

Tuesday, February 02, 2010

Page 1 of 3  
REQUEST NUMBER: 10-1545

**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: 10-1545  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

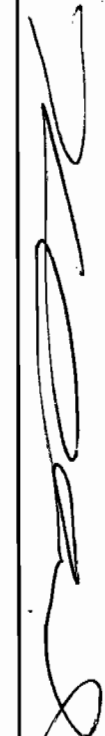
Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/2/2010  
TURNAROUND/REPORT DUE: 3/4/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background  
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6010B		1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	

Tuesday, February 02, 2010

REQUEST NUMBER: 10-1545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6010B		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
SW-846:6020		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
SW-846:6850		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
SW-846:8082		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
SW-846:8321A_MOD		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
SW-846:9012A		1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	

Tuesday, February 02, 2010

Page 3 of 3  
REQUEST NUMBER: 10-1545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9012A						
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	

Final Page of REQUEST NUMBER 10-1545

Tuesday, February 02, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1545C

**LOS ALAMOS**

REQUEST NUMBER: 10-1545

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/4/2010

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
RE15-10-8170	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8170	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8169	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8169	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8171	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8171	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8168	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8168	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8222	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8222	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8221	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8220	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8223	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8224	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8233	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8233	1	POLY	SW-846:6850	Ice	W
RE15-10-8233	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8231	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8231	1	POLY	SW-846:6850	Ice	W
RE15-10-8231	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8230	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8230	1	POLY	SW-846:6850	Ice	W
RE15-10-8230	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8232	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8232	1	POLY	SW-846:6850	Ice	W
RE15-10-8232	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8220	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8223	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8224	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8221	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time



7100 2/2/10 3:00

Printed Name	Signature	Printed Name	Signature
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Printed Name	Signature	Printed Name	Signature
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Printed Name	Signature	Printed Name	Signature
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Received for DISPOSAL By:	Date	Time	Remarks:
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Printed Name	Signature
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10-1545

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

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

SAMPLE ID: RE15-10-8168

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010	MEDIA:	OBT3		A11h	
TIME COLLECTED (HH:MM)		1402	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	15-007(c)	ok	SAMPLE TECH CODE:	HA		ok	
LOCATION ID:	15-610813	↓	FIELD QC TYPE:	NA		↓	
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA		↓	
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV		↓	
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:			NA	
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NA

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

SAMPLE DESC:

Brown silty sand, cobbles

SAMPLE COMMENTS:

NA

LOCATION DESC:

7C-21

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\pm$  5 dpm  
Beta/Gamma  $\pm$  1430 dpm

HE negative

PID  $\frac{\text{Ambient Reading}}{0.1}$  ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Laney A. Lopez

RELINQUISHED BY (Printed Name) A. Goumar (Signature) <i>A. Goumar</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARCZAK (Signature) <i>W</i>	Date/Time 1/29/10 1540
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: RE15-10-8169

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1407		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-007(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610813	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
							NA

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

SAMPLE DESC:

Brown silty clay

FR: RE15-10-8233

SAMPLE COMMENTS:

NA

LOCATION DESC:

7c-21

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  5 dpm  
Beta/Gamma  $\leq$  1513 dpm

PID  $\frac{\text{Ambient Reading}}{0.2} = 0.0$  ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

Lacey A. Lopez

RELINQUISHED BY (Printed Name) A. Goumas (Signature) <i>A. Goumas</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MAROTTA (Signature) <i>S. Marotta</i>	Date/Time 1/29/10 1540
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: RE15-10-8170

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1414		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-007(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610814			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	B	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC:

Brown sandy silt

FD: RE 15-10-8224

SAMPLE COMMENTS:

NR

LOCATION DESC:

7c-14

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha  $\pm$  16 dpm  
Beta/Gamma  $\pm$  1714 dpm

PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.6}$  ppm

COLLECTED BY (PRINT)

TLMcFarlang

REVIEWED BY (PRINT)

Lacey A. Lopez

RELINQUISHED BY (Printed Name) A. Gouma J (Signature) <i>A. Gouma J</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MAR 214 (Signature) <i>SM</i>	Date/Time 1/29/10 1540
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: RE15-10-8171

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1420		SUB-MEDIA:	TUFF1		L
PRS ID:	15-007(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610814	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:		COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC:

Brown highly weathered stuff,  
root material

SAMPLE COMMENTS:

NA

FR RE15-10-8232

LOCATION DESC:

7c-14

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  16 dpm  
Beta/Gamma  $\leq$  1561 dpmPID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.9} \text{ ppm}$ 

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) A. Gama 3 (Signature) <i>A. Gama</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARTIN (Signature) <i>S. Martin</i>	Date/Time 1/29/10 1560
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: RE15-10-8220

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	OBT3		ok
TIME COLLECTED (HH:MM)		1036		SUB-MEDIA:	TUFF 1		L
PRS ID:	15-007(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK	15-610798		FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	73m 1/29/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	N	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-8139

Gray tuff and brownish weathered tuff

SAMPLE COMMENTS:

Tuff interface at 0.5 ft

LOCATION DESC:

7C-2

FIELD SCREENING/MEASUREMENT RESULTS:

PID  $\frac{\text{Ambient Reading}}{0.0} = \frac{0.0}{0.0}$  ppmAlpha  $\leq$  22 dpm  
Beta/Gamma  $\leq$  1444 dpm

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT) A. Goumas

RELINQUISHED BY (Printed Name) A. Goumas (Signature) <i>A. Goumas</i>	Date/Time 4/29/10 1540	RECEIVED BY (Printed Name) S. MARCZYK (Signature) <i>SM</i>	Date/Time 4/29/10 1540
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: RE15-10-8221

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		1129		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	15-610803		FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	2.1		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	73m 1/29/10 2082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	N	
1	Normal	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	L	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 15-10 - 8149

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC: 7c - 25

FIELD SCREENING/MEASUREMENT RESULTS:

PID  $\frac{\text{Ambient Reading}}{0.2} = \frac{0.0}{0.2} \text{ ppm}$ Alpha  $\leq 11$  dpm  
Beta/Gamma  $\leq 1748$  dpm

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

A. Gouma

RELINQUISHED BY (Printed Name) A. Gouma (Signature) <i>A. Gouma</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MAROZAY (Signature) <i>S. Marozay</i>	Date/Time 1/29/10 1540
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: RE15-10-8222

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/29/2010	MEDIA:	OBT3	Allh
TIME COLLECTED (HH:MM)		1146	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-007(c)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	UNK	15-610794	FIELD QC TYPE:	FD	↓
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:
				NA	

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

SAMPLE DESC: QC Sample of RE 15-10-8130

Brown moist silty clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

7c-19

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

PID  $\frac{\text{Ambient Reading}}{0.1} = \frac{0.0}{0.1} \text{ ppm}$

Alpha = 27 dpm  
Beta/Gamma = 1762 dpm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT) A. Goumas

RELINQUISHED BY (Printed Name) A. Goumas (Signature)	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARCZYK (Signature)	Date/Time 1/29/10 1540
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: RE15-10-8223

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	QBT3		A114
TIME COLLECTED (HH:MM)		1348		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-007(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK	15-610811		FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	12/29/10 2082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	N	
1	Normal	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 15-10-8164

Brown silty sand, some rocks, moist

SAMPLE COMMENTS:

NA

LOCATION DESC: 7c-24

FIELD SCREENING/MEASUREMENT RESULTS:

PID  $\frac{\text{Ambient Reading}}{0.0} = 0.0$  ppmAlpha  $\leq 11$  dpm  
Beta/Gamma  $\neq 1783$  dpm

COLLECTED BY (PRINT)

ThMcFarlane

REVIEWED BY (PRINT)

Lacey A. Lopez

RELINQUISHED BY (Printed Name) A. Goumas (Signature) <i>A. Goumas</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARCAY (Signature) <i>SM</i>	Date/Time 1/29/10 1540
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: RE15-10-8224

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA: QBT3		A11h	
TIME COLLECTED (HH:MM)		1414		SUB-MEDIA: TUFF 1		NA	
PRS ID: 15-007(c)		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: UNK		15-6108/4		FIELD QC TYPE: ED			
LOCATION TYPE: GENERIC		ok		FIELD PREP: NA			
TOP DEPTH: 0		0.0		SAMPLE USAGE: QC		↓	
BOTTOM DEPTH: 0		0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX: B		S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	7241/29/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	N	
1	Normal	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	Normal	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 15-10-8170

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

7C-14

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  16 dpm  
Beta/Gamma  $\leq$  1714 dpm

HE neg  
PID  $\frac{\text{Ambient Reading}}{0.6} = 6.0$  ppm

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

Larry A. Loyola

RELINQUISHED BY (Printed Name) A. Gama J (Signature) <i>A. Gama J</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARCUM (Signature) <i>SM</i>	Date/Time 1/29/10 1540
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: RE15-10-8230

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:		NA	
TIME COLLECTED (HH:MM)		1017		SUB-MEDIA:		OTHER	
PRS ID: 15-007(c)		OK		SAMPLE TECH CODE:		DC	
LOCATION ID: UNK		15-610797		FIELD QC TYPE:		FR	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		UF	
TOP DEPTH: 0		↓		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		↓		SCREEN/PORT DESC:		NA	
FIELD MATRIX: W		↓		EXCAVATED: YES/NO/NA		NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	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 RE15-10-8137

## SAMPLE COMMENTS:

Rinsate

## LOCATION DESC:

NA

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 73m 1/29/10 dpm  
 Beta/Gamma = 73m 1/29/10 dpm

PID  $\frac{\text{Ambient Reading}}{\text{ppm}} = 73m 1/29/10$

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

A. Goumas

RELINQUISHED BY (Printed Name) A. Goumas (Signature) <i>A. Goumas</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. WARCZAG (Signature) <i>S. WARCZAG</i>	Date/Time 1/29/10 1540
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: RE15-10-8231

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		1221		SUB-MEDIA:	OTHER		
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-G1080C		FIELD QC TYPE:	FR		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS-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 RE15-10-8155

## SAMPLE COMMENTS:

Rinsate

## LOCATION DESC:

NA

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = ~~\_\_\_\_\_~~ dpm 73m 1/29/10  
Beta/Gamma = ~~\_\_\_\_\_~~ dpmPID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$  73m 1/29/10

COLLECTED BY (PRINT)

Th MCFarland

REVIEWED BY (PRINT)

Lacey A. Lopez

RELINQUISHED BY (Printed Name) A. Gomas (Signature) <i>A. Gomas</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) G. MARCZAK (Signature) <i>G. Marczak</i>	Date/Time 1/29/10 1540
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: RE15-10-8232

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/29/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1436	SUB-MEDIA:	OTHER
PRS ID:	15-007(c)	SAMPLE TECH CODE:	DC
LOCATION ID:	UNK	FIELD QC TYPE:	ER
LOCATION TYPE:	GENERIC	FIELD PREP:	UF
TOP DEPTH:	0	SAMPLE USAGE:	QC
BOTTOM DEPTH:	0	SCREEN/PORT DESC:	NA
FIELD MATRIX:	W	EXCAVATED: YES/NO/NA	NO
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA
BOREHOLE: YES/NO/NA	NO	WATER FLOWING: YES/NO/NA	NO
BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	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

RE15-10-8171

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =        dpmBeta/Gamma =        dpmPID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ 

7am 1/29/10

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) A. Gorman (Signature) <i>A. Gorman</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MARCZYK (Signature) <i>S. Marczyk</i>	Date/Time 1/29/10 1540
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: RE15-10-8233

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/29/2010		MEDIA:	NA		OK
TIME COLLECTED (HH:MM)		1437		SUB-MEDIA:	OTHER		
PRS ID:	15-007(c)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610813		FIELD QC TYPE:	EB		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				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 RE15-10-8169

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =        dpm 73m 1/29/10  
 Beta/Gamma =        dpm

PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$  73m 1/29/10

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) A. Goumas (Signature) <i>A. Goumas</i>	Date/Time 1/29/10 1540	RECEIVED BY (Printed Name) S. MAROTTA (Signature) <i>SM</i>	Date/Time 1/29/10 1540
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: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8168

ARS Sample ID: ARS2-10-00037-003

Sample Collection Date: 01/29/10 14:02

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	19.80	21.31	28.72	21.48		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	23.71	14.02	19.14	14.32		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.08	0.09	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	9.18	4.92	1.41	4.93		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.11	0.16	0.09	0.16		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.12	0.14	0.07	0.14		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	-0.01	12.05	0.00	12.05		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.19	0.25	0.11	0.25		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	0.89	0.33	0.09	0.35		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	1.74	0.73	0.25	0.73		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	1.17	0.87	0.27	0.87		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	2.62	2.40	1.04	2.48		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.01	0.08	0.07	0.08		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 2.66

  
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.

NELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00037  
 Client Sample ID: RE15-10-B169  
 Sample Collection Date: 01/29/10 14:02  
 Sample Matrix: Soil/Solid

Request or PO Number:  
 ARS Sample ID: ARS2-10-00037-004  
 Date Received: 02/01/10 00:00  
 Report Date: 02/03/10 09:24

Analysis Description	Analysis Results	Analysis Error +/- 2σ	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	-2.20	13.33	37.10	13.33		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	29.83	13.70	18.29	14.18		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	19.47	8.18	1.90	8.17		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.00	12.46	0.13	12.44		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	-0.01	38.70	0.09	38.70		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.36	0.37	0.15	0.37		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.28	0.50	0.13	0.50		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	2.05	0.91	0.33	0.92		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	-0.08	111.10	0.25	111.10		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	4.04	3.10	1.29	3.23		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.52	0.25	0.05	0.25		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 1.66

*Matthew J. Fisher*  
 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 # EB7558





133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8170

ARS Sample ID: ARS2-10-00037-005

Sample Collection Date: 01/29/10 14:14

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	5.14	10.47	37.39	10.49		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	33.84	14.08	18.27	14.68		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.02	0.05	0.11	0.05		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	29.03	9.45	1.77	9.49		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.14	0.20	0.12	0.20		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.14	0.18	0.09	0.18		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	-0.01	15.15	0.07	15.15		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.33	0.46	0.13	0.46		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	0.84	0.39	0.12	0.40		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	0.93	0.79	0.11	0.79		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	0.84	0.53	0.19	0.53		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	2.05	2.43	1.15	2.47		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.00	0.04	0.08	0.04		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 1.29

  
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: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8171

ARS Sample ID: ARS2-10-00037-006

Sample Collection Date: 01/29/10 14:20

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPL	Q-act	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	11.87	18.34	31.30	18.40		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	18.68	11.88	16.63	12.10		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	-1.70	-13.64	2.97	-13.64		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.00	14.65	0.15	14.65		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	-0.01	19.16	0.09	19.16		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.00	15.23	0.17	15.23		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.82	0.73	0.26	0.73		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	0.63	0.40	0.49	0.40		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	-0.09	130.60	0.29	130.60		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	3.18	4.02	1.82	4.08		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.01	0.06	0.08	0.06		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 1.11

*Matthew L. Feller*  
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 # E8755B



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00037

Client Sample ID: RE15-10-8220

Sample Collection Date: 01/29/10 10:36

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00037-007

Date Received: 02/01/10 00:00

Report Date: 02/02/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TPII	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	0.48	9.75	28.63	9.75		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	20.71	13.02	18.95	13.27		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.08	0.17	0.14	0.17		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	23.33	9.56	2.19	9.59		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.00	14.94	0.15	14.94		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.15	0.19	0.11	0.19		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	0.26	0.23	0.09	0.23		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.39	0.45	0.17	0.45		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.61	0.62	0.19	0.62		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-226	2.11	0.96	0.38	0.96		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	1.44	0.79	0.22	0.79		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	1.06	2.56	1.44	2.57		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.25	0.26	0.10	0.26		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 0.00

*Matthew J. Fisher*  
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

905-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8221

ARS Sample ID: ARS2-10-00037-008

Sample Collection Date: 01/29/10 11:29

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

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	34.55	28.74	37.10	29.05		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	24.12	13.77	18.25	14.08		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.08	0.15	0.13	0.15		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	-0.95	-18.05	3.58	-18.05		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.15	0.22	0.13	0.22		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.13	0.14	0.09	0.14		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	0.19	0.20	0.08	0.20		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.00	13.41	0.13	13.41		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.85	0.62	0.17	0.62		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	2.50	1.03	0.34	1.04		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	0.15	0.23	0.20	0.23		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	2.90	2.83	1.37	2.89		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.52	0.42	0.14	0.42		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 1.19

*Matthew J. Fisher*  
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: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8222

ARS Sample ID: ARS2-10-00037-009

Sample Collection Date: 01/29/10 11:46

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	Min	Max	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	29.37	27.61	37.28	27.84		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	31.02	14.58	18.65	15.06		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	14.47	5.22	1.07	5.24		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.00	7.00	0.07	7.00		nCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.15	0.14	0.05	0.14		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	0.37	0.20	0.04	0.20		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.00	7.28	0.08	7.28		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.24	0.35	0.06	0.35		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	1.38	0.68	0.19	0.68		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	0.73	0.40	0.11	0.40		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	4.49	3.19	1.20	3.35		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	0.08	0.16	0.08	0.16		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 2.52

*Matthew J. Edger*  
Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # EB755B



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8223

ARS Sample ID: ARS2-10-00037-010

Sample Collection Date: 01/29/10 13:48

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	Yell	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	11.82	18.28	31.19	18.34		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	26.60	13.04	19.36	13.50		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	-0.84	-15.23	3.14	-15.23		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.06	0.09	0.11	0.09		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.12	0.12	0.08	0.12		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-137	0.03	0.09	0.07	0.09		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.00	11.77	0.13	11.77		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	1.15	0.44	0.11	0.45		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	1.89	1.22	0.30	1.22		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-235	2.80	1.31	0.24	1.31		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	5.08	4.81	1.57	5.20		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	-0.01	11.45	0.05	11.45		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 2.16

  
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: ARS2-10-00037

Request or PO Number:

Client Sample ID: RE15-10-8224

ARS Sample ID: ARS2-10-00037-011

Sample Collection Date: 01/29/10 14:14

Date Received: 02/01/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/03/10 08:24

Analysis Description	Analysis Results	Analysis Error +/- %	MDC	TPI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	14.97	19.09	28.72	19.18		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
GROSS BETA	24.18	13.96	19.14	14.27		pCi/g	EPA 900.0M	2/2/2010	NP	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
K-40	-0.63	-7.53	1.81	-7.53		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CO-60	0.00	8.57	0.09	8.57		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
CS-134	0.00	0.00	0.06	0.00		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
LS-137	0.00	0.09	0.05	0.09		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
EU-152	0.00	8.91	0.10	8.91		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
PB-212	0.63	0.32	0.11	0.32		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
RA-228	-0.10	86.02	0.23	86.02		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-238	1.18	0.63	0.13	0.63		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
U-236	2.49	4.64	1.11	2.69		pCi/g	EPA 901.1M	2/2/2010	NP	N/A
AM-241	-0.01	17.87	0.04	17.87		pCi/g	EPA 901.1M	2/2/2010	NP	N/A

NOTES: % Moisture: 1.67

*M. A. Eden*  
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 excess than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # EB7558

## DATA VALIDATION COVER SHEET

5121-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1545 VALIDATION DATE: 03/22/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Peter Steves 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):

1. It should be noted that the parent samples for the aqueous QC analyses were from other LANL RNs. No sample data were qualified as a result.


Reviewed by: Susan BallLevel: IDate: 3/23/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_


Mr. Peter Steves

DATE: 03/22/10




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

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

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

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

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only  557.7342

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

Client Sample No.

RE15-10-8170

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250068

Extraction Type: Solid Prep

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	.607	2.43	0.831	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate Isotope Ratio			3.19			1	23-FEB-10 19:33	per0223053a
14797-73-0	Perchlorate-101	.607	2.43	0.836	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate-O(18)			5.52	ug/kg		1	23-FEB-10 19:33	per0223053a

<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 %Solids  
Aliquot

P.S. 3/22/10

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: 950068  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8169  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545  
 GEL Sample ID: 246055002  
 Date Filtered: 18-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 85

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:57	per0223056a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate-O(18)			5.33	ug/kg		1	23-FEB-10 19:57	per0223056a

<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 %Solids  
 Aliquot

P.S. 3/22/10

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: 250068  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8171  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545  
 GEL Sample ID: 246055003  
 Date Filtered: 18-FEB-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 %Solids: 88  
 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	.568	2.27	1.70	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate Isotope Ratio			3.11			1	23-FEB-10 20:05	per0223057a
14797-73-0	Perchlorate-101	.568	2.27	1.75	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate-O(18)			5.83	ug/kg		1	23-FEB-10 20:05	per0223057a

<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 %Solids  
 Aliquot

P.S. 3/22/10

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: 950068  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8168  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545  
 GEL Sample ID: 246055004  
 Date Filtered: 18-FEB-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 % Solids: 79

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	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:13	per0223058a
14797-73-0	Perchlorate-101	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate-O(18)			5.65	ug/kg		1	23-FEB-10 20:13	per0223058a

<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

P.S. 3/22/10

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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8222

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:21	per0223059a
14797-73-0	Perchlorate-101	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate-O(18)			5.70	ug/kg		1	23-FEB-10 20:21	per0223059a

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

P.S. 3/22/10



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: 250068  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8221  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545  
 GEL Sample ID: 246055006  
 Date Filtered: 18-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 87

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:29	per0223060a
14797-73-0	Perchlorate-101	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate-O(18)			5.38	ug/kg		1	23-FEB-10 20:29	per0223060a

<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

P.S. 3/22/10

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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8220

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:02	per0223064a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 21:02	per0223064a

<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

P.S. 3/22/10

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: 250068

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8223

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 81

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	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:10	per0223065a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate-O(18)			5.62	ug/kg		1	23-FEB-10 21:10	per0223065a

<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

P.S. 3/22/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8224

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055009

Date Filtered: 18-FEB-10

Injection Volume (mL): 20

%Solids: 84

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.595	2.38	0.764	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 21:18	per0223066a
14797-73-0	Perchlorate-101	.595	2.38	0.756	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate-O(18)			5.45	ug/kg		1	23-FEB-10 21:18	per0223066a

<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: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8233

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056001

Date Filtered: 07-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	08-FEB-10 21:26	per0208070a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:26	per0208070a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:26	per0208070a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 21:26	per0208070a

<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: 250027  
 Extraction Type: Filter/DAI  
 Sample Volume/Weight: 10.0 mL  
 Concentrated Extract Volume: 10.0  
 Client Sample No. RE15-10-8231  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545-1  
 GEL Sample ID: 246056002  
 Date Filtered: 07-FEB-10  
 Injection Volume (uL): 20  
 %Solids:

CAS No.	Analyte <sup>A</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	08-FEB-10 21:32	per0208071a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:32	per0208071a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:32	per0208071a
	Perchlorate-O(18)			0.474	ug/L		1	08-FEB-10 21:32	per0208071a

<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  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  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: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8230

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056003

Date Filtered: 07-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	08-FEB-10 21:39	per0208072a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:39	per0208072a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:39	per0208072a
	Perchlorate-O(18)			0.477	ug/L		1	08-FEB-10 21:39	per0208072a

<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

P.S. 3/22/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: WATER  
 Extraction Batch ID: 950027  
 Extraction Type: Filter/DAI  
 Sample Volume/Weight: 10.0 mL  
 Concentrated Extract Volume: 10.0  
 Client Sample No. RE15-10-8232  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545-1  
 GEL Sample ID: 246056004  
 Date Filtered: 07-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	08-FEB-10 22:05	per0208076a
	Perchlorate Isotope Ratio						1	08-FEB-10 22:05	per0208076a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 22:05	per0208076a
	Perchlorate-O(18)			0.475	ug/L		1	08-FEB-10 22:05	per0208076a

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



## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1545 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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):

- The CCV %Ds were >20% with a positive bias for PETN; 2-amino-4,6-dinitrotoluene; 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene. The associated sample results were NDs and, thus, were not qualified.
- 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.

Reviewed by: Susan Ball


Level: I

Date: 3/23/10


VALIDATOR'S SIGNATURE: \_\_\_\_\_

Mr. Peter Steves

DATE: 03/22/10

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"/>	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 type="checkbox"/>	<input checked="" 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**

5122-2

**LC/MS/MS High Explosive 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"/>	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input type="checkbox"/>	<input checked="" 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****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 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: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304182a

Date Analyzed: 08-MAR-10 08:16

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260128.wiff

Date Analyzed: 28-FEB-10 00:08

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

P.S. 3/22/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304188a

Date Analyzed: 08-MAR-10 11:13

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

P.S. 3/22/10



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260131.wiff

Date Analyzed: 28-FEB-10 00:55

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304189a

Date Analyzed: 08-MAR-10 11:43

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260132.wiff

Date Analyzed: 28-FEB-10 01:11

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304190a

Date Analyzed: 08-MAR-10 12:12

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260133.wiff

Date Analyzed: 28-FEB-10 01:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	360	J
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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304191a

Date Analyzed: 08-MAR-10 12:42

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

P.S. 3/22/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 248892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260134.wiff

Date Analyzed: 28-FEB-10 01:42

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304192a

Date Analyzed: 08-MAR-10 13:11

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

P.S. 3/22/10



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260135.wiff

Date Analyzed: 28-FEB-10 01:58

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304193a

Date Analyzed: 08-MAR-10 13:41

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260139.wiff

Date Analyzed: 28-FEB-10 03:01

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304194a

Date Analyzed: 08-MAR-10 14:10

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260140.wiff

Date Analyzed: 28-FEB-10 03:17

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

P.S. 3/22/10

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304195a

Date Analyzed: 08-MAR-10 14:40

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

P.S. 3/22/10

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260141.wiff

Date Analyzed: 28-FEB-10 03:32

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

P.S. 3/22/10

## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1545 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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):

- It should be noted that the MS/MSD analyses were performed on a LANL parent 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: Susan Ball

Level: I


Date: 3/23/10

VALIDATOR'S SIGNATURE:


Mr. Peter Steves

DATE: 03/22/10



ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5116-2</b>  <b>Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) 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 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 SummarySDG Number: 10-1545  
Lab Sample ID: 246055005Date Collected: 01/29/2010 12:00  
Date Received: 02/03/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.I  
Analyst: JAOC  
Allquot: 30.18 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 25.8  
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	4.46	ug/kg	1.49	4.46	1
11104-28-2	Aroclor-1221	U	4.46	ug/kg	1.49	4.46	1
11141-16-5	Aroclor-1232	U	4.46	ug/kg	1.49	4.46	1
53469-21-9	Aroclor-1242	U	4.46	ug/kg	1.49	4.46	1
12672-29-6	Aroclor-1248	U	4.46	ug/kg	1.49	4.46	1
11097-69-1	Aroclor-1254		33.2	ug/kg	1.49	4.46	2
11096-82-5	Aroclor-1260		10.3	ug/kg	1.49	4.46	2

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

Records Use only

**Section I.**REQUEST NUMBER: 10-1545 VALIDATION DATE: 03/22/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Peter Steves 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): _____ |  |   |   |


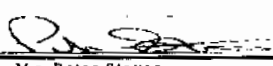
**Section II. Completeness Check**


- | 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):

- In the solid ICB/CCBs, Pb and Sb were detected. The Sb results for samples RE15-10-8168 and -8220 through -8223 were NDs and, thus, were not qualified. The Sb result for sample -8171 was a detect  $\leq 5X$  the greatest associated blank concentration and, thus, was qualified U,I4b. The remaining associated sample results were detects  $> 5X$  the greatest associated blank concentration and, thus, were not qualified. In the aqueous ICB/CCBs, Tl was detected. The associated result for sample -8231 was a detect  $\leq 5X$  the greatest associated blank concentration and, thus, was qualified U,I4b. The remaining associated Tl sample results were NDs and, thus, were not qualified.
- In the FR blanks, samples -8230 through -8233, which were associated with all samples, Al, Ba, Ca, Fe, Pb, Mn, K, Na and Cr were detected. The Na results for samples -8168, -8222, -8221 and -8223 results were detects  $\leq 5X$  the greatest associated FR concentration and, thus, were qualified U,I4d. The remaining associated sample results were detects  $> 5X$  the FR blank concentration and, thus, were not qualified.
- The solid MS %Rs were  $>$  the laboratory UAL for Ba, Ca, Mg, Mn, K and Zn. The associated sample results were detects and, thus, were qualified J+,I6b. Also, the solid MS %Rs were  $>$  the laboratory UAL for Al, Sb and Pb. However, the associated parent sample concentrations were  $> 4X$  the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.
- The solid RPD between the duplicate and its parent sample for Pb and V were  $> 35\%$ , and the duplicate and parent sample results were  $\geq 5X$  the RLs. The associated sample results were detects and, thus, were qualified J,I10a.


Reviewed by: Susan BallLevel: IDate: 3/23/10

DATA VALIDATION COVER SHEET	
5118-1	Records Use only
Data Validation Cover Sheet	 Los Alamos NATIONAL LABORATORY FEB. 1945
VALIDATOR'S SIGNATURE:  Mr. Peter Steves	
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Metals Interference check sample percent recover value is <50%.	R, I2	J-, I2




METALS ANALYTICAL DATA VALIDATION CHECKLIST	
<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>	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"/>	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was $<$ the LAL but $>10\%$ . Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

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

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: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055001

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8170

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3200000	ug/kg	*	8090	23800	23800	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-36-0	Antimony	243000	ug/kg	*	393	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-38-2	Arsenic	3630	ug/kg		234	1170	1170	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-39-3	Barium J+,I6b	49500	ug/kg	*N	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-41-7	Beryllium	470	ug/kg		234	117	117	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-43-9	Cadmium	313	ug/kg	J	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-70-2	Calcium J+,I6b	1550000	ug/kg	*N	9520	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-47-3	Chromium	6340	ug/kg	*	178	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-48-4	Cobalt	2210	ug/kg		178	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-50-8	Copper	9110	ug/kg		357	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-89-6	Iron	10500000	ug/kg	*	9520	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-92-1	Lead J,I10a	63700000	ug/kg	*	14900	59500	59500	50	P	HSC	03/01/10 20:10	030110A-2	949334
7439-95-4	Magnesium J+,I6b	749000	ug/kg	*N	10100	35700	35700	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-96-5	Manganese J+,I6b	177000	ug/kg	*N	238	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-97-6	Mercury	14.3	ug/kg	*N	4.14	12.2	12.2	1	AV	JXL1	02/22/10 10:24	02210S1-4	951546
7440-02-0	Nickel	5230	ug/kg		117	468	468	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-09-7	Potassium J+,I6b	726000	ug/kg	*N	7610	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7782-49-2	Selenium	1170	ug/kg	U	586	1170	1170	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-22-4	Silver	743	ug/kg	*	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-23-5	Sodium	116000	ug/kg		8330	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-28-0	Thallium	107	ug/kg	J	70.3	234	234	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-62-2	Vanadium J,I10a	9990	ug/kg	*	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-66-6	Zinc J+,I6b	206000	ug/kg	*N	393	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.598	g	30	mL	02/19/10	TXB3

P.S. 3/22/10

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055002

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8169

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13900000	ug/kg	*	6910	20300	20300	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-36-0	Antimony	1760	ug/kg	*	335	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-38-2	Arsenic	3280	ug/kg		211	1050	1050	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-39-3	Barium J+,16b	173000	ug/kg	*N	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-41-7	Beryllium	1560	ug/kg		21.1	105	105	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-43-9	Cadmium	226	ug/kg	J	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-70-2	Calcium J+,16b	2480000	ug/kg	*N	8130	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-47-3	Chromium	17400	ug/kg	*	152	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-48-4	Cobalt	5160	ug/kg		152	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-50-8	Copper	8100	ug/kg		305	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-89-6	Iron	12500000	ug/kg	*	8130	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-92-1	Lead J,110a	180000	ug/kg	*	254	1020	1020	1	P	HSC	03/01/10 20:58	030110A-2	949334
7439-95-4	Magnesium J+,16b	1890000	ug/kg	*N	8640	30500	30500	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-96-5	Manganese J+,16b	282000	ug/kg	*N	203	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-97-6	Mercury	18.8	ug/kg	*N	4.38	12.9	12.9	1	AV	JXL1	02/22/10 10:35	022210S1-4	951546
7440-02-0	Nickel	11500	ug/kg		105	421	421	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-09-7	Potassium J+,16b	1690000	ug/kg	*N	6510	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7782-49-2	Selenium	2110	ug/kg	U	1050	2110	2110	4	MS	RMJ	02/26/10 02:28	100225-3	949336
7440-22-4	Silver	508	ug/kg	U*	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-23-5	Sodium	71900	ug/kg		7110	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-28-0	Thallium	278	ug/kg		63.2	211	211	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-62-2	Vanadium J,110a	26600	ug/kg	*	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-66-6	Zinc J+,16b	24500	ug/kg	*N	335	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.578	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.558	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.547	g	30	mL	02/19/10	TXB3

P.S. 3/22/10

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055003

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8171

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15100000	ug/kg	*	7000	20600	20600	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-36-0	Antimony U,14b	414	ug/kg	J*	340	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-38-2	Arsenic	2720	ug/kg		211	1050	1050	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-39-3	Barium J+,16b	180000	ug/kg	*N	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-41-7	Beryllium	1130	ug/kg		21.1	105	105	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-43-9	Cadmium	159	ug/kg	J	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-70-2	Calcium J+,16b	2240000	ug/kg	*N	8230	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-47-3	Chromium	15500	ug/kg	*	154	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-48-4	Cobalt	6750	ug/kg		154	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-50-8	Copper	8990	ug/kg		309	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-89-6	Iron	14700000	ug/kg	*	8230	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-92-1	Lead J,110a	90600	ug/kg	*	257	1030	1030	1	P	HSC	03/01/10 21:05	030110A-2	949334
7439-95-4	Magnesium J+,16b	2400000	ug/kg	*N	8750	30900	30900	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-96-5	Manganese J+,16b	364000	ug/kg	*N	206	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-97-6	Mercury	19.2	ug/kg	*N	4.39	12.9	12.9	1	AV	JXL1	02/22/10 10:37	022110S1-4	951546
7440-02-0	Nickel	9150	ug/kg		105	422	422	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-09-7	Potassium J+,16b	2060000	ug/kg	*N	6590	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7782-49-2	Selenium	1050	ug/kg	U	527	1050	1050	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-22-4	Silver	515	ug/kg	U*	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-23-5	Sodium	1030000	ug/kg		7200	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-28-0	Thallium	223	ug/kg		63.2	211	211	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-62-2	Vanadium J,110a	30900	ug/kg	*	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-66-6	Zinc J+,16b	37200	ug/kg	*N	340	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.552	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.539	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.528	g	30	mL	02/19/10	TXB3

P.S. 3/22/10

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055004

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8168

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4640000	ug/kg	*	7860	23100	23100	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-36-0	Antimony	1160	ug/kg	U*	381	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-38-2	Arsenic	1270	ug/kg		245	1230	1230	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-39-3	Barium J+,I6b	83300	ug/kg	*N	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-41-7	Beryllium	423	ug/kg		24.5	123	123	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-43-9	Cadmium	122	ug/kg	J	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-70-2	Calcium J+,I6b	3110000	ug/kg	*N	9240	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-47-3	Chromium	12800	ug/kg	*	173	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-48-4	Cobalt	3140	ug/kg		173	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-50-8	Copper	6580	ug/kg		347	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-89-6	Iron	8740000	ug/kg	*	9240	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-92-1	Lead J,I10a	45900	ug/kg	*	289	1160	1160	1	P	HSC	03/01/10 21:12	030110A-2	949334
7439-95-4	Magnesium J+,I6b	1240000	ug/kg	*N	9820	34700	34700	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-96-5	Manganese J+,I6b	242000	ug/kg	*N	231	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-97-6	Mercury	14.4	ug/kg	U*N	4.91	14.4	14.4	1	AV	JXL1	02/22/10 10:39	022210S1-4	951546
7440-02-0	Nickel	4940	ug/kg		123	491	491	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-09-7	Potassium J+,I6b	1090000	ug/kg	*N	7390	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7782-49-2	Selenium	1230	ug/kg	U	614	1230	1230	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-22-4	Silver	578	ug/kg	U*	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-23-5	Sodium U,I4d	83000	ug/kg		8090	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-28-0	Thallium	84.2	ug/kg	J	73.6	245	245	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-62-2	Vanadium J,I10a	18800	ug/kg	*	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-66-6	Zinc J+,I6b	23500	ug/kg	*N	381	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.545	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.513	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055005

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8222

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12900000	ug/kg	*	8670	25500	25500	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-36-0	Antimony	1280	ug/kg	U*	421	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-38-2	Arsenic	5360	ug/kg		264	1320	1320	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-39-3	Barium J+,16b	168000	ug/kg	*N	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-41-7	Beryllium	998	ug/kg		26.4	132	132	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-43-9	Cadmium	140	ug/kg	J	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-70-2	Calcium J+,16b	2350000	ug/kg	*N	10200	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-47-3	Chromium	11900	ug/kg	*	191	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-48-4	Cobalt	5810	ug/kg		191	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-50-8	Copper	8950	ug/kg		383	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-89-6	Iron	13700000	ug/kg	*	10200	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-92-1	Lead J,110a	72900	ug/kg	*	319	1280	1280	1	P	HSC	03/01/10 21:19	030110A-2	949334
7439-95-4	Magnesium J+,16b	2180000	ug/kg	*N	10800	38300	38300	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-96-5	Manganese J+,16b	332000	ug/kg	*N	255	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-97-6	Mercury	15.7	ug/kg	*N	4.66	13.7	13.7	1	AV	JXL	02/22/10 10:40	022210S1-4	951546
7440-02-0	Nickel	9020	ug/kg		132	528	528	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-09-7	Potassium J+,16b	2080000	ug/kg	*N	8160	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7782-49-2	Selenium	1320	ug/kg	U	660	1320	1320	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-22-4	Silver	638	ug/kg	U*	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-23-5	Sodium U,14d	106000	ug/kg		8930	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-28-0	Thallium	200	ug/kg	J	79.2	264	264	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-62-2	Vanadium J,110a	29000	ug/kg	*	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-66-6	Zinc J+,16b	30800	ug/kg	*N	421	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.528	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.59	g	30	mL	02/19/10	TXB3

P.S. 3/22/10



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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055006

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8221

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16900000	ug/kg	*	7210	21200	21200	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-36-0	Antimony	1060	ug/kg	U*	350	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-38-2	Arsenic	2830	ug/kg		221	1110	1110	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-39-3	Barium J+,I6b	190000	ug/kg	*N	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-41-7	Beryllium	1590	ug/kg		22.1	111	111	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-43-9	Cadmium	214	ug/kg	J	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-70-2	Calcium J+,I6b	2650000	ug/kg	*N	8480	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-47-3	Chromium	14800	ug/kg	*	159	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-48-4	Cobalt	5660	ug/kg		159	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-50-8	Copper	8100	ug/kg		318	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-89-6	Iron	13600000	ug/kg	*	8480	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-92-1	Lead J,I10a	45700	ug/kg	*	265	1060	1060	1	P	HSC	03/01/10 21:26	030110A-2	949334
7439-95-4	Magnesium J+,I6b	2370000	ug/kg	*N	9010	31800	31800	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-96-5	Manganese J+,I6b	290000	ug/kg	*N	212	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-97-6	Mercury	19.1	ug/kg	*N	4.47	13.2	13.2	1	AV	JXL1	02/22/10 10:42	022210S1-4	951546
7440-02-0	Nickel	11500	ug/kg		111	443	443	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-09-7	Potassium J+,I6b	2210000	ug/kg	*N	6790	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7782-49-2	Selenium	2210	ug/kg	U	1110	2210	2210	4	MS	RMJ	02/26/10 02:32	100225-3	949336
7440-22-4	Silver	530	ug/kg	U*	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-23-5	Sodium U,I4d	97100	ug/kg		7420	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-28-0	Thallium	273	ug/kg		66.4	221	221	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-62-2	Vanadium J,I10a	30000	ug/kg	*	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-66-6	Zinc J+,I6b	27400	ug/kg	*N	350	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.541	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055007

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8220

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10200000	ug/kg	*	7000	20600	20600	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-36-0	Antimony	1030	ug/kg	U*	340	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-38-2	Arsenic	2100	ug/kg		201	1000	1000	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-39-3	Barium J+,I6b	123000	ug/kg	*N	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-41-7	Beryllium	888	ug/kg		20.1	100	100	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-43-9	Cadmium	118	ug/kg	J	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-70-2	Calcium J+,I6b	1600000	ug/kg	*N	8240	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-47-3	Chromium	14500	ug/kg	*	154	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-48-4	Cobalt	3710	ug/kg		154	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-50-8	Copper	5820	ug/kg		309	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-89-6	Iron	11600000	ug/kg	*	8240	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-92-1	Lead J,I10a	41200	ug/kg	*	257	1030	1030	1	P	HSC	03/01/10 21:33	030110A-2	949334
7439-95-4	Magnesium J+,I6b	1610000	ug/kg	*N	8750	30900	30900	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-96-5	Manganese J+,I6b	292000	ug/kg	*N	206	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-97-6	Mercury	12	ug/kg	J*N	4.15	12.2	12.2	1	AV	JXL1	02/22/10 10:44	022210S1-4	951546
7440-02-0	Nickel	7790	ug/kg		100	402	402	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-09-7	Potassium J+,I6b	1210000	ug/kg	*N	6590	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-22-4	Silver	515	ug/kg	U*	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-23-5	Sodium	102000	ug/kg		7210	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-28-0	Thallium	166	ug/kg	J	60.3	201	201	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-62-2	Vanadium J,I10a	19800	ug/kg	*	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-66-6	Zinc J+,I6b	34800	ug/kg	*N	340	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.532	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.545	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.539	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055008

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8223

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7670000	ug/kg	*	8120	23900	23900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-36-0	Antimony	1190	ug/kg	U*	394	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-38-2	Arsenic	1900	ug/kg		243	1210	1210	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-39-3	Barium J+,16b	128000	ug/kg	*N	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-41-7	Beryllium	754	ug/kg		243	121	121	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-43-9	Cadmium	191	ug/kg	J	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-70-2	Calcium J+,16b	2810000	ug/kg	*N	9550	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-47-3	Chromium	9860	ug/kg	*	179	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-48-4	Cobalt	4110	ug/kg		179	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-50-8	Copper	8380	ug/kg		358	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-89-6	Iron	10700000	ug/kg	*	9550	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-92-1	Lead J,110a	48200	ug/kg	*	299	1190	1190	1	P	HSC	03/01/10 21:40	030110A-2	949334
7439-95-4	Magnesium J+,16b	1570000	ug/kg	*N	10200	35800	35800	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-96-5	Manganese J+,16b	293000	ug/kg	*N	239	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-97-6	Mercury	9.51	ug/kg	J*N	4.49	13.2	13.2	1	AV	JXL1	02/22/10 10:45	0221051-4	951546
7440-02-0	Nickel	7060	ug/kg		121	485	485	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-09-7	Potassium J+,16b	1710000	ug/kg	*N	7640	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7782-49-2	Selenium	1210	ug/kg	U	607	1210	1210	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-22-4	Silver	164	ug/kg	J*	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-23-5	Sodium U,14d	55100	ug/kg		8360	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-28-0	Thallium	150	ug/kg	J	72.8	243	243	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-62-2	Vanadium J,110a	21400	ug/kg	*	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-66-6	Zinc J+,16b	30300	ug/kg	*N	394	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.52	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.512	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.564	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055009

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8224

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3060000	ug/kg	*	7930	23300	23300	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-36-0	Antimony	176000	ug/kg	*	385	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-38-2	Arsenic	4000	ug/kg		230	1150	1150	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-39-3	Barium J+,I6b	52900	ug/kg	*N	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-41-7	Beryllium	460	ug/kg		23	115	115	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-43-9	Cadmium	273	ug/kg	J	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-70-2	Calcium J+,I6b	1430000	ug/kg	*N	9330	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-47-3	Chromium	5950	ug/kg	*	175	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-48-4	Cobalt	1910	ug/kg		175	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-50-8	Copper	7440	ug/kg		350	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-89-6	Iron	7910000	ug/kg	*	9330	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-92-1	Lead J,I10a	66500000	ug/kg	*	29200	117000	117000	100	P	HSC	03/01/10 21:47	030110A-2	949334
7439-95-4	Magnesium J+,I6b	660000	ug/kg	*N	9910	35000	35000	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-96-5	Manganese J+,I6b	200000	ug/kg	*N	233	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-97-6	Mercury	18.2	ug/kg	*N	4.24	12.5	12.5	1	AV	JXL	02/22/10 10:50	022210S1-4	951546
7440-02-0	Nickel	4590	ug/kg		115	459	459	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-09-7	Potassium J+,I6b	717000	ug/kg	*N	7460	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7782-49-2	Selenium	1150	ug/kg	U	574	1150	1150	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-22-4	Silver	411	ug/kg	J*	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-23-5	Sodium	135000	ug/kg		8160	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-28-0	Thallium	112	ug/kg	J	68.9	230	230	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-62-2	Vanadium J,I10a	10100	ug/kg	*	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-66-6	Zinc J+,I6b	194000	ug/kg	*N	385	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.572	g	30	mL	02/19/10	TXB3

P.S. 3/22/10

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056001

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8233

LEVEL: Low

DATE RECEIVED 03-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	103	ug/L	J	68	200	200	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-39-3	Barium	1.47	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-70-2	Calcium	53.6	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-47-3	Chromium	2.5	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-89-6	Iron	75.1	ug/L	J	30	100	100	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-92-1	Lead	1.21	ug/L	J	0.5	2	2	1	MS	PRB	03/02/10 14:56	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-96-5	Manganese	3	ug/L	J	1	5	5	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:14	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-09-7	Potassium	174	ug/L		50	150	150	1	P	HSC	02/11/10 20:21	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-23-5	Sodium	171	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:56	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:21	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

P.S. 3/22/10

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056002

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8231

LEVEL: Low

DATE RECEIVED 03-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	02/11/10 20:35	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-70-2	Calcium	53.1	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	03/02/10 14:45	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:22	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-09-7	Potassium	159	ug/L		50	150	150	1	P	HSC	02/11/10 20:35	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-23-5	Sodium	126	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-28-0	Thallium U,14b	0.413	ug/L	J	0.3	1	1	1	MS	PRB	03/02/10 14:45	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:35	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

P.S. 3/22/10

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056003

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8230

LEVEL: Low

DATE RECEIVED 03-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	265	ug/L		68	200	200	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-39-3	Barium	2.15	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-70-2	Calcium	109	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-89-6	Iron	153	ug/L		30	100	100	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	03/02/10 14:47	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-96-5	Manganese	2.91	ug/L	J	1	5	5	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:24	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-09-7	Potassium	203	ug/L		50	150	150	1	P	HSC	02/11/10 20:39	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-23-5	Sodium	186	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:47	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:39	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

P.S. 3/22/10

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056004

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8232

LEVEL: Low

DATE RECEIVED 03-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	02/11/10 20:42	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-92-1	Lead	3.14	ug/L		0.5	2	2	1	MS	PRB	03/02/10 14:49	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:26	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-09-7	Potassium	142	ug/L	J	50	150	150	1	P	HSC	02/11/10 20:42	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-23-5	Sodium	117	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:49	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:42	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

P.S. 3/22/10



## DATA VALIDATION COVER SHEET

5120-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1545 VALIDATION DATE: 03/22/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves 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 | PESTICIDES/POLYCHLORINATED BIPHENYLS         |
| <input type="checkbox"/> OTHER (DESCRIBE): Total CN only |  |   |  |

## 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. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs. No sample data were qualified as a result.


Reviewed by: Susan Ball Level: I Date: 3/23/10

VALIDATOR'S SIGNATURE: ## DATE: 03/22/10


Mr. Peter Steves

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

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
<input 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)

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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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8170  
Sample ID: 246055001  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 17.6%

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	69.9	257	ug/kg	1	AXC2	02/12/10	1256	948946	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	02/11/10	1531	948945

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8169  
Sample ID: 246055002  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 14.9%

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	78.3	288	ug/kg	1	AXC2	02/12/10	1257	948946	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	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8171  
Sample ID: 246055003  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 12%

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	02/12/10	1258	948946	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	02/11/10	1531	948945

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8168  
Sample ID: 246055004  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 20.6%

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	77.9	286	ug/kg	1	AXC2	02/12/10	1259	948946	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	02/11/10	1531	948945

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8222  
Sample ID: 246055005  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 25.8%

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	80.3	295	ug/kg	1	AXC2	02/12/10	1300	948946	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	02/11/10	1531	948945

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8221  
Sample ID: 246055006  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 12.8%

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	78.0	287	ug/kg	1	AXC2	02/12/10	1301	948946	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	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8220  
Sample ID: 246055007  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 8.71%

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	71.6	263	ug/kg	1	AXC2	02/12/10	1302	948946	1

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8223  
Sample ID: 246055008  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 19.5%

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	72.8	268	ug/kg	1	AXC2	02/12/10	1306	948946	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	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8224  
Sample ID: 246055009  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 15.9%

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	77.8	286	ug/kg	1	AXC2	02/12/10	1319	948946	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	02/11/10	1531	948945

### 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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8233  
Sample ID: 246056001  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client

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 "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/08/10	1510	948940	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	02/05/10	1408	948939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

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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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8231  
Sample ID: 246056002  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-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	02/08/10	1511	948940	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

### 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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8230  
Sample ID: 246056003  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client

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 "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/08/10	1512	948940	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	02/05/10	1408	948939

### 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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8232  
Sample ID: 246056004  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-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	02/08/10	1513	948940	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	02/05/10	1408	948939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

P.S. 3/22/10

Tuesday, February 02, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1545C

LOS ALAMOS

REQUEST NUMBER: 10-1545

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/4/2010

General Engineering Laboratories, Inc.,  
Charleston, SC,

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2460557, 2460567

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8170	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8170	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8169	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8169	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8171	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8171	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8168	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8168	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8222	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8222	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8221	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8220	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8223	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8224	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8233	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8233	1	POLY	SW-846:6850	Ice	W
RE15-10-8233	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8231	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8231	1	POLY	SW-846:6850	Ice	W
RE15-10-8231	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8230	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8230	1	POLY	SW-846:6850	Ice	W
RE15-10-8230	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8232	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8232	1	POLY	SW-846:6850	Ice	W
RE15-10-8232	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8220	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8223	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8224	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8221	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

7/20 7/2/10 3:00 Greg Tyler 7/3/10 0855 Page 2 of 2  
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

10-1545

Tuesday, February 02, 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: 10-1545

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/2/2010

TURNAROUND/REPORT DUE: 3/4/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ERM CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-60108	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	

Tuesday, February 02, 2010

REQUEST NUMBER: 10-1545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-6010B	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846-6020	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846-6350	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846-8082	1	RE15-10-8222	R	1/29/2010	
	SW-846-8321A_MOD	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
	SW-846-9012A	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	

REQUEST NUMBER: 10-1545

Tuesday, February 02, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-9012A					
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	

Final Page of REQUEST NUMBER 10-1545



February 09, 2010

www.gel.com

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

Re: LANL ER Project  
Work Orders: 246055 246056  
SDG: 10-1545

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 03, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis  
Project Manager

Purchase Order: 72733-001-09  
Chain of Custody: 10-1545  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 246055 and 246056**  
**SDG: 10-1545**



## Table of Contents

<b>Case Narrative.....</b>	<b>1</b>
<b>Chain of Custody and Supporting Documentation .....</b>	<b>5</b>
<b>Data Review Qualifier Flag Definition Sheet .....</b>	<b>14</b>
<b>LC/MS/MS Perchlorate Analysis.....</b>	<b>16</b>
Sample Data Summary .....	21
Quality Control Summary.....	31
Sample Data .....	59
Standards Data.....	78
Quality Control .....	100
Miscellaneous Data .....	109
<b>LC/MS/MS Perchlorate Analysis.....</b>	<b>116</b>
Sample Data Summary .....	121
Quality Control Summary.....	126
Sample Data .....	155
Standards Data.....	164
Quality Control .....	188
Miscellaneous Data .....	193
<b>LC/MS/MS Explosives Analysis.....</b>	<b>201</b>
Sample Data Summary .....	207
Quality Control Summary.....	226
Sample Data .....	379
Standards Data.....	443
Quality Control Data .....	696
Miscellaneous Data .....	727
<b>GC Semivolatile PCB Analysis .....</b>	<b>743</b>
Sample Data Summary .....	749
Quality Control Summary.....	751
Sample Data .....	757
Standards Data.....	765
Quality Control Data .....	823
Miscellaneous Data .....	836
<b>Metals Analysis .....</b>	<b>857</b>
Case Narrative .....	858
Sample Data Summary .....	864

Quality Control Summary.....	874
Standards .....	929
Raw Data.....	941
Miscellaneous .....	1295
<b>Metals Analysis .....</b>	<b>1335</b>
Case Narrative.....	1336
Sample Data Summary .....	1342
Quality Control Summary.....	1347
Standards .....	1394
Raw Data.....	1407
Miscellaneous .....	1657
<b>General Chemistry Analysis .....</b>	<b>1697</b>
Case Narrative.....	1698
Sample Data Summary .....	1703
Quality Control Summary.....	1714
Instrument QC Data Summary .....	1717
Cyanide, Total .....	1719
Miscellaneous .....	1735
<b>General Chemistry Analysis .....</b>	<b>1737</b>
Case Narrative.....	1738
Sample Data Summary .....	1743
Quality Control Summary.....	1749
Instrument QC Data Summary .....	1752
Cyanide, Total .....	1754

# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 246055 and 246056  
SDG # : 10-1545**

**February 09, 2010**

**Laboratory Identification:**

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

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 03, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

**Sample Identification** The laboratory received the following samples:

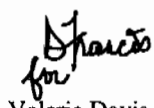
<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
246055001	RE15-10-8170
246055002	RE15-10-8169
246055003	RE15-10-8171
246055004	RE15-10-8168
246055005	RE15-10-8222
246055006	RE15-10-8221
246055007	RE15-10-8220
246055008	RE15-10-8223
246055009	RE15-10-8224
246056001	RE15-10-8233
246056002	RE15-10-8231
246056003	RE15-10-8230
246056004	RE15-10-8232

**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 and Perchlorates by LCMSMS.

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

A handwritten signature in black ink, appearing to read "for Valerie Davis".

Valerie Davis

Project Manager

**List of current GEL Certifications as of 09 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**

Tuesday, February 02, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1545C

**LOS ALAMOS**

REQUEST NUMBER: 10-1545

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/4/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2460557, 2460567

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8170	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8170	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8169	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8169	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8171	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8171	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8168	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8168	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8222	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8222	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8221	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8220	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8223	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8224	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8233	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8233	1	POLY	SW-846:6850	Ice	W
RE15-10-8233	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8231	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8231	1	POLY	SW-846:6850	Ice	W
RE15-10-8231	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8230	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8230	1	POLY	SW-846:6850	Ice	W
RE15-10-8230	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8232	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8232	1	POLY	SW-846:6850	Ice	W
RE15-10-8232	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8220	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8223	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8224	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8221	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:

Date Time

Received By:

Date Time



7/20 2/2/10 3:00 Greg Tyler 2/3/10 0855 Page 2 of 2

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name Signature

10-1545

Tuesday, February 02, 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: 10-1545  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/2/2010  
TURNAROUND/REPORT DUE: 3/4/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background  
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	

Tuesday, February 02, 2010

REQUEST NUMBER: 10-1545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846:6020	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846:6850	1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	
	SW-846:8082	1	RE15-10-8222	R	1/29/2010	
	SW-846:8321A_MOD	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	
		1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
	SW-846:9012A	1	RE15-10-8168	R	1/29/2010	
		1	RE15-10-8169	R	1/29/2010	
		1	RE15-10-8170	R	1/29/2010	
		1	RE15-10-8171	R	1/29/2010	
		1	RE15-10-8220	R	1/29/2010	
		1	RE15-10-8221	R	1/29/2010	

Tuesday, February 02, 2010

REQUEST NUMBER: 10-1545

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE15-10-8222	R	1/29/2010	
		1	RE15-10-8223	R	1/29/2010	
		1	RE15-10-8224	R	1/29/2010	
		1	RE15-10-8230	W	1/29/2010	
		1	RE15-10-8231	W	1/29/2010	
		1	RE15-10-8232	W	1/29/2010	
		1	RE15-10-8233	W	1/29/2010	

Final Page of REQUEST NUMBER 10-1545



## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL		SDG/ARCO/Work Order: 10-1545	
Received By: Greg Tyler		Date Received: 2/03/10	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 60cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags    blue ice    dry ice    none    other 1-3, 6C    11,12C
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: <b>No time on Chain of Custody.</b>
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

## Comments:

## Fed Ex Tracking Numbers:

7209 7849 8139 1C  
 7209 7849 8117 2C  
 7209 7849 8128 3C  
 7209 7849 8150 6C  
 7209 7849 8161 6C  
 7209 7849 8140 11C  
 7209 7849 8106 12C

PM (or PMA) review: Initials

Date

2/4/10

ORIGIN ID: SAFA (505) 665-9868  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02FEB10  
ACTMGT: 64.8 LB MON  
CAD: 0014176/CAFE2449

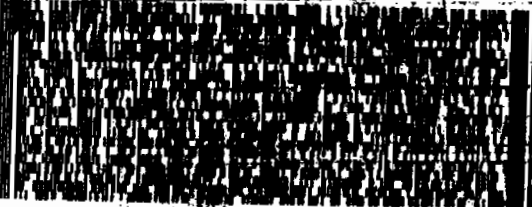
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 68010ANR3A05529E00

10



FedEx  
Express



2 of 2 WED - 03FEB A1  
PS# 7209 7849 8139  
283  
Matr# 7209 7849 8128 (8201)  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

CAD: 0014176/CAFE2449

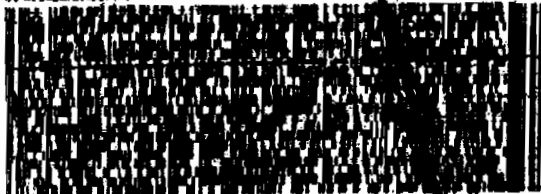
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 68010ANR3A05529E00

30



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Express



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29407  
SC-US  
CHS

ORIGIN ID: SAFA (505) 665-9868  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 02FEB10  
ACTMGT: 61.8 LB MON  
CAD: 0014176/CAFE2449

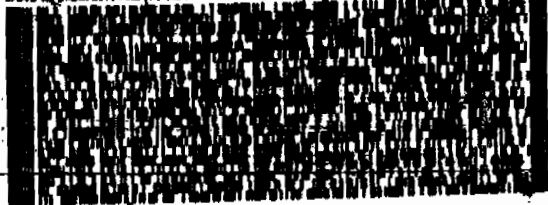
BILL SENDER

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2040 SAVAGE RD

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(843) 556-8171  
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PS# 7209 7849 8117  
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LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

CAD: 0014176/CAFE2449

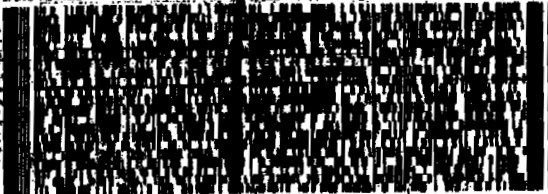
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CHS



ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS NM 87545  
UNITED STATES US

SHIP DATE: 02FEB10  
ACTWGT: 34.8 LB MAN  
CAD: 0014176/CAFE2448

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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS NM 87545  
UNITED STATES US

SHIP DATE: 02FEB10  
ACTWGT: 63.0 LB MAN  
CAD: 0014176/CAFE2449

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REF: 00010AMR3A05529E00



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Matr-N 7209 7849 8158 0201

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TRKN 7209 7849 8140  
0201

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PRIORITY OVERNIGHT

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SC-US  
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
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TAGG BLDG 1237 DPU 03  
LOS ALAMOS NM 87545  
UNITED STATES US

SHIP DATE: 02FEB10  
ACTWGT: 23.0 LB MAN  
CAD: 0014176/CAFE2449

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2 of 3  
MPS# 7209 7849 8106  
Matr-N 7209 7849 8091 0201

WED - 03FEB A1  
PRIORITY OVERNIGHT

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CHS

# **Data Review Qualifier Flag Definition Sheet**



## Data Review Qualifier Definitions

Qualifier    Explanation

\*    A quality control analyte recovery is outside of specified acceptance criteria

\*\*    Analyte is a surrogate compound

<    Result is less than value reported

>    Result is greater than value reported

^    RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

A    The TIC is a suspected aldol-condensation product

B    Target analyte was detected in the associated blank

B    Metals-Either presence of analyte detected in the associated blank, or  
MDL/IDL < sample value < PQL

BD    Results are either below the MDC or tracer recovery is low

C    Analyte has been confirmed by GC/MS analysis

D    Results are reported from a diluted aliquot of the sample

d    5-day BOD-The 2:1 depletion requirement was not met for this sample

E    Organics-Concentration of the target analyte exceeds the instrument calibration range

E    Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

H    Analytical holding time was exceeded

h    Preparation or preservation holding time was exceeded

J    Value is estimated

N    Metals-The Matrix spike sample recovery is not within specified control limits

N    Organics-Presumptive evidence based on mass spectral library search to make a tentative  
identification of the analyte (TIC). Quantitation is based on nearest internal standard  
response factor

N/A    Spike recovery limits do not apply. Sample concentration exceeds spike concentration  
by 4X or more

ND    Analyte concentration is not detected above the reporting limit

UI    Gamma Spectroscopy-Uncertain identification

X    Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y    QC Samples were not spiked with this compound

Z    Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

# LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1545**

**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:** 950071

**Prep Batch Number:** 950068

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246055001	RE15-10-8170
246055002	RE15-10-8169
246055003	RE15-10-8171
246055004	RE15-10-8168
246055005	RE15-10-8222
246055006	RE15-10-8221
246055007	RE15-10-8220
246055008	RE15-10-8223
246055009	RE15-10-8224
1202035664	Interference Check Sample (ICS)
1202035660	Method Blank (MB)
1202035661	Laboratory Control Sample (LCS)
1202035662	246055001(RE15-10-8170) Matrix Spike (MS)
1202035663	246055001(RE15-10-8170) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

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

**Calibration Information**

**Initial Calibration**

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

10-1545-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**

Sample 246055001 (RE15-10-8170) from was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

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

The MSD recoveries were within the established acceptance limits.

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

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

**Retention Time Standard Area Acceptance**

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

**Retention Time**

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

### **Technical Information**

#### **Holding Time Specifications**

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

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

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

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: Heather M. Moore Date: 02/28/10

10-1545-PERLCMS

Page 4 of 4

# SAMPLE DATA SUMMARY

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8170

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.607	2.43	0.831	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate Isotope Ratio			3.19			1	23-FEB-10 19:33	per0223053a
14797-73-0	Perchlorate-101	.607	2.43	0.836	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate-O(18)			5.52	ug/kg		1	23-FEB-10 19:33	per0223053a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8169

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:57	per0223056a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate-O(18)			5.33	ug/kg		1	23-FEB-10 19:57	per0223056a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8171

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.568	2.27	1.70	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate Isotope Ratio			3.11			1	23-FEB-10 20:05	per0223057a
14797-73-0	Perchlorate-101	.568	2.27	1.75	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate-O(18)			5.83	ug/kg		1	23-FEB-10 20:05	per0223057a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8168

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055004

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:13	per0223058a
14797-73-0	Perchlorate-101	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate-O(18)			5.65	ug/kg		1	23-FEB-10 20:13	per0223058a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8222

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:21	per0223059a
14797-73-0	Perchlorate-101	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate-O(18)			5.70	ug/kg		1	23-FEB-10 20:21	per0223059a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8221

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055006

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:29	per0223060a
14797-73-0	Perchlorate-101	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate-O(18)			5.38	ug/kg		1	23-FEB-10 20:29	per0223060a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8220

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 91.3

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:02	per0223064a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 21:02	per0223064a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8223

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:10	per0223065a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate-O(18)			5.62	ug/kg		1	23-FEB-10 21:10	per0223065a

<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: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8224

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.595	2.38	0.764	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 21:18	per0223066a
14797-73-0	Perchlorate-101	.595	2.38	0.756	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate-O(18)			5.45	ug/kg		1	23-FEB-10 21:18	per0223066a

<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): 10-1545

Extract Batch Code: 950068 Date Filtered: 18-FEB-10

Matrix: SOIL Sample ID: 1202035661

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.98	ug/kg	98.8		70 - 130
Perchlorate Isotope Ratio		3.1				-
Perchlorate-101	2.00	2.04	ug/kg	102		70 - 130
Perchlorate-O(18)		4.69	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): 10-1545

Extract Batch Code: 950068 Date Filtered: 18-FEB-10

Matrix: SOIL Sample ID: 1202035664

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.15	ug/kg	108		70 - 130
Perchlorate Isotope Ratio		3.35				
Perchlorate-101	2.00	2.06	ug/kg	103		70 - 130
Perchlorate-O(18)		4.72	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: Charliers W. Wilson

Page 40 of 134

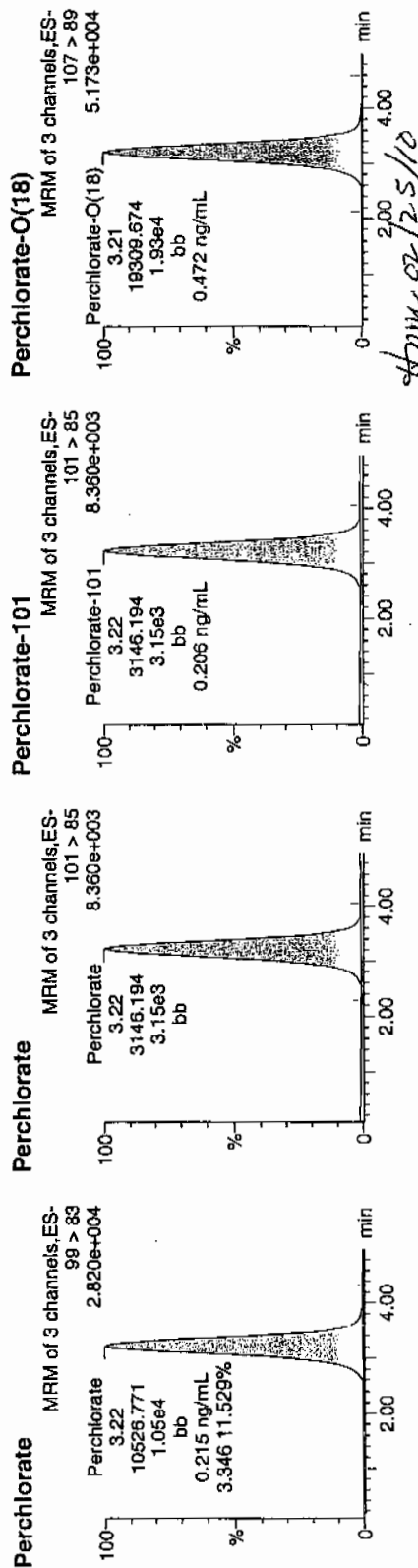
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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223040a  
Date: 23-Feb-2010  
Time: 17:48:41  
ID: 1202035664  
Vial: 2:1,C

02-24-10

1202035664 | 1202035664 | 1202035664



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035664	Perchlorate	99 > 83	3.22	10526.771	10526.771	bb			0.2153	107.63	7.63	1420.2...	3.35
1202035664	Perchlorate-101	101 > 85	3.22	3146.194	3146.194	bb			0.2063	103.14	3.14	910.460	
1202035664	Perchlorate-O(18)	107 > 89	3.21	19309.674	19309.674	bb			0.4719	94.38	-5.62	1264.2...	

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

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1545

Extract Batch Code: 950068

Date Extracted: 18-FEB-10

GEL MS/PS ID: 1202035662

Client ID: RE15-10-8170

GEL MSD/PSD ID: 1202035663

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.43	0.831	ug/kg	3.10	93.4		3.22	98.5		3.96		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.29			3.15			0			-
Perchlorate-101	2.43	0.836	ug/kg	3.02	89.9		3.28	101		8.42		30	75 - 125
Perchlorate-O(18)	0	5.52	ug/kg	5.61			5.61			.0629			-

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

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1545

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	23-FEB-10	per0223001a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223001a	IPB001
Perchlorate	0.00	0	NA	23-FEB-10	per0223002a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223002a	IPB001

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

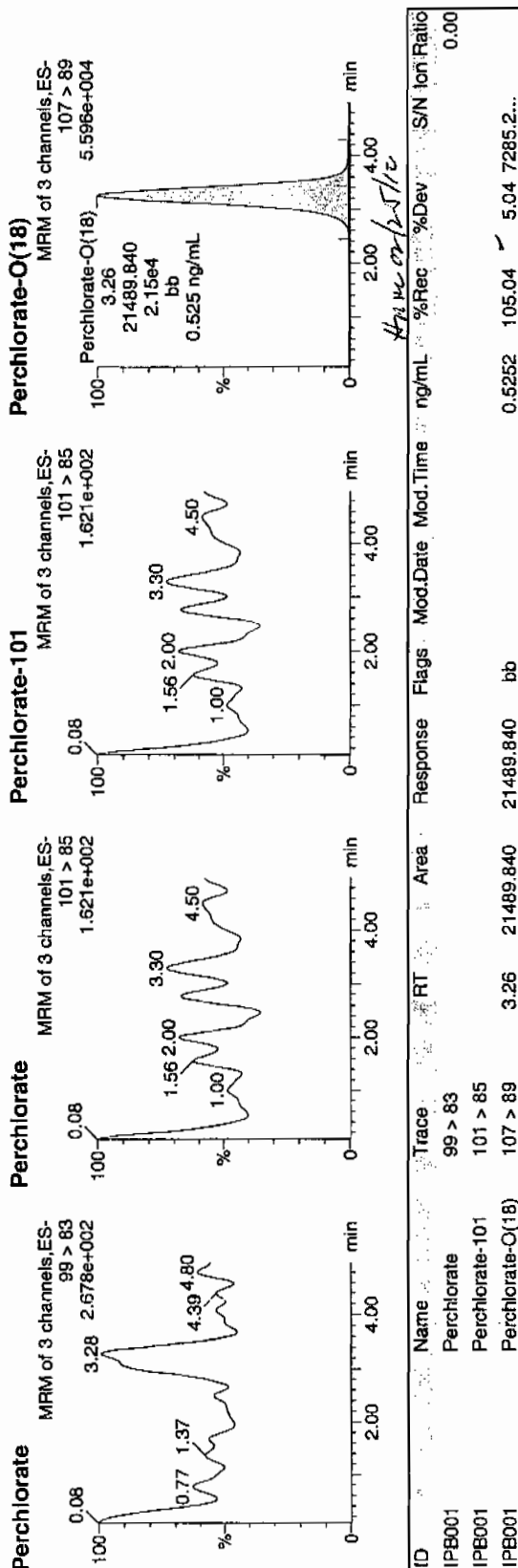
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

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Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

Name: per0223001a  
Date: 23-Feb-2010  
Time: 12:33:48  
ID: IPB001  
Vial: 1:1,A

0224-10



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time

Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223002a

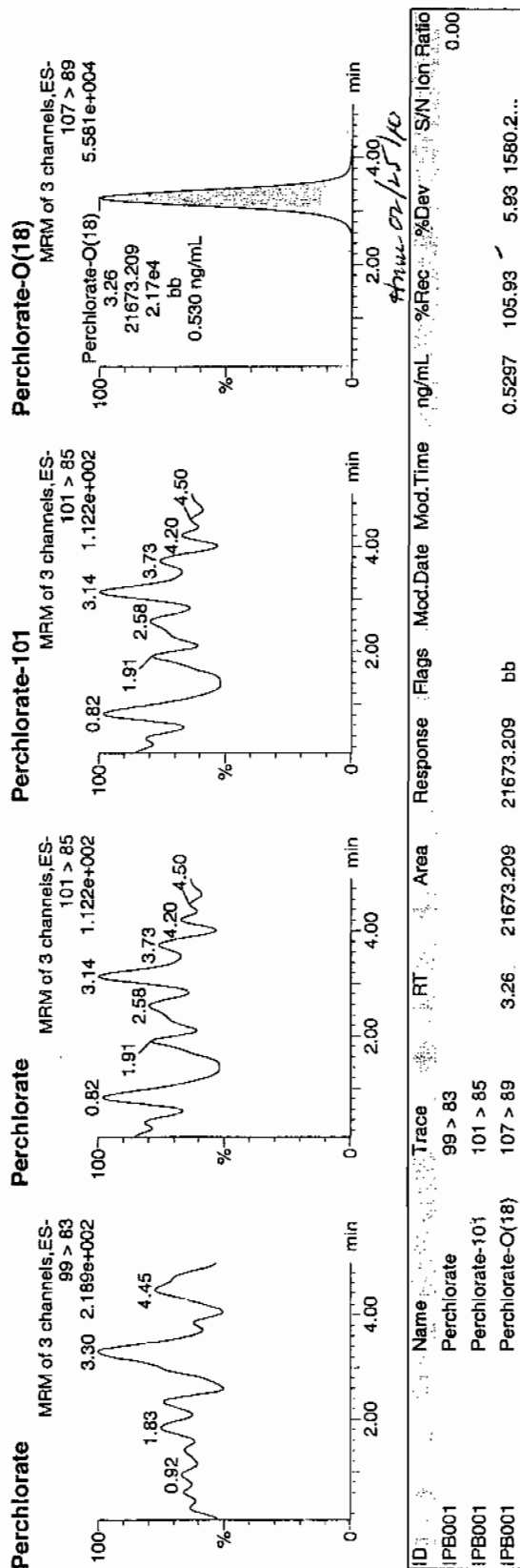
Date: 23-Feb-2010

Time: 12:42:00

ID: IPB001

Vial: 1:1,A

0224-10





Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1545

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	23-FEB-10	per0223008a	IPB002
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223008a	IPB002
Perchlorate	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate	0.00	0	NA	23-FEB-10	per0223036a	IPB005
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223036a	IPB005
Perchlorate	0.00	0	NA	23-FEB-10	per0223049a	IPB006
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223049a	IPB006
Perchlorate	0.00	0	NA	23-FEB-10	per0223062a	IPB007
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223062a	IPB007
Perchlorate	0.00	0	NA	23-FEB-10	per0223067a	IPB008

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1545

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-101	0.00	0	NA	23-FEB-10	per0223067a	IPB008
Perchlorate	0.00	0	NA	23-FEB-10	per0223075a	IPB009
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223075a	IPB009

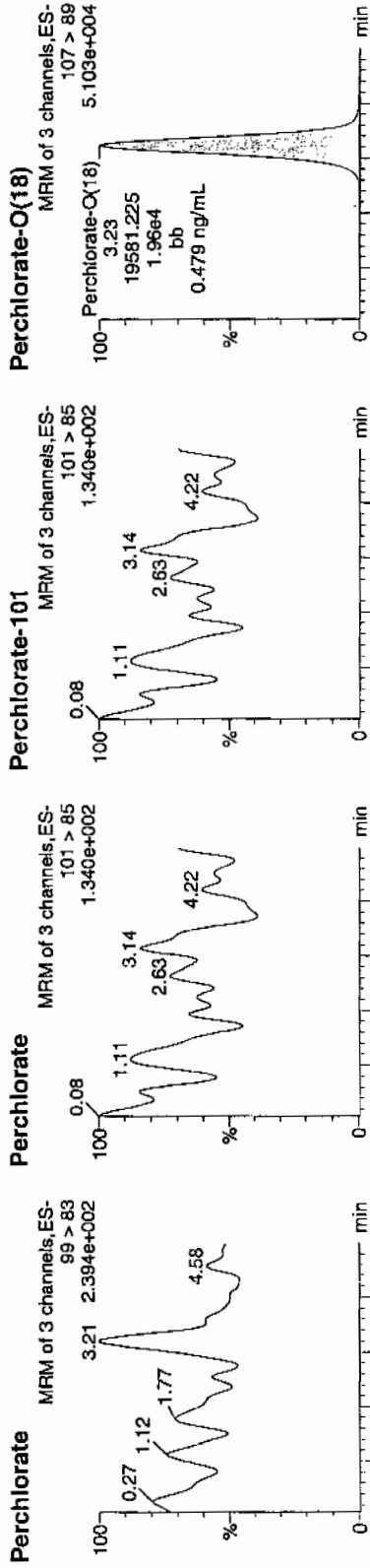
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223008a  
Date: 23-Feb-2010  
Time: 13:30:32  
ID: IPB002  
Vial: 1:1,A

02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	3.23	19581.225	19581.225	bb			0.4785	95.71	-4.29	7325.9...	

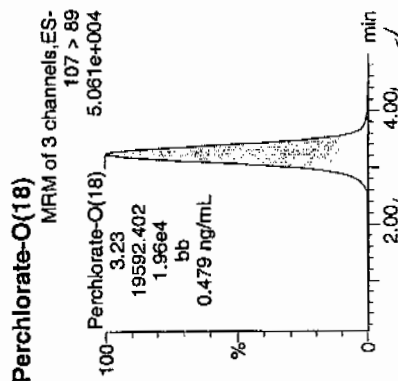
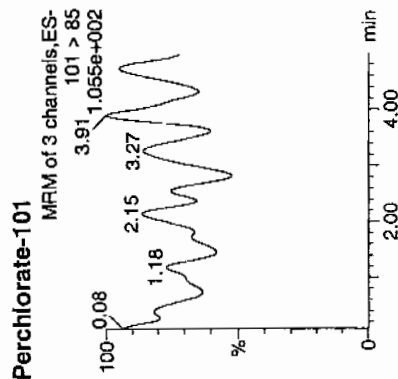
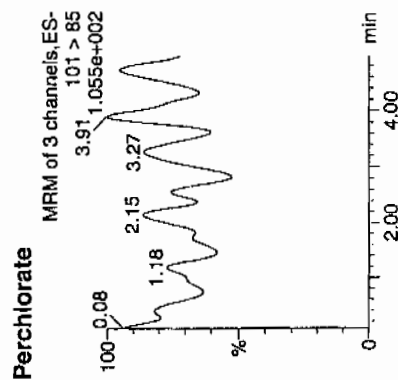
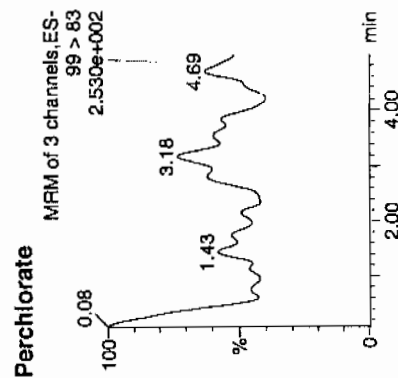
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223010a  
Date: 23-Feb-2010  
Time: 13:46:52  
ID: IPB003  
Vial: 1:1,A

6224-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.23	19592.402	19592.402	bb			0.4788	95.76	-4.24	4079.9...	

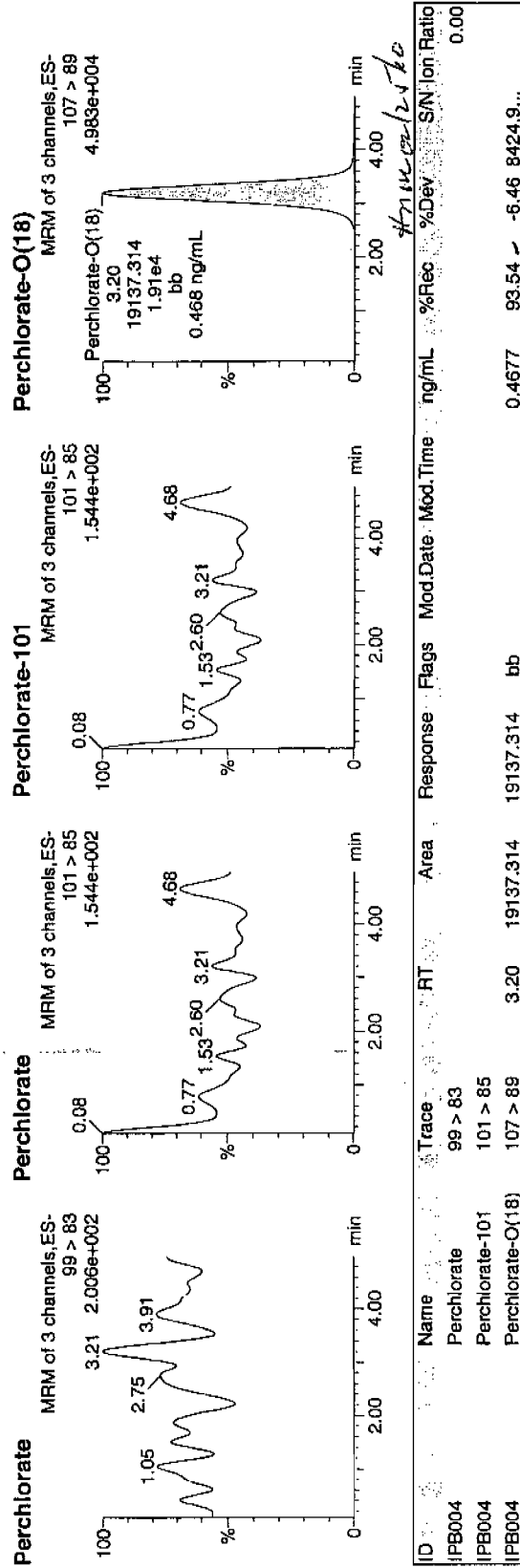
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223023a  
Date: 23-Feb-2010  
Time: 15:31:45  
ID: IPB004  
Vial: 1:1,A

02-24-10



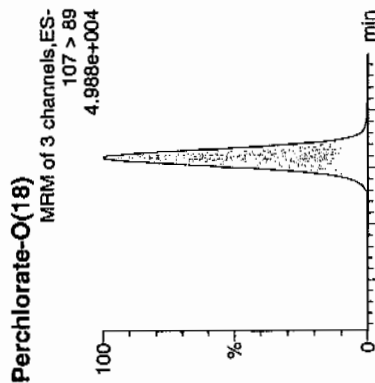
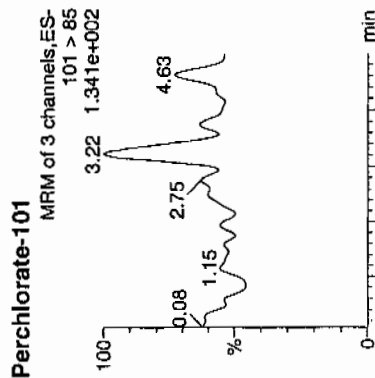
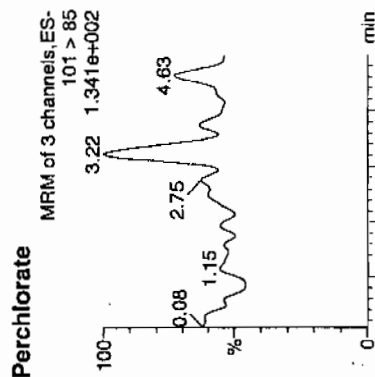
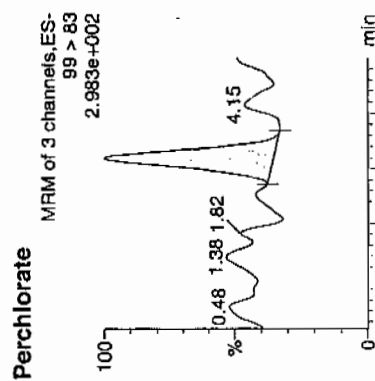
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223036a  
Date: 23-Feb-2010  
Time: 17:16:21  
ID: IPB005  
Vial: 1:1,A

0.24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	3.20	71.064	71.064	bb			0.0015			8.434	0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	3.17	18894.705	18894.705	bb			0.4618	92.35	-7.65	2125.4...	

Quantify Sample Report MassLynx 4.0 SP4

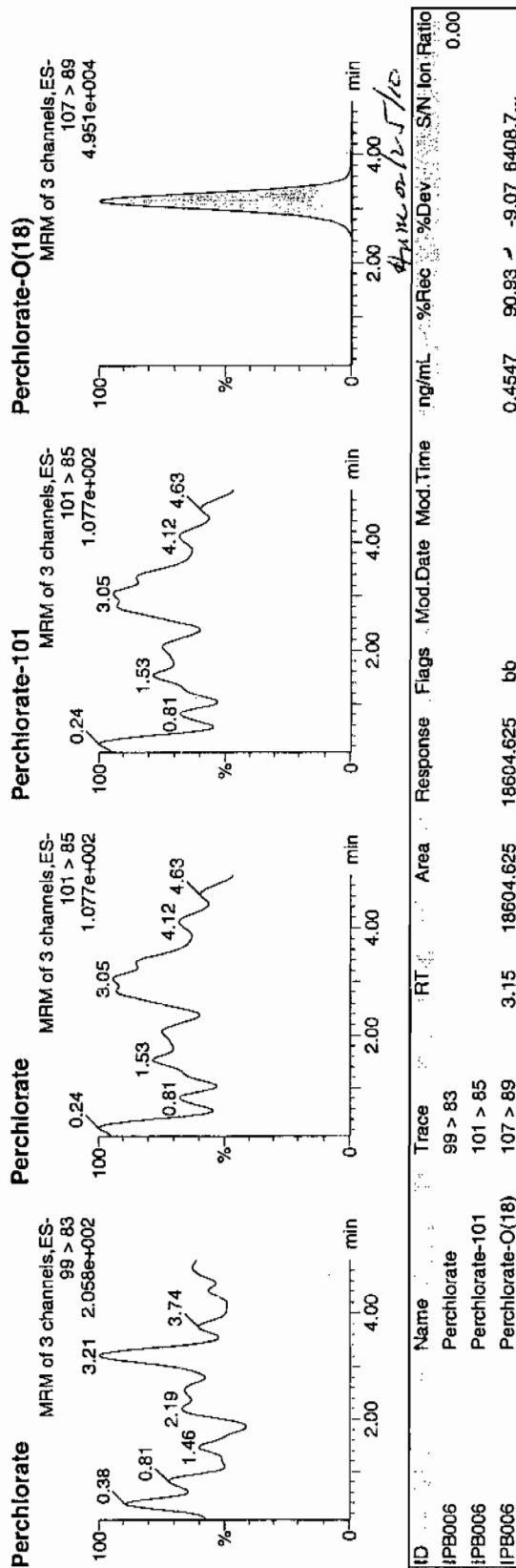
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223049a  
Date: 23-Feb-2010  
Time: 19:01:09  
ID: IPB006  
Vial: 1:1,A

02.24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	3.15	18604.625	18604.625	bb			0.4547	90.93	-9.07	6408.7...	

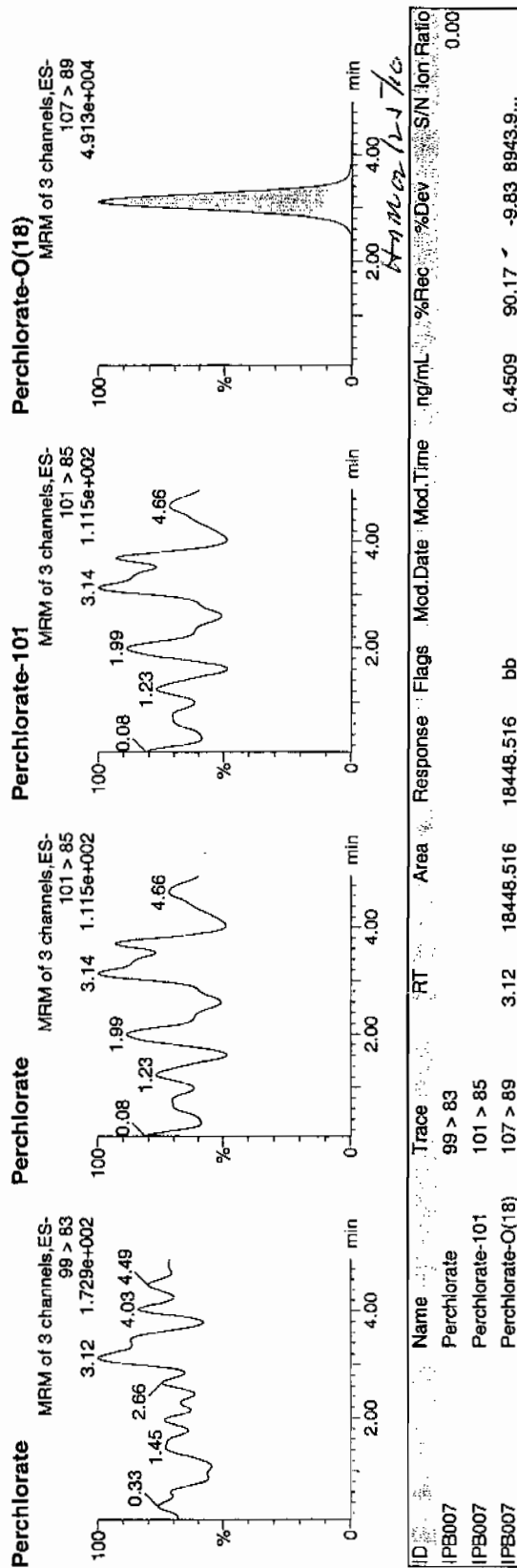
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223062a  
Date: 23-Feb-2010  
Time: 20:46:00  
ID: IPB007  
Vial: 1:1,A

02-24-10





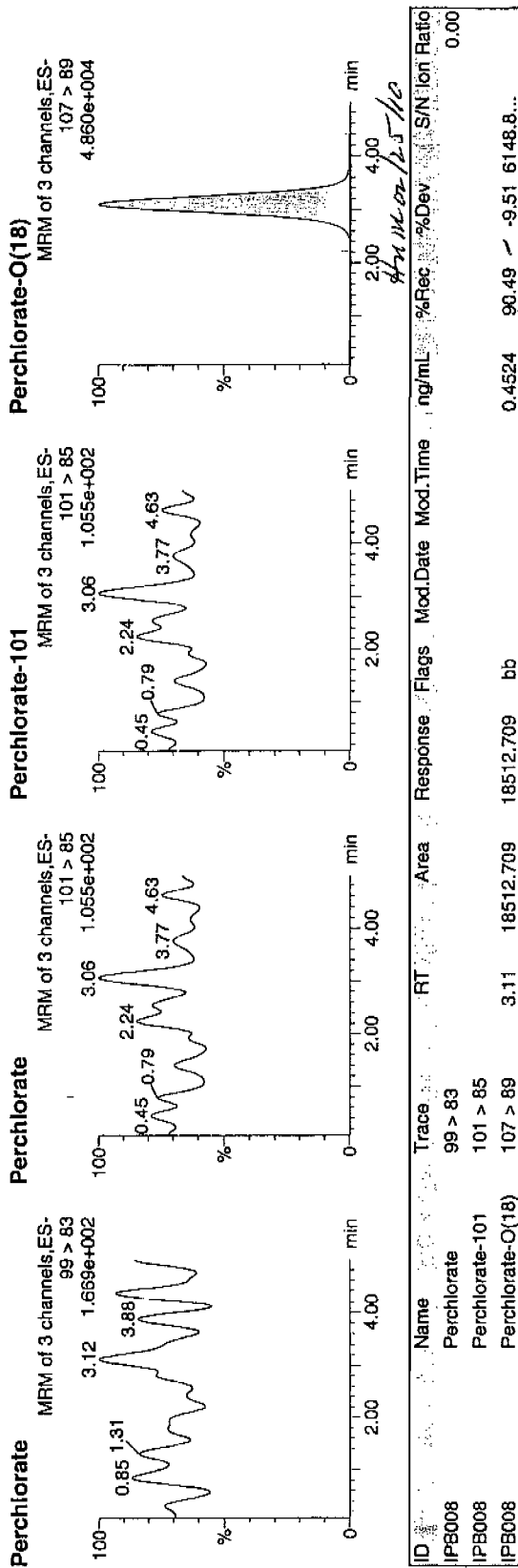
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223067a  
Date: 23-Feb-2010  
Time: 21:26:20  
ID: IPB008  
Vial: 1:1,A

02.24.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83											0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	3.11	18512.709	18512.709	bb			0.4524	90.49	-9.51	6148.8...	

