8	484.91 ug/L	484.91 ppb	10:20:06
2	Ni 231.604†	20774.2	20994.0	478.20 ug/L	478.20 ppb	10:20:06

2	P 214.914†	4643.6	4499.0	2311.7 ug/L	2311.7 ppb	10:20:06
2	Pb 220.353†	4351.5	4408.4	485.88 ug/L	485.88 ppb	10:20:06
2	S 181.975 Axial†	796.3	766.1	966.61 ug/L	966.61 ppb	10:20:06
2	Sb 206.836†	1501.2	1490.9	491.82 ug/L	491.82 ppb	10:20:06
2	Se 196.026†	788.2	824.8	502.61 ug/L	502.61 ppb	10:20:06
2	Si 251.611†	80135.5	80667.0	2387.3 ug/L	2387.3 ppb	10:19:46
2	Sn 189.927†	2969.6	2995.5	477.26 ug/L	477.26 ppb	10:20:06
2	Ti 334.940†	324962.8	331228.2	485.91 ug/L	485.91 ppb	10:19:46
2	Tl 190.801†	1591.2	1650.5	485.37 ug/L	485.37 ppb	10:20:06
2	U 409.014†	14018.2	17519.3	458.78 ug/L	458.78 ppb	10:19:46
2	V 292.402†	72136.1	74800.5	481.36 ug/L	481.36 ppb	10:19:46
2	Zn 213.857†	52925.6	53024.2	477.03 ug/L	477.03 ppb	10:19:46
2	SiO2†	80139.7	80664.8	5130.7 ug/L	5130.7 ppb	10:20:44
3	Sc Radial	3671.6	3671.6	98.3 %		10:19:10
3	Y RADIAL	4174.4	4174.4	98.25 %		10:18:50
3	Al 396.153Radial†	5319.3	5551.2	5197.0 ug/L	5197.0 ppb	10:18:50
3	Ca 317.933Radial†	2338.2	2364.8	5227.5 ug/L	5227.5 ppb	10:19:10
3	Fe 238.204 Radial†	298.7	293.5	5217.1 ug/L	5217.1 ppb	10:19:10
3	K 766.490 Radial†	28693.9	26183.4	5109.2 ug/L	5109.2 ppb	10:18:50
3	Mg 279.077 IEC†	97.0	96.2	5221.1 ug/L	5221.1 ppb	10:19:10
3	Na 589.592 Radial†	27707.0	29221.0	10566 ug/L	10566 ppb	10:18:50
3	Sr 421.552†	66444.9	67564.9	518.23 ug/L	518.23 ppb	10:18:50
3	Sc 361.383	937294.0	937294.0	99.451 %		10:20:14
3	Y 371.029	786492.0	786492.0	98.480 %		10:20:14
3	Ag 328.068†	111182.8	111426.5	478.83 ug/L	478.83 ppb	10:20:14
3	As 188.979†	1178.1	1211.0	484.93 ug/L	484.93 ppb	10:20:34
3	B 249.677†	20844.7	21693.8	480.22 ug/L	480.22 ppb	10:20:14
3	Ba 233.527†	65473.8	65819.9	476.68 ug/L	476.68 ppb	10:20:14
3	Be 313.107†	1413091.8	1424718.3	480.02 ug/L	480.02 ppb	10:20:14
3	Cd 226.502†	44993.6	45423.8	468.57 ug/L	468.57 ppb	10:20:34
3	Co 228.616†	24397.7	24596.9	471.71 ug/L	471.71 ppb	10:20:34
3	Cr 267.716†	47067.7	47258.5	478.27 ug/L	478.27 ppb	10:20:14
3	Cu 324.752†	172301.8	166975.1	474.71 ug/L	474.71 ppb	10:20:14
3	Mn 257.610†	455448.9	457480.2	477.34 ug/L	477.34 ppb	10:20:14
3	Mo 202.031†	7157.1	7184.5	480.95 ug/L	480.95 ppb	10:20:34
3	Ni 231.604†	20755.5	20794.5	473.65 ug/L	473.65 ppb	10:20:34
3	P 214.914†	4641.9	4456.9	2289.1 ug/L	2289.1 ppb	10:20:34
3	Pb 220.353†	4334.5	4353.4	479.84 ug/L	479.84 ppb	10:20:34
3	S 181.975 Axial†	798.2	761.1	960.32 ug/L	960.32 ppb	10:20:34
3	Sb 206.836†	1499.1	1475.7	486.86 ug/L	486.86 ppb	10:20:34
3	Se 196.026†	789.8	819.6	499.65 ug/L	499.65 ppb	10:20:34
3	Si 251.611†	80683.0	80520.5	2383.0 ug/L	2383.0 ppb	10:20:14
3	Sn 189.927†	2982.6	2982.8	475.23 ug/L	475.23 ppb	10:20:34
3	Ti 334.940†	327012.6	330463.1	484.80 ug/L	484.80 ppb	10:20:14
3	Tl 190.801†	1584.8	1630.3	479.44 ug/L	479.44 ppb	10:20:34
3	U 409.014†	14000.1	17379.1	455.09 ug/L	455.09 ppb	10:20:14
3	V 292.402†	72847.2	74888.2	481.84 ug/L	481.84 ppb	10:20:14
3	Zn 213.857†	53299.5	52940.0	476.28 ug/L	476.28 ppb	10:20:14
3	SiO2†	80132.6	79960.7	5085.9 ug/L	5085.9 ppb	10:20:50

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	934201.5	99.123 %	0.4591			0.46%
Sc Radial	3682.1	98.6 %	0.34			0.34%
Y 371.029	782703.4	98.006 %	0.4779			0.49%
Y RADIAL	4170.8	98.17 %	0.657			0.67%
Ag 328.068†	111482.6	479.06 ug/L	0.312	479.06 ppb	0.312	0.07%
QC value within limits for Ag 328.068 Recovery = 95.81%						
Al 396.153Radial†	5509.6	5157.8 ug/L	34.96	5157.8 ppb	34.96	0.68%
QC value within limits for Al 396.153Radial Recovery = 103.16%						
As 188.979†	1221.3	489.03 ug/L	5.000	489.03 ppb	5.000	1.02%
QC value within limits for As 188.979 Recovery = 97.81%						
B 249.677†	21652.3	479.30 ug/L	1.244	479.30 ppb	1.244	0.26%
QC value within limits for B 249.677 Recovery = 95.86%						
Ba 233.527†	66069.8	478.49 ug/L	1.604	478.49 ppb	1.604	0.34%
QC value within limits for Ba 233.527 Recovery = 95.70%						
Be 313.107†	1422916.5	479.42 ug/L	0.551	479.42 ppb	0.551	0.12%
QC value within limits for Be 313.107 Recovery = 95.88%						
Ca 317.933Radial†	2363.1	5223.9 ug/L	5.97	5223.9 ppb	5.97	0.11%

QC value within limits for Ca 317.933 Radial Recovery = 104.48%

Cd 226.502†	45519.9	469.57 ug/L	2.411	469.57 ppb	2.411	0.51%
QC value within limits for Cd 226.502 Recovery = 93.91%						
Co 228.616†	24675.6	473.23 ug/L	2.085	473.23 ppb	2.085	0.44%
QC value within limits for Co 228.616 Recovery = 94.65%						
Cr 267.716†	47293.3	478.62 ug/L	0.460	478.62 ppb	0.460	0.10%
QC value within limits for Cr 267.716 Recovery = 95.72%						
Cu 324.752†	166963.8	474.67 ug/L	0.551	474.67 ppb	0.551	0.12%
QC value within limits for Cu 324.752 Recovery = 94.93%						
Fe 238.204 Radial†	290.7	5166.4 ug/L	51.47	5166.4 ppb	51.47	1.00%
QC value within limits for Fe 238.204 Radial Recovery = 103.33%						
K 766.490 Radial†	26026.9	5078.6 ug/L	37.90	5078.6 ppb	37.90	0.75%
QC value within limits for K 766.490 Radial Recovery = 101.57%						
Mg 279.077 IEC†	97.7	5303.3 ug/L	71.89	5303.3 ppb	71.89	1.36%
QC value within limits for Mg 279.077 IEC Recovery = 106.07%						
Mn 257.610†	458767.7	478.68 ug/L	1.172	478.68 ppb	1.172	0.24%
QC value within limits for Mn 257.610 Recovery = 95.74%						
Mo 202.031†	7202.3	482.14 ug/L	2.411	482.14 ppb	2.411	0.50%
QC value within limits for Mo 202.031 Recovery = 96.43%						
Na 589.592 Radial†	29168.0	10547 ug/L	47.3	10547 ppb	47.3	0.45%
QC value within limits for Na 589.592 Radial Recovery = 105.47%						
Ni 231.604†	20864.8	475.25 ug/L	2.553	475.25 ppb	2.553	0.54%
QC value within limits for Ni 231.604 Recovery = 95.05%						
P 214.914†	4475.7	2299.2 ug/L	11.52	2299.2 ppb	11.52	0.50%
QC value within limits for P 214.914 Recovery = 91.97%						
Pb 220.353†	4371.5	481.82 ug/L	3.511	481.82 ppb	3.511	0.73%
QC value within limits for Pb 220.353 Recovery = 96.36%						
S 181.975 Axial†	762.6	962.23 ug/L	3.796	962.23 ppb	3.796	0.39%
QC value within limits for S 181.975 Axial Recovery = 96.22%						
Sb 206.836†	1481.4	488.72 ug/L	2.704	488.72 ppb	2.704	0.55%
QC value within limits for Sb 206.836 Recovery = 97.74%						
Se 196.026†	815.5	497.13 ug/L	7.089	497.13 ppb	7.089	1.43%
QC value within limits for Se 196.026 Recovery = 99.43%						
Si 251.611†	80705.5	2388.5 ug/L	6.15	2388.5 ppb	6.15	0.26%
QC value within limits for Si 251.611 Recovery = 95.54%						
Sn 189.927†	2983.7	475.38 ug/L	1.810	475.38 ppb	1.810	0.38%
QC value within limits for Sn 189.927 Recovery = 95.08%						
Sr 421.552†	67230.0	515.66 ug/L	3.546	515.66 ppb	3.546	0.69%
QC value within limits for Sr 421.552 Recovery = 103.13%						
Ti 334.940†	331124.9	485.76 ug/L	0.899	485.76 ppb	0.899	0.19%
QC value within limits for Ti 334.940 Recovery = 97.15%						
Tl 190.801†	1640.9	482.55 ug/L	2.972	482.55 ppb	2.972	0.62%
QC value within limits for Tl 190.801 Recovery = 96.51%						
U 409.014†	17421.2	456.20 ug/L	2.238	456.20 ppb	2.238	0.49%
QC value within limits for U 409.014 Recovery = 91.24%						
V 292.402†	74852.8	481.64 ug/L	0.255	481.64 ppb	0.255	0.05%
QC value within limits for V 292.402 Recovery = 96.33%						
Zn 213.857†	53008.3	476.90 ug/L	0.565	476.90 ppb	0.565	0.12%
QC value within limits for Zn 213.857 Recovery = 95.38%						
SiO2†	80404.2	5114.2 ug/L	24.59	5114.2 ppb	24.59	0.48%
QC value within limits for SiO2 Recovery = 95.64%						

All analyte(s) passed QC.

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

Autosampler Location: 8  
 Date Collected: 2/26/2010 10:22:59  
 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	3729.6	3729.6	99.9 %		10:25:12
1	Y RADIAL	4350.5	4350.5	102.4 %		10:24:52
1	Al 396.153Radial†	-127.5	12.1	11.398 ug/L	11.398 ppb	10:24:52
1	Ca 317.933Radial†	20.4	6.5	14.264 ug/L	14.264 ppb	10:25:12
1	Fe 238.204 Radial†	10.5	0.2	3.4625 ug/L	3.4625 ppb	10:25:12
1	K 766.490 Radial†	3211.3	209.0	40.822 ug/L	40.822 ppb	10:24:52
1	Mg 279.077 IEC†	4.3	1.9	102.72 ug/L	102.72 ppb	10:25:12
1	Na 589.592 Radial†	-1038.6	-5.6	-2.0412 ug/L	-2.0412 ppb	10:24:52
1	Sr 421.552†	44.6	14.7	0.1129 ug/L	0.1129 ppb	10:24:52
1	Sc 361.383	942174.5	942174.5	99.969 %		10:26:09
1	Y 371.029	801457.0	801457.0	100.35 %		10:26:09
1	Ag 328.068†	368.8	-0.7	-0.0009 ug/L	-0.0009 ppb	10:26:14
1	As 188.979†	-19.9	6.5	2.5882 ug/L	2.5882 ppb	10:26:34
1	B 249.677†	-39.0	695.1	15.455 ug/L	15.455 ppb	10:26:14
1	Ba 233.527†	33.6	18.6	0.1333 ug/L	0.1333 ppb	10:26:34
1	Be 313.107†	-3680.9	148.2	0.0498 ug/L	0.0498 ppb	10:26:14
1	Cd 226.502†	-187.5	-5.5	-0.0580 ug/L	-0.0580 ppb	10:26:34
1	Co 228.616†	-57.7	6.8	0.1317 ug/L	0.1317 ppb	10:26:34
1	Cr 267.716†	99.8	30.9	0.3129 ug/L	0.3129 ppb	10:26:34
1	Cu 324.752†	6433.5	158.1	0.4517 ug/L	0.4517 ppb	10:26:14
1	Mn 257.610†	512.4	31.1	0.0286 ug/L	0.0286 ppb	10:26:34
1	Mo 202.031†	18.4	6.3	0.4249 ug/L	0.4249 ppb	10:26:34
1	Ni 231.604†	68.6	-6.9	-0.1575 ug/L	-0.1575 ppb	10:26:34
1	P 214.914†	213.6	3.0	1.5357 ug/L	1.5357 ppb	10:26:34
1	Pb 220.353†	-35.7	-40.7	-4.4693 ug/L	-4.4693 ppb	10:26:34
1	S 181.975 Axial†	36.2	-5.3	-6.7175 ug/L	-6.7175 ppb	10:26:34
1	Sb 206.836†	33.1	1.5	0.4991 ug/L	0.4991 ppb	10:26:34
1	Se 196.026†	-33.1	-7.7	-4.5067 ug/L	-4.5067 ppb	10:26:34
1	Si 251.611†	625.3	17.9	0.5267 ug/L	0.5267 ppb	10:26:34
1	Sn 189.927†	25.7	9.4	1.5059 ug/L	1.5059 ppb	10:26:34
1	Ti 334.940†	-1653.4	-7.6	-0.0162 ug/L	-0.0162 ppb	10:26:14
1	Tl 190.801†	-26.6	10.0	2.9315 ug/L	2.9315 ppb	10:26:34
1	U 409.014†	-3436.0	-135.2	-3.5544 ug/L	-3.5544 ppb	10:26:09
1	V 292.402†	-1694.1	-55.5	-0.3521 ug/L	-0.3521 ppb	10:26:14
1	Zn 213.857†	722.6	69.2	0.6281 ug/L	0.6281 ppb	10:26:34
1	SiO2†	657.6	43.9	2.7849 ug/L	2.7849 ppb	10:27:40
2	Sc Radial	3758.0	3758.0	101 %		10:25:37
2	Y RADIAL	4275.8	4275.8	100.6 %		10:25:17
2	Al 396.153Radial†	-136.5	4.2	3.9782 ug/L	3.9782 ppb	10:25:17
2	Ca 317.933Radial†	24.3	10.2	22.459 ug/L	22.459 ppb	10:25:37
2	Fe 238.204 Radial†	10.7	0.3	5.8530 ug/L	5.8530 ppb	10:25:37
2	K 766.490 Radial†	3196.0	169.4	33.100 ug/L	33.100 ppb	10:25:17
2	Mg 279.077 IEC†	4.2	1.7	94.061 ug/L	94.061 ppb	10:25:37
2	Na 589.592 Radial†	-1038.1	2.6	0.9466 ug/L	0.9466 ppb	10:25:17
2	Sr 421.552†	18.6	-11.5	-0.0882 ug/L	-0.0882 ppb	10:25:17
2	Sc 361.383	939889.2	939889.2	99.727 %		10:26:39
2	Y 371.029	799644.9	799644.9	100.13 %		10:26:39
2	Ag 328.068†	382.0	13.3	0.0560 ug/L	0.0560 ppb	10:26:44
2	As 188.979†	-12.0	14.4	5.7229 ug/L	5.7229 ppb	10:27:04
2	B 249.677†	-64.0	669.9	14.895 ug/L	14.895 ppb	10:26:44
2	Ba 233.527†	31.9	16.9	0.1229 ug/L	0.1229 ppb	10:27:04
2	Be 313.107†	-3650.1	170.1	0.0574 ug/L	0.0574 ppb	10:26:44
2	Cd 226.502†	-198.4	-16.9	-0.1743 ug/L	-0.1743 ppb	10:27:04
2	Co 228.616†	-58.3	6.1	0.1160 ug/L	0.1160 ppb	10:27:04
2	Cr 267.716†	103.8	35.1	0.3540 ug/L	0.3540 ppb	10:27:04
2	Cu 324.752†	6298.4	38.3	0.1069 ug/L	0.1069 ppb	10:26:44
2	Mn 257.610†	493.2	13.2	0.0104 ug/L	0.0104 ppb	10:27:04
2	Mo 202.031†	7.0	-5.0	-0.3314 ug/L	-0.3314 ppb	10:27:04
2	Ni 231.604†	82.7	7.4	0.1696 ug/L	0.1696 ppb	10:27:04



2	P 214.914†	208.2	-1.8	-1.0080 ug/L	-1.0080 ppb	10:27:04
2	Pb 220.353†	-40.7	-45.8	-5.0337 ug/L	-5.0337 ppb	10:27:04
2	S 181.975 Axial†	40.1	-1.3	-1.6449 ug/L	-1.6449 ppb	10:27:04
2	Sb 206.836†	44.3	12.7	4.0329 ug/L	4.0329 ppb	10:27:04
2	Se 196.026†	-24.1	1.3	0.7628 ug/L	0.7628 ppb	10:27:04
2	Si 251.611†	633.9	28.0	0.8358 ug/L	0.8358 ppb	10:27:04
2	Sn 189.927†	14.5	-1.7	-0.2734 ug/L	-0.2734 ppb	10:27:04
2	Ti 334.940†	-1592.8	49.2	0.0656 ug/L	0.0656 ppb	10:26:44
2	Tl 190.801†	-33.6	3.0	0.8700 ug/L	0.8700 ppb	10:27:04
2	U 409.014†	-3142.3	151.0	3.9659 ug/L	3.9659 ppb	10:26:39
2	V 292.402†	-1604.5	30.2	0.1952 ug/L	0.1952 ppb	10:26:44
2	Zn 213.857†	723.5	71.9	0.6504 ug/L	0.6504 ppb	10:27:04
2	SiO2†	688.8	76.7	4.9019 ug/L	4.9019 ppb	10:27:45
3	Sc Radial	3758.7	3758.7	101 %		10:26:02
3	Y RADIAL	4281.6	4281.6	100.8 %		10:25:42
3	Al 396.153Radial†	-145.3	-4.5	-4.2213 ug/L	-4.2213 ppb	10:25:42
3	Ca 317.933Radial†	22.1	8.0	17.787 ug/L	17.787 ppb	10:26:02
3	Fe 238.204 Radial†	11.0	0.5	9.6023 ug/L	9.6023 ppb	10:26:02
3	K 766.490 Radial†	3186.0	158.9	31.046 ug/L	31.046 ppb	10:25:42
3	Mg 279.077 IEC†	1.1	-1.4	-76.381 ug/L	-76.381 ppb	10:26:02
3	Na 589.592 Radial†	-1068.5	-27.4	-9.8901 ug/L	-9.8901 ppb	10:25:42
3	Sr 421.552†	39.7	9.5	0.0726 ug/L	0.0726 ppb	10:25:42
3	Sc 361.383	930649.6	930649.6	98.746 %		10:27:09
3	Y 371.029	793786.6	793786.6	99.394 %		10:27:09
3	Ag 328.068†	272.1	-94.2	-0.4017 ug/L	-0.4017 ppb	10:27:14
3	As 188.979†	-12.6	13.6	5.4096 ug/L	5.4096 ppb	10:27:34
3	B 249.677†	-68.4	664.7	14.779 ug/L	14.779 ppb	10:27:14
3	Ba 233.527†	35.8	21.2	0.1525 ug/L	0.1525 ppb	10:27:34
3	Be 313.107†	-3595.2	189.4	0.0634 ug/L	0.0634 ppb	10:27:14
3	Cd 226.502†	-168.1	11.8	0.1207 ug/L	0.1207 ppb	10:27:34
3	Co 228.616†	-53.7	10.1	0.1936 ug/L	0.1936 ppb	10:27:34
3	Cr 267.716†	84.4	16.5	0.1666 ug/L	0.1666 ppb	10:27:34
3	Cu 324.752†	6347.5	150.8	0.4287 ug/L	0.4287 ppb	10:27:14
3	Mn 257.610†	515.5	40.6	0.0464 ug/L	0.0464 ppb	10:27:34
3	Mo 202.031†	8.7	-3.2	-0.2154 ug/L	-0.2154 ppb	10:27:34
3	Ni 231.604†	87.5	13.1	0.2992 ug/L	0.2992 ppb	10:27:34
3	P 214.914†	199.9	-8.2	-4.4791 ug/L	-4.4791 ppb	10:27:34
3	Pb 220.353†	-36.9	-42.4	-4.6570 ug/L	-4.6570 ppb	10:27:34
3	S 181.975 Axial†	43.8	2.8	3.5885 ug/L	3.5885 ppb	10:27:34
3	Sb 206.836†	47.7	16.6	5.2893 ug/L	5.2893 ppb	10:27:34
3	Se 196.026†	-29.2	-4.1	-2.3862 ug/L	-2.3862 ppb	10:27:34
3	Si 251.611†	646.2	46.8	1.3922 ug/L	1.3922 ppb	10:27:34
3	Sn 189.927†	16.5	0.5	0.0788 ug/L	0.0788 ppb	10:27:34
3	Ti 334.940†	-1723.0	-98.5	-0.1363 ug/L	-0.1363 ppb	10:27:14
3	Tl 190.801†	-43.0	-6.8	-1.9998 ug/L	-1.9998 ppb	10:27:34
3	U 409.014†	-3232.1	28.7	0.7530 ug/L	0.7530 ppb	10:27:09
3	V 292.402†	-1685.2	-67.6	-0.4334 ug/L	-0.4334 ppb	10:27:14
3	Zn 213.857†	703.3	58.6	0.5285 ug/L	0.5285 ppb	10:27:34
3	SiO2†	631.0	25.0	1.6026 ug/L	1.6026 ppb	10:27:50

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937571.1	99.481 %		0.6475			0.65%
Sc Radial	3748.8	100 %		0.4			0.44%
Y 371.029	798296.2	99.958 %		0.5020			0.50%
Y RADIAL	4302.7	101.3 %		0.98			0.97%
Ag 328.068†	-27.2	-0.1155 ug/L		0.24947	-0.1155 ppb	0.24947	215.95%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	4.0	3.7183 ug/L		7.81291	3.7183 ppb	7.81291	210.12%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	11.5	4.5736 ug/L		1.72649	4.5736 ppb	1.72649	37.75%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	676.6	15.043 ug/L		0.3614	15.043 ppb	0.3614	2.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	18.9	0.1363 ug/L		0.01502	0.1363 ppb	0.01502	11.02%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	169.3	0.0568 ug/L		0.00680	0.0568 ppb	0.00680	11.96%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	8.2	18.170 ug/L		4.1109	18.170 ppb	4.1109	22.63%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-3.6	-0.0372 ug/L	0.14859	-0.0372 ppb	0.14859	399.63%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	7.7	0.1471 ug/L	0.04098	0.1471 ppb	0.04098	27.86%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	27.5	0.2778 ug/L	0.09848	0.2778 ppb	0.09848	35.45%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	115.7	0.3291 ug/L	0.19275	0.3291 ppb	0.19275	58.57%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.4	6.3059 ug/L	3.09488	6.3059 ppb	3.09488	49.08%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	179.1	34.989 ug/L	5.1544	34.989 ppb	5.1544	14.73%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.7	40.134 ug/L	100.9983	40.134 ppb	100.9983	251.65%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	28.3	0.0285 ug/L	0.01796	0.0285 ppb	0.01796	63.09%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-0.6	-0.0407 ug/L	0.40729	-0.0407 ppb	0.40729	>999.9%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-10.1	-3.6616 ug/L	5.59713	-3.6616 ppb	5.59713	152.86%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	4.6	0.1038 ug/L	0.23535	0.1038 ppb	0.23535	226.80%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.3	-1.3171 ug/L	3.01928	-1.3171 ppb	3.01928	229.23%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-43.0	-4.7200 ug/L	0.28745	-4.7200 ppb	0.28745	6.09%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.3	-1.5913 ug/L	5.15324	-1.5913 ppb	5.15324	323.84%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	10.3	3.2738 ug/L	2.48368	3.2738 ppb	2.48368	75.87%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.5	-2.0434 ug/L	2.65145	-2.0434 ppb	2.65145	129.76%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	30.9	0.9182 ug/L	0.43860	0.9182 ppb	0.43860	47.77%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.7	0.4371 ug/L	0.94220	0.4371 ppb	0.94220	215.56%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.2	0.0324 ug/L	0.10640	0.0324 ppb	0.10640	328.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-19.0	-0.0290 ug/L	0.10159	-0.0290 ppb	0.10159	350.90%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.1	0.6006 ug/L	2.47663	0.6006 ppb	2.47663	412.38%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	14.8	0.3882 ug/L	3.77342	0.3882 ppb	3.77342	972.12%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-31.0	-0.1968 ug/L	0.34188	-0.1968 ppb	0.34188	173.74%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	66.6	0.6023 ug/L	0.06492	0.6023 ppb	0.06492	10.78%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	48.5	3.0965 ug/L	1.67161	3.0965 ppb	1.67161	53.98%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 15  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/26/2010 11:39:51  
 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	3675.7	3675.7	98.4 %		11:42:03
1	Y RADIAL	4140.0	4140.0	97.45 %		11:41:43
1	Al 396.153Radial†	5262.7	5487.6	5136.9 ug/L	5136.9 ppb	11:41:43
1	Ca 317.933Radial†	2353.2	2377.2	5255.1 ug/L	5255.1 ppb	11:42:03
1	Fe 238.204 Radial†	295.3	289.8	5150.8 ug/L	5150.8 ppb	11:42:03
1	K 766.490 Radial†	28298.1	25748.6	5024.3 ug/L	5024.3 ppb	11:41:43
1	Mg 279.077 IEC†	100.4	99.5	5399.8 ug/L	5399.8 ppb	11:42:03
1	Na 589.592 Radial†	27338.1	28814.5	10419 ug/L	10419 ppb	11:41:43
1	Sr 421.552†	65962.4	66999.0	513.89 ug/L	513.89 ppb	11:41:43
1	Sc 361.383	931836.5	931836.5	98.872 %		11:43:02
1	Y 371.029	779670.9	779670.9	97.626 %		11:43:02
1	Ag 328.068†	111638.0	112541.7	483.59 ug/L	483.59 ppb	11:43:02
1	As 188.979†	1183.7	1223.6	489.97 ug/L	489.97 ppb	11:43:22
1	B 249.677†	20425.5	21392.5	473.51 ug/L	473.51 ppb	11:43:02
1	Ba 233.527†	65968.3	66705.6	483.09 ug/L	483.09 ppb	11:43:02
1	Be 313.107†	1416209.3	1436193.0	483.89 ug/L	483.89 ppb	11:43:02
1	Cd 226.502†	45278.6	45977.0	474.29 ug/L	474.29 ppb	11:43:22
1	Co 228.616†	24646.6	24992.2	479.30 ug/L	479.30 ppb	11:43:22
1	Cr 267.716†	47252.0	47722.0	482.96 ug/L	482.96 ppb	11:43:02
1	Cu 324.752†	173266.7	168965.6	480.36 ug/L	480.36 ppb	11:43:02
1	Mn 257.610†	458923.8	463676.9	483.79 ug/L	483.79 ppb	11:43:02
1	Mo 202.031†	7199.3	7269.4	486.62 ug/L	486.62 ppb	11:43:22
1	Ni 231.604†	20906.4	21069.4	479.91 ug/L	479.91 ppb	11:43:22
1	P 214.914†	4674.4	4517.1	2320.2 ug/L	2320.2 ppb	11:43:22
1	Pb 220.353†	4338.5	4383.0	483.09 ug/L	483.09 ppb	11:43:22
1	S 181.975 Axial†	804.6	772.3	974.47 ug/L	974.47 ppb	11:43:22
1	Sb 206.836†	1517.7	1503.3	495.92 ug/L	495.92 ppb	11:43:22
1	Se 196.026†	789.7	824.2	502.16 ug/L	502.16 ppb	11:43:22
1	Si 251.611†	81109.2	81426.7	2409.8 ug/L	2409.8 ppb	11:43:02
1	Sn 189.927†	3024.6	3042.8	484.79 ug/L	484.79 ppb	11:43:22
1	Ti 334.940†	329431.0	334834.9	491.20 ug/L	491.20 ppb	11:43:02
1	Tl 190.801†	1598.0	1652.9	486.09 ug/L	486.09 ppb	11:43:22
1	U 409.014†	13820.6	17280.1	452.48 ug/L	452.48 ppb	11:43:02
1	V 292.402†	73045.6	75517.8	485.92 ug/L	485.92 ppb	11:43:02
1	Zn 213.857†	53534.2	53491.2	481.25 ug/L	481.25 ppb	11:43:02
1	SiO2†	81356.5	81670.5	5194.8 ug/L	5194.8 ppb	11:44:22
2	Sc Radial	3689.0	3689.0	98.8 %		11:42:28
2	Y RADIAL	4224.3	4224.3	99.43 %		11:42:08
2	Al 396.153Radial†	5376.2	5583.2	5226.9 ug/L	5226.9 ppb	11:42:08
2	Ca 317.933Radial†	2355.6	2371.1	5241.5 ug/L	5241.5 ppb	11:42:28
2	Fe 238.204 Radial†	298.4	291.8	5186.6 ug/L	5186.6 ppb	11:42:28
2	K 766.490 Radial†	28917.1	26271.2	5126.3 ug/L	5126.3 ppb	11:42:08
2	Mg 279.077 IEC†	94.4	93.2	5054.9 ug/L	5054.9 ppb	11:42:28
2	Na 589.592 Radial†	28094.0	29479.3	10659 ug/L	10659 ppb	11:42:08
2	Sr 421.552†	67583.1	68397.2	524.62 ug/L	524.62 ppb	11:42:08
2	Sc 361.383	935111.2	935111.2	99.220 %		11:43:29
2	Y 371.029	783529.8	783529.8	98.109 %		11:43:29
2	Ag 328.068†	112120.8	112632.9	483.99 ug/L	483.99 ppb	11:43:29
2	As 188.979†	1175.5	1211.2	485.04 ug/L	485.04 ppb	11:43:49
2	B 249.677†	20593.0	21489.0	475.65 ug/L	475.65 ppb	11:43:29
2	Ba 233.527†	66197.1	66702.6	483.07 ug/L	483.07 ppb	11:43:29
2	Be 313.107†	1425812.7	1440855.9	485.46 ug/L	485.46 ppb	11:43:29
2	Cd 226.502†	45316.7	45855.1	473.03 ug/L	473.03 ppb	11:43:49
2	Co 228.616†	24634.0	24892.2	477.38 ug/L	477.38 ppb	11:43:49
2	Cr 267.716†	47374.7	47678.3	482.52 ug/L	482.52 ppb	11:43:29
2	Cu 324.752†	174004.8	169095.9	480.73 ug/L	480.73 ppb	11:43:29
2	Mn 257.610†	460171.0	463308.5	483.43 ug/L	483.43 ppb	11:43:29
2	Mo 202.031†	7211.5	7256.2	485.74 ug/L	485.74 ppb	11:43:49
2	Ni 231.604†	20928.9	21017.9	478.74 ug/L	478.74 ppb	11:43:49

2	P 214.914†	4691.5	4517.8	2320.5 ug/L	2320.5 ppb	11:43:49
2	Pb 220.353†	4361.8	4391.1	484.00 ug/L	484.00 ppb	11:43:49
2	S 181.975 Axial†	803.7	768.5	969.72 ug/L	969.72 ppb	11:43:49
2	Sb 206.836†	1533.2	1513.6	499.11 ug/L	499.11 ppb	11:43:49
2	Se 196.026†	782.7	814.2	496.43 ug/L	496.43 ppb	11:43:49
2	Si 251.611†	81421.7	81454.5	2410.7 ug/L	2410.7 ppb	11:43:29
2	Sn 189.927†	3009.3	3016.7	480.62 ug/L	480.62 ppb	11:43:49
2	Ti 334.940†	330576.7	334822.7	491.21 ug/L	491.21 ppb	11:43:29
2	Tl 190.801†	1615.5	1664.9	489.61 ug/L	489.61 ppb	11:43:49
2	U 409.014†	14109.3	17522.1	458.84 ug/L	458.84 ppb	11:43:29
2	V 292.402†	73488.5	75705.5	487.10 ug/L	487.10 ppb	11:43:29
2	Zn 213.857†	53730.1	53499.0	481.32 ug/L	481.32 ppb	11:43:29
2	SiO2†	80530.1	80549.4	5123.3 ug/L	5123.3 ppb	11:44:27
3	Sc Radial	3663.3	3663.3	98.1 %		11:42:53
3	Y RADIAL	4108.2	4108.2	96.70 %		11:42:33
3	Al 396.153Radial†	5260.1	5503.1	5151.6 ug/L	5151.6 ppb	11:42:33
3	Ca 317.933Radial†	2352.0	2384.1	5270.3 ug/L	5270.3 ppb	11:42:53
3	Fe 238.204 Radial†	298.1	293.6	5218.3 ug/L	5218.3 ppb	11:42:53
3	K 766.490 Radial†	28346.6	25895.4	5053.0 ug/L	5053.0 ppb	11:42:33
3	Mg 279.077 IEC†	99.7	99.2	5385.1 ug/L	5385.1 ppb	11:42:53
3	Na 589.592 Radial†	27345.3	28916.0	10456 ug/L	10456 ppb	11:42:33
3	Sr 421.552†	66039.8	67304.9	516.24 ug/L	516.24 ppb	11:42:33
3	Sc 361.383	933881.0	933881.0	99.089 %		11:43:56
3	Y 371.029	781076.6	781076.6	97.802 %		11:43:56
3	Ag 328.068†	111937.7	112596.9	483.85 ug/L	483.85 ppb	11:43:56
3	As 188.979†	1188.4	1225.8	490.85 ug/L	490.85 ppb	11:44:17
3	B 249.677†	20611.4	21534.9	476.67 ug/L	476.67 ppb	11:43:56
3	Ba 233.527†	66180.8	66774.0	483.58 ug/L	483.58 ppb	11:43:56
3	Be 313.107†	1421868.8	1438768.8	484.76 ug/L	484.76 ppb	11:43:56
3	Cd 226.502†	45119.5	45716.3	471.59 ug/L	471.59 ppb	11:44:17
3	Co 228.616†	24520.3	24810.2	475.79 ug/L	475.79 ppb	11:44:17
3	Cr 267.716†	47298.9	47664.7	482.38 ug/L	482.38 ppb	11:43:56
3	Cu 324.752†	174268.0	169592.5	482.15 ug/L	482.15 ppb	11:43:56
3	Mn 257.610†	460229.3	463978.2	484.11 ug/L	484.11 ppb	11:43:56
3	Mo 202.031†	7160.4	7214.2	482.93 ug/L	482.93 ppb	11:44:17
3	Ni 231.604†	20801.5	20917.2	476.45 ug/L	476.45 ppb	11:44:17
3	P 214.914†	4648.7	4480.8	2300.4 ug/L	2300.4 ppb	11:44:17
3	Pb 220.353†	4347.9	4382.8	483.06 ug/L	483.06 ppb	11:44:17
3	S 181.975 Axial†	804.4	770.3	971.98 ug/L	971.98 ppb	11:44:17
3	Sb 206.836†	1499.8	1482.0	488.96 ug/L	488.96 ppb	11:44:17
3	Se 196.026†	792.7	825.4	503.10 ug/L	503.10 ppb	11:44:17
3	Si 251.611†	81443.7	81584.8	2414.6 ug/L	2414.6 ppb	11:43:56
3	Sn 189.927†	2997.5	3008.8	479.37 ug/L	479.37 ppb	11:44:17
3	Ti 334.940†	330757.2	335443.8	492.10 ug/L	492.10 ppb	11:43:56
3	Tl 190.801†	1600.8	1652.2	485.91 ug/L	485.91 ppb	11:44:17
3	U 409.014†	14016.3	17446.9	456.86 ug/L	456.86 ppb	11:43:56
3	V 292.402†	73231.5	75543.6	486.03 ug/L	486.03 ppb	11:43:56
3	Zn 213.857†	53619.0	53458.2	480.96 ug/L	480.96 ppb	11:43:56
3	SiO2†	80161.1	80284.0	5106.5 ug/L	5106.5 ppb	11:44:32

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	933609.6	99.060 %	0.1755			0.18%
Sc Radial	3676.0	98.4 %	0.35			0.35%
Y 371.029	781425.8	97.846 %	0.2445			0.25%
Y RADIAL	4157.5	97.86 %	1.412			1.44%
Ag 328.068†	112590.5	483.81 ug/L	0.202	483.81 ppb	0.202	0.04%
QC value within limits for Ag 328.068 Recovery = 96.76%						
Al 396.153Radial†	5524.7	5171.8 ug/L	48.24	5171.8 ppb	48.24	0.93%
QC value within limits for Al 396.153Radial Recovery = 103.44%						
As 188.979†	1220.2	488.62 ug/L	3.129	488.62 ppb	3.129	0.64%
QC value within limits for As 188.979 Recovery = 97.72%						
B 249.677†	21472.1	475.28 ug/L	1.616	475.28 ppb	1.616	0.34%
QC value within limits for B 249.677 Recovery = 95.06%						
Ba 233.527†	66727.4	483.25 ug/L	0.292	483.25 ppb	0.292	0.06%
QC value within limits for Ba 233.527 Recovery = 96.65%						
Be 313.107†	1438605.9	484.71 ug/L	0.785	484.71 ppb	0.785	0.16%
QC value within limits for Be 313.107 Recovery = 96.94%						
Ca 317.933Radial†	2377.5	5255.6 ug/L	14.45	5255.6 ppb	14.45	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 105.11%

Cd 226.502†	45849.5	472.97 ug/L	1.350	472.97 ppb	1.350	0.29%
QC value within limits for Cd 226.502 Recovery = 94.59%						
Co 228.616†	24898.2	477.49 ug/L	1.753	477.49 ppb	1.753	0.37%
QC value within limits for Co 228.616 Recovery = 95.50%						
Cr 267.716†	47688.4	482.62 ug/L	0.300	482.62 ppb	0.300	0.06%
QC value within limits for Cr 267.716 Recovery = 96.52%						
Cu 324.752†	169218.0	481.08 ug/L	0.941	481.08 ppb	0.941	0.20%
QC value within limits for Cu 324.752 Recovery = 96.22%						
Fe 238.204 Radial†	291.7	5185.2 ug/L	33.76	5185.2 ppb	33.76	0.65%
QC value within limits for Fe 238.204 Radial Recovery = 103.70%						
K 766.490 Radial†	25971.7	5067.9 ug/L	52.62	5067.9 ppb	52.62	1.04%
QC value within limits for K 766.490 Radial Recovery = 101.36%						
Mg 279.077 IEC†	97.3	5279.9 ug/L	194.99	5279.9 ppb	194.99	3.69%
QC value within limits for Mg 279.077 IEC Recovery = 105.60%						
Mn 257.610†	463654.5	483.78 ug/L	0.344	483.78 ppb	0.344	0.07%
QC value within limits for Mn 257.610 Recovery = 96.76%						
Mo 202.031†	7246.6	485.10 ug/L	1.925	485.10 ppb	1.925	0.40%
QC value within limits for Mo 202.031 Recovery = 97.02%						
Na 589.592 Radial†	29070.0	10511 ug/L	129.5	10511 ppb	129.5	1.23%
QC value within limits for Na 589.592 Radial Recovery = 105.11%						
Ni 231.604†	21001.5	478.37 ug/L	1.764	478.37 ppb	1.764	0.37%
QC value within limits for Ni 231.604 Recovery = 95.67%						
P 214.914†	4505.2	2313.7 ug/L	11.52	2313.7 ppb	11.52	0.50%
QC value within limits for P 214.914 Recovery = 92.55%						
Pb 220.353†	4385.6	483.38 ug/L	0.532	483.38 ppb	0.532	0.11%
QC value within limits for Pb 220.353 Recovery = 96.68%						
S 181.975 Axial†	770.4	972.05 ug/L	2.378	972.05 ppb	2.378	0.24%
QC value within limits for S 181.975 Axial Recovery = 97.21%						
Sb 206.836†	1499.6	494.66 ug/L	5.188	494.66 ppb	5.188	1.05%
QC value within limits for Sb 206.836 Recovery = 98.93%						
Se 196.026†	821.3	500.57 ug/L	3.609	500.57 ppb	3.609	0.72%
QC value within limits for Se 196.026 Recovery = 100.11%						
Si 251.611†	81488.6	2411.7 ug/L	2.53	2411.7 ppb	2.53	0.10%
QC value within limits for Si 251.611 Recovery = 96.47%						
Sn 189.927†	3022.8	481.60 ug/L	2.838	481.60 ppb	2.838	0.59%
QC value within limits for Sn 189.927 Recovery = 96.32%						
Sr 421.552†	67567.0	518.25 ug/L	5.638	518.25 ppb	5.638	1.09%
QC value within limits for Sr 421.552 Recovery = 103.65%						
Ti 334.940†	335033.8	491.50 ug/L	0.515	491.50 ppb	0.515	0.10%
QC value within limits for Ti 334.940 Recovery = 98.30%						
Tl 190.801†	1656.6	487.20 ug/L	2.089	487.20 ppb	2.089	0.43%
QC value within limits for Tl 190.801 Recovery = 97.44%						
U 409.014†	17416.4	456.06 ug/L	3.253	456.06 ppb	3.253	0.71%
QC value within limits for U 409.014 Recovery = 91.21%						
V 292.402†	75589.0	486.35 ug/L	0.652	486.35 ppb	0.652	0.13%
QC value within limits for V 292.402 Recovery = 97.27%						
Zn 213.857†	53482.8	481.18 ug/L	0.192	481.18 ppb	0.192	0.04%
QC value within limits for Zn 213.857 Recovery = 96.24%						
SiO2†	80834.6	5141.5 ug/L	46.89	5141.5 ppb	46.89	0.91%
QC value within limits for SiO2 Recovery = 96.15%						

All analyte(s) passed QC.

Sequence No.: 16  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 11:46:43  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3700.4	3700.4	99.1 %		11:48:55
1	Y RADIAL	4268.9	4268.9	100.5 %		11:48:35
1	Al 396.153Radial†	-136.8	1.8	1.6638 ug/L	1.6638 ppb	11:48:35
1	Ca 317.933Radial†	21.1	7.4	16.249 ug/L	16.249 ppb	11:48:55
1	Fe 238.204 Radial†	10.1	-0.2	-3.4040 ug/L	-3.4040 ppb	11:48:55
1	K 766.490 Radial†	2941.3	-38.2	-7.4700 ug/L	-7.4700 ppb	11:48:35
1	Mg 279.077 IEC†	2.3	-0.1	-5.0691 ug/L	-5.0691 ppb	11:48:55
1	Na 589.592 Radial†	-1065.9	-41.5	-15.002 ug/L	-15.002 ppb	11:48:35
1	Sr 421.552†	23.5	-6.3	-0.0481 ug/L	-0.0481 ppb	11:48:35
1	Sc 361.383	914107.9	914107.9	96.991 %		11:49:52
1	Y 371.029	778046.0	778046.0	97.423 %		11:49:52
1	Ag 328.068†	380.4	22.5	0.0995 ug/L	0.0995 ppb	11:49:52
1	As 188.979†	-19.3	6.5	2.5709 ug/L	2.5709 ppb	11:50:12
1	B 249.677†	-442.3	278.0	6.1829 ug/L	6.1829 ppb	11:50:12
1	Ba 233.527†	25.4	11.1	0.0794 ug/L	0.0794 ppb	11:50:12
1	Be 313.107†	-3778.5	-65.5	-0.0221 ug/L	-0.0221 ppb	11:49:52
1	Cd 226.502†	-186.6	-10.4	-0.1076 ug/L	-0.1076 ppb	11:50:12
1	Co 228.616†	-83.8	-21.9	-0.4184 ug/L	-0.4184 ppb	11:50:12
1	Cr 267.716†	83.5	17.1	0.1748 ug/L	0.1748 ppb	11:50:12
1	Cu 324.752†	6285.9	203.5	0.5824 ug/L	0.5824 ppb	11:49:52
1	Mn 257.610†	493.1	27.0	0.0280 ug/L	0.0280 ppb	11:50:12
1	Mo 202.031†	17.6	6.2	0.4118 ug/L	0.4118 ppb	11:50:12
1	Ni 231.604†	92.8	20.2	0.4598 ug/L	0.4598 ppb	11:50:12
1	P 214.914†	214.8	10.9	5.6892 ug/L	5.6892 ppb	11:50:12
1	Pb 220.353†	-59.3	-66.1	-7.2654 ug/L	-7.2654 ppb	11:50:12
1	S 181.975 Axial†	44.8	4.7	5.8913 ug/L	5.8913 ppb	11:50:12
1	Sb 206.836†	43.5	13.2	4.1885 ug/L	4.1885 ppb	11:50:12
1	Se 196.026†	-31.1	-6.6	-3.9026 ug/L	-3.9026 ppb	11:50:12
1	Si 251.611†	624.0	35.7	1.0545 ug/L	1.0545 ppb	11:50:12
1	Sn 189.927†	12.0	-3.9	-0.6192 ug/L	-0.6192 ppb	11:50:12
1	Ti 334.940†	-1634.5	-38.9	-0.0514 ug/L	-0.0514 ppb	11:49:52
1	Tl 190.801†	-38.8	-3.3	-0.9706 ug/L	-0.9706 ppb	11:50:12
1	U 409.014†	-3465.7	-271.4	-7.1323 ug/L	-7.1323 ppb	11:49:52
1	V 292.402†	-1632.3	-43.8	-0.2859 ug/L	-0.2859 ppb	11:49:52
1	Zn 213.857†	684.3	51.9	0.4678 ug/L	0.4678 ppb	11:50:12
1	SiO2†	577.8	-18.2	-1.1747 ug/L	-1.1747 ppb	11:51:08
2	Sc Radial	3722.8	3722.8	99.7 %		11:49:21
2	Y RADIAL	4199.0	4199.0	98.83 %		11:49:00
2	Al 396.153Radial†	-129.2	10.2	9.5953 ug/L	9.5953 ppb	11:49:00
2	Ca 317.933Radial†	20.7	6.9	15.161 ug/L	15.161 ppb	11:49:21
2	Fe 238.204 Radial†	12.5	2.2	39.479 ug/L	39.479 ppb	11:49:21
2	K 766.490 Radial†	3043.2	46.2	9.0268 ug/L	9.0268 ppb	11:49:00
2	Mg 279.077 IEC†	3.0	0.5	29.051 ug/L	29.051 ppb	11:49:21
2	Na 589.592 Radial†	-1128.4	-97.7	-35.311 ug/L	-35.311 ppb	11:49:00
2	Sr 421.552†	44.0	14.2	0.1089 ug/L	0.1089 ppb	11:49:00
2	Sc 361.383	909788.0	909788.0	96.533 %		11:50:18
2	Y 371.029	774965.2	774965.2	97.037 %		11:50:18
2	Ag 328.068†	294.2	-64.9	-0.2597 ug/L	-0.2597 ppb	11:50:18
2	As 188.979†	-18.3	7.5	2.9727 ug/L	2.9727 ppb	11:50:38
2	B 249.677†	-465.0	252.3	5.6046 ug/L	5.6046 ppb	11:50:38
2	Ba 233.527†	0.6	-14.4	-0.1045 ug/L	-0.1045 ppb	11:50:38
2	Be 313.107†	-3643.8	55.6	0.0182 ug/L	0.0182 ppb	11:50:18
2	Cd 226.502†	-187.2	-11.9	-0.1285 ug/L	-0.1285 ppb	11:50:38
2	Co 228.616†	-70.9	-8.9	-0.1696 ug/L	-0.1696 ppb	11:50:38
2	Cr 267.716†	88.6	22.8	0.2372 ug/L	0.2372 ppb	11:50:38
2	Cu 324.752†	6218.6	164.7	0.4758 ug/L	0.4758 ppb	11:50:18
2	Mn 257.610†	512.9	49.9	0.0547 ug/L	0.0547 ppb	11:50:38
2	Mo 202.031†	20.3	9.0	0.6077 ug/L	0.6077 ppb	11:50:38
2	Ni 231.604†	88.4	16.1	0.3672 ug/L	0.3672 ppb	11:50:38

2	P 214.914†	201.0	-2.4	-1.3711 ug/L	-1.3711 ppb	11:50:38
2	Pb 220.353†	-61.1	-68.3	-7.5004 ug/L	-7.5004 ppb	11:50:38
2	S 181.975 Axial†	42.4	2.4	2.9953 ug/L	2.9953 ppb	11:50:38
2	Sb 206.836†	41.2	11.0	3.5305 ug/L	3.5305 ppb	11:50:38
2	Se 196.026†	-33.5	-9.3	-5.3418 ug/L	-5.3418 ppb	11:50:38
2	Si 251.611†	631.0	46.0	1.3584 ug/L	1.3584 ppb	11:50:38
2	Sn 189.927†	25.8	10.5	1.6689 ug/L	1.6689 ppb	11:50:38
2	Ti 334.940†	-1719.0	-134.5	-0.1933 ug/L	-0.1933 ppb	11:50:18
2	Tl 190.801†	-35.8	-0.4	-0.1125 ug/L	-0.1125 ppb	11:50:38
2	U 409.014†	-3561.0	-387.0	-10.177 ug/L	-10.177 ppb	11:50:18
2	V 292.402†	-1681.3	-102.6	-0.6676 ug/L	-0.6676 ppb	11:50:18
2	Zn 213.857†	681.8	52.6	0.4690 ug/L	0.4690 ppb	11:50:38
2	SiO2†	642.0	51.1	3.2421 ug/L	3.2421 ppb	11:51:13
3	Sc Radial	3718.8	3718.8	99.6 %		11:49:46
3	Y RADIAL	4334.3	4334.3	102.0 %		11:49:26
3	Al 396.153Radial†	-108.4	31.0	29.198 ug/L	29.198 ppb	11:49:26
3	Ca 317.933Radial†	19.5	5.6	12.474 ug/L	12.474 ppb	11:49:46
3	Fe 238.204 Radial†	12.7	2.4	42.985 ug/L	42.985 ppb	11:49:46
3	K 766.490 Radial†	3008.4	14.5	2.8302 ug/L	2.8302 ppb	11:49:26
3	Mg 279.077 IEC†	1.8	-0.7	-37.720 ug/L	-37.720 ppb	11:49:46
3	Na 589.592 Radial†	-1029.7	0.2	0.0708 ug/L	0.0708 ppb	11:49:26
3	Sr 421.552†	-1.6	-31.5	-0.2421 ug/L	-0.2421 ppb	11:49:26
3	Sc 361.383	905865.2	905865.2	96.117 %		11:50:43
3	Y 371.029	770587.4	770587.4	96.489 %		11:50:43
3	Ag 328.068†	302.0	-55.5	-0.2194 ug/L	-0.2194 ppb	11:50:43
3	As 188.979†	-16.0	9.7	3.8792 ug/L	3.8792 ppb	11:51:03
3	B 249.677†	-469.9	245.2	5.4458 ug/L	5.4458 ppb	11:51:03
3	Ba 233.527†	1.9	-13.2	-0.0947 ug/L	-0.0947 ppb	11:51:03
3	Be 313.107†	-3649.7	33.1	0.0109 ug/L	0.0109 ppb	11:50:43
3	Cd 226.502†	-206.8	-33.2	-0.3479 ug/L	-0.3479 ppb	11:51:03
3	Co 228.616†	-73.7	-12.2	-0.2353 ug/L	-0.2353 ppb	11:51:03
3	Cr 267.716†	87.8	22.4	0.2332 ug/L	0.2332 ppb	11:51:03
3	Cu 324.752†	6073.9	41.9	0.1257 ug/L	0.1257 ppb	11:50:43
3	Mn 257.610†	492.2	30.6	0.0377 ug/L	0.0377 ppb	11:51:03
3	Mo 202.031†	6.6	-5.2	-0.3428 ug/L	-0.3428 ppb	11:51:03
3	Ni 231.604†	91.0	19.1	0.4364 ug/L	0.4364 ppb	11:51:03
3	P 214.914†	209.7	7.5	3.9734 ug/L	3.9734 ppb	11:51:03
3	Pb 220.353†	-49.6	-56.6	-6.2160 ug/L	-6.2160 ppb	11:51:03
3	S 181.975 Axial†	41.4	1.6	1.9945 ug/L	1.9945 ppb	11:51:03
3	Sb 206.836†	52.2	22.6	7.2313 ug/L	7.2313 ppb	11:51:03
3	Se 196.026†	-19.9	4.7	2.8805 ug/L	2.8805 ppb	11:51:03
3	Si 251.611†	632.2	50.2	1.4922 ug/L	1.4922 ppb	11:51:03
3	Sn 189.927†	30.0	14.9	2.3753 ug/L	2.3753 ppb	11:51:03
3	Ti 334.940†	-1652.5	-73.0	-0.0990 ug/L	-0.0990 ppb	11:50:43
3	Tl 190.801†	-38.9	-3.8	-1.1003 ug/L	-1.1003 ppb	11:51:03
3	U 409.014†	-3456.6	-294.4	-7.7431 ug/L	-7.7431 ppb	11:50:43
3	V 292.402†	-1639.2	-66.4	-0.4484 ug/L	-0.4484 ppb	11:50:43
3	Zn 213.857†	681.3	55.2	0.4923 ug/L	0.4923 ppb	11:51:03
3	SiO2†	633.4	45.0	2.8803 ug/L	2.8803 ppb	11:51:18

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909920.3	96.547 %		0.4375			0.45%
Sc Radial	3714.0	99.4 %		0.32			0.32%
Y 371.029	774532.9	96.983 %		0.4693			0.48%
Y RADIAL	4267.4	100.4 %		1.59			1.59%
Ag 328.068†	-32.7	-0.1265 ug/L		0.19680	-0.1265 ppb	0.19680	155.52%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	14.4	13.486 ug/L		14.1736	13.486 ppb	14.1736	105.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	7.9	3.1409 ug/L		0.67014	3.1409 ppb	0.67014	21.34%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	258.5	5.7445 ug/L		0.38793	5.7445 ppb	0.38793	6.75%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-5.5	-0.0399 ug/L		0.10343	-0.0399 ppb	0.10343	259.01%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	7.7	0.0023 ug/L		0.02151	0.0023 ppb	0.02151	924.47%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.6	14.628 ug/L		1.9430	14.628 ppb	1.9430	13.28%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-18.5	-0.1947 ug/L	0.13313	-0.1947 ppb	0.13313	68.39%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-14.3	-0.2745 ug/L	0.12895	-0.2745 ppb	0.12895	46.99%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	20.8	0.2151 ug/L	0.03490	0.2151 ppb	0.03490	16.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	136.7	0.3946 ug/L	0.23890	0.3946 ppb	0.23890	60.54%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.5	26.353 ug/L	25.8302	26.353 ppb	25.8302	98.01%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	7.5	1.4623 ug/L	8.33304	1.4623 ppb	8.33304	569.85%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.5795 ug/L	33.38815	-4.5795 ppb	33.38815	729.07%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	35.8	0.0401 ug/L	0.01353	0.0401 ppb	0.01353	33.71%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.3	0.2256 ug/L	0.50185	0.2256 ppb	0.50185	222.50%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-46.3	-16.747 ug/L	17.7552	-16.747 ppb	17.7552	106.02%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	18.5	0.4211 ug/L	0.04814	0.4211 ppb	0.04814	11.43%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	5.3	2.7638 ug/L	3.68229	2.7638 ppb	3.68229	133.23%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-63.7	-6.9939 ug/L	0.68387	-6.9939 ppb	0.68387	9.78%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.9	3.6271 ug/L	2.02376	3.6271 ppb	2.02376	55.80%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	15.6	4.9835 ug/L	1.97431	4.9835 ppb	1.97431	39.62%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.7	-2.1213 ug/L	4.39107	-2.1213 ppb	4.39107	207.00%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	44.0	1.3017 ug/L	0.22430	1.3017 ppb	0.22430	17.23%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	7.2	1.1417 ug/L	1.56533	1.1417 ppb	1.56533	137.11%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-7.9	-0.0604 ug/L	0.17582	-0.0604 ppb	0.17582	290.95%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-82.1	-0.1146 ug/L	0.07218	-0.1146 ppb	0.07218	63.00%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-2.5	-0.7278 ug/L	0.53678	-0.7278 ppb	0.53678	73.76%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-317.6	-8.3507 ug/L	1.61054	-8.3507 ppb	1.61054	19.29%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-71.0	-0.4673 ug/L	0.19158	-0.4673 ppb	0.19158	41.00%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	53.3	0.4764 ug/L	0.01378	0.4764 ppb	0.01378	2.89%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	26.0	1.6492 ug/L	2.45232	1.6492 ppb	2.45232	148.69%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.



Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 12:38:18

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	3633.1	3633.1	97.3 %		12:40:30
1	Y RADIAL	4097.3	4097.3	96.44 %		12:40:10
1	Al 396.153Radial†	5319.9	5609.1	5251.1 ug/L	5251.1 ppb	12:40:10
1	Ca 317.933Radial†	2346.4	2398.3	5301.8 ug/L	5301.8 ppb	12:40:30
1	Fe 238.204 Radial†	293.3	291.2	5177.0 ug/L	5177.0 ppb	12:40:30
1	K 766.490 Radial†	28554.5	26348.8	5141.5 ug/L	5141.5 ppb	12:40:10
1	Mg 279.077 IEC†	96.5	96.8	5250.8 ug/L	5250.8 ppb	12:40:30
1	Na 589.592 Radial†	26966.5	28757.8	10399 ug/L	10399 ppb	12:40:10
1	Sr 421.552†	65412.6	67218.5	515.57 ug/L	515.57 ppb	12:40:10
1	Sc 361.383	925323.5	925323.5	98.181 %		12:41:28
1	Y 371.029	772067.2	772067.2	96.674 %		12:41:28
1	Ag 328.068†	112629.8	114346.6	491.31 ug/L	491.31 ppb	12:41:33
1	As 188.979†	1188.2	1236.6	495.08 ug/L	495.08 ppb	12:41:53
1	B 249.677†	20756.7	21875.3	484.21 ug/L	484.21 ppb	12:41:33
1	Ba 233.527†	66400.2	67615.2	489.67 ug/L	489.67 ppb	12:41:33
1	Be 313.107†	1408461.4	1438383.6	484.62 ug/L	484.62 ppb	12:41:28
1	Cd 226.502†	46532.1	47576.1	490.80 ug/L	490.80 ppb	12:41:33
1	Co 228.616†	25081.0	25610.1	491.16 ug/L	491.16 ppb	12:41:33
1	Cr 267.716†	47476.1	48286.6	488.66 ug/L	488.66 ppb	12:41:33
1	Cu 324.752†	172829.8	169754.2	482.59 ug/L	482.59 ppb	12:41:33
1	Mn 257.610†	460773.5	468828.0	489.17 ug/L	489.17 ppb	12:41:28
1	Mo 202.031†	7154.9	7275.4	487.03 ug/L	487.03 ppb	12:41:53
1	Ni 231.604†	21184.6	21501.6	489.76 ug/L	489.76 ppb	12:41:33
1	P 214.914†	4710.6	4587.3	2357.4 ug/L	2357.4 ppb	12:41:53
1	Pb 220.353†	4337.7	4413.1	486.42 ug/L	486.42 ppb	12:41:53
1	S 181.975 Axial†	808.4	781.9	986.60 ug/L	986.60 ppb	12:41:53
1	Sb 206.836†	1529.7	1526.4	503.40 ug/L	503.40 ppb	12:41:53
1	Se 196.026†	795.7	835.8	509.11 ug/L	509.11 ppb	12:41:53
1	Si 251.611†	81863.4	82772.4	2449.8 ug/L	2449.8 ppb	12:41:33
1	Sn 189.927†	3036.3	3076.3	490.11 ug/L	490.11 ppb	12:41:53
1	Ti 334.940†	323931.2	331578.4	486.43 ug/L	486.43 ppb	12:41:33
1	Tl 190.801†	1615.7	1682.3	494.60 ug/L	494.60 ppb	12:41:53
1	U 409.014†	14676.0	18249.7	477.95 ug/L	477.95 ppb	12:41:33
1	V 292.402†	73428.1	76427.4	491.75 ug/L	491.75 ppb	12:41:33
1	Zn 213.857†	53884.3	54228.9	487.88 ug/L	487.88 ppb	12:41:33
1	SiO2†	80948.7	81834.3	5205.2 ug/L	5205.2 ppb	12:43:00
2	Sc Radial	3636.2	3636.2	97.4 %		12:40:55
2	Y RADIAL	4090.7	4090.7	96.28 %		12:40:35
2	Al 396.153Radial†	5308.2	5592.5	5235.7 ug/L	5235.7 ppb	12:40:35
2	Ca 317.933Radial†	2344.5	2394.3	5292.9 ug/L	5292.9 ppb	12:40:55
2	Fe 238.204 Radial†	289.7	287.2	5106.0 ug/L	5106.0 ppb	12:40:55
2	K 766.490 Radial†	28690.7	26464.1	5164.1 ug/L	5164.1 ppb	12:40:35
2	Mg 279.077 IEC†	98.1	98.3	5335.7 ug/L	5335.7 ppb	12:40:55
2	Na 589.592 Radial†	26839.0	28603.5	10343 ug/L	10343 ppb	12:40:35
2	Sr 421.552†	65358.7	67106.7	514.72 ug/L	514.72 ppb	12:40:35
2	Sc 361.383	927582.0	927582.0	98.421 %		12:41:59
2	Y 371.029	773632.1	773632.1	96.870 %		12:41:59
2	Ag 328.068†	111925.4	113351.5	487.03 ug/L	487.03 ppb	12:42:04
2	As 188.979†	1189.6	1235.1	494.44 ug/L	494.44 ppb	12:42:24
2	B 249.677†	20562.5	21626.4	478.69 ug/L	478.69 ppb	12:42:04
2	Ba 233.527†	66089.5	67134.8	486.19 ug/L	486.19 ppb	12:42:04
2	Be 313.107†	1414120.9	1440641.0	485.37 ug/L	485.37 ppb	12:41:59
2	Cd 226.502†	46336.9	47262.4	487.57 ug/L	487.57 ppb	12:42:04
2	Co 228.616†	24962.8	25427.9	487.66 ug/L	487.66 ppb	12:42:04
2	Cr 267.716†	47222.5	47911.3	484.86 ug/L	484.86 ppb	12:42:04
2	Cu 324.752†	171916.1	168397.2	478.73 ug/L	478.73 ppb	12:42:04
2	Mn 257.610†	462420.2	469358.4	489.71 ug/L	489.71 ppb	12:41:59
2	Mo 202.031†	7136.2	7238.6	484.56 ug/L	484.56 ppb	12:42:24
2	Ni 231.604†	21143.1	21406.8	487.60 ug/L	487.60 ppb	12:42:04

2	P 214.914†	4672.1	4536.4	2331.0 ug/L	2331.0 ppb	12:42:24
2	Pb 220.353†	4303.2	4367.3	481.38 ug/L	481.38 ppb	12:42:24
2	S 181.975 Axial†	807.2	778.7	982.52 ug/L	982.52 ppb	12:42:24
2	Sb 206.836†	1513.2	1505.8	496.75 ug/L	496.75 ppb	12:42:24
2	Se 196.026†	778.8	816.7	497.64 ug/L	497.64 ppb	12:42:24
2	Si 251.611†	81447.1	82146.3	2431.2 ug/L	2431.2 ppb	12:42:04
2	Sn 189.927†	3027.6	3059.9	487.51 ug/L	487.51 ppb	12:42:24
2	Ti 334.940†	322014.1	328827.2	482.39 ug/L	482.39 ppb	12:42:04
2	Tl 190.801†	1597.5	1659.8	488.04 ug/L	488.04 ppb	12:42:24
2	U 409.014†	14632.7	18169.3	475.85 ug/L	475.85 ppb	12:42:04
2	V 292.402†	73106.0	75918.1	488.49 ug/L	488.49 ppb	12:42:04
2	Zn 213.857†	53632.6	53839.5	484.37 ug/L	484.37 ppb	12:42:04
2	SiO2†	80422.0	81098.4	5158.4 ug/L	5158.4 ppb	12:43:06
3	Sc Radial	3649.4	3649.4	97.7 %		12:41:21
3	Y RADIAL	4046.8	4046.8	95.25 %		12:41:00
3	Al 396.153Radial†	5197.4	5459.3	5110.8 ug/L	5110.8 ppb	12:41:00
3	Ca 317.933Radial†	2356.8	2398.2	5301.4 ug/L	5301.4 ppb	12:41:21
3	Fe 238.204 Radial†	297.3	294.0	5225.3 ug/L	5225.3 ppb	12:41:21
3	K 766.490 Radial†	28097.4	25749.8	5024.7 ug/L	5024.7 ppb	12:41:00
3	Mg 279.077 IEC†	96.5	96.3	5224.0 ug/L	5224.0 ppb	12:41:21
3	Na 589.592 Radial†	26219.4	27869.2	10077 ug/L	10077 ppb	12:41:00
3	Sr 421.552†	64316.5	65796.2	504.66 ug/L	504.66 ppb	12:41:00
3	Sc 361.383	930434.9	930434.9	98.724 %		12:42:30
3	Y 371.029	776156.4	776156.4	97.186 %		12:42:30
3	Ag 328.068†	113414.0	114510.7	492.03 ug/L	492.03 ppb	12:42:35
3	As 188.979†	1151.2	1192.6	477.64 ug/L	477.64 ppb	12:42:55
3	B 249.677†	21016.7	22022.5	487.47 ug/L	487.47 ppb	12:42:35
3	Ba 233.527†	66775.5	67623.8	489.73 ug/L	489.73 ppb	12:42:35
3	Be 313.107†	1416639.2	1438786.2	484.75 ug/L	484.75 ppb	12:42:30
3	Cd 226.502†	46906.5	47695.0	492.02 ug/L	492.02 ppb	12:42:35
3	Co 228.616†	25299.6	25691.3	492.68 ug/L	492.68 ppb	12:42:35
3	Cr 267.716†	47733.9	48282.1	488.62 ug/L	488.62 ppb	12:42:35
3	Cu 324.752†	173988.6	169960.8	483.18 ug/L	483.18 ppb	12:42:35
3	Mn 257.610†	463418.1	468928.5	489.28 ug/L	489.28 ppb	12:42:30
3	Mo 202.031†	7018.1	7096.8	475.09 ug/L	475.09 ppb	12:42:55
3	Ni 231.604†	21370.6	21571.4	491.35 ug/L	491.35 ppb	12:42:35
3	P 214.914†	4607.9	4456.9	2287.3 ug/L	2287.3 ppb	12:42:55
3	Pb 220.353†	4249.9	4299.9	473.92 ug/L	473.92 ppb	12:42:55
3	S 181.975 Axial†	794.8	763.6	963.45 ug/L	963.45 ppb	12:42:55
3	Sb 206.836†	1484.9	1472.5	485.79 ug/L	485.79 ppb	12:42:55
3	Se 196.026†	772.6	808.0	492.84 ug/L	492.84 ppb	12:42:55
3	Si 251.611†	82485.1	82944.0	2455.0 ug/L	2455.0 ppb	12:42:35
3	Sn 189.927†	2970.2	2992.4	476.76 ug/L	476.76 ppb	12:42:55
3	Ti 334.940†	325673.8	331531.0	486.36 ug/L	486.36 ppb	12:42:35
3	Tl 190.801†	1565.5	1622.5	477.13 ug/L	477.13 ppb	12:42:55
3	U 409.014†	14717.7	18209.8	476.89 ug/L	476.89 ppb	12:42:35
3	V 292.402†	73785.0	76378.1	491.26 ug/L	491.26 ppb	12:42:35
3	Zn 213.857†	54218.7	54266.2	488.20 ug/L	488.20 ppb	12:42:35
3	SiO2†	80669.5	81098.6	5158.6 ug/L	5158.6 ppb	12:43:11

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	927780.1	98.442 %	0.2718			0.28%
Sc Radial	3639.6	97.4 %	0.23			0.24%
Y 371.029	773951.9	96.910 %	0.2584			0.27%
Y RADIAL	4078.2	95.99 %	0.646			0.67%
Ag 328.068†	114069.6	490.12 ug/L	2.702	490.12 ppb	2.702	0.55%
QC value within limits for Ag 328.068 Recovery = 98.02%						
Al 396.153Radial†	5553.6	5199.2 ug/L	76.91	5199.2 ppb	76.91	1.48%
QC value within limits for Al 396.153Radial Recovery = 103.98%						
As 188.979†	1221.4	489.05 ug/L	9.893	489.05 ppb	9.893	2.02%
QC value within limits for As 188.979 Recovery = 97.81%						
B 249.677†	21841.4	483.45 ug/L	4.435	483.45 ppb	4.435	0.92%
QC value within limits for B 249.677 Recovery = 96.69%						
Ba 233.527†	67457.9	488.53 ug/L	2.027	488.53 ppb	2.027	0.41%
QC value within limits for Ba 233.527 Recovery = 97.71%						
Be 313.107†	1439270.2	484.91 ug/L	0.400	484.91 ppb	0.400	0.08%
QC value within limits for Be 313.107 Recovery = 96.98%						
Ca 317.933Radial†	2397.0	5298.7 ug/L	5.03	5298.7 ppb	5.03	0.09%

QC value within limits for Ca 317.933 Radial Recovery = 105.97%									
Cd	226.502†	47511.2	490.13 ug/L	2.301	490.13 ppb	2.301	0.47%		
QC value within limits for Cd 226.502 Recovery = 98.03%									
Co	228.616†	25576.4	490.50 ug/L	2.572	490.50 ppb	2.572	0.52%		
QC value within limits for Co 228.616 Recovery = 98.10%									
Cr	267.716†	48160.0	487.38 ug/L	2.183	487.38 ppb	2.183	0.45%		
QC value within limits for Cr 267.716 Recovery = 97.48%									
Cu	324.752†	169370.7	481.50 ug/L	2.417	481.50 ppb	2.417	0.50%		
QC value within limits for Cu 324.752 Recovery = 96.30%									
Fe	238.204 Radial†	290.8	5169.4 ug/L	59.99	5169.4 ppb	59.99	1.16%		
QC value within limits for Fe 238.204 Radial Recovery = 103.39%									
K	766.490 Radial†	26187.5	5110.1 ug/L	74.85	5110.1 ppb	74.85	1.46%		
QC value within limits for K 766.490 Radial Recovery = 102.20%									
Mg	279.077 IEC†	97.1	5270.2 ug/L	58.32	5270.2 ppb	58.32	1.11%		
QC value within limits for Mg 279.077 IEC Recovery = 105.40%									
Mn	257.610†	469038.3	489.39 ug/L	0.287	489.39 ppb	0.287	0.06%		
QC value within limits for Mn 257.610 Recovery = 97.88%									
Mo	202.031†	7203.6	482.22 ug/L	6.303	482.22 ppb	6.303	1.31%		
QC value within limits for Mo 202.031 Recovery = 96.44%									
Na	589.592 Radial†	28410.2	10273 ug/L	171.7	10273 ppb	171.7	1.67%		
QC value within limits for Na 589.592 Radial Recovery = 102.73%									
Ni	231.604†	21493.3	489.57 ug/L	1.881	489.57 ppb	1.881	0.38%		
QC value within limits for Ni 231.604 Recovery = 97.91%									
P	214.914†	4526.9	2325.2 ug/L	35.35	2325.2 ppb	35.35	1.52%		
QC value within limits for P 214.914 Recovery = 93.01%									
Pb	220.353†	4360.1	480.57 ug/L	6.291	480.57 ppb	6.291	1.31%		
QC value within limits for Pb 220.353 Recovery = 96.11%									
S	181.975 Axial†	774.7	977.52 ug/L	12.358	977.52 ppb	12.358	1.26%		
QC value within limits for S 181.975 Axial Recovery = 97.75%									
Sb	206.836†	1501.5	495.31 ug/L	8.895	495.31 ppb	8.895	1.80%		
QC value within limits for Sb 206.836 Recovery = 99.06%									
Se	196.026†	820.2	499.86 ug/L	8.360	499.86 ppb	8.360	1.67%		
QC value within limits for Se 196.026 Recovery = 99.97%									
Si	251.611†	82620.9	2445.3 ug/L	12.50	2445.3 ppb	12.50	0.51%		
QC value within limits for Si 251.611 Recovery = 97.81%									
Sn	189.927†	3042.8	484.80 ug/L	7.076	484.80 ppb	7.076	1.46%		
QC value within limits for Sn 189.927 Recovery = 96.96%									
Sr	421.552†	66707.1	511.65 ug/L	6.066	511.65 ppb	6.066	1.19%		
QC value within limits for Sr 421.552 Recovery = 102.33%									
Ti	334.940†	330645.5	485.06 ug/L	2.315	485.06 ppb	2.315	0.48%		
QC value within limits for Ti 334.940 Recovery = 97.01%									
Tl	190.801†	1654.9	486.59 ug/L	8.825	486.59 ppb	8.825	1.81%		
QC value within limits for Tl 190.801 Recovery = 97.32%									
U	409.014†	18209.6	476.90 ug/L	1.048	476.90 ppb	1.048	0.22%		
QC value within limits for U 409.014 Recovery = 95.38%									
V	292.402†	76241.2	490.50 ug/L	1.755	490.50 ppb	1.755	0.36%		
QC value within limits for V 292.402 Recovery = 98.10%									
Zn	213.857†	54111.5	486.82 ug/L	2.123	486.82 ppb	2.123	0.44%		
QC value within limits for Zn 213.857 Recovery = 97.36%									
SiO2†		81343.8	5174.1 ug/L	26.98	5174.1 ppb	26.98	0.52%		
QC value within limits for SiO2 Recovery = 96.76%									

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 12:45:20

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	3707.7	3707.7	99.3 %		12:47:33
1	Y RADIAL	4265.4	4265.4	100.4 %		12:47:13
1	Al 396.153Radial†	-137.6	1.3	1.2066 ug/L	1.2066 ppb	12:47:13
1	Ca 317.933Radial†	14.8	1.0	2.1992 ug/L	2.1992 ppb	12:47:33
1	Fe 238.204 Radial†	10.2	-0.0	-0.8762 ug/L	-0.8762 ppb	12:47:33
1	K 766.490 Radial†	3015.3	30.6	5.9671 ug/L	5.9671 ppb	12:47:13
1	Mg 279.077 IEC†	0.7	-1.7	-94.838 ug/L	-94.838 ppb	12:47:33
1	Na 589.592 Radial†	-1014.9	12.0	4.3469 ug/L	4.3469 ppb	12:47:13
1	Sr 421.552†	36.1	6.4	0.0492 ug/L	0.0492 ppb	12:47:13
1	Sc 361.383	877728.4	877728.4	93.131 %		12:48:30
1	Y 371.029	766005.8	766005.8	95.915 %		12:48:30
1	Ag 328.068†	696.4	378.1	1.6181 ug/L	1.6181 ppb	12:48:30
1	As 188.979†	-23.4	1.3	0.5292 ug/L	0.5292 ppb	12:48:50
1	B 249.677†	-357.2	350.5	7.7948 ug/L	7.7948 ppb	12:48:50
1	Ba 233.527†	24.4	11.1	0.0782 ug/L	0.0782 ppb	12:48:50
1	Be 313.107†	-3669.1	-109.4	-0.0370 ug/L	-0.0370 ppb	12:48:30
1	Cd 226.502†	-200.8	-33.6	-0.3489 ug/L	-0.3489 ppb	12:48:50
1	Co 228.616†	-69.9	-10.6	-0.2023 ug/L	-0.2023 ppb	12:48:50
1	Cr 267.716†	72.3	8.7	0.0900 ug/L	0.0900 ppb	12:48:50
1	Cu 324.752†	6129.7	304.4	0.8708 ug/L	0.8708 ppb	12:48:30
1	Mn 257.610†	469.7	22.9	0.0276 ug/L	0.0276 ppb	12:48:50
1	Mo 202.031†	13.5	2.5	0.1664 ug/L	0.1664 ppb	12:48:50
1	Ni 231.604†	63.9	-6.9	-0.1567 ug/L	-0.1567 ppb	12:48:50
1	P 214.914†	209.1	13.9	7.2625 ug/L	7.2625 ppb	12:48:50
1	Pb 220.353†	-68.8	-78.8	-8.6595 ug/L	-8.6595 ppb	12:48:50
1	S 181.975 Axial†	42.2	3.8	4.8579 ug/L	4.8579 ppb	12:48:50
1	Sb 206.836†	48.1	20.0	6.3647 ug/L	6.3647 ppb	12:48:50
1	Se 196.026†	-36.7	-14.0	-8.2421 ug/L	-8.2421 ppb	12:48:50
1	Si 251.611†	633.5	72.6	2.1530 ug/L	2.1530 ppb	12:48:50
1	Sn 189.927†	11.4	-4.0	-0.6422 ug/L	-0.6422 ppb	12:48:50
1	Ti 334.940†	-1600.9	-72.7	-0.0943 ug/L	-0.0943 ppb	12:48:30
1	Tl 190.801†	-26.3	8.5	2.4760 ug/L	2.4760 ppb	12:48:50
1	U 409.014†	-3427.3	-378.3	-9.9415 ug/L	-9.9415 ppb	12:48:30
1	V 292.402†	-1670.1	-154.3	-0.9978 ug/L	-0.9978 ppb	12:48:30
1	Zn 213.857†	660.8	55.9	0.5079 ug/L	0.5079 ppb	12:48:50
1	SiO2†	665.2	100.2	6.3880 ug/L	6.3880 ppb	12:49:46
2	Sc Radial	3704.1	3704.1	99.2 %		12:47:58
2	Y RADIAL	4178.3	4178.3	98.35 %		12:47:38
2	Al 396.153Radial†	-119.0	19.9	18.753 ug/L	18.753 ppb	12:47:38
2	Ca 317.933Radial†	21.9	8.2	18.044 ug/L	18.044 ppb	12:47:58
2	Fe 238.204 Radial†	10.7	0.5	8.7604 ug/L	8.7604 ppb	12:47:58
2	K 766.490 Radial†	3079.0	97.6	19.063 ug/L	19.063 ppb	12:47:38
2	Mg 279.077 IEC†	1.0	-1.5	-80.627 ug/L	-80.627 ppb	12:47:58
2	Na 589.592 Radial†	-1009.8	16.2	5.8731 ug/L	5.8731 ppb	12:47:38
2	Sr 421.552†	54.5	25.0	0.1917 ug/L	0.1917 ppb	12:47:38
2	Sc 361.383	887630.5	887630.5	94.182 %		12:48:55
2	Y 371.029	778405.1	778405.1	97.468 %		12:48:55
2	Ag 328.068†	672.4	344.3	1.4817 ug/L	1.4817 ppb	12:48:55
2	As 188.979†	-24.4	0.5	0.1847 ug/L	0.1847 ppb	12:49:15
2	B 249.677†	-388.6	321.4	7.1466 ug/L	7.1466 ppb	12:49:15
2	Ba 233.527†	19.3	5.3	0.0383 ug/L	0.0383 ppb	12:49:15
2	Be 313.107†	-3717.7	-117.1	-0.0397 ug/L	-0.0397 ppb	12:48:55
2	Cd 226.502†	-214.8	-46.1	-0.4789 ug/L	-0.4789 ppb	12:49:15
2	Co 228.616†	-73.8	-13.8	-0.2652 ug/L	-0.2652 ppb	12:49:15
2	Cr 267.716†	96.2	33.2	0.3407 ug/L	0.3407 ppb	12:49:15
2	Cu 324.752†	6199.6	305.2	0.8753 ug/L	0.8753 ppb	12:48:55
2	Mn 257.610†	482.9	31.2	0.0367 ug/L	0.0367 ppb	12:49:15
2	Mo 202.031†	7.3	-4.3	-0.2853 ug/L	-0.2853 ppb	12:49:15
2	Ni 231.604†	79.9	9.3	0.2129 ug/L	0.2129 ppb	12:49:15

2	P 214.914†	217.6	20.4	10.696 ug/L	10.696 ppb	12:49:15
2	Pb 220.353†	-43.8	-51.5	-5.6595 ug/L	-5.6595 ppb	12:49:15
2	S 181.975 Axial†	49.1	10.7	13.452 ug/L	13.452 ppb	12:49:15
2	Sb 206.836†	45.2	16.3	5.1758 ug/L	5.1758 ppb	12:49:15
2	Se 196.026†	-28.0	-4.3	-2.5166 ug/L	-2.5166 ppb	12:49:15
2	Si 251.611†	636.2	67.9	2.0193 ug/L	2.0193 ppb	12:49:15
2	Sn 189.927†	10.6	-5.0	-0.7890 ug/L	-0.7890 ppb	12:49:15
2	Ti 334.940†	-1637.5	-92.3	-0.1209 ug/L	-0.1209 ppb	12:48:55
2	Tl 190.801†	-30.1	4.7	1.3744 ug/L	1.3744 ppb	12:49:15
2	U 409.014†	-3574.4	-493.4	-12.969 ug/L	-12.969 ppb	12:48:55
2	V 292.402†	-1586.3	-45.3	-0.3191 ug/L	-0.3191 ppb	12:48:55
2	Zn 213.857†	672.7	60.6	0.5468 ug/L	0.5468 ppb	12:49:15
2	SiO2†	672.1	99.7	6.3631 ug/L	6.3631 ppb	12:49:51
3	Sc Radial	3694.2	3694.2	98.9 %		12:48:24
3	Y RADIAL	4226.7	4226.7	99.49 %		12:48:03
3	Al 396.153Radial†	-152.0	-13.8	-12.949 ug/L	-12.949 ppb	12:48:03
3	Ca 317.933Radial†	15.2	1.4	3.0628 ug/L	3.0628 ppb	12:48:24
3	Fe 238.204 Radial†	10.6	0.4	6.3730 ug/L	6.3730 ppb	12:48:24
3	K 766.490 Radial†	2957.9	-16.4	-3.2134 ug/L	-3.2134 ppb	12:48:03
3	Mg 279.077 IEC†	3.6	1.2	64.420 ug/L	64.420 ppb	12:48:24
3	Na 589.592 Radial†	-1010.9	12.4	4.4730 ug/L	4.4730 ppb	12:48:03
3	Sr 421.552†	4.9	-25.0	-0.1917 ug/L	-0.1917 ppb	12:48:03
3	Sc 361.383	889758.1	889758.1	94.408 %		12:49:21
3	Y 371.029	781698.1	781698.1	97.880 %		12:49:21
3	Ag 328.068†	685.1	356.0	1.5261 ug/L	1.5261 ppb	12:49:21
3	As 188.979†	-22.1	3.0	1.1892 ug/L	1.1892 ppb	12:49:41
3	B 249.677†	-400.2	310.2	6.8964 ug/L	6.8964 ppb	12:49:41
3	Ba 233.527†	8.7	-5.9	-0.0448 ug/L	-0.0448 ppb	12:49:41
3	Be 313.107†	-3771.2	-164.4	-0.0554 ug/L	-0.0554 ppb	12:49:21
3	Cd 226.502†	-208.3	-38.7	-0.4016 ug/L	-0.4016 ppb	12:49:41
3	Co 228.616†	-65.7	-5.1	-0.0975 ug/L	-0.0975 ppb	12:49:41
3	Cr 267.716†	81.8	17.7	0.1822 ug/L	0.1822 ppb	12:49:41
3	Cu 324.752†	6188.7	277.9	0.7959 ug/L	0.7959 ppb	12:49:21
3	Mn 257.610†	492.3	40.0	0.0397 ug/L	0.0397 ppb	12:49:41
3	Mo 202.031†	14.5	3.3	0.2223 ug/L	0.2223 ppb	12:49:41
3	Ni 231.604†	70.6	-0.8	-0.0173 ug/L	-0.0173 ppb	12:49:41
3	P 214.914†	210.0	11.8	6.1353 ug/L	6.1353 ppb	12:49:41
3	Pb 220.353†	-61.0	-69.6	-7.6501 ug/L	-7.6501 ppb	12:49:41
3	S 181.975 Axial†	42.5	3.6	4.4967 ug/L	4.4967 ppb	12:49:41
3	Sb 206.836†	45.6	16.7	5.2867 ug/L	5.2867 ppb	12:49:41
3	Se 196.026†	-28.9	-5.2	-3.0143 ug/L	-3.0143 ppb	12:49:41
3	Si 251.611†	637.0	67.1	1.9889 ug/L	1.9889 ppb	12:49:41
3	Sn 189.927†	7.5	-8.3	-1.3278 ug/L	-1.3278 ppb	12:49:41
3	Ti 334.940†	-1608.3	-57.2	-0.0846 ug/L	-0.0846 ppb	12:49:21
3	Tl 190.801†	-36.2	-1.6	-0.4730 ug/L	-0.4730 ppb	12:49:41
3	U 409.014†	-3470.1	-373.8	-9.8251 ug/L	-9.8251 ppb	12:49:21
3	V 292.402†	-1689.1	-150.2	-0.9688 ug/L	-0.9688 ppb	12:49:21
3	Zn 213.857†	664.5	50.3	0.4546 ug/L	0.4546 ppb	12:49:41
3	SiO2†	665.6	91.1	5.8023 ug/L	5.8023 ppb	12:49:56