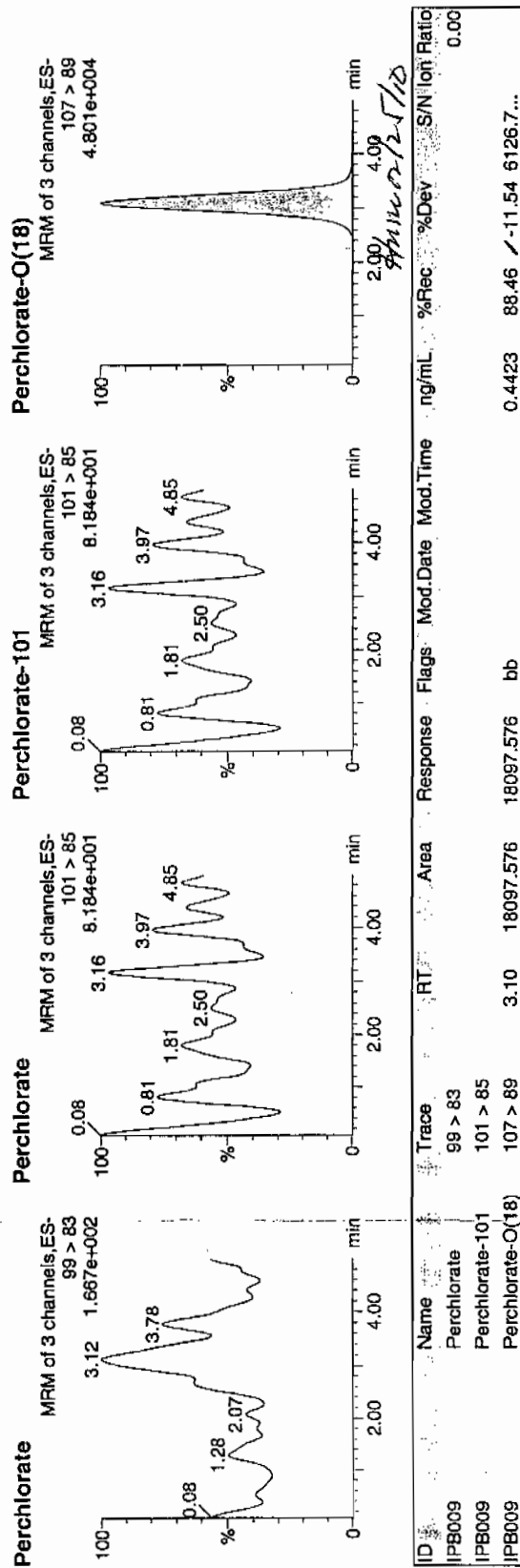
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223075a  
Date: 23-Feb-2010  
Time: 22:31:12  
ID: IPB009  
Vial: 1:1,A

002-2710



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	3.10	18097.576	18097.576	bb			0.4423	88.46	-11.54	6126.7...	
IPB009	Perchlorate-Q(18)	107 > 89											

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

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

Calibration Report - MS1 Static

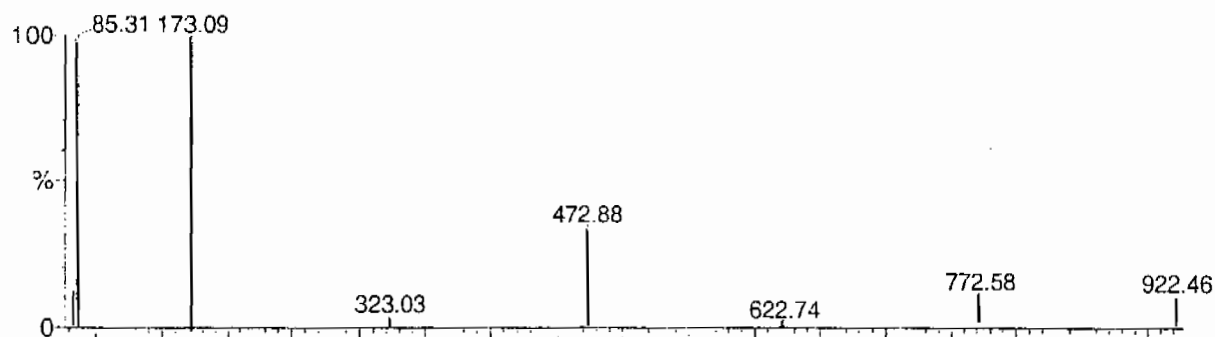
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

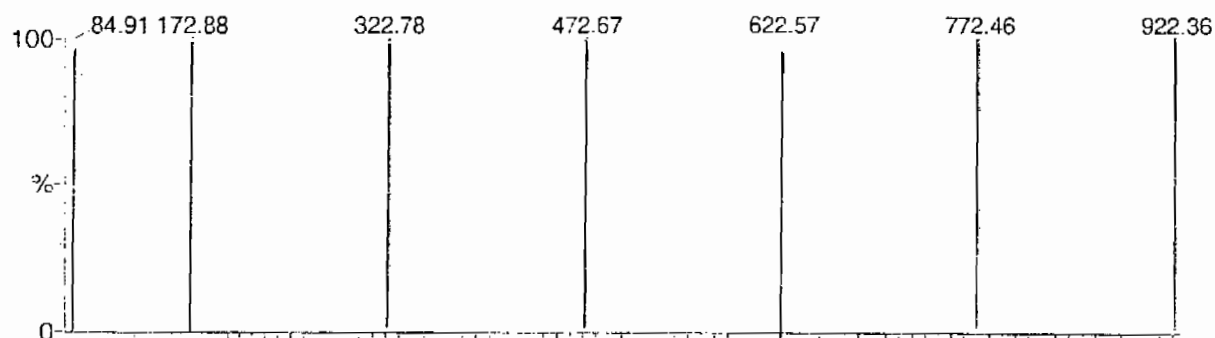
DATA HIGHLIGHTED BY GEL 01-01-03

Data file: STATMS1 - Uncalibrated

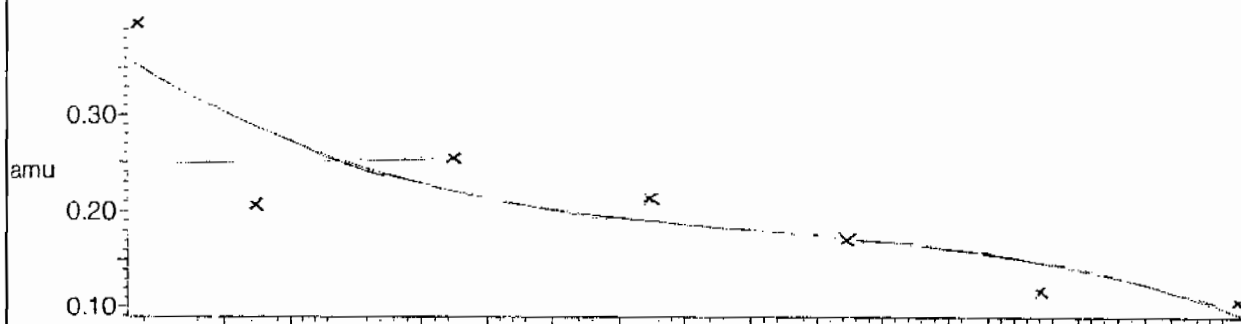
7 matches of 7 tested references



Reference file: Nairb

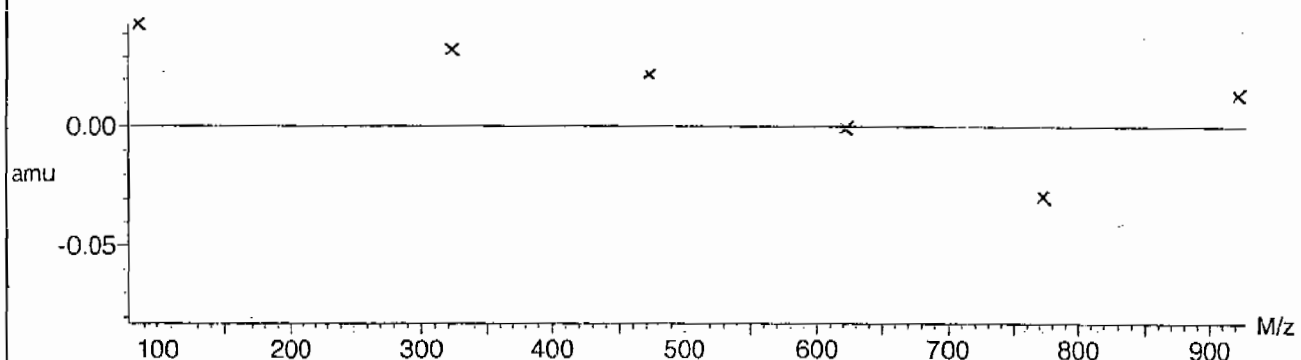


Mass difference (Raw - Ref mass)



Residuals

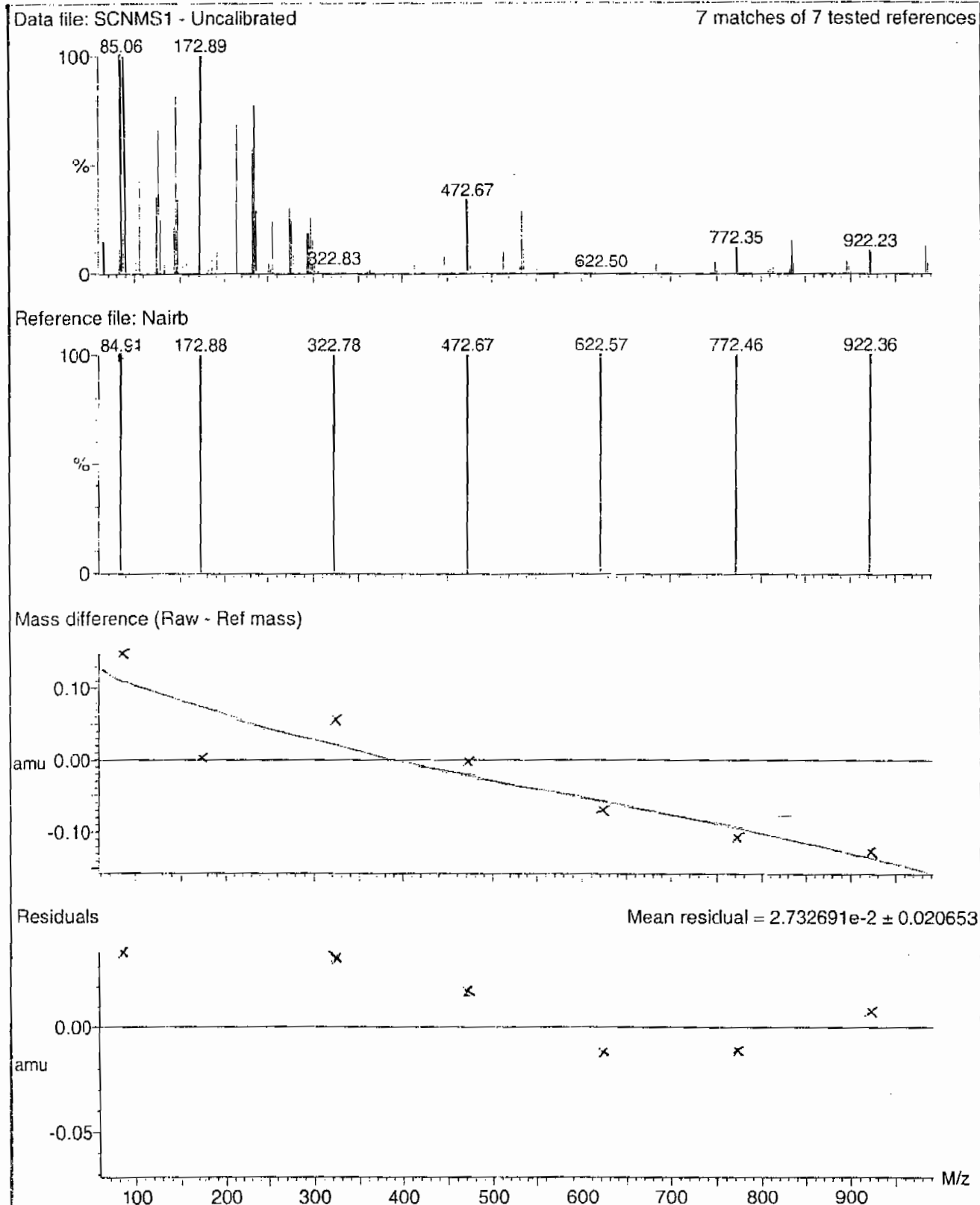
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

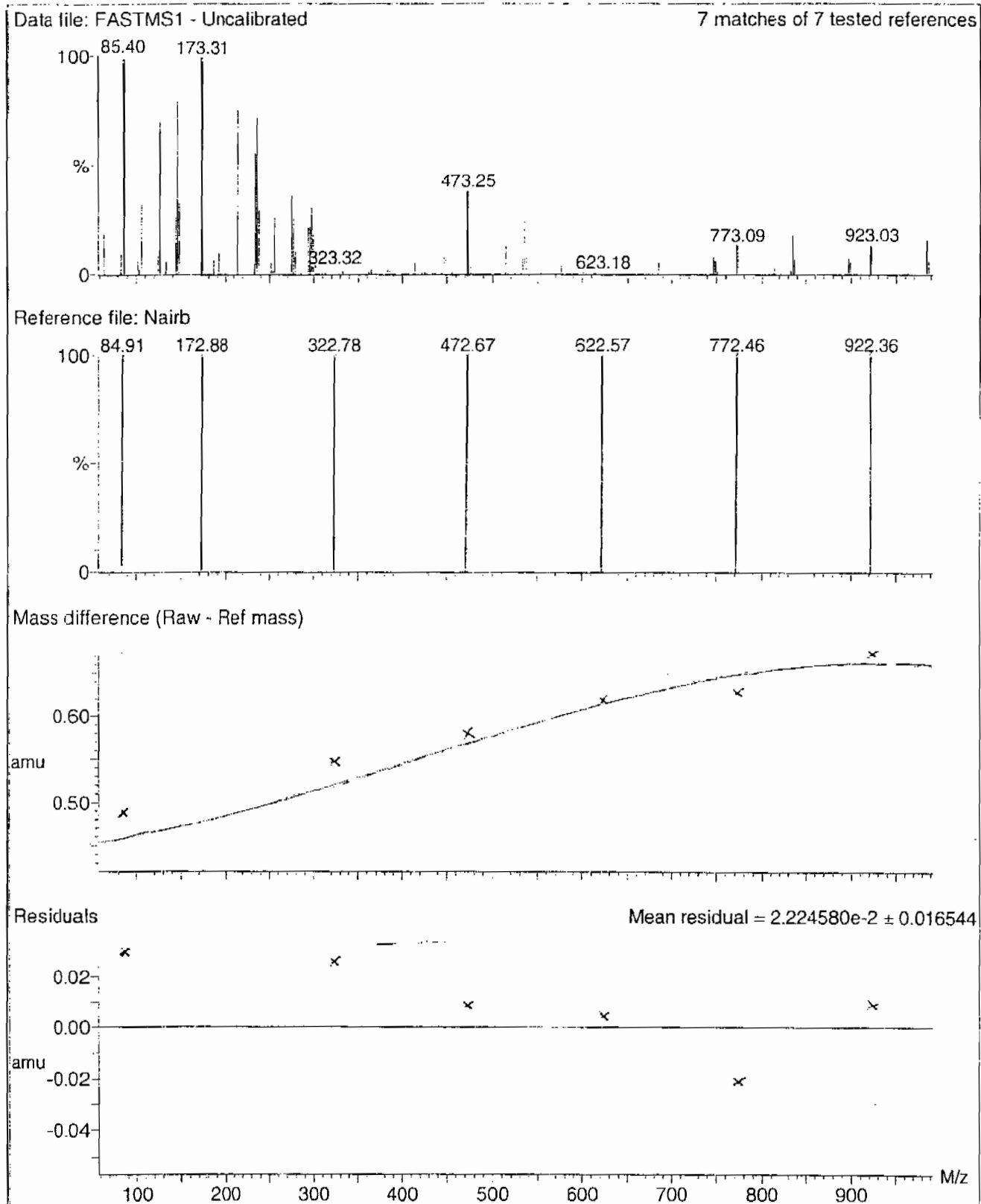
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Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

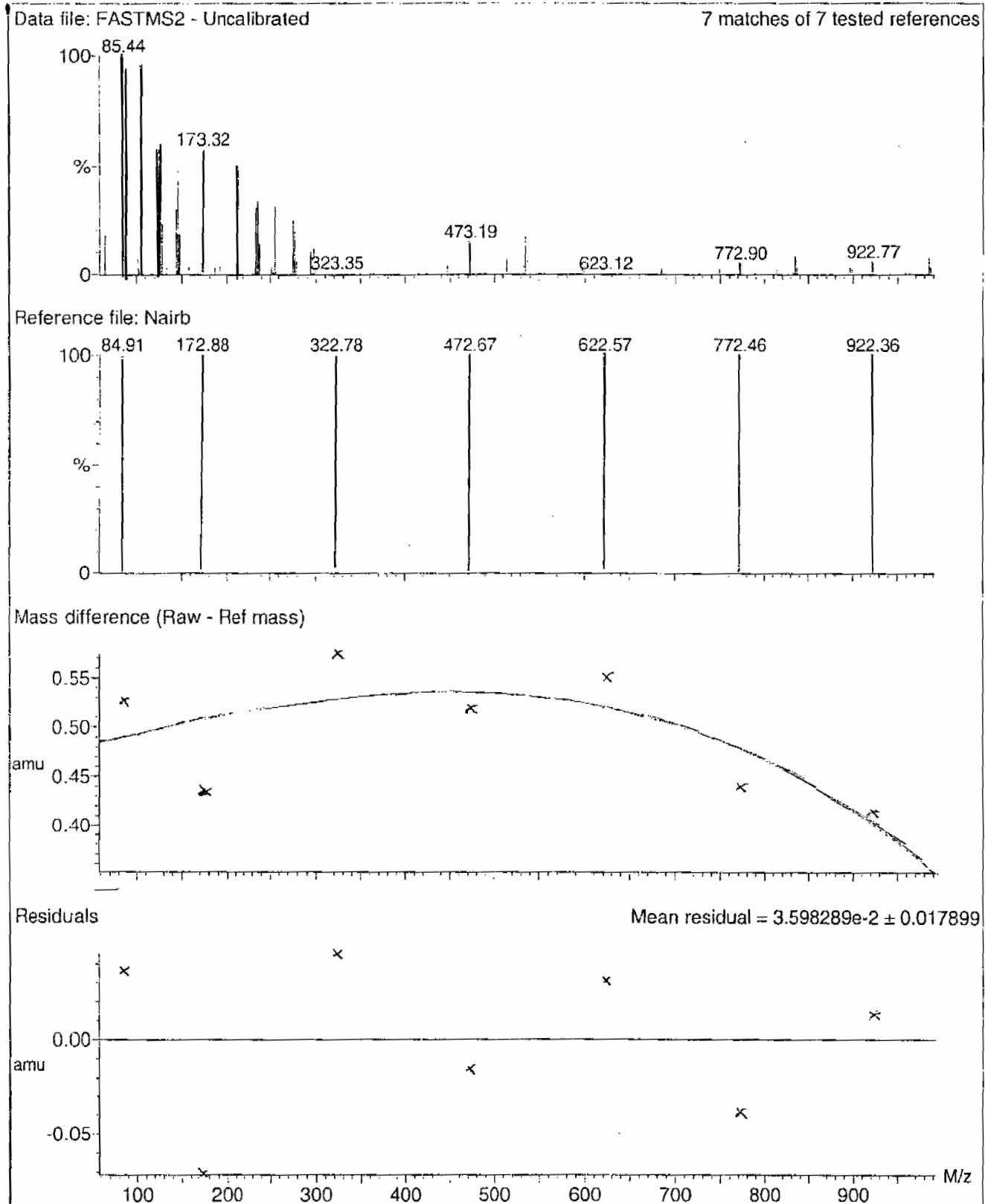
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



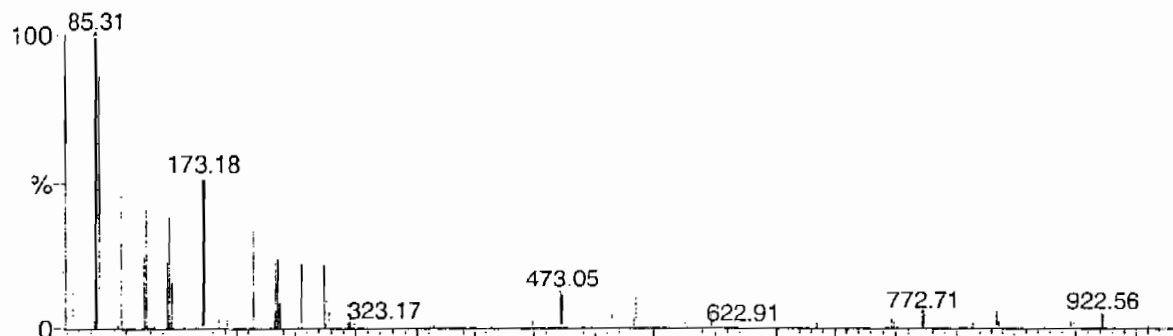
Calibration Report - MS2 Scanning

Page 1 of 1

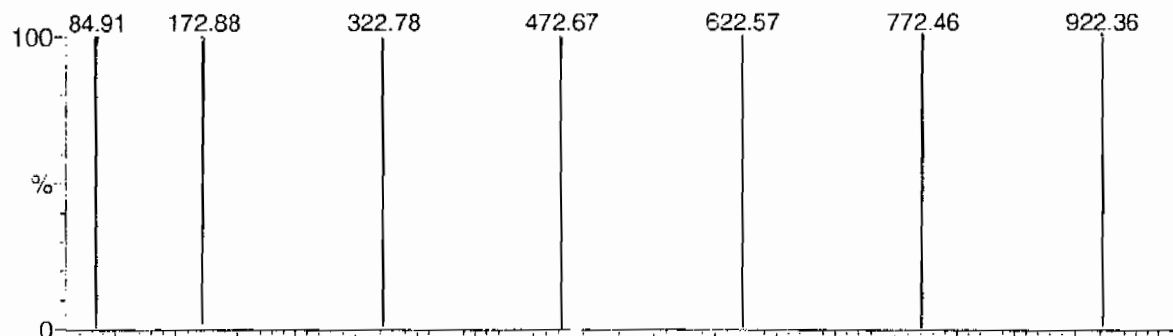
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

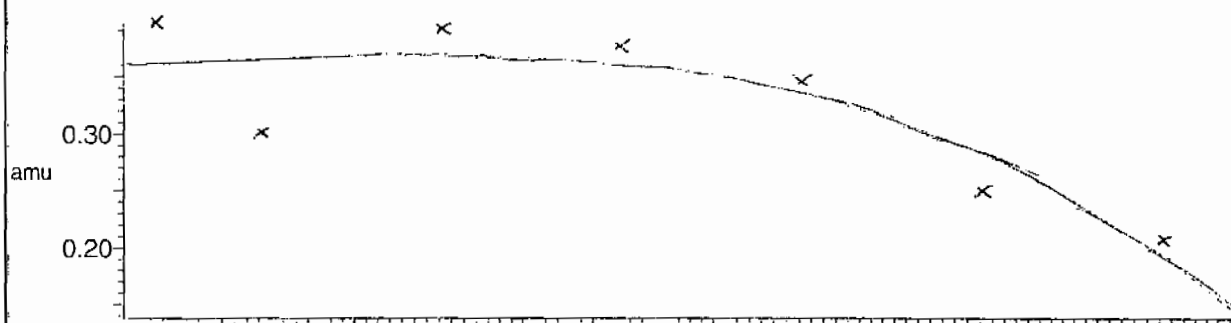
7 matches of 7 tested references



Reference file: Nairb

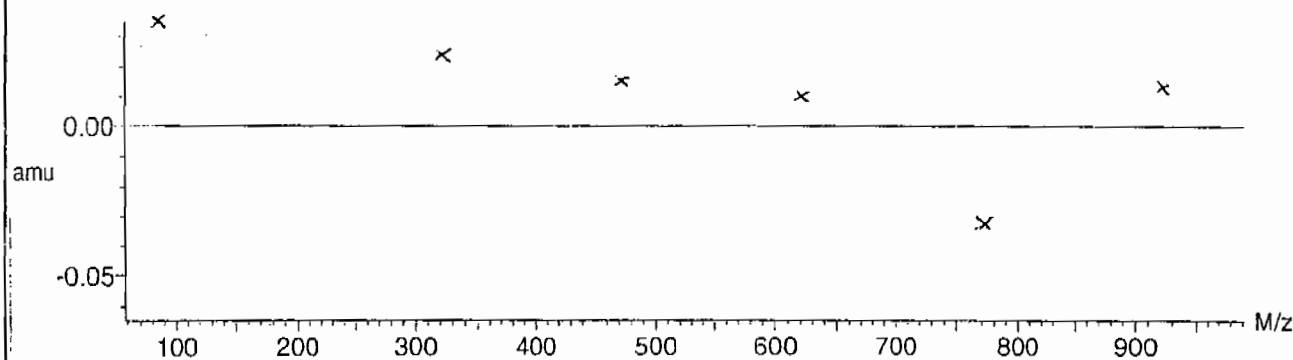


Mass difference (Raw - Ref mass)



Residuals

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





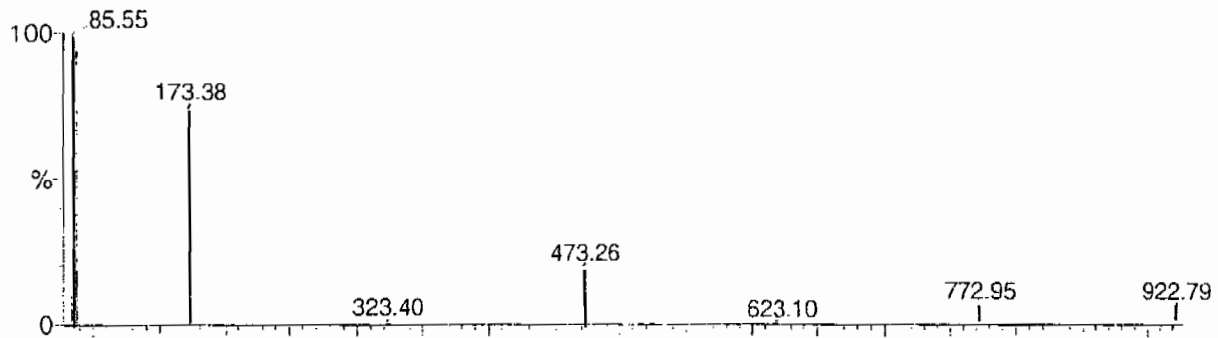
Calibration Report - MS2 Static

Page 1 of 1

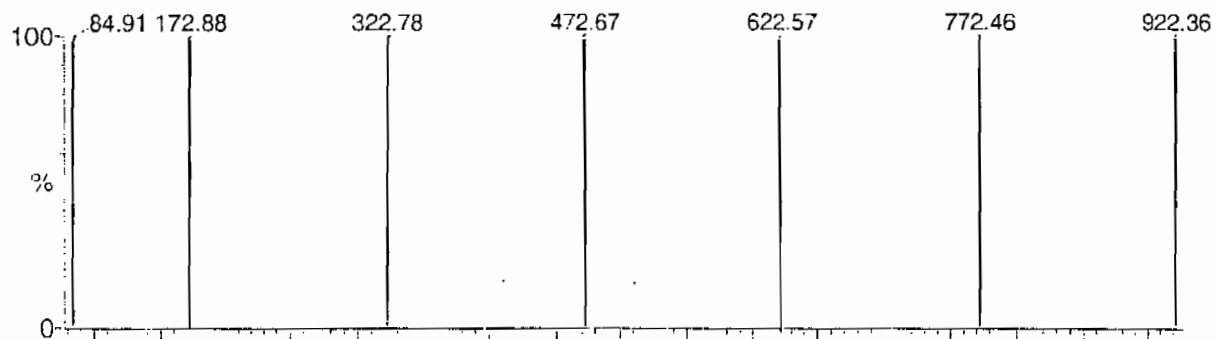
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Data file: STATMS2 - Uncalibrated

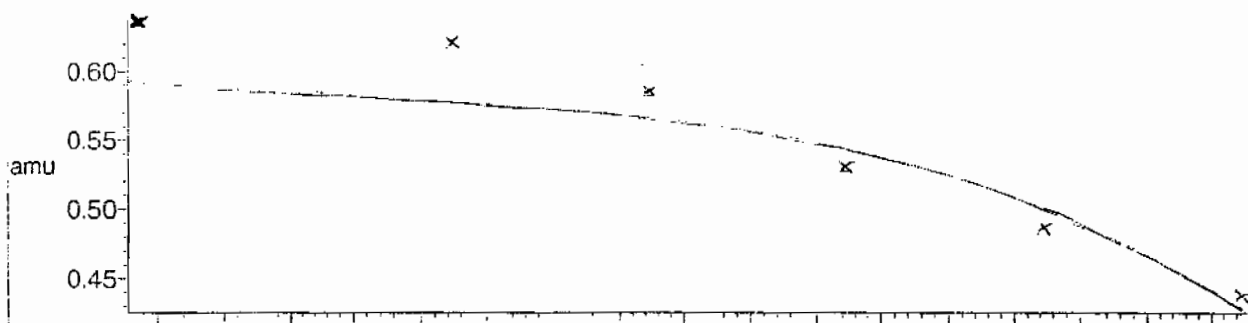
7 matches of 7 tested references



Reference file: Nairb

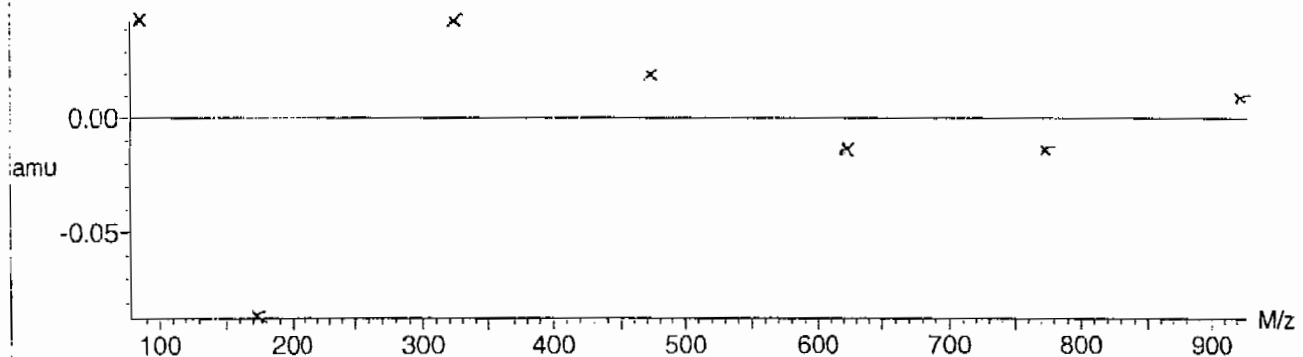


Mass difference (Raw - Ref mass)



Residuals

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



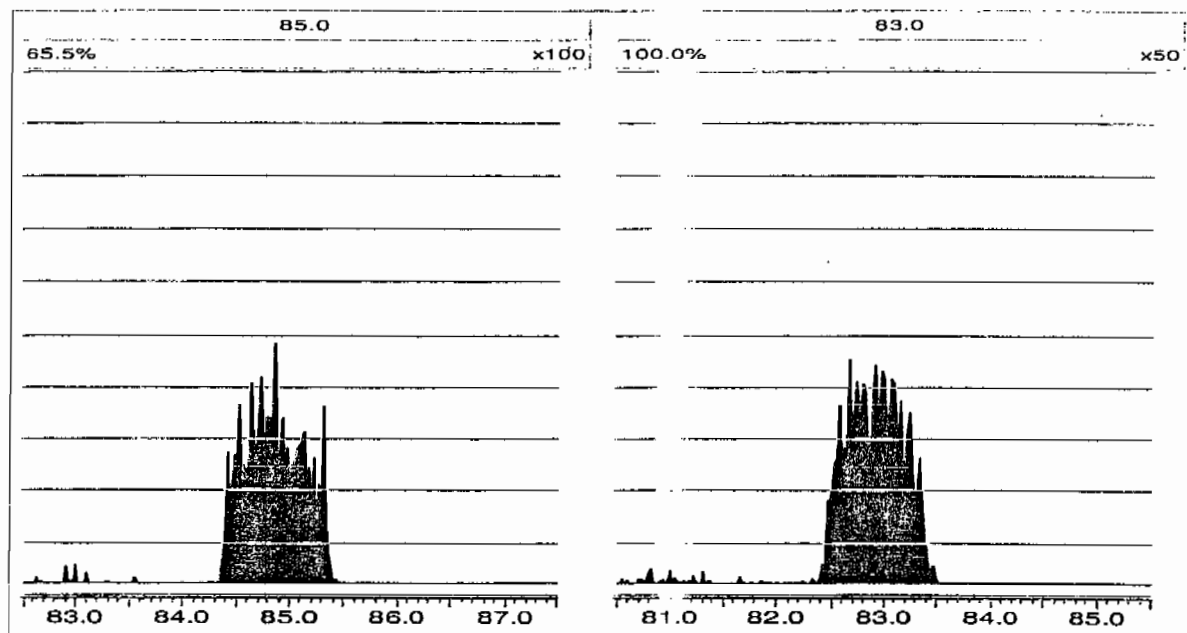
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Tuesday, February 23, 2010 10:32:55 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1545

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	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
1202035660	per0223038a	23-FEB-10 17:32	20052.6	3.16	3.15988	1	
1202035661	per0223039a	23-FEB-10 17:40	19174.5	3.17	3.18465	1.005	
1202035664	per0223040a	23-FEB-10 17:48	19309.7	3.21	3.2219	1.004	
246055001	per0223053a	23-FEB-10 19:33	18628.7	3.14	3.14743	1.002	
1202035662	per0223054a	23-FEB-10 19:41	18922.6	3.14	3.15983	1.006	
1202035663	per0223055a	23-FEB-10 19:49	18934.5	3.14	3.15985	1.006	
246055002	per0223056a	23-FEB-10 19:57	18576.1	3.12	3.13507	1.005	
246055003	per0223057a	23-FEB-10 20:05	20987.9	3.12	3.13505	1.005	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

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

GEL Job No.(SDG): 10-1545

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
246055004	per0223058a	23-FEB-10 20:13	18356.6	3.12	3.14738	1.009	
246055005	per0223059a	23-FEB-10 20:21	17327	3.12	3.15985	1.013	
246055006	per0223060a	23-FEB-10 20:29	19188.6	3.11	3.12258	1.004	
246055007	per0223064a	23-FEB-10 21:02	18853	3.11	3.13507	1.008	
246055008	per0223065a	23-FEB-10 21:10	18502.7	3.11	3.11015	1	
246055009	per0223066a	23-FEB-10 21:18	18740.9	3.11	3.12255	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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8170

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.607	2.43	0.831	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate Isotope Ratio			3.19			1	23-FEB-10 19:33	per0223053a
14797-73-0	Perchlorate-101	.607	2.43	0.836	ug/kg	J	1	23-FEB-10 19:33	per0223053a
	Perchlorate-O(18)			5.52	ug/kg		1	23-FEB-10 19:33	per0223053a

<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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223053a

Date: 23-Feb-2010

Time: 19:33:26

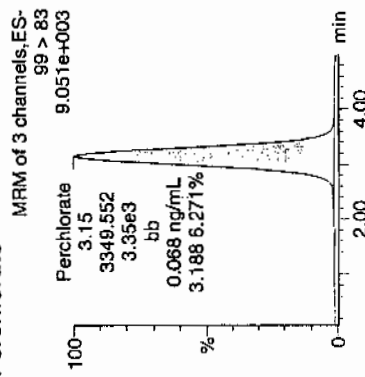
ID: 246055001

Vial: 2:3,A

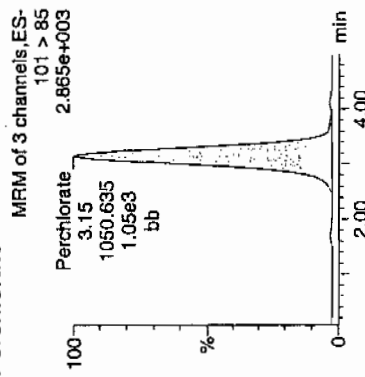
623410

15720 | 950071 | 5070 | 11 |

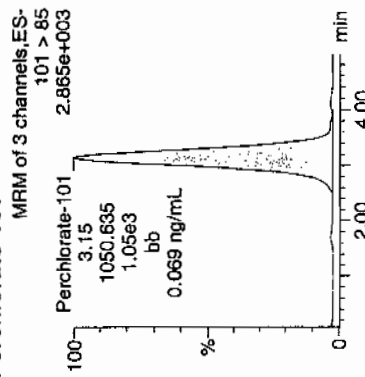
**Perchlorate**



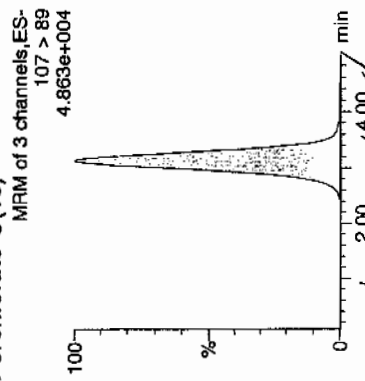
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246055001	Perchlorate	99 > 83	3.15	3349.552	3349.552	bb			0.0685			1376.3...	3.19
246055001	Perchlorate-101	101 > 85	3.15	1050.635	1050.635	bb			0.0689			1135.5...	
246055001	Perchlorate-O(18)	107 > 89	3.14	18628.719	18628.719	bb			0.4553	91.05	-8.95	2793.9...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8169

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate Isotope Ratio						1	23-FEB-10 19:57	per0223056a
14797-73-0	Perchlorate-101	.587	2.35	0.587	ug/kg	U	1	23-FEB-10 19:57	per0223056a
	Perchlorate-O(18)			5.33	ug/kg		1	23-FEB-10 19:57	per0223056a

<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

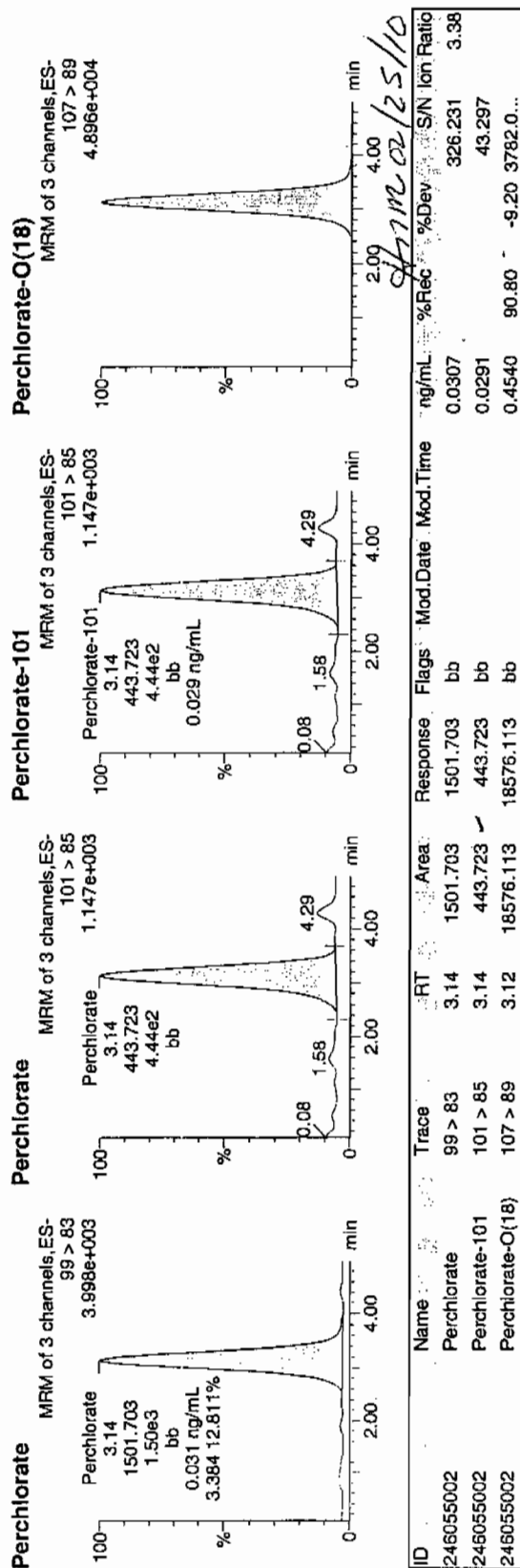
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223056a  
Date: 23-Feb-2010  
Time: 19:57:34  
ID: 246055002  
Vial: 2:3,D

03-24-10

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Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8171

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.568	2.27	1.70	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate Isotope Ratio			3.11			1	23-FEB-10 20:05	per0223057a
14797-73-0	Perchlorate-101	.568	2.27	1.75	ug/kg	J	1	23-FEB-10 20:05	per0223057a
	Perchlorate-O(18)			5.83	ug/kg		1	23-FEB-10 20:05	per0223057a

<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

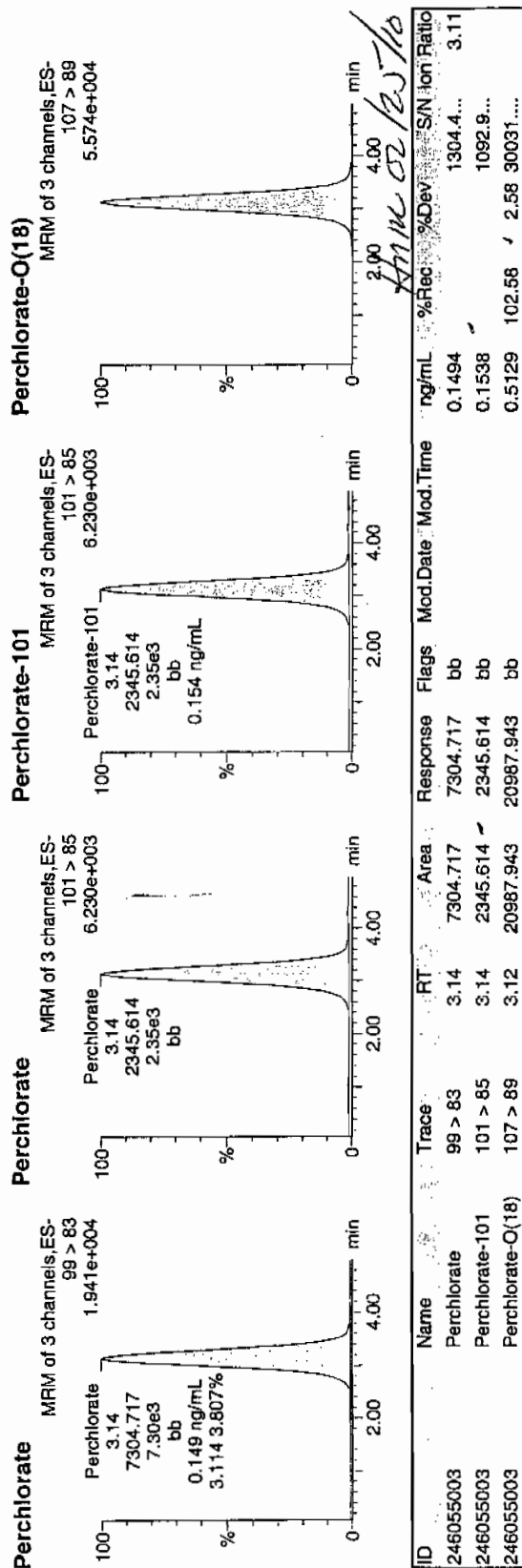
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223057a  
Date: 23-Feb-2010  
Time: 20:05:35  
ID: 246055003  
Vial: 2:3,E

02-24-10

19201950071 | 502011



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246055003	Perchlorate	99 > 83	3.14	7304.717	7304.717	bb			0.1494			1304.4...	3.11
246055003	Perchlorate-101	101 > 85	3.14	2345.614	2345.614	bb			0.1538			1092.9...	
246055003	Perchlorate-O(18)	107 > 89	3.12	20987.943	20987.943	bb			0.5129	102.58	2.58	30031....	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8168

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055004

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 79

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	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:13	per0223058a
14797-73-0	Perchlorate-101	.63	2.52	0.630	ug/kg	U	1	23-FEB-10 20:13	per0223058a
	Perchlorate-O(18)			5.65	ug/kg		1	23-FEB-10 20:13	per0223058a

<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

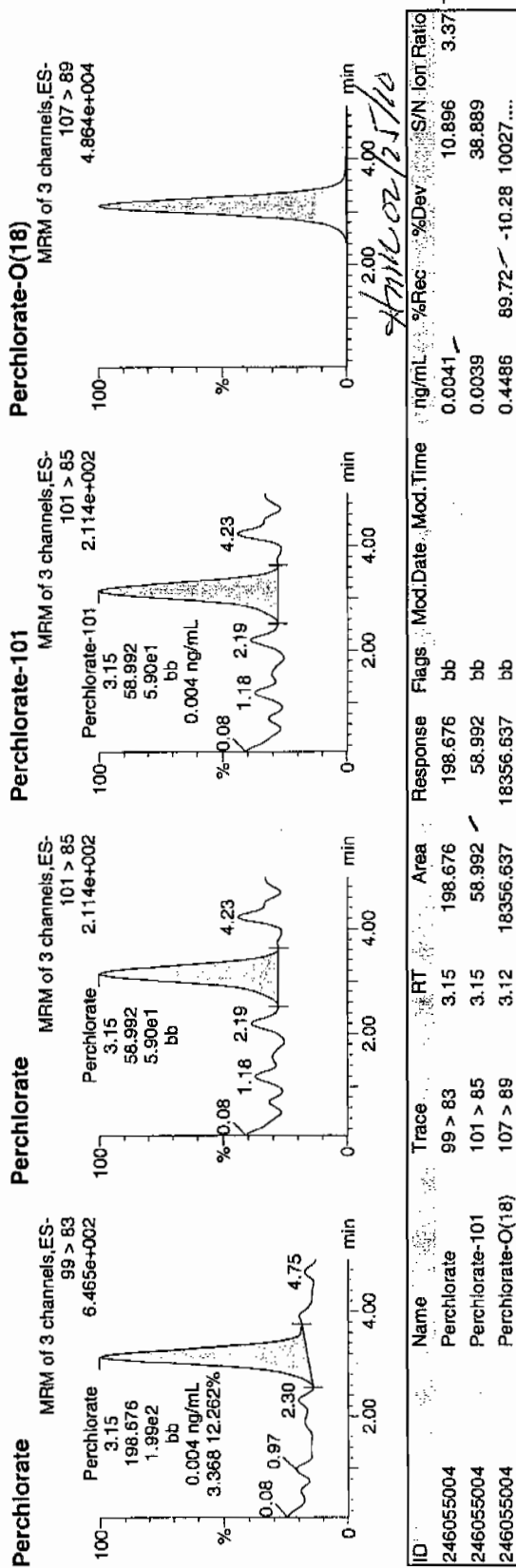
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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223058a  
Date: 23-Feb-2010  
Time: 20:13:37  
ID: 246055004  
Vial: 2:3,F

02.24.10

14261950071 | 5020 | 1 |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8222

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:21	per0223059a
14797-73-0	Perchlorate-101	.673	2.69	0.673	ug/kg	U	1	23-FEB-10 20:21	per0223059a
	Perchlorate-O(18)			5.70	ug/kg		1	23-FEB-10 20:21	per0223059a

<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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223059a

Date: 23-Feb-2010

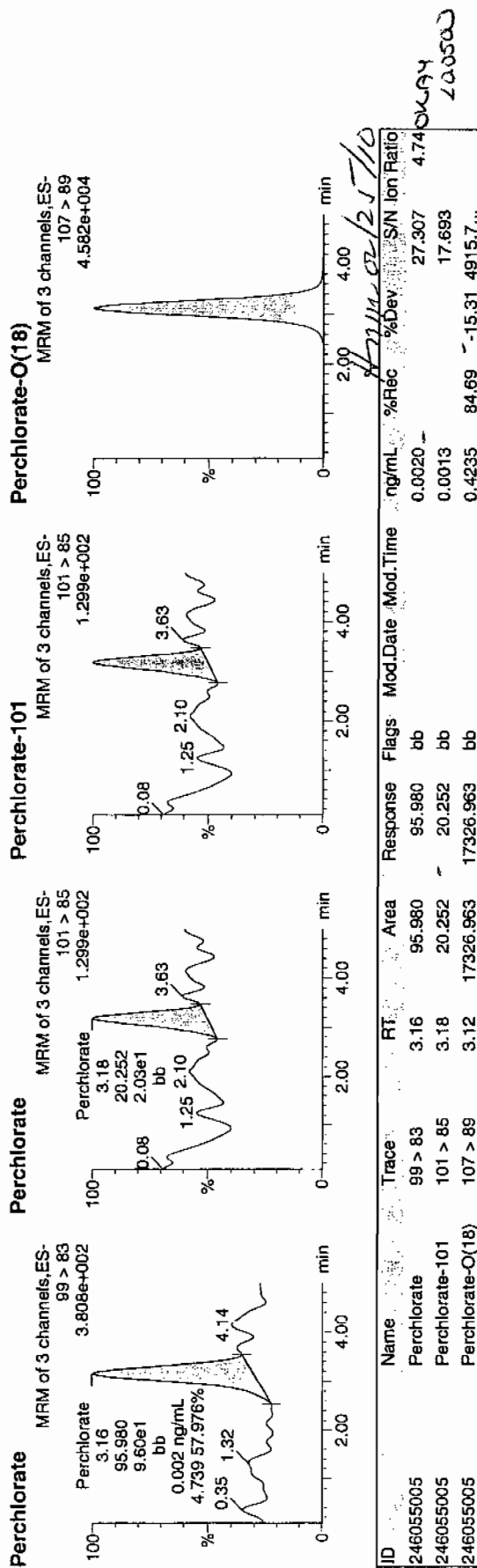
Time: 20:21:38

ID: 246055005

Vial: 2:4,A

02:24-10

LANU | 950071 | 50230 | 11



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: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8221

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055006

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate Isotope Ratio						1	23-FEB-10 20:29	per0223060a
14797-73-0	Perchlorate-101	.574	2.29	0.574	ug/kg	U	1	23-FEB-10 20:29	per0223060a
	Perchlorate-O(18)			5.38	ug/kg		1	23-FEB-10 20:29	per0223060a

<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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223060a

Date: 23-Feb-2010

Time: 20:29:41

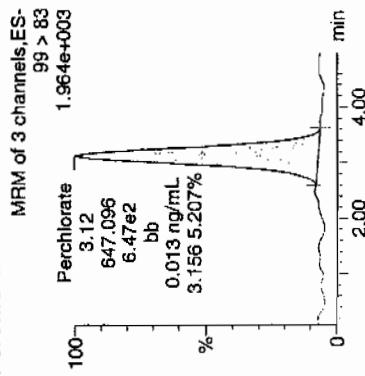
ID: 246055006

Vial: 2:4,B

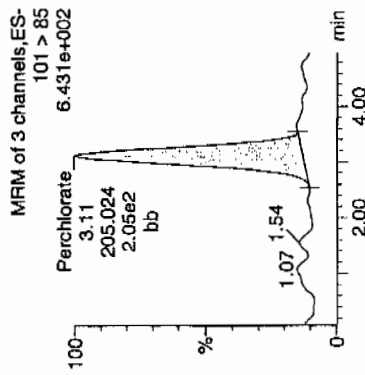
02-24-10

LAN 950071 | SUD | 1 |

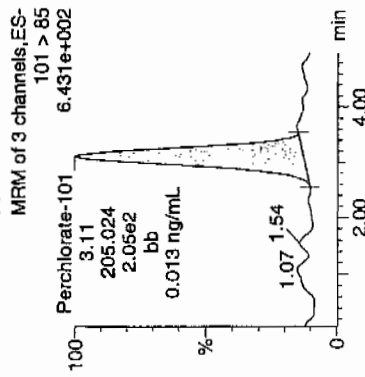
**Perchlorate**



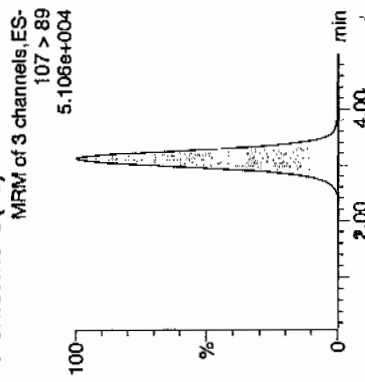
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246055006	Perchlorate	99 > 83	3.12	647.096	647.096	bb			0.0132	251.305	3.16		
246055006	Perchlorate-101	101 > 85	3.11	205.024	205.024	bb			0.0134	68.324			
246055006	Perchlorate-O(18)	107 > 89	3.11	19188.623	19188.623	bb			0.4689	93.79	-6.21	11777	...

AMC 02/25/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8220

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 91.3

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	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:02	per0223064a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 21:02	per0223064a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 21:02	per0223064a

<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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223064a

Date: 23-Feb-2010

Time: 21:02:04

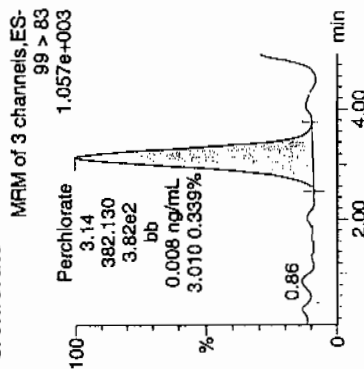
ID: 246055007

Vial: 2:4,C

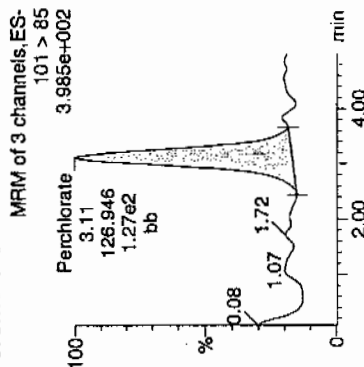
02-24-10

1420 | 950071 | 5070 | 11

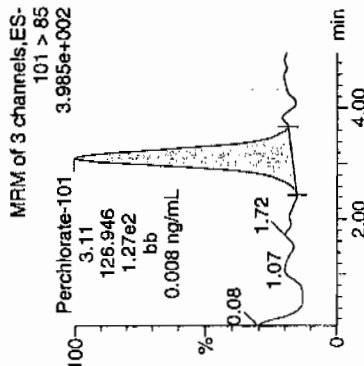
**Perchlorate**



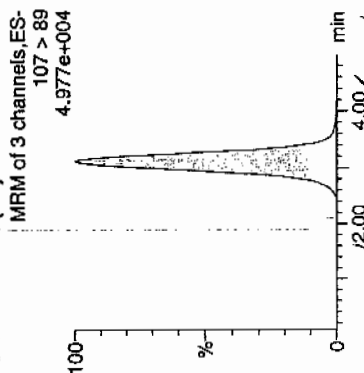
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246055007	Perchlorate	99 > 83	3.14	382.130	382.130	bb			0.0078	47.933			3.01
246055007	Perchlorate-101	101 > 85	3.11	126.946	126.946	bb			0.0083	21.190			
246055007	Perchlorate-O(18)	107 > 89	3.11	18852.994	18852.994	bb			0.4607	92.15	-7.85	7586.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8223

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate Isotope Ratio						1	23-FEB-10 21:10	per0223065a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	23-FEB-10 21:10	per0223065a
	Perchlorate-O(18)			5.62	ug/kg		1	23-FEB-10 21:10	per0223065a

<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

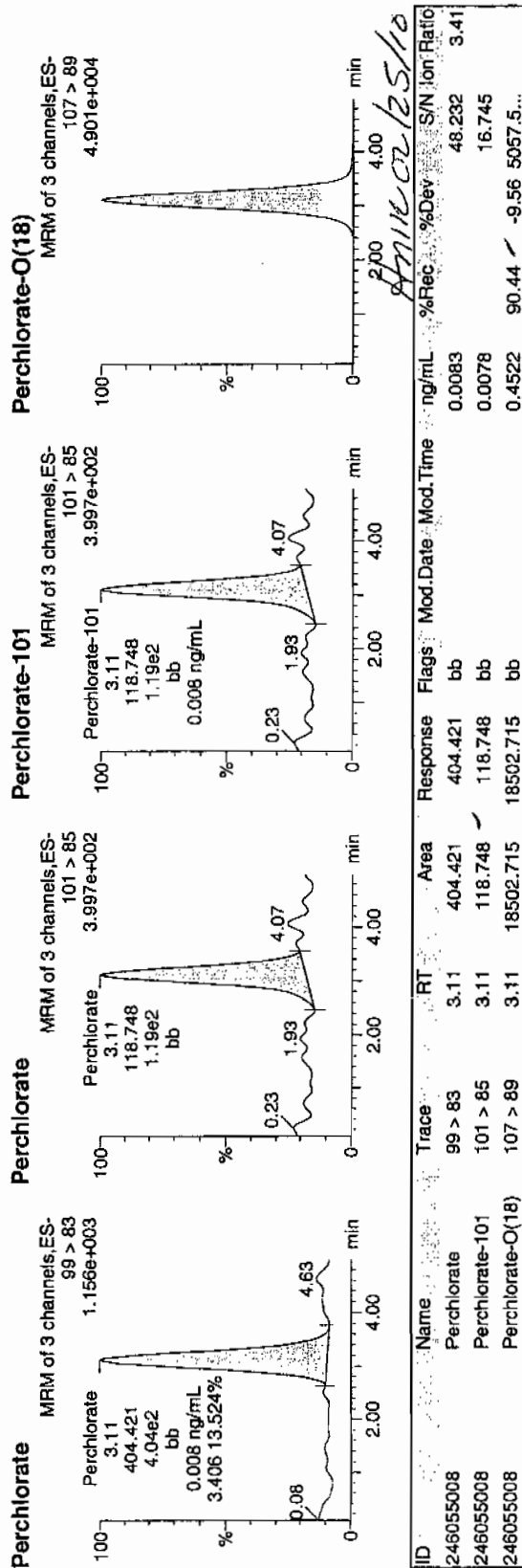
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223065a  
Date: 23-Feb-2010  
Time: 21:10:17  
ID: 246055008  
Vial: 2:4,D

LOW | 95071 | 5070 | 1 | 1 |  
02.24.10



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8224

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 246055009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.595	2.38	0.764	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate Isotope Ratio			3.24			1	23-FEB-10 21:18	per0223066a
14797-73-0	Perchlorate-101	.595	2.38	0.756	ug/kg	J	1	23-FEB-10 21:18	per0223066a
	Perchlorate-O(18)			5.45	ug/kg		1	23-FEB-10 21:18	per0223066a

<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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223066a

Date: 23-Feb-2010

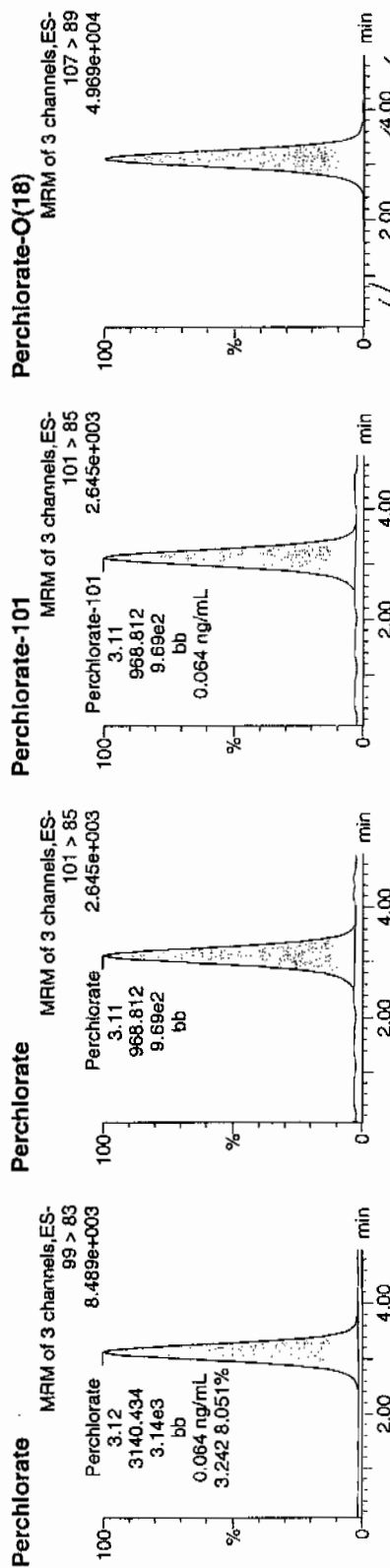
Time: 21:18:19

ID: 246055009

Vial: 2:4,E

08-24-10

LAN-195071 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246055009	Perchlorate	99 > 83	3.12	3140.434	3140.434	bb			0.0642			750.938	3.24
246055009	Perchlorate-101	101 > 85	3.11	968.812	968.812	bb			0.0635			203.315	
246055009	Perchlorate-O(18)	107 > 89	3.11	18740.887	18740.887	bb			0.4580	91.60	-8.40	4416.3...	

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

# STANDARDS DATA



Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1545

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-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

Coefficient of Determination:

Calibration Curve: 48901.36

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1545

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-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: 15252.16

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\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time

Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022310a.mdb 24 Feb 2010 09:36:48

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

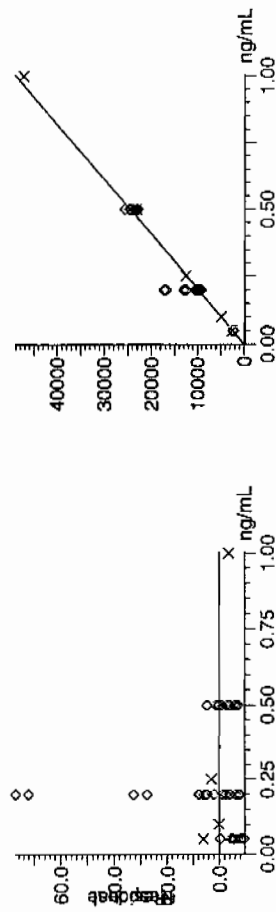
Compound name: Perchlorate

Response Factor: 48901.4

RRF SD: 2330.99, % Relative SD: 4.76673

Response type: External Std, Area

Curve type: RF



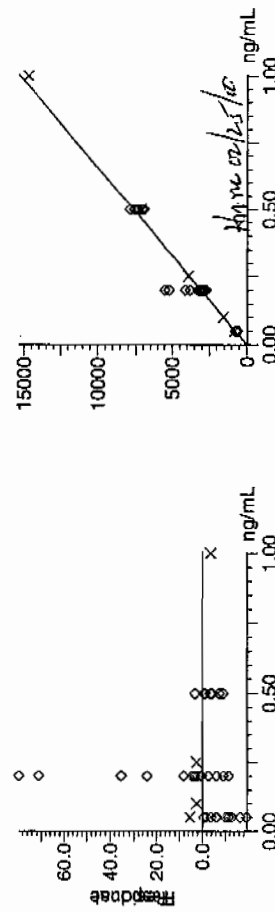
Compound name: Perchlorate-101

Response Factor: 15252.2

RRF SD: 748.661, % Relative SD: 4.90856

Response type: External Std, Area

Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

Page 2 of 2

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

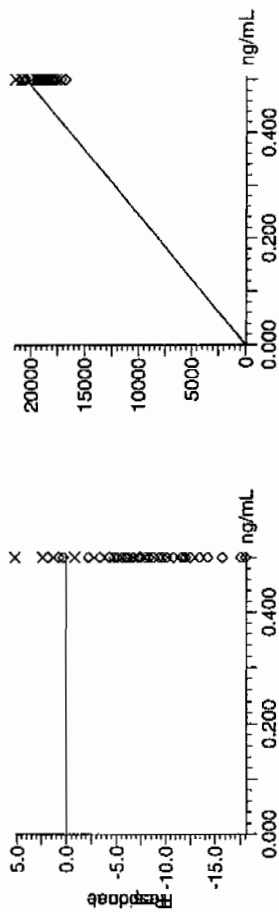
Compound name: Perchlorate-O(18)

Response Factor: 40918.6

RRF SD: 2026.62, % Relative SD: 4.9528 ✓

Response type: External Std, Area

Curve type: RF ✓



02-24-10

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

Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1545

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.93	23-FEB-10 13:38	per0223009a
Perchlorate Isotope Ratio		3.22		23-FEB-10 13:38	per0223009a
Perchlorate-101	.5	.5	99.45	23-FEB-10 13:38	per0223009a

# Quantify Sample Report MassLynx 4.0 SP4

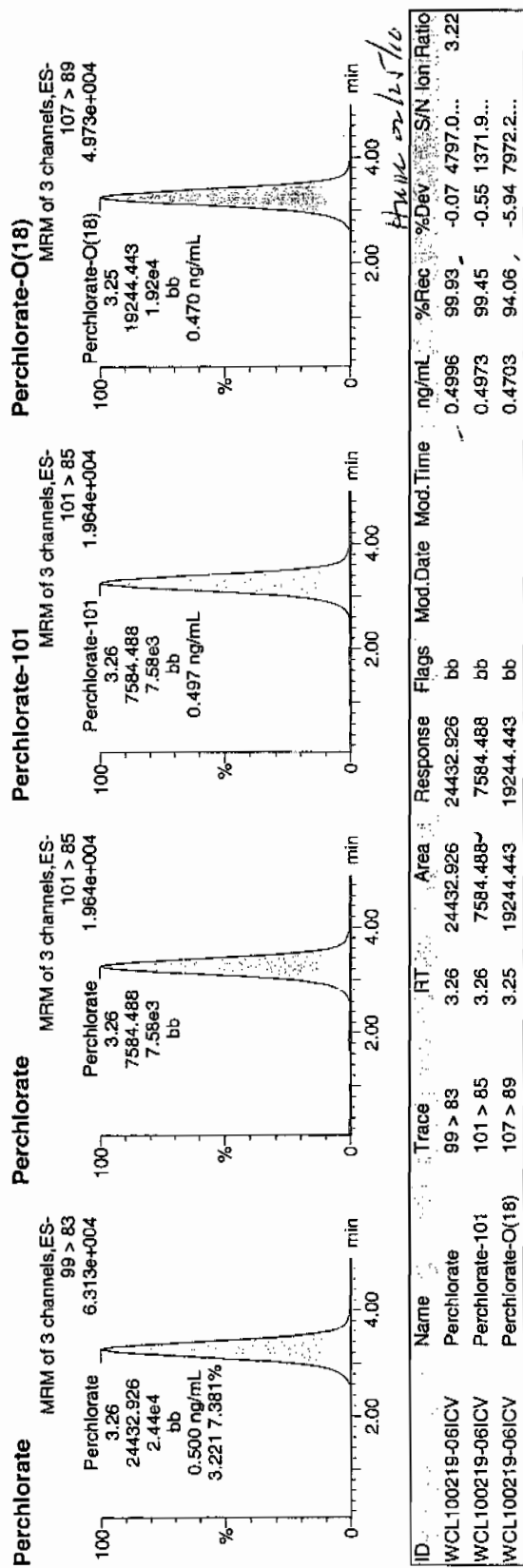
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223009a  
 Date: 23-Feb-2010  
 Time: 13:38:42  
 ID: WCL100219-06ICV  
 Vial: 1:2,A

*Perchlorate*



Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1545

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.18	23-FEB-10 15:23	per0223022a
Perchlorate Isotope Ratio		3.26		23-FEB-10 15:23	per0223022a
Perchlorate-101	.5	.5	99.37	23-FEB-10 15:23	per0223022a
Perchlorate	.5	.52	104.6	23-FEB-10 17:08	per0223035a
Perchlorate Isotope Ratio		3.25		23-FEB-10 17:08	per0223035a
Perchlorate-101	.5	.52	103.03	23-FEB-10 17:08	per0223035a
Perchlorate	.5	.48	96.6	23-FEB-10 18:52	per0223048a
Perchlorate Isotope Ratio		3.23		23-FEB-10 18:52	per0223048a
Perchlorate-101	.5	.48	95.87	23-FEB-10 18:52	per0223048a
Perchlorate	.5	.5	100.19	23-FEB-10 20:37	per0223061a
Perchlorate Isotope Ratio		3.26		23-FEB-10 20:37	per0223061a
Perchlorate-101	.5	.49	98.63	23-FEB-10 20:37	per0223061a
Perchlorate	.5	.48	95.72	23-FEB-10 22:22	per0223074a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1545

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.21		23-FEB-10 22:22	per0223074a
Perchlorate-101	.5	.48	95.75	23-FEB-10 22:22	per0223074a



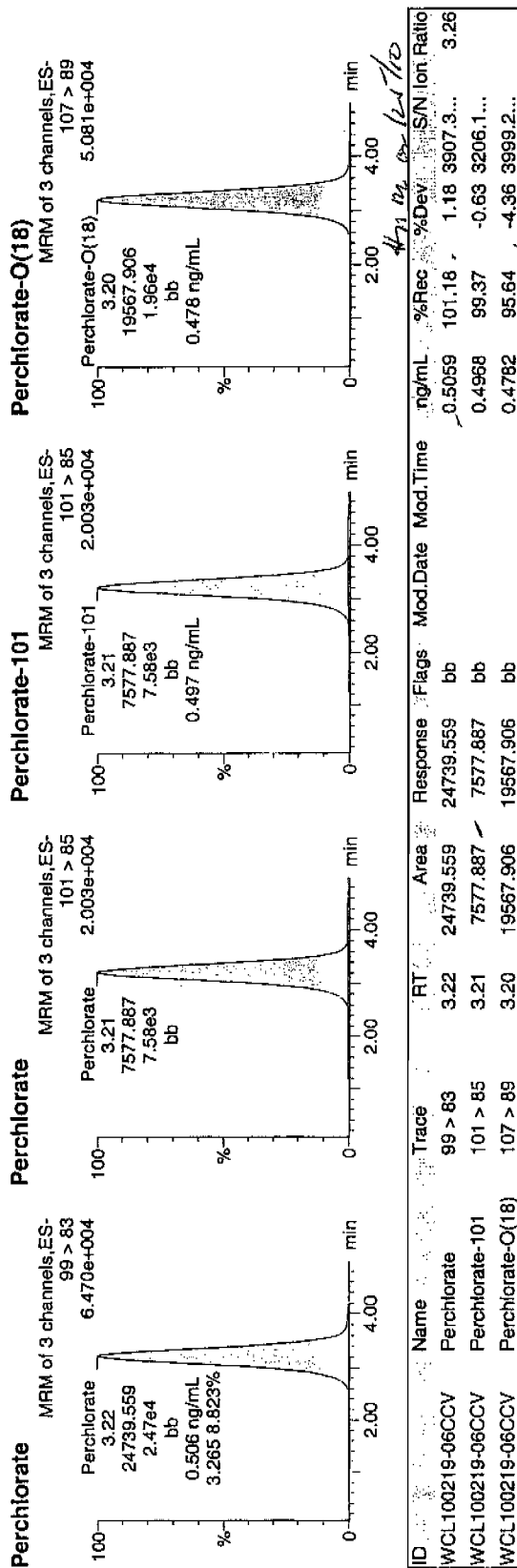
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223022a  
Date: 23-Feb-2010  
Time: 15:23:34  
ID: WCL100219-06CCV  
Vial: 1:2,A

*Per*  
*02-24-10*



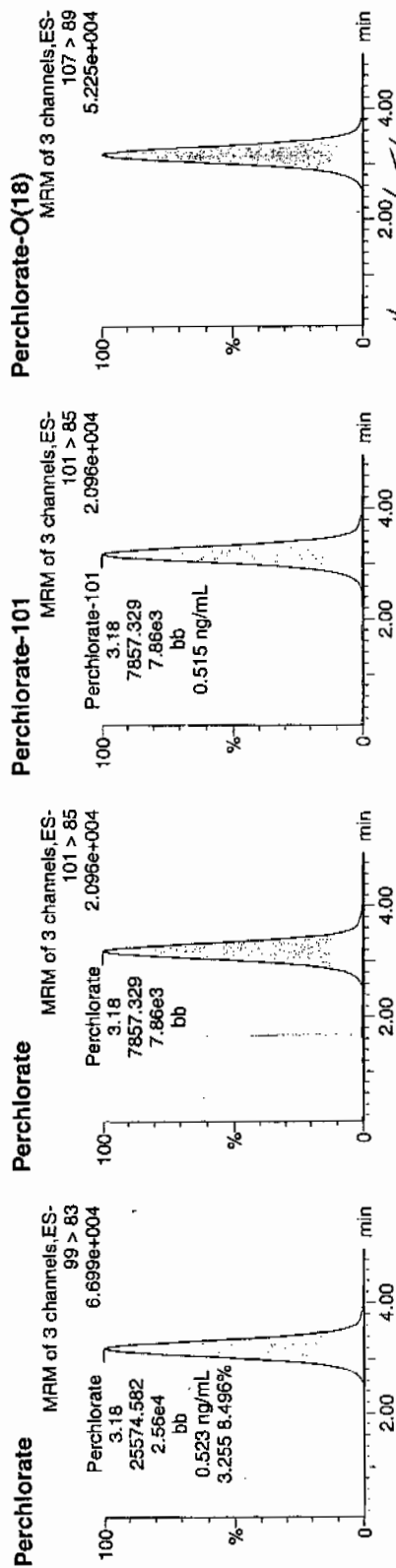
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223035a  
Date: 23-Feb-2010  
Time: 17:08:18  
ID: WCL100219-06CCV  
Vial: 1:2,A

*Per  
02-24-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	3.18	25574.582	25574.582	bb			0.5230	104.60	4.60	5650.3...	3.25
WCL100219-06CCV	Perchlorate-101	101 > 85	3.18	7857.329	7857.329	bb			0.5152	103.03	3.03	775.250	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	3.17	20000.623	20000.623	bb			0.4888	97.76	-2.24	9648.1...	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time

Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223048a

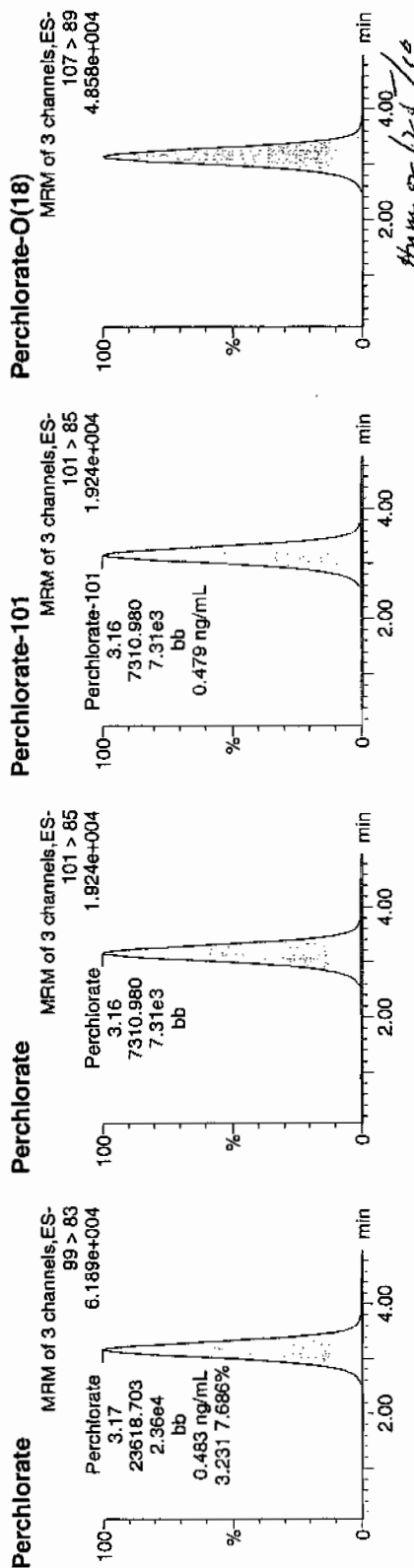
Date: 23-Feb-2010

Time: 18:52:53

ID: WCL100219-06CCV

Vial: 1:2,A

Per  
3  
0224-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	3.17	23618.703	23618.703	bb			0.4830	96.60	-3.40	5446.2...	3.23
WCL100219-06CCV	Perchlorate-101	101 > 85	3.16	7310.980	7310.980	bb			0.4793	95.87	-4.13	41.802	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	3.15	18393.375	18393.375	bb			0.4495	89.90	-10.10	1981.7...	

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

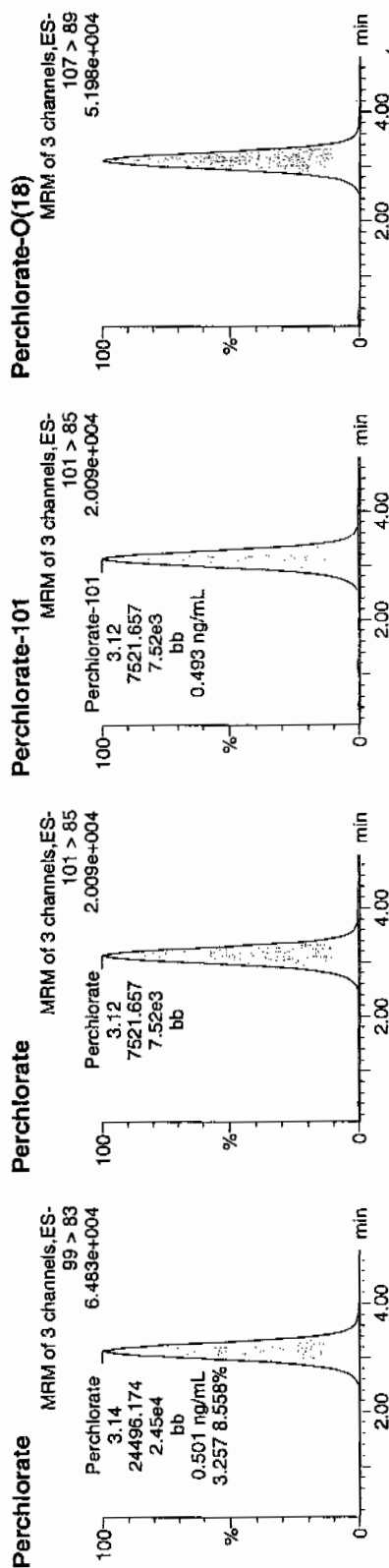
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223061a  
Date: 23-Feb-2010  
Time: 20:37:43  
ID: WCL100219-06CCV  
Vial: 1:2,A

Runs  
622  
02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	3.14	24496.174	24496.174	bb			0.5009	100.19	0.19	5714.9...	3.26
WCL100219-06CCV	Perchlorate-101	101 > 85	3.12	7521.657	7521.657	bb			0.4932	98.63	-1.37	1497.4...	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	3.11	19571.971	19571.971	bb			0.4783	95.66	-4.34	2684.6...	

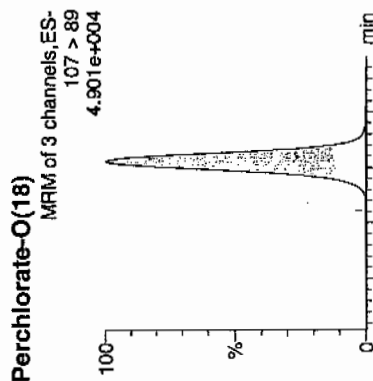
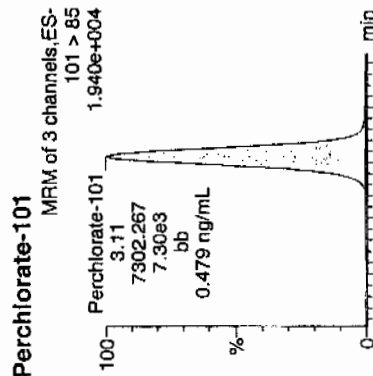
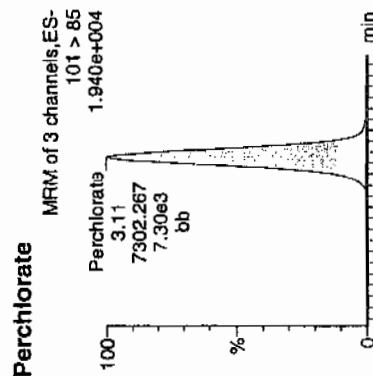
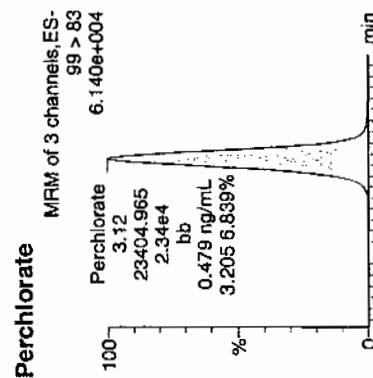
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223074a  
Date: 23-Feb-2010  
Time: 22:22:56  
ID: WCL100219-06CCV  
Vial: 1:2,A

Pan  
and  
02.24.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-06CCV	Perchlorate	99 > 83	3.12	23404.965	23404.965	bb			0.4786	95.72	-4.28	3543.2...	3.21
WCL100219-06CCV	Perchlorate-101	101 > 85	3.11	7302.267	7302.267	bb			0.4788	95.75	-4.25	1424.8...	
WCL100219-06CCV	Perchlorate-O(18)	107 > 89	3.10	18471.350	18471.350	bb			0.4514	90.28	-9.72	13463...	

Handwritten: 02.24.10

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1545

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.65	23-FEB-10 13:55	per0223011a
Perchlorate Isotope Ratio		3.41		23-FEB-10 13:55	per0223011a
Perchlorate-101	.05	.05	93.69	23-FEB-10 13:55	per0223011a
Perchlorate	.05	.05	94.13	23-FEB-10 15:39	per0223024a
Perchlorate Isotope Ratio		3.07		23-FEB-10 15:39	per0223024a
Perchlorate-101	.05	.05	98.19	23-FEB-10 15:39	per0223024a
Perchlorate	.05	.05	95.66	23-FEB-10 17:24	per0223037a
Perchlorate Isotope Ratio		3.19		23-FEB-10 17:24	per0223037a
Perchlorate-101	.05	.05	96.29	23-FEB-10 17:24	per0223037a
Perchlorate	.05	.05	94.19	23-FEB-10 19:09	per0223050a
Perchlorate Isotope Ratio		3.04		23-FEB-10 19:09	per0223050a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1545

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	99.39	23-FEB-10 19:09	per0223050a
Perchlorate	.05	.05	94.93	23-FEB-10 20:54	per0223063a
Perchlorate Isotope Ratio		3.23		23-FEB-10 20:54	per0223063a
Perchlorate-101	.05	.05	94.12	23-FEB-10 20:54	per0223063a
Perchlorate	.05	.05	90.68	23-FEB-10 22:39	per0223076a
Perchlorate Isotope Ratio		3.48		23-FEB-10 22:39	per0223076a
Perchlorate-101	.05	.04	83.55	23-FEB-10 22:39	per0223076a

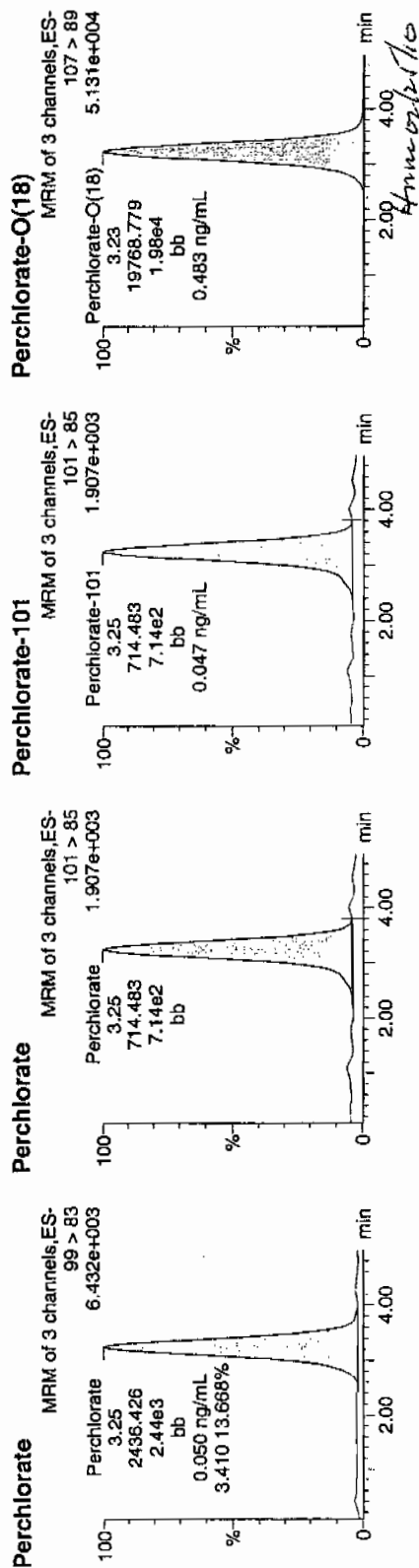
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223011a  
Date: 23-Feb-2010  
Time: 13:55:02  
ID: WCL100219-07CRI  
Vial: 1;2,B

*Run and compare*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.25	2436.426	2436.426	bb			0.0498	99.65	-0.35	752.514	3.41
WCL100219-07CRI	Perchlorate-101	101 > 85	3.25	714.483	714.483	bb			0.0468	93.69	-6.31	197.166	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.23	19768.779	19768.779	bb			0.4831	96.63	-3.37	3562.3...	



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

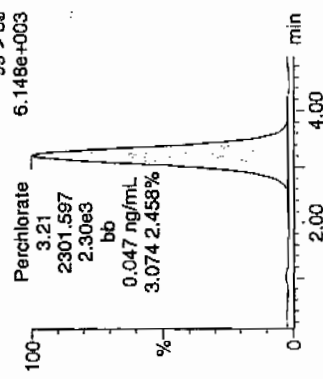
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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223024a  
Date: 23-Feb-2010  
Time: 15:39:48  
ID: WCL100219-07CRI  
Vial: 1;2,B

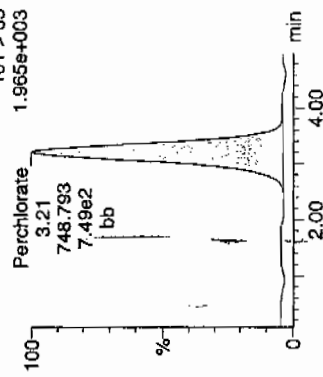
Pure  
02-24-10

Perchlorate MRM of 3 channels, ES-  
99 > 83



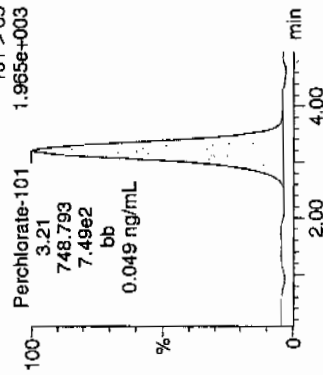
Perchlorate

MRM of 3 channels, ES-  
101 > 85



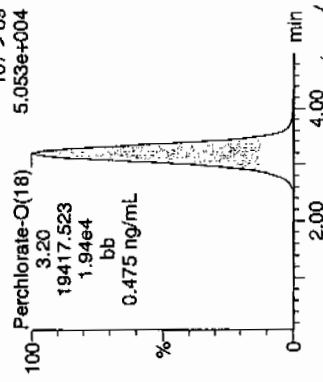
Perchlorate-101

MRM of 3 channels, ES-  
101 > 85



Perchlorate-O(18)

MRM of 3 channels, ES-  
107 > 89



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.21	2301.597	2301.597	bb			0.0471	94.13	-5.87	345.822	3.07
WCL100219-07CRI	Perchlorate-101	101 > 85	3.21	748.793	748.793	bb			0.0491	98.19	-1.81	179.800	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.20	19417.523	19417.523	bb			0.4745	94.91	-5.09	8390.9...	

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223037a

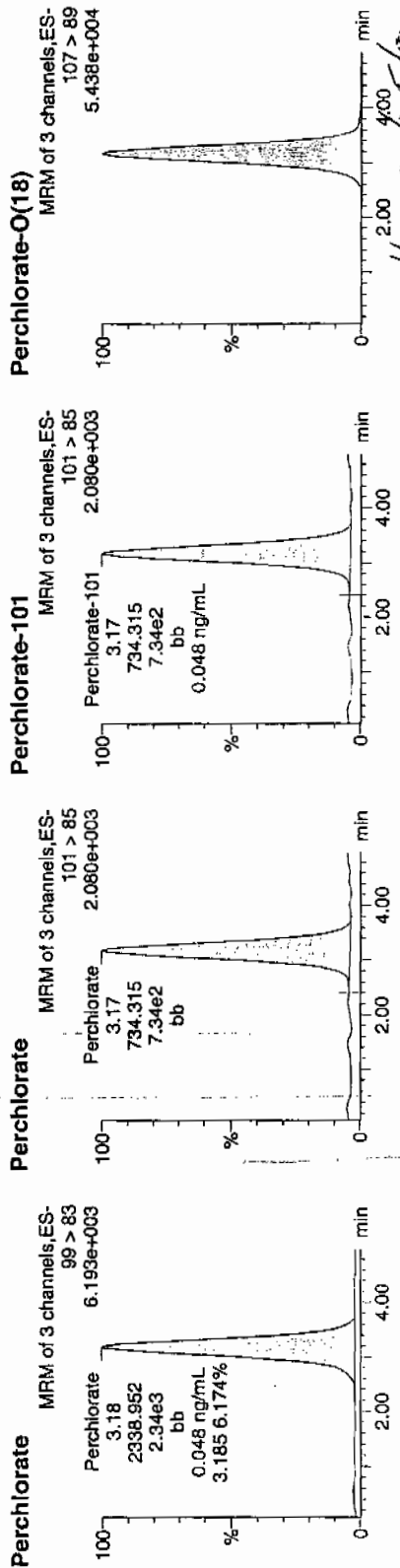
Date: 23-Feb-2010

Time: 17:24:23

ID: WCL100219-07CRI

Vial: 1:2,B

*Per  
and  
02/24/10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.18	2338.952	2338.952	bb			0.0478	95.66	-4.34	575.341	3.19
WCL100219-07CRI	Perchlorate-101	101 > 85	3.17	734.315	734.315	bb			0.0481	96.29	-3.71	259.348	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.17	20606.650	20606.650	bb			0.5036	100.72	0.72	10983...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223050a

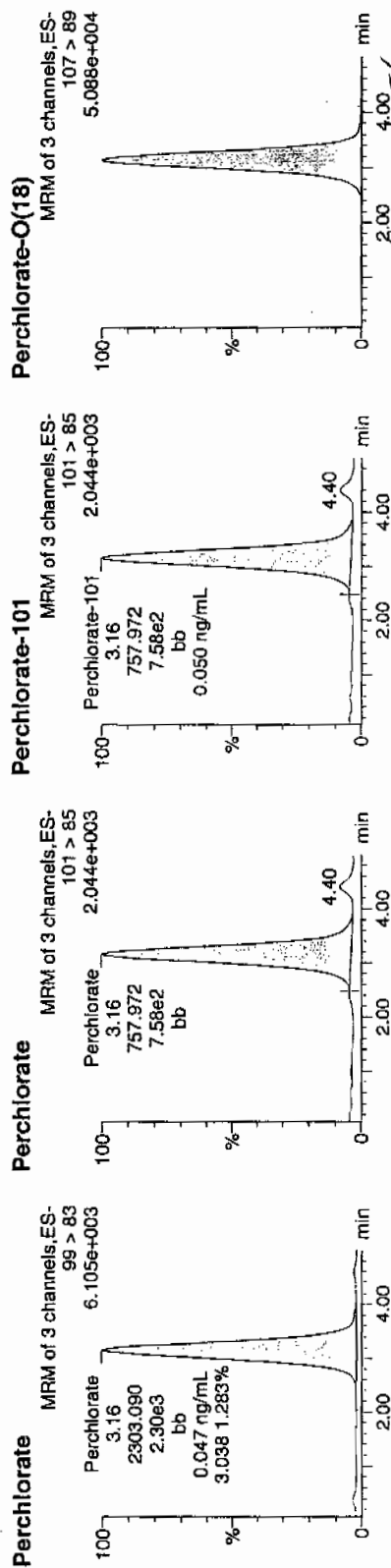
Date: 23-Feb-2010

Time: 19:09:11

ID: WCL100219-07CRI

Vial: 1:2,B

*Per  
02-24-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.16	2303.090	2303.090	bb			0.0471	94.19	-5.81	621.859	3.04
WCL100219-07CRI	Perchlorate-101	101 > 85	3.16	757.972	757.972	bb			0.0497	99.39	-0.61	379.074	
WCL100219-07CRI	Perchlorate-O(16)	107 > 89	3.15	19230.377	19230.377	bb			0.4700	93.99	-6.01	5771.8...	

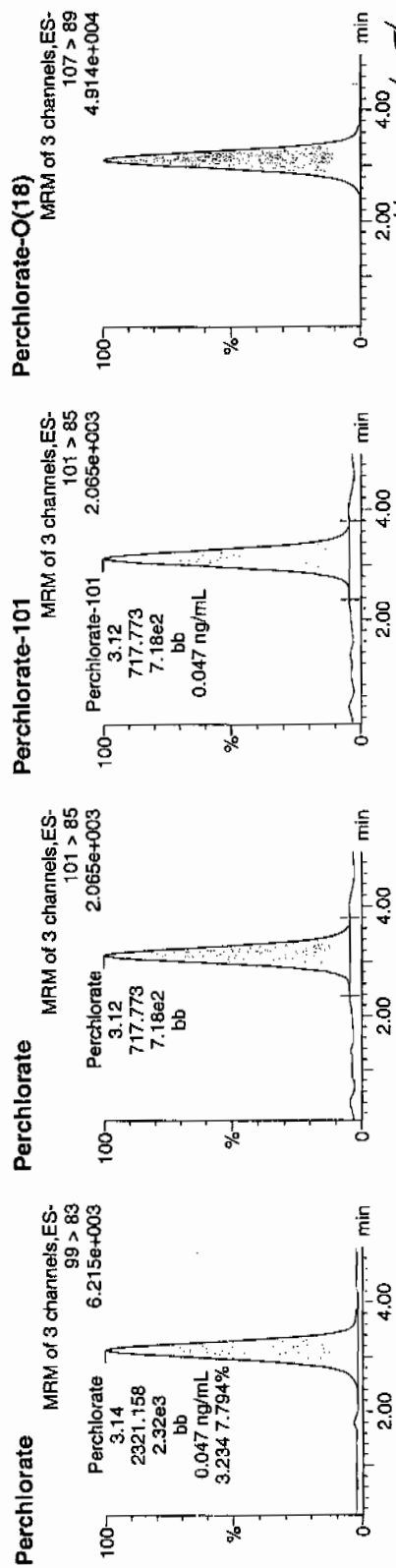
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223063a  
Date: 23-Feb-2010  
Time: 20:54:02  
ID: WCL100219-07CRI  
Vial: 1:2,B

*Per*  
*02-24-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.14	2321.158	2321.158	bb			0.0475	94.93	-5.07	88.026	3.23
WCL100219-07CRI	Perchlorate-101	101 > 85	3.12	717.773	717.773	bb			0.0471	94.12	-5.88	899.037	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.11	18669.115	18669.115	bb			0.4563	91.25	-8.75	2265.6...	

*4.914e+004*

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qid

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223076a

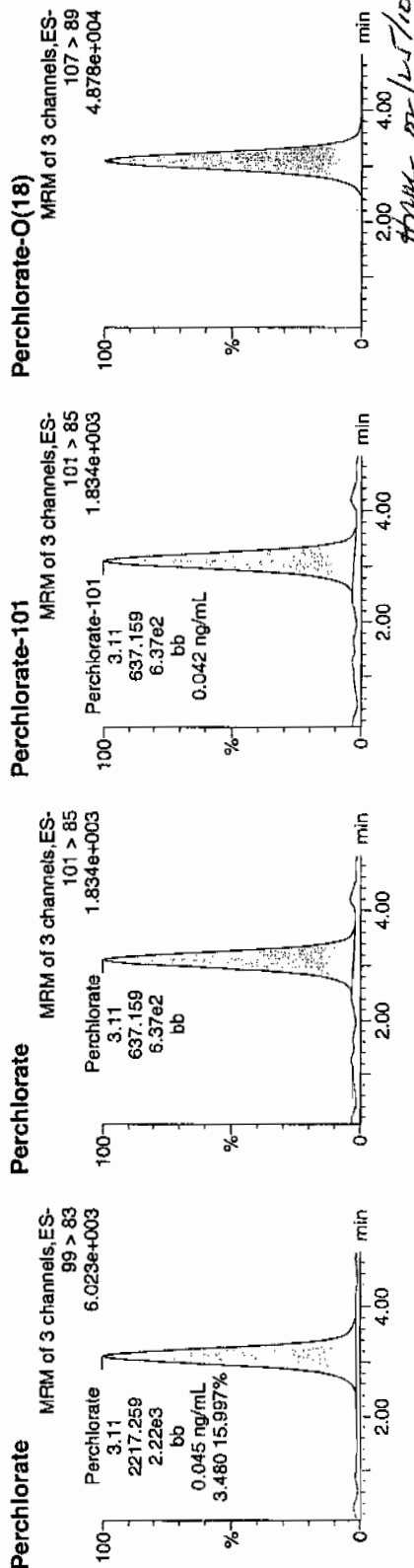
Date: 23-Feb-2010

Time: 22:39:14

ID: WCL100219-07CRI

Vial: 1:2,B

*Run on 2/24/10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.11	2217.259	2217.259	bb			0.0453	90.68	-9.32	486.685	3.48
WCL100219-07CRI	Perchlorate-101	101 > 85	3.11	637.159	637.159	bb			0.0418	83.55	-16.45	214.354	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.10	18546.570	18546.570	bb			0.4533	90.65	-9.35	2886.6...	

# QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 1202035660

Date Filtered: 18-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	23-FEB-10 17:32	per0223038a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:32	per0223038a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	23-FEB-10 17:32	per0223038a
	Perchlorate-O(18)			4.90	ug/kg		1	23-FEB-10 17:32	per0223038a

<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

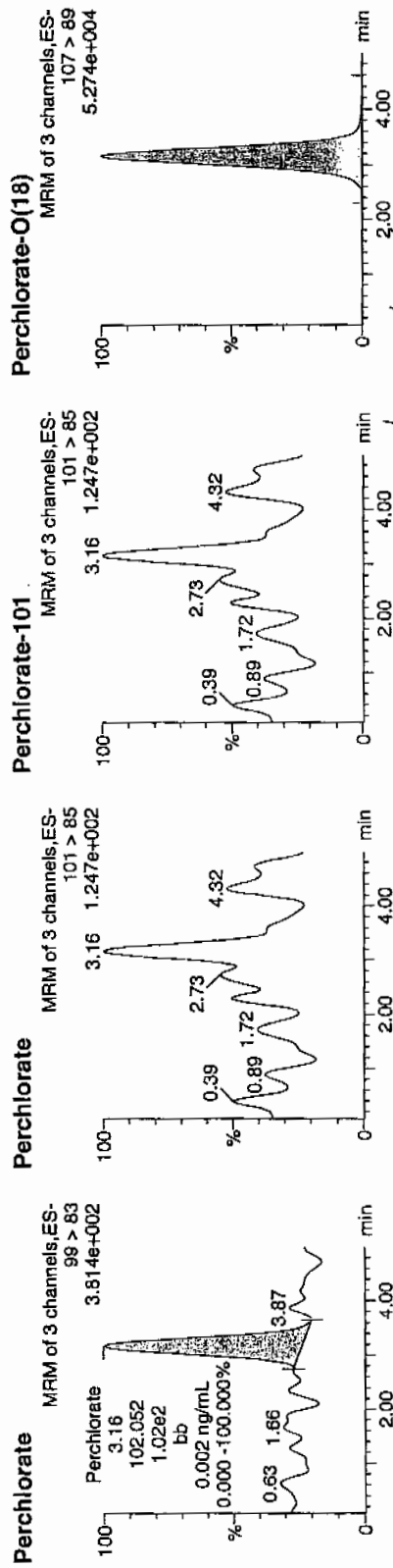
Page 38 of 134

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223038a  
Date: 23-Feb-2010  
Time: 17:32:27  
ID: 1202035660  
Vial: 2:1A

1202035660 | 950071 | 5022 | 103 | 11 | 02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035660	Perchlorate	99 > 83	3.16	102.052	102.052	bb				0.0021	98.01	-1.99	3381.9...	0.00
1202035660	Perchlorate-101	101 > 85												
1202035660	Perchlorate-O(18)	107 > 89	3.16	20052.578	20052.578	bb				0.4901	98.01	-1.99	3381.9...	0.00

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



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 1202035661

Date Filtered: 18-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	1.98	ug/kg	J	1	23-FEB-10 17:40	per0223039a
	Perchlorate Isotope Ratio			3.1			1	23-FEB-10 17:40	per0223039a
14797-73-0	Perchlorate-101	.5	2	2.04	ug/kg		1	23-FEB-10 17:40	per0223039a
	Perchlorate-O(18)			4.69	ug/kg		1	23-FEB-10 17:40	per0223039a

<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

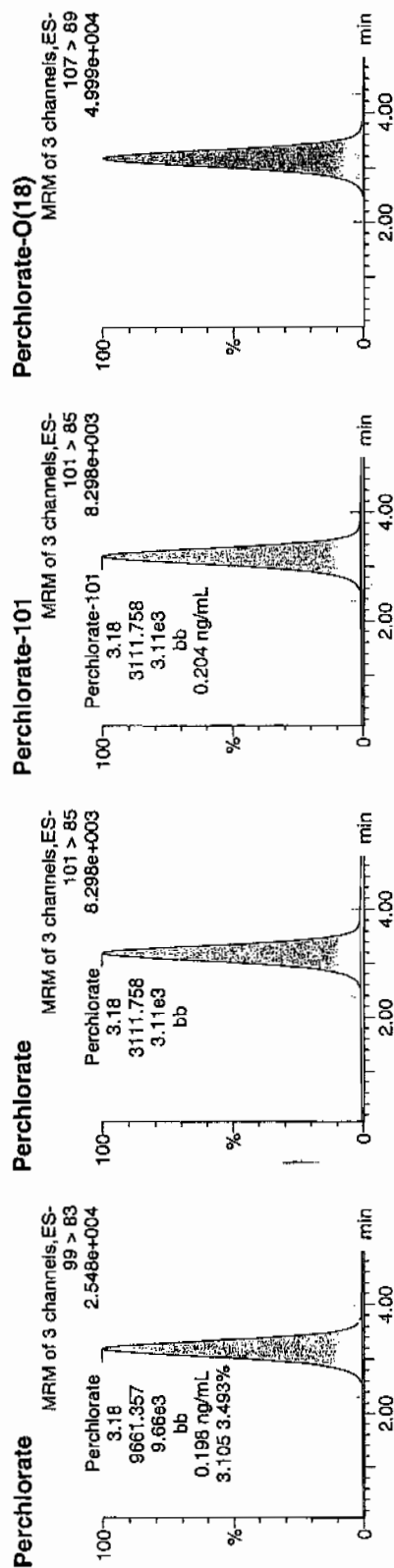
# Quantify Sample Report MassLynx 4.0 SP4 The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223039a  
Date: 23-Feb-2010  
Time: 17:40:39  
ID: 1202035661  
Vial: 2:1B

LANC | 950071 | 5000 | 6.5 | 1.1 |  
02.24.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035661	Perchlorate	99 > 83	3.18	9661.357	9661.357	bb			-0.1976	98.78	-1.22	3441.0...	3.10
1202035661	Perchlorate-101	101 > 85	3.18	3111.758	3111.758	bb			0.2040	102.01	2.01	214.221	
1202035661	Perchlorate-O(18)	107 > 89	3.17	19174.484	19174.484	bb			0.4886	93.72	-6.28	5052.6...	

$$\frac{9661.357}{48901.4} = 0.1976$$

4/8/10 12:51/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8170MS

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 1202035662

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

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	.607	2.43	3.10	ug/kg		1	23-FEB-10 19:41	per0223054a
	Perchlorate Isotope Ratio			3.29			1	23-FEB-10 19:41	per0223054a
14797-73-0	Perchlorate-101	.607	2.43	3.02	ug/kg		1	23-FEB-10 19:41	per0223054a
	Perchlorate-O(18)			5.61	ug/kg		1	23-FEB-10 19:41	per0223054a

<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

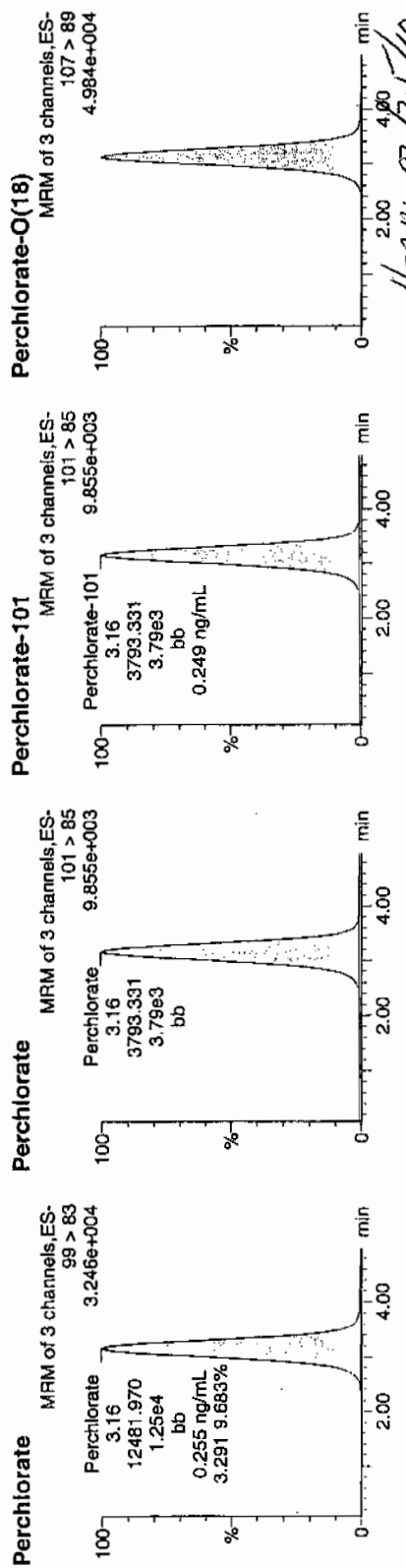
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223054a  
 Date: 23-Feb-2010  
 Time: 19:41:29  
 ID: 1202035662  
 Vial: 2:3,B

08-24-10

LANC | 950071 | 5070 | MS | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035662	Perchlorate	99 > 83	3.16	12481.970	12481.970	bb			0.2552	127.62	27.62	7557.7	3.29
1202035662	Perchlorate-101	101 > 85	3.16	3793.331	3793.331	bb			0.2487	124.35	24.35	857.059	
1202035662	Perchlorate-Q(18)	107 > 89	3.14	18922.586	18922.586	bb			0.4624	92.49	-7.51	4697.1	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950068

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8170MSD

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545

GEL Sample ID: 1202035663

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.607	2.43	3.22	ug/kg		1	23-FEB-10 19:49	per0223055a
	Perchlorate Isotope Ratio			3.15			1	23-FEB-10 19:49	per0223055a
14797-73-0	Perchlorate-101	.607	2.43	3.28	ug/kg		1	23-FEB-10 19:49	per0223055a
	Perchlorate-O(18)			5.61	ug/kg		1	23-FEB-10 19:49	per0223055a

<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

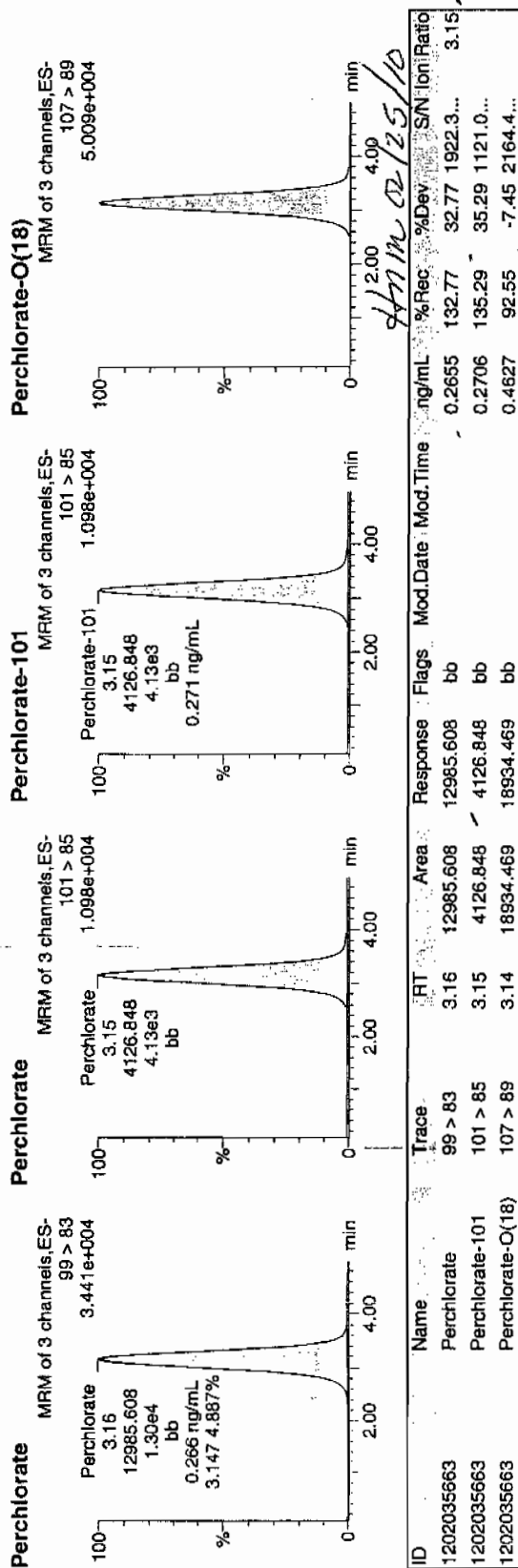
Dataset: C:\MassLynx\P perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time  
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223055a  
Date: 23-Feb-2010  
Time: 19:49:31  
ID: 1202035663  
Vial: 2:3,C

622  
0-2410

1422 | 950071 | 50720 | MSO | 11



# 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: 950068  
 Analyst: Lynne Russell  
 Method: SW846 6850 Modified  
 Lab SOP: GL-OA-E-067 REV# 6  
 Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202035660 MB	18-FEB-2010 13:17:00	2	20	10
1202035661 LCS	18-FEB-2010 13:17:00	2	20	10
245998001	18-FEB-2010 13:17:00	2	20	10
245998002	18-FEB-2010 13:17:00	2	20	10
245998003	18-FEB-2010 13:17:00	2	20	10
245998004	18-FEB-2010 13:17:00	2	20	10
245998005	18-FEB-2010 13:17:00	2	20	10
245998006	18-FEB-2010 13:17:00	2	20	10
245998007	18-FEB-2010 13:17:00	2	20	10
245998008	18-FEB-2010 13:17:00	2	20	10
245998009	18-FEB-2010 13:17:00	2	20	10
246055001	18-FEB-2010 13:17:00	2	20	10
1202035662 MS (246055001)	18-FEB-2010 13:17:00	2	20	10
1202035663 MSD (246055001)	18-FEB-2010 13:17:00	2	20	10
246055002	18-FEB-2010 13:17:00	2	20	10
246055003	18-FEB-2010 13:17:00	2	20	10
246055004	18-FEB-2010 13:17:00	2	20	10
246055005	18-FEB-2010 13:17:00	2	20	10
246055006	18-FEB-2010 13:17:00	2	20	10
246055007	18-FEB-2010 13:17:00	2	20	10
246055008	18-FEB-2010 13:17:00	2	20	10
246055009	18-FEB-2010 13:17:00	2	20	10
1202035664 LCS	18-FEB-2010 13:17:00	2	20	10

### Comments:

De-solting cartridges used: 091120-1-Ba and 100112-1-H.



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/23/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per022310a  
 Initial Calibration Date: 02/23/10

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

Reviewed BY: *Amul*  
 Date: *02/25/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100219-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0223001a	IPB001	CWW	2/23/2010 12:33			1		USE	B
per0223002a	IPB001	CWW	2/23/2010 12:42			1		USE	B
per0223003a	WCLICAL-01	CWW	2/23/2010 12:50			1		USE	I
per0223004a	WCLICAL-02	CWW	2/23/2010 12:58			1		USE	I
per0223005a	WCLICAL-03	CWW	2/23/2010 13:06			1		USE	I
per0223006a	WCLICAL-04	CWW	2/23/2010 13:14			1		USE	I
per0223007a	WCLICAL-05	CWW	2/23/2010 13:22			1		USE	I
per0223008a	IPB002	CWW	2/23/2010 13:30			1		USE	B
per0223009a	WCLICV	CWW	2/23/2010 13:38			1		USE	C
per0223010a	IPB003	CWW	2/23/2010 13:46			1		USE	B
per0223011a	WCLCRI	CWW	2/23/2010 13:55			1		USE	C
per0223012a	1202035646	CWW	2/23/2010 14:03	950063	10-1514	1	LANL	USE	S
per0223013a	1202035647	CWW	2/23/2010 14:11	950063	10-1514	1	LANL	USE	S
per0223014a	1202035650	CWW	2/23/2010 14:19	950063	10-1514	1	LANL	USE	S
per0223015a	245979001	CWW	2/23/2010 14:27	950063	10-1514	1	LANL	USE	S
per0223016a	1202035648	CWW	2/23/2010 14:35	950063	10-1514	1	LANL	USE	S
per0223017a	1202035649	CWW	2/23/2010 14:43	950063	10-1514	1	LANL	USE	S
per0223018a	245979002	CWW	2/23/2010 14:51	950063	10-1514	1	LANL	USE	S
per0223019a	245979003	CWW	2/23/2010 14:59	950063	10-1514	1	LANL	USE	S
per0223020a	245979004	CWW	2/23/2010 15:07	950063	10-1514	1	LANL	USE	S
per0223021a	245979005	CWW	2/23/2010 15:15	950063	10-1514	1	LANL	USE	S
per0223022a	WCLCCV	CWW	2/23/2010 15:23			1		USE	C
per0223023a	IPB004	CWW	2/23/2010 15:31			1		USE	B
per0223024a	WCLCRI	CWW	2/23/2010 15:39			1		USE	C
per0223025a	245979006	CWW	2/23/2010 15:47	950063	10-1514	1	LANL	USE	S
per0223026a	245979007	CWW	2/23/2010 15:55	950063	10-1514	1	LANL	USE	S
per0223027a	245979008	CWW	2/23/2010 16:03	950063	10-1514	1	LANL	USE	S
per0223028a	245979009	CWW	2/23/2010 16:11	950063	10-1514	1	LANL	USE	S
per0223029a	245979010	CWW	2/23/2010 16:20	950063	10-1514	1	LANL	USE	S

per0223030a	245979011	CWW	2/23/2010 16:28	950063	10-1514	1	LANL	USE	S
per0223031a	245979012	CWW	2/23/2010 16:36	950063	10-1514	1	LANL	USE	S
per0223032a	245979013	CWW	2/23/2010 16:44	950063	10-1514	1	LANL	USE	S
per0223033a	245979014	CWW	2/23/2010 16:52	950063	10-1514	1	LANL	USE	S
per0223034a	245979015	CWW	2/23/2010 17:00	950063	10-1514	1	LANL	USE	S
per0223035a	WCLCCV	CWW	2/23/2010 17:08			1		USE	C
per0223036a	IPB005	CWW	2/23/2010 17:16			1		USE	B
per0223037a	WCLCRI	CWW	2/23/2010 17:24			1		USE	C
per0223038a	1202035660	CWW	2/23/2010 17:32	950071	VARIOUS	1	LANL	USE	S
per0223039a	1202035661	CWW	2/23/2010 17:40	950071	VARIOUS	1	LANL	USE	S
per0223040a	1202035664	CWW	2/23/2010 17:48	950071	VARIOUS	1	LANL	USE	S
per0223041a	245998001	CWW	2/23/2010 17:56	950071	10-1517	1	LANL	USE	S
per0223042a	245998002	CWW	2/23/2010 18:04	950071	10-1517	1	LANL	USE	S
per0223043a	245998003	CWW	2/23/2010 18:12	950071	10-1517	1	LANL	USE	S
per0223044a	245998004	CWW	2/23/2010 18:20	950071	10-1517	1	LANL	USE	S
per0223045a	245998005	CWW	2/23/2010 18:28	950071	10-1517	1	LANL	USE	S
per0223046a	245998006	CWW	2/23/2010 18:36	950071	10-1517	1	LANL	USE	S
per0223047a	245998007	CWW	2/23/2010 18:44	950071	10-1517	1	LANL	USE	S
per0223048a	WCLCCV	CWW	2/23/2010 18:52			1		USE	C
per0223049a	IPB006	CWW	2/23/2010 19:01			1		USE	B
per0223050a	WCLCRI	CWW	2/23/2010 19:09			1		USE	C
per0223051a	245998008	CWW	2/23/2010 19:17	950071	10-1517	1	LANL	USE	S
per0223052a	245998009	CWW	2/23/2010 19:25	950071	10-1517	1	LANL	USE	S
per0223053a	246055001	CWW	2/23/2010 19:33	950071	10-1545	1	LANL	USE	S
per0223054a	1202035662	CWW	2/23/2010 19:41	950071	10-1545	1	LANL	USE	S
per0223055a	1202035663	CWW	2/23/2010 19:49	950071	10-1545	1	LANL	USE	S
per0223056a	246055002	CWW	2/23/2010 19:57	950071	10-1545	1	LANL	USE	S
per0223057a	246055003	CWW	2/23/2010 20:05	950071	10-1545	1	LANL	USE	S
per0223058a	246055004	CWW	2/23/2010 20:13	950071	10-1545	1	LANL	USE	S
per0223059a	246055005	CWW	2/23/2010 20:21	950071	10-1545	1	LANL	USE	S
per0223060a	246055006	CWW	2/23/2010 20:29	950071	10-1545	1	LANL	USE	S
per0223061a	WCLCCV	CWW	2/23/2010 20:37			1		USE	C
per0223062a	IPB007	CWW	2/23/2010 20:46			1		USE	B
per0223063a	WCLCRI	CWW	2/23/2010 20:54			1		USE	C
per0223064a	246055007	CWW	2/23/2010 21:02	950071	10-1545	1	LANL	USE	S
per0223065a	246055008	CWW	2/23/2010 21:10	950071	10-1545	1	LANL	USE	S
per0223066a	246055009	CWW	2/23/2010 21:18	950071	10-1545	1	LANL	USE	S

per0223067a	IPB008	CWW	2/23/2010 21:26	952906	VARIOUS	1	LANL	USE	B
per0223068a	1202042433	CWW	2/23/2010 21:34	952906	VARIOUS	1	LANL	USE	S
per0223069a	1202042434	CWW	2/23/2010 21:42	952906	VARIOUS	1	LANL	USE	S
per0223070a	1202042437	CWW	2/23/2010 21:50	952906	VARIOUS	1	LANL	USE	S
per0223071a	246607001	CWW	2/23/2010 21:58	952906	10-1699-1	1	LANL	USE	S
per0223072a	246607002	CWW	2/23/2010 22:06	952906	10-1699-1	1	LANL	USE	S
per0223073a	246607003	CWW	2/23/2010 22:14	952906	10-1699-1	1	LANL	USE	S
per0223074a	WCLCCV	CWW	2/23/2010 22:22	952906	10-1699-1	1	LANL	USE	C
per0223075a	IPB009	CWW	2/23/2010 22:31			1		USE	B
per0223076a	WCLCRI	CWW	2/23/2010 22:39			1		USE	C
per0223077a	246607004	CWW	2/23/2010 22:47	952906	10-1699-1	1	LANL	USE	S
per0223078a	246607005	CWW	2/23/2010 22:55	952906	10-1699-1	1	LANL	USE	S
per0223079a	246607006	CWW	2/23/2010 23:03	952906	10-1699-1	1	LANL	USE	S
per0223080a	246610001	CWW	2/23/2010 23:11	952906	10-1701	1	LANL	USE	S
per0223081a	246610002	CWW	2/23/2010 23:19	952906	10-1701	1	LANL	USE	S
per0223082a	246610003	CWW	2/23/2010 23:27	952906	10-1701	1	LANL	USE	S
per0223083a	246611001	CWW	2/23/2010 23:35	952906	10-1702	1	LANL	USE	S
per0223084a	246611002	CWW	2/23/2010 23:43	952906	10-1702	1	LANL	USE	S
per0223085a	246611003	CWW	2/23/2010 23:51	952906	10-1702	1	LANL	USE	S
per0223086a	WCLCCV	CWW	2/23/2010 23:59			1		USE	C
per0223087a	IPB010	CWW	2/24/2010 0:08			1		USE	B
per0223088a	WCLCRI	CWW	2/24/2010 0:16			1		USE	C
per0223089a	246679001	CWW	2/24/2010 0:24	952906	10-1704	1	LANL	USE	S
per0223090a	1202042435	CWW	2/24/2010 0:32	952906	10-1704	1	LANL	USE	S
per0223091a	1202042436	CWW	2/24/2010 0:40	952906	10-1704	1	LANL	USE	S
per0223092a	246679002	CWW	2/24/2010 0:48	952906	10-1704	1	LANL	USE	S
per0223093a	246679003	CWW	2/24/2010 0:56	952906	10-1704	1	LANL	USE	S
per0223094a	246679004	CWW	2/24/2010 1:04	952906	10-1704	1	LANL	USE	S
per0223095a	246679005	CWW	2/24/2010 1:12	952906	10-1704	1	LANL	USE	S
per0223096a	246679006	CWW	2/24/2010 1:20	952906	10-1704	1	LANL	USE	S
per0223097a	246679007	CWW	2/24/2010 1:28	952906	10-1704	1	LANL	USE	S
per0223098a	246679008	CWW	2/24/2010 1:36	952906	10-1704	1	LANL	USE	S
per0223099a	WCLCCV	CWW	2/24/2010 1:44			1		USE	C
per0223100a	IPB011	CWW	2/24/2010 1:52			1		USE	B
per0223101a	WCLCRI	CWW	2/24/2010 2:00			1		USE	C
per0223102a	1202042671	CWW	2/24/2010 2:08	952990	VARIOUS	1	LANL	USE	S
per0223103a	1202042672	CWW	2/24/2010 2:17	952990	VARIOUS	1	LANL	USE	S

per0223104a	1202042675	CWW	2/24/2010 2:25	952990	VARIOUS	1	LANL	USE	S
per0223105a	246719001	CWW	2/24/2010 2:33	952990	10-1729	1	LANL	USE	S
per0223106a	1202042673	CWW	2/24/2010 2:41	952990	10-1729	1	LANL	USE	S
per0223107a	1202042674	CWW	2/24/2010 2:49	952990	10-1729	1	LANL	USE	S
per0223108a	246719002	CWW	2/24/2010 2:57	952990	10-1729	1	LANL	USE	S
per0223109a	246719003	CWW	2/24/2010 3:05	952990	10-1729	1	LANL	USE	S
per0223110a	WCLCCV	CWW	2/24/2010 3:13			1		USE	C
per0223111a	IPB012	CWW	2/24/2010 3:21			1		USE	B
per0223112a	WCLCRI	CWW	2/24/2010 3:29			1		USE	C
per0223113a	246719004	CWW	2/24/2010 3:37	952990	10-1729	1	LANL	USE	S
per0223114a	246719005	CWW	2/24/2010 3:46	952990	10-1729	1	LANL	USE	S
per0223115a	246719006	CWW	2/24/2010 3:54	952990	10-1729	1	LANL	USE	S
per0223116a	246719007	CWW	2/24/2010 4:02	952990	10-1729	1	LANL	USE	S
per0223117a	246719008	CWW	2/24/2010 4:10	952990	10-1729	1	LANL	USE	S
per0223118a	246741001	CWW	2/24/2010 4:18	952990	10-1711	1	LANL	USE	S
per0223119a	246741002	CWW	2/24/2010 4:26	952990	10-1711	1	LANL	USE	S
per0223120a	246741003	CWW	2/24/2010 4:34	952990	10-1711	1	LANL	USE	S
per0223121a	WCLCCV	CWW	2/24/2010 4:42			1		USE	C
per0223122a	IPB013	CWW	2/24/2010 4:50			1		USE	B
per0223123a	WCLCRI	CWW	2/24/2010 4:58			1		USE	C
per0223124a	246741004	CWW	2/24/2010 5:06	952990	10-1711	1	LANL	USE	S
per0223125a	246741005	CWW	2/24/2010 5:14	952990	10-1711	1	LANL	USE	S
per0223126a	246741006	CWW	2/24/2010 5:22	952990	10-1711	1	LANL	USE	S
per0223127a	246741007	CWW	2/24/2010 5:30	952990	10-1711	1	LANL	USE	S
per0223128a	246741008	CWW	2/24/2010 5:38	952990	10-1711	1	LANL	USE	S
per0223129a	246741009	CWW	2/24/2010 5:46	952990	10-1711	1	LANL	USE	S
per0223130a	246741010	CWW	2/24/2010 5:54	952990	10-1711	1	LANL	USE	S
per0223131a	246741011	CWW	2/24/2010 6:02	952990	10-1711	1	LANL	USE	S
per0223132a	WCLCCV	CWW	2/24/2010 6:11			1		USE	C
per0223133a	IPB014	CWW	2/24/2010 6:19			1		USE	B
per0223134a	WCLCRI	CWW	2/24/2010 6:27			1		USE	C

## Isotope Ratio Criteria

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

2.31-3.85

## Tune Criteria

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

# LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1545-1**

**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: 950028

Prep Batch Number: 950027

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246056001	RE15-10-8233
246056002	RE15-10-8231
246056003	RE15-10-8230
246056004	RE15-10-8232
1202035573	Interference Check Sample (ICS)
1202035565	Method Blank (MB)
1202035566	Laboratory Control Sample (LCS)
1202035571	245911001(RE16-10-1400) Matrix Spike (MS)
1202035572	245911001(RE16-10-1400) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

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

**Calibration Information**

**Initial Calibration**

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

**CCV Requirements**

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

10-1545-1-PERLCMS

Page 1 of 4

**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 245911001 (RE16-10-1400) from SDG 10-1487-1 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.

**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.

10-1545-1-PERLCMS

Page 2 of 4



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

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

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

#### **Miscellaneous Information**

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

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

##### **Manual Integrations**

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

##### **Method Comments**

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

##### **Additional Comments**

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

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

##### **Perchlorate Isotope Ratio**

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

#### **System Configuration**

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

**Chromatographic Columns**

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

Dionex: IonPac AG-16 2 x 50 mm.

**Certification Statement**

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

**Review Validation:**

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

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

Reviewer: Herbert M. Mauer Date: 02/11/10

# SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8233

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056001

Date Filtered: 07-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	08-FEB-10 21:26	per0208070a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:26	per0208070a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:26	per0208070a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 21:26	per0208070a

<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: 250027  
 Extraction Type: Filter/DAI  
 Client Sample No. RE15-10-8231  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545-1  
 GEL Sample ID: 246056002  
 Date Filtered: 07-FEB-10  
 Injection Volume (uL): 20

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	08-FEB-10 21:32	per0208071a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:32	per0208071a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:32	per0208071a
	Perchlorate-Q(18)			0.474	ug/L		1	08-FEB-10 21:32	per0208071a

<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

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

**Lab Name:** GEL Laboratories LLC  
**Lab Code:** GEL  
**Instrument:** LCMSMS  
**Method:** SW846 6850 Modified  
**Matrix:** WATER  
**Extraction Batch ID:** 950027  
**Extraction Type:** Filter/DAI  
**Client Sample No.**  
RE15-10-8230  
**Date Received:** 03-FEB-10  
**GEL Job No (SDG):** 10-1545-1  
**GEL Sample ID:** 246056003  
**Date Filtered:** 07-FEB-10  
**Injection Volume (uL):** 20

**Sample Volume/Weight:** 10.0 mL

**%Solids:**

**Concentrated Extract Volume:** 10.0

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	08-FEB-10 21:39	per0208072a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:39	per0208072a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:39	per0208072a
	Perchlorate-O(18)			0.477	ug/L		1	08-FEB-10 21:39	per0208072a

<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: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8232

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056004

Date Filtered: 07-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	08-FEB-10 22:05	per0208076a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 22:05	per0208076a
	Perchlorate-O(18)			0.475	ug/L		1	08-FEB-10 22:05	per0208076a

<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

# QUALITY CONTROL SUMMARY



Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1545-1

Extract Batch Code: 950027

Date Filtered: 07-FEB-10

Matrix: WASTE WATER

Sample ID: 1202035566

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.196	ug/L	98.0		85 - 115
Perchlorate Isotope Ratio		3.01				-
Perchlorate-101	0.200	.207	ug/L	103		85 - 115
Perchlorate-O(18)		.483	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): 10-1545-1

Extract Batch Code: 950027 Date Filtered: 07-FEB-10

Matrix: WATER Sample ID: 1202035573

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.211	ug/L	105		70 - 130
Perchlorate Isotope Ratio		3.12				
Perchlorate-101	0.200	.214	ug/L	107		70 - 130
Perchlorate-O(18)		.488	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: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208052a

Date: 08-Feb-2010

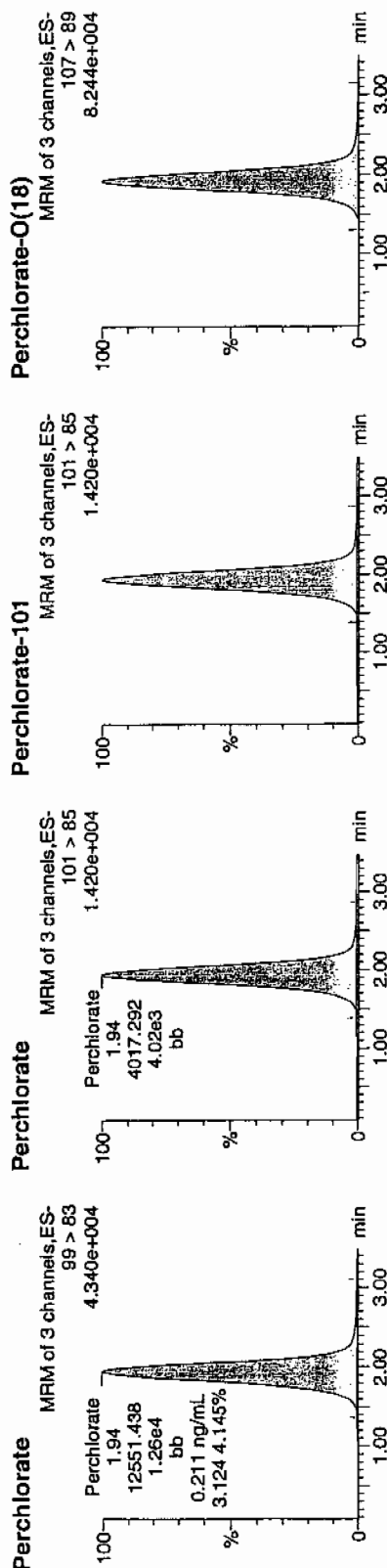
Time: 19:28:20

ID: 1202035573

Vial: 2:1,C

02-09-10

1202035573 | 1202035573 | 1202035573



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	Day	SIN	Or	Ratio
1202035573	Perchlorate	99 > 83	1.94	12551.438	12551.438	bb				0.2108	105.42	5.42	1217.2...	3.12
1202035573	Perchlorate-101	101 > 85	1.94	4017.292	4017.292	bb				0.2140	107.01	7.01	2883.8...	
1202035573	Perchlorate-O(18)	107 > 89	1.93	23733.555	23733.555	bb				0.4879	97.59	-2.41	5289.0...	

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

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1545-1

Extract Batch Code: 950027

Date Extracted: 07-FEB-10

GEL MS/PS ID: 1202035571

Client ID: RE16-10-1400

GEL MSD/PSD ID: 1202035572

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	0.00204	ug/L	0.192	94.8		.198	98.1		3.39		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3			3.01			0			-
Perchlorate-101	0.200	0.00319	ug/L	0.203	99.9		.209	103		2.76		30	75 - 125
Perchlorate-O(18)	0	0.461	ug/L	0.468			.462			1.31			-

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

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1545-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate	0.00	0	NA	08-FEB-10	per0208002a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time

Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020810a.mdb 09 Feb 2010 07:47:59

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020810a.cdb 09 Feb 2010 07:48:17

Name: per0208001a

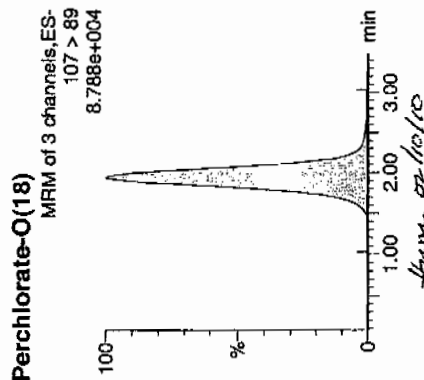
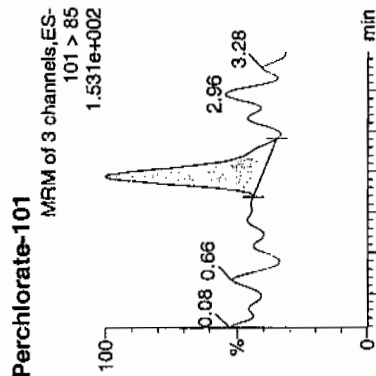
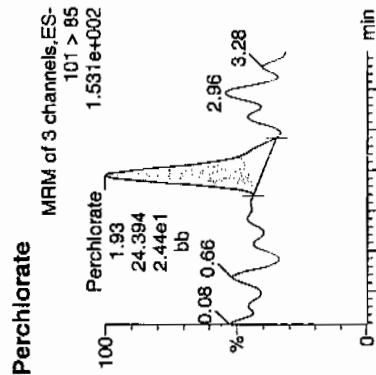
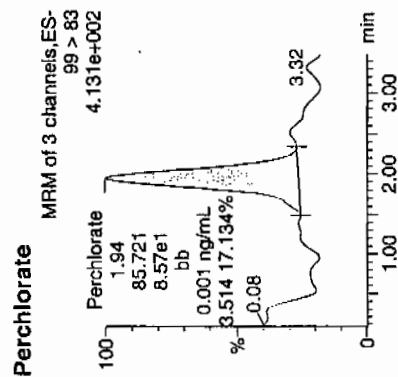
Date: 08-Feb-2010

Time: 13:54:09

ID: IPB001

Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.94	85.721	85.721	bb			0.0014			29.463	3.51
IPB001	Perchlorate-101	101 > 85	1.93	24.394	24.394	bb			0.0013			21.780	
IPB001	Perchlorate-O(18)	107 > 89	1.94	25816.436	25816.436	bb			0.5308	106.15	6.15	6489.2...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208002a

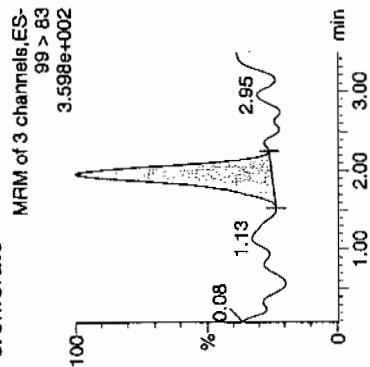
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Time: 14:00:52

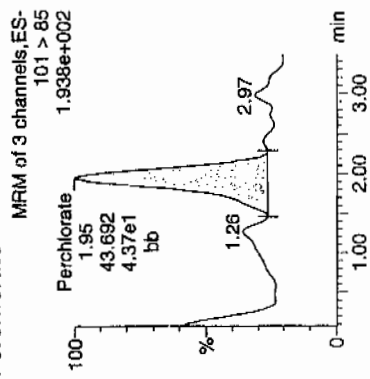
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Vial: 1:1,A

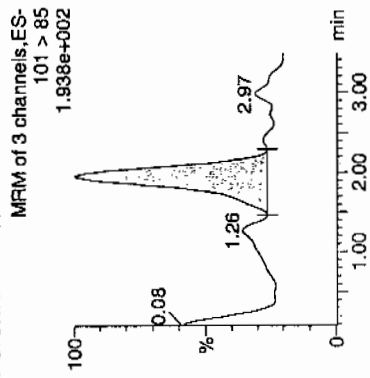
Perchlorate



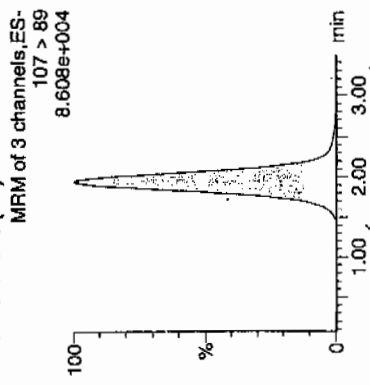
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.97	72.177	72.177	bb			0.0012			25.847	1.65
IPB001	Perchlorate-101	101 > 85	1.95	43.692	43.692	bb			0.0023			6.442	
IPB001	Perchlorate-O(18)	107 > 89	1.94	25472.947	25472.947	bb			0.5237	104.74	4.74	6120.9...	

0.0012  
0.0023  
0.5237

## Perchlorate Continuing Calibration Blank

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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1545-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-FEB-10	per0208008a	IPB002
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208008a	IPB002
Perchlorate	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate	0.00	0	NA	08-FEB-10	per0208061a	IPB008



Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1545-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208061a	IPB008
Perchlorate	0.00	0	NA	08-FEB-10	per0208074a	IPB009
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208074a	IPB009
Perchlorate	0.00	0	NA	08-FEB-10	per0208080a	IPB010
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208080a	IPB010
Perchlorate	0.00	0	NA	08-FEB-10	per0208084a	IPB011
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208084a	IPB011

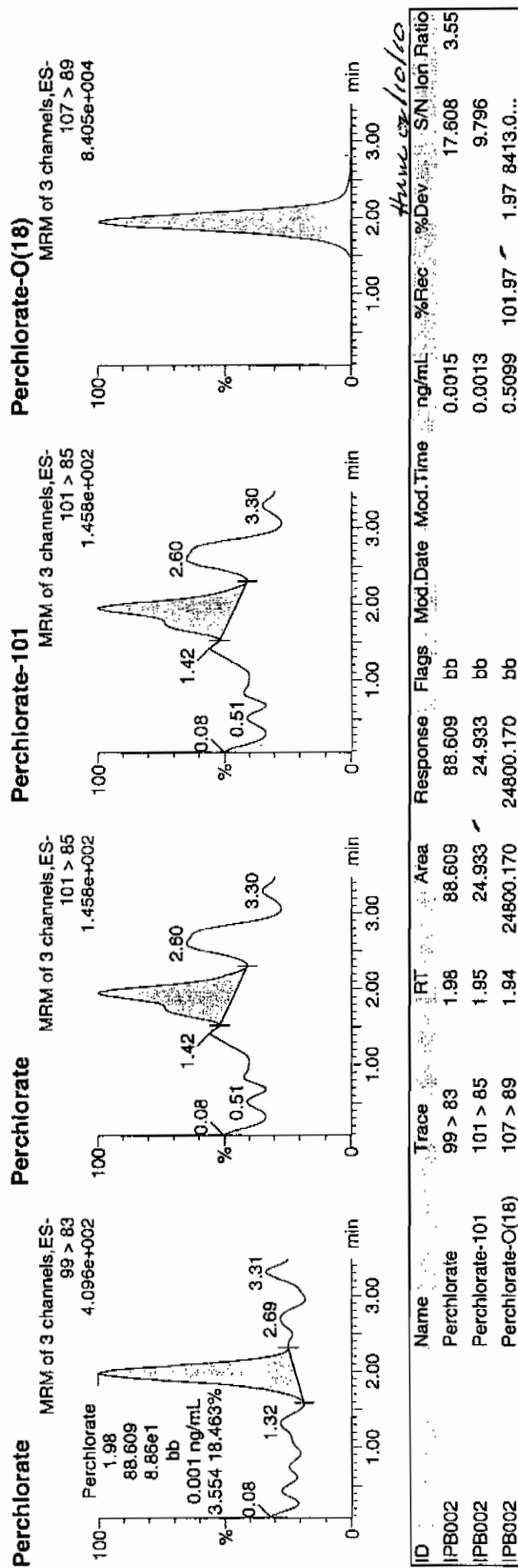
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208008a  
Date: 08-Feb-2010  
Time: 14:40:00  
ID: IPB002  
Vial: 1:1,A

02.01.10



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

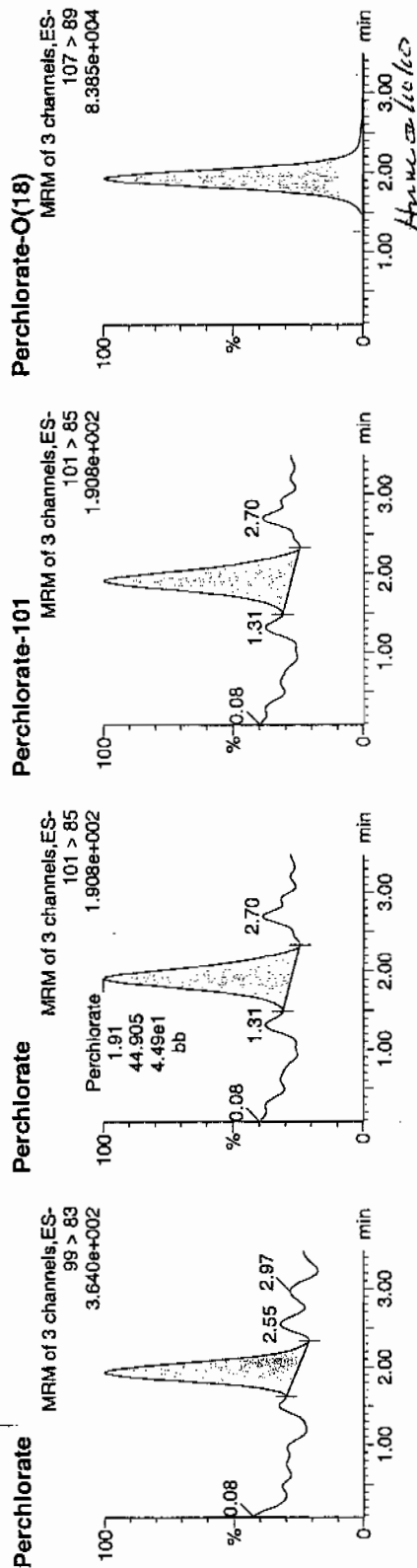
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208010a  
Date: 08-Feb-2010  
Time: 14:53:04  
ID: IPB003  
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod. Date	Mod. Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83	1.93	78.058	78.058	bb			0.0013	17.447	1.74		
IPB003	Perchlorate-101	101 > 85	1.91	44.905	44.905	bb			0.0024	6.119			
IPB003	Perchlorate-O(18)	107 > 89	1.34	24645.639	24645.639	bb			0.5067	101.34	1.34	10100	

0.0034  
10.0500

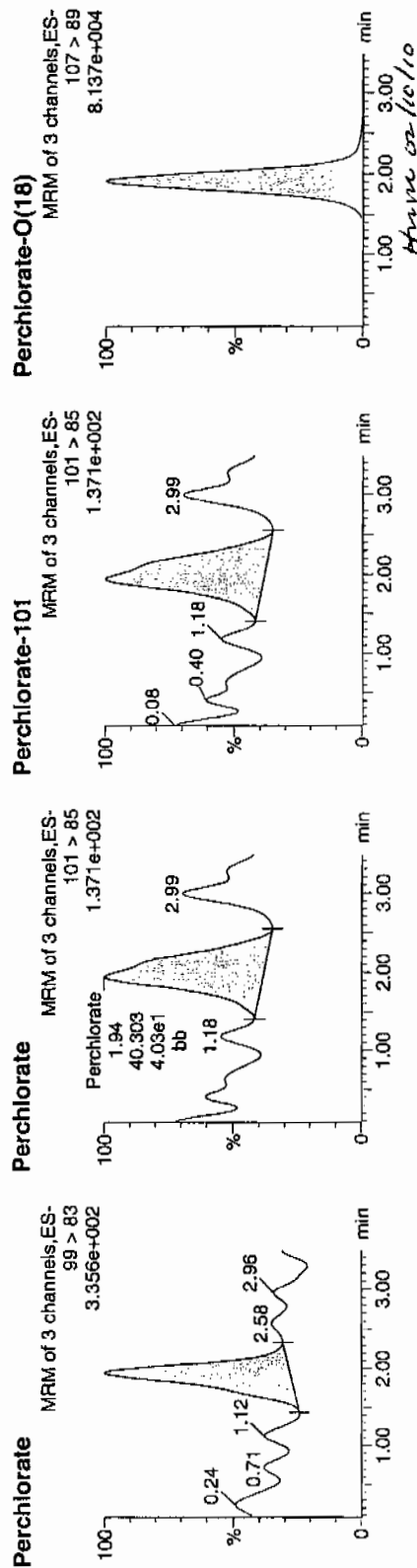
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208022a  
Date: 08-Feb-2010  
Time: 16:11:45  
ID: IPB004  
Vial: 1:1.A

02-27-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
IPB004	Perchlorate	99 > 83	1.94	78.709	78.709	bb			0.0013			20.514	1.95
IPB004	Perchlorate-101	101 > 85	1.94	40.303	40.303	bb			0.0021			13.319	
IPB004	Perchlorate-O(18)	107 > 89	1.92	23985.541	23985.541	bb			0.4931	98.62	-1.38	5434.3...	

0.0013  
0.0021  
0.4931

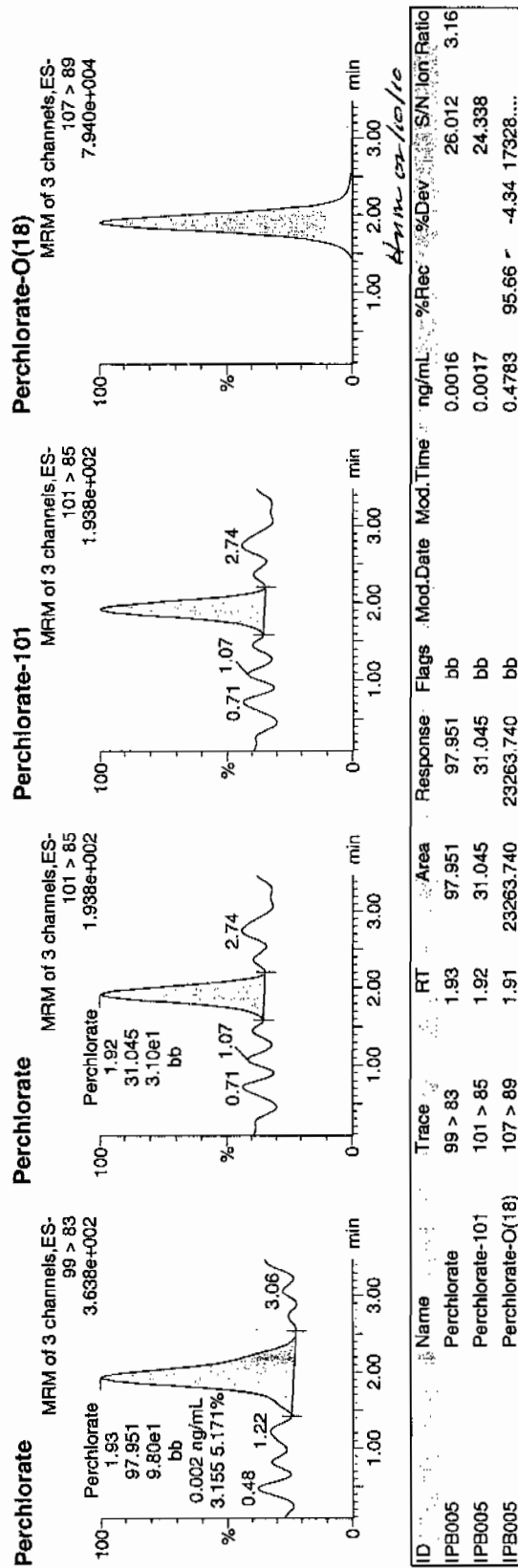
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

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Date: 08-Feb-2010  
Time: 16:37:55  
ID: IPB005  
Vial: 1:1,A

0209-10



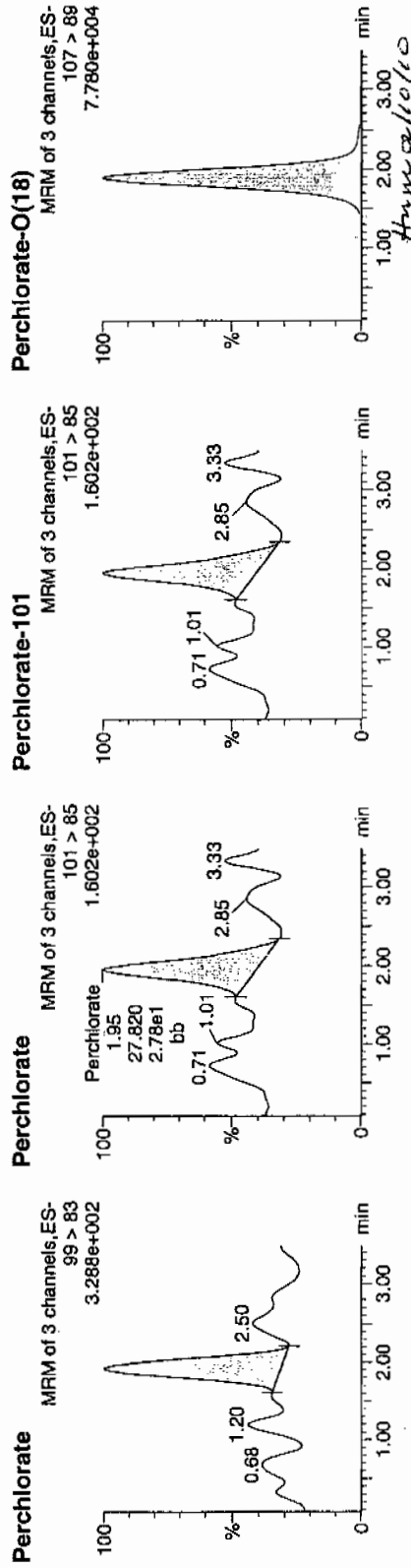
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208035a  
Date: 08-Feb-2010  
Time: 17:36:50  
ID: IPB006  
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83	1.92	61.682	61.682	bb			0.0010			7.589	2.22
IPB006	Perchlorate-101	101 > 85	1.95	27.820	27.820	bb			0.0015			8.535	
IPB006	Perchlorate-O(18)	107 > 89	1.89	22700.701	22700.701	bb			0.4657	93.34	-6.66	9296.2...	

0.004  
2.0550

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208048a

Date: 08-Feb-2010

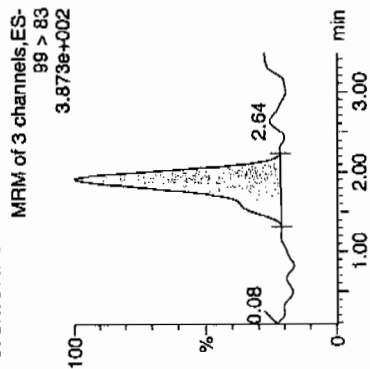
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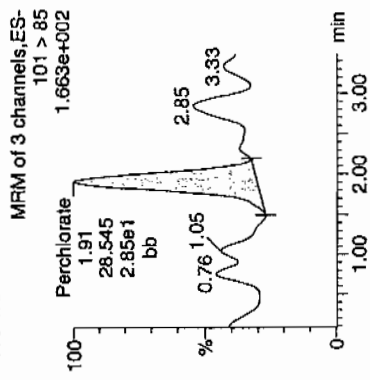
Vial: 1:1,A

02-01-10

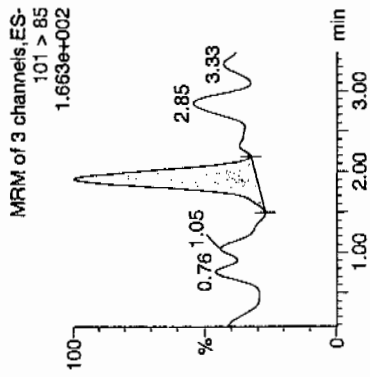
### Perchlorate



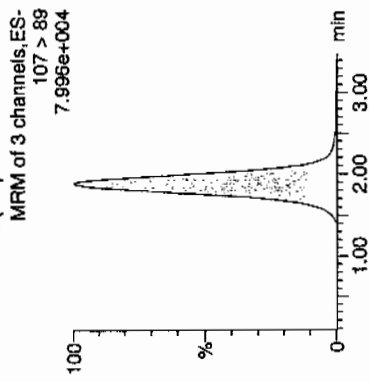
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83	1.92	98.695	98.695	bb			0.0017			45.617	3.46
IPB007	Perchlorate-101	101 > 85	1.91	28.545	28.545	bb			0.0015			16.585	
IPB007	Perchlorate-O(18)	107 > 89	1.88	23201.119	23201.119	bb			0.4770	95.40	-4.60	2781.0...	

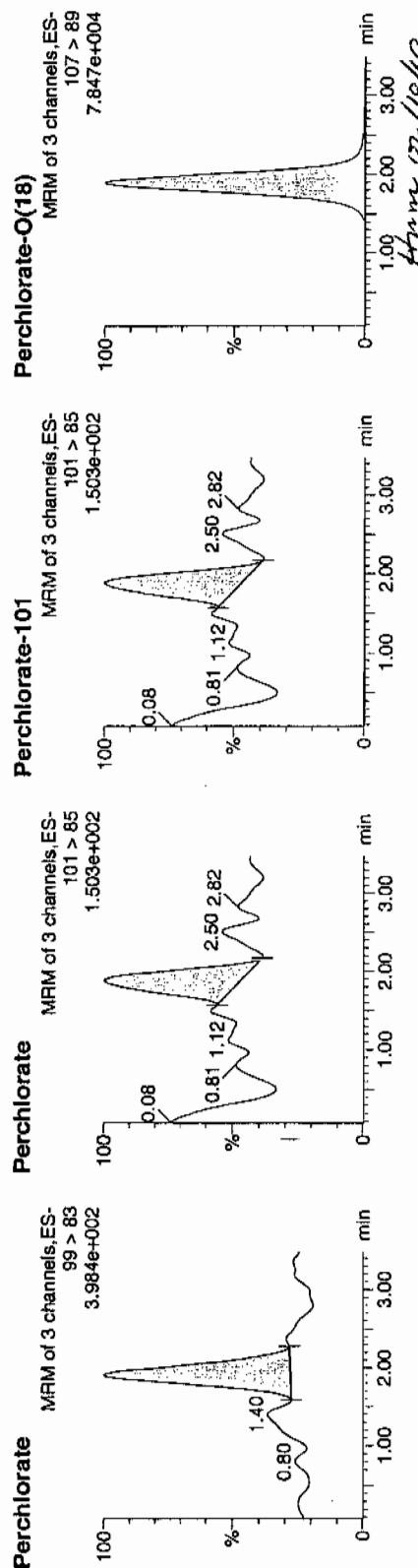
**Quantity Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208061a  
Date: 08-Feb-2010  
Time: 20:27:18  
ID: IPB008  
Vial: 1:1,A

03-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83	1.91	82.327	82.327	bb			0.0014			25.247	3.44
IPB008	Perchlorate-101	101 > 85	1.88	23.921	23.921	bb			0.0013			7.965	
IPB008	Perchlorate-O(18)	107 > 89	1.89	22850.625	22850.625	bb			0.4698	93.96	-6.04	9586.1...	



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

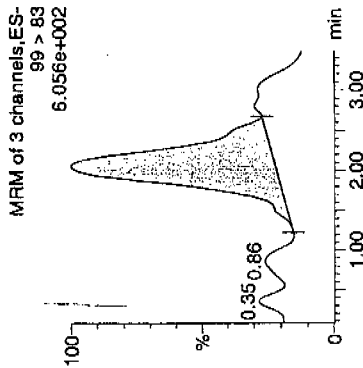
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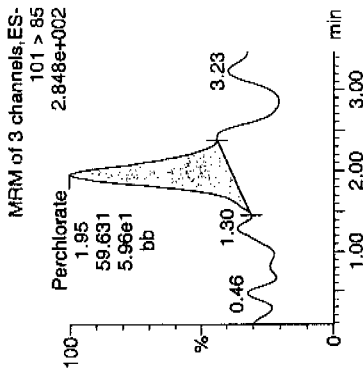
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Vial: 1:1,A

02-04-10

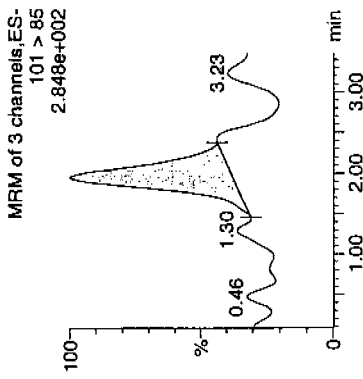
### Perchlorate



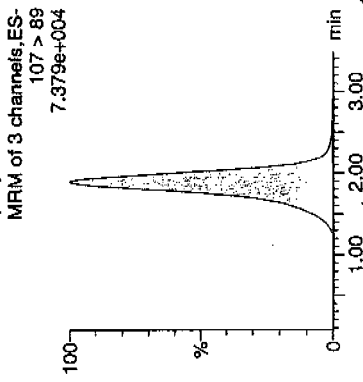
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83	2.05	246.817	246.817	bb			0.0041			12.504	4.14
IPB009	Perchlorate-101	101 > 85	1.95	59.631	59.631	bb			0.0032			10.438	
IPB009	Perchlorate-O(18)	107 > 89	1.89	23201.556	23201.656	bb			0.4770	95.40	-4.60	2554.5...	

OKAY  
25.0300

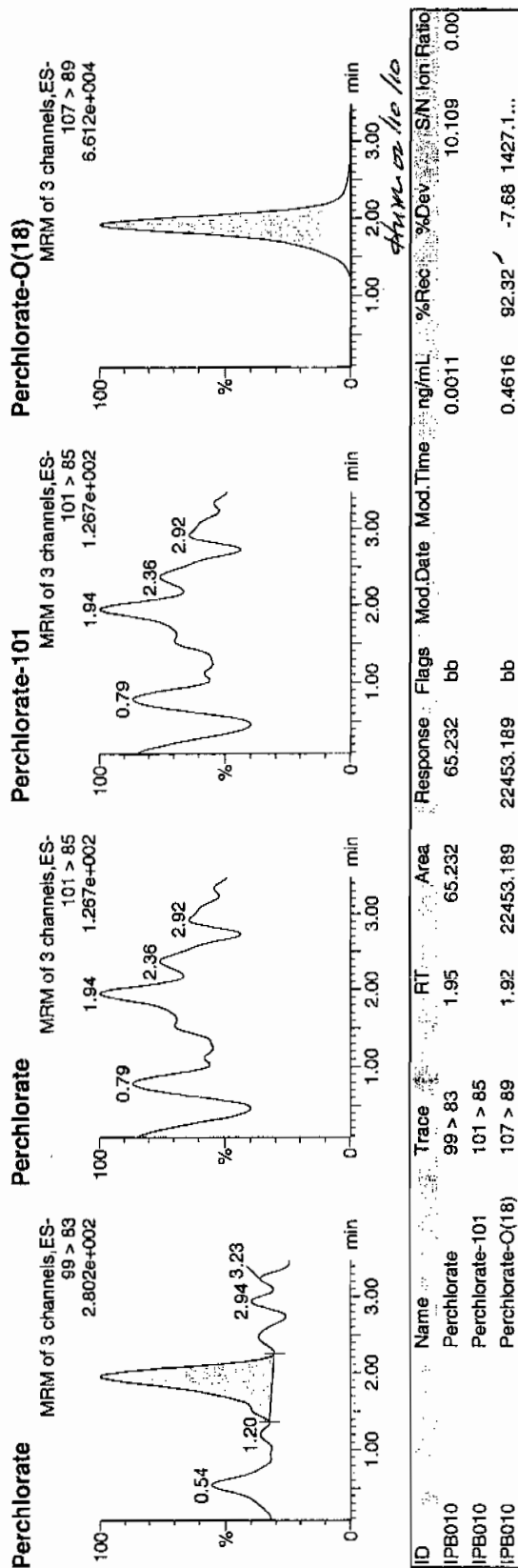
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020310a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

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Date: 08-Feb-2010  
Time: 22:32:07  
ID: IPB010  
Vial: 1:1,A

02-09-10



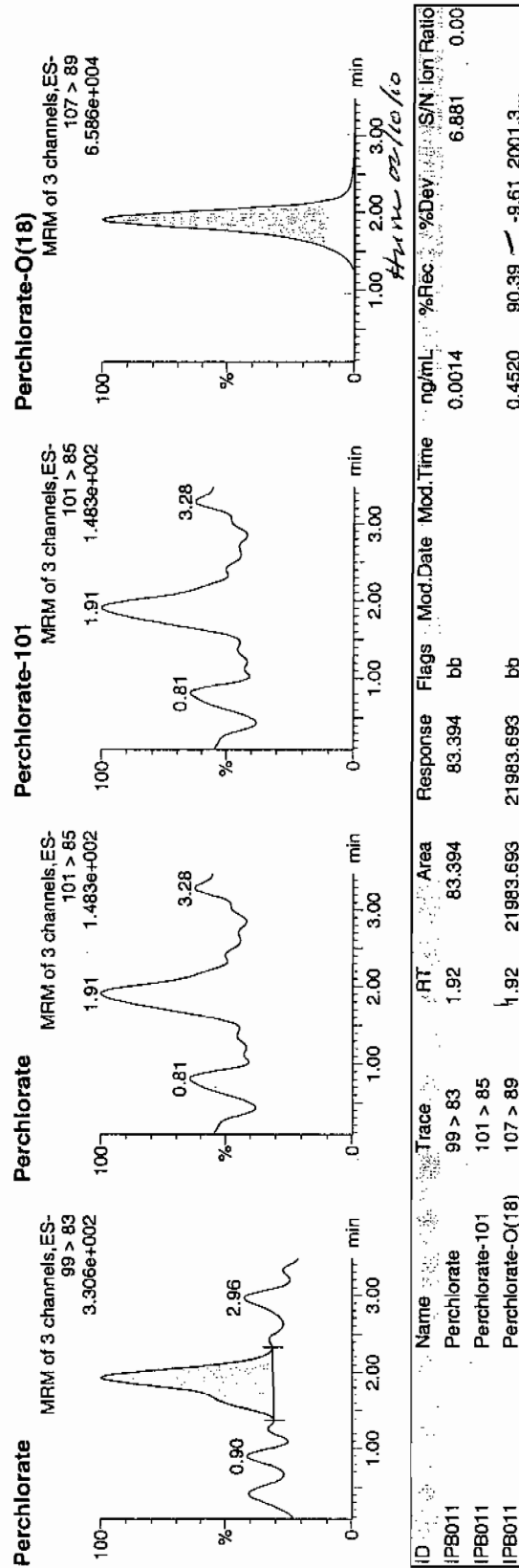
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208084a  
Date: 08-Feb-2010  
Time: 22:58:57  
ID: IPB011  
Vial: 1:1,A

0209-10



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
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; 3770.3457	100
; 3920.2400	100

QUANTO ULTIMA: nairb\_01-08-08.cal

Calibration Report - MS1 Static

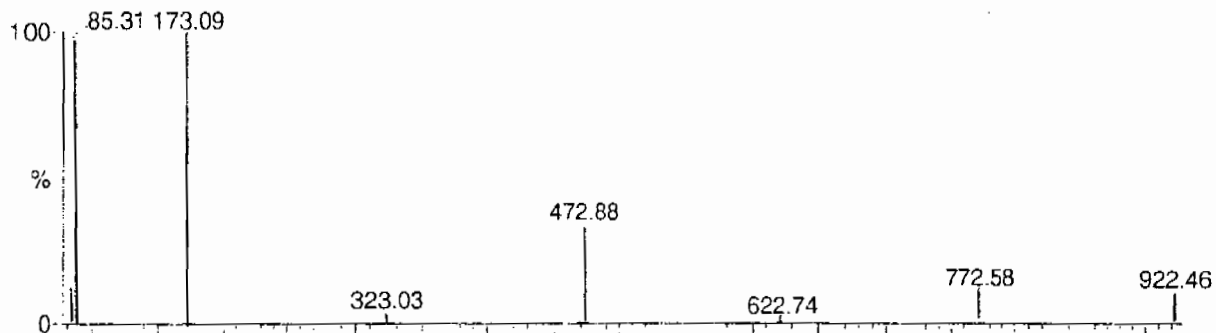
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

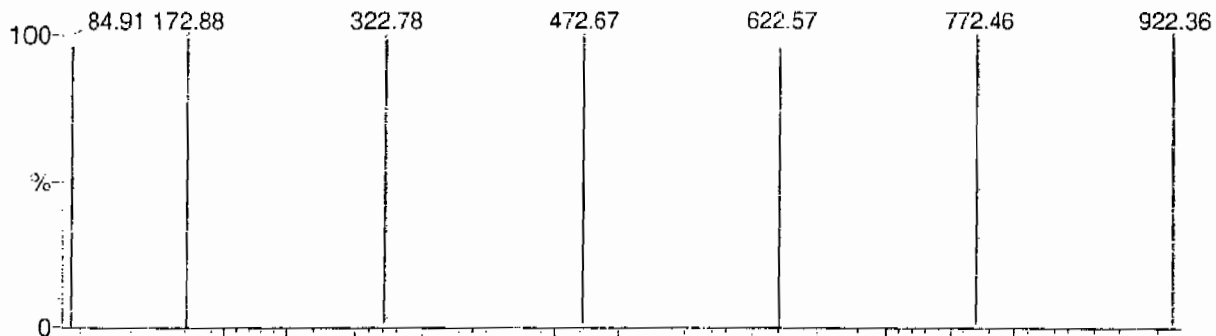
POINTS HIGHLIGHTED BY GEL 01-07-03

Data file: STATMS1 - Uncalibrated

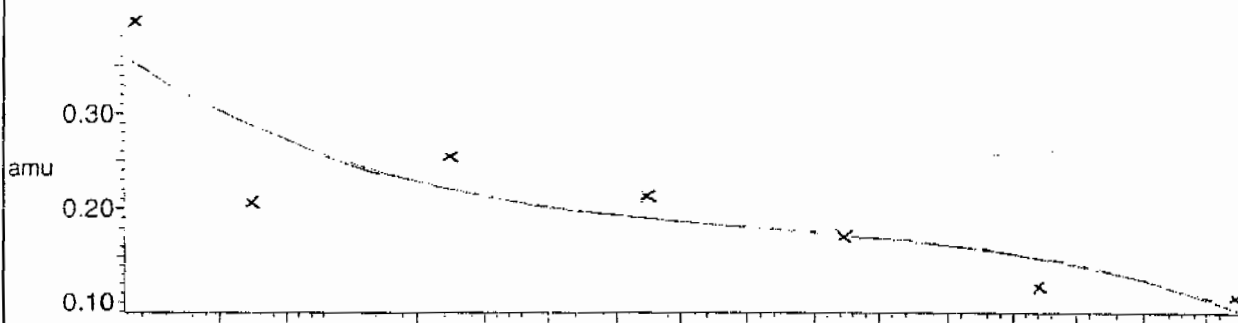
7 matches of 7 tested references



Reference file: Nairb

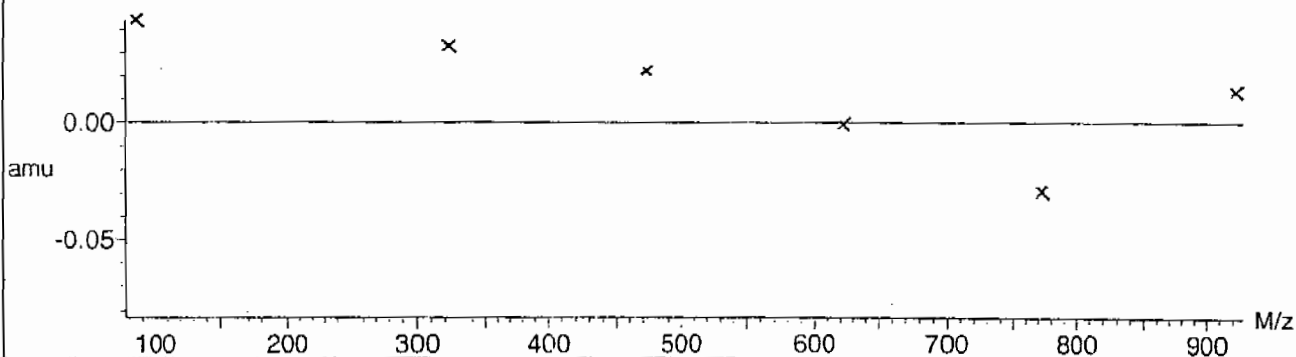


Mass difference (Raw - Ref mass)



Residuals

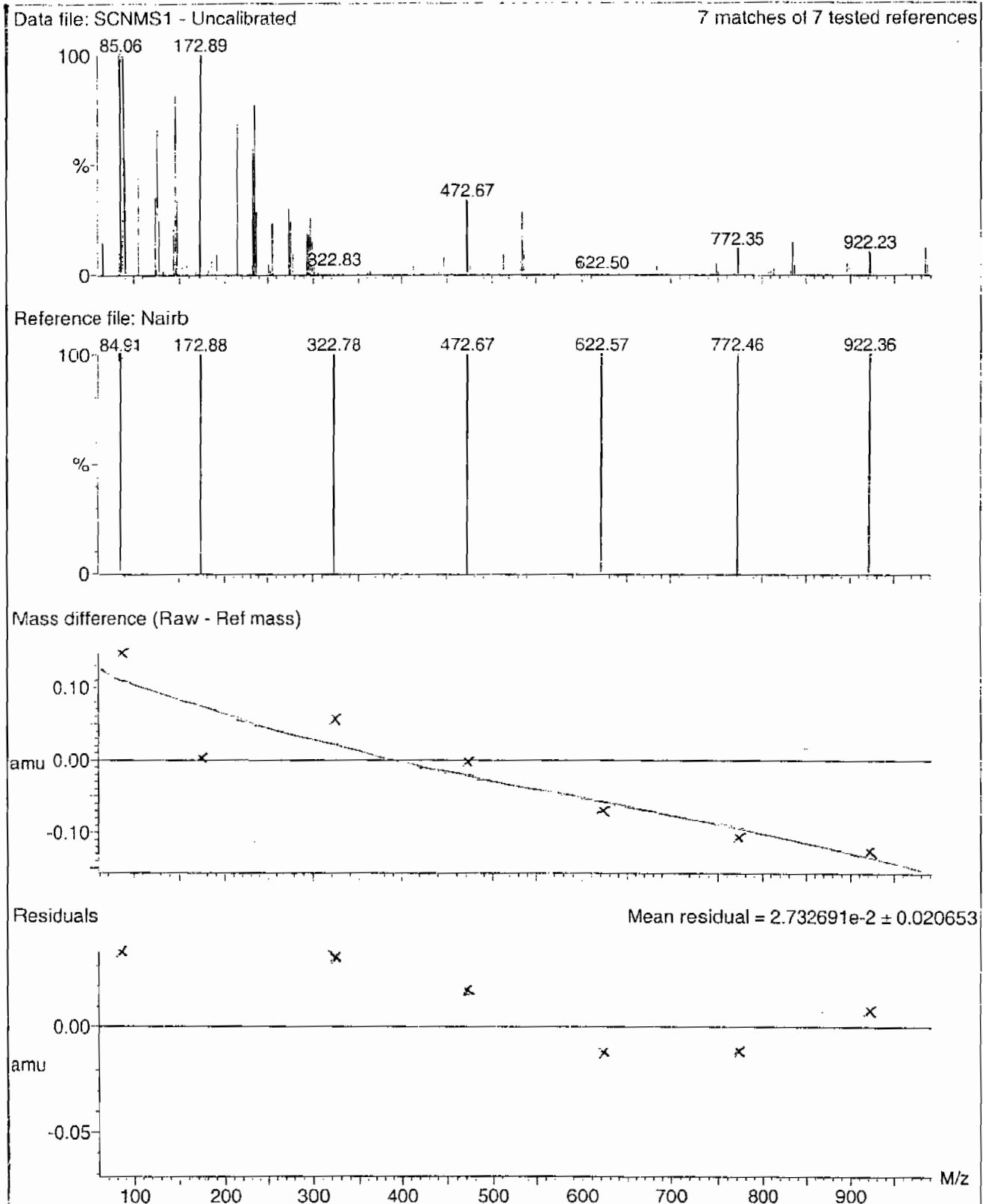
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

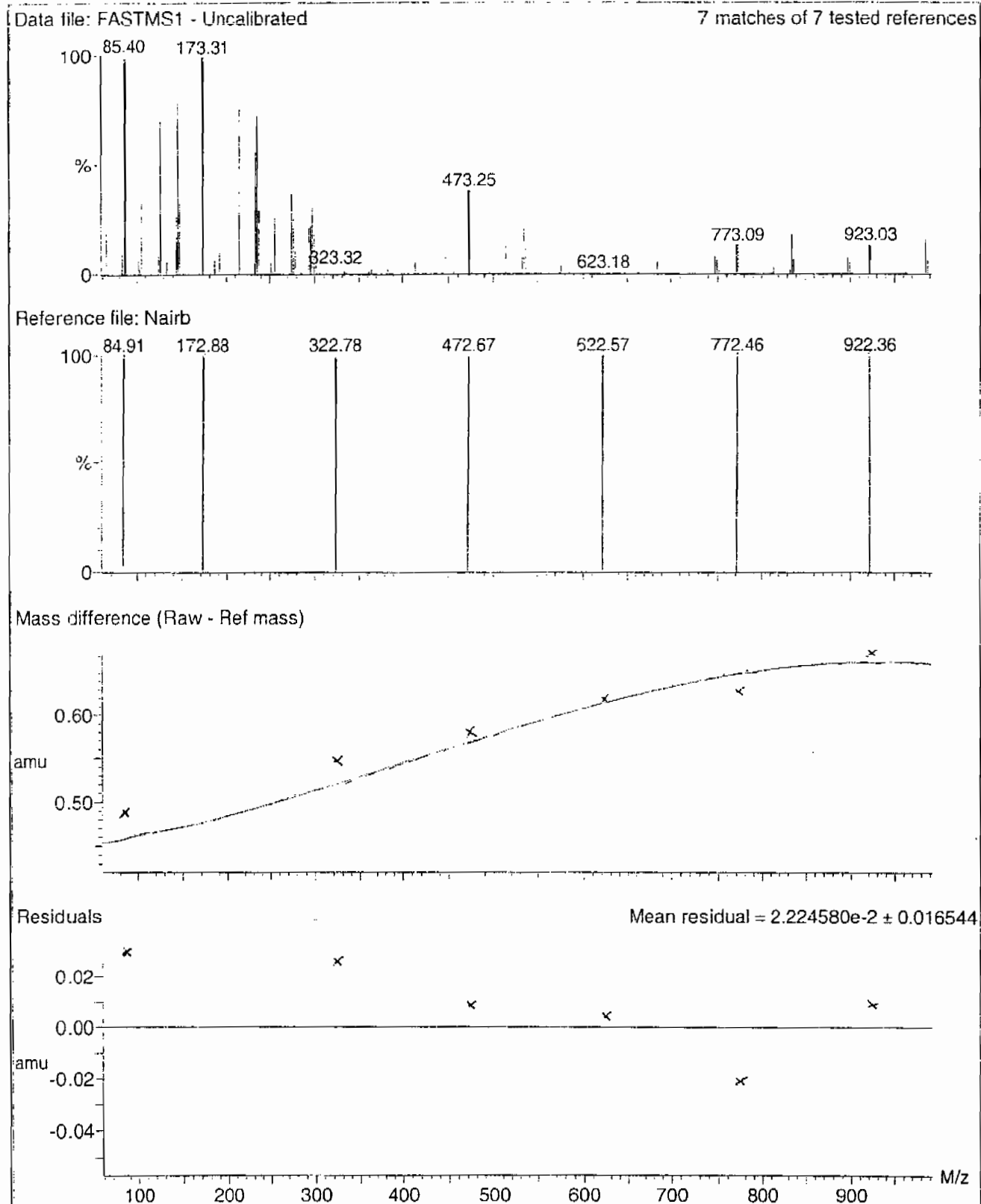
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



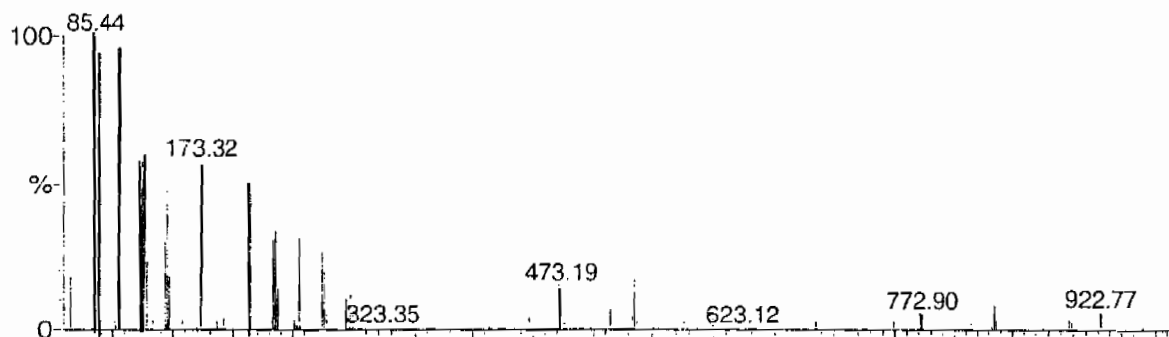
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

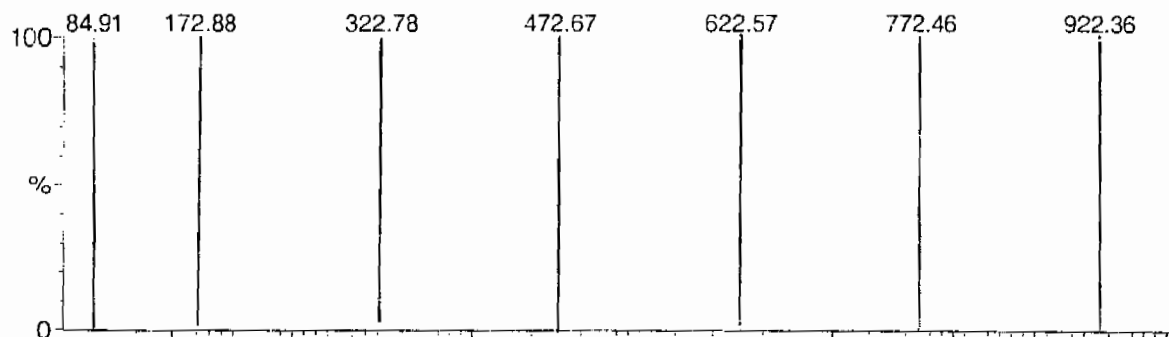
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

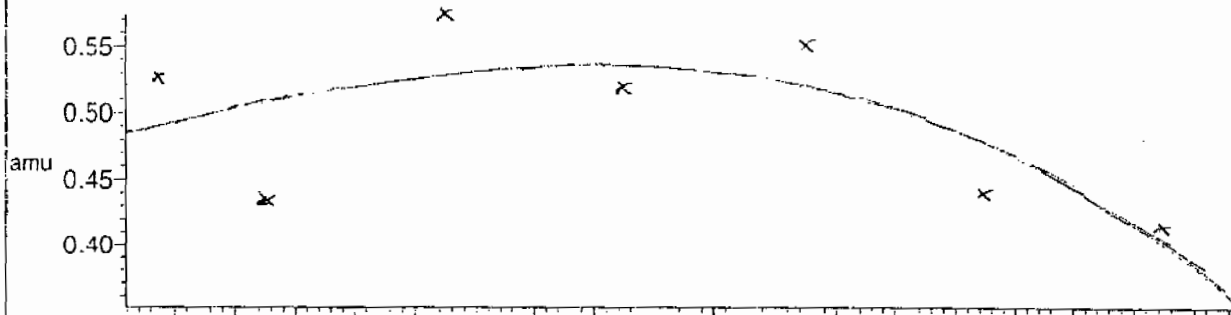
7 matches of 7 tested references



Reference file: Nairb

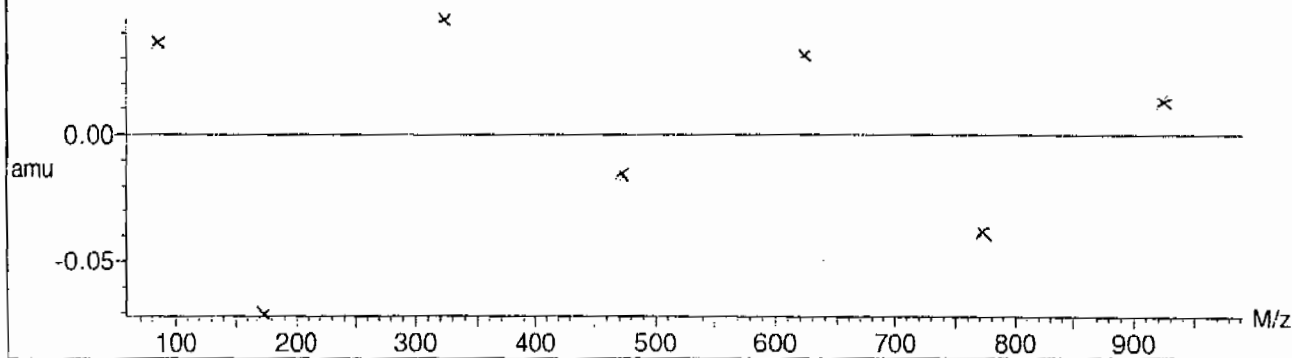


Mass difference (Raw - Ref mass)



Residuals

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





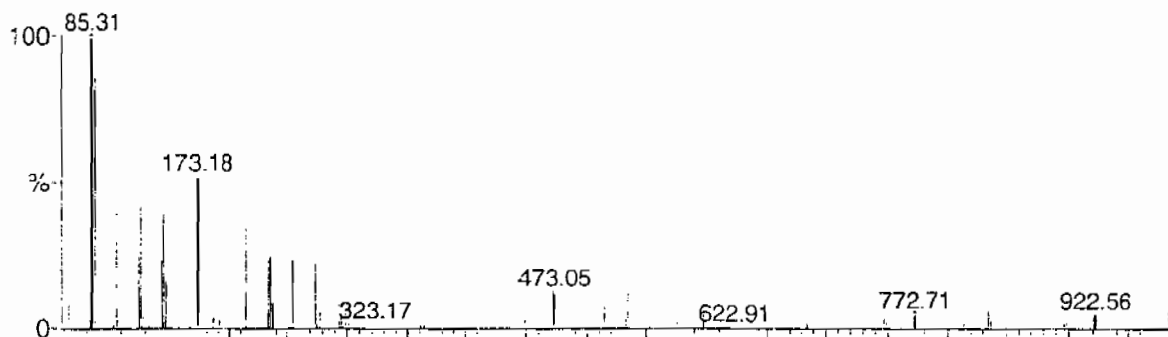
Calibration Report - MS2 Scanning

Page 1 of 1

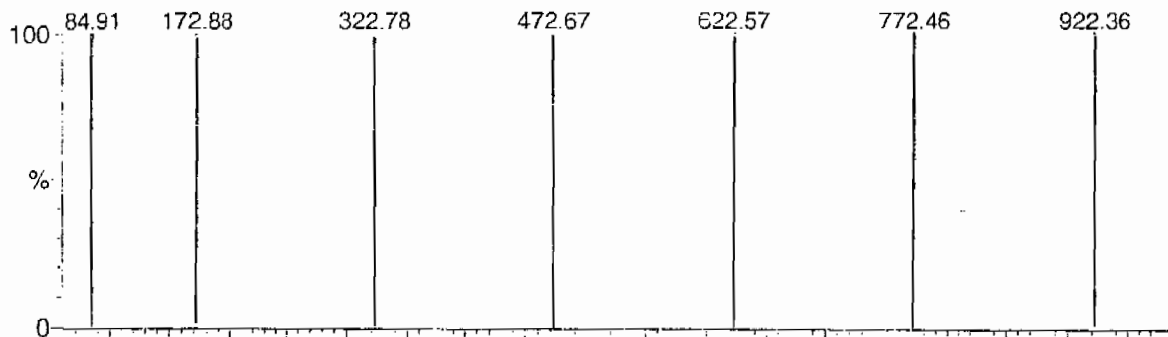
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

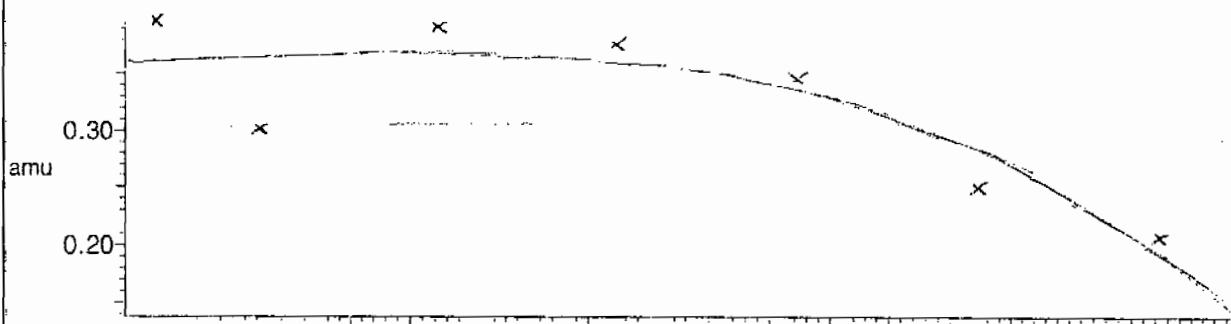
7 matches of 7 tested references



Reference file: Nairb

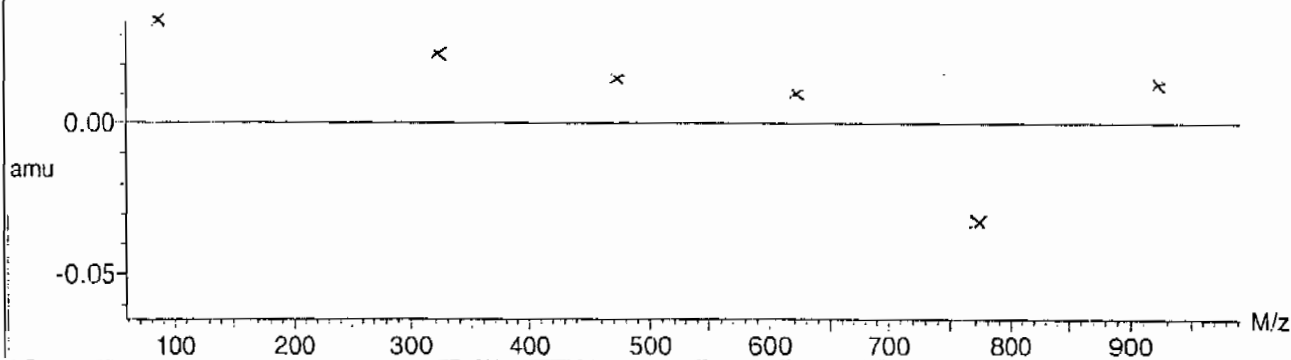


Mass difference (Raw - Ref mass)



Residuals

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



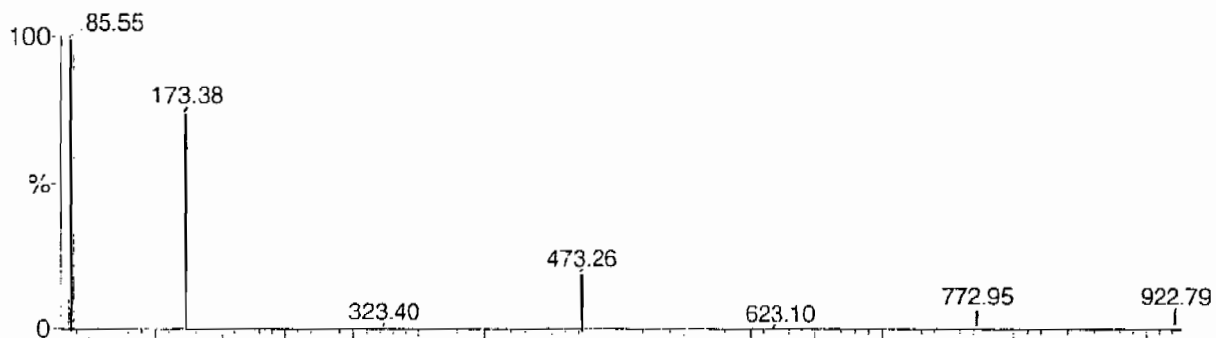
Calibration Report - MS2 Static

Page 1 of 1

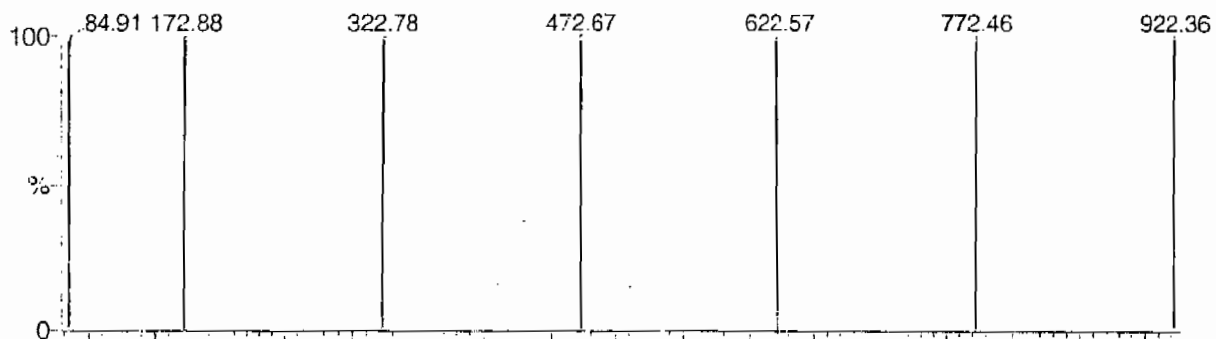
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

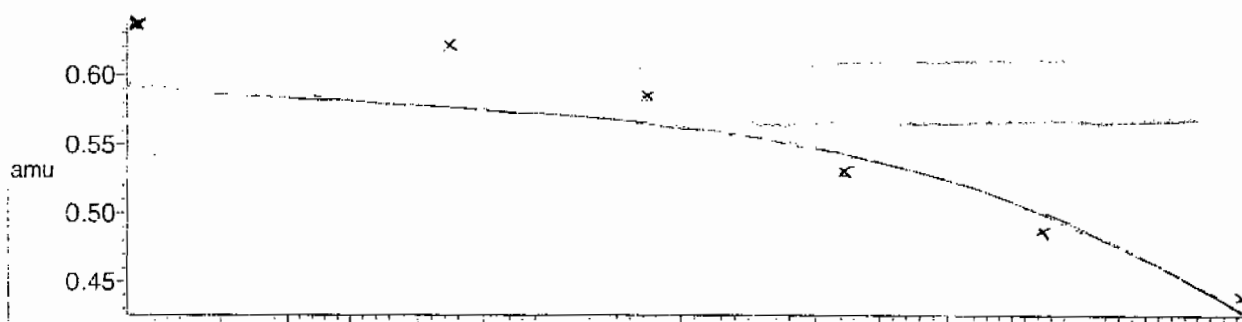
7 matches of 7 tested references



Reference file: Nairb

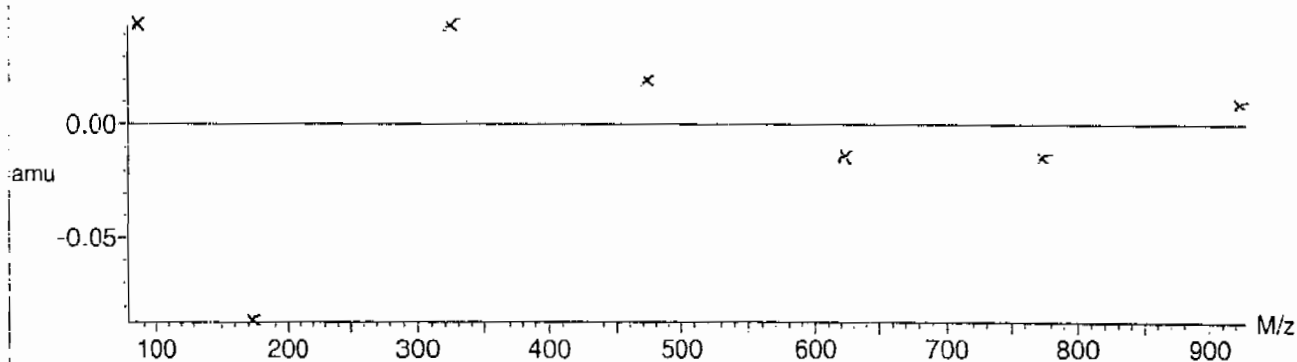


Mass difference (Raw - Ref mass)



Residuals

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



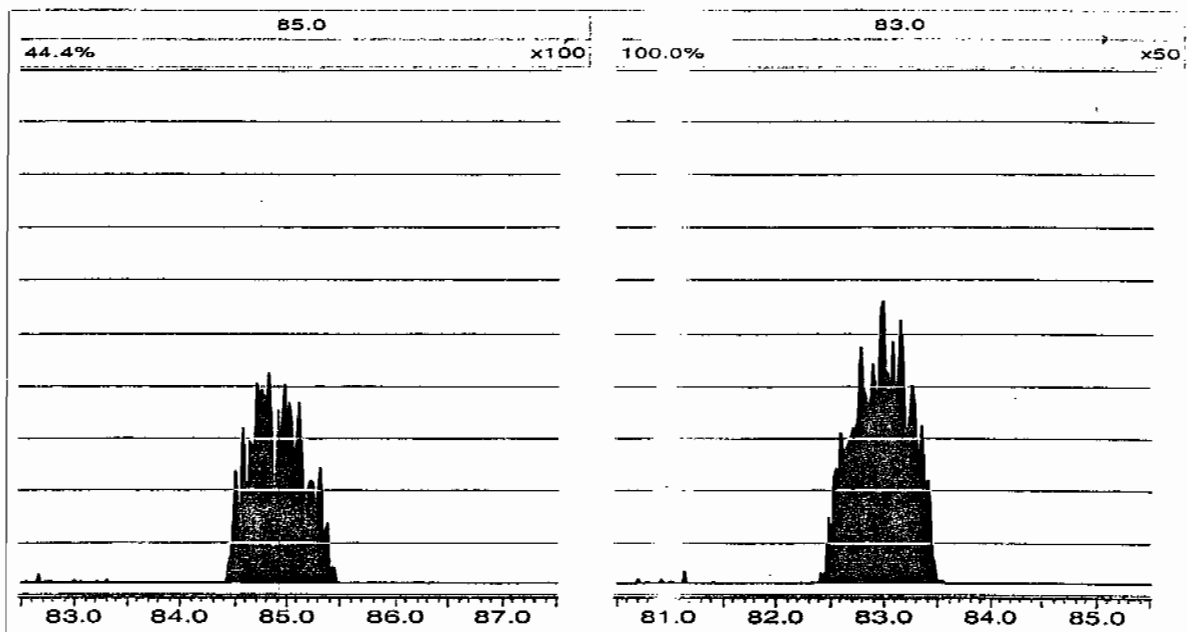
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, February 08, 2010 12:29:43 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1545-1

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	per0208006a	08-FEB-10	24441.6				
Lower Area Limit			12220.8				
Upper Area Limit			48883.2				
1202035565	per0208050a	08-FEB-10 19:15	22209.3	1.88	1.89273	1.007	
1202035566	per0208051a	08-FEB-10 19:21	23514.8	1.88	1.89277	1.007	
1202035573	per0208052a	08-FEB-10 19:28	23733.6	1.93	1.94248	1.006	
246056001	per0208070a	08-FEB-10 21:26	23472.1	1.88	1.88027	1	
246056002	per0208071a	08-FEB-10 21:32	23057.8	1.88	1.88027	1	
246056003	per0208072a	08-FEB-10 21:39	23192.6	1.89	1.90522	1.008	
246056004	per0208076a	08-FEB-10 22:05	23081.2	1.91	1.93002	1.01	

# SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8233

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056001

Date Filtered: 07-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	08-FEB-10 21:26	per0208070a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:26	per0208070a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:26	per0208070a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 21:26	per0208070a

<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: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208070a

Date: 08-Feb-2010

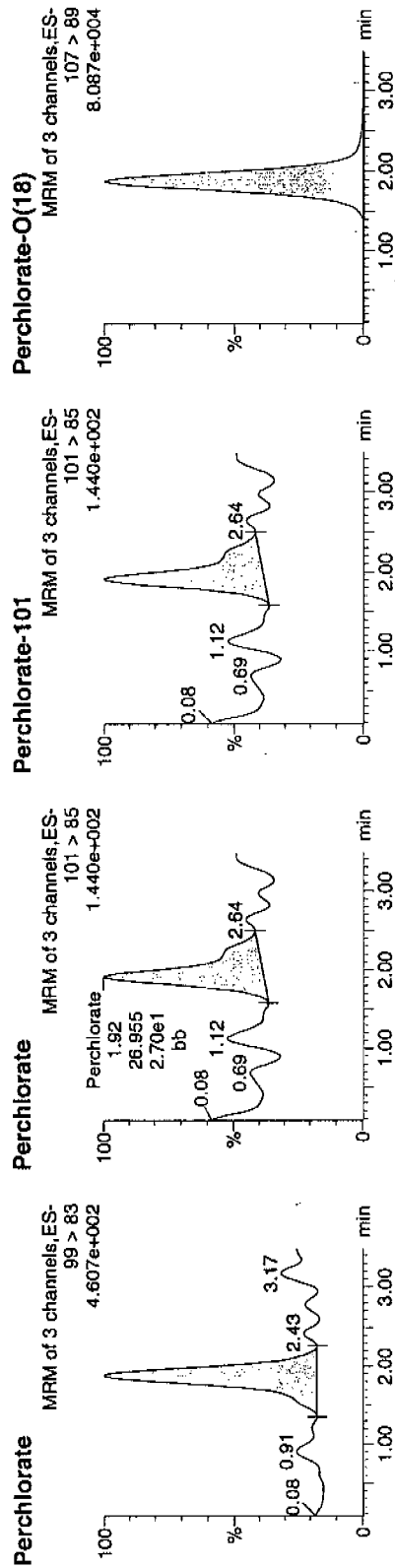
Time: 21:26:17

ID: 246056001

Vial: 2:3,F

02-24-10

124601950023 | 124601950023 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246056001	Perchlorate	99 > 83	1.88	109.848	109.848	bb			0.0018	27.833	4.08		
246056001	Perchlorate-101	101 > 85	1.92	26.955	26.955	bb			0.0014	32.506			
246056001	Perchlorate-O(18)	107 > 89	1.88	23472.148	23472.148	bb			0.4826	96.51	-3.49	2573.6...	