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	885039.0	93.907 %		0.6812			0.73%
Sc Radial	3702.0	99.1 %		0.19			0.19%
Y 371.029	775369.7	97.088 %		1.0361			1.07%
Y RADIAL	4223.5	99.41 %		1.027			1.03%
Ag 328.068†	359.4	1.5420 ug/L		0.06956	1.5420 ppb	0.06956	4.51%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	2.5	2.3368 ug/L		15.88116	2.3368 ppb	15.88116	679.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.6	0.6344 ug/L		0.51041	0.6344 ppb	0.51041	80.46%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	327.4	7.2792 ug/L		0.46366	7.2792 ppb	0.46366	6.37%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	3.5	0.0239 ug/L		0.06274	0.0239 ppb	0.06274	262.38%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-130.3	-0.0441 ug/L		0.00995	-0.0441 ppb	0.00995	22.60%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.5	7.7686 ug/L		8.90913	7.7686 ppb	8.90913	114.68%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502† -39.5 -0.4098 ug/L 0.06539 -0.4098 ppb 0.06539 15.96%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† -9.8 -0.1883 ug/L 0.08470 -0.1883 ppb 0.08470 44.97%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† 19.9 0.2043 ug/L 0.12682 0.2043 ppb 0.12682 62.08%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† 295.8 0.8473 ug/L 0.04463 0.8473 ppb 0.04463 5.27%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 0.3 4.7524 ug/L 5.01856 4.7524 ppb 5.01856 105.60%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† 37.2 7.2722 ug/L 11.19531 7.2722 ppb 11.19531 153.95%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† -0.7 -37.015 ug/L 88.1322 -37.015 ppb 88.1322 238.10%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† 31.4 0.0347 ug/L 0.00631 0.0347 ppb 0.00631 18.17%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† 0.5 0.0345 ug/L 0.27836 0.0345 ppb 0.27836 807.97%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† 13.5 4.8977 ug/L 0.84712 4.8977 ppb 0.84712 17.30%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 0.6 0.0130 ug/L 0.18664 0.0130 ppb 0.18664 >999.9%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† 15.4 8.0314 ug/L 2.37585 8.0314 ppb 2.37585 29.58%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -66.6 -7.3230 ug/L 1.52649 -7.3230 ppb 1.52649 20.85%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 6.0 7.6022 ug/L 5.06927 7.6022 ppb 5.06927 66.68%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 17.7 5.6091 ug/L 0.65676 5.6091 ppb 0.65676 11.71%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -7.8 -4.5910 ug/L 3.17174 -4.5910 ppb 3.17174 69.09%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 69.2 2.0538 ug/L 0.08731 2.0538 ppb 0.08731 4.25%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† -5.8 -0.9197 ug/L 0.36098 -0.9197 ppb 0.36098 39.25%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 2.1 0.0164 ug/L 0.19378 0.0164 ppb 0.19378 >999.9%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -74.1 -0.0999 ug/L 0.01883 -0.0999 ppb 0.01883 18.84%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† 3.8 1.1258 ug/L 1.49010 1.1258 ppb 1.49010 132.36%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† -415.2 -10.912 ug/L 1.7827 -10.912 ppb 1.7827 16.34%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† -116.6 -0.7619 ug/L 0.38376 -0.7619 ppb 0.38376 50.37%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† 55.6 0.5031 ug/L 0.04627 0.5031 ppb 0.04627 9.20%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 97.0 6.1844 ug/L 0.33122 6.1844 ppb 0.33122 5.36%

QC value within limits for SiO2 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 13:26:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3599.7	3599.7	96.4 %		13:28:31
1	Y RADIAL	4105.6	4105.6	96.64 %		13:28:11
1	Al 396.153Radial†	5274.8	5613.1	5254.6 ug/L	5254.6 ppb	13:28:11
1	Ca 317.933Radial†	2318.8	2392.0	5287.9 ug/L	5287.9 ppb	13:28:31
1	Fe 238.204 Radial†	286.8	287.3	5106.5 ug/L	5106.5 ppb	13:28:31
1	K 766.490 Radial†	28494.9	26559.3	5182.7 ug/L	5182.7 ppb	13:28:11
1	Mg 279.077 IEC†	98.1	99.4	5391.2 ug/L	5391.2 ppb	13:28:31
1	Na 589.592 Radial†	26554.6	28587.6	10337 ug/L	10337 ppb	13:28:11
1	Sr 421.552†	65012.5	67427.2	517.17 ug/L	517.17 ppb	13:28:11
1	Sc 361.383	915264.1	915264.1	97.114 %		13:29:30
1	Y 371.029	765704.4	765704.4	95.877 %		13:29:30
1	Ag 328.068†	110575.7	113492.2	487.64 ug/L	487.64 ppb	13:29:30
1	As 188.979†	1176.5	1237.8	495.63 ug/L	495.63 ppb	13:29:50
1	B 249.677†	20170.4	21503.9	475.96 ug/L	475.96 ppb	13:29:30
1	Ba 233.527†	65468.0	67398.6	488.10 ug/L	488.10 ppb	13:29:30
1	Be 313.107†	1395274.5	1440571.4	485.38 ug/L	485.38 ppb	13:29:30
1	Cd 226.502†	45899.5	47445.6	489.46 ug/L	489.46 ppb	13:29:30
1	Co 228.616†	24670.8	25468.5	488.43 ug/L	488.43 ppb	13:29:50
1	Cr 267.716†	46717.1	48036.6	486.13 ug/L	486.13 ppb	13:29:30
1	Cu 324.752†	171229.7	170041.2	483.41 ug/L	483.41 ppb	13:29:30
1	Mn 257.610†	455237.5	468285.4	488.59 ug/L	488.59 ppb	13:29:30
1	Mo 202.031†	7152.0	7352.5	492.18 ug/L	492.18 ppb	13:29:50
1	Ni 231.604†	20824.9	21368.3	486.72 ug/L	486.72 ppb	13:29:50
1	P 214.914†	4693.4	4622.2	2375.9 ug/L	2375.9 ppb	13:29:50
1	Pb 220.353†	4331.6	4455.3	491.08 ug/L	491.08 ppb	13:29:50
1	S 181.975 Axial†	791.3	773.3	975.70 ug/L	975.70 ppb	13:29:50
1	Sb 206.836†	1523.0	1536.6	506.74 ug/L	506.74 ppb	13:29:50
1	Se 196.026†	785.5	834.3	508.00 ug/L	508.00 ppb	13:29:50
1	Si 251.611†	80631.8	82420.6	2439.3 ug/L	2439.3 ppb	13:29:30
1	Sn 189.927†	3012.2	3085.4	491.57 ug/L	491.57 ppb	13:29:50
1	Ti 334.940†	326943.8	338306.7	496.30 ug/L	496.30 ppb	13:29:30
1	Tl 190.801†	1602.7	1687.0	496.06 ug/L	496.06 ppb	13:29:50
1	U 409.014†	14068.8	17788.7	465.85 ug/L	465.85 ppb	13:29:30
1	V 292.402†	72316.0	76104.2	489.75 ug/L	489.75 ppb	13:29:30
1	Zn 213.857†	52976.8	53897.6	484.90 ug/L	484.90 ppb	13:29:30
1	SiO2†	81219.5	83019.3	5280.6 ug/L	5280.6 ppb	13:30:50
2	Sc Radial	3580.0	3580.0	95.8 %		13:28:56
2	Y RADIAL	4032.2	4032.2	94.91 %		13:28:36
2	Al 396.153Radial†	5169.3	5533.2	5179.6 ug/L	5179.6 ppb	13:28:36
2	Ca 317.933Radial†	2295.7	2381.2	5263.9 ug/L	5263.9 ppb	13:28:56
2	Fe 238.204 Radial†	284.7	286.7	5096.2 ug/L	5096.2 ppb	13:28:56
2	K 766.490 Radial†	28087.9	26297.9	5131.7 ug/L	5131.7 ppb	13:28:36
2	Mg 279.077 IEC†	95.9	97.6	5297.7 ug/L	5297.7 ppb	13:28:56
2	Na 589.592 Radial†	26169.6	28338.0	10247 ug/L	10247 ppb	13:28:36
2	Sr 421.552†	64026.2	66770.7	512.14 ug/L	512.14 ppb	13:28:36
2	Sc 361.383	923400.7	923400.7	97.977 %		13:29:57
2	Y 371.029	771762.8	771762.8	96.636 %		13:29:57
2	Ag 328.068†	111807.8	113746.5	488.73 ug/L	488.73 ppb	13:29:57
2	As 188.979†	1200.0	1251.2	500.93 ug/L	500.93 ppb	13:30:18
2	B 249.677†	20405.2	21560.5	477.24 ug/L	477.24 ppb	13:29:57
2	Ba 233.527†	66228.9	67581.1	489.42 ug/L	489.42 ppb	13:29:57
2	Be 313.107†	1411074.2	1444037.4	486.54 ug/L	486.54 ppb	13:29:57
2	Cd 226.502†	46374.5	47514.0	490.16 ug/L	490.16 ppb	13:29:57
2	Co 228.616†	24732.1	25307.2	485.33 ug/L	485.33 ppb	13:30:18
2	Cr 267.716†	47210.5	48116.3	486.93 ug/L	486.93 ppb	13:29:57
2	Cu 324.752†	172971.3	170265.1	484.05 ug/L	484.05 ppb	13:29:57
2	Mn 257.610†	460238.7	469259.4	489.61 ug/L	489.61 ppb	13:29:57
2	Mo 202.031†	7177.8	7314.0	489.60 ug/L	489.60 ppb	13:30:18
2	Ni 231.604†	20871.2	21226.6	483.49 ug/L	483.49 ppb	13:30:18

2	P 214.914†	4686.6	4572.7	2349.3 ug/L	2349.3 ppb	13:30:18
2	Pb 220.353†	4344.6	4429.3	488.20 ug/L	488.20 ppb	13:30:18
2	S 181.975 Axial†	804.2	779.3	983.26 ug/L	983.26 ppb	13:30:18
2	Sb 206.836†	1532.5	1532.5	505.39 ug/L	505.39 ppb	13:30:18
2	Se 196.026†	792.6	834.4	508.02 ug/L	508.02 ppb	13:30:18
2	Si 251.611†	81459.1	82533.3	2442.6 ug/L	2442.6 ppb	13:29:57
2	Sn 189.927†	3046.6	3093.2	492.82 ug/L	492.82 ppb	13:30:18
2	Ti 334.940†	330244.7	338709.2	496.89 ug/L	496.89 ppb	13:29:57
2	Tl 190.801†	1621.4	1691.6	497.44 ug/L	497.44 ppb	13:30:18
2	U 409.014†	14106.7	17699.8	463.51 ug/L	463.51 ppb	13:29:57
2	V 292.402†	73007.8	76154.1	490.02 ug/L	490.02 ppb	13:29:57
2	Zn 213.857†	53564.3	54016.5	486.00 ug/L	486.00 ppb	13:29:57
2	SiO2†	81938.1	83015.8	5280.5 ug/L	5280.5 ppb	13:30:55
3	Sc Radial	3601.0	3601.0	96.4 %		13:29:21
3	Y RADIAL	4093.1	4093.1	96.34 %		13:29:01
3	Al 396.153Radial†	5311.5	5649.2	5288.8 ug/L	5288.8 ppb	13:29:01
3	Ca 317.933Radial†	2303.9	2375.7	5251.8 ug/L	5251.8 ppb	13:29:21
3	Fe 238.204 Radial†	285.6	285.9	5082.5 ug/L	5082.5 ppb	13:29:21
3	K 766.490 Radial†	28568.5	26625.4	5195.7 ug/L	5195.7 ppb	13:29:01
3	Mg 279.077 IEC†	94.8	95.8	5200.6 ug/L	5200.6 ppb	13:29:21
3	Na 589.592 Radial†	26384.7	28401.8	10270 ug/L	10270 ppb	13:29:01
3	Sr 421.552†	65231.3	67630.9	518.74 ug/L	518.74 ppb	13:29:01
3	Sc 361.383	919189.0	919189.0	97.530 %		13:30:25
3	Y 371.029	768291.1	768291.1	96.201 %		13:30:25
3	Ag 328.068†	111525.7	113980.1	489.72 ug/L	489.72 ppb	13:30:25
3	As 188.979†	1172.8	1229.0	492.11 ug/L	492.11 ppb	13:30:45
3	B 249.677†	20324.6	21573.3	477.53 ug/L	477.53 ppb	13:30:25
3	Ba 233.527†	65786.5	67437.3	488.38 ug/L	488.38 ppb	13:30:25
3	Be 313.107†	1404516.5	1443912.7	486.50 ug/L	486.50 ppb	13:30:25
3	Cd 226.502†	46178.8	47530.1	490.33 ug/L	490.33 ppb	13:30:25
3	Co 228.616†	24487.5	25172.1	482.74 ug/L	482.74 ppb	13:30:45
3	Cr 267.716†	47013.8	48135.4	487.13 ug/L	487.13 ppb	13:30:25
3	Cu 324.752†	172494.7	170585.3	484.96 ug/L	484.96 ppb	13:30:25
3	Mn 257.610†	458335.6	469460.4	489.82 ug/L	489.82 ppb	13:30:25
3	Mo 202.031†	7114.1	7282.2	487.47 ug/L	487.47 ppb	13:30:45
3	Ni 231.604†	20720.8	21170.0	482.20 ug/L	482.20 ppb	13:30:45
3	P 214.914†	4638.0	4544.8	2334.3 ug/L	2334.3 ppb	13:30:45
3	Pb 220.353†	4314.2	4418.5	487.03 ug/L	487.03 ppb	13:30:45
3	S 181.975 Axial†	798.6	777.3	980.81 ug/L	980.81 ppb	13:30:45
3	Sb 206.836†	1511.7	1518.3	500.77 ug/L	500.77 ppb	13:30:45
3	Se 196.026†	790.0	835.4	508.57 ug/L	508.57 ppb	13:30:45
3	Si 251.611†	81206.4	82655.1	2446.3 ug/L	2446.3 ppb	13:30:25
3	Sn 189.927†	3006.2	3066.0	488.48 ug/L	488.48 ppb	13:30:45
3	Ti 334.940†	328998.2	338975.6	497.29 ug/L	497.29 ppb	13:30:25
3	Tl 190.801†	1595.9	1672.9	492.01 ug/L	492.01 ppb	13:30:45
3	U 409.014†	14009.5	17666.1	462.63 ug/L	462.63 ppb	13:30:25
3	V 292.402†	72716.6	76197.0	490.26 ug/L	490.26 ppb	13:30:25
3	Zn 213.857†	53346.3	54043.6	486.26 ug/L	486.26 ppb	13:30:25
3	SiO2†	80348.6	81769.3	5201.1 ug/L	5201.1 ppb	13:31:01

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	919284.6	97.540 %	0.4318			0.44%
Sc Radial	3593.6	96.2 %	0.32			0.33%
Y 371.029	768586.1	96.238 %	0.3806			0.40%
Y RADIAL	4077.0	95.96 %	0.925			0.96%
Ag 328.068†	113739.6	488.70 ug/L	1.041	488.70 ppb	1.041	0.21%
QC value within limits for Ag 328.068 Recovery = 97.74%						
Al 396.153Radial†	5598.5	5241.0 ug/L	55.86	5241.0 ppb	55.86	1.07%
QC value within limits for Al 396.153Radial Recovery = 104.82%						
As 188.979†	1239.3	496.22 ug/L	4.439	496.22 ppb	4.439	0.89%
QC value within limits for As 188.979 Recovery = 99.24%						
B 249.677†	21545.9	476.91 ug/L	0.832	476.91 ppb	0.832	0.17%
QC value within limits for B 249.677 Recovery = 95.38%						
Ba 233.527†	67472.4	488.63 ug/L	0.695	488.63 ppb	0.695	0.14%
QC value within limits for Ba 233.527 Recovery = 97.73%						
Be 313.107†	1442840.5	486.14 ug/L	0.662	486.14 ppb	0.662	0.14%
QC value within limits for Be 313.107 Recovery = 97.23%						
Ca 317.933Radial†	2383.0	5267.8 ug/L	18.37	5267.8 ppb	18.37	0.35%



QC value within limits for Ca 317.933 Radial Recovery = 105.36%									
Cd	226.502†	47496.6	489.98 ug/L	0.462	489.98 ppb	0.462	0.09%		
QC value within limits for Cd 226.502 Recovery = 98.00%									
Co	228.616†	25316.0	485.50 ug/L	2.852	485.50 ppb	2.852	0.59%		
QC value within limits for Co 228.616 Recovery = 97.10%									
Cr	267.716†	48096.1	486.73 ug/L	0.529	486.73 ppb	0.529	0.11%		
QC value within limits for Cr 267.716 Recovery = 97.35%									
Cu	324.752†	170297.2	484.14 ug/L	0.778	484.14 ppb	0.778	0.16%		
QC value within limits for Cu 324.752 Recovery = 96.83%									
Fe	238.204 Radial†	286.6	5095.1 ug/L	12.06	5095.1 ppb	12.06	0.24%		
QC value within limits for Fe 238.204 Radial Recovery = 101.90%									
K	766.490 Radial†	26494.2	5170.0 ug/L	33.82	5170.0 ppb	33.82	0.65%		
QC value within limits for K 766.490 Radial Recovery = 103.40%									
Mg	279.077 IEC†	97.6	5296.5 ug/L	95.31	5296.5 ppb	95.31	1.80%		
QC value within limits for Mg 279.077 IEC Recovery = 105.93%									
Mn	257.610†	469001.7	489.34 ug/L	0.658	489.34 ppb	0.658	0.13%		
QC value within limits for Mn 257.610 Recovery = 97.87%									
Mo	202.031†	7316.3	489.75 ug/L	2.356	489.75 ppb	2.356	0.48%		
QC value within limits for Mo 202.031 Recovery = 97.95%									
Na	589.592 Radial†	28442.5	10285 ug/L	46.9	10285 ppb	46.9	0.46%		
QC value within limits for Na 589.592 Radial Recovery = 102.85%									
Ni	231.604†	21255.0	484.14 ug/L	2.327	484.14 ppb	2.327	0.48%		
QC value within limits for Ni 231.604 Recovery = 96.83%									
P	214.914†	4579.9	2353.2 ug/L	21.09	2353.2 ppb	21.09	0.90%		
QC value within limits for P 214.914 Recovery = 94.13%									
Pb	220.353†	4434.4	488.77 ug/L	2.084	488.77 ppb	2.084	0.43%		
QC value within limits for Pb 220.353 Recovery = 97.75%									
S	181.975 Axial†	776.6	979.92 ug/L	3.857	979.92 ppb	3.857	0.39%		
QC value within limits for S 181.975 Axial Recovery = 97.99%									
Sb	206.836†	1529.1	504.30 ug/L	3.131	504.30 ppb	3.131	0.62%		
QC value within limits for Sb 206.836 Recovery = 100.86%									
Se	196.026†	834.7	508.20 ug/L	0.324	508.20 ppb	0.324	0.06%		
QC value within limits for Se 196.026 Recovery = 101.64%									
Si	251.611†	82536.3	2442.7 ug/L	3.51	2442.7 ppb	3.51	0.14%		
QC value within limits for Si 251.611 Recovery = 97.71%									
Sn	189.927†	3081.6	490.96 ug/L	2.232	490.96 ppb	2.232	0.45%		
QC value within limits for Sn 189.927 Recovery = 98.19%									
Sr	421.552†	67276.3	516.02 ug/L	3.448	516.02 ppb	3.448	0.67%		
QC value within limits for Sr 421.552 Recovery = 103.20%									
Ti	334.940†	338663.9	496.83 ug/L	0.500	496.83 ppb	0.500	0.10%		
QC value within limits for Ti 334.940 Recovery = 99.37%									
Tl	190.801†	1683.8	495.17 ug/L	2.825	495.17 ppb	2.825	0.57%		
QC value within limits for Tl 190.801 Recovery = 99.03%									
U	409.014†	17718.2	463.99 ug/L	1.664	463.99 ppb	1.664	0.36%		
QC value within limits for U 409.014 Recovery = 92.80%									
V	292.402†	76151.8	490.01 ug/L	0.258	490.01 ppb	0.258	0.05%		
QC value within limits for V 292.402 Recovery = 98.00%									
Zn	213.857†	53985.9	485.72 ug/L	0.721	485.72 ppb	0.721	0.15%		
QC value within limits for Zn 213.857 Recovery = 97.14%									
SiO2†		82601.4	5254.1 ug/L	45.90	5254.1 ppb	45.90	0.87%		
QC value within limits for SiO2 Recovery = 98.25%									

All analyte(s) passed QC.

Sequence No.: 15  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 13:33:11  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3655.5	3655.5	97.9 %		13:35:23
1	Y RADIAL	4146.1	4146.1	97.59 %		13:35:03
1	Al 396.153Radial†	-145.6	-8.9	-8.3426 ug/L	-8.3426 ppb	13:35:03
1	Ca 317.933Radial†	18.4	4.9	10.777 ug/L	10.777 ppb	13:35:23
1	Fe 238.204 Radial†	11.3	1.2	21.499 ug/L	21.499 ppb	13:35:23
1	K 766.490 Radial†	3000.2	58.4	11.403 ug/L	11.403 ppb	13:35:03
1	Mg 279.077 IEC†	-1.2	-3.7	-200.44 ug/L	-200.44 ppb	13:35:23
1	Na 589.592 Radial†	-933.3	80.8	29.206 ug/L	29.206 ppb	13:35:03
1	Sr 421.552†	43.7	14.7	0.1129 ug/L	0.1129 ppb	13:35:03
1	Sc 361.383	925957.7	925957.7	98.248 %		13:36:20
1	Y 371.029	785246.6	785246.6	98.324 %		13:36:20
1	Ag 328.068†	499.6	138.8	0.6008 ug/L	0.6008 ppb	13:36:25
1	As 188.979†	-29.6	-3.8	-1.4868 ug/L	-1.4868 ppb	13:36:45
1	B 249.677†	-497.0	228.2	5.0704 ug/L	5.0704 ppb	13:36:45
1	Ba 233.527†	0.8	-14.3	-0.1015 ug/L	-0.1015 ppb	13:36:45
1	Be 313.107†	-3688.4	76.1	0.0254 ug/L	0.0254 ppb	13:36:25
1	Cd 226.502†	-220.4	-42.3	-0.4381 ug/L	-0.4381 ppb	13:36:45
1	Co 228.616†	-64.8	-1.5	-0.0276 ug/L	-0.0276 ppb	13:36:45
1	Cr 267.716†	77.4	9.8	0.1017 ug/L	0.1017 ppb	13:36:25
1	Cu 324.752†	6181.9	14.7	0.0427 ug/L	0.0427 ppb	13:36:25
1	Mn 257.610†	464.4	-8.8	0.0011 ug/L	0.0011 ppb	13:36:45
1	Mo 202.031†	14.6	2.8	0.1885 ug/L	0.1885 ppb	13:36:45
1	Ni 231.604†	95.6	21.8	0.4963 ug/L	0.4963 ppb	13:36:45
1	P 214.914†	202.7	-4.4	-2.3637 ug/L	-2.3637 ppb	13:36:45
1	Pb 220.353†	-47.6	-53.5	-5.8775 ug/L	-5.8775 ppb	13:36:45
1	S 181.975 Axial†	46.4	5.7	7.2226 ug/L	7.2226 ppb	13:36:45
1	Sb 206.836†	40.2	9.2	2.9446 ug/L	2.9446 ppb	13:36:45
1	Se 196.026†	-32.8	-7.9	-4.5973 ug/L	-4.5973 ppb	13:36:45
1	Si 251.611†	632.6	36.3	1.0736 ug/L	1.0736 ppb	13:36:45
1	Sn 189.927†	13.8	-2.2	-0.3472 ug/L	-0.3472 ppb	13:36:45
1	Ti 334.940†	-1669.1	-52.5	-0.0595 ug/L	-0.0595 ppb	13:36:25
1	Tl 190.801†	-31.7	4.4	1.2763 ug/L	1.2763 ppb	13:36:45
1	U 409.014†	-3220.6	23.8	0.6233 ug/L	0.6233 ppb	13:36:20
1	V 292.402†	-1531.9	79.8	0.5038 ug/L	0.5038 ppb	13:36:25
1	Zn 213.857†	683.5	42.1	0.3757 ug/L	0.3757 ppb	13:36:45
1	SiO2†	675.5	73.5	4.6844 ug/L	4.6844 ppb	13:37:51
2	Sc Radial	3639.0	3639.0	97.4 %		13:35:48
2	Y RADIAL	4147.7	4147.7	97.63 %		13:35:28
2	Al 396.153Radial†	-115.6	21.3	19.967 ug/L	19.967 ppb	13:35:28
2	Ca 317.933Radial†	19.8	6.4	14.109 ug/L	14.109 ppb	13:35:48
2	Fe 238.204 Radial†	11.3	1.3	23.027 ug/L	23.027 ppb	13:35:48
2	K 766.490 Radial†	3021.1	93.8	18.316 ug/L	18.316 ppb	13:35:28
2	Mg 279.077 IEC†	3.0	0.7	36.268 ug/L	36.268 ppb	13:35:48
2	Na 589.592 Radial†	-958.8	50.3	18.193 ug/L	18.193 ppb	13:35:28
2	Sr 421.552†	-8.4	-38.6	-0.2963 ug/L	-0.2963 ppb	13:35:28
2	Sc 361.383	915646.8	915646.8	97.154 %		13:36:50
2	Y 371.029	777139.5	777139.5	97.309 %		13:36:50
2	Ag 328.068†	427.8	70.7	0.3074 ug/L	0.3074 ppb	13:36:55
2	As 188.979†	-22.1	3.7	1.4585 ug/L	1.4585 ppb	13:37:15
2	B 249.677†	-514.9	204.0	4.5323 ug/L	4.5323 ppb	13:37:15
2	Ba 233.527†	17.5	2.9	0.0220 ug/L	0.0220 ppb	13:37:15
2	Be 313.107†	-3804.9	-86.1	-0.0290 ug/L	-0.0290 ppb	13:36:55
2	Cd 226.502†	-204.8	-28.7	-0.2985 ug/L	-0.2985 ppb	13:37:15
2	Co 228.616†	-46.4	16.8	0.3231 ug/L	0.3231 ppb	13:37:15
2	Cr 267.716†	94.8	28.7	0.2910 ug/L	0.2910 ppb	13:36:55
2	Cu 324.752†	6184.5	88.3	0.2512 ug/L	0.2512 ppb	13:36:55
2	Mn 257.610†	458.7	-9.3	-0.0089 ug/L	-0.0089 ppb	13:37:15
2	Mo 202.031†	21.9	10.5	0.7035 ug/L	0.7035 ppb	13:37:15
2	Ni 231.604†	75.4	2.1	0.0472 ug/L	0.0472 ppb	13:37:15

2	P 214.914†	215.2	10.8	5.7319 ug/L	5.7319 ppb	13:37:15
2	Pb 220.353†	-60.1	-66.8	-7.3392 ug/L	-7.3392 ppb	13:37:15
2	S 181.975 Axial†	43.3	3.1	3.8679 ug/L	3.8679 ppb	13:37:15
2	Sb 206.836†	44.1	13.7	4.3808 ug/L	4.3808 ppb	13:37:15
2	Se 196.026†	-25.5	-0.9	-0.4362 ug/L	-0.4362 ppb	13:37:15
2	Si 251.611†	628.5	39.3	1.1567 ug/L	1.1567 ppb	13:37:15
2	Sn 189.927†	21.6	6.0	0.9501 ug/L	0.9501 ppb	13:37:15
2	Ti 334.940†	-1628.7	-30.1	-0.0462 ug/L	-0.0462 ppb	13:36:55
2	Tl 190.801†	-29.4	6.4	1.8798 ug/L	1.8798 ppb	13:37:15
2	U 409.014†	-3132.7	77.4	2.0308 ug/L	2.0308 ppb	13:36:50
2	V 292.402†	-1571.7	21.3	0.1462 ug/L	0.1462 ppb	13:36:55
2	Zn 213.857†	667.3	33.2	0.2974 ug/L	0.2974 ppb	13:37:15
2	SiO2†	681.6	87.6	5.5646 ug/L	5.5646 ppb	13:37:56
3	Sc Radial	3637.3	3637.3	97.4 %		13:36:13
3	Y RADIAL	4179.7	4179.7	98.38 %		13:35:53
3	Al 396.153Radial†	-127.4	9.1	8.5413 ug/L	8.5413 ppb	13:35:53
3	Ca 317.933Radial†	19.5	6.1	13.512 ug/L	13.512 ppb	13:36:13
3	Fe 238.204 Radial†	10.7	0.7	11.880 ug/L	11.880 ppb	13:36:13
3	K 766.490 Radial†	2943.0	15.1	2.9366 ug/L	2.9366 ppb	13:35:53
3	Mg 279.077 IEC†	1.2	-1.3	-68.813 ug/L	-68.813 ppb	13:36:13
3	Na 589.592 Radial†	-943.4	65.7	23.756 ug/L	23.756 ppb	13:35:53
3	Sr 421.552†	55.7	27.2	0.2089 ug/L	0.2089 ppb	13:35:53
3	Sc 361.383	904481.1	904481.1	95.970 %		13:37:20
3	Y 371.029	767430.2	767430.2	96.094 %		13:37:20
3	Ag 328.068†	374.4	20.4	0.0896 ug/L	0.0896 ppb	13:37:25
3	As 188.979†	-25.9	-0.6	-0.2179 ug/L	-0.2179 ppb	13:37:45
3	B 249.677†	-492.1	221.3	4.9188 ug/L	4.9188 ppb	13:37:45
3	Ba 233.527†	12.9	-1.6	-0.0118 ug/L	-0.0118 ppb	13:37:45
3	Be 313.107†	-3808.9	-138.6	-0.0469 ug/L	-0.0469 ppb	13:37:25
3	Cd 226.502†	-202.9	-29.5	-0.3050 ug/L	-0.3050 ppb	13:37:45
3	Co 228.616†	-69.4	-7.8	-0.1507 ug/L	-0.1507 ppb	13:37:45
3	Cr 267.716†	99.4	34.6	0.3506 ug/L	0.3506 ppb	13:37:25
3	Cu 324.752†	6180.9	163.1	0.4643 ug/L	0.4643 ppb	13:37:25
3	Mn 257.610†	492.2	31.4	0.0368 ug/L	0.0368 ppb	13:37:45
3	Mo 202.031†	2.9	-9.1	-0.6049 ug/L	-0.6049 ppb	13:37:45
3	Ni 231.604†	82.0	9.9	0.2266 ug/L	0.2266 ppb	13:37:45
3	P 214.914†	202.8	0.7	0.2935 ug/L	0.2935 ppb	13:37:45
3	Pb 220.353†	-48.3	-55.3	-6.0812 ug/L	-6.0812 ppb	13:37:45
3	S 181.975 Axial†	37.0	-3.0	-3.7778 ug/L	-3.7778 ppb	13:37:45
3	Sb 206.836†	45.0	15.2	4.8356 ug/L	4.8356 ppb	13:37:45
3	Se 196.026†	-28.2	-4.0	-2.2995 ug/L	-2.2995 ppb	13:37:45
3	Si 251.611†	624.5	43.1	1.2877 ug/L	1.2877 ppb	13:37:45
3	Sn 189.927†	18.1	2.6	0.4164 ug/L	0.4164 ppb	13:37:45
3	Ti 334.940†	-1672.4	-96.4	-0.1341 ug/L	-0.1341 ppb	13:37:25
3	Tl 190.801†	-39.6	-4.6	-1.3295 ug/L	-1.3295 ppb	13:37:45
3	U 409.014†	-3167.6	1.2	0.0295 ug/L	0.0295 ppb	13:37:20
3	V 292.402†	-1613.1	-41.8	-0.2770 ug/L	-0.2770 ppb	13:37:25
3	Zn 213.857†	649.1	22.7	0.2024 ug/L	0.2024 ppb	13:37:45
3	SiO2†	705.7	121.3	7.7530 ug/L	7.7530 ppb	13:38:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	915361.9	97.124 %	1.1397			1.17%
Sc Radial	3643.9	97.6 %	0.27			0.28%
Y 371.029	776605.4	97.242 %	1.1169			1.15%
Y RADIAL	4157.9	97.87 %	0.446			0.46%
Ag 328.068†	76.6	0.3326 ug/L	0.25652	0.3326 ppb	0.25652	77.12%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	7.2	6.7219 ug/L	14.24225	6.7219 ppb	14.24225	211.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.0821 ug/L	1.47736	-0.0821 ppb	1.47736	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	217.8	4.8405 ug/L	0.27747	4.8405 ppb	0.27747	5.73%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-4.3	-0.0305 ug/L	0.06382	-0.0305 ppb	0.06382	209.46%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-49.5	-0.0168 ug/L	0.03767	-0.0168 ppb	0.03767	223.59%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	12.799 ug/L	1.7765	12.799 ppb	1.7765	13.88%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-33.5	-0.3472 ug/L	0.07877	-0.3472 ppb	0.07877	22.69%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	2.5	0.0483 ug/L	0.24587	0.0483 ppb	0.24587	509.46%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	24.4	0.2478 ug/L	0.12997	0.2478 ppb	0.12997	52.46%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	88.7	0.2527 ug/L	0.21082	0.2527 ppb	0.21082	83.42%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	1.1	18.802 ug/L	6.0433	18.802 ppb	6.0433	32.14%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	55.8	10.885 ug/L	7.7029	10.885 ppb	7.7029	70.76%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-1.4	-77.663 ug/L	118.6041	-77.663 ppb	118.6041	152.72%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	4.5	0.0097 ug/L	0.02400	0.0097 ppb	0.02400	248.07%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	1.4	0.0957 ug/L	0.65911	0.0957 ppb	0.65911	688.76%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	65.6	23.718 ug/L	5.5064	23.718 ppb	5.5064	23.22%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	11.3	0.2567 ug/L	0.22609	0.2567 ppb	0.22609	88.07%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	2.4	1.2206 ug/L	4.12661	1.2206 ppb	4.12661	338.09%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-58.5	-6.4326 ug/L	0.79165	-6.4326 ppb	0.79165	12.31%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	1.9	2.4376 ug/L	5.63795	2.4376 ppb	5.63795	231.29%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	12.7	4.0537 ug/L	0.98701	4.0537 ppb	0.98701	24.35%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-4.3	-2.4443 ug/L	2.08433	-2.4443 ppb	2.08433	85.27%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	39.6	1.1726 ug/L	0.10793	1.1726 ppb	0.10793	9.20%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.1	0.3397 ug/L	0.65200	0.3397 ppb	0.65200	191.91%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	1.1	0.0085 ug/L	0.26829	0.0085 ppb	0.26829	>999.9%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-59.7	-0.0800 ug/L	0.04735	-0.0800 ppb	0.04735	59.22%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	2.1	0.6089 ug/L	1.70556	0.6089 ppb	1.70556	280.12%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	34.1	0.8945 ug/L	1.02785	0.8945 ppb	1.02785	114.90%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	19.8	0.1243 ug/L	0.39089	0.1243 ppb	0.39089	314.43%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	32.7	0.2918 ug/L	0.08677	0.2918 ppb	0.08677	29.73%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		94.1	6.0007 ug/L	1.58009	6.0007 ppb	1.58009	26.33%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 14:58:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3532.0	3532.0	94.6 %		15:00:41
1	Y RADIAL	4066.9	4066.9	95.72 %		15:00:21
1	Al 396.153Radial†	5057.3	5488.1	5137.7 ug/L	5137.7 ppb	15:00:21
1	Ca 317.933Radial†	2277.5	2394.6	5293.5 ug/L	5293.5 ppb	15:00:41
1	Fe 238.204 Radial†	292.4	298.9	5312.8 ug/L	5312.8 ppb	15:00:41
1	K 766.490 Radial†	28162.2	26774.8	5224.4 ug/L	5224.4 ppb	15:00:21
1	Mg 279.077 IEC†	95.7	98.8	5358.2 ug/L	5358.2 ppb	15:00:41
1	Na 589.592 Radial†	28949.6	31649.0	11444 ug/L	11444 ppb	15:00:21
1	Sr 421.552†	65907.9	69668.5	534.37 ug/L	534.37 ppb	15:00:21
1	Sc 361.383	909925.6	909925.6	96.547 %		15:01:39
1	Y 371.029	759509.4	759509.4	95.102 %		15:01:39
1	Ag 328.068†	108156.2	111654.2	479.83 ug/L	479.83 ppb	15:01:44
1	As 188.979†	1144.5	1211.8	485.18 ug/L	485.18 ppb	15:02:04
1	B 249.677†	19830.3	21273.5	470.82 ug/L	470.82 ppb	15:01:44
1	Ba 233.527†	63997.9	66271.4	479.94 ug/L	479.94 ppb	15:01:44
1	Be 313.107†	1366204.5	1418891.1	478.04 ug/L	478.04 ppb	15:01:39
1	Cd 226.502†	45263.6	47064.2	485.50 ug/L	485.50 ppb	15:01:44
1	Co 228.616†	24258.1	25190.1	483.11 ug/L	483.11 ppb	15:01:44
1	Cr 267.716†	45851.1	47421.8	479.93 ug/L	479.93 ppb	15:01:44
1	Cu 324.752†	165087.4	164713.7	468.28 ug/L	468.28 ppb	15:01:44
1	Mn 257.610†	448126.8	463670.7	483.80 ug/L	483.80 ppb	15:01:39
1	Mo 202.031†	6927.6	7163.3	479.54 ug/L	479.54 ppb	15:02:04
1	Ni 231.604†	20497.7	21155.1	481.87 ug/L	481.87 ppb	15:01:44
1	P 214.914†	4590.9	4544.4	2337.1 ug/L	2337.1 ppb	15:02:04
1	Pb 220.353†	4209.7	4355.2	480.01 ug/L	480.01 ppb	15:02:04
1	S 181.975 Axial†	781.6	768.1	969.12 ug/L	969.12 ppb	15:02:04
1	Sb 206.836†	1474.7	1495.8	493.46 ug/L	493.46 ppb	15:02:04
1	Se 196.026†	768.3	821.2	500.90 ug/L	500.90 ppb	15:02:04
1	Si 251.611†	78647.8	80852.7	2392.9 ug/L	2392.9 ppb	15:01:44
1	Sn 189.927†	2961.6	3051.2	486.12 ug/L	486.12 ppb	15:02:04
1	Ti 334.940†	310001.9	322734.1	473.46 ug/L	473.46 ppb	15:01:44
1	Tl 190.801†	1551.5	1643.6	483.24 ug/L	483.24 ppb	15:02:04
1	U 409.014†	13734.7	17527.7	458.98 ug/L	458.98 ppb	15:01:44
1	V 292.402†	70527.2	74688.3	480.56 ug/L	480.56 ppb	15:01:44
1	Zn 213.857†	51958.0	53162.4	478.25 ug/L	478.25 ppb	15:01:44
1	SiO2†	80489.8	82754.2	5264.1 ug/L	5264.1 ppb	15:03:11
2	Sc Radial	3524.9	3524.9	94.4 %		15:01:06
2	Y RADIAL	4053.1	4053.1	95.40 %		15:00:46
2	Al 396.153Radial†	5070.3	5512.6	5160.9 ug/L	5160.9 ppb	15:00:46
2	Ca 317.933Radial†	2278.1	2400.0	5305.5 ug/L	5305.5 ppb	15:01:06
2	Fe 238.204 Radial†	290.2	297.2	5282.1 ug/L	5282.1 ppb	15:01:06
2	K 766.490 Radial†	28258.7	26937.2	5256.1 ug/L	5256.1 ppb	15:00:46
2	Mg 279.077 IEC†	98.5	102.0	5531.8 ug/L	5531.8 ppb	15:01:06
2	Na 589.592 Radial†	28834.0	31588.4	11422 ug/L	11422 ppb	15:00:46
2	Sr 421.552†	65640.7	69526.1	533.27 ug/L	533.27 ppb	15:00:46
2	Sc 361.383	914978.6	914978.6	97.084 %		15:02:10
2	Y 371.029	765281.9	765281.9	95.825 %		15:02:10
2	Ag 328.068†	108840.0	111739.9	480.19 ug/L	480.19 ppb	15:02:15
2	As 188.979†	1149.2	1210.1	484.52 ug/L	484.52 ppb	15:02:35
2	B 249.677†	19987.2	21321.6	471.90 ug/L	471.90 ppb	15:02:15
2	Ba 233.527†	64529.6	66453.0	481.26 ug/L	481.26 ppb	15:02:15
2	Be 313.107†	1376678.9	1421865.5	479.04 ug/L	479.04 ppb	15:02:10
2	Cd 226.502†	45749.1	47305.4	487.99 ug/L	487.99 ppb	15:02:15
2	Co 228.616†	24406.1	25203.8	483.36 ug/L	483.36 ppb	15:02:15
2	Cr 267.716†	46245.0	47565.3	481.38 ug/L	481.38 ppb	15:02:15
2	Cu 324.752†	166025.0	164735.1	468.34 ug/L	468.34 ppb	15:02:15
2	Mn 257.610†	449549.1	462572.5	482.65 ug/L	482.65 ppb	15:02:10
2	Mo 202.031†	6927.4	7123.5	476.87 ug/L	476.87 ppb	15:02:35
2	Ni 231.604†	20644.4	21189.0	482.64 ug/L	482.64 ppb	15:02:15

2	P 214.914†	4594.3	4521.7	2324.9 ug/L	2324.9 ppb	15:02:35
2	Pb 220.353†	4195.0	4316.0	475.70 ug/L	475.70 ppb	15:02:35
2	S 181.975 Axial†	791.1	773.3	975.76 ug/L	975.76 ppb	15:02:35
2	Sb 206.836†	1491.8	1505.0	496.23 ug/L	496.23 ppb	15:02:35
2	Se 196.026†	772.4	821.1	500.71 ug/L	500.71 ppb	15:02:35
2	Si 251.611†	79313.5	81088.5	2399.9 ug/L	2399.9 ppb	15:02:15
2	Sn 189.927†	2945.2	3017.4	480.75 ug/L	480.75 ppb	15:02:35
2	Ti 334.940†	312063.9	323084.8	473.96 ug/L	473.96 ppb	15:02:15
2	Tl 190.801†	1562.7	1646.3	484.01 ug/L	484.01 ppb	15:02:35
2	U 409.014†	13679.1	17391.8	455.41 ug/L	455.41 ppb	15:02:15
2	V 292.402†	71126.4	74902.1	481.88 ug/L	481.88 ppb	15:02:15
2	Zn 213.857†	52360.7	53280.1	479.31 ug/L	479.31 ppb	15:02:15
2	SiO2†	80064.0	81855.2	5206.8 ug/L	5206.8 ppb	15:03:16
3	Sc Radial	3519.0	3519.0	94.2 %		15:01:31
3	Y RADIAL	3976.1	3976.1	93.59 %		15:01:11
3	Al 396.153Radial†	5042.5	5491.9	5141.3 ug/L	5141.3 ppb	15:01:11
3	Ca 317.933Radial†	2267.5	2392.7	5289.4 ug/L	5289.4 ppb	15:01:31
3	Fe 238.204 Radial†	289.0	296.4	5268.2 ug/L	5268.2 ppb	15:01:31
3	K 766.490 Radial†	28027.8	26741.6	5218.0 ug/L	5218.0 ppb	15:01:11
3	Mg 279.077 IEC†	97.8	101.4	5499.2 ug/L	5499.2 ppb	15:01:31
3	Na 589.592 Radial†	28489.5	31273.2	11308 ug/L	11308 ppb	15:01:11
3	Sr 421.552†	64975.1	68934.6	528.74 ug/L	528.74 ppb	15:01:11
3	Sc 361.383	915271.6	915271.6	97.115 %		15:02:41
3	Y 371.029	764820.6	764820.6	95.767 %		15:02:41
3	Ag 328.068†	110035.3	112934.8	485.30 ug/L	485.30 ppb	15:02:46
3	As 188.979†	1150.7	1211.3	485.01 ug/L	485.01 ppb	15:03:06
3	B 249.677†	20310.5	21647.9	479.13 ug/L	479.13 ppb	15:02:46
3	Ba 233.527†	65409.1	67337.4	487.66 ug/L	487.66 ppb	15:02:46
3	Be 313.107†	1383255.3	1428183.3	481.18 ug/L	481.18 ppb	15:02:41
3	Cd 226.502†	46337.1	47895.8	494.09 ug/L	494.09 ppb	15:02:46
3	Co 228.616†	24839.5	25642.0	491.76 ug/L	491.76 ppb	15:02:46
3	Cr 267.716†	46908.5	48233.2	488.13 ug/L	488.13 ppb	15:02:46
3	Cu 324.752†	168071.5	166787.7	474.17 ug/L	474.17 ppb	15:02:46
3	Mn 257.610†	452389.2	465348.6	485.54 ug/L	485.54 ppb	15:02:41
3	Mo 202.031†	6984.1	7179.6	480.62 ug/L	480.62 ppb	15:03:06
3	Ni 231.604†	20990.8	21538.9	490.61 ug/L	490.61 ppb	15:02:46
3	P 214.914†	4622.6	4549.3	2338.6 ug/L	2338.6 ppb	15:03:06
3	Pb 220.353†	4239.9	4360.8	480.64 ug/L	480.64 ppb	15:03:06
3	S 181.975 Axial†	801.3	783.6	988.74 ug/L	988.74 ppb	15:03:06
3	Sb 206.836†	1497.0	1509.8	497.97 ug/L	497.97 ppb	15:03:06
3	Se 196.026†	778.2	826.8	504.05 ug/L	504.05 ppb	15:03:06
3	Si 251.611†	80417.1	82198.7	2432.8 ug/L	2432.8 ppb	15:02:46
3	Sn 189.927†	2990.9	3063.5	488.08 ug/L	488.08 ppb	15:03:06
3	Ti 334.940†	316331.1	327376.0	480.25 ug/L	480.25 ppb	15:02:46
3	Tl 190.801†	1572.8	1656.2	486.92 ug/L	486.92 ppb	15:03:06
3	U 409.014†	14263.2	17988.8	471.08 ug/L	471.08 ppb	15:02:46
3	V 292.402†	72212.3	75996.9	488.91 ug/L	488.91 ppb	15:02:46
3	Zn 213.857†	53217.6	54145.1	487.11 ug/L	487.11 ppb	15:02:46
3	SiO2†	78650.6	80373.4	5112.2 ug/L	5112.2 ppb	15:03:22

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913391.9	96.915 %	0.3189			0.33%
Sc Radial	3525.3	94.4 %	0.17			0.18%
Y 371.029	763204.0	95.564 %	0.4017			0.42%
Y RADIAL	4032.0	94.90 %	1.151			1.21%
Ag 328.068†	112109.7	481.77 ug/L	3.063	481.77 ppb	3.063	0.64%
QC value within limits for Ag 328.068 Recovery = 96.35%						
Al 396.153Radial†	5497.5	5146.6 ug/L	12.49	5146.6 ppb	12.49	0.24%
QC value within limits for Al 396.153Radial Recovery = 102.93%						
As 188.979†	1211.1	484.90 ug/L	0.341	484.90 ppb	0.341	0.07%
QC value within limits for As 188.979 Recovery = 96.98%						
B 249.677†	21414.4	473.95 ug/L	4.519	473.95 ppb	4.519	0.95%
QC value within limits for B 249.677 Recovery = 94.79%						
Ba 233.527†	66687.3	482.95 ug/L	4.129	482.95 ppb	4.129	0.85%
QC value within limits for Ba 233.527 Recovery = 96.59%						
Be 313.107†	1422980.0	479.42 ug/L	1.603	479.42 ppb	1.603	0.33%
QC value within limits for Be 313.107 Recovery = 95.88%						
Ca 317.933Radial†	2395.8	5296.1 ug/L	8.35	5296.1 ppb	8.35	0.16%

QC value within limits for Ca 317.933 Radial Recovery = 105.92%					
Cd 226.502†	47421.8	489.19 ug/L	4.421	489.19 ppb	4.421 0.90%
QC value within limits for Cd 226.502 Recovery = 97.84%					
Co 228.616†	25345.3	486.08 ug/L	4.924	486.08 ppb	4.924 1.01%
QC value within limits for Co 228.616 Recovery = 97.22%					
Cr 267.716†	47740.1	483.15 ug/L	4.375	483.15 ppb	4.375 0.91%
QC value within limits for Cr 267.716 Recovery = 96.63%					
Cu 324.752†	165412.2	470.26 ug/L	3.381	470.26 ppb	3.381 0.72%
QC value within limits for Cu 324.752 Recovery = 94.05%					
Fe 238.204 Radial†	297.5	5287.7 ug/L	22.82	5287.7 ppb	22.82 0.43%
QC value within limits for Fe 238.204 Radial Recovery = 105.75%					
K 766.490 Radial†	26817.9	5232.8 ug/L	20.44	5232.8 ppb	20.44 0.39%
QC value within limits for K 766.490 Radial Recovery = 104.66%					
Mg 279.077 IEC†	100.7	5463.1 ug/L	92.27	5463.1 ppb	92.27 1.69%
QC value within limits for Mg 279.077 IEC Recovery = 109.26%					
Mn 257.610†	463863.9	484.00 ug/L	1.457	484.00 ppb	1.457 0.30%
QC value within limits for Mn 257.610 Recovery = 96.80%					
Mo 202.031†	7155.5	479.01 ug/L	1.930	479.01 ppb	1.930 0.40%
QC value within limits for Mo 202.031 Recovery = 95.80%					
Na 589.592 Radial†	31503.5	11391 ug/L	73.0	11391 ppb	73.0 0.64%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 113.91%					
Ni 231.604†	21294.4	485.04 ug/L	4.839	485.04 ppb	4.839 1.00%
QC value within limits for Ni 231.604 Recovery = 97.01%					
P 214.914†	4538.5	2333.6 ug/L	7.49	2333.6 ppb	7.49 0.32%
QC value within limits for P 214.914 Recovery = 93.34%					
Pb 220.353†	4344.0	478.78 ug/L	2.686	478.78 ppb	2.686 0.56%
QC value within limits for Pb 220.353 Recovery = 95.76%					
S 181.975 Axial†	775.0	977.87 ug/L	9.980	977.87 ppb	9.980 1.02%
QC value within limits for S 181.975 Axial Recovery = 97.79%					
Sb 206.836†	1503.5	495.88 ug/L	2.275	495.88 ppb	2.275 0.46%
QC value within limits for Sb 206.836 Recovery = 99.18%					
Se 196.026†	823.0	501.89 ug/L	1.872	501.89 ppb	1.872 0.37%
QC value within limits for Se 196.026 Recovery = 100.38%					
Si 251.611†	81380.0	2408.5 ug/L	21.31	2408.5 ppb	21.31 0.88%
QC value within limits for Si 251.611 Recovery = 96.34%					
Sn 189.927†	3044.1	484.98 ug/L	3.795	484.98 ppb	3.795 0.78%
QC value within limits for Sn 189.927 Recovery = 97.00%					
Sr 421.552†	69376.4	532.13 ug/L	2.985	532.13 ppb	2.985 0.56%
QC value within limits for Sr 421.552 Recovery = 106.43%					
Ti 334.940†	324398.3	475.89 ug/L	3.784	475.89 ppb	3.784 0.80%
QC value within limits for Ti 334.940 Recovery = 95.18%					
Tl 190.801†	1648.7	484.72 ug/L	1.942	484.72 ppb	1.942 0.40%
QC value within limits for Tl 190.801 Recovery = 96.94%					
U 409.014†	17636.1	461.82 ug/L	8.216	461.82 ppb	8.216 1.78%
QC value within limits for U 409.014 Recovery = 92.36%					
V 292.402†	75195.8	483.78 ug/L	4.487	483.78 ppb	4.487 0.93%
QC value within limits for V 292.402 Recovery = 96.76%					
Zn 213.857†	53529.2	481.56 ug/L	4.840	481.56 ppb	4.840 1.01%
QC value within limits for Zn 213.857 Recovery = 96.31%					
SiO2†	81660.9	5194.4 ug/L	76.69	5194.4 ppb	76.69 1.48%
QC value within limits for SiO2 Recovery = 97.14%					
QC Failed. Continue with analysis.					

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 15:05:31

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	3579.2	3579.2	95.8 %		15:07:44
1	Y RADIAL	4133.8	4133.8	97.30 %		15:07:24
1	Al 396.153Radial†	-102.9	32.5	30.638 ug/L	30.638 ppb	15:07:24
1	Ca 317.933Radial†	31.6	19.0	42.013 ug/L	42.013 ppb	15:07:44
1	Fe 238.204 Radial†	10.2	0.4	6.2170 ug/L	6.2170 ppb	15:07:44
1	K 766.490 Radial†	3094.5	222.2	43.389 ug/L	43.389 ppb	15:07:24
1	Mg 279.077 IEC†	2.2	-0.2	-9.7679 ug/L	-9.7679 ppb	15:07:44
1	Na 589.592 Radial†	-839.8	158.1	57.167 ug/L	57.167 ppb	15:07:24
1	Sr 421.552†	96.7	71.0	0.5443 ug/L	0.5443 ppb	15:07:24
1	Sc 361.383	895127.2	895127.2	94.977 %		15:08:41
1	Y 371.029	760350.6	760350.6	95.207 %		15:08:41
1	Ag 328.068†	374.7	24.8	0.1121 ug/L	0.1121 ppb	15:08:41
1	As 188.979†	-30.2	-5.4	-2.1521 ug/L	-2.1521 ppb	15:09:01
1	B 249.677†	-427.8	283.6	6.3058 ug/L	6.3058 ppb	15:09:01
1	Ba 233.527†	14.3	-0.0	-0.0021 ug/L	-0.0021 ppb	15:09:01
1	Be 313.107†	-3676.0	-40.1	-0.0145 ug/L	-0.0145 ppb	15:08:41
1	Cd 226.502†	-192.3	-20.5	-0.2141 ug/L	-0.2141 ppb	15:09:01
1	Co 228.616†	-77.2	-16.7	-0.3217 ug/L	-0.3217 ppb	15:09:01
1	Cr 267.716†	80.3	15.6	0.1611 ug/L	0.1611 ppb	15:08:41
1	Cu 324.752†	6083.9	128.3	0.3712 ug/L	0.3712 ppb	15:08:41
1	Mn 257.610†	521.3	67.5	0.0714 ug/L	0.0714 ppb	15:09:01
1	Mo 202.031†	0.3	-11.7	-0.7796 ug/L	-0.7796 ppb	15:09:01
1	Ni 231.604†	86.7	15.7	0.3586 ug/L	0.3586 ppb	15:09:01
1	P 214.914†	215.9	16.7	8.8444 ug/L	8.8444 ppb	15:09:01
1	Pb 220.353†	-52.8	-60.6	-6.6568 ug/L	-6.6568 ppb	15:09:01
1	S 181.975 Axial†	41.8	2.5	3.0892 ug/L	3.0892 ppb	15:09:01
1	Sb 206.836†	47.2	18.0	5.7295 ug/L	5.7295 ppb	15:09:01
1	Se 196.026†	-37.0	-13.6	-7.9626 ug/L	-7.9626 ppb	15:09:01
1	Si 251.611†	620.0	45.2	1.3494 ug/L	1.3494 ppb	15:09:01
1	Sn 189.927†	17.0	1.6	0.2599 ug/L	0.2599 ppb	15:09:01
1	Ti 334.940†	-1842.3	-293.4	-0.4192 ug/L	-0.4192 ppb	15:08:41
1	Tl 190.801†	-34.1	0.8	0.2262 ug/L	0.2262 ppb	15:09:01
1	U 409.014†	-3538.9	-424.2	-11.150 ug/L	-11.150 ppb	15:08:41
1	V 292.402†	-1708.0	-159.2	-1.0442 ug/L	-1.0442 ppb	15:08:41
1	Zn 213.857†	724.9	109.6	0.9919 ug/L	0.9919 ppb	15:09:01
1	SiO2†	642.6	62.6	4.0148 ug/L	4.0148 ppb	15:09:57
2	Sc Radial	3557.7	3557.7	95.2 %		15:08:09
2	Y RADIAL	4158.1	4158.1	97.87 %		15:07:49
2	Al 396.153Radial†	-132.0	1.3	1.2408 ug/L	1.2408 ppb	15:07:49
2	Ca 317.933Radial†	25.9	13.2	29.171 ug/L	29.171 ppb	15:08:09
2	Fe 238.204 Radial†	11.3	1.5	26.844 ug/L	26.844 ppb	15:08:09
2	K 766.490 Radial†	3137.4	286.8	56.006 ug/L	56.006 ppb	15:07:49
2	Mg 279.077 IEC†	1.3	-1.1	-60.444 ug/L	-60.444 ppb	15:08:09
2	Na 589.592 Radial†	-835.6	157.2	56.842 ug/L	56.842 ppb	15:07:49
2	Sr 421.552†	59.8	32.8	0.2516 ug/L	0.2516 ppb	15:07:49
2	Sc 361.383	894896.7	894896.7	94.953 %		15:09:06
2	Y 371.029	760445.2	760445.2	95.219 %		15:09:06
2	Ag 328.068†	341.9	-9.7	-0.0228 ug/L	-0.0228 ppb	15:09:06
2	As 188.979†	-32.5	-7.8	-3.0854 ug/L	-3.0854 ppb	15:09:26
2	B 249.677†	-485.2	223.1	4.9566 ug/L	4.9566 ppb	15:09:26
2	Ba 233.527†	28.6	15.0	0.1075 ug/L	0.1075 ppb	15:09:26
2	Be 313.107†	-3635.2	1.8	0.0003 ug/L	0.0003 ppb	15:09:06
2	Cd 226.502†	-187.2	-15.1	-0.1617 ug/L	-0.1617 ppb	15:09:26
2	Co 228.616†	-76.4	-15.9	-0.3044 ug/L	-0.3044 ppb	15:09:26
2	Cr 267.716†	85.9	21.5	0.2253 ug/L	0.2253 ppb	15:09:06
2	Cu 324.752†	6181.0	232.2	0.6706 ug/L	0.6706 ppb	15:09:06
2	Mn 257.610†	478.0	22.0	0.0280 ug/L	0.0280 ppb	15:09:26
2	Mo 202.031†	15.0	3.7	0.2515 ug/L	0.2515 ppb	15:09:26
2	Ni 231.604†	80.8	9.6	0.2191 ug/L	0.2191 ppb	15:09:26



2	P 214.914†	212.0	12.7	6.6179 ug/L	6.6179 ppb	15:09:26
2	Pb 220.353†	-41.8	-49.0	-5.3845 ug/L	-5.3845 ppb	15:09:26
2	S 181.975 Axial†	40.1	0.8	0.9551 ug/L	0.9551 ppb	15:09:26
2	Sb 206.836†	42.4	13.0	4.1259 ug/L	4.1259 ppb	15:09:26
2	Se 196.026†	-27.6	-3.7	-2.0661 ug/L	-2.0661 ppb	15:09:26
2	Si 251.611†	613.3	38.3	1.1338 ug/L	1.1338 ppb	15:09:26
2	Sn 189.927†	15.1	-0.4	-0.0526 ug/L	-0.0526 ppb	15:09:26
2	Ti 334.940†	-1654.3	-95.9	-0.1247 ug/L	-0.1247 ppb	15:09:06
2	Tl 190.801†	-26.4	8.8	2.5849 ug/L	2.5849 ppb	15:09:26
2	U 409.014†	-3729.8	-626.2	-16.462 ug/L	-16.462 ppb	15:09:06
2	V 292.402†	-1659.8	-109.0	-0.7249 ug/L	-0.7249 ppb	15:09:06
2	Zn 213.857†	753.2	139.6	1.2617 ug/L	1.2617 ppb	15:09:26
2	SiO2†	658.1	79.1	5.0399 ug/L	5.0399 ppb	15:10:02
3	Sc Radial	3541.5	3541.5	94.8 %		15:08:34
3	Y RADIAL	4087.9	4087.9	96.22 %		15:08:14
3	Al 396.153Radial†	-140.9	-8.7	-8.1522 ug/L	-8.1522 ppb	15:08:14
3	Ca 317.933Radial†	27.1	14.7	32.446 ug/L	32.446 ppb	15:08:34
3	Fe 238.204 Radial†	10.6	0.8	14.158 ug/L	14.158 ppb	15:08:34
3	K 766.490 Radial†	3156.4	321.8	62.858 ug/L	62.858 ppb	15:08:14
3	Mg 279.077 IEC†	-1.6	-4.2	-226.12 ug/L	-226.12 ppb	15:08:34
3	Na 589.592 Radial†	-884.1	102.0	36.887 ug/L	36.887 ppb	15:08:14
3	Sr 421.552†	9.5	-20.0	-0.1536 ug/L	-0.1536 ppb	15:08:14
3	Sc 361.383	896867.1	896867.1	95.162 %		15:09:32
3	Y 371.029	761472.5	761472.5	95.348 %		15:09:32
3	Ag 328.068†	286.8	-68.3	-0.2784 ug/L	-0.2784 ppb	15:09:32
3	As 188.979†	-27.9	-3.0	-1.1670 ug/L	-1.1670 ppb	15:09:52
3	B 249.677†	-455.4	255.5	5.6790 ug/L	5.6790 ppb	15:09:52
3	Ba 233.527†	8.3	-6.4	-0.0486 ug/L	-0.0486 ppb	15:09:52
3	Be 313.107†	-3759.5	-120.4	-0.0409 ug/L	-0.0409 ppb	15:09:32
3	Cd 226.502†	-208.2	-36.8	-0.3849 ug/L	-0.3849 ppb	15:09:52
3	Co 228.616†	-66.1	-5.0	-0.0983 ug/L	-0.0983 ppb	15:09:52
3	Cr 267.716†	104.6	41.0	0.4203 ug/L	0.4203 ppb	15:09:32
3	Cu 324.752†	6121.5	155.4	0.4524 ug/L	0.4524 ppb	15:09:32
3	Mn 257.610†	501.5	45.5	0.0581 ug/L	0.0581 ppb	15:09:52
3	Mo 202.031†	-5.8	-18.1	-1.2117 ug/L	-1.2117 ppb	15:09:52
3	Ni 231.604†	67.7	-4.3	-0.0987 ug/L	-0.0987 ppb	15:09:52
3	P 214.914†	211.5	11.6	6.1021 ug/L	6.1021 ppb	15:09:52
3	Pb 220.353†	-40.9	-48.0	-5.2766 ug/L	-5.2766 ppb	15:09:52
3	S 181.975 Axial†	55.0	16.3	20.571 ug/L	20.571 ppb	15:09:52
3	Sb 206.836†	47.3	18.0	5.6960 ug/L	5.6960 ppb	15:09:52
3	Se 196.026†	-33.5	-9.8	-5.7356 ug/L	-5.7356 ppb	15:09:52
3	Si 251.611†	597.6	20.3	0.6184 ug/L	0.6184 ppb	15:09:52
3	Sn 189.927†	7.6	-8.2	-1.3066 ug/L	-1.3066 ppb	15:09:52
3	Ti 334.940†	-1704.3	-144.7	-0.1817 ug/L	-0.1817 ppb	15:09:32
3	Tl 190.801†	-28.8	6.4	1.8641 ug/L	1.8641 ppb	15:09:52
3	U 409.014†	-3794.5	-685.6	-18.020 ug/L	-18.020 ppb	15:09:32
3	V 292.402†	-1759.0	-209.3	-1.3873 ug/L	-1.3873 ppb	15:09:32
3	Zn 213.857†	748.8	133.3	1.2081 ug/L	1.2081 ppb	15:09:52
3	SiO2†	624.1	41.9	2.7032 ug/L	2.7032 ppb	15:10:07

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895630.3	95.031 %	0.1143			0.12%
Sc Radial	3559.5	95.3 %	0.51			0.53%
Y 371.029	760756.1	95.258 %	0.0779			0.08%
Y RADIAL	4126.6	97.13 %	0.838			0.86%
Ag 328.068†	-17.7	-0.0630 ug/L	0.19834	-0.0630 ppb	0.19834	314.76%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.4	7.9089 ug/L	20.23661	7.9089 ppb	20.23661	255.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.4	-2.1349 ug/L	0.95933	-2.1349 ppb	0.95933	44.94%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	254.0	5.6471 ug/L	0.67518	5.6471 ppb	0.67518	11.96%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.9	0.0189 ug/L	0.08017	0.0189 ppb	0.08017	423.28%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-52.9	-0.0184 ug/L	0.02089	-0.0184 ppb	0.02089	113.67%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	15.6	34.543 ug/L	6.6734	34.543 ppb	6.6734	19.32%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-24.1	-0.2536 ug/L	0.11670	-0.2536 ppb	0.11670	46.03%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-12.5	-0.2415 ug/L	0.12428	-0.2415 ppb	0.12428	51.47%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	26.0	0.2689 ug/L	0.13500	0.2689 ppb	0.13500	50.20%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	172.0	0.4981 ug/L	0.15482	0.4981 ppb	0.15482	31.08%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.9	15.740 ug/L	10.4042	15.740 ppb	10.4042	66.10%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	277.0	54.084 ug/L	9.8756	54.084 ppb	9.8756	18.26%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-1.8	-98.777 ug/L	113.1554	-98.777 ppb	113.1554	114.56%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	45.0	0.0525 ug/L	0.02219	0.0525 ppb	0.02219	42.27%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	-8.7	-0.5799 ug/L	0.75176	-0.5799 ppb	0.75176	129.63%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	139.1	50.298 ug/L	11.6158	50.298 ppb	11.6158	23.09%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	7.0	0.1597 ug/L	0.23438	0.1597 ppb	0.23438	146.77%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	13.7	7.1881 ug/L	1.45735	7.1881 ppb	1.45735	20.27%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-52.5	-5.7727 ug/L	0.76761	-5.7727 ppb	0.76761	13.30%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	6.5	8.2051 ug/L	10.76214	8.2051 ppb	10.76214	131.16%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	16.3	5.1838 ug/L	0.91631	5.1838 ppb	0.91631	17.68%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-9.0	-5.2548 ug/L	2.97748	-5.2548 ppb	2.97748	56.66%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	34.6	1.0339 ug/L	0.37561	1.0339 ppb	0.37561	36.33%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	-2.3	-0.3664 ug/L	0.82906	-0.3664 ppb	0.82906	226.26%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	27.9	0.2141 ug/L	0.35046	0.2141 ppb	0.35046	163.66%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-178.0	-0.2419 ug/L	0.15617	-0.2419 ppb	0.15617	64.57%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	5.3	1.5584 ug/L	1.20866	1.5584 ppb	1.20866	77.56%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-578.7	-15.211 ug/L	3.6019	-15.211 ppb	3.6019	23.68%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-159.2	-1.0521 ug/L	0.33126	-1.0521 ppb	0.33126	31.49%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	127.5	1.1539 ug/L	0.14281	1.1539 ppb	0.14281	12.38%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		61.2	3.9193 ug/L	1.17125	3.9193 ppb	1.17125	29.88%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 15:19:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3475.3	3475.3	93.0 %		15:21:31
1	Y RADIAL	3903.0	3903.0	91.87 %		15:21:11
1	Al 396.153Radial†	4955.5	5465.9	5117.0 ug/L	5117.0 ppb	15:21:11
1	Ca 317.933Radial†	2262.5	2417.7	5344.5 ug/L	5344.5 ppb	15:21:31
1	Fe 238.204 Radial†	288.8	300.1	5333.4 ug/L	5333.4 ppb	15:21:31
1	K 766.490 Radial†	27489.3	26537.6	5178.1 ug/L	5178.1 ppb	15:21:11
1	Mg 279.077 IEC†	94.0	98.6	5348.6 ug/L	5348.6 ppb	15:21:31
1	Na 589.592 Radial†	27720.8	30827.8	11147 ug/L	11147 ppb	15:21:11
1	Sr 421.552†	63771.9	68510.1	525.48 ug/L	525.48 ppb	15:21:11
1	Sc 361.383	914279.2	914279.2	97.009 %		15:22:28
1	Y 371.029	763801.6	763801.6	95.639 %		15:22:28
1	Ag 328.068†	109590.3	112599.1	483.89 ug/L	483.89 ppb	15:22:34
1	As 188.979†	1150.0	1211.9	485.37 ug/L	485.37 ppb	15:22:54
1	B 249.677†	20101.6	21455.3	474.85 ug/L	474.85 ppb	15:22:34
1	Ba 233.527†	64917.4	66903.6	484.52 ug/L	484.52 ppb	15:22:34
1	Be 313.107†	1384849.0	1431372.2	482.27 ug/L	482.27 ppb	15:22:28
1	Cd 226.502†	45909.4	47506.7	490.07 ug/L	490.07 ppb	15:22:34
1	Co 228.616†	24575.1	25397.2	487.03 ug/L	487.03 ppb	15:22:34
1	Cr 267.716†	46515.8	47880.9	484.57 ug/L	484.57 ppb	15:22:34
1	Cu 324.752†	167696.3	166588.8	473.61 ug/L	473.61 ppb	15:22:34
1	Mn 257.610†	453166.1	466655.1	486.92 ug/L	486.92 ppb	15:22:28
1	Mo 202.031†	6907.8	7108.8	475.89 ug/L	475.89 ppb	15:22:54
1	Ni 231.604†	20786.3	21351.6	486.34 ug/L	486.34 ppb	15:22:34
1	P 214.914†	4585.3	4516.0	2320.8 ug/L	2320.8 ppb	15:22:54
1	Pb 220.353†	4217.9	4342.9	478.64 ug/L	478.64 ppb	15:22:54
1	S 181.975 Axial†	787.4	770.2	971.83 ug/L	971.83 ppb	15:22:54
1	Sb 206.836†	1466.4	1479.9	488.17 ug/L	488.17 ppb	15:22:54
1	Se 196.026†	778.0	787.5	504.64 ug/L	504.64 ppb	15:22:54
1	Si 251.611†	79967.7	81825.4	2421.8 ug/L	2421.8 ppb	15:22:34
1	Sn 189.927†	2931.5	3005.7	478.88 ug/L	478.88 ppb	15:22:54
1	Ti 334.940†	323014.4	334618.8	490.90 ug/L	490.90 ppb	15:22:28
1	Tl 190.801†	1561.7	1646.5	484.20 ug/L	484.20 ppb	15:22:54
1	U 409.014†	13960.6	17692.8	463.30 ug/L	463.30 ppb	15:22:34
1	V 292.402†	71706.7	75556.4	486.01 ug/L	486.01 ppb	15:22:34
1	Zn 213.857†	52717.3	53688.9	482.99 ug/L	482.99 ppb	15:22:34
1	SiO2†	79420.0	81254.4	5168.5 ug/L	5168.5 ppb	15:24:02
2	Sc Radial	3468.5	3468.5	92.9 %		15:21:56
2	Y RADIAL	3903.4	3903.4	91.88 %		15:21:36
2	Al 396.153Radial†	4997.9	5521.9	5169.0 ug/L	5169.0 ppb	15:21:36
2	Ca 317.933Radial†	2251.5	2410.6	5328.9 ug/L	5328.9 ppb	15:21:56
2	Fe 238.204 Radial†	286.9	298.6	5308.3 ug/L	5308.3 ppb	15:21:56
2	K 766.490 Radial†	27608.1	26722.8	5214.3 ug/L	5214.3 ppb	15:21:36
2	Mg 279.077 IEC†	93.5	98.2	5327.6 ug/L	5327.6 ppb	15:21:56
2	Na 589.592 Radial†	27668.4	30829.3	11148 ug/L	11148 ppb	15:21:36
2	Sr 421.552†	63798.0	68671.2	526.72 ug/L	526.72 ppb	15:21:36
2	Sc 361.383	896681.0	896681.0	95.142 %		15:23:00
2	Y 371.029	750950.1	750950.1	94.030 %		15:23:00
2	Ag 328.068†	110214.3	115472.1	496.18 ug/L	496.18 ppb	15:23:05
2	As 188.979†	1174.1	1260.5	504.59 ug/L	504.59 ppb	15:23:25
2	B 249.677†	20252.1	22020.2	487.38 ug/L	487.38 ppb	15:23:05
2	Ba 233.527†	65380.2	68703.4	497.55 ug/L	497.55 ppb	15:23:05
2	Be 313.107†	1353957.9	1426920.8	480.77 ug/L	480.77 ppb	15:23:00
2	Cd 226.502†	46237.3	48780.2	503.22 ug/L	503.22 ppb	15:23:05
2	Co 228.616†	24787.3	26117.5	500.89 ug/L	500.89 ppb	15:23:05
2	Cr 267.716†	46768.7	49087.8	496.77 ug/L	496.77 ppb	15:23:05
2	Cu 324.752†	168415.6	170737.5	485.40 ug/L	485.40 ppb	15:23:05
2	Mn 257.610†	441982.9	464069.0	484.22 ug/L	484.22 ppb	15:23:00
2	Mo 202.031†	6987.0	7331.8	490.80 ug/L	490.80 ppb	15:23:25
2	Ni 231.604†	20958.9	21953.5	500.05 ug/L	500.05 ppb	15:23:05

2	P 214.914†	4628.4	4654.1	2392.4 ug/L	2392.4 ppb	15:23:25
2	Pb 220.353†	4249.1	4461.0	491.66 ug/L	491.66 ppb	15:23:25
2	S 181.975 Axial†	796.3	795.5	1003.7 ug/L	1003.7 ppb	15:23:25
2	Sb 206.836†	1500.6	1545.5	509.70 ug/L	509.70 ppb	15:23:25
2	Se 196.026†	780.5	845.8	515.40 ug/L	515.40 ppb	15:23:25
2	Si 251.611†	80579.5	84086.2	2488.7 ug/L	2488.7 ppb	15:23:05
2	Sn 189.927†	2983.9	3120.0	497.08 ug/L	497.08 ppb	15:23:25
2	Ti 334.940†	315163.1	332901.6	488.37 ug/L	488.37 ppb	15:23:00
2	Tl 190.801†	1583.2	1700.8	499.94 ug/L	499.94 ppb	15:23:25
2	U 409.014†	14020.8	18038.5	472.37 ug/L	472.37 ppb	15:23:05
2	V 292.402†	72029.9	77346.8	497.60 ug/L	497.60 ppb	15:23:05
2	Zn 213.857†	53097.0	55154.4	496.20 ug/L	496.20 ppb	15:23:05
2	SiO2†	79072.3	82495.7	5247.3 ug/L	5247.3 ppb	15:24:07
3	Sc Radial	3498.2	3498.2	93.7 %		15:22:21
3	Y RADIAL	3936.4	3936.4	92.65 %		15:22:01
3	Al 396.153Radial†	5022.4	5502.3	5150.9 ug/L	5150.9 ppb	15:22:01
3	Ca 317.933Radial†	2263.1	2402.4	5310.7 ug/L	5310.7 ppb	15:22:21
3	Fe 238.204 Radial†	289.0	298.2	5300.5 ug/L	5300.5 ppb	15:22:21
3	K 766.490 Radial†	27994.3	26883.0	5245.6 ug/L	5245.6 ppb	15:22:01
3	Mg 279.077 IEC†	98.8	103.1	5591.5 ug/L	5591.5 ppb	15:22:21
3	Na 589.592 Radial†	27948.5	30875.6	11164 ug/L	11164 ppb	15:22:01
3	Sr 421.552†	64340.3	68667.4	526.69 ug/L	526.69 ppb	15:22:01
3	Sc 361.383	912120.8	912120.8	96.780 %		15:23:31
3	Y 371.029	761903.4	761903.4	95.402 %		15:23:31
3	Ag 328.068†	108689.0	111935.2	481.03 ug/L	481.03 ppb	15:23:36
3	As 188.979†	1166.8	1232.0	493.31 ug/L	493.31 ppb	15:23:56
3	B 249.677†	19991.7	21390.8	473.43 ug/L	473.43 ppb	15:23:36
3	Ba 233.527†	64257.2	66379.8	480.73 ug/L	480.73 ppb	15:23:36
3	Be 313.107†	1373887.1	1423423.7	479.59 ug/L	479.59 ppb	15:23:31
3	Cd 226.502†	45560.2	47257.9	487.50 ug/L	487.50 ppb	15:23:36
3	Co 228.616†	24388.9	25264.8	484.52 ug/L	484.52 ppb	15:23:36
3	Cr 267.716†	46123.9	47589.4	481.62 ug/L	481.62 ppb	15:23:36
3	Cu 324.752†	165764.5	165001.8	469.10 ug/L	469.10 ppb	15:23:36
3	Mn 257.610†	449426.9	463896.9	484.03 ug/L	484.03 ppb	15:23:31
3	Mo 202.031†	6994.0	7214.6	482.97 ug/L	482.97 ppb	15:23:56
3	Ni 231.604†	20673.3	21285.5	484.84 ug/L	484.84 ppb	15:23:36
3	P 214.914†	4628.9	4572.3	2351.9 ug/L	2351.9 ppb	15:23:56
3	Pb 220.353†	4251.9	4388.3	483.66 ug/L	483.66 ppb	15:23:56
3	S 181.975 Axial†	797.8	782.8	987.73 ug/L	987.73 ppb	15:23:56
3	Sb 206.836†	1488.9	1506.7	496.97 ug/L	496.97 ppb	15:23:56
3	Se 196.026†	783.9	835.4	509.25 ug/L	509.25 ppb	15:23:56
3	Si 251.611†	79114.3	81138.7	2401.3 ug/L	2401.3 ppb	15:23:36
3	Sn 189.927†	2970.4	3053.0	486.40 ug/L	486.40 ppb	15:23:56
3	Ti 334.940†	320165.1	332462.7	487.71 ug/L	487.71 ppb	15:23:31
3	Tl 190.801†	1577.4	1666.6	490.04 ug/L	490.04 ppb	15:23:56
3	U 409.014†	13758.1	17517.6	458.71 ug/L	458.71 ppb	15:23:36
3	V 292.402†	70854.5	74850.7	481.63 ug/L	481.63 ppb	15:23:36
3	Zn 213.857†	52260.6	53345.6	479.89 ug/L	479.89 ppb	15:23:36
3	SiO2†	78352.0	80344.6	5110.3 ug/L	5110.3 ppb	15:24:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907693.7	96.311 %	1.0184			1.06%
Sc Radial	3480.7	93.2 %	0.42			0.45%
Y 371.029	758885.0	95.024 %	0.8686			0.91%
Y RADIAL	3914.2	92.13 %	0.452			0.49%
Ag 328.068†	113335.4	487.03 ug/L	8.053	487.03 ppb	8.053	1.65%
QC value within limits for Ag 328.068 Recovery = 97.41%						
Al 396.153Radial†	5496.7	5145.6 ug/L	26.37	5145.6 ppb	26.37	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.91%						
As 188.979†	1234.8	494.42 ug/L	9.659	494.42 ppb	9.659	1.95%
QC value within limits for As 188.979 Recovery = 98.88%						
B 249.677†	21622.1	478.55 ug/L	7.675	478.55 ppb	7.675	1.60%
QC value within limits for B 249.677 Recovery = 95.71%						
Ba 233.527†	67329.0	487.60 ug/L	8.822	487.60 ppb	8.822	1.81%
QC value within limits for Ba 233.527 Recovery = 97.52%						
Be 313.107†	1427238.9	480.88 ug/L	1.343	480.88 ppb	1.343	0.28%
QC value within limits for Be 313.107 Recovery = 96.18%						
Ca 317.933Radial†	2410.2	5328.1 ug/L	16.94	5328.1 ppb	16.94	0.32%

QC value within limits for Ca 317.933 Radial Recovery = 106.56%

Cd 226.502†	47848.3	493.59 ug/L	8.433	493.59 ppb	8.433	1.71%
QC value within limits for Cd 226.502 Recovery = 98.72%						
Co 228.616†	25593.2	490.81 ug/L	8.815	490.81 ppb	8.815	1.80%
QC value within limits for Co 228.616 Recovery = 98.16%						
Cr 267.716†	48186.0	487.66 ug/L	8.032	487.66 ppb	8.032	1.65%
QC value within limits for Cr 267.716 Recovery = 97.53%						
Cu 324.752†	167442.7	476.04 ug/L	8.416	476.04 ppb	8.416	1.77%
QC value within limits for Cu 324.752 Recovery = 95.21%						
Fe 238.204 Radial†	299.0	5314.1 ug/L	17.18	5314.1 ppb	17.18	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 106.28%						
K 766.490 Radial†	26714.4	5212.7 ug/L	33.77	5212.7 ppb	33.77	0.65%
QC value within limits for K 766.490 Radial Recovery = 104.25%						
Mg 279.077 IEC†	99.9	5422.6 ug/L	146.65	5422.6 ppb	146.65	2.70%
QC value within limits for Mg 279.077 IEC Recovery = 108.45%						
Mn 257.610†	464873.7	485.05 ug/L	1.616	485.05 ppb	1.616	0.33%
QC value within limits for Mn 257.610 Recovery = 97.01%						
Mo 202.031†	7218.4	483.22 ug/L	7.459	483.22 ppb	7.459	1.54%
QC value within limits for Mo 202.031 Recovery = 96.64%						
Na 589.592 Radial†	30844.3	11153 ug/L	9.8	11153 ppb	9.8	0.09%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 111.53%						
Ni 231.604†	21530.2	490.41 ug/L	8.384	490.41 ppb	8.384	1.71%
QC value within limits for Ni 231.604 Recovery = 98.08%						
P 214.914†	4580.8	2355.0 ug/L	35.93	2355.0 ppb	35.93	1.53%
QC value within limits for P 214.914 Recovery = 94.20%						
Pb 220.353†	4397.4	484.66 ug/L	6.566	484.66 ppb	6.566	1.35%
QC value within limits for Pb 220.353 Recovery = 96.93%						
S 181.975 Axial†	782.8	987.77 ug/L	15.957	987.77 ppb	15.957	1.62%
QC value within limits for S 181.975 Axial Recovery = 98.78%						
Sb 206.836†	1510.7	498.28 ug/L	10.823	498.28 ppb	10.823	2.17%
QC value within limits for Sb 206.836 Recovery = 99.66%						
Se 196.026†	836.2	509.76 ug/L	5.400	509.76 ppb	5.400	1.06%
QC value within limits for Se 196.026 Recovery = 101.95%						
Si 251.611†	82350.1	2437.3 ug/L	45.69	2437.3 ppb	45.69	1.87%
QC value within limits for Si 251.611 Recovery = 97.49%						
Sn 189.927†	3059.6	487.45 ug/L	9.144	487.45 ppb	9.144	1.88%
QC value within limits for Sn 189.927 Recovery = 97.49%						
Sr 421.552†	68616.2	526.29 ug/L	0.705	526.29 ppb	0.705	0.13%
QC value within limits for Sr 421.552 Recovery = 105.26%						
Ti 334.940†	333327.7	488.99 ug/L	1.682	488.99 ppb	1.682	0.34%
QC value within limits for Ti 334.940 Recovery = 97.80%						
Tl 190.801†	1671.3	491.39 ug/L	7.954	491.39 ppb	7.954	1.62%
QC value within limits for Tl 190.801 Recovery = 98.28%						
U 409.014†	17749.6	464.79 ug/L	6.949	464.79 ppb	6.949	1.50%
QC value within limits for U 409.014 Recovery = 92.96%						
V 292.402†	75917.9	488.41 ug/L	8.255	488.41 ppb	8.255	1.69%
QC value within limits for V 292.402 Recovery = 97.68%						
Zn 213.857†	54063.0	486.36 ug/L	8.660	486.36 ppb	8.660	1.78%
QC value within limits for Zn 213.857 Recovery = 97.27%						
SiO2†	81364.9	5175.4 ug/L	68.73	5175.4 ppb	68.73	1.33%
QC value within limits for SiO2 Recovery = 96.78%						

QC Failed. Continue with analysis.