24.94  
12.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8231

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056002

Date Filtered: 07-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	08-FEB-10 21:32	per0208071a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:32	per0208071a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:32	per0208071a
	Perchlorate-O(18)			0.474	ug/L		1	08-FEB-10 21:32	per0208071a

<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\per020810a.dld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208071a

Date: 08-Feb-2010

Time: 21:32:48

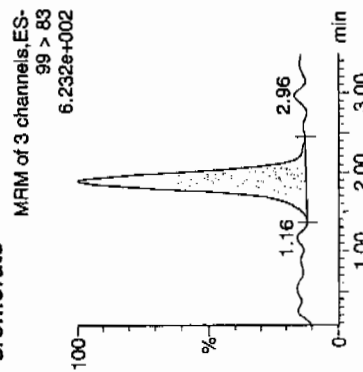
ID: 246056002

Vial: 2:4,A

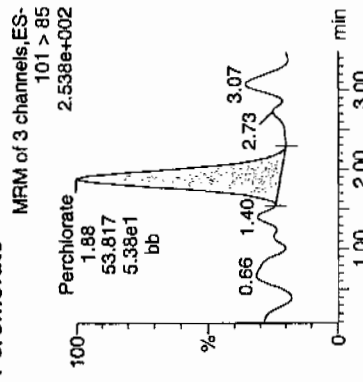
02-09-10

14201950028 | 122 | 11

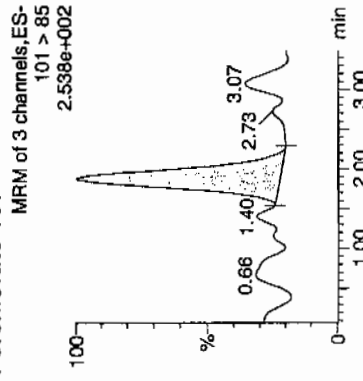
### Perchlorate



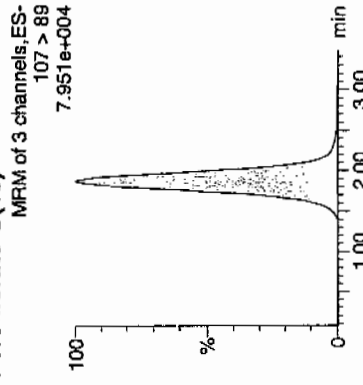
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246056002	Perchlorate	99 > 83	1.88	155.058	155.058	bb			0.0026			32.806	2.88
246056002	Perchlorate-101	101 > 85	1.88	53.817	53.817	bb			0.0029			13.551	
246056002	Perchlorate-O(18)	107 > 89	1.88	23057.768	23057.768	bb			0.4740	94.81	-5.19	2172.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: WATER  
 Extraction Batch ID: 950027  
 Extraction Type: Filter/DAI  
 Client Sample No. RE15-10-8230  
 Date Received: 03-FEB-10  
 GEL Job No (SDG): 10-1545-1  
 GEL Sample ID: 246056003  
 Date Filtered: 07-FEB-10  
 Injection Volume (uL): 20  
 %Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	08-FEB-10 21:39	per0208072a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:39	per0208072a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:39	per0208072a
	Perchlorate-O(18)			0.477	ug/L		1	08-FEB-10 21:39	per0208072a

<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\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208072a

Date: 08-Feb-2010

Time: 21:39:22

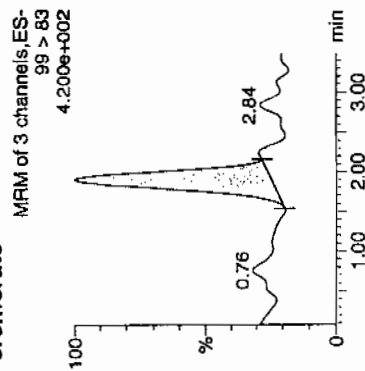
ID: 246056003

Vial: 2:4,B

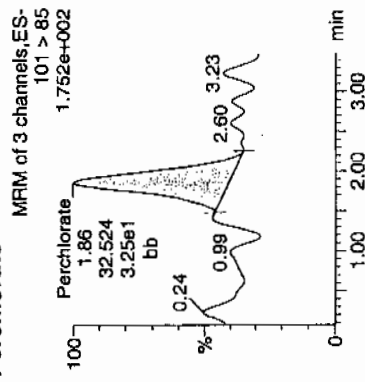
0209-10

122-11

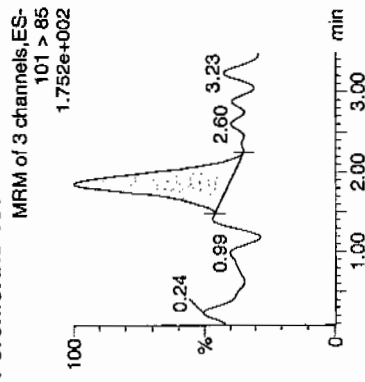
### Perchlorate



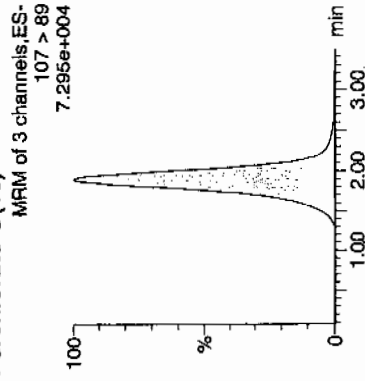
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246056003	Perchlorate	99 > 83	1.91	81.911	81.911	bb			0.0014			26.623	2.52
246056003	Perchlorate-101	101 > 85	1.86	32.524	32.524	bb			0.0017			21.913	
246056003	Perchlorate-O(18)	107 > 89	1.89	23192.615	23192.615	bb			0.4768	95.36	-4.64	8006.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 950027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8232

Date Received: 03-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 246056004

Date Filtered: 07-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	08-FEB-10 22:05	per0208076a
	Perchlorate Isotope Ratio						1	08-FEB-10 22:05	per0208076a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 22:05	per0208076a
	Perchlorate-O(18)			0.475	ug/L		1	08-FEB-10 22:05	per0208076a

<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

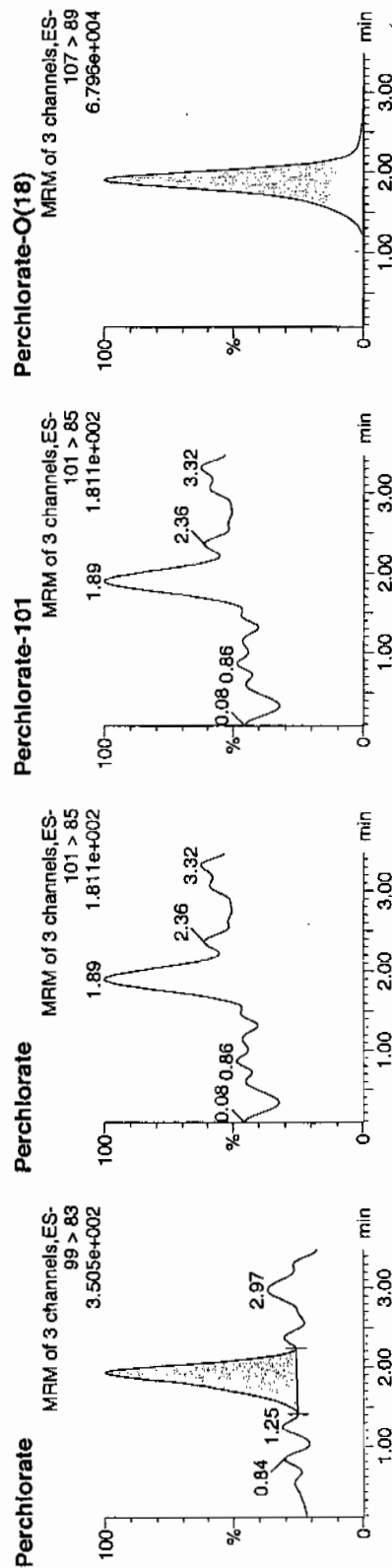
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208076a  
Date: 08-Feb-2010  
Time: 22:05:47  
ID: 246056004  
Vial: 2:4,C

02-09-10

122028 | 122011



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246056004	Perchlorate	99 > 83	1.93	82.948	82.948	bb			0.0014			21.482	0.00
246056004	Perchlorate-101	101 > 85											
246056004	Perchlorate-O(18)	107 > 89	1.91	23081.150	23081.150	bb			0.4745	94.91	-5.09	3750.8...	

# STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1545-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-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

Coefficient of Determination:

Calibration Curve: 59530.66

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1545-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-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:

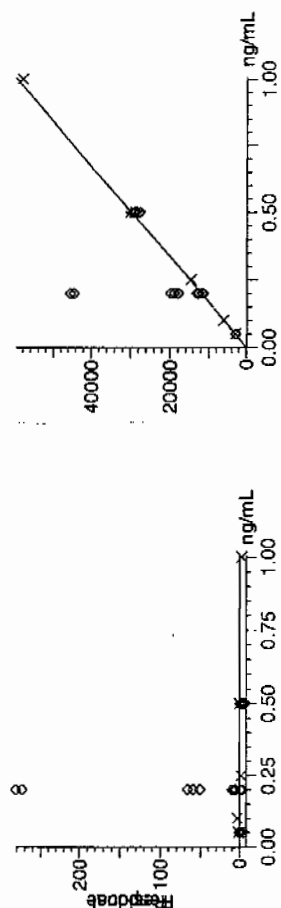
Calibration Curve: 18771.12

Response Type: External Standard

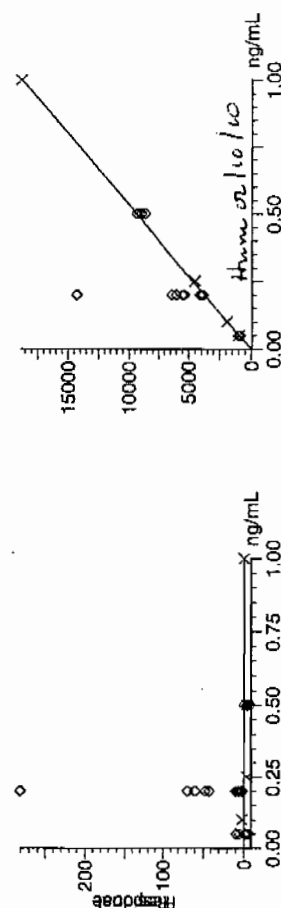
Curve Type: RF



Compound name: Perchlorate  
 Response Factor: 59530.6  
 RRF SD: 1393.77, % Relative SD: 2.34126  
 Response type: External Std, Area  
 Curve type: RF



Compound name: Perchlorate-101  
 Response Factor: 18771.1  
 RRF SD: 687.466, % Relative SD: 3.66236  
 Response type: External Std, Area  
 Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time

Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

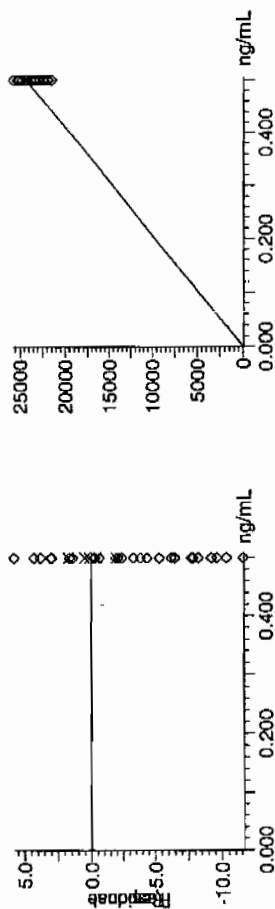
Compound name: Perchlorate-O(18)

Response Factor: 48640

RRF SD: 647.782, % Relative SD: 1.33179

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1545-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.59	08-FEB-10 14:46	per0208009a
Perchlorate Isotope Ratio		3.19		08-FEB-10 14:46	per0208009a
Perchlorate-101	.5	.5	99.88	08-FEB-10 14:46	per0208009a

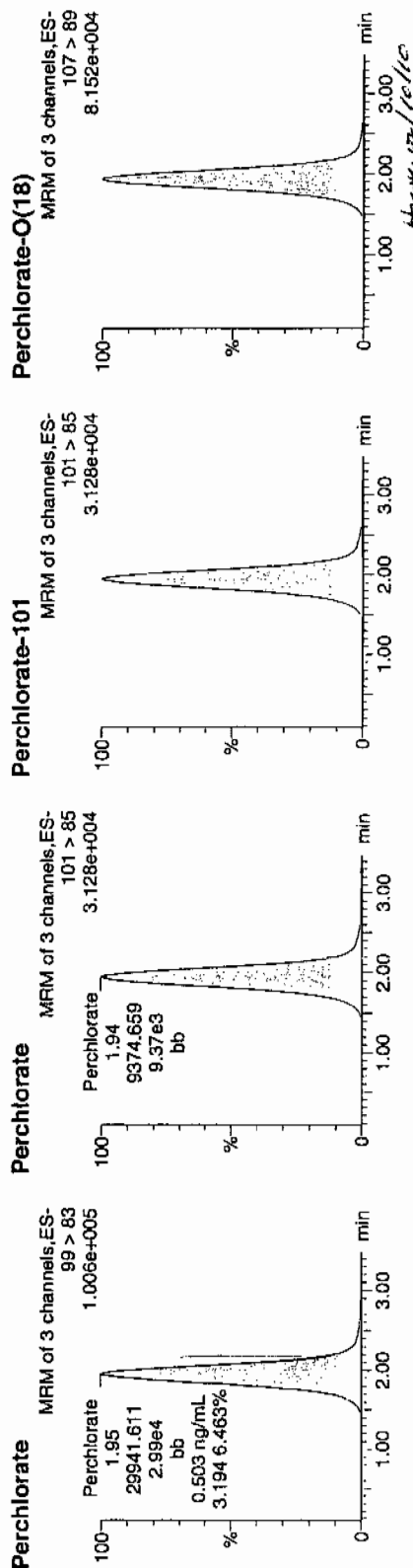
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208009a  
Date: 08-Feb-2010  
Time: 14:46:32  
ID: WCL100128-06ICV  
Vial: 1:2,A

Para  
Cms  
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-06ICV	Perchlorate	95 > 83	1.95	29941.611	29941.611	bb			0.5030	100.59	0.59	5446.9...	3.19
WCL100128-06ICV	Perchlorate-101	101 > 85	1.94	9374.659	9374.659	bb			0.4994	99.88	-0.12	264.354	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	1.93	24277.504	24277.504	bb			0.4991	99.83	-0.17	3258.6...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1545-1

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.49	08-FEB-10 16:05	per0208021a
Perchlorate Isotope Ratio		3.13		08-FEB-10 16:05	per0208021a
Perchlorate-101	.5	.5	99.83	08-FEB-10 16:05	per0208021a
Perchlorate	.5	.49	97.32	08-FEB-10 17:30	per0208034a
Perchlorate Isotope Ratio		3.24		08-FEB-10 17:30	per0208034a
Perchlorate-101	.5	.48	95.26	08-FEB-10 17:30	per0208034a
Perchlorate	.5	.48	95.6	08-FEB-10 18:55	per0208047a
Perchlorate Isotope Ratio		3.13		08-FEB-10 18:55	per0208047a
Perchlorate-101	.5	.49	97	08-FEB-10 18:55	per0208047a
Perchlorate	.5	.47	93.45	08-FEB-10 20:20	per0208060a
Perchlorate Isotope Ratio		3.05		08-FEB-10 20:20	per0208060a
Perchlorate-101	.5	.49	97.09	08-FEB-10 20:20	per0208060a
Perchlorate	.5	.48	96.67	08-FEB-10 21:45	per0208073a

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1545-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.22		08-FEB-10 21:45	per0208073a
Perchlorate-101	.5	.48	95.12	08-FEB-10 21:45	per0208073a
Perchlorate	.5	.46	92.19	08-FEB-10 22:52	per0208083a
Perchlorate Isotope Ratio		3.17		08-FEB-10 22:52	per0208083a
Perchlorate-101	.5	.46	92.08	08-FEB-10 22:52	per0208083a

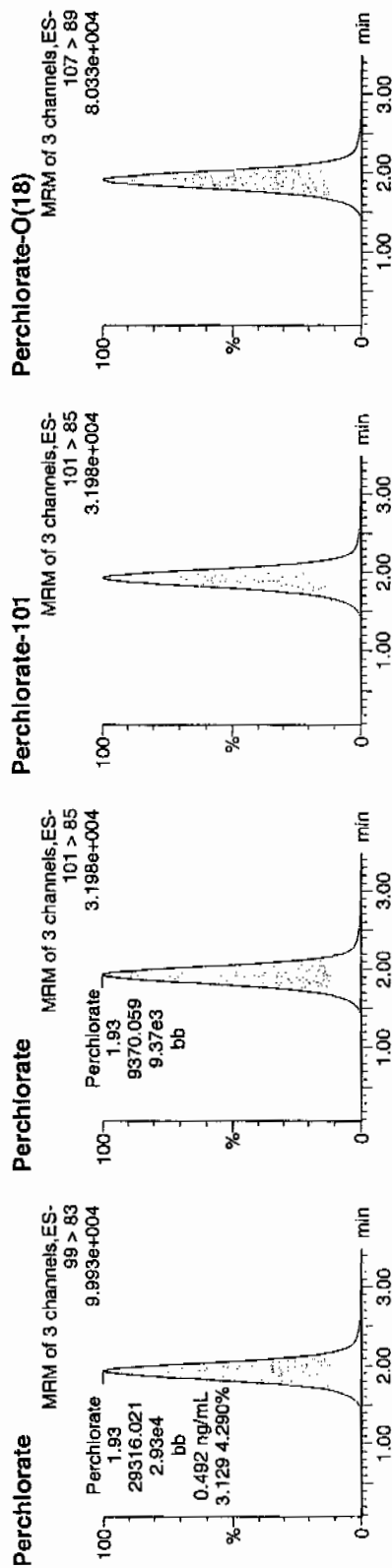
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208021a  
Date: 08-Feb-2010  
Time: 16:05:12  
ID: WCL100128-06CCV  
Vial: 1:2,A

*Per  
and  
02-09-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.93	29316.021	29316.021	bb			0.4925	98.49	-1.51	1324.3...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.93	9370.059	9370.059	bb			0.4992	99.83	-0.17	4157.5...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.92	23385.551	23385.551	bb			0.4808	96.16	-3.84	3253.6...	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208034a

Date: 08-Feb-2010

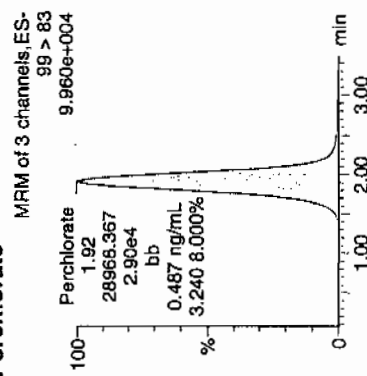
Time: 17:30:17

ID: WCL100128-06CCV

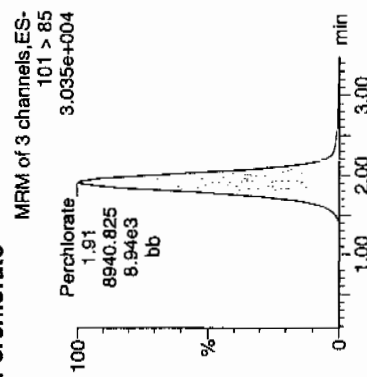
Vial: 1:2,A

Pure  
02/09/10

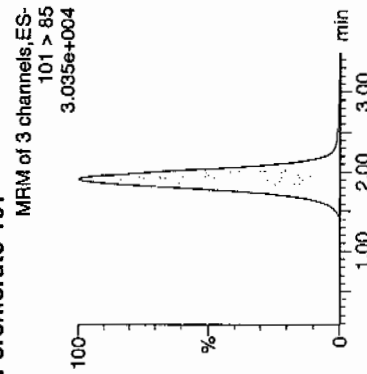
## Perchlorate



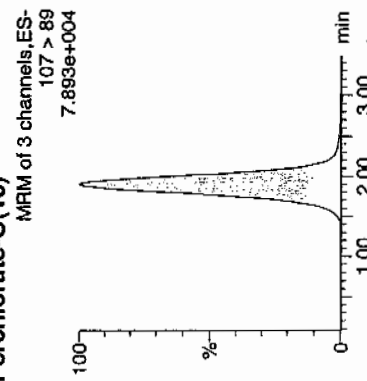
## Perchlorate



## Perchlorate-101



## Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.92	28968.367	28968.367	bb			0.4866	97.32	-2.68	7606.4...		3.24
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8940.825	8940.825	bb			0.4763	95.26	-4.74	3381.0...		
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.91	23019.350	23019.350	bb			0.4733	94.65	-5.35	4411.7...		



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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208047a

Date: 08-Feb-2010

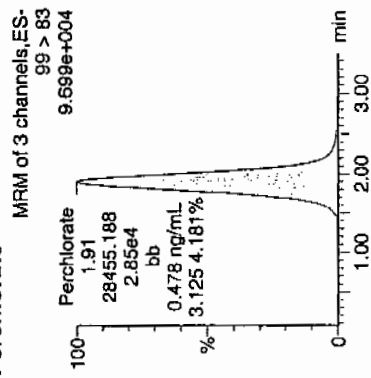
Time: 18:55:25

ID: WCL100128-06CCV

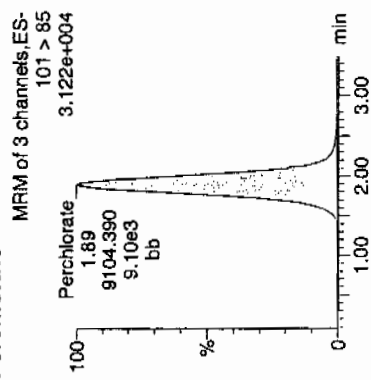
Vial: 1:2, A

*Perchlorate*  
*02-09-10*

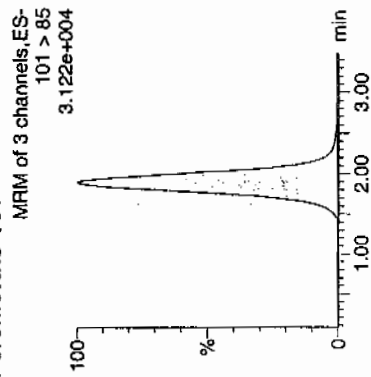
### Perchlorate



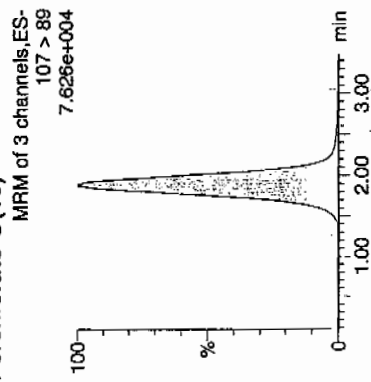
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.91	28455.188	28455.188	bb			0.4780	95.60	-4.40	6190.9...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.89	9104.390	9104.390	bb			0.4850	97.00	-3.00	681.071	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22404.150	22404.150	bb			0.4606	92.12	-7.88	2959.4...	

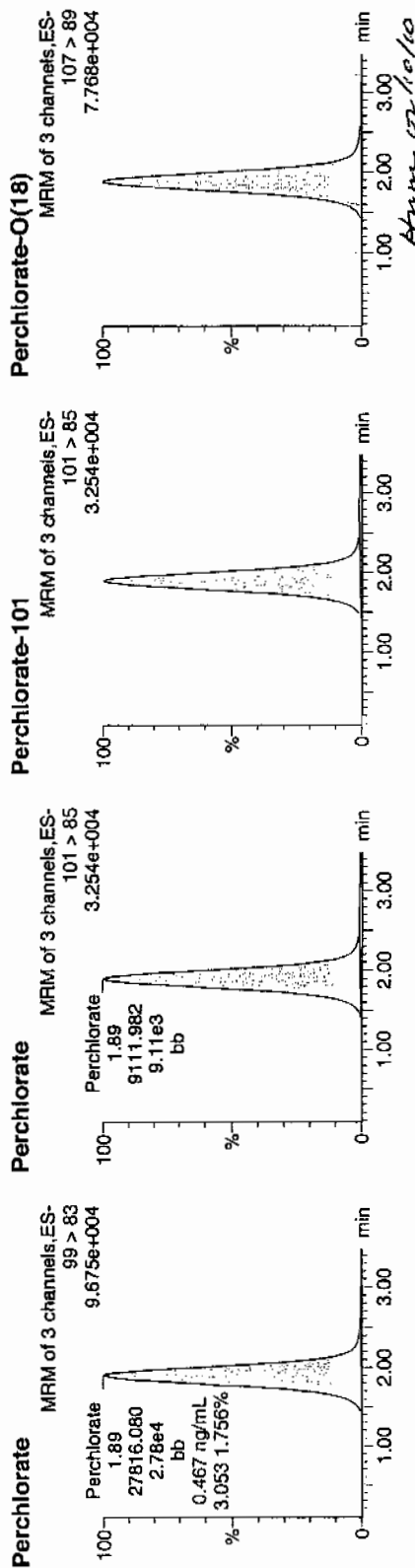
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\P perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208060a  
Date: 08-Feb-2010  
Time: 20:20:32  
ID: WCL100128-06CCV  
Vial: 1:2,A

*Pure and  
02-24-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.89	27816.080	27816.080	bb			0.4673	93.45	-6.55	1799.5...	3.05
WCL100128-06CCV	Perchlorate-101	101 > 85	1.89	9111.982	9111.982	bb			0.4854	97.09	-2.91	1434.4...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22435.383	22435.383	bb			0.4613	92.25	-7.75	1805.8...	

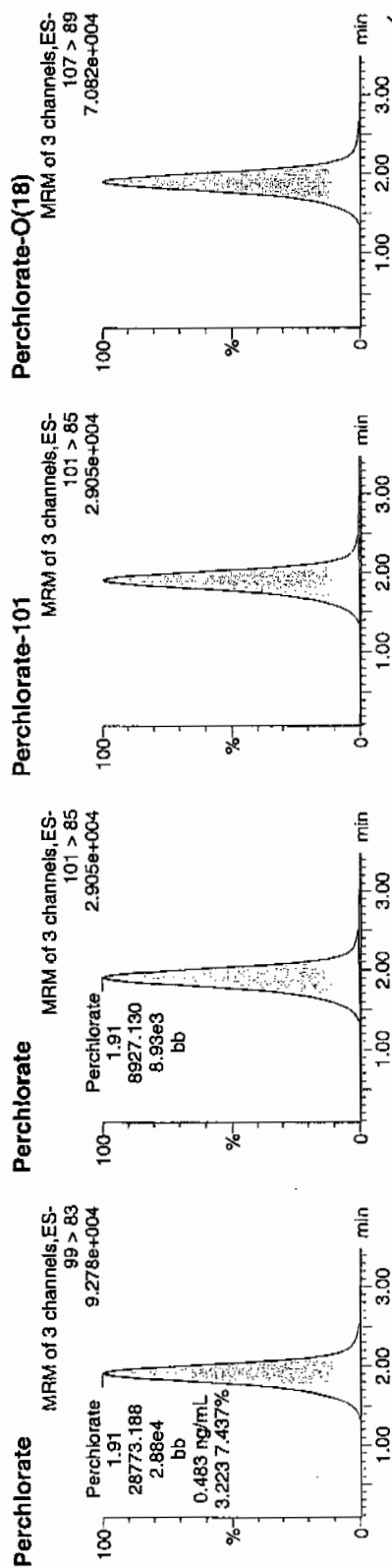
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208073a  
Date: 08-Feb-2010  
Time: 21:45:55  
ID: WCL100128-06CCV  
Vial: 1:2,A

Pure  
and  
02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.91	28773.188	28773.188	bb			0.4833	96.67	-3.33	3174.1...	3.22
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8927.130	8927.130	bb			0.4756	95.12	-4.88	5417.8...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22077.664	22077.664	bb			0.4539	90.78	-9.22	7805.6...	

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

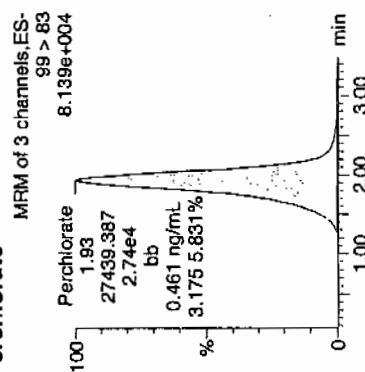
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Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

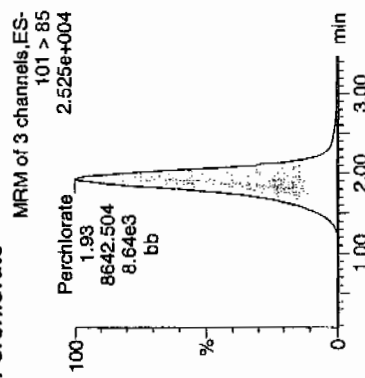
Name: per0208083a  
Date: 08-Feb-2010  
Time: 22:52:11  
ID: WCL100128-06CCV  
Vial: 1:2,A

Pure  
and  
01-09-10

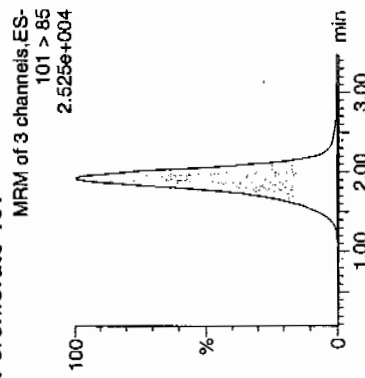
**Perchlorate**



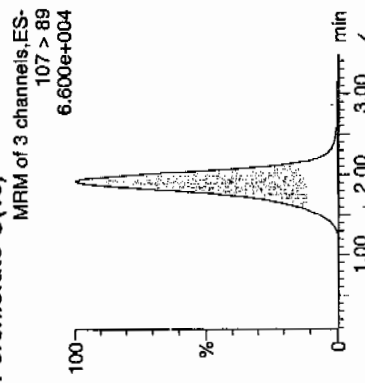
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod. Date	Mod. Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	98 > 83	1.93	27439.387	27439.387	bb			0.4609	92.19	-7.81	2104.5...	3.17
WCL100128-06CCV	Perchlorate-101	101 > 85	1.93	8642.504	8642.504	bb			0.4604	92.08	-7.92	933.140	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.92	22080.438	22080.438	bb			0.4540	90.79	-9.21	3605.2...	

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1545-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	101.73	08-FEB-10 14:59	per0208011a
Perchlorate Isotope Ratio		2.96		08-FEB-10 14:59	per0208011a
Perchlorate-101	.05	.05	109.1	08-FEB-10 14:59	per0208011a
Perchlorate	.05	.05	100.29	08-FEB-10 16:18	per0208023a
Perchlorate Isotope Ratio		3.21		08-FEB-10 16:18	per0208023a
Perchlorate-101	.05	.05	98.94	08-FEB-10 16:18	per0208023a
Perchlorate	.05	.05	101.53	08-FEB-10 17:43	per0208036a
Perchlorate Isotope Ratio		3.05		08-FEB-10 17:43	per0208036a
Perchlorate-101	.05	.05	105.49	08-FEB-10 17:43	per0208036a
Perchlorate	.05	.05	101.45	08-FEB-10 19:08	per0208049a
Perchlorate Isotope Ratio		3.36		08-FEB-10 19:08	per0208049a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1545-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	95.78	08-FEB-10 19:08	per0208049a
Perchlorate	.05	.05	97.2	08-FEB-10 20:33	per0208062a
Perchlorate Isotope Ratio		3.14		08-FEB-10 20:33	per0208062a
Perchlorate-101	.05	.05	98.24	08-FEB-10 20:33	per0208062a
Perchlorate	.05	.05	99.1	08-FEB-10 21:59	per0208075a
Perchlorate Isotope Ratio		3.16		08-FEB-10 21:59	per0208075a
Perchlorate-101	.05	.05	99.59	08-FEB-10 21:59	per0208075a
Perchlorate	.05	.05	93.89	08-FEB-10 23:05	per0208085a
Perchlorate Isotope Ratio		3.2		08-FEB-10 23:05	per0208085a
Perchlorate-101	.05	.05	93.02	08-FEB-10 23:05	per0208085a

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208011a

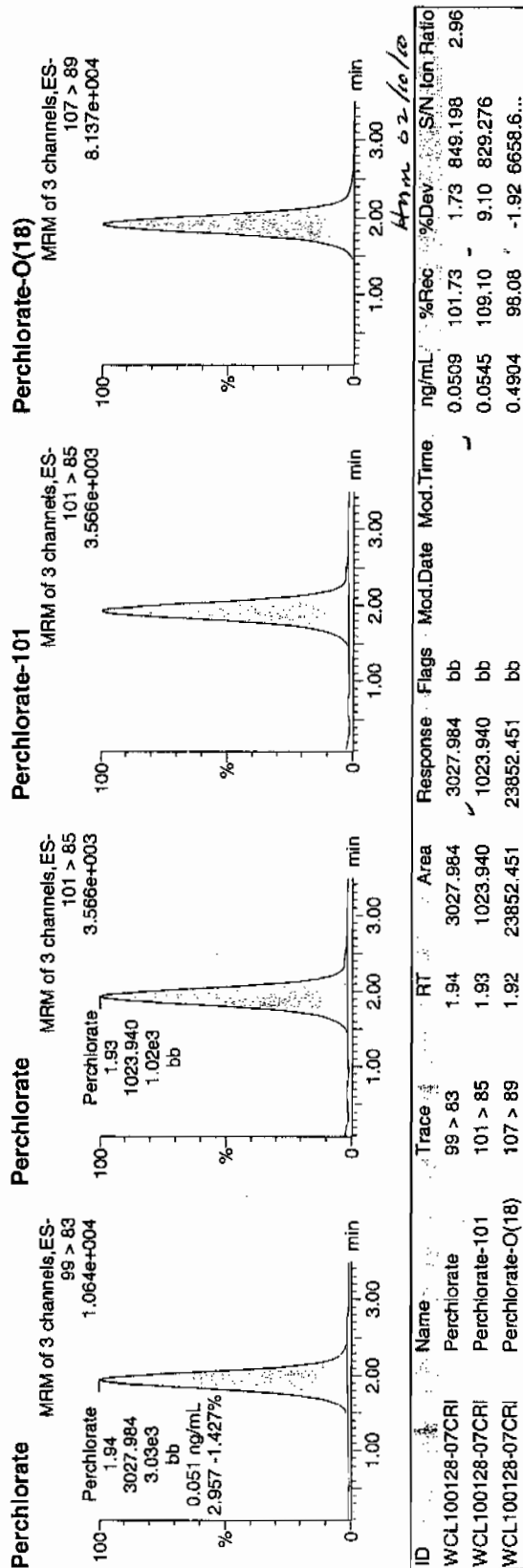
Date: 08-Feb-2010

Time: 14:59:36

ID: WCL100128-07CRI

Vial: 1:2,B

Pure  
Cous  
01-09-10



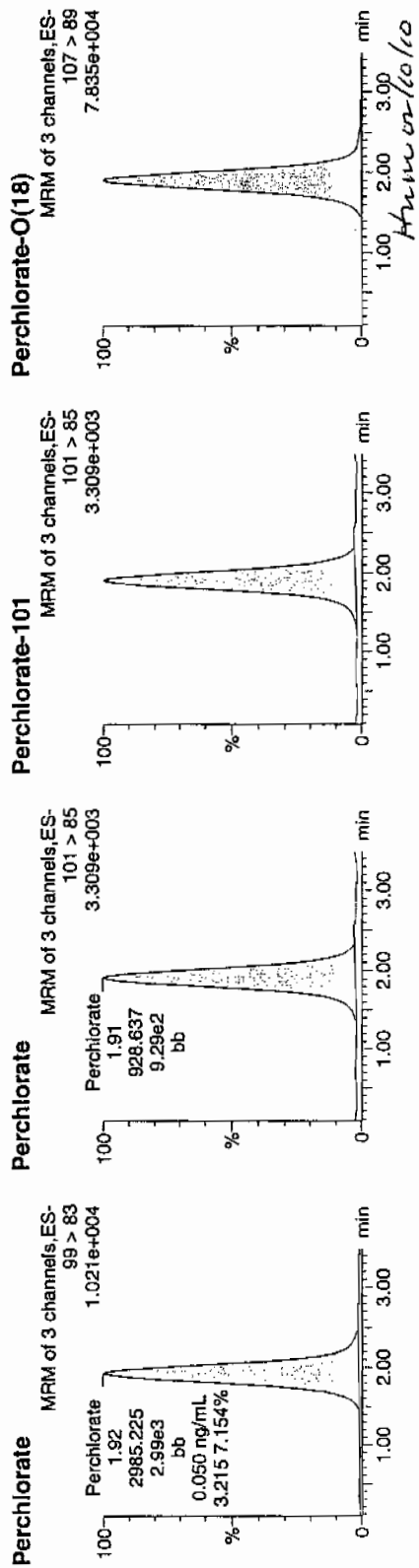
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208023a  
Date: 08-Feb-2010  
Time: 16:18:17  
ID: WCL100128-07CRI  
Vial: 1:2,B

Pure  
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.92	2985.225	2985.225	bb			0.0501	100.29	0.29	2277.7...	3.21
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	928.637	928.637	bb			0.0495	98.94	-1.06	1285.2...	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.91	22805.957	22805.957	bb			0.4689	93.77	-6.23	2391.8...	



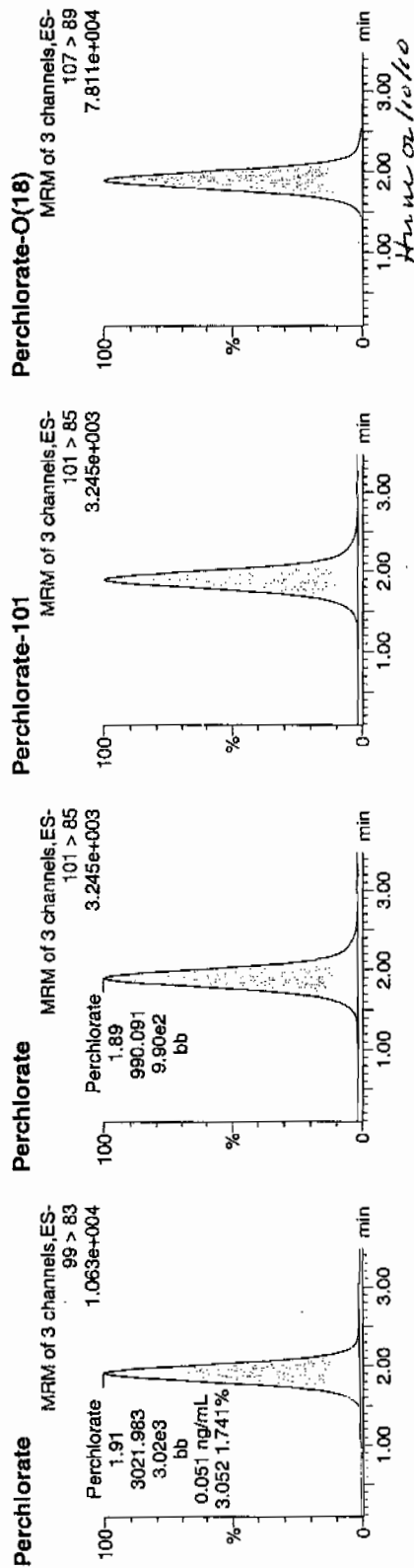
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208036a  
Date: 08-Feb-2010  
Time: 17:43:22  
ID: WCL100128-07CRI  
Vial: 1:2,B

*Pass  
and  
02-09-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	3021.983	3021.983	bb			0.0508	101.53	1.53	1282.6...	3.05
WCL100128-07CRI	Perchlorate-101	101 > 85	1.89	990.091	990.091	bb			0.0527	105.49	5.49	30.390	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	22734.426	22734.426	bb			0.4674	93.48	-6.52	4696.0...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208049a

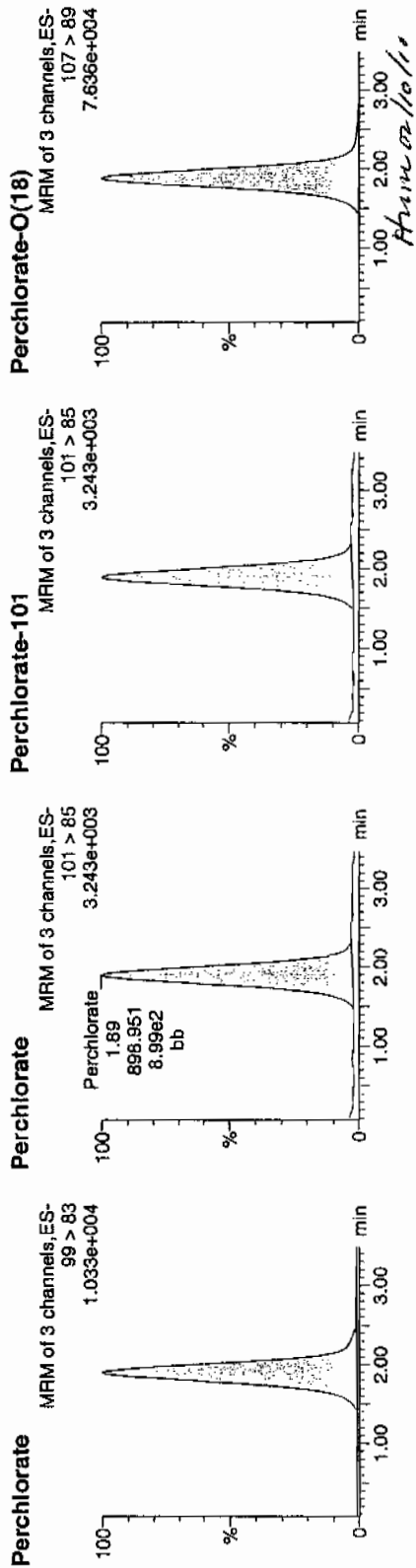
Date: 08-Feb-2010

Time: 19:08:31

ID: WCL100128-07CRI

Vial: 1:2,B

Pass  
and  
02-21-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	3019.704	3019.704	bb			0.0507	101.45	1.45	1111.1...	3.36
WCL100128-07CRI	Perchlorate-101	101 > 85	1.89	898.951	898.951	bb			0.0479	95.78	-4.22	607.346	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	22316.896	22316.896	bb			0.4588	91.76	-8.24	6290.4...	

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

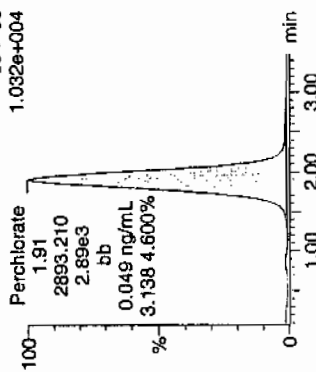
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

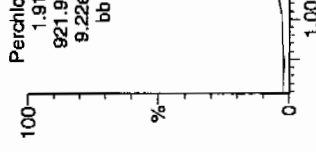
Name: per0208062a  
Date: 08-Feb-2010  
Time: 20:33:51  
ID: WCL100128-07CRI  
Vial: 1:2,B

*Per*  
*02-09-10*

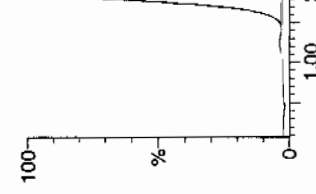
**Perchlorate** MRM of 3 channels, ES-  
99 > 83 1.032e+004



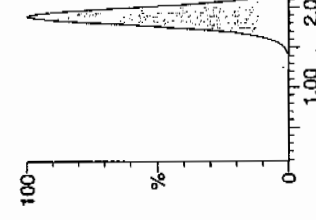
**Perchlorate** MRM of 3 channels, ES-  
101 > 85 3.307e+003



**Perchlorate-101** MRM of 3 channels, ES-  
101 > 85 3.307e+003



**Perchlorate-O(18)** MRM of 3 channels, ES-  
107 > 89 7.552e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	2893.210	2893.210	bb			0.0486	97.20	-2.80	767.866	3.14
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	921.995	921.995	bb			0.0491	98.24	-1.76	510.313	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	21979.691	21979.691	bb			0.4519	90.38	-9.62	1938.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208075a

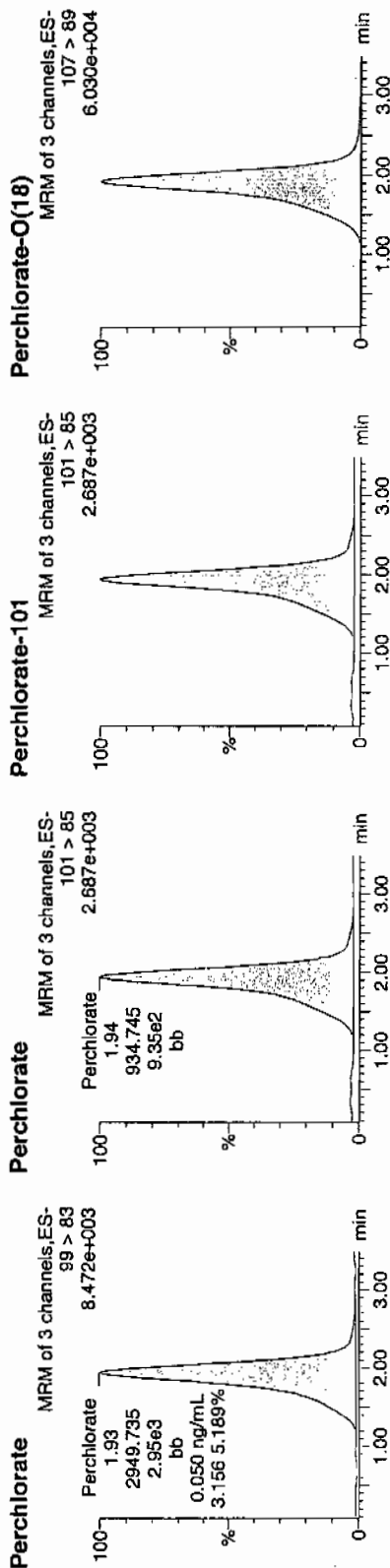
Date: 08-Feb-2010

Time: 21:59:15

ID: WCL100128-07CRI

Vial: 1:2,B

*Pure and*  
*02-29-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.93	2949.735	2949.735	bb			0.0495	99.10	-0.90	555.102	3.16
WCL100128-07CRI	Perchlorate-101	101 > 85	1.94	934.745	934.745	bb			0.0498	98.59	-0.41	523.923	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.93	21809.545	21809.545	bb			0.4484	89.68	-10.32	1949.9...	

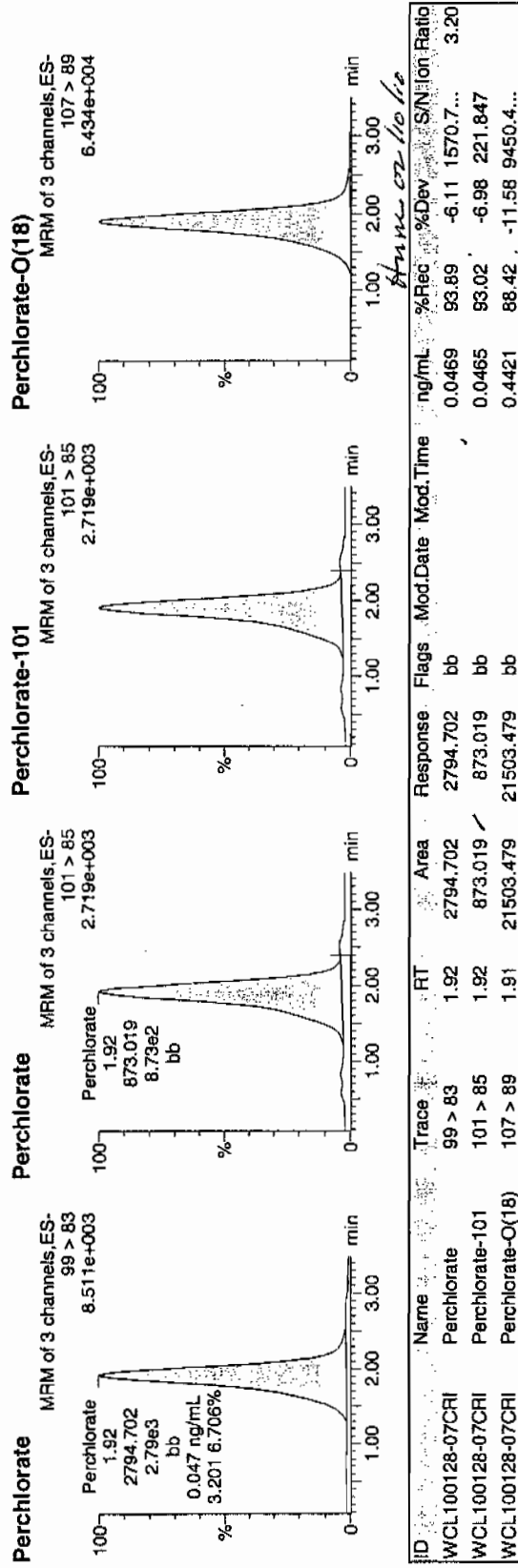
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208085a  
Date: 08-Feb-2010  
Time: 23:05:29  
ID: WCL100128-07CRI  
Vial: 1:2,B

*Pure*  
*WCL*  
*01-01-10*



# QUALITY CONTROL

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WASTE WATER

Extraction Batch ID: 250027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 07-FEB-10

GEL Job No (SDG): 10-1545-1

GEL Sample ID: 1202035565

Date Filtered: 07-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	08-FEB-10 19:15	per0208050a
	Perchlorate Isotope Ratio						1	08-FEB-10 19:15	per0208050a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 19:15	per0208050a
	Perchlorate-O(18)			0.457	ug/L		1	08-FEB-10 19:15	per0208050a

<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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208050a

Date: 08-Feb-2010

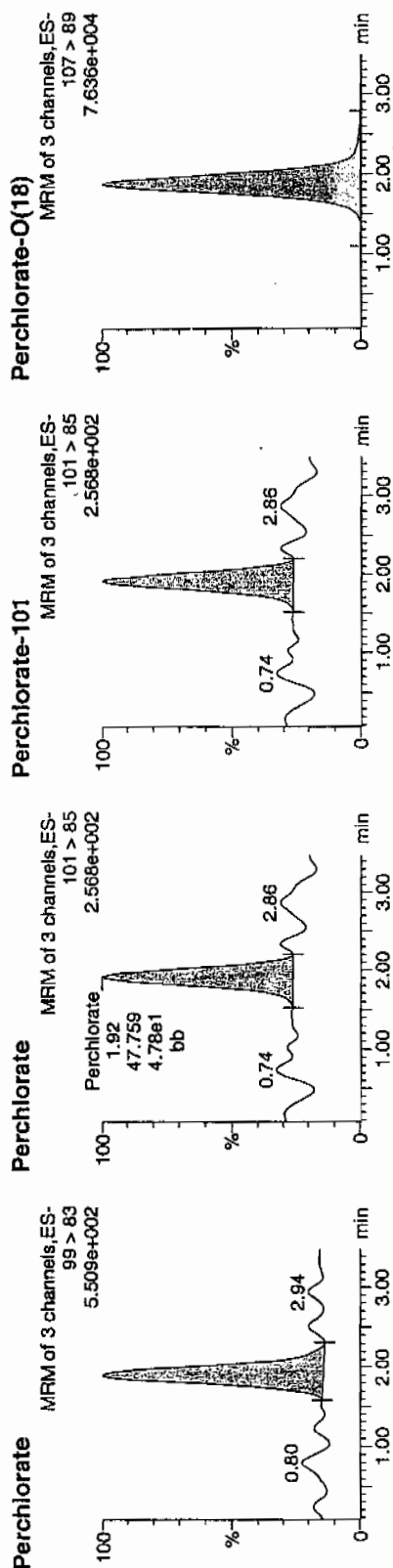
Time: 19:15:05

ID: 1202035565

Vial: 2:1,A

02-09-10

1202035565 | 1202035565 | 1202035565



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	Day	Ratio
1202035565	Perchlorate	99 > 83	1.89	121.925	121.925	bb					0.0020
1202035565	Perchlorate-101	101 > 85	1.92	47.759	47.759	bb					0.0025
1202035565	Perchlorate-O(18)	107 > 89	1.88	22209.346	22209.346	bb					0.4566
											91.32
											-8.68
											5376.4...
											39.295
											14.790
											2.55



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: WASTE WATER  
 Extraction Batch ID: 950027  
 Extraction Type: Filter/DAI  
 Sample Volume/Weight: 10.0 mL  
 Concentrated Extract Volume: 10.0  
 Client Sample No. LCS  
 Date Received: 07-FEB-10  
 GEL Job No (SDG): 10-1545-1  
 GEL Sample ID: 1202035566  
 Date Filtered: 07-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	0.196	ug/L	J	1	08-FEB-10 19:21	per0208051a
	Perchlorate Isotope Ratio			3.01			1	08-FEB-10 19:21	per0208051a
14797-73-0	Perchlorate-101	.05	.2	0.207	ug/L		1	08-FEB-10 19:21	per0208051a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 19:21	per0208051a

<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

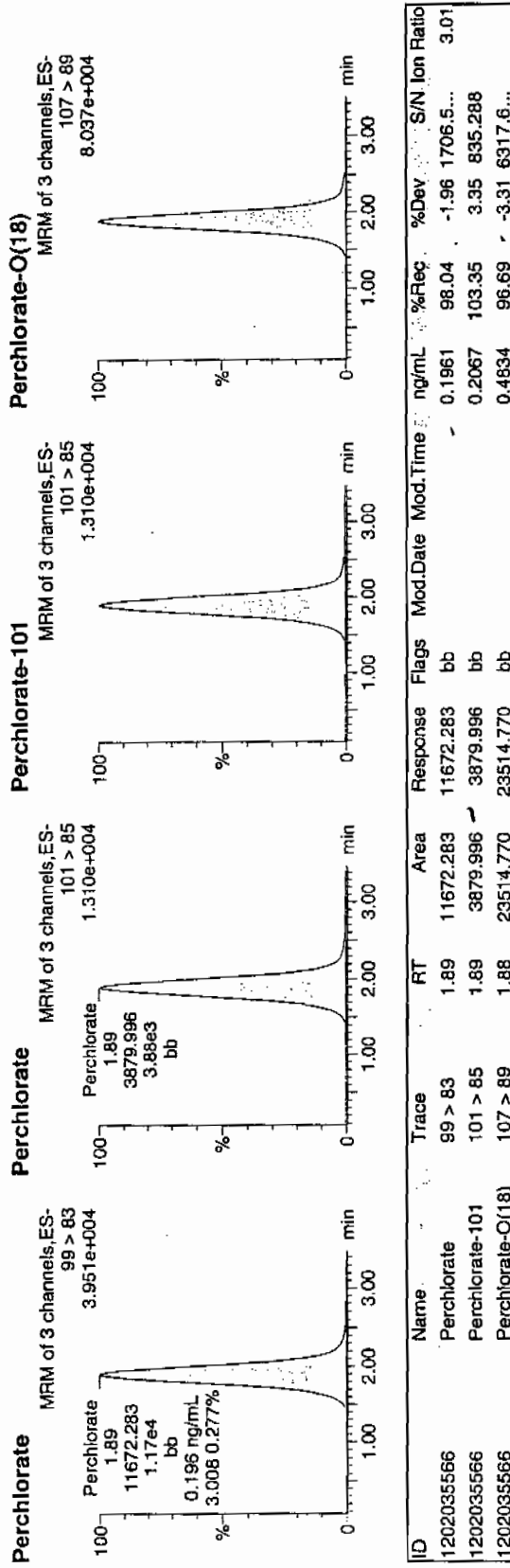
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208051a  
Date: 08-Feb-2010  
Time: 19:21:48  
ID: 1202035566  
Vial: 2:1,B

1202035566 | 1202035566 | 1202035566

0209-10



$$\frac{11672.283}{59530.6} = 0.1961$$

Handwritten: 0.1961

# 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: 950027 Verified by: \_\_\_\_\_  
 Analyst: Charles Wilson Lab SOP: GL-OA-E-067 REV# 6  
 Method: SW846 6850 Modified Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202035565 MB	07-FEB-2010 14:31:00	10	10	1
1202035566 LCS	07-FEB-2010 14:31:00	10	10	1
245911001	07-FEB-2010 14:31:00	10	10	1
1202035571 MS (245911001)	07-FEB-2010 14:31:00	10	10	1
1202035572 MSD (245911001)	07-FEB-2010 14:31:00	10	10	1
245922001	07-FEB-2010 14:31:00	10	10	1
245934001	07-FEB-2010 14:31:00	10	10	1
245934004	07-FEB-2010 14:31:00	10	10	1
245939001	07-FEB-2010 14:31:00	10	10	1
245939002	07-FEB-2010 14:31:00	10	10	1
245953001	07-FEB-2010 14:31:00	10	10	1
245965001	07-FEB-2010 14:31:00	10	10	1
245975001	07-FEB-2010 14:31:00	10	10	1
245981001	07-FEB-2010 14:31:00	10	10	1
246000001	07-FEB-2010 14:31:00	10	10	1
246007001	07-FEB-2010 14:31:00	10	10	1
246056001	07-FEB-2010 14:31:00	10	10	1
246056002	07-FEB-2010 14:31:00	10	10	1
246056003	07-FEB-2010 14:31:00	10	10	1
246056004	07-FEB-2010 14:31:00	10	10	1
246375001	07-FEB-2010 14:31:00	10	10	1
1202035567 MS (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035568 MSD (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035573 LCS	07-FEB-2010 14:31:00	10	10	1

### Comments:

Desalting cartridges used: 100105-1-H & 091118-1-Ba

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202035573	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
LCS	1202035566	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
MS	1202035567	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
MS	1202035571	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
MSD	1202035568	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
MSD	1202035572	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL
RGNT	All	OZSI HPLC Grade Water	1246195	10	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#2

Date: 02/08/10

Extr. Injection Volume: 20uL

Sequence Number: per020810a

Initial Calibration Date: 02/08/10

Method: EPA 6850-Modified

Int. Std.: UCL100122-01

Mobile Phase Lot#: 1254342, 1261217

Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *Amu*

Date: 02/15/10

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

Alt Check Std. ID: WCL100128-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0208001a	IPB001	CWW	2/8/2010 13:54			1		USE	B
per0208002a	IPB001	CWW	2/8/2010 14:00			1		USE	B
per0208003a	WCLICAL-01	CWW	2/8/2010 14:07			1		USE	I
per0208004a	WCLICAL-02	CWW	2/8/2010 14:13			1		USE	I
per0208005a	WCLICAL-03	CWW	2/8/2010 14:20			1		USE	I
per0208006a	WCLICAL-04	CWW	2/8/2010 14:26			1		USE	I
per0208007a	WCLICAL-05	CWW	2/8/2010 14:33			1		USE	I
per0208008a	IPB002	CWW	2/8/2010 14:40			1		USE	B
per0208009a	WCLICV	CWW	2/8/2010 14:46			1		USE	C
per0208010a	IPB003	CWW	2/8/2010 14:53			1		USE	B
per0208011a	WCLCRI	CWW	2/8/2010 14:59			1		USE	C
per0208012a	1202035621	CWW	2/8/2010 15:06	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208013a	1202035622	CWW	2/8/2010 15:12	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208014a	1202035625	CWW	2/8/2010 15:19	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208015a	246431001	CWW	2/8/2010 15:25	950048	10-1650	1	LANL	DUSE-RE	S
per0208016a	1202035623	CWW	2/8/2010 15:32	950048	10-1650	1	LANL	DUSE-RE	S
per0208017a	1202035624	CWW	2/8/2010 15:39	950048	10-1650	1	LANL	DUSE-RE	S
per0208018a	246431002	CWW	2/8/2010 15:45	950048	10-1650	1	LANL	DUSE-RE	S
per0208019a	246431003	CWW	2/8/2010 15:52	950048	10-1650	1	LANL	DUSE-RE	S
per0208020a	246431004	CWW	2/8/2010 15:58	950048	10-1650	1	LANL	DUSE-RE	S
per0208021a	WCLCCV	CWW	2/8/2010 16:05			1		USE	C
per0208022a	IPB004	CWW	2/8/2010 16:11			1		USE	B
per0208023a	WCLCRI	CWW	2/8/2010 16:18			1		USE	C
per0208024a	246472001	CWW	2/8/2010 16:24	950048	10-1640	1	LANL	DUSE-RE	S
per0208025a	246472002	CWW	2/8/2010 16:31	950048	10-1640	1	LANL	DUSE-RE	S
per0208026a	IPB005	CWW	2/8/2010 16:37			1		USE	B
per0208027a	1202029082	CWW	2/8/2010 16:44	947249	VARIOUS	1	LANL	USE	S
per0208028a	1202029083	CWW	2/8/2010 16:51	947249	VARIOUS	1	LANL	USE	S
per0208029a	1202029088	CWW	2/8/2010 16:57	947249	VARIOUS	1	LANL	USE	S

per0208030a	245605003	CWW	2/8/2010 17:04	947249	10-1413	200	LANL	USE	S
per0208031a	245608002	CWW	2/8/2010 17:10	947249	10-1415	1	LANL	USE	S
per0208032a	245673001	CWW	2/8/2010 17:17	947249	10-1442	100	LANL	USE	S
per0208033a	245673003	CWW	2/8/2010 17:23	947249	10-1442	200	LANL	USE	S
per0208034a	WCLCCV	CWW	2/8/2010 17:30			1		USE	C
per0208035a	IPB006	CWW	2/8/2010 17:36			1		USE	B
per0208036a	WCLCRI	CWW	2/8/2010 17:43			1		USE	C
per0208037a	245673006	CWW	2/8/2010 17:49	947249	10-1442	200	LANL	USE	S
per0208038a	245676001	CWW	2/8/2010 17:56	947249	10-1446	1	LANL	USE	S
per0208039a	1202029086	CWW	2/8/2010 18:03	947249	10-1446	1	LANL	USE	S
per0208040a	1202029087	CWW	2/8/2010 18:09	947249	10-1446	1	LANL	USE	S
per0208041a	245791001	CWW	2/8/2010 18:16	947249	10-1467	1	LANL	USE	S
per0208042a	1202029084	CWW	2/8/2010 18:22	947249	10-1467	1	LANL	USE	S
per0208043a	1202029085	CWW	2/8/2010 18:29	947249	10-1467	1	LANL	USE	S
per0208044a	245791003	CWW	2/8/2010 18:35	947249	10-1467	1	LANL	USE	S
per0208045a	245791006	CWW	2/8/2010 18:42	947249	10-1467	1	LANL	USE	S
per0208046a	245791007	CWW	2/8/2010 18:48	947249	10-1467	1	LANL	USE	S
per0208047a	WCLCCV	CWW	2/8/2010 18:55			1		USE	C
per0208048a	IPB007	CWW	2/8/2010 19:01			1		USE	B
per0208049a	WCLCRI	CWW	2/8/2010 19:08			1		USE	C
per0208050a	1202035565	CWW	2/8/2010 19:15	950028	VARIOUS	1	LANL	USE	S
per0208051a	1202035566	CWW	2/8/2010 19:21	950028	VARIOUS	1	LANL	USE	S
per0208052a	1202035573	CWW	2/8/2010 19:28	950028	VARIOUS	1	LANL	USE	S
per0208053a	245911001	CWW	2/8/2010 19:34	950028	10-1487-1	1	LANL	USE	S
per0208054a	1202035571	CWW	2/8/2010 19:41	950028	10-1487-1	1	LANL	USE	S
per0208055a	1202035572	CWW	2/8/2010 19:47	950028	10-1487-1	1	LANL	USE	S
per0208056a	245922001	CWW	2/8/2010 19:54	950028	10-1493-1	1	LANL	USE	S
per0208057a	245934001	CWW	2/8/2010 20:00	950028	10-1502	1	LANL	DUSE-DL	S
per0208058a	245934004	CWW	2/8/2010 20:07	950028	10-1502	1	LANL	DUSE-RA	S
per0208059a	245939001	CWW	2/8/2010 20:14	950028	10-1506-1	1	LANL	USE	S
per0208060a	WCLCCV	CWW	2/8/2010 20:20			1		USE	C
per0208061a	IPB008	CWW	2/8/2010 20:27			1		USE	B
per0208062a	WCLCRI	CWW	2/8/2010 20:33			1		USE	C
per0208063a	245939002	CWW	2/8/2010 20:40	950028	10-1506-1	1	LANL	USE	S
per0208064a	245953001	CWW	2/8/2010 20:47	950028	10-1508-1	1	LANL	USE	S
per0208065a	245965001	CWW	2/8/2010 20:53	950028	10-1511-1	1	LANL	USE	S
per0208066a	245975001	CWW	2/8/2010 21:00	950028	10-1512-1	1	LANL	USE	S

per0208067a	245981001	CWW	2/8/2010 21:06	950028	10-1514-1	1	LANL	USE	S
per0208068a	246000001	CWW	2/8/2010 21:13	950028	10-1517-1	1	LANL	USE	S
per0208069a	246007001	CWW	2/8/2010 21:19	950028	10-1520-1	1	LANL	USE	S
per0208070a	246056001	CWW	2/8/2010 21:26	950028	10-1545-1	1	LANL	USE	S
per0208071a	246056002	CWW	2/8/2010 21:32	950028	10-1545-1	1	LANL	USE	S
per0208072a	246056003	CWW	2/8/2010 21:39	950028	10-1545-1	1	LANL	USE	S
per0208073a	WCLCCV	CWW	2/8/2010 21:45			1		USE	C
per0208074a	IPB009	CWW	2/8/2010 21:52			1		USE	B
per0208075a	WCLCRI	CWW	2/8/2010 21:59			1		USE	C
per0208076a	246056004	CWW	2/8/2010 22:05	950028	10-1545-1	1	LANL	USE	S
per0208077a	246375001	CWW	2/8/2010 22:12	950028	10-1609	1	LANL	USE	S
per0208078a	1202035567	CWW	2/8/2010 22:19	950028	10-1609	1	LANL	USE	S
per0208079a	1202035568	CWW	2/8/2010 22:25	950028	10-1609	1	LANL	USE	S
per0208080a	IPB010	CWW	2/8/2010 22:32			1		USE	B
per0208081a	1262643 Supp	CWW	2/8/2010 22:38	Screen	Inhouse	1	GEL	DUSE	S
per0208082a	1202035625	CWW	2/8/2010 22:45	950048	VARIOUS	1	LANL	DUSE	S
per0208083a	WCLCCV	CWW	2/8/2010 22:52			1		USE	C
per0208084a	IPB011	CWW	2/8/2010 22:58			1		USE	B
per0208085a	WCLCRI	CWW	2/8/2010 23:05			1		USE	C

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

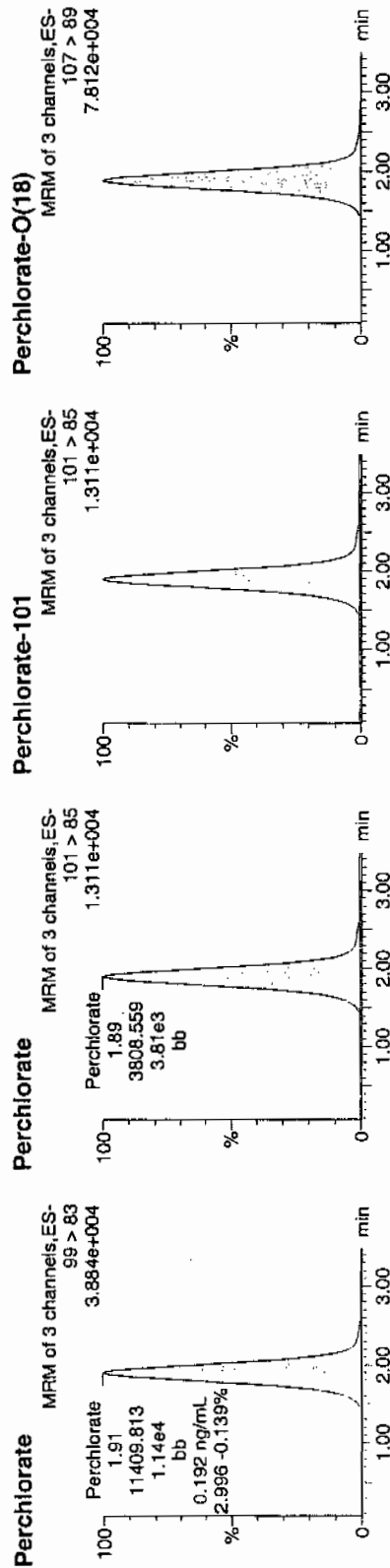
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208054a  
Date: 08-Feb-2010  
Time: 19:41:23  
ID: 1202035571  
Vial: 2:1,E

02-04-10

1202035571 | 1202035571 | 1202035571



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035571	Perchlorate	99 > 83	1.91	11409.813	11409.813	bb			0.1917	95.83	-4.17	2471.6...	3.00
1202035571	Perchlorate-101	101 > 85	1.89	3808.559	3808.559	bb			0.2029	101.45	1.45	676.220	
1202035571	Perchlorate-O(18)	107 > 89	1.89	22745.916	22745.916	bb			0.4676	93.53	-6.47	4602.2...	



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time  
 Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208055a

Date: 08-Feb-2010

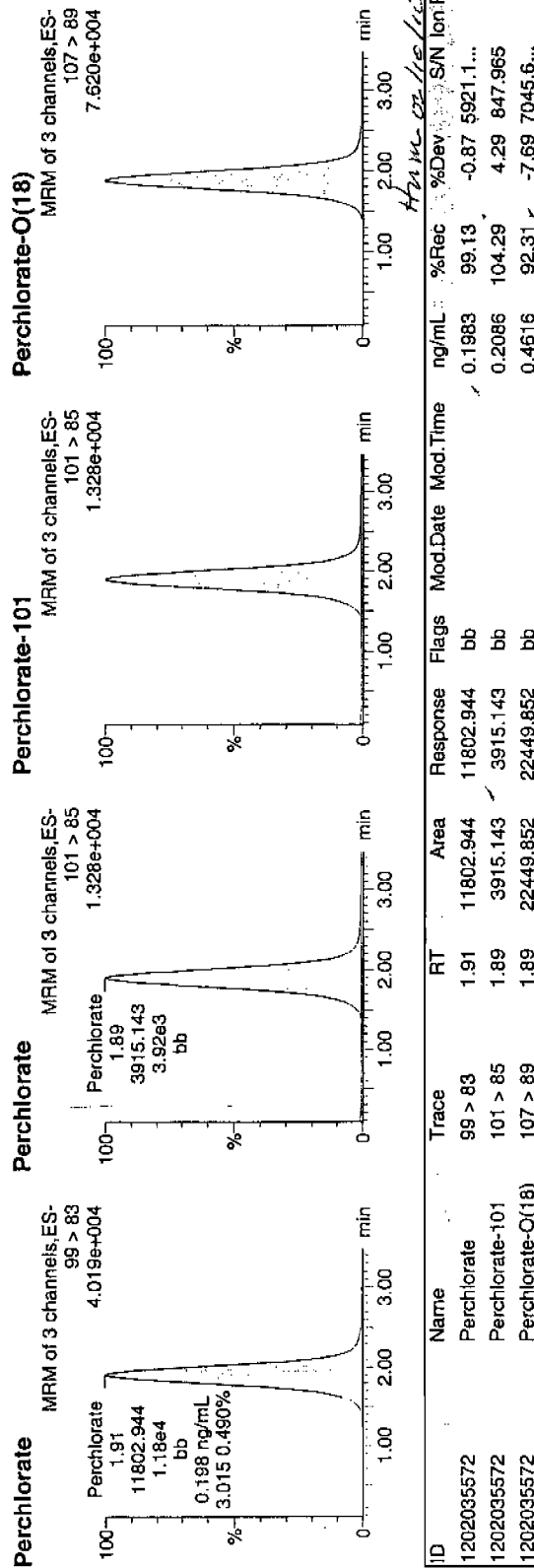
Time: 19:47:53

ID: 1202035572

Vial: 2:1,F

333  
02-09-10

1202035572 | 1202035572 | 1202035572



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035572	Perchlorate	99 > 83	1.91	11802.944	11802.944	bb			0.1983	99.13	-0.87	5921.1...	3.01
1202035572	Perchlorate-101	101 > 85	1.89	3915.143	3915.143	bb			0.2086	104.29	4.29	847.965	
1202035572	Perchlorate-O(18)	107 > 89	1.89	22449.852	22449.852	bb			0.4616	92.31	-7.69	7045.6...	

### 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 10-1545**

**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: 948893

Prep Batch Number: 948892

**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>
246055001	RE15-10-8170
246055002	RE15-10-8169
246055003	RE15-10-8171
246055004	RE15-10-8168
246055005	RE15-10-8222
246055006	RE15-10-8221
246055007	RE15-10-8220
246055008	RE15-10-8223
246055009	RE15-10-8224
1202032884	Method Blank (MB)
1202032885	Laboratory Control Sample (LCS)
1202032886	246055001(RE15-10-8170) Matrix Spike (MS)
1202032887	246055001(RE15-10-8170) Matrix Spike Duplicate (MSD)

10-1545-EXPLCMS

Page 1 of 5

### **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.

#### **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**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

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

The LCS spike recoveries were within the established acceptance limits.

#### **QC Sample Designation**

Sample 246055001 (RE15-10-8170) 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 in this SDG.

10-1545-EXPLCMS

Page 2 of 5

## **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**

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

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

The LCS spike recoveries were within the established acceptance limits.

**QC Sample Designation**

Sample 246055001 (RE15-10-8170) 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 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 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 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: Heather M. Maurer Date: 03/10/10



# SAMPLE DATA SUMMARY

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304182a

Date Analyzed: 08-MAR-10 08:16

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: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260128.wiff

Date Analyzed: 28-FEB-10 00:08

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: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304188a

Date Analyzed: 08-MAR-10 11:13

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: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260131.wiff

Date Analyzed: 28-FEB-10 00:55

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: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304189a

Date Analyzed: 08-MAR-10 11:43

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: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260132.wiff

Date Analyzed: 28-FEB-10 01:11

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: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304190a

Date Analyzed: 08-MAR-10 12:12

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: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260133.wiff

Date Analyzed: 28-FEB-10 01:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	360	J
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: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304191a

Date Analyzed: 08-MAR-10 12:42

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: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260134.wiff

Date Analyzed: 28-FEB-10 01:42

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304192a

Date Analyzed: 08-MAR-10 13:11

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		

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260135.wiff

Date Analyzed: 28-FEB-10 01:58

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: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304193a

Date Analyzed: 08-MAR-10 13:41

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: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260139.wiff

Date Analyzed: 28-FEB-10 03:01

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: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304194a

Date Analyzed: 08-MAR-10 14:10

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: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260140.wiff

Date Analyzed: 28-FEB-10 03:17

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: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304195a

Date Analyzed: 08-MAR-10 14:40

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: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260141.wiff

Date Analyzed: 28-FEB-10 03:32

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

# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
246055001	RE15-10-8170	110	70 - 144	
246055001	RE15-10-8170	94	70 - 144	
246055002	RE15-10-8169	122	70 - 144	
246055002	RE15-10-8169	98.4	70 - 144	
246055003	RE15-10-8171	114	70 - 144	
246055003	RE15-10-8171	97.6	70 - 144	
246055004	RE15-10-8168	111	70 - 144	
246055004	RE15-10-8168	97.2	70 - 144	
246055005	RE15-10-8222	108	70 - 144	
246055005	RE15-10-8222	97.2	70 - 144	
246055006	RE15-10-8221	113	70 - 144	
246055006	RE15-10-8221	97.2	70 - 144	
246055007	RE15-10-8220	107	70 - 144	
246055007	RE15-10-8220	96.4	70 - 144	
246055008	RE15-10-8223	114	70 - 144	
246055008	RE15-10-8223	96	70 - 144	
246055009	RE15-10-8224	117	70 - 144	
246055009	RE15-10-8224	98.8	70 - 144	
1202032884	MB for batch 948892	109	70 - 144	
1202032884	MB for batch 948892	94.8	70 - 144	
1202032885	LCS for batch 948892	106	70 - 144	
1202032885	LCS for batch 948892	89.2	70 - 144	
1202032886	RE15-10-8170(246055001MS)	119	70 - 144	
1202032886	RE15-10-8170(246055001MS)	94	70 - 144	
1202032887	RE15-10-8170(246055001MSD)	110	70 - 144	
1202032887	RE15-10-8170(246055001MSD)	94	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) 10-1545

Extract Batch Code: 948892

Date Extracted: 10-FEB-10

GEL LCS ID: 1202032885

GEL LCSDUP ID:

Analysis Date/Time: 08-MAR-10 07:47

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	4280	85.6					69 - 126
2,4,6-Trinitrotoluene	5000	4880	97.7					73 - 149
2,4-Dinitrotoluene	5000	4570	91.4					87 - 137
2,6-Dinitrotoluene	5000	4700	94.1					89 - 120
2-Amino-4,6-dinitrotoluene	5000	5550	111					90 - 130
4-Amino-2,6-dinitrotoluene	5000	5480	110					84 - 130
HMX	5000	5530	111					58 - 138
Nitrobenzene	5000	4840	96.7					71 - 122
PETN	5000	5130	103					64 - 137
RDX	5000	4730	94.6					81 - 137
Tetryl	5000	2600	52.1					51 - 112
m-Dinitrobenzene	5000	4920	98.4					83 - 122
m-Nitrotoluene	5000	4590	91.9					73 - 118
o-Nitrotoluene	5000	4970	99.3					72 - 119
p-Nitrotoluene	5000	5000	100					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) 10-1545

Extract Batch Code: 948892

Date Extracted: 10-FEB-10

GEL LCS ID: 1202032885

GEL LCSDUP ID:

Analysis Date/Time: 27-FEB-10 23:52

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
2,4-Diamino-6-nitrotoluene	5000	5210	104					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5590	112					64 - 122
3,5-Dinitroaniline	5000	4310	86.2					70 - 127
tris(o-cresyl) phosphate	5000	5100	102					84 - 119
TATB	5000	5050	101					28 - 162

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

3

# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Extract Batch Code: 948892

Date Extracted: 10-FEB-10

GEL Spike ID: 1202032886

GEL SpikeDup ID: 1202032887

Analysis Date/Time: 08-MAR-10 08:46

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
HMX	5000	0	4350	86.9	4310	86.1	.924	30	51 - 144
Nitrobenzene	5000	0	4970	99.4	4590	91.7	8.05	30	70 - 122
PETN	5000	0	6870	137	6480	130	5.82	30	60 - 140
1,3,5-Trinitrobenzene	5000	0	4420	88.4	5170	103	15.7	30	50 - 140
2-Amino-4,6-dinitrotoluene	5000	0	5580	112	5480	110	1.72	30	85 - 137
2,6-Dinitrotoluene	5000	0	4960	99.2	5010	100	1.04	30	90 - 118
2,4-Dinitrotoluene	5000	0	4560	91.2	4850	96.9	6.13	30	86 - 135
2,4,6-Trinitrotoluene	5000	0	5790	116	4960	99.2	15.4	30	76 - 144
4-Amino-2,6-dinitrotoluene	5000	0	5950	119	5290	106	11.7	30	72 - 143
RDX	5000	0	4610	92.2	4960	99.3	7.46	30	59 - 152
Tetryl	5000	0	3280	65.6	3010	60.1	8.62	30	36 - 124
m-Dinitrobenzene	5000	0	4850	97	4820	96.3	.716	30	85 - 118
m-Nitrotoluene	5000	0	4570	91.5	4390	87.7	4.19	30	70 - 120
o-Nitrotoluene	5000	0	5350	107	4760	95.2	11.7	30	69 - 123
p-Nitrotoluene	5000	0	4720	94.5	4750	95.1	.639	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: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Extract Batch Code: 948892

Date Extracted: 10-FEB-10

GEL Spike ID: 1202032886

GEL SpikeDup ID: 1202032887

Analysis Date/Time: 28-FEB-10 00:24

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	5220	104	5600	112	7.02	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5760	115	6190	124	7.2	30	55 - 130
TATB	5000	0	5460	109	5380	108	1.48	30	29 - 155
3,5-Dinitroaniline	5000	0	4670	93.4	4470	89.4	4.38	30	73 - 129
tris(o-cresyl) phosphate	5000	0	5150	103	5130	103	.389	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): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 04-MAR-10 15:16

GEL Data File: EXP0304001a

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	607.958
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	536.234
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

# Identify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 05 10:25:00 2010, Page 1 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\030410expa.mdb, Time: Fri Mar 05 09:18:46 2010  
 Calibration: Untitled, Time: Fri Mar 05 10:16:18 2010

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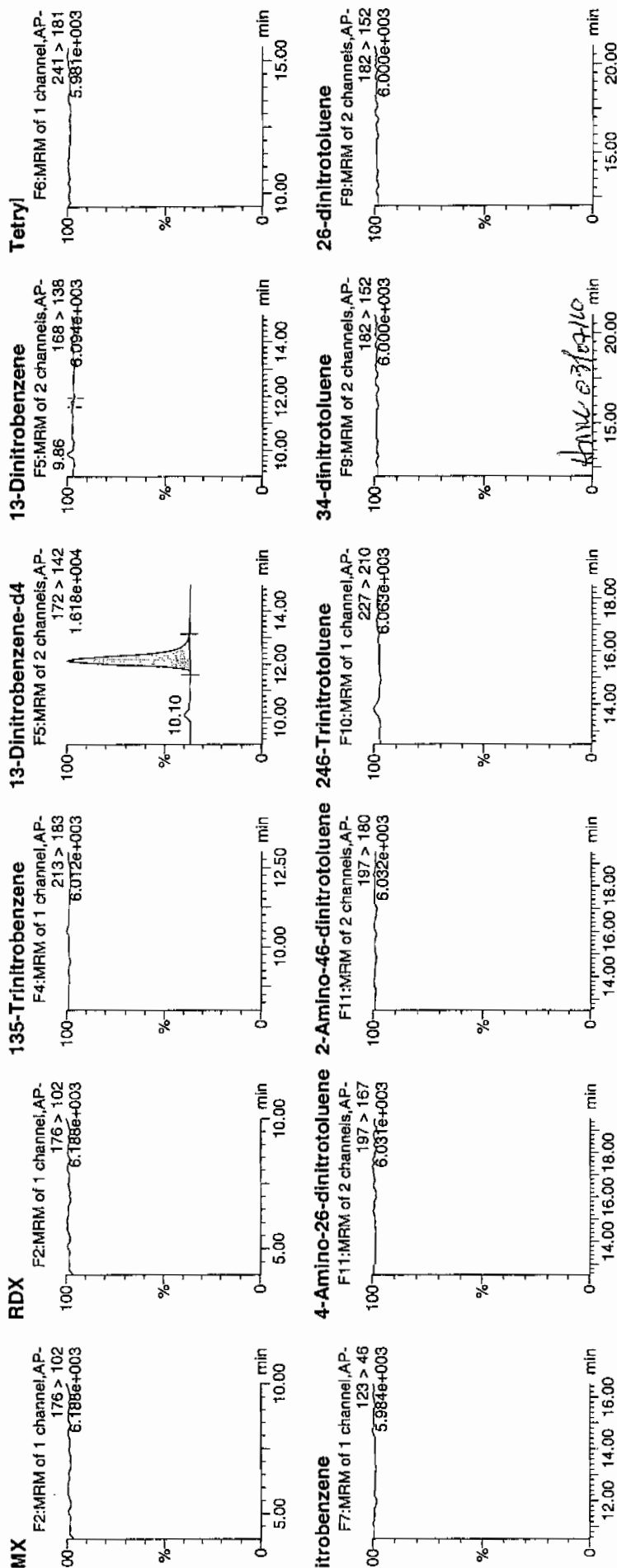
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Time: 15:16:39

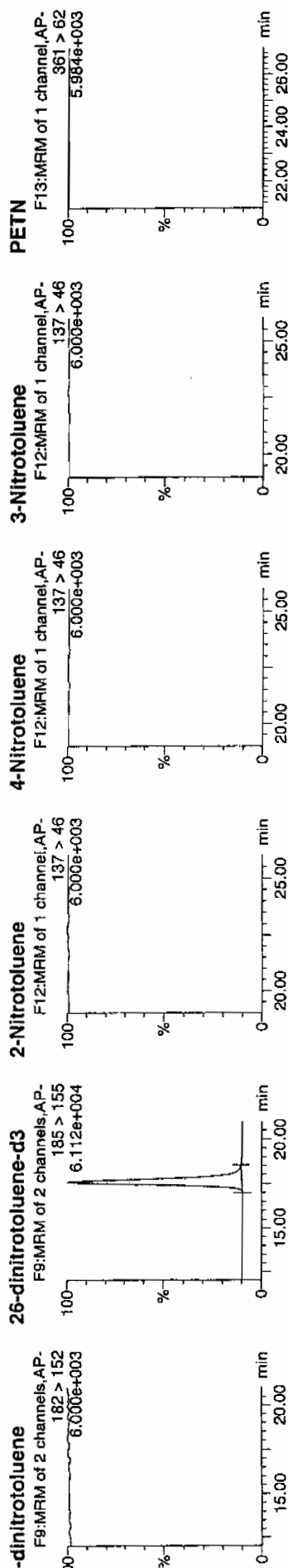
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Lot: 1:1,A

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3/6/10



taset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

[illegible]

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 04-MAR-10 15:46

GEL Data File: EXP0304002a

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	579.131
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	573.881
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

uantify Sample Report  
EL Laboratories, LLC / Analyst : Michael A. Penny

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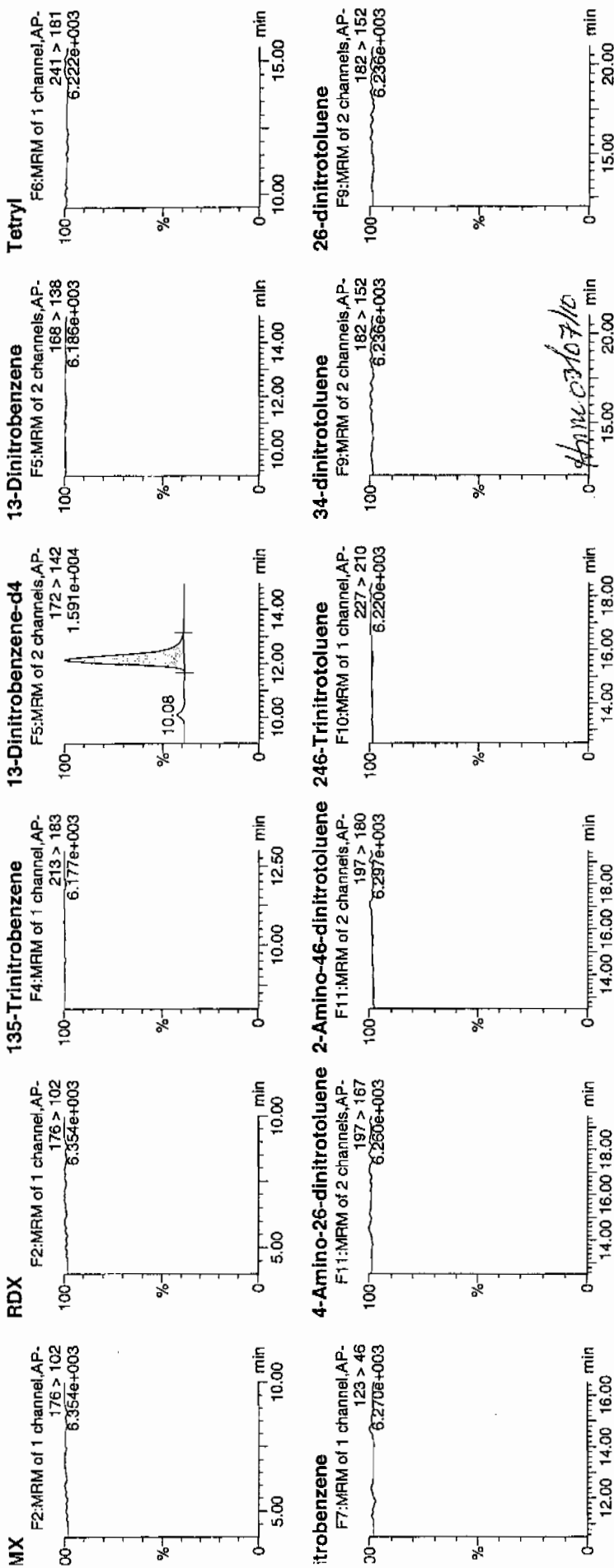
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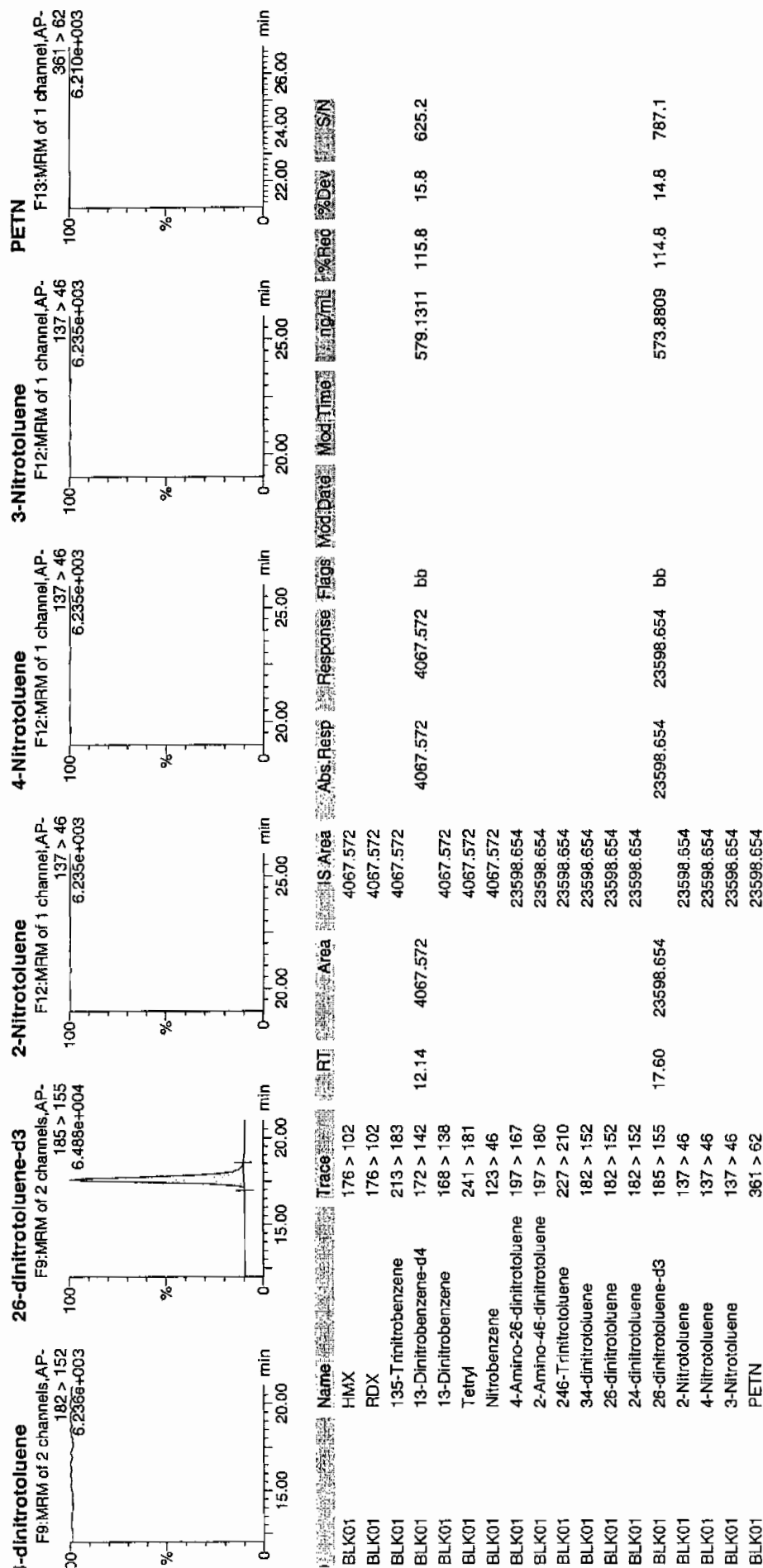
10/17  
3/1/10



### Quantify Sample Report

CEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 26-FEB-10 14:53

GEL Data File: EXS02260001.wiff

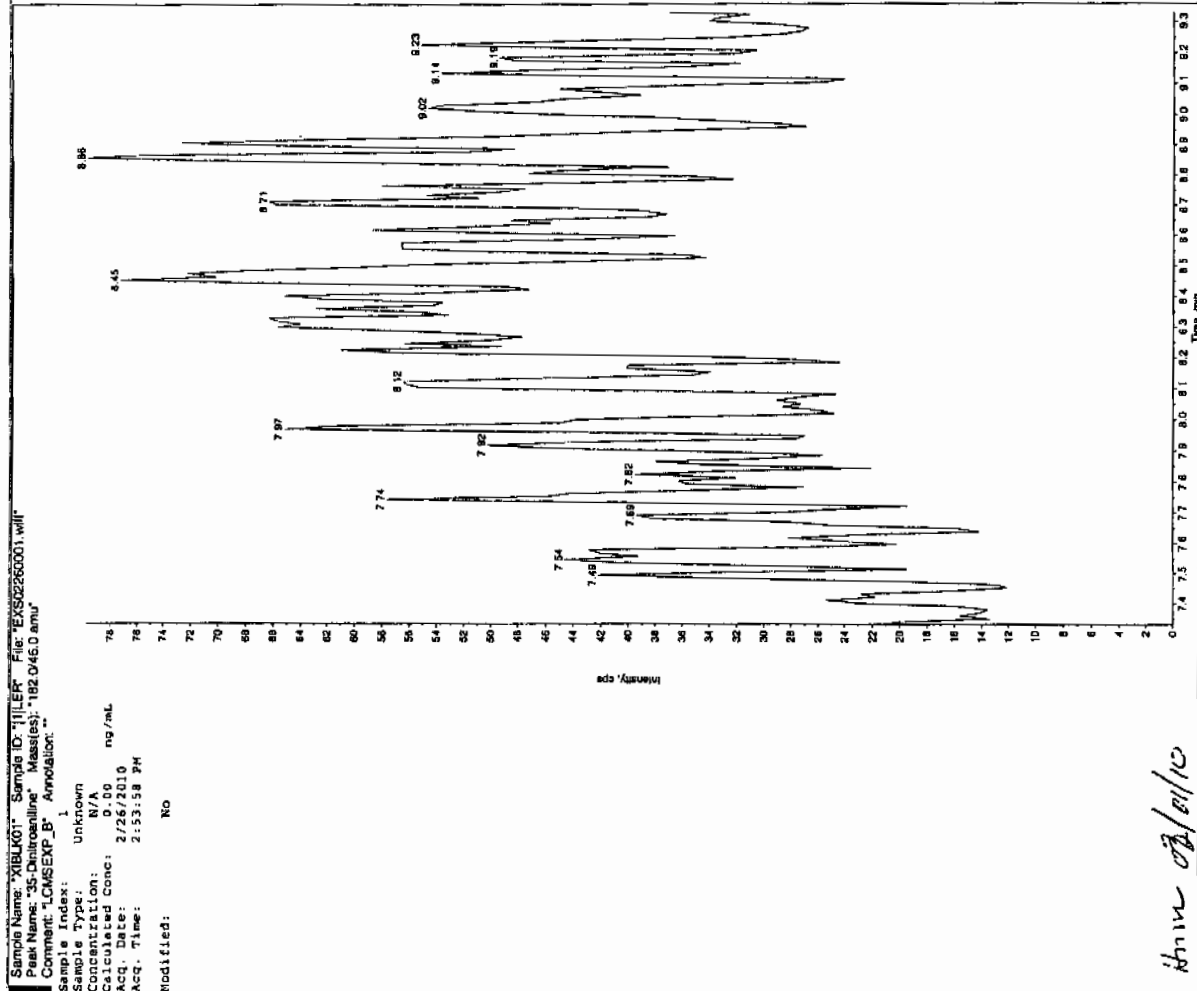
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

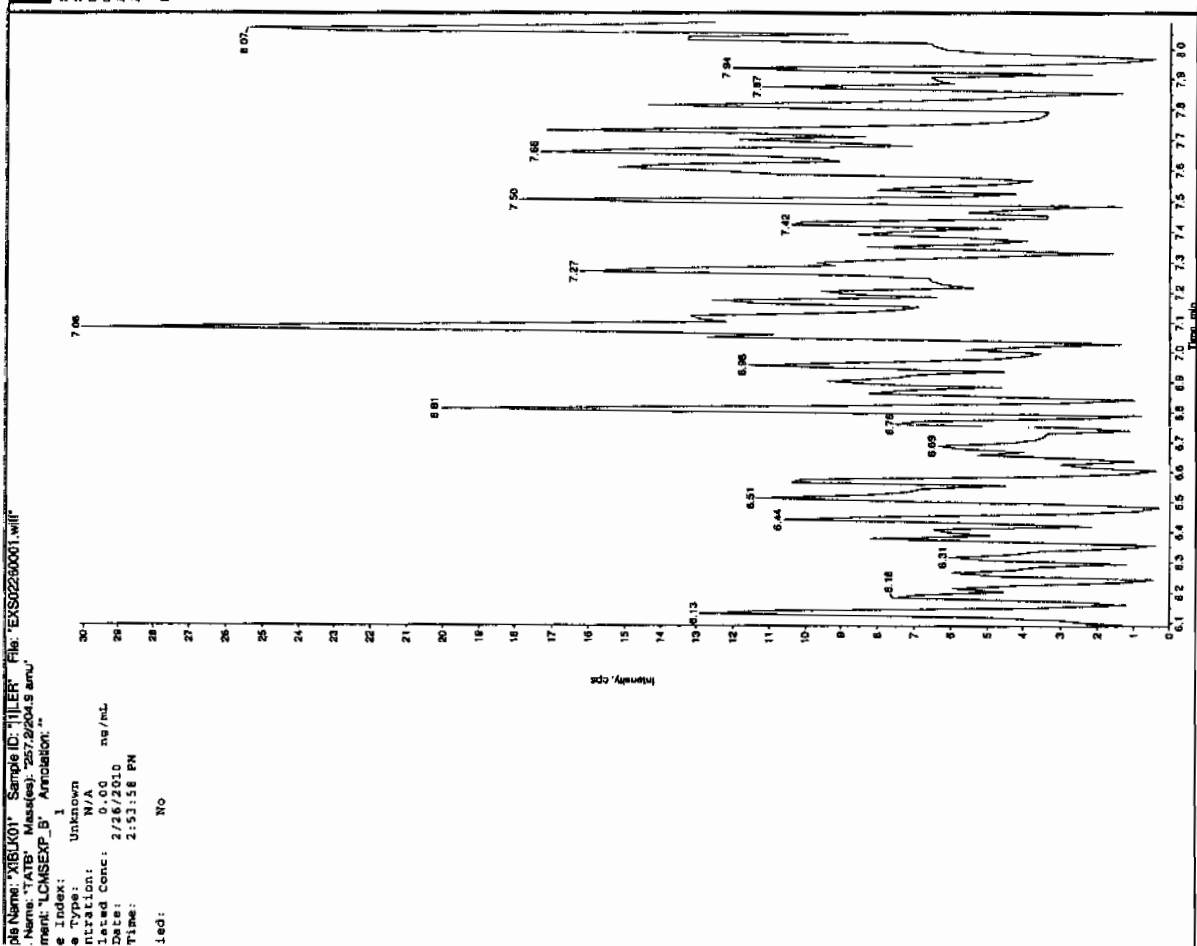
Compound	True	Found (ug/L)
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0