Sequence No.: 13  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/26/2010 15:26:23  
 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	3601.3	3601.3	96.4 %		15:28:35
1	Y RADIAL	4027.9	4027.9	94.81 %		15:28:15
1	Al 396.153Radial†	-124.2	11.0	10.349 ug/L	10.349 ppb	15:28:15
1	Ca 317.933Radial†	24.6	11.5	25.446 ug/L	25.446 ppb	15:28:35
1	Fe 238.204 Radial†	11.7	1.8	32.204 ug/L	32.204 ppb	15:28:35
1	K 766.490 Radial†	3049.5	155.7	30.405 ug/L	30.405 ppb	15:28:15
1	Mg 279.077 IEC†	2.5	0.1	4.7526 ug/L	4.7526 ppb	15:28:35
1	Na 589.592 Radial†	-930.9	69.0	24.932 ug/L	24.932 ppb	15:28:15
1	Sr 421.552†	15.6	-13.8	-0.1061 ug/L	-0.1061 ppb	15:28:15
1	Sc 361.383	885622.8	885622.8	93.969 %		15:29:32
1	Y 371.029	775006.4	775006.4	97.042 %		15:29:32
1	Ag 328.068†	363.0	16.5	0.0886 ug/L	0.0886 ppb	15:29:32
1	As 188.979†	-20.5	4.6	1.8173 ug/L	1.8173 ppb	15:29:52
1	B 249.677†	-470.8	233.0	5.1770 ug/L	5.1770 ppb	15:29:52
1	Ba 233.527†	19.1	5.2	0.0384 ug/L	0.0384 ppb	15:29:52
1	Be 313.107†	-3722.5	-131.2	-0.0451 ug/L	-0.0451 ppb	15:29:32
1	Cd 226.502†	-194.4	-24.8	-0.2617 ug/L	-0.2617 ppb	15:29:52
1	Co 228.616†	-68.9	-8.8	-0.1675 ug/L	-0.1675 ppb	15:29:52
1	Cr 267.716†	76.0	12.0	0.1282 ug/L	0.1282 ppb	15:29:52
1	Cu 324.752†	6274.9	400.3	1.1456 ug/L	1.1456 ppb	15:29:32
1	Mn 257.610†	510.1	61.4	0.0670 ug/L	0.0670 ppb	15:29:52
1	Mo 202.031†	18.7	7.9	0.5303 ug/L	0.5303 ppb	15:29:52
1	Ni 231.604†	64.9	-6.4	-0.1458 ug/L	-0.1458 ppb	15:29:52
1	P 214.914†	207.5	10.1	5.1575 ug/L	5.1575 ppb	15:29:52
1	Pb 220.353†	-61.2	-70.1	-7.6987 ug/L	-7.6987 ppb	15:29:52
1	S 181.975 Axial†	45.8	7.2	9.0659 ug/L	9.0659 ppb	15:29:52
1	Sb 206.836†	46.3	17.5	5.5779 ug/L	5.5779 ppb	15:29:52
1	Se 196.026†	-27.4	-3.7	-2.0797 ug/L	-2.0797 ppb	15:29:52
1	Si 251.611†	600.4	31.3	0.9232 ug/L	0.9232 ppb	15:29:52
1	Sn 189.927†	8.2	-7.6	-1.2050 ug/L	-1.2050 ppb	15:29:52
1	Ti 334.940†	-1832.7	-304.0	-0.4384 ug/L	-0.4384 ppb	15:29:32
1	Tl 190.801†	-27.7	7.2	2.1122 ug/L	2.1122 ppb	15:29:52
1	U 409.014†	-3480.6	-402.1	-10.573 ug/L	-10.573 ppb	15:29:32
1	V 292.402†	-1550.4	-10.8	-0.0858 ug/L	-0.0858 ppb	15:29:32
1	Zn 213.857†	712.5	104.7	0.9449 ug/L	0.9449 ppb	15:29:52
1	SiO2†	663.4	92.0	5.8529 ug/L	5.8529 ppb	15:30:48
2	Sc Radial	3576.7	3576.7	95.8 %		15:29:00
2	Y RADIAL	4135.3	4135.3	97.34 %		15:28:40
2	Al 396.153Radial†	-131.8	2.2	2.0871 ug/L	2.0871 ppb	15:28:40
2	Ca 317.933Radial†	23.4	10.5	23.196 ug/L	23.196 ppb	15:29:00
2	Fe 238.204 Radial†	9.5	-0.4	-7.2046 ug/L	-7.2046 ppb	15:29:00
2	K 766.490 Radial†	3055.1	183.3	35.801 ug/L	35.801 ppb	15:28:40
2	Mg 279.077 IEC†	2.2	-0.2	-11.185 ug/L	-11.185 ppb	15:29:00
2	Na 589.592 Radial†	-908.8	85.3	30.855 ug/L	30.855 ppb	15:28:40
2	Sr 421.552†	17.6	-11.6	-0.0890 ug/L	-0.0890 ppb	15:28:40
2	Sc 361.383	876662.7	876662.7	93.018 %		15:29:57
2	Y 371.029	763655.2	763655.2	95.621 %		15:29:57
2	Ag 328.068†	347.8	4.2	0.0221 ug/L	0.0221 ppb	15:29:57
2	As 188.979†	-28.2	-3.9	-1.5371 ug/L	-1.5371 ppb	15:30:17
2	B 249.677†	-453.7	246.3	5.4792 ug/L	5.4792 ppb	15:30:17
2	Ba 233.527†	11.5	-2.7	-0.0224 ug/L	-0.0224 ppb	15:30:17
2	Be 313.107†	-3646.7	-90.2	-0.0311 ug/L	-0.0311 ppb	15:29:57
2	Cd 226.502†	-202.2	-35.4	-0.3676 ug/L	-0.3676 ppb	15:30:17
2	Co 228.616†	-82.1	-23.7	-0.4539 ug/L	-0.4539 ppb	15:30:17
2	Cr 267.716†	91.0	28.9	0.2952 ug/L	0.2952 ppb	15:30:17
2	Cu 324.752†	6139.3	322.8	0.9254 ug/L	0.9254 ppb	15:29:57
2	Mn 257.610†	505.3	61.8	0.0642 ug/L	0.0642 ppb	15:30:17
2	Mo 202.031†	12.7	1.6	0.1097 ug/L	0.1097 ppb	15:30:17
2	Ni 231.604†	50.6	-21.1	-0.4810 ug/L	-0.4810 ppb	15:30:17

2	P 214.914†	211.6	16.9	8.8670 ug/L	8.8670 ppb	15:30:17
2	Pb 220.353†	-50.2	-58.9	-6.4724 ug/L	-6.4724 ppb	15:30:17
2	S 181.975 Axial†	52.3	14.7	18.629 ug/L	18.629 ppb	15:30:17
2	Sb 206.836†	34.6	5.5	1.7911 ug/L	1.7911 ppb	15:30:17
2	Se 196.026†	-33.3	-10.4	-6.1413 ug/L	-6.1413 ppb	15:30:17
2	Si 251.611†	608.5	46.6	1.3808 ug/L	1.3808 ppb	15:30:17
2	Sn 189.927†	27.8	13.6	2.1750 ug/L	2.1750 ppb	15:30:17
2	Ti 334.940†	-1753.6	-238.9	-0.3402 ug/L	-0.3402 ppb	15:29:57
2	Tl 190.801†	-35.6	-1.6	-0.4593 ug/L	-0.4593 ppb	15:30:17
2	U 409.014†	-3583.6	-550.7	-14.474 ug/L	-14.474 ppb	15:29:57
2	V 292.402†	-1710.2	-199.5	-1.2920 ug/L	-1.2920 ppb	15:29:57
2	Zn 213.857†	719.1	119.5	1.0878 ug/L	1.0878 ppb	15:30:17
2	SiO2†	604.7	36.1	2.3005 ug/L	2.3005 ppb	15:30:53
3	Sc Radial	3558.6	3558.6	95.3 %		15:29:25
3	Y RADIAL	4199.2	4199.2	98.84 %		15:29:05
3	Al 396.153Radial†	-123.0	10.8	10.150 ug/L	10.150 ppb	15:29:05
3	Ca 317.933Radial†	27.3	14.7	32.439 ug/L	32.439 ppb	15:29:25
3	Fe 238.204 Radial†	12.2	2.4	43.029 ug/L	43.029 ppb	15:29:25
3	K 766.490 Radial†	2960.6	100.3	19.578 ug/L	19.578 ppb	15:29:05
3	Mg 279.077 IEC†	-0.0	-2.5	-134.88 ug/L	-134.88 ppb	15:29:25
3	Na 589.592 Radial†	-924.7	63.9	23.096 ug/L	23.096 ppb	15:29:05
3	Sr 421.552†	18.4	-10.7	-0.0821 ug/L	-0.0821 ppb	15:29:05
3	Sc 361.383	883463.6	883463.6	93.740 %		15:30:22
3	Y 371.029	771858.0	771858.0	96.648 %		15:30:22
3	Ag 328.068†	302.4	-47.1	-0.1805 ug/L	-0.1805 ppb	15:30:22
3	As 188.979†	-33.9	-9.8	-3.8787 ug/L	-3.8787 ppb	15:30:42
3	B 249.677†	-516.0	183.6	4.0767 ug/L	4.0767 ppb	15:30:42
3	Ba 233.527†	13.4	-0.8	-0.0062 ug/L	-0.0062 ppb	15:30:42
3	Be 313.107†	-3717.9	-135.9	-0.0462 ug/L	-0.0462 ppb	15:30:22
3	Cd 226.502†	-211.1	-43.2	-0.4529 ug/L	-0.4529 ppb	15:30:42
3	Co 228.616†	-84.0	-25.1	-0.4826 ug/L	-0.4826 ppb	15:30:42
3	Cr 267.716†	94.6	32.0	0.3313 ug/L	0.3313 ppb	15:30:42
3	Cu 324.752†	6245.2	384.9	1.1039 ug/L	1.1039 ppb	15:30:22
3	Mn 257.610†	507.7	60.1	0.0725 ug/L	0.0725 ppb	15:30:42
3	Mo 202.031†	5.6	-6.1	-0.4017 ug/L	-0.4017 ppb	15:30:42
3	Ni 231.604†	79.8	9.6	0.2184 ug/L	0.2184 ppb	15:30:42
3	P 214.914†	222.1	26.3	13.804 ug/L	13.804 ppb	15:30:42
3	Pb 220.353†	-54.6	-63.3	-6.9539 ug/L	-6.9539 ppb	15:30:42
3	S 181.975 Axial†	44.4	5.9	7.4370 ug/L	7.4370 ppb	15:30:42
3	Sb 206.836†	47.0	18.5	5.8950 ug/L	5.8950 ppb	15:30:42
3	Se 196.026†	-26.5	-2.9	-1.5526 ug/L	-1.5526 ppb	15:30:42
3	Si 251.611†	607.0	39.9	1.1886 ug/L	1.1886 ppb	15:30:42
3	Sn 189.927†	21.4	6.5	1.0408 ug/L	1.0408 ppb	15:30:42
3	Ti 334.940†	-1693.0	-159.8	-0.2135 ug/L	-0.2135 ppb	15:30:22
3	Tl 190.801†	-32.6	1.9	0.5474 ug/L	0.5474 ppb	15:30:42
3	U 409.014†	-3560.5	-496.5	-13.054 ug/L	-13.054 ppb	15:30:22
3	V 292.402†	-1636.3	-106.6	-0.7162 ug/L	-0.7162 ppb	15:30:22
3	Zn 213.857†	733.7	129.1	1.1631 ug/L	1.1631 ppb	15:30:42
3	SiO2†	611.5	38.3	2.4540 ug/L	2.4540 ppb	15:30:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	881916.4	93.575 %		0.4962			0.53%
Sc Radial	3578.9	95.8 %		0.57			0.60%
Y 371.029	770173.2	96.437 %		0.7338			0.76%
Y RADIAL	4120.8	96.99 %		2.038			2.10%
Ag 328.068†	-8.8	-0.0233 ug/L		0.14013	-0.0233 ppb	0.14013	602.19%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	8.0	7.5289 ug/L		4.71379	7.5289 ppb	4.71379	62.61%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.0	-1.1995 ug/L		2.86297	-1.1995 ppb	2.86297	238.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	221.0	4.9109 ug/L		0.73814	4.9109 ppb	0.73814	15.03%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.6	0.0033 ug/L		0.03152	0.0033 ppb	0.03152	960.81%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-119.1	-0.0408 ug/L		0.00842	-0.0408 ppb	0.00842	20.63%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	12.2	27.027 ug/L		4.8199	27.027 ppb	4.8199	17.83%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-34.5	-0.3607 ug/L	0.09577	-0.3607 ppb	0.09577	26.55%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-19.2	-0.3680 ug/L	0.17423	-0.3680 ppb	0.17423	47.35%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	24.3	0.2516 ug/L	0.10831	0.2516 ppb	0.10831	43.05%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	369.4	1.0583 ug/L	0.11697	1.0583 ppb	0.11697	11.05%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.3	22.676 ug/L	26.4375	22.676 ppb	26.4375	116.59%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	146.4	28.595 ug/L	8.2615	28.595 ppb	8.2615	28.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.9	-47.103 ug/L	76.4307	-47.103 ppb	76.4307	162.26%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	61.1	0.0679 ug/L	0.00422	0.0679 ppb	0.00422	6.21%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	1.2	0.0794 ug/L	0.46673	0.0794 ppb	0.46673	587.74%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	72.7	26.294 ug/L	4.0551	26.294 ppb	4.0551	15.42%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-6.0	-0.1361 ug/L	0.34980	-0.1361 ppb	0.34980	257.03%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	17.8	9.2760 ug/L	4.33755	9.2760 ppb	4.33755	46.76%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-64.1	-7.0417 ug/L	0.61783	-7.0417 ppb	0.61783	8.77%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	9.3	11.710 ug/L	6.0463	11.710 ppb	6.0463	51.63%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	13.9	4.4213 ug/L	2.28336	4.4213 ppb	2.28336	51.64%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-5.7	-3.2578 ug/L	2.51100	-3.2578 ppb	2.51100	77.08%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	39.3	1.1642 ug/L	0.22979	1.1642 ppb	0.22979	19.74%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	4.2	0.6702 ug/L	1.72022	0.6702 ppb	1.72022	256.65%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-12.0	-0.0924 ug/L	0.01235	-0.0924 ppb	0.01235	13.37%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-234.2	-0.3307 ug/L	0.11279	-0.3307 ppb	0.11279	34.10%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.5	0.7334 ug/L	1.29578	0.7334 ppb	1.29578	176.68%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-483.1	-12.700 ug/L	1.9745	-12.700 ppb	1.9745	15.55%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-105.6	-0.6980 ug/L	0.60332	-0.6980 ppb	0.60332	86.44%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	117.7	1.0653 ug/L	0.11085	1.0653 ppb	0.11085	10.41%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		55.5	3.5358 ug/L	2.00814	3.5358 ppb	2.00814	56.79%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.



User canceled analysis.

## =====

## Analysis Begun

Start Time: 2/26/2010 15:55:36

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\022610.sif

Batch ID:

Results Data Set: 022610

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

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/26/2010 15:55:37

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

## -----

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3491.1	3491.1	93.5 %		15:57:49
1	Y RADIAL	3929.9	3929.9	92.50 %		15:57:29
1	Al 396.153Radial†	5117.1	5614.6	5256.5 ug/L	5256.5 ppb	15:57:29
1	Ca 317.933Radial†	2247.6	2390.8	5285.0 ug/L	5285.0 ppb	15:57:49
1	Fe 238.204 Radial†	280.4	289.6	5148.2 ug/L	5148.2 ppb	15:57:49
1	K 766.490 Radial†	27706.2	26635.4	5197.5 ug/L	5197.5 ppb	15:57:29
1	Mg 279.077 IEC†	93.9	98.0	5318.4 ug/L	5318.4 ppb	15:57:49
1	Na 589.592 Radial†	26575.7	29467.5	10655 ug/L	10655 ppb	15:57:29
1	Sr 421.552†	62860.1	67223.2	515.61 ug/L	515.61 ppb	15:57:29
1	Sc 361.383	905543.8	905543.8	96.082 %		15:58:46
1	Y 371.029	757628.9	757628.9	94.866 %		15:58:46
1	Ag 328.068†	107814.3	111840.4	480.59 ug/L	480.59 ppb	15:58:51
1	As 188.979†	1162.0	1235.8	494.67 ug/L	494.67 ppb	15:59:11
1	B 249.677†	19957.3	21505.1	475.99 ug/L	475.99 ppb	15:58:51
1	Ba 233.527†	64291.7	66897.9	484.48 ug/L	484.48 ppb	15:58:51
1	Be 313.107†	1363631.7	1423060.8	479.44 ug/L	479.44 ppb	15:58:46
1	Cd 226.502†	45507.4	47544.8	490.48 ug/L	490.48 ppb	15:58:51
1	Co 228.616†	24353.7	25411.2	487.36 ug/L	487.36 ppb	15:58:51
1	Cr 267.716†	46156.8	47969.8	485.45 ug/L	485.45 ppb	15:58:51
1	Cu 324.752†	165982.0	166472.2	473.27 ug/L	473.27 ppb	15:58:51
1	Mn 257.610†	445440.5	463120.8	483.21 ug/L	483.21 ppb	15:58:46
1	Mo 202.031†	6946.4	7217.6	483.16 ug/L	483.16 ppb	15:59:11
1	Ni 231.604†	20593.4	21357.5	486.48 ug/L	486.48 ppb	15:58:51
1	P 214.914†	4652.6	4631.6	2382.9 ug/L	2382.9 ppb	15:59:11
1	Pb 220.353†	4278.2	4447.6	490.21 ug/L	490.21 ppb	15:59:11
1	S 181.975 Axial†	790.0	780.7	985.01 ug/L	985.01 ppb	15:59:11
1	Sb 206.836†	1486.2	1515.2	499.74 ug/L	499.74 ppb	15:59:11
1	Se 196.026†	779.3	836.5	509.38 ug/L	509.38 ppb	15:59:11
1	Si 251.611†	78794.6	81399.7	2409.1 ug/L	2409.1 ppb	15:58:51
1	Sn 189.927†	2960.7	3065.1	488.34 ug/L	488.34 ppb	15:59:11
1	Ti 334.940†	309318.0	323576.0	474.69 ug/L	474.69 ppb	15:58:51
1	Tl 190.801†	1589.7	1691.2	497.09 ug/L	497.09 ppb	15:59:11
1	U 409.014†	14059.2	17934.3	469.67 ug/L	469.67 ppb	15:58:51
1	V 292.402†	71164.0	75704.6	487.11 ug/L	487.11 ppb	15:58:51
1	Zn 213.857†	51762.6	53219.5	478.75 ug/L	478.75 ppb	15:58:51
1	SiO2†	79262.1	81879.8	5208.2 ug/L	5208.2 ppb	16:00:19
2	Sc Radial	3465.8	3465.8	92.8 %		15:58:14
2	Y RADIAL	3982.5	3982.5	93.74 %		15:57:54
2	Al 396.153Radial†	5090.2	5625.5	5266.9 ug/L	5266.9 ppb	15:57:54
2	Ca 317.933Radial†	2230.5	2389.9	5283.1 ug/L	5283.1 ppb	15:58:14
2	Fe 238.204 Radial†	280.6	292.1	5191.3 ug/L	5191.3 ppb	15:58:14
2	K 766.490 Radial†	27778.9	26930.0	5255.0 ug/L	5255.0 ppb	15:57:54
2	Mg 279.077 IEC†	94.3	99.2	5381.6 ug/L	5381.6 ppb	15:58:14
2	Na 589.592 Radial†	26766.2	29880.0	10804 ug/L	10804 ppb	15:57:54
2	Sr 421.552†	63506.1	68409.9	524.71 ug/L	524.71 ppb	15:57:54
2	Sc 361.383	913369.2	913369.2	96.913 %		15:59:17

2	Y 371.029	763350.9	763350.9	95.583 %		15:59:17
2	Ag 328.068†	107925.8	110994.2	476.98 ug/L	476.98 ppb	15:59:22
2	As 188.979†	1167.0	1230.6	492.60 ug/L	492.60 ppb	15:59:42
2	B 249.677†	20023.1	21395.0	473.54 ug/L	473.54 ppb	15:59:22
2	Ba 233.527†	64675.2	66720.4	483.19 ug/L	483.19 ppb	15:59:22
2	Be 313.107†	1385329.7	1433290.5	482.87 ug/L	482.87 ppb	15:59:17
2	Cd 226.502†	45665.9	47302.6	487.97 ug/L	487.97 ppb	15:59:22
2	Co 228.616†	24415.4	25257.7	484.41 ug/L	484.41 ppb	15:59:22
2	Cr 267.716†	46309.8	47716.1	482.89 ug/L	482.89 ppb	15:59:22
2	Cu 324.752†	165943.5	164952.4	468.95 ug/L	468.95 ppb	15:59:22
2	Mn 257.610†	453138.6	467092.2	487.36 ug/L	487.36 ppb	15:59:17
2	Mo 202.031†	6976.3	7186.5	481.08 ug/L	481.08 ppb	15:59:42
2	Ni 231.604†	20684.0	21267.4	484.42 ug/L	484.42 ppb	15:59:22
2	P 214.914†	4670.3	4608.4	2371.3 ug/L	2371.3 ppb	15:59:42
2	Pb 220.353†	4280.5	4411.9	486.28 ug/L	486.28 ppb	15:59:42
2	S 181.975 Axial†	790.3	774.0	976.59 ug/L	976.59 ppb	15:59:42
2	Sb 206.836†	1500.8	1516.9	500.23 ug/L	500.23 ppb	15:59:42
2	Se 196.026†	784.2	834.6	508.40 ug/L	508.40 ppb	15:59:42
2	Si 251.611†	78936.1	80843.0	2392.6 ug/L	2392.6 ppb	15:59:22
2	Sn 189.927†	2975.7	3054.2	486.60 ug/L	486.60 ppb	15:59:42
2	Ti 334.940†	309936.4	321455.9	471.57 ug/L	471.57 ppb	15:59:22
2	Tl 190.801†	1575.9	1662.8	488.82 ug/L	488.82 ppb	15:59:42
2	U 409.014†	13975.0	17722.1	464.09 ug/L	464.09 ppb	15:59:22
2	V 292.402†	71198.1	75105.2	483.26 ug/L	483.26 ppb	15:59:22
2	Zn 213.857†	52003.9	53006.9	476.83 ug/L	476.83 ppb	15:59:22
2	SiO2†	80011.1	81946.0	5212.5 ug/L	5212.5 ppb	16:00:24
3	Sc Radial	3480.7	3480.7	93.2 %		15:58:39
3	Y RADIAL	3975.4	3975.4	93.57 %		15:58:19
3	Al 396.153Radial†	5039.4	5547.5	5193.4 ug/L	5193.4 ppb	15:58:19
3	Ca 317.933Radial†	2220.7	2369.0	5237.0 ug/L	5237.0 ppb	15:58:39
3	Fe 238.204 Radial†	280.1	290.2	5159.2 ug/L	5159.2 ppb	15:58:39
3	K 766.490 Radial†	27671.0	26686.3	5207.4 ug/L	5207.4 ppb	15:58:19
3	Mg 279.077 IEC†	91.3	95.5	5181.5 ug/L	5181.5 ppb	15:58:39
3	Na 589.592 Radial†	26537.1	29511.1	10671 ug/L	10671 ppb	15:58:19
3	Sr 421.552†	62956.3	67527.6	517.95 ug/L	517.95 ppb	15:58:19
3	Sc 361.383	901270.2	901270.2	95.629 %		15:59:48
3	Y 371.029	752768.3	752768.3	94.258 %		15:59:48
3	Ag 328.068†	108355.1	112938.0	485.30 ug/L	485.30 ppb	15:59:53
3	As 188.979†	1162.0	1241.6	497.00 ug/L	497.00 ppb	16:00:13
3	B 249.677†	20188.4	21845.2	483.53 ug/L	483.53 ppb	15:59:53
3	Ba 233.527†	64925.4	67877.9	491.57 ug/L	491.57 ppb	15:59:53
3	Be 313.107†	1364005.3	1430181.0	481.85 ug/L	481.85 ppb	15:59:48
3	Cd 226.502†	45912.5	48193.0	497.17 ug/L	497.17 ppb	15:59:53
3	Co 228.616†	24555.5	25742.4	493.70 ug/L	493.70 ppb	15:59:53
3	Cr 267.716†	46398.4	48450.3	490.31 ug/L	490.31 ppb	15:59:53
3	Cu 324.752†	166891.7	168242.5	478.30 ug/L	478.30 ppb	15:59:53
3	Mn 257.610†	447217.7	467177.5	487.45 ug/L	487.45 ppb	15:59:48
3	Mo 202.031†	6932.6	7237.5	484.49 ug/L	484.49 ppb	16:00:13
3	Ni 231.604†	20731.4	21603.5	492.08 ug/L	492.08 ppb	15:59:53
3	P 214.914†	4616.4	4616.8	2374.0 ug/L	2374.0 ppb	16:00:13
3	Pb 220.353†	4243.9	4432.9	488.58 ug/L	488.58 ppb	16:00:13
3	S 181.975 Axial†	783.2	777.5	981.06 ug/L	981.06 ppb	16:00:13
3	Sb 206.836†	1492.2	1528.7	504.11 ug/L	504.11 ppb	16:00:13
3	Se 196.026†	780.2	841.3	512.27 ug/L	512.27 ppb	16:00:13
3	Si 251.611†	79453.8	82477.9	2441.0 ug/L	2441.0 ppb	15:59:53
3	Sn 189.927†	2954.6	3073.4	489.65 ug/L	489.65 ppb	16:00:13
3	Ti 334.940†	311272.0	327145.9	479.93 ug/L	479.93 ppb	15:59:53
3	Tl 190.801†	1569.5	1677.9	493.25 ug/L	493.25 ppb	16:00:13
3	U 409.014†	13870.4	17806.2	466.29 ug/L	466.29 ppb	15:59:53
3	V 292.402†	71503.0	76410.2	491.59 ug/L	491.59 ppb	15:59:53
3	Zn 213.857†	52132.3	53861.5	484.54 ug/L	484.54 ppb	15:59:53
3	SiO2†	79429.0	82445.5	5244.3 ug/L	5244.3 ppb	16:00:29

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906727.8	96.208 %	0.6510			0.68%
Sc Radial	3479.2	93.1 %	0.34			0.37%
Y 371.029	757916.0	94.902 %	0.6633			0.70%
Y RADIAL	3962.6	93.27 %	0.671			0.72%

Ag	328.068†	111924.2	480.96 ug/L	4.173	480.96 ppb	4.173	0.87%
	QC value within limits for Ag 328.068 Recovery = 96.19%						
Al	396.153Radial†	5595.9	5238.9 ug/L	39.78	5238.9 ppb	39.78	0.76%
	QC value within limits for Al 396.153Radial Recovery = 104.78%						
As	188.979†	1236.0	494.76 ug/L	2.201	494.76 ppb	2.201	0.44%
	QC value within limits for As 188.979 Recovery = 98.95%						
B	249.677†	21581.8	477.69 ug/L	5.207	477.69 ppb	5.207	1.09%
	QC value within limits for B 249.677 Recovery = 95.54%						
Ba	233.527†	67165.4	486.41 ug/L	4.512	486.41 ppb	4.512	0.93%
	QC value within limits for Ba 233.527 Recovery = 97.28%						
Be	313.107†	1428844.1	481.39 ug/L	1.761	481.39 ppb	1.761	0.37%
	QC value within limits for Be 313.107 Recovery = 96.28%						
Ca	317.933Radial†	2383.2	5268.4 ug/L	27.17	5268.4 ppb	27.17	0.52%
	QC value within limits for Ca 317.933Radial Recovery = 105.37%						
Cd	226.502†	47680.2	491.87 ug/L	4.754	491.87 ppb	4.754	0.97%
	QC value within limits for Cd 226.502 Recovery = 98.37%						
Co	228.616†	25470.4	488.49 ug/L	4.745	488.49 ppb	4.745	0.97%
	QC value within limits for Co 228.616 Recovery = 97.70%						
Cr	267.716†	48045.4	486.22 ug/L	3.770	486.22 ppb	3.770	0.78%
	QC value within limits for Cr 267.716 Recovery = 97.24%						
Cu	324.752†	166555.7	473.51 ug/L	4.680	473.51 ppb	4.680	0.99%
	QC value within limits for Cu 324.752 Recovery = 94.70%						
Fe	238.204 Radial†	290.6	5166.2 ug/L	22.41	5166.2 ppb	22.41	0.43%
	QC value within limits for Fe 238.204 Radial Recovery = 103.32%						
K	766.490 Radial†	26750.5	5219.9 ug/L	30.73	5219.9 ppb	30.73	0.59%
	QC value within limits for K 766.490 Radial Recovery = 104.40%						
Mg	279.077 IEC†	97.6	5293.8 ug/L	102.30	5293.8 ppb	102.30	1.93%
	QC value within limits for Mg 279.077 IEC Recovery = 105.88%						
Mn	257.610†	465796.9	486.01 ug/L	2.419	486.01 ppb	2.419	0.50%
	QC value within limits for Mn 257.610 Recovery = 97.20%						
Mo	202.031†	7213.9	482.91 ug/L	1.718	482.91 ppb	1.718	0.36%
	QC value within limits for Mo 202.031 Recovery = 96.58%						
Na	589.592 Radial†	29619.5	10710 ug/L	82.0	10710 ppb	82.0	0.77%
	QC value within limits for Na 589.592 Radial Recovery = 107.10%						
Ni	231.604†	21409.4	487.66 ug/L	3.962	487.66 ppb	3.962	0.81%
	QC value within limits for Ni 231.604 Recovery = 97.53%						
P	214.914†	4619.0	2376.1 ug/L	6.08	2376.1 ppb	6.08	0.26%
	QC value within limits for P 214.914 Recovery = 95.04%						
Pb	220.353†	4430.8	488.36 ug/L	1.976	488.36 ppb	1.976	0.40%
	QC value within limits for Pb 220.353 Recovery = 97.67%						
S	181.975 Axial†	777.4	980.89 ug/L	4.214	980.89 ppb	4.214	0.43%
	QC value within limits for S 181.975 Axial Recovery = 98.09%						
Sb	206.836†	1520.3	501.36 ug/L	2.396	501.36 ppb	2.396	0.48%
	QC value within limits for Sb 206.836 Recovery = 100.27%						
Se	196.026†	837.5	510.02 ug/L	2.013	510.02 ppb	2.013	0.39%
	QC value within limits for Se 196.026 Recovery = 102.00%						
Si	251.611†	81573.5	2414.2 ug/L	24.64	2414.2 ppb	24.64	1.02%
	QC value within limits for Si 251.611 Recovery = 96.57%						
Sn	189.927†	3064.2	488.20 ug/L	1.527	488.20 ppb	1.527	0.31%
	QC value within limits for Sn 189.927 Recovery = 97.64%						
Sr	421.552†	67720.3	519.42 ug/L	4.728	519.42 ppb	4.728	0.91%
	QC value within limits for Sr 421.552 Recovery = 103.88%						
Ti	334.940†	324059.3	475.40 ug/L	4.223	475.40 ppb	4.223	0.89%
	QC value within limits for Ti 334.940 Recovery = 95.08%						
Tl	190.801†	1677.3	493.05 ug/L	4.142	493.05 ppb	4.142	0.84%
	QC value within limits for Tl 190.801 Recovery = 98.61%						
U	409.014†	17820.9	466.68 ug/L	2.809	466.68 ppb	2.809	0.60%
	QC value within limits for U 409.014 Recovery = 93.34%						
V	292.402†	75740.0	487.32 ug/L	4.168	487.32 ppb	4.168	0.86%
	QC value within limits for V 292.402 Recovery = 97.46%						
Zn	213.857†	53362.6	480.04 ug/L	4.011	480.04 ppb	4.011	0.84%
	QC value within limits for Zn 213.857 Recovery = 96.01%						
SiO2†		82090.4	5221.7 ug/L	19.69	5221.7 ppb	19.69	0.38%
	QC value within limits for SiO2 Recovery = 97.65%						
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 16:02:40

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	3627.9	3627.9	97.1 %		16:04:53
1	Y RADIAL	4132.0	4132.0	97.26 %		16:04:33
1	Al 396.153Radial†	-116.5	20.0	18.751 ug/L	18.751 ppb	16:04:33
1	Ca 317.933Radial†	28.3	15.2	33.504 ug/L	33.504 ppb	16:04:53
1	Fe 238.204 Radial†	11.3	1.3	23.277 ug/L	23.277 ppb	16:04:53
1	K 766.490 Radial†	3128.9	214.3	41.844 ug/L	41.844 ppb	16:04:33
1	Mg 279.077 IEC†	1.7	-0.7	-36.837 ug/L	-36.837 ppb	16:04:53
1	Na 589.592 Radial†	-882.2	126.1	45.602 ug/L	45.602 ppb	16:04:33
1	Sr 421.552†	35.7	6.8	0.0518 ug/L	0.0518 ppb	16:04:33
1	Sc 361.383	899549.3	899549.3	95.446 %		16:05:49
1	Y 371.029	764886.9	764886.9	95.775 %		16:05:49
1	Ag 328.068†	316.2	-38.4	-0.1433 ug/L	-0.1433 ppb	16:05:49
1	As 188.979†	-24.4	0.9	0.3552 ug/L	0.3552 ppb	16:06:09
1	B 249.677†	-499.8	210.4	4.6751 ug/L	4.6751 ppb	16:05:49
1	Ba 233.527†	16.9	2.6	0.0194 ug/L	0.0194 ppb	16:06:09
1	Be 313.107†	-3727.3	-74.9	-0.0259 ug/L	-0.0259 ppb	16:05:49
1	Cd 226.502†	-213.3	-41.5	-0.4338 ug/L	-0.4338 ppb	16:06:09
1	Co 228.616†	-67.1	-5.8	-0.1093 ug/L	-0.1093 ppb	16:06:09
1	Cr 267.716†	97.7	33.4	0.3462 ug/L	0.3462 ppb	16:05:49
1	Cu 324.752†	6149.4	165.4	0.4812 ug/L	0.4812 ppb	16:05:49
1	Mn 257.610†	534.1	78.1	0.0853 ug/L	0.0853 ppb	16:06:09
1	Mo 202.031†	20.0	8.9	0.5991 ug/L	0.5991 ppb	16:06:09
1	Ni 231.604†	82.9	11.4	0.2594 ug/L	0.2594 ppb	16:06:09
1	P 214.914†	209.5	8.9	4.6477 ug/L	4.6477 ppb	16:06:09
1	Pb 220.353†	-60.8	-68.7	-7.5428 ug/L	-7.5428 ppb	16:06:09
1	S 181.975 Axial†	42.3	2.8	3.5284 ug/L	3.5284 ppb	16:06:09
1	Sb 206.836†	44.8	15.3	4.8992 ug/L	4.8992 ppb	16:06:09
1	Se 196.026†	-20.0	4.5	2.7126 ug/L	2.7126 ppb	16:06:09
1	Si 251.611†	612.2	33.8	0.9945 ug/L	0.9945 ppb	16:06:09
1	Sn 189.927†	23.5	8.3	1.3261 ug/L	1.3261 ppb	16:06:09
1	Ti 334.940†	-1789.1	-228.1	-0.3196 ug/L	-0.3196 ppb	16:05:49
1	Tl 190.801†	-33.8	1.2	0.3558 ug/L	0.3558 ppb	16:06:09
1	U 409.014†	-3792.2	-671.3	-17.646 ug/L	-17.646 ppb	16:05:49
1	V 292.402†	-1575.7	-11.9	-0.1045 ug/L	-0.1045 ppb	16:05:49
1	Zn 213.857†	716.1	96.6	0.8719 ug/L	0.8719 ppb	16:06:09
1	SiO2†	622.3	38.0	2.4065 ug/L	2.4065 ppb	16:07:06
2	Sc Radial	3594.0	3594.0	96.2 %		16:05:18
2	Y RADIAL	4077.2	4077.2	95.97 %		16:04:58
2	Al 396.153Radial†	-135.6	-1.1	-0.9816 ug/L	-0.9816 ppb	16:04:58
2	Ca 317.933Radial†	23.8	10.8	23.863 ug/L	23.863 ppb	16:05:18
2	Fe 238.204 Radial†	11.0	1.1	19.626 ug/L	19.626 ppb	16:05:18
2	K 766.490 Radial†	3087.0	201.1	39.267 ug/L	39.267 ppb	16:04:58
2	Mg 279.077 IEC†	-0.4	-2.9	-157.09 ug/L	-157.09 ppb	16:05:18
2	Na 589.592 Radial†	-914.3	84.2	30.448 ug/L	30.448 ppb	16:04:58
2	Sr 421.552†	28.8	-0.1	-0.0007 ug/L	-0.0007 ppb	16:04:58
2	Sc 361.383	900799.6	900799.6	95.579 %		16:06:15
2	Y 371.029	764355.1	764355.1	95.709 %		16:06:15
2	Ag 328.068†	310.8	-44.5	-0.1731 ug/L	-0.1731 ppb	16:06:15
2	As 188.979†	-24.9	0.3	0.1405 ug/L	0.1405 ppb	16:06:35
2	B 249.677†	-448.9	264.4	5.8772 ug/L	5.8772 ppb	16:06:15
2	Ba 233.527†	4.0	-10.9	-0.0785 ug/L	-0.0785 ppb	16:06:35
2	Be 313.107†	-3668.4	-7.8	-0.0032 ug/L	-0.0032 ppb	16:06:15
2	Cd 226.502†	-206.0	-33.5	-0.3506 ug/L	-0.3506 ppb	16:06:35
2	Co 228.616†	-67.9	-6.5	-0.1247 ug/L	-0.1247 ppb	16:06:35
2	Cr 267.716†	100.5	36.2	0.3731 ug/L	0.3731 ppb	16:06:15
2	Cu 324.752†	6172.0	180.1	0.5215 ug/L	0.5215 ppb	16:06:15
2	Mn 257.610†	514.1	56.5	0.0672 ug/L	0.0672 ppb	16:06:35
2	Mo 202.031†	6.9	-4.9	-0.3228 ug/L	-0.3228 ppb	16:06:35
2	Ni 231.604†	72.2	-0.0	0.0000 ug/L	0.0000 ppb	16:06:35

2	P 214.914†	217.9	17.4	9.1707 ug/L	9.1707 ppb	16:06:35
2	Pb 220.353†	-52.6	-60.0	-6.6000 ug/L	-6.6000 ppb	16:06:35
2	S 181.975 Axial†	53.9	14.9	18.763 ug/L	18.763 ppb	16:06:35
2	Sb 206.836†	39.9	10.1	3.2025 ug/L	3.2025 ppb	16:06:35
2	Se 196.026†	-31.7	-7.8	-4.5133 ug/L	-4.5133 ppb	16:06:35
2	Si 251.611†	616.6	37.5	1.1166 ug/L	1.1166 ppb	16:06:35
2	Sn 189.927†	16.2	0.6	0.1055 ug/L	0.1055 ppb	16:06:35
2	Ti 334.940†	-1730.3	-164.0	-0.2181 ug/L	-0.2181 ppb	16:06:15
2	Tl 190.801†	-17.6	18.2	5.3231 ug/L	5.3231 ppb	16:06:35
2	U 409.014†	-3706.3	-575.9	-15.139 ug/L	-15.139 ppb	16:06:15
2	V 292.402†	-1610.6	-46.0	-0.3317 ug/L	-0.3317 ppb	16:06:15
2	Zn 213.857†	726.3	106.3	0.9616 ug/L	0.9616 ppb	16:06:35
2	SiO2†	619.5	34.1	2.1859 ug/L	2.1859 ppb	16:07:11
3	Sc Radial	3613.0	3613.0	96.7 %		16:05:43
3	Y RADIAL	4137.5	4137.5	97.39 %		16:05:23
3	Al 396.153Radial†	-133.9	1.5	1.3410 ug/L	1.3410 ppb	16:05:23
3	Ca 317.933Radial†	20.3	7.1	15.653 ug/L	15.653 ppb	16:05:43
3	Fe 238.204 Radial†	12.0	2.1	37.403 ug/L	37.403 ppb	16:05:43
3	K 766.490 Radial†	2996.8	91.0	17.755 ug/L	17.755 ppb	16:05:23
3	Mg 279.077 IEC†	0.1	-2.3	-124.96 ug/L	-124.96 ppb	16:05:43
3	Na 589.592 Radial†	-887.5	116.9	42.278 ug/L	42.278 ppb	16:05:23
3	Sr 421.552†	4.3	-25.5	-0.1959 ug/L	-0.1959 ppb	16:05:23
3	Sc 361.383	898568.5	898568.5	95.342 %		16:06:40
3	Y 371.029	763082.7	763082.7	95.549 %		16:06:40
3	Ag 328.068†	285.7	-70.1	-0.2824 ug/L	-0.2824 ppb	16:06:40
3	As 188.979†	-17.4	8.2	3.2540 ug/L	3.2540 ppb	16:07:00
3	B 249.677†	-469.5	241.6	5.3679 ug/L	5.3679 ppb	16:06:40
3	Ba 233.527†	20.3	6.2	0.0439 ug/L	0.0439 ppb	16:07:00
3	Be 313.107†	-3673.0	-22.2	-0.0082 ug/L	-0.0082 ppb	16:06:40
3	Cd 226.502†	-202.3	-30.2	-0.3172 ug/L	-0.3172 ppb	16:07:00
3	Co 228.616†	-69.0	-7.8	-0.1471 ug/L	-0.1471 ppb	16:07:00
3	Cr 267.716†	55.4	-10.8	-0.1024 ug/L	-0.1024 ppb	16:06:40
3	Cu 324.752†	6163.8	187.5	0.5418 ug/L	0.5418 ppb	16:06:40
3	Mn 257.610†	513.7	57.4	0.0686 ug/L	0.0686 ppb	16:07:00
3	Mo 202.031†	26.0	15.2	1.0189 ug/L	1.0189 ppb	16:07:00
3	Ni 231.604†	97.9	27.2	0.6191 ug/L	0.6191 ppb	16:07:00
3	P 214.914†	208.5	8.0	4.1549 ug/L	4.1549 ppb	16:07:00
3	Pb 220.353†	-67.3	-75.6	-8.3105 ug/L	-8.3105 ppb	16:07:00
3	S 181.975 Axial†	48.5	9.4	11.854 ug/L	11.854 ppb	16:07:00
3	Sb 206.836†	41.6	12.0	3.8240 ug/L	3.8240 ppb	16:07:00
3	Se 196.026†	-37.5	-13.9	-8.0753 ug/L	-8.0753 ppb	16:07:00
3	Si 251.611†	587.0	8.1	0.2278 ug/L	0.2278 ppb	16:07:00
3	Sn 189.927†	14.7	-0.8	-0.1314 ug/L	-0.1314 ppb	16:07:00
3	Ti 334.940†	-1795.2	-236.5	-0.3295 ug/L	-0.3295 ppb	16:06:40
3	Tl 190.801†	-40.6	-5.9	-1.7194 ug/L	-1.7194 ppb	16:07:00
3	U 409.014†	-3586.0	-459.3	-12.076 ug/L	-12.076 ppb	16:06:40
3	V 292.402†	-1721.3	-166.3	-1.0724 ug/L	-1.0724 ppb	16:06:40
3	Zn 213.857†	717.7	99.1	0.8897 ug/L	0.8897 ppb	16:07:00
3	SiO2†	650.9	68.7	4.3526 ug/L	4.3526 ppb	16:07:16

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	899639.1	95.456 %		0.1186				0.12%
Sc Radial	3611.6	96.7 %		0.45				0.47%
Y 371.029	764108.2	95.678 %		0.1161				0.12%
Y RADIAL	4115.6	96.87 %		0.785				0.81%
Ag 328.068†	-51.0	-0.1996 ug/L		0.07323	-0.1996 ppb		0.07323	36.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.8	6.3701 ug/L		10.78485	6.3701 ppb		10.78485	169.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	1.2499 ug/L		1.73892	1.2499 ppb		1.73892	139.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	238.8	5.3067 ug/L		0.60337	5.3067 ppb		0.60337	11.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.7	-0.0051 ug/L		0.06477	-0.0051 ppb		0.06477	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-35.0	-0.0125 ug/L		0.01195	-0.0125 ppb		0.01195	96.00%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.0	24.340 ug/L		8.9346	24.340 ppb		8.9346	36.71%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-35.1	-0.3672 ug/L	0.06007	-0.3672 ppb	0.06007	16.36%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-6.7	-0.1271 ug/L	0.01898	-0.1271 ppb	0.01898	14.94%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	19.6	0.2056 ug/L	0.26710	0.2056 ppb	0.26710	129.90%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	177.7	0.5148 ug/L	0.03087	0.5148 ppb	0.03087	6.00%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	1.5	26.769 ug/L	9.3891	26.769 ppb	9.3891	35.07%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	168.8	32.955 ug/L	13.2267	32.955 ppb	13.2267	40.14%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-2.0	-106.30 ug/L	62.261	-106.30 ppb	62.261	58.57%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	64.0	0.0737 ug/L	0.01004	0.0737 ppb	0.01004	13.63%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	6.4	0.4317 ug/L	0.68636	0.4317 ppb	0.68636	158.98%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	109.1	39.443 ug/L	7.9647	39.443 ppb	7.9647	20.19%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	12.8	0.2929 ug/L	0.31093	0.2929 ppb	0.31093	106.17%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	11.4	5.9911 ug/L	2.76464	5.9911 ppb	2.76464	46.15%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-68.1	-7.4844 ug/L	0.85674	-7.4844 ppb	0.85674	11.45%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	9.0	11.382 ug/L	7.6284	11.382 ppb	7.6284	67.02%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	12.4	3.9752 ug/L	0.85840	3.9752 ppb	0.85840	21.59%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-5.7	-3.2920 ug/L	5.49671	-3.2920 ppb	5.49671	166.97%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	26.5	0.7796 ug/L	0.48180	0.7796 ppb	0.48180	61.80%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.7	0.4334 ug/L	0.78211	0.4334 ppb	0.78211	180.45%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	-6.3	-0.0483 ug/L	0.13057	-0.0483 ppb	0.13057	270.55%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-209.6	-0.2891 ug/L	0.06163	-0.2891 ppb	0.06163	21.32%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	4.5	1.3198 ug/L	3.61886	1.3198 ppb	3.61886	274.19%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-568.8	-14.954 ug/L	2.7894	-14.954 ppb	2.7894	18.65%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-74.7	-0.5029 ug/L	0.50617	-0.5029 ppb	0.50617	100.65%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	100.7	0.9077 ug/L	0.04753	0.9077 ppb	0.04753	5.24%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		46.9	2.9817 ug/L	1.19240	2.9817 ppb	1.19240	39.99%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 3  
 Sample ID: 1202039897|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 38  
 Date Collected: 2/26/2010 16:09:26  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039897|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3622.1	3622.1	97.0 %		16:11:39
1	Y RADIAL	4238.3	4238.3	99.76 %		16:11:19
1	Al 396.153Radial†	-103.8	32.8	30.887 ug/L	30.887 ppb	16:11:19
1	Ca 317.933Radial†	24.8	11.6	25.603 ug/L	25.603 ppb	16:11:39
1	Fe 238.204 Radial†	13.6	3.7	65.700 ug/L	65.700 ppb	16:11:39
1	K 766.490 Radial†	2955.8	41.0	7.9838 ug/L	7.9838 ppb	16:11:19
1	Mg 279.077 IEC†	4.8	2.5	133.40 ug/L	133.40 ppb	16:11:39
1	Na 589.592 Radial†	-926.9	78.6	28.412 ug/L	28.412 ppb	16:11:19
1	Sr 421.552†	166.8	142.1	1.0898 ug/L	1.0898 ppb	16:11:19
1	Sc 361.383	936118.7	936118.7	99.327 %		16:12:35
1	Y 371.029	793138.1	793138.1	99.313 %		16:12:35
1	Ag 328.068†	297.5	-70.2	-0.2806 ug/L	-0.2806 ppb	16:12:40
1	As 188.979†	-31.9	-5.7	-2.2341 ug/L	-2.2341 ppb	16:13:00
1	B 249.677†	-525.0	205.4	4.5578 ug/L	4.5578 ppb	16:13:00
1	Ba 233.527†	13.2	-1.8	-0.0106 ug/L	-0.0106 ppb	16:13:00
1	Be 313.107†	-3848.1	-43.9	-0.0147 ug/L	-0.0147 ppb	16:12:40
1	Cd 226.502†	-210.8	-30.2	-0.3181 ug/L	-0.3181 ppb	16:13:00
1	Co 228.616†	-64.0	0.1	0.0012 ug/L	0.0012 ppb	16:13:00
1	Cr 267.716†	75.5	7.0	0.0770 ug/L	0.0770 ppb	16:13:00
1	Cu 324.752†	6373.1	138.9	0.3977 ug/L	0.3977 ppb	16:12:40
1	Mn 257.610†	488.3	10.2	0.0116 ug/L	0.0116 ppb	16:13:00
1	Mo 202.031†	9.6	-2.4	-0.1549 ug/L	-0.1549 ppb	16:13:00
1	Ni 231.604†	64.8	-10.3	-0.2339 ug/L	-0.2339 ppb	16:13:00
1	P 214.914†	211.4	2.2	1.0888 ug/L	1.0888 ppb	16:13:00
1	Pb 220.353†	-60.7	-66.1	-7.2641 ug/L	-7.2641 ppb	16:13:00
1	S 181.975 Axial†	41.1	-0.1	-0.1168 ug/L	-0.1168 ppb	16:13:00
1	Sb 206.836†	42.0	10.6	3.4179 ug/L	3.4179 ppb	16:13:00
1	Se 196.026†	-28.8	-3.5	-1.8774 ug/L	-1.8774 ppb	16:13:00
1	Si 251.611†	625.6	22.2	0.6617 ug/L	0.6617 ppb	16:13:00
1	Sn 189.927†	31.6	15.6	2.4800 ug/L	2.4800 ppb	16:13:00
1	Ti 334.940†	-1617.3	18.1	0.0184 ug/L	0.0184 ppb	16:12:40
1	Tl 190.801†	-25.7	10.9	3.1690 ug/L	3.1690 ppb	16:13:00
1	U 409.014†	-3226.5	53.4	1.3961 ug/L	1.3961 ppb	16:12:35
1	V 292.402†	-1606.5	21.6	0.1306 ug/L	0.1306 ppb	16:12:40
1	Zn 213.857†	821.7	173.7	1.5681 ug/L	1.5681 ppb	16:13:00
1	SiO2†	666.4	56.9	3.6340 ug/L	3.6340 ppb	16:14:06
2	Sc Radial	3657.3	3657.3	97.9 %		16:12:04
2	Y RADIAL	4165.0	4165.0	98.04 %		16:11:44
2	Al 396.153Radial†	-127.4	9.7	9.1196 ug/L	9.1196 ppb	16:11:44
2	Ca 317.933Radial†	19.8	6.2	13.775 ug/L	13.775 ppb	16:12:04
2	Fe 238.204 Radial†	11.0	0.9	15.312 ug/L	15.312 ppb	16:12:04
2	K 766.490 Radial†	3246.2	308.2	60.190 ug/L	60.190 ppb	16:11:44
2	Mg 279.077 IEC†	2.5	0.1	6.8458 ug/L	6.8458 ppb	16:12:04
2	Na 589.592 Radial†	-884.1	131.6	47.568 ug/L	47.568 ppb	16:11:44
2	Sr 421.552†	45.2	16.2	0.1245 ug/L	0.1245 ppb	16:11:44
2	Sc 361.383	948098.7	948098.7	100.60 %		16:13:06
2	Y 371.029	802766.0	802766.0	100.52 %		16:13:06
2	Ag 328.068†	249.5	-121.7	-0.5175 ug/L	-0.5175 ppb	16:13:11
2	As 188.979†	-23.6	2.9	1.1719 ug/L	1.1719 ppb	16:13:31
2	B 249.677†	-509.2	227.8	5.0643 ug/L	5.0643 ppb	16:13:31
2	Ba 233.527†	-5.6	-20.6	-0.1493 ug/L	-0.1493 ppb	16:13:31
2	Be 313.107†	-3813.9	39.0	0.0133 ug/L	0.0133 ppb	16:13:11
2	Cd 226.502†	-211.7	-28.5	-0.2947 ug/L	-0.2947 ppb	16:13:31
2	Co 228.616†	-70.2	-5.2	-0.0992 ug/L	-0.0992 ppb	16:13:31
2	Cr 267.716†	89.7	20.2	0.2045 ug/L	0.2045 ppb	16:13:31
2	Cu 324.752†	6216.1	-98.2	-0.2791 ug/L	-0.2791 ppb	16:13:11
2	Mn 257.610†	501.0	16.6	0.0185 ug/L	0.0185 ppb	16:13:31
2	Mo 202.031†	20.6	8.4	0.5657 ug/L	0.5657 ppb	16:13:31
2	Ni 231.604†	87.5	11.5	0.2623 ug/L	0.2623 ppb	16:13:31

2	P 214.914†	202.6	-9.2	-4.8948 ug/L	-4.8948 ppb	16:13:31
2	Pb 220.353†	-91.2	-95.6	-10.507 ug/L	-10.507 ppb	16:13:31
2	S 181.975 Axial†	42.9	1.1	1.3832 ug/L	1.3832 ppb	16:13:31
2	Sb 206.836†	44.1	12.1	3.8656 ug/L	3.8656 ppb	16:13:31
2	Se 196.026†	-38.4	-12.8	-7.4533 ug/L	-7.4533 ppb	16:13:31
2	Si 251.611†	595.9	-15.3	-0.4600 ug/L	-0.4600 ppb	16:13:31
2	Sn 189.927†	15.3	-1.0	-0.1638 ug/L	-0.1638 ppb	16:13:31
2	Ti 334.940†	-1608.8	47.1	0.0696 ug/L	0.0696 ppb	16:13:11
2	Tl 190.801†	-42.3	-5.4	-1.5644 ug/L	-1.5644 ppb	16:13:31
2	U 409.014†	-3262.2	59.0	1.5490 ug/L	1.5490 ppb	16:13:06
2	V 292.402†	-1697.1	-48.0	-0.2959 ug/L	-0.2959 ppb	16:13:11
2	Zn 213.857†	810.8	152.3	1.3798 ug/L	1.3798 ppb	16:13:31
2	SiO2†	604.4	-13.2	-0.8565 ug/L	-0.8565 ppb	16:14:11
3	Sc Radial	3686.5	3686.5	98.7 %		16:12:29
3	Y RADIAL	4156.2	4156.2	97.83 %		16:12:09
3	Al 396.153Radial†	-106.3	32.2	30.279 ug/L	30.279 ppb	16:12:09
3	Ca 317.933Radial†	18.1	4.4	9.7667 ug/L	9.7667 ppb	16:12:29
3	Fe 238.204 Radial†	10.6	0.4	6.3947 ug/L	6.3947 ppb	16:12:29
3	K 766.490 Radial†	2990.1	22.4	4.3615 ug/L	4.3615 ppb	16:12:09
3	Mg 279.077 IEC†	3.6	1.2	63.125 ug/L	63.125 ppb	16:12:29
3	Na 589.592 Radial†	-909.5	113.0	40.848 ug/L	40.848 ppb	16:12:09
3	Sr 421.552†	70.5	41.5	0.3181 ug/L	0.3181 ppb	16:12:09
3	Sc 361.383	941160.5	941160.5	99.862 %		16:13:36
3	Y 371.029	797251.9	797251.9	99.828 %		16:13:36
3	Ag 328.068†	267.1	-102.2	-0.4350 ug/L	-0.4350 ppb	16:13:41
3	As 188.979†	-17.0	9.4	3.7383 ug/L	3.7383 ppb	16:14:01
3	B 249.677†	-501.7	231.6	5.1496 ug/L	5.1496 ppb	16:14:01
3	Ba 233.527†	0.5	-14.6	-0.1063 ug/L	-0.1063 ppb	16:14:01
3	Be 313.107†	-3803.5	21.5	0.0072 ug/L	0.0072 ppb	16:13:41
3	Cd 226.502†	-197.7	-16.0	-0.1660 ug/L	-0.1660 ppb	16:14:01
3	Co 228.616†	-76.7	-12.3	-0.2374 ug/L	-0.2374 ppb	16:14:01
3	Cr 267.716†	91.0	22.2	0.2246 ug/L	0.2246 ppb	16:14:01
3	Cu 324.752†	6219.4	-49.3	-0.1387 ug/L	-0.1387 ppb	16:13:41
3	Mn 257.610†	452.6	-28.2	-0.0314 ug/L	-0.0314 ppb	16:14:01
3	Mo 202.031†	5.1	-7.0	-0.4642 ug/L	-0.4642 ppb	16:14:01
3	Ni 231.604†	73.5	-1.9	-0.0432 ug/L	-0.0432 ppb	16:14:01
3	P 214.914†	225.0	14.7	7.8564 ug/L	7.8564 ppb	16:14:01
3	Pb 220.353†	-49.0	-54.0	-5.9337 ug/L	-5.9337 ppb	16:14:01
3	S 181.975 Axial†	50.3	8.8	11.152 ug/L	11.152 ppb	16:14:01
3	Sb 206.836†	40.9	9.3	2.9149 ug/L	2.9149 ppb	16:14:01
3	Se 196.026†	-31.4	-6.0	-3.4961 ug/L	-3.4961 ppb	16:14:01
3	Si 251.611†	628.6	21.9	0.6546 ug/L	0.6546 ppb	16:14:01
3	Sn 189.927†	3.8	-12.4	-1.9777 ug/L	-1.9777 ppb	16:14:01
3	Ti 334.940†	-1644.5	-0.4	-0.0036 ug/L	-0.0036 ppb	16:13:41
3	Tl 190.801†	-31.7	4.9	1.4372 ug/L	1.4372 ppb	16:14:01
3	U 409.014†	-3377.6	-80.5	-2.1165 ug/L	-2.1165 ppb	16:13:36
3	V 292.402†	-1718.8	-82.1	-0.5318 ug/L	-0.5318 ppb	16:13:41
3	Zn 213.857†	821.1	168.6	1.5309 ug/L	1.5309 ppb	16:14:01
3	SiO2†	1535.9	924.1	58.940 ug/L	58.940 ppb	16:14:16

Mean Data: 1202039897|951818|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	941792.6	99.929 %		0.6382			0.64%
Sc Radial	3655.3	97.9 %		0.86			0.88%
Y 371.029	797718.7	99.886 %		0.6049			0.61%
Y RADIAL	4186.5	98.54 %		1.060			1.08%
Ag 328.068†	-98.0	-0.4110 ug/L		0.12027	-0.4110 ppb	0.12027	29.26%
Al 396.153Radial†	24.9	23.429 ug/L		12.3957	23.429 ppb	12.3957	52.91%
As 188.979†	2.2	0.8920 ug/L		2.99600	0.8920 ppb	2.99600	335.86%
B 249.677†	221.6	4.9239 ug/L		0.31994	4.9239 ppb	0.31994	6.50%
Ba 233.527†	-12.3	-0.0887 ug/L		0.07104	-0.0887 ppb	0.07104	80.06%
Be 313.107†	5.5	0.0019 ug/L		0.01472	0.0019 ppb	0.01472	762.16%
Ca 317.933Radial†	7.4	16.382 ug/L		8.2334	16.382 ppb	8.2334	50.26%
Cd 226.502†	-24.9	-0.2596 ug/L		0.08187	-0.2596 ppb	0.08187	31.53%
Co 228.616†	-5.8	-0.1118 ug/L		0.11980	-0.1118 ppb	0.11980	107.16%
Cr 267.716†	16.5	0.1687 ug/L		0.08004	0.1687 ppb	0.08004	47.44%
Cu 324.752†	-2.8	-0.0067 ug/L		0.35717	-0.0067 ppb	0.35717	>999.9%
Fe 238.204 Radial†	1.6	29.135 ug/L		31.9782	29.135 ppb	31.9782	109.76%
K 766.490 Radial†	123.9	24.178 ug/L		31.2394	24.178 ppb	31.2394	129.20%



Mg 279.077 IEC†	1.2	67.790 ug/L	63.4058	67.790 ppb	63.4058	93.53%
Mn 257.610†	-0.5	-0.0004 ug/L	0.02702	-0.0004 ppb	0.02702	>999.9%
Mo 202.031†	-0.3	-0.0178 ug/L	0.52844	-0.0178 ppb	0.52844	>999.9%
Na 589.592 Radial†	107.7	38.943 ug/L	9.7192	38.943 ppb	9.7192	24.96%
Ni 231.604†	-0.2	-0.0049 ug/L	0.25031	-0.0049 ppb	0.25031	>999.9%
P 214.914†	2.6	1.3501 ug/L	6.37960	1.3501 ppb	6.37960	472.52%
Pb 220.353†	-71.9	-7.9015 ug/L	2.35213	-7.9015 ppb	2.35213	29.77%
S 181.975 Axial†	3.3	4.1396 ug/L	6.11938	4.1396 ppb	6.11938	147.83%
Sb 206.836†	10.7	3.3995 ug/L	0.47564	3.3995 ppb	0.47564	13.99%
Se 196.026†	-7.4	-4.2756 ug/L	2.86852	-4.2756 ppb	2.86852	67.09%
Si 251.611†	9.6	0.2854 ug/L	0.64560	0.2854 ppb	0.64560	226.19%
Sn 189.927†	0.7	0.1128 ug/L	2.24170	0.1128 ppb	2.24170	>999.9%
Sr 421.552†	66.6	0.5108 ug/L	0.51069	0.5108 ppb	0.51069	99.98%
Ti 334.940†	21.6	0.0281 ug/L	0.03756	0.0281 ppb	0.03756	133.54%
Tl 190.801†	3.5	1.0139 ug/L	2.39489	1.0139 ppb	2.39489	236.20%
U 409.014†	10.6	0.2762 ug/L	2.07355	0.2762 ppb	2.07355	750.83%
V 292.402†	-36.2	-0.2324 ug/L	0.33574	-0.2324 ppb	0.33574	144.47%
Zn 213.857†	164.9	1.4929 ug/L	0.09973	1.4929 ppb	0.09973	6.68%
SiO2†	322.6	20.572 ug/L	33.3030	20.572 ppb	33.3030	161.88%

Sequence No.: 4  
 Sample ID: 1202039898|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 39  
 Date Collected: 2/26/2010 16:16:27  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039898|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3636.5	3636.5	97.4 %		16:18:39
1	Y RADIAL	4135.3	4135.3	97.34 %		16:18:19
1	Al 396.153Radial†	5452.8	5740.6	5374.2 ug/L	5374.2 ppb	16:18:19
1	Ca 317.933Radial†	2418.7	2470.4	5461.0 ug/L	5461.0 ppb	16:18:39
1	Fe 238.204 Radial†	310.2	308.2	5478.2 ug/L	5478.2 ppb	16:18:39
1	K 766.490 Radial†	29938.6	27743.4	5415.7 ug/L	5415.7 ppb	16:18:19
1	Mg 279.077 IEC†	103.2	103.5	5616.1 ug/L	5616.1 ppb	16:18:39
1	Na 589.592 Radial†	15311.9	16761.6	6060.8 ug/L	6060.8 ppb	16:18:19
1	Sr 421.552†	70379.3	72257.9	554.23 ug/L	554.23 ppb	16:18:19
1	Sc 361.383	919128.8	919128.8	97.524 %		16:19:38
1	Y 371.029	769356.6	769356.6	96.335 %		16:19:38
1	Ag 328.068†	101659.1	103870.5	446.73 ug/L	446.73 ppb	16:19:38
1	As 188.979†	1199.2	1256.1	503.05 ug/L	503.05 ppb	16:19:58
1	B 249.677†	20580.5	21837.0	483.32 ug/L	483.32 ppb	16:19:38
1	Ba 233.527†	68501.4	70225.6	508.57 ug/L	508.57 ppb	16:19:38
1	Be 313.107†	1409763.0	1449386.8	488.37 ug/L	488.37 ppb	16:19:38
1	Cd 226.502†	45899.5	47246.9	487.38 ug/L	487.38 ppb	16:19:58
1	Co 228.616†	24598.7	25287.8	484.95 ug/L	484.95 ppb	16:19:58
1	Cr 267.716†	48417.3	49577.7	501.74 ug/L	501.74 ppb	16:19:38
1	Cu 324.752†	178259.9	176508.5	501.80 ug/L	501.80 ppb	16:19:38
1	Mn 257.610†	471315.5	482800.7	503.76 ug/L	503.76 ppb	16:19:38
1	Mo 202.031†	7273.0	7445.7	498.44 ug/L	498.44 ppb	16:19:58
1	Ni 231.604†	21391.4	21859.0	497.91 ug/L	497.91 ppb	16:19:58
1	P 214.914†	1285.7	1107.7	494.08 ug/L	494.08 ppb	16:19:58
1	Pb 220.353†	4450.5	4558.5	502.41 ug/L	502.41 ppb	16:19:58
1	S 181.975 Axial†	3982.9	4042.5	5104.8 ug/L	5104.8 ppb	16:19:58
1	Sb 206.836†	1597.7	1606.6	529.53 ug/L	529.53 ppb	16:19:58
1	Se 196.026†	782.5	827.8	505.37 ug/L	505.37 ppb	16:19:58
1	Si 251.611†	161977.6	165482.6	4903.5 ug/L	4903.5 ppb	16:19:38
1	Sn 189.927†	3166.1	3230.2	514.62 ug/L	514.62 ppb	16:19:58
1	Ti 334.940†	337537.4	347753.7	510.15 ug/L	510.15 ppb	16:19:38
1	Tl 190.801†	1644.0	1722.4	506.57 ug/L	506.57 ppb	16:19:58
1	U 409.014†	15123.4	18809.2	492.59 ug/L	492.59 ppb	16:19:38
1	V 292.402†	75510.9	79067.2	508.63 ug/L	508.63 ppb	16:19:38
1	Zn 213.857†	54288.7	55013.4	494.88 ug/L	494.88 ppb	16:19:38
1	SiO2†	162530.1	166042.7	10575 ug/L	10575 ppb	16:20:59
2	Sc Radial	3616.6	3616.6	96.8 %		16:19:04
2	Y RADIAL	4094.2	4094.2	96.37 %		16:18:44
2	Al 396.153Radial†	5411.1	5728.3	5362.7 ug/L	5362.7 ppb	16:18:44
2	Ca 317.933Radial†	2411.6	2476.6	5474.8 ug/L	5474.8 ppb	16:19:04
2	Fe 238.204 Radial†	305.9	305.6	5430.9 ug/L	5430.9 ppb	16:19:04
2	K 766.490 Radial†	29666.2	27631.1	5393.7 ug/L	5393.7 ppb	16:18:44
2	Mg 279.077 IEC†	105.4	106.4	5773.4 ug/L	5773.4 ppb	16:19:04
2	Na 589.592 Radial†	15059.8	16587.7	5998.0 ug/L	5998.0 ppb	16:18:44
2	Sr 421.552†	69765.2	72021.2	552.41 ug/L	552.41 ppb	16:18:44
2	Sc 361.383	924072.6	924072.6	98.048 %		16:20:06
2	Y 371.029	773059.2	773059.2	96.798 %		16:20:06
2	Ag 328.068†	102247.9	103913.3	446.90 ug/L	446.90 ppb	16:20:06
2	As 188.979†	1206.0	1256.4	503.20 ug/L	503.20 ppb	16:20:26
2	B 249.677†	20644.3	21789.2	482.27 ug/L	482.27 ppb	16:20:06
2	Ba 233.527†	68972.4	70330.2	509.33 ug/L	509.33 ppb	16:20:06
2	Be 313.107†	1418318.6	1450378.8	488.71 ug/L	488.71 ppb	16:20:06
2	Cd 226.502†	46125.7	47225.8	487.17 ug/L	487.17 ppb	16:20:26
2	Co 228.616†	24736.8	25293.7	485.06 ug/L	485.06 ppb	16:20:26
2	Cr 267.716†	48779.5	49681.5	502.79 ug/L	502.79 ppb	16:20:06
2	Cu 324.752†	179080.3	176367.3	501.40 ug/L	501.40 ppb	16:20:06
2	Mn 257.610†	474341.6	483301.3	504.27 ug/L	504.27 ppb	16:20:06
2	Mo 202.031†	7290.8	7423.8	496.97 ug/L	496.97 ppb	16:20:26
2	Ni 231.604†	21528.6	21881.6	498.42 ug/L	498.42 ppb	16:20:26

2	P 214.914†	1283.0	1097.9	488.94 ug/L	488.94 ppb	16:20:26
2	Pb 220.353†	4471.0	4555.0	502.03 ug/L	502.03 ppb	16:20:26
2	S 181.975 Axial†	4006.2	4044.4	5107.2 ug/L	5107.2 ppb	16:20:26
2	Sb 206.836†	1607.1	1607.4	529.78 ug/L	529.78 ppb	16:20:26
2	Se 196.026†	796.9	838.2	511.34 ug/L	511.34 ppb	16:20:26
2	Si 251.611†	162988.6	165625.1	4907.8 ug/L	4907.8 ppb	16:20:06
2	Sn 189.927†	3199.2	3246.7	517.24 ug/L	517.24 ppb	16:20:26
2	Ti 334.940†	339552.1	347956.8	510.43 ug/L	510.43 ppb	16:20:06
2	Tl 190.801†	1656.5	1726.1	507.67 ug/L	507.67 ppb	16:20:26
2	U 409.014†	15269.0	18874.8	494.32 ug/L	494.32 ppb	16:20:06
2	V 292.402†	76196.0	79351.6	510.43 ug/L	510.43 ppb	16:20:06
2	Zn 213.857†	54715.6	55151.0	496.14 ug/L	496.14 ppb	16:20:06
2	SiO2†	162596.9	165219.2	10522 ug/L	10522 ppb	16:21:04
3	Sc Radial	3594.1	3594.1	96.2 %		16:19:30
3	Y RADIAL	4183.4	4183.4	98.47 %		16:19:10
3	Al 396.153Radial†	5500.6	5856.3	5483.1 ug/L	5483.1 ppb	16:19:10
3	Ca 317.933Radial†	2388.6	2468.4	5456.6 ug/L	5456.6 ppb	16:19:30
3	Fe 238.204 Radial†	306.2	307.9	5472.0 ug/L	5472.0 ppb	16:19:30
3	K 766.490 Radial†	30299.1	28481.1	5559.8 ug/L	5559.8 ppb	16:19:10
3	Mg 279.077 IEC†	101.6	103.1	5592.8 ug/L	5592.8 ppb	16:19:30
3	Na 589.592 Radial†	15404.9	17044.0	6162.9 ug/L	6162.9 ppb	16:19:10
3	Sr 421.552†	71443.4	74217.3	569.26 ug/L	569.26 ppb	16:19:10
3	Sc 361.383	928784.9	928784.9	98.548 %		16:20:33
3	Y 371.029	776160.9	776160.9	97.187 %		16:20:33
3	Ag 328.068†	103008.2	104155.7	447.95 ug/L	447.95 ppb	16:20:33
3	As 188.979†	1216.7	1261.1	505.05 ug/L	505.05 ppb	16:20:53
3	B 249.677†	20973.5	22016.5	487.31 ug/L	487.31 ppb	16:20:33
3	Ba 233.527†	69381.1	70387.9	509.75 ug/L	509.75 ppb	16:20:33
3	Be 313.107†	1425550.2	1450377.7	488.71 ug/L	488.71 ppb	16:20:33
3	Cd 226.502†	46358.8	47223.7	487.14 ug/L	487.14 ppb	16:20:53
3	Co 228.616†	24857.7	25288.4	484.96 ug/L	484.96 ppb	16:20:53
3	Cr 267.716†	49040.5	49693.8	502.92 ug/L	502.92 ppb	16:20:33
3	Cu 324.752†	180610.9	176993.8	503.18 ug/L	503.18 ppb	16:20:33
3	Mn 257.610†	477278.3	483826.8	504.83 ug/L	504.83 ppb	16:20:33
3	Mo 202.031†	7347.2	7443.4	498.28 ug/L	498.28 ppb	16:20:53
3	Ni 231.604†	21603.0	21845.7	497.60 ug/L	497.60 ppb	16:20:53
3	P 214.914†	1281.9	1090.2	484.45 ug/L	484.45 ppb	16:20:53
3	Pb 220.353†	4479.8	4540.8	500.49 ug/L	500.49 ppb	16:20:53
3	S 181.975 Axial†	4017.9	4035.6	5096.0 ug/L	5096.0 ppb	16:20:53
3	Sb 206.836†	1618.5	1610.7	530.83 ug/L	530.83 ppb	16:20:53
3	Se 196.026†	811.9	849.3	517.97 ug/L	517.97 ppb	16:20:53
3	Si 251.611†	163909.4	165716.1	4910.4 ug/L	4910.4 ppb	16:20:33
3	Sn 189.927†	3206.4	3237.4	515.76 ug/L	515.76 ppb	16:20:53
3	Ti 334.940†	341993.5	348677.2	511.50 ug/L	511.50 ppb	16:20:33
3	Tl 190.801†	1676.2	1737.6	511.04 ug/L	511.04 ppb	16:20:53
3	U 409.014†	15367.4	18895.6	494.86 ug/L	494.86 ppb	16:20:33
3	V 292.402†	76541.9	79308.3	510.16 ug/L	510.16 ppb	16:20:33
3	Zn 213.857†	54943.6	55099.3	495.66 ug/L	495.66 ppb	16:20:33
3	SiO2†	162485.9	164265.2	10461 ug/L	10461 ppb	16:21:09

Mean Data: 1202039898|951818|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	923995.4	98.040	%	0.5123			0.52%
Sc Radial	3615.7	96.8	%	0.57			0.59%
Y 371.029	772858.9	96.773	%	0.4266			0.44%
Y RADIAL	4137.7	97.39	%	1.050			1.08%
Ag 328.068†	103979.8	447.19	ug/L	0.660	447.19 ppb	0.660	0.15%
Al 396.153Radial†	5775.0	5406.7	ug/L	66.41	5406.7 ppb	66.41	1.23%
As 188.979†	1257.9	503.77	ug/L	1.114	503.77 ppb	1.114	0.22%
B 249.677†	21880.9	484.30	ug/L	2.662	484.30 ppb	2.662	0.55%
Ba 233.527†	70314.5	509.22	ug/L	0.596	509.22 ppb	0.596	0.12%
Be 313.107†	1450047.7	488.60	ug/L	0.194	488.60 ppb	0.194	0.04%
Ca 317.933Radial†	2471.8	5464.1	ug/L	9.49	5464.1 ppb	9.49	0.17%
Cd 226.502†	47232.1	487.23	ug/L	0.131	487.23 ppb	0.131	0.03%
Co 228.616†	25290.0	484.99	ug/L	0.061	484.99 ppb	0.061	0.01%
Cr 267.716†	49651.0	502.48	ug/L	0.644	502.48 ppb	0.644	0.13%
Cu 324.752†	176623.2	502.13	ug/L	0.935	502.13 ppb	0.935	0.19%
Fe 238.204 Radial†	307.2	5460.4	ug/L	25.70	5460.4 ppb	25.70	0.47%
K 766.490 Radial†	27951.9	5456.4	ug/L	90.19	5456.4 ppb	90.19	1.65%

Mg 279.077 IEC†	104.3	5660.8 ug/L	98.19	5660.8 ppb	98.19	1.73%
Mn 257.610†	483309.6	504.28 ug/L	0.535	504.28 ppb	0.535	0.11%
Mo 202.031†	7437.6	497.90 ug/L	0.804	497.90 ppb	0.804	0.16%
Na 589.592 Radial†	16797.8	6073.9 ug/L	83.26	6073.9 ppb	83.26	1.37%
Ni 231.604†	21862.1	497.98 ug/L	0.414	497.98 ppb	0.414	0.08%
P 214.914†	1098.6	489.16 ug/L	4.820	489.16 ppb	4.820	0.99%
Pb 220.353†	4551.5	501.64 ug/L	1.016	501.64 ppb	1.016	0.20%
S 181.975 Axial†	4040.8	5102.7 ug/L	5.89	5102.7 ppb	5.89	0.12%
Sb 206.836†	1608.3	530.05 ug/L	0.692	530.05 ppb	0.692	0.13%
Se 196.026†	838.4	511.56 ug/L	6.305	511.56 ppb	6.305	1.23%
Si 251.611†	165607.9	4907.2 ug/L	3.49	4907.2 ppb	3.49	0.07%
Sn 189.927†	3238.1	515.88 ug/L	1.315	515.88 ppb	1.315	0.25%
Sr 421.552†	72832.1	558.63 ug/L	9.247	558.63 ppb	9.247	1.66%
Ti 334.940†	348129.2	510.69 ug/L	0.714	510.69 ppb	0.714	0.14%
Tl 190.801†	1728.7	508.43 ug/L	2.325	508.43 ppb	2.325	0.46%
U 409.014†	18859.9	493.92 ug/L	1.184	493.92 ppb	1.184	0.24%
V 292.402†	79242.4	509.74 ug/L	0.970	509.74 ppb	0.970	0.19%
Zn 213.857†	55087.9	495.56 ug/L	0.633	495.56 ppb	0.633	0.13%
SiO2†	165175.7	10519 ug/L	56.7	10519 ppb	56.7	0.54%

Sequence No.: 5  
 Sample ID: 246555001|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 40  
 Date Collected: 2/26/2010 16:23:20  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 246555001|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3698.1	3698.1	99.0 %		16:25:32
1	Y RADIAL	4261.0	4261.0	100.3 %		16:25:12
1	Al 396.153Radial†	-126.7	12.0	11.224 ug/L	11.224 ppb	16:25:12
1	Ca 317.933Radial†	49.3	35.9	79.253 ug/L	79.253 ppb	16:25:32
1	Fe 238.204 Radial†	9.8	-0.5	-8.6670 ug/L	-8.6670 ppb	16:25:32
1	K 766.490 Radial†	4119.2	1153.3	225.22 ug/L	225.22 ppb	16:25:12
1	Mg 279.077 IEC†	3.1	0.6	34.329 ug/L	34.329 ppb	16:25:32
1	Na 589.592 Radial†	-385.1	645.5	233.39 ug/L	233.39 ppb	16:25:12
1	Sr 421.552†	101.6	72.7	0.5567 ug/L	0.5567 ppb	16:25:12
1	Sc 361.383	952122.5	952122.5	101.02 %		16:26:29
1	Y 371.029	804700.2	804700.2	100.76 %		16:26:29
1	Ag 328.068†	311.2	-61.7	-0.2653 ug/L	-0.2653 ppb	16:26:34
1	As 188.979†	-24.1	2.6	1.0209 ug/L	1.0209 ppb	16:26:54
1	B 249.677†	665.8	1393.1	30.981 ug/L	30.981 ppb	16:26:34
1	Ba 233.527†	60.2	44.5	0.3218 ug/L	0.3218 ppb	16:26:54
1	Be 313.107†	-3750.4	117.9	0.0400 ug/L	0.0400 ppb	16:26:34
1	Cd 226.502†	-192.9	-8.9	-0.0909 ug/L	-0.0909 ppb	16:26:54
1	Co 228.616†	-76.6	-11.3	-0.2152 ug/L	-0.2152 ppb	16:26:54
1	Cr 267.716†	121.6	51.4	0.5189 ug/L	0.5189 ppb	16:26:34
1	Cu 324.752†	7431.2	1078.5	3.0659 ug/L	3.0659 ppb	16:26:34
1	Mn 257.610†	790.8	301.3	0.3119 ug/L	0.3119 ppb	16:26:54
1	Mo 202.031†	19.5	7.3	0.4866 ug/L	0.4866 ppb	16:26:54
1	Ni 231.604†	82.3	6.0	0.1365 ug/L	0.1365 ppb	16:26:54
1	P 214.914†	225.2	12.3	5.9447 ug/L	5.9447 ppb	16:26:54
1	Pb 220.353†	-58.5	-62.9	-6.9030 ug/L	-6.9030 ppb	16:26:54
1	S 181.975 Axial†	60.3	18.2	22.939 ug/L	22.939 ppb	16:26:54
1	Sb 206.836†	51.7	19.5	6.1872 ug/L	6.1872 ppb	16:26:54
1	Se 196.026†	-25.4	0.3	0.1275 ug/L	0.1275 ppb	16:26:54
1	Si 251.611†	49913.7	48799.8	1447.8 ug/L	1447.8 ppb	16:26:34
1	Sn 189.927†	2.5	-13.8	-2.1793 ug/L	-2.1793 ppb	16:26:54
1	Ti 334.940†	-1541.0	120.9	0.1854 ug/L	0.1854 ppb	16:26:34
1	Tl 190.801†	-38.4	-1.3	-0.3796 ug/L	-0.3796 ppb	16:26:54
1	U 409.014†	-3359.1	-23.2	-0.6110 ug/L	-0.6110 ppb	16:26:29
1	V 292.402†	-1604.9	50.4	0.3271 ug/L	0.3271 ppb	16:26:34
1	Zn 213.857†	1183.6	518.0	4.6998 ug/L	4.6998 ppb	16:26:54
1	SiO2†	50104.6	48982.4	3123.5 ug/L	3123.5 ppb	16:28:00
2	Sc Radial	3695.0	3695.0	98.9 %		16:25:57
2	Y RADIAL	4164.0	4164.0	98.01 %		16:25:37
2	Al 396.153Radial†	-113.5	25.1	23.589 ug/L	23.589 ppb	16:25:37
2	Ca 317.933Radial†	56.4	43.0	95.114 ug/L	95.114 ppb	16:25:57
2	Fe 238.204 Radial†	14.8	4.6	82.267 ug/L	82.267 ppb	16:25:57
2	K 766.490 Radial†	3940.5	976.2	190.62 ug/L	190.62 ppb	16:25:37
2	Mg 279.077 IEC†	5.0	2.6	141.30 ug/L	141.30 ppb	16:25:57
2	Na 589.592 Radial†	-450.2	579.3	209.49 ug/L	209.49 ppb	16:25:37
2	Sr 421.552†	87.7	58.7	0.4496 ug/L	0.4496 ppb	16:25:37
2	Sc 361.383	950817.8	950817.8	100.89 %		16:26:59
2	Y 371.029	803740.5	803740.5	100.64 %		16:26:59
2	Ag 328.068†	200.5	-171.0	-0.7087 ug/L	-0.7087 ppb	16:27:05
2	As 188.979†	-24.4	2.2	0.8904 ug/L	0.8904 ppb	16:27:25
2	B 249.677†	617.2	1345.8	29.914 ug/L	29.914 ppb	16:27:05
2	Ba 233.527†	41.0	25.5	0.1869 ug/L	0.1869 ppb	16:27:25
2	Be 313.107†	-3731.1	131.9	0.0448 ug/L	0.0448 ppb	16:27:05
2	Cd 226.502†	-204.2	-20.4	-0.2183 ug/L	-0.2183 ppb	16:27:25
2	Co 228.616†	-66.5	-1.4	-0.0266 ug/L	-0.0266 ppb	16:27:25
2	Cr 267.716†	94.3	24.5	0.2539 ug/L	0.2539 ppb	16:27:05
2	Cu 324.752†	7303.7	962.2	2.7378 ug/L	2.7378 ppb	16:27:05
2	Mn 257.610†	815.1	326.5	0.3428 ug/L	0.3428 ppb	16:27:25
2	Mo 202.031†	23.4	11.2	0.7564 ug/L	0.7564 ppb	16:27:25
2	Ni 231.604†	72.6	-3.5	-0.0805 ug/L	-0.0805 ppb	16:27:25

2	P 214.914†	230.4	17.7	8.8550 ug/L	8.8550 ppb	16:27:25
2	Pb 220.353†	-66.4	-70.8	-7.7779 ug/L	-7.7779 ppb	16:27:25
2	S 181.975 Axial†	66.5	24.5	30.883 ug/L	30.883 ppb	16:27:25
2	Sb 206.836†	47.8	15.7	5.0128 ug/L	5.0128 ppb	16:27:25
2	Se 196.026†	-23.8	1.9	1.3506 ug/L	1.3506 ppb	16:27:25
2	Si 251.611†	49236.4	48196.3	1429.9 ug/L	1429.9 ppb	16:27:05
2	Sn 189.927†	14.3	-2.1	-0.3233 ug/L	-0.3233 ppb	16:27:25
2	Ti 334.940†	-1529.5	130.2	0.1906 ug/L	0.1906 ppb	16:27:05
2	Tl 190.801†	-34.6	2.4	0.6930 ug/L	0.6930 ppb	16:27:25
2	U 409.014†	-3196.0	133.9	3.5091 ug/L	3.5091 ppb	16:26:59
2	V 292.402†	-1648.5	5.0	0.0398 ug/L	0.0398 ppb	16:27:05
2	Zn 213.857†	1188.8	524.8	4.7496 ug/L	4.7496 ppb	16:27:25
2	SiO2†	49215.4	48169.1	3071.7 ug/L	3071.7 ppb	16:28:05
3	Sc Radial	3707.2	3707.2	99.3 %		16:26:23
3	Y RADIAL	4125.7	4125.7	97.11 %		16:26:03
3	Al 396.153Radial†	-125.2	13.8	12.919 ug/L	12.919 ppb	16:26:03
3	Ca 317.933Radial†	53.6	40.1	88.596 ug/L	88.596 ppb	16:26:23
3	Fe 238.204 Radial†	12.7	2.5	44.200 ug/L	44.200 ppb	16:26:23
3	K 766.490 Radial†	3965.0	987.7	192.87 ug/L	192.87 ppb	16:26:03
3	Mg 279.077 IEC†	3.4	1.0	51.995 ug/L	51.995 ppb	16:26:23
3	Na 589.592 Radial†	-435.6	595.5	215.35 ug/L	215.35 ppb	16:26:03
3	Sr 421.552†	70.7	41.3	0.3163 ug/L	0.3163 ppb	16:26:03
3	Sc 361.383	935880.4	935880.4	99.301 %		16:27:30
3	Y 371.029	791586.0	791586.0	99.118 %		16:27:30
3	Ag 328.068†	280.8	-86.9	-0.3579 ug/L	-0.3579 ppb	16:27:35
3	As 188.979†	-16.7	9.6	3.8180 ug/L	3.8180 ppb	16:27:55
3	B 249.677†	576.0	1314.0	29.214 ug/L	29.214 ppb	16:27:35
3	Ba 233.527†	57.3	42.6	0.3094 ug/L	0.3094 ppb	16:27:55
3	Be 313.107†	-3767.0	36.8	0.0135 ug/L	0.0135 ppb	16:27:35
3	Cd 226.502†	-212.8	-32.3	-0.3379 ug/L	-0.3379 ppb	16:27:55
3	Co 228.616†	-75.7	-11.7	-0.2243 ug/L	-0.2243 ppb	16:27:55
3	Cr 267.716†	135.3	67.3	0.6842 ug/L	0.6842 ppb	16:27:35
3	Cu 324.752†	7468.6	1243.8	3.5389 ug/L	3.5389 ppb	16:27:35
3	Mn 257.610†	798.0	322.2	0.3382 ug/L	0.3382 ppb	16:27:55
3	Mo 202.031†	21.7	9.8	0.6617 ug/L	0.6617 ppb	16:27:55
3	Ni 231.604†	103.0	28.2	0.6434 ug/L	0.6434 ppb	16:27:55
3	P 214.914†	219.1	10.0	4.6003 ug/L	4.6003 ppb	16:27:55
3	Pb 220.353†	-65.7	-71.2	-7.8218 ug/L	-7.8218 ppb	16:27:55
3	S 181.975 Axial†	69.1	28.0	35.420 ug/L	35.420 ppb	16:27:55
3	Sb 206.836†	42.4	11.0	3.5119 ug/L	3.5119 ppb	16:27:55
3	Se 196.026†	-27.7	-2.5	-1.3384 ug/L	-1.3384 ppb	16:27:55
3	Si 251.611†	50385.0	50131.9	1487.3 ug/L	1487.3 ppb	16:27:35
3	Sn 189.927†	12.4	-3.8	-0.5868 ug/L	-0.5868 ppb	16:27:55
3	Ti 334.940†	-1300.3	336.9	0.5022 ug/L	0.5022 ppb	16:27:35
3	Tl 190.801†	-30.7	5.7	1.6749 ug/L	1.6749 ppb	16:27:55
3	U 409.014†	-3320.7	-42.3	-1.1173 ug/L	-1.1173 ppb	16:27:30
3	V 292.402†	-1625.1	2.5	0.0168 ug/L	0.0168 ppb	16:27:35
3	Zn 213.857†	1168.1	522.7	4.7305 ug/L	4.7305 ppb	16:27:55
3	SiO2†	50267.1	50006.8	3188.8 ug/L	3188.8 ppb	16:28:10

Mean Data: 246555001|951818|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	946273.6	100.40 %	0.958			0.95%
Sc Radial	3700.1	99.1 %	0.17			0.17%
Y 371.029	800008.9	100.17 %	0.915			0.91%
Y RADIAL	4183.6	98.47 %	1.642			1.67%
Ag 328.068†	-106.5	-0.4440 ug/L	0.23391	-0.4440 ppb	0.23391	52.69%
Al 396.153Radial†	17.0	15.910 ug/L	6.7032	15.910 ppb	6.7032	42.13%
As 188.979†	4.8	1.9098 ug/L	1.65390	1.9098 ppb	1.65390	86.60%
B 249.677†	1351.0	30.036 ug/L	0.8899	30.036 ppb	0.8899	2.96%
Ba 233.527†	37.5	0.2727 ug/L	0.07458	0.2727 ppb	0.07458	27.35%
Be 313.107†	95.5	0.0328 ug/L	0.01686	0.0328 ppb	0.01686	51.47%
Ca 317.933Radial†	39.7	87.654 ug/L	7.9721	87.654 ppb	7.9721	9.09%
Cd 226.502†	-20.5	-0.2157 ug/L	0.12353	-0.2157 ppb	0.12353	57.27%
Co 228.616†	-8.1	-0.1553 ug/L	0.11162	-0.1553 ppb	0.11162	71.85%
Cr 267.716†	47.7	0.4856 ug/L	0.21707	0.4856 ppb	0.21707	44.70%
Cu 324.752†	1094.8	3.1142 ug/L	0.40271	3.1142 ppb	0.40271	12.93%
Fe 238.204 Radial†	2.2	39.266 ug/L	45.6671	39.266 ppb	45.6671	116.30%
K 766.490 Radial†	1039.1	202.90 ug/L	19.359	202.90 ppb	19.359	9.54%

Mg 279.077 IEC†	1.4	75.875 ug/L	57.3451	75.875 ppb	57.3451	75.58%
Mn 257.610†	316.7	0.3310 ug/L	0.01668	0.3310 ppb	0.01668	5.04%
Mo 202.031†	9.4	0.6349 ug/L	0.13688	0.6349 ppb	0.13688	21.56%
Na 589.592 Radial†	606.8	219.41 ug/L	12.461	219.41 ppb	12.461	5.68%
Ni 231.604†	10.2	0.2331 ug/L	0.37150	0.2331 ppb	0.37150	159.34%
P 214.914†	13.3	6.4667 ug/L	2.17485	6.4667 ppb	2.17485	33.63%
Pb 220.353†	-68.3	-7.5009 ug/L	0.51822	-7.5009 ppb	0.51822	6.91%
S 181.975 Axial†	23.6	29.747 ug/L	6.3177	29.747 ppb	6.3177	21.24%
Sb 206.836†	15.4	4.9040 ug/L	1.34095	4.9040 ppb	1.34095	27.34%
Se 196.026†	-0.1	0.0466 ug/L	1.34632	0.0466 ppb	1.34632	>999.9%
Si 251.611†	49042.7	1455.0 ug/L	29.38	1455.0 ppb	29.38	2.02%
Sn 189.927†	-6.6	-1.0298 ug/L	1.00418	-1.0298 ppb	1.00418	97.51%
Sr 421.552†	57.6	0.4409 ug/L	0.12043	0.4409 ppb	0.12043	27.32%
Ti 334.940†	196.0	0.2928 ug/L	0.18144	0.2928 ppb	0.18144	61.98%
Tl 190.801†	2.3	0.6628 ug/L	1.02756	0.6628 ppb	1.02756	155.04%
U 409.014†	22.8	0.5936 ug/L	2.53750	0.5936 ppb	2.53750	427.47%
V 292.402†	19.3	0.1279 ug/L	0.17291	0.1279 ppb	0.17291	135.18%
Zn 213.857†	521.8	4.7266 ug/L	0.02511	4.7266 ppb	0.02511	0.53%
SiO2†	49052.7	3128.0 ug/L	58.72	3128.0 ppb	58.72	1.88%

Sequence No.: 6  
 Sample ID: 1202039899|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 41  
 Date Collected: 2/26/2010 16:30:21  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039899|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3641.6	3641.6	97.5 %		16:32:33
1	Y RADIAL	4313.1	4313.1	101.5 %		16:32:13
1	Al 396.153Radial†	-108.6	28.5	26.759 ug/L	26.759 ppb	16:32:13
1	Ca 317.933Radial†	46.7	34.0	75.146 ug/L	75.146 ppb	16:32:33
1	Fe 238.204 Radial†	11.5	1.5	26.276 ug/L	26.276 ppb	16:32:33
1	K 766.490 Radial†	3954.2	1048.6	204.78 ug/L	204.78 ppb	16:32:13
1	Mg 279.077 IEC†	-0.1	-2.6	-139.80 ug/L	-139.80 ppb	16:32:33
1	Na 589.592 Radial†	-501.1	520.5	188.20 ug/L	188.20 ppb	16:32:13
1	Sr 421.552†	136.9	110.4	0.8464 ug/L	0.8464 ppb	16:32:13
1	Sc 361.383	922146.7	922146.7	97.844 %		16:33:30
1	Y 371.029	781549.1	781549.1	97.861 %		16:33:30
1	Ag 328.068†	313.8	-49.0	-0.1973 ug/L	-0.1973 ppb	16:33:30
1	As 188.979†	-27.6	-1.8	-0.7080 ug/L	-0.7080 ppb	16:33:50
1	B 249.677†	525.8	1271.5	28.271 ug/L	28.271 ppb	16:33:30
1	Ba 233.527†	44.8	30.7	0.2220 ug/L	0.2220 ppb	16:33:50
1	Be 313.107†	-3761.6	-14.2	-0.0045 ug/L	-0.0045 ppb	16:33:30
1	Cd 226.502†	-207.0	-29.5	-0.3088 ug/L	-0.3088 ppb	16:33:50
1	Co 228.616†	-78.7	-16.0	-0.3065 ug/L	-0.3065 ppb	16:33:50
1	Cr 267.716†	97.0	30.1	0.3095 ug/L	0.3095 ppb	16:33:50
1	Cu 324.752†	7423.7	1309.9	3.7295 ug/L	3.7295 ppb	16:33:30
1	Mn 257.610†	709.5	243.7	0.2624 ug/L	0.2624 ppb	16:33:50
1	Mo 202.031†	12.6	0.8	0.0578 ug/L	0.0578 ppb	16:33:50
1	Ni 231.604†	91.6	18.1	0.4138 ug/L	0.4138 ppb	16:33:50
1	P 214.914†	230.7	25.1	12.679 ug/L	12.679 ppb	16:33:50
1	Pb 220.353†	-59.4	-65.7	-7.2166 ug/L	-7.2166 ppb	16:33:50
1	S 181.975 Axial†	62.2	22.1	27.859 ug/L	27.859 ppb	16:33:50
1	Sb 206.836†	50.9	20.4	6.4851 ug/L	6.4851 ppb	16:33:50
1	Se 196.026†	-14.5	10.6	6.3445 ug/L	6.3445 ppb	16:33:50
1	Si 251.611†	49762.2	50251.0	1490.9 ug/L	1490.9 ppb	16:33:30
1	Sn 189.927†	17.6	1.7	0.2829 ug/L	0.2829 ppb	16:33:50
1	Ti 334.940†	-1541.4	71.0	0.1289 ug/L	0.1289 ppb	16:33:30
1	Tl 190.801†	-43.1	-7.3	-2.1367 ug/L	-2.1367 ppb	16:33:50
1	U 409.014†	-3517.7	-293.3	-7.7129 ug/L	-7.7129 ppb	16:33:30
1	V 292.402†	-1661.8	-59.4	-0.3979 ug/L	-0.3979 ppb	16:33:30
1	Zn 213.857†	971.0	338.8	3.0648 ug/L	3.0648 ppb	16:33:50
1	SiO2†	50632.5	51134.1	3260.8 ug/L	3260.8 ppb	16:34:46
2	Sc Radial	3651.8	3651.8	97.8 %		16:32:59
2	Y RADIAL	4187.2	4187.2	98.56 %		16:32:38
2	Al 396.153Radial†	-137.7	-0.9	-0.9062 ug/L	-0.9062 ppb	16:32:38
2	Ca 317.933Radial†	44.4	31.4	69.432 ug/L	69.432 ppb	16:32:59
2	Fe 238.204 Radial†	11.5	1.4	24.377 ug/L	24.377 ppb	16:32:59
2	K 766.490 Radial†	3962.2	1045.5	204.17 ug/L	204.17 ppb	16:32:38
2	Mg 279.077 IEC†	3.2	0.9	46.322 ug/L	46.322 ppb	16:32:59
2	Na 589.592 Radial†	-498.4	524.6	189.70 ug/L	189.70 ppb	16:32:38
2	Sr 421.552†	68.8	40.4	0.3091 ug/L	0.3091 ppb	16:32:38
2	Sc 361.383	936920.8	936920.8	99.412 %		16:33:56
2	Y 371.029	794077.8	794077.8	99.430 %		16:33:56
2	Ag 328.068†	313.4	-54.5	-0.2235 ug/L	-0.2235 ppb	16:33:56
2	As 188.979†	-18.7	7.6	3.0108 ug/L	3.0108 ppb	16:34:16
2	B 249.677†	568.4	1305.8	29.034 ug/L	29.034 ppb	16:33:56
2	Ba 233.527†	31.3	16.4	0.1180 ug/L	0.1180 ppb	16:34:16
2	Be 313.107†	-3850.1	-42.7	-0.0140 ug/L	-0.0140 ppb	16:33:56
2	Cd 226.502†	-210.1	-29.4	-0.3062 ug/L	-0.3062 ppb	16:34:16
2	Co 228.616†	-68.5	-4.4	-0.0833 ug/L	-0.0833 ppb	16:34:16
2	Cr 267.716†	71.2	2.7	0.0311 ug/L	0.0311 ppb	16:34:16
2	Cu 324.752†	7436.8	1203.4	3.4254 ug/L	3.4254 ppb	16:33:56
2	Mn 257.610†	716.8	239.6	0.2504 ug/L	0.2504 ppb	16:34:16
2	Mo 202.031†	20.9	9.0	0.6031 ug/L	0.6031 ppb	16:34:16
2	Ni 231.604†	92.4	17.4	0.3968 ug/L	0.3968 ppb	16:34:16



2	P 214.914†	233.3	24.0	12.116 ug/L	12.116 ppb	16:34:16
2	Pb 220.353†	-63.5	-68.9	-7.5682 ug/L	-7.5682 ppb	16:34:16
2	S 181.975 Axial†	58.1	16.9	21.329 ug/L	21.329 ppb	16:34:16
2	Sb 206.836†	35.7	4.2	1.3298 ug/L	1.3298 ppb	16:34:16
2	Se 196.026†	-30.5	-5.3	-3.0328 ug/L	-3.0328 ppb	16:34:16
2	Si 251.611†	50806.3	50499.4	1498.2 ug/L	1498.2 ppb	16:33:56
2	Sn 189.927†	9.2	-7.0	-1.0971 ug/L	-1.0971 ppb	16:34:16
2	Ti 334.940†	-1543.4	93.8	0.1454 ug/L	0.1454 ppb	16:33:56
2	Tl 190.801†	-33.5	3.0	0.8679 ug/L	0.8679 ppb	16:34:16
2	U 409.014†	-3478.2	-196.9	-5.1780 ug/L	-5.1780 ppb	16:33:56
2	V 292.402†	-1698.5	-69.5	-0.4453 ug/L	-0.4453 ppb	16:33:56
2	Zn 213.857†	966.7	318.8	2.8838 ug/L	2.8838 ppb	16:34:16
2	SiO2†	49869.6	49550.8	3159.8 ug/L	3159.8 ppb	16:34:52
3	Sc Radial	3712.0	3712.0	99.4 %		16:33:24
3	Y RADIAL	4132.2	4132.2	97.26 %		16:33:04
3	Al 396.153Radial†	-124.5	14.6	13.741 ug/L	13.741 ppb	16:33:04
3	Ca 317.933Radial†	54.8	41.1	90.949 ug/L	90.949 ppb	16:33:24
3	Fe 238.204 Radial†	10.1	-0.2	-3.9757 ug/L	-3.9757 ppb	16:33:24
3	K 766.490 Radial†	3896.3	913.5	178.36 ug/L	178.36 ppb	16:33:04
3	Mg 279.077 IEC†	-1.6	-4.0	-219.34 ug/L	-219.34 ppb	16:33:24
3	Na 589.592 Radial†	-453.4	578.2	209.07 ug/L	209.07 ppb	16:33:04
3	Sr 421.552†	63.1	33.5	0.2566 ug/L	0.2566 ppb	16:33:04
3	Sc 361.383	919528.6	919528.6	97.566 %		16:34:21
3	Y 371.029	778932.0	778932.0	97.534 %		16:34:21
3	Ag 328.068†	159.1	-206.7	-0.8715 ug/L	-0.8715 ppb	16:34:21
3	As 188.979†	-19.1	6.9	2.7291 ug/L	2.7291 ppb	16:34:41
3	B 249.677†	509.7	1256.4	27.940 ug/L	27.940 ppb	16:34:21
3	Ba 233.527†	41.1	27.0	0.1951 ug/L	0.1951 ppb	16:34:41
3	Be 313.107†	-3767.5	-31.2	-0.0106 ug/L	-0.0106 ppb	16:34:21
3	Cd 226.502†	-207.2	-30.4	-0.3161 ug/L	-0.3161 ppb	16:34:41
3	Co 228.616†	-68.2	-5.3	-0.1013 ug/L	-0.1013 ppb	16:34:41
3	Cr 267.716†	94.1	27.5	0.2835 ug/L	0.2835 ppb	16:34:41
3	Cu 324.752†	7510.0	1420.0	4.0454 ug/L	4.0454 ppb	16:34:21
3	Mn 257.610†	712.8	249.2	0.2684 ug/L	0.2684 ppb	16:34:41
3	Mo 202.031†	18.3	6.7	0.4472 ug/L	0.4472 ppb	16:34:41
3	Ni 231.604†	86.2	12.8	0.2921 ug/L	0.2921 ppb	16:34:41
3	P 214.914†	225.9	20.9	10.360 ug/L	10.360 ppb	16:34:41
3	Pb 220.353†	-71.3	-78.1	-8.5738 ug/L	-8.5738 ppb	16:34:41
3	S 181.975 Axial†	62.6	22.6	28.597 ug/L	28.597 ppb	16:34:41
3	Sb 206.836†	36.6	5.9	1.8654 ug/L	1.8654 ppb	16:34:41
3	Se 196.026†	-39.5	-15.1	-8.8949 ug/L	-8.8949 ppb	16:34:41
3	Si 251.611†	49557.7	50186.3	1489.0 ug/L	1489.0 ppb	16:34:21
3	Sn 189.927†	10.5	-5.5	-0.8615 ug/L	-0.8615 ppb	16:34:41
3	Ti 334.940†	-1631.5	-25.9	-0.0011 ug/L	-0.0011 ppb	16:34:21
3	Tl 190.801†	-34.8	1.1	0.3087 ug/L	0.3087 ppb	16:34:41
3	U 409.014†	-3802.8	-595.8	-15.659 ug/L	-15.659 ppb	16:34:21
3	V 292.402†	-1575.4	24.3	0.1272 ug/L	0.1272 ppb	16:34:21
3	Zn 213.857†	957.2	327.5	2.9671 ug/L	2.9671 ppb	16:34:41
3	SiO2†	49719.0	50345.2	3210.4 ug/L	3210.4 ppb	16:34:57

Mean Data: 1202039899|951818|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	926198.7	98.274	%	0.9950			1.01%
Sc Radial	3668.5	98.2	%	1.02			1.04%
Y 371.029	784853.0	98.275	%	1.0137			1.03%
Y RADIAL	4210.8	99.11	%	2.182			2.20%
Ag 328.068†	-103.4	-0.4308	ug/L	0.38192	-0.4308	ppb	0.38192 88.65%
Al 396.153Radial†	14.1	13.198	ug/L	13.8404	13.198	ppb	13.8404 104.87%
As 188.979†	4.2	1.6773	ug/L	2.07055	1.6773	ppb	2.07055 123.44%
B 249.677†	1277.9	28.415	ug/L	0.5611	28.415	ppb	0.5611 1.97%
Ba 233.527†	24.7	0.1784	ug/L	0.05402	0.1784	ppb	0.05402 30.29%
Be 313.107†	-29.4	-0.0097	ug/L	0.00481	-0.0097	ppb	0.00481 49.44%
Ca 317.933Radial†	35.5	78.509	ug/L	11.1459	78.509	ppb	11.1459 14.20%
Cd 226.502†	-29.8	-0.3104	ug/L	0.00511	-0.3104	ppb	0.00511 1.64%
Co 228.616†	-8.6	-0.1637	ug/L	0.12395	-0.1637	ppb	0.12395 75.72%
Cr 267.716†	20.1	0.2080	ug/L	0.15375	0.2080	ppb	0.15375 73.91%
Cu 324.752†	1311.1	3.7334	ug/L	0.31002	3.7334	ppb	0.31002 8.30%
Fe 238.204 Radial†	0.9	15.559	ug/L	16.9441	15.559	ppb	16.9441 108.90%
K 766.490 Radial†	1002.5	195.77	ug/L	15.077	195.77	ppb	15.077 7.70%

Mg 279.077 IEC†	-1.9	-104.27 ug/L	136.347	-104.27 ppb	136.347	130.76%
Mn 257.610†	244.2	0.2604 ug/L	0.00918	0.2604 ppb	0.00918	3.53%
Mo 202.031†	5.5	0.3694 ug/L	0.28087	0.3694 ppb	0.28087	76.04%
Na 589.592 Radial†	541.1	195.66 ug/L	11.638	195.66 ppb	11.638	5.95%
Ni 231.604†	16.1	0.3676 ug/L	0.06589	0.3676 ppb	0.06589	17.93%
P 214.914†	23.3	11.718 ug/L	1.2095	11.718 ppb	1.2095	10.32%
Pb 220.353†	-70.9	-7.7862 ug/L	0.70441	-7.7862 ppb	0.70441	9.05%
S 181.975 Axial†	20.5	25.928 ug/L	4.0006	25.928 ppb	4.0006	15.43%
Sb 206.836†	10.1	3.2268 ug/L	2.83449	3.2268 ppb	2.83449	87.84%
Se 196.026†	-3.2	-1.8611 ug/L	7.68696	-1.8611 ppb	7.68696	413.04%
Si 251.611†	50312.2	1492.7 ug/L	4.90	1492.7 ppb	4.90	0.33%
Sn 189.927†	-3.6	-0.5586 ug/L	0.73820	-0.5586 ppb	0.73820	132.15%
Sr 421.552†	61.4	0.4707 ug/L	0.32645	0.4707 ppb	0.32645	69.35%
Ti 334.940†	46.3	0.0911 ug/L	0.08024	0.0911 ppb	0.08024	88.09%
Tl 190.801†	-1.1	-0.3201 ug/L	1.59796	-0.3201 ppb	1.59796	499.29%
U 409.014†	-362.0	-9.5166 ug/L	5.46832	-9.5166 ppb	5.46832	57.46%
V 292.402†	-34.8	-0.2387 ug/L	0.31771	-0.2387 ppb	0.31771	133.12%
Zn 213.857†	328.4	2.9719 ug/L	0.09061	2.9719 ppb	0.09061	3.05%
SiO2†	50343.4	3210.3 ug/L	50.49	3210.3 ppb	50.49	1.57%

Sequence No.: 7  
 Sample ID: 1202039900|951818|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 42  
 Date Collected: 2/26/2010 16:37:07  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202039900|951818|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3617.7	3617.7	96.9 %		16:39:20
1	Y RADIAL	4150.1	4150.1	97.68 %		16:39:00
1	Al 396.153Radial†	5450.5	5767.2	5400.1 ug/L	5400.1 ppb	16:39:00
1	Ca 317.933Radial†	2414.0	2478.4	5478.8 ug/L	5478.8 ppb	16:39:20
1	Fe 238.204 Radial†	298.2	297.6	5288.5 ug/L	5288.5 ppb	16:39:20
1	K 766.490 Radial†	30425.9	28406.3	5545.2 ug/L	5545.2 ppb	16:39:00
1	Mg 279.077 IEC†	99.6	100.3	5444.6 ug/L	5444.6 ppb	16:39:20
1	Na 589.592 Radial†	15289.1	16819.7	6081.9 ug/L	6081.9 ppb	16:39:00
1	Sr 421.552†	69374.2	71595.7	549.15 ug/L	549.15 ppb	16:39:00
1	Sc 361.383	945667.2	945667.2	100.34 %		16:40:19
1	Y 371.029	789662.6	789662.6	98.877 %		16:40:19
1	Ag 328.068†	105925.7	105197.3	452.31 ug/L	452.31 ppb	16:40:19
1	As 188.979†	1194.8	1217.1	487.54 ug/L	487.54 ppb	16:40:39
1	B 249.677†	22059.4	22718.8	503.00 ug/L	503.00 ppb	16:40:19
1	Ba 233.527†	69806.2	69554.8	503.71 ug/L	503.71 ppb	16:40:19
1	Be 313.107†	1436612.0	1435577.9	483.72 ug/L	483.72 ppb	16:40:19
1	Cd 226.502†	47822.9	47843.0	493.54 ug/L	493.54 ppb	16:40:19
1	Co 228.616†	24555.9	24537.3	470.54 ug/L	470.54 ppb	16:40:39
1	Cr 267.716†	49115.8	48880.6	494.68 ug/L	494.68 ppb	16:40:19
1	Cu 324.752†	183179.1	176281.5	501.15 ug/L	501.15 ppb	16:40:19
1	Mn 257.610†	479225.9	477121.8	497.82 ug/L	497.82 ppb	16:40:19
1	Mo 202.031†	7235.4	7198.9	481.92 ug/L	481.92 ppb	16:40:39
1	Ni 231.604†	21288.4	21140.8	481.55 ug/L	481.55 ppb	16:40:39
1	P 214.914†	1257.7	1042.8	459.52 ug/L	459.52 ppb	16:40:39
1	Pb 220.353†	4428.2	4408.3	485.89 ug/L	485.89 ppb	16:40:39
1	S 181.975 Axial†	3954.2	3899.3	4923.9 ug/L	4923.9 ppb	16:40:39
1	Sb 206.836†	1572.8	1535.8	506.36 ug/L	506.36 ppb	16:40:39
1	Se 196.026†	768.9	791.8	483.52 ug/L	483.52 ppb	16:40:39
1	Si 251.611†	214722.0	213387.3	6325.0 ug/L	6325.0 ppb	16:40:19
1	Sn 189.927†	3146.8	3119.9	497.09 ug/L	497.09 ppb	16:40:39
1	Ti 334.940†	343005.9	343490.8	503.91 ug/L	503.91 ppb	16:40:19
1	Tl 190.801†	1623.2	1654.4	486.73 ug/L	486.73 ppb	16:40:39
1	U 409.014†	15385.4	18635.2	488.05 ug/L	488.05 ppb	16:40:19
1	V 292.402†	76696.9	78076.2	502.13 ug/L	502.13 ppb	16:40:19
1	Zn 213.857†	54961.6	54121.9	486.92 ug/L	486.92 ppb	16:40:19
1	SiO2†	210439.7	209113.1	13322 ug/L	13322 ppb	16:41:40
2	Sc Radial	3614.9	3614.9	96.8 %		16:39:45
2	Y RADIAL	4137.1	4137.1	97.38 %		16:39:25
2	Al 396.153Radial†	5446.8	5767.7	5399.7 ug/L	5399.7 ppb	16:39:25
2	Ca 317.933Radial†	2396.8	2462.5	5443.6 ug/L	5443.6 ppb	16:39:45
2	Fe 238.204 Radial†	299.6	299.3	5319.3 ug/L	5319.3 ppb	16:39:45
2	K 766.490 Radial†	30502.0	28508.8	5565.2 ug/L	5565.2 ppb	16:39:25
2	Mg 279.077 IEC†	100.0	100.9	5472.4 ug/L	5472.4 ppb	16:39:45
2	Na 589.592 Radial†	15267.1	16809.0	6078.0 ug/L	6078.0 ppb	16:39:25
2	Sr 421.552†	69180.9	71450.5	548.04 ug/L	548.04 ppb	16:39:25
2	Sc 361.383	926963.3	926963.3	98.355 %		16:40:47
2	Y 371.029	776268.1	776268.1	97.200 %		16:40:47
2	Ag 328.068†	103571.7	104934.0	451.20 ug/L	451.20 ppb	16:40:47
2	As 188.979†	1219.4	1266.2	507.00 ug/L	507.00 ppb	16:41:07
2	B 249.677†	21566.6	22661.3	501.67 ug/L	501.67 ppb	16:40:47
2	Ba 233.527†	68315.4	69442.8	502.90 ug/L	502.90 ppb	16:40:47
2	Be 313.107†	1408675.7	1436063.6	483.88 ug/L	483.88 ppb	16:40:47
2	Cd 226.502†	46813.4	47778.2	492.88 ug/L	492.88 ppb	16:40:47
2	Co 228.616†	24928.9	25410.3	487.32 ug/L	487.32 ppb	16:41:07
2	Cr 267.716†	48200.4	48937.5	495.26 ug/L	495.26 ppb	16:40:47
2	Cu 324.752†	178684.1	175395.0	498.63 ug/L	498.63 ppb	16:40:47
2	Mn 257.610†	469197.1	476562.2	497.24 ug/L	497.24 ppb	16:40:47
2	Mo 202.031†	7335.7	7446.3	498.47 ug/L	498.47 ppb	16:41:07
2	Ni 231.604†	21597.3	21883.0	498.45 ug/L	498.45 ppb	16:41:07

2	P 214.914†	1290.5	1101.5	491.48 ug/L	491.48 ppb	16:41:07
2	Pb 220.353†	4504.6	4575.0	504.24 ug/L	504.24 ppb	16:41:07
2	S 181.975 Axial†	4013.6	4039.3	5100.7 ug/L	5100.7 ppb	16:41:07
2	Sb 206.836†	1613.1	1608.4	530.07 ug/L	530.07 ppb	16:41:07
2	Se 196.026†	794.6	833.3	508.10 ug/L	508.10 ppb	16:41:07
2	Si 251.611†	209742.7	212642.7	6302.7 ug/L	6302.7 ppb	16:40:47
2	Sn 189.927†	3188.5	3225.5	513.89 ug/L	513.89 ppb	16:41:07
2	Ti 334.940†	335886.8	343150.3	503.41 ug/L	503.41 ppb	16:40:47
2	Tl 190.801†	1659.7	1724.1	506.99 ug/L	506.99 ppb	16:41:07
2	U 409.014†	14903.4	18454.5	483.30 ug/L	483.30 ppb	16:40:47
2	V 292.402†	75303.8	78202.2	503.15 ug/L	503.15 ppb	16:40:47
2	Zn 213.857†	53820.0	54066.4	486.31 ug/L	486.31 ppb	16:40:47
2	SiO2†	210857.0	213769.2	13618 ug/L	13618 ppb	16:41:45
3	Sc Radial	3622.6	3622.6	97.0 %		16:40:10
3	Y RADIAL	4081.7	4081.7	96.07 %		16:39:50
3	Al 396.153Radial†	5358.9	5665.2	5303.4 ug/L	5303.4 ppb	16:39:50
3	Ca 317.933Radial†	2405.0	2465.7	5450.6 ug/L	5450.6 ppb	16:40:10
3	Fe 238.204 Radial†	299.9	298.9	5311.8 ug/L	5311.8 ppb	16:40:10
3	K 766.490 Radial†	29966.1	27889.3	5444.2 ug/L	5444.2 ppb	16:39:50
3	Mg 279.077 IEC†	101.9	102.6	5568.5 ug/L	5568.5 ppb	16:40:10
3	Na 589.592 Radial†	14939.5	16437.8	5943.8 ug/L	5943.8 ppb	16:39:50
3	Sr 421.552†	68160.0	70246.1	538.80 ug/L	538.80 ppb	16:39:50
3	Sc 361.383	922872.3	922872.3	97.921 %		16:41:14
3	Y 371.029	771201.7	771201.7	96.566 %		16:41:14
3	Ag 328.068†	103313.6	105137.3	452.06 ug/L	452.06 ppb	16:41:14
3	As 188.979†	1203.6	1255.6	502.78 ug/L	502.78 ppb	16:41:34
3	B 249.677†	21572.7	22764.7	503.98 ug/L	503.98 ppb	16:41:14
3	Ba 233.527†	68125.3	69556.5	503.72 ug/L	503.72 ppb	16:41:14
3	Be 313.107†	1398078.4	1431590.3	482.37 ug/L	482.37 ppb	16:41:14
3	Cd 226.502†	46676.8	47849.8	493.62 ug/L	493.62 ppb	16:41:14
3	Co 228.616†	24727.2	25316.7	485.52 ug/L	485.52 ppb	16:41:34
3	Cr 267.716†	48019.3	48969.9	495.58 ug/L	495.58 ppb	16:41:14
3	Cu 324.752†	177880.5	175379.6	498.59 ug/L	498.59 ppb	16:41:14
3	Mn 257.610†	467581.2	477026.7	497.72 ug/L	497.72 ppb	16:41:14
3	Mo 202.031†	7267.6	7409.8	496.03 ug/L	496.03 ppb	16:41:34
3	Ni 231.604†	21367.3	21745.4	495.32 ug/L	495.32 ppb	16:41:34
3	P 214.914†	1288.2	1105.0	493.33 ug/L	493.33 ppb	16:41:34
3	Pb 220.353†	4453.6	4543.2	500.72 ug/L	500.72 ppb	16:41:34
3	S 181.975 Axial†	3992.4	4035.7	5096.2 ug/L	5096.2 ppb	16:41:34
3	Sb 206.836†	1598.5	1600.7	527.57 ug/L	527.57 ppb	16:41:34
3	Se 196.026†	789.8	832.0	507.32 ug/L	507.32 ppb	16:41:34
3	Si 251.611†	209197.1	213030.9	6314.2 ug/L	6314.2 ppb	16:41:14
3	Sn 189.927†	3166.8	3217.8	512.65 ug/L	512.65 ppb	16:41:34
3	Ti 334.940†	334449.1	343195.9	503.47 ug/L	503.47 ppb	16:41:14
3	Tl 190.801†	1638.8	1710.2	502.96 ug/L	502.96 ppb	16:41:34
3	U 409.014†	14918.1	18536.6	485.46 ug/L	485.46 ppb	16:41:14
3	V 292.402†	74832.6	78060.4	502.22 ug/L	502.22 ppb	16:41:14
3	Zn 213.857†	53826.1	54315.2	488.59 ug/L	488.59 ppb	16:41:14
3	SiO2†	211465.6	215341.1	13719 ug/L	13719 ppb	16:41:50

Mean Data: 1202039900|951818|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	931834.2	98.872 %		1.2895			1.30%
Sc Radial	3618.4	96.9 %		0.10			0.11%
Y 371.029	779044.1	97.548 %		1.1943			1.22%
Y RADIAL	4123.0	97.05 %		0.855			0.88%
Ag 328.068†	105089.5	451.86 ug/L		0.581	451.86 ppb	0.581	0.13%
Al 396.153Radial†	5733.4	5367.7 ug/L		55.72	5367.7 ppb	55.72	1.04%
As 188.979†	1246.3	499.11 ug/L		10.233	499.11 ppb	10.233	2.05%
B 249.677†	22714.9	502.88 ug/L		1.157	502.88 ppb	1.157	0.23%
Ba 233.527†	69518.0	503.44 ug/L		0.469	503.44 ppb	0.469	0.09%
Be 313.107†	1434410.6	483.32 ug/L		0.825	483.32 ppb	0.825	0.17%
Ca 317.933Radial†	2468.9	5457.7 ug/L		18.60	5457.7 ppb	18.60	0.34%
Cd 226.502†	47823.7	493.35 ug/L		0.406	493.35 ppb	0.406	0.08%
Co 228.616†	25088.1	481.12 ug/L		9.212	481.12 ppb	9.212	1.91%
Cr 267.716†	48929.3	495.17 ug/L		0.458	495.17 ppb	0.458	0.09%
Cu 324.752†	175685.3	499.46 ug/L		1.466	499.46 ppb	1.466	0.29%
Fe 238.204 Radial†	298.6	5306.5 ug/L		16.03	5306.5 ppb	16.03	0.30%
K 766.490 Radial†	28268.1	5518.2 ug/L		64.85	5518.2 ppb	64.85	1.18%

Mg 279.077 IEC†	101.3	5495.2 ug/L	65.02	5495.2 ppb	65.02	1.18%
Mn 257.610†	476903.5	497.60 ug/L	0.311	497.60 ppb	0.311	0.06%
Mo 202.031†	7351.7	492.14 ug/L	8.934	492.14 ppb	8.934	1.82%
Na 589.592 Radial†	16688.9	6034.5 ug/L	78.64	6034.5 ppb	78.64	1.30%
Ni 231.604†	21589.7	491.77 ug/L	8.993	491.77 ppb	8.993	1.83%
P 214.914†	1083.1	481.44 ug/L	19.007	481.44 ppb	19.007	3.95%
Pb 220.353†	4508.8	496.95 ug/L	9.742	496.95 ppb	9.742	1.96%
S 181.975 Axial†	3991.4	5040.2 ug/L	100.77	5040.2 ppb	100.77	2.00%
Sb 206.836†	1581.6	521.33 ug/L	13.030	521.33 ppb	13.030	2.50%
Se 196.026†	819.0	499.65 ug/L	13.971	499.65 ppb	13.971	2.80%
Si 251.611†	213020.3	6314.0 ug/L	11.15	6314.0 ppb	11.15	0.18%
Sn 189.927†	3187.7	507.87 ug/L	9.363	507.87 ppb	9.363	1.84%
Sr 421.552†	71097.5	545.33 ug/L	5.683	545.33 ppb	5.683	1.04%
Ti 334.940†	343279.0	503.60 ug/L	0.276	503.60 ppb	0.276	0.05%
Tl 190.801†	1696.3	498.89 ug/L	10.728	498.89 ppb	10.728	2.15%
U 409.014†	18542.1	485.60 ug/L	2.380	485.60 ppb	2.380	0.49%
V 292.402†	78112.9	502.50 ug/L	0.565	502.50 ppb	0.565	0.11%
Zn 213.857†	54167.8	487.27 ug/L	1.180	487.27 ppb	1.180	0.24%
SiO2†	212741.1	13553 ug/L	206.3	13553 ppb	206.3	1.52%

Sequence No.: 8

Sample ID: 1202039901|951818|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 2/26/2010 16:44:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202039901|951818|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3542.2	3542.2	94.8 %		16:46:14
1	Y RADIAL	4138.4	4138.4	97.41 %		16:45:54
1	Al 396.153Radial†	-162.7	-31.6	-29.737 ug/L	-29.737 ppb	16:45:54
1	Ca 317.933Radial†	26.5	14.0	30.903 ug/L	30.903 ppb	16:46:14
1	Fe 238.204 Radial†	10.6	0.9	15.656 ug/L	15.656 ppb	16:46:14
1	K 766.490 Radial†	3178.8	344.8	67.345 ug/L	67.345 ppb	16:45:54
1	Mg 279.077 IEC†	-0.4	-2.8	-153.97 ug/L	-153.97 ppb	16:46:14
1	Na 589.592 Radial†	-848.1	140.2	50.694 ug/L	50.694 ppb	16:45:54
1	Sr 421.552†	37.4	9.5	0.0725 ug/L	0.0725 ppb	16:45:54
1	Sc 361.383	905934.1	905934.1	96.124 %		16:47:11
1	Y 371.029	768672.5	768672.5	96.249 %		16:47:11
1	Ag 328.068†	262.2	-96.9	-0.4012 ug/L	-0.4012 ppb	16:47:11
1	As 188.979†	-19.5	6.2	2.4446 ug/L	2.4446 ppb	16:47:31
1	B 249.677†	-250.4	473.5	10.528 ug/L	10.528 ppb	16:47:11
1	Ba 233.527†	11.5	-3.2	-0.0227 ug/L	-0.0227 ppb	16:47:31
1	Be 313.107†	-3709.4	-28.7	-0.0100 ug/L	-0.0100 ppb	16:47:11
1	Cd 226.502†	-216.2	-42.9	-0.4461 ug/L	-0.4461 ppb	16:47:31
1	Co 228.616†	-85.9	-24.9	-0.4774 ug/L	-0.4774 ppb	16:47:31
1	Cr 267.716†	81.5	15.8	0.1655 ug/L	0.1655 ppb	16:47:31
1	Cu 324.752†	6455.0	437.9	1.2519 ug/L	1.2519 ppb	16:47:11
1	Mn 257.610†	529.4	69.3	0.0801 ug/L	0.0801 ppb	16:47:31
1	Mo 202.031†	7.1	-4.6	-0.3079 ug/L	-0.3079 ppb	16:47:31
1	Ni 231.604†	77.7	5.3	0.1221 ug/L	0.1221 ppb	16:47:31
1	P 214.914†	231.1	29.8	15.672 ug/L	15.672 ppb	16:47:31
1	Pb 220.353†	-60.1	-67.5	-7.4289 ug/L	-7.4289 ppb	16:47:31
1	S 181.975 Axial†	55.9	16.7	21.049 ug/L	21.049 ppb	16:47:31
1	Sb 206.836†	49.9	20.2	6.4311 ug/L	6.4311 ppb	16:47:31
1	Se 196.026†	-36.9	-13.0	-7.5782 ug/L	-7.5782 ppb	16:47:31
1	Si 251.611†	10281.7	10088.7	299.32 ug/L	299.32 ppb	16:47:11
1	Sn 189.927†	16.0	0.3	0.0589 ug/L	0.0589 ppb	16:47:31
1	Ti 334.940†	-1674.7	-95.9	-0.1193 ug/L	-0.1193 ppb	16:47:11
1	Tl 190.801†	-30.9	4.6	1.3319 ug/L	1.3319 ppb	16:47:31
1	U 409.014†	-3574.0	-416.3	-10.943 ug/L	-10.943 ppb	16:47:11
1	V 292.402†	-1597.0	-22.3	-0.1722 ug/L	-0.1722 ppb	16:47:11
1	Zn 213.857†	767.3	144.7	1.3088 ug/L	1.3088 ppb	16:47:31
1	SiO2†	10416.4	10222.5	651.88 ug/L	651.88 ppb	16:48:27
2	Sc Radial	3481.4	3481.4	93.2 %		16:46:39
2	Y RADIAL	4110.5	4110.5	96.75 %		16:46:19
2	Al 396.153Radial†	-146.3	-17.1	-16.058 ug/L	-16.058 ppb	16:46:19
2	Ca 317.933Radial†	24.6	12.4	27.509 ug/L	27.509 ppb	16:46:39
2	Fe 238.204 Radial†	12.5	3.1	54.981 ug/L	54.981 ppb	16:46:39
2	K 766.490 Radial†	3216.0	443.3	86.578 ug/L	86.578 ppb	16:46:19
2	Mg 279.077 IEC†	3.1	0.9	49.506 ug/L	49.506 ppb	16:46:39
2	Na 589.592 Radial†	-811.1	164.3	59.397 ug/L	59.397 ppb	16:46:19
2	Sr 421.552†	48.3	21.9	0.1676 ug/L	0.1676 ppb	16:46:19
2	Sc 361.383	898469.5	898469.5	95.332 %		16:47:36
2	Y 371.029	761456.8	761456.8	95.346 %		16:47:36
2	Ag 328.068†	296.8	-58.4	-0.2244 ug/L	-0.2244 ppb	16:47:36
2	As 188.979†	-27.1	-2.1	-0.8051 ug/L	-0.8051 ppb	16:47:56
2	B 249.677†	-231.1	491.6	10.923 ug/L	10.923 ppb	16:47:36
2	Ba 233.527†	8.6	-6.1	-0.0433 ug/L	-0.0433 ppb	16:47:56
2	Be 313.107†	-3706.8	-58.1	-0.0199 ug/L	-0.0199 ppb	16:47:36
2	Cd 226.502†	-206.1	-34.2	-0.3610 ug/L	-0.3610 ppb	16:47:56
2	Co 228.616†	-57.4	4.3	0.0829 ug/L	0.0829 ppb	16:47:56
2	Cr 267.716†	104.5	40.7	0.4209 ug/L	0.4209 ppb	16:47:56
2	Cu 324.752†	6318.1	350.1	1.0054 ug/L	1.0054 ppb	16:47:36
2	Mn 257.610†	539.7	84.7	0.0918 ug/L	0.0918 ppb	16:47:56
2	Mo 202.031†	14.7	3.4	0.2299 ug/L	0.2299 ppb	16:47:56
2	Ni 231.604†	79.6	8.0	0.1828 ug/L	0.1828 ppb	16:47:56

2	P 214.914†	220.9	21.1	11.006 ug/L	11.006 ppb	16:47:56
2	Pb 220.353†	-59.5	-67.4	-7.4118 ug/L	-7.4118 ppb	16:47:56
2	S 181.975 Axial†	50.4	11.3	14.332 ug/L	14.332 ppb	16:47:56
2	Sb 206.836†	39.3	9.6	3.0481 ug/L	3.0481 ppb	16:47:56
2	Se 196.026†	-29.8	-5.8	-3.2488 ug/L	-3.2488 ppb	16:47:56
2	Si 251.611†	10277.2	10172.8	301.81 ug/L	301.81 ppb	16:47:36
2	Sn 189.927†	14.7	-0.9	-0.1389 ug/L	-0.1389 ppb	16:47:56
2	Ti 334.940†	-1673.2	-108.9	-0.1546 ug/L	-0.1546 ppb	16:47:36
2	Tl 190.801†	-27.9	7.4	2.1732 ug/L	2.1732 ppb	16:47:56
2	U 409.014†	-3614.2	-489.3	-12.867 ug/L	-12.867 ppb	16:47:36
2	V 292.402†	-1639.6	-80.8	-0.5417 ug/L	-0.5417 ppb	16:47:36
2	Zn 213.857†	768.3	152.3	1.3724 ug/L	1.3724 ppb	16:47:56
2	SiO2†	10489.1	10388.7	662.47 ug/L	662.47 ppb	16:48:32
3	Sc Radial	3622.6	3622.6	97.0 %		16:47:04
3	Y RADIAL	4054.7	4054.7	95.44 %		16:46:44
3	Al 396.153Radial†	-123.1	13.0	12.216 ug/L	12.216 ppb	16:46:44
3	Ca 317.933Radial†	25.3	12.1	26.853 ug/L	26.853 ppb	16:47:04
3	Fe 238.204 Radial†	10.5	0.5	9.4121 ug/L	9.4121 ppb	16:47:04
3	K 766.490 Radial†	3159.5	250.5	48.922 ug/L	48.922 ppb	16:46:44
3	Mg 279.077 IEC†	4.1	1.7	93.823 ug/L	93.823 ppb	16:47:04
3	Na 589.592 Radial†	-892.1	114.7	41.471 ug/L	41.471 ppb	16:46:44
3	Sr 421.552†	36.7	7.9	0.0604 ug/L	0.0604 ppb	16:46:44
3	Sc 361.383	905974.4	905974.4	96.128 %		16:48:02
3	Y 371.029	767693.0	767693.0	96.126 %		16:48:02
3	Ag 328.068†	218.8	-142.1	-0.5957 ug/L	-0.5957 ppb	16:48:02
3	As 188.979†	-20.9	4.7	1.8583 ug/L	1.8583 ppb	16:48:22
3	B 249.677†	-281.9	440.8	9.8008 ug/L	9.8008 ppb	16:48:02
3	Ba 233.527†	20.9	6.7	0.0477 ug/L	0.0477 ppb	16:48:22
3	Be 313.107†	-3772.3	-94.0	-0.0320 ug/L	-0.0320 ppb	16:48:02
3	Cd 226.502†	-199.8	-25.8	-0.2698 ug/L	-0.2698 ppb	16:48:22
3	Co 228.616†	-69.9	-8.2	-0.1581 ug/L	-0.1581 ppb	16:48:22
3	Cr 267.716†	77.0	11.2	0.1179 ug/L	0.1179 ppb	16:48:22
3	Cu 324.752†	6381.7	361.4	1.0347 ug/L	1.0347 ppb	16:48:02
3	Mn 257.610†	546.0	86.6	0.0874 ug/L	0.0874 ppb	16:48:22
3	Mo 202.031†	9.0	-2.7	-0.1778 ug/L	-0.1778 ppb	16:48:22
3	Ni 231.604†	72.5	-0.1	-0.0018 ug/L	-0.0018 ppb	16:48:22
3	P 214.914†	222.9	21.2	11.132 ug/L	11.132 ppb	16:48:22
3	Pb 220.353†	-62.0	-69.5	-7.6312 ug/L	-7.6312 ppb	16:48:22
3	S 181.975 Axial†	47.5	7.9	9.9312 ug/L	9.9312 ppb	16:48:22
3	Sb 206.836†	39.1	9.0	2.8882 ug/L	2.8882 ppb	16:48:22
3	Se 196.026†	-23.5	1.0	0.6146 ug/L	0.6146 ppb	16:48:22
3	Si 251.611†	10309.5	10117.2	300.16 ug/L	300.16 ppb	16:48:02
3	Sn 189.927†	23.5	8.2	1.3079 ug/L	1.3079 ppb	16:48:22
3	Ti 334.940†	-1691.3	-113.1	-0.1648 ug/L	-0.1648 ppb	16:48:02
3	Tl 190.801†	-31.5	3.9	1.1447 ug/L	1.1447 ppb	16:48:22
3	U 409.014†	-3616.0	-459.8	-12.086 ug/L	-12.086 ppb	16:48:02
3	V 292.402†	-1630.5	-57.1	-0.3879 ug/L	-0.3879 ppb	16:48:02
3	Zn 213.857†	782.0	159.9	1.4490 ug/L	1.4490 ppb	16:48:22
3	SiO2†	10217.7	10015.3	638.67 ug/L	638.67 ppb	16:48:37

Mean Data: 1202039901|951818|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	903459.4	95.861 %		0.4585				0.48%
Sc Radial	3548.7	95.0 %		1.90				2.00%
Y 371.029	765940.8	95.907 %		0.4901				0.51%
Y RADIAL	4101.2	96.53 %		1.003				1.04%
Ag 328.068†	-99.1	-0.4071 ug/L		0.18571	-0.4071 ppb		0.18571	45.62%
Al 396.153Radial†	-11.9	-11.193 ug/L		21.3954	-11.193 ppb		21.3954	191.15%
As 188.979†	2.9	1.1659 ug/L		1.73193	1.1659 ppb		1.73193	148.55%
B 249.677†	468.6	10.417 ug/L		0.5691	10.417 ppb		0.5691	5.46%
Ba 233.527†	-0.9	-0.0061 ug/L		0.04773	-0.0061 ppb		0.04773	780.25%
Be 313.107†	-60.3	-0.0206 ug/L		0.01102	-0.0206 ppb		0.01102	53.46%
Ca 317.933Radial†	12.9	28.422 ug/L		2.1742	28.422 ppb		2.1742	7.65%
Cd 226.502†	-34.3	-0.3590 ug/L		0.08819	-0.3590 ppb		0.08819	24.57%
Co 228.616†	-9.6	-0.1842 ug/L		0.28106	-0.1842 ppb		0.28106	152.60%
Cr 267.716†	22.6	0.2348 ug/L		0.16293	0.2348 ppb		0.16293	69.40%
Cu 324.752†	383.2	1.0973 ug/L		0.13462	1.0973 ppb		0.13462	12.27%
Fe 238.204 Radial†	1.5	26.683 ug/L		24.7047	26.683 ppb		24.7047	92.59%
K 766.490 Radial†	346.2	67.615 ug/L		18.8298	67.615 ppb		18.8298	27.85%

Mg 279.077 IEC†	-0.1	-3.5485 ug/L	132.14393	-3.5485 ppb	132.14393	>999.9%
Mn 257.610†	80.2	0.0864 ug/L	0.00587	0.0864 ppb	0.00587	6.79%
Mo 202.031†	-1.3	-0.0853 ug/L	0.28056	-0.0853 ppb	0.28056	329.09%
Na 589.592 Radial†	139.7	50.521 ug/L	8.9645	50.521 ppb	8.9645	17.74%
Ni 231.604†	4.4	0.1010 ug/L	0.09411	0.1010 ppb	0.09411	93.15%
P 214.914†	24.0	12.603 ug/L	2.6583	12.603 ppb	2.6583	21.09%
Pb 220.353†	-68.1	-7.4907 ug/L	0.12203	-7.4907 ppb	0.12203	1.63%
S 181.975 Axial†	12.0	15.104 ug/L	5.5993	15.104 ppb	5.5993	37.07%
Sb 206.836†	12.9	4.1225 ug/L	2.00094	4.1225 ppb	2.00094	48.54%
Se 196.026†	-5.9	-3.4041 ug/L	4.09861	-3.4041 ppb	4.09861	120.40%
Si 251.611†	10126.2	300.43 ug/L	1.265	300.43 ppb	1.265	0.42%
Sn 189.927†	2.6	0.4093 ug/L	0.78444	0.4093 ppb	0.78444	191.66%
Sr 421.552†	13.1	0.1001 ug/L	0.05871	0.1001 ppb	0.05871	58.63%
Ti 334.940†	-106.0	-0.1462 ug/L	0.02387	-0.1462 ppb	0.02387	16.32%
Tl 190.801†	5.3	1.5499 ug/L	0.54781	1.5499 ppb	0.54781	35.34%
U 409.014†	-455.1	-11.965 ug/L	0.9676	-11.965 ppb	0.9676	8.09%
V 292.402†	-53.4	-0.3673 ug/L	0.18563	-0.3673 ppb	0.18563	50.55%
Zn 213.857†	152.3	1.3767 ug/L	0.07021	1.3767 ppb	0.07021	5.10%
SiO2†	10208.8	651.01 ug/L	11.924	651.01 ppb	11.924	1.83%



Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 16:50:48

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	3560.2	3560.2	95.3 %		16:53:00
1	Y RADIAL	4061.7	4061.7	95.60 %		16:52:40
1	Al 396.153Radial†	5078.6	5468.0	5118.4 ug/L	5118.4 ppb	16:52:40
1	Ca 317.933Radial†	2295.6	2394.4	5293.2 ug/L	5293.2 ppb	16:53:00
1	Fe 238.204 Radial†	294.2	298.3	5302.2 ug/L	5302.2 ppb	16:53:00
1	K 766.490 Radial†	28143.9	26519.8	5174.5 ug/L	5174.5 ppb	16:52:40
1	Mg 279.077 IEC†	95.7	97.9	5312.0 ug/L	5312.0 ppb	16:53:00
1	Na 589.592 Radial†	29258.6	31730.9	11474 ug/L	11474 ppb	16:52:40
1	Sr 421.552†	66225.0	69449.5	532.69 ug/L	532.69 ppb	16:52:40
1	Sc 361.383	899437.6	899437.6	95.435 %		16:53:59
1	Y 371.029	753752.2	753752.2	94.381 %		16:53:59
1	Ag 328.068†	107080.3	111833.1	480.62 ug/L	480.62 ppb	16:53:59
1	As 188.979†	1160.3	1242.3	497.35 ug/L	497.35 ppb	16:54:19
1	B 249.677†	19656.4	21330.8	472.09 ug/L	472.09 ppb	16:53:59
1	Ba 233.527†	63977.5	67023.0	485.39 ug/L	485.39 ppb	16:53:59
1	Be 313.107†	1361293.7	1430245.9	481.88 ug/L	481.88 ppb	16:53:59
1	Cd 226.502†	45185.7	47529.3	490.30 ug/L	490.30 ppb	16:53:59
1	Co 228.616†	24178.9	25400.1	487.13 ug/L	487.13 ppb	16:54:19
1	Cr 267.716†	45941.4	48070.2	486.49 ug/L	486.49 ppb	16:53:59
1	Cu 324.752†	166014.8	167679.3	476.72 ug/L	476.72 ppb	16:53:59
1	Mn 257.610†	444737.2	465531.2	485.74 ug/L	485.74 ppb	16:53:59
1	Mo 202.031†	6965.6	7286.8	487.79 ug/L	487.79 ppb	16:54:19
1	Ni 231.604†	20493.8	21398.6	487.41 ug/L	487.41 ppb	16:54:19
1	P 214.914†	4609.8	4619.7	2375.7 ug/L	2375.7 ppb	16:54:19
1	Pb 220.353†	4256.3	4454.9	490.98 ug/L	490.98 ppb	16:54:19
1	S 181.975 Axial†	784.2	780.2	984.41 ug/L	984.41 ppb	16:54:19
1	Sb 206.836†	1458.8	1496.9	493.97 ug/L	493.97 ppb	16:54:19
1	Se 196.026†	785.8	848.8	517.12 ug/L	517.12 ppb	16:54:19
1	Si 251.611†	78374.2	81515.9	2412.5 ug/L	2412.5 ppb	16:53:59
1	Sn 189.927†	2940.5	3064.9	488.30 ug/L	488.30 ppb	16:54:19
1	Ti 334.940†	315053.1	331771.0	486.72 ug/L	486.72 ppb	16:53:59
1	Tl 190.801†	1548.6	1659.3	487.91 ug/L	487.91 ppb	16:54:19
1	U 409.014†	13294.5	17232.3	451.20 ug/L	451.20 ppb	16:53:59
1	V 292.402†	70673.4	75693.4	487.03 ug/L	487.03 ppb	16:53:59
1	Zn 213.857†	51351.8	53154.7	478.13 ug/L	478.13 ppb	16:53:59
1	SiO2†	78757.2	81910.8	5210.1 ug/L	5210.1 ppb	16:55:19
2	Sc Radial	3491.2	3491.2	93.5 %		16:53:25
2	Y RADIAL	3984.7	3984.7	93.79 %		16:53:05
2	Al 396.153Radial†	5027.3	5518.5	5165.8 ug/L	5165.8 ppb	16:53:05
2	Ca 317.933Radial†	2264.9	2409.2	5325.8 ug/L	5325.8 ppb	16:53:25
2	Fe 238.204 Radial†	289.7	299.6	5324.9 ug/L	5324.9 ppb	16:53:25
2	K 766.490 Radial†	27915.2	26858.5	5240.7 ug/L	5240.7 ppb	16:53:05
2	Mg 279.077 IEC†	96.7	101.0	5477.7 ug/L	5477.7 ppb	16:53:25
2	Na 589.592 Radial†	29067.1	32132.4	11619 ug/L	11619 ppb	16:53:05
2	Sr 421.552†	65681.6	70240.7	538.76 ug/L	538.76 ppb	16:53:05
2	Sc 361.383	897785.9	897785.9	95.259 %		16:54:26
2	Y 371.029	752064.4	752064.4	94.170 %		16:54:26
2	Ag 328.068†	107092.7	112052.6	481.57 ug/L	481.57 ppb	16:54:26
2	As 188.979†	1172.4	1257.2	503.30 ug/L	503.30 ppb	16:54:47
2	B 249.677†	19712.4	21427.5	474.23 ug/L	474.23 ppb	16:54:26
2	Ba 233.527†	64028.8	67200.2	486.67 ug/L	486.67 ppb	16:54:26
2	Be 313.107†	1360859.4	1432414.3	482.62 ug/L	482.62 ppb	16:54:26
2	Cd 226.502†	45155.7	47585.0	490.87 ug/L	490.87 ppb	16:54:26
2	Co 228.616†	24201.3	25470.2	488.47 ug/L	488.47 ppb	16:54:47
2	Cr 267.716†	45835.9	48048.0	486.27 ug/L	486.27 ppb	16:54:26
2	Cu 324.752†	166174.8	168167.3	478.11 ug/L	478.11 ppb	16:54:26
2	Mn 257.610†	444769.5	466422.5	486.67 ug/L	486.67 ppb	16:54:26
2	Mo 202.031†	6960.8	7295.2	488.36 ug/L	488.36 ppb	16:54:47
2	Ni 231.604†	20503.5	21448.4	488.55 ug/L	488.55 ppb	16:54:47

2	P 214.914†	4626.8	4646.4	2389.7 ug/L	2389.7 ppb	16:54:47
2	Pb 220.353†	4276.1	4483.9	494.17 ug/L	494.17 ppb	16:54:47
2	S 181.975 Axial†	790.4	788.3	994.64 ug/L	994.64 ppb	16:54:47
2	Sb 206.836†	1473.8	1515.5	499.96 ug/L	499.96 ppb	16:54:47
2	Se 196.026†	775.2	839.2	511.55 ug/L	511.55 ppb	16:54:47
2	Si 251.611†	78413.8	81708.5	2418.2 ug/L	2418.2 ppb	16:54:26
2	Sn 189.927†	2947.8	3078.3	490.43 ug/L	490.43 ppb	16:54:47
2	Ti 334.940†	315027.0	332351.0	487.56 ug/L	487.56 ppb	16:54:26
2	Tl 190.801†	1554.0	1668.0	490.44 ug/L	490.44 ppb	16:54:47
2	U 409.014†	13260.5	17222.3	450.94 ug/L	450.94 ppb	16:54:26
2	V 292.402†	70633.3	75787.5	487.63 ug/L	487.63 ppb	16:54:26
2	Zn 213.857†	51391.2	53295.1	479.39 ug/L	479.39 ppb	16:54:26
2	SiO2†	78727.1	82031.0	5217.7 ug/L	5217.7 ppb	16:55:25
3	Sc Radial	3513.1	3513.1	94.1 %		16:53:50
3	Y RADIAL	3971.7	3971.7	93.48 %		16:53:30
3	Al 396.153Radial†	5014.8	5471.5	5121.9 ug/L	5121.9 ppb	16:53:30
3	Ca 317.933Radial†	2270.7	2400.2	5305.8 ug/L	5305.8 ppb	16:53:50
3	Fe 238.204 Radial†	289.3	297.3	5284.0 ug/L	5284.0 ppb	16:53:50
3	K 766.490 Radial†	27838.6	26590.4	5188.4 ug/L	5188.4 ppb	16:53:30
3	Mg 279.077 IEC†	94.8	98.4	5337.9 ug/L	5337.9 ppb	16:53:50
3	Na 589.592 Radial†	28733.0	31582.8	11420 ug/L	11420 ppb	16:53:30
3	Sr 421.552†	65303.7	69399.7	532.30 ug/L	532.30 ppb	16:53:30
3	Sc 361.383	904465.5	904465.5	95.968 %		16:54:54
3	Y 371.029	756564.7	756564.7	94.733 %		16:54:54
3	Ag 328.068†	108068.5	112239.1	482.34 ug/L	482.34 ppb	16:54:54
3	As 188.979†	1149.5	1224.2	490.21 ug/L	490.21 ppb	16:55:14
3	B 249.677†	20018.6	21593.7	477.95 ug/L	477.95 ppb	16:54:54
3	Ba 233.527†	64525.8	67221.7	486.82 ug/L	486.82 ppb	16:54:54
3	Be 313.107†	1370236.7	1431635.2	482.35 ug/L	482.35 ppb	16:54:54
3	Cd 226.502†	45569.6	47666.1	491.71 ug/L	491.71 ppb	16:54:54
3	Co 228.616†	24153.7	25233.0	483.91 ug/L	483.91 ppb	16:55:14
3	Cr 267.716†	46222.8	48095.8	486.74 ug/L	486.74 ppb	16:54:54
3	Cu 324.752†	167667.8	168434.7	478.86 ug/L	478.86 ppb	16:54:54
3	Mn 257.610†	448632.8	466999.9	487.27 ug/L	487.27 ppb	16:54:54
3	Mo 202.031†	6960.4	7240.7	484.72 ug/L	484.72 ppb	16:55:14
3	Ni 231.604†	20439.4	21222.6	483.40 ug/L	483.40 ppb	16:55:14
3	P 214.914†	4614.7	4597.9	2363.6 ug/L	2363.6 ppb	16:55:14
3	Pb 220.353†	4273.1	4447.7	490.18 ug/L	490.18 ppb	16:55:14
3	S 181.975 Axial†	777.6	768.8	970.06 ug/L	970.06 ppb	16:55:14
3	Sb 206.836†	1479.8	1510.3	498.14 ug/L	498.14 ppb	16:55:14
3	Se 196.026†	768.8	826.5	503.97 ug/L	503.97 ppb	16:55:14
3	Si 251.611†	79075.3	81790.0	2420.6 ug/L	2420.6 ppb	16:54:54
3	Sn 189.927†	2939.2	3046.5	485.37 ug/L	485.37 ppb	16:55:14
3	Ti 334.940†	317847.1	332847.2	488.30 ug/L	488.30 ppb	16:54:54
3	Tl 190.801†	1578.0	1681.0	494.28 ug/L	494.28 ppb	16:55:14
3	U 409.014†	13529.2	17399.5	455.60 ug/L	455.60 ppb	16:54:54
3	V 292.402†	71016.5	75639.1	486.65 ug/L	486.65 ppb	16:54:54
3	Zn 213.857†	51896.6	53423.4	480.60 ug/L	480.60 ppb	16:54:54
3	SiO2†	78793.9	81490.3	5183.3 ug/L	5183.3 ppb	16:55:30

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900563.0	95.554 %		0.3692			0.39%
Sc Radial	3521.5	94.3 %		0.94			1.00%
Y 371.029	754127.1	94.428 %		0.2847			0.30%
Y RADIAL	4006.0	94.29 %		1.146			1.21%
Ag 328.068†	112041.6	481.51 ug/L		0.863	481.51 ppb	0.863	0.18%
QC value within limits for Ag 328.068 Recovery = 96.30%							
Al 396.153Radial†	5486.0	5135.4 ug/L		26.44	5135.4 ppb	26.44	0.51%
QC value within limits for Al 396.153Radial Recovery = 102.71%							
As 188.979†	1241.2	496.96 ug/L		6.554	496.96 ppb	6.554	1.32%
QC value within limits for As 188.979 Recovery = 99.39%							
B 249.677†	21450.6	474.75 ug/L		2.964	474.75 ppb	2.964	0.62%
QC value within limits for B 249.677 Recovery = 94.95%							
Ba 233.527†	67148.3	486.29 ug/L		0.788	486.29 ppb	0.788	0.16%
QC value within limits for Ba 233.527 Recovery = 97.26%							
Be 313.107†	1431431.8	482.28 ug/L		0.370	482.28 ppb	0.370	0.08%
QC value within limits for Be 313.107 Recovery = 96.46%							
Ca 317.933Radial†	2401.3	5308.3 ug/L		16.43	5308.3 ppb	16.43	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 106.17%

Cd 226.502†	47593.4	490.96 ug/L	0.710	490.96 ppb	0.710	0.14%
QC value within limits for Cd 226.502 Recovery = 98.19%						
Co 228.616†	25367.8	486.50 ug/L	2.342	486.50 ppb	2.342	0.48%
QC value within limits for Co 228.616 Recovery = 97.30%						
Cr 267.716†	48071.4	486.50 ug/L	0.238	486.50 ppb	0.238	0.05%
QC value within limits for Cr 267.716 Recovery = 97.30%						
Cu 324.752†	168093.8	477.89 ug/L	1.088	477.89 ppb	1.088	0.23%
QC value within limits for Cu 324.752 Recovery = 95.58%						
Fe 238.204 Radial†	298.4	5303.7 ug/L	20.49	5303.7 ppb	20.49	0.39%
QC value within limits for Fe 238.204 Radial Recovery = 106.07%						
K 766.490 Radial†	26656.2	5201.2 ug/L	34.87	5201.2 ppb	34.87	0.67%
QC value within limits for K 766.490 Radial Recovery = 104.02%						
Mg 279.077 IEC†	99.1	5375.9 ug/L	89.14	5375.9 ppb	89.14	1.66%
QC value within limits for Mg 279.077 IEC Recovery = 107.52%						
Mn 257.610†	466317.9	486.56 ug/L	0.770	486.56 ppb	0.770	0.16%
QC value within limits for Mn 257.610 Recovery = 97.31%						
Mo 202.031†	7274.2	486.96 ug/L	1.961	486.96 ppb	1.961	0.40%
QC value within limits for Mo 202.031 Recovery = 97.39%						
Na 589.592 Radial†	31815.4	11504 ug/L	102.8	11504 ppb	102.8	0.89%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 115.04%						
Ni 231.604†	21356.5	486.45 ug/L	2.702	486.45 ppb	2.702	0.56%
QC value within limits for Ni 231.604 Recovery = 97.29%						
P 214.914†	4621.4	2376.4 ug/L	13.05	2376.4 ppb	13.05	0.55%
QC value within limits for P 214.914 Recovery = 95.05%						
Pb 220.353†	4462.2	491.78 ug/L	2.113	491.78 ppb	2.113	0.43%
QC value within limits for Pb 220.353 Recovery = 98.36%						
S 181.975 Axial†	779.1	983.04 ug/L	12.351	983.04 ppb	12.351	1.26%
QC value within limits for S 181.975 Axial Recovery = 98.30%						
Sb 206.836†	1507.6	497.36 ug/L	3.067	497.36 ppb	3.067	0.62%
QC value within limits for Sb 206.836 Recovery = 99.47%						
Se 196.026†	838.2	510.88 ug/L	6.604	510.88 ppb	6.604	1.29%
QC value within limits for Se 196.026 Recovery = 102.18%						
Si 251.611†	81671.5	2417.1 ug/L	4.19	2417.1 ppb	4.19	0.17%
QC value within limits for Si 251.611 Recovery = 96.68%						
Sn 189.927†	3063.2	488.03 ug/L	2.542	488.03 ppb	2.542	0.52%
QC value within limits for Sn 189.927 Recovery = 97.61%						
Sr 421.552†	69696.6	534.58 ug/L	3.619	534.58 ppb	3.619	0.68%
QC value within limits for Sr 421.552 Recovery = 106.92%						
Ti 334.940†	332323.1	487.53 ug/L	0.789	487.53 ppb	0.789	0.16%
QC value within limits for Ti 334.940 Recovery = 97.51%						
Tl 190.801†	1669.4	490.88 ug/L	3.208	490.88 ppb	3.208	0.65%
QC value within limits for Tl 190.801 Recovery = 98.18%						
U 409.014†	17284.7	452.58 ug/L	2.617	452.58 ppb	2.617	0.58%
QC value within limits for U 409.014 Recovery = 90.52%						
V 292.402†	75706.7	487.10 ug/L	0.495	487.10 ppb	0.495	0.10%
QC value within limits for V 292.402 Recovery = 97.42%						
Zn 213.857†	53291.1	479.37 ug/L	1.233	479.37 ppb	1.233	0.26%
QC value within limits for Zn 213.857 Recovery = 95.87%						
SiO2†	81810.7	5203.7 ug/L	18.05	5203.7 ppb	18.05	0.35%
QC value within limits for SiO2 Recovery = 97.31%						

QC Failed. Continue with analysis.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 16:57:39

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	3587.5	3587.5	96.0 %		16:59:52
1	Y RADIAL	4127.3	4127.3	97.15 %		16:59:32
1	Al 396.153Radial†	-128.8	5.8	5.4294 ug/L	5.4294 ppb	16:59:32
1	Ca 317.933Radial†	18.7	5.5	12.258 ug/L	12.258 ppb	16:59:52
1	Fe 238.204 Radial†	11.0	1.1	19.962 ug/L	19.962 ppb	16:59:52
1	K 766.490 Radial†	3086.9	206.8	40.397 ug/L	40.397 ppb	16:59:32
1	Mg 279.077 IEC†	4.1	1.8	97.763 ug/L	97.763 ppb	16:59:52
1	Na 589.592 Radial†	-983.3	10.7	3.8637 ug/L	3.8637 ppb	16:59:32
1	Sr 421.552†	80.8	54.2	0.4156 ug/L	0.4156 ppb	16:59:32
1	Sc 361.383	893782.5	893782.5	94.835 %		17:00:49
1	Y 371.029	760552.5	760552.5	95.232 %		17:00:49
1	Ag 328.068†	286.9	-67.2	-0.2734 ug/L	-0.2734 ppb	17:00:49
1	As 188.979†	-21.8	3.4	1.3576 ug/L	1.3576 ppb	17:01:09
1	B 249.677†	-374.9	338.7	7.5270 ug/L	7.5270 ppb	17:00:49
1	Ba 233.527†	18.7	4.6	0.0330 ug/L	0.0330 ppb	17:01:09
1	Be 313.107†	-3636.6	-4.5	-0.0019 ug/L	-0.0019 ppb	17:00:49
1	Cd 226.502†	-210.9	-40.4	-0.4213 ug/L	-0.4213 ppb	17:01:09
1	Co 228.616†	-48.5	13.4	0.2576 ug/L	0.2576 ppb	17:01:09
1	Cr 267.716†	31.4	-35.8	-0.3560 ug/L	-0.3560 ppb	17:00:49
1	Cu 324.752†	6177.0	236.1	0.6783 ug/L	0.6783 ppb	17:00:49
1	Mn 257.610†	500.0	45.8	0.0457 ug/L	0.0457 ppb	17:01:09
1	Mo 202.031†	11.4	0.0	0.0025 ug/L	0.0025 ppb	17:01:09
1	Ni 231.604†	72.9	1.4	0.0311 ug/L	0.0311 ppb	17:01:09
1	P 214.914†	209.5	10.3	5.3418 ug/L	5.3418 ppb	17:01:09
1	Pb 220.353†	-55.5	-63.5	-6.9820 ug/L	-6.9820 ppb	17:01:09
1	S 181.975 Axial†	42.8	3.7	4.6370 ug/L	4.6370 ppb	17:01:09
1	Sb 206.836†	37.6	8.0	2.5733 ug/L	2.5733 ppb	17:01:09
1	Se 196.026†	-29.4	-5.6	-3.2069 ug/L	-3.2069 ppb	17:01:09
1	Si 251.611†	582.8	6.9	0.2045 ug/L	0.2045 ppb	17:01:09
1	Sn 189.927†	22.8	7.8	1.2445 ug/L	1.2445 ppb	17:01:09
1	Ti 334.940†	-1679.2	-124.3	-0.1838 ug/L	-0.1838 ppb	17:00:49
1	Tl 190.801†	-34.3	0.5	0.1500 ug/L	0.1500 ppb	17:01:09
1	U 409.014†	-3528.9	-419.2	-11.020 ug/L	-11.020 ppb	17:00:49
1	V 292.402†	-1613.3	-62.1	-0.4163 ug/L	-0.4163 ppb	17:00:49
1	Zn 213.857†	742.0	128.8	1.1657 ug/L	1.1657 ppb	17:01:09
1	SiO2†	658.4	80.2	5.1165 ug/L	5.1165 ppb	17:02:05
2	Sc Radial	3596.4	3596.4	96.3 %		17:00:17
2	Y RADIAL	4185.2	4185.2	98.51 %		16:59:57
2	Al 396.153Radial†	-127.5	7.5	7.0635 ug/L	7.0635 ppb	16:59:57
2	Ca 317.933Radial†	19.8	6.7	14.707 ug/L	14.707 ppb	17:00:17
2	Fe 238.204 Radial†	13.4	3.6	63.550 ug/L	63.550 ppb	17:00:17
2	K 766.490 Radial†	3070.1	181.4	35.418 ug/L	35.418 ppb	16:59:57
2	Mg 279.077 IEC†	-1.9	-4.4	-238.70 ug/L	-238.70 ppb	17:00:17
2	Na 589.592 Radial†	-892.1	107.9	39.010 ug/L	39.010 ppb	16:59:57
2	Sr 421.552†	62.8	35.2	0.2702 ug/L	0.2702 ppb	16:59:57
2	Sc 361.383	887942.8	887942.8	94.215 %		17:01:14
2	Y 371.029	755115.9	755115.9	94.552 %		17:01:14
2	Ag 328.068†	339.7	-9.1	-0.0143 ug/L	-0.0143 ppb	17:01:14
2	As 188.979†	-19.5	5.7	2.2679 ug/L	2.2679 ppb	17:01:34
2	B 249.677†	-455.5	250.5	5.5618 ug/L	5.5618 ppb	17:01:14
2	Ba 233.527†	13.5	-0.8	-0.0051 ug/L	-0.0051 ppb	17:01:34
2	Be 313.107†	-3663.6	-58.3	-0.0200 ug/L	-0.0200 ppb	17:01:14
2	Cd 226.502†	-198.8	-29.0	-0.3074 ug/L	-0.3074 ppb	17:01:34
2	Co 228.616†	-72.1	-12.0	-0.2322 ug/L	-0.2322 ppb	17:01:34
2	Cr 267.716†	60.9	-4.3	-0.0343 ug/L	-0.0343 ppb	17:01:14
2	Cu 324.752†	6165.9	267.2	0.7682 ug/L	0.7682 ppb	17:01:14
2	Mn 257.610†	510.2	60.1	0.0787 ug/L	0.0787 ppb	17:01:34
2	Mo 202.031†	4.5	-7.2	-0.4788 ug/L	-0.4788 ppb	17:01:34
2	Ni 231.604†	83.1	12.7	0.2901 ug/L	0.2901 ppb	17:01:34

2	P 214.914†	208.8	11.0	5.6703 ug/L	5.6703 ppb	17:01:34
2	Pb 220.353†	-70.6	-79.9	-8.7831 ug/L	-8.7831 ppb	17:01:34
2	S 181.975 Axial†	42.6	3.7	4.6176 ug/L	4.6176 ppb	17:01:34
2	Sb 206.836†	50.3	21.8	6.9298 ug/L	6.9298 ppb	17:01:34
2	Se 196.026†	-29.3	-5.7	-3.1402 ug/L	-3.1402 ppb	17:01:34
2	Si 251.611†	607.1	36.7	1.0957 ug/L	1.0957 ppb	17:01:34
2	Sn 189.927†	22.1	7.2	1.1499 ug/L	1.1499 ppb	17:01:34
2	Ti 334.940†	-1672.3	-128.7	-0.1632 ug/L	-0.1632 ppb	17:01:14
2	Tl 190.801†	-30.2	4.7	1.3646 ug/L	1.3646 ppb	17:01:34
2	U 409.014†	-3456.4	-366.8	-9.6480 ug/L	-9.6480 ppb	17:01:14
2	V 292.402†	-1639.8	-101.4	-0.6828 ug/L	-0.6828 ppb	17:01:14
2	Zn 213.857†	725.5	116.4	1.0447 ug/L	1.0447 ppb	17:01:34
2	SiO2†	598.0	20.7	1.3318 ug/L	1.3318 ppb	17:02:10
3	Sc Radial	3585.9	3585.9	96.0 %		17:00:42
3	Y RADIAL	4244.5	4244.5	99.91 %		17:00:22
3	Al 396.153Radial†	-118.3	16.7	15.671 ug/L	15.671 ppb	17:00:22
3	Ca 317.933Radial†	20.9	7.8	17.285 ug/L	17.285 ppb	17:00:42
3	Fe 238.204 Radial†	13.6	3.9	68.264 ug/L	68.264 ppb	17:00:42
3	K 766.490 Radial†	3091.1	212.6	41.535 ug/L	41.535 ppb	17:00:22
3	Mg 279.077 IEC†	0.9	-1.5	-80.715 ug/L	-80.715 ppb	17:00:42
3	Na 589.592 Radial†	-1052.5	-61.9	-22.377 ug/L	-22.377 ppb	17:00:22
3	Sr 421.552†	59.4	32.0	0.2451 ug/L	0.2451 ppb	17:00:22
3	Sc 361.383	896762.4	896762.4	95.151 %		17:01:40
3	Y 371.029	762140.8	762140.8	95.431 %		17:01:40
3	Ag 328.068†	252.6	-104.3	-0.4144 ug/L	-0.4144 ppb	17:01:40
3	As 188.979†	-31.4	-6.6	-2.6009 ug/L	-2.6009 ppb	17:02:00
3	B 249.677†	-404.7	308.7	6.8556 ug/L	6.8556 ppb	17:01:40
3	Ba 233.527†	9.1	-5.5	-0.0383 ug/L	-0.0383 ppb	17:02:00
3	Be 313.107†	-3719.8	-79.1	-0.0271 ug/L	-0.0271 ppb	17:01:40
3	Cd 226.502†	-200.2	-28.4	-0.3027 ug/L	-0.3027 ppb	17:02:00
3	Co 228.616†	-82.8	-22.5	-0.4327 ug/L	-0.4327 ppb	17:02:00
3	Cr 267.716†	106.7	43.2	0.4476 ug/L	0.4476 ppb	17:01:40
3	Cu 324.752†	6253.6	294.9	0.8494 ug/L	0.8494 ppb	17:01:40
3	Mn 257.610†	478.0	21.0	0.0319 ug/L	0.0319 ppb	17:02:00
3	Mo 202.031†	7.7	-3.9	-0.2562 ug/L	-0.2562 ppb	17:02:00
3	Ni 231.604†	56.1	-16.5	-0.3761 ug/L	-0.3761 ppb	17:02:00
3	P 214.914†	214.0	14.3	7.4278 ug/L	7.4278 ppb	17:02:00
3	Pb 220.353†	-61.8	-69.9	-7.6879 ug/L	-7.6879 ppb	17:02:00
3	S 181.975 Axial†	43.2	3.9	4.9129 ug/L	4.9129 ppb	17:02:00
3	Sb 206.836†	37.3	7.5	2.3928 ug/L	2.3928 ppb	17:02:00
3	Se 196.026†	-26.5	-2.4	-1.2111 ug/L	-1.2111 ppb	17:02:00
3	Si 251.611†	609.6	33.1	0.9851 ug/L	0.9851 ppb	17:02:00
3	Sn 189.927†	17.5	2.1	0.3291 ug/L	0.3291 ppb	17:02:00
3	Ti 334.940†	-1722.8	-164.2	-0.2264 ug/L	-0.2264 ppb	17:01:40
3	Tl 190.801†	-34.5	0.4	0.1190 ug/L	0.1190 ppb	17:02:00
3	U 409.014†	-3624.5	-507.4	-13.344 ug/L	-13.344 ppb	17:01:40
3	V 292.402†	-1592.9	-35.1	-0.2633 ug/L	-0.2633 ppb	17:01:40
3	Zn 213.857†	734.2	118.0	1.0621 ug/L	1.0621 ppb	17:02:00
3	SiO2†	616.2	33.6	2.1510 ug/L	2.1510 ppb	17:02:15

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892829.2	94.733 %		0.4760			0.50%
Sc Radial	3589.9	96.1 %		0.15			0.16%
Y 371.029	759269.8	95.072 %		0.4613			0.49%
Y RADIAL	4185.7	98.52 %		1.379			1.40%
Ag 328.068†	-60.2	-0.2340 ug/L		0.20298	-0.2340 ppb	0.20298	86.73%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	10.0	9.3879 ug/L		5.50222	9.3879 ppb	5.50222	58.61%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.8	0.3415 ug/L		2.58856	0.3415 ppb	2.58856	757.99%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	299.3	6.6482 ug/L		0.99890	6.6482 ppb	0.99890	15.03%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-0.6	-0.0035 ug/L		0.03571	-0.0035 ppb	0.03571	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-47.3	-0.0164 ug/L		0.01300	-0.0164 ppb	0.01300	79.49%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.7	14.750 ug/L		2.5139	14.750 ppb	2.5139	17.04%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-32.6	-0.3438 ug/L	0.06715	-0.3438 ppb	0.06715	19.53%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-7.0	-0.1358 ug/L	0.35509	-0.1358 ppb	0.35509	261.53%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	1.0	0.0191 ug/L	0.40446	0.0191 ppb	0.40446	>999.9%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	266.1	0.7653 ug/L	0.08558	0.7653 ppb	0.08558	11.18%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.9	50.592 ug/L	26.6304	50.592 ppb	26.6304	52.64%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	200.2	39.117 ug/L	3.2533	39.117 ppb	3.2533	8.32%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.4	-73.884 ug/L	168.3359	-73.884 ppb	168.3359	227.84%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	42.3	0.0521 ug/L	0.02402	0.0521 ppb	0.02402	46.13%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-3.7	-0.2442 ug/L	0.24088	-0.2442 ppb	0.24088	98.64%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	18.9	6.8322 ug/L	30.80102	6.8322 ppb	30.80102	450.82%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.8	-0.0183 ug/L	0.33581	-0.0183 ppb	0.33581	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	11.8	6.1466 ug/L	1.12157	6.1466 ppb	1.12157	18.25%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-71.1	-7.8177 ug/L	0.90754	-7.8177 ppb	0.90754	11.61%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.7	4.7225 ug/L	0.16518	4.7225 ppb	0.16518	3.50%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	12.4	3.9653 ug/L	2.56894	3.9653 ppb	2.56894	64.79%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-4.6	-2.5194 ug/L	1.13352	-2.5194 ppb	1.13352	44.99%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	25.6	0.7618 ug/L	0.48577	0.7618 ppb	0.48577	63.77%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.7	0.9078 ug/L	0.50341	0.9078 ppb	0.50341	55.45%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	40.5	0.3103 ug/L	0.09210	0.3103 ppb	0.09210	29.68%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-139.1	-0.1911 ug/L	0.03226	-0.1911 ppb	0.03226	16.88%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.9	0.5445 ug/L	0.71040	0.5445 ppb	0.71040	130.46%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-431.2	-11.337 ug/L	1.8683	-11.337 ppb	1.8683	16.48%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-66.2	-0.4541 ug/L	0.21231	-0.4541 ppb	0.21231	46.75%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	121.1	1.0909 ug/L	0.06539	1.0909 ppb	0.06539	5.99%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	44.8	2.8664 ug/L	1.99119	2.8664 ppb	1.99119	69.47%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Saturday, March 06, 2010 12:09:34

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.661

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	4777.6		4777.599		78.513		1.6	
Mg	24.0	48634.0		48634.045		234.209		0.5	
Co	58.9	90810.3		90810.329		749.980		0.8	
Rh	102.9	182759.1		182759.120		2080.782		1.1	
In	114.9	251410.0		251410.017		1585.778		0.6	
Pb	208.0	269712.7		269712.731		1579.796		0.6	
[> Ba	137.9	240159.5		240159.536		2766.790		1.2	
[ Ba++	69.0	3561.9		0.015		0.000		2.0	
[> Ce	139.9	293604.7		293604.702		1492.439		0.5	
[ CeO	155.9	6296.5		0.021		0.000		1.8	
Bkgd	220.0	22.2		22.200		3.915		17.6	

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.50	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	6.5	5313.7
Co	59	17	7.3	86868.6
In	115	17	8.0	235041.8

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	585	2050	0.658
Be	9.0	9.0	2046	2075	0.619
Mg	24.0	24.0	5699	2080	0.646
Mg	25.0	25.0	5927	2080	0.613
Mg	26.0	25.9	6172	2080	0.645
Co	58.9	59.0	14193	2110	0.623
Rh	102.9	102.9	24880	2160	0.639
In	114.9	114.9	27795	2180	0.649
Ce	139.9	139.9	33866	2200	0.642
Pb	206.0	206.0	49948	2295	0.612
Pb	207.0	207.0	50159	2240	0.638
Pb	208.0	208.0	50451	2265	0.700
U	238.1	238.1	57734	2275	0.727

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Report Date/Time: Saturday, March 06, 2010 12:08:07

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## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, March 06, 2010 23:53:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\Blank.683

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		19	
>	Sc	45		ug/L		748203	
	Cr	52		ug/L		-2544	
	Cr	53		ug/L		124920	
	Mn	55		ug/L		1454	
[	Ni	60		ug/L		87	
>	Ge	74		ug/L		318141	
	As	75		ug/L		253	
	Se	77		ug/L		7537	
	Se	82		ug/L		16	
[	Kr	83		ug/L		106	
[	Mo	98		ug/L		94	
	Ag	107		ug/L		71	
	Cd	111		ug/L		40	
	Cd	114		ug/L		62	
>	In	115		ug/L		223079	
	Sb	121		ug/L		355	
[	Sb	123		ug/L		281	
>	Lu	175		ug/L		454991	
	Tl	205		ug/L		1114	
	Pb	208		ug/L		817	
[	U	238		ug/L		861	

Sample ID: Blank

Report Date/Time: Saturday, March 06, 2010 23:54:42

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	1.0000
Ni	60Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	
Se	77Linear Thru Zero	1.0000
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Mo	98Simple Linear	
Ag	107Simple Linear	0.9999
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
Pb	208Simple Linear	
U	238Simple Linear	

## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
[>	In	115					
	Sb	121					
[	Sb	123					
[>	Lu	175					
	Tl	205					
	Pb	208					
[	U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, March 06, 2010 23:58:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\Standard 1.684

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	0.342	3855	0.005
[>	Sc	45		ug/L		760319	760319.176
[	Cr	52	10.000	ug/L	2.274	38926	0.055
[	Cr	53		ug/L		119066	-0.010
[	Mn	55	10.000	ug/L	3.024	68818	0.089
[	Ni	60	10.000	ug/L	1.205	11611	0.015
[>	Ge	74		ug/L		325889	325888.557
[	As	75	10.000	ug/L	1.905	9763	0.029
[	Se	77		ug/L		7305	-0.001
[	Se	82	10.000	ug/L	1.389	931	0.003
[	Kr	83		ug/L		109	0.000
[	Mo	98	10.000	ug/L	0.735	30771	0.133
[	Ag	107	10.000	ug/L	0.448	55067	0.238
[	Cd	111	10.000	ug/L	2.484	13713	0.059
[	Cd	114		ug/L		32919	0.142
[>	In	115		ug/L		231366	231366.422
[	Sb	121	10.000	ug/L	2.085	48299	0.207
[	Sb	123		ug/L		37974	0.163
[>	Lu	175		ug/L		467314	467314.453
[	Tl	205	10.000	ug/L	0.585	215983	0.460
[	Pb	208	10.000	ug/L	0.751	370530	0.791
[	U	238	10.000	ug/L	1.715	503887	1.077

Sample ID: Standard 1

Report Date/Time: Sunday, March 07, 2010 00:00:35

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

## QC Out Of Limits

Measurement Type   Analyte   Mass   Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, March 07, 2010 00:04:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI liquid.mth

Dataset File: c:\elandata\Dataset\100305\Standard 2.685

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	100.006	ug/L	1.273	39095	0.051
[>	Sc 45		ug/L		769997	769996.600
	Cr 52	99.977	ug/L	1.791	408378	0.534
	Cr 53		ug/L		168453	0.052
	Mn 55	99.997	ug/L	2.257	681445	0.883
[	Ni 60	99.998	ug/L	1.353	116543	0.151
[>	Ge 74		ug/L		323324	323324.185
	As 75	100.025	ug/L	1.754	96953	0.299
	Se 77		ug/L		14810	0.022
	Se 82	100.065	ug/L	1.850	9721	0.030
[	Kr 83		ug/L		130	0.000
[	Mo 98	100.021	ug/L	1.596	311865	1.355
	Ag 107	99.983	ug/L	0.612	537544	2.336
	Cd 111	100.011	ug/L	1.656	137548	0.598
	Cd 114		ug/L		328185	1.426
[>	In 115		ug/L		230092	230092.175
	Sb 121	100.022	ug/L	0.801	487798	2.118
[	Sb 123		ug/L		386102	1.677
[>	Lu 175		ug/L		460754	460753.508
	Tl 205	99.848	ug/L	1.048	1836991	3.984
	Pb 208	99.900	ug/L	1.375	3311780	7.187
[	U 238	99.863	ug/L	1.749	4358883	9.457