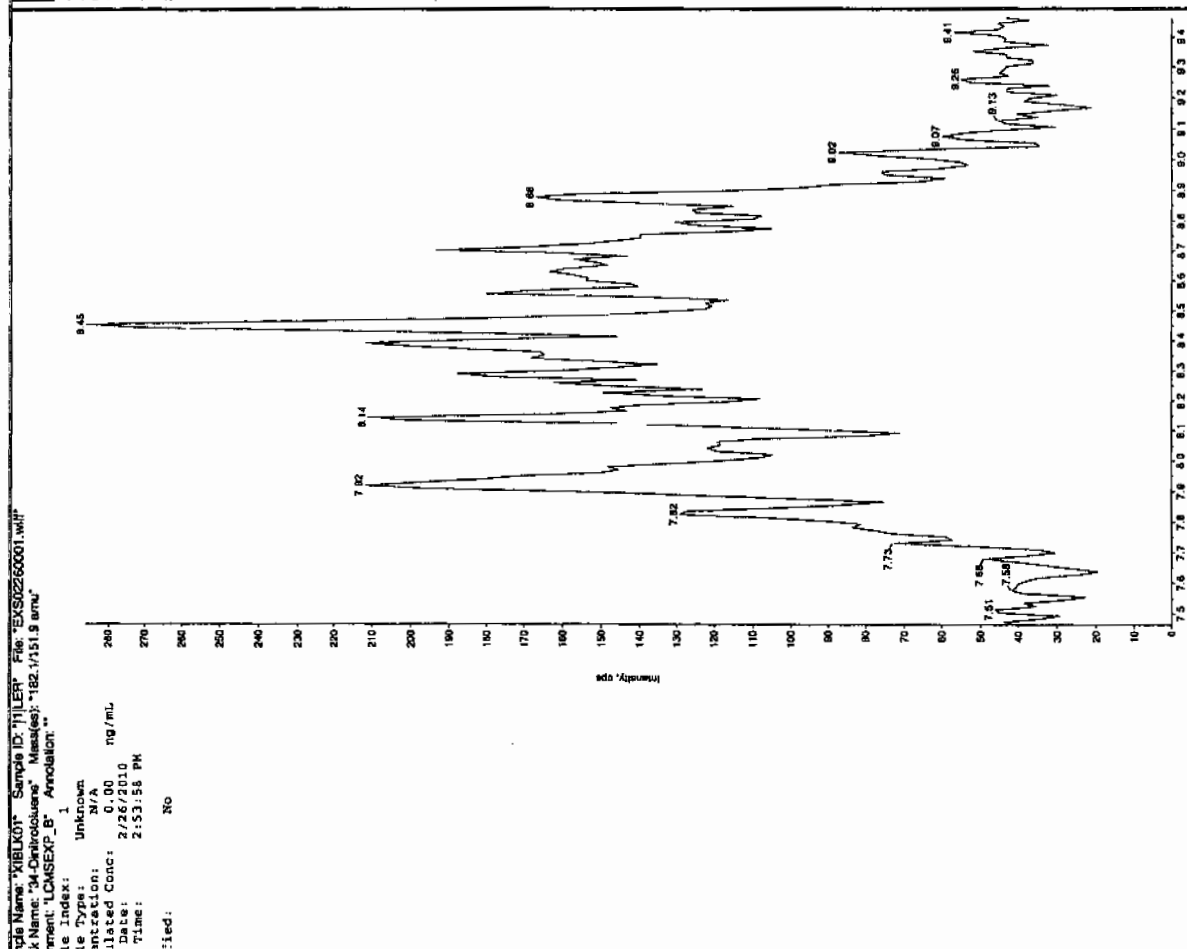
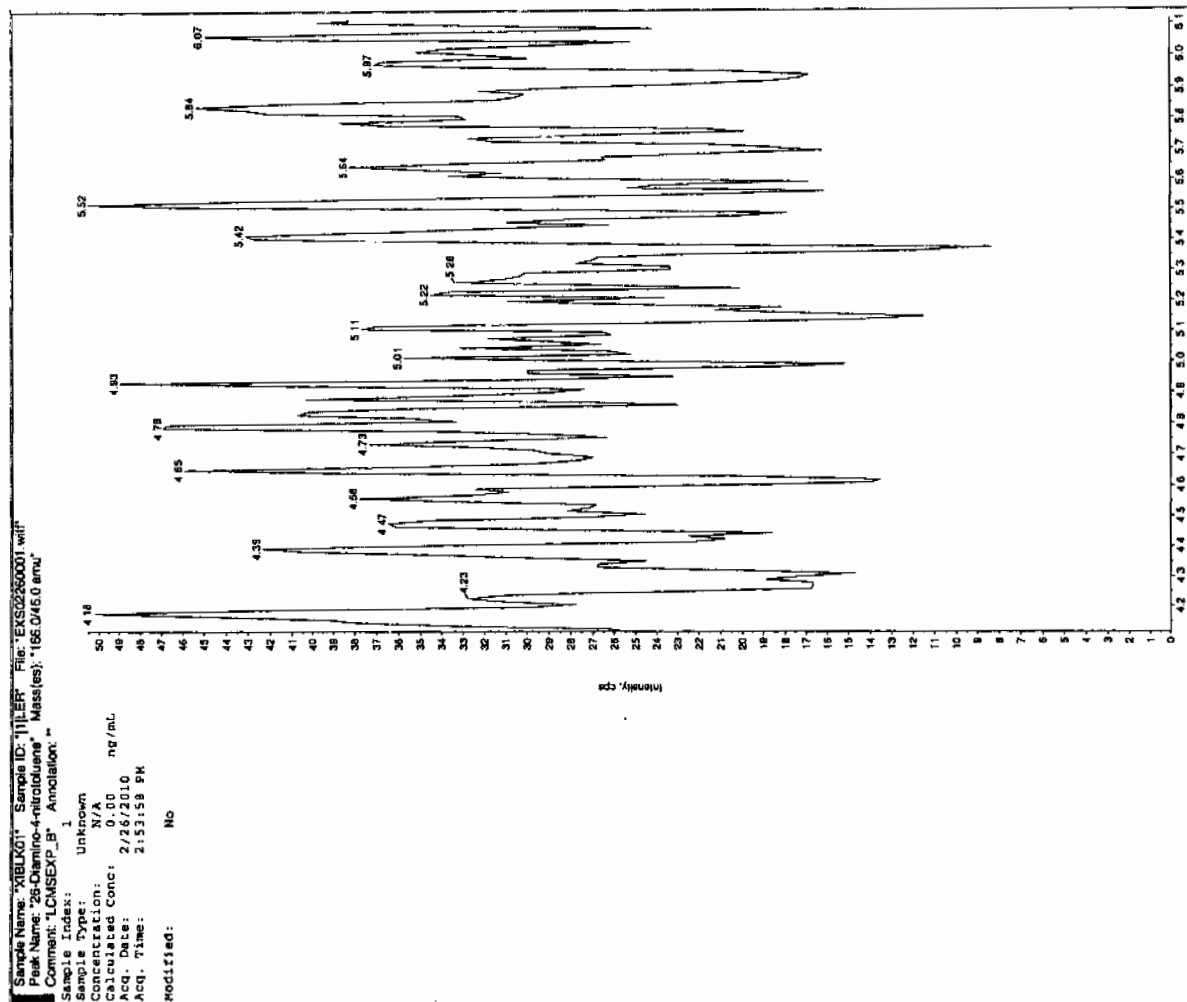
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L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



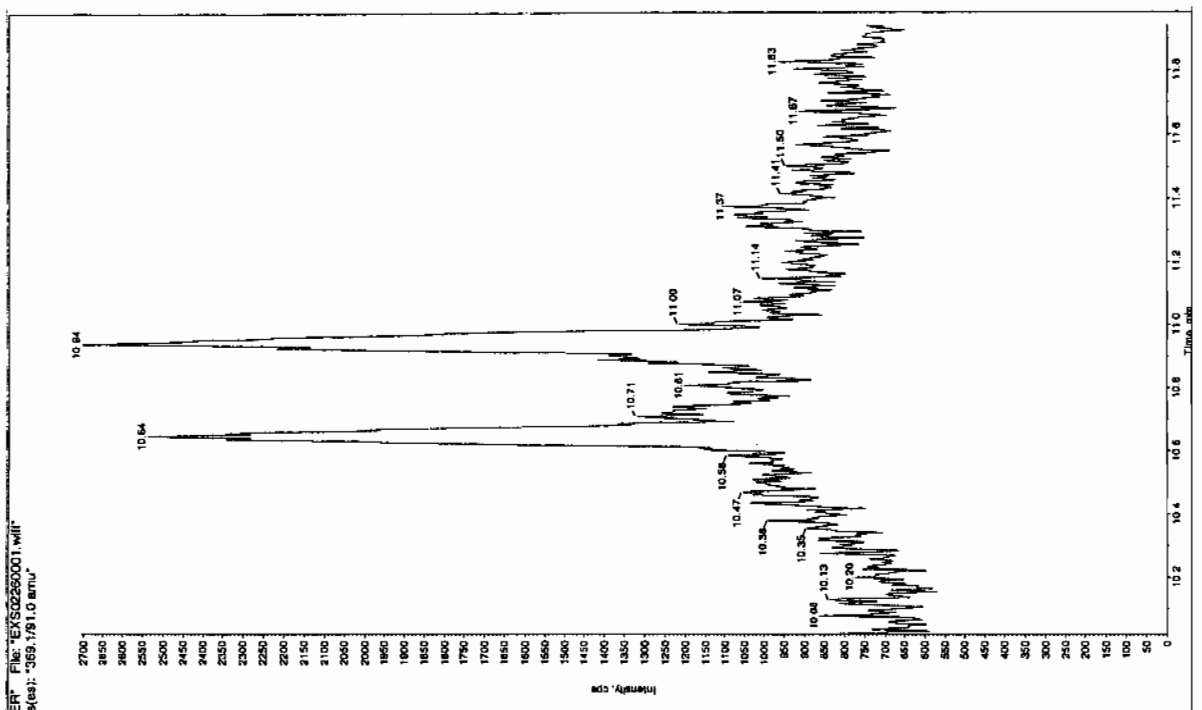
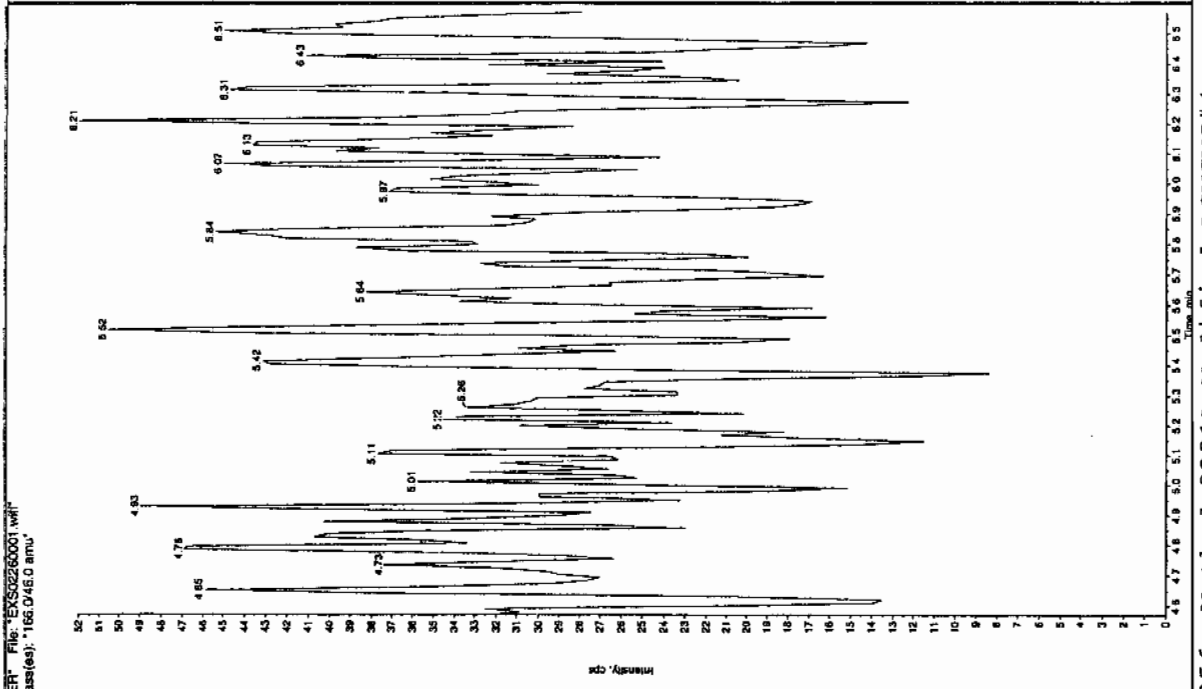
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 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 2:53:58 PM  
 Modified: No

Sample Name: "XBLX01" Sample ID: "11L1R" File: "EXS02260001.wif"  
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 Comment: "LCMSEXP\_B" Annotation: ""

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 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 2:53:58 PM  
 Modified: No



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 26-FEB-10 15:09

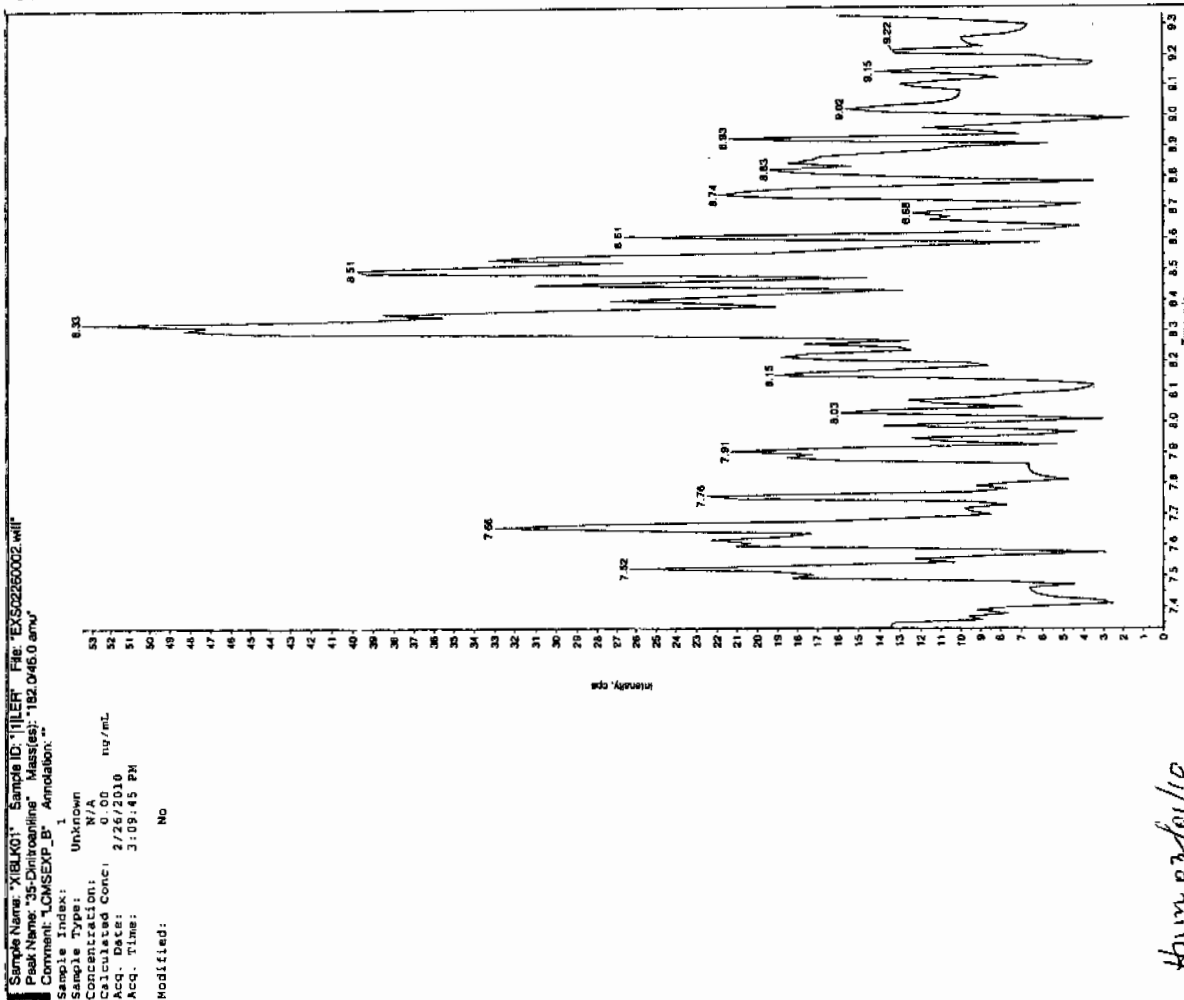
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Instrument ID: LCMSMS

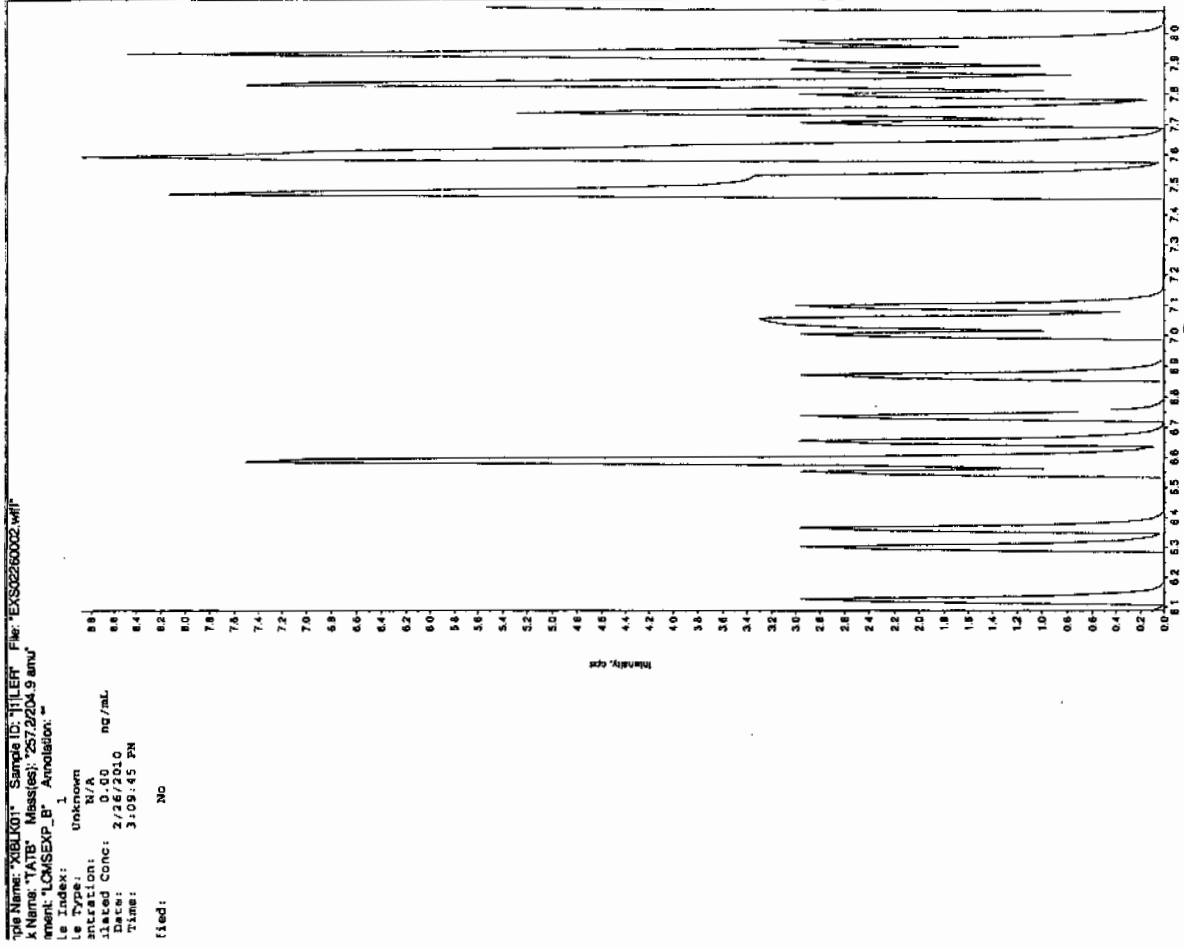
Column: Phenomenex Ultracarb 5µ ODS(20)

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

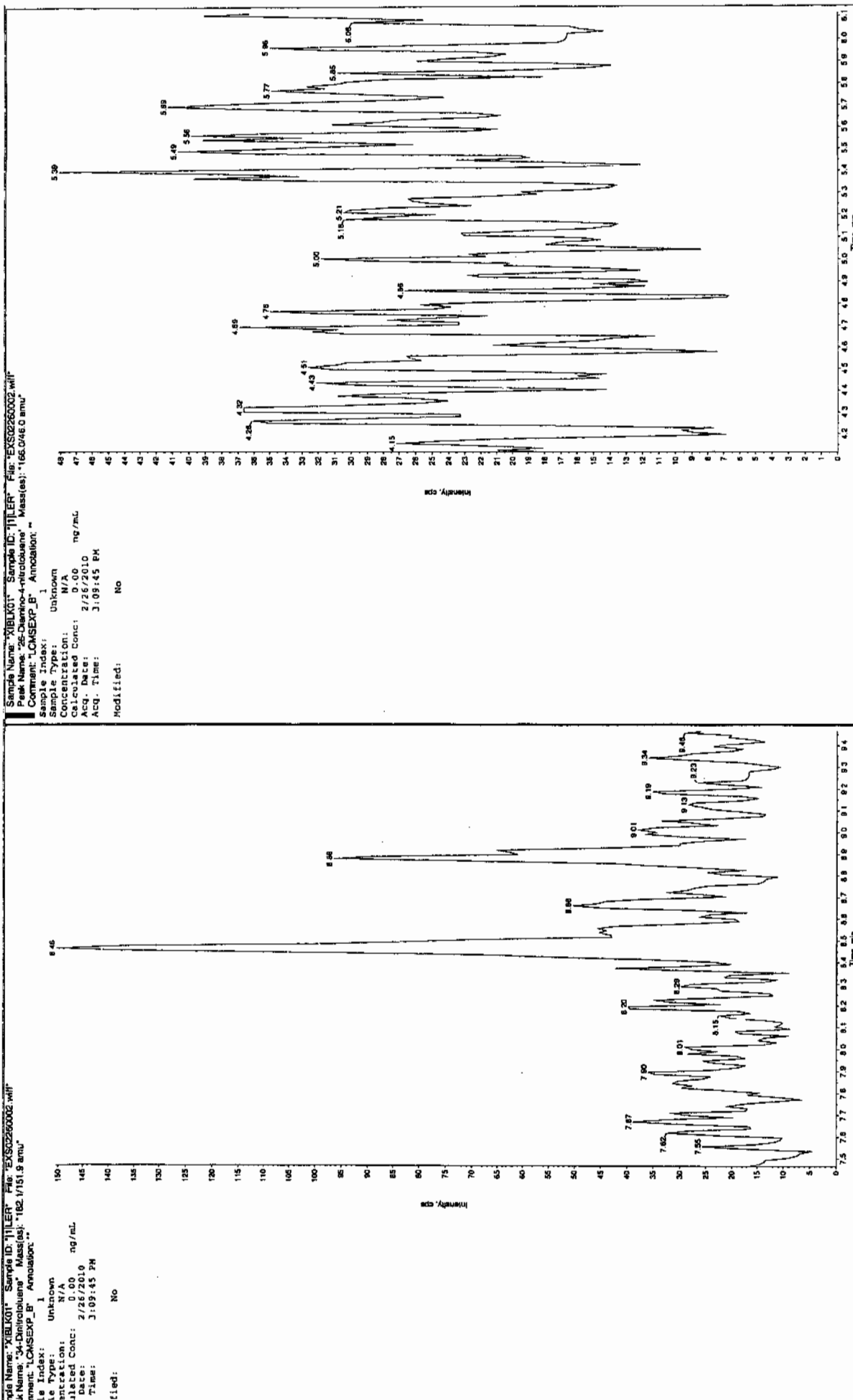
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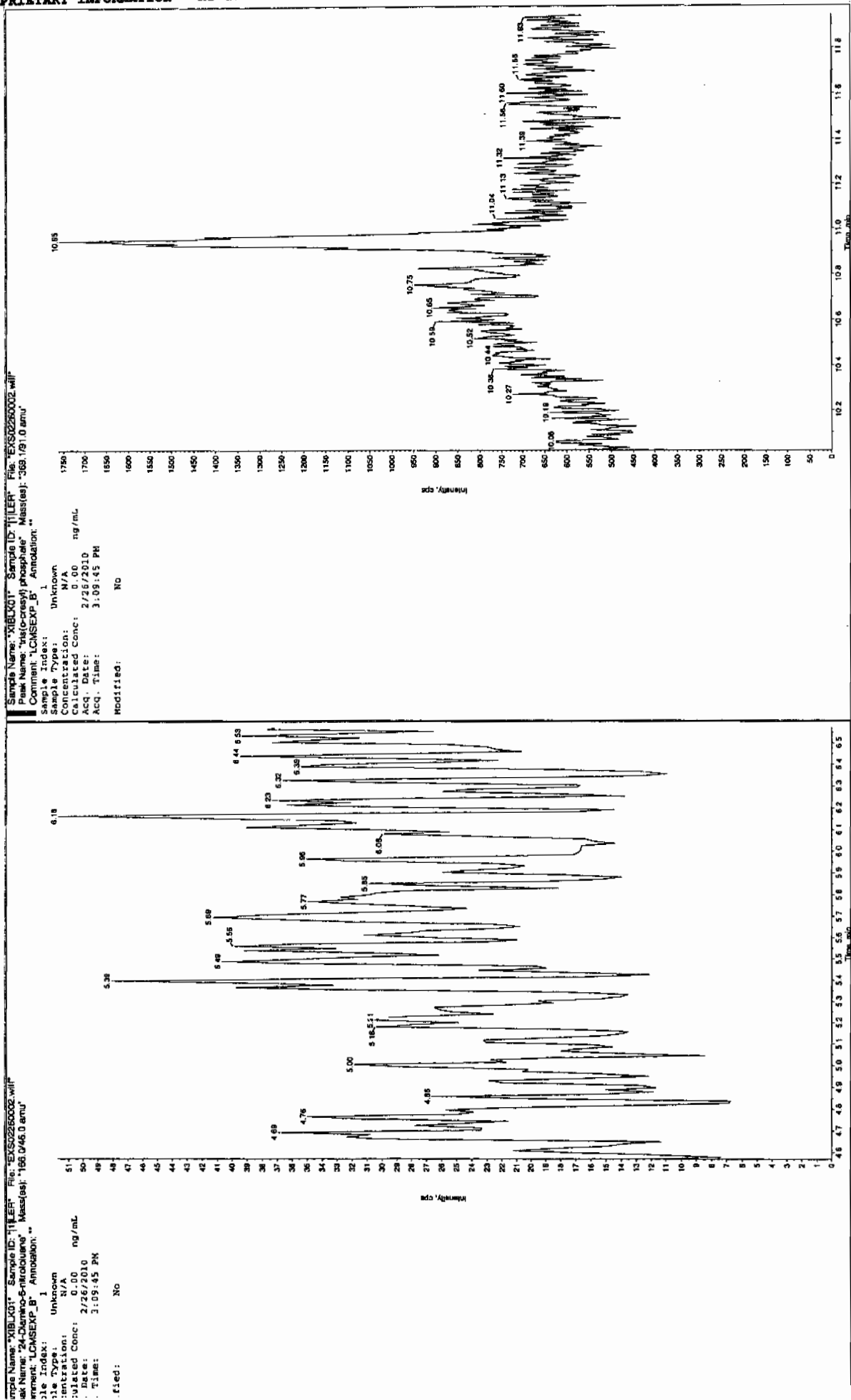
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SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 04-MAR-10 19:12

GEL Data File: EXP0304009a

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	522.148
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.283
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



Identify Sample Report  
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

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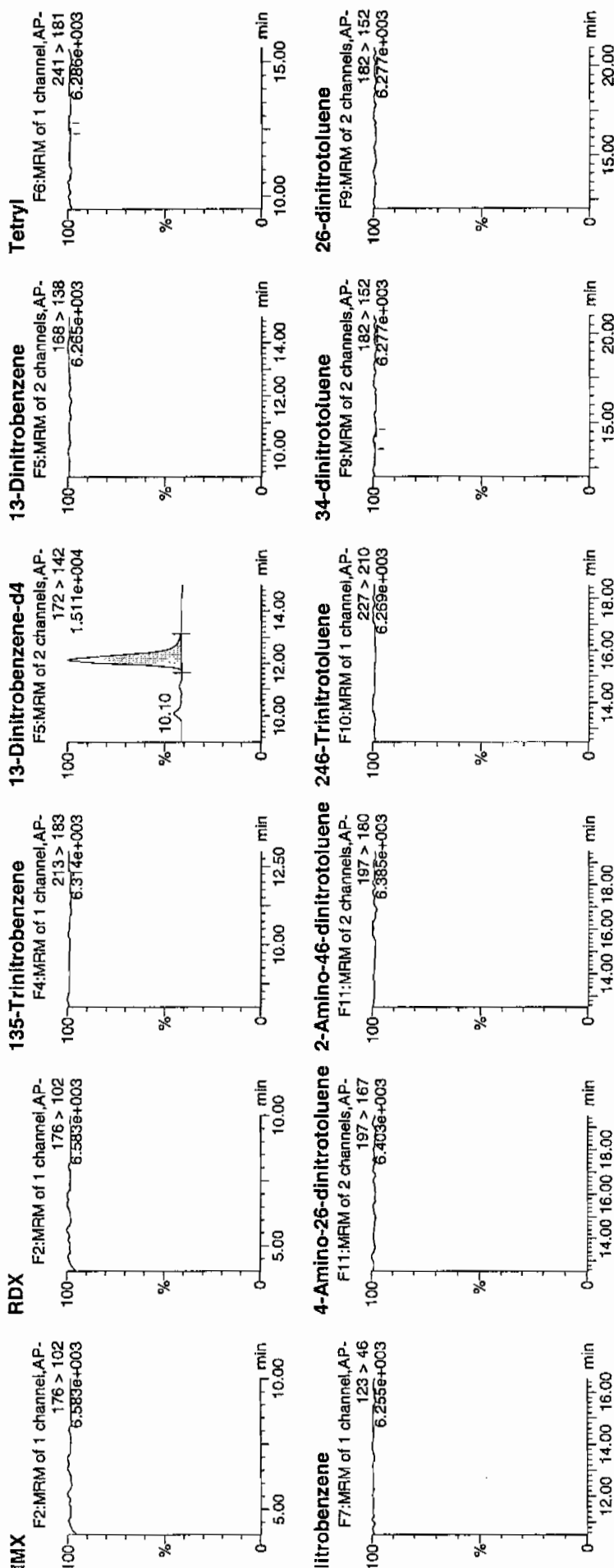
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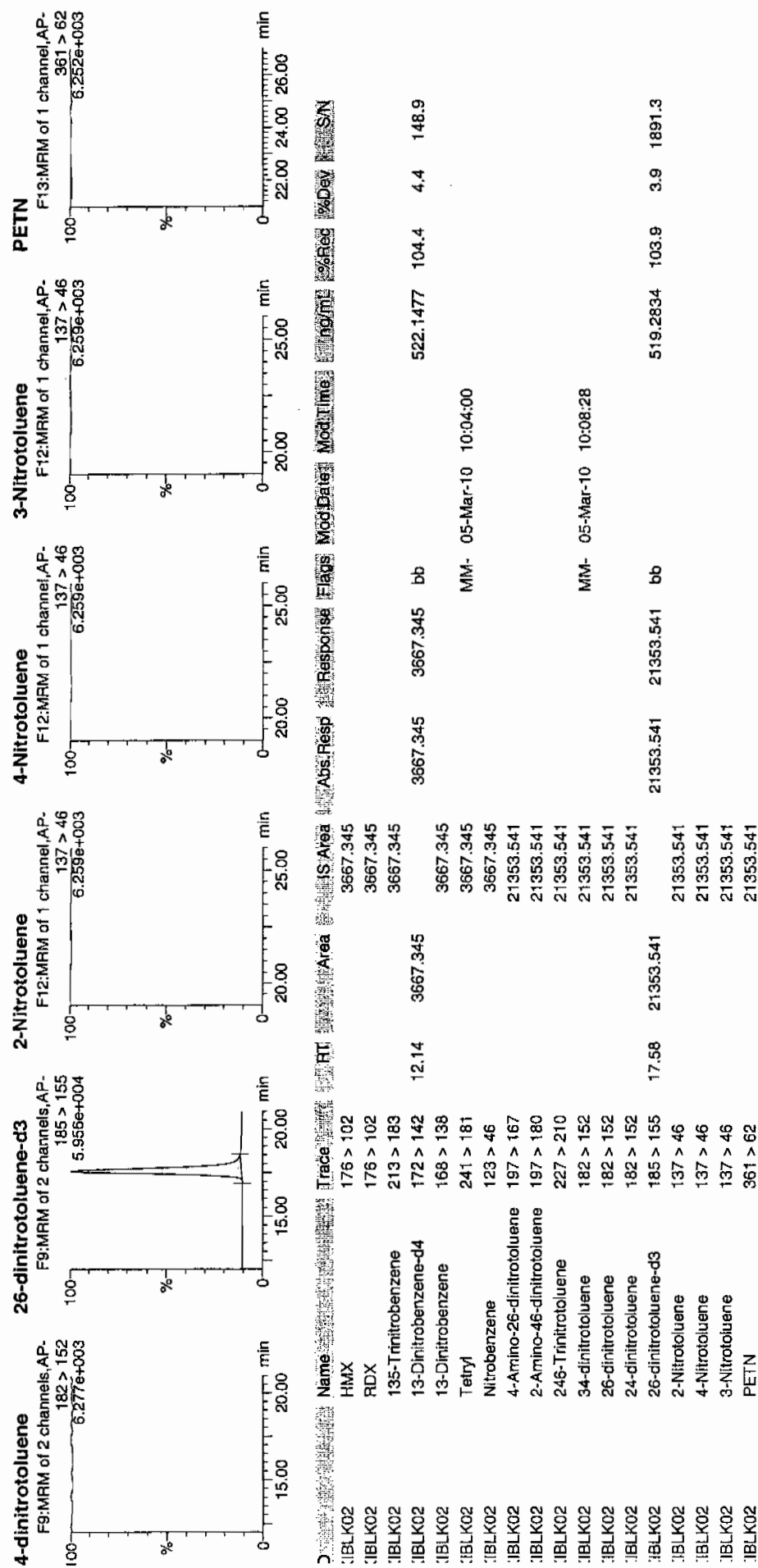


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Printed: Fri Mar 05 10:25:00 2010, Page 18 of 77

Quantify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 04-MAR-10 20:11

GEL Data File: EXP0304011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	542.741
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	569.446
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

uantify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

atlasat: C:\MASSLYNX\New\_Exp.PRO\030410expA.qtd, Time: Fri Mar 05 10:16:18 2010

ame: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304011a

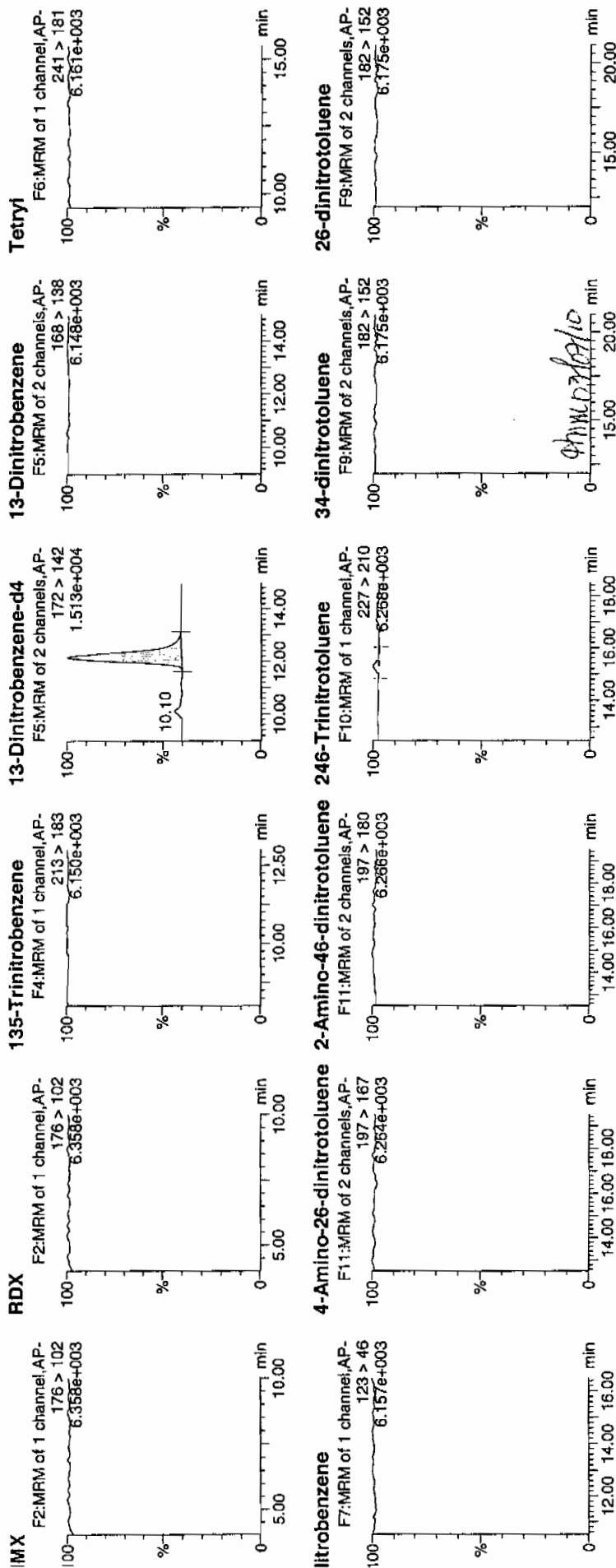
ate: 04-Mar-2010

ime: 20:11:24

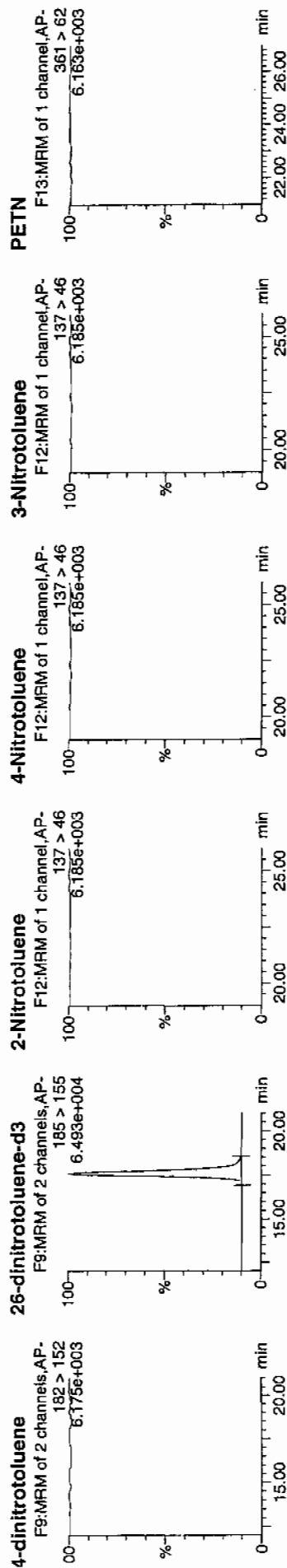
y: XIBLK03

ial: 1:1,A

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3/6/10



atataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

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4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 05-MAR-10 02:34

GEL Data File: EXP0304024a

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	521.731
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	509.028
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  
IEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Sample Name: C:\MASSLYNX\NEW\_EXP\PRO\data\EXP0304024a

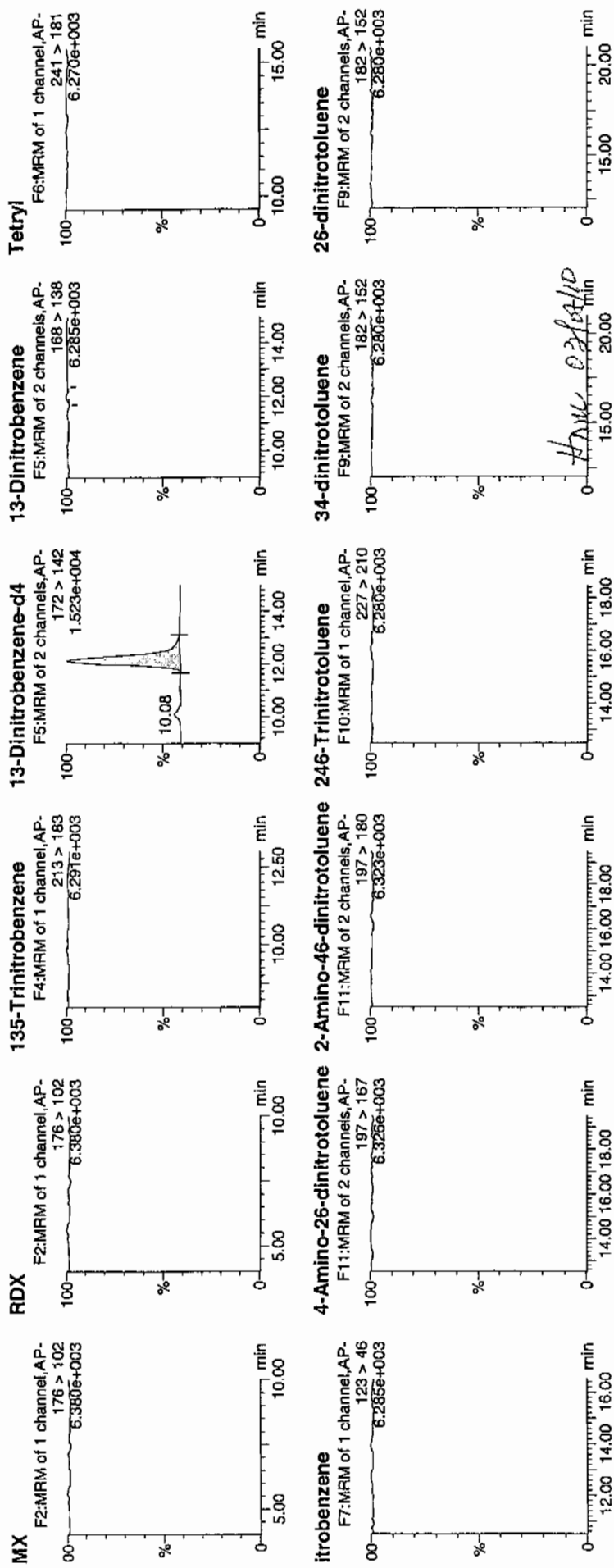
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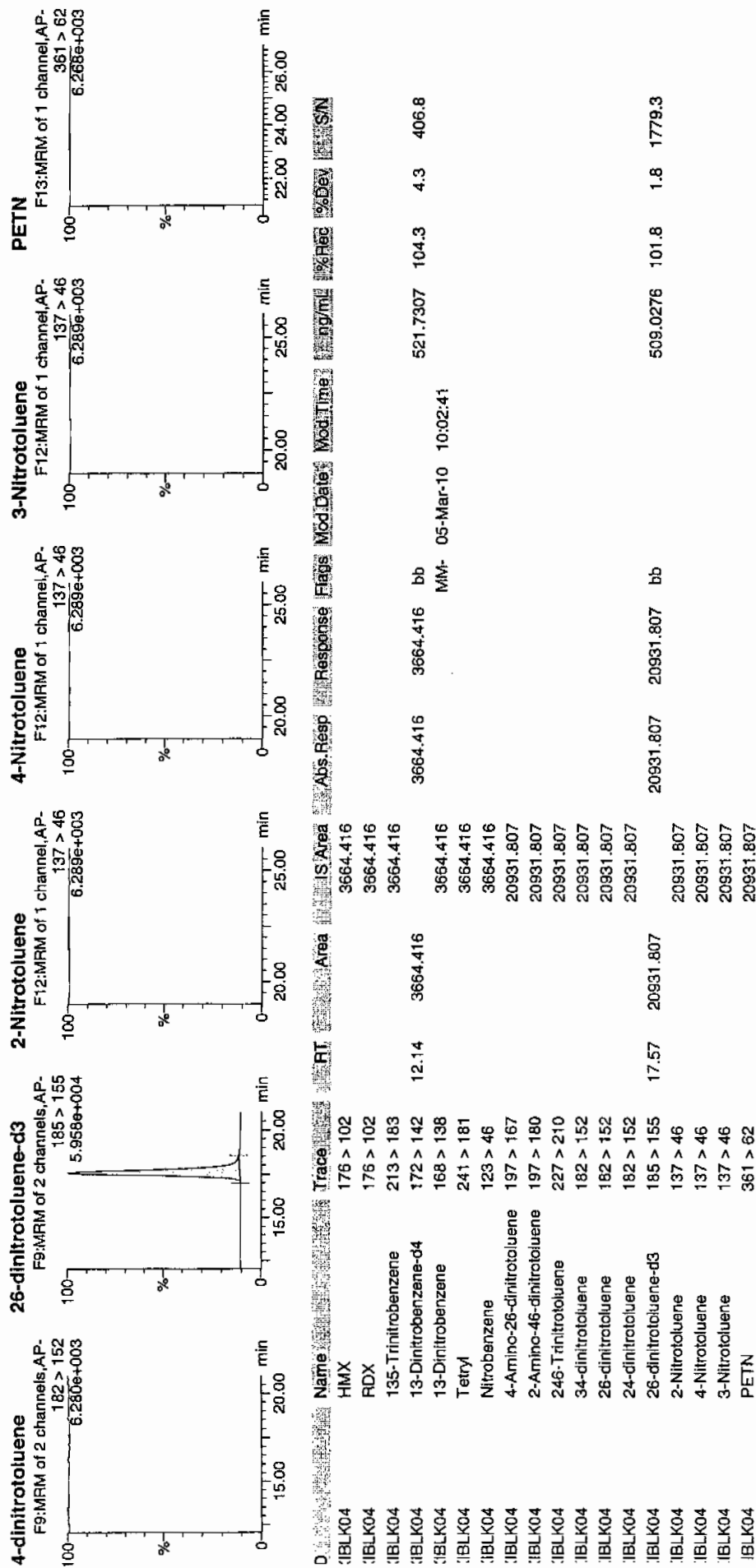
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Label: 1:1,A

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Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010





4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 05-MAR-10 08:58

GEL Data File: EXP0304037a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	520.666
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	533.265
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

Quantify Sample Report  
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304037a

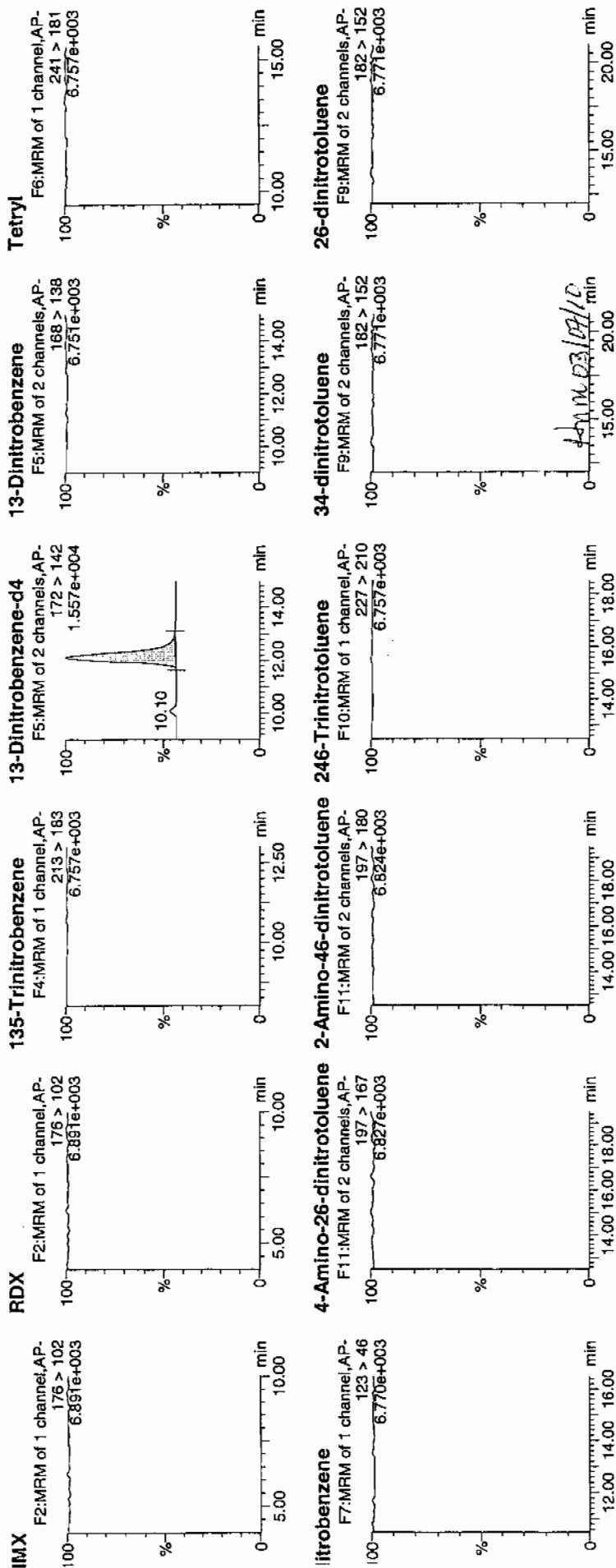
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Time: 08:58:06

ID: XIBLK05

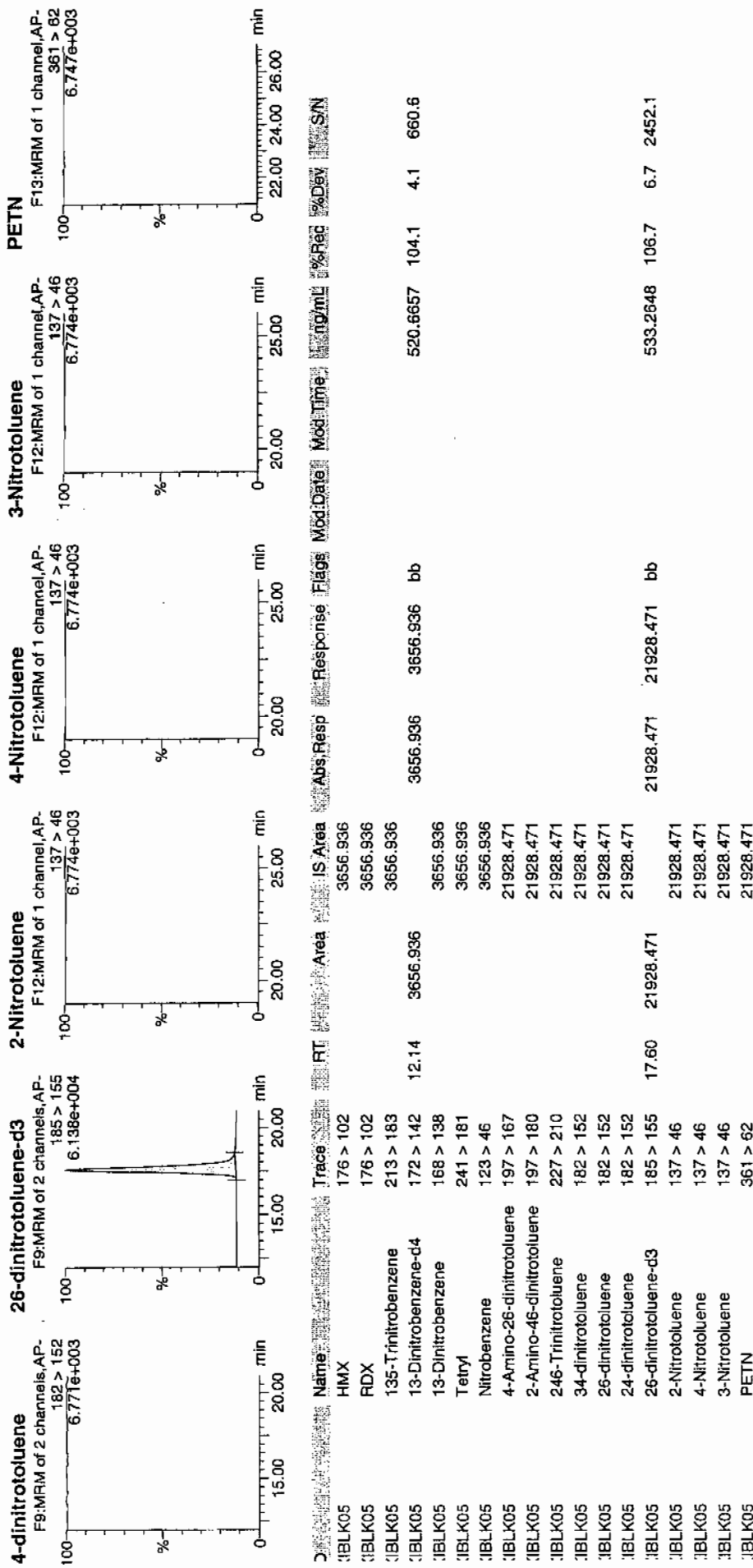
Label: 1:1,A

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Quantify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 05-MAR-10 15:21

GEL Data File: EXP0304050a

Instrument ID: LCMSMS

Column: Phenomenex Ultra<sup>®</sup>carb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	566.455
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	585.17
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

Printed: Sat Mar 06 12:20:52 2010, Page 23 of 107

Identify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304050a

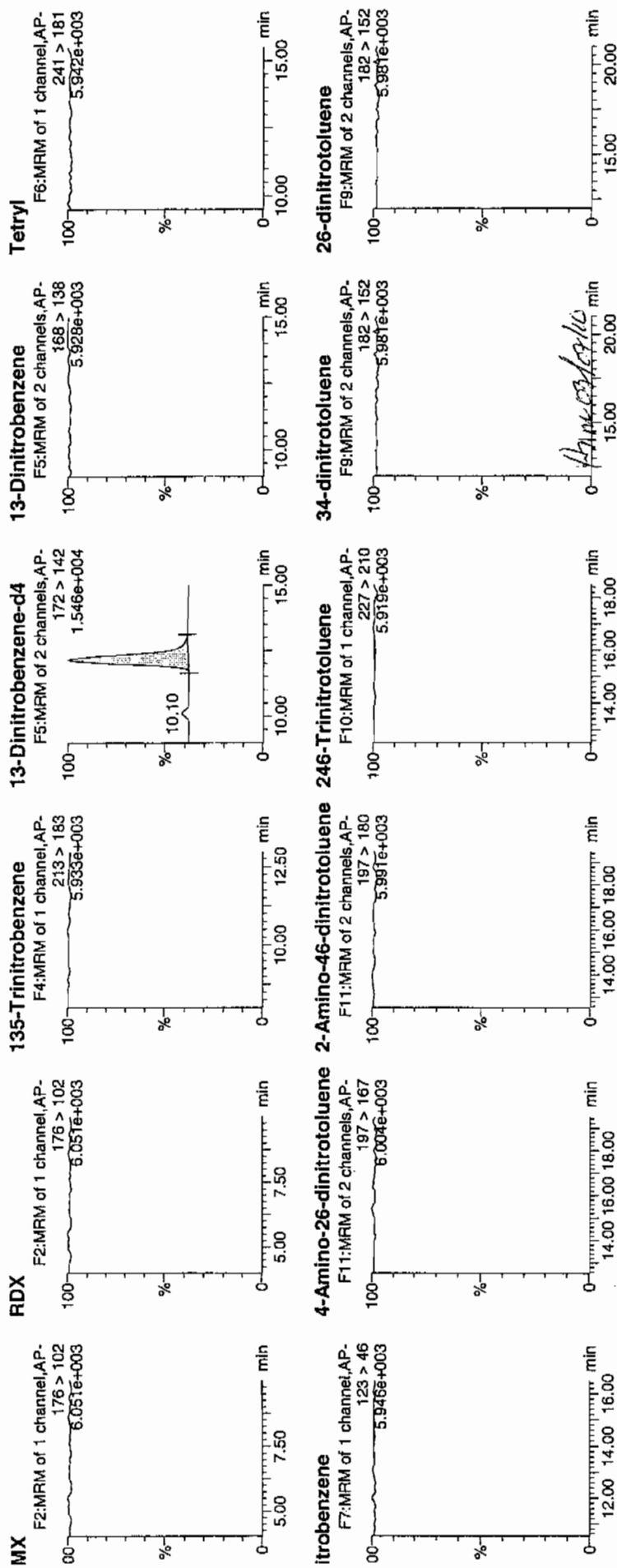
Date: 05-Mar-2010

Time: 15:21:48

Sample ID: XIBLK06

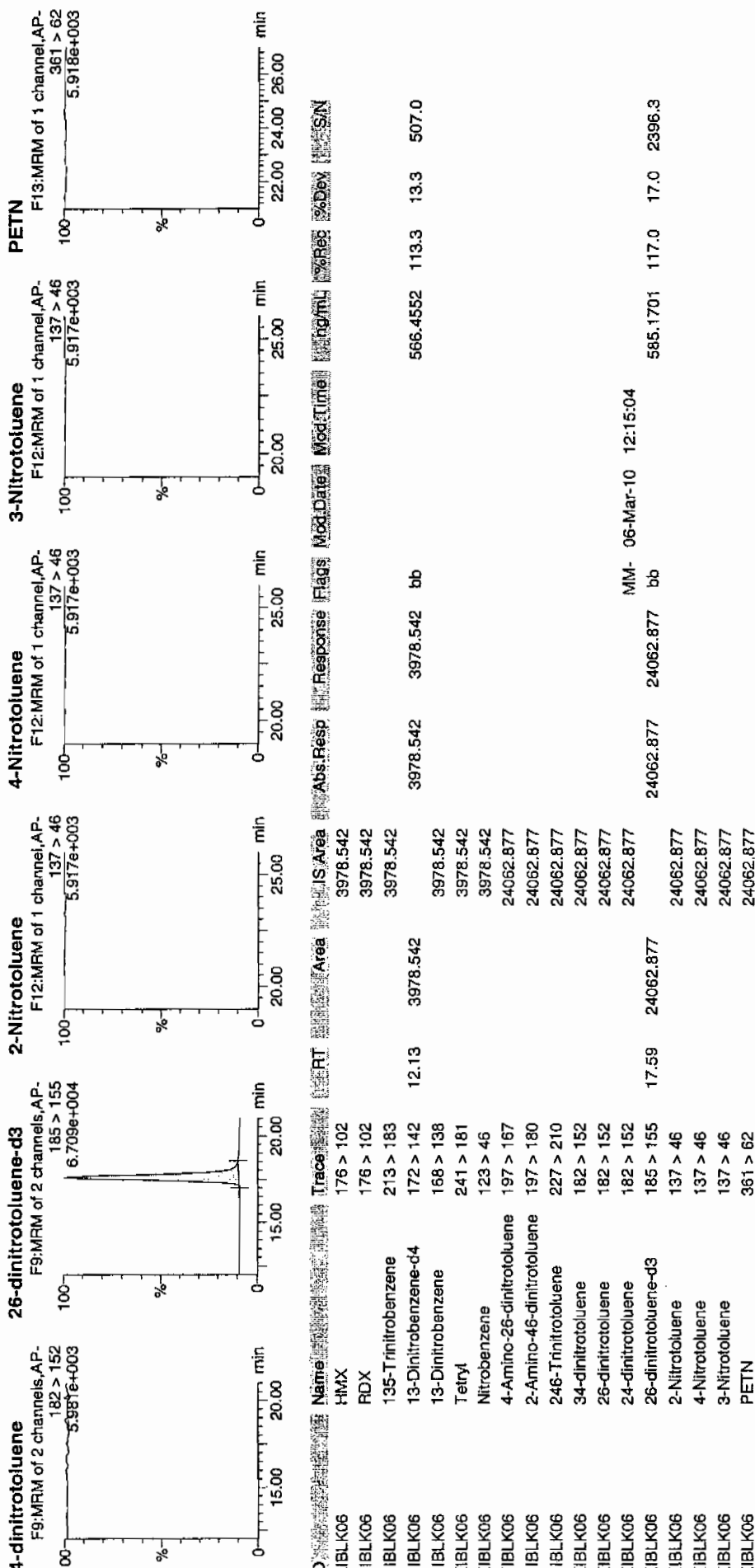
Ratio: 1:1,A

1.546e+004  
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uantify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSL\YNN\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 05-MAR-10 17:19

GEL Data File: EXP0304054a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	550.421
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	589.463
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

Quantify Sample Report  
 iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Sample Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0304054a

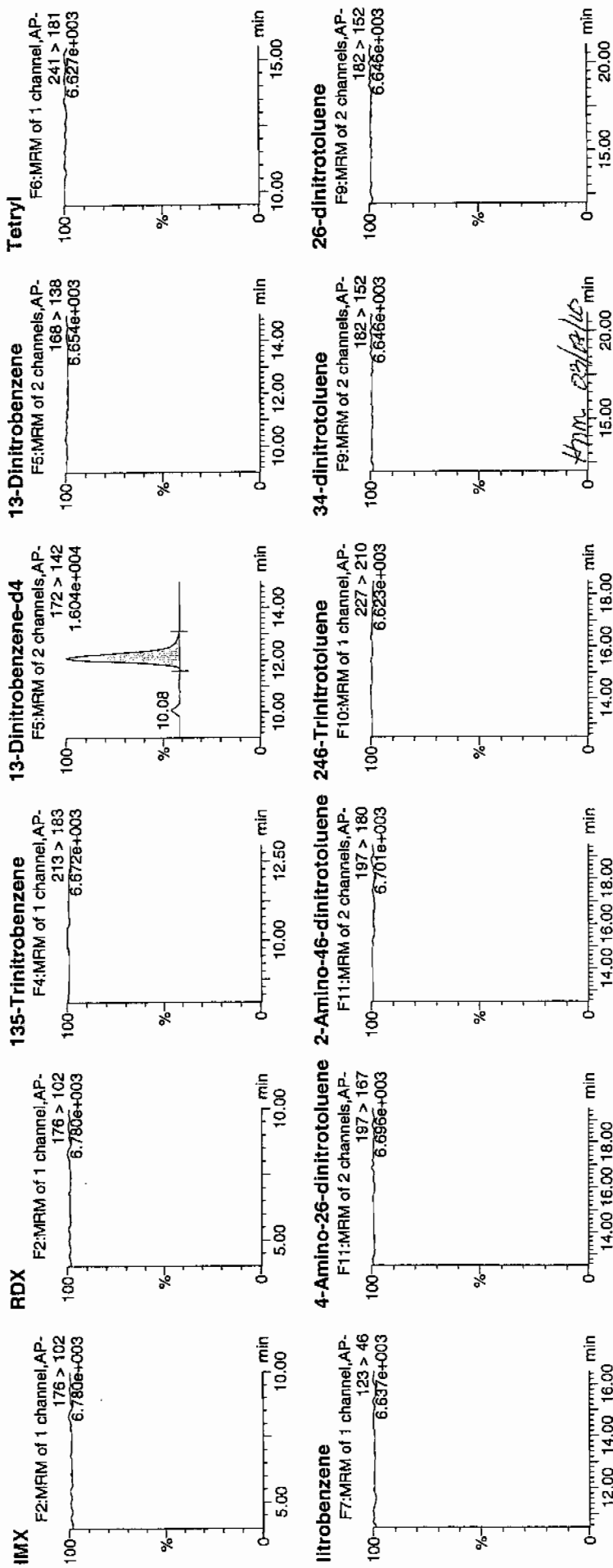
Date: 05-Mar-2010

Time: 17:19:56

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File: 1:1,A

17:19:56  
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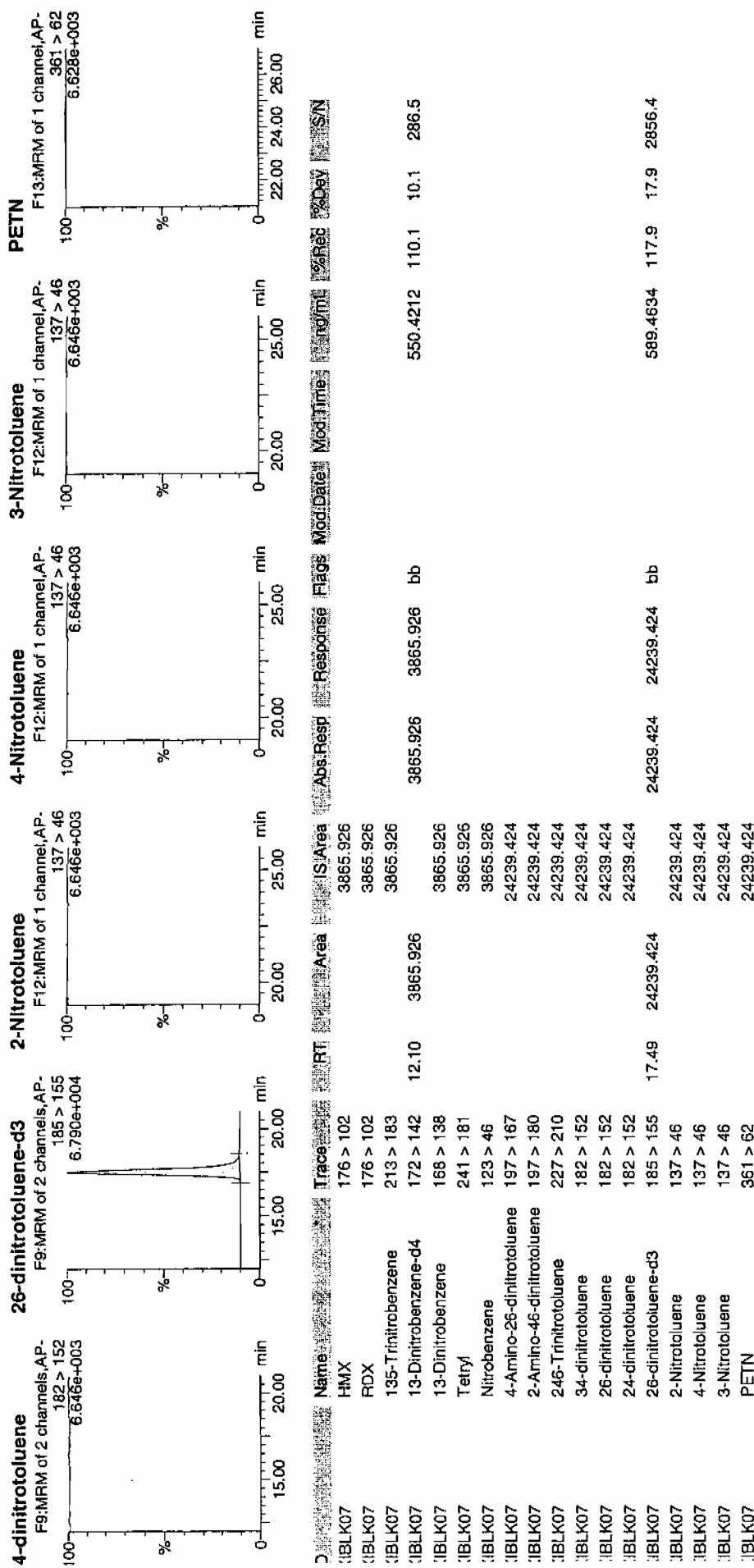




Printed: Sat Mar 06 12:20:52 2010, Page 32 of 107

Quantify Sample Report  
IEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 05-MAR-10 22:44

GEL Data File: EXP0304065a

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	526.538
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	517.577
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

Printed: Sat Mar 06 12:20:52 2010, Page 53 of 107

Quantify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304065a

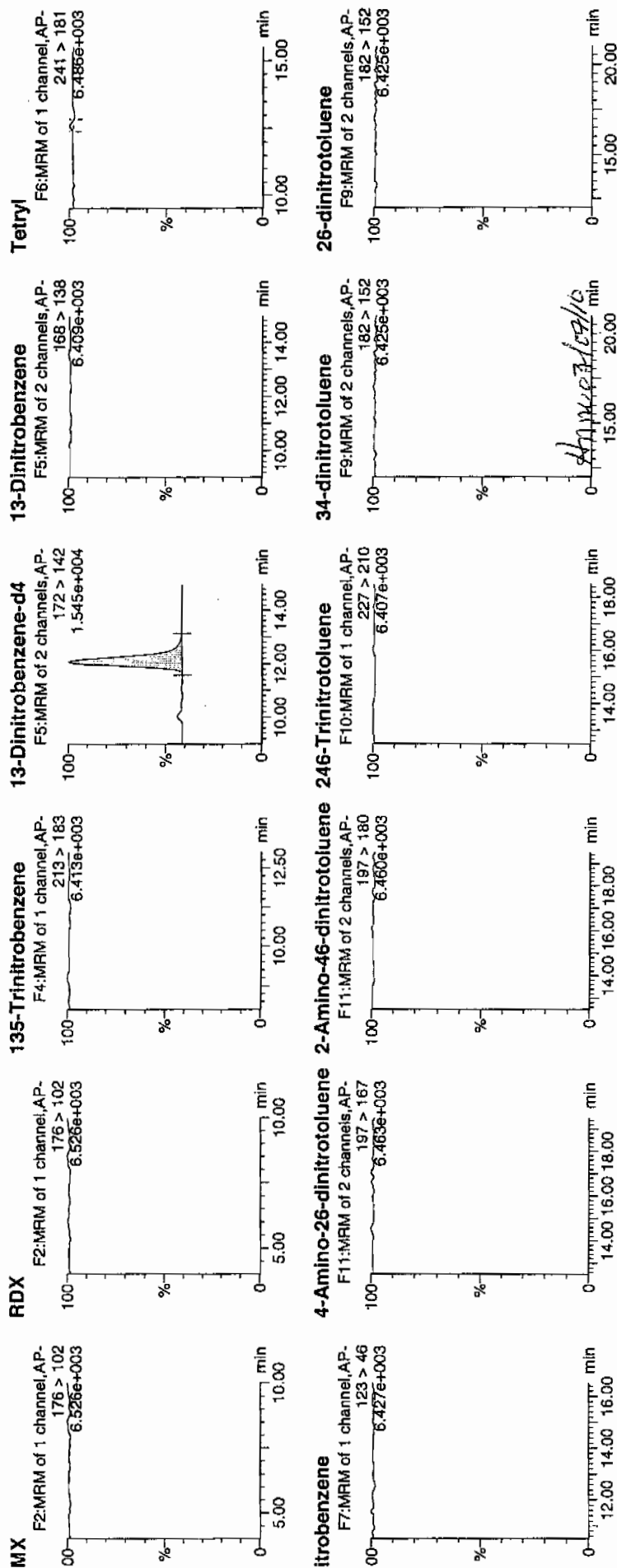
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File: XIBLK08

Label: 1:1,A

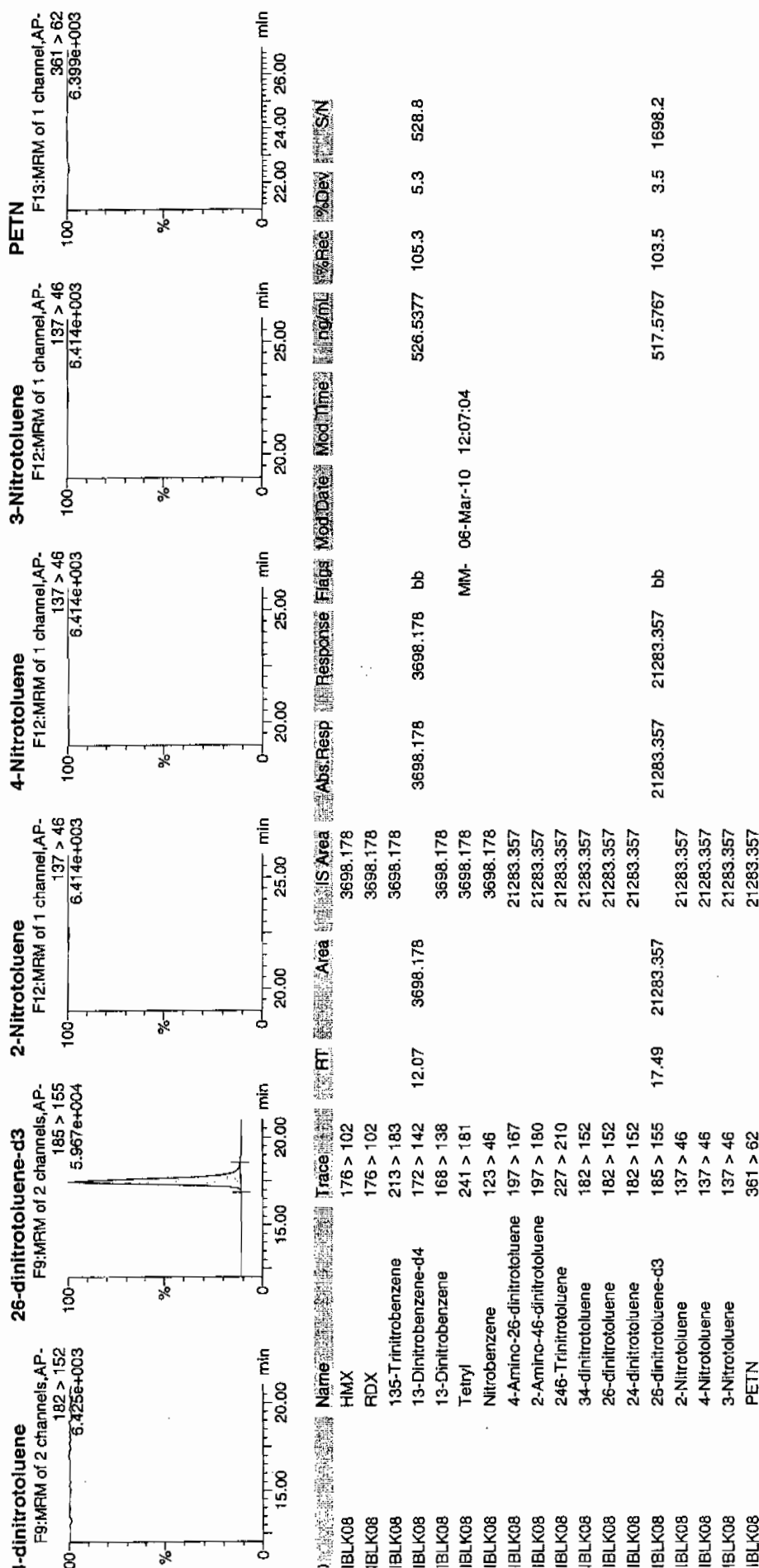
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Printed: Sat Mar 06 12:20:52 2010, Page 54 of 107

Quantity Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 06-MAR-10 04:38

GEL Data File: EXP0304077a

Instrument ID: LCMSMS

Column: Phenomenex Ultra<sup>®</sup>carb 5u ODS(20)

Compound	True	Found (ug/L)
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	566.283
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	540.156
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

uantify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

ame: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304077a

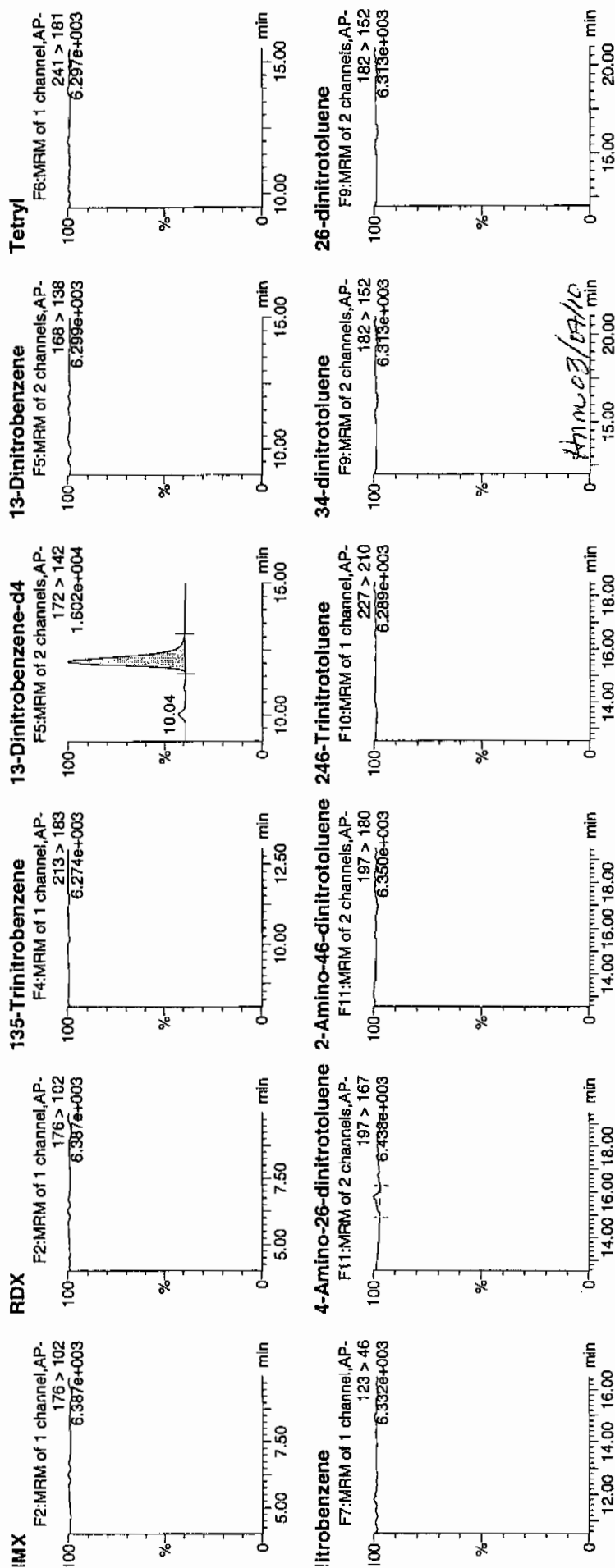
late: 06-Mar-2010

ime: 04:38:34

J: XIBLK09

tal: 1:1,A

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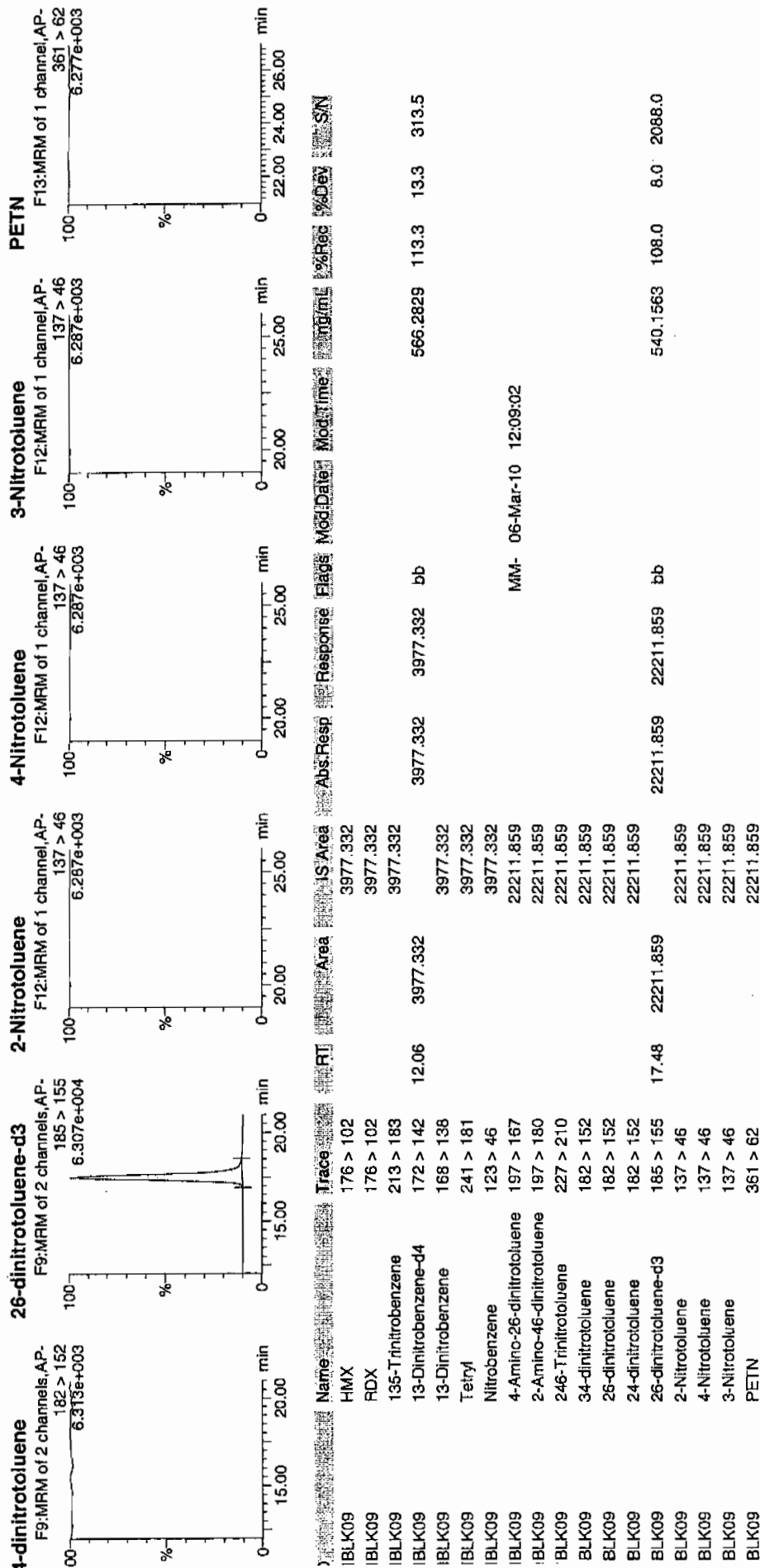


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Mar 06 12:20:52 2010, Page 78 of 107

atset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 06-MAR-10 07:35

GEL Data File: EXP0304083a

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	560.254
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	557.283
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



uantify Sample Report  
EL Laboratories, LLC / Analyst : Michael A. Penny

atasset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

ame: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304083a

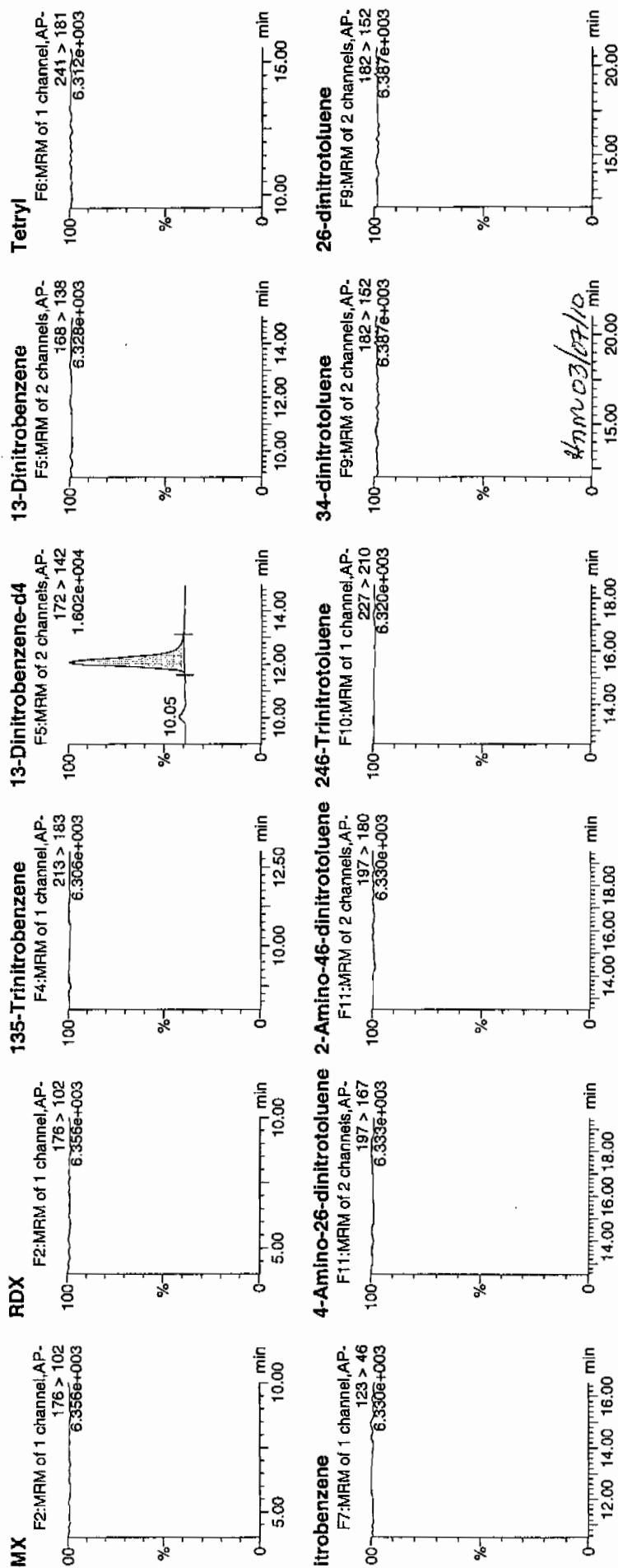
ate: 06-Mar-2010

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>: XIBLK10

ial: 1:1,A

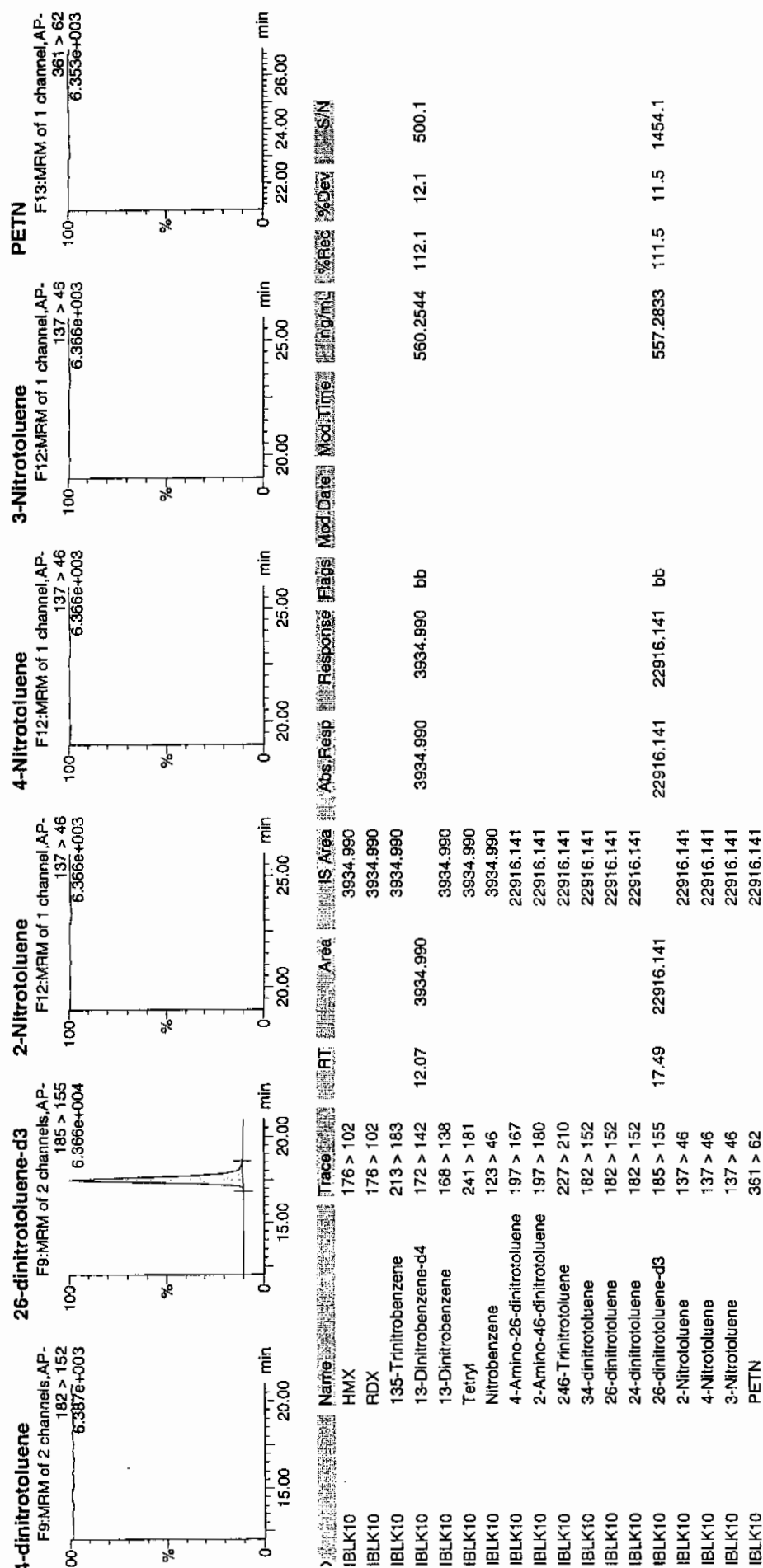
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Printed: Sat Mar 06 12:20:52 2010, Page 90 of 107

unify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qtd, Time: Sat Mar 06 12:19:13 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 06-MAR-10 11:02

GEL Data File: EXP0304090a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	529.903
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	527.941
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

Printed: Sat Mar 06 12:20:52 2010, Page 103 of 107

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Sample Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0304090a

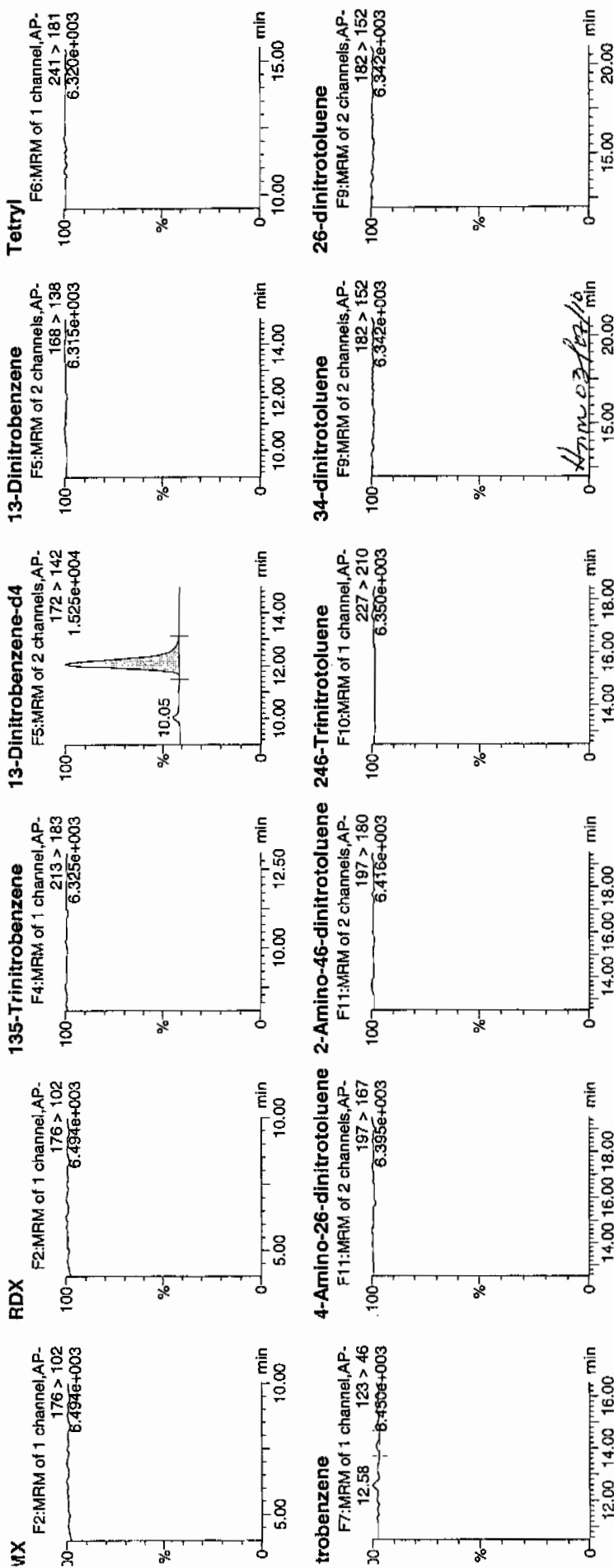
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Time: 11:02:17

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Label: 1:1,A

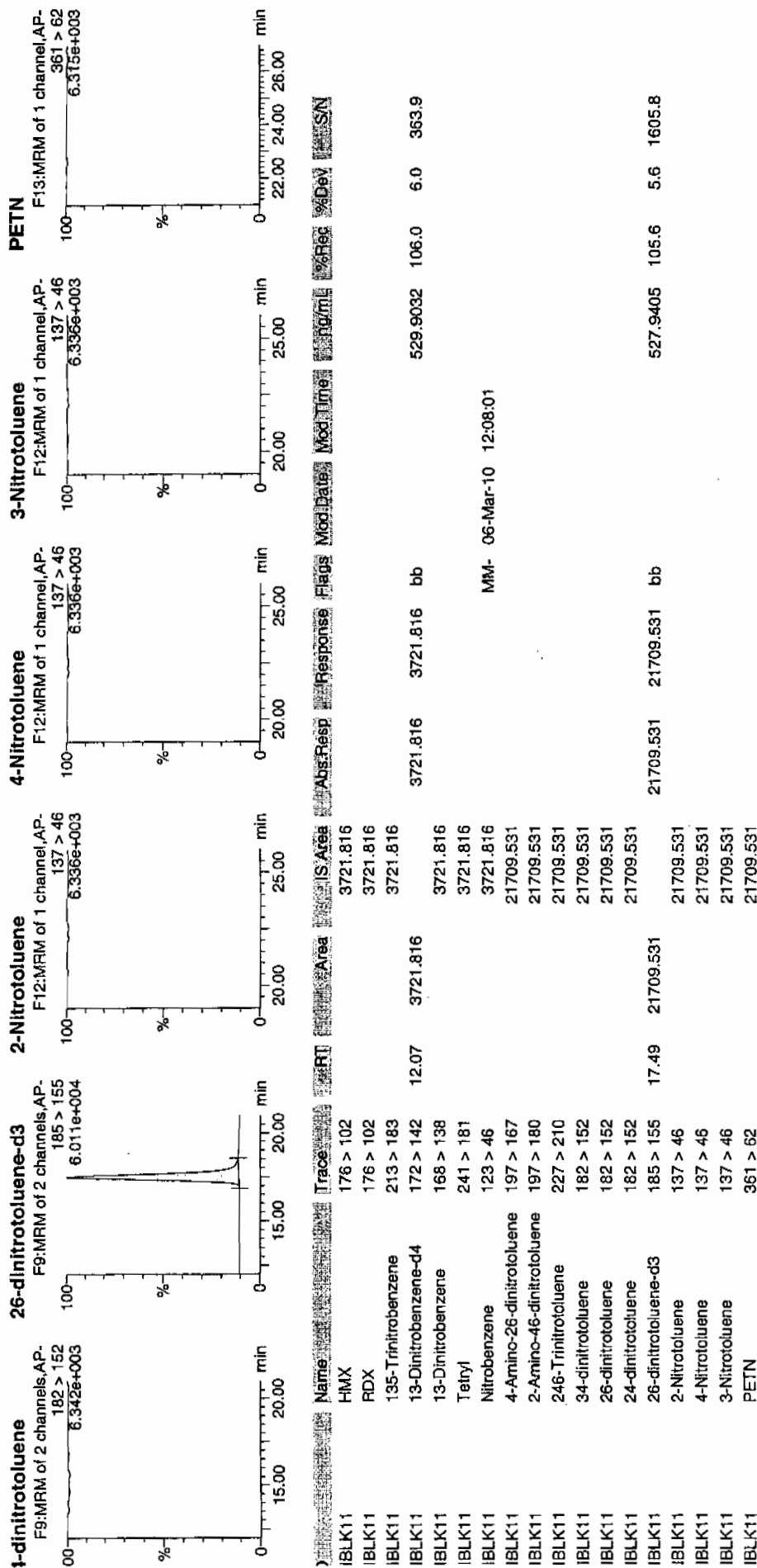
100  
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Printed: Sat Mar 06 12:20:52 2010, Page 104 of 107

Quantify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 06-MAR-10 16:56

GEL Data File: EXP0304102a

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	576.214
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	562.132
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

Identify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qtd, Time: Sun Mar 07 13:32:46 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304102a

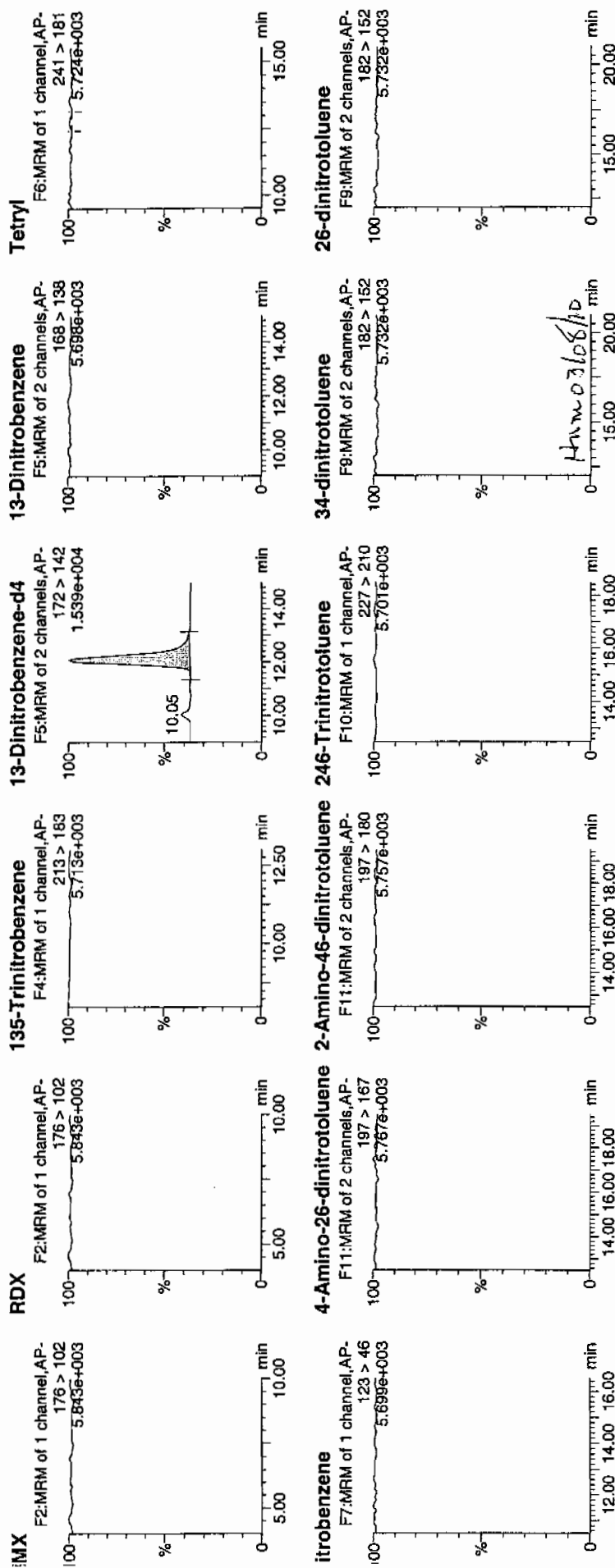
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Time: 16:56:16