Sample ID: Standard 2

Report Date/Time: Sunday, March 07, 2010 00:06:29

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999



## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Lu	175					
	Tl	205					
	Pb	208					
	U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, March 07, 2010 00:10:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 1.686

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.576	ug/L	2.806	20992	0.026
> Sc	45		ug/L		801580	801580.409
Cr	52	53.234	ug/L	0.547	225133	0.284
Cr	53		ug/L		148660	0.019
Mn	55	52.381	ug/L	1.991	372381	0.463
Ni	60	52.788	ug/L	2.322	64092	0.080
> Ge	74		ug/L		343102	343102.471
As	75	49.758	ug/L	3.689	51316	0.149
Se	77		ug/L		11672	0.010
Se	82	50.827	ug/L	4.456	5247	0.015
Kr	83		ug/L		117	0.000
Mo	98	50.301	ug/L	3.251	161644	0.682
Ag	107	51.007	ug/L	0.884	282552	1.192
Cd	111	52.405	ug/L	2.697	74284	0.313
Cd	114		ug/L		175459	0.740
> In	115		ug/L		237056	237055.710
Sb	121	52.404	ug/L	1.541	263473	1.110
Sb	123		ug/L		205981	0.868
> Lu	175		ug/L		467158	467157.650
Tl	205	54.949	ug/L	0.945	1025378	2.193
Pb	208	55.068	ug/L	1.818	1851345	3.962
U	238	53.573	ug/L	1.170	2370934	5.074

Sample ID: QC Std 1

Report Date/Time: Sunday, March 07, 2010 00:12:23

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	103.153				
>	Sc	45		107.1			
	Cr	52	106.469				
	Cr	53					
	Mn	55	104.763				
	Ni	60	105.576				
>	Ge	74		107.8			
	As	75	99.516				
	Se	77					
	Se	82	101.654				
	Kr	83					
	Mo	98	100.602				
	Ag	107	102.013				
	Cd	111	104.809				
	Cd	114					
>	In	115		106.3			
	Sb	121	104.807				
	Sb	123					
>	Lu	175		102.7			
	Tl	205	109.898				
	Pb	208	110.137				
	U	238	107.146				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Pb	208	ICV is out of limits (+/- 10%)

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, March 07, 2010 00:16:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 2.687

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	91.502	28	0.000
> Sc	45		ug/L		805093	805092.530
Cr	52	0.387	ug/L	16.792	-1073	0.002
Cr	53		ug/L		143433	0.011
Mn	55	0.002	ug/L	151.334	1581	0.000
Ni	60	-0.002	ug/L	320.776	92	-0.000
> Ge	74		ug/L		338749	338749.257
As	75	-0.332	ug/L	113.093	-67	-0.001
Se	77		ug/L		9527	0.004
Se	82	-0.077	ug/L	160.868	10	-0.000
Kr	83		ug/L		123	0.000
Mo	98	0.017	ug/L	21.250	153	0.000
Ag	107	0.002	ug/L	71.643	86	0.000
Cd	111	-0.005	ug/L	102.042	35	-0.000
Cd	114		ug/L		76	0.000
> In	115		ug/L		235406	235405.974
Sb	121	0.230	ug/L	6.036	1523	0.005
Sb	123		ug/L		1168	0.004
> Lu	175		ug/L		468191	468191.478
Tl	205	0.176	ug/L	13.846	4434	0.007
Pb	208	0.002	ug/L	34.473	922	0.000
U	238	0.003	ug/L	39.097	1003	0.000

Sample ID: QC Std 2

Report Date/Time: Sunday, March 07, 2010 00:18:22

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		107.6				
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
>	Ge	74		106.5				
	As	75						
	Se	77						
	Se	82						
	Kr	83						
	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115		105.5				
	Sb	121						
	Sb	123						
>	Lu	175		102.9				
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, March 07, 2010 00:22:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 3.688

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.581	ug/L	7.273	260	0.000
> Sc	45		ug/L		811620	811620.110
Cr	52	11.209	ug/L	0.344	45820	0.060
Cr	53		ug/L		129937	-0.007
Mn	55	5.804	ug/L	0.836	43189	0.051
[ Ni	60	2.146	ug/L	1.338	2730	0.003
> Ge	74		ug/L		342416	342416.037
As	75	5.233	ug/L	4.786	5632	0.016
Se	77		ug/L		8179	0.000
Se	82	5.479	ug/L	6.352	581	0.002
[ Kr	83		ug/L		122	0.000
[ Mo	98	0.543	ug/L	3.820	1854	0.007
Ag	107	1.018	ug/L	2.201	5743	0.024
Cd	111	1.117	ug/L	2.735	1633	0.007
Cd	114		ug/L		3814	0.016
> In	115		ug/L		238351	238351.158
Sb	121	3.099	ug/L	3.944	16020	0.066
[ Sb	123		ug/L		12385	0.051
> Lu	175		ug/L		478284	478284.212
Tl	205	1.280	ug/L	1.377	25600	0.051
Pb	208	2.383	ug/L	1.543	82861	0.171
[ U	238	0.271	ug/L	1.213	13183	0.026

Sample ID: QC Std 3

Report Date/Time: Sunday, March 07, 2010 00:24:17

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	116.182				
>	Sc	45		108.5			
	Cr	52	112.086				
	Cr	53					
	Mn	55	116.086				
	Ni	60	107.305				
>	Ge	74		107.6			
	As	75	104.653				
	Se	77					
	Se	82	109.584				
	Kr	83					
	Mo	98	108.675				
	Ag	107	101.791				
	Cd	111	111.674				
	Cd	114					
>	In	115		106.8			
	Sb	121	103.304				
	Sb	123					
>	Lu	175		105.1			
	Tl	205	128.005				
	Pb	208	119.168				
	U	238	135.523				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, March 07, 2010 00:28:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 4.689

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.104		ug/L	26.520	57	0.000
>	Sc	45			ug/L		728781	728781.094
	Cr	52	2.807		ug/L	1.254	8448	0.015
	Cr	53			ug/L		94865	-0.037
	Mn	55	6.029		ug/L	0.832	40227	0.053
	Ni	60	3.266		ug/L	0.799	3685	0.005
[>	Ge	74			ug/L		310872	310871.801
	As	75	-0.012		ug/L	3783.147	239	-0.000
	Se	77			ug/L		8075	0.002
	Se	82	-1.293		ug/L	16.921	-104	-0.000
	Kr	83			ug/L		278	0.001
[	Mo	98	1978.342		ug/L	1.112	5886261	26.805
	Ag	107	0.109		ug/L	2.605	629	0.003
	Cd	111	0.541		ug/L	14.324	750	0.003
	Cd	114			ug/L		8514	0.038
>	In	115			ug/L		219597	219596.753
	Sb	121	0.045		ug/L	13.005	557	0.001
	Sb	123			ug/L		449	0.001
[>	Lu	175			ug/L		437186	437185.888
	Tl	205	0.015		ug/L	9.076	1336	0.001
	Pb	208	0.220		ug/L	0.478	7702	0.016
	U	238	-0.016		ug/L	1.910	178	-0.001

Sample ID: QC Std 4

Report Date/Time: Sunday, March 07, 2010 00:30:13

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45			97.4			
	Cr	52	85.070					
	Cr	53						
	Mn	55	103.946					
	Ni	60	98.665					
>	Ge	74			97.7			
	As	75						
	Se	77						
	Se	82						
	Kr	83						
	Mo	98	98.917					
	Ag	107						
	Cd	111	121.838					
	Cd	114						
>	In	115			98.4			
	Sb	121						
	Sb	123						
>	Lu	175			96.1			
	Tl	205						
	Pb	208	116.358					
	U	238						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, March 07, 2010 00:34:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 5.690

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.260	ug/L	1.283	6991	0.010
> Sc	45		ug/L		713500	713500.497
Cr	52	23.632	ug/L	2.422	87616	0.126
Cr	53		ug/L		110625	-0.012
Mn	55	27.031	ug/L	0.762	171753	0.239
Ni	60	22.906	ug/L	0.223	24806	0.035
> Ge	74		ug/L		305944	305944.019
As	75	21.220	ug/L	5.356	19655	0.063
Se	77		ug/L		10171	0.010
Se	82	20.080	ug/L	1.324	1859	0.006
Kr	83		ug/L		290	0.001
Mo	98	1967.797	ug/L	2.511	5748648	26.662
Ag	107	19.540	ug/L	1.581	98496	0.456
Cd	111	20.346	ug/L	1.776	26258	0.122
Cd	114		ug/L		69537	0.322
> In	115		ug/L		215646	215646.167
Sb	121	22.331	ug/L	2.487	102317	0.473
Sb	123		ug/L		79187	0.366
> Lu	175		ug/L		432428	432427.984
Tl	205	21.652	ug/L	1.911	374646	0.864
Pb	208	21.315	ug/L	1.516	663841	1.533
U	238	23.574	ug/L	0.751	966195	2.233

Sample ID: QC Std 5

Report Date/Time: Sunday, March 07, 2010 00:36:09

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	96.301					
>	Sc	45		95.4				
	Cr	52	101.426					
	Cr	53						
	Mn	55	104.771					
	Ni	60	98.268					
>	Ge	74		96.2				
	As	75	106.098					
	Se	77						
	Se	82	100.401					
	Kr	83						
	Mo	98	98.390					
	Ag	107	97.700					
	Cd	111	99.521					
	Cd	114						
>	In	115		96.7				
	Sb	121	111.653					
	Sb	123						
>	Lu	175		95.0				
	Tl	205	108.262					
	Pb	208	105.578					
	U	238	117.869					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 07, 2010 00:40:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 6.691

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.393	ug/L	1.981	19934	0.026
>	Sc	45		ug/L		763738	763738.402
	Cr	52	52.077	ug/L	1.016	209788	0.278
	Cr	53		ug/L		143661	0.021
	Mn	55	52.543	ug/L	2.655	355904	0.464
	Ni	60	52.881	ug/L	0.607	61181	0.080
>	Ge	74		ug/L		330121	330121.465
	As	75	48.918	ug/L	1.594	48557	0.146
	Se	77		ug/L		11260	0.010
	Se	82	50.767	ug/L	3.314	5045	0.015
	Kr	83		ug/L		129	0.000
	Mo	98	48.821	ug/L	2.452	151587	0.661
	Ag	107	50.472	ug/L	2.538	270101	1.179
	Cd	111	51.687	ug/L	1.757	70791	0.309
	Cd	114		ug/L		167442	0.731
>	In	115		ug/L		229054	229053.972
	Sb	121	52.440	ug/L	2.328	254729	1.111
	Sb	123		ug/L		199878	0.871
>	Lu	175		ug/L		464437	464437.025
	Tl	205	52.771	ug/L	1.653	979102	2.106
	Pb	208	53.378	ug/L	0.548	1784272	3.840
	U	238	52.212	ug/L	0.294	2297363	4.945

Sample ID: QC Std 6

Report Date/Time: Sunday, March 07, 2010 00:42:06

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	102.787				
>	Sc	45		102.1			
	Cr	52	104.154				
	Cr	53					
	Mn	55	105.086				
	Ni	60	105.761				
>	Ge	74		103.8			
	As	75	97.836				
	Se	77					
	Se	82	101.533				
	Kr	83					
	Mo	98	97.643				
	Ag	107	100.944				
	Cd	111	103.374				
	Cd	114					
>	In	115		102.7			
	Sb	121	104.880				
	Sb	123					
>	Lu	175		102.1			
	Tl	205	105.541				
	Pb	208	106.756				
	U	238	104.424				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 07, 2010 00:46:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 7.692

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.011	ug/L	109.602	24	0.000
[> Sc	45		ug/L		756666	756666.203
[ Cr	52	0.161	ug/L	49.759	-1924	0.001
[ Cr	53		ug/L		140756	0.019
[ Mn	55	-0.010	ug/L	91.210	1405	-0.000
[ Ni	60	-0.007	ug/L	67.473	81	-0.000
[> Ge	74		ug/L		323228	323228.150
[ As	75	-0.436	ug/L	62.285	-166	-0.001
[ Se	77		ug/L		9750	0.006
[ Se	82	-0.065	ug/L	39.971	10	-0.000
[ Kr	83		ug/L		113	0.000
[ Mo	98	0.036	ug/L	16.390	206	0.000
[ Ag	107	0.000	ug/L	289.951	74	0.000
[ Cd	111	0.001	ug/L	955.688	41	0.000
[ Cd	114		ug/L		60	-0.000
[> In	115		ug/L		227474	227474.492
[ Sb	121	0.079	ug/L	1.379	742	0.002
[ Sb	123		ug/L		596	0.001
[> Lu	175		ug/L		453589	453588.772
[ Tl	205	0.206	ug/L	10.043	4849	0.008
[ Pb	208	0.002	ug/L	60.461	866	0.000
[ U	238	0.001	ug/L	49.925	917	0.000

Sample ID: QC Std 7

Report Date/Time: Sunday, March 07, 2010 00:48:04

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45						101.1
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
>	Ge	74						101.6
	As	75						
	Se	77						
	Se	82						
	Kr	83						
	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115						102.0
	Sb	121						
	Sb	123						
>	Lu	175						99.7
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041618

Sample Date/Time: Sunday, March 07, 2010 00:52:24

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 952556|1|ba|

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\1202041618.693

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.004	ug/L	238.924	19	-0.000
[>	Sc	45		ug/L		775623	775622.534
[	Cr	52	0.553	ug/L	19.469	-346	0.003
[	Cr	53		ug/L		207591	0.101
[	Mn	55	0.093	ug/L	3.716	2145	0.001
[	Ni	60	0.122	ug/L	8.452	234	0.000
[>	Ge	74		ug/L		324448	324447.881
[	As	75	-0.661	ug/L	35.489	-384	-0.002
[	Se	77		ug/L		15612	0.024
[	Se	82	-0.223	ug/L	16.624	-5	-0.000
[	Kr	83		ug/L		116	0.000
[	Mo	98	0.022	ug/L	11.538	161	0.000
[	Ag	107	-0.004	ug/L	2.371	49	-0.000
[	Cd	111	-0.007	ug/L	43.130	31	-0.000
[	Cd	114		ug/L		37	-0.000
[>	In	115		ug/L		223250	223249.887
[	Sb	121	-0.016	ug/L	31.160	278	-0.000
[	Sb	123		ug/L		240	-0.000
[>	Lu	175		ug/L		456494	456494.213
[	Tl	205	0.044	ug/L	8.463	1914	0.002
[	Pb	208	-0.001	ug/L	153.121	795	-0.000
[	U	238	-0.018	ug/L	1.775	90	-0.002

Sample ID: 1202041618

Report Date/Time: Sunday, March 07, 2010 00:54:02

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			103.7		
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74			102.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.1		
	Sb	121					
	Sb	123					
>	Lu	175			100.3		
	Tl	205					
	Pb	208					
	U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041619

Sample Date/Time: Sunday, March 07, 2010 00:58:21

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\1202041619.694

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	48.998	ug/L	2.547	19031	0.025
> Sc	45		ug/L		764495	764495.500
Cr	52	48.632	ug/L	0.864	195924	0.260
Cr	53		ug/L		229197	0.133
Mn	55	49.452	ug/L	0.865	335440	0.437
[ Ni	60	49.628	ug/L	0.604	57480	0.075
> Ge	74		ug/L		325316	325315.747
As	75	47.590	ug/L	2.860	46558	0.142
Se	77		ug/L		18552	0.033
Se	82	50.357	ug/L	1.455	4933	0.015
[ Kr	83		ug/L		126	0.000
[ Mo	98	47.909	ug/L	2.635	145354	0.649
Ag	107	49.860	ug/L	2.024	260739	1.165
Cd	111	49.146	ug/L	0.769	65778	0.294
Cd	114		ug/L		155501	0.694
> In	115		ug/L		223810	223810.213
Sb	121	51.556	ug/L	2.235	244712	1.092
[ Sb	123		ug/L		192978	0.861
> Lu	175		ug/L		453876	453875.864
Tl	205	48.830	ug/L	2.628	885447	1.948
Pb	208	51.228	ug/L	0.084	1673547	3.685
[ U	238	49.325	ug/L	0.410	2121052	4.671

Sample ID: 1202041619

Report Date/Time: Sunday, March 07, 2010 01:00:00

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			102.2		
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Ge	74			102.3		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.3		
	Sb	121					
[	Sb	123					
>	Lu	175			99.8		
	Tl	205					
	Pb	208					
[	U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246555001

Sample Date/Time: Sunday, March 07, 2010 01:04:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\246555001.695

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	440.233	20	0.000
> Sc	45		ug/L		732682	732681.578
Cr	52	1.564	ug/L	0.746	3628	0.008
Cr	53		ug/L		211035	0.121
Mn	55	0.612	ug/L	3.790	5381	0.005
Ni	60	0.994	ug/L	2.197	1187	0.002
> Ge	74		ug/L		311196	311196.077
As	75	-0.807	ug/L	55.015	-504	-0.002
Se	77		ug/L		15979	0.028
Se	82	-0.150	ug/L	105.265	2	-0.000
Kr	83		ug/L		109	0.000
Mo	98	0.168	ug/L	2.968	584	0.002
Ag	107	0.002	ug/L	185.819	79	0.000
Cd	111	-0.006	ug/L	82.867	31	-0.000
Cd	114		ug/L		69	0.000
> In	115		ug/L		216574	216573.764
Sb	121	-0.008	ug/L	58.903	309	-0.000
Sb	123		ug/L		262	-0.000
> Lu	175		ug/L		440785	440784.784
Tl	205	0.354	ug/L	8.210	7294	0.014
Pb	208	0.069	ug/L	3.796	2969	0.005
U	238	-0.013	ug/L	3.136	288	-0.001

Sample ID: 246555001

Report Date/Time: Sunday, March 07, 2010 01:05:55

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		97.9				
	Cr	52						
	Cr	53						
	Mn	55						
[	Ni	60						
[>	Ge	74		97.8				
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
[>	In	115		97.1				
	Sb	121						
[	Sb	123						
[>	Lu	175		96.9				
	Tl	205						
	Pb	208						
[	U	238						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 07, 2010 01:34:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 8.700

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.307	ug/L	0.833	19937	0.027
> Sc	45		ug/L		750401	750400.591
Cr	52	51.997	ug/L	1.122	205797	0.278
Cr	53		ug/L		159859	0.046
Mn	55	52.657	ug/L	1.522	350499	0.465
Ni	60	52.036	ug/L	1.508	59159	0.079
> Ge	74		ug/L		319329	319329.116
As	75	48.532	ug/L	0.803	46602	0.145
Se	77		ug/L		13658	0.019
Se	82	50.141	ug/L	0.875	4821	0.015
Kr	83		ug/L		110	0.000
Mo	98	48.591	ug/L	1.093	148359	0.658
Ag	107	50.225	ug/L	0.684	264327	1.173
Cd	111	50.239	ug/L	0.369	67664	0.300
Cd	114		ug/L		164292	0.729
> In	115		ug/L		225220	225220.017
Sb	121	51.732	ug/L	3.213	247068	1.096
Sb	123		ug/L		193850	0.860
> Lu	175		ug/L		464626	464625.800
Tl	205	52.192	ug/L	1.665	968624	2.083
Pb	208	53.454	ug/L	1.662	1787358	3.846
U	238	52.946	ug/L	0.804	2330482	5.014

Sample ID: QC Std 8

Report Date/Time: Sunday, March 07, 2010 01:35:39

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	104.615					
[>	Sc	45		100.3				
	Cr	52	103.993					
	Cr	53						
	Mn	55	105.315					
	Ni	60	104.072					
[>	Ge	74		100.4				
	As	75	97.063					
	Se	77						
	Se	82	100.282					
	Kr	83						
[	Mo	98	97.181					
	Ag	107	100.451					
	Cd	111	100.478					
	Cd	114						
[>	In	115		101.0				
	Sb	121	103.464					
	Sb	123						
[>	Lu	175		102.1				
	Tl	205	104.383					
	Pb	208	106.908					
	U	238	105.892					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 07, 2010 01:39:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\MethodVan\liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 9.701

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.015	ug/L	49.563	25	0.000
> Sc	45		ug/L		733343	733342.727
Cr	52	0.629	ug/L	9.232	-28	0.003
Cr	53		ug/L		150512	0.038
Mn	55	0.014	ug/L	78.900	1515	0.000
Ni	60	0.007	ug/L	110.368	93	0.000
> Ge	74		ug/L		312542	312542.150
As	75	-0.693	ug/L	53.713	-398	-0.002
Se	77		ug/L		11747	0.014
Se	82	0.045	ug/L	355.148	20	0.000
Kr	83		ug/L		100	-0.000
Mo	98	0.023	ug/L	9.234	161	0.000
Ag	107	0.001	ug/L	247.515	75	0.000
Cd	111	-0.007	ug/L	86.034	30	-0.000
Cd	114		ug/L		61	0.000
> In	115		ug/L		219989	219988.702
Sb	121	0.079	ug/L	5.959	719	0.002
Sb	123		ug/L		539	0.001
> Lu	175		ug/L		454641	454640.700
Tl	205	0.299	ug/L	8.962	6536	0.012
Pb	208	0.001	ug/L	252.728	832	0.000
U	238	0.002	ug/L	23.485	953	0.000

Sample ID: QC Std 9

Report Date/Time: Sunday, March 07, 2010 01:41:36

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		98.0			
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74		98.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.6			
	Sb	121					
	Sb	123					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041620

Sample Date/Time: Sunday, March 07, 2010 02:03:48

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\1202041620.705

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.003	ug/L	275.480	26	0.000
>	Sc	45		ug/L		935092	935091.752
	Cr	52	5.816	ug/L	2.602	25870	0.031
	Cr	53		ug/L		280357	0.133
	Mn	55	12.085	ug/L	2.029	101626	0.107
[	Ni	60	0.599	ug/L	5.124	956	0.001
>	Ge	74		ug/L		354791	354790.597
	As	75	1.258	ug/L	47.925	1618	0.004
	Se	77		ug/L		26365	0.051
	Se	82	0.297	ug/L	22.156	50	0.000
[	Kr	83		ug/L		120	0.000
[	Mo	98	1.210	ug/L	1.235	3959	0.016
	Ag	107	-0.005	ug/L	35.713	44	-0.000
	Cd	111	-0.007	ug/L	63.177	32	-0.000
	Cd	114		ug/L		39	-0.000
>	In	115		ug/L		235499	235499.448
	Sb	121	0.036	ug/L	20.235	557	0.001
[	Sb	123		ug/L		525	0.001
>	Lu	175		ug/L		490812	490812.402
	Tl	205	-0.006	ug/L	14.707	1084	-0.000
	Pb	208	0.059	ug/L	5.683	2949	0.004
[	U	238	1.264	ug/L	1.887	59650	0.120

Sample ID: 1202041620

Report Date/Time: Sunday, March 07, 2010 02:05:26

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		125.0				
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
[>	Ge	74		111.5				
	As	75						
	Se	77						
	Se	82						
	Kr	83						
[	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115		105.6				
	Sb	121						
	Sb	123						
[>	Lu	175		107.9				
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits	Message
Sc 45 Int Std for samSc		45		

### QC Action

QC Action Line: Continue



## ICPMS#5 - Summary Report

Sample ID: 1202041621

Sample Date/Time: Sunday, March 07, 2010 02:09:45

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 952556j1|baj

Method File: c:\elandata\Method\VanI liquid.mth

Dataset File: c:\elandata\Dataset\100305\1202041621.706

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	42.869	ug/L	0.396	21094	0.022
[ > Sc	45		ug/L		968538	968538.041
[ Cr	52	48.938	ug/L	1.583	249790	0.261
[ Cr	53		ug/L		264579	0.106
[ Mn	55	56.908	ug/L	1.034	488755	0.503
[ Ni	60	46.879	ug/L	0.370	68798	0.071
[ > Ge	74		ug/L		368279	368279.469
[ As	75	76.810	ug/L	4.089	84856	0.230
[ Se	77		ug/L		22131	0.036
[ Se	82	19.839	ug/L	4.087	2210	0.006
[ Kr	83		ug/L		157	0.000
[ Mo	98	49.594	ug/L	3.504	166139	0.672
[ Ag	107	48.746	ug/L	1.797	281507	1.139
[ Cd	111	10.350	ug/L	2.152	15331	0.062
[ Cd	114		ug/L		34868	0.141
[ > In	115		ug/L		247176	247176.355
[ Sb	121	193.033	ug/L	1.276	1010841	4.088
[ Sb	123		ug/L		814100	3.293
[ > Lu	175		ug/L		510158	510157.871
[ Tl	205	87.572	ug/L	2.332	1783960	3.494
[ Pb	208	41.289	ug/L	0.565	1516282	2.970
[ U	238	49.845	ug/L	1.334	2409178	4.720

Sample ID: 1202041621

Report Date/Time: Sunday, March 07, 2010 02:11:23

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45						129.4
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
>	Ge	74						115.8
	As	75						
	Se	77						
	Se	82						
	Kr	83						
	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115						110.8
	Sb	121						
	Sb	123						
>	Lu	175						112.1
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sanSc		45	

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: 1202041622

Sample Date/Time: Sunday, March 07, 2010 02:15:42

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 952556|5|baj

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\1202041622.707

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.006	ug/L	288.173	21	-0.000
> Sc	45		ug/L		904771	904770.818
Cr	52	1.433	ug/L	10.531	3857	0.008
Cr	53		ug/L		176597	0.028
Mn	55	2.367	ug/L	3.194	20666	0.021
Ni	60	0.107	ug/L	9.498	251	0.000
> Ge	74		ug/L		361284	361283.791
As	75	0.005	ug/L	6237.961	297	0.000
Se	77		ug/L		14107	0.015
Se	82	-0.020	ug/L	61.371	16	-0.000
Kr	83		ug/L		101	-0.000
Mo	98	0.215	ug/L	5.439	833	0.003
Ag	107	-0.007	ug/L	28.798	39	-0.000
Cd	111	-0.024	ug/L	31.495	8	-0.000
Cd	114		ug/L		31	-0.000
> In	115		ug/L		249702	249701.521
Sb	121	-0.023	ug/L	9.467	275	-0.000
Sb	123		ug/L		239	-0.000
> Lu	175		ug/L		507982	507982.112
Tl	205	0.666	ug/L	10.024	14751	0.027
Pb	208	-0.004	ug/L	14.699	763	-0.000
U	238	0.227	ug/L	1.943	11881	0.021

Sample ID: 1202041622

Report Date/Time: Sunday, March 07, 2010 02:17:20

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			120.9			
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
[>	Ge	74			113.6			
	As	75						
	Se	77						
	Se	82						
	Kr	83						
[	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
[>	In	115			111.9			
	Sb	121						
	Sb	123						
[>	Lu	175			111.6			
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 07, 2010 02:21:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 8.708

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.210	ug/L	1.658	23166	0.026
[>	Sc	45		ug/L		873693	873693.234
	Cr	52	50.469	ug/L	0.205	232492	0.270
	Cr	53		ug/L		166445	0.024
	Mn	55	51.407	ug/L	2.454	398372	0.454
[	Ni	60	49.862	ug/L	1.238	65995	0.075
[>	Ge	74		ug/L		355368	355367.697
	As	75	49.261	ug/L	0.969	52636	0.147
	Se	77		ug/L		14296	0.017
	Se	82	50.988	ug/L	2.087	5455	0.015
[	Kr	83		ug/L		117	-0.000
[	Mo	98	49.248	ug/L	2.186	165683	0.667
	Ag	107	49.837	ug/L	2.432	288976	1.164
	Cd	111	51.269	ug/L	1.756	76088	0.306
	Cd	114		ug/L		179685	0.724
[>	In	115		ug/L		248199	248199.192
	Sb	121	51.490	ug/L	3.025	270985	1.091
[	Sb	123		ug/L		212225	0.854
[>	Lu	175		ug/L		505424	505423.638
	Tl	205	52.724	ug/L	1.497	1064559	2.104
	Pb	208	53.115	ug/L	2.303	1931681	3.821
[	U	238	52.208	ug/L	1.542	2499442	4.944

Sample ID: QC Std 8

Report Date/Time: Sunday, March 07, 2010 02:23:17

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	104.420				
>	Sc	45		116.8			
	Cr	52	100.937				
	Cr	53					
	Mn	55	102.815				
	Ni	60	99.725				
>	Ge	74		111.7			
	As	75	98.521				
	Se	77					
	Se	82	101.975				
	Kr	83					
	Mo	98	98.497				
	Ag	107	99.674				
	Cd	111	102.539				
	Cd	114					
>	In	115		111.3			
	Sb	121	102.979				
	Sb	123					
>	Lu	175		111.1			
	Tl	205	105.448				
	Pb	208	106.229				
	U	238	104.416				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 07, 2010 02:27:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liquid.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 9.709

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.006	ug/L	123.847	24	0.000
[> Sc	45		ug/L		837626	837626.246
[ Cr	52	0.965	ug/L	8.730	1477	0.005
[ Cr	53		ug/L		161043	0.025
[ Mn	55	0.010	ug/L	62.821	1705	0.000
[ Ni	60	-0.001	ug/L	533.193	96	-0.000
[> Ge	74		ug/L		344326	344325.529
[ As	75	-0.655	ug/L	58.995	-397	-0.002
[ Se	77		ug/L		12493	0.013
[ Se	82	0.094	ug/L	53.063	27	0.000
[ Kr	83		ug/L		99	-0.000
[ Mo	98	0.013	ug/L	11.027	143	0.000
[ Ag	107	0.000	ug/L	8927.327	76	0.000
[ Cd	111	-0.001	ug/L	810.908	41	-0.000
[ Cd	114		ug/L		68	0.000
[> In	115		ug/L		239817	239816.718
[ Sb	121	0.078	ug/L	2.103	776	0.002
[ Sb	123		ug/L		607	0.001
[> Lu	175		ug/L		491035	491034.751
[ Tl	205	0.416	ug/L	7.574	9356	0.017
[ Pb	208	0.001	ug/L	50.663	931	0.000
[ U	238	0.003	ug/L	45.122	1046	0.000

Sample ID: QC Std 9

Report Date/Time: Sunday, March 07, 2010 02:29:16

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
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	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			112.0			
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
[>	Ge	74			108.2			
	As	75						
	Se	77						
	Se	82						
	Kr	83						
[	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
[>	In	115			107.5			
	Sb	121						
	Sb	123						
[>	Lu	175			107.9			
	Tl	205						
	Pb	208						
	U	238						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Sunday, March 07, 2010 12:47:09

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.667

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		4808.8		4808.810		108.927		2.3
Mg	24.0		50727.3		50727.315		619.955		1.2
Co	58.9		88616.6		88616.606		384.339		0.4
Rh	102.9		166250.4		166250.400		950.647		0.6
In	114.9		227713.9		227713.943		749.789		0.3
Pb	208.0		239302.0		239302.024		3735.445		1.6
[> Ba	137.9		227074.7		227074.676		1482.945		0.7
[ Ba++	69.0		3788.7		0.017		0.000		1.1
[> Ce	139.9		277482.0		277482.011		1509.902		0.5
[ CeO	155.9		6354.9		0.023		0.000		2.0
Bkgd	220.0		24.1		24.100		3.209		13.3

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.50	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	6.5	5423.7
Co	59	17	7.0	93544.6
In	115	17	7.8	224994.3

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	587	2050	0.686
Be	9.0	9.0	2049	2075	0.646
Mg	24.0	24.0	5697	2080	0.658
Mg	25.0	25.0	5925	2080	0.646
Mg	26.0	26.0	6170	2080	0.632
Co	58.9	58.9	14191	2110	0.626
Rh	102.9	102.9	24873	2160	0.636
In	114.9	114.9	27788	2180	0.640
Ce	139.9	139.9	33871	2200	0.643
Pb	206.0	206.0	49948	2295	0.615
Pb	207.0	207.0	50159	2240	0.636
Pb	208.0	208.0	50451	2265	0.704
U	238.1	238.0	57727	2275	0.728

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, March 07, 2010 14:48:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\Blank.913

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		19	
Sc	45		ug/L		1090080	
Mn	55		ug/L		1397	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45					
Mn	55					

### 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#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, March 07, 2010 14:50:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\Standard 1.914

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	3.913	4540	0.004
>	Sc	45		ug/L		1127751	1127751.301
[	Mn	55	10.000	ug/L	2.692	89004	0.078

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
[	Mn	55					

### 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: Standard 1

Report Date/Time: Sunday, March 07, 2010 14:50:44

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## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, March 07, 2010 14:52:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\Standard 2.915

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.011	ug/L	1.651	44025	0.041
>	Sc	45		ug/L		1085477	1085476.617
[	Mn	55	99.979	ug/L	0.465	826647	0.760

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
[	Mn	55					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, March 07, 2010 14:53:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 1.916

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.543	ug/L	0.844	23383	0.022
Sc	45		ug/L		1076401	1076401.332
Mn	55	54.134	ug/L	2.618	444372	0.412

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	107.086				
Sc	45		98.7			
Mn	55	108.268				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Sunday, March 07, 2010 14:54:05

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, March 07, 2010 14:55:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 2.917

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.017	ug/L	81.654	26	0.000
>	Sc	45		ug/L		1061286	1061286.234
[	Mn	55	0.006	ug/L	54.435	1408	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		97.4			
[	Mn	55					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Sunday, March 07, 2010 14:55:50

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## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, March 07, 2010 14:57:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 3.918

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.555	ug/L	3.602	263	0.000
>	Sc	45		ug/L		1085474	1085474.011
[	Mn	55	5.961	ug/L	0.967	50592	0.045

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	111.080				
>	Sc	45		99.6			
[	Mn	55	119.216				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, March 07, 2010 14:59:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 4.919

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.108	ug/L	7.554	59	0.000
>	Sc	45		ug/L		956038	956037.870
[	Mn	55	6.214	ug/L	1.528	46395	0.047

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45			87.7			
[	Mn	55	107.132					

### 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 4

Report Date/Time: Sunday, March 07, 2010 14:59:13

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## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, March 07, 2010 15:00:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 5.920

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.846		ug/L	0.466	7677	0.008
>	Sc	45			ug/L		952080	952080.305
[	Mn	55	28.366		ug/L	1.112	206575	0.216

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	99.229					
>	Sc	45		87.3				
[	Mn	55	109.945					

### QC Out Of Limits

Measurement Type: Analyte      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Sunday, March 07, 2010 15:00:56

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 07, 2010 15:02:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 6.921

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.159	ug/L	2.051	22314	0.022
>	Sc	45		ug/L		1034646	1034645.797
[	Mn	55	54.649	ug/L	1.629	431245	0.416

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	106.318				
>	Sc	45		94.9			
[	Mn	55	109.299				

### 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#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 07, 2010 15:04:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 7.922

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.024	ug/L	35.488	28	0.000
Sc	45		ug/L		1042082	1042082.469
Mn	55	0.000	ug/L	2193.540	1337	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.6				
Mn	55						

### 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: Sunday, March 07, 2010 15:04:24

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## ICPMS#5 - Summary Report

Sample ID: 1202041618

Sample Date/Time: Sunday, March 07, 2010 15:05:54

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\1202041618.923

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.017		ug/L	144.323	26	0.000
>	Sc	45			ug/L		1067500	1067500.048
[	Mn	55	0.162		ug/L	6.593	2682	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		97.9				
[	Mn	55						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041619

Sample Date/Time: Sunday, March 07, 2010 15:07:38

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 952556|1|ba|

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\1202041619.924

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.954	ug/L	0.606	23665	0.022
>	Sc	45		ug/L		1081096	1081096.351
[	Mn	55	55.661	ug/L	0.296	458954	0.423

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		99.2			
[	Mn	55					

### 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#5 - Summary Report

Sample ID: 246555001

Sample Date/Time: Sunday, March 07, 2010 15:09:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\246555001.925

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.014	ug/L	32.663	24	0.000
Sc	45		ug/L		1042765	1042764.956
Mn	55	0.757	ug/L	2.866	7341	0.006

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.7				
Mn	55						

### 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: 246555001

Report Date/Time: Sunday, March 07, 2010 15:09:34

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 07, 2010 15:17:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 8.930

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.228	ug/L	2.582	22889	0.021
>	Sc	45		ug/L		1080145	1080144.813
[	Mn	55	53.619	ug/L	1.513	441763	0.408

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	104.456					
>	Sc	45		99.1				
[	Mn	55	107.238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 07, 2010 15:19:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 9.931

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.014		ug/L	69.389	25	0.000
>	Sc	45			ug/L		1059987	1059986.611
[	Mn	55	0.022		ug/L	34.502	1539	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		97.2				
[	Mn	55						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202041620

Sample Date/Time: Sunday, March 07, 2010 15:26:35

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 952556|1|ba|

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\1202041620.935

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	248.580	21	0.000
>	Sc	45		ug/L		1075550	1075550.398
[	Mn	55	14.023	ug/L	1.395	116067	0.107

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		98.7			
[	Mn	55					

### 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: 1202041620

Report Date/Time: Sunday, March 07, 2010 15:26:49

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## ICPMS#5 - Summary Report

Sample ID: 1202041621

Sample Date/Time: Sunday, March 07, 2010 15:28:18

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 952556|1|baj

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\1202041621.936

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.732	ug/L	0.393	23114	0.022
>	Sc	45		ug/L		1060216	1060215.794
[	Mn	55	66.180	ug/L	0.700	534890	0.503

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		97.3			
[	Mn	55					

### 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: 1202041621

Report Date/Time: Sunday, March 07, 2010 15:28:32

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## ICPMS#5 - Summary Report

Sample ID: 1202041622

Sample Date/Time: Sunday, March 07, 2010 15:30:02

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 952556|5|baj

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\1202041622.937

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.020	ug/L	83.138	28	0.000
>	Sc	45		ug/L		1080351	1080350.689
[	Mn	55	2.806	ug/L	2.219	24431	0.021

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		99.1			
[	Mn	55					

### 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: 1202041622

Report Date/Time: Sunday, March 07, 2010 15:30:16

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 07, 2010 15:31:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 8.938

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.705	ug/L	1.549	23468	0.022
>	Sc	45		ug/L		1057417	1057417.421
[	Mn	55	53.281	ug/L	1.014	429762	0.405

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	109.409					
>	Sc	45		97.0				
[	Mn	55	106.563					

### 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 8

Report Date/Time: Sunday, March 07, 2010 15:32:00

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 07, 2010 15:33:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and mn.mth

Dataset File: c:\elandata\Dataset\100305\QC Std 9.939

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.018	ug/L	75.774	26	0.000
>	Sc	45		ug/L		1047638	1047638.280
[	Mn	55	0.031	ug/L	11.359	1586	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		96.1				
[	Mn	55						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, March 07, 2010 15:33:45

Page 1

=====  
Analysis BegunLogged In Analyst: Administrator  
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS  
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\021710W1.SIF

Batch ID:

Results Data Set: 021710W2

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====  
Method Loaded

Method Name: WATER

Method Last Saved: 2/8/2010 13:04:57

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/17/2010 09:35:12

Analyst:

Data Type: Original

-----  
Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0006	0.0053	0.0006	09:36:12	Yes
2		[0.00]	0.0005	0.0028	0.0005	09:36:47	Yes
Mean:		[0.00]	0.0006				
SD:		0.00	0.0001				
%RSD:		0.00	17.93				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/17/2010 09:37:06

Analyst:

Data Type: Original

-----  
Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0017	0.0110	0.0023	09:38:07	Yes
2		[0.2]	0.0018	0.0104	0.0023	09:38:42	Yes
Mean:		[0.2]	0.0018				
SD:		0.0	0.0001				
%RSD:		0.0	3.11				

Standard number 1 applied. [0.2]  
Correlation Coef.: 1.000000 Slope: 0.00877 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/17/2010 09:39:01

Analyst:

Data Type: Original

-----  
Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0045	0.0220	0.0050	09:40:02	Yes
2		[0.5]	0.0044	0.0217	0.0050	09:40:37	Yes
Mean:		[0.5]	0.0045				
SD:		0.0	0.0000				
%RSD:		0.0	0.41				

Standard number 2 applied. [0.5]  
Correlation Coef.: 0.999971 Slope: 0.00893 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/17/2010 09:40:56

Analyst:

Data Type: Original

-----  
Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0191	0.0895	0.0196	09:41:58	Yes
2		[2.0]	0.0191	0.0903	0.0197	09:42:32	Yes
Mean:		[2.0]	0.0191				
SD:		0.0	0.0000				
%RSD:		0.0	0.15				

Standard number 3 applied. [2.0]  
Correlation Coef.: 0.999863 Slope: 0.00961 Intercept: -0.00015

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 2/17/2010 09:42:52

Data Type: Original

-----  
Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0484	0.2236	0.0490	09:43:54	Yes
2		[5.0]	0.0483	0.2221	0.0488	09:44:29	Yes
Mean:		[5.0]	0.0484				
SD:		0.0	0.0001				
%RSD:		0.0	0.21				

Standard number 4 applied. [5.0]  
Correlation Coef.: 0.999974 Slope: 0.00970 Intercept: -0.00020

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

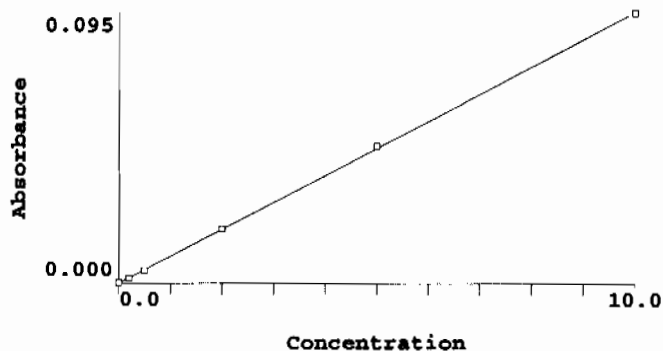
Date Collected: 2/17/2010 09:44:49

Data Type: Original

-----  
Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0954	0.4427	0.0960	09:45:49	Yes
2		[10.0]	0.0951	0.4391	0.0956	09:46:24	Yes
Mean:		[10.0]	0.0953				
SD:		0.0	0.0003				
%RSD:		0.0	0.27				

Standard number 5 applied. [10.0]  
Correlation Coef.: 0.999961 Slope: 0.00956 Intercept: -0.00004

-----  
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	0.004	0.00	17.9
S0.2	0.0018	0.2	0.188	0.00	3.1
S0.5	0.0045	0.5	0.471	0.00	0.4
S2.0	0.0191	2.0	2.004	0.00	0.1

S5.0	0.0484	5.0	5.063	0.00	0.2
S10.0	0.0953	10.0	9.969	0.00	0.3

Correlation Coef.: 0.999961 Slope: 0.00956 Intercept: -0.00004

Sequence No.: 7

Autosampler Location: 9

Sample ID: ICV

Date Collected: 2/17/2010 09:46:43

Analyst:

Data Type: Original

## Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.252	5.252	0.0502	0.2331	0.0507	09:47:44	Yes
2	5.207	5.207	0.0497	0.2298	0.0503	09:48:19	Yes
Mean:	5.230	5.230	0.0500				
SD:	0.032	0.032	0.0003				
%RSD:	0.607	0.607	0.61				

QC value within limits for Hg 253.7 Recovery = 104.60%  
All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 10

Sample ID: ICB

Date Collected: 2/17/2010 09:48:39

Analyst:

Data Type: Original

## Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	0.0016	0.0004	09:49:40	Yes
2	0.000	0.000	-0.0000	0.0027	0.0005	09:50:15	Yes
Mean:	-0.008	-0.008	-0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	134.1	134.1	85.46				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 11

Sample ID: CRDL

Date Collected: 2/17/2010 09:50:35

Analyst:

Data Type: Original

## Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.178	0.178	0.0017	0.0097	0.0022	09:51:36	Yes
2	0.175	0.175	0.0016	0.0087	0.0022	09:52:11	Yes
Mean:	0.176	0.176	0.0016				
SD:	0.002	0.002	0.0000				
%RSD:	1.236	1.236	1.27				

QC value within limits for Hg 253.7 Recovery = 88.19%  
All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 09:52:31

Analyst:

Data Type: Original

## Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.111	5.111	0.0488	0.2267	0.0494	09:53:31	Yes
2	5.119	5.119	0.0489	0.2263	0.0494	09:54:06	Yes
Mean:	5.115	5.115	0.0489				
SD:	0.005	0.005	0.0001				
%RSD:	0.106	0.106	0.11				

QC value within limits for Hg 253.7 Recovery = 102.30%  
All analyte(s) passed QC.

Sequence No.: 11  
Sample ID: CCB  
Analyst:

Autosampler Location: 8  
Date Collected: 2/17/2010 09:54:25  
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	-0.0002	0.0004	0.0004	09:55:26	Yes
2	-0.014	-0.014	-0.0002	0.0015	0.0004	09:56:01	Yes
Mean:	-0.015	-0.015	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	12.15	12.15	9.35				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 12  
Sample ID: 1202039320|951563|1  
Analyst: JXL

Autosampler Location: 12  
Date Collected: 2/17/2010 09:56:20  
Data Type: Original

## Replicate Data: 1202039320|951563|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	0.0005	0.0004	09:57:22	Yes
2	0.006	0.006	0.0000	0.0018	0.0006	09:57:57	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.013	0.013	0.0001				
%RSD:	409.9	409.9	173.74				

Sequence No.: 13  
Sample ID: 1202039321|951563|1  
Analyst: JXL

Autosampler Location: 13  
Date Collected: 2/17/2010 09:58:17  
Data Type: Original

## Replicate Data: 1202039321|951563|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.018	2.018	0.0193	0.0913	0.0198	09:59:19	Yes
2	2.038	2.038	0.0194	0.0922	0.0200	09:59:54	Yes
Mean:	2.028	2.028	0.0193				
SD:	0.014	0.014	0.0001				
%RSD:	0.668	0.668	0.67				

Sequence No.: 14  
Sample ID: 245934001|951563|1  
Analyst: JXL

Autosampler Location: 14  
Date Collected: 2/17/2010 10:00:14  
Data Type: Original

## Replicate Data: 245934001|951563|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0001	0.0036	0.0007	10:01:14	Yes
2	0.024	0.024	0.0002	0.0038	0.0007	10:01:50	Yes
Mean:	0.020	0.020	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	27.85	27.85	35.88				

Sequence No.: 15  
Sample ID: 245934002|951563|1  
Analyst: JXL

Autosampler Location: 15  
Date Collected: 2/17/2010 10:02:09  
Data Type: Original

## Replicate Data: 245934002|951563|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	--------------	----------------	-----------	-------------	------	-------------

-----  
Replicate Data: 1202039323|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.024	2.024	0.0193	0.0929	0.0199	10:12:43	Yes
2	1.985	1.985	0.0189	0.0898	0.0195	10:13:17	Yes
Mean:	2.005	2.005	0.0191				
SD:	0.027	0.027	0.0003				
%RSD:	1.354	1.354	1.36				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 1202039325|951563|5

Date Collected: 2/17/2010 10:13:37

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039325|951563|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	0.0021	0.0005	10:14:38	Yes
2	-0.005	-0.005	-0.0001	0.0015	0.0005	10:15:13	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.610	8.610	4.54				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 10:15:32

Analyst:

Data Type: Original

-----  
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.089	5.089	0.0486	0.2253	0.0492	10:16:33	Yes
2	5.081	5.081	0.0485	0.2275	0.0491	10:17:08	Yes
Mean:	5.085	5.085	0.0486				
SD:	0.006	0.006	0.0001				
%RSD:	0.112	0.112	0.11				

QC value within limits for Hg 253.7 Recovery = 101.71%  
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/17/2010 10:17:26

Analyst:

Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	-0.0001	0.0018	0.0005	10:18:27	Yes
2	-0.004	-0.004	-0.0001	0.0020	0.0005	10:19:02	Yes
Mean:	-0.004	-0.004	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.591	8.591	4.14				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 246293002|951563|1

Date Collected: 2/17/2010 10:19:21

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246293002|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0038	0.0006	10:20:23	Yes
2	0.002	0.002	-0.0000	0.0027	0.0005	10:20:58	Yes

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0002	0.0005	0.0003	10:30:03	Yes
2	-0.002	-0.002	-0.0001	0.0020	0.0005	10:30:38	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.012	0.012	0.0001				
%RSD:	117.3	117.3	82.53				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 246465001|951503|1

Date Collected: 2/17/2010 10:30:57

Analyst: JXL

Data Type: Original

Replicate Data: 246465001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0001	0.0023	0.0005	10:31:58	Yes
2	0.004	0.004	-0.0000	0.0021	0.0005	10:32:33	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	354.6	354.6	104.60				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 246590001|951503|1

Date Collected: 2/17/2010 10:32:53

Analyst: JXL

Data Type: Original

Replicate Data: 246590001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0001	0.0020	0.0005	10:33:53	Yes
2	0.000	0.000	-0.0000	0.0020	0.0005	10:34:28	Yes
Mean:	-0.001	-0.001	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	184.8	184.8	44.22				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 246591001|951503|1

Date Collected: 2/17/2010 10:34:47

Analyst: JXL

Data Type: Original

Replicate Data: 246591001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	-0.0000	0.0022	0.0005	10:35:48	Yes
2	-0.007	-0.007	-0.0001	0.0024	0.0004	10:36:23	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	205.4	205.4	77.44				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246606001|951503|1

Date Collected: 2/17/2010 10:36:42

Analyst: JXL

Data Type: Original

Replicate Data: 246606001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	0.0013	0.0004	10:37:43	Yes
2	0.001	0.001	-0.0000	0.0027	0.0005	10:38:18	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	201.4	201.4	87.27				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 10:38:37



Analyst:

Data Type: Original

-----  
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.901	4.901	0.0468	0.2205	0.0474	10:39:37	Yes
2	4.918	4.918	0.0470	0.2207	0.0475	10:40:12	Yes
Mean:	4.910	4.910	0.0469				
SD:	0.012	0.012	0.0001				
%RSD:	0.244	0.244	0.24				

QC value within limits for Hg 253.7 Recovery = 98.19%  
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/17/2010 10:40:31

Analyst:

Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	-0.0000	0.0029	0.0005	10:41:32	Yes
2	0.009	0.009	0.0000	0.0036	0.0006	10:42:07	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	131.4	131.4	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 1202039173|951503|1

Date Collected: 2/17/2010 10:42:27

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039173|951503|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	-0.0001	0.0020	0.0005	10:43:27	Yes
2	-0.007	-0.007	-0.0001	0.0017	0.0004	10:44:02	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	62.16	62.16	31.63				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 1202039174|951503|1

Date Collected: 2/17/2010 10:44:22

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039174|951503|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.012	2.012	0.0192	0.0919	0.0197	10:45:23	Yes
2	1.950	1.950	0.0186	0.0891	0.0192	10:45:57	Yes
Mean:	1.981	1.981	0.0189				
SD:	0.044	0.044	0.0004				
%RSD:	2.199	2.199	2.20				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202039175|951503|5

Date Collected: 2/17/2010 10:46:17

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039175|951503|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0003	0.0004	0.0003	10:47:18	Yes

## Replicate Data: 246431001|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	-0.0002	0.0018	0.0004	10:57:00	Yes
2	-0.006	-0.006	-0.0001	0.0027	0.0005	10:57:36	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	54.51	54.51	36.73				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202039380|951593|1

Date Collected: 2/17/2010 10:57:55

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039380|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.011	-0.011	-0.0002	0.0020	0.0004	10:58:57	Yes
2	-0.012	-0.012	-0.0002	0.0018	0.0004	10:59:32	Yes
Mean:	-0.012	-0.012	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.997	5.997	4.37				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202039381|951593|1

Date Collected: 2/17/2010 10:59:51

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039381|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.943	1.943	0.0185	0.0894	0.0191	11:00:52	Yes
2	1.923	1.923	0.0183	0.0878	0.0189	11:01:27	Yes
Mean:	1.933	1.933	0.0184				
SD:	0.014	0.014	0.0001				
%RSD:	0.700	0.700	0.70				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 11:01:46

Analyst:

Data Type: Original

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.917	4.917	0.0470	0.2196	0.0475	11:02:47	Yes
2	4.890	4.890	0.0467	0.2184	0.0473	11:03:22	Yes
Mean:	4.904	4.904	0.0468				
SD:	0.019	0.019	0.0002				
%RSD:	0.390	0.390	0.39				

QC value within limits for Hg 253.7 Recovery = 98.07%  
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/17/2010 11:03:41

Analyst:

Data Type: Original

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	0.0026	0.0005	11:04:41	Yes
2	-0.016	-0.016	-0.0002	0.0012	0.0004	11:05:17	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	72.63	72.63	51.34				

QC value within limits for Hg 253.7 Recovery = Not calculated

1	-0.008	-0.008	-0.0001	0.0022	0.0004	11:14:19	Yes
2	-0.016	-0.016	-0.0002	0.0015	0.0004	11:14:54	Yes
Mean:	-0.012	-0.012	-0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	48.82	48.82	35.35				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 1202039439|951627|1

Date Collected: 2/17/2010 11:15:14

Analyst: JXL

Data Type: Original

Replicate Data: 1202039439|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0002	0.0013	0.0003	11:16:15	Yes
2	-0.018	-0.018	-0.0002	0.0013	0.0003	11:16:50	Yes
Mean:	-0.019	-0.019	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.243	6.243	5.06				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 1202039440|951627|1

Date Collected: 2/17/2010 11:17:10

Analyst: JXL

Data Type: Original

Replicate Data: 1202039440|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.975	1.975	0.0188	0.0909	0.0194	11:18:12	Yes
2	1.988	1.988	0.0190	0.0907	0.0195	11:18:47	Yes
Mean:	1.982	1.982	0.0189				
SD:	0.009	0.009	0.0001				
%RSD:	0.452	0.452	0.45				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 246555001|951627|1

Date Collected: 2/17/2010 11:19:07

Analyst: JXL

Data Type: Original

Replicate Data: 246555001|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.022	-0.022	-0.0003	0.0008	0.0003	11:20:09	Yes
2	-0.020	-0.020	-0.0002	0.0018	0.0003	11:20:43	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.389	6.389	5.27				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 246571001|951627|1

Date Collected: 2/17/2010 11:21:04

Analyst: JXL

Data Type: Original

Replicate Data: 246571001|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0003	0.0014	0.0003	11:22:05	Yes
2	-0.020	-0.020	-0.0002	0.0016	0.0003	11:22:40	Yes
Mean:	-0.022	-0.022	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	9.432	9.432	7.84				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 1202039441|951627|1

Date Collected: 2/17/2010 11:23:00

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039441|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	-0.0002	0.0013	0.0003	11:24:01	Yes
2	-0.020	-0.020	-0.0002	0.0011	0.0003	11:24:36	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.177	0.177	0.15				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/17/2010 11:24:56

Data Type: Original  
-----

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.900	4.900	0.0468	0.2214	0.0474	11:25:56	Yes
2	4.923	4.923	0.0470	0.2210	0.0476	11:26:31	Yes
Mean:	4.912	4.912	0.0469				
SD:	0.016	0.016	0.0002				
%RSD:	0.329	0.329	0.33				

QC value within limits for Hg 253.7 Recovery = 98.24%  
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/17/2010 11:26:50

Data Type: Original  
-----

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0002	0.0009	0.0003	11:27:51	Yes
2	-0.014	-0.014	-0.0002	0.0014	0.0004	11:28:26	Yes
Mean:	-0.017	-0.017	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	25.07	25.07	19.99				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 1202039442|951627|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 2/17/2010 11:28:45

Data Type: Original  
-----

## Replicate Data: 1202039442|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.956	1.956	0.0187	0.0901	0.0192	11:29:46	Yes
2	1.952	1.952	0.0186	0.0894	0.0192	11:30:21	Yes
Mean:	1.954	1.954	0.0186				
SD:	0.003	0.003	0.0000				
%RSD:	0.139	0.139	0.14				

Sequence No.: 61

Sample ID: 1202039443|951627|5

Analyst: JXL

Autosampler Location: 53

Date Collected: 2/17/2010 11:30:41

Data Type: Original  
-----

## Replicate Data: 1202039443|951627|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	-0.0002	0.0013	0.0003	11:31:42	Yes
2	-0.014	-0.014	-0.0002	0.0024	0.0004	11:32:17	Yes
Mean:	-0.017	-0.017	-0.0002				

SD: 0.005 0.005 0.0000  
%RSD: 26.18 26.18 20.90

Sequence No.: 62

Autosampler Location: 54

Sample ID: 246571002|951627|1

Date Collected: 2/17/2010 11:32:37

Analyst: JXL

Data Type: Original

Replicate Data: 246571002|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0002	0.0014	0.0003	11:33:38	Yes
2	-0.027	-0.027	-0.0003	0.0004	0.0003	11:34:13	Yes
Mean:	-0.023	-0.023	-0.0003				
SD:	0.005	0.005	0.0000				
%RSD:	20.83	20.83	17.53				

Sequence No.: 63

Autosampler Location: 55

Sample ID: 1202041589|952544|1

Date Collected: 2/17/2010 11:34:32

Analyst: JXL

Data Type: Original

Replicate Data: 1202041589|952544|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	-0.0002	0.0015	0.0003	11:35:33	Yes
2	-0.020	-0.020	-0.0002	0.0014	0.0003	11:36:08	Yes
Mean:	-0.020	-0.020	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	2.738	2.738	2.25				

Sequence No.: 64

Autosampler Location: 56

Sample ID: 1202041591|952544|1

Date Collected: 2/17/2010 11:36:28

Analyst: JXL

Data Type: Original

Replicate Data: 1202041591|952544|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.959	1.959	0.0187	0.0900	0.0192	11:37:29	Yes
2	1.932	1.932	0.0184	0.0890	0.0190	11:38:04	Yes
Mean:	1.945	1.945	0.0186				
SD:	0.020	0.020	0.0002				
%RSD:	1.006	1.006	1.01				

Sequence No.: 65

Autosampler Location: 57

Sample ID: 1202041592|952544|1

Date Collected: 2/17/2010 11:38:23

Analyst: JXL

Data Type: Original

Replicate Data: 1202041592|952544|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.140	2.140	0.0204	0.0962	0.0210	11:39:25	Yes
2	2.126	2.126	0.0203	0.0959	0.0208	11:39:59	Yes
Mean:	2.133	2.133	0.0204				
SD:	0.010	0.010	0.0001				
%RSD:	0.465	0.465	0.47				

Sequence No.: 66

Autosampler Location: 58

Sample ID: 246858010|952544|1

Date Collected: 2/17/2010 11:40:19

Analyst: JXL

Data Type: Original

Replicate Data: 246858010|952544|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0003	0.0039	0.0009	11:41:21	Yes
2	0.039	0.039	0.0003	0.0048	0.0009	11:41:56	Yes
Mean:	0.038	0.038	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	4.649	4.649	5.26				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 1202041590|952544|5

Date Collected: 2/17/2010 11:42:15

Analyst: JXL

Data Type: Original

Replicate Data: 1202041590|952544|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	-0.0001	0.0020	0.0004	11:43:17	Yes
2	-0.012	-0.012	-0.0002	0.0010	0.0004	11:43:52	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	15.75	15.75	11.25				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 1202039338|951572|1

Date Collected: 2/17/2010 11:44:12

Analyst: JXL

Data Type: Original

Replicate Data: 1202039338|951572|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	-0.0002	0.0016	0.0003	11:45:14	Yes
2	-0.023	-0.023	-0.0003	0.0012	0.0003	11:45:49	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	15.05	15.05	12.45				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 1202039340|951572|1

Date Collected: 2/17/2010 11:46:09

Analyst: JXL

Data Type: Original

Replicate Data: 1202039340|951572|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.948	1.948	0.0186	0.0891	0.0191	11:47:11	Yes
2	1.950	1.950	0.0186	0.0892	0.0191	11:47:46	Yes
Mean:	1.949	1.949	0.0186				
SD:	0.001	0.001	0.0000				
%RSD:	0.048	0.048	0.05				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 11:48:06

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.754	4.754	0.0454	0.2137	0.0460	11:49:07	Yes
2	4.726	4.726	0.0451	0.2150	0.0457	11:49:41	Yes
Mean:	4.740	4.740	0.0453				
SD:	0.020	0.020	0.0002				
%RSD:	0.425	0.425	0.43				

QC value within limits for Hg 253.7 Recovery = 94.80%  
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB  
Analyst:

Date Collected: 2/17/2010 11:50:00  
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	-0.0003	0.0014	0.0003	11:51:01	Yes
2	-0.015	-0.015	-0.0002	0.0019	0.0004	11:51:36	Yes
Mean:	-0.018	-0.018	-0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	28.95	28.95	23.36				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

=====

Sequence No.: 72  
Sample ID: 1202039341|951572|1  
Analyst: JXL

Autosampler Location: 62  
Date Collected: 2/17/2010 11:51:55  
Data Type: Original

-----  
Replicate Data: 1202039341|951572|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.875	1.875	0.0179	0.0859	0.0184	11:52:57	Yes
2	1.897	1.897	0.0181	0.0872	0.0186	11:53:32	Yes
Mean:	1.886	1.886	0.0180				
SD:	0.016	0.016	0.0001				
%RSD:	0.827	0.827	0.83				

=====

Sequence No.: 73  
Sample ID: 246074006|951572|1  
Analyst: JXL

Autosampler Location: 63  
Date Collected: 2/17/2010 11:53:52  
Data Type: Original

-----  
Replicate Data: 246074006|951572|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0002	0.0017	0.0004	11:54:53	Yes
2	-0.015	-0.015	-0.0002	0.0016	0.0004	11:55:28	Yes
Mean:	-0.015	-0.015	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.335	2.335	1.81				

=====

Sequence No.: 74  
Sample ID: 1202039339|951572|5  
Analyst: JXL

Autosampler Location: 64  
Date Collected: 2/17/2010 11:55:48  
Data Type: Original

-----  
Replicate Data: 1202039339|951572|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	-0.0002	0.0014	0.0004	11:56:49	Yes
2	-0.020	-0.020	-0.0002	0.0013	0.0003	11:57:24	Yes
Mean:	-0.018	-0.018	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	11.86	11.86	9.57				

=====

Sequence No.: 75  
Sample ID: 1202039398|951605|1  
Analyst: JXL

Autosampler Location: 65  
Date Collected: 2/17/2010 11:57:43  
Data Type: Original

-----  
Replicate Data: 1202039398|951605|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	-0.0001	0.0017	0.0004	11:58:45	Yes
2	-0.010	-0.010	-0.0001	0.0020	0.0004	11:59:19	Yes

# Miscellaneous



# Prep LogBook

Analyst: FGA Verified by: \_\_\_\_\_

Batch: 952554

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202041618		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
LCS	1202041619		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246555001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246571001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246571002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246574001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246574002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246598001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246598002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246690001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
DUP	1202041620	246690001	SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
MS	1202041621	246690001	SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SDILT	1202041622	246690001	SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246690002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER	.5	mL
SAMPLE	246742001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246742002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246755001		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246755002		SW846 3005A	17-FEB-2010 13:00	<2	50 mL	50 mL	1	WATER	.5	mL

Reagent/Solvent/Lot ID	Amount	Description	Comments
1265209	2.5 mL	HYDROCHLORIC ACID	
1268732	1 mL	Nitric Acid CONC.	

# Prep LogBook

Analyst: TXB3 Verified by: \_\_\_\_\_

Batch: 951624

Lab SOP: GL-MA-E-010 REV# 23

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202039439		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
LCS	1202039440		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1	.2	mL
SAMPLE	246555001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1	.2	mL
SAMPLE	246571001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
DUP	1202039441	246571001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
MS	1202039442	246571001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SDILT	1202039443	246571001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246571002		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		

Comments Digestion Start Date: 16-FEB-10 11:55  
Digestion End Date: 16-FEB-10 13:55

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1257474-1	.5 mL	NITRIC ACID
1261483-C	1.5 mL	5% Potassium Persulfate
1264984-C	3 mL	5% KMnO4 solution
1255532-C	1 mL	Hg reducing agent
WHG100216-06	500 uL	Mercury Working 2nd Source 5.0fCV
WHG100216-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100216-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100216-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100216-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100216-04	500 uL	Mercury Working 1st Source CAL 5.0fCCV

# Prep LogBook

Analyst: BCDI Verified by: \_\_\_\_\_

Batch: 951817

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202039898	U11268741-01	.25	mL
LCS	1202039898	U11268744-06	.25	mL
MS	1202039900	U11268741-01	.25	mL
MS	1202039900	U11268744-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202039897		SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER
LCS	1202039898		SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER
SAMPLE	246555001		SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER
DUP	1202039899	246555001	SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER
MS	1202039900	246555001	SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER
SDILT	1202039901	246555001	SW846 3005A	21-FEB-2010 09:16	<2	50 mL	50 mL	1	WATER

## Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1268732	1 mL	Nitric Acid CONC.

# Standard Logbook

**Serial ID:** UHG1167639-01      **Opened:** 13-AUG-09      **Amount :** 125 mL  
**Name:** MHGSTOCK1      **Received:** 13-AUG-09      **Catalog Number :** PLHG4-2Y  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 15-37HG  
**Employee:** Bryan Davis      **Solvent :** 10% HNO3  
**Supplier:** Spex  
**Description:** Mercury Source Standard #1 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

**Serial ID:** UHG1167641-02      **Opened:** 13-AUG-09      **Amount :** 100 mL  
**Name:** MHGSTOCK2      **Received:** 13-AUG-09      **Catalog Number :** AHG1KN-100  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 4905530  
**Employee:** Bryan Davis      **Solvent :** 3% HNO3  
**Supplier:** Ricca Chemical Company  
**Description:** Mercury Source Standard #2 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

**Serial ID:** UI090422-40      **Opened:** 04-MAY-09      **Amount :** 500 mL  
**Name:** TRACE ICP ICESA 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 ICESA 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:** UI090828-42      **Opened:** 16-SEP-09      **Amount :** 500 mL  
**Name:** TRACE ICP Na-1000SOUR      **Received:** 27-AUG-09      **Catalog Number :** 060011-02-03  
**Type:** Source Material      **Expires:** 01-MAR-10      **Lot Number :** 1017098  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** 02SI  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

# Standard Logbook

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR,HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

**Serial ID:** UI090930-A      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE liquid Spike Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

# Standard Logbook

**Serial ID:** UI090930-B      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE Liquid Spike Solution B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L



# Standard Logbook

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRNMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091217-06      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master A      **Received:** 17-DEC-09      **Catalog Number :** 160055-01  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018209  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV SOLN A - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

**Serial ID:** UI091217-07      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master B      **Received:** 17-DEC-09      **Catalog Number :** 160054-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018210  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln B - 10ppm  
**Comments:** None

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

**Serial ID:** UI091217-08      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** O2SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** O2SI  
**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:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 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:** UI100205-A      **Opened:** 05-FEB-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 05-FEB-10      **Lot Number :** 1018516  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** O2si  
**Description:** ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

**Serial ID:** UI100205-B      **Opened:** 05-FEB-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 05-FEB-10      **Lot Number :** 1018516  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** O2si  
**Description:** MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).  
**Comments:** None

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI100210-48      **Opened:** 11-FEB-10      **Amount :** 1000 mL  
**Name:** Trace ICP IC SA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-10      **Lot Number :** 1018807  
**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:** UI100211-40      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

**Serial ID:** UI100211-41      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI

# Standard Logbook

**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:** UI100219-11      **Opened:** 19-FEB-10      **Amount :** 1000 mL  
**Name:** ICP-MS ICSA Master A      **Received:** 19-FEB-10      **Catalog Number :** 160013-01-01L  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018321  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3  
**Supplier:** 02SI  
**Description:** ICP-MS ICSA Master A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

**Serial ID:** UI100226-40      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

# Standard Logbook

**Serial ID:** UI100226-41      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

**Serial ID:** UI1268741-01      **Opened:** 11-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 11-FEB-10  
**Type:** Source Material      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

**Serial ID:** UI1268744-06      **Opened:** 11-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 11-FEB-10  
**Type:** Source Material      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

**Serial ID:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCalSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C

# Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

**Serial ID:** IHG100216-01      **Opened:** 16-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 16-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 17-FEB-10      **Solvent :** 1mL HNO3 + Typel H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** IHG100216-02      **Opened:** 16-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 17-FEB-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:** WHG100216-01a      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.2CRA      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 0.2/CRA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

**Serial ID:** WHG100216-02      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.5      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL



# Standard Logbook

Description: Mercury Working 1st Source CAL 0.5

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100216-03      Opened: 16-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL2.0      Received: 16-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 23-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL

Description: Mercury Working 1st Source CAL 2.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100216-04      Opened: 16-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL5.0CCV      Received: 16-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 23-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL

Description: Mercury Working 1st Source CAL 5.0/CCV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100216-05      Opened: 16-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL10.0      Received: 16-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 23-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL

Description: Mercury Working 1st Source CAL 10.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100216-06      Opened: 16-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORK5.0ICV      Received: 16-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 23-FEB-10  
 Employee: Tara Griffin  
 Supplier: GEL

Description: Mercury Working 2nd Source 5.0/ICV

# Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100216-13      Opened: 16-FEB-10      Pipet Id : Hg1289245  
 Name: MHGLIQLCSMSSPIKE      Received: 16-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 23-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL

Description: Mercury working intermediate standard for LCS/MS

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100225-42      Opened: 25-FEB-10      Balance Id : 216  
 Name: TRACE ICP 0.1 PPM STD.      Received: 02-NOV-09      Pipet Id : 3581809  
 Type: Working      Expires: 26-FEB-10      Solvent : 3%HCL and 1%HNO3 -1272839  
 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.
WI100225-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100225-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100225-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100225-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100225-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100225-43      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100225-44      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100225-45      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

**Serial ID:** WI100225-46      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100225-47      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL & 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100226-42      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**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.
WI100226-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100226-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100226-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100226-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100226-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100226-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100226-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100226-43      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** W1100226-44      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100226-45      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

**Serial ID:** WI100226-46      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100226-47      **Opened:** 26-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 27-FEB-10      **Solvent :** 3%HCL &1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100306-04      **Opened:** 06-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 06-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 07-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100306-04A      **Opened:** 06-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 06-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100306-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100306-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100306-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100306-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100306-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100306-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100306-05      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 06-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expres:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100306-06      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 06-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100306-07      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 06-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 07-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

**Serial ID:** WMS100306-08      **Opened:** 06-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 06-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 07-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

**Serial ID:** WMS100307-04      **Opened:** 07-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 07-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 08-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100307-04A      **Opened:** 07-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 07-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 08-MAR-10      **Solvent :** 2% $\text{HNO}_3$ /1% $\text{HCl}$  - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100307-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100307-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100307-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100307-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100307-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100307-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100307-05      **Opened:** 07-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 07-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expres:** 08-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100307-06      **Opened:** 07-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 07-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 08-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100307-07      **Opened:** 07-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 07-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expres:** 08-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

# Standard Logbook

**Serial ID:** WMS100307-08      **Opened:** 07-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 07-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 08-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

## Standard Logbook

Serial ID: 100202      Opened: 02-FEB-10      Lot Number : 200930201  
Name: I-HCL      Received: 02-FEB-10  
Type: Reagent/Solvent      Expires: 02-FEB-11  
Employee: Francena Armstrong  
Supplier: J.T. BAKER  
Description: HYDROCHLORIC ACID  
Comments: None

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Serial ID: 1100721TCLP      Opened: 16-APR-09      Lot Number : H02026 L  
Name: I-HNO3      Received: 02-APR-09  
Type: Reagent/Solvent      Expires: 02-APR-10  
Employee: Clifford Postell  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

---

Serial ID: 1156689-A      Opened: 20-JUL-09      Lot Number : 41226920  
Name: B-KMnO4(VWR)-MER      Received: 20-JUL-09  
Type: Reagent/Solvent      Expires: 20-JUL-10  
Employee: Tara Griffin      Verified: 07-AUG-07  
Supplier: VWR  
Description: Potassium Permanganate  
Comments: None

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Serial ID: 1176183      Opened: 24-AUG-09      Lot Number : H20001  
Name: B-H2SO4-MER      Received: 24-AUG-09  
Type: Reagent/Solvent      Expires: 24-AUG-10  
Employee: Tara Griffin  
Supplier: Mallinckrodt  
Description: Sulfuric Acid, Concentrated  
Comments: None

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Serial ID: 1215906      Opened: 06-NOV-09      Lot Number : H44465  
Name: B-K2S2O8S-MER      Received: 06-NOV-09  
Type: Reagent/Solvent      Expires: 06-NOV-10  
Employee: Tara Griffin  
Supplier: J.T BAKER  
Description: Potassium Persulfate Concentrate.  
Comments: None

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# Standard Logbook

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCl-MER      **Received:** 12-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 12-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** Fisher Scientific  
**Description:** Hydroxylamine Hydrochloride  
**Comments:** None

**Serial ID:** 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:** 1257474-1      **Opened:** 20-JAN-10      **Instrument Id :** MERCURY  
**Name:** B-HNO3-MER      **Received:** 20-JAN-10      **Lot Number :** H20053  
**Type:** Reagent/Solvent      **Expires:** 20-JAN-11  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt Chemicals  
**Description:** NITRIC ACID  
**Comments:** None

**Serial ID:** 1261483-C      **Opened:** 28-JAN-10      **Balance Id :** BAL-002  
**Name:** B-K2S2O8-MER      **Received:** 28-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 28-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% Potassium Persulfate  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

**Serial ID:** 1264984-C      **Opened:** 04-FEB-10      **Balance Id :** BAL-002  
**Name:** B-KMnO4-MER      **Received:** 04-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% KMnO4 solution



# Standard Logbook

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: 1265209      Opened: 04-FEB-10      Lot Number : J02039  
 Name: I-HCL      Received: 04-FEB-10      Preservative\_Id : 5 none  
 Type: Reagent/Solvent      Expires: 04-FEB-11  
 Employee: Bryan Davis  
 Supplier: J.T. BAKER  
 Description: HYDROCHLORIC ACID  
 Comments: None

Serial ID: 1268732      Opened: 11-FEB-10      Lot Number : H12022 L  
 Name: I-HNO3      Received: 11-FEB-10  
 Type: Reagent/Solvent      Expires: 11-FEB-11  
 Employee: Bryan Davis  
 Supplier: BAKER  
 Description: Nitric Acid CONC.  
 Comments: None

Serial ID: 1272839      Opened: 22-FEB-10      Amount : 20 L  
 Name: B-ICP-RINSE SOLN      Received: 12-FEB-10      Lot Number : H04040+G34050  
 Type: Reagent/Solvent      Expires: 28-FEB-10      Solvent : 3%HCL+1%HNO3  
 Employee: Helen Camello  
 Supplier: GEL  
 Description: 3%HCL+1%HNO3 RINSE SOLN.  
 Comments: None

Serial ID: 1276824      Opened: 01-MAR-10      Solvent : Type I Water  
 Name: B-2%HNO3/1%HCl-ICPMS      Received: 01-MAR-10  
 Type: Reagent/Solvent      Expires: 08-MAR-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.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	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 10-1665**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 951942 and 951948    **Method:** SW9012A Cyanide and Total

**Prep Batch :** 951939 and 951943    **Method:** SSW846 9010B Prep

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202040210	Method Blank (MB)
1202040211	246592005(RE16-10-3165) Sample Duplicate (DUP)
1202040212	246592006(RE16-10-3159) Sample Duplicate (DUP)
1202040213	246592005(RE16-10-3165) Matrix Spike (MS)
1202040214	246592006(RE16-10-3159) Matrix Spike (MS)
1202040215	246592005(RE16-10-3165) Matrix Spike Duplicate (MSD)
1202040216	246592006(RE16-10-3159) Matrix Spike Duplicate (MSD)
1202040217	Laboratory Control Sample (LCS)
1202040227	Method Blank (MB)
1202040228	246554005(RE15-10-8177) Sample Duplicate (DUP)
1202040229	246554006(RE15-10-8225) Sample Duplicate (DUP)
1202040230	246554005(RE15-10-8177) Matrix Spike (MS)
1202040231	246554006(RE15-10-8225) Matrix Spike (MS)
1202040232	246554005(RE15-10-8177) Matrix Spike Duplicate (MSD)
1202040233	246554006(RE15-10-8225) Matrix Spike Duplicate (MSD)
1202040234	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: 246592005 (RE16-10-3165), 246592006 (RE16-10-3159)- Batch 951942, 246554005 (RE15-10-8177) and 246554006 (RE15-10-8225)- Batch 951948.

#### **Matrix Spike (MS)/Post Spike (PS) Recovery Statement**

The MS/PS recoveries for this sample set were within the required acceptance limits.

#### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries for this sample set were within the required acceptance limits.

#### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPDs between the spike and spike duplicate met the acceptance limits.

#### **Duplicate Relative Percent Difference (RPD) Statement**

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202040228 (RE15-10-8177) and 246554005 (RE15-10-8177)- Batch 951948.

### **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: 1202040217 (LCS)- Batch 951942 and 1202040234 (LCS)- Batch 951948.

**Sample Re-analysis**

The samples in this SDG did not require re-analysis.

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

A DER was not required for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

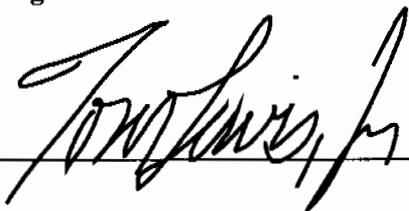
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

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

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

Reviewer: \_\_\_\_\_



Date: \_\_\_\_\_

08Mar10

# Sample Data Summary



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1665 GEL Work Order: 246554

**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



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# 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: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8175  
Sample ID: 246554001  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: .851%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	60.2	221	ug/kg	1	AXC2	02/18/10	1022	951942	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8174  
Sample ID: 246554002  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 7.15%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.6	245	ug/kg	1	AXC2	02/18/10	1023	951942	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8176  
Sample ID: 246554003  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 6.04%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	67.0	246	ug/kg	1	AXC2	02/18/10	1024	951942	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8178  
Sample ID: 246554004  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 2.48%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.7	256	ug/kg	1	AXC2	02/18/10	1025	951942	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/17/10	1541	951939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

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

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8177  
Sample ID: 246554005  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 3.3%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	62.8	231	ug/kg	1	AXC2	02/16/10	1232	951948	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1543	951943

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

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TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 26, 2010

Client SDG: 10-1665

Client Sample ID: RE15-10-8225  
Sample ID: 246554006  
Matrix: R  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 1.34%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.3	244	ug/kg	1	AXC2	02/16/10	1236	951948	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1543	951943

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# **Quality Control Summary**



# GEL LABORATORIES LLC

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## QC Summary

Report Date: February 26, 2010

Page 1 of 2

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

Contact: Ms. Joylene Valdez

Workorder: 246554

Paramname	NOM	Sample	Qual	QC	Units	RPD %	REC %	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	951942										
QC1202040211	246592005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/18/10	10:27
QC1202040212	246592006	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/18/10	10:34
QC1202040217	LCS										
Cyanide, Total	67900				95800	ug/kg	141	(32%-157%)		02/18/10	10:22
QC1202040210	MB										
Cyanide, Total			U		250	ug/kg				02/18/10	10:21
QC1202040213	246592005	MS									
Cyanide, Total	6270	U	ND		5440	ug/kg	86.3	(26%-158%)		02/18/10	10:28
QC1202040214	246592006	MS									
Cyanide, Total	5510	U	ND		5440	ug/kg	98.1	(26%-158%)		02/18/10	10:35
QC1202040215	246592005	MSD									
Cyanide, Total	6150	U	ND		5390	ug/kg	0.910	(0%-30%)		02/18/10	10:29
QC1202040216	246592006	MSD									
Cyanide, Total	6050	U	ND		5840	ug/kg	7.10	(0%-30%)		02/18/10	10:36
Batch	951948										
QC1202040228	246554005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/16/10	12:33
QC1202040229	246554006	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/16/10	12:37
QC1202040234	LCS										
Cyanide, Total	67900				65500	ug/kg	96.5	(32%-157%)		02/16/10	12:32
QC1202040227	MB										
Cyanide, Total			U		250	ug/kg				02/16/10	12:31
QC1202040230	246554005	MS									
Cyanide, Total	4880	U	ND		5270	ug/kg	108	(26%-158%)		02/16/10	12:34
QC1202040231	246554006	MS									
Cyanide, Total	4870	U	ND		5460	ug/kg	112	(26%-158%)		02/16/10	12:38
QC1202040232	246554005	MSD									
Cyanide, Total	5070	U	ND		5170	ug/kg	1.87	(0%-30%)		02/16/10	12:35
QC1202040233	246554006	MSD									
Cyanide, Total	4690	U	ND		5260	ug/kg	3.77	(0%-30%)		02/16/10	12:39

### 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

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### QC Summary

Workorder: 246554

Page 2 of 2

Parname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.									
BD	Results are either below the MDC or tracer recovery is low									
C	Analyte has been confirmed by GC/MS analysis									
D	Results are reported from a diluted aliquot of the sample									
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range									
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria									
E	Organics--Concentration of the target analyte exceeds the instrument calibration range									
F	Estimated Value									
H	Analytical holding time was exceeded									
J	Value is estimated									
M	M if above MDC and less than LLD									
M	Matrix Related Failure									
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor									
N/A	RPD or %Recovery limits do not apply.									
ND	Analyte concentration is not detected above the detection limit									
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%									
R	Sample results are rejected									
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.									
UI	Gamma Spectroscopy--Uncertain identification									
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
Y	QC Samples were not spiked with this compound									
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.									
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.									
d	5-day BOD--The 2:1 depletion requirement was not met for this sample									
h	Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 26-FEB-2010 09:05

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1665**

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
<b>ICV</b>	<b>16-FEB-2010 12:25:43</b>	<b>OM_2-16-2010_12-15-14</b>	<b>161</b>	<b>150</b>	<b>107</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	16-FEB-2010 12:40:00	OM_2-16-2010_12-15-14	109	100	109	(90%-110%)	Yes
<b>ICV</b>	<b>18-FEB-2010 10:15:42</b>	<b>OM_2-18-2010_10-05-11</b>	<b>162</b>	<b>150</b>	<b>108</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	18-FEB-2010 10:29:59	OM_2-18-2010_10-05-11	100	100	100	(90%-110%)	Yes
CCV	18-FEB-2010 10:42:23	OM_2-18-2010_10-05-11	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>16-FEB-2010 12:27:34</b>	<b>OM_2-16-2010_12-15-14</b>	<b>-1.46</b>	<b>10</b>	<b>Yes</b>
CCB	16-FEB-2010 12:41:51	OM_2-16-2010_12-15-14	-2.13	10	Yes
<b>ICB</b>	<b>18-FEB-2010 10:17:32</b>	<b>OM_2-18-2010_10-05-11</b>	<b>-0.607</b>	<b>10</b>	<b>Yes</b>
CCB	18-FEB-2010 10:31:49	OM_2-18-2010_10-05-11	-0.746	10	Yes
CCB	18-FEB-2010 10:44:14	OM_2-18-2010_10-05-11	-0.84	10	Yes

# Cyanide, Total

# Prep LogBook

Analyst: AXS5  
Batch: 951943  
Lab SOP: GL-GC-E-067 REV# 13

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202040227		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.5 g	25 mL	50		g
LCS	1202040234		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.25 g	25 mL	100		mL
SAMPLE	246554005		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.56 g	25 mL	44.64286		mL
DUP	1202040228	246554005	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.51 g	25 mL	49.01961		mL
MS	1202040230	246554005	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.53 g	25 mL	47.16981		mL
MSD	1202040232	246554005	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.51 g	25 mL	49.01961		mL
SAMPLE	246554006		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
DUP	1202040229	246554006	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.53 g	25 mL	47.16981		mL
MS	1202040231	246554006	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
MSD	1202040233	246554006	SW846 9010B Prep	15-FEB-2010 15:43	>12	0.54 g	25 mL	46.2963		mL
SAMPLE	246575003		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.53 g	25 mL	47.16981		mL
SAMPLE	246575004		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
SAMPLE	246688002		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.51 g	25 mL	49.01961		mL
SAMPLE	246688008		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.56 g	25 mL	44.64286		mL
SAMPLE	246719001		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
SAMPLE	246719002		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.5 g	25 mL	50		mL
SAMPLE	246719003		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.51 g	25 mL	49.01961		mL
SAMPLE	246719004		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.5 g	25 mL	50		mL
SAMPLE	246719005		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
SAMPLE	246719006		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.54 g	25 mL	46.2963		mL
SAMPLE	246719007		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.57 g	25 mL	43.85965		mL
SAMPLE	246719008		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.53 g	25 mL	47.16981		mL
SAMPLE	246736001		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.51 g	25 mL	49.01961		mL
SAMPLE	246736002		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.53 g	25 mL	47.16981		mL
SAMPLE	246738001		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.52 g	25 mL	48.07692		mL
SAMPLE	246738002		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.5 g	25 mL	50		mL
SAMPLE	246738003		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.54 g	25 mL	46.2963		mL
SAMPLE	246738004		SW846 9010B Prep	15-FEB-2010 15:43	>12	0.55 g	25 mL	45.45455		mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100215-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

# Prep LogBook

Analyst: AXS5  
 Batch: 951939  
 Lab SOP: GL-GC-E-067 REV# 13

Verified by:

Type	Sample Id	Lot Id	Spike Amount	Spike Units
LCS	1202040217	URF1200957-01	.25	g
MS	1202040213	URF1269274-02	.025	mL
MS	1202040214	URF1269274-02	.025	mL
MSD	1202040215	URF1269274-02	.025	mL
MSD	1202040216	URF1269274-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202040210		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.5 g	25 mL	50	SOIL
LCS	1202040217		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.25 g	25 mL	100	SOIL
SAMPLE	246554001		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	246554002		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246554003		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246554004		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246592005		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.58 g	25 mL	43.10345	SOIL
DUP	1202040211	246592005	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202040213	246592005	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1202040215	246592005	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246592006		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL
DUP	1202040212	246592006	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.57 g	25 mL	43.85965	SOIL
MS	1202040214	246592006	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.56 g	25 mL	44.64286	SOIL
MSD	1202040216	246592006	SW846 9010B Prep	17-FEB-2010 15:41	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	246592007		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246592008		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246592009		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246592010		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246592011		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246607001		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246607002		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246607003		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	246607004		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246607005		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246607006		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246611001		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246611002		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246611003		SW846 9010B Prep	17-FEB-2010 15:41	>12	0.52 g	25 mL	48.07692	SOIL

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page#



Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100217-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1270663-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1270669-C	1 mL	51% MgCl2 Soln	
1270661-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/16/2010 12:18:34	OM_2-16-2010_12-15-14
150 ppb		1	axc2	2/16/2010 12:19:26	OM_2-16-2010_12-15-14
100 ppb		1	axc2	2/16/2010 12:20:19	OM_2-16-2010_12-15-14
50 ppb		1	axc2	2/16/2010 12:21:11	OM_2-16-2010_12-15-14
10 ppb		1	axc2	2/16/2010 12:22:05	OM_2-16-2010_12-15-14
CRDL 5.0 ppb		1	axc2	2/16/2010 12:22:59	OM_2-16-2010_12-15-14
ICAL-00		1	axc2	2/16/2010 12:23:53	OM_2-16-2010_12-15-14
ICV		1	axc2	2/16/2010 12:25:43	OM_2-16-2010_12-15-14
ICB		1	axc2	2/16/2010 12:27:34	OM_2-16-2010_12-15-14
		1	axc2	2/16/2010 12:29:23	OM_2-16-2010_12-15-14
1202040227	951948	1	axc2	2/16/2010 12:31:13	OM_2-16-2010_12-15-14
1202040234	951948	25	axc2	2/16/2010 12:32:06	OM_2-16-2010_12-15-14
246554005	951948	1	axc2	2/16/2010 12:32:59	OM_2-16-2010_12-15-14
1202040228	951948	1	axc2	2/16/2010 12:33:52	OM_2-16-2010_12-15-14
1202040230	951948	1	axc2	2/16/2010 12:34:45	OM_2-16-2010_12-15-14
1202040232	951948	1	axc2	2/16/2010 12:35:38	OM_2-16-2010_12-15-14
246554006	951948	1	axc2	2/16/2010 12:36:31	OM_2-16-2010_12-15-14
1202040229	951948	1	axc2	2/16/2010 12:37:24	OM_2-16-2010_12-15-14
1202040231	951948	1	axc2	2/16/2010 12:38:16	OM_2-16-2010_12-15-14
1202040233	951948	1	axc2	2/16/2010 12:39:08	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:40:00	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:41:51	OM_2-16-2010_12-15-14
246575003	951948	1	axc2	2/16/2010 12:43:40	OM_2-16-2010_12-15-14
246575004	951948	1	axc2	2/16/2010 12:44:31	OM_2-16-2010_12-15-14
246688002	951948	1	axc2	2/16/2010 12:45:23	OM_2-16-2010_12-15-14
246688008	951948	1	axc2	2/16/2010 12:46:14	OM_2-16-2010_12-15-14
246719001	951948	1	axc2	2/16/2010 12:47:06	OM_2-16-2010_12-15-14
246719002	951948	1	axc2	2/16/2010 12:48:00	OM_2-16-2010_12-15-14
246719003	951948	1	axc2	2/16/2010 12:48:53	OM_2-16-2010_12-15-14
246719004	951948	1	axc2	2/16/2010 12:49:47	OM_2-16-2010_12-15-14
246719005	951948	1	axc2	2/16/2010 12:50:40	OM_2-16-2010_12-15-14
246719006	951948	1	axc2	2/16/2010 12:51:33	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:52:26	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:54:16	OM_2-16-2010_12-15-14
246719007	951948	1	axc2	2/16/2010 12:56:06	OM_2-16-2010_12-15-14
246719008	951948	1	axc2	2/16/2010 12:56:59	OM_2-16-2010_12-15-14
246736001	951948	1	axc2	2/16/2010 12:57:52	OM_2-16-2010_12-15-14
246736002	951948	1	axc2	2/16/2010 12:58:45	OM_2-16-2010_12-15-14
246738001	951948	1	axc2	2/16/2010 12:59:37	OM_2-16-2010_12-15-14
246738002	951948	1	axc2	2/16/2010 13:00:29	OM_2-16-2010_12-15-14
246738003	951948	1	axc2	2/16/2010 13:01:21	OM_2-16-2010_12-15-14
246738004	951948	1	axc2	2/16/2010 13:02:13	OM_2-16-2010_12-15-14
1202036036	950200	1	axc2	2/16/2010 13:03:05	OM_2-16-2010_12-15-14
1202036043	950200	25	axc2	2/16/2010 13:03:57	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:04:50	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:06:40	OM_2-16-2010_12-15-14
246338001	950200	1	axc2	2/16/2010 13:08:30	OM_2-16-2010_12-15-14
1202036037	950200	1	axc2	2/16/2010 13:09:23	OM_2-16-2010_12-15-14
1202036039	950200	1	axc2	2/16/2010 13:10:17	OM_2-16-2010_12-15-14
1202036041	950200	1	axc2	2/16/2010 13:11:11	OM_2-16-2010_12-15-14
246338002	950200	1	axc2	2/16/2010 13:12:03	OM_2-16-2010_12-15-14
1202036038	950200	1	axc2	2/16/2010 13:12:57	OM_2-16-2010_12-15-14
1202036040	950200	1	axc2	2/16/2010 13:13:50	OM_2-16-2010_12-15-14
1202036042	950200	1	axc2	2/16/2010 13:14:43	OM_2-16-2010_12-15-14
246437001	950200	1	axc2	2/16/2010 13:15:35	OM_2-16-2010_12-15-14
246437002	950200	1	axc2	2/16/2010 13:16:28	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:17:21	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:19:11	OM_2-16-2010_12-15-14

246437003	950200	1	axc2	2/16/2010	13:20:59	OM_2-16-2010_12-15-14
246437004	950200	1	axc2	2/16/2010	13:21:52	OM_2-16-2010_12-15-14
246437005	950200	1	axc2	2/16/2010	13:22:44	OM_2-16-2010_12-15-14
246437006	950200	1	axc2	2/16/2010	13:23:36	OM_2-16-2010_12-15-14
246437007	950200	1	axc2	2/16/2010	13:24:28	OM_2-16-2010_12-15-14
246437008	950200	1	axc2	2/16/2010	13:25:22	OM_2-16-2010_12-15-14
246437009	950200	1	axc2	2/16/2010	13:26:16	OM_2-16-2010_12-15-14
246437010	950200	1	axc2	2/16/2010	13:27:10	OM_2-16-2010_12-15-14
246437011	950200	1	axc2	2/16/2010	13:28:04	OM_2-16-2010_12-15-14
246437012	950200	1	axc2	2/16/2010	13:28:58	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:29:49	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:31:39	OM_2-16-2010_12-15-14
246437013	950200	1	axc2	2/16/2010	13:33:29	OM_2-16-2010_12-15-14
246437014	950200	1	axc2	2/16/2010	13:34:22	OM_2-16-2010_12-15-14
246443001	950200	1	axc2	2/16/2010	13:35:15	OM_2-16-2010_12-15-14
246443002	950200	1	axc2	2/16/2010	13:36:09	OM_2-16-2010_12-15-14
246443003	950200	1	axc2	2/16/2010	13:37:01	OM_2-16-2010_12-15-14
246443004	950200	1	axc2	2/16/2010	13:37:53	OM_2-16-2010_12-15-14
1202034316	949506	1	axc2	2/16/2010	13:38:46	OM_2-16-2010_12-15-14
1202034318	949506	250	axc2	2/16/2010	13:39:38	OM_2-16-2010_12-15-14
246086001	949506	1	axc2	2/16/2010	13:40:31	OM_2-16-2010_12-15-14
1202034317	949506	1	axc2	2/16/2010	13:41:23	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:42:15	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:44:05	OM_2-16-2010_12-15-14

Original Run Filename: OM\_2-16-2010\_12-15-14.OMN created 2/16/2010 12:15:14  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-16-2010\_12-15-14.OMN last modified 2/16/2010 13:45:12  
 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)				
WCN100216-01	1	S1	200	9.83	2/16/2010@12:18:34			200 ppb
WCN100216-02	1	S2	150	7.35	2/16/2010@12:19:26			150 ppb
WCN100216-03	1	S3	100	4.91	2/16/2010@12:20:19			100 ppb
WCN100216-04	1	S4	50.0	2.60	2/16/2010@12:21:11			50 ppb
WCN100216-05	1	S5	10.0	0.637	2/16/2010@12:22:05			10 ppb
WCN100216-06	1	S6	5.00	0.369	2/16/2010@12:22:59			CRDL 5.0 ppb
WCN100216-08	1	S7	0.00	0.0164	2/16/2010@12:23:53			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100216-07	1	S8	161	7.92	2/16/2010@12:25:43			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100216-08	1	S7	-1.46	0.0326	2/16/2010@12:27:34			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.46 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.46 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100216-06	1	S6	5.56	0.373	2/16/2010@12:29:23			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.56 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.56 > 2.50					
Message			Pass					
Action			None					
1202040227 951948 MB	1	1	-1.54	0.0290	2/16/2010@12:31:13			
1202040234  LCS	1	2	26.2	1.38	2/16/2010@12:32:06		25.00	
246554005	1	3	-1.08	0.0513	2/16/2010@12:32:59			
1202040228  DUP	1	4	-1.63	0.0243	2/16/2010@12:33:52			
1202040230  MS	1	5	108	5.35	2/16/2010@12:34:45			
1202040232  MSD	1	6	102	5.06	2/16/2010@12:35:38			
246554006	1	7	-1.16	0.0471	2/16/2010@12:36:31			
1202040229  DUP	1	8	-1.45	0.0333	2/16/2010@12:37:24			
1202040231  MS	1	9	112	5.54	2/16/2010@12:38:16			
1202040233  MSD	1	10	112	5.54	2/16/2010@12:39:08			
WCN100216-03	1	S3	109	5.38	2/16/2010@12:40:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			8.9 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100216-08	1	S7	-2.13	2.62e-4	2/16/2010@12:41:51			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.13 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.13 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246575003	1	11	-0.699	0.0696	2/16/2010@12:43:40			
246575004	1	12	-1.59	0.0264	2/16/2010@12:44:31			
246688002	1	13	-1.31	0.0399	2/16/2010@12:45:23			
246688008	1	14	-2.08	0.00243	2/16/2010@12:46:14			
246719001	1	15	-1.59	0.0264	2/16/2010@12:47:06			
246719002	1	16	-1.69	0.0215	2/16/2010@12:48:00			
246719003	1	17	-2.02	0.00544	2/16/2010@12:48:53			
246719004	1	18	-1.70	0.0209	2/16/2010@12:49:47			
246719005	1	19	-1.72	0.0203	2/16/2010@12:50:40			
246719006	1	20	-2.13	1.55e-4	2/16/2010@12:51:33			
WCN100216-03	1	S3	105	5.18	2/16/2010@12:52:26			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100216-08	1	S7	-1.95	0.00902	2/16/2010@12:54:16			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.95 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.95 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246719007	1	21	-1.60	0.0260	2/16/2010@12:56:06			
246719008	1	22	-1.73	0.0195	2/16/2010@12:56:59			
246736001	1	23	10.9	0.631	2/16/2010@12:57:52			
246736002	1	24	4.59	0.326	2/16/2010@12:58:45			
246738001	1	25	0.262	0.116	2/16/2010@12:59:37			
246738002	1	26	0.241	0.115	2/16/2010@13:00:29			
246738003	1	27	0.0963	0.108	2/16/2010@13:01:21			
246738004	1	28	1.55	0.179	2/16/2010@13:02:13			
1202036036 950200 MB	1	29	-2.13	1.91e-4	2/16/2010@13:03:05			
1202036043 LCS	1	30	30.7	1.59	2/16/2010@13:03:57		25.00	
WCN100216-03	1	S3	105	5.21	2/16/2010@13:04:50			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100216-08	1	S7	-1.46	0.0329	2/16/2010@13:06:40			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:		-1.46 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.46 > -5.00				
Message		CCB Passed				
Action		Continue				
246338001	1	31	-2.34	-0.00999	2/16/2010@13:08:30	
1202036037	DUP	1	32	-2.09	0.00198	2/16/2010@13:09:23
1202036039	MS	1	33	109	5.38	2/16/2010@13:10:17
1202036041	MSD	1	34	107	5.27	2/16/2010@13:11:11
246338002	1	35	-0.243	0.0918	2/16/2010@13:12:03	
1202036038	DUP	1	36	-2.13	2.67e-4	2/16/2010@13:12:57
1202036040	MS	1	37	107	5.29	2/16/2010@13:13:50
1202036042	MSD	1	38	104	5.16	2/16/2010@13:14:43
246437001	1	39	-0.864	0.0616	2/16/2010@13:15:35	
246437002	1	40	-1.07	0.0516	2/16/2010@13:16:28	
WCN100216-03	1	S3	105	5.18	2/16/2010@13:17:21	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		4.7 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		4.7 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100216-08	1	S7	-2.06	0.00359	2/16/2010@13:19:11	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				
246437003	1	41	-1.25	0.0427	2/16/2010@13:20:59	
246437004	1	42	-1.62	0.0250	2/16/2010@13:21:52	
246437005	1	43	-0.818	0.0638	2/16/2010@13:22:44	
246437006	1	44	-1.64	0.0239	2/16/2010@13:23:36	
246437007	1	45	-1.23	0.0439	2/16/2010@13:24:28	
246437008	1	46	-1.14	0.0483	2/16/2010@13:25:22	
246437009	1	47	-1.40	0.0359	2/16/2010@13:26:16	
246437010	1	48	-1.59	0.0265	2/16/2010@13:27:10	
246437011	1	49	-1.44	0.0338	2/16/2010@13:28:04	
246437012	1	50	-1.60	0.0258	2/16/2010@13:28:58	
WCN100216-03	1	S3	105	5.20	2/16/2010@13:29:49	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				
WCN100216-08	1	S7	-1.73	0.0198	2/16/2010@13:31:39	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.73 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.73 > -5.00				
Message		CCB Passed				
Action		Continue				

246437013	1	51	-0.931	0.0584	2/16/2010@13:33:29		
246437014	1	52	-2.13	0.00	2/16/2010@13:34:22		
246443001	1	53	0.408	0.123	2/16/2010@13:35:15		
246443002	1	54	-1.89	0.0120	2/16/2010@13:36:09		
246443003	1	55	-1.47	0.0320	2/16/2010@13:37:01		
246443004	1	56	-1.18	0.0462	2/16/2010@13:37:53		
1202034316 949506 MB	1	57	-0.669	0.0711	2/16/2010@13:38:46		
1202034318 LCS	1	58	150	7.38	2/16/2010@13:39:38	250.00	
246086001	1	59	-1.22	0.0444	2/16/2010@13:40:31		
1202034317 DUP	1	60	-1.98	0.00761	2/16/2010@13:41:23		
WCN100216-03	1	S3	105	5.19	2/16/2010@13:42:15		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100216-08	1	S7	-1.62	0.0250	2/16/2010@13:44:05		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.62 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.62 > -5.00				
Message			CCB Passed				
Action			Continue				

Analyte Properties Table for OM\_2-16-2010\_12-15-14.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

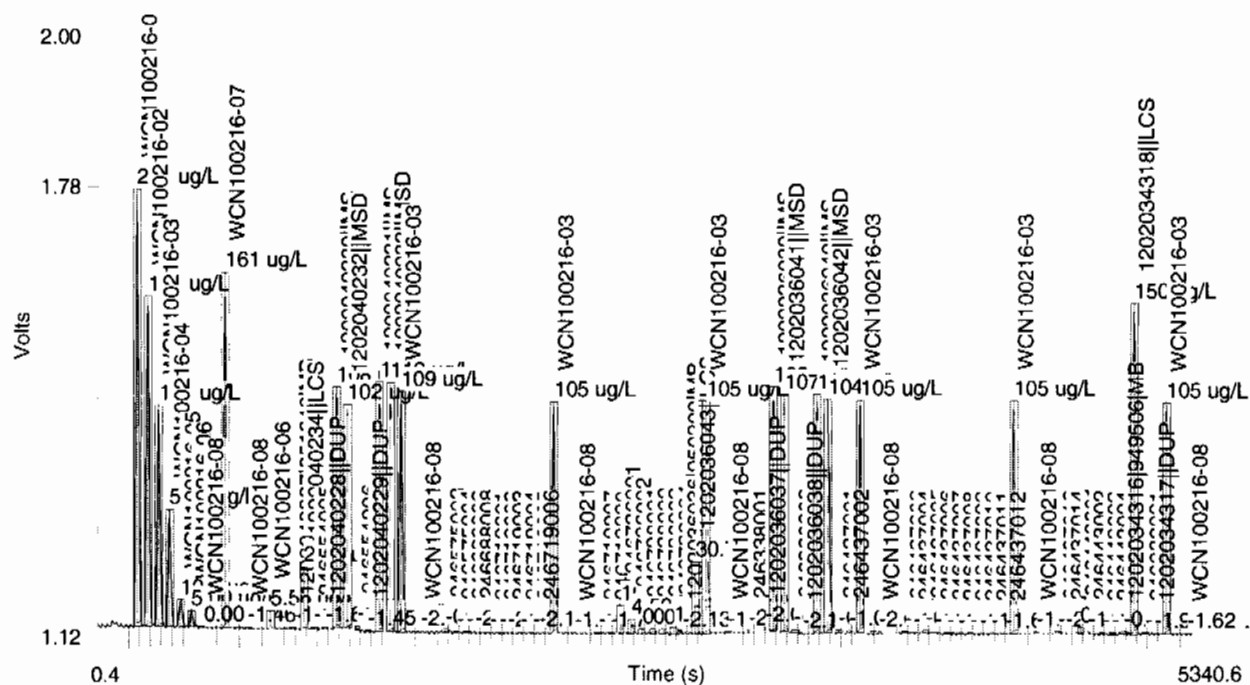
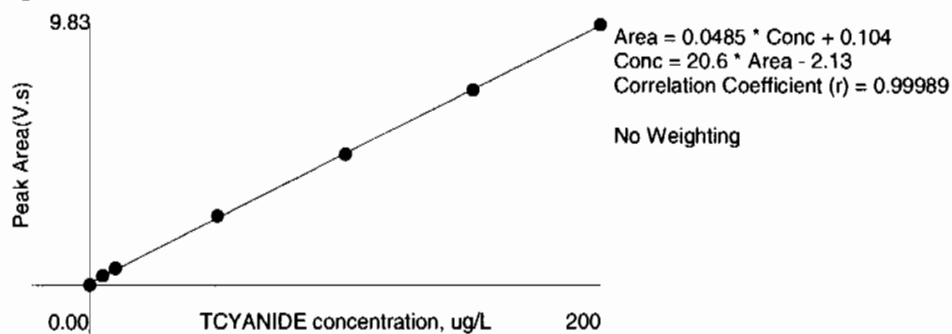


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.83	0.635	-0.3	2/16/2010	12:19:37
2	150	1	7.35	0.478	0.4	2/16/2010	12:20:29
3	100	1	4.91	0.319	0.9	2/16/2010	12:21:21
4	50.0	1	2.60	0.168	-2.7	2/16/2010	12:22:14
5	10.0	1	0.637	0.0389	-8.1	2/16/2010	12:23:08
6	5.00	1	0.369	0.0232	-6.4	2/16/2010	12:24:02
7	0.00	1	0.0164	0.00106		2/16/2010	12:24:56

Figure 1: TCYANIDE





This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/18/2010 10:08:32	OM_2-18-2010_10-05-11
150 ppb		1	axc2	2/18/2010 10:09:24	OM_2-18-2010_10-05-11
100 ppb		1	axc2	2/18/2010 10:10:17	OM_2-18-2010_10-05-11
50 ppb		1	axc2	2/18/2010 10:11:10	OM_2-18-2010_10-05-11
10 ppb		1	axc2	2/18/2010 10:12:03	OM_2-18-2010_10-05-11
CRDL 5.0 ppb		1	axc2	2/18/2010 10:12:57	OM_2-18-2010_10-05-11
ICAL-00		1	axc2	2/18/2010 10:13:51	OM_2-18-2010_10-05-11
ICV		1	axc2	2/18/2010 10:15:42	OM_2-18-2010_10-05-11
ICB		1	axc2	2/18/2010 10:17:32	OM_2-18-2010_10-05-11
		1	axc2	2/18/2010 10:19:22	OM_2-18-2010_10-05-11
1202040210	951942	1	axc2	2/18/2010 10:21:11	OM_2-18-2010_10-05-11
1202040217	951942	25	axc2	2/18/2010 10:22:05	OM_2-18-2010_10-05-11
246554001	951942	1	axc2	2/18/2010 10:22:58	OM_2-18-2010_10-05-11
246554002	951942	1	axc2	2/18/2010 10:23:51	OM_2-18-2010_10-05-11
246554003	951942	1	axc2	2/18/2010 10:24:44	OM_2-18-2010_10-05-11
246554004	951942	1	axc2	2/18/2010 10:25:37	OM_2-18-2010_10-05-11
246592005	951942	1	axc2	2/18/2010 10:26:30	OM_2-18-2010_10-05-11
1202040211	951942	1	axc2	2/18/2010 10:27:22	OM_2-18-2010_10-05-11
1202040213	951942	1	axc2	2/18/2010 10:28:15	OM_2-18-2010_10-05-11
1202040215	951942	1	axc2	2/18/2010 10:29:07	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010 10:29:59	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010 10:31:49	OM_2-18-2010_10-05-11
246592006	951942	1	axc2	2/18/2010 10:33:37	OM_2-18-2010_10-05-11
1202040212	951942	1	axc2	2/18/2010 10:34:29	OM_2-18-2010_10-05-11
1202040214	951942	1	axc2	2/18/2010 10:35:21	OM_2-18-2010_10-05-11
1202040216	951942	1	axc2	2/18/2010 10:36:12	OM_2-18-2010_10-05-11
246592007	951942	1	axc2	2/18/2010 10:37:04	OM_2-18-2010_10-05-11
246592008	951942	1	axc2	2/18/2010 10:37:58	OM_2-18-2010_10-05-11
246592009	951942	1	axc2	2/18/2010 10:38:52	OM_2-18-2010_10-05-11
246592010	951942	1	axc2	2/18/2010 10:39:45	OM_2-18-2010_10-05-11
246592011	951942	1	axc2	2/18/2010 10:40:38	OM_2-18-2010_10-05-11
246607001	951942	1	axc2	2/18/2010 10:41:31	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010 10:42:23	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010 10:44:14	OM_2-18-2010_10-05-11
246607002	951942	1	axc2	2/18/2010 10:46:03	OM_2-18-2010_10-05-11
246607003*	951942	1	axc2	2/18/2010 10:46:55	OM_2-18-2010_10-05-11
246607004*	951942	1	axc2	2/18/2010 10:47:48	OM_2-18-2010_10-05-11
246607005	951942	1	axc2	2/18/2010 10:48:41	OM_2-18-2010_10-05-11
246607006	951942	1	axc2	2/18/2010 10:49:33	OM_2-18-2010_10-05-11
246611001	951942	1	axc2	2/18/2010 10:50:26	OM_2-18-2010_10-05-11
246611002	951942	1	axc2	2/18/2010 10:51:18	OM_2-18-2010_10-05-11
246611003	951942	1	axc2	2/18/2010 10:52:10	OM_2-18-2010_10-05-11
1202042848	953084	1	axc2	2/18/2010 10:53:02	OM_2-18-2010_10-05-11
1202042855	953084	25	axc2	2/18/2010 10:53:53	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010 10:54:46	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010 10:56:36	OM_2-18-2010_10-05-11
246837001	953084	1	axc2	2/18/2010 10:58:27	OM_2-18-2010_10-05-11
1202042850	953084	1	axc2	2/18/2010 10:59:21	OM_2-18-2010_10-05-11
1202042852	953084	1	axc2	2/18/2010 11:00:14	OM_2-18-2010_10-05-11
1202042854	953084	1	axc2	2/18/2010 11:01:06	OM_2-18-2010_10-05-11
246837002	953084	1	axc2	2/18/2010 11:02:00	OM_2-18-2010_10-05-11
246837003	953084	1	axc2	2/18/2010 11:02:53	OM_2-18-2010_10-05-11
246837004	953084	1	axc2	2/18/2010 11:03:46	OM_2-18-2010_10-05-11
246837005	953084	1	axc2	2/18/2010 11:04:39	OM_2-18-2010_10-05-11
246837006	953084	1	axc2	2/18/2010 11:05:32	OM_2-18-2010_10-05-11
246854011	953084	1	axc2	2/18/2010 11:06:24	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010 11:07:17	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010 11:09:07	OM_2-18-2010_10-05-11

1202042849	953084	1	axc2	2/18/2010	11:10:55	OM_2-18-2010_10-05-11
1202042851	953084	1	axc2	2/18/2010	11:11:47	OM_2-18-2010_10-05-11
1202042853	953084	1	axc2	2/18/2010	11:12:40	OM_2-18-2010_10-05-11
246870001	953084	1	axc2	2/18/2010	11:13:32	OM_2-18-2010_10-05-11
246870002	953084	1	axc2	2/18/2010	11:14:24	OM_2-18-2010_10-05-11
246870003	953084	1	axc2	2/18/2010	11:15:18	OM_2-18-2010_10-05-11
246870004	953084	1	axc2	2/18/2010	11:16:12	OM_2-18-2010_10-05-11
246870005	953084	1	axc2	2/18/2010	11:17:07	OM_2-18-2010_10-05-11
246870006	953084	1	axc2	2/18/2010	11:18:00	OM_2-18-2010_10-05-11
246870007	953084	1	axc2	2/18/2010	11:18:53	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010	11:19:46	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010	11:21:36	OM_2-18-2010_10-05-11
246870008	953084	1	axc2	2/18/2010	11:23:26	OM_2-18-2010_10-05-11
246870009	953084	1	axc2	2/18/2010	11:24:19	OM_2-18-2010_10-05-11
246900001	953084	1	axc2	2/18/2010	11:25:13	OM_2-18-2010_10-05-11
246900002	953084	1	axc2	2/18/2010	11:26:05	OM_2-18-2010_10-05-11
246901001	953084	1	axc2	2/18/2010	11:26:58	OM_2-18-2010_10-05-11
246901002	953084	1	axc2	2/18/2010	11:27:51	OM_2-18-2010_10-05-11
246607003	951942	1	axc2	2/18/2010	11:28:44	OM_2-18-2010_10-05-11
246607004	951942	1	axc2	2/18/2010	11:29:37	OM_2-18-2010_10-05-11
1202042899	953097	1	axc2	2/18/2010	11:30:29	OM_2-18-2010_10-05-11
1202042900	953097	1	axc2	2/18/2010	11:31:21	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010	11:32:14	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010	11:34:04	OM_2-18-2010_10-05-11
1202042901*	953097	1	axc2	2/18/2010	11:35:52	OM_2-18-2010_10-05-11
246900001*	953097	1	axc2	2/18/2010	11:36:45	OM_2-18-2010_10-05-11
246900002*	953097	1	axc2	2/18/2010	11:37:39	OM_2-18-2010_10-05-11
246901001*	953097	1	axc2	2/18/2010	11:38:33	OM_2-18-2010_10-05-11
246901002*	953097	1	axc2	2/18/2010	11:39:27	OM_2-18-2010_10-05-11
CCV		1	axc2	2/18/2010	11:40:20	OM_2-18-2010_10-05-11
CCB		1	axc2	2/18/2010	11:42:11	OM_2-18-2010_10-05-11

Original Run Filename: OM\_2-18-2010\_10-05-11.OMN created 2/18/2010 10:05:11  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-18-2010\_10-05-11.OMN last modified 2/18/2010 11:43:16  
 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)				
WCN100218-01	1	S1	200	9.28	2/18/2010@10:08:32			200 ppb
WCN100218-02	1	S2	150	6.90	2/18/2010@10:09:24			150 ppb
WCN100218-03	1	S3	100	4.37	2/18/2010@10:10:17			100 ppb
WCN100218-04	1	S4	50.0	2.39	2/18/2010@10:11:10			50 ppb
WCN100218-05	1	S5	10.0	0.630	2/18/2010@10:12:03			10 ppb
WCN100218-06	1	S6	5.00	0.361	2/18/2010@10:12:57			CRDL 5.0 ppb
WCN100218-08	1	S7	0.00	0.0272	2/18/2010@10:13:51			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
			Result:	0.99939 > 0.99500				
			Message	Pass				
			Action	Continue				
WCN100218-07	1	S8	162	7.44	2/18/2010@10:15:42			ICV
			Known Conc:	150				
DQM Test: > + Percent Relative Difference								
			Result:	7.9 < 10.0				
			Message	ICV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	7.9 < 10.0				
			Message	ICV Passed				
			Action	Continue				
			Calibration:	Table/Fig. 1				
WCN100218-08	1	S7	-0.607	0.0455	2/18/2010@10:17:32			ICB/CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-0.607 < 5.01				
			Message	ICB/CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-0.607 > -5.01				
			Message	ICB/CCB Passed				
			Action	Continue				
WCN100218-06	1	S6	6.08	0.350	2/18/2010@10:19:22			
			Known Conc:	5.00				
DQM Test: > + Concentration Limit								
			Result:	6.08 < 7.50				
			Message	CRDL Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	6.08 > 2.50				
			Message	Pass				
			Action	None				
1202040210 951942 MB	1	1	-1.01	0.0272	2/18/2010@10:21:11			
1202040217  LCS	1	2	38.3	1.82	2/18/2010@10:22:05		25.00	
246554001	1	3	-0.863	0.0339	2/18/2010@10:22:58			
246554002	1	4	-0.890	0.0327	2/18/2010@10:23:51			
246554003	1	5	-0.517	0.0497	2/18/2010@10:24:44			
246554004	1	6	-1.24	0.0165	2/18/2010@10:25:37			
246592005	1	7	0.591	0.100	2/18/2010@10:26:30			
1202040211  DUP	1	8	0.508	0.0963	2/18/2010@10:27:22			
1202040213  MS	1	9	86.8	4.03	2/18/2010@10:28:15			
1202040215  MSD	1	10	87.7	4.07	2/18/2010@10:29:07			
WCN100218-03	1	S3	100	4.65	2/18/2010@10:29:59			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					
WCN100218-08	1	S7	-0.746	0.0392	2/18/2010@10:31:49			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.746 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.746 > -5.00					
Message			CCB Passed					
Action			Continue					
246592006	1	11	0.583	0.0997	2/18/2010@10:33:37			
1202040212	1	12	0.675	0.104	2/18/2010@10:34:29			
1202040214	1	13	98.7	4.57	2/18/2010@10:35:21			
1202040216	1	14	96.5	4.47	2/18/2010@10:36:12			
246592007	1	15	0.211	0.0828	2/18/2010@10:37:04			
246592008	1	16	0.633	0.102	2/18/2010@10:37:58			
246592009	1	17	1.69	0.150	2/18/2010@10:38:52			
246592010	1	18	0.740	0.107	2/18/2010@10:39:45			
246592011	1	19	0.405	0.0916	2/18/2010@10:40:38			
246607001	1	20	2.67	0.195	2/18/2010@10:41:31			
WCN100218-03	1	S3	101	4.68	2/18/2010@10:42:23			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					
WCN100218-08	1	S7	-0.840	0.0349	2/18/2010@10:44:14			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.840 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.840 > -5.00					
Message			CCB Passed					
Action			Continue					
246607002	1	21	2.85	0.203	2/18/2010@10:46:03			
246607003	1	22	1.41	0.137	2/18/2010@10:46:55			
246607004	1	23	5.55	0.326	2/18/2010@10:47:48			
246607005	1	24	0.447	0.0935	2/18/2010@10:48:41			
246607006	1	25	3.74	0.244	2/18/2010@10:49:33			
246611001	1	26	-0.787	0.0374	2/18/2010@10:50:26			
246611002	1	27	-0.830	0.0354	2/18/2010@10:51:18			
246611003	1	28	-1.19	0.0192	2/18/2010@10:52:10			
1202042848	1	29	-1.00	0.0274	2/18/2010@10:53:02			
1202042855	1	30	29.1	1.40	2/18/2010@10:53:53		25.00	
WCN100218-03	1	S3	101	4.65	2/18/2010@10:54:46			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					
WCN100218-08	1	S7	-0.857	0.0342	2/18/2010@10:56:36			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit						
Result:		-0.857 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-0.857 > -5.00				
Message		CCB Passed				
Action		Continue				
246837001	1	31	-0.928	0.0309	2/18/2010@10:58:27	
1202042850  DUP	1	32	-0.794	0.0370	2/18/2010@10:59:21	
1202042852  MS	1	33	110	5.09	2/18/2010@11:00:14	
1202042854  MSD	1	34	102	4.74	2/18/2010@11:01:06	
246837002	1	35	-1.61	0.00	2/18/2010@11:02:00	
246837003	1	36	-0.339	0.0577	2/18/2010@11:02:53	
246837004	1	37	2.51	0.187	2/18/2010@11:03:46	
246837005	1	38	-0.475	0.0516	2/18/2010@11:04:39	
246837006	1	39	0.371	0.0901	2/18/2010@11:05:32	
246854011	1	40	3.12	0.215	2/18/2010@11:06:24	
WCN100218-03	1	S3	101	4.67	2/18/2010@11:07:17	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:		1.0 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		1.0 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100218-08	1	S7	-0.997	0.0278	2/18/2010@11:09:07	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:		-0.997 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-0.997 > -5.00				
Message		CCB Passed				
Action		Continue				
1202042849 DUP	1	41	3.16	0.217	2/18/2010@11:10:55	
1202042851  MS	1	42	94.9	4.40	2/18/2010@11:11:47	
1202042853  MSD	1	43	104	4.82	2/18/2010@11:12:40	
246870001	1	44	0.237	0.0840	2/18/2010@11:13:32	
246870002	1	45	0.780	0.109	2/18/2010@11:14:24	
246870003	1	46	0.521	0.0969	2/18/2010@11:15:18	
246870004	1	47	-0.493	0.0508	2/18/2010@11:16:12	
246870005	1	48	-0.0192	0.0723	2/18/2010@11:17:07	
246870006	1	49	-1.05	0.0254	2/18/2010@11:18:00	
246870007	1	50	0.231	0.0837	2/18/2010@11:18:53	
WCN100218-03	1	S3	103	4.75	2/18/2010@11:19:46	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:		2.8 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		2.8 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100218-08	1	S7	-1.17	0.0200	2/18/2010@11:21:36	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:		-1.17 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.17 > -5.00				
Message		CCB Passed				
Action		Continue				

246870008	1	51	1.99	0.164	2/18/2010@11:23:26		
246870009	1	52	-0.104	0.0685	2/18/2010@11:24:19		
246900001	1	53	73.4	3.42	2/18/2010@11:25:13		
246900002	1	54	14.4	0.730	2/18/2010@11:26:05		
246901001	1	55	20.8	1.02	2/18/2010@11:26:58		
246901002	1	56	190	8.71	2/18/2010@11:27:51		
246607003 951942	1	22	1.17	0.126	2/18/2010@11:28:44		
246607004	1	23	0.346	0.0889	2/18/2010@11:29:37		
1202042899 953097 MB	1	57	-1.53	0.00344	2/18/2010@11:30:29		
1202042900 LCS	1	58	-0.759	0.0386	2/18/2010@11:31:21		
WCN100218-03	1	S3	103	4.76	2/18/2010@11:32:14		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100218-08	1	S7	-0.952	0.0299	2/18/2010@11:34:04		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.952 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.952 > -5.00				
Message			CCB Passed				
Action			Continue				
1202042901 LCSD	1	59	-0.844	0.0348	2/18/2010@11:35:52		
246900001	1	60	79.5	3.69	2/18/2010@11:36:45		
246900002	1	61	21.1	1.04	2/18/2010@11:37:39		
246901001	1	62	42.4	2.00	2/18/2010@11:38:33		
246901002	1	63	196	8.98	2/18/2010@11:39:27		
WCN100218-03	1	S3	103	4.77	2/18/2010@11:40:20		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			3.2 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			3.2 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100218-08	1	S7	6.95	0.390	2/18/2010@11:42:11		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			6.95 > 5.00				
Message			CCB Failed				
Action			Stop Run				
DQM Test: < - Concentration Limit							
Result:			6.95 > -5.00				
Message			CCB Passed				
Action			Continue				

Analyte Properties Table for OM\_2-18-2010\_10-05-11.OMN

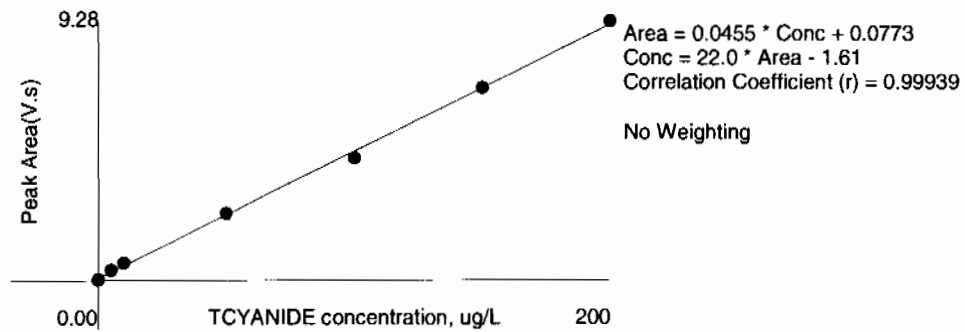
Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.28	0.608	-1.2	2/18/2010	10:09:35
2	150	1	6.90	0.453	-0.0	2/18/2010	10:10:27
3	100	1	4.37	0.285	5.5	2/18/2010	10:11:20
4	50.0	1	2.39	0.155	-1.6	2/18/2010	10:12:13
5	10.0	1	0.630	0.0408	-18.4	2/18/2010	10:13:06
6	5.00	1	0.361	0.0225	-18.6	2/18/2010	10:14:00
7	0.00	1	0.0272	0.00121		2/18/2010	10:14:54

Figure 1: TCYANIDE





# **General Chemistry Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665-1**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 951961      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 951960      **Method:** SSW846 9010B Prep

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

<b>Sample ID</b>	<b>Client ID</b>
246555001	RE15-10-8234
1202040269	Method Blank (MB)
1202040270	246590001(RE16-10-3873) Sample Duplicate (DUP)
1202040271	246574001(CASA-10-9452) Sample Duplicate (DUP)
1202040272	246590001(RE16-10-3873) Matrix Spike (MS)
1202040273	246574001(CASA-10-9452) Matrix Spike (MS)
1202040274	246590001(RE16-10-3873) Matrix Spike Duplicate (MSD)
1202040275	246574001(CASA-10-9452) Matrix Spike Duplicate (MSD)
1202040276	Laboratory Control Sample (LCS)

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

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

**Preparation/Analytical Method Verification**

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

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

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

The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**

The following samples were selected for QC analysis: 246574001 (CASA-10-9452) and 246590001 (RE16-10-3873).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**

The MS/PS recoveries for this sample set were within the required acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries for this sample set were within the required acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**

The RPDs between the spike and spike duplicate met the acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202040271 (CASA-10-9452).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**

All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

**Sample Re-analysis**

The samples in this SDG did not require re-analysis.

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

A DER was not required for this SDG.

#### **Additional Comments**

Additional comments were not required for this SDG.

#### **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

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

**Review Validation:**

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

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

Reviewer:  Date: 08Mar10

# Sample Data Summary

## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1665-1 GEL Work Order: 246555

**The Qualifiers in this report are defined as follows:**

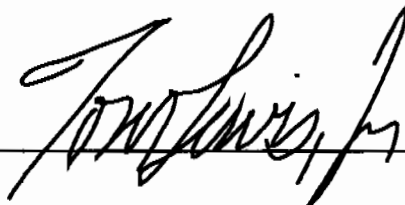
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read 'Valerie Davis', is written over a horizontal line.



# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: February 20, 2010

Client SDG: 10-1665-1

Client Sample ID: RE15-10-8234  
Sample ID: 246555001  
Matrix: W  
Collect Date: 04-FEB-10 12:00  
Receive Date: 09-FEB-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

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

### Flow Injection Analysis

SW9012A Cyanide, Total "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/17/10	1140	951961	1
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### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/16/10	1527	951960

### The following Analytical Methods were performed

Method	Description	Analyst Comments
J	SW846 9012A	

# **Quality Control Summary**

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: February 20, 2010

Page 1 of 2

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

Contact: Ms. Joylene Valdez

Workorder: 246555

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	951961										
QC1202040270	246590001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	02/17/10	11:53
QC1202040271	246574001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			02/17/10	11:45
QC1202040276	LCS										
Cyanide, Total	50.0				47.2	ug/L	94.4	(90%-110%)		02/17/10	11:34
QC1202040269	MB										
Cyanide, Total			U		5.00	ug/L				02/17/10	11:33
QC1202040272	246590001	MS									
Cyanide, Total	100	U	ND		109	ug/L	109	(60%-144%)		02/17/10	11:53
QC1202040273	246574001	MS									
Cyanide, Total	100	U	ND		107	ug/L	105	(60%-144%)		02/17/10	11:46
QC1202040274	246590001	MSD									
Cyanide, Total	100	U	ND		101	ug/L	7.62	(0%-20%)		02/17/10	11:54
QC1202040275	246574001	MSD									
Cyanide, Total	100	U	ND		112	ug/L	4.57	(0%-20%)		02/17/10	11:47

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

## GEL LABORATORIES LLC

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

### QC Summary

Workorder: 246555

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 20-FEB-2010 15:13

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1665-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	17-FEB-2010 10:20:19	OM_2-17-2010_10-09-49	162	150	108	(90%-110%)	Yes
CCV	17-FEB-2010 11:24:24	OM_2-17-2010_10-09-49	102	100	102	(90%-110%)	Yes
CCV	17-FEB-2010 11:36:52	OM_2-17-2010_10-09-49	102	100	102	(90%-110%)	Yes
CCV	17-FEB-2010 11:49:25	OM_2-17-2010_10-09-49	102	100	102	(90%-110%)	Yes
CCV	17-FEB-2010 12:01:56	OM_2-17-2010_10-09-49	103	100	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	17-FEB-2010 10:22:09	OM_2-17-2010_10-09-49	-1.26	10	Yes
CCB	17-FEB-2010 11:26:15	OM_2-17-2010_10-09-49	-1.32	10	Yes
CCB	17-FEB-2010 11:38:42	OM_2-17-2010_10-09-49	-1.32	10	Yes
CCB	17-FEB-2010 11:51:16	OM_2-17-2010_10-09-49	-1.67	10	Yes
CCB	17-FEB-2010 12:03:47	OM_2-17-2010_10-09-49	-1.03	10	Yes

# Cyanide, Total

# Prep LogBook

Analyst: AXS5  
 Batch: 951960  
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202040269		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.0125	mL
LCS	1202040276		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246530001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WASTE WATER	.025	mL
SAMPLE	246530002		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WASTE WATER	.025	mL
SAMPLE	246555001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246560001		EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246560002		EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246571001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246571002		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246574001		EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
DUP	1202040271	246574001	EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	GROUND WATER	.0125	mL
MS	1202040273	246574001	EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
MSD	1202040275	246574001	EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	246590001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
DUP	1202040270	246590001	SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
MS	1202040272	246590001	SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
MSD	1202040274	246590001	SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246591001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246606001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246613001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246710001		EPA 335.4	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246714002		SM 4500-C <sub>18</sub> C	16-FEB-2010 15:27	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	246724001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WASTE WATER	.025	mL
SAMPLE	246724002		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246742001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246742002		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246753001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246766001		SW846 9010B Prep	16-FEB-2010 15:27	>12	25 mL	25 mL	1	WATER	.025	mL



## Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100216-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1270663-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1270669-C	1 mL	51% MgCl2 Soln	
1270661-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/17/2010 10:13:10	OM_2-17-2010_10-09-49
150 ppb		1	axc2	2/17/2010 10:14:02	OM_2-17-2010_10-09-49
100 ppb		1	axc2	2/17/2010 10:14:54	OM_2-17-2010_10-09-49
50 ppb		1	axc2	2/17/2010 10:15:47	OM_2-17-2010_10-09-49
10 ppb		1	axc2	2/17/2010 10:16:40	OM_2-17-2010_10-09-49
CRDL 5.0 ppb		1	axc2	2/17/2010 10:17:34	OM_2-17-2010_10-09-49
ICAL-00		1	axc2	2/17/2010 10:18:29	OM_2-17-2010_10-09-49
ICV		1	axc2	2/17/2010 10:20:19	OM_2-17-2010_10-09-49
ICB		1	axc2	2/17/2010 10:22:09	OM_2-17-2010_10-09-49
		1	axc2	2/17/2010 10:23:59	OM_2-17-2010_10-09-49
1202036044	950203	1	axc2	2/17/2010 10:25:48	OM_2-17-2010_10-09-49
1202036051	950203	25	axc2	2/17/2010 10:26:42	OM_2-17-2010_10-09-49
246432001	950203	1	axc2	2/17/2010 10:27:35	OM_2-17-2010_10-09-49
246432002	950203	1	axc2	2/17/2010 10:28:28	OM_2-17-2010_10-09-49
246432003	950203	1	axc2	2/17/2010 10:29:21	OM_2-17-2010_10-09-49
246432004	950203	1	axc2	2/17/2010 10:30:14	OM_2-17-2010_10-09-49
246432005	950203	1	axc2	2/17/2010 10:31:07	OM_2-17-2010_10-09-49
246432006	950203	1	axc2	2/17/2010 10:31:59	OM_2-17-2010_10-09-49
246432007	950203	1	axc2	2/17/2010 10:32:51	OM_2-17-2010_10-09-49
246432008	950203	1	axc2	2/17/2010 10:33:44	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:34:36	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 10:36:26	OM_2-17-2010_10-09-49
246432009	950203	1	axc2	2/17/2010 10:38:15	OM_2-17-2010_10-09-49
246432010	950203	1	axc2	2/17/2010 10:39:07	OM_2-17-2010_10-09-49
246443005	950203	1	axc2	2/17/2010 10:39:59	OM_2-17-2010_10-09-49
1202036045	950203	1	axc2	2/17/2010 10:40:50	OM_2-17-2010_10-09-49
1202036047	950203	1	axc2	2/17/2010 10:41:41	OM_2-17-2010_10-09-49
1202036049	950203	1	axc2	2/17/2010 10:42:36	OM_2-17-2010_10-09-49
246477002	950203	1	axc2	2/17/2010 10:43:29	OM_2-17-2010_10-09-49
1202036046	950203	1	axc2	2/17/2010 10:44:22	OM_2-17-2010_10-09-49
1202036048	950203	1	axc2	2/17/2010 10:45:16	OM_2-17-2010_10-09-49
1202036050	950203	1	axc2	2/17/2010 10:46:09	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:47:02	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 10:48:52	OM_2-17-2010_10-09-49
246754005	950203	1	axc2	2/17/2010 10:50:42	OM_2-17-2010_10-09-49
246754006	950203	1	axc2	2/17/2010 10:51:34	OM_2-17-2010_10-09-49
246754007	950203	1	axc2	2/17/2010 10:52:27	OM_2-17-2010_10-09-49
246754008	950203	1	axc2	2/17/2010 10:53:19	OM_2-17-2010_10-09-49
246754009	950203	1	axc2	2/17/2010 10:54:13	OM_2-17-2010_10-09-49
246754010	950203	1	axc2	2/17/2010 10:55:04	OM_2-17-2010_10-09-49
246754011	950203	1	axc2	2/17/2010 10:55:57	OM_2-17-2010_10-09-49
1202042861	953089	1	axc2	2/17/2010 10:56:49	OM_2-17-2010_10-09-49
1202042868	953089	1	axc2	2/17/2010 10:57:40	OM_2-17-2010_10-09-49
246531002	953089	1	axc2	2/17/2010 10:58:33	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 10:59:25	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 11:01:15	OM_2-17-2010_10-09-49
246755001	953089	1	axc2	2/17/2010 11:03:05	OM_2-17-2010_10-09-49
246755002	953089	1	axc2	2/17/2010 11:03:58	OM_2-17-2010_10-09-49
246838001	953089	1	axc2	2/17/2010 11:04:52	OM_2-17-2010_10-09-49
246842001	953089	1	axc2	2/17/2010 11:05:45	OM_2-17-2010_10-09-49
1202042862	953089	1	axc2	2/17/2010 11:06:39	OM_2-17-2010_10-09-49
1202042864	953089	1	axc2	2/17/2010 11:07:32	OM_2-17-2010_10-09-49
1202042866	953089	1	axc2	2/17/2010 11:08:26	OM_2-17-2010_10-09-49
246844001	953089	1	axc2	2/17/2010 11:09:18	OM_2-17-2010_10-09-49
246853001	953089	1	axc2	2/17/2010 11:10:11	OM_2-17-2010_10-09-49
246871001	953089	1	axc2	2/17/2010 11:11:04	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010 11:11:56	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010 11:13:46	OM_2-17-2010_10-09-49

247024001	953089	1	axc2	2/17/2010	11:15:35	OM_2-17-2010_10-09-49
246878001	953089	1	axc2	2/17/2010	11:16:27	OM_2-17-2010_10-09-49
1202042863	953089	1	axc2	2/17/2010	11:17:19	OM_2-17-2010_10-09-49
1202042865	953089	1	axc2	2/17/2010	11:18:12	OM_2-17-2010_10-09-49
1202042867	953089	1	axc2	2/17/2010	11:19:03	OM_2-17-2010_10-09-49
246882001	953089	1	axc2	2/17/2010	11:19:56	OM_2-17-2010_10-09-49
246882002	953089	1	axc2	2/17/2010	11:20:50	OM_2-17-2010_10-09-49
246883001	953089	1	axc2	2/17/2010	11:21:44	OM_2-17-2010_10-09-49
246883002	953089	1	axc2	2/17/2010	11:22:39	OM_2-17-2010_10-09-49
246883003	953089	1	axc2	2/17/2010	11:23:31	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:24:24	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:26:15	OM_2-17-2010_10-09-49
246883004	953089	1	axc2	2/17/2010	11:28:04	OM_2-17-2010_10-09-49
246894001	953089	1	axc2	2/17/2010	11:28:57	OM_2-17-2010_10-09-49
246923002	953089	1	axc2	2/17/2010	11:29:51	OM_2-17-2010_10-09-49
246924002	953089	1	axc2	2/17/2010	11:30:44	OM_2-17-2010_10-09-49
246937002	953089	1	axc2	2/17/2010	11:31:37	OM_2-17-2010_10-09-49
247024001	953089	2	axc2	2/17/2010	11:32:29	OM_2-17-2010_10-09-49
1202040269	951961	1	axc2	2/17/2010	11:33:22	OM_2-17-2010_10-09-49
1202040276	951961	1	axc2	2/17/2010	11:34:15	OM_2-17-2010_10-09-49
246530001	951961	1	axc2	2/17/2010	11:35:07	OM_2-17-2010_10-09-49
246530002	951961	1	axc2	2/17/2010	11:36:00	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:36:52	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:38:42	OM_2-17-2010_10-09-49
246555001	951961	1	axc2	2/17/2010	11:40:30	OM_2-17-2010_10-09-49
246560001	951961	1	axc2	2/17/2010	11:41:24	OM_2-17-2010_10-09-49
246560002	951961	1	axc2	2/17/2010	11:42:19	OM_2-17-2010_10-09-49
246571001	951961	1	axc2	2/17/2010	11:43:12	OM_2-17-2010_10-09-49
246571002	951961	1	axc2	2/17/2010	11:44:06	OM_2-17-2010_10-09-49
246574001	951961	1	axc2	2/17/2010	11:45:00	OM_2-17-2010_10-09-49
1202040271	951961	1	axc2	2/17/2010	11:45:53	OM_2-17-2010_10-09-49
1202040273	951961	1	axc2	2/17/2010	11:46:47	OM_2-17-2010_10-09-49
1202040275	951961	1	axc2	2/17/2010	11:47:40	OM_2-17-2010_10-09-49
246590001	951961	1	axc2	2/17/2010	11:48:33	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	11:49:25	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	11:51:16	OM_2-17-2010_10-09-49
1202040270	951961	1	axc2	2/17/2010	11:53:04	OM_2-17-2010_10-09-49
1202040272	951961	1	axc2	2/17/2010	11:53:58	OM_2-17-2010_10-09-49
1202040274	951961	1	axc2	2/17/2010	11:54:49	OM_2-17-2010_10-09-49
246591001	951961	1	axc2	2/17/2010	11:55:42	OM_2-17-2010_10-09-49
246606001	951961	1	axc2	2/17/2010	11:56:34	OM_2-17-2010_10-09-49
246613001	951961	1	axc2	2/17/2010	11:57:27	OM_2-17-2010_10-09-49
246710001	951961	1	axc2	2/17/2010	11:58:22	OM_2-17-2010_10-09-49
246714002	951961	1	axc2	2/17/2010	11:59:16	OM_2-17-2010_10-09-49
246724001	951961	1	axc2	2/17/2010	12:00:10	OM_2-17-2010_10-09-49
246724002	951961	1	axc2	2/17/2010	12:01:04	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	12:01:56	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	12:03:47	OM_2-17-2010_10-09-49
246742001	951961	1	axc2	2/17/2010	12:05:37	OM_2-17-2010_10-09-49
246742002	951961	1	axc2	2/17/2010	12:06:30	OM_2-17-2010_10-09-49
246753001	951961	1	axc2	2/17/2010	12:07:23	OM_2-17-2010_10-09-49
246766001	951961	1	axc2	2/17/2010	12:08:17	OM_2-17-2010_10-09-49
CCV		1	axc2	2/17/2010	12:09:10	OM_2-17-2010_10-09-49
CCB		1	axc2	2/17/2010	12:11:00	OM_2-17-2010_10-09-49

Original Run Filename: OM\_2-17-2010\_10-09-49.OMN created 2/17/2010 10:09:49  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-17-2010\_10-09-49.OMN last modified 2/17/2010 12:12:05  
 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)				
WCN100217-01	1	S1	200	9.92	2/17/2010@10:13:10			200 ppb
WCN100217-02	1	S2	150	7.45	2/17/2010@10:14:02			150 ppb
WCN100217-03	1	S3	100	4.78	2/17/2010@10:14:54			100 ppb
WCN100217-04	1	S4	50.0	2.59	2/17/2010@10:15:47			50 ppb
WCN100217-05	1	S5	10.0	0.647	2/17/2010@10:16:40			10 ppb
WCN100217-06	1	S6	5.00	0.374	2/17/2010@10:17:34			CRDL 5.0 ppb
WCN100217-08	1	S7	0.00	0.0267	2/17/2010@10:18:29			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99970 > 0.99500					
Message			Pass					
Action			Continue					
WCN100217-07	1	S8	162	7.99	2/17/2010@10:20:19			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			7.7 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.7 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100217-08	1	S7	-1.26	0.0231	2/17/2010@10:22:09			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.26 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.26 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100217-06	1	S6	6.01	0.379	2/17/2010@10:23:59			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.01 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.01 > 2.50					
Message			Pass					
Action			None					
1202036044 950203 MB	1	1	-1.71	0.00125	2/17/2010@10:25:48			
1202036051  LCS	1	2	29.7	1.54	2/17/2010@10:26:42		25.00	
246432001	1	3	-0.857	0.0429	2/17/2010@10:27:35			
246432002	1	4	-1.21	0.0258	2/17/2010@10:28:28			
246432003	1	5	-1.10	0.0307	2/17/2010@10:29:21			
246432004	1	6	-1.20	0.0260	2/17/2010@10:30:14			
246432005	1	7	-1.72	4.79e-4	2/17/2010@10:31:07			
246432006	1	8	1.78	0.172	2/17/2010@10:31:59			
246432007	1	9	-0.828	0.0443	2/17/2010@10:32:51			
246432008	1	10	-0.968	0.0374	2/17/2010@10:33:44			
WCN100217-03	1	S3	101	5.01	2/17/2010@10:34:36			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					
WCN100217-08	1	S7	-1.10	0.0308	2/17/2010@10:36:26			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.10 > 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.10 > -5.00					
Message			CCB Passed					
Action			Continue					
246432009	1	11	-0.127	0.0786	2/17/2010@10:38:15			
246432010	1	12	-1.04	0.0339	2/17/2010@10:39:07			
246443005	1	13	-0.966	0.0376	2/17/2010@10:39:59			
1202036045  DUP	1	14	-0.853	0.0430	2/17/2010@10:40:50			
1202036047  MS	1	15	103	5.11	2/17/2010@10:41:41			
1202036049  MSD	1	16	98.4	4.90	2/17/2010@10:42:36			
246477002	1	17	0.420	0.105	2/17/2010@10:43:29			
1202036046  DUP	1	18	0.202	0.0947	2/17/2010@10:44:22			
1202036048  MS	1	19	96.1	4.79	2/17/2010@10:45:16			
1202036050  MSD	1	20	92.0	4.59	2/17/2010@10:46:09			
WCN100217-03	1	S3	102	5.05	2/17/2010@10:47:02			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.5 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.5 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100217-08	1	S7	-1.04	0.0339	2/17/2010@10:48:52			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.04 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.04 > -5.00					
Message			CCB Passed					
Action			Continue					
246754005	1	21	-0.582	0.0563	2/17/2010@10:50:42			
246754006	1	22	-0.462	0.0622	2/17/2010@10:51:34			
246754007	1	23	2.95	0.229	2/17/2010@10:52:27			
246754008	1	24	-0.140	0.0779	2/17/2010@10:53:19			
246754009	1	25	-0.622	0.0544	2/17/2010@10:54:13			
246754010	1	26	-0.857	0.0429	2/17/2010@10:55:04			
246754011	1	27	-1.43	0.0147	2/17/2010@10:55:57			
1202042861 953089 MB	1	28	-1.74	-2.03e-4	2/17/2010@10:56:49			
1202042868  LCS	1	29	53.6	2.71	2/17/2010@10:57:40			
246531002	1	30	-0.820	0.0447	2/17/2010@10:58:33			
WCN100217-03	1	S3	101	5.02	2/17/2010@10:59:25			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					
WCN100217-08	1	S7	-1.09	0.0315	2/17/2010@11:01:15			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							
246755001	1	31	-1.29	0.0217	2/17/2010@11:03:05				
246755002	1	32	-1.44	0.0142	2/17/2010@11:03:58				
246838001	1	33	-1.88	-0.00736	2/17/2010@11:04:52				
246842001	1	34	-1.60	0.00632	2/17/2010@11:05:45				
1202042862  DUP	1	35	-1.47	0.0130	2/17/2010@11:06:39				
1202042864  MS	1	36	109	5.40	2/17/2010@11:07:32				
1202042866  MSD	1	37	109	5.41	2/17/2010@11:08:26				
246844001	1	38	-1.05	0.0336	2/17/2010@11:09:18				
246853001	1	39	-0.789	0.0462	2/17/2010@11:10:11				
246871001	1	40	-1.72	4.87e-4	2/17/2010@11:11:04				
WCN100217-03	1	S3	102	5.09	2/17/2010@11:11:56				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		2.3 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		2.3 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100217-08	1	S7	-1.37	0.0175	2/17/2010@11:13:46				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-1.37 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.37 > -5.00							
Message		CCB Passed							
Action		Continue							
247024001	1	55	275	13.5	2/17/2010@11:15:35				
246878001	1	41	0.661	0.117	2/17/2010@11:16:27				
1202042863  DUP	1	42	2.26	0.196	2/17/2010@11:17:19				
1202042865  MS	1	43	94.4	4.70	2/17/2010@11:18:12				
1202042867  MSD	1	44	112	5.55	2/17/2010@11:19:03				
246882001	1	45	-1.23	0.0244	2/17/2010@11:19:56				
246882002	1	46	-0.923	0.0397	2/17/2010@11:20:50				
246883001	1	47	-1.07	0.0323	2/17/2010@11:21:44				
246883002	1	48	-1.04	0.0339	2/17/2010@11:22:39				
246883003	1	49	-1.71	0.00134	2/17/2010@11:23:31				
WCN100217-03	1	S3	102	5.07	2/17/2010@11:24:24				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		2.0 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		2.0 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100217-08	1	S7	-1.32	0.0204	2/17/2010@11:26:15				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-1.32 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.32 > -5.00							
Message		CCB Passed							
Action		Continue							

246883004	1	50	-1.17	0.0275	2/17/2010@11:28:04		
246894001	1	51	6.46	0.401	2/17/2010@11:28:57		
246923002	1	52	0.530	0.111	2/17/2010@11:29:51		
246924002	1	53	0.751	0.122	2/17/2010@11:30:44		
246937002	1	54	21.6	1.14	2/17/2010@11:31:37		
247024001	1	55	109	5.44	2/17/2010@11:32:29	2.00	
1202040269 951961 MB	1	56	-1.06	0.0328	2/17/2010@11:33:22		
1202040276 LCS	1	57	47.2	2.39	2/17/2010@11:34:15		
246530001	1	58	-1.73	3.57e-4	2/17/2010@11:35:07		
246530002	1	59	-1.73	1.71e-4	2/17/2010@11:36:00		
WCN100217-03	1	S3	102	5.07	2/17/2010@11:36:52		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				
WCN100217-08	1	S7	-1.32	0.0204	2/17/2010@11:38:42		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.32 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.32 > -5.00				
Message			CCB Passed				
Action			Continue				
246555001	1	60	-1.26	0.0234	2/17/2010@11:40:30		
246560001	1	61	-2.04	-0.0150	2/17/2010@11:41:24		
246560002	1	62	-0.699	0.0506	2/17/2010@11:42:19		
246571001	1	63	-1.74	-1.65e-4	2/17/2010@11:43:12		
246571002	1	64	-1.89	-0.00753	2/17/2010@11:44:06		
246574001	1	65	1.51	0.159	2/17/2010@11:45:00		
1202040271 DUP	1	66	1.22	0.145	2/17/2010@11:45:53		
1202040273 MS	1	67	107	5.30	2/17/2010@11:46:47		
1202040275 MSD	1	68	112	5.54	2/17/2010@11:47:40		
246590001	1	69	-1.19	0.0264	2/17/2010@11:48:33		
WCN100217-03	1	S3	102	5.05	2/17/2010@11:49:25		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			1.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			1.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100217-08	1	S7	-1.67	0.00297	2/17/2010@11:51:16		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.67 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.67 > -5.00				
Message			CCB Passed				
Action			Continue				
1202040270 DUP	1	70	-1.23	0.0246	2/17/2010@11:53:04		
1202040272 MS	1	71	109	5.40	2/17/2010@11:53:58		
1202040274 MSD	1	72	101	5.03	2/17/2010@11:54:49		
246591001	1	73	-1.34	0.0195	2/17/2010@11:55:42		
246606001	1	74	-1.56	0.00833	2/17/2010@11:56:34		
246613001	1	75	-1.37	0.0180	2/17/2010@11:57:27		
246710001	1	76	-1.59	0.00682	2/17/2010@11:58:22		
246714002	1	77	19.8	1.05	2/17/2010@11:59:16		

246724001	1	78	-1.32	0.0204	2/17/2010@12:00:10		
246724002	1	79	-1.37	0.0180	2/17/2010@12:01:04		
WCN100217-03	1	S3	103	5.11	2/17/2010@12:01:56		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.7 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100217-08	1	S7	-1.03	0.0346	2/17/2010@12:03:47		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.03 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.03 > -5.00				
Message			CCB Passed				
Action			Continue				
246742001	1	80	-1.63	0.00514	2/17/2010@12:05:37		
246742002	1	81	-1.73	3.14e-4	2/17/2010@12:06:30		
246753001	1	82	-1.60	0.00637	2/17/2010@12:07:23		
246766001	1	83	-1.39	0.0169	2/17/2010@12:08:17		
WCN100217-03	1	S3	103	5.13	2/17/2010@12:09:10		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			3.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			3.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100217-08	1	S7	-1.74	-1.58e-4	2/17/2010@12:11:00		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.74 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.74 > -5.00				
Message			CCB Passed				
Action			Continue				

Analyte Properties Table for OM\_2-17-2010\_10-09-49.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39



Channel 1: Current View

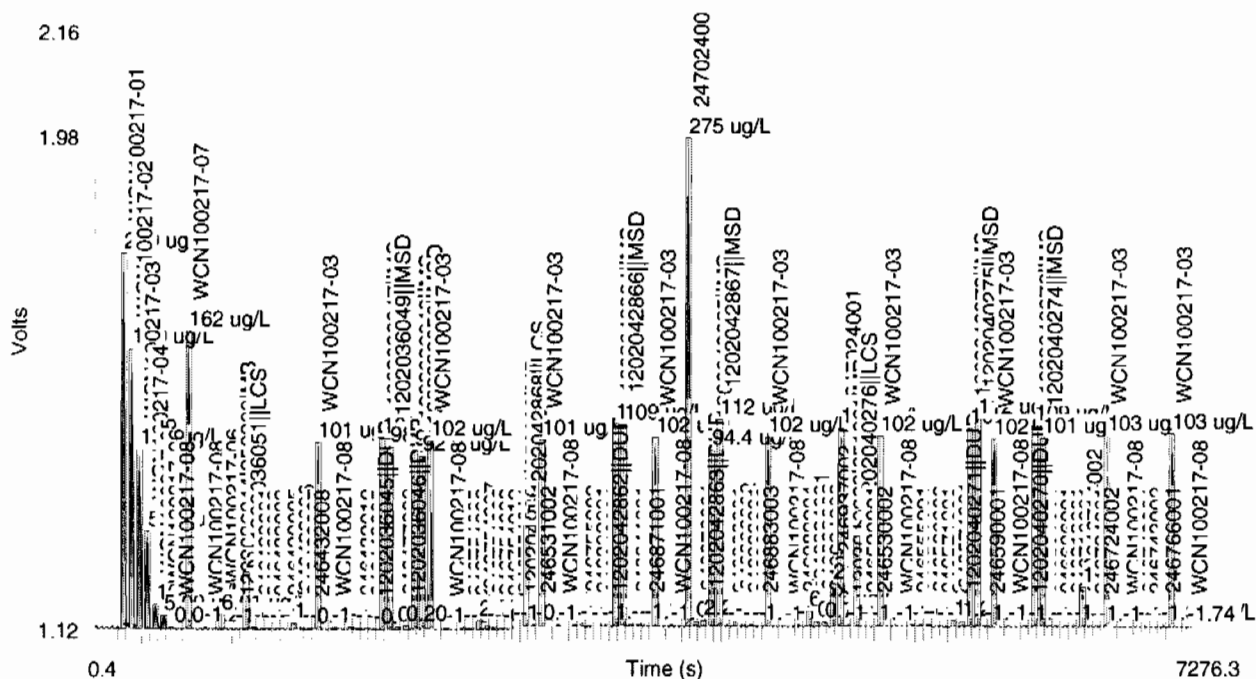
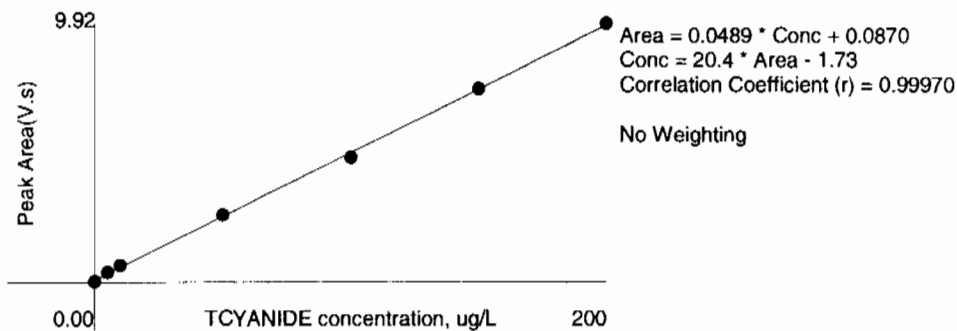


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.92	0.646	-0.6	2/17/2010	10:14:13
2	150	1	7.45	0.484	-0.3	2/17/2010	10:15:05
3	100	1	4.78	0.310	3.9	2/17/2010	10:15:57
4	50.0	1	2.59	0.169	-2.1	2/17/2010	10:16:50
5	10.0	1	0.647	0.0416	-12.4	2/17/2010	10:17:43
6	5.00	1	0.374	0.0226	-13.0	2/17/2010	10:18:37
7	0.00	1	0.0267	0.00251		2/17/2010	10:19:31

Figure 1: TCYANIDE



# RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1665**

**Method/Analysis Information**

**Procedure:**                      **Dry Weight-Percent Moisture**

Analytical Method:

Analytical Batch Number:    951438

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
246554006	RE15-10-8225
1202039039	246554001(RE15-10-8175) Sample Duplicate (DUP)

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-OA-E-020 REV# 9.

**Calibration Information:**

**Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Quality Control (QC) Information:**

**Designated QC**

The following sample was used for QC: 246554001 (RE15-10-8175). The QC was from LANL work order 246554.

**QC Information**

All of the QC samples met the required acceptance limits.

CSU

Not Applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

None of the samples in this sample set required reprep or reanalysis.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**

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

**Additional Comments**

Additional comments were not required for this sample set.

**Blank Decision Level**

Not Applicable. The blank result is less than the decision level.

**Qualifier information**

Manual qualifiers were not required.

**Method/Analysis Information**

**Product:** LSC, Tritium Dist, Solid

Analytical Method: EPA 906.0 Modified

Analytical Batch Number: 958199

<b>Sample ID</b>	<b>Client ID</b>
246554001	RE15-10-8175
246554006	RE15-10-8225
1202054898	Method Blank (MB)
1202054899	246554001(RE15-10-8175) Sample Duplicate (DUP)
1202054900	Laboratory Control Sample (LCS)
1202054901	246554001(RE15-10-8175) Matrix Spike (MS)

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-RAD-A-002 REV# 18.

#### **Calibration Information:**

##### **Calibration Information**

All initial and continuing calibration requirements have been met. The initial Calibrations were performed in August 2009 and September 2009.

##### **Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

##### **Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

#### **Quality Control (QC) Information:**

##### **Blank Information**

The blank volume is representative of the sample volume in this batch.

##### **Designated QC**

The following sample was used for QC: 246554001 (RE15-10-8175). The QC was from LANL work order 246554.

##### **QC Information**

All of the QC samples met the required acceptance limits.

##### **CSU**

The blank result is less than 1.65 times the CSU.

#### **Technical Information:**

##### **Holding Time**

All sample procedures for this sample set were performed within the required holding time.

##### **Sample Re-prep/Re-analysis**

Sample 1202054901 (RE15-10-8175) was recounted due to low recovery. Samples 1202054898 (MB), 1202054899 (RE15-10-8175), 246554001 (RE15-10-8175) and 246554006 (RE15-10-8225) were recounted due to the quench number being outside the calibration range. Recount is being reported. Samples were recounted due to a detector lock out condition. Recount is being reported. Samples were recounted due to low LCS recovery.

#### **Miscellaneous Information:**

##### **Data Exception (DER) Documentation**

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

##### **Additional Comments**

Additional comments were not required for this sample set.

#### **Blank Decision Level**

The blank result is less than the decision level.

#### **Qualifier information**

Manual qualifiers were not required.

#### **Method/Analysis Information**

**Product:** H3  
**Analytical Method:** GL-RAD-A-002  
**Analytical Batch Number:** 953105

<b>Sample ID</b>	<b>Client ID</b>
246554002	RE15-10-8174
246554003	RE15-10-8176
246554004	RE15-10-8178
246554005	RE15-10-8177
1202042922	Method Blank (MB)
1202042923	246440001(RE15-10-8354) Sample Duplicate (DUP)
1202042924	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-RAD-A-002 REV# 18.

#### **Calibration Information:**

##### **Calibration Information**

All initial and continuing calibration requirements have been met.

##### **Standards Information**

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

##### **Sample Geometry**

All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:****Blank Information**

The blank volume is representative of the sample volume in this batch.

**Designated QC**

The following sample was used for QC: 246440001 (RE15-10-8354). The QC was from LANL work order 246440.

**QC Information**

All of the QC samples met the required acceptance limits.

**CSU**

The blank result is less than 1.65 times the CSU.

**Technical Information:****Holding Time**

All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

None of the samples in this sample set required reprep or reanalysis.

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

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

**Additional Comments**

Additional comments were not required for this sample set.

**Blank Decision Level**

The blank result is less than the decision level.

**Qualifier information**

Manual qualifiers were not required.

**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:

*Shen Austin 3/4/2010*

Reviewer/Date: \_\_\_\_\_



# SAMPLE DATA SUMMARY

## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1665 GEL Work Order: 246554

**The Qualifiers in this report are defined as follows:**

- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8175  
Sample ID: 246554001  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: .851%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>LSC, Tritium Dist, Solid "As Received"</i>												
Tritium	U	2.23	4.38	+/-1.35	6.00	pCi/g		KXK2	03/04/10	1401	958199	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	EPA 906.0 Modified

### Notes:

TPU is calculated at the 67% confidence level (I-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.

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8175 Project: LANL01004  
Sample ID: 246554001 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------	-------	------

ND Analyte concentration is not detected above the detection limit  
NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier  
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%  
R Sample results are rejected  
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.  
UI Gamma Spectroscopy--Uncertain identification  
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier  
Y QC Samples were not spiked with this compound  
Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.  
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.  
d 5-day BOD--The 2:1 depletion requirement was not met for this sample  
h Preparation or preservation holding time was exceeded  
The above sample is reported on a dry weight basis.

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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 5, 2010

Client Sample ID: RE15-10-8174  
Sample ID: 246554002  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 7.15%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>H3 "As Received"</i>												
Tritium		18600	155	+/-1330	250	pCi/L		KXK2	02/27/10	1217	953105	2

### The following Analytical Methods were performed

Method	Description
--------	-------------

1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

TPU is calculated at the 67% confidence level (1-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

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 5, 2010

Client Sample ID: RE15-10-8174  
Sample ID: 246554002

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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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 5, 2010

Client Sample ID: RE15-10-8176  
Sample ID: 246554003  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 6.04%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>H3 "As Received"</i>												
Tritium		5.89E+05	529	+/-41400	250	pCi/L	KXK2	02/27/10	1255	953105	2	

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

TPU is calculated at the 67% confidence level (1-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

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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 5, 2010

Client Sample ID: RE15-10-8176 Project: LANL01004  
Sample ID: 246554003 Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.



# GEL LABORATORIES LLC

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8178  
Sample ID: 246554004  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 2.48%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>H3 "As Received"</i>												
Tritium		2.10E+06	1260	+/-1.48E+05	250	pCi/L	KXK2	02/27/10	1300	953105	2	

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

TPU is calculated at the 67% confidence level (1-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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID:  
Sample ID:

RE15-10-8178  
246554004

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------	-------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

# GEL LABORATORIES LLC

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8177  
Sample ID: 246554005  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 3.3%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
"As Received"												
<b>Rad Liquid Scintillation Analysis</b>												
H3 "As Received"												
Tritium		3.89E+06	1980	+/-2.73E+05	250	pCi/L		KXX2	02/27/10	1303	953105	2

### The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

### Notes:

TPU is calculated at the 67% confidence level (1-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

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### Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8177  
Sample ID: 246554005

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------	-------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

# GEL LABORATORIES LLC

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## Certificate of Analysis

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

Report Date: March 5, 2010

Client Sample ID: RE15-10-8225  
Sample ID: 246554006  
Matrix: R  
Collect Date: 04-FEB-10  
Receive Date: 09-FEB-10  
Collector: Client  
Moisture: 1.34%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
<b>Gravimetric Solids</b>												
<i>"As Received"</i>												
<b>Rad Liquid Scintillation Analysis</b>												
<i>LSC, Tritium Dist, Solid "As Received"</i>												
Tritium	U	1.07	4.69	+/-1.38	6.00	pCi/g	KXK2	03/04/10	1448	958199	2	

### The following Analytical Methods were performed

Method	Description
--------	-------------

- |   |                        |
|---|------------------------|
| 1 | ASTM D 2216 (Modified) |
| 2 | EPA 906.0 Modified     |

### Notes:

TPU is calculated at the 67% confidence level (1-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
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  - 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

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## Certificate of Analysis

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TA-03, SM271, Drop Pt. 02U, Rm  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 5, 2010

Client Sample ID:  
Sample ID:

RE15-10-8225  
246554006

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------	-------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

# QUALITY CONTROL DATA

# GEL LABORATORIES LLC

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## QC Summary

Report Date: March 5, 2010

Page 1 of 2

Client : Los Alamos National Laboratory  
PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm  
Los Alamos, New Mexico  
Contact: Ms. Joylene Valdez  
Workorder: 246554

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	953105										
QC1202042923	246440001	DUP									
Tritium			292	202	pCi/L	0.393		(0-1)	KXK2	02/27/1013:44	
		TPU:	+/-60.2	+/-55.1							
QC1202042924	LCS										
Tritium	5550			6340	pCi/L		114	(80%-120%)		02/27/1014:21	
		TPU:		+/-517							
QC1202042922	MB										
Tritium			U	4.93	pCi/L					02/27/1013:06	
		TPU:		+/-42.6							
Batch	958199										
QC1202054899	246554001	DUP									
Tritium		U	2.23	1.65	pCi/g	0.109		(0-1)	KXK2	03/05/1015:02	
		TPU:	+/-1.35	+/-1.33							
QC1202054900	LCS										
Tritium	34.1			35.1	pCi/g		103	(80%-120%)		03/04/1017:24	
		TPU:		+/-5.35							
QC1202054898	MB										
Tritium			U	0.249	pCi/g					03/04/1015:35	
		TPU:		+/-1.36							
QC1202054901	246554001	MS									
Tritium	34.1	U	2.23	29.6	pCi/g		86.6	(75%-125%)		03/04/1017:08	
		TPU:	+/-1.35	+/-4.75							

### Notes:

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- 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



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### QC Summary

Workorder: 246554

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
M	Matrix Related Failure								
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor								
N/A	RPD or %Recovery limits do not apply.								
ND	Analyte concentration is not detected above the detection limit								
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%								
R	Sample results are rejected								
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.								
UI	Gamma Spectroscopy--Uncertain identification								
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
Y	QC Samples were not spiked with this compound								
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.								
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.								
d	5-day BOD--The 2:I 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.

\*\* Indicates analyte is a surrogate compound.

^ 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.

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.