ID: XIBLK12

Label: 1:1,A

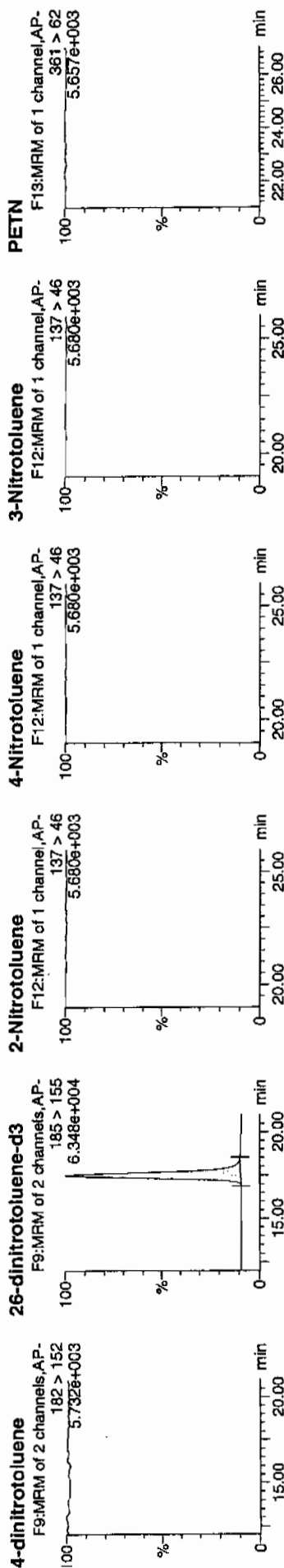
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Printed: Sun Mar 07 13:34:18 2010, Page 22 of 101

Quantify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



Name	RT	Area	S/Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Int:Unit	%Rec	%Dev	S/N
4-dinitrotoluene	176 > 102	4047.082	4047.082									
26-dinitrotoluene-d3	176 > 102	4047.082	4047.082									
2-Nitrotoluene	213 > 183	4047.082	4047.082									
4-Nitrotoluene	172 > 142	12.07	4047.082									
3-Nitrotoluene	168 > 138		4047.082									
PETN	241 > 181		4047.082									
4-dinitrotoluene	123 > 46		4047.082									
26-dinitrotoluene-d3	197 > 167		23115.531									
2-Nitrotoluene	197 > 180		23115.531									
4-Nitrotoluene	227 > 210		23115.531									
3-Nitrotoluene	182 > 152		23115.531									
PETN	182 > 152		23115.531									
4-dinitrotoluene	185 > 155	17.47	23115.531									
26-dinitrotoluene-d3	137 > 46		23115.531									
2-Nitrotoluene	137 > 46		23115.531									
4-Nitrotoluene	137 > 46		23115.531									
3-Nitrotoluene	361 > 62		23115.531									

MM- 07-Mar-10 13:21:33

iEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 06-MAR-10 22:50

GEL Data File: EXP0304114a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
RDX	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
Tetryl	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	537.14
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	529.515
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0

uantify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

ame: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304114a

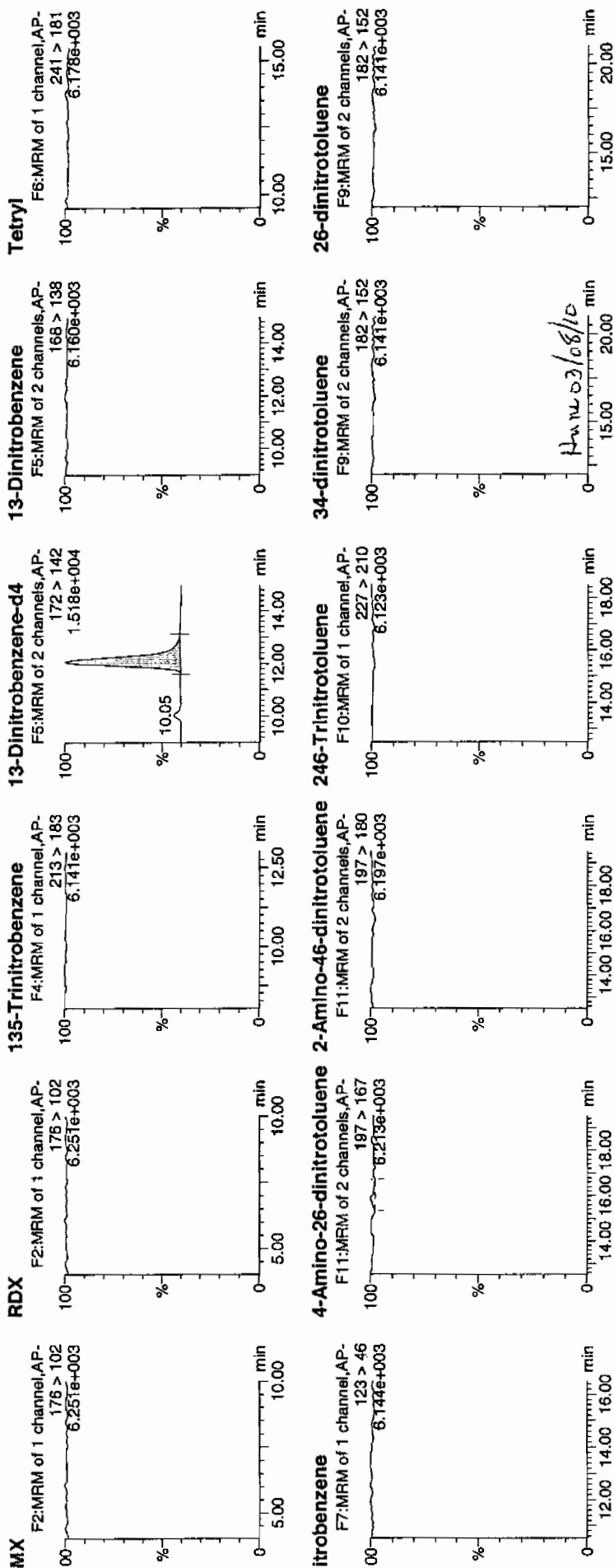
ate: 06-Mar-2010

ime: 22:50:11

); XIBLK13

ial: 1:1,A

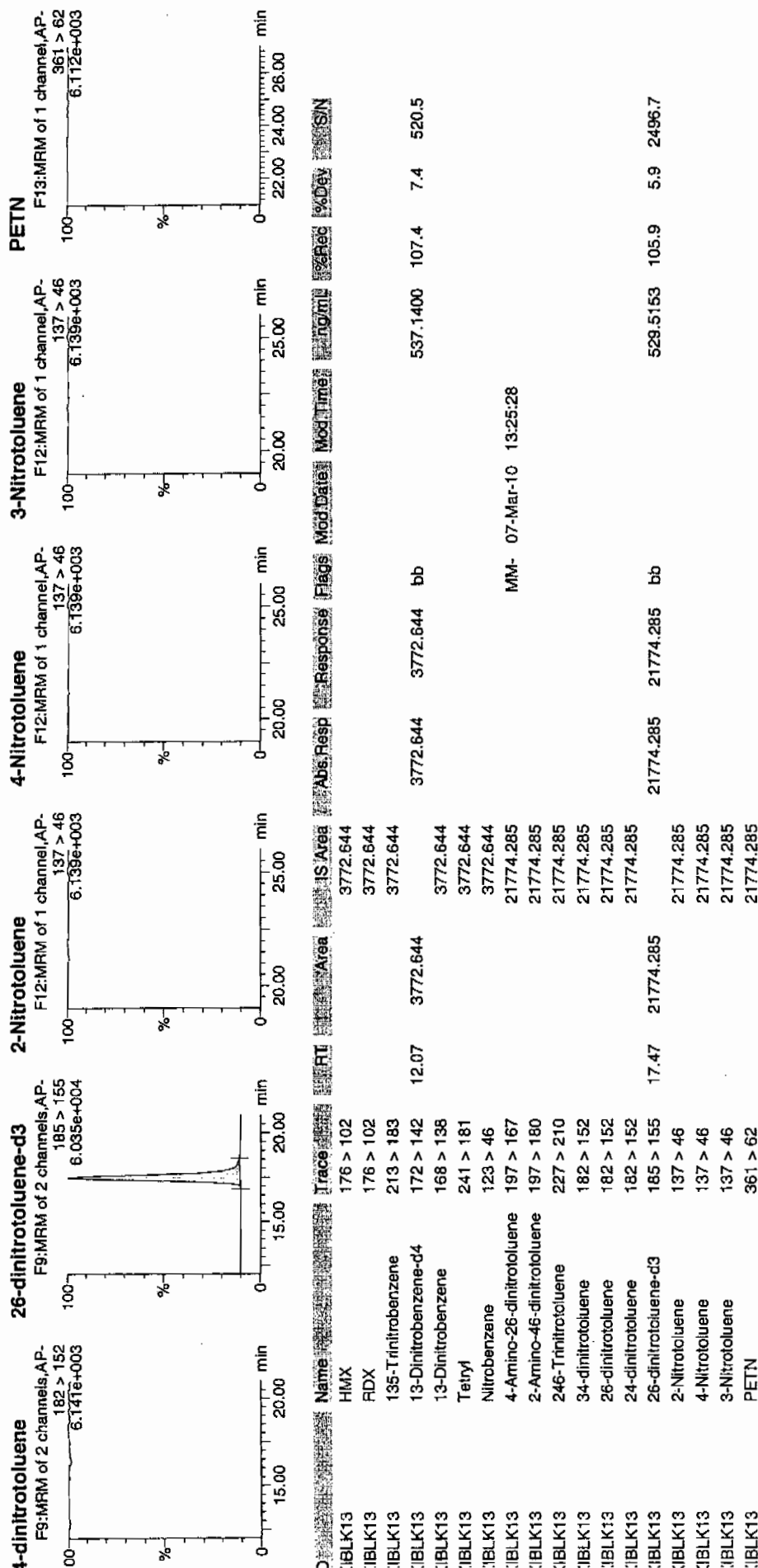
3/9/10



Printed: Sun Mar 07 13:34:18 2010, Page 46 of 101

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qd, Time: Sun Mar 07 13:32:46 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 07-MAR-10 05:13

GEL Data File: EXP0304127a

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	644.848
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	590.438
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

Printed: Sun Mar 07 13:34:18 2010, Page 71 of 101

antify Sample Report  
Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

me: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304127a

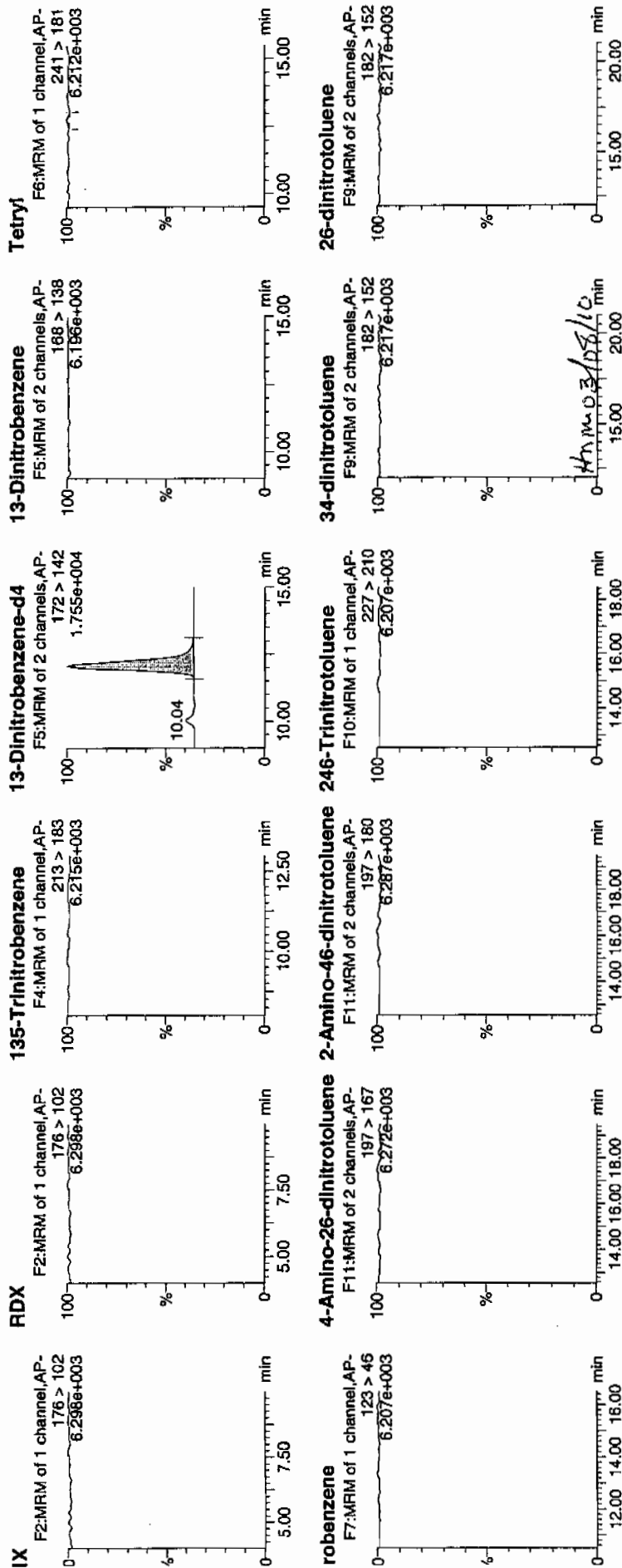
te: 07-Mar-2010

ne: 05:13:46

XIBLK14

il: 1:1,A

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3/3/10

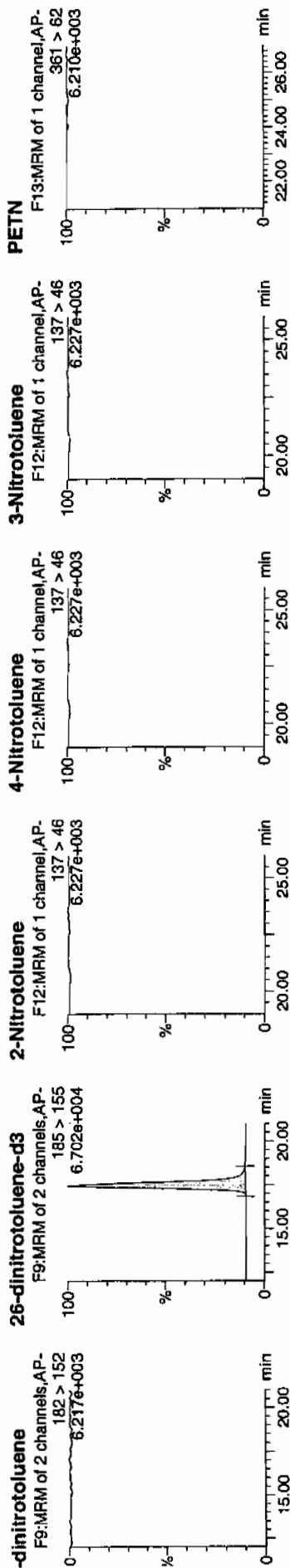


Printed: Sun Mar 07 13:34:18 2010, Page 72 of 101

# Identify Sample Report

IL Laboratories, LLC / Analyst: Michael A. Penny

tasel: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



Name	RT	Area	SArea	Abs:Resp	Response	Flag	Mod:Date	Mod:Time	Integ:nt	%Res	%Dev	SN
3LK14	176 > 102			4529.140								
3LK14	176 > 102			4529.140								
3LK14	213 > 183			4529.140								
3LK14	172 > 142	12.06	4529.140		4529.140	bb	MM-	07-Mar-10	13:21:14			
3LK14	188 > 138			4529.140								
3LK14	241 > 181			4529.140								
3LK14	123 > 46			4529.140								
3LK14	197 > 167			24279.488								
3LK14	197 > 180			24279.488								
3LK14	227 > 210			24279.488								
3LK14	182 > 152			24279.488								
3LK14	182 > 152			24279.488								
3LK14	182 > 152			24279.488								
3LK14	185 > 155	17.45	24279.488		24279.488	bb			590.4377	118.1	18.1	3202.9
3LK14	137 > 46			24279.488								
3LK14	137 > 46			24279.488								
3LK14	137 > 46			24279.488								
3LK14	361 > 62			24279.488								
PETN												

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 07-MAR-10 11:37

GEL Data File: EXP0304140a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
PETN	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	606.883
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.497
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0

Printed: Sun Mar 07 13:34:18 2010, Page 97 of 101

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304140a

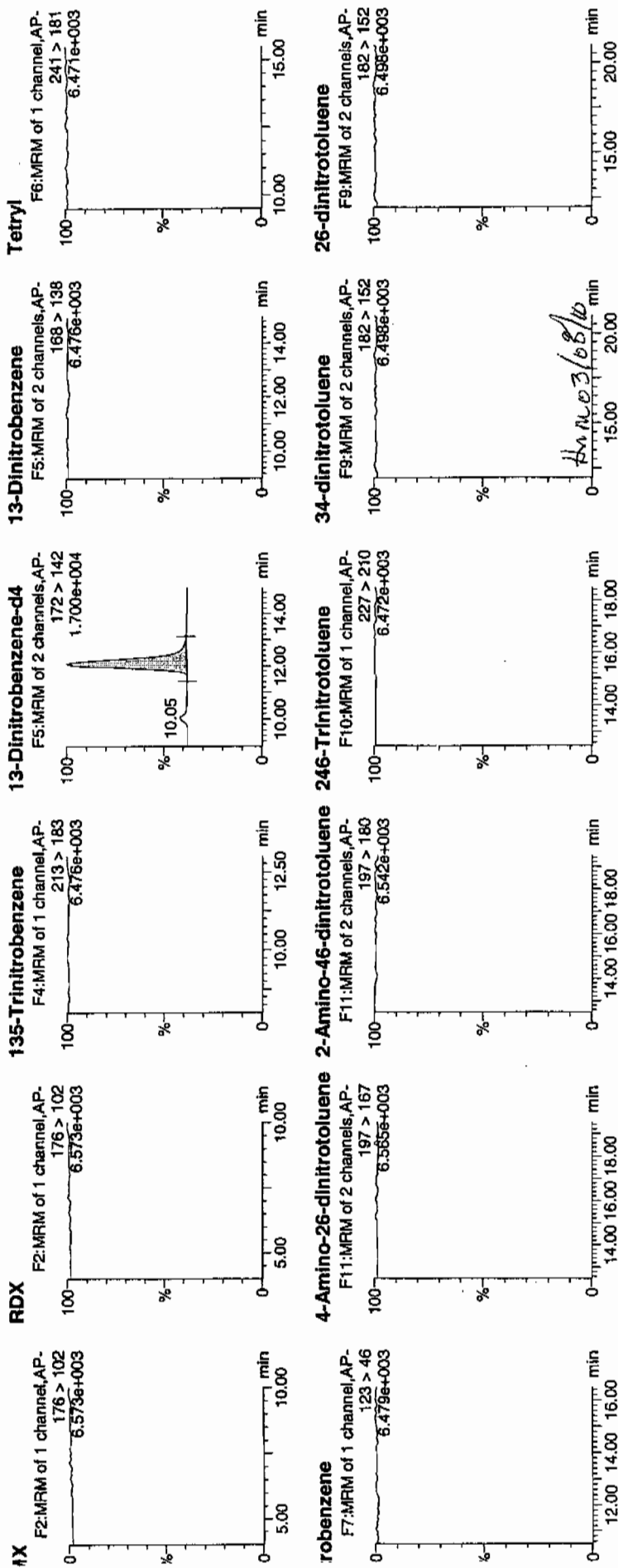
Date: 07-Mar-2010

Time: 11:37:25

File: XIBLK15

File: 1:1,A

10/10  
3/10

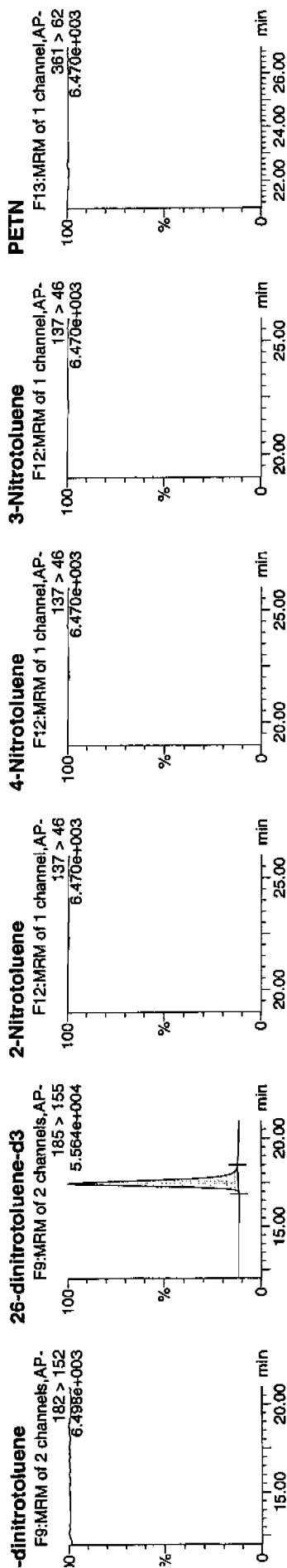




Printed: Sun Mar 07 13:34:18 2010, Page 98 of 101

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	%Rec	%Dev	S/N
3LK15	HMx	176 > 102	4262.488	4262.488								
3LK15	RDX	176 > 102	4262.488	4262.488								
3LK15	135-Trinitrobenzene	213 > 183	4262.488	4262.488								
3LK15	13-Dinitrobenzene-d4	172 > 142	12.07	4262.488			bb			606.8828	121.4	472.5
3LK15	13-Dinitrobenzene	168 > 138	4262.488	4262.488								
3LK15	Tetryl	241 > 181	4262.488	4262.488								
3LK15	Nitrobenzene	123 > 46	19553.002	19553.002								
3LK15	4-Amino-26-dinitrotoluene	197 > 167	19553.002	19553.002								
3LK15	2-Amino-46-dinitrotoluene	197 > 180	19553.002	19553.002								
3LK15	246-Trinitrotoluene	227 > 210	19553.002	19553.002								
3LK15	34-dinitrotoluene	182 > 152	19553.002	19553.002								
3LK15	26-dinitrotoluene	182 > 152	19553.002	19553.002								
3LK15	24-dinitrotoluene	182 > 152	19553.002	19553.002								
3LK15	26-dinitrotoluene-d3	185 > 155	17.47	19553.002			bb			475.4973	95.1	1968.1
3LK15	2-Nitrotoluene	137 > 46	19553.002	19553.002								
3LK15	4-Nitrotoluene	137 > 46	19553.002	19553.002								
3LK15	3-Nitrotoluene	137 > 46	19553.002	19553.002								
3LK15	PETN	361 > 62	19553.002	19553.002								

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 07-MAR-10 15:04

GEL Data File: EXP0304147a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u QDS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	546.85
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.472
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

Printed: Mon Mar 08 12:06:42 2010, Page 11 of 93

Identify Sample Report  
 L: Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304147a

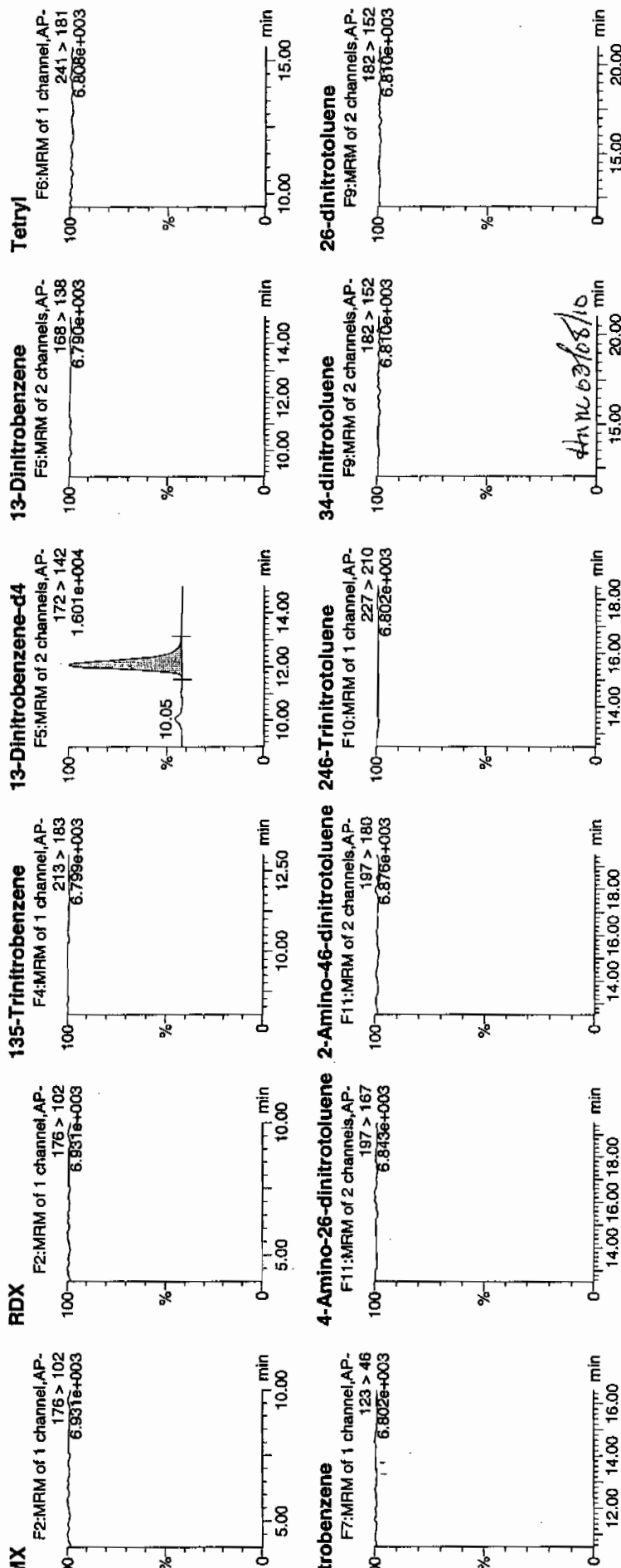
Date: 07-Mar-2010

Time: 15:04:12

File: XIBLK16

Alt: 1:1,A

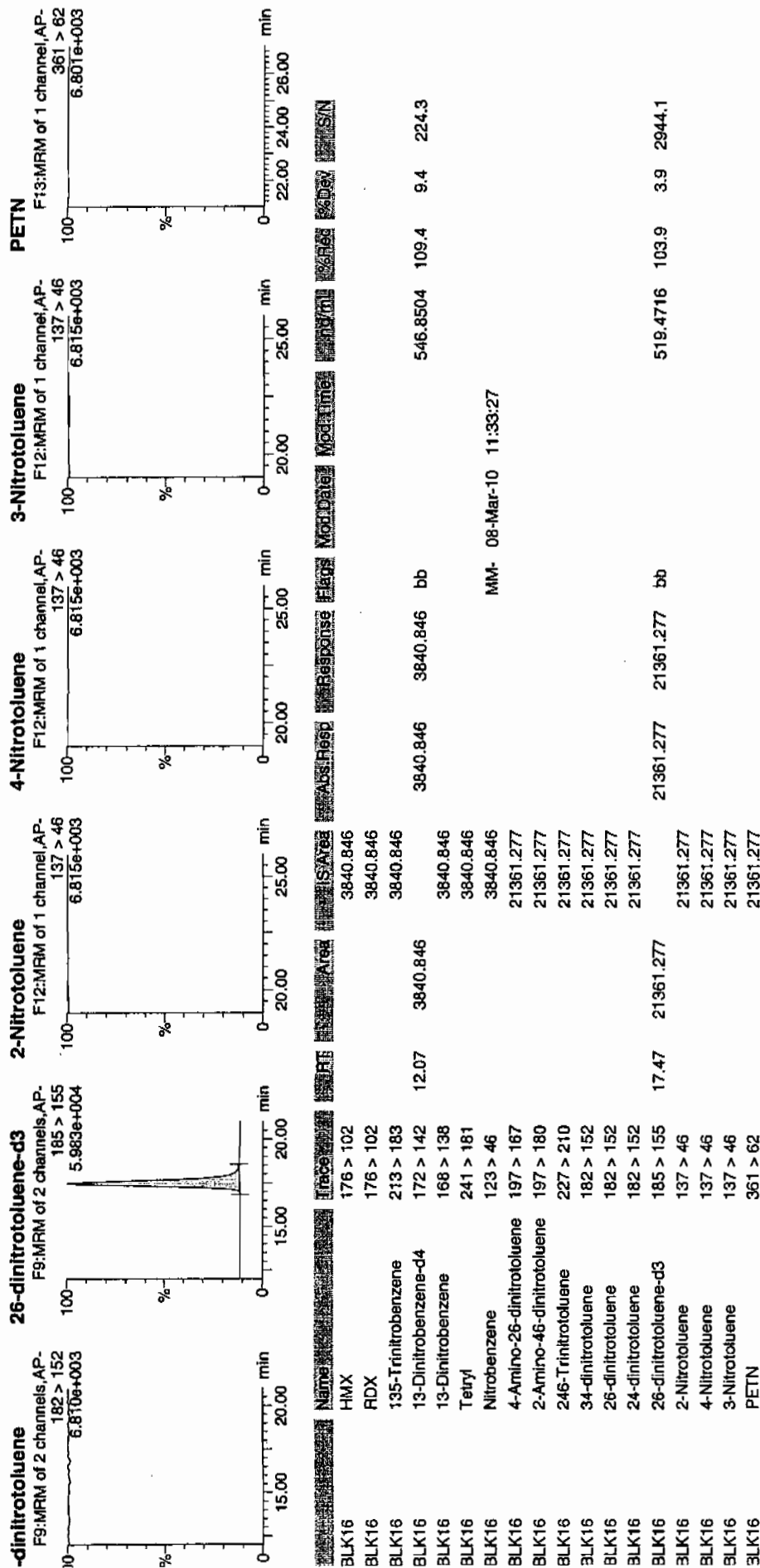
MT  
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Printed: Mon Mar 08 12:06:42 2010, Page 12 of 93

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 07-MAR-10 21:27

GEL Data File: EXP0304160a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	560.78
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	555.358
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304160a

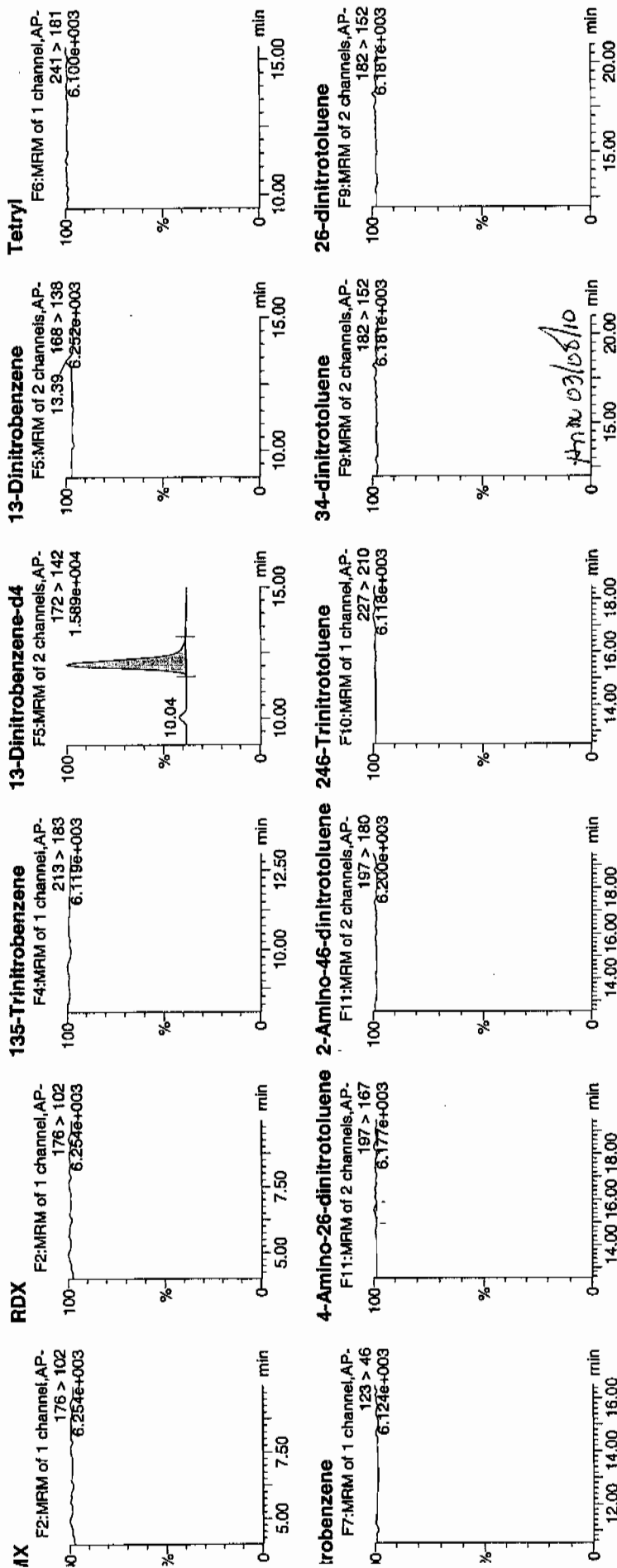
Date: 07-Mar-2010

Time: 21:27:32

Sample: XIBLK17

Split: 1:1,A

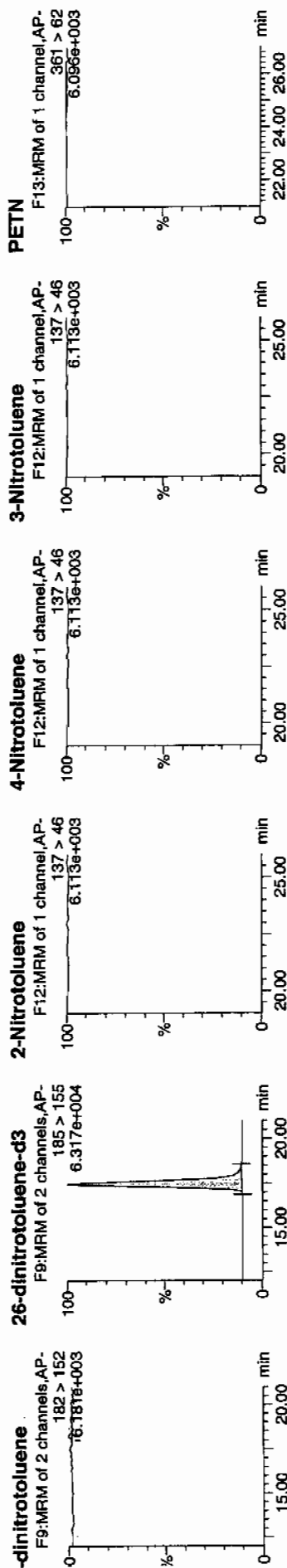
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Printed: Mon Mar 08 12:06:42 2010, Page 38 of 93

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

tasel: C:\MASSLYNX\New\_Exp.PROV030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



Name	Trace	RT	Area	%Area	Abs Resp	Response	Mod Date	Mod Time	%Rec	%Dev	S/N
3LK17	HMX	176 > 102	3938.683								
3LK17	RDX	176 > 102	3938.683								
3LK17	135-Trinitrobenzene	213 > 183	3938.683								
3LK17	13-Dinitrobenzene-d4	172 > 142	12.06	3938.683							
3LK17	13-Dinitrobenzene	168 > 138	3938.683								
3LK17	Tetryl	241 > 181	3938.683								
3LK17	Nitrobenzene	123 > 46	3938.683								
3LK17	4-Amino-26-dinitrotoluene	197 > 167	22836.973								
3LK17	2-Amino-46-dinitrotoluene	197 > 180	22836.973								
3LK17	246-Trinitrotoluene	227 > 210	22836.973								
3LK17	34-dinitrotoluene	182 > 152	22836.973								
3LK17	26-dinitrotoluene	182 > 152	22836.973								
3LK17	24-dinitrotoluene	182 > 152	22836.973								
3LK17	26-dinitrotoluene-d3	185 > 155	22836.973								
3LK17	2-Nitrotoluene	137 > 46	22836.973								
3LK17	4-Nitrotoluene	137 > 46	22836.973								
3LK17	3-Nitrotoluene	137 > 46	22836.973								
3LK17	PETN	361 > 62	22836.973								

IL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 08-MAR-10 03:50

GEL Data File: EXP0304173a

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	520.029
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	555.047
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



Identify Sample Report  
 IL Laboratories, LLC / Analyst: Michael A. Penny

Sample: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304173a

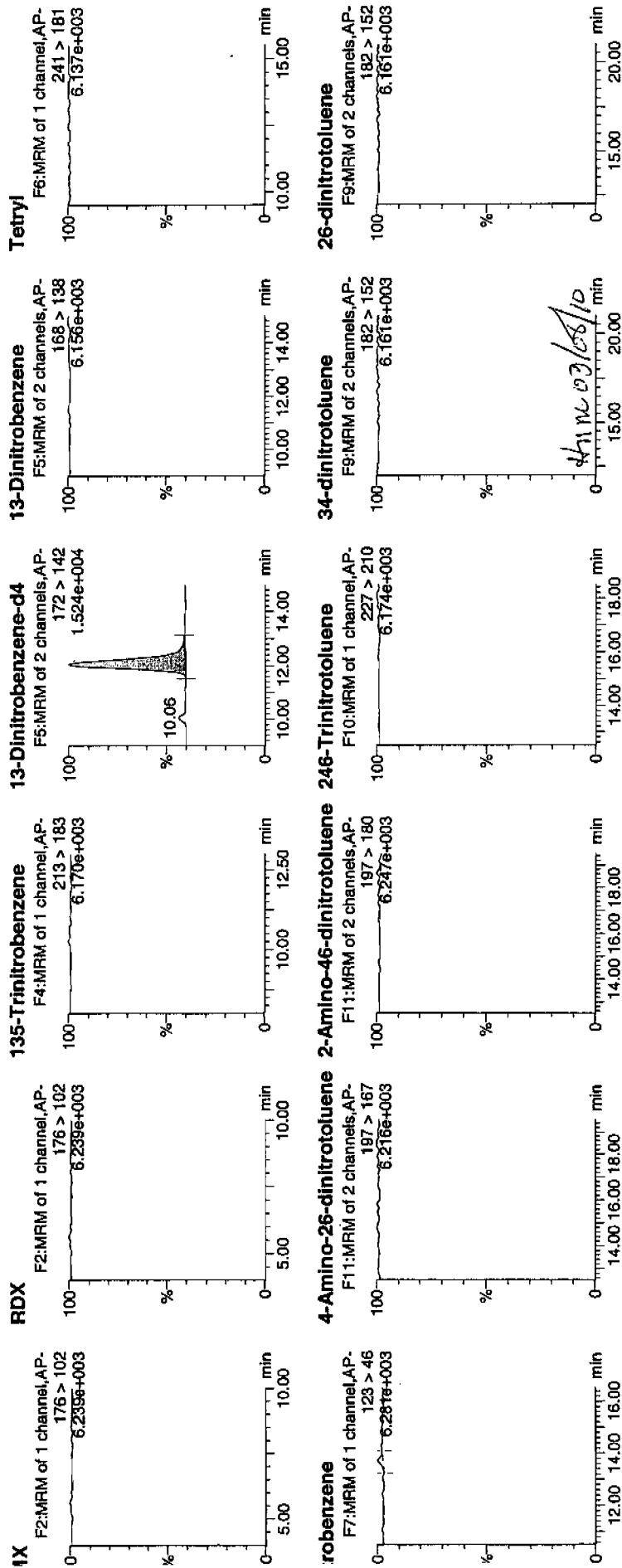
Date: 08-Mar-2010

Time: 03:50:54

Sample: XIBLK18

Injection: 1:1,A

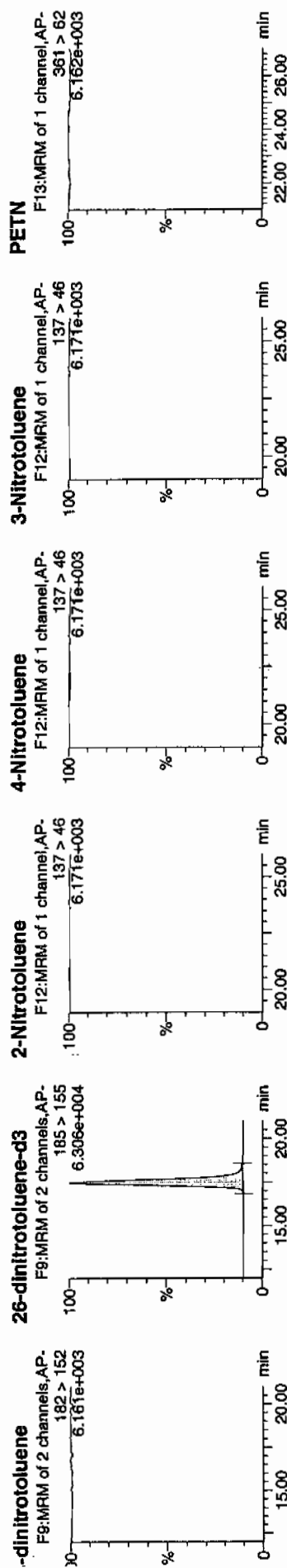
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Printed: Mon Mar 08 12:06:42 2010, Page 64 of 93

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



Name	RT	Area	SI Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	%Rec	%Dev	S/N
BLK18	176 > 102		3652.467									
BLK18	176 > 102		3652.467									
BLK18	135-Trinitrobenzene		3652.467									
BLK18	13-Dinitrobenzene-d4	12.07	3652.467		3652.467	bb	MM-08-Mar-10	11:33:15	520.0294	104.0	4.0	218.6
BLK18	13-Dinitrobenzene		3652.467									
BLK18	168 > 138		3652.467									
BLK18	241 > 181		3652.467									
BLK18	Nitrobenzene		3652.467									
BLK18	123 > 46		3652.467									
BLK18	4-Amino-26-dinitrotoluene		22824.164									
BLK18	2-Amino-46-dinitrotoluene		22824.164									
BLK18	246-Trinitrotoluene		22824.164									
BLK18	34-dinitrotoluene		22824.164									
BLK18	26-dinitrotoluene		22824.164									
BLK18	24-dinitrotoluene		22824.164									
BLK18	26-dinitrotoluene-d3	17.47	22824.164		22824.164	bb			555.0466	111.0	11.0	1739.5
BLK18	2-Nitrotoluene		22824.164									
BLK18	4-Nitrotoluene		22824.164									
BLK18	3-Nitrotoluene		22824.164									
BLK18	PETN	361 > 62										

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 08-MAR-10 06:47

GEL Data File: EXP0304179a

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	530.016
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	485.003
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

Justify Sample Report  
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304179a

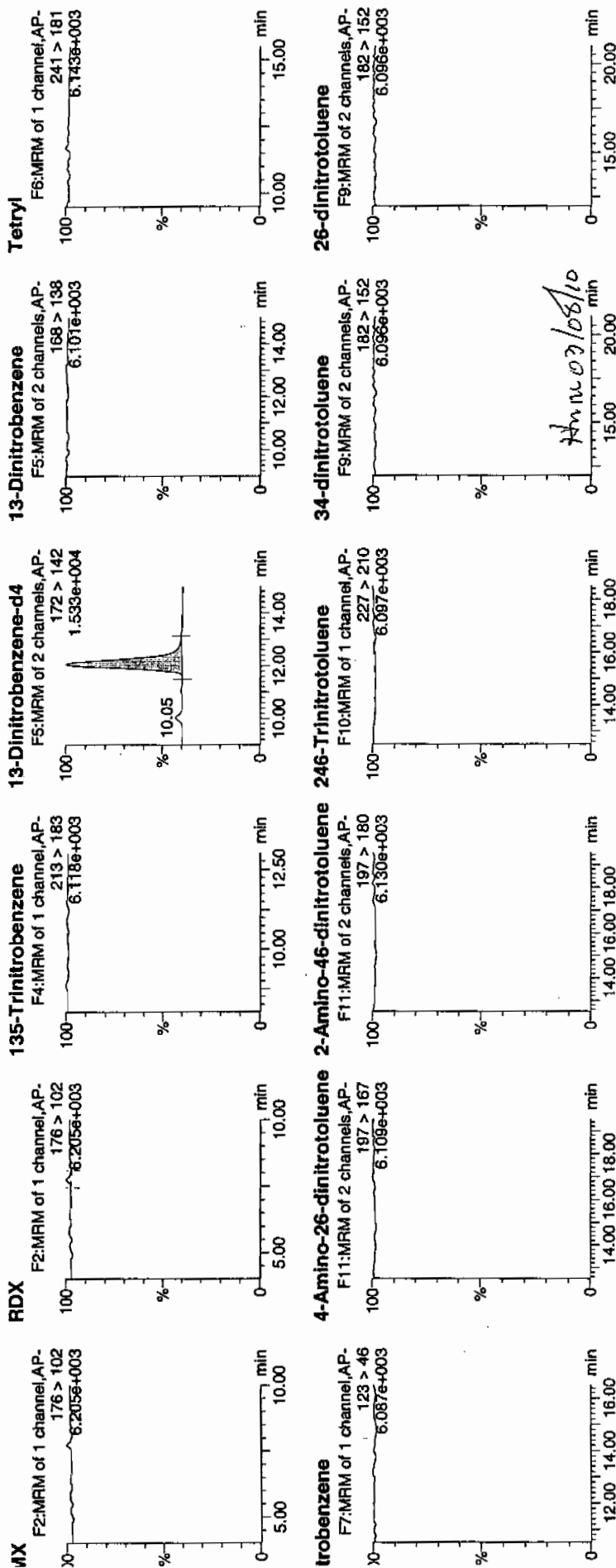
Date: 08-Mar-2010

Time: 06:47:54

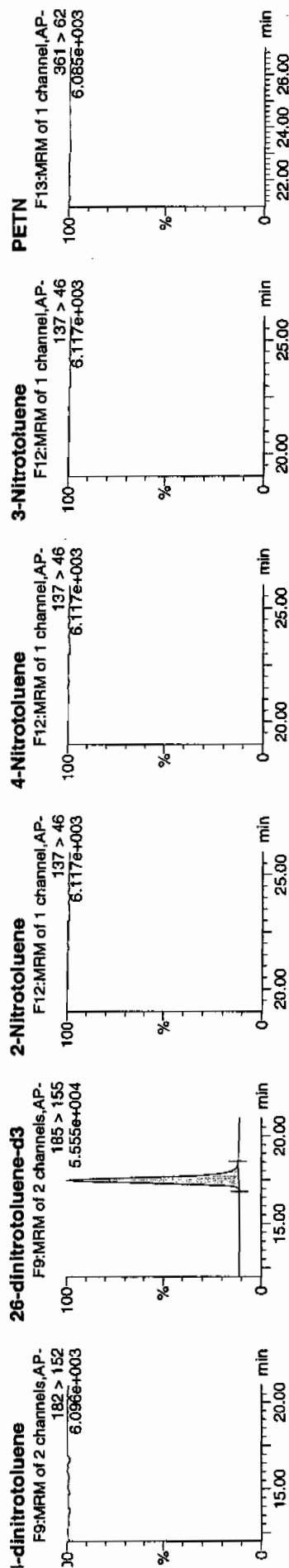
Sample: XIBLK19

Ratio: 1:1,A

11/17  
2/8/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



Name	RT	Area	SA Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Ref Rec	Lab Dev	SN
BLK19											
HMX	176 > 102		3722.607								
BLK19											
RDX	176 > 102		3722.607								
BLK19											
135-Trinitrobenzene	213 > 183		3722.607								
BLK19											
13-Dinitrobenzene-d4	172 > 142	12.07	3722.607								
BLK19											
13-Dinitrobenzene	168 > 138		3722.607								
BLK19											
Tetryl	241 > 181		3722.607								
BLK19											
Nitrobenzene	123 > 46		3722.607								
BLK19											
4-Amino-26-dinitrotoluene	197 > 167		19943.895								
BLK19											
2-Amino-46-dinitrotoluene	197 > 180		19943.895								
BLK19											
246-Trinitrotoluene	227 > 210		19943.895								
BLK19											
34-dinitrotoluene	182 > 152		19943.895								
BLK19											
26-dinitrotoluene	182 > 152		19943.895								
BLK19											
24-dinitrotoluene	182 > 152		19943.895								
BLK19											
26-dinitrotoluene-d3	185 > 155	17.47	19943.895								
BLK19											
2-Nitrotoluene	137 > 46		19943.895								
BLK19											
4-Nitrotoluene	137 > 46		19943.895								
BLK19											
3-Nitrotoluene	137 > 46		19943.895								
BLK19											
PETN	361 > 62										
BLK19											

MM- 08-Mar-10 11:14:44

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 08-MAR-10 10:14

GEL Data File: EXP0304186a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	520.333
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	699.444
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0

Identify Sample Report  
EL Laboratories, LLC / Analyst: Michael A. Penny

Fileset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

File: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304186a

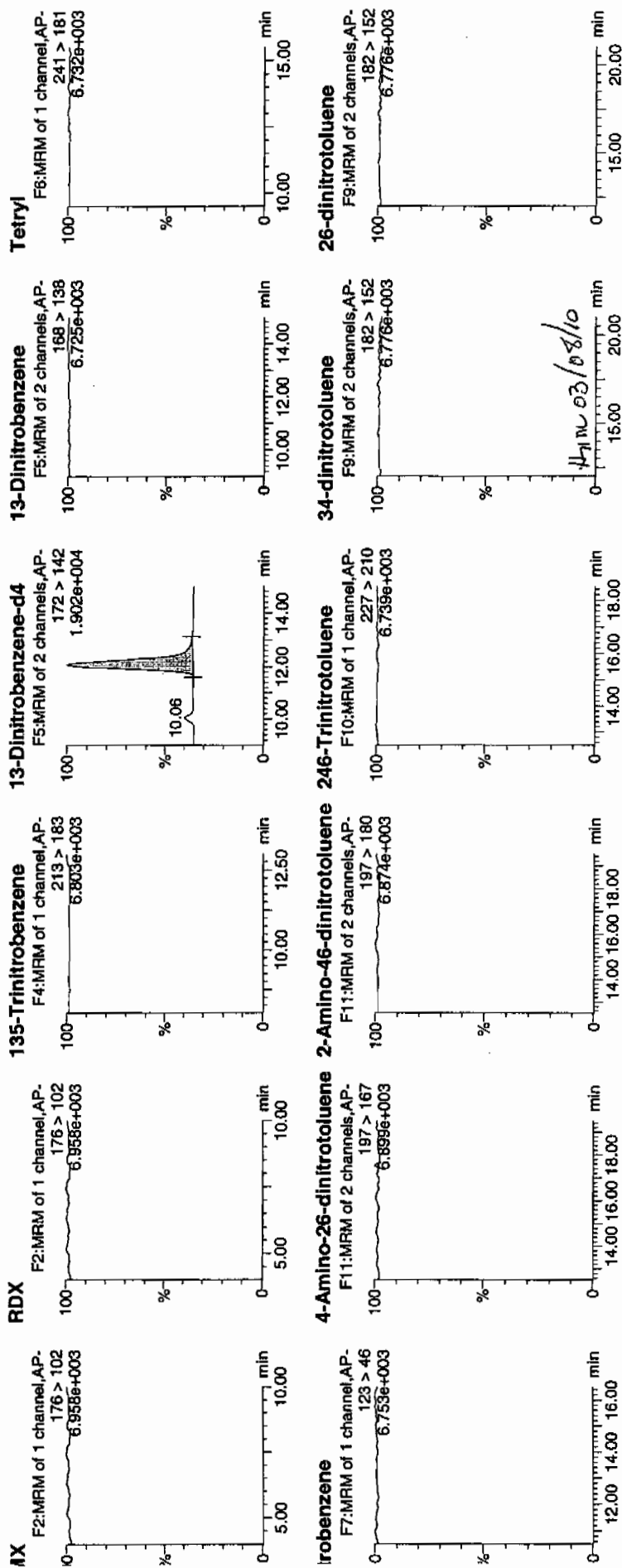
Date: 08-Mar-2010

Time: 10:14:33

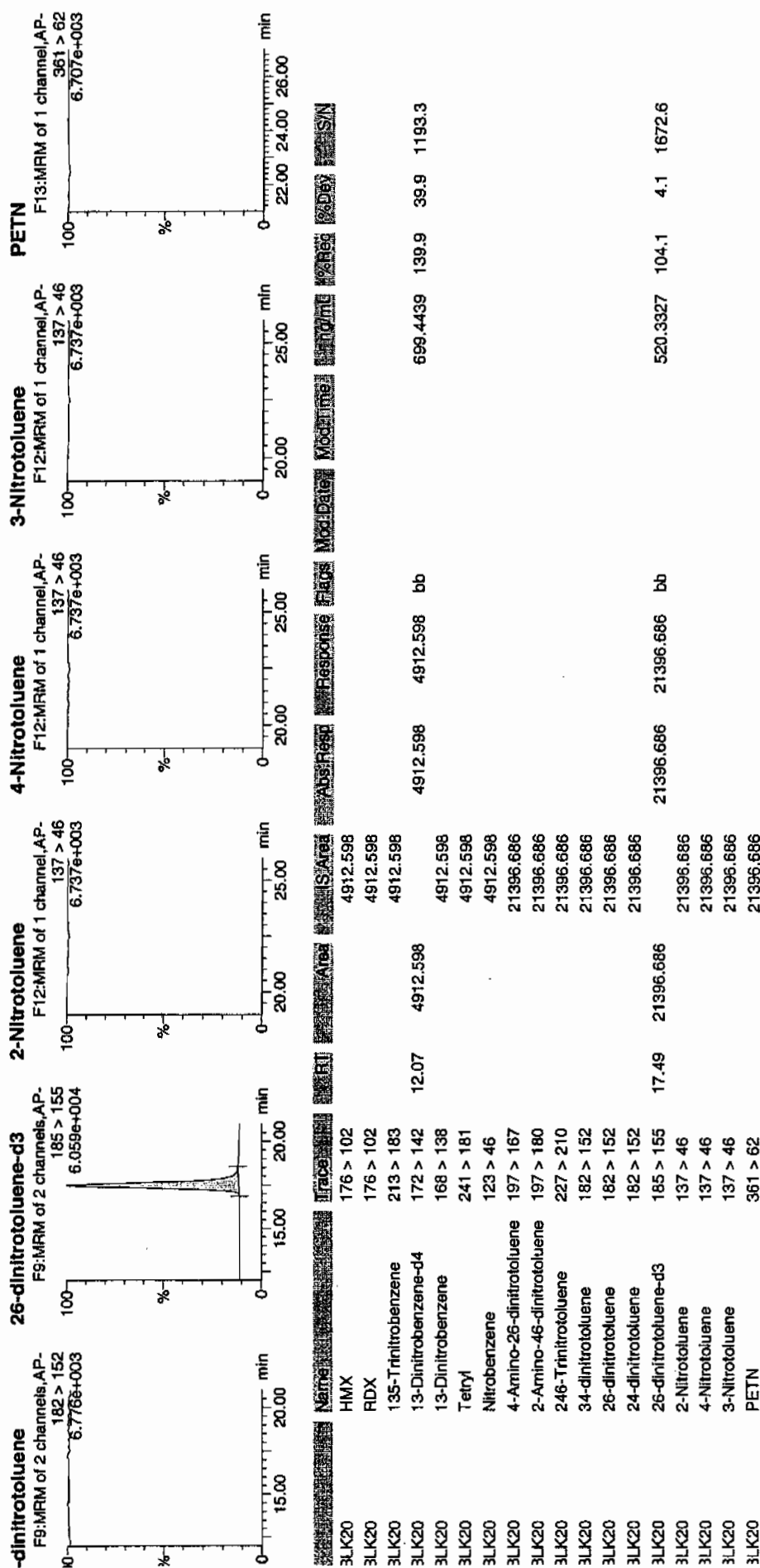
File: XIBLK20

Alt: 1:1,A

WAT  
3/8/10



Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010





4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 08-MAR-10 15:39

GEL Data File: EXP0304197a

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	536.755
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	515.235
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\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304197a

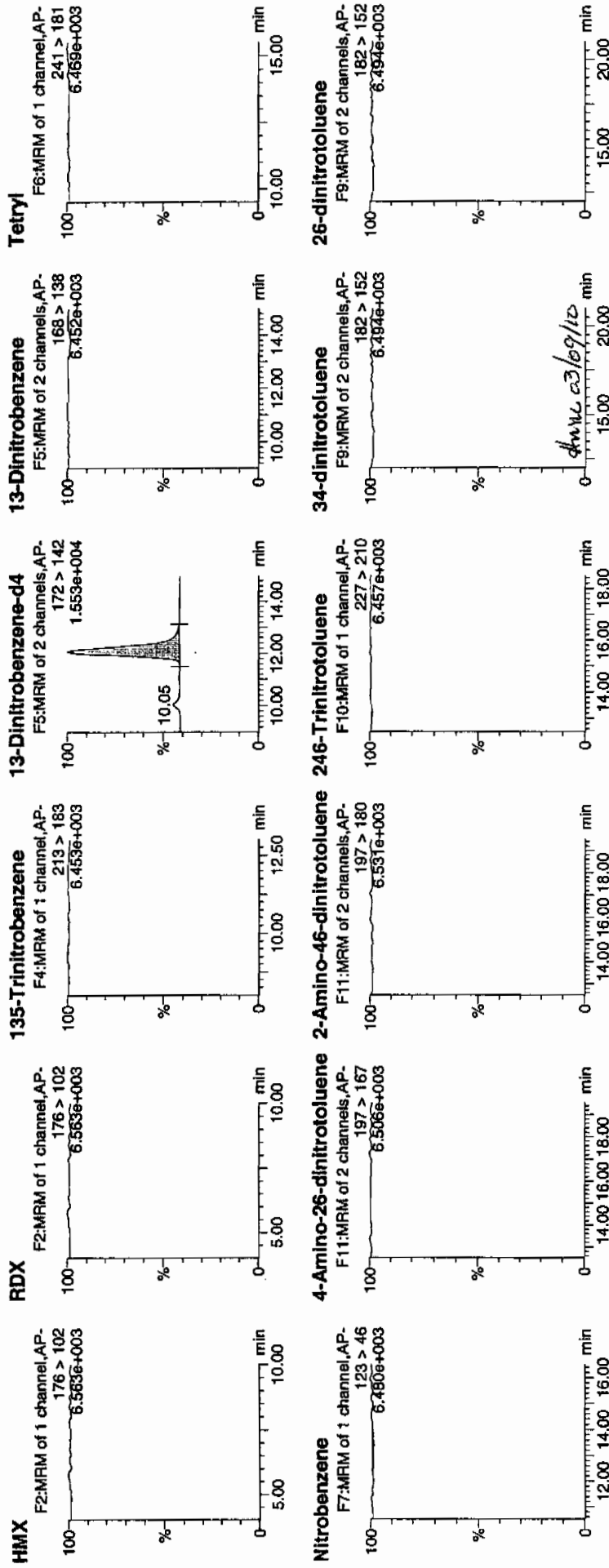
Date: 08-Mar-2010

Time: 15:39:14

ID: XIBLK21

Vial: 1:1,A

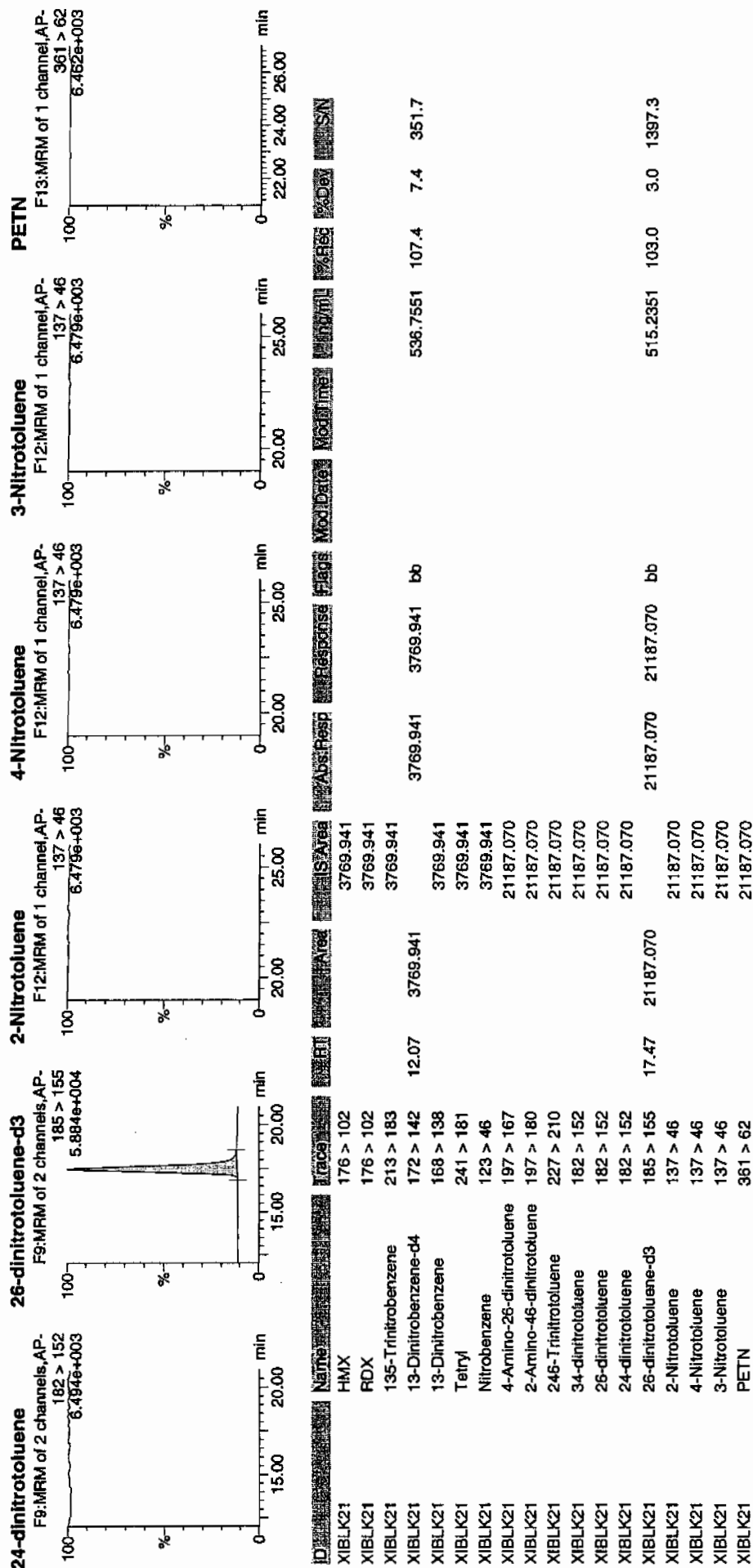
10/11  
3/10/10



Printed: Tue Mar 09 09:42:03 2010, Page 20 of 89

# Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 26-FEB-10 17:15

GEL Data File: EXS02260010.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 3/1/10

Sample Name: "XIBL002" Sample ID: "111ER" File: "EXS02260010.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

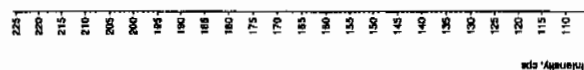
Concentration: N/A

Calculated Conc: 2/26/2010 ng/mL

Acq. Date: 5:15:22 PM

Acq. Time: 5:15:22 PM

Modified: No



Sample Name: "XIBL002" Sample ID: "111ER" File: "EXS02260010.wif"

Peak Name: "35-Dehydroaniline" Mass(es): "182.0450 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

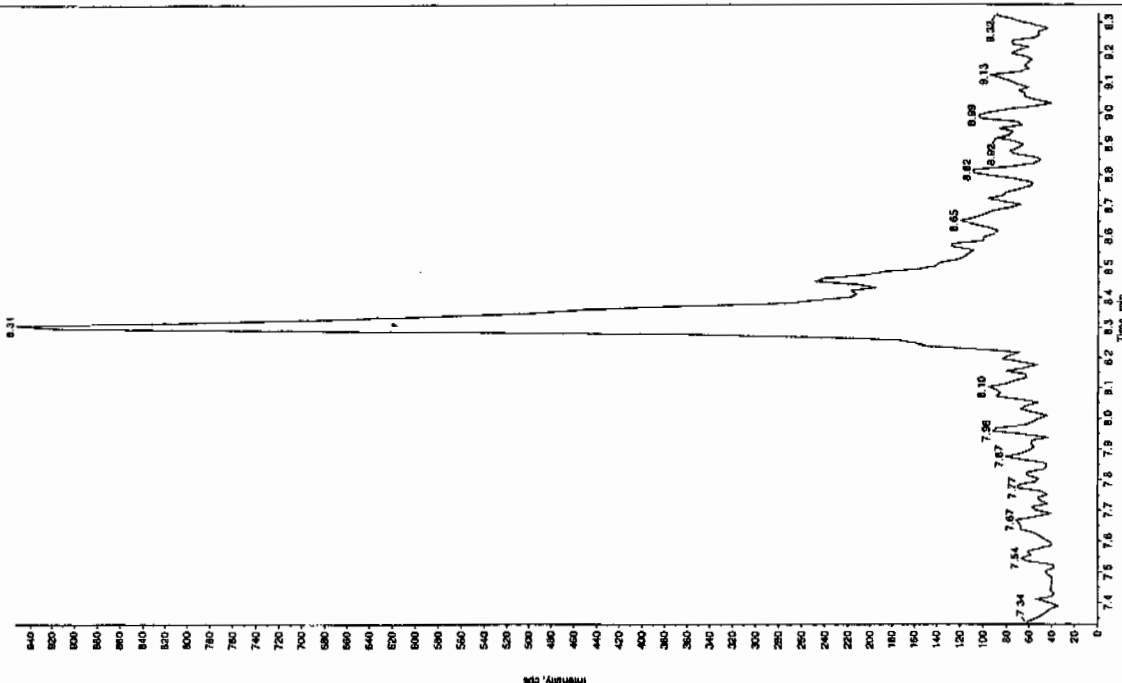
Concentration: N/A

Calculated Conc: 2/26/2010 ng/mL

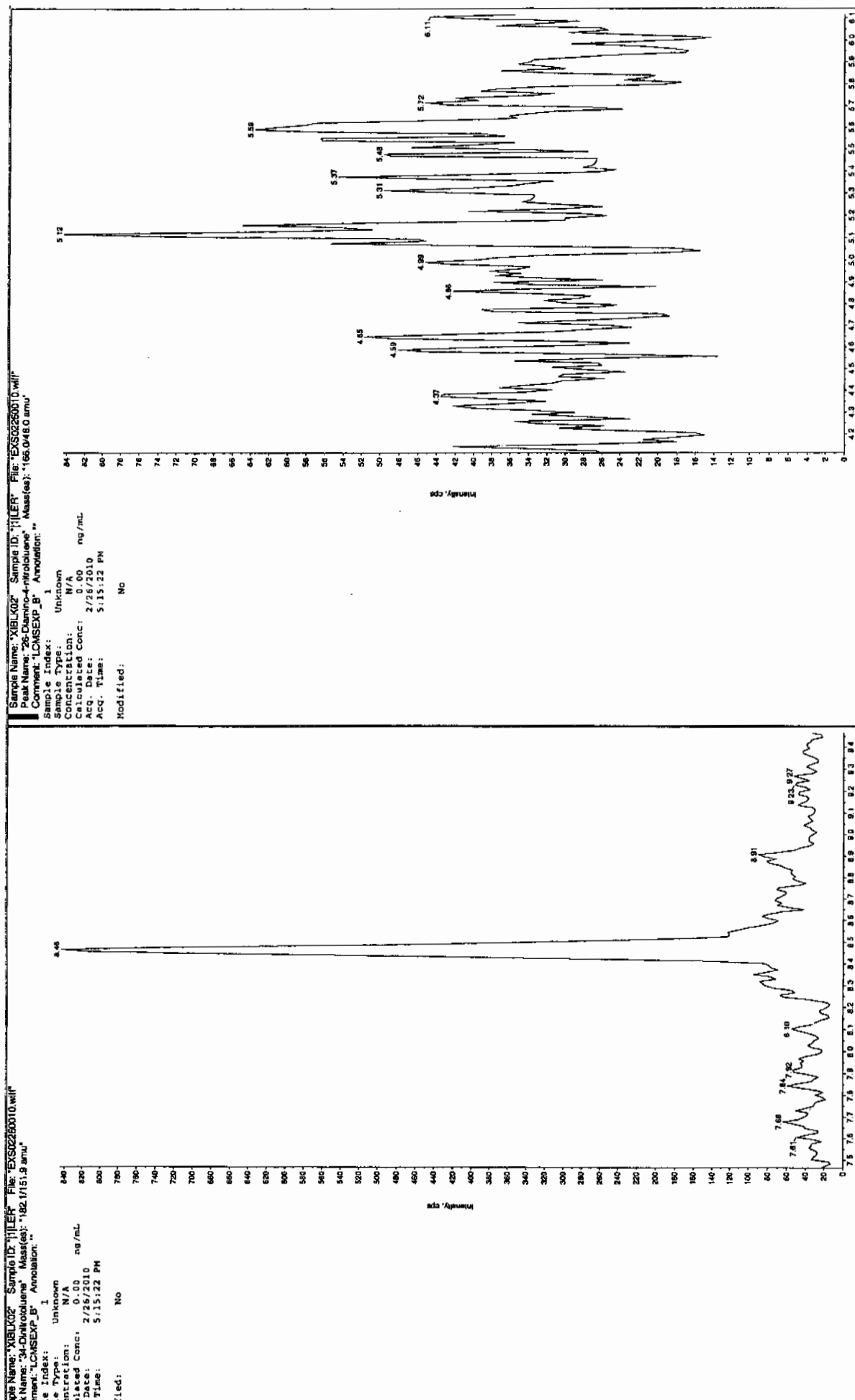
Acq. Date: 5:15:22 PM

Acq. Time: 5:15:22 PM

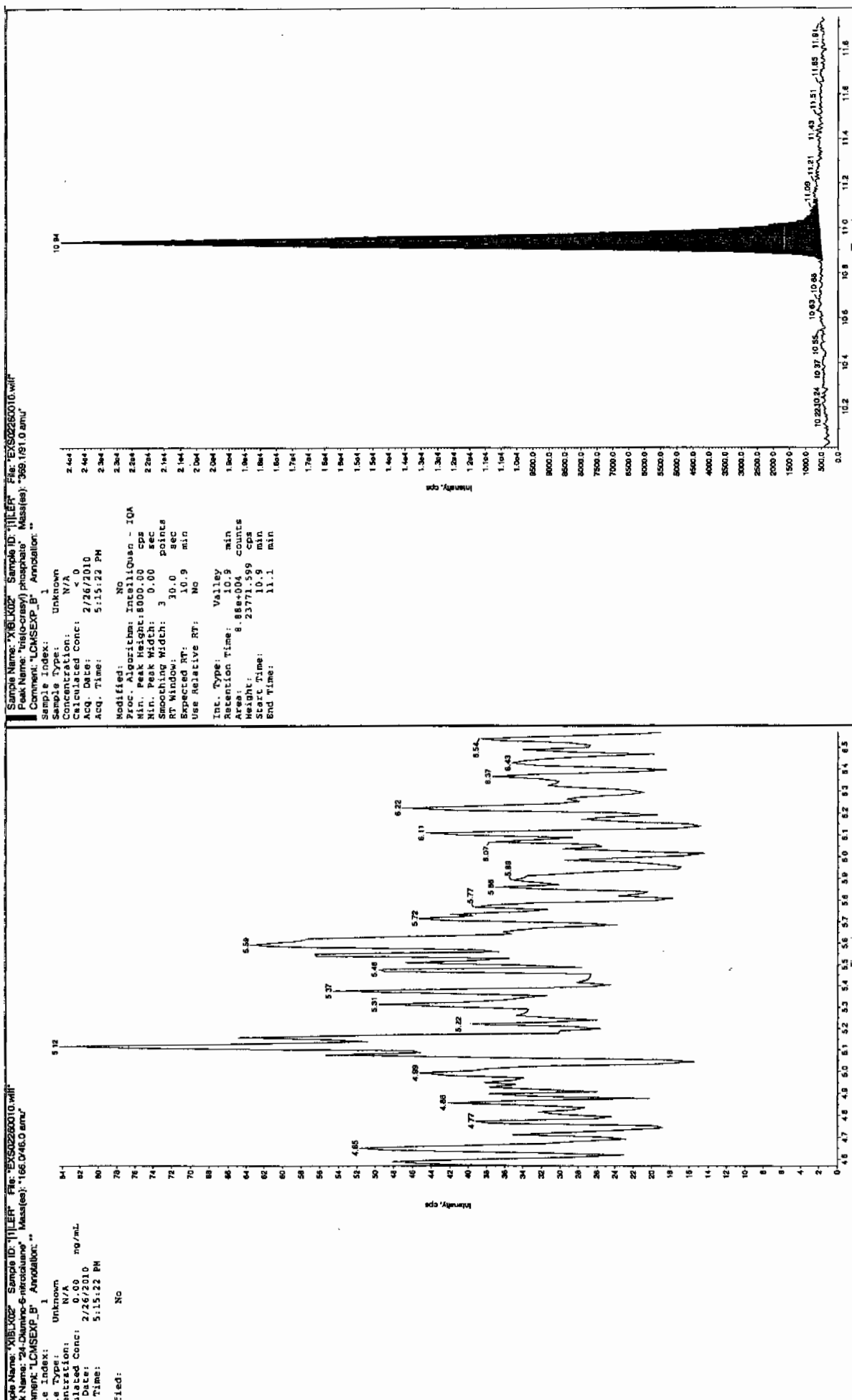
Modified: No



for 03/01/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 26-FEB-10 17:46

GEL Data File: EXS02260012.wiff

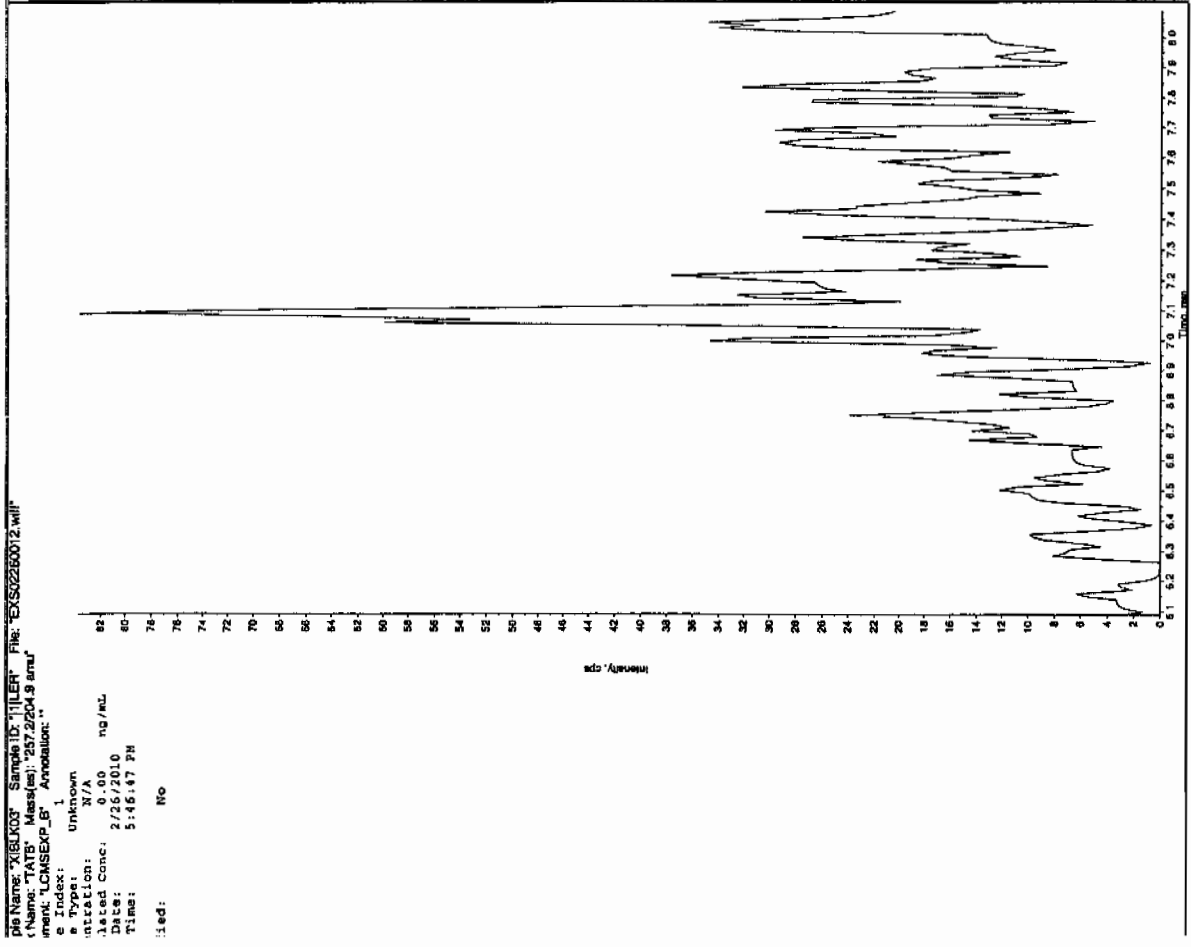
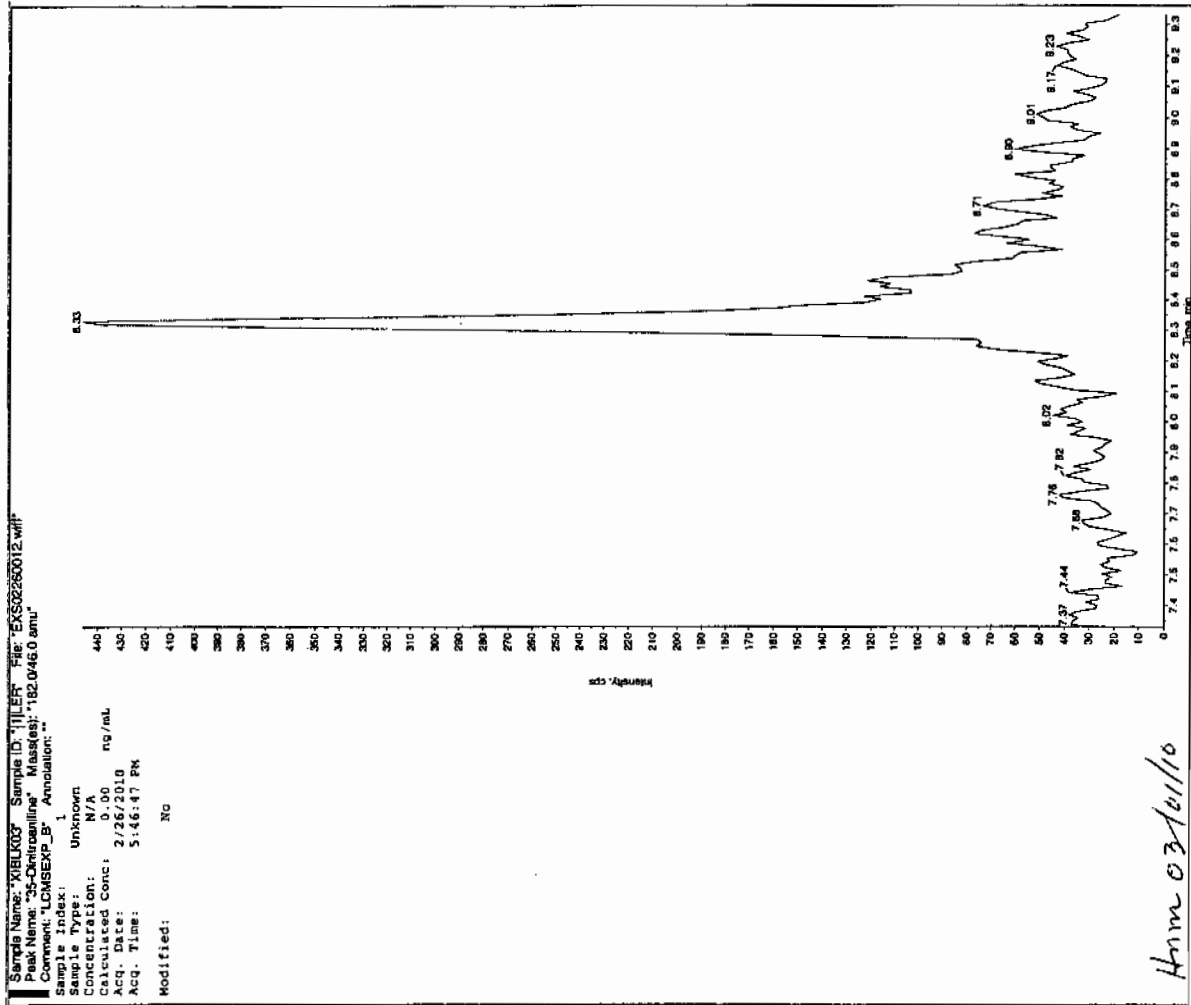
Instrument ID: LCMSMS

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

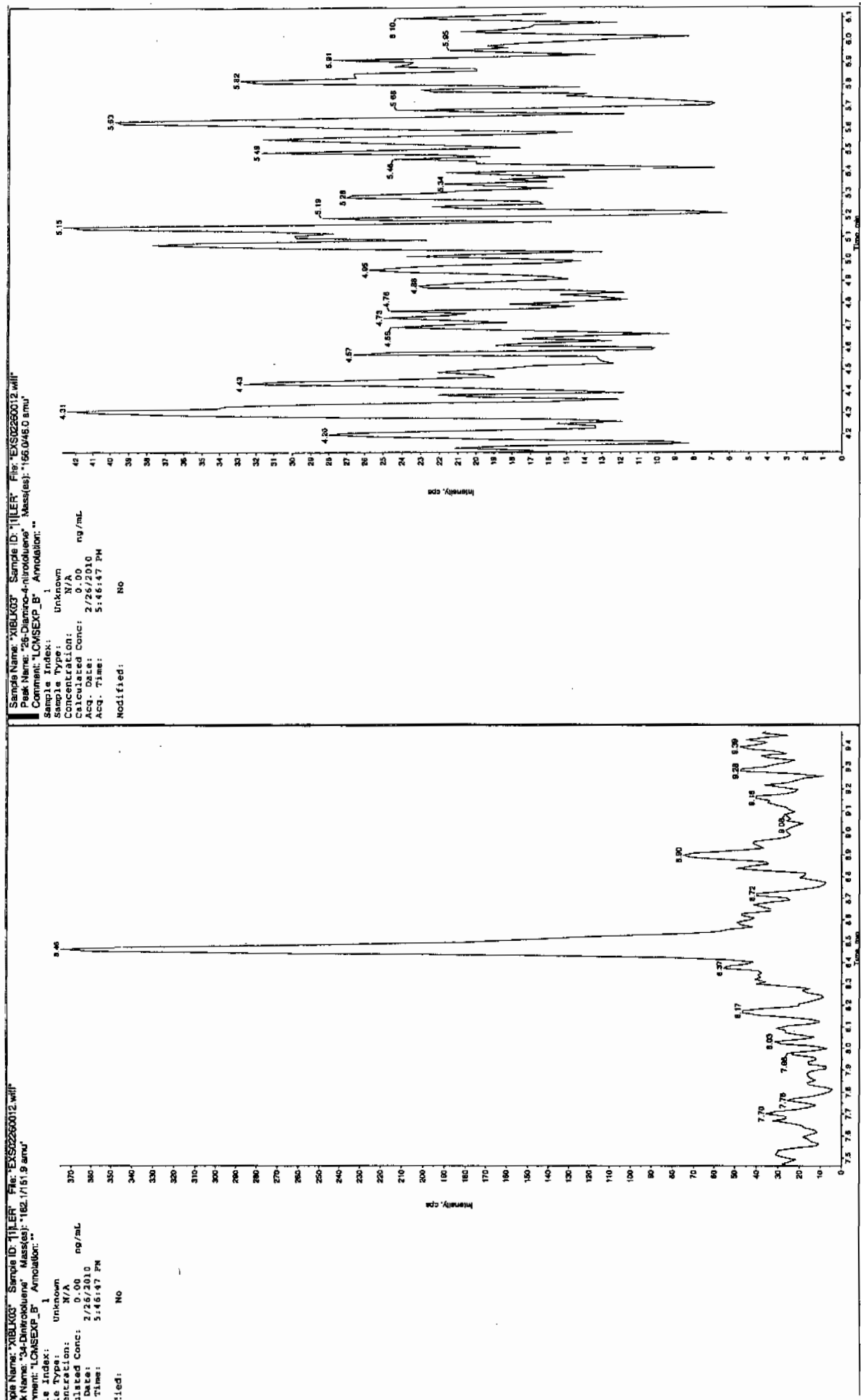


See 3/1/10

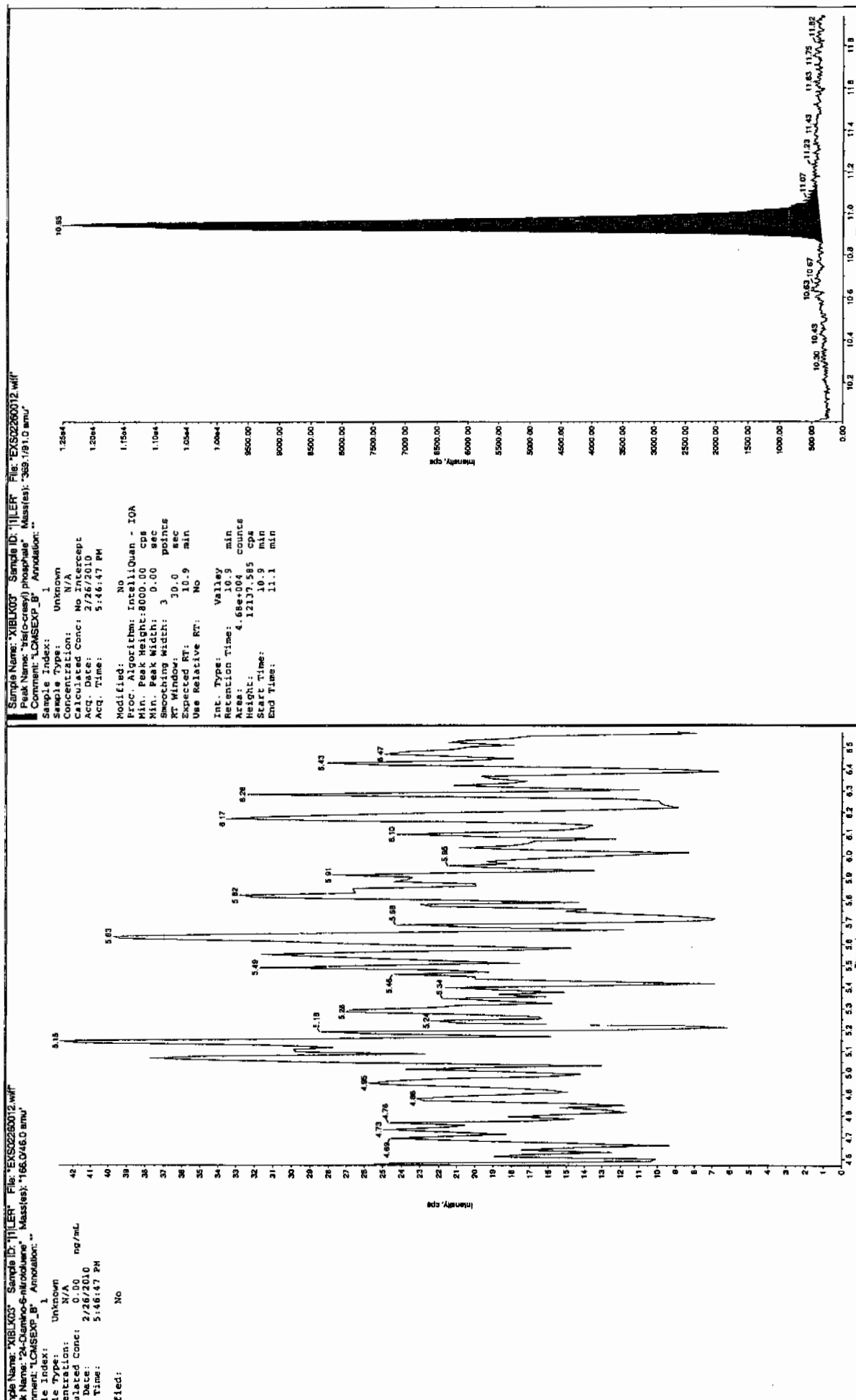


Ann 03/01/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 26-FEB-10 21:10

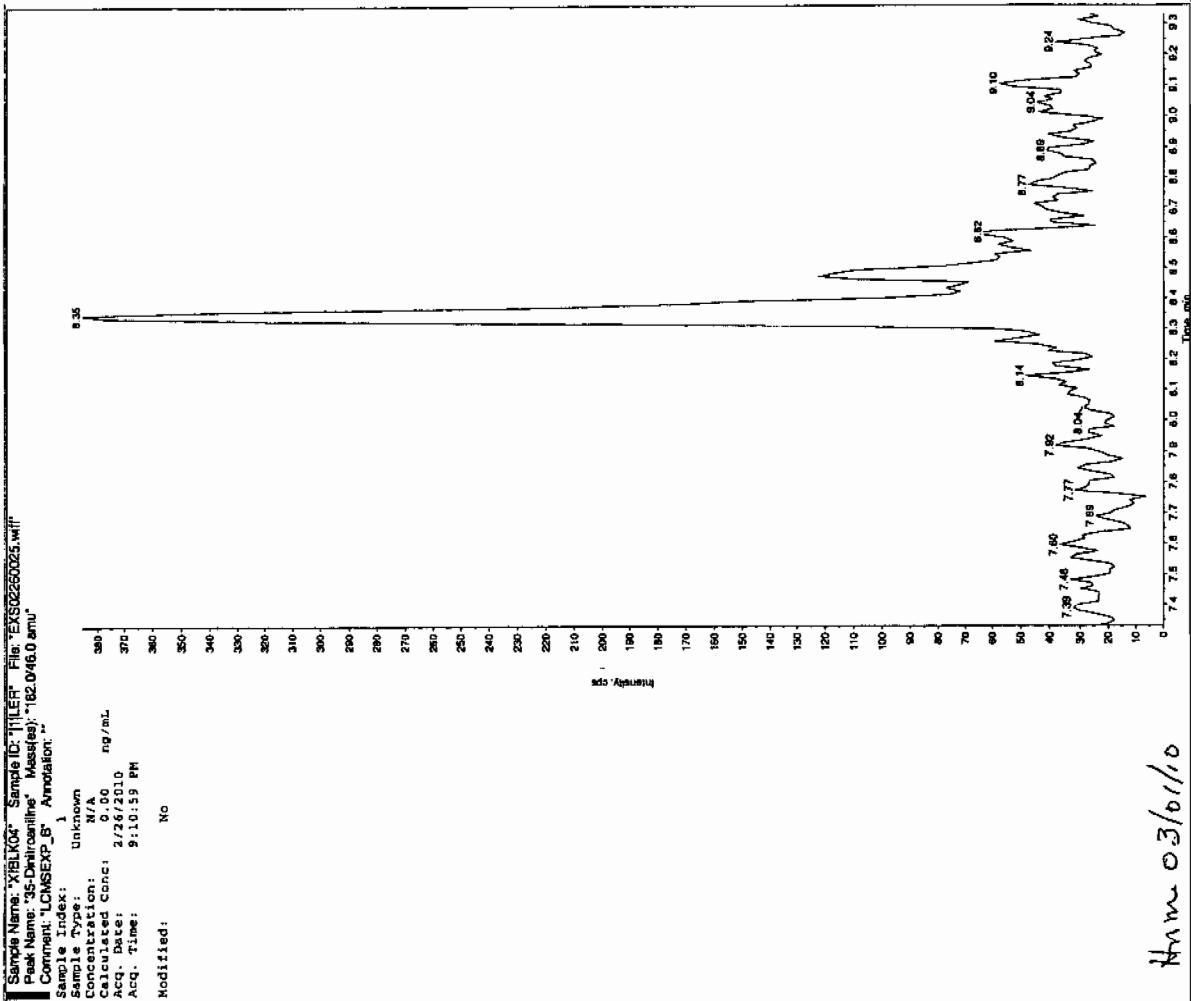
GEL Data File: EXS02260025.wiff

Instrument ID: LCMSMS

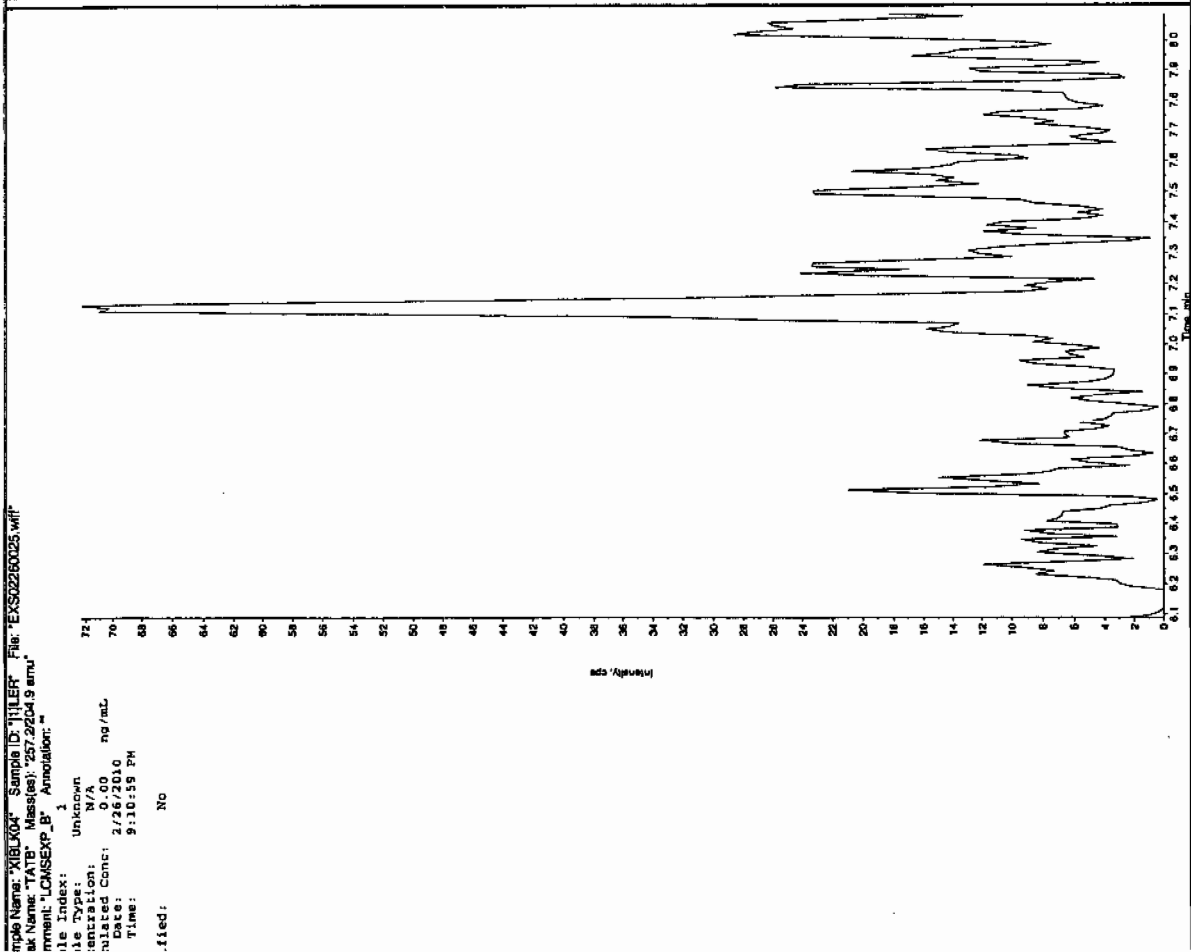
Column: Phenomenex Ultracarb 5u ODS(20)