**RAW DATA**

# Radiochemistry Batch Checklist, Rev10

Batch# 953105 Product: H3 Date: 3-1-10

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to 100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%.	✓		
Or meets the client's required RER acceptance criteria.			
Tracer yield is 15-125% . Carrier yield 25-125%.			NA
Or meets the client's contract acceptance criteria.			
Method blank is less than the RDL/ LLD.	✓		
(If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms.	✓		
All line outs initialed and dated.	✓		
No transcription errors are apparent.			
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch Data Exception Reports (DER) completed, if applicable.			NA
Batch Data Exception Reports (DER) second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

RADchecklistrev10, revised 1/13/2010

Primary Review Performed By: JM

Secondary Review Performed By: Lupe

3/1/10

LANL 3-6-10

# Tritium Que Sheet

Batch #: 953105 Analyst: KKK2 First Client Due Date 06-MAR-10 Internal Due Date: 23-FEB-10  
 Spike Isotope: Hydrogen-3 Spike Code: Expiration Date: Vol:   
 LCS Isotope: Hydrogen-3 LCS Code: 0134-K Expiration Date: 3/27/10 Vol: 0.1

Prep Date: 2/23/10 Initials: YKJ Pipet ID: 29709168 Witness: AW 3/24/10

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Total Moisture Diet Vol (mL)
246440001-1	RE15-10-8354	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	12	1		414.54	323.34	91.20
246440002-1	RE15-10-8356	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	13	2		423.81	361.93	61.88
246440003-1	RE15-10-8353	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	14	3		420.88	366.59	54.29
246440004-1	RE15-10-8352	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	15	4		185.56	142.88	42.68
246440005-1	RE15-10-8355	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	16	5		513.01	448.37	64.64
246440006-1	RE15-10-8351	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	17	6		496.10	421.19	74.91
246440007-1	RE15-10-8350	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	18	7		250.07	269.55	80.52
246440008-1	RE15-10-8357	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	19	8		493.66	464.53	29.13
246440009-1	RE15-10-8338	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	20	9		396.67	308.21	88.46
246440010-1	RE15-10-8336	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	21	10		343.74	283.59	60.15
246440011-1	RE15-10-8339	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	22	11		461.95	434.69	27.26
246440012-1	RE15-10-8337	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	23	12		500.25	443.22	57.03
246440013-1	RE15-10-8375	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	24	13		401.35	372.28	29.07
246440014-1	RE15-10-8374	SAMPLE		25 pCi/mL SOIL		LANL010	02-FEB-10	10	25	14		409.26	383.48	25.78
246477002-1	WSTCB-10-10161	SAMPLE		25 pCi/mL SOIL		LANL010	03-FEB-10	10	26	15		462.52	403.78	58.74
246554002-1	RE15-10-8174	SAMPLE		25 pCi/mL SOIL		LANL010	04-FEB-10	10	27	17		449.79	417.85	31.94
246554003-1	RE15-10-8176	SAMPLE		25 pCi/mL SOIL		LANL010	04-FEB-10	10	28	18		529.27	497.51	31.76
246554004-1	RE15-10-8178	SAMPLE		25 pCi/mL SOIL		LANL010	04-FEB-10	10	29	19		503.90	491.81	12.09
246554005-1	RE15-10-8177	SAMPLE		25 pCi/mL SOIL		LANL010	04-FEB-10	10	30	20		456.49	441.88	14.61
1202042922-1	MB for batch 953105	MB		25 pCi/mL SOIL		QC ACCOUNT		10	31	22		20.00	0	20.00
1202042923-1	RE15-10-8354(246440001DUP)	DUP		25 pCi/mL SOIL		QC ACCOUNT	02-FEB-10	10	32	1		414.54	323.34	91.20
1202042924-1	LCS for batch 953105	LCS		25 pCi/mL SOIL		QC ACCOUNT		10	33	23		20.00	0	20.00

Bkg Rack #: 11  
 dailies ✓

Bkg prepared with ~~dist~~ water? Yes/No

Comments:

Instrument Used (circle as appropriate): LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4140127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060086, Orange DG06095168

Calibration Used: Ecosci Ultra (10 mL sample/13 mL Econscint Ultra)  
 Date: 3-1-10

DATE	2/23/2010	INITIALS	KXK2	BATCH NUMBER	953105				
Sample #	Flask Wt. (g)	Sample Wet (g)	Flask & Sample Wet (g)	% Moisture of Sample (Balance Interface using % Moisture Batch)	Total Moisture in Sample (mL)	Sample Dry (g)	Flask & Sample Dry (g)	mLs aliquoted into LSC vial	Collection Tube Number
246440001	200	414.54	614.54	0.220	91.20	323.34	523.34	10	
246440002	200	423.81	623.81	0.146	61.88	361.93	561.93	10	
246440003	200	420.88	620.88	0.129	54.29	366.59	566.59	10	
246440004	200	185.56	385.56	0.230	42.68	142.88	342.88	10	
246440005	200	513.01	713.01	0.126	64.64	448.37	648.37	10	
246440006	200	496.10	696.10	0.151	74.91	421.19	621.19	10	
246440007	200	350.07	550.07	0.230	80.52	269.55	469.55	10	
246440008	200	493.66	693.66	0.059	29.13	464.53	664.53	10	
246440009	200	396.67	596.67	0.223	88.46	308.21	508.21	10	
246440010	200	343.74	543.74	0.175	60.15	283.59	483.59	10	
246440011	200	461.95	661.95	0.059	27.26	434.69	634.69	10	
246440012	200	500.25	700.25	0.114	57.03	443.22	643.22	10	
246440013	200	401.35	601.35	0.197	79.07	322.28	522.28	10	
246440014	200	409.26	609.26	0.063	25.78	383.48	583.48	10	
246477002	200	462.52	662.52	0.127	58.74	403.78	603.78	10	
246554001	200	468.60	668.60	0.008	3.75	464.84	664.84	10	
246554002	200	449.79	649.79	0.071	31.94	417.85	617.85	10	
246554003	200	529.27	729.27	0.060	31.76	497.51	697.51	10	
246554004	200	503.90	703.90	0.024	12.09	491.81	691.81	10	
246554005	200	456.49	656.49	0.032	14.61	441.88	641.88	10	
246554006	200	446.59	646.59	0.019	5.91	440.78	640.78	10	
MB	200	20.00	220.00	1.000	20.00	0.00	200.00	10	
DUP	200	414.54	614.54	0.220	91.20	323.34	523.34	10	
LCS	200	20.00	220.00	1.000	20.00	0.00	200.00	10	

3-1-10

3-1-10

## Tritium Solid

Filename : H3VAC.XLS  
File type : Excel  
Version # : 1.2.6

Spike S/N :  
Spike Exp Date :  
Spike Activity (dpm/ml):  
Spike Volume Added:

LCS S/N :  
LCS Exp Date :  
LCS Activity (dpm/ml):  
LCS Volume Added:

Batch : 953105  
Analyst : KKK2  
Prep Date : 2/23/2010

Procedure Code : LSC\_VH3S  
Permanence : Tritium  
Required MDC :  
Half-life of Tritium :

Pipet, 0.1 ml Sidev : +/-  
Pipet, 0.5 ml Sidev : +/-  
Pipet, 1.0 ml Sidev : +/-  
Pipet, 5.0 ml Sidev : +/-

H-3 Abundance : 1  
Method Uncertainty : 0.0881  
Geometry: 10mL DW/13mL  
Ecosant Ultra

pCi/L  
years

## Sample Characteristics

Pos.	Sample ID	Wet Sample Weight (g)	Total Moisture L	Sample Aliquot in Vial L	Sample Aliquot Sidev. L	Dry Sample Weight (g)	% Moisture of Sample	Rtg number	Sample Date/Time
1	246440001.1	414.54	0.0912	0.0100	2.5729E-05	323.34	22.00%	1	2/2/2010 12:00
2	246440002.1	423.81	0.0619	0.0100	2.5729E-05	361.93	14.60%	2	2/2/2010 12:00
3	246440003.1	420.88	0.0543	0.0100	2.5729E-05	368.59	12.90%	3	2/2/2010 12:00
4	246440004.1	185.56	0.0427	0.0100	2.5729E-05	142.88	23.00%	4	2/2/2010 12:00
5	246440005.1	513.01	0.0646	0.0100	2.5729E-05	448.37	12.60%	5	2/2/2010 12:00
6	246440006.1	486.10	0.0749	0.0100	2.5729E-05	421.19	15.10%	6	2/2/2010 12:00
7	246440007.1	350.07	0.0805	0.0100	2.5729E-05	269.55	23.00%	7	2/2/2010 12:00
8	246440008.1	493.66	0.0291	0.0100	2.5729E-05	464.53	5.90%	8	2/2/2010 12:00
9	246440009.1	396.67	0.0865	0.0100	2.5729E-05	308.21	22.30%	9	2/2/2010 12:00
10	246440010.1	343.74	0.0602	0.0100	2.5729E-05	283.59	17.50%	10	2/2/2010 12:00
11	246440011.1	481.95	0.0273	0.0100	2.5729E-05	434.69	5.90%	11	2/2/2010 12:00
12	246440012.1	500.25	0.0570	0.0100	2.5729E-05	443.22	11.40%	12	2/2/2010 12:00
13	246440013.1	401.35	0.0791	0.0100	2.5729E-05	322.28	19.70%	13	2/2/2010 12:00
14	246440014.1	409.26	0.0258	0.0100	2.5729E-05	383.48	6.30%	14	2/2/2010 12:00
15	246477002.1	482.52	0.0587	0.0100	2.5729E-05	403.78	12.70%	15	2/3/2010 12:00
16	246554002.1	449.79	0.0319	0.0100	2.5729E-05	417.85	7.10%	17	2/4/2010 12:00
17	246554003.1	528.27	0.0318	0.0100	2.5729E-05	497.51	6.00%	18	2/4/2010 12:00
18	246554004.1	503.90	0.0121	0.0100	2.5729E-05	491.81	2.40%	19	2/4/2010 12:00
19	246554005.1	458.49	0.0146	0.0100	2.5729E-05	441.88	3.20%	20	2/4/2010 12:00
20	1202042922.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	22	2/23/2010 0:00
21	1202042923.1	414.54	0.0912	0.0100	2.5729E-05	323.34	22.00%	1	2/2/2010 12:00
22	1202042924.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	23	2/23/2010 0:00

Count raw Data				Background				Calibration Data				Detector				Backgrounds	
Pos.	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Error (cpm/dpm)	Detector Efficiency (cpm/dpm)	Rack Position #	Count Start Date/Time	
1	12	35.0297	760.76	2.92	1.16	35	2/27/2010 2:53	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2723	0.00792	0.2723	11	2/27/2010 2:15	
2	13	35.0297	757.9	3.41	1.16	35	2/27/2010 3:31	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2677	0.00792	0.2677	11	2/27/2010 2:15	
3	14	35.0296	760.15	2.8	1.16	35	2/27/2010 4:08	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2713	0.00792	0.2713	11	2/27/2010 2:15	
4	15	35.0297	760.57	1.75	1.16	35	2/27/2010 4:46	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2720	0.00792	0.2720	11	2/27/2010 2:15	
5	16	35.0297	757.14	3.59	1.16	35	2/27/2010 5:23	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2664	0.00792	0.2664	11	2/27/2010 2:15	
6	-17	35.0296	760.43	1.66	1.16	35	2/27/2010 6:01	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2718	0.00792	0.2718	11	2/27/2010 2:15	
7	18	35.0297	762.89	4.58	1.16	35	2/27/2010 6:36	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2758	0.00792	0.2758	11	2/27/2010 2:15	
8	19	35.0297	760.05	5.49	1.16	35	2/27/2010 7:16	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2712	0.00792	0.2712	11	2/27/2010 2:15	
9	20	35.0297	757.57	1.54	1.16	35	2/27/2010 7:53	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2671	0.00792	0.2671	11	2/27/2010 2:15	
10	21	35.0297	759.31	2.19	1.16	35	2/27/2010 8:31	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2700	0.00792	0.2700	11	2/27/2010 2:15	
11	22	35.0297	762.72	7.24	1.16	35	2/27/2010 9:09	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2755	0.00792	0.2755	11	2/27/2010 2:15	
12	23	35.0296	760.14	2.39	1.16	35	2/27/2010 9:46	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2713	0.00792	0.2713	11	2/27/2010 2:15	
13	24	35.0296	762.89	6.16	1.16	35	2/27/2010 10:24	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2758	0.00792	0.2758	11	2/27/2010 2:15	
14	25	35.0296	761.15	12.76	1.16	35	2/27/2010 11:02	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2730	0.00792	0.2730	11	2/27/2010 2:15	
15	26	35.0296	758.7	4.85	1.16	35	2/27/2010 11:39	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2690	0.00792	0.2690	11	2/27/2010 2:15	
16	27	35.0296	760.78	112.96	1.16	35	2/27/2010 12:17	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2724	0.00792	0.2724	11	2/27/2010 2:15	
17	28	2.91297	760.86	3550.47	1.16	35	2/27/2010 12:55	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2725	0.00792	0.2725	11	2/27/2010 2:15	
18	29	0.84628	757.04	12377.5	1.16	35	2/27/2010 13:00	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2662	0.00792	0.2662	11	2/27/2010 2:15	
19	30	0.46295	757.96	23033	1.16	35	2/27/2010 13:03	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2678	0.00792	0.2678	11	2/27/2010 2:15	
20	31	35.013	761.97	1.19	1.16	35	2/27/2010 13:06	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2743	0.00792	0.2743	11	2/27/2010 2:15	
21	32	35.0296	758.79	2.36	1.16	35	2/27/2010 13:44	0.996	LSCORANGE	7/23/2009	7/31/2010	0.2691	0.00792	0.2691	11	2/27/2010 2:15	
22	33	15.0296	760.4	39.36	1.16	35	2/27/2010 14:21	0.999	LSCORANGE	7/23/2009	7/31/2010	0.2717	0.00792	0.2717	11	2/27/2010 2:15	

## Notes:

- 1 - Results are decay corrected to Sample Date/Time  
 2 - Reference date for Spike Activity (dpm/ml) is the Batch Prep Date  
 3 - Spike Nominals are decay corrected to Sample Date/Time

Results Pos.	Decision Level	Critical Level	Required MDC	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count CPM	Net Count Rate Error CPM	1 SIGMA		Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
										Counting Uncertainty	Total Prop. Uncertainty						
	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	CPM	CPM	CPM	pCi/L	pCi/L						
1	99.5921	70.2917	250	154.8033	292.2289	0.194	1.760	0.341	0.361	58.6682	60.2105		SAMPLE				
2	101.2981	71.5174	250	157.5026	380.1037	0.161	2.250	0.361	0.361	61.0182	66.5136		SAMPLE				
3	99.9287	70.5491	250	155.3703	273.3022	0.205	1.640	0.336	0.336	56.0311	58.1761		SAMPLE				
4	99.6762	70.3723	250	154.9807	98.0757	0.489	0.590	0.268	0.268	47.9113	48.3958		SAMPLE				
5	101.7737	71.8531	250	158.2420	412.4393	0.152	2.430	0.368	0.368	62.5004	68.7855		SAMPLE				
6	99.7605	70.4318	250	155.1119	83.1853	0.568	0.500	0.284	0.284	47.2045	47.5587		SAMPLE				
7	99.3210	69.4155	250	152.8736	560.7773	0.119	3.420	0.405	0.405	66.3747	77.0132		SAMPLE				
8	99.9896	70.5928	250	155.4665	722.0320	0.101	4.330	0.436	0.436	72.6543	88.3601		SAMPLE				
9	101.5063	71.8643	250	157.8262	64.3272	0.731	0.380	0.278	0.278	46.9975	47.2106		SAMPLE				
10	100.4360	70.9037	250	156.1622	172.5221	0.300	1.030	0.309	0.309	51.7979	53.1733		SAMPLE				
11	98.4203	69.4858	250	153.0281	997.9447	0.081	6.080	0.490	0.490	80.3757	106.2596		SAMPLE				
12	99.6363	70.5559	250	155.3851	204.9964	0.259	1.230	0.318	0.318	53.0564	54.9438		SAMPLE				
13	98.3234	69.4172	250	152.8773	819.8997	0.092	5.000	0.457	0.457	74.9571	94.2294		SAMPLE				
14	98.3365	70.1324	250	154.4526	1921.8974	0.055	11.600	0.630	0.630	104.4309	169.7628		SAMPLE				
15	100.7946	71.1619	250	156.7197	620.2712	0.113	3.690	0.414	0.414	69.6265	81.9397		SAMPLE				
16	99.5256	70.2659	250	154.7465	18556.4325	0.018	111.800	1.805	1.805	299.5820	1326.6788		SAMPLE				
17	253.8689	179.2336	250	529.3241	588830.9216	0.013	3548.310	34.913	34.913	5791.9888	41417.5953		SAMPLE				
18	468.7261	330.9247	250	1263.7349	2101360.9954	0.013	12376.340	120.937	120.937	20633.7140	147787.9992		SAMPLE				
19	626.7883	442.5179	250	1979.0908	3898496.7226	0.013	23031.840	223.053	223.053	37658.2678	273429.1040		SAMPLE				
20	98.5572	69.5822	250	153.2459	4.9303	8.635	0.030	0.259	0.259	42.5719	42.5733		MB				
21	100.7564	71.1349	250	156.6603	201.6377	0.264	1.200	0.317	0.317	53.2653	55.0855	246440001.1	DUP	36.7%	0.3929	5548.7462	114.2%
22	128.3834	90.6256	250	214.3628	6336.7864	0.044	39.200	1.628	1.628	270.1395	517.4530		LCS				



# REGISTRY

SAT 27 FEB 2010 2:14

\*\*\* DIRECTORY PATH :S:\LSC\O\DA\953105A0 \*\*\*

PARAMETER GROUP: 8  
ID: H-3 (3)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	11	BKG	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	12	246440001	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	13	246440002	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	14	246440003	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	15	246440004	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	16	246440005	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	17	246440006	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	18	246440007	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	19	246440008	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	20	246440009	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	21	246440010	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
12	22	246440011	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
13	23	246440012	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
14	24	246440013	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
15	25	246440014	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
16	26	246477002	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
17	27	246554002	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
18	28	246554003	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
19	29	246554004	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
20	30	246554005	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
21	31	1202042922	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
22	32	1202042923	35:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
23	33	1202042924	15:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1  
COINCIDENCE BIAS (L/H) L

MCA INPUT TRIGG. INHIBIT  
1 LRSUM DCOS G  
2 GSUM G

MEMORY SPLIT  
L\*R  
L\*R

WINDOW	CHANNELS	MCA	HALF
1	50- 175	1	2
2	5- 320	1	2
3	1- 1024	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
SEND SPECTRA		12				
RESOLUTION OF SPECTRA		1024				

LISTING  
INSTRUMENT NUMBER

Y  
1

REGISTRY

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3
Q011101N.001	27 FEB 2010	2:51				
11	BKG	35:01.780	757.99	1.16	2.30	6.95
Q021201N.001	27 FEB 2010	3:29				
12	246440001	35:01.780	760.76	2.92	4.44	9.29
Q031301N.001	27 FEB 2010	4:07				
13	246440002	35:01.780	757.90	3.41	4.90	10.46
Q041401N.001	27 FEB 2010	4:44				
14	246440003	35:01.773	760.15	2.80	4.17	10.13
Q051501N.001	27 FEB 2010	5:22				
15	246440004	35:01.780	760.57	1.75	3.00	8.18
Q061601N.001	27 FEB 2010	5:59				
16	246440005	35:01.780	757.14	3.59	5.11	10.34
Q071701N.001	27 FEB 2010	6:37				
17	246440006	35:01.773	760.43	1.66	2.74	7.12
Q081801N.001	27 FEB 2010	7:14				
18	246440007	35:01.779	762.89	4.58	6.34	11.83
Q091901N.001	27 FEB 2010	7:52				
19	246440008	35:01.779	760.05	5.49	6.92	11.74
Q102001N.001	27 FEB 2010	8:29				
20	246440009	35:01.779	757.57	1.54	2.71	7.27
Q112101N.001	27 FEB 2010	9:07				
21	246440010	35:01.779	759.31	2.19	3.56	8.35
Q122201N.001	27 FEB 2010	9:45				
22	246440011	35:01.779	762.72	7.24	9.23	14.08
Q132301N.001	27 FEB 2010	10:22				
23	246440012	35:01.778	760.14	2.39	3.97	9.02
Q142401N.001	27 FEB 2010	11:00				
24	246440013	35:01.778	762.89	6.16	8.09	12.50
Q152501N.001	27 FEB 2010	11:38				
25	246440014	35:01.778	761.15	12.76	15.31	20.22
Q162601N.001	27 FEB 2010	12:15				
26	246477002	35:01.778	758.70	4.85	6.51	11.51
Q172701N.001	27 FEB 2010	12:53				
27	246554002	35:01.778	760.78	112.96	124.94	129.59
Q182801N.001	27 FEB 2010	12:58				
28	246554003	2:54.778	760.86	3550.47	3848.59	3853.16
Q192901N.001	27 FEB 2010	13:01				
29	246554004	0:50.777	757.04	12377.50	13406.20	13413.50
Q203001N.001	27 FEB 2010	13:04				
30	246554005	0:27.777	757.96	23033.00	24978.70	24978.70
Q213101N.001	27 FEB 2010	13:42				
31	1202042922	35:00.777	761.97	1.19	2.86	7.89
Q223201N.001	27 FEB 2010	14:20				
32	1202042923	35:01.776	758.79	2.36	4.09	9.67
Q233301N.001	27 FEB 2010	14:37				
33	1202042924	15:01.776	760.40	39.36	43.79	48.14

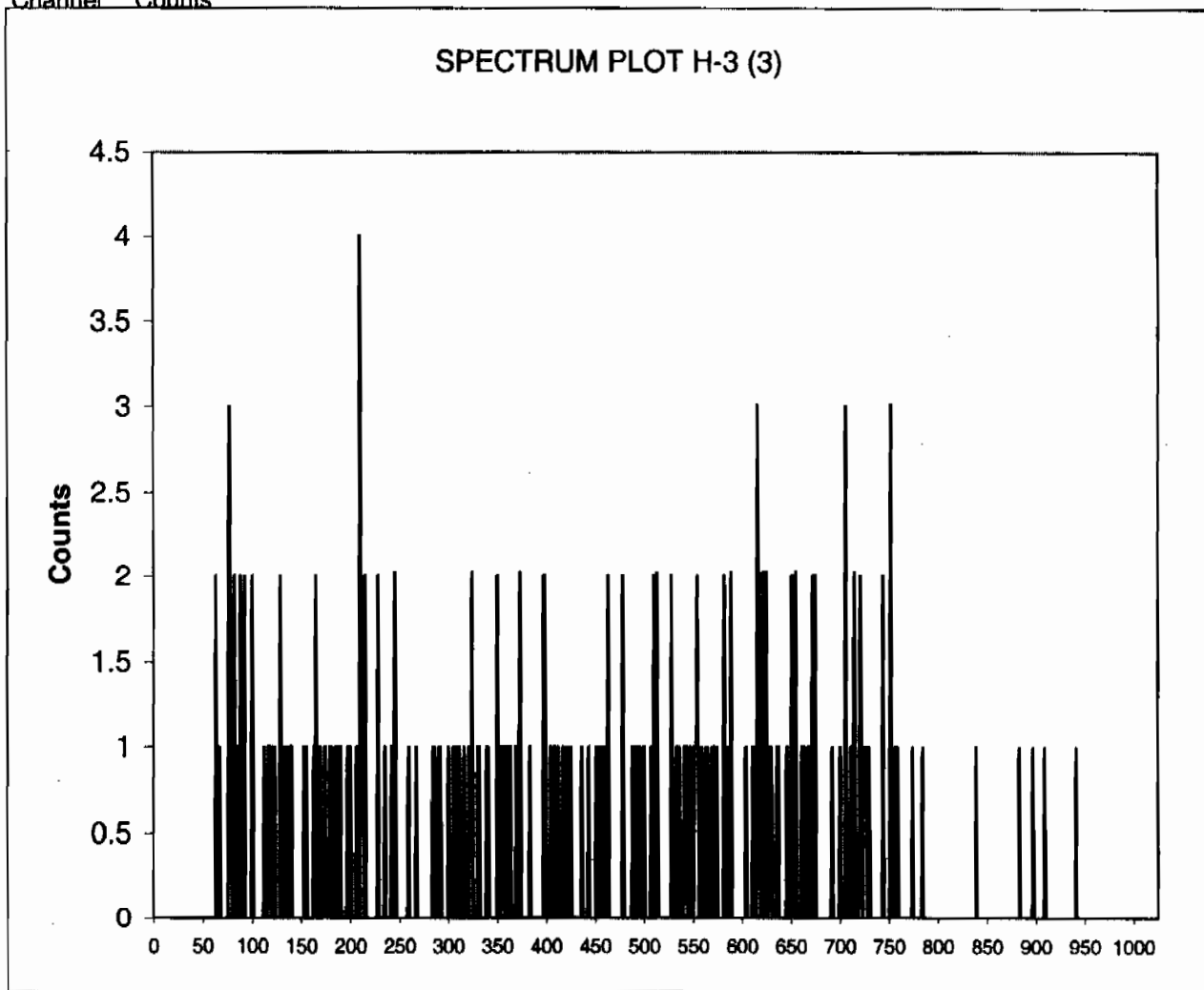
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Data Capture Date:  
FileName:  
File Info:

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s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 1, BKG, 35.02967:  
Quench: 757.99  
Start, End, X-Axis 50-175

Channel Counts



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32	0
33	0
34	0
35	0

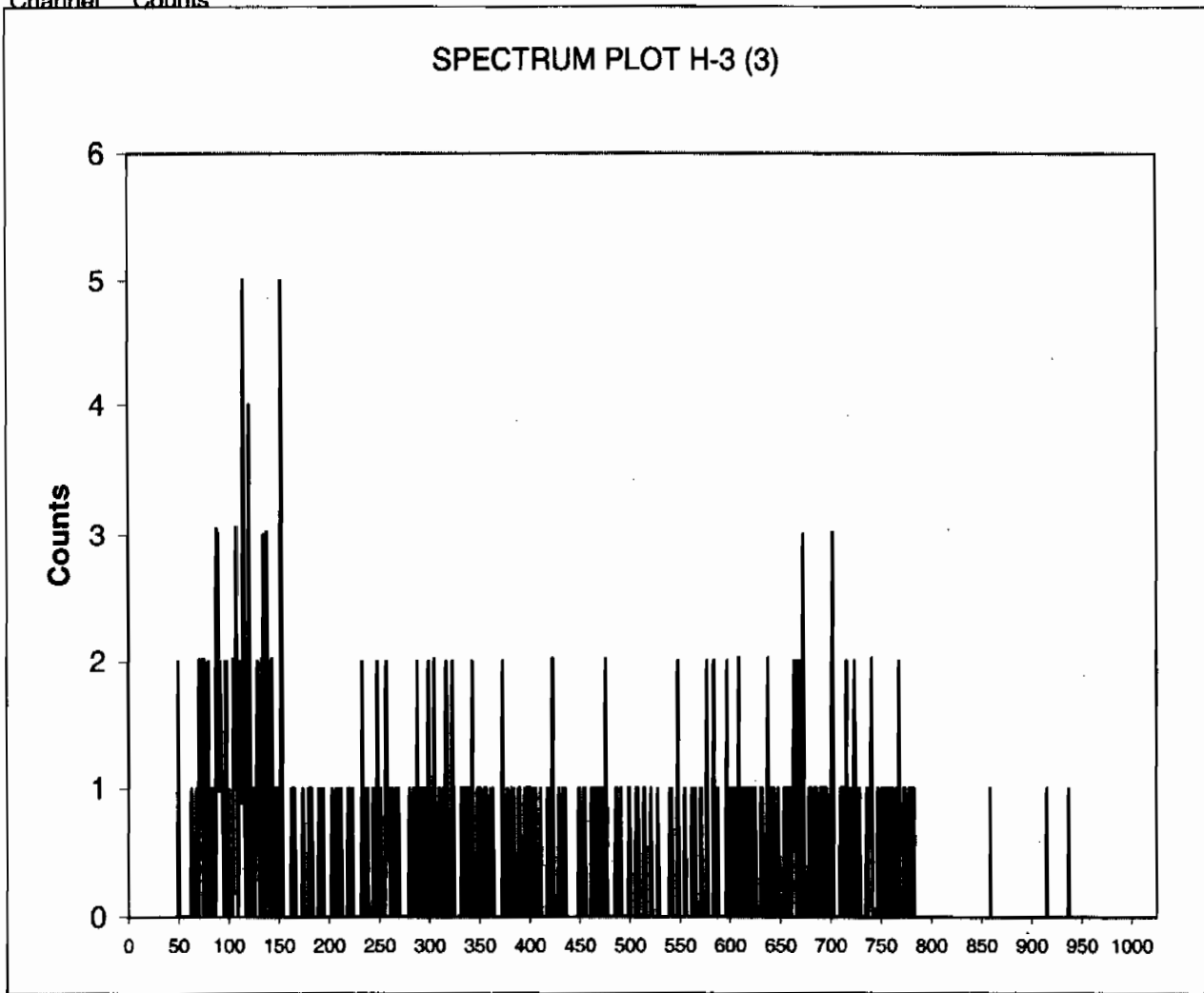
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FileName:  
File Info:

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s:\scfiles\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 2, 246440001, 35.02967:  
Quench: 760.76  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
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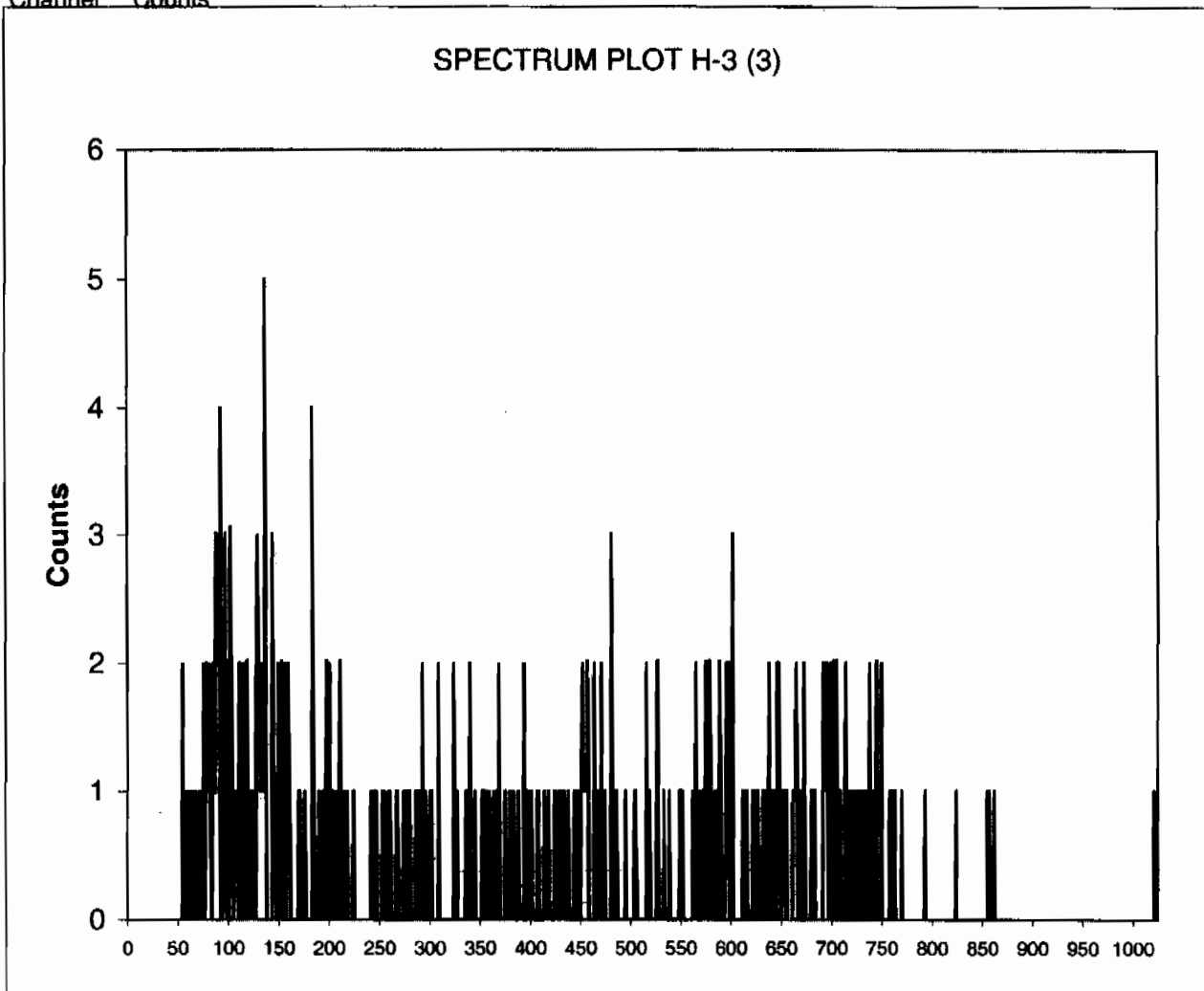
ID:  
Comments:

H-3 (3)  
ORANGE

Sample, Rack-Pos, Time:  
Quench:  
Start, End, X-Axis

3, 246440002, 35.02967:  
757.9  
50-175

Channel Counts



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32	0
33	0
34	0
35	0

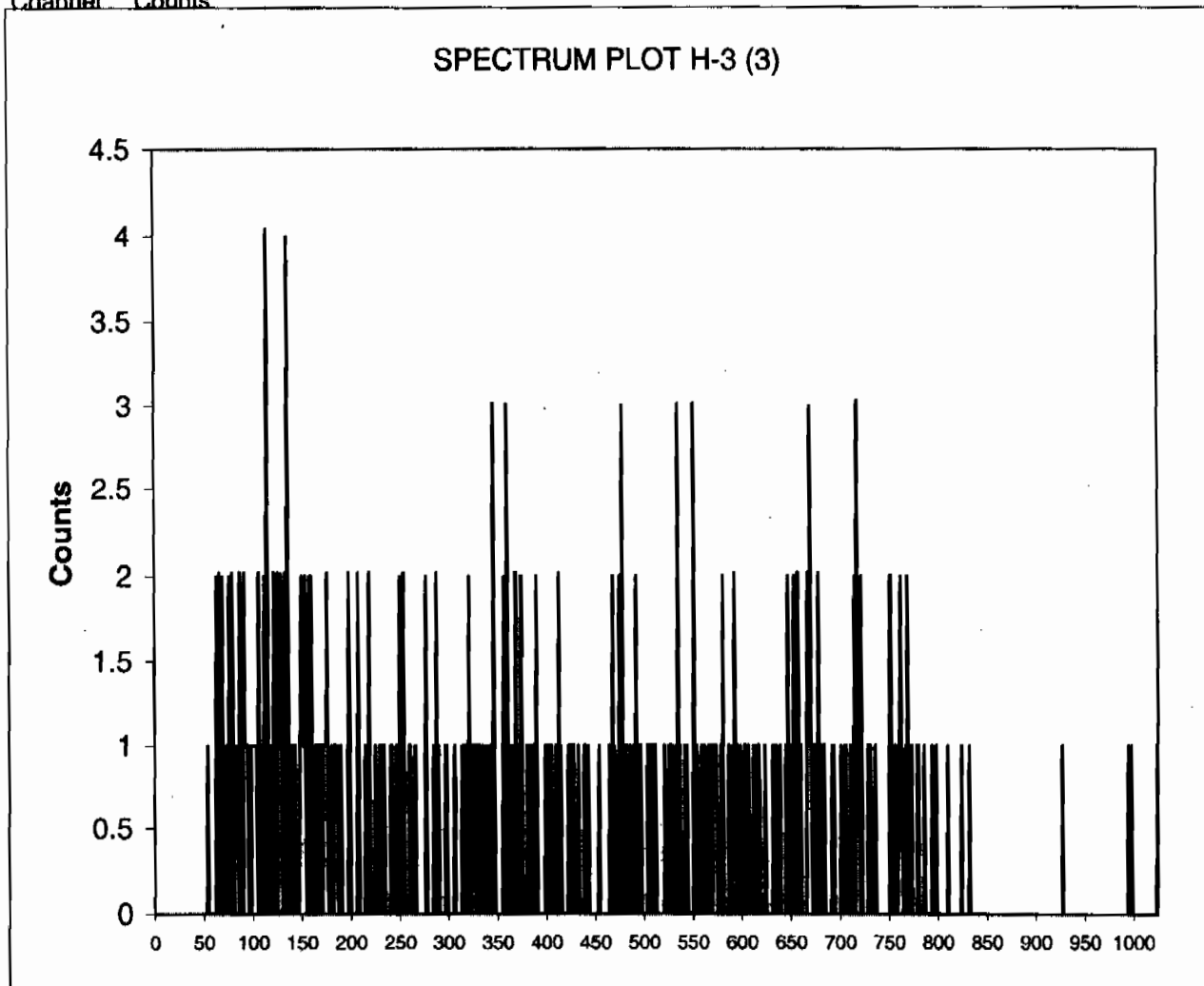
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Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
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ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 4, 246440003, 35.02955:  
Quench: 760.15  
Start, End, X-Axis 50-175

Channel Counts



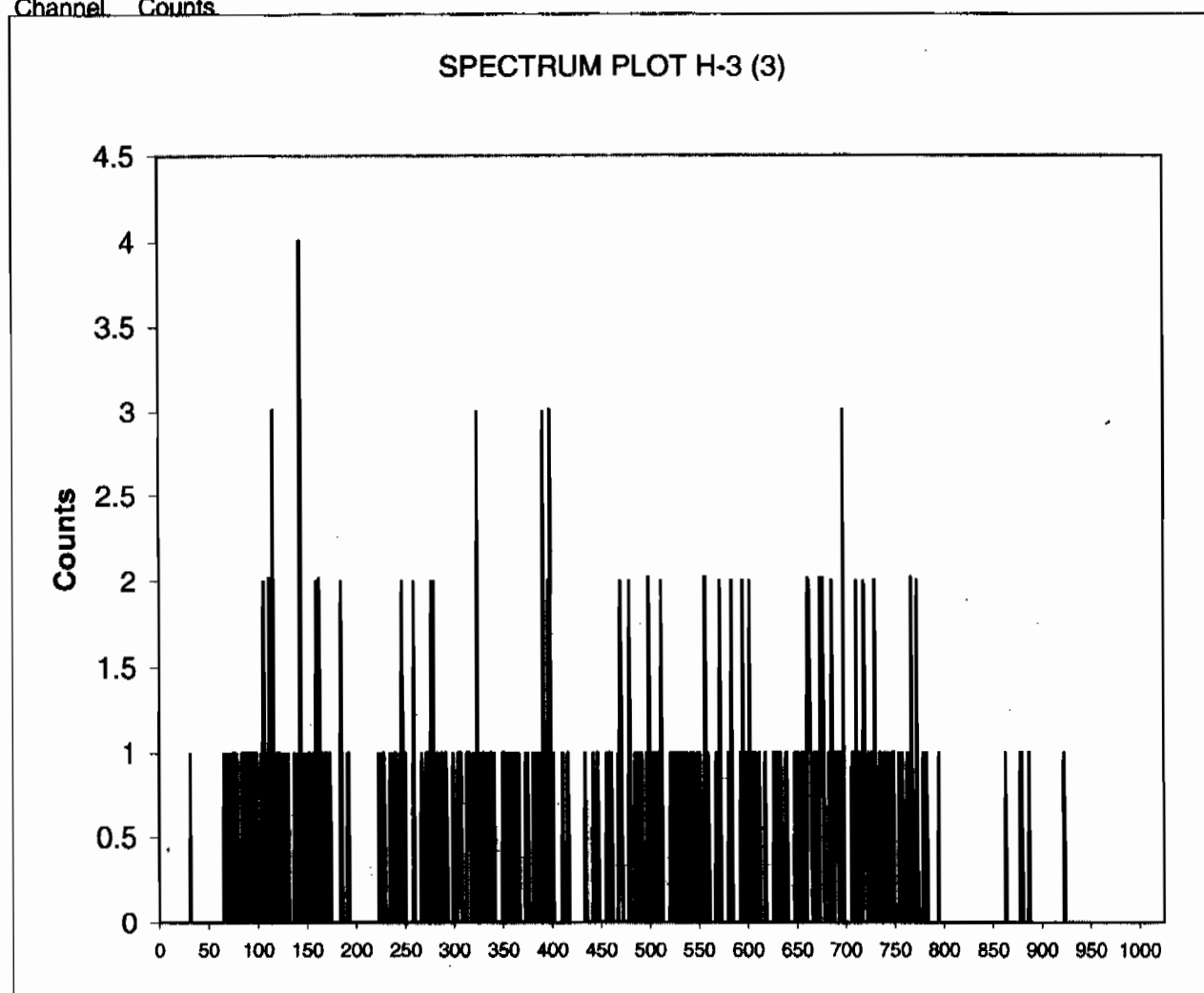
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File Info: s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 5, 246440004, 35.02967:  
Quench: 760.57  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	1
33	0
34	0
35	0

Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ061601N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

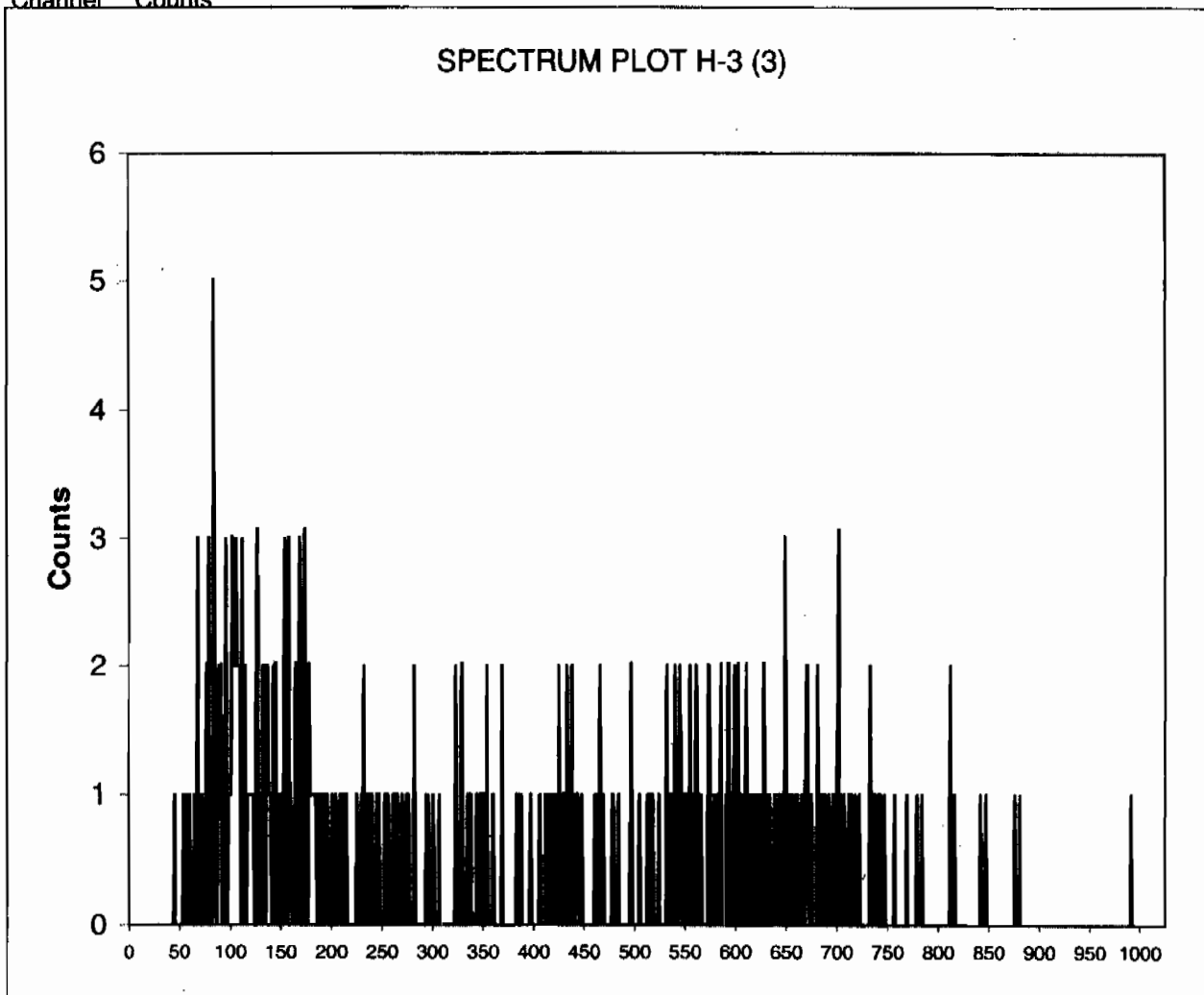
ID:  
Comments:

H-3 (3)  
ORANGE

Sample, Rack-Pos, Time:  
Quench:  
Start, End, X-Axis

6, 246440005, 35.02967:  
757.14  
50-175

Channel Counts



31 0  
32 0  
33 0  
34 0  
35 0

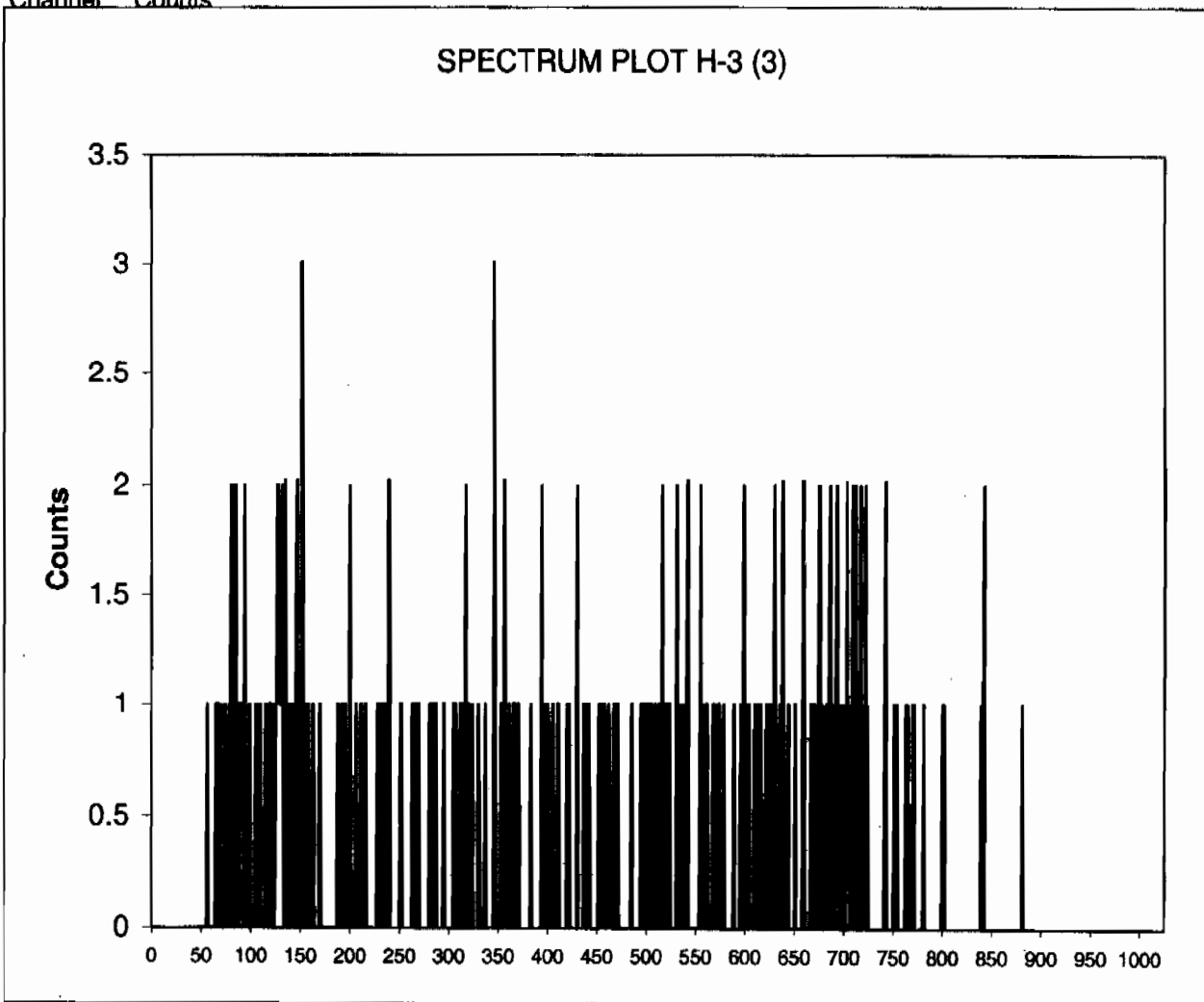


Instrument Type: Quantulus  
Data Capture Date: SAT 27 FEB 2010 2:14  
FileName: s:\sc\files\orange\953105A0\SQ071701N.001.xls  
File Info: s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 7, 246440006, 35.02955:  
Quench: 760.43  
Start, End, X-Axis 50-175

Channel Counts



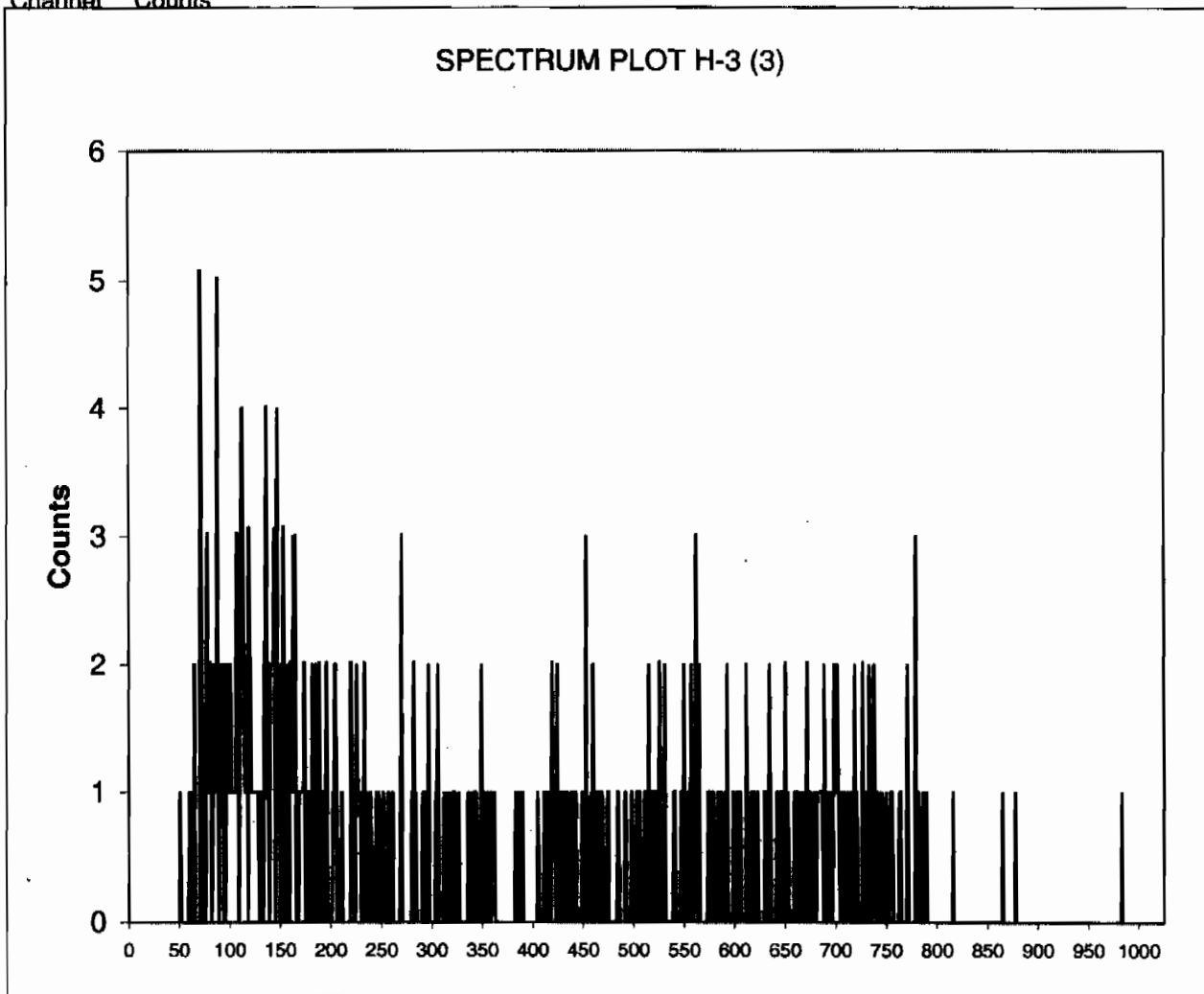
31	0
32	0
33	0
34	0
35	0

Instrument Type: Quantulus  
Data Capture Date: SAT 27 FEB 2010 2:14  
FileName: s:\lsc\files\orange\953105A0\SQ081801N.001.xls  
File Info: s:\lsc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 8, 246440007, 35.02965:  
Quench: 762.89  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

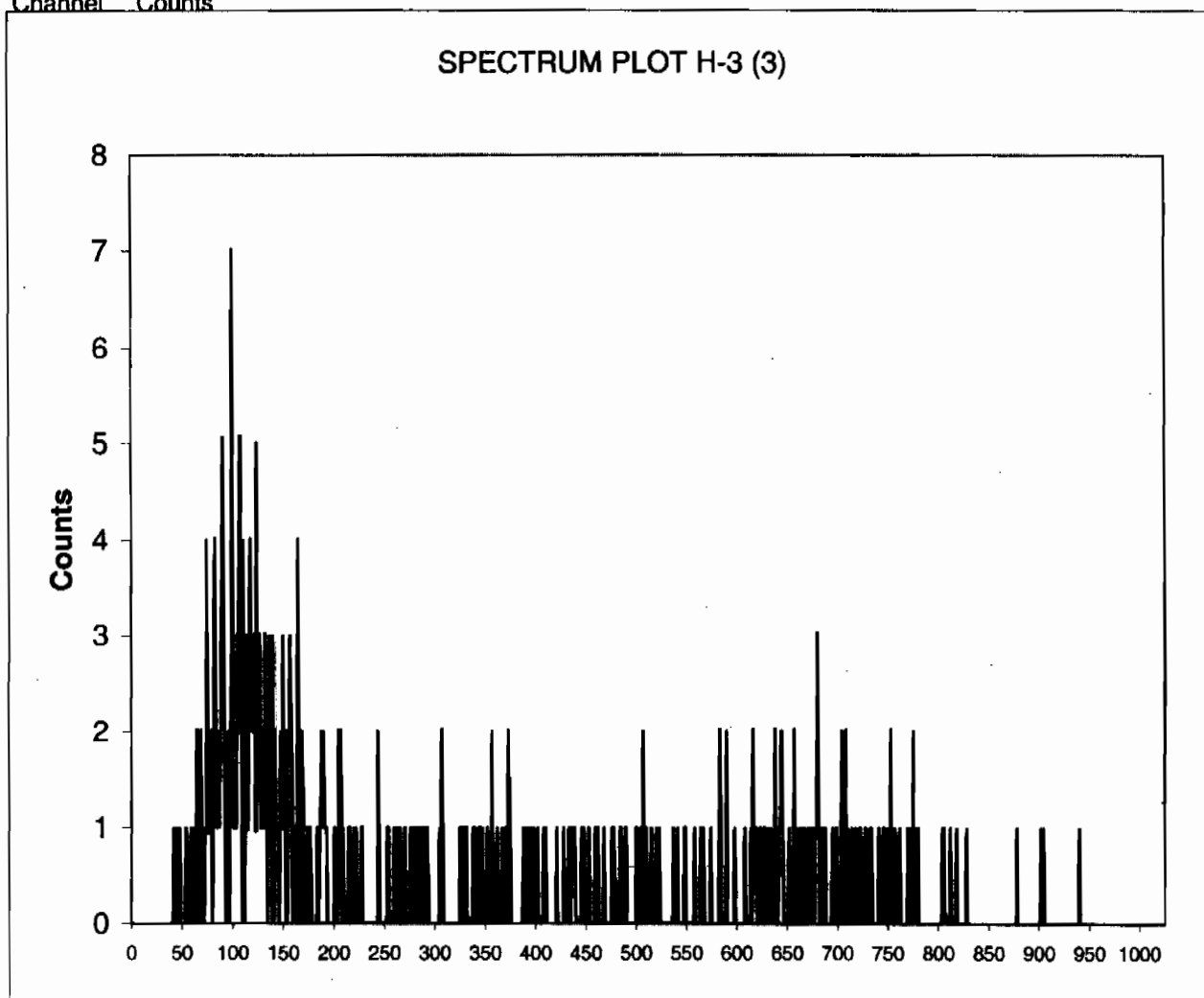
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ091901N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 9, 246440008, 35.02965:  
Quench: 760.05  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

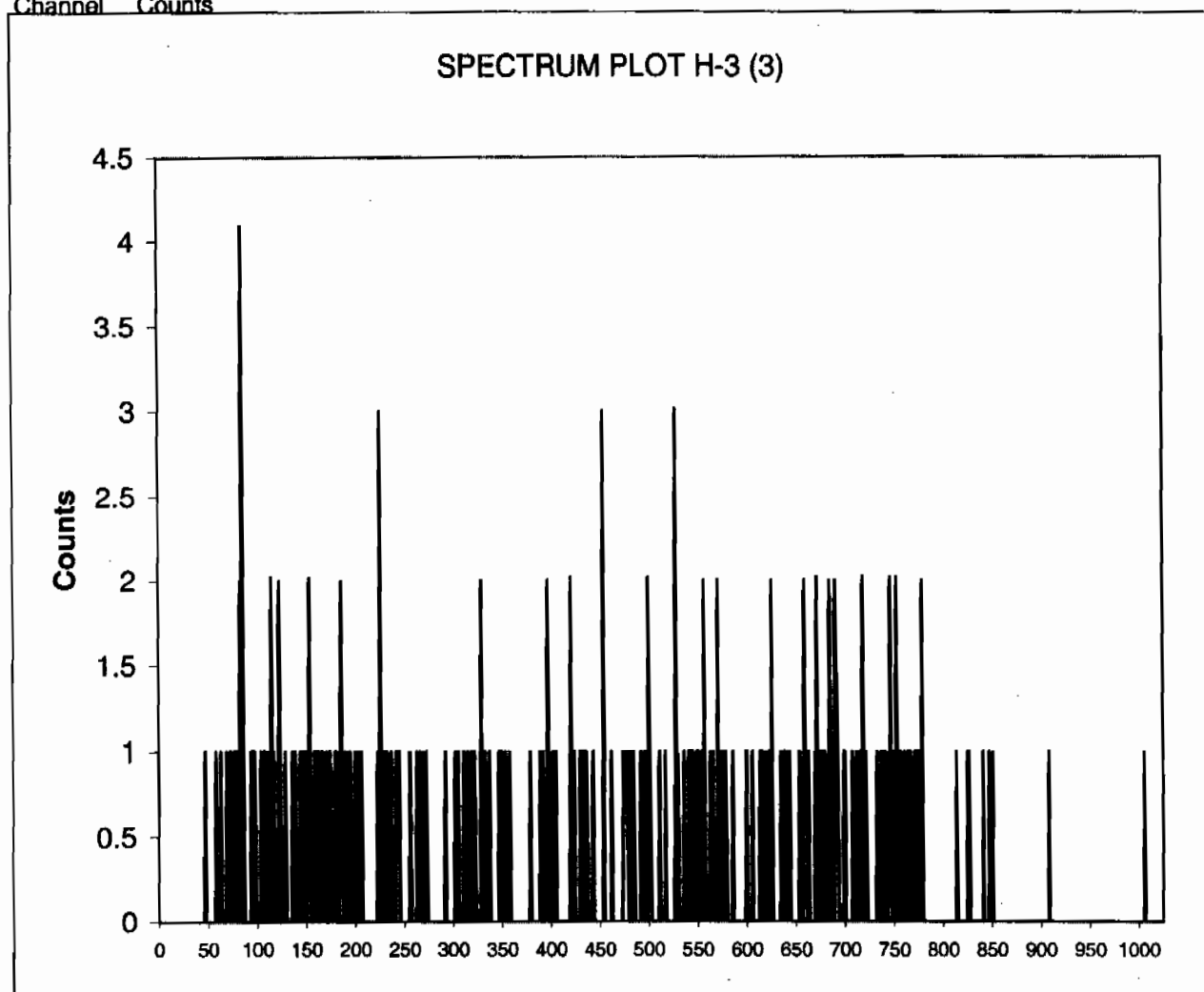
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ102001N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 10, 246440009, 35.02965:  
Quench: 757.57  
Start, End, X-Axis 50-175

Channel Counts



30	0
31	0
32	0
33	0
34	0
35	0

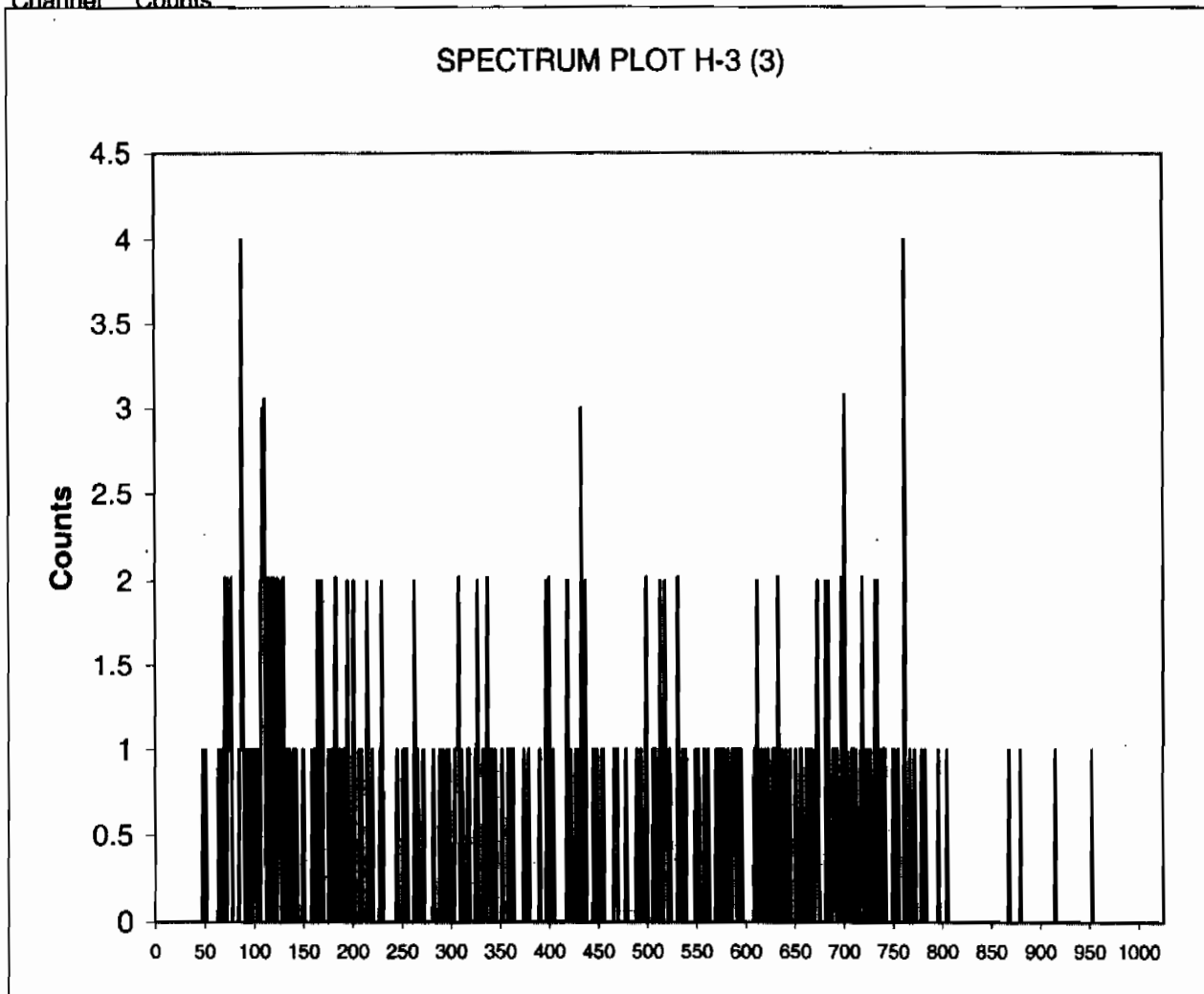
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ112101N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 11, 246440010, 35.02965:  
Quench: 759.31  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

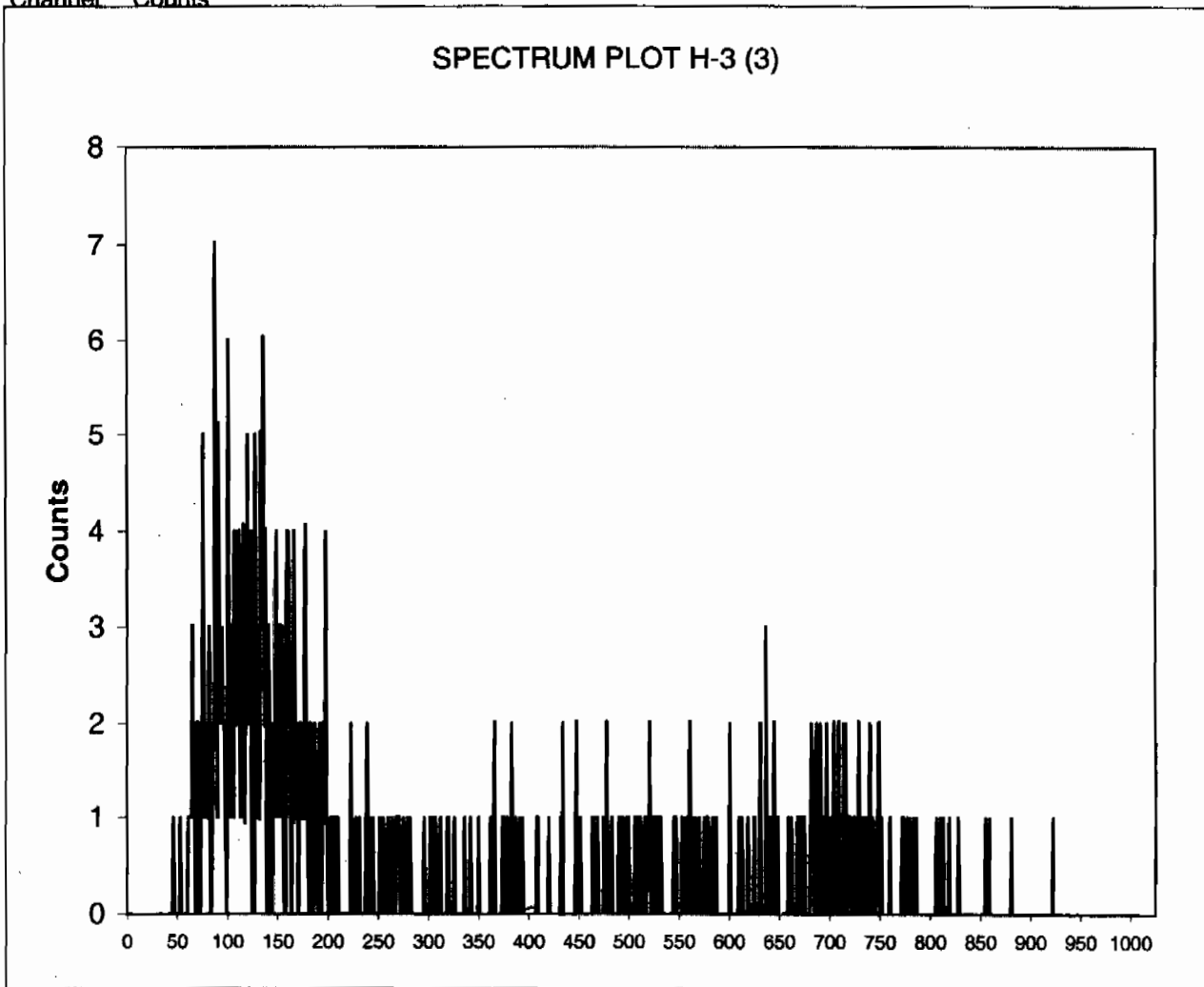
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ122201N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 12, 246440011, 35.02965:  
Quench: 762.72  
Start, End, X-Axis 50-175

Channel Counts



30	0
31	0
32	0
33	0
34	0
35	0

Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ132301N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

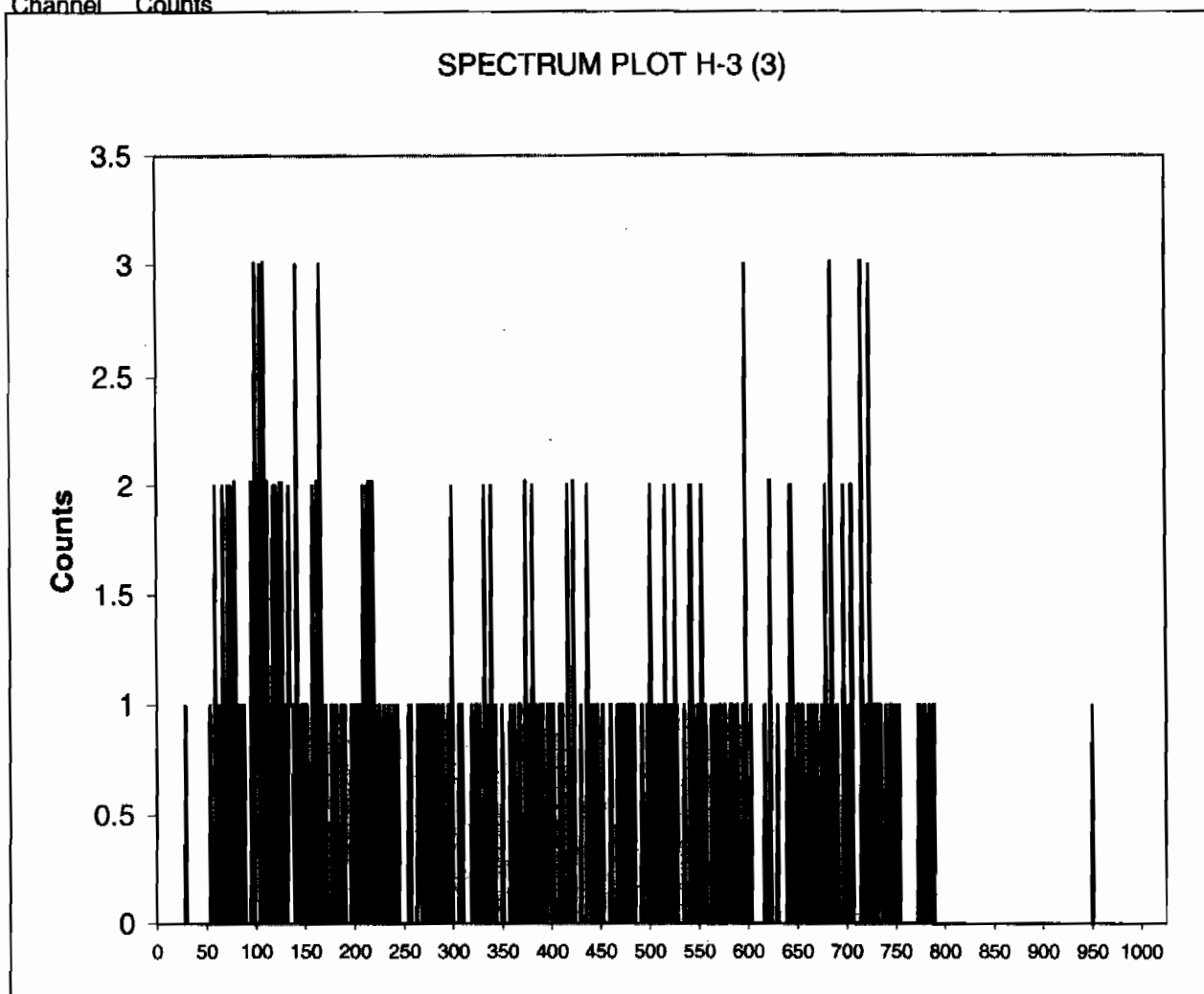
ID:  
Comments:

H-3 (3)  
ORANGE

Sample, Rack-Pos, Time:  
Quench:  
Start, End, X-Axis

13, 246440012, 35.02963:  
760.14  
50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\lsc\files\orange\953105A0\SQ142401N.001.xls  
s:\lsc\files\orange\953105A0\U953105A0.xls

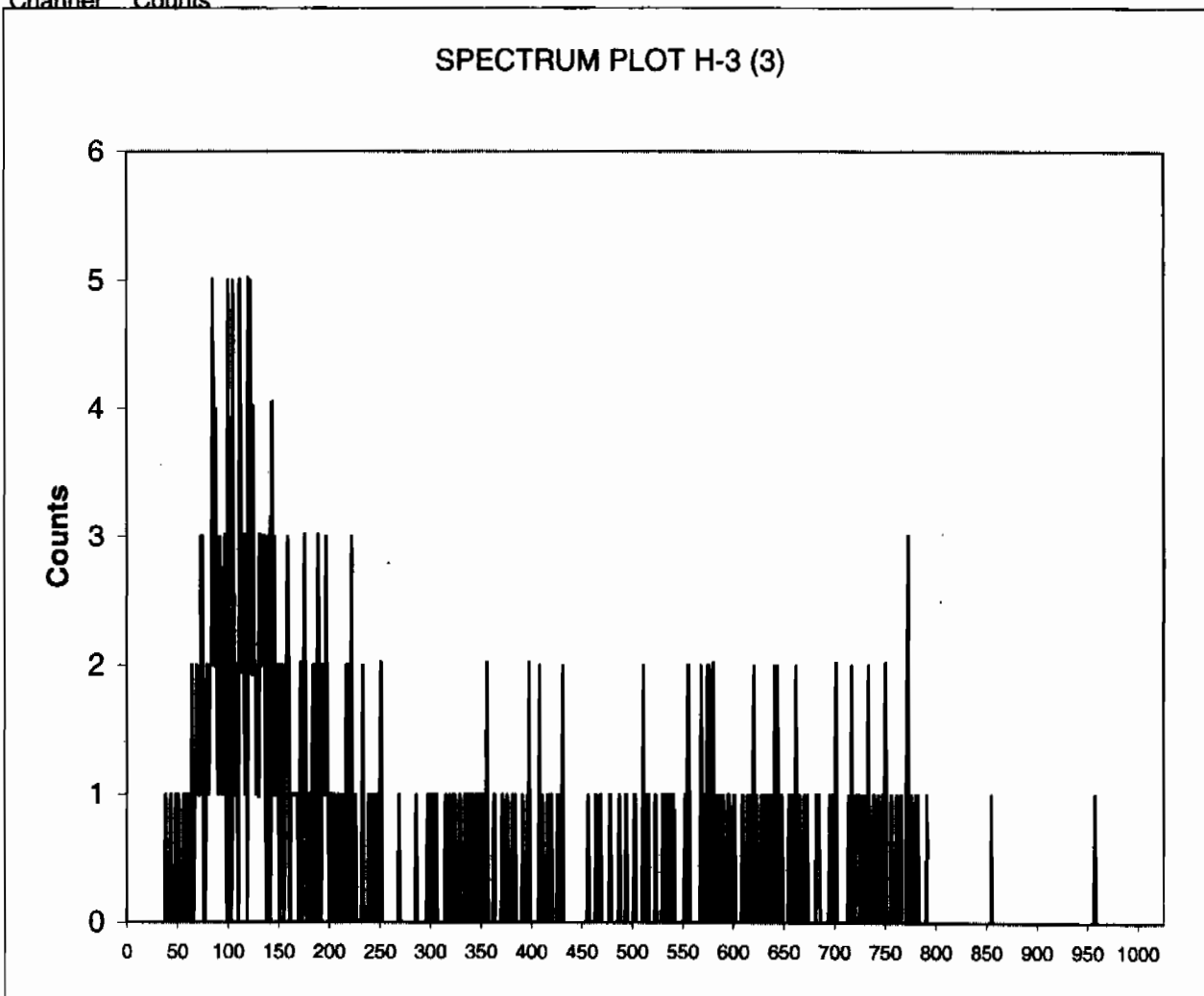
ID:  
Comments:

H-3 (3)  
ORANGE

Sample, Rack-Pos, Time:  
Quench:  
Start, End, X-Axis

14, 246440013, 35.02963:  
762.89  
50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

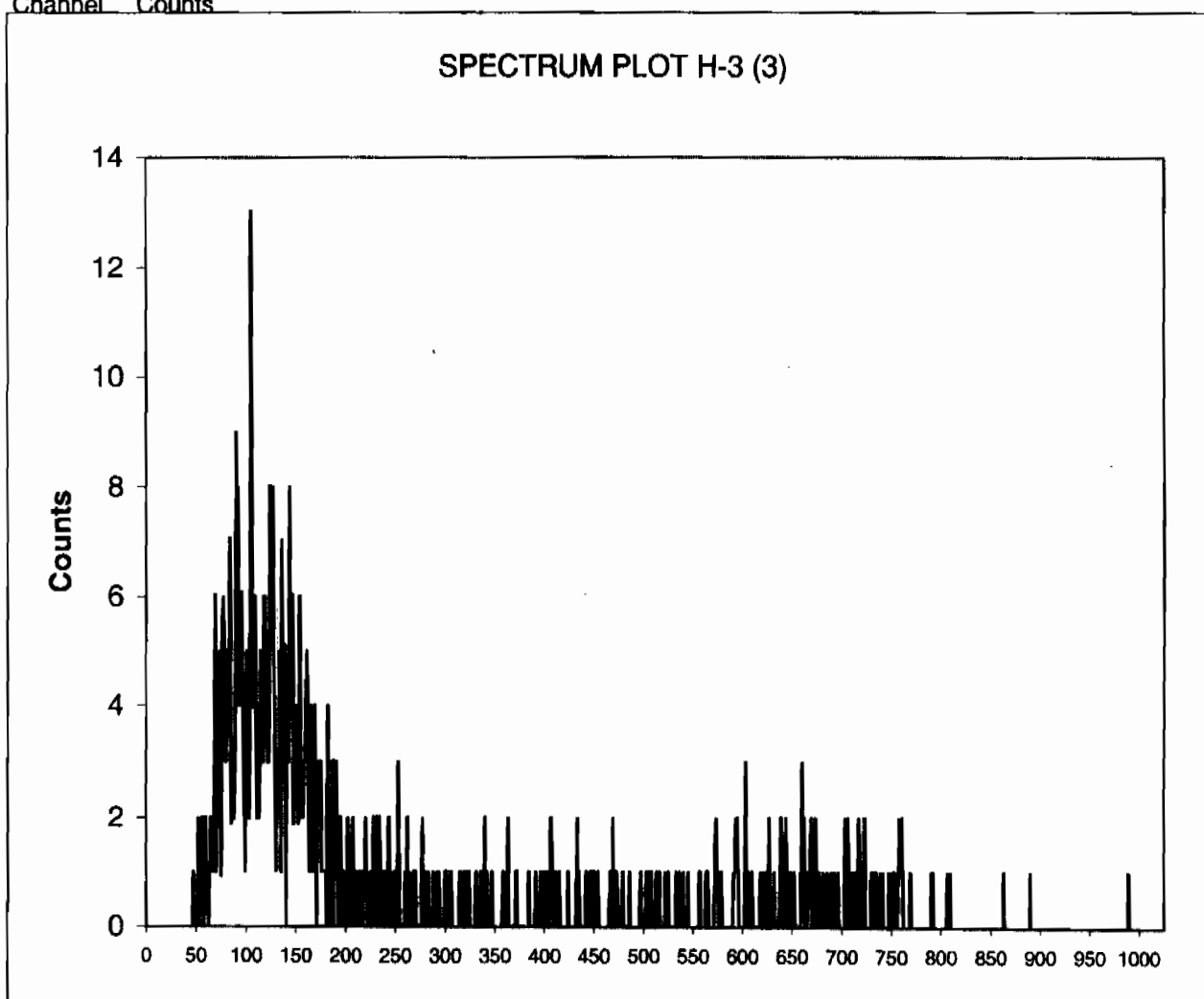


Instrument Type: Quantulus  
Data Capture Date: SAT 27 FEB 2010 2:14  
FileName: s:\sc\files\orange\953105A0\SQ152501N.001.xls  
File Info: s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 15, 246440014, 35.02963:  
Quench: 761.15  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

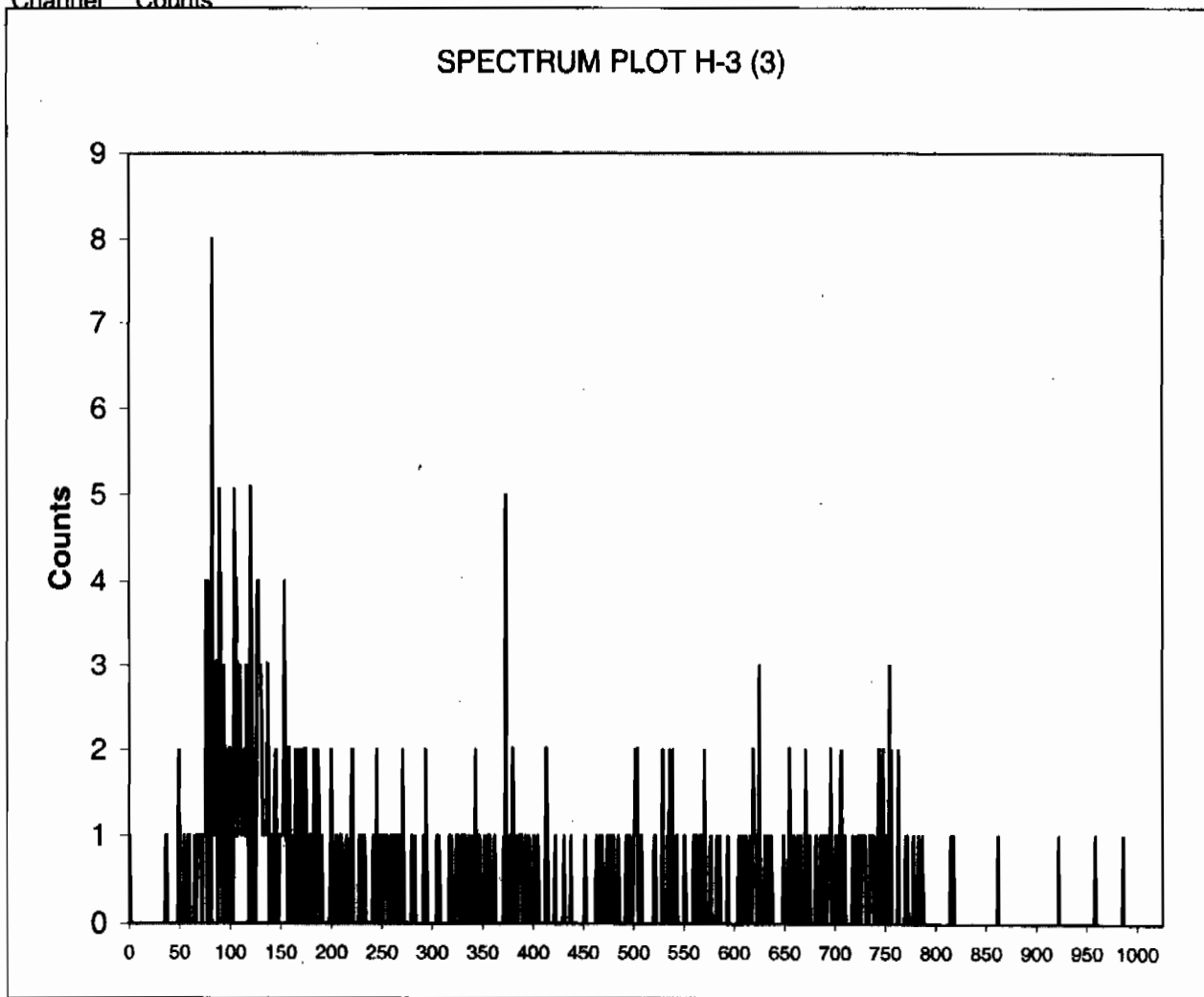
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ162601N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 16, 246477002, 35.02963:  
Quench: 758.7  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

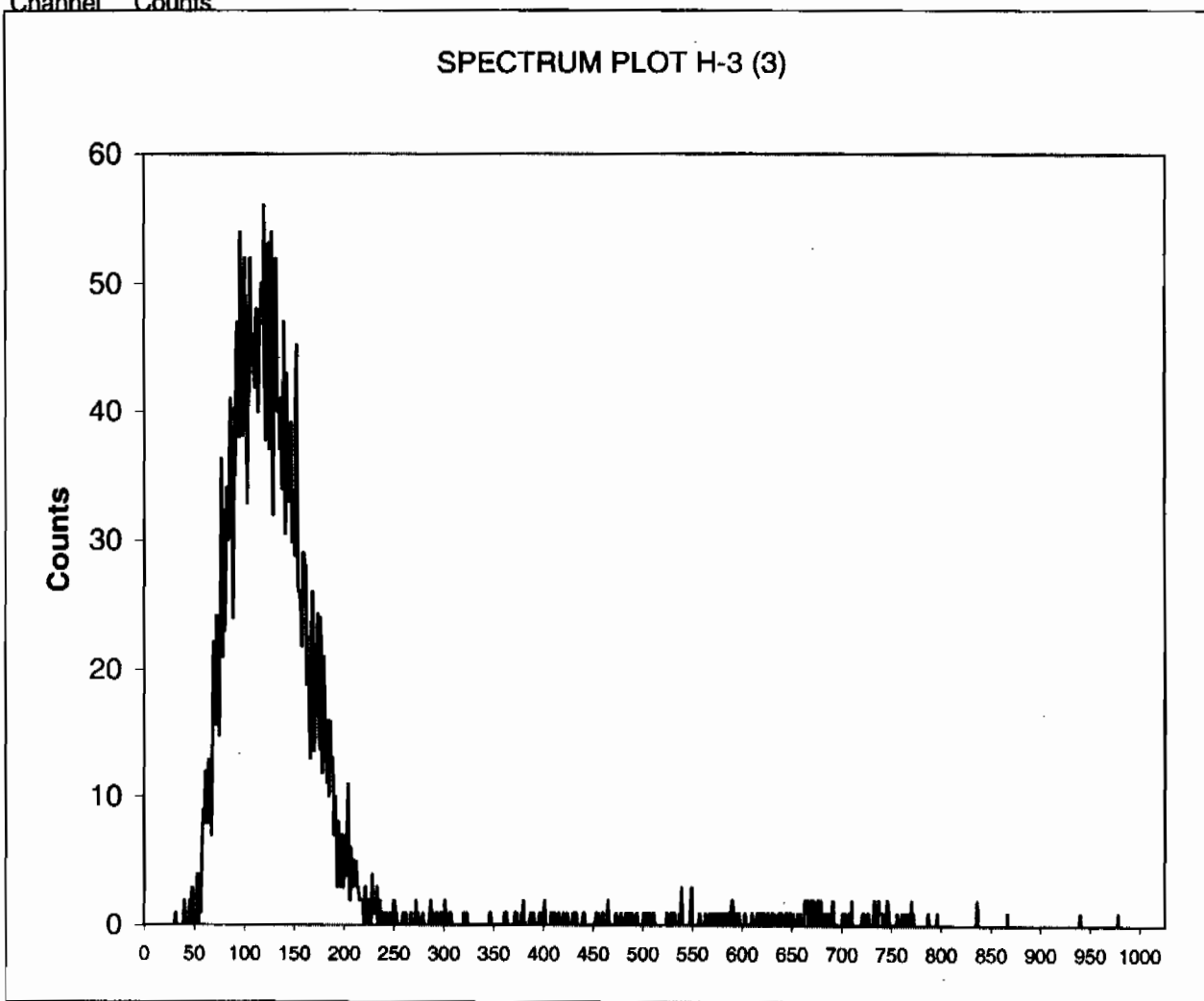
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ172701N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 17, 246554002, 35.02963:  
Quench: 760.78  
Start, End, X-Axis 50-175

Channel Counts



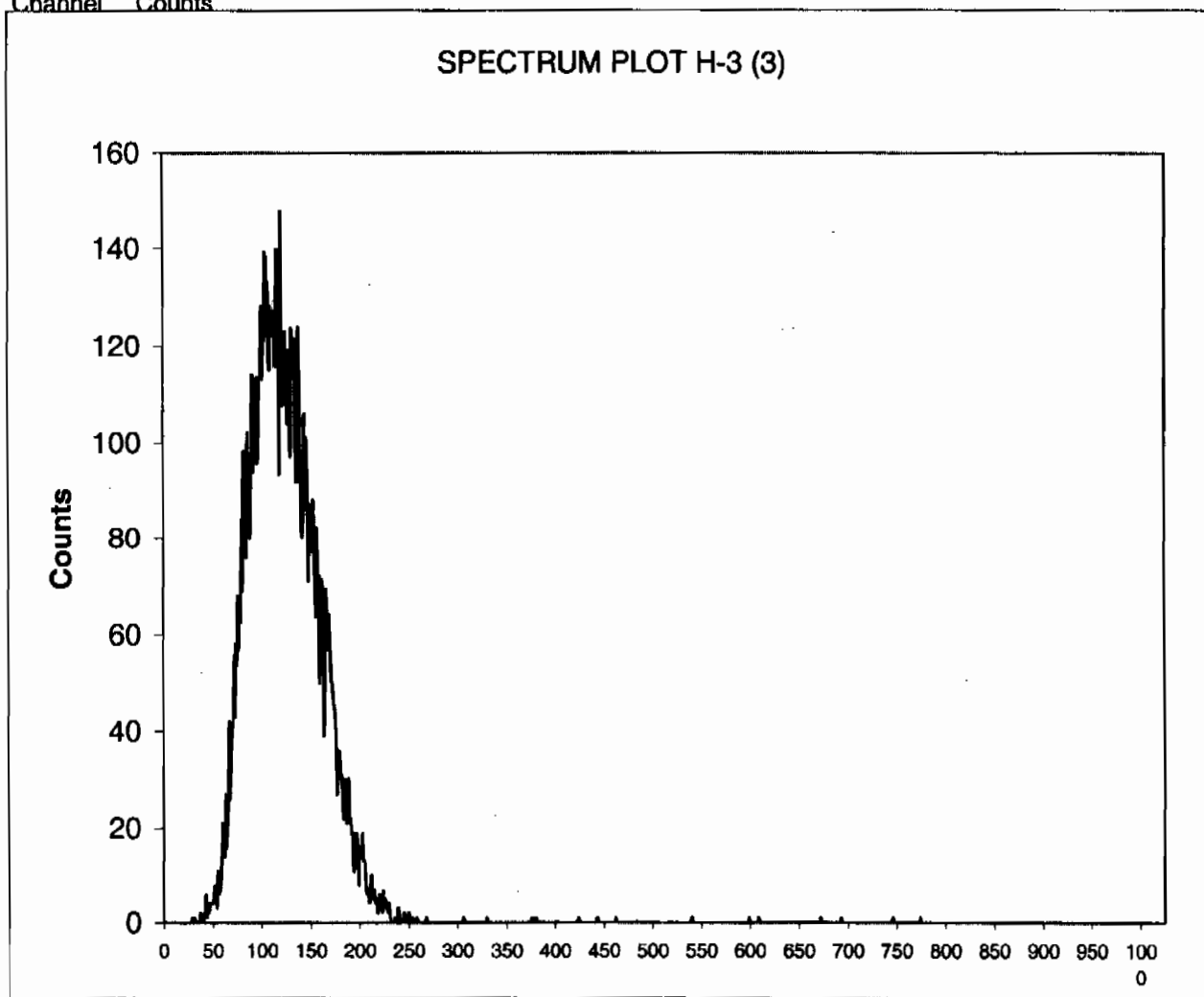
31	1
32	0
33	0
34	0
35	0

Instrument Type: Quantulus  
Data Capture Date: SAT 27 FEB 2010 2:14  
FileName: s:\sc\files\orange\953105A0\SQ182801N.001.xls  
File Info: s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 18, 246554003, 2.912967:  
Quench: 760.86  
Start, End, X-Axis 50-175

Channel Counts



31	1
32	0
33	0
34	0
35	0

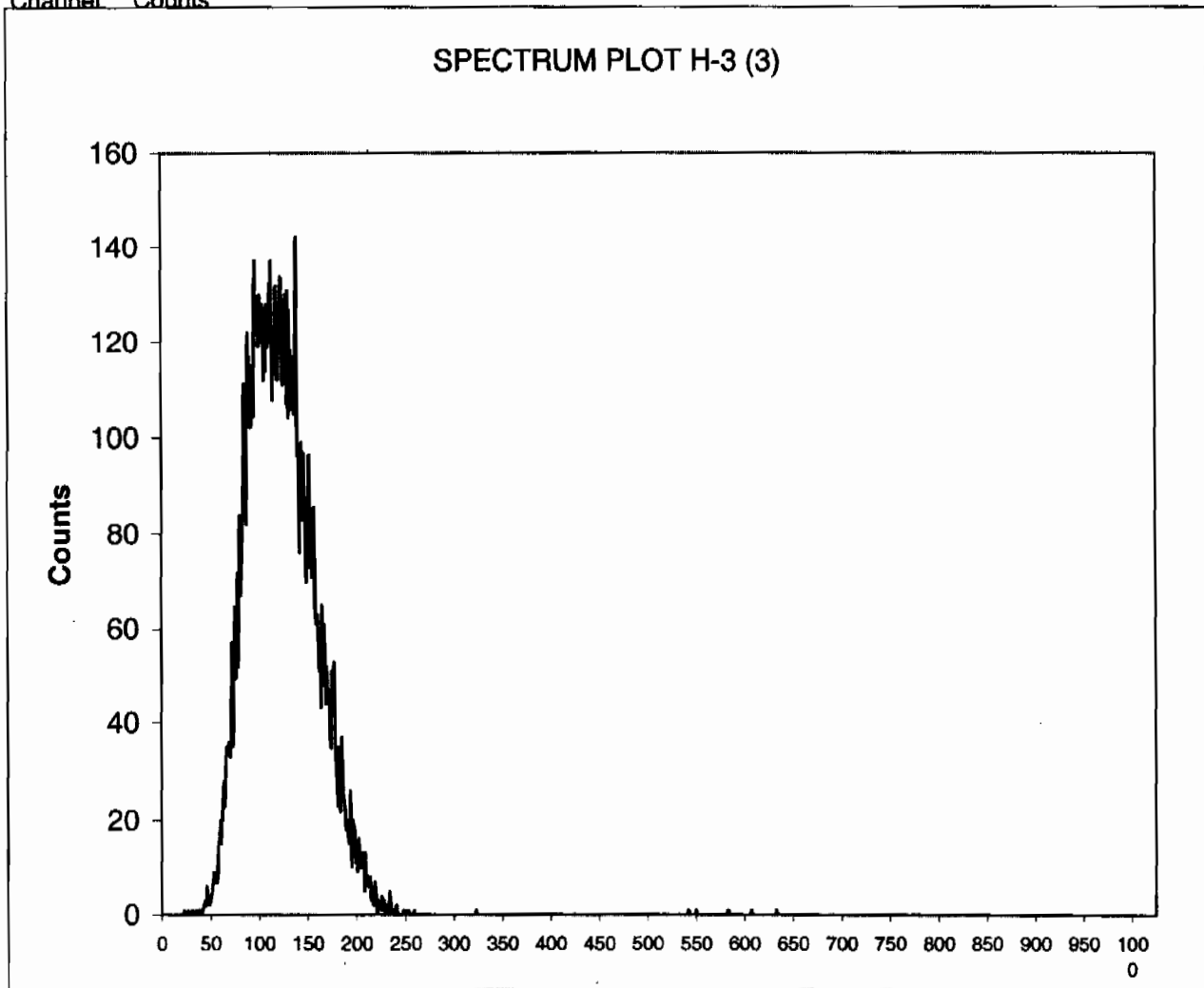
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ192901N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 19, 246554004, .8462833:  
Quench: 757.04  
Start, End, X-Axis 50-175

Channel Counts



30	0
31	1
32	0
33	0
34	0
35	1

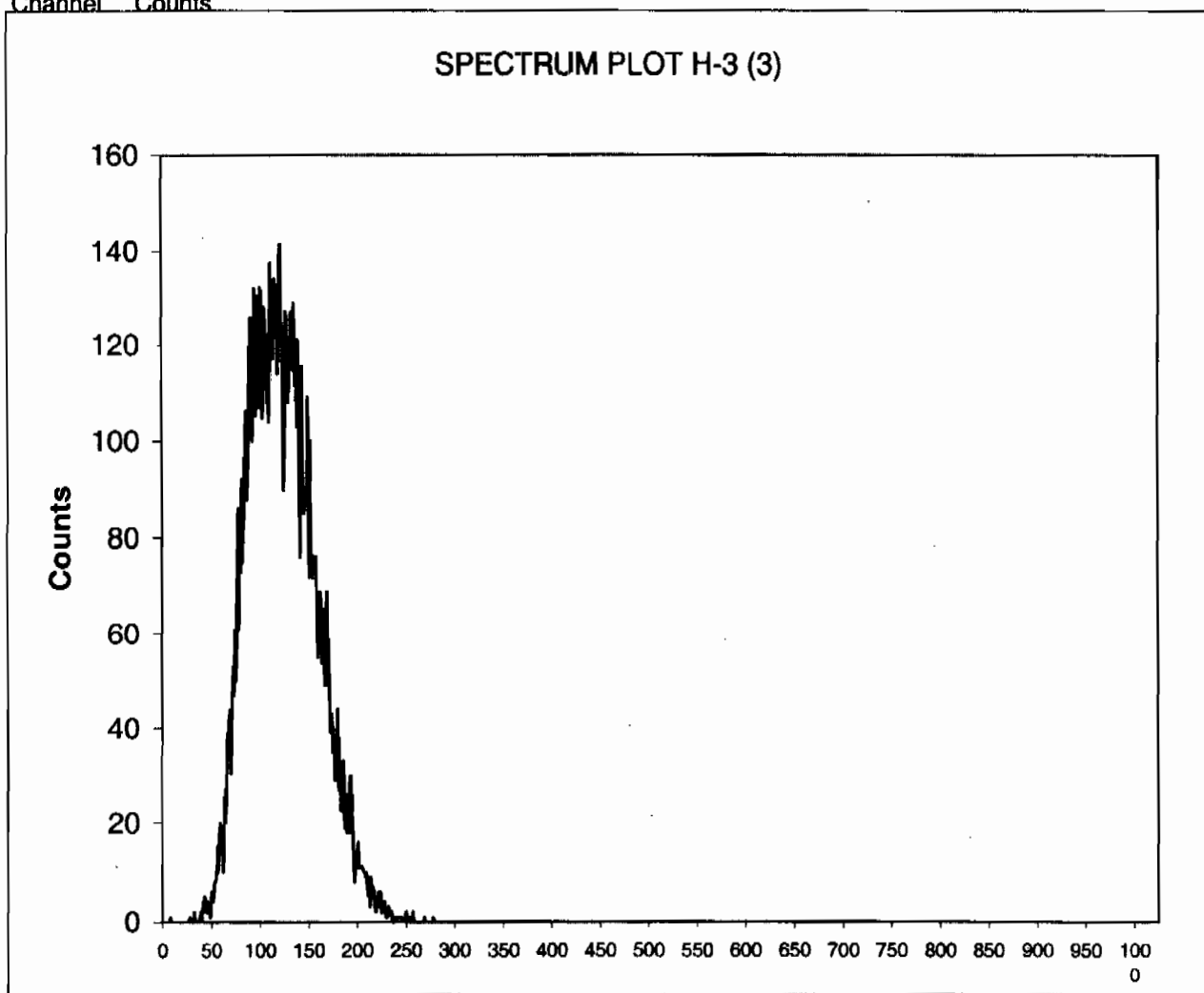
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ203001N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 20, 246554005, .46295:  
Quench: 757.96  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	2
33	1
34	0
35	0

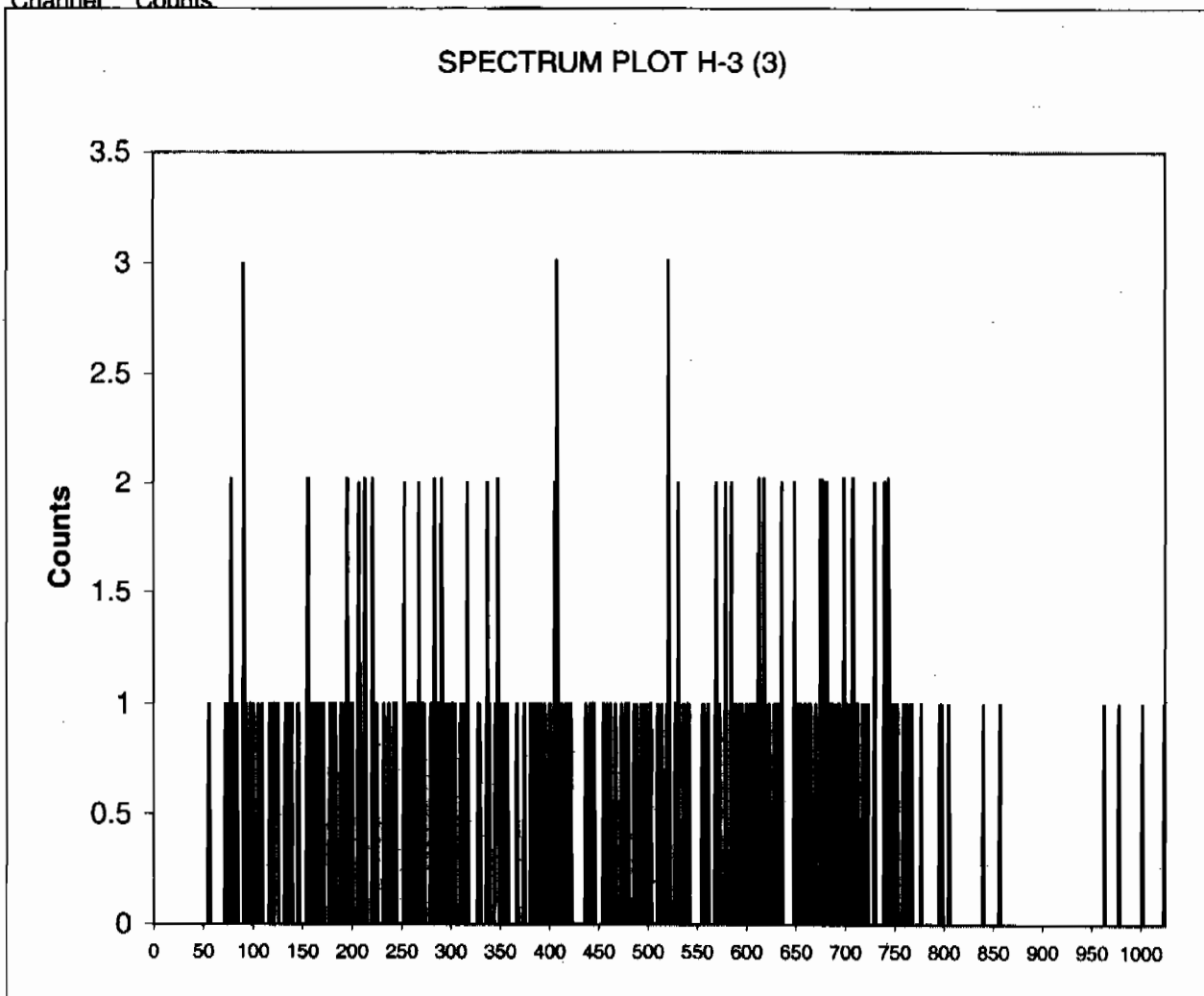
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ213101N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 21, 1202042922, 35.01295:  
Quench: 761.97  
Start, End, X-Axis 50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

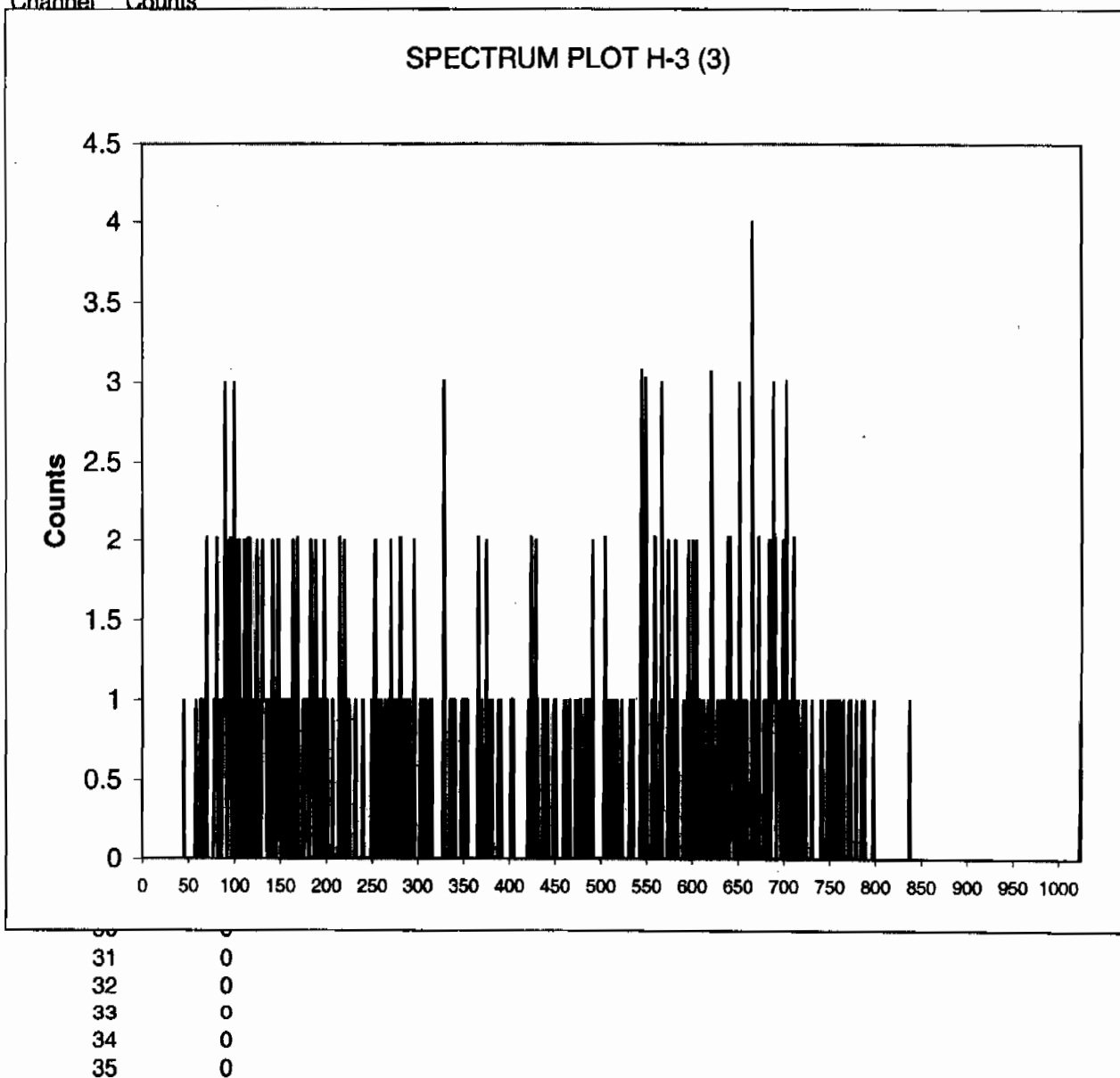
Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ223201N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

ID: H-3 (3)  
Comments: ORANGE

Sample, Rack-Pos, Time: 22, 1202042923, 35.0296:  
Quench: 758.79  
Start, End, X-Axis 50-175

Channel Counts





Instrument Type:  
Data Capture Date:  
FileName:  
File Info:

Quantulus  
SAT 27 FEB 2010 2:14  
s:\sc\files\orange\953105A0\SQ233301N.001.xls  
s:\sc\files\orange\953105A0\U953105A0.xls

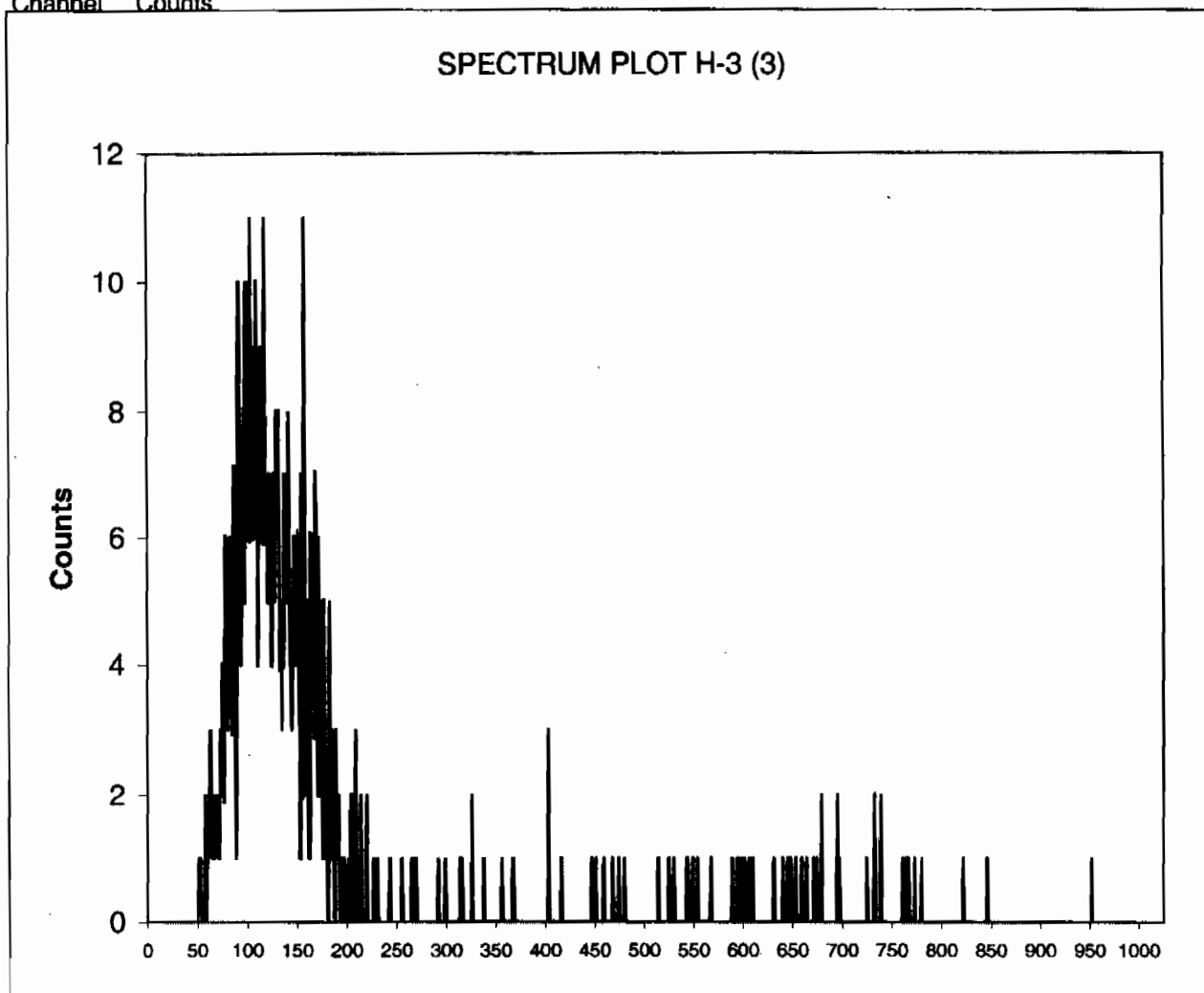
ID:  
Comments:

H-3 (3)  
ORANGE

Sample, Rack-Pos, Time:  
Quench:  
Start, End, X-Axis

23, 1202042924, 15.0296:  
760.4  
50-175

Channel Counts



31	0
32	0
33	0
34	0
35	0

Batch# 958199 Radiochemistry Batch Checklist, Rev10  
 Product: Tritium Date: 3/5/10

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to 100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%.	✓		
Or meets the client's required RER acceptance criteria.			
Tracer yield is 15-125% . Carrier yield 25-125%.			NA
Or meets the client's contract acceptance criteria.			
Method blank is less than the RDL/ LLD.	✓		
(If rad samples, < 5% of lowest activity)			
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms.			
All line outs initialed and dated.	✓		
No transcription errors are apparent.			
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hlt notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch Data Exception Reports (DER) completed, if applicable.			NA
Batch Data Exception Reports (DER) second reviewed and disposition verified to be completed.			NA
Allquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

RADchecklistrev10, revised 1/13/2010

Primary Review Performed By:

*Alvin J. Pace*

Secondary Review Performed By:

*Layla Y. 3/5/10*

LANL 3/9/10

## Tritium Que Sheet

26-FEB-10

Batch #: 958199 Analyst: KKK2 First Client Due Date 09-MAR-10 Internal Due Date: 02-MAR-10  
 Spike Isotope: Hydrogen-3 Spike Code: 0134-K Expiration Date: 3/27/10 Vol: 0.1  
 LCS Isotope: Hydrogen-3 LCS Code: 0134-K Expiration Date: 3/27/10 Vol: 0.1

Prep Date: 2/26/10 Initials: YKJ Pipet ID: 2970968 Witness: YKJ 2/26/10

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
246554001-1	RE15-10-3175	SAMPLE		6 pC/g	SOIL	LANL010	04-FEB-10	10	4-3	11	50	3.253	9.1	13
246554006-1	RE15-10-3225	SAMPLE		6 pC/g	SOIL	LANL010	04-FEB-10	10	4-3	64	50	3.253		13
1202054898-1	MB for batch 958199	MB		6 pC/g	SOIL	QC ACCOUNT		10	4-4	107	50	3.253		13
1202054899-1	RE15-10-3175(246554001DUP)	DUP		6 pC/g	SOIL	QC ACCOUNT	04-FEB-10	10	4-5	115	50	3.253		13
1202054901-1	RE15-10-3175(246554001MS)	MS		6 pC/g	SOIL	QC ACCOUNT	04-FEB-10	10	4-1	1517	50	3.259		13
1202054904-1	LCS for batch 958199	LCS		6 pC/g	SOIL	QC ACCOUNT		10	4-2	1701	50	3.253		13

Bkg Rack #: 49-1/0-1

dailies 3/5/10

3/5/10

Comments:

Bkg prepared with dead water? Yes No

Instrument Used (circle as appropriate): LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4140127, LS6000 (Brown) 7060653, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656, Orange DG606095168

Calibration Used : Ecopoint Ultra (10 mL sample/13 mL Econscint Ultra)  
 Data Reviewed By: YKJ 3-4-10

GEL Laboratories LLC, Radiochemistry Division

Page 1 of 1

## Tritium Solid

Filename : H3DST.XLS  
File type : Excel  
Version # : 1.2.5

Batch : 958199  
Analyst : KKK2  
Prep Date : 2/26/2010

Spike SN : 0134-K  
Spike Exp Date : 3/27/2010  
Spike Activity (dpm/ml): 2462.51  
Spike Volume Added: 0.10

LCS SN : 0134-K  
LCS Exp Date : 3/27/2010  
LCS Activity (dpm/ml): 2462.51  
LCS Volume Added: 0.10

Procedure Code : LSCSH3S  
Paramname : Tritium  
Required MDC : 6 pCi/g  
Half-life of Tritium : 12.32 years

Pipet, 0.1 ml Stdv : +/- 0.000701 ml  
Pipet, 0.5 ml Stdv : +/- 0.002564 ml  
Pipet, 1.0 ml Stdv : +/- 0.005480 ml  
Pipet, 5.0 ml Stdv : +/- 0.025729 ml

H-3 Abundance : 1  
Method Uncertainty : 0.1155  
Geometry: 10mL DW/13mL Ecocint  
Ultra

Sample Characteristics									
Pos.	Sample ID	Total Sample Volume (L)	Sample Aliquot G	Sample Aliquot StDev. G	Distilled Sample Counted L	Sample Counted StDev. L	Rtg number	Sample Date/Time	
1	246554001.1	0.0500	3.2530	3.5565E-03	0.0100	2.5729E-05	11	2/4/2010 12:00	
2	246554006.1	0.0500	3.2580	3.5570E-03	0.0100	2.5729E-05	64	2/4/2010 12:00	
3	1202054898.1	0.0500	3.2530	3.5565E-03	0.0100	2.5729E-05	107	2/26/2010 0:00	
4	1202054898.1	0.0500	3.2530	3.5565E-03	0.0100	2.5729E-05	115	2/4/2010 12:00	
5	1202054901.1	0.0500	3.2590	3.5571E-03	0.0100	2.5729E-05	517	2/4/2010 12:00	
6	1202054900.1	0.0500	3.2530	3.5565E-03	0.0100	2.5729E-05	701	2/26/2010 0:00	

Count raw Data				Background				Calibration Data				Detector Efficiency				Backgrounds			
Pos.	Rack	Counting	Quench#	Gross	cpm	Count	Time	Count	Start	Sample	Decay	Counted	Calibration	Due	Detector	Efficiency	Rack	Count	Date/Time
	Position #	Time (min.)		cpm	cpm	(min.)	(min.)	Time	Date/Time			on	Date	Date	Efficiency (cpm/dpm)	Error (cpm/dpm)	Position #	Start	Date/Time
1	49-2	45	118.2	2.96	2.38	45		45	3/4/2010 14:01	0.996		LSCGOLD	8/20/2009	8/31/2010	0.1805	0.00792	49-1	3/4/2010 13:14	
2	49-3	45	132.6	2.64	2.38	45		45	3/4/2010 14:48	0.996		LSCGOLD	8/20/2009	8/31/2010	0.1684	0.00792	49-1	3/4/2010 13:14	
3	49-4	45	134.1	2.44	2.38	45		45	3/4/2010 15:35	0.999		LSCGOLD	8/20/2009	8/31/2010	0.1669	0.00792	49-1	3/4/2010 13:14	
4	6-2	45	74.8	3.98	3.47	45		45	3/5/2010 15:02	0.996		LSCBROWN	9/9/2009	9/30/2010	0.2152	0.00792	6-1	3/5/2010 14:15	
5	16-1	15	120.5	10	2.38	45		45	3/4/2010 17:08	0.996		LSCGOLD	8/20/2009	8/31/2010	0.1789	0.00792	49-1	3/4/2010 13:14	
6	16-2	15	117.9	11.53	2.38	45		45	3/4/2010 17:24	0.999		LSCGOLD	8/20/2009	8/31/2010	0.1807	0.00792	49-1	3/4/2010 13:14	

## Page 3

- 1 - Results are decay corrected to Sample Date/Time  
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date  
3 - Spike Nominals are decay corrected to Sample Date/Time

\* - RPD changed to 0% due to activity below MDC for 1202054899.1

Results																		
Pos.	Decision Level		Critical Level	Required MDC	Sample Act.		Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty		1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal pCi/g	Recovery
	pCi/g	pCi/g			MDC	pCi/g				pCi/g	pCi/g							
1	2,9187	2,0606	6	4,3780	2,2339	0,5940	0,5800	0,3445	1,3268	1,3518			SAMPLE					
2	3,1236	2,2053	6	4,6854	1,0717	1,2846	0,2600	0,3340	1,3767	1,3823			SAMPLE					
3	3,1462	2,2213	6	4,7193	0,2491	5,4546	0,0600	0,3273	1,3588	1,3591			MB					
4	2,9575	2,0890	6	4,3915	1,6484	0,7979	0,5100	0,4069	1,3151	1,3289		246554001.1	DUP	0,0%	0,1092			
5	4,1568	2,9346	6	6,6453	26,5562	0,1117	7,6200	0,8483	3,2902	4,7483		246554001.1	MS			34,1490	86,6%	
6	4,1096	2,9014	6	6,5697	35,0873	0,0994	9,1500	0,9064	3,4757	5,3478		246554001.1	LCS			34,0989	102,9%	

PAGE: 1

4 MAR 2010 13:10

## ID: TRITIUM

USER: 4

COMMENT: GOLD

PRESET TIME : 45.00

DATA CALC : CPM H# : YES SAMPLE REPEATS: 1 PRINTER : STD

COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : EDIT

TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF

SCINTILLATOR: LIQUID LUMEX: YES LOW SAMPLE REJ: 0

LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

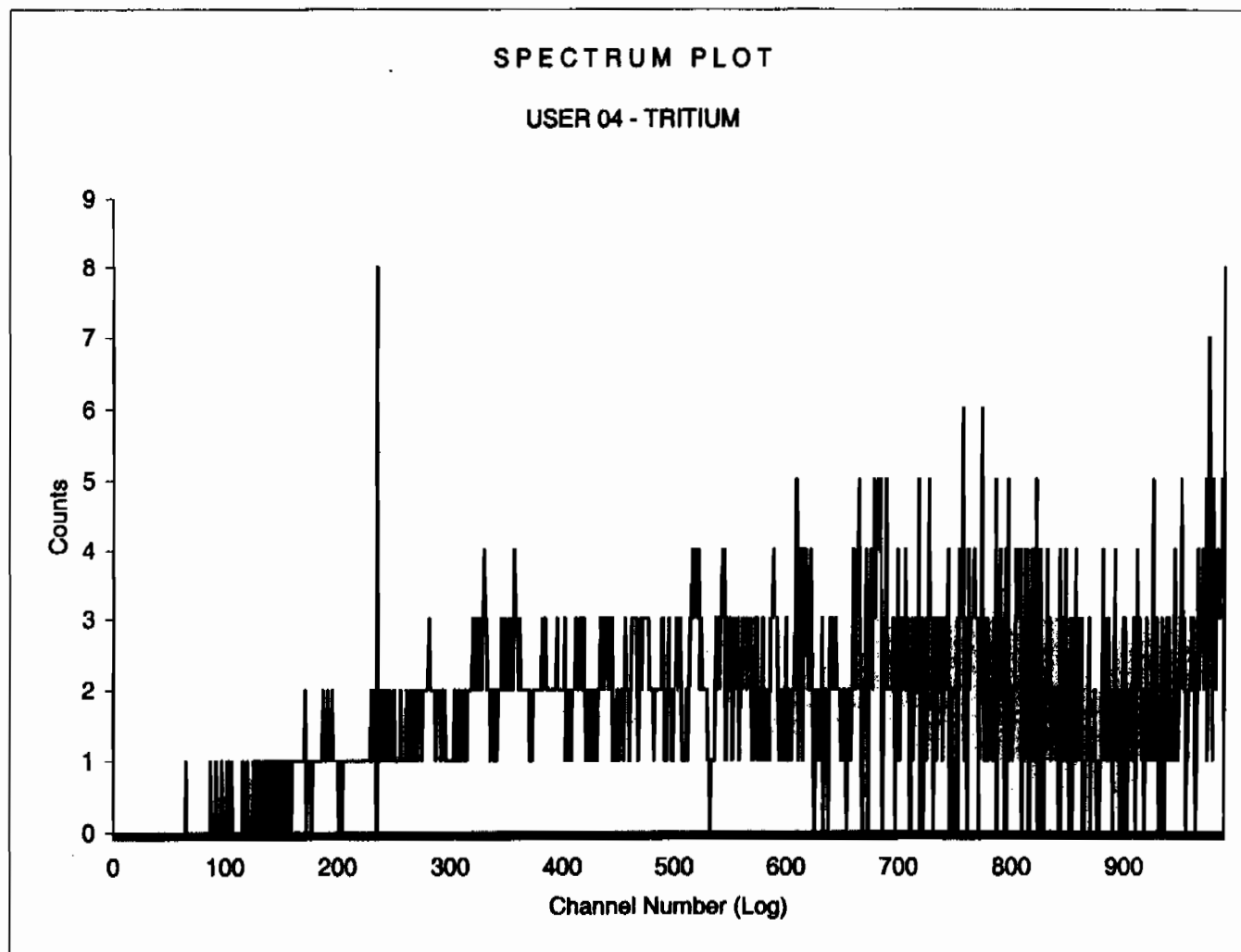
CHAN: 0.0 - 235.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

CHAN: 0.0 - 1000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1		WIND2		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR		
1	49-1	45.00	107.1	2.38	19.51	42.36	4.58	0.20	46.40
2	49-2	45.00	118.2	2.96	17.47	46.09	4.39	0.16	93.31
3	49-3	45.00	132.6	2.64	18.49	41.00	4.66	0.18	140.26
4	49-4	45.00	134.1	2.44	19.24	42.20	4.59	0.16	187.17
<del>5</del>	<del>49-5</del>	<del>45.00</del>	<del>96.9</del>	<del>3.11</del>	<del>16.96</del>	<del>42.20</del>	<del>4.59</del>	<del>0.16</del>	<del>234.00</del>

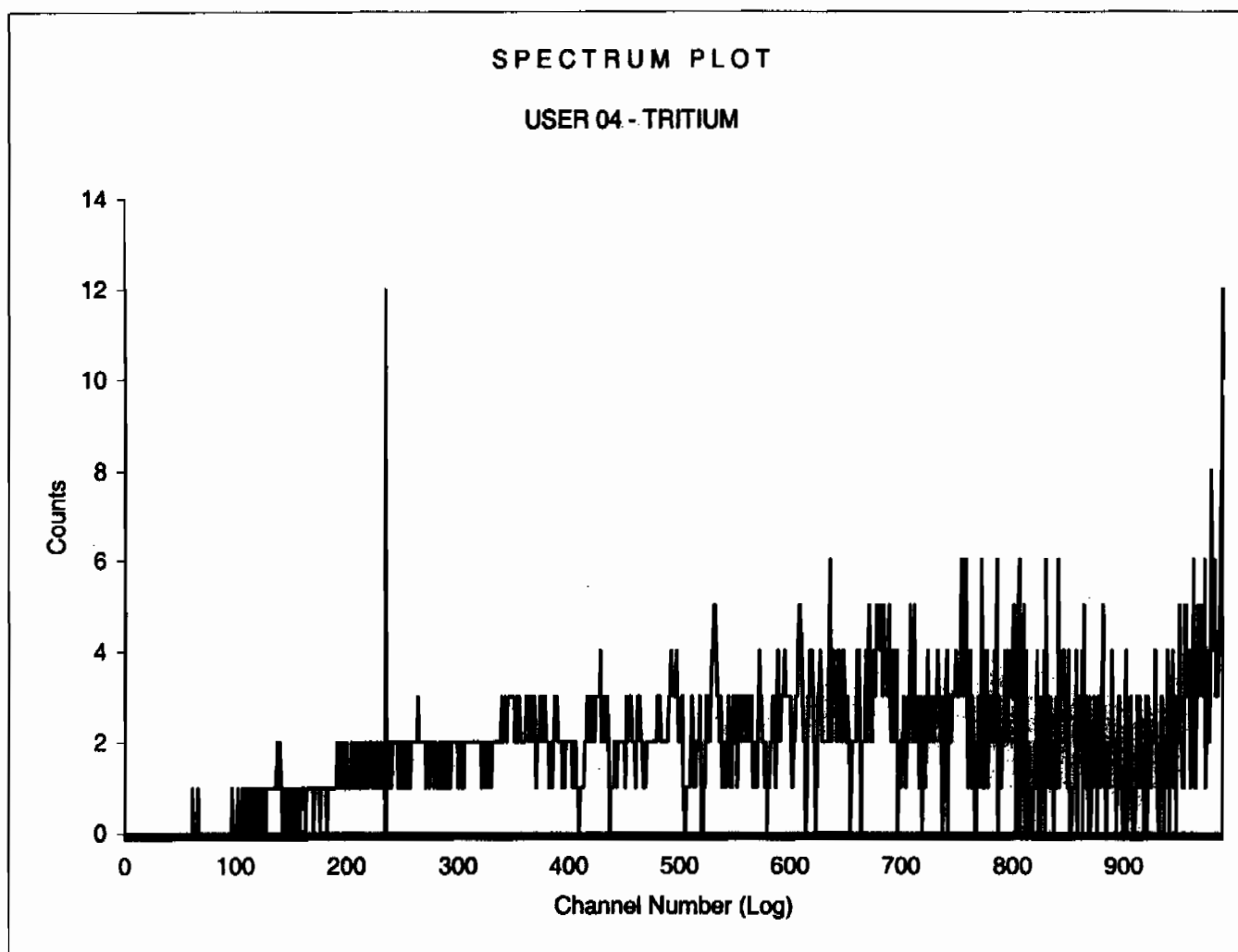
JP 3/5/10

Sample Count Start Time:	4 Mar 2010 13:14:21		
Data Capture Date	04 Mar 2010 13:59:32		
User Filename	S04030449-1A.XLS		
	U04030449-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	49-1	45.00
H#, Total Counts:	107.1	2058	
Win1: Tritium - Start, End, Counts:	0	235	107
Win2: - Start, End, Counts:	0	990	1685





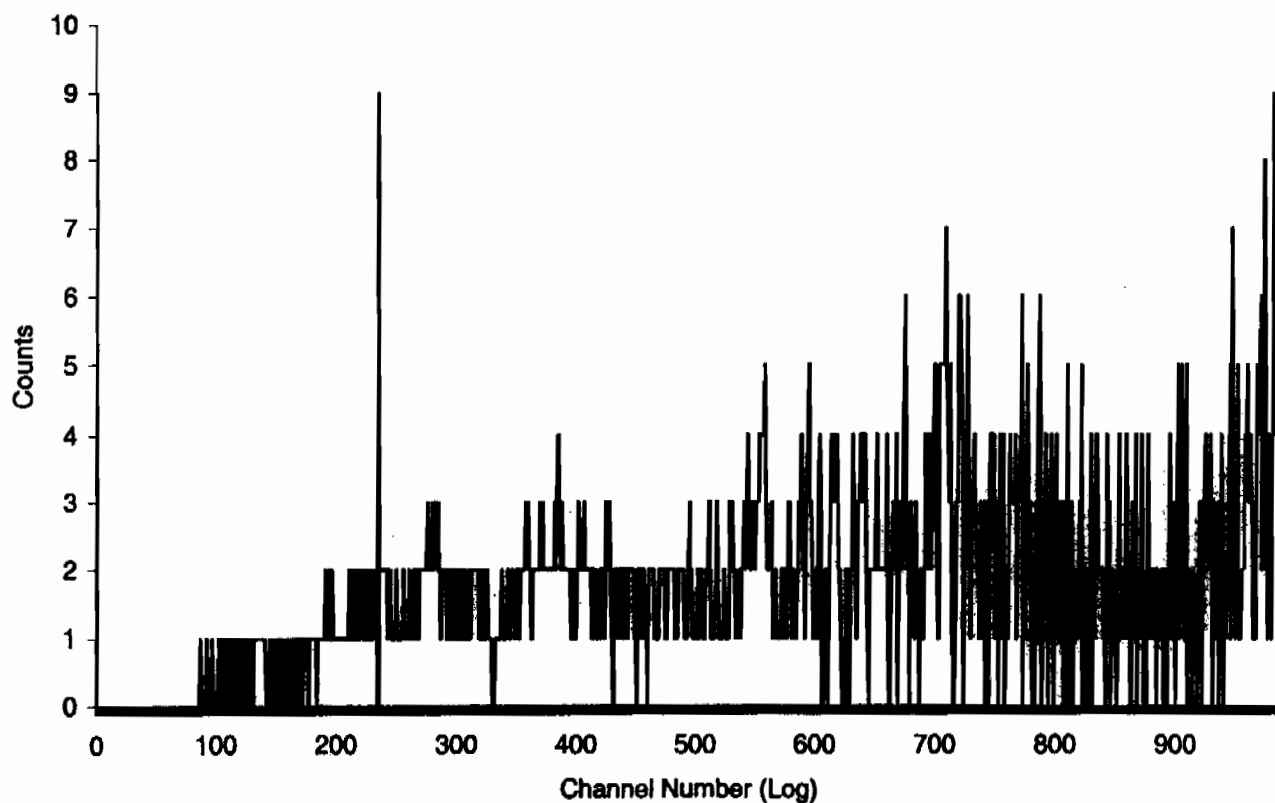
Sample Count Start Time:	4 Mar 2010 14:01:16		
Data Capture Date	04 Mar 2010 14:46:27		
User Filename	S04030449-2A.XLS		
	U04030449-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	2	49-2	45.00
H#, Total Counts:	118.2	2218	
Win1: Tritium - Start, End, Counts:	0	235	134
Win2: - Start, End, Counts:	0	990	1888



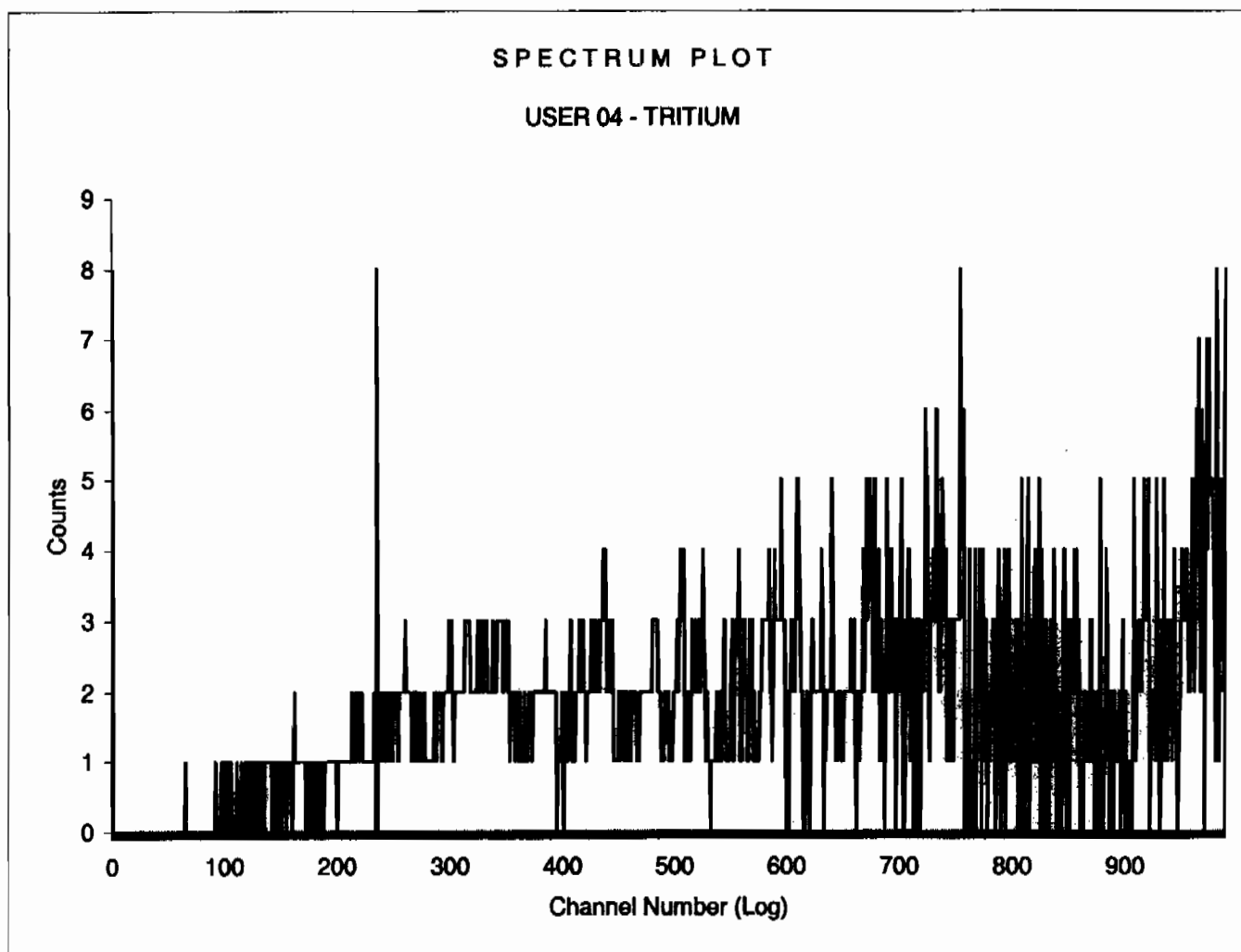
Sample Count Start Time:	4 Mar 2010 14:48:13		
Data Capture Date	04 Mar 2010 15:33:24		
User Filename	S04030449-3A.XLS		
	U04030449-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	3	49-3	45.00
H#, Total Counts:	132.6	1901	
Win1: Tritium - Start, End, Counts:	0	235	121
Win2: - Start, End, Counts:	0	990	1692

# SPECTRUM PLOT

USER 04 - TRITIUM



Sample Count Start Time:	4 Mar 2010 15:35:07		
Data Capture Date	04 Mar 2010 16:20:19		
User Filename	S04030449-4A.XLS		
	U04030449-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	4	49-4	45.00
H#, Total Counts:	134.1	2051	
Win1: Tritium - Start, End, Counts:	0	235	112
Win2: - Start, End, Counts:	0	990	1742



PAGE: 1

ID: TRITIUM

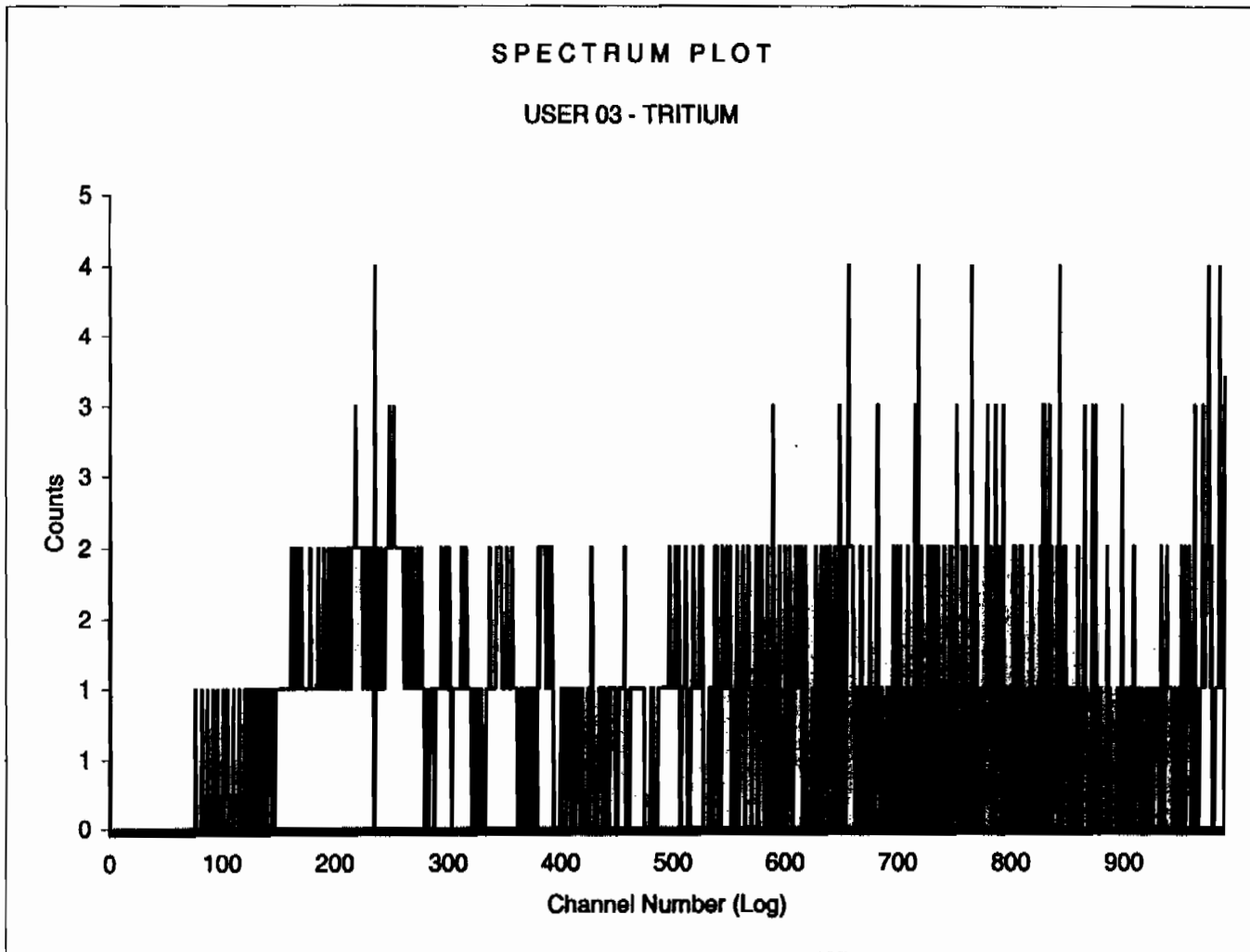
4 MAR 2010 17:05

USER: 3 COMMENT: GOLD  
 PRESET TIME : 15.00  
 DATA CALC : CPM H# : YES SAMPLE REPEATS: 1 PRINTER : STD  
 COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : EDIT  
 TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF  
 SCINTILLATOR: LIQUID LUMEX: YES LOW SAMPLE REJ: 0  
 LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

CHAN: 0.0 - 235.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0  
 CHAN: 0.0 - 1000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1		WIND2		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR		
1	16-1	15.00	120.5	10.00	16.33	58.80	6.73	0.13	15.79
2	16-2	15.00	117.9	11.53	15.21	56.93	6.84	0.12	32.09

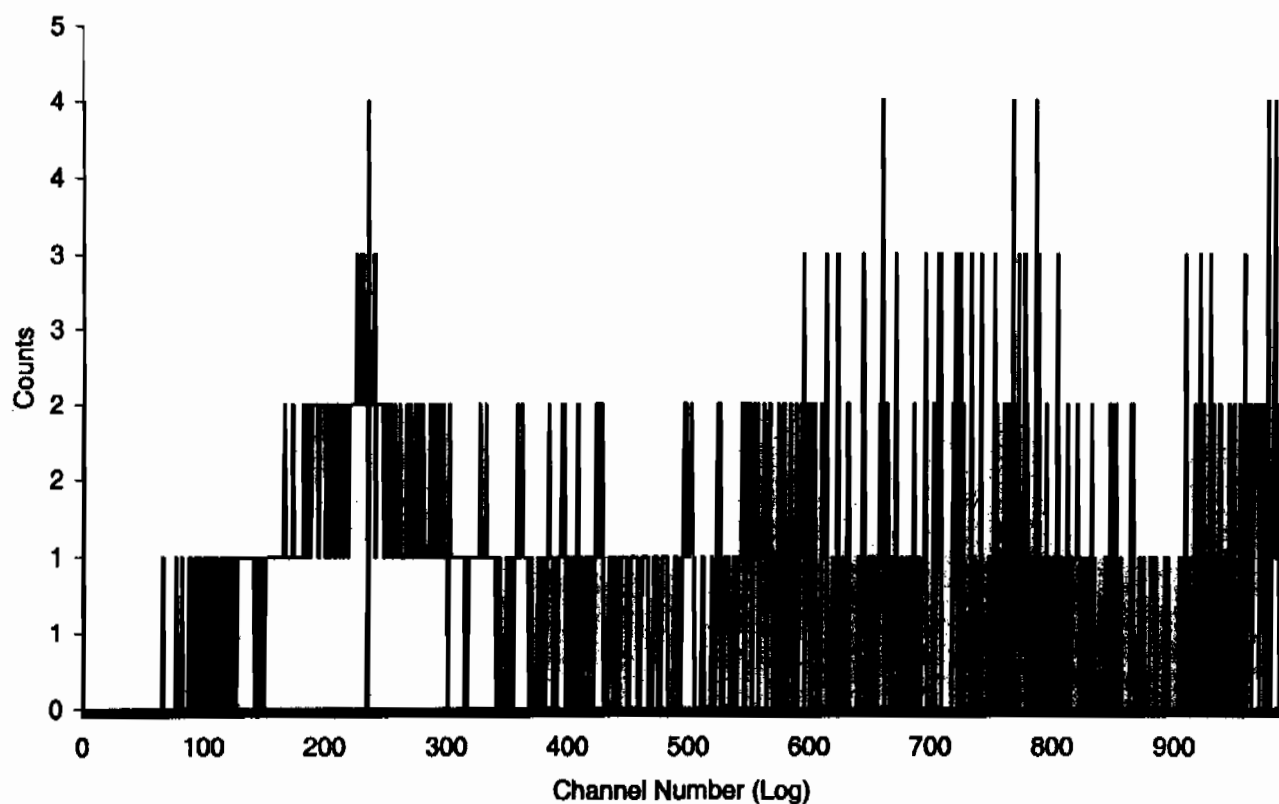
Sample Count Start Time:	4 Mar 2010 17:08:41		
Data Capture Date	04 Mar 2010 17:23:46		
User Filename	S03030416-1B.XLS		
	U03030416-1B.XLS		
Spectrum Type	Log Counts		
User Number	03		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	16-1	15.00
H#, Total Counts:	120.5	922	
Win1: Tritium - Start, End, Counts:	0	235	152
Win2: - Start, End, Counts:	0	990	823



Sample Count Start Time:	4 Mar 2010 17:24:59		
Data Capture Date	04 Mar 2010 17:40:04		
User Filename	S03030416-2B.XLS		
	U03030416-1B.XLS		
Spectrum Type	Log Counts		
User Number	03		
User Id	TRITIUM		
User Comment	GOLD		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	2	16-2	15.00
H#, Total Counts:	117.9	878	
Win1: Tritium - Start, End, Counts:	0	235	175
Win2: - Start, End, Counts:	0	990	802

# SPECTRUM PLOT

USER 03 - TRITIUM



PAGE: 1

ID: TRITIUM

5 MAR 2010 14:23

USER:13

COMMENT: BROWN

PRESET TIME : 45.00  
DATA CALC : CPM H# : YES SAMPLE REPEATS: 1 PRINTER : STD  
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : EDIT  
TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF  
SCINTILLATOR: LIQUID LUMEX: YES LOW SAMPLE REJ: 0  
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

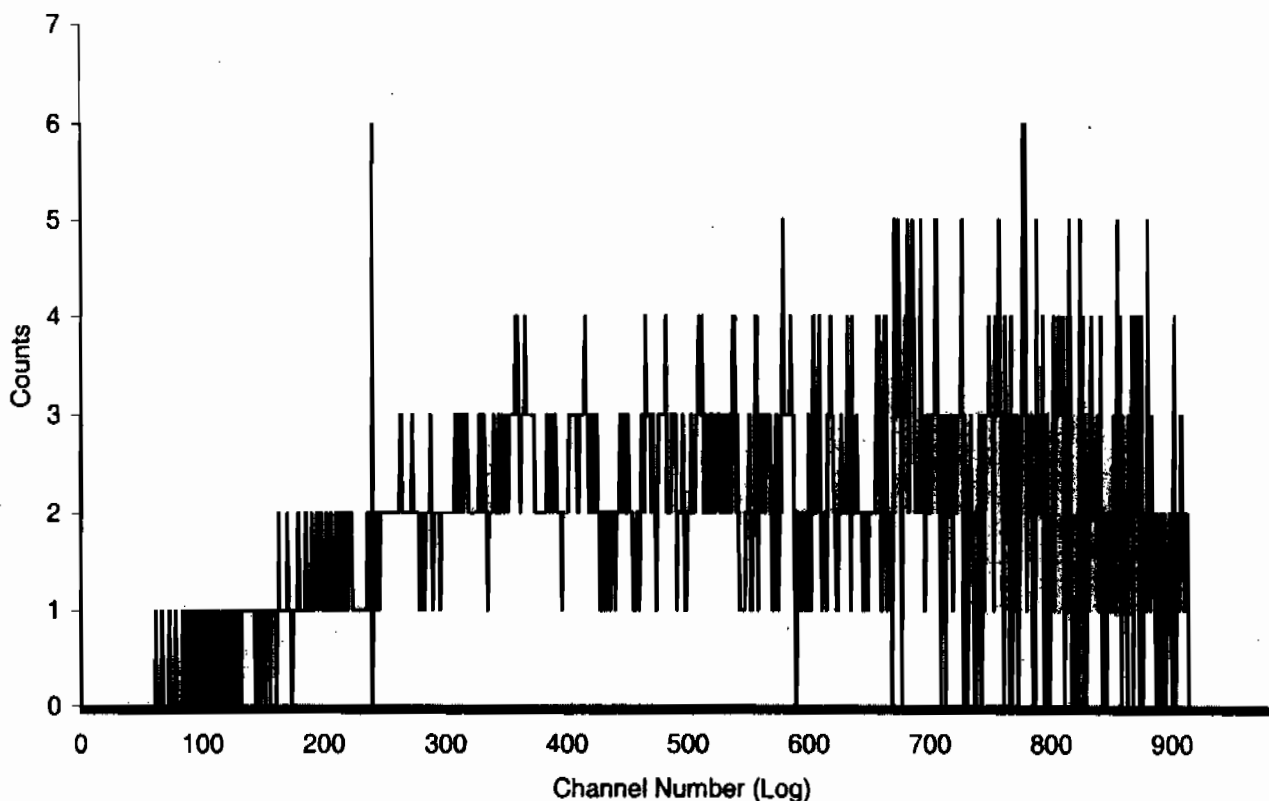
CHAN: 0.0 - 240.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0  
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

SAM	POS	TIME	H#	<u>WIND1</u>		LUMEX	ELAPSED
NO		MIN		CPM	%ERROR	%	TIME
1	6-1	45.00	84.4	3.47	16.37	0.43	46.44
2	6-2	45.00	74.8	3.98	15.20	0.35	93.34

Sample Count Start Time:	5 Mar 2010 14:15:13		
Data Capture Date	05 Mar 2010 15:00:04		
User Filename	S13030506-1A.XLS		
	U13030506-1A.XLS		
Spectrum Type	Log Counts		
User Number	13		
User Id	TRITIUM		
User Comment	BROWN		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	6-1	45.00
H#, Total Counts:	84.4	1677	
Win1: Tritium - Start, End, Counts:	0	240	157
Win2: - Start, End, Counts:	0	990	1677

# SPECTRUM PLOT

USER 13 - TRITIUM

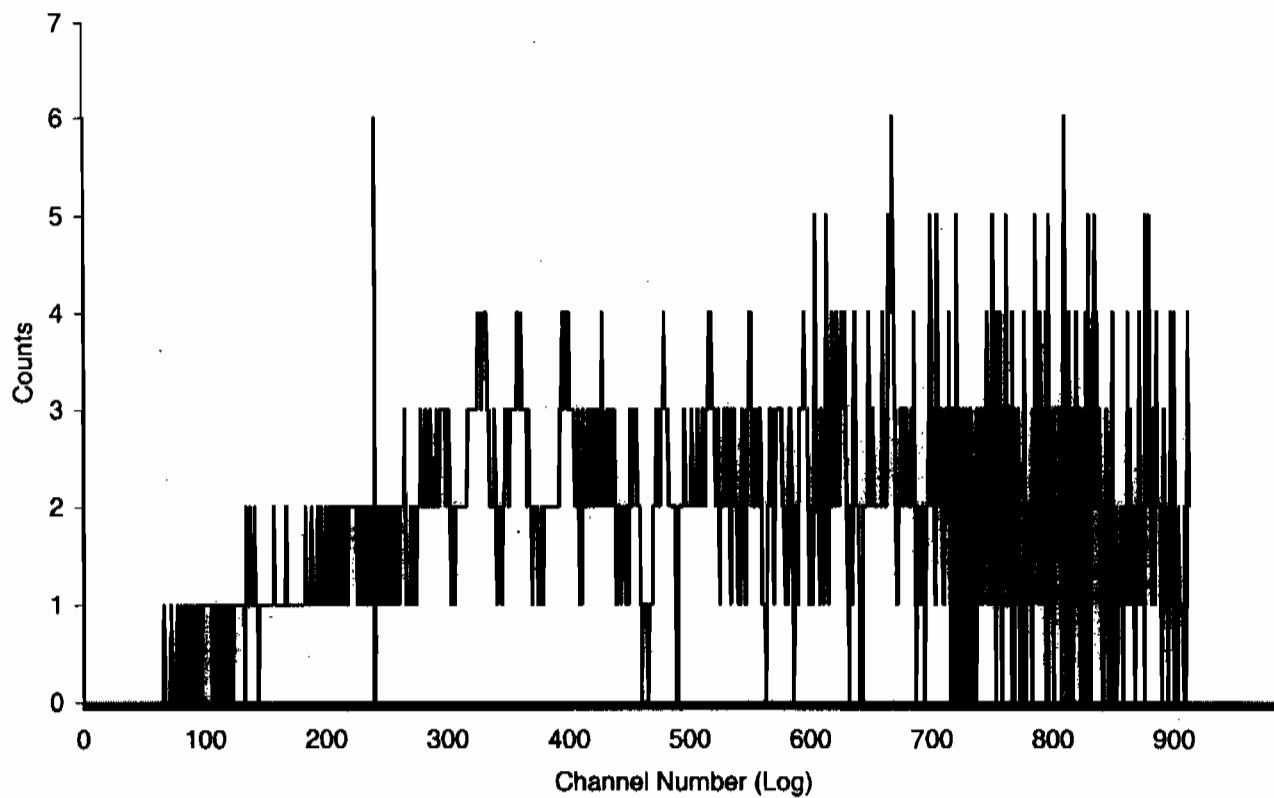




Sample Count Start Time:	5 Mar 2010 15:02:07
Data Capture Date	05 Mar 2010 15:47:47
User Filename	S13030506-2A.XLS
	U13030506-1A.XLS
Spectrum Type	Log Counts
User Number	13
User Id	TRITIUM
User Comment	BROWN
Scintillator	LIQUID
Sample, Rack-Pos, Time:	2 6-2 45.00
H#, Total Counts:	74.8 1639
Win1: Tritium - Start, End, Counts:	0 240 180
Win2: - Start, End, Counts:	0 990 1639

### SPECTRUM PLOT

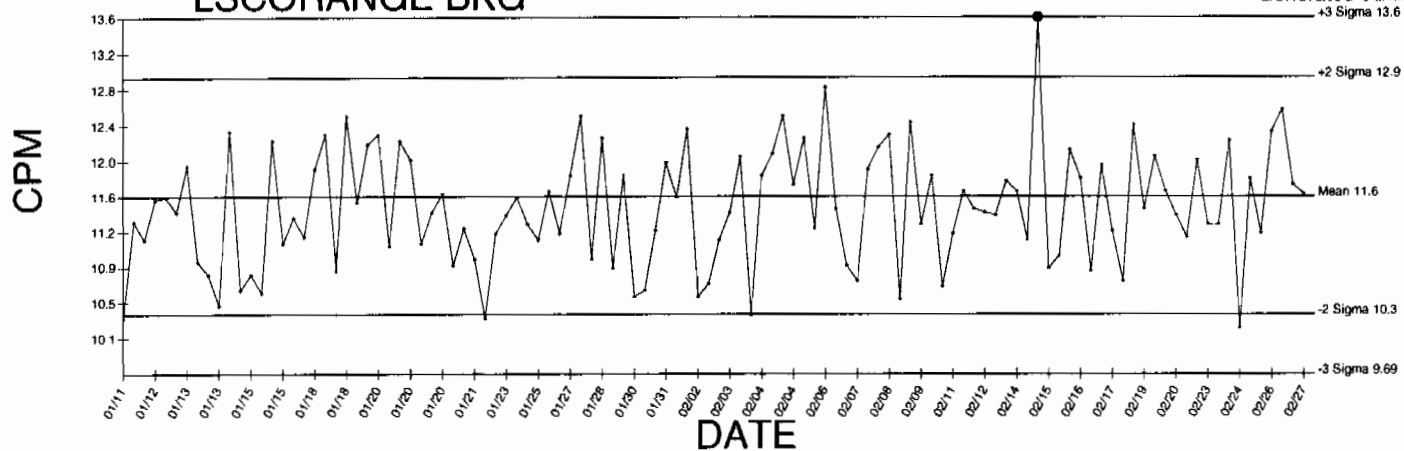
USER 13 - TRITIUM



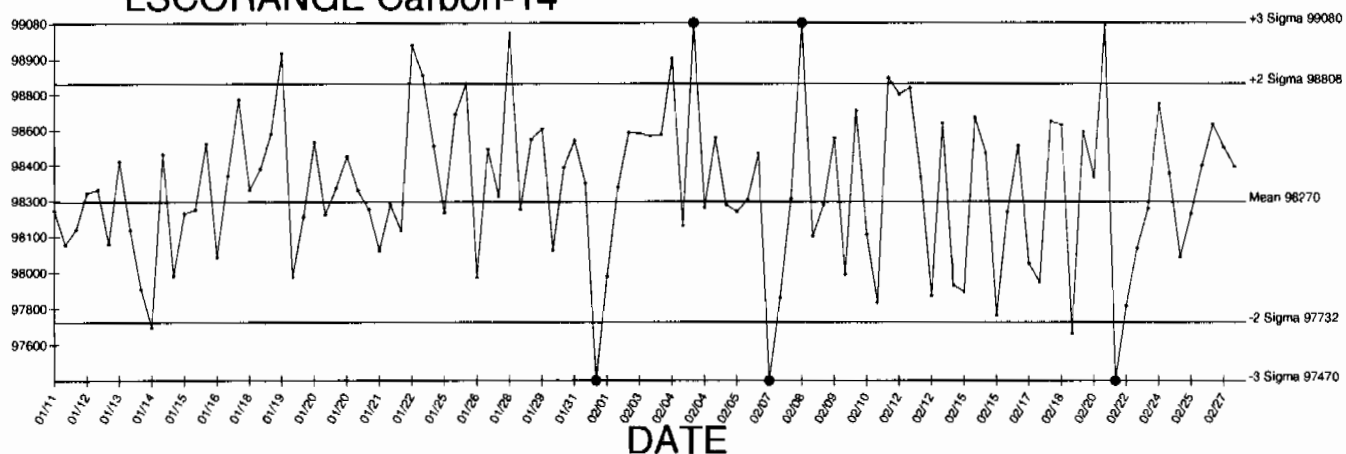
# BACKGROUND AND EFFICIENCY DATA

# LSCORANGE BKG

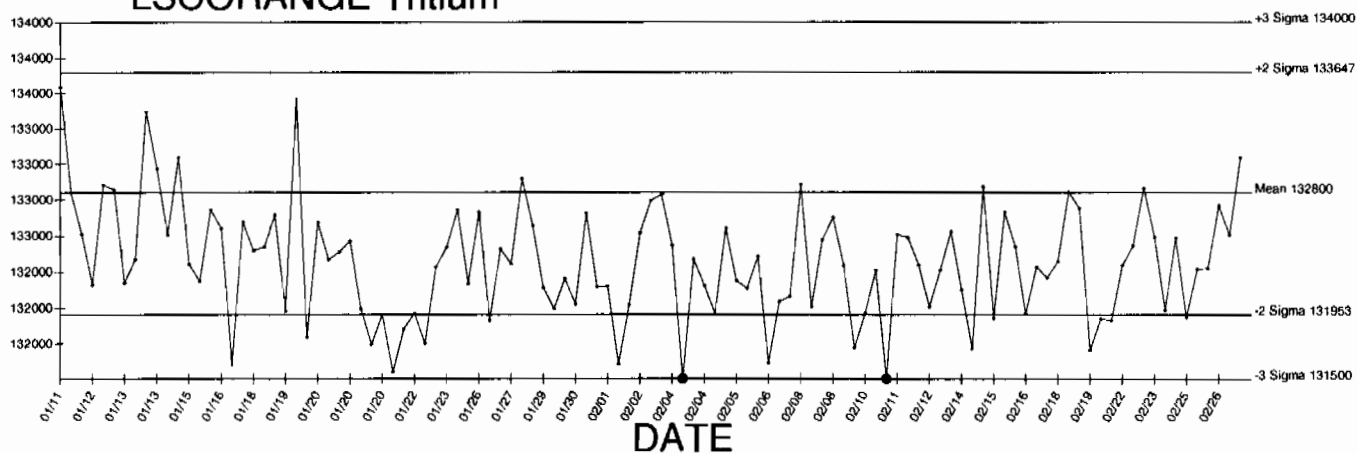
Generated 02/27/2010



# LSCORANGE Carbon-14



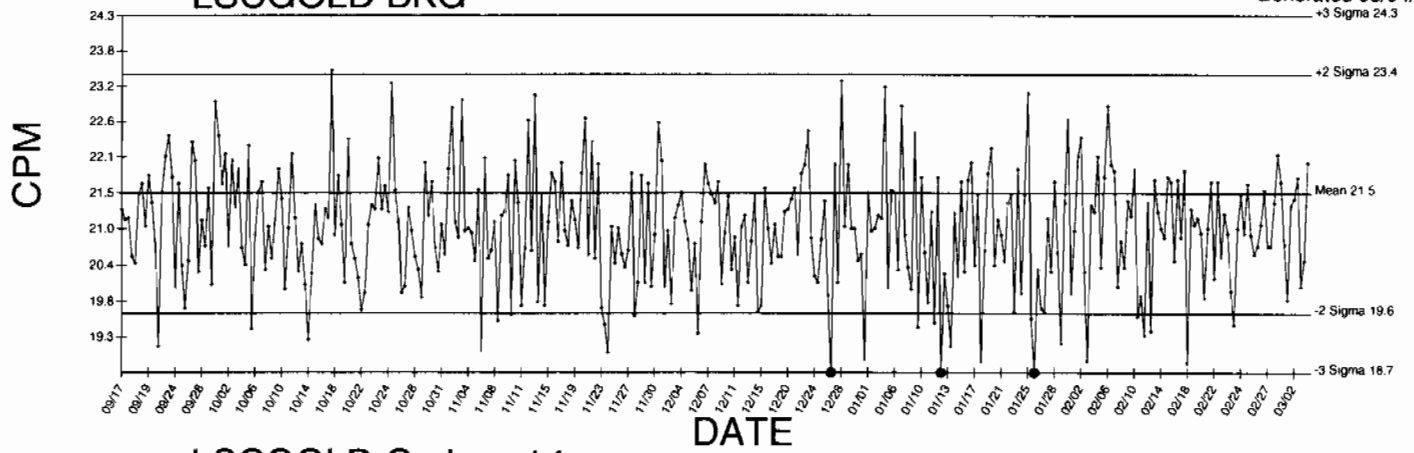
# LSCORANGE Tritium



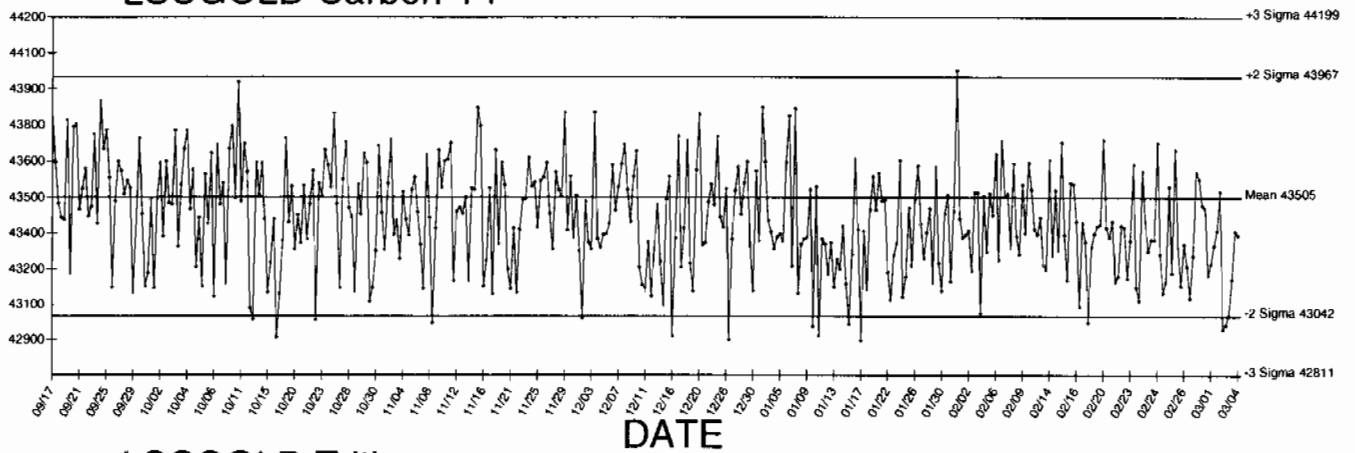
● Denotes Outlier

# LSCGOLD BKG

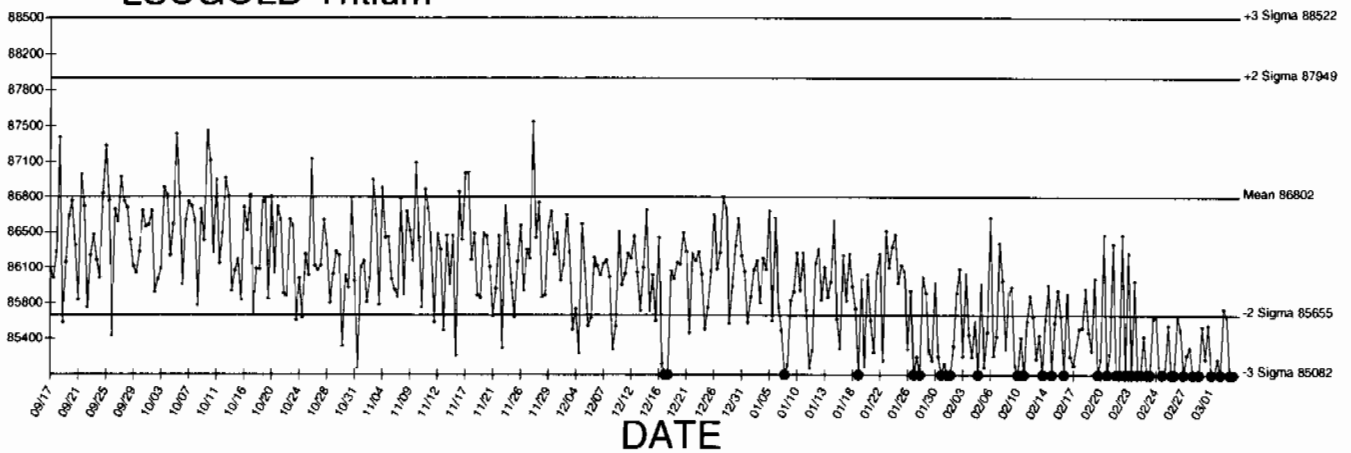
Generated 03/04/2010



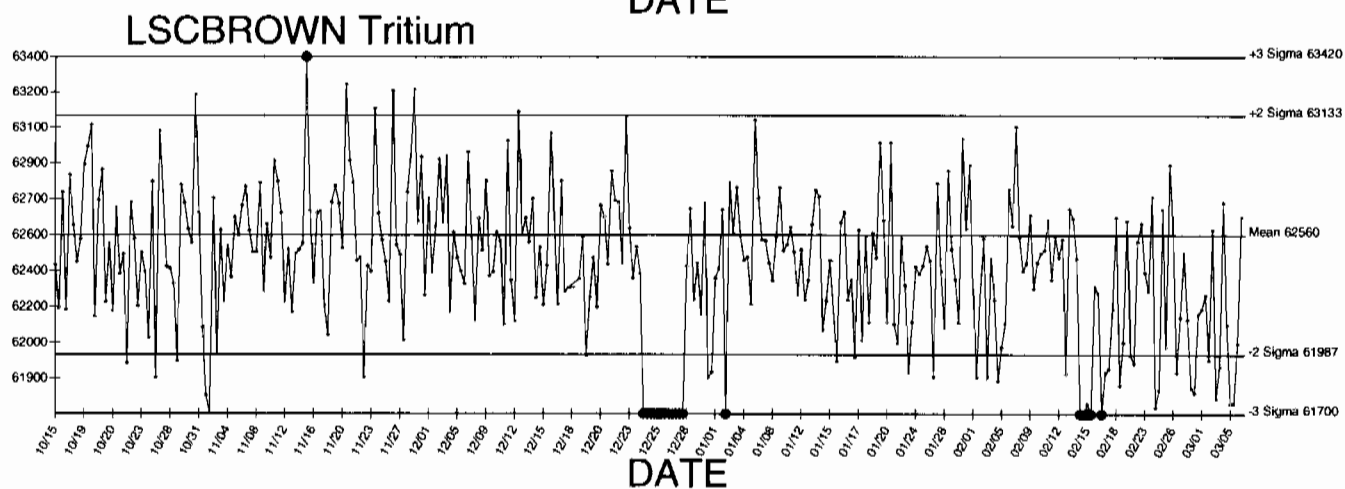
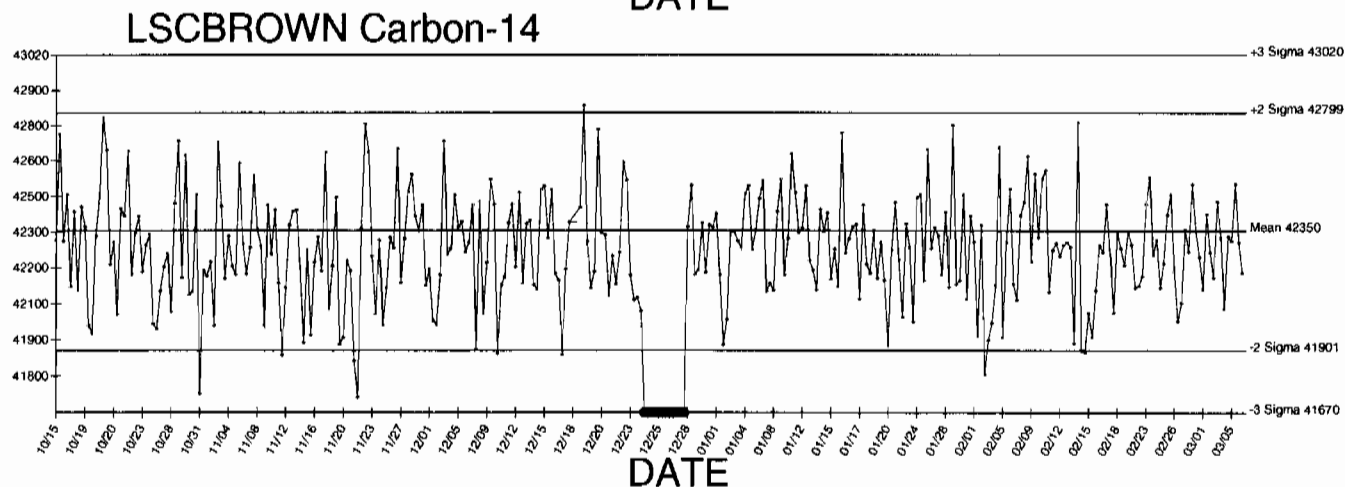
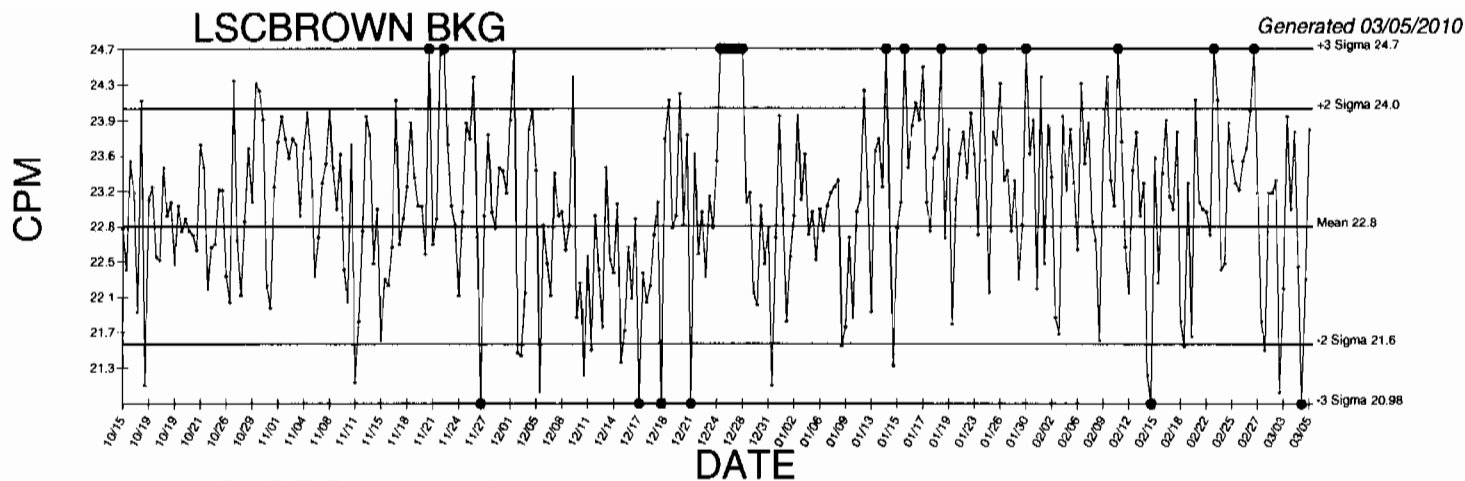
# LSCGOLD Carbon-14



# LSCGOLD Tritium



● Denotes Outlier



● Denotes Outlier

# STANDARDS DATA

0134



CALIBRATION  
No. 0146

**Description** Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY-64  
Chemical form: water Batch: 111

**Measurement** Reference time: 1200 GMT on 1 March 1996  
Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water  
which is equivalent to: 13.19 microcuries per gram of water  
or:  $2.93 \times 10^7$  disintegrations per minute per gram of water

**Method of Measurement**

This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

**Accuracy** The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than  $\pm 2.5\%$

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99.7% confidence level, and the estimated systematic uncertainties.

**Purity** No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

**Physical Data** Half-life of tritium:  $12.43 \pm 0.11$  years  
Maximum beta energy of tritium: 18.6 keV

**Remarks:** The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore  
1 curie (Ci) =  $3.7 \times 10^{10}$  becquerels exactly.

Useful conversion factors are:

1 microcurie ( $\mu\text{Ci}$ ) =  $3.7 \times 10^4$  Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27.027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved  
signatory

*W. F. Case*

2(-5-023-061a

**Amersham**  
The Health Science Group

# Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Johnson
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Johnson
Prep Date:	02/21/2001
Verification Date:	09/10/2008
Expiration Date:	03/27/2010
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004
Balance ID:	38080204

## Calculations Converting parent activity to dpm/mL|dpm/g

$(\text{Mass of parent(g)}) * (\text{Parm Activity (kBq/g)}) * (\text{conversion dpm to kBq}) / (\text{Dilution Vol}) = \text{Parent Activity (dpm/mL)}$
$(\text{Mass of parent(g)}) * (\text{Parm Activity (kBq/g)}) * (\text{conversion dpm to kBq}) / \text{Density (g/mL)} / (\text{Dilution Vol}) = \text{Parent Activity (dpm/g)}$
$(3.3659 \text{ g}) * (488 \text{ kBq/g}) * (60000 \text{ dpm/kBq}) / (100 \text{ mL}) = 985535.5200 \text{ dpm/mL}$
$(3.3659 \text{ g}) * (488 \text{ kBq/g}) * (60000 \text{ dpm/kBq}) / (1.0004 \text{ g/mL}) / (100 \text{ mL}) = 985180.3116 \text{ dpm/g}$

## Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/25/2006	07/25/2007
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2006	12/20/2007
07/11/2007	Daniel Roy	5.5863	1000	0134-J	5503.5128 dpm/ml	07/29/2008	07/29/2009
03/25/2009	Mary Aders	5.4917	1000	0134-K	5410.3147 dpm/ml	03/27/2009	03/27/2010

GEL Laboratories LLC  
Version 1.0 9/18/2000



## Verification for H-3 Standard 0134-K

M. Aders	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff Mass. Used (mL)	Source DPM/mL
4/9/2009	0134-K N1	1097.2000	54.0000	1043.2000	0.380548	2741.3099
	0134-K N2	1073.2000	54.0000	1019.2000	0.380548	2678.242955
	0134-K N3	1085.2000	54.0000	1031.2000	0.380548	2709.776428
Mean Value (Counting) =	2709.776428		104.954429	Pass		
Stdev =	31.53347278		0.01163893	Rule 3 (Pass/Fail)		
Certificate Value =	2581.86	dpm/mL				
Lower Limit =	2646.709482	dpm/mL				
Upper Limit =	2772.843373	dpm/mL				
Rule 1 Pass/Fail	Fail	*exception taken due to full recovery of standard				
Two sigma =	63.06694556	dpm/mL				
10 % of Mean =	270.9776428	dpm/mL				
Rule 2 (Pass/Fail)	Pass					

## Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements

Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-K by transferring 0.1 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ecosint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ecosint Ultra liquid scintillation cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on Silver for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 4/9/09 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

$$\text{Source dpm/g} = (A - B)/(C)(D)$$

where:

A = Ver. source cpm,

B = BKG cpm,

C = System efficiency, (cpm/dpm), and

D = mass used for standard verification.

Reference RAD SOP M-001

Handwritten signature: Amanda J. Fehr 4/9/09

# RUNLOGS

## Instrument Run Log

Instrument Type: LSC

Batch ID:953105

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
246440001	SAMPLE	KXK2	LSCORANGE	27-FEB-10 02:53	DONE		
246440002	SAMPLE	KXK2	LSCORANGE	27-FEB-10 03:31	DONE		
246440003	SAMPLE	KXK2	LSCORANGE	27-FEB-10 04:08	DONE		
246440004	SAMPLE	KXK2	LSCORANGE	27-FEB-10 04:46	DONE		
246440005	SAMPLE	KXK2	LSCORANGE	27-FEB-10 05:23	DONE		
246440006	SAMPLE	KXK2	LSCORANGE	27-FEB-10 06:01	DONE		
246440007	SAMPLE	KXK2	LSCORANGE	27-FEB-10 06:38	DONE		
246440008	SAMPLE	KXK2	LSCORANGE	27-FEB-10 07:16	DONE		
246440009	SAMPLE	KXK2	LSCORANGE	27-FEB-10 07:53	DONE		
246440010	SAMPLE	KXK2	LSCORANGE	27-FEB-10 08:31	DONE		
246440011	SAMPLE	KXK2	LSCORANGE	27-FEB-10 09:09	DONE		
246440012	SAMPLE	KXK2	LSCORANGE	27-FEB-10 09:46	DONE		
246440013	SAMPLE	KXK2	LSCORANGE	27-FEB-10 10:24	DONE		
246440014	SAMPLE	KXK2	LSCORANGE	27-FEB-10 11:02	DONE		
246477002	SAMPLE	KXK2	LSCORANGE	27-FEB-10 11:39	DONE		
246554002	SAMPLE	KXK2	LSCORANGE	27-FEB-10 12:17	DONE		
246554003	SAMPLE	KXK2	LSCORANGE	27-FEB-10 12:55	DONE		
246554004	SAMPLE	KXK2	LSCORANGE	27-FEB-10 13:00	DONE		
246554005	SAMPLE	KXK2	LSCORANGE	27-FEB-10 13:03	DONE		
1202042922	MB	KXK2	LSCORANGE	27-FEB-10 13:06	DONE		
1202042923	DUP	KXK2	LSCORANGE	27-FEB-10 13:44	DONE		
1202042924	LCS	KXK2	LSCORANGE	27-FEB-10 14:21	DONE		

# Instrument Run Log

Instrument Type: LSC

Batch ID: 958199

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
246554001	SAMPLE	KXK2	LSCGOLD	04-MAR-10 14:01	DONE	10mL DW/13mL Ecoscint Ultra	20-AUG-09 00:00
246554006	SAMPLE	KXK2	LSCGOLD	04-MAR-10 14:48	DONE	10mL DW/13mL Ecoscint Ultra	20-AUG-09 00:00
1202054898	MB	KXK2	LSCGOLD	04-MAR-10 15:35	DONE	10mL DW/13mL Ecoscint Ultra	20-AUG-09 00:00
1202054901	MS	KXK2	LSCGOLD	04-MAR-10 17:08	DONE	10mL DW/13mL Ecoscint Ultra	20-AUG-09 00:00
1202054900	LCS	KXK2	LSCGOLD	04-MAR-10 17:24	DONE	10mL DW/13mL Ecoscint Ultra	20-AUG-09 00:00
1202054899	DUP	KXK2	LSCBROWN	05-MAR-10 15:02	DONE	10mL DW/13mL Ecoscint Ultra	09-SEP-09 00:00