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

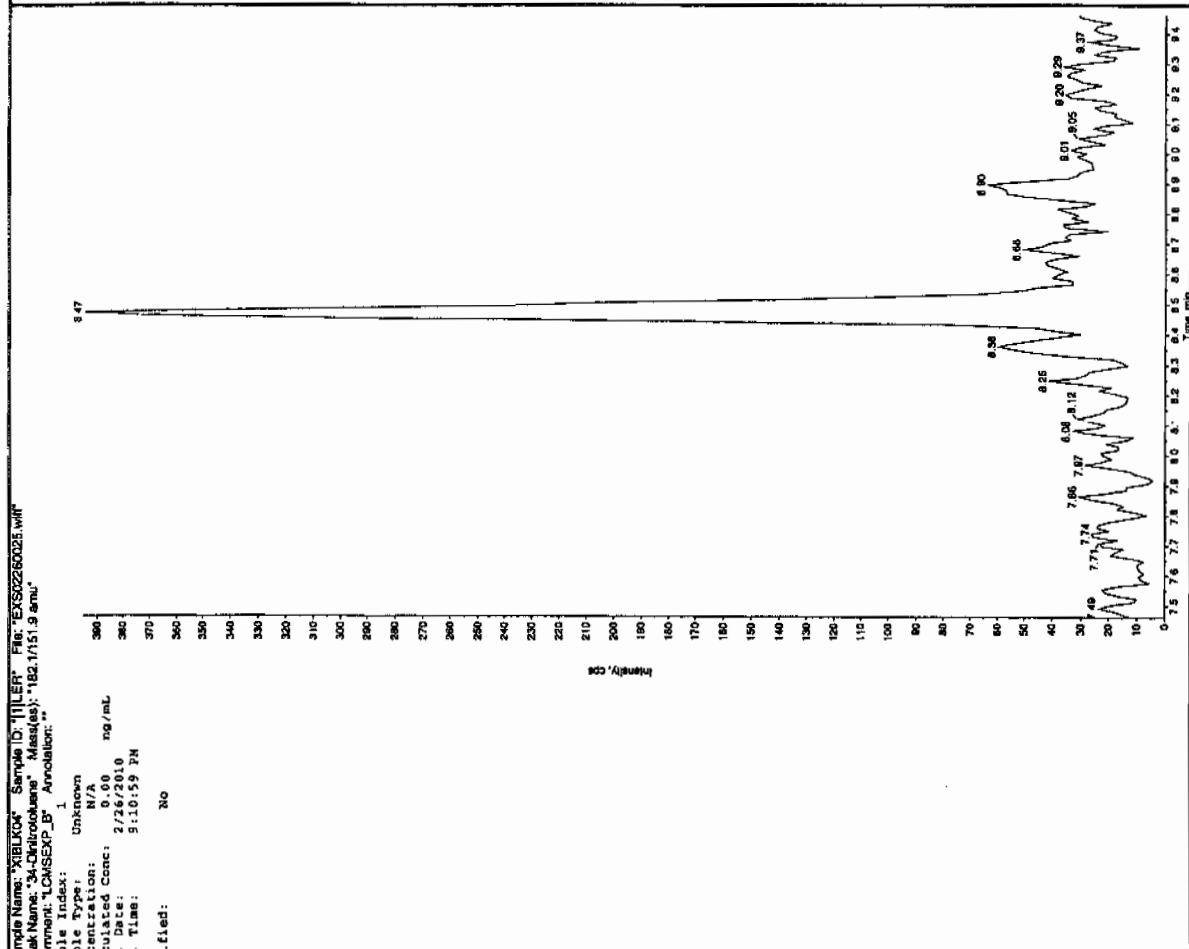
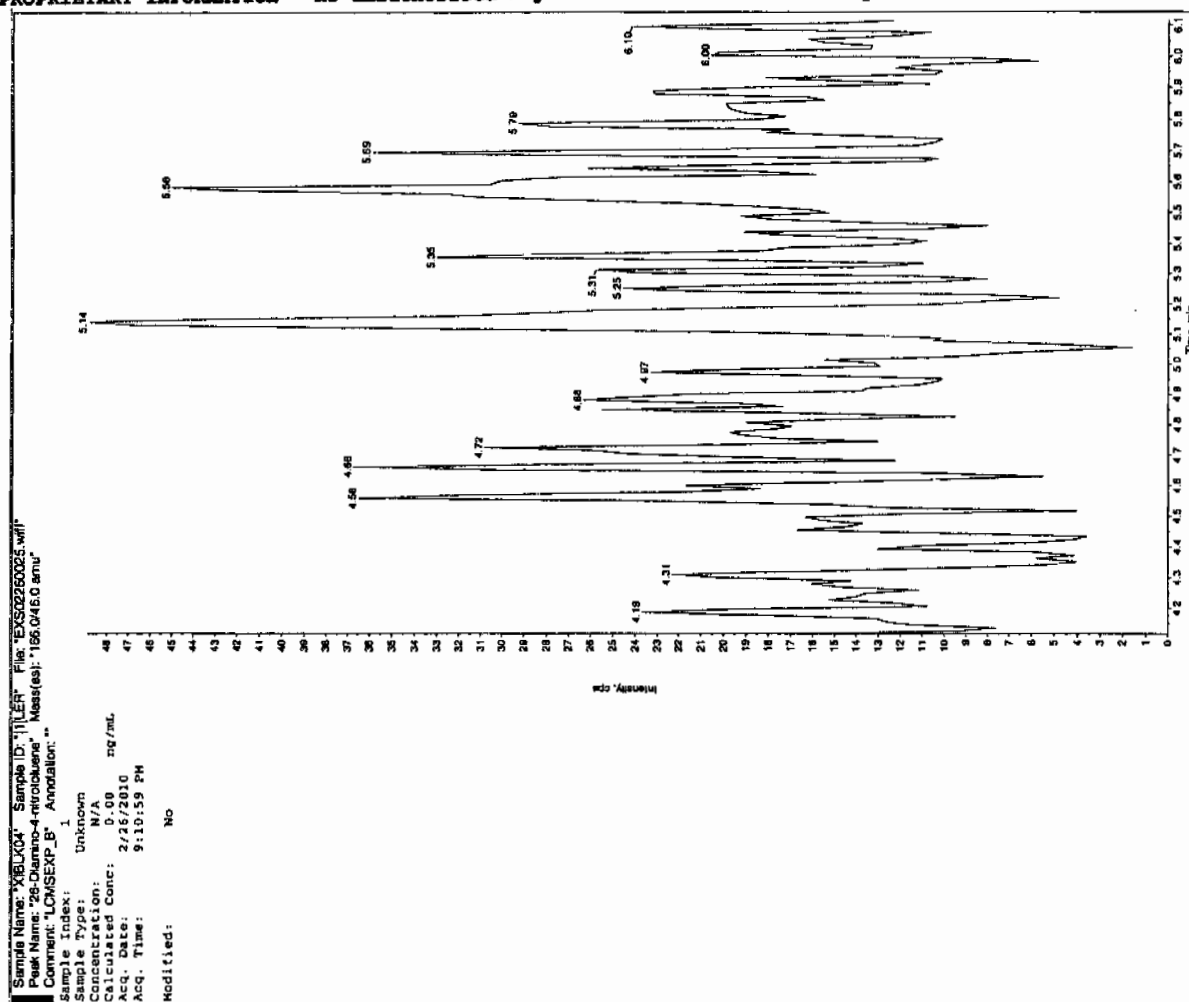
Ken 3/1/10



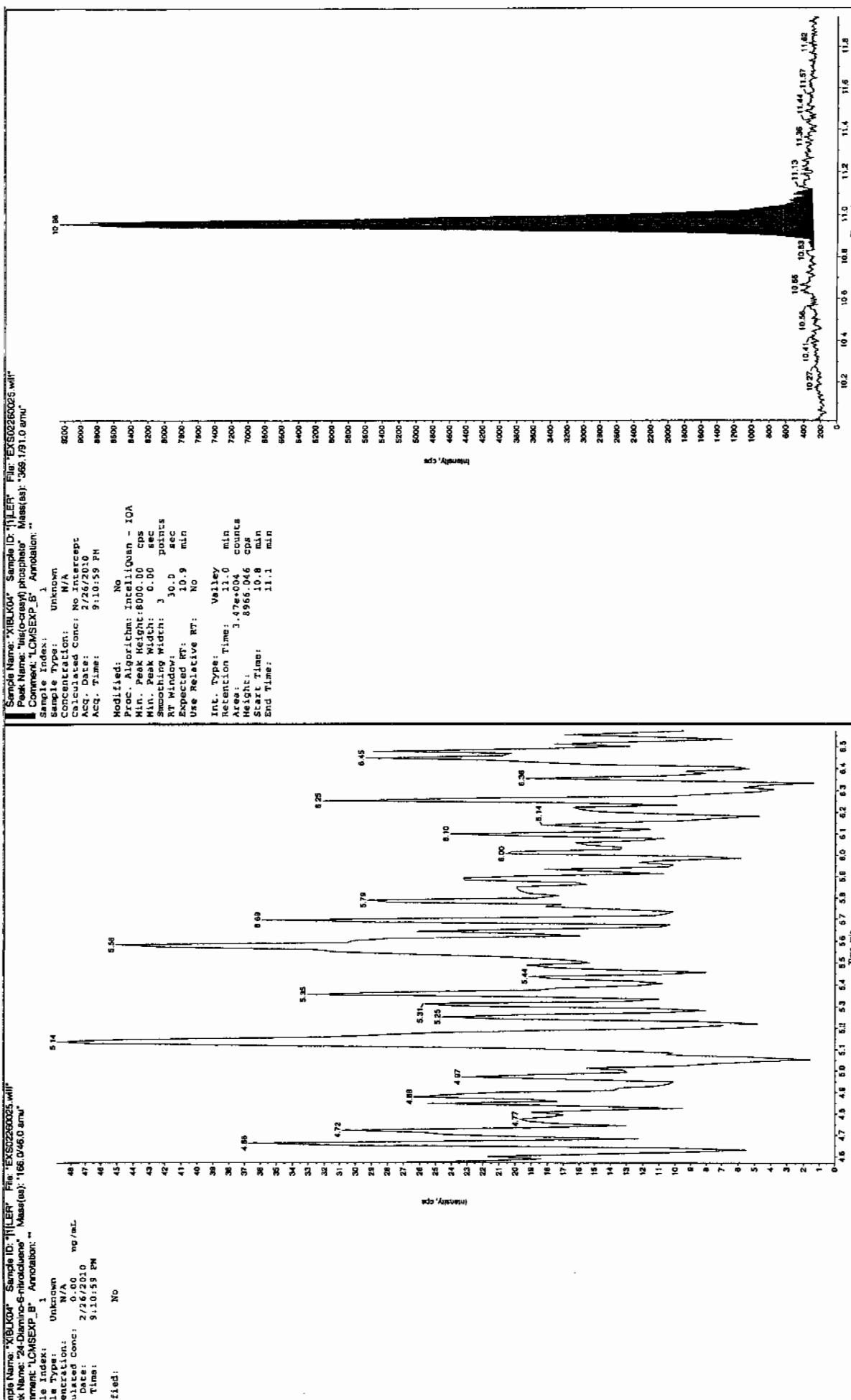
Hum 03/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 26-FEB-10 22:13

GEL Data File: EXS02260029.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 3/1/10

Sample Name: "XIBLK05" Sample ID: "JILLER" File: "EXS0228X029.will"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

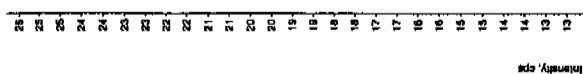
Concentration: 0.00 ng/mL

Calculated Conc: 2/26/2010

Acq. Date: 10:13:52 PM

Acq. Time: 10:13:52 PM

Modified: No



Sample Name: "XIBLK05" Sample ID: "JILLER" File: "EXS0225X029.will"

Peak Name: "35-Dichlorosulfone" Mass(es): "182.046.6 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

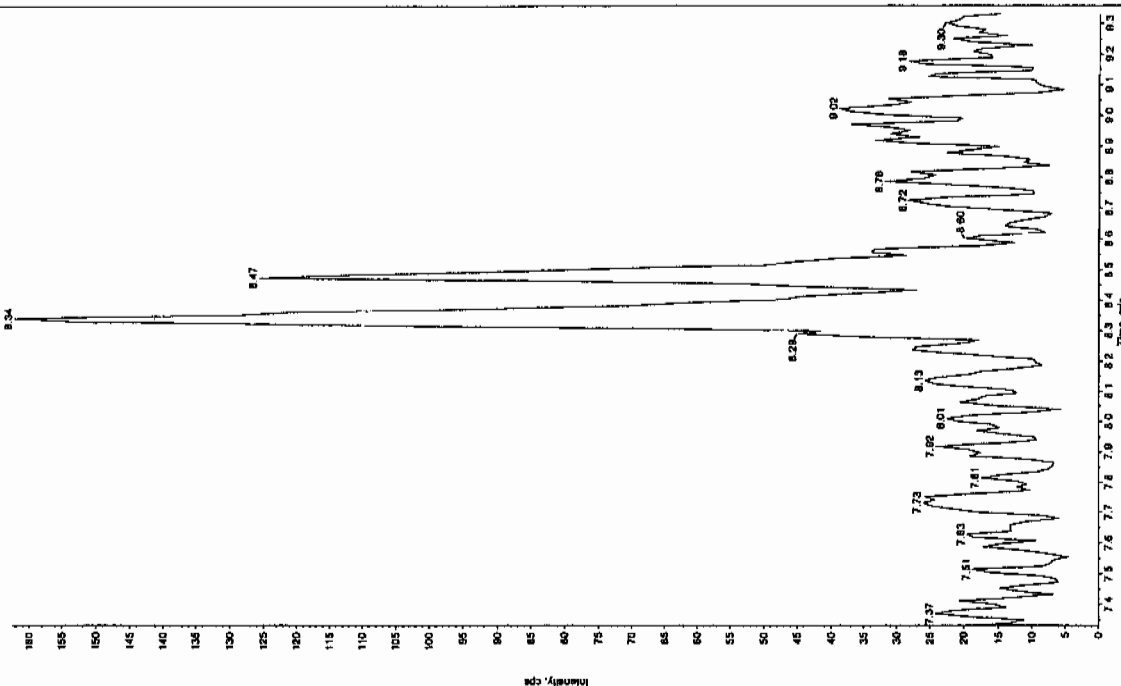
Concentration: 0.00 ng/mL

Calculated Conc: 2/26/2010

Acq. Date: 10:13:52 PM

Acq. Time: 10:13:52 PM

Modified: No

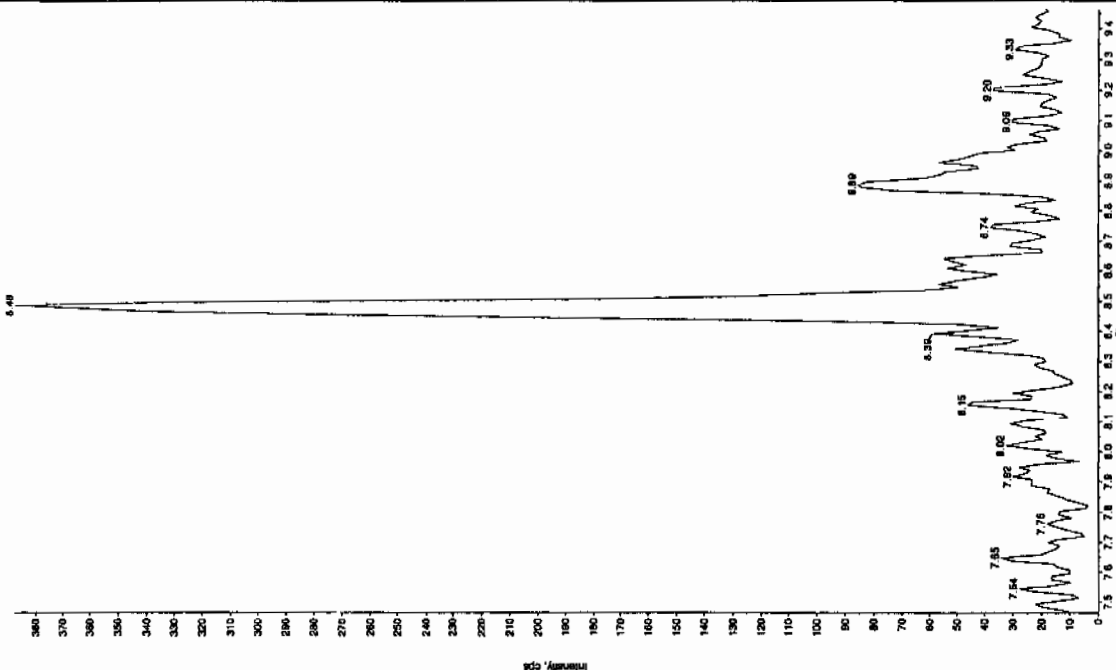


HW 03/01/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

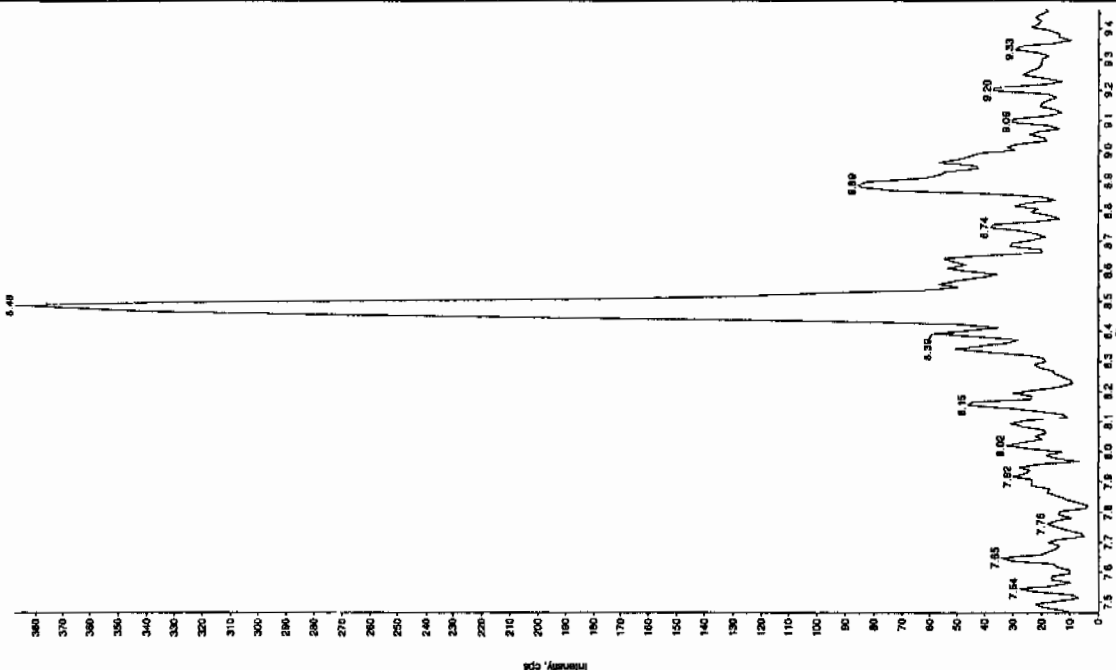
Sample Name: "XIBLX05" Sample ID: "111ER" File: "EX502260023.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 10:13:52 PM  
 Modified: No

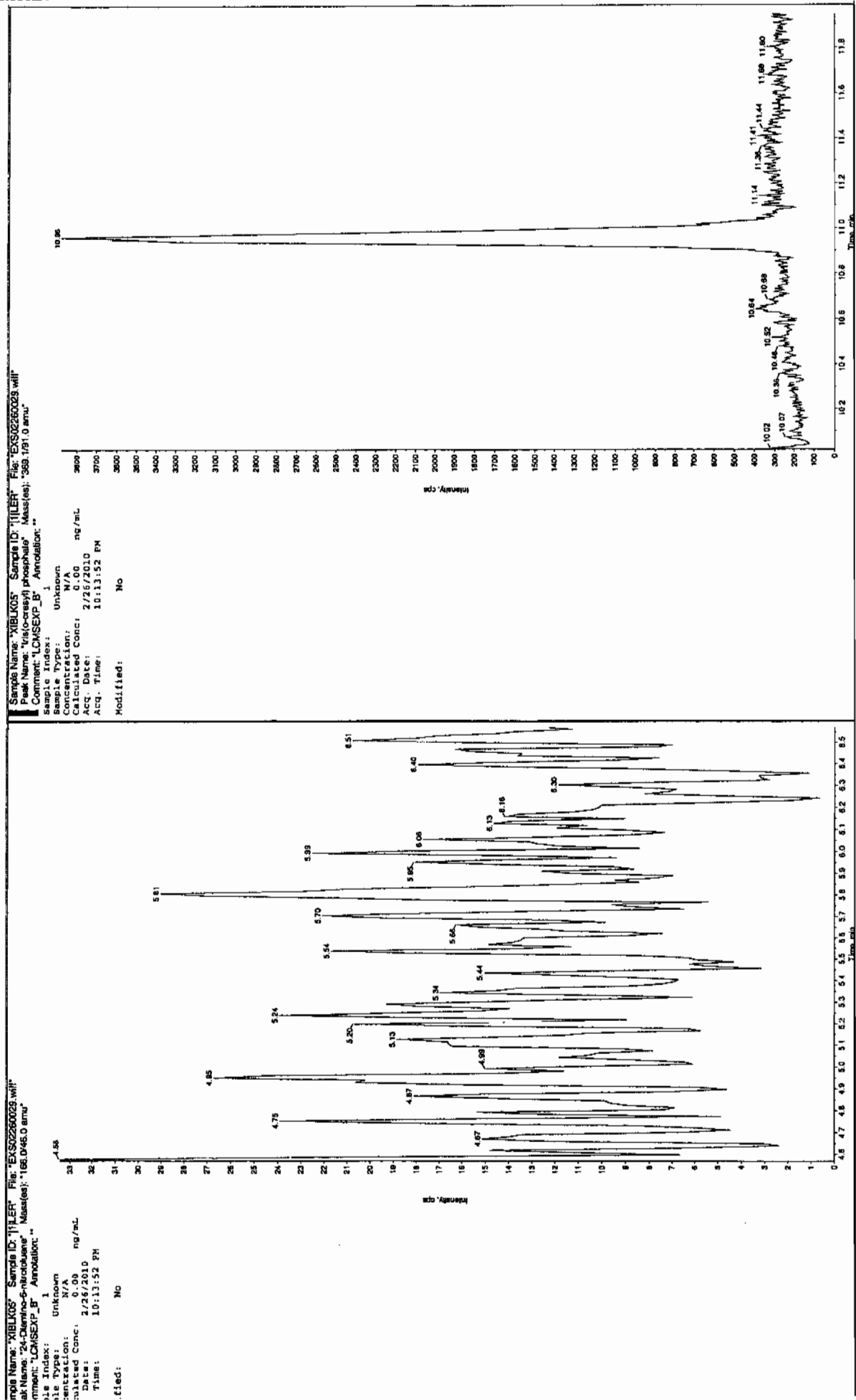


Sample Name: "XIBLX05" Sample ID: "111ER" File: "EX502260023.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 10:13:52 PM  
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



XL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 27-FEB-10 00:35

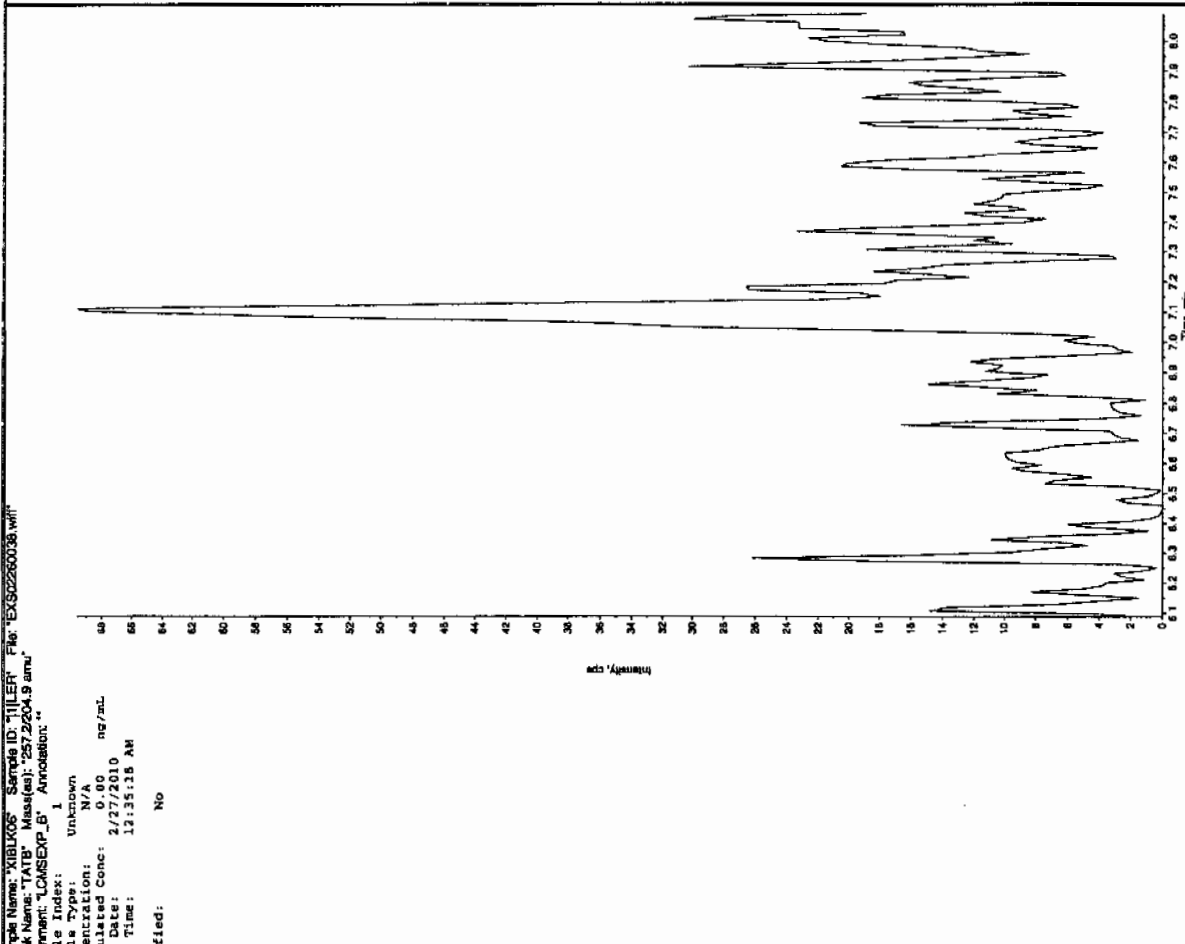
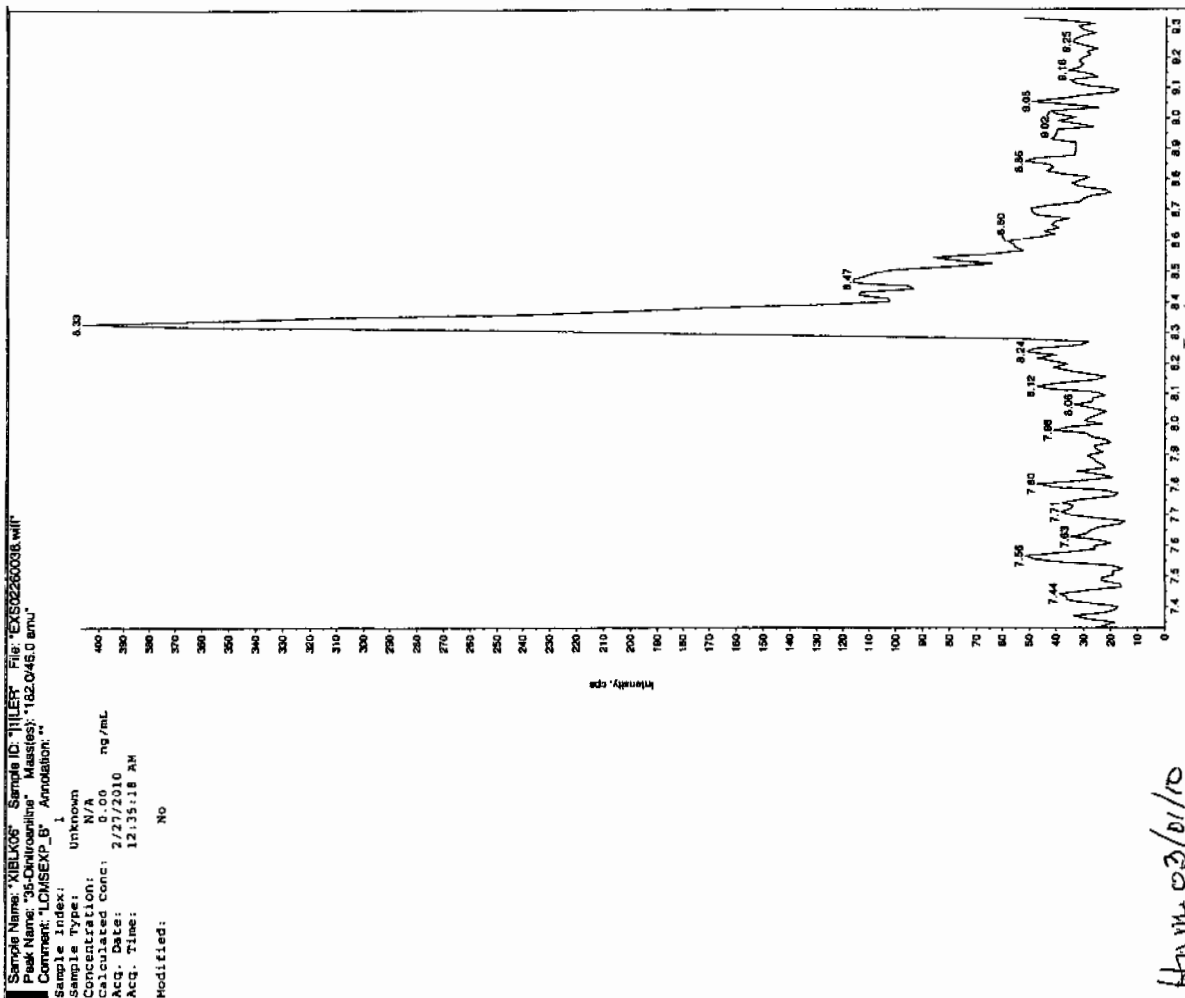
GEL Data File: EXS02260038.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultra<sup>®</sup>carb 5u ODS(20)

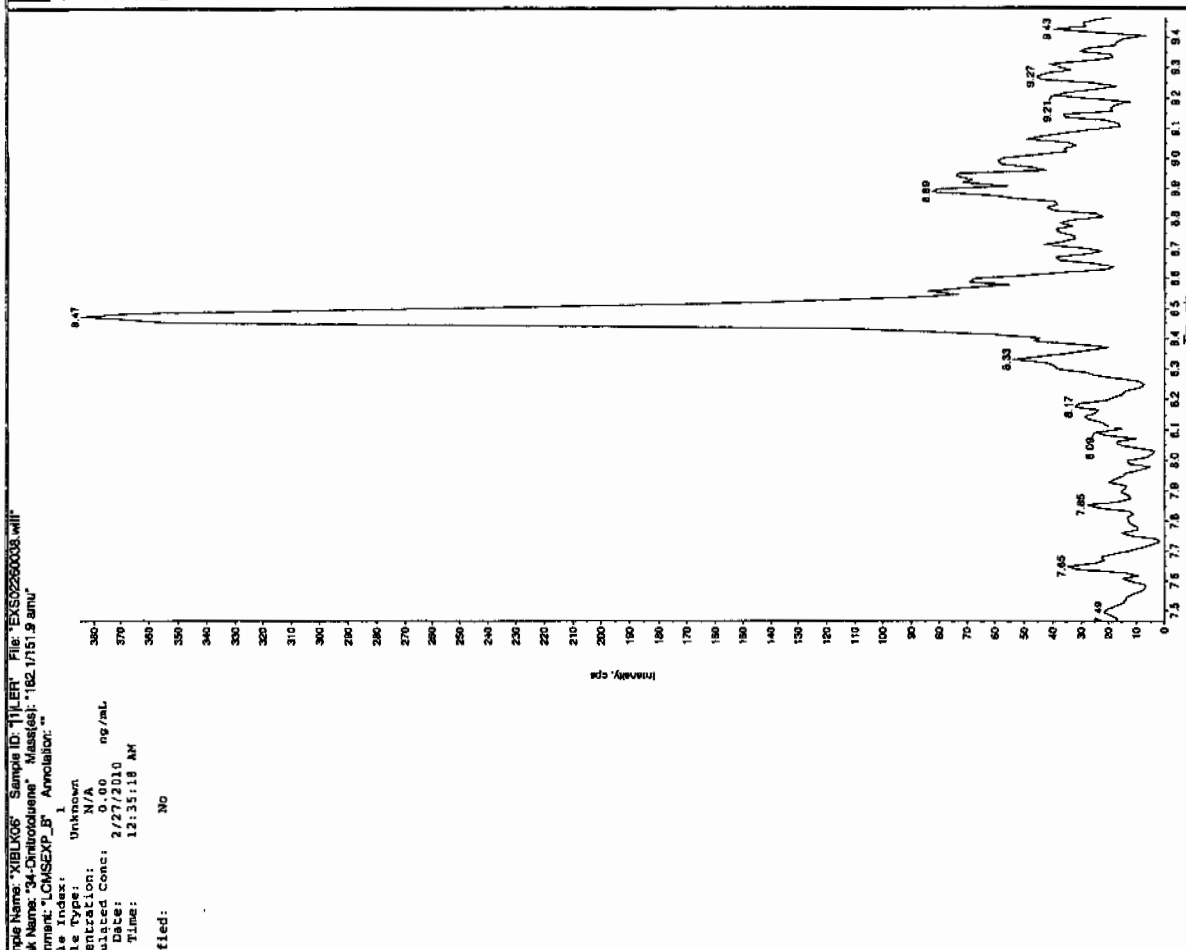
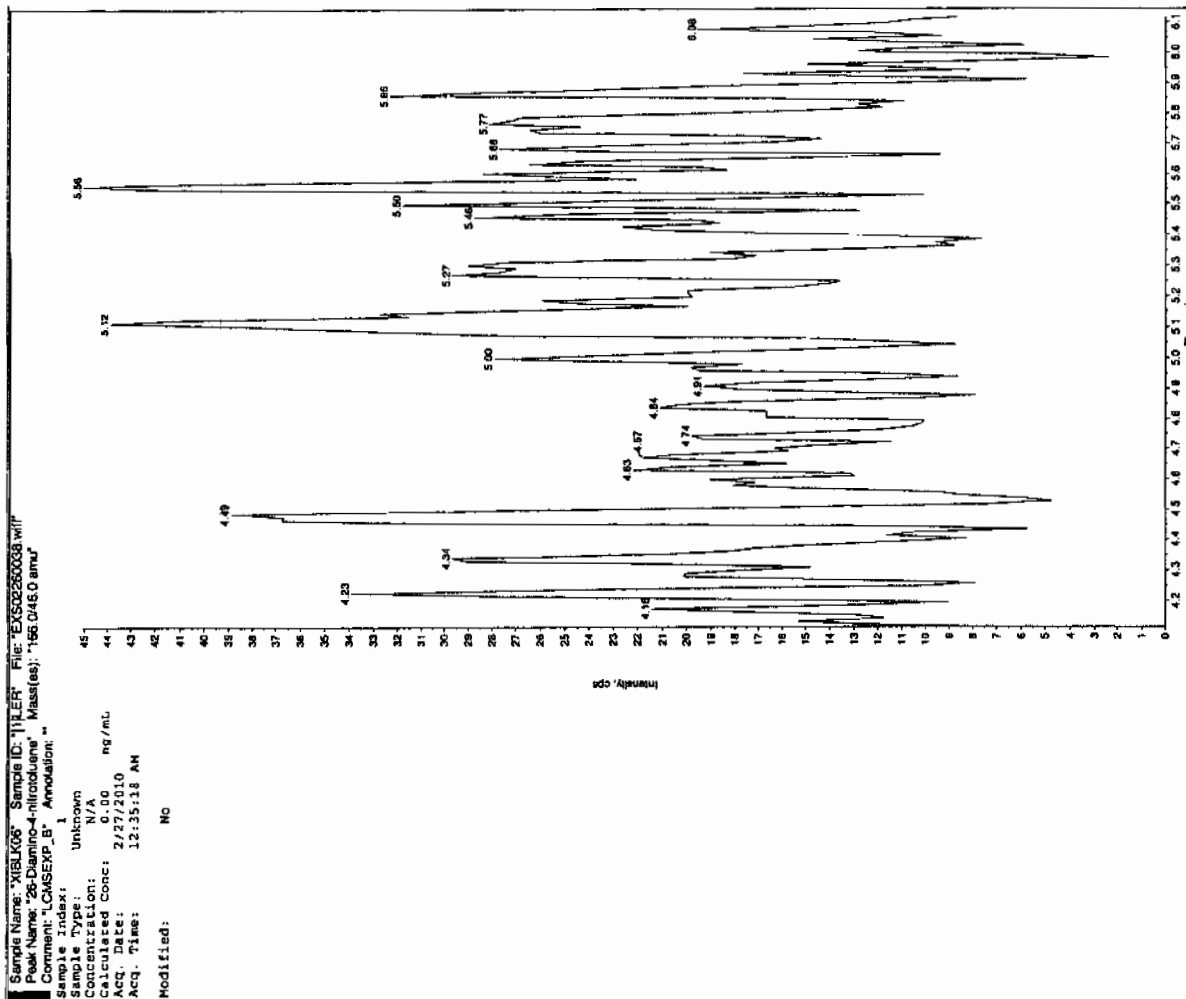
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 3/1/10

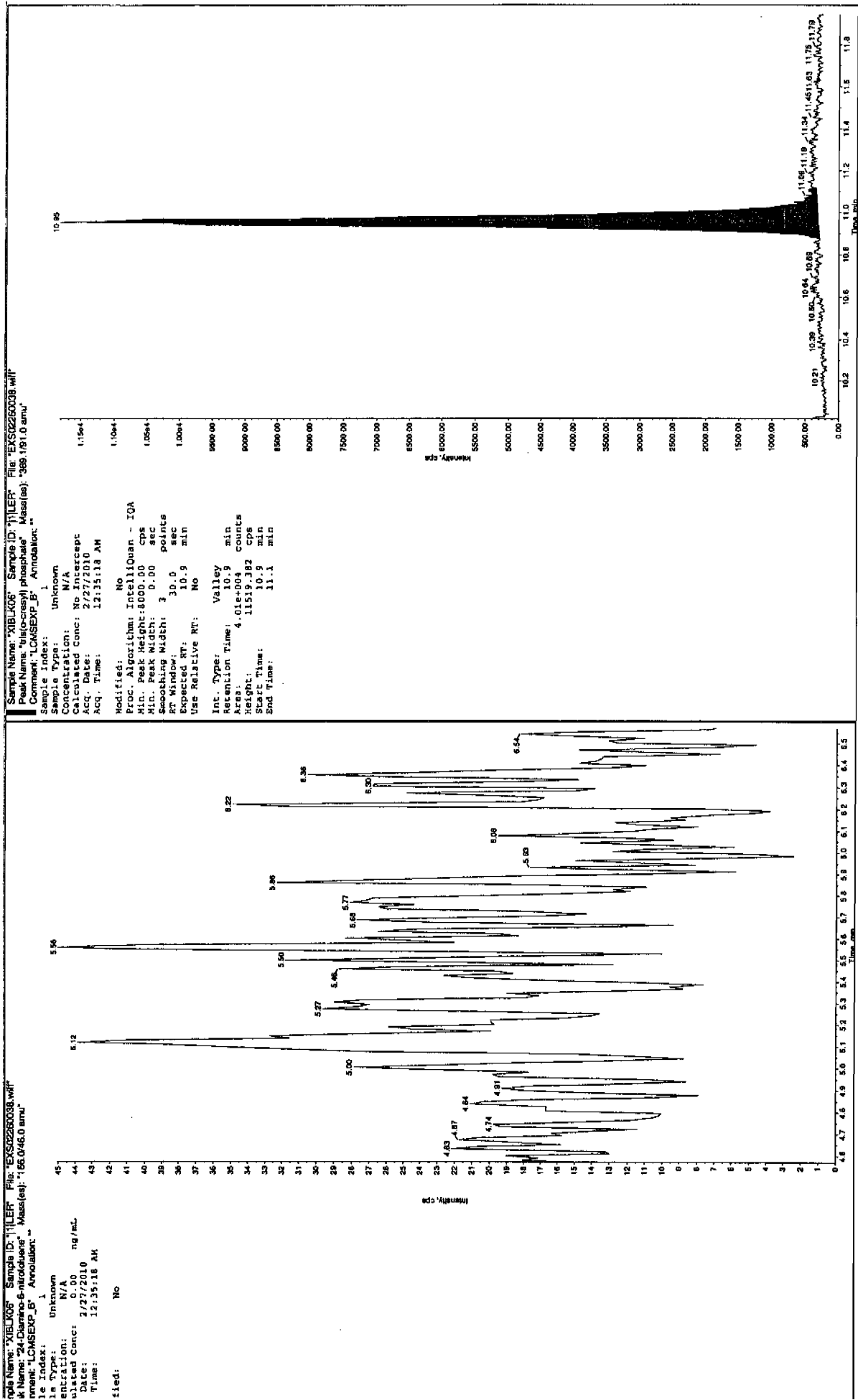


Run 03/01/10

IL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 27-FEB-10 03:59

GEL Data File: EXS02260051.wiff

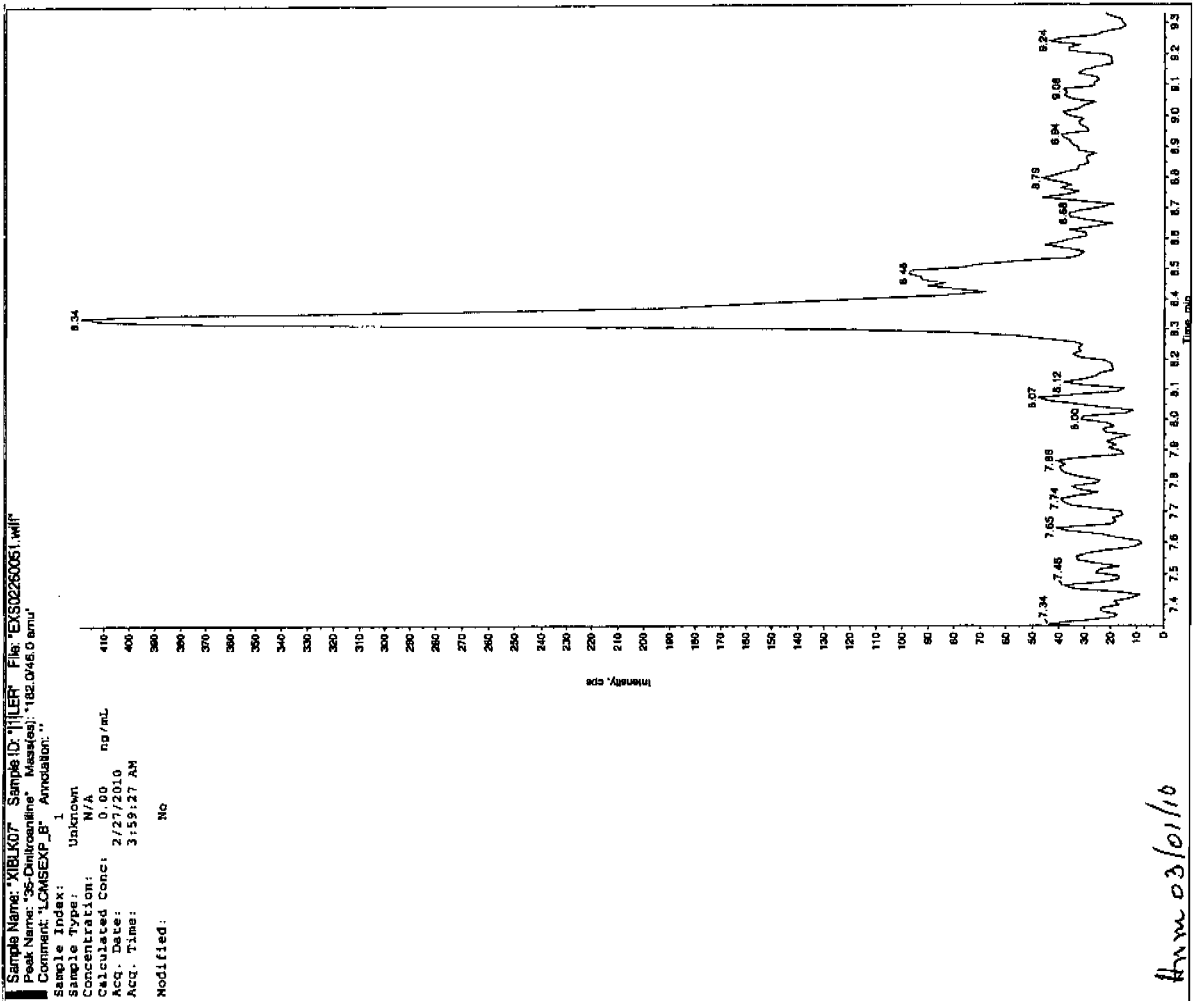
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

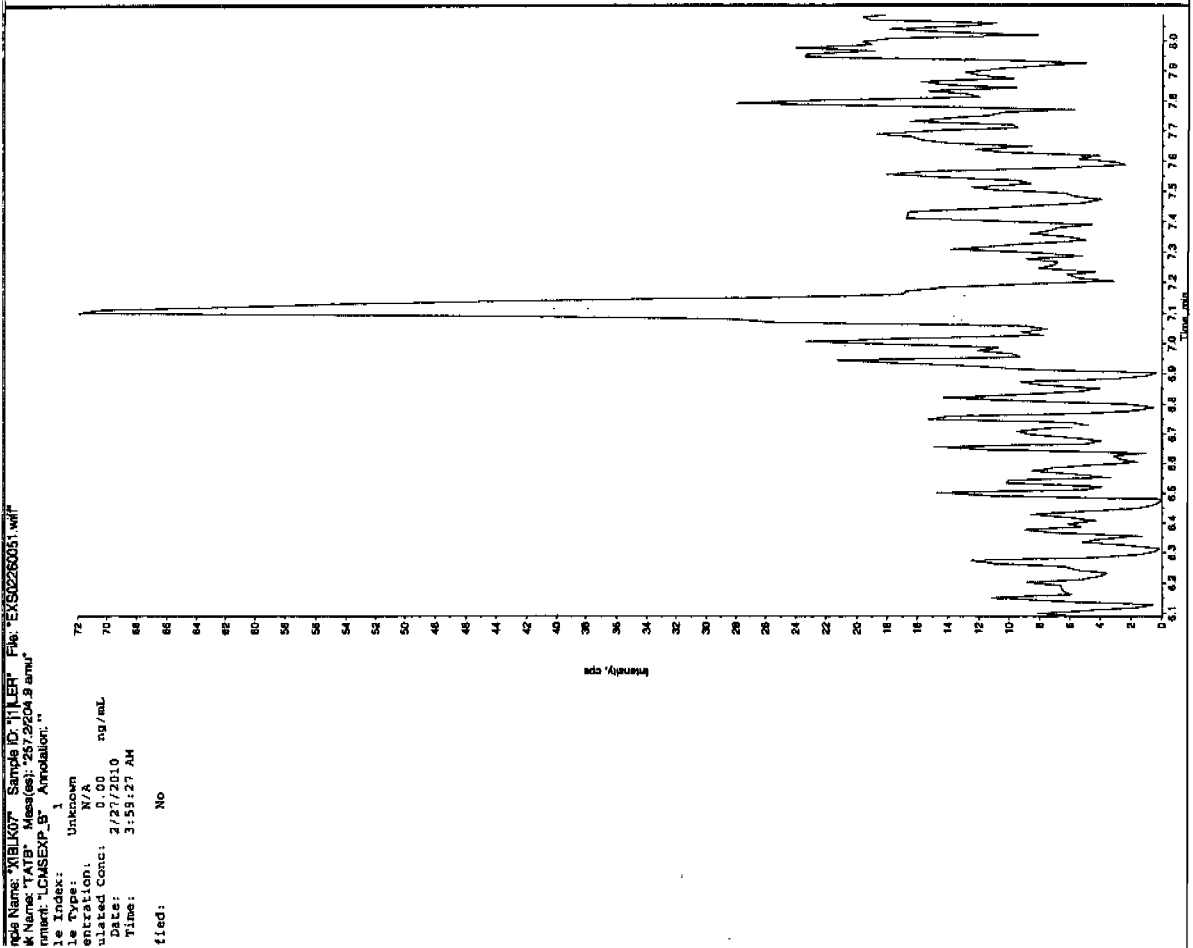
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



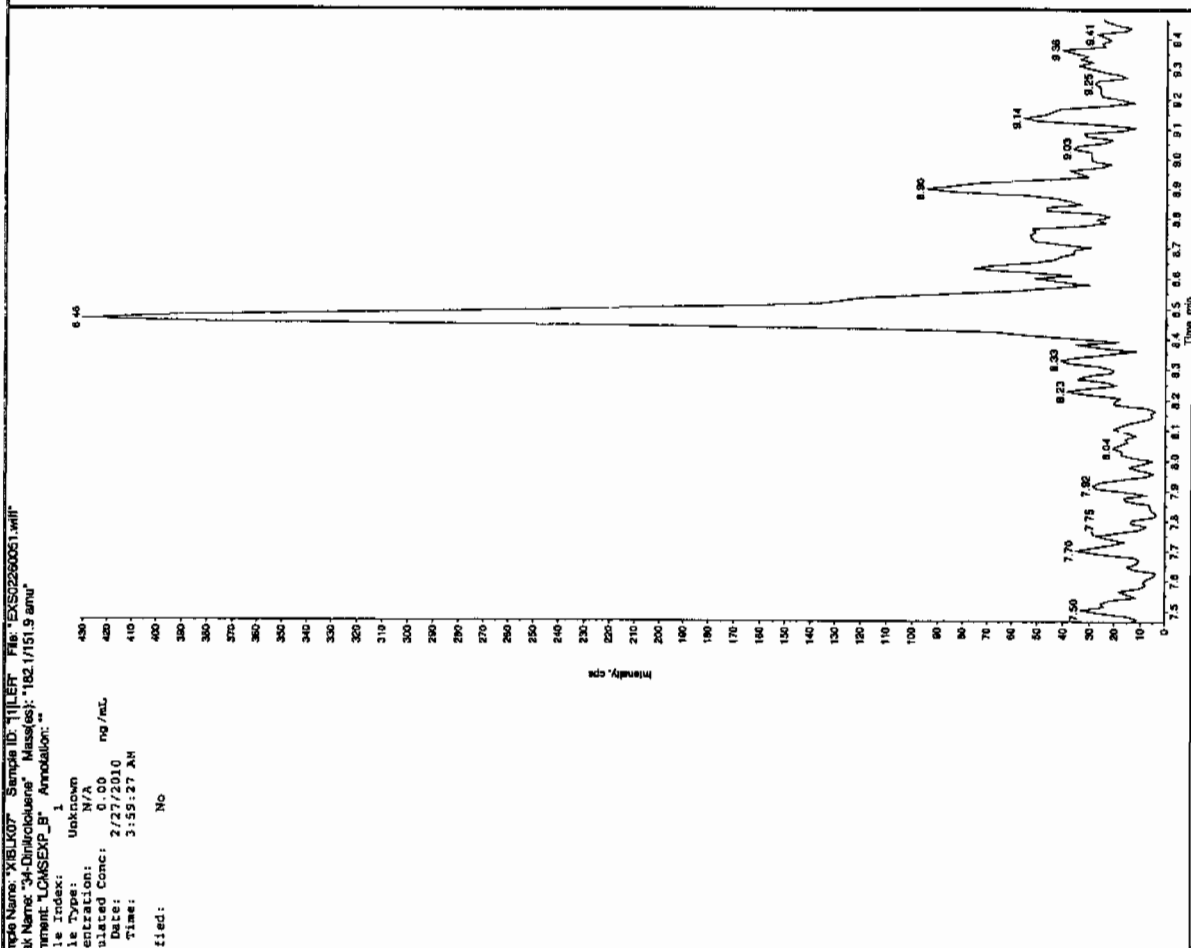
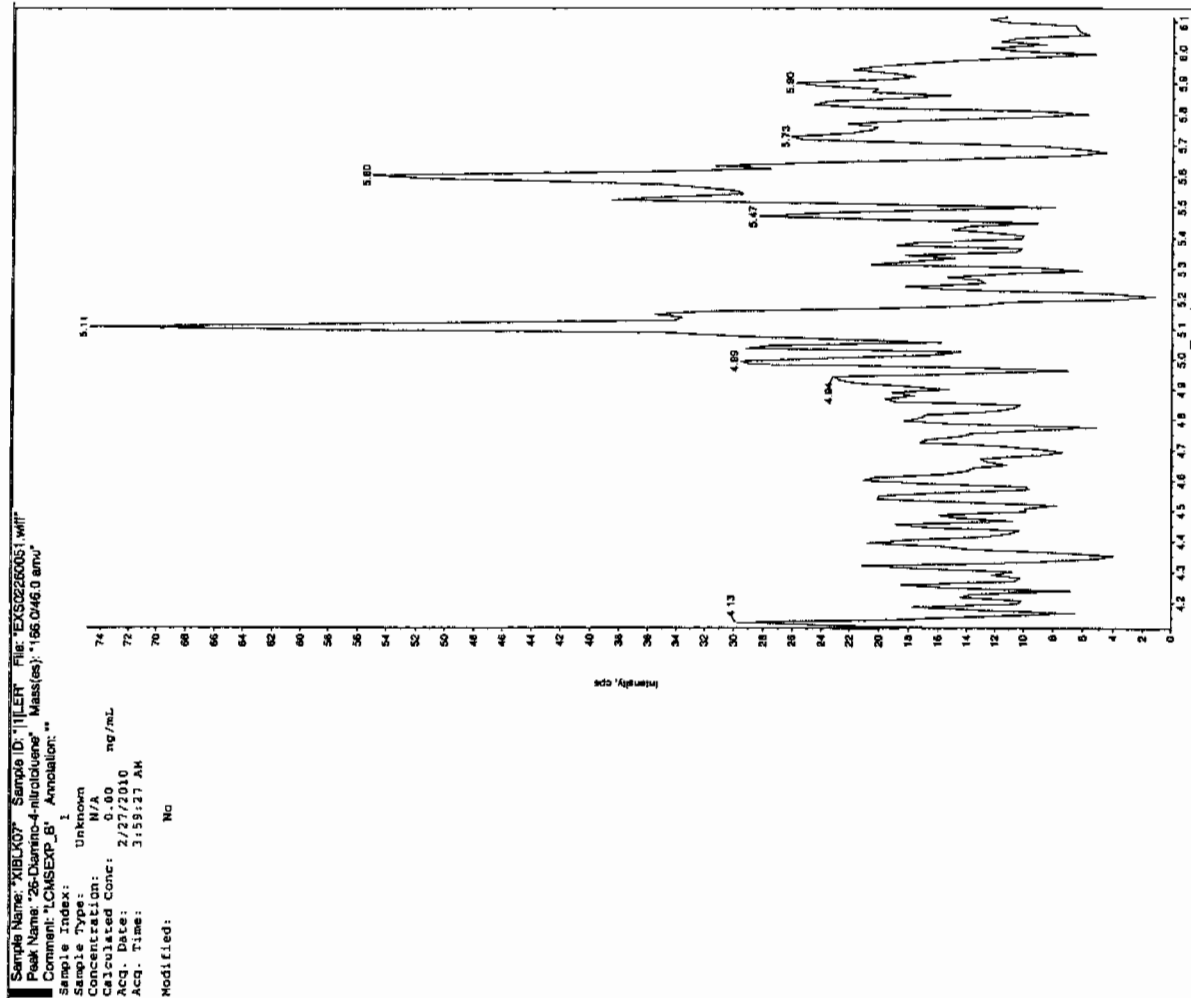
See 31110



Ann 03/01/10



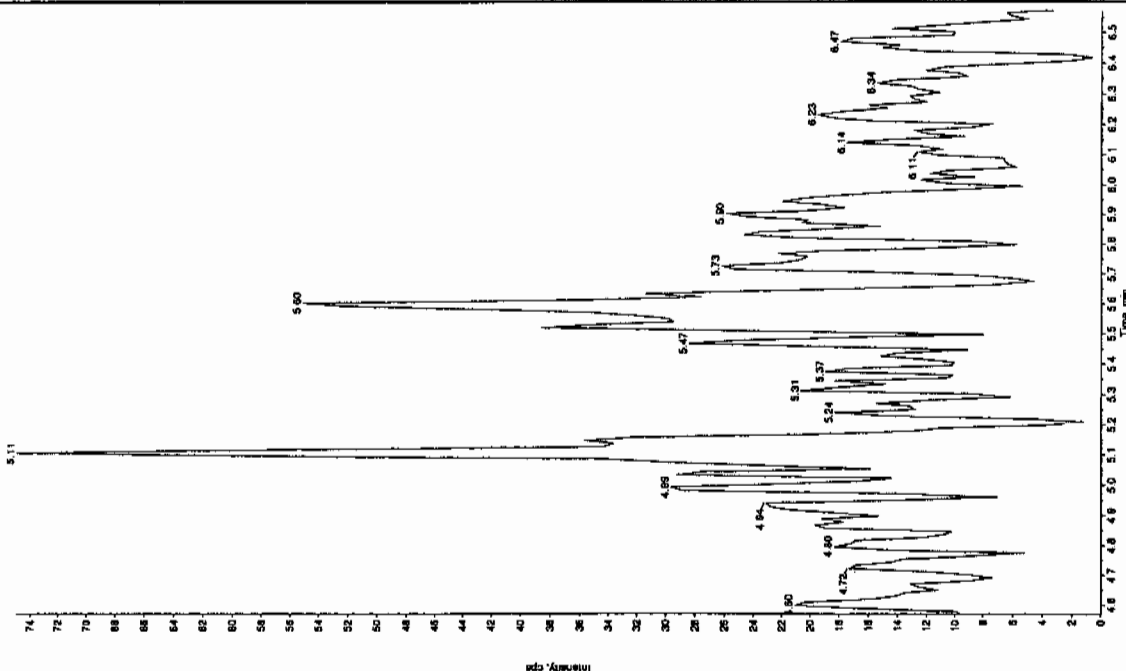
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMMSMS#4

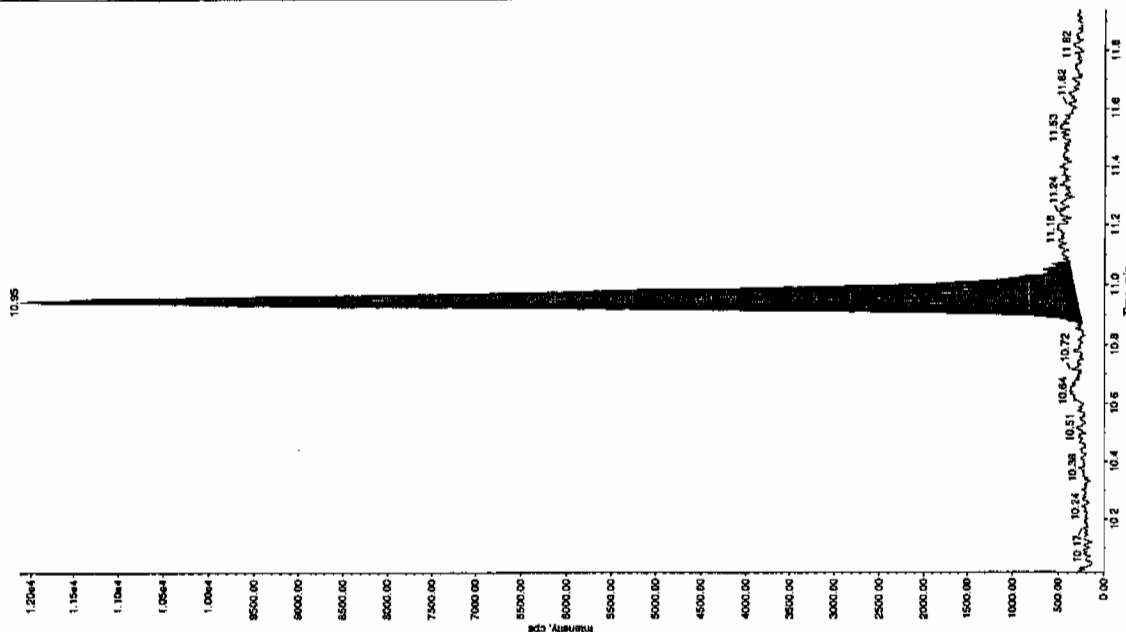
Sample Name: "XIELK07"    Sample ID: "I1LEF"    File: "XS0226051.wif"  
 I1 Name: "24-Diamino-6-nitrotoluene"    Mass(es): "166.046.0 amu"

Index	Sample	Conc	Date	Time	Notes
74	Unknown	N/A			
72	Unknown	0.00	2/27/2019	3:59:27 AM	
70	Unknown				
68	Unknown				
66	Unknown				
64	Unknown				
62	Unknown				
60	Unknown				
58	Unknown				
56	Unknown				
54	Unknown				



Sample Name: 'XIBLX07' Sample ID: '11LER' File: 'EXS02260051.will'  
Peak Name: 'tris(o-cresyl) phosphine' Mass(es): '369.1/91.0 amu'

Sample Index:	1	Ammonium	
Comment: LCMSEX.P.B			
Unknown			
Concentration:	N/A		12044
Conc: No Intercept			
Date: 2/27/2010			1544
Time: 3:59:27 AM			
Modified:	No		1044
Algorithm: Iter1Own - TOA			
Iter: 1	Peak Height: 8000.00	cps	
Width: 0.00	sec		
3	points		1044
Smoothing Width:	10.0	sec	
Window: F			
Expected RT:	10.9	min	
Relative RT:	No		10044
Valley			
Stenion Time:	min		9500.00
Height:	4.13e+104		
Time:	11821.117	cps	
Time:	10.9	min	9000.00
Time:	11.1	min	



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 27-FEB-10 06:36

GEL Data File: EXS02260061.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

Jan 31/10

Sample Name: "XIBLX06" Sample ID: "111ER" File: "EXS02260061.will"

Peak Name: "35-Ornithine" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 2.00 ng/mL

Acq. Date: 2/27/2010

Acq. Time: 6:36:30 AM

Modified: No

Sample Name: "XIBLX06" Sample ID: "111ER" File: "EXS02260061.will"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

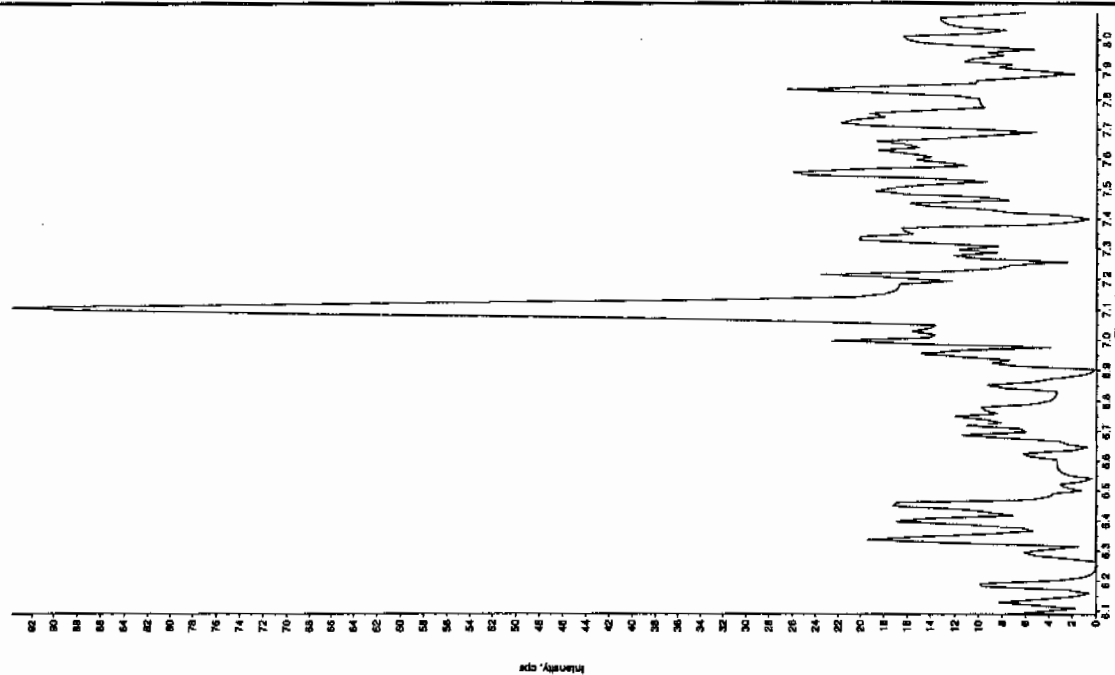
Concentration: N/A

Calculated Conc: 2.00 ng/mL

Acq. Date: 2/27/2010

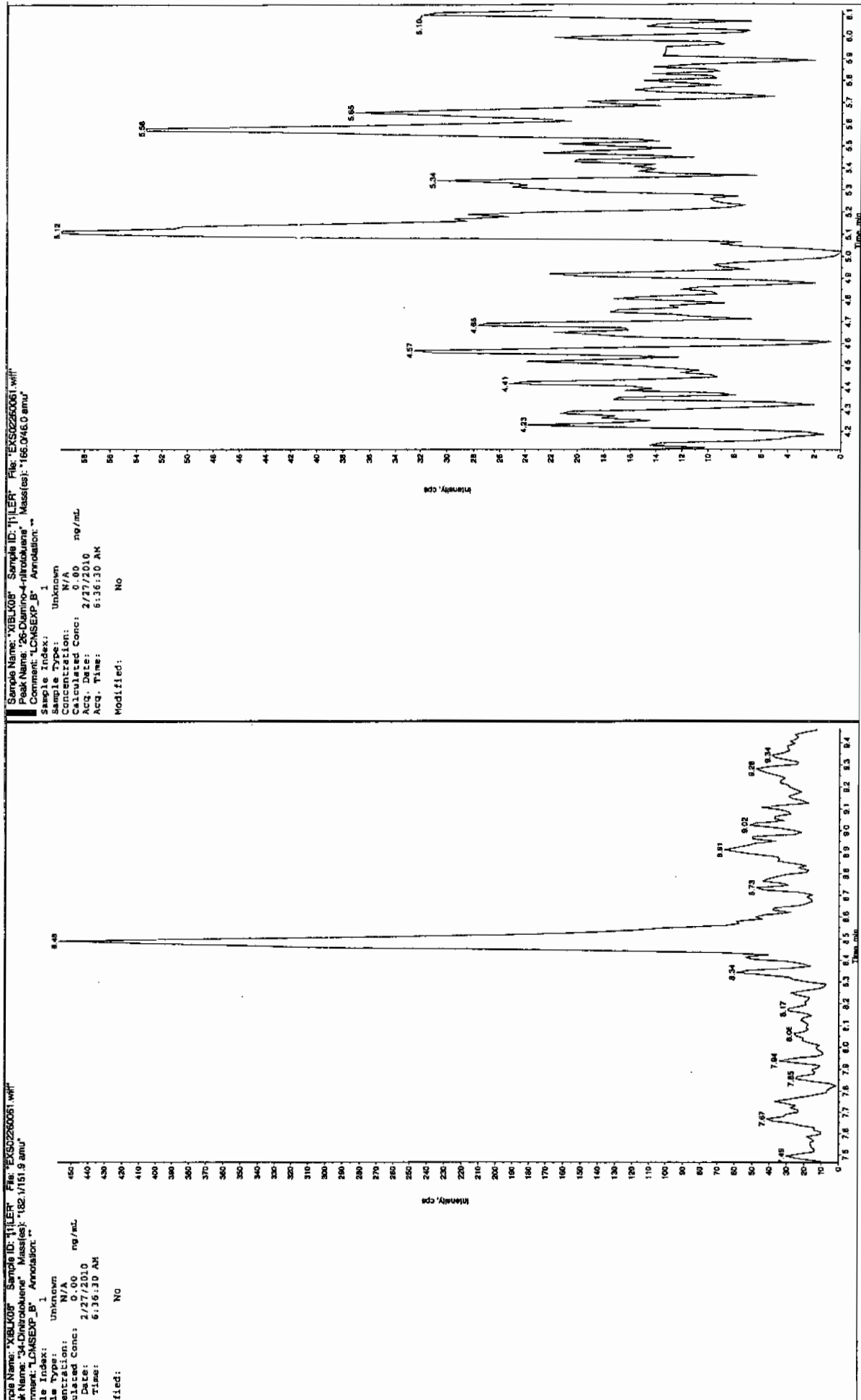
Acq. Time: 6:36:30 AM

Modified: No

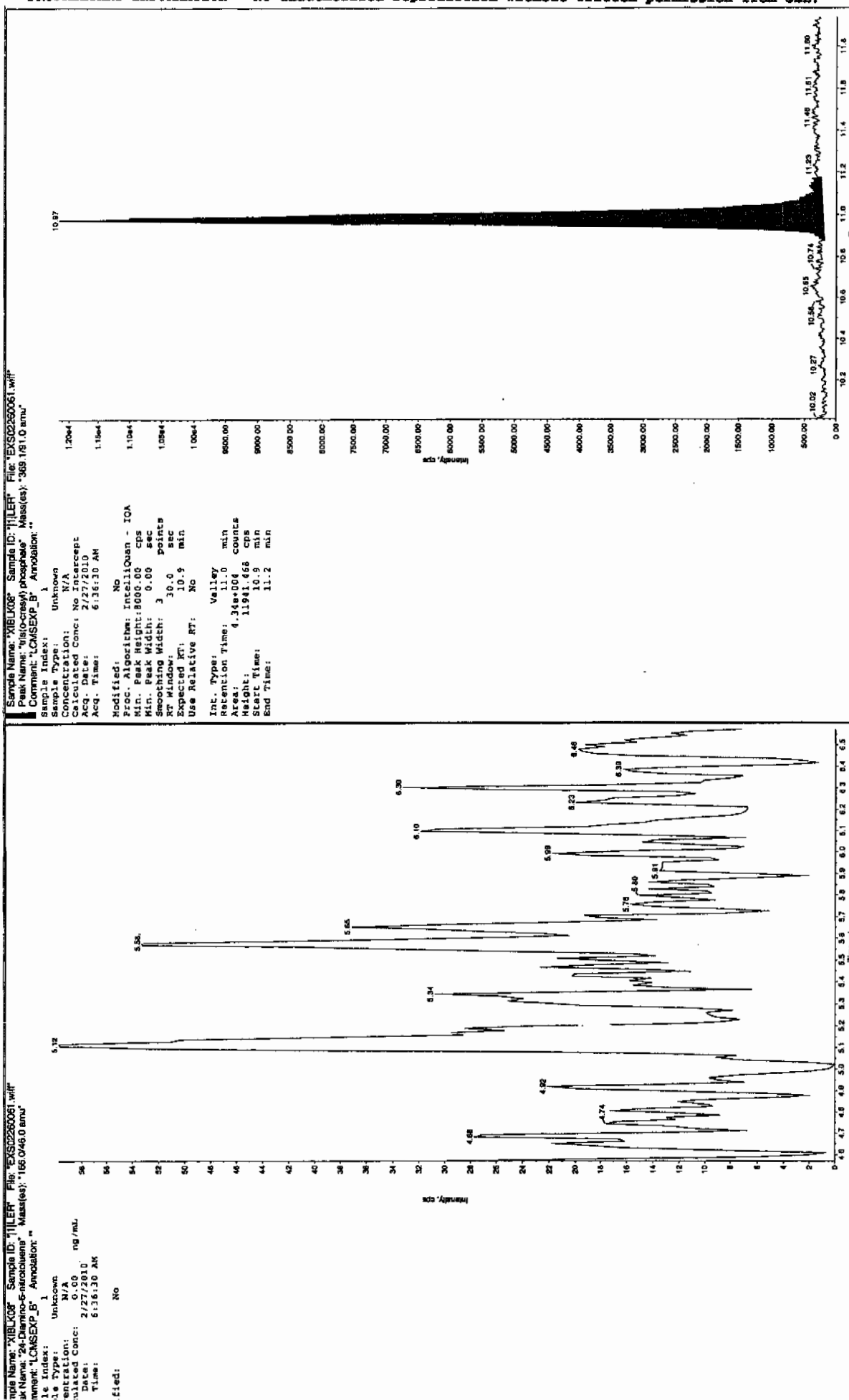


Jan 31/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 27-FEB-10 10:00

GEL Data File: EXS02260074.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



Run 3/11/10

Sample Name: "XBLX09" Sample ID: "111ER" File: "EXS02260074.will"

Peak Name: "TATB" Mass(es): 257.2204.9 amu

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

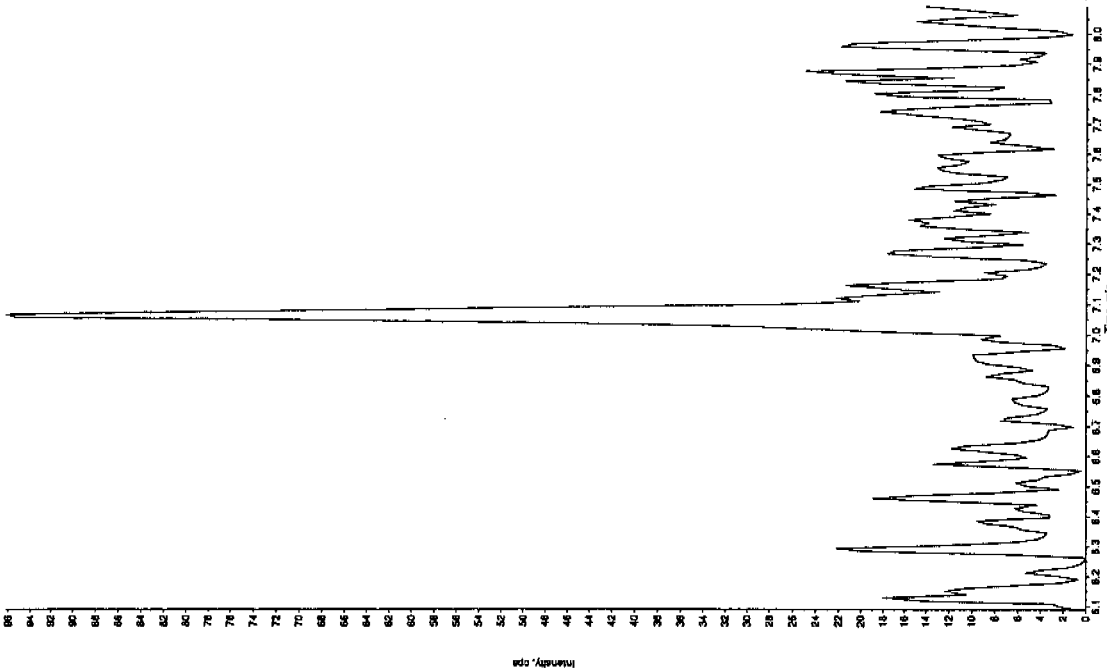
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/27/2010

Acq. Time: 10:00:38 AM

Modified: NO



Sample Name: "XBLX09" Sample ID: "111ER" File: "EXS02260074.will"

Peak Name: "35-Dinitrobenzyl" Mass(es): 182.046.0 amu

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

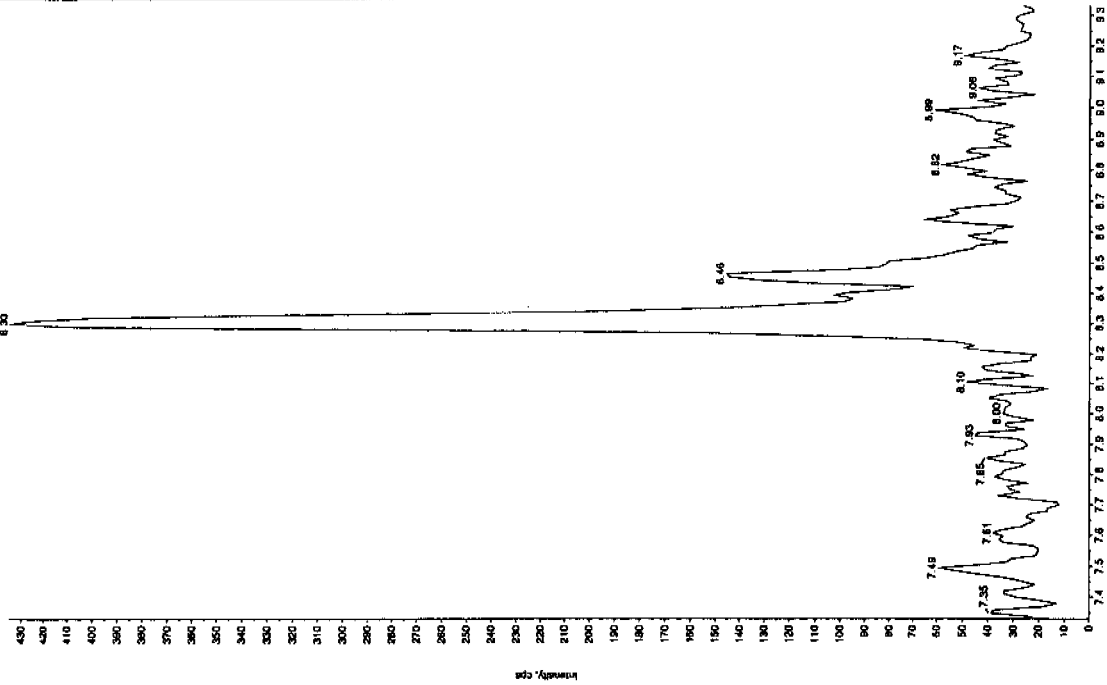
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/27/2010

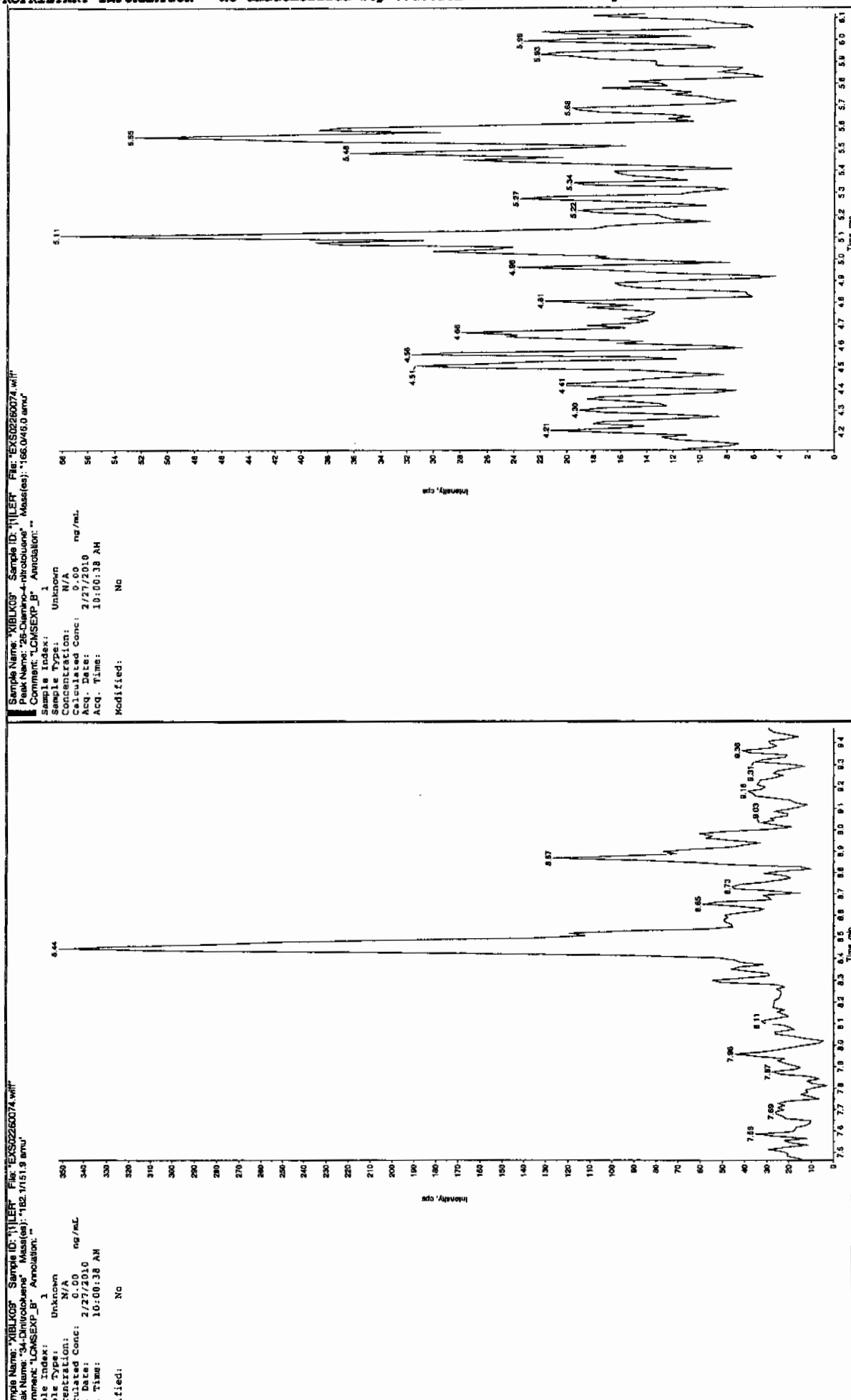
Acq. Time: 10:00:38 AM

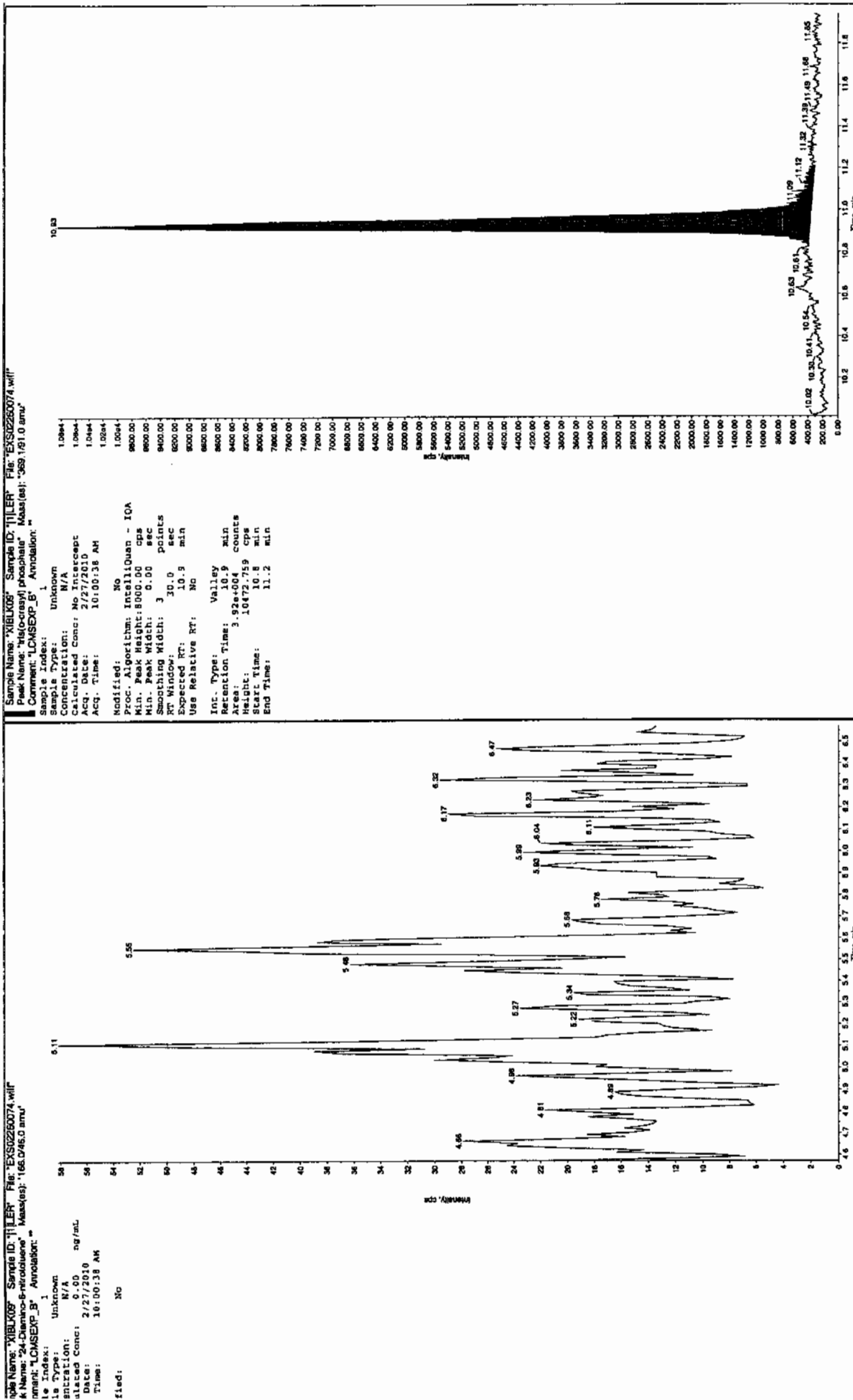
Modified: NO



Run 03/01/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 27-FEB-10 13:24

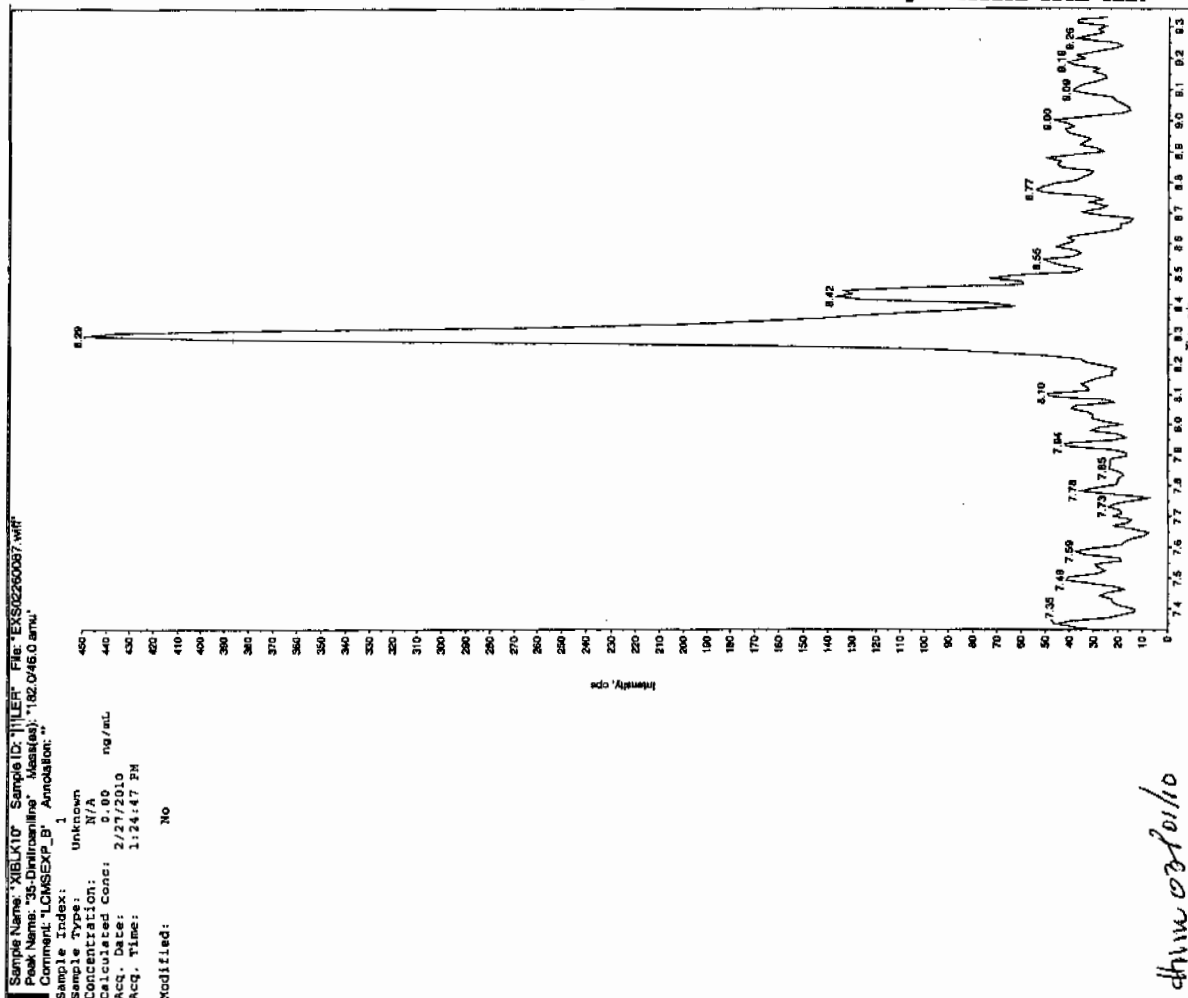
GEL Data File: EXS02260087.wiff

Instrument ID: LCMSMS

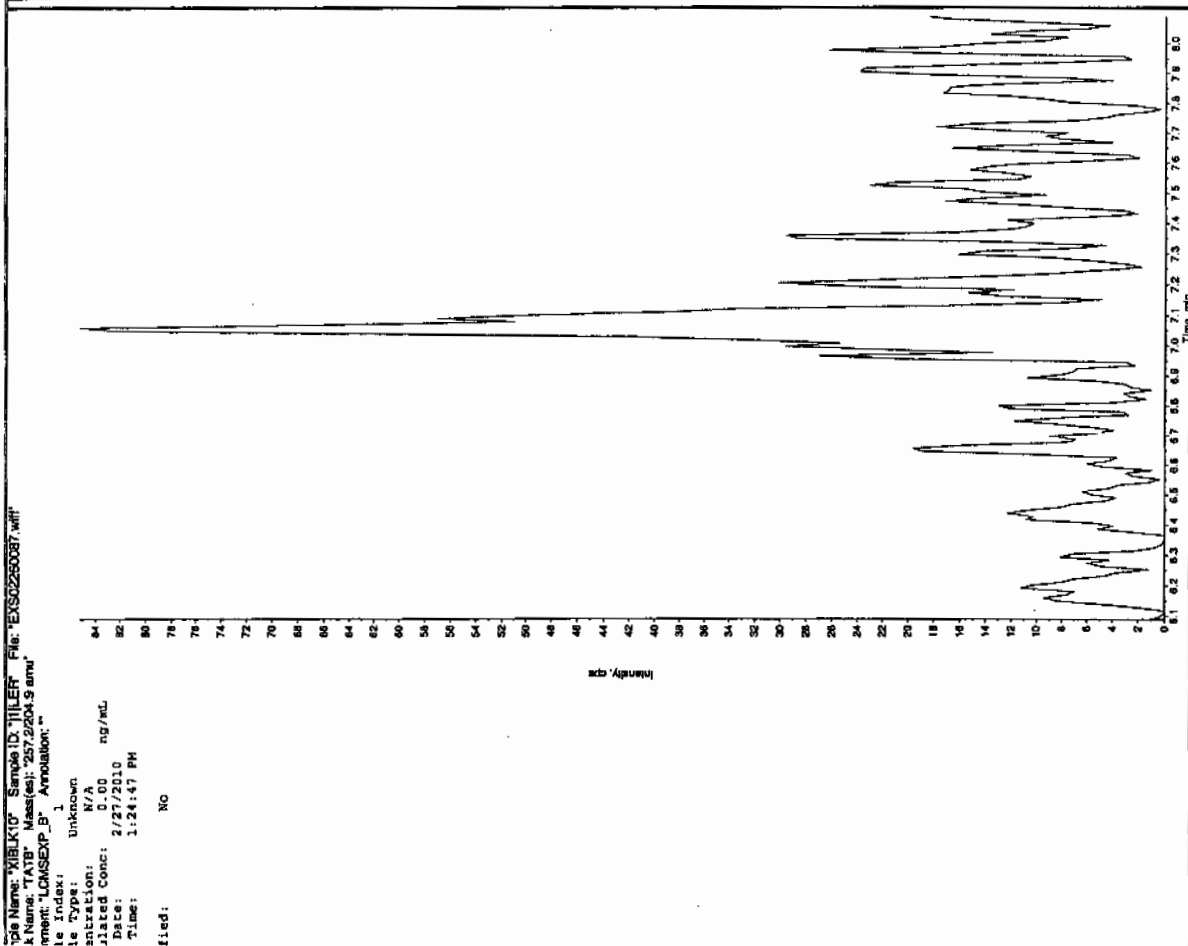
Column: Phenomenex Ultracarb 5u ODS(20)

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

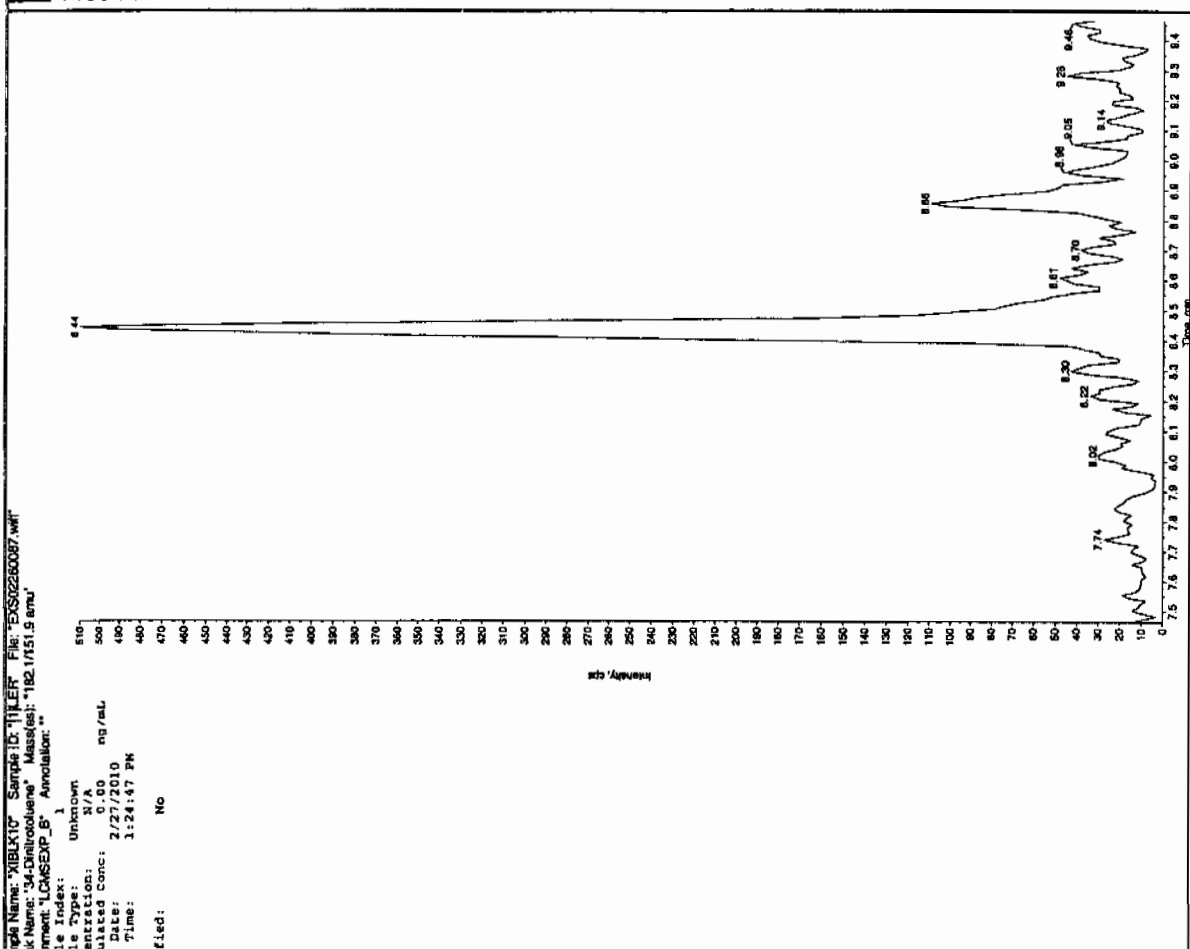
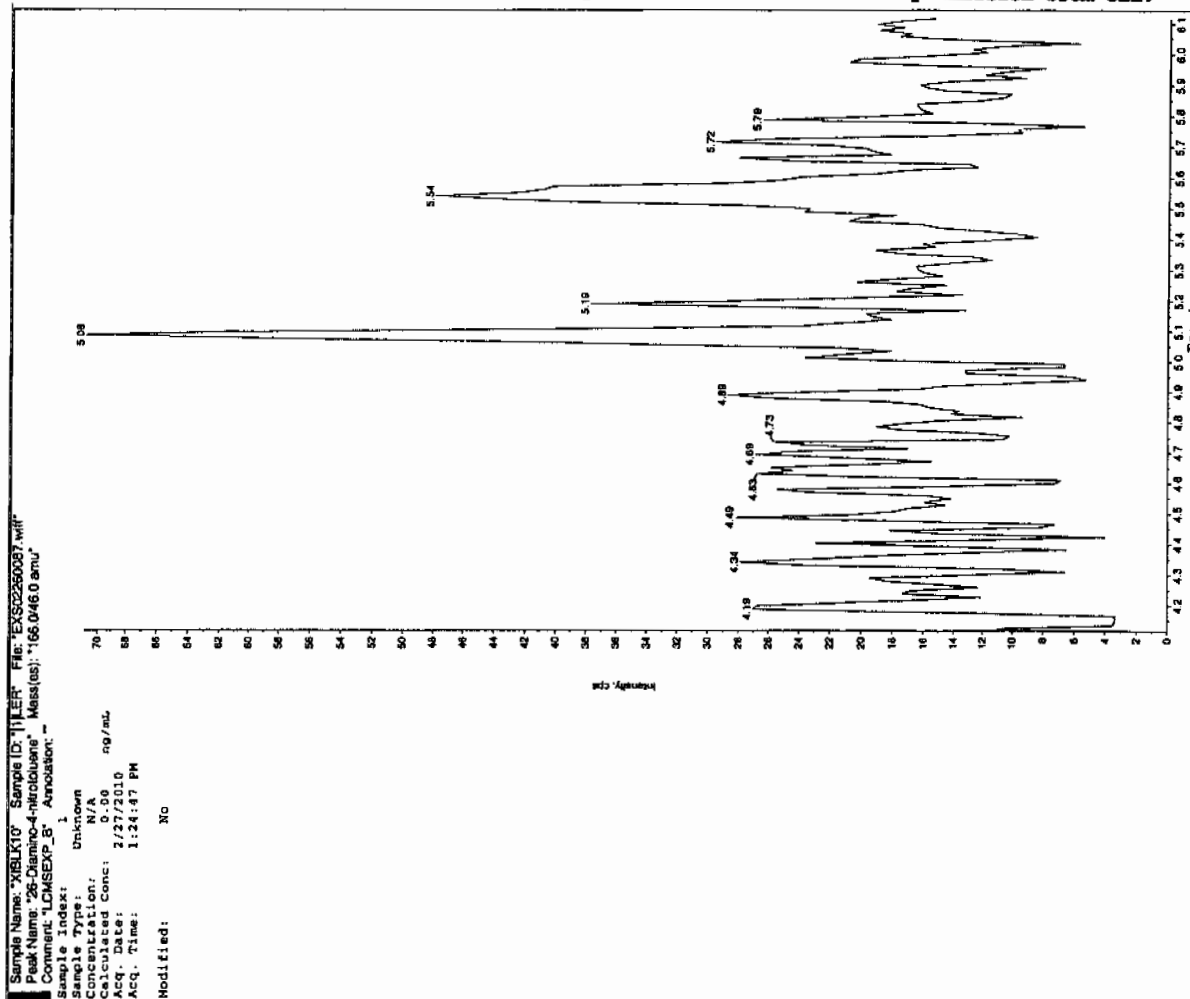
Gen 3/1/10



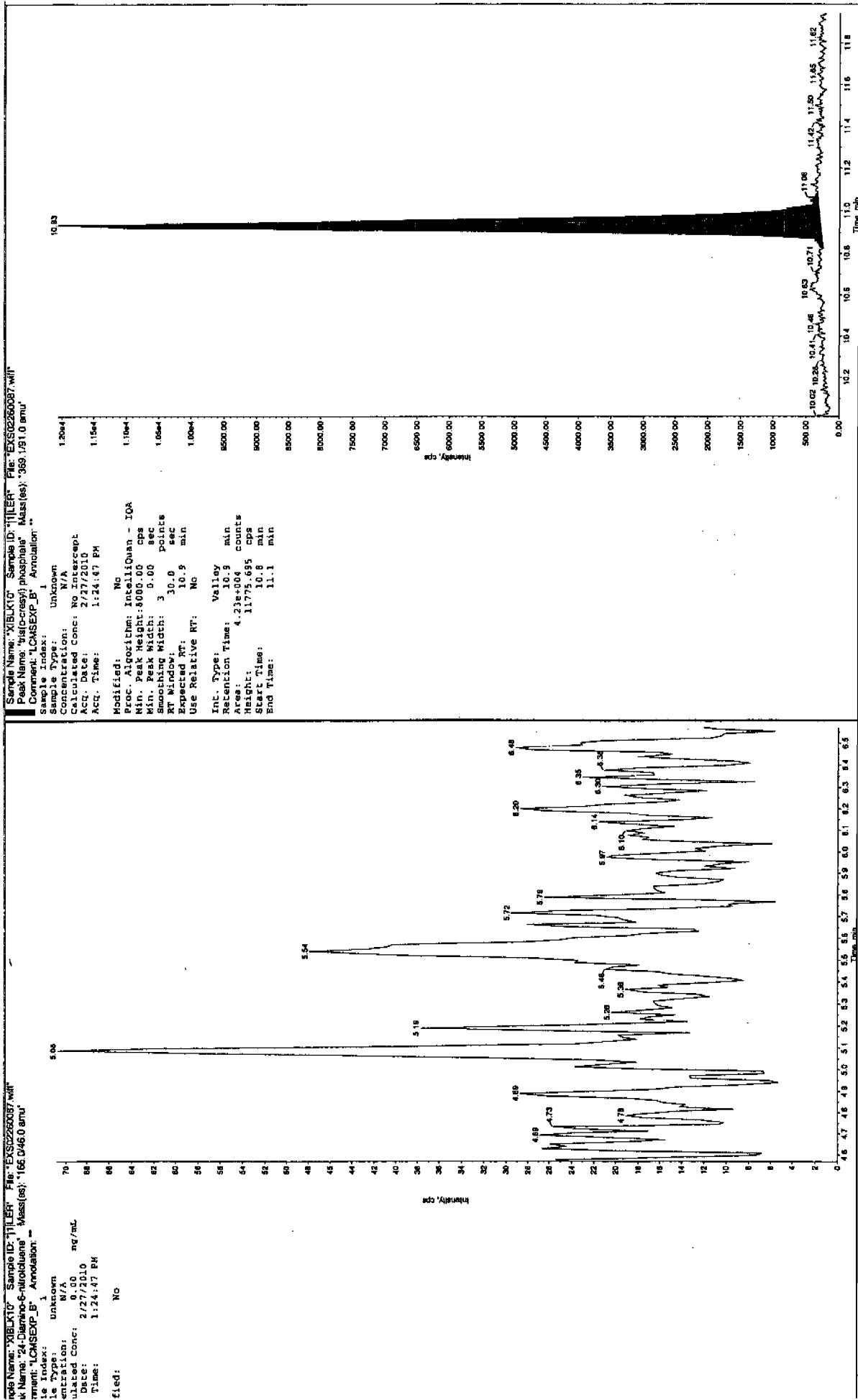
dm 02/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 27-FEB-10 14:43

GEL Data File: EXS02260092.wiff

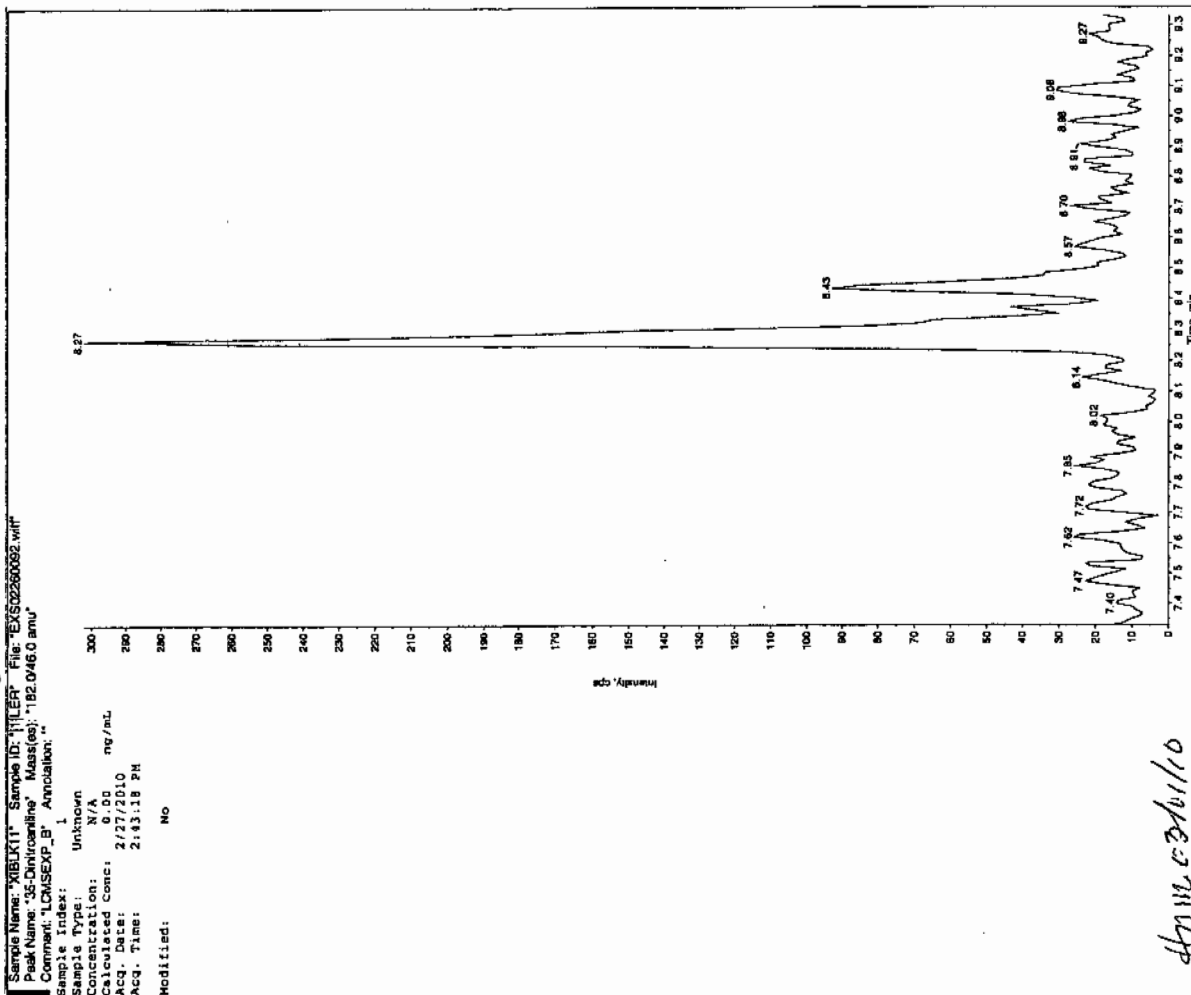
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

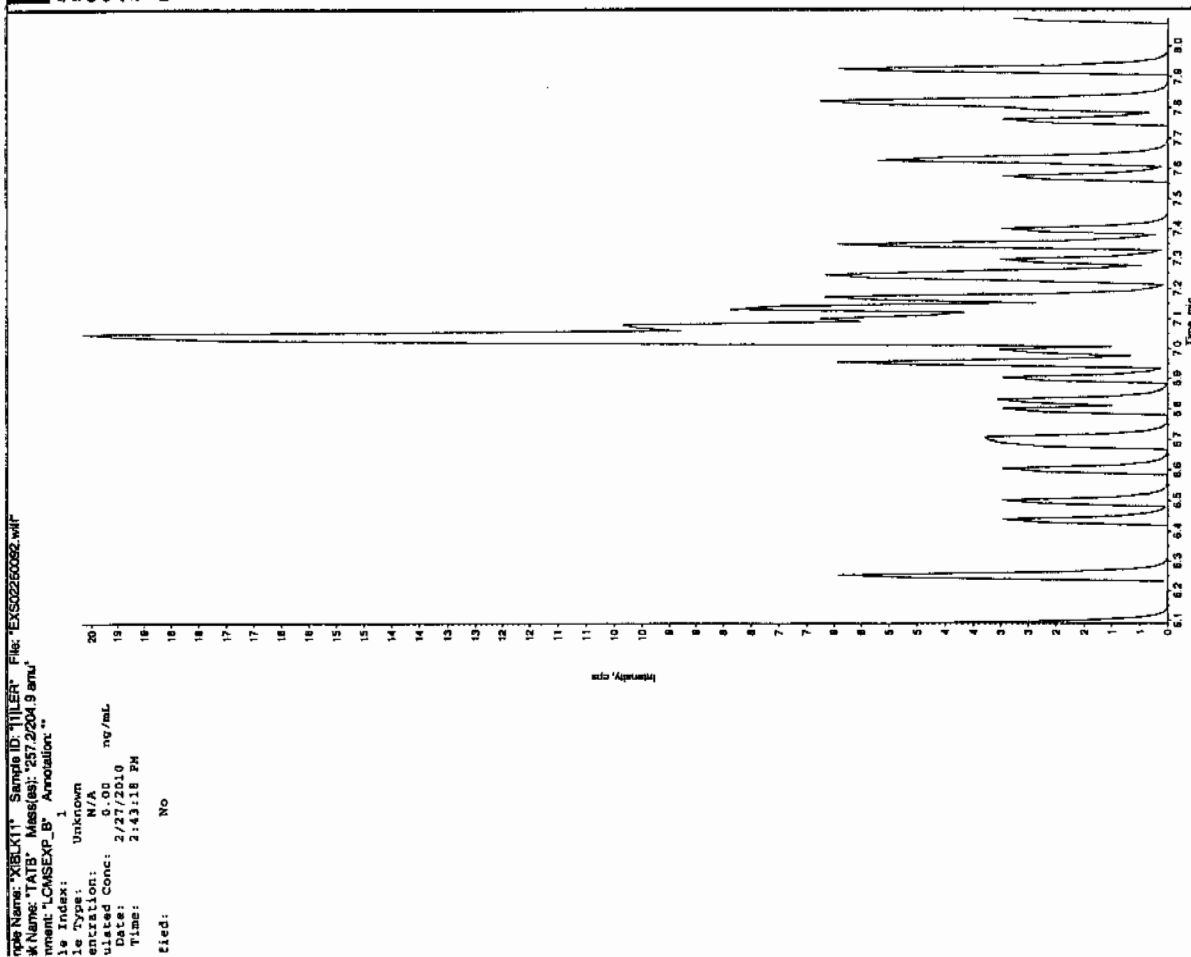
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



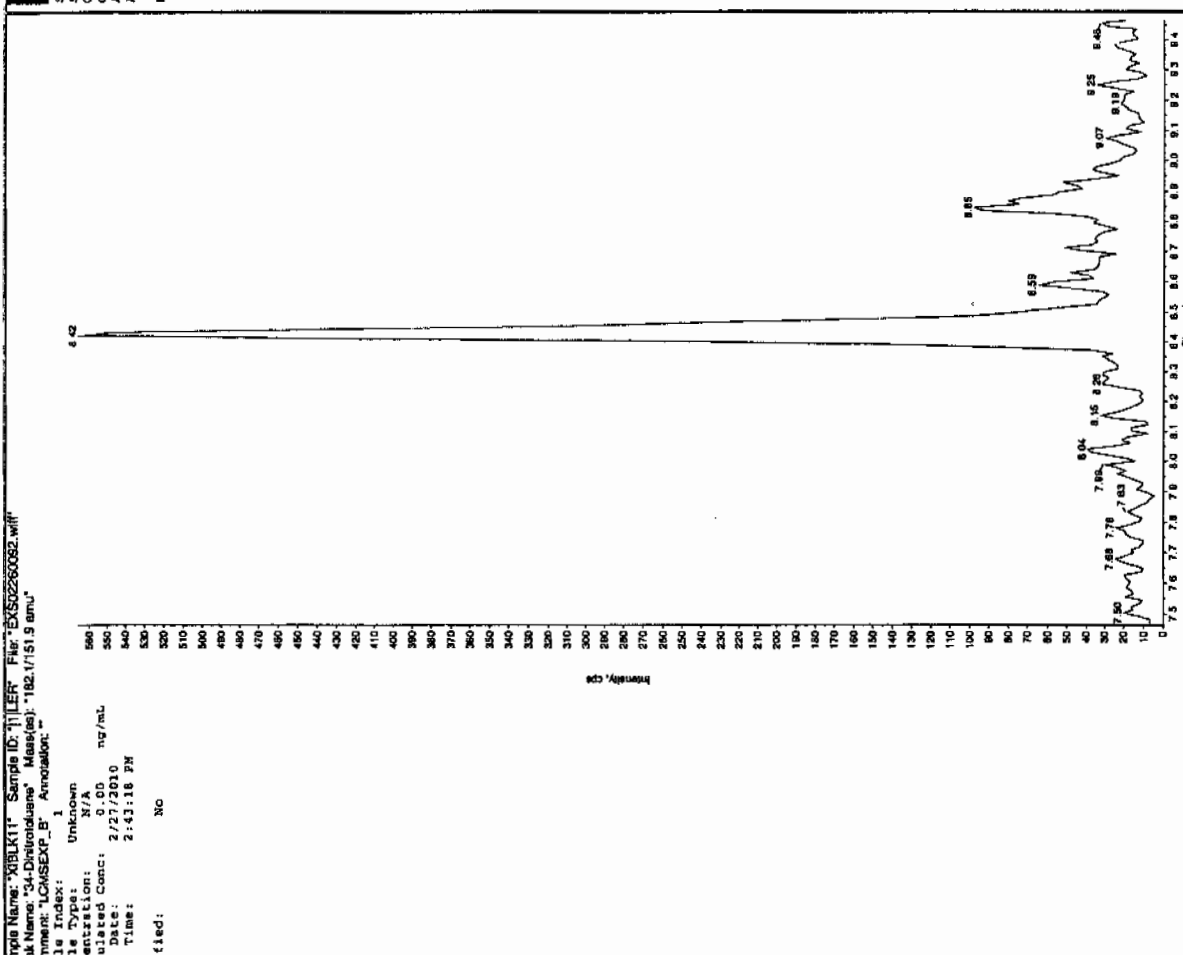
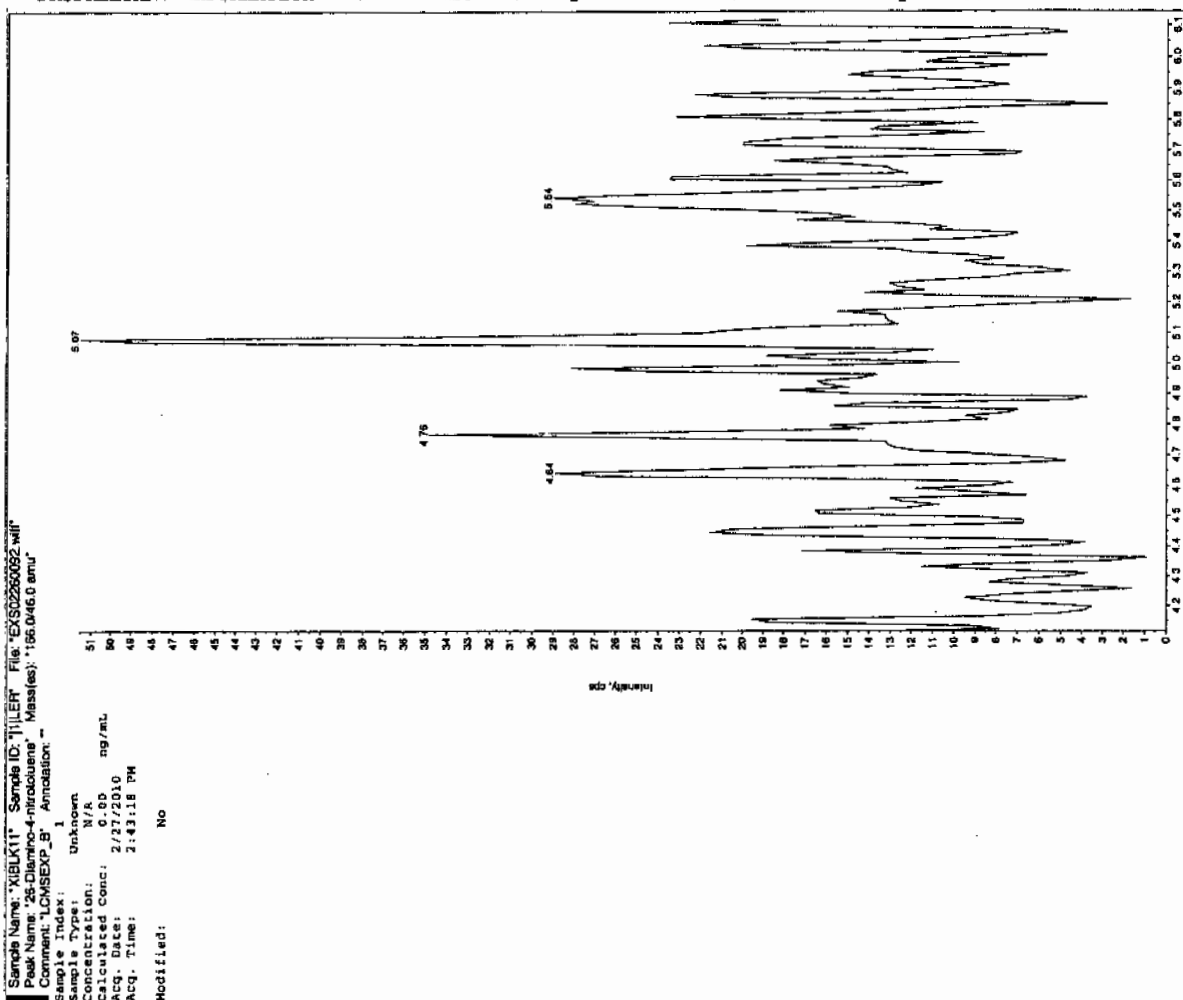
See 31110



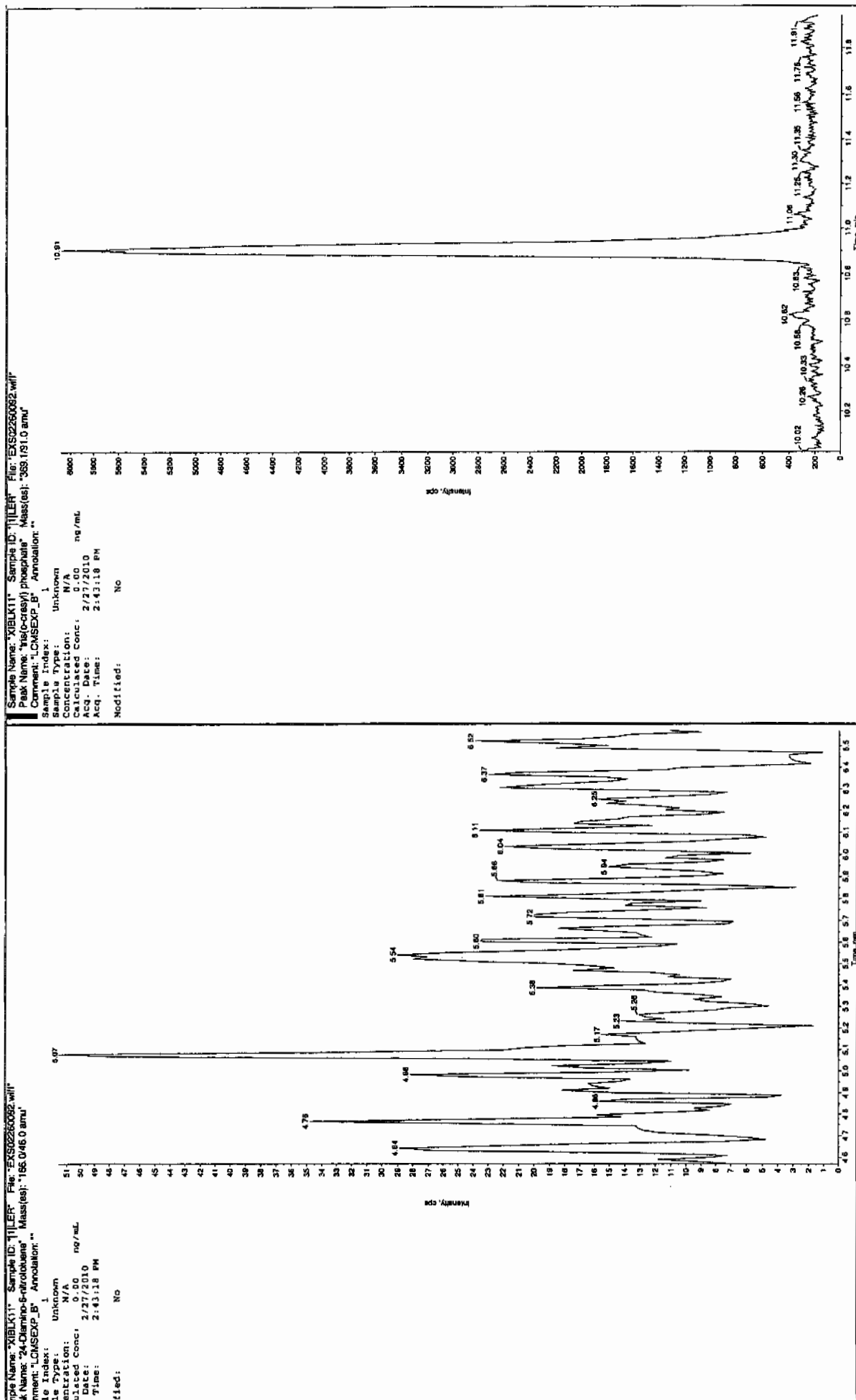
471110 031110



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 27-FEB-10 16:48

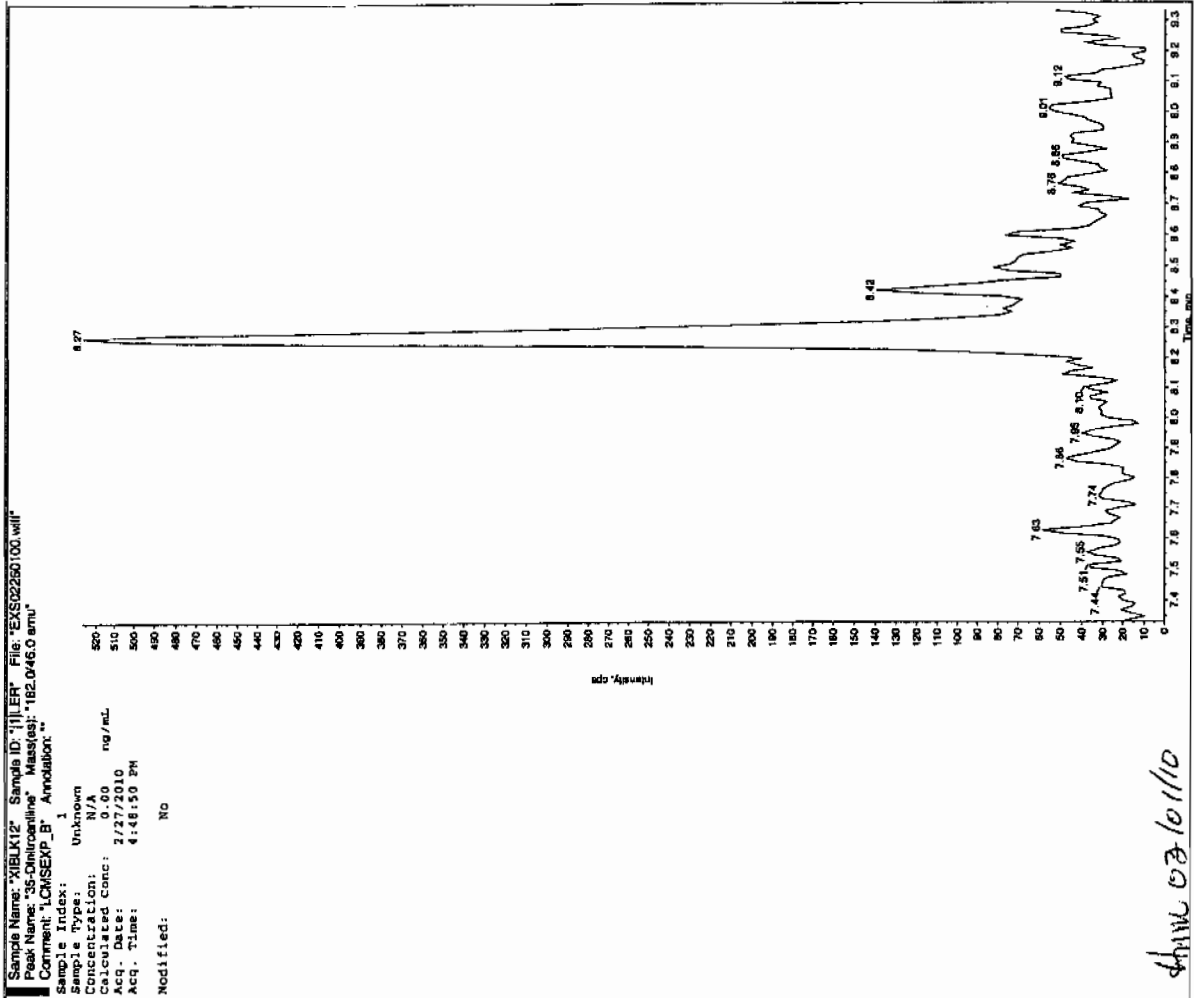
GEL Data File: EXS02260100.wiff

Instrument ID: LCMSMS

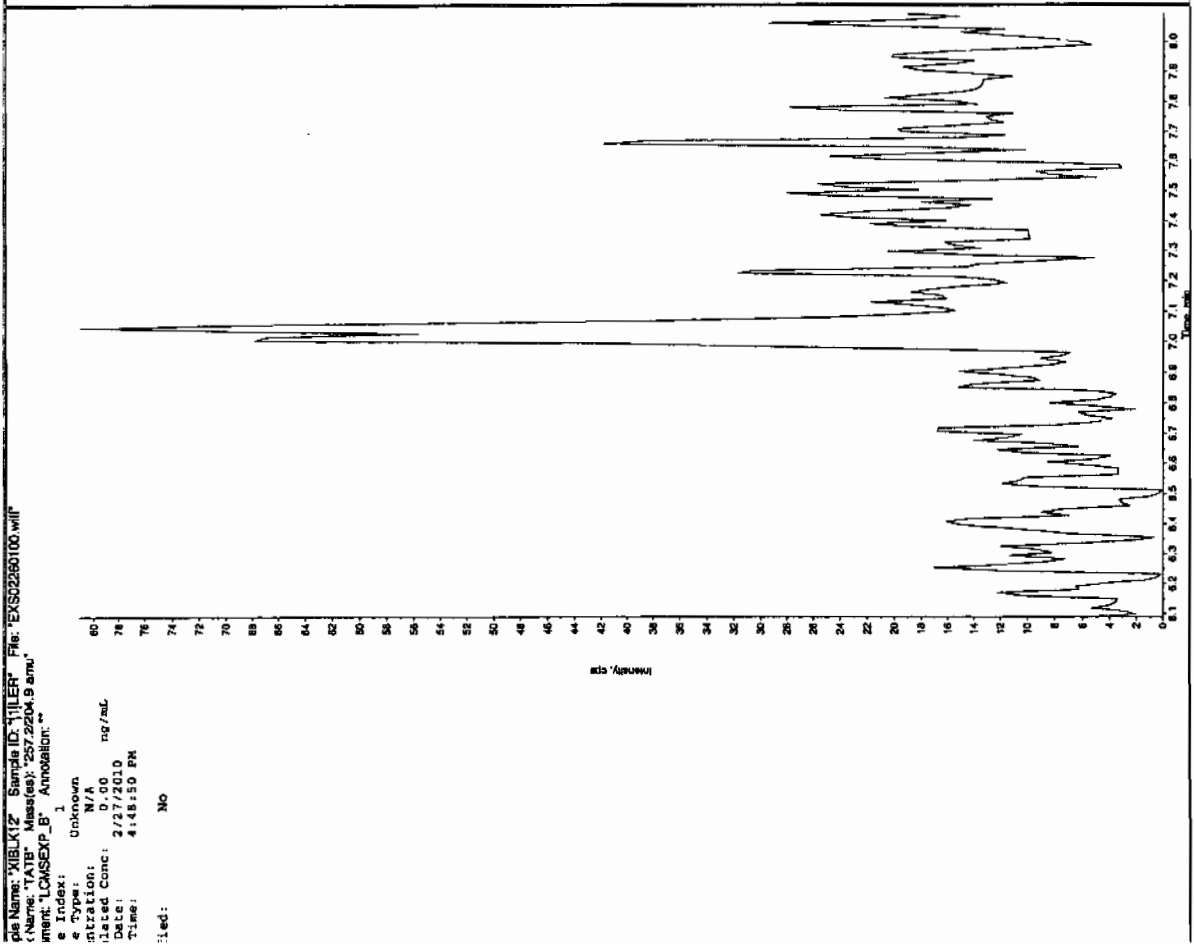
Column: Phenomenex Ultracarb 5u ODS(20)

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

Gen 3/1/10

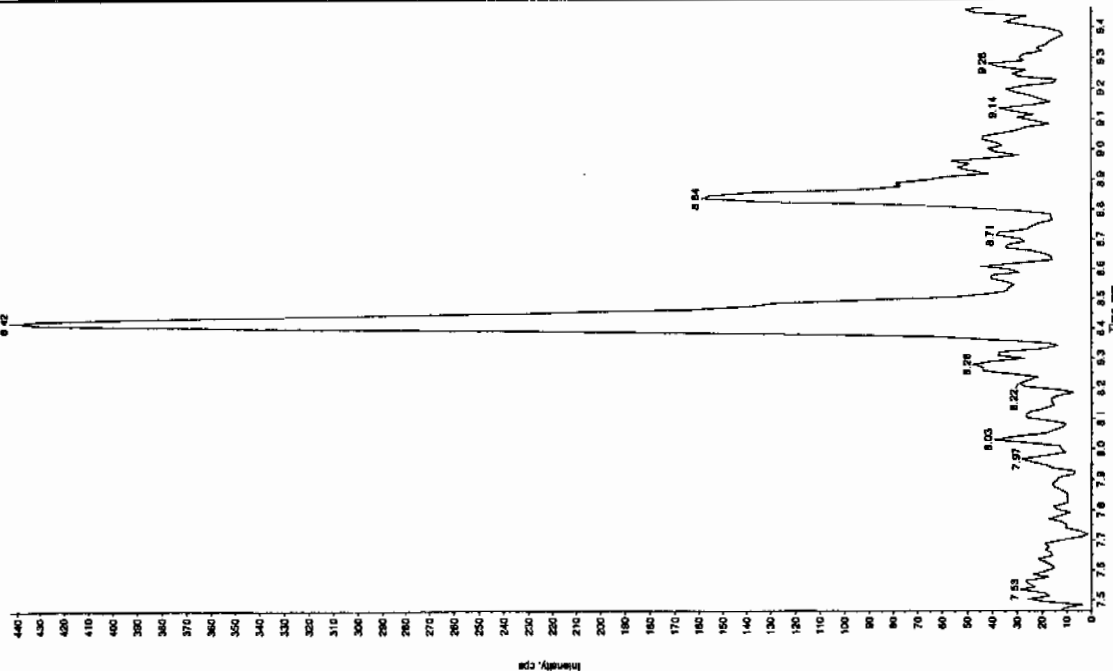


4/11/10 03:10/10

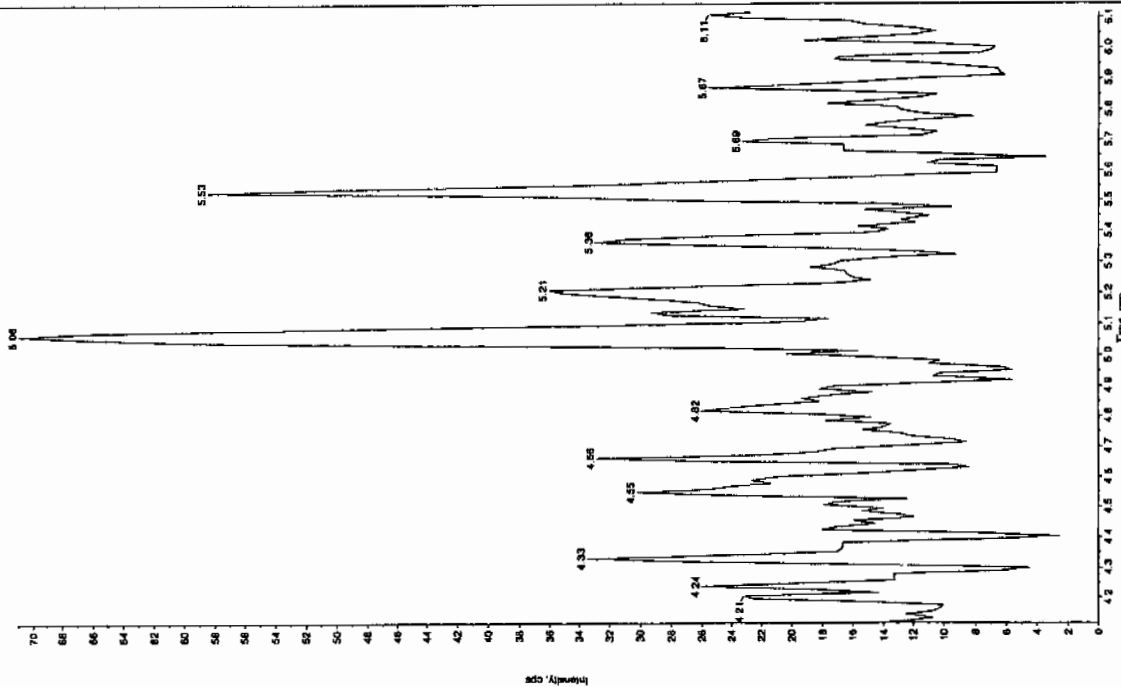


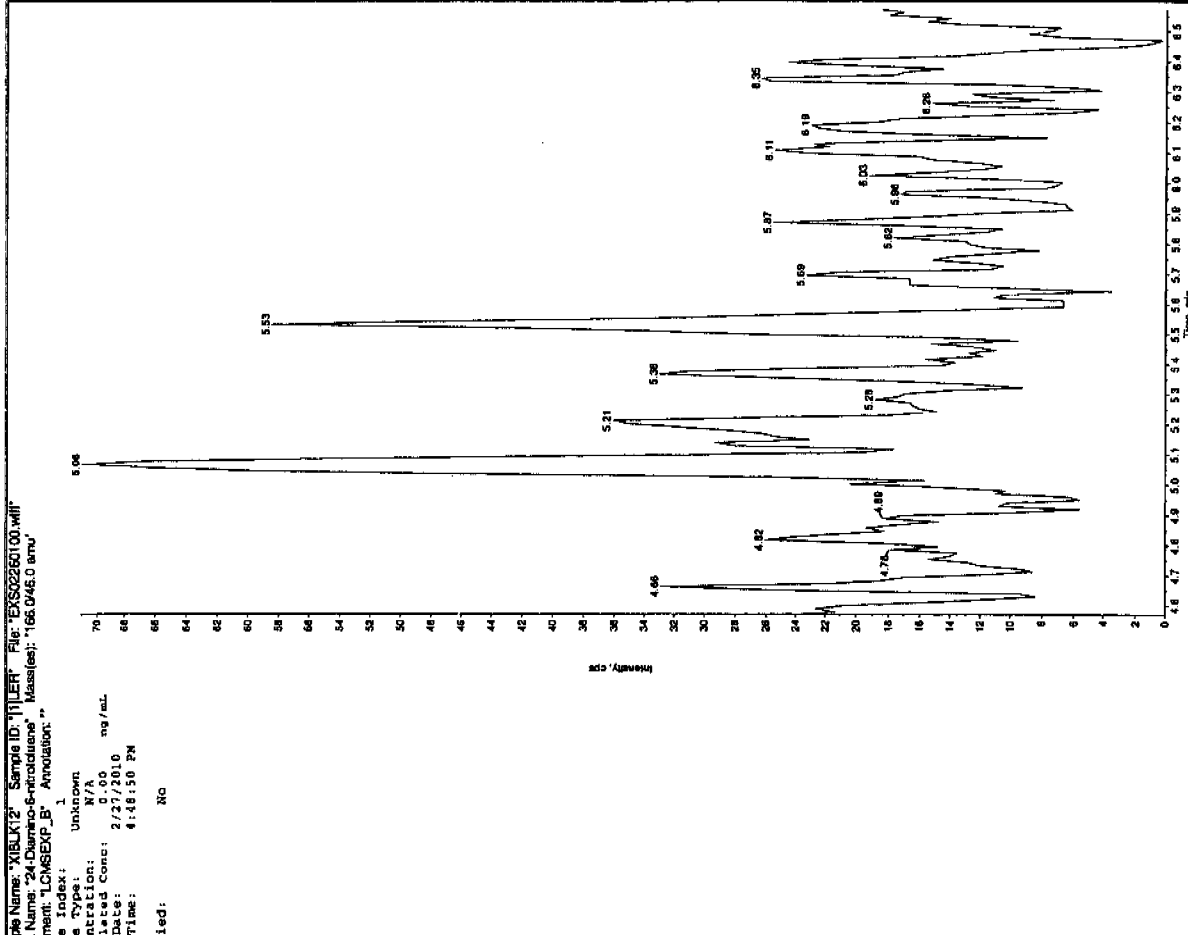
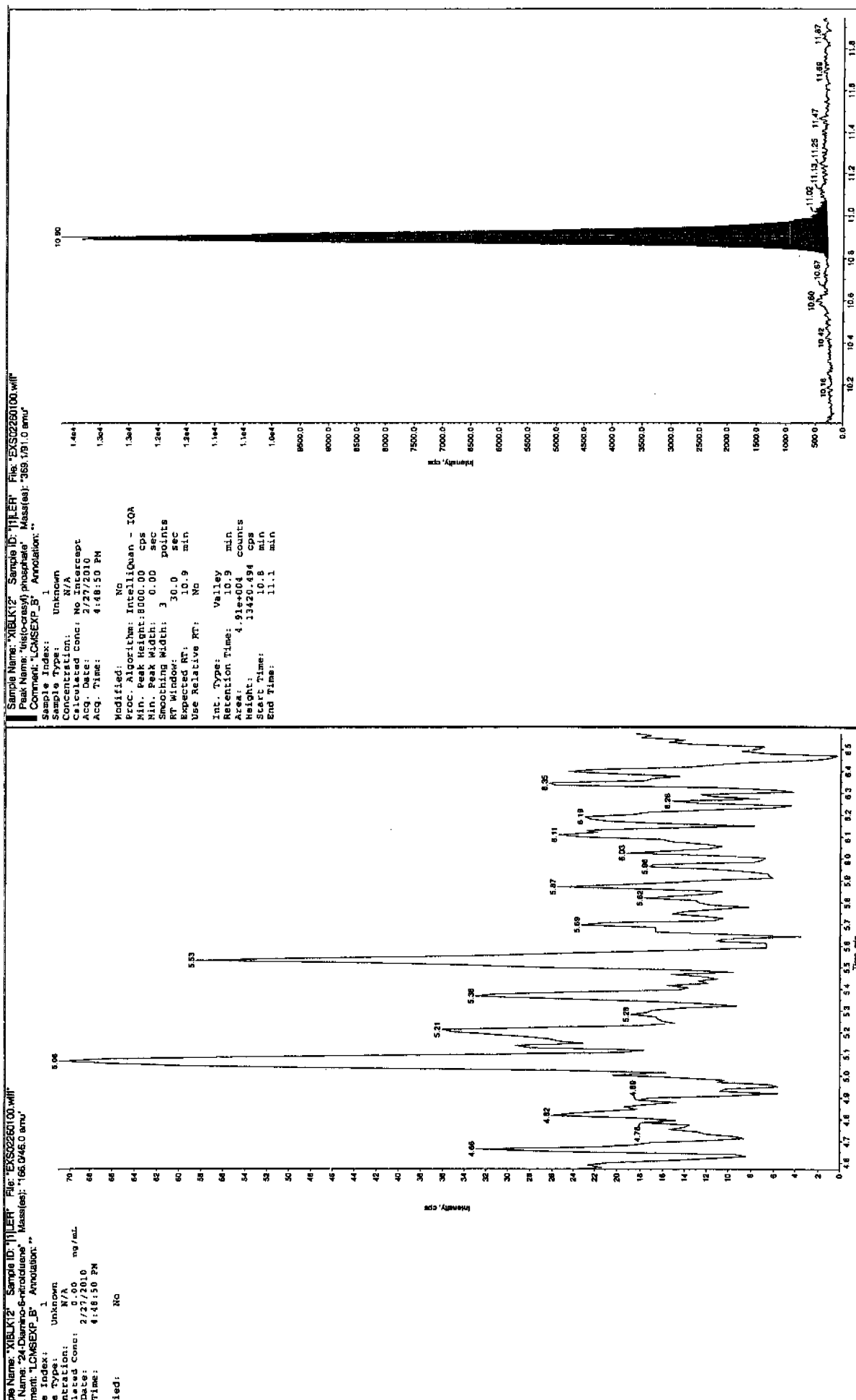
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK12" Sample ID: "11111" File: "EX502260100.wif"  
 Peak Name: "34-Dinitrochlorane" Mass(es): "182.1/181.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Date: 2/27/2010  
 Time: 4:48:50 PM  
 Modified: No



Sample Name: "XIBLK12" Sample ID: "11111" File: "EX502260100.wif"  
 Peak Name: "25-Dinitrochlorane" Mass(es): "166.0/165.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Date: 2/27/2010  
 Time: 4:48:50 PM  
 Modified: No





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 27-FEB-10 20:12

GEL Data File: EXS02260113.wiff

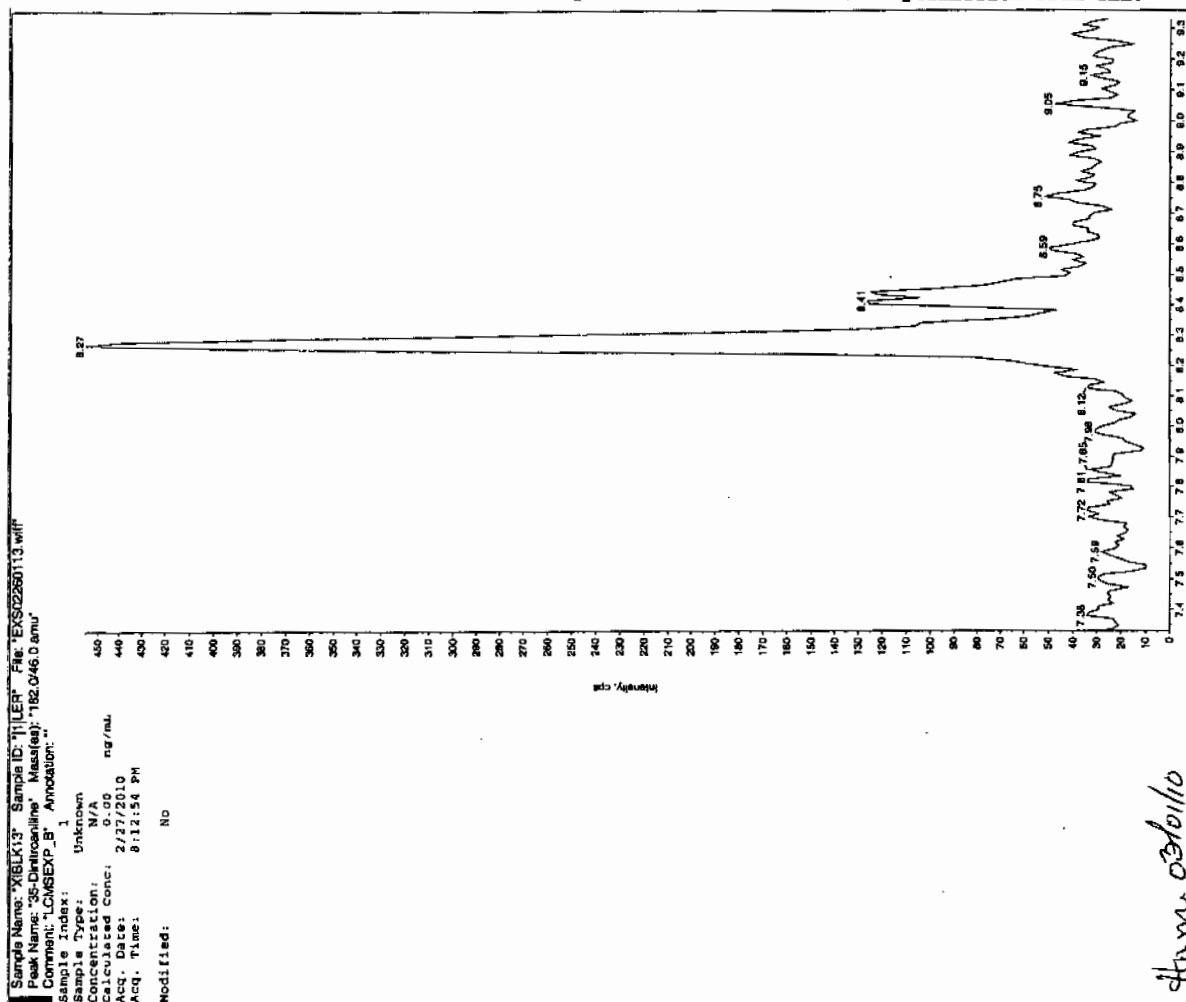
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

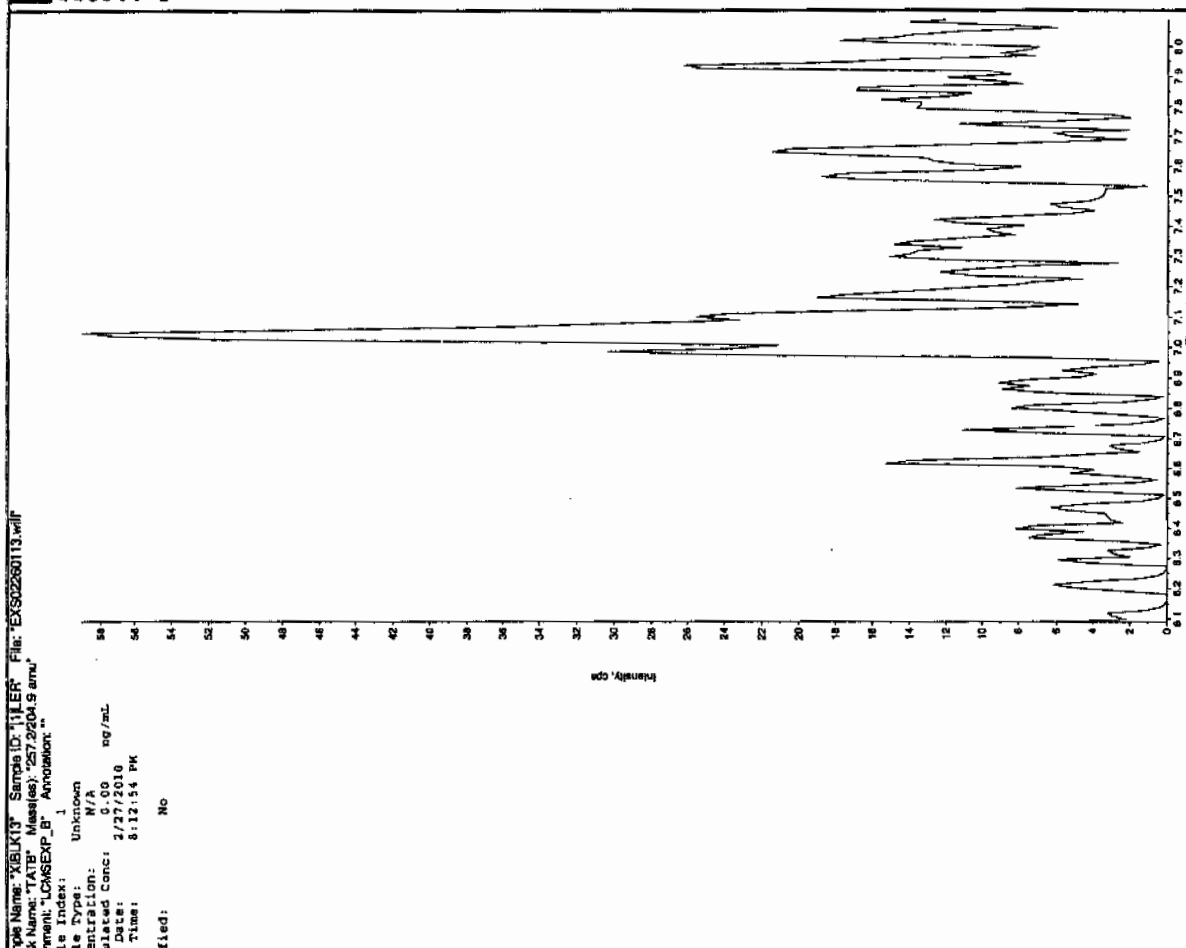
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



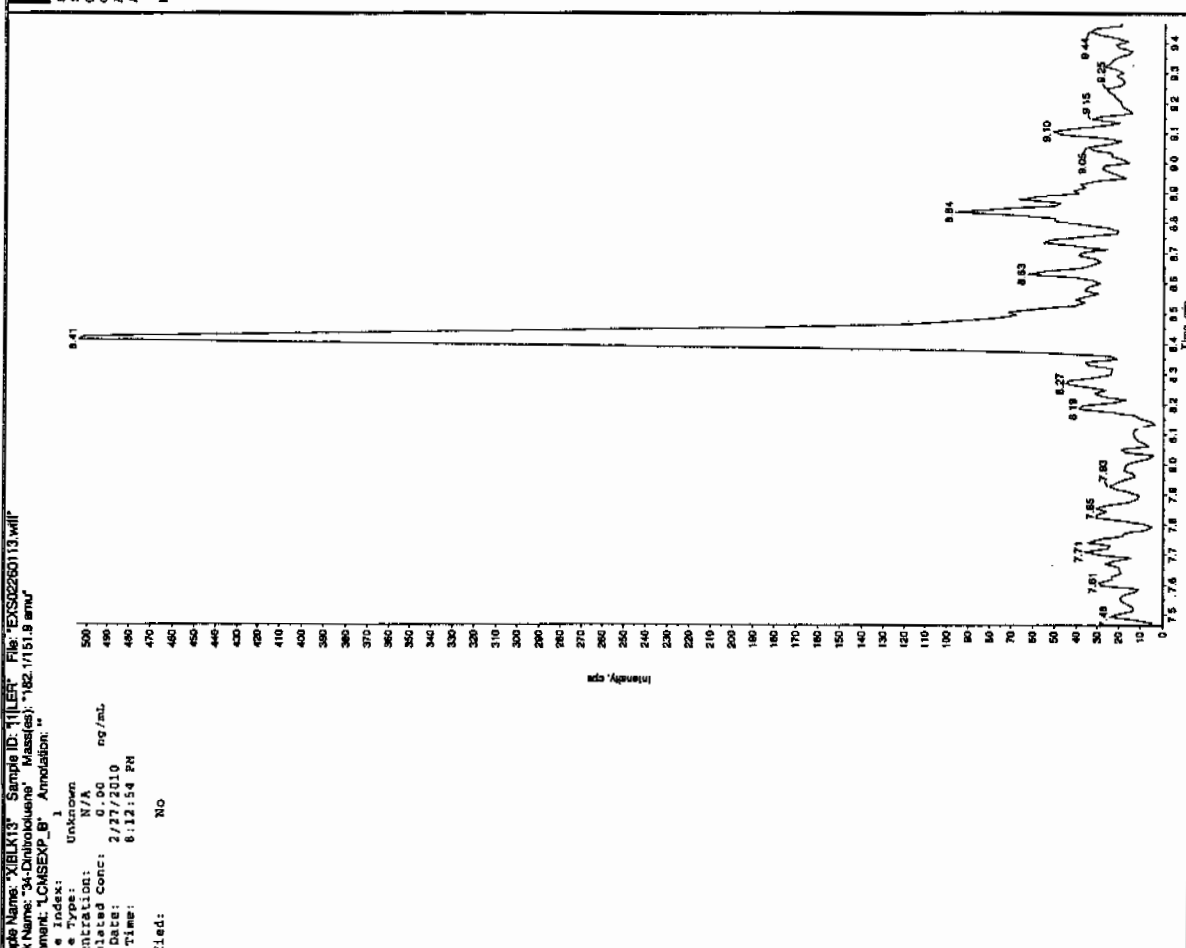
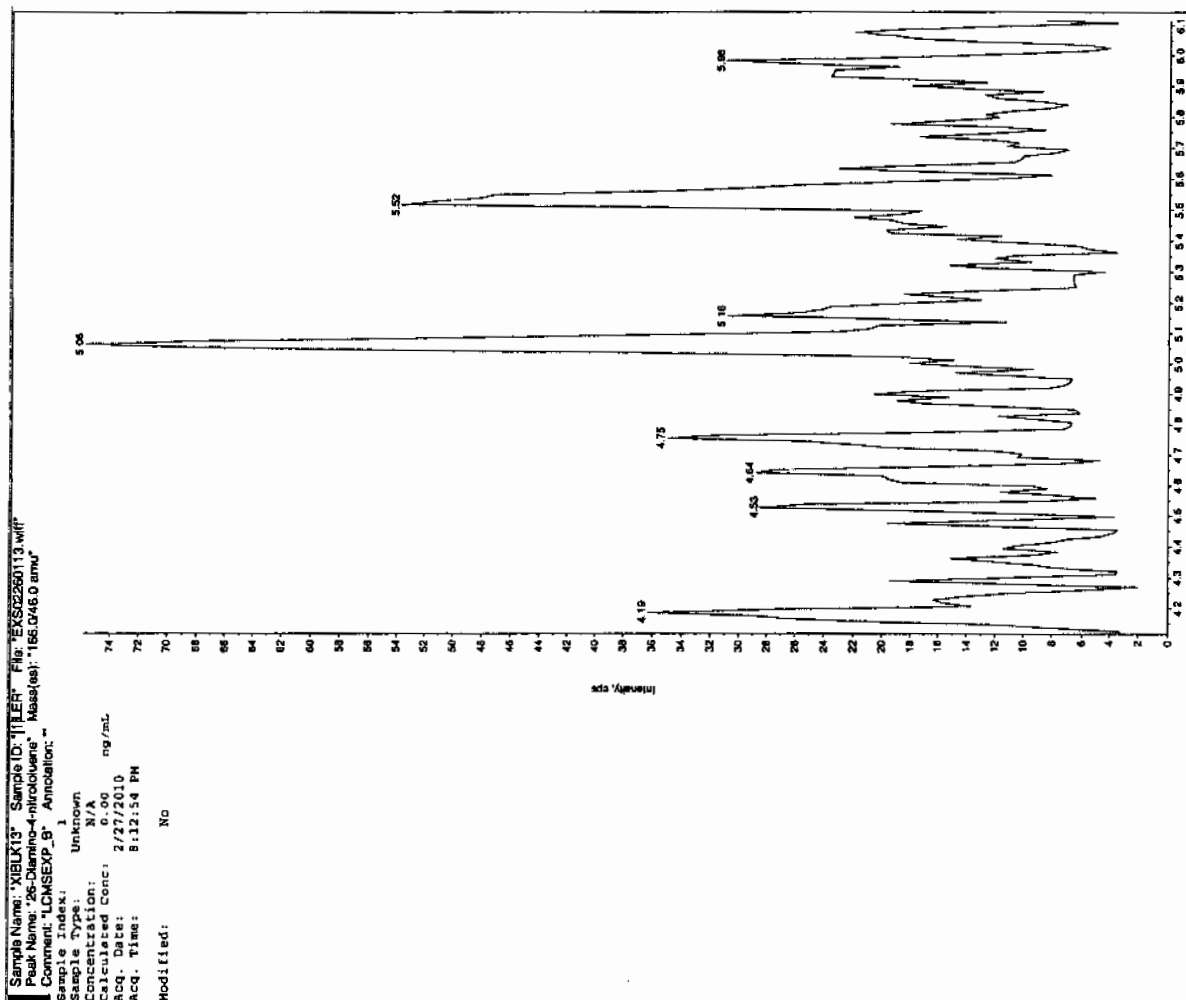
den 3/1/10



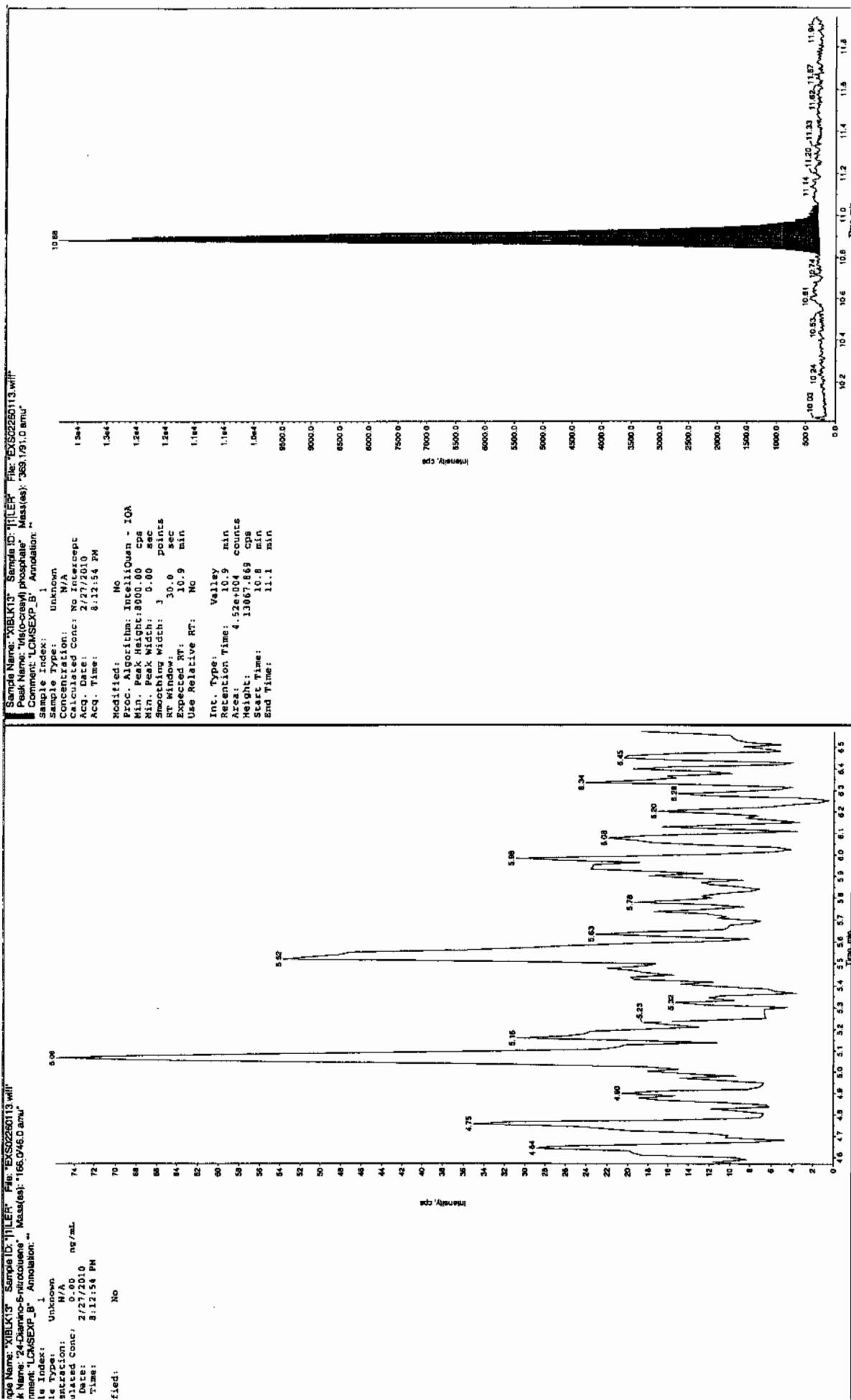
den 03/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



GL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 27-FEB-10 23:05

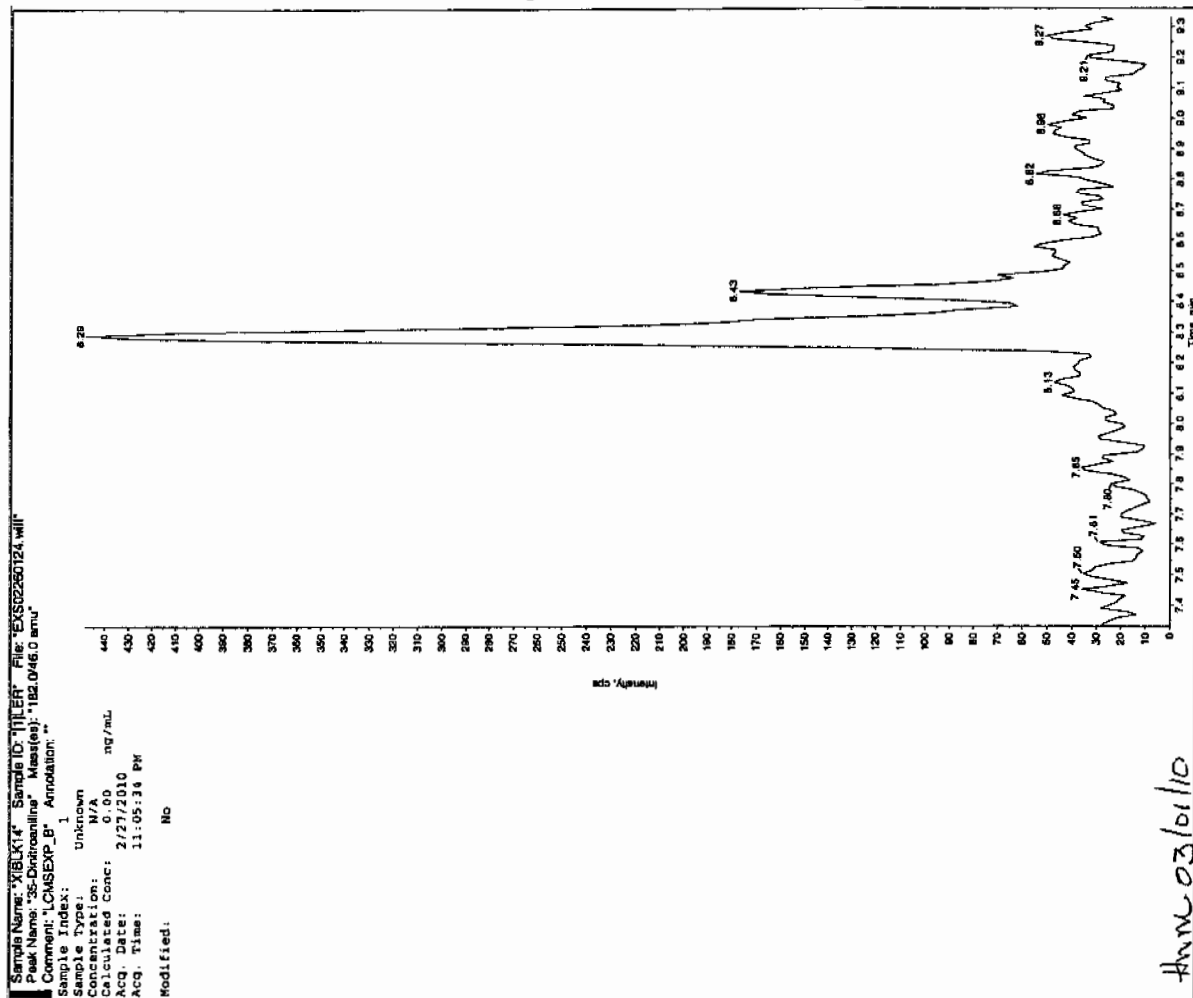
GEL Data File: EXS02260124.wiff

Instrument ID: LCMSMS

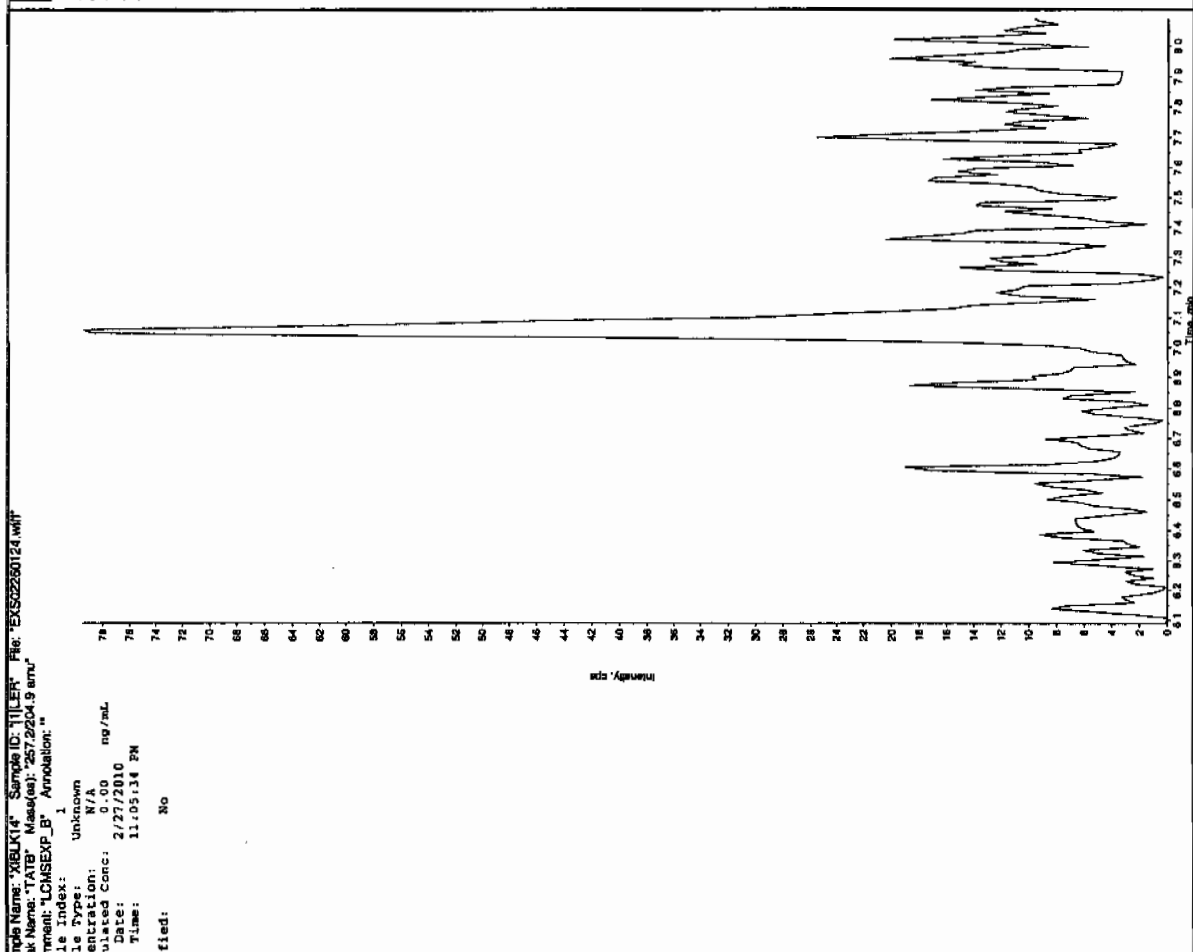
Column: Phenomenex Ultracarb 5u ODS(20)

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

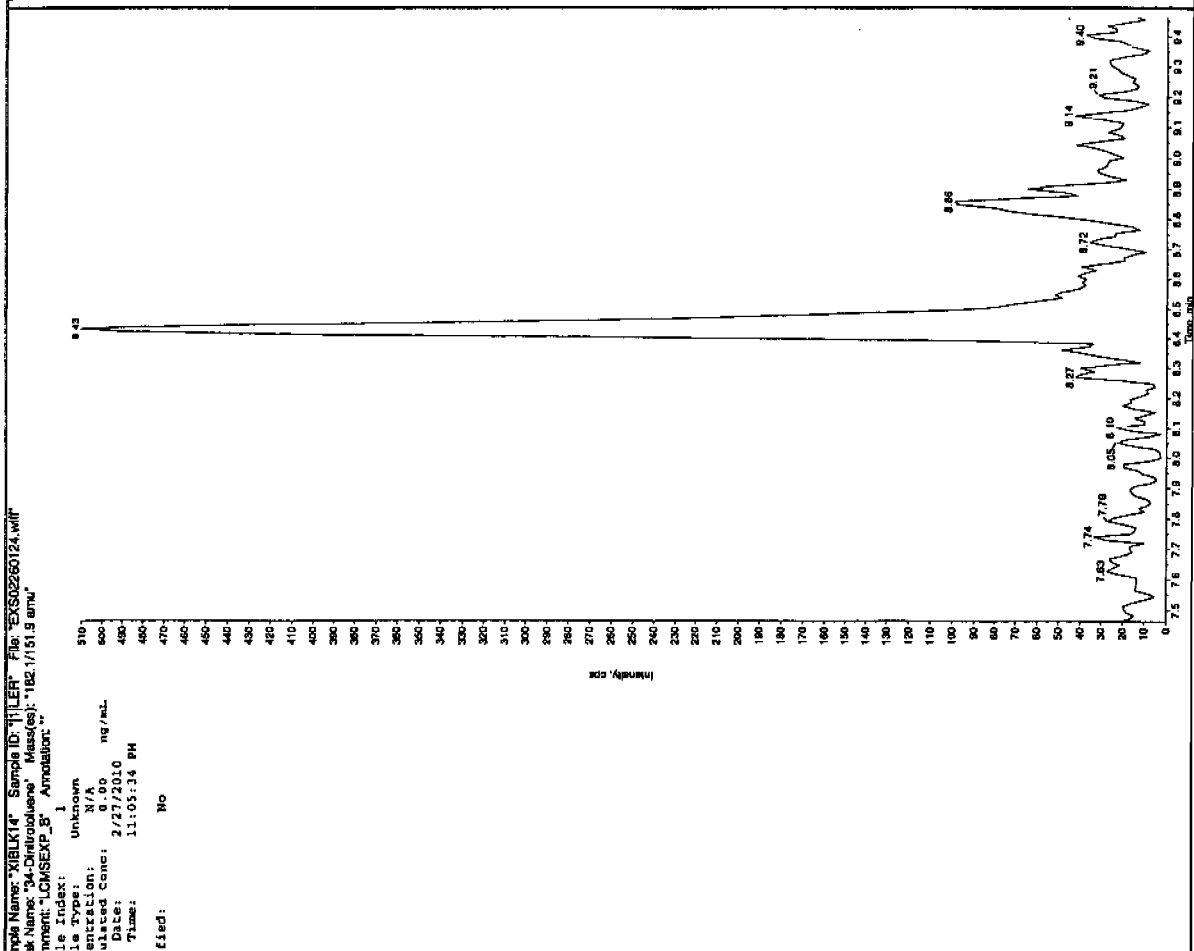
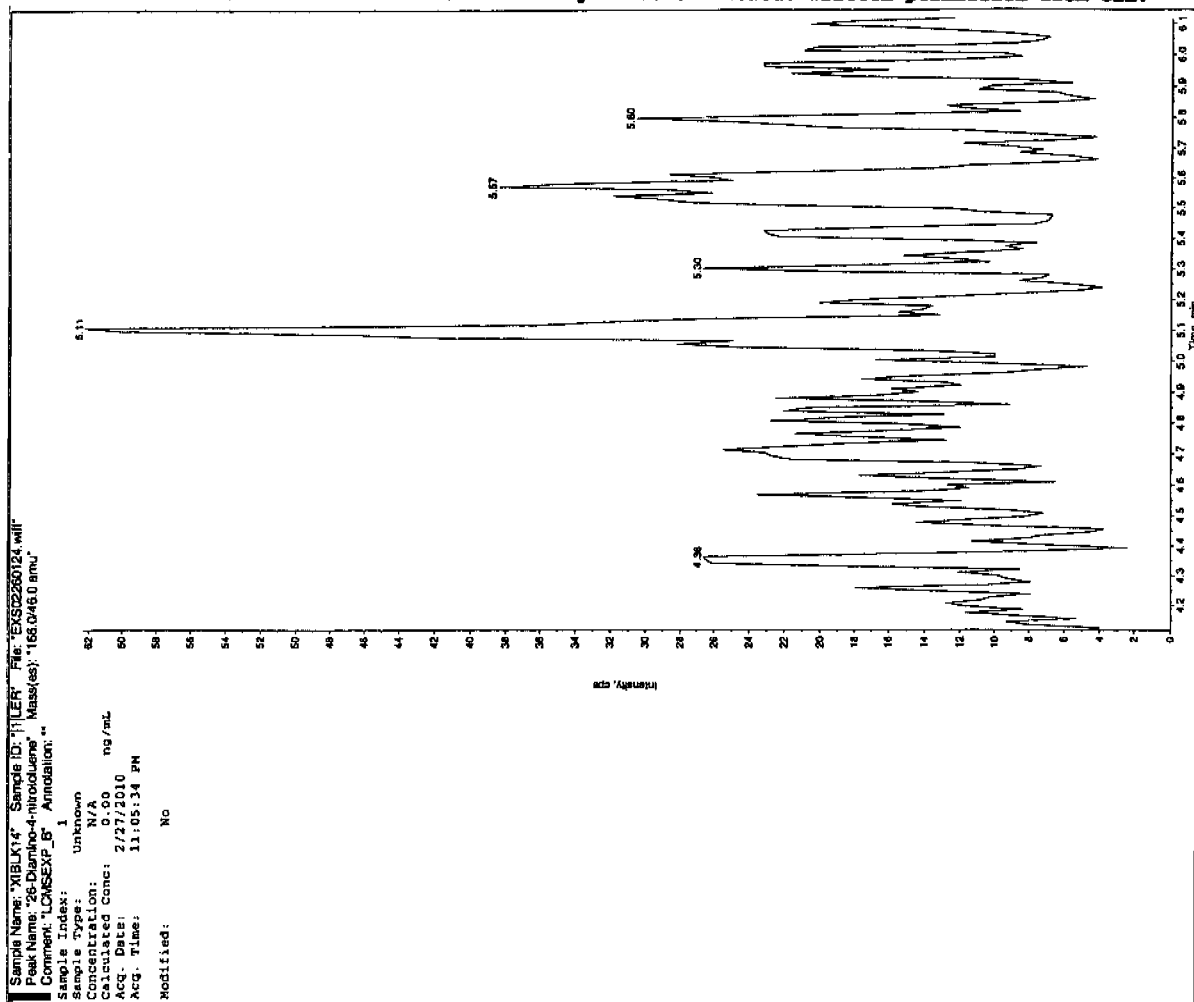
Jan 31/10



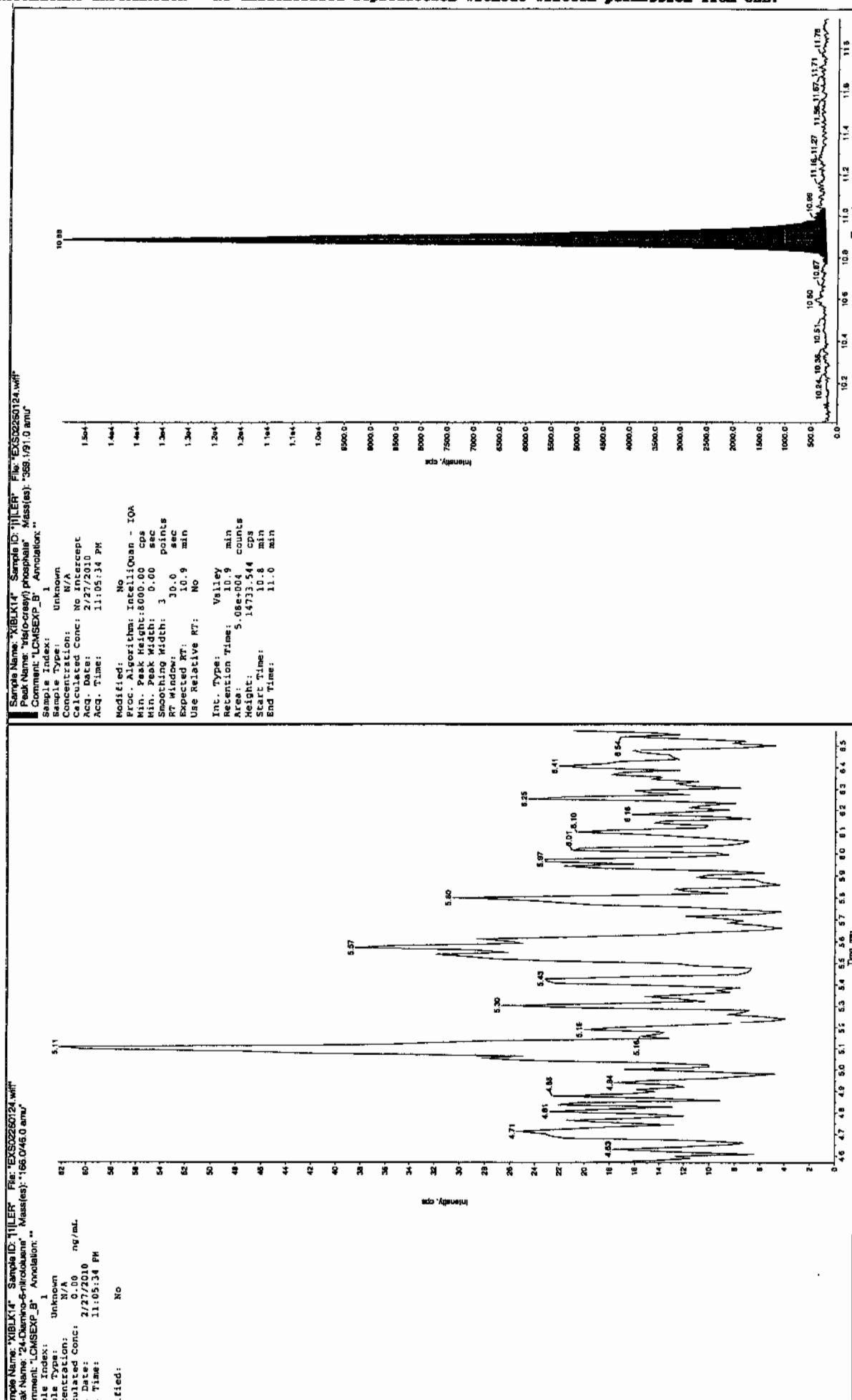
Jan 03/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 28-FEB-10 02:29

GEL Data File: EXS02260137.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

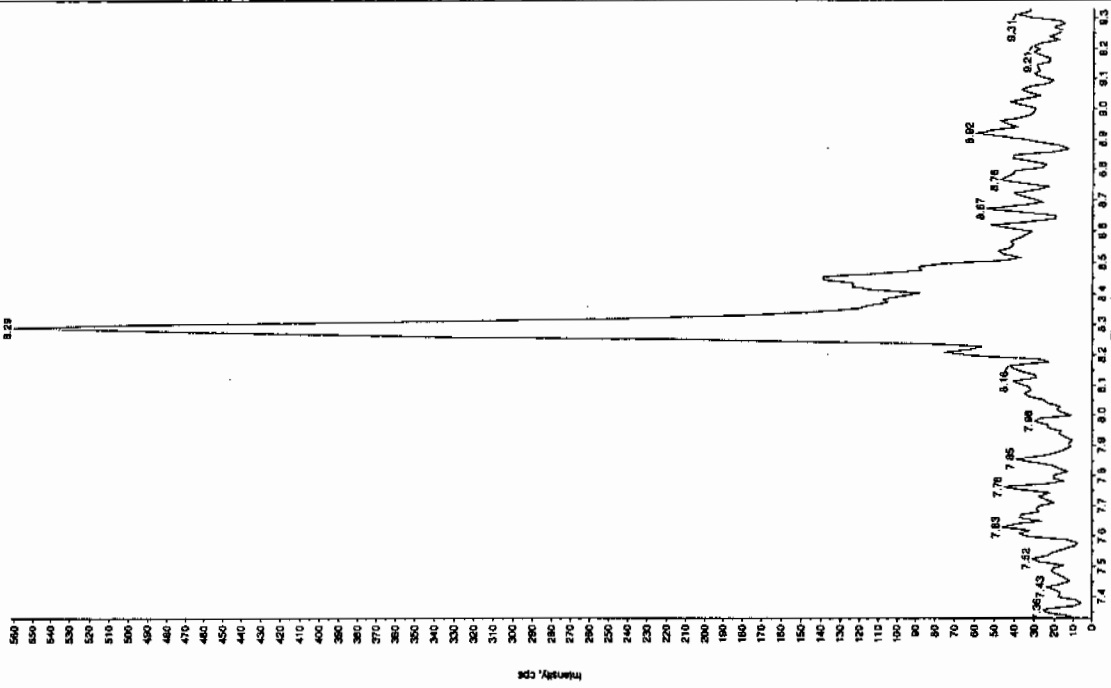
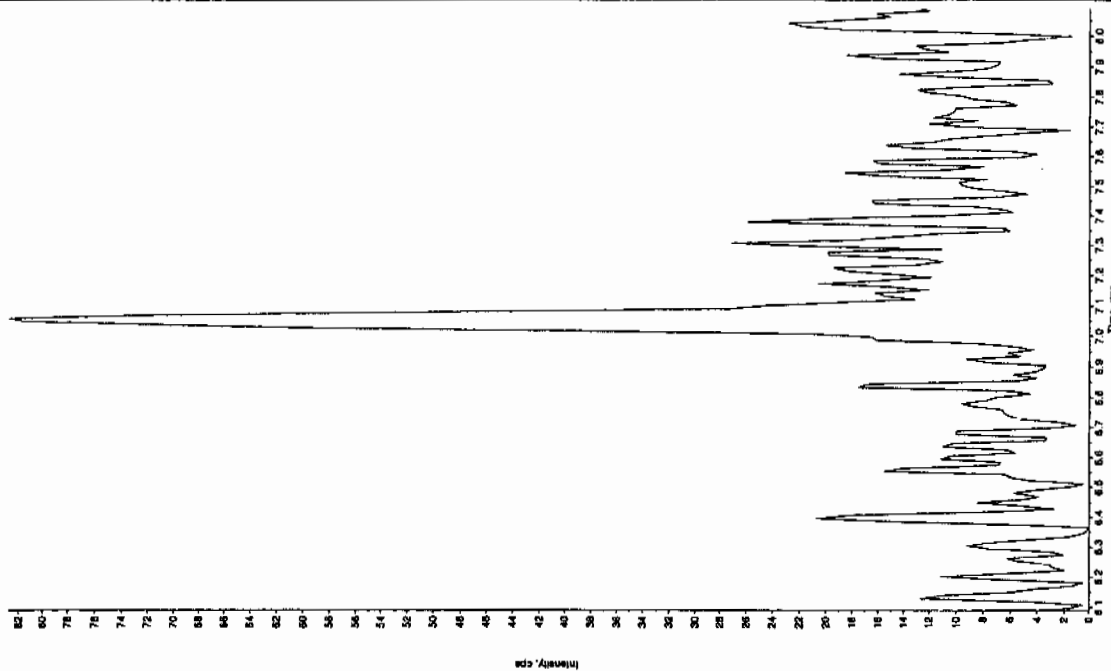
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



Jan 31/10

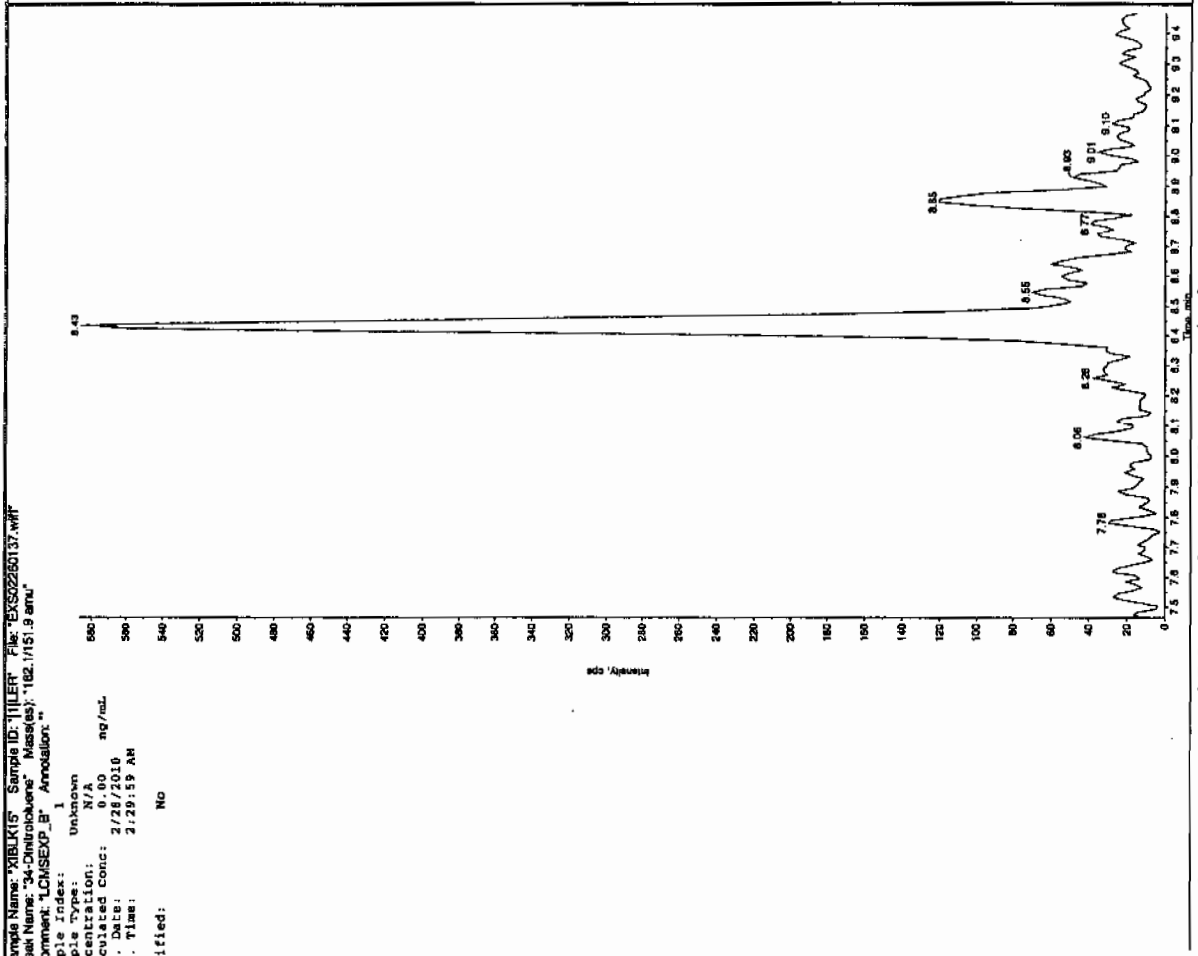
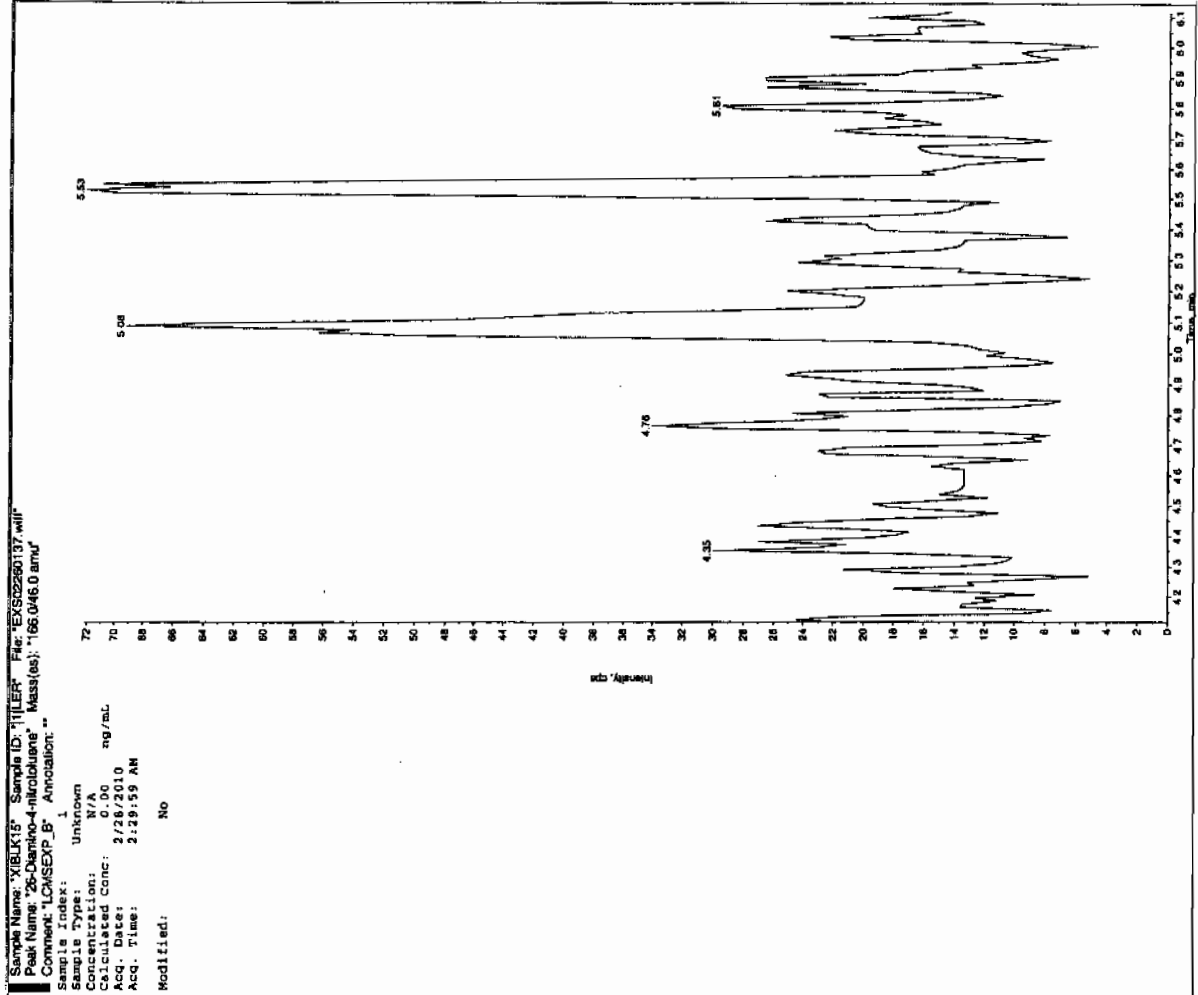
Sample Name: 'XBLX15' Sample ID: 'JILER' File: 'EXS02260137.wif'

Peak Name: '35-Dimethylamine' Mass(es): '257.254.9 amu'  
 Comment: 'LONSEXP\_B' Annotation: ''  
 Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 2:29:59 AM  
 Modified: No

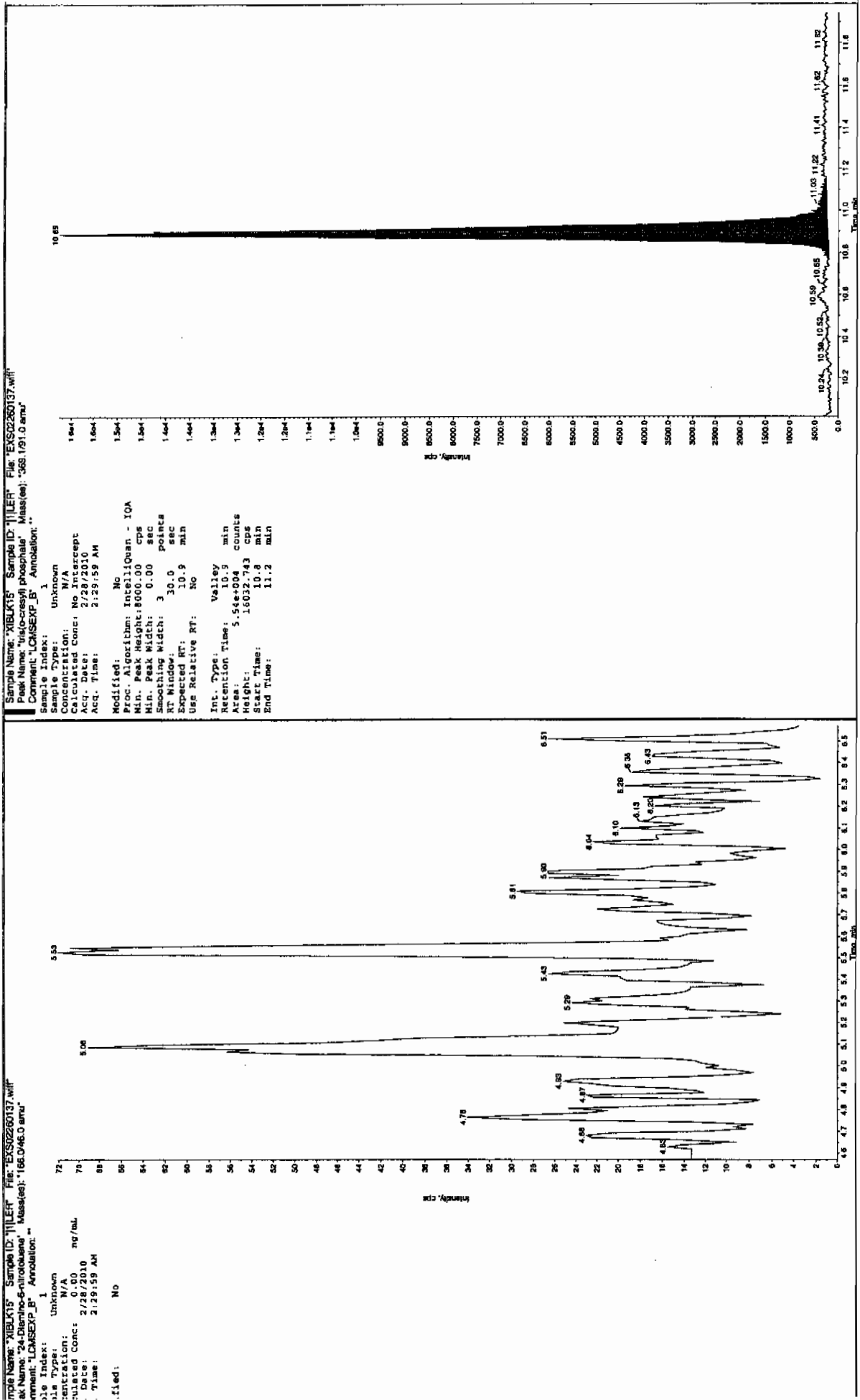


Amc03/01/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 28-FEB-10 04:04

GEL Data File: EXS02260143.wiff

Instrument ID: LCMSMS

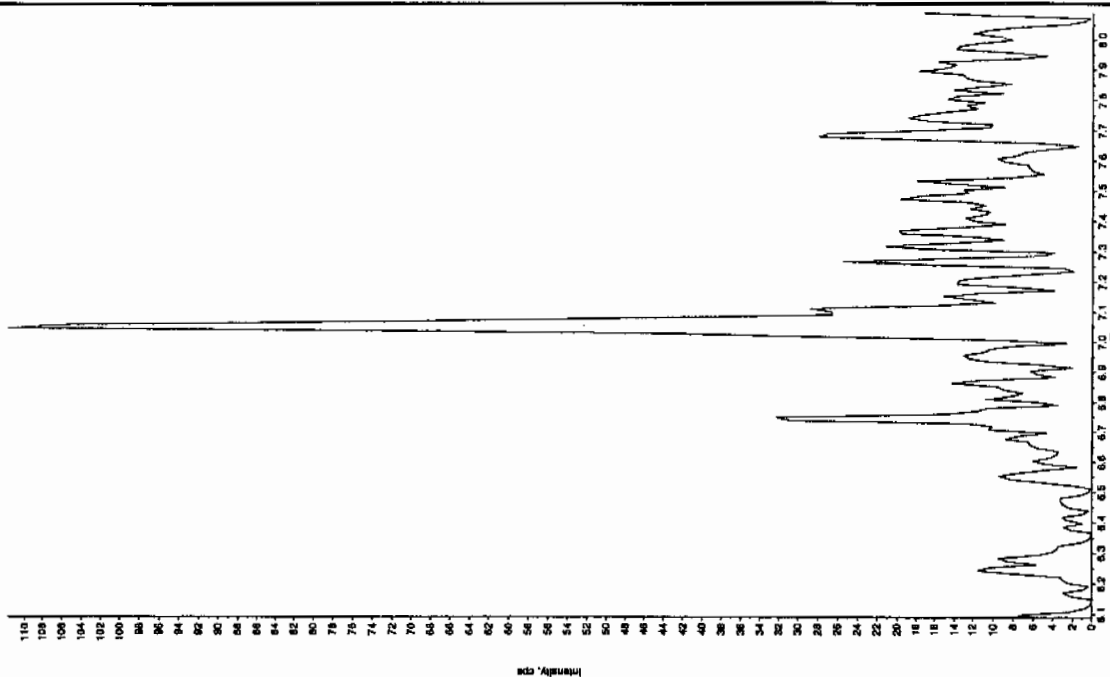
Column: Phenomenex Ultracarb 5u ODS(20)

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

few 3/1/10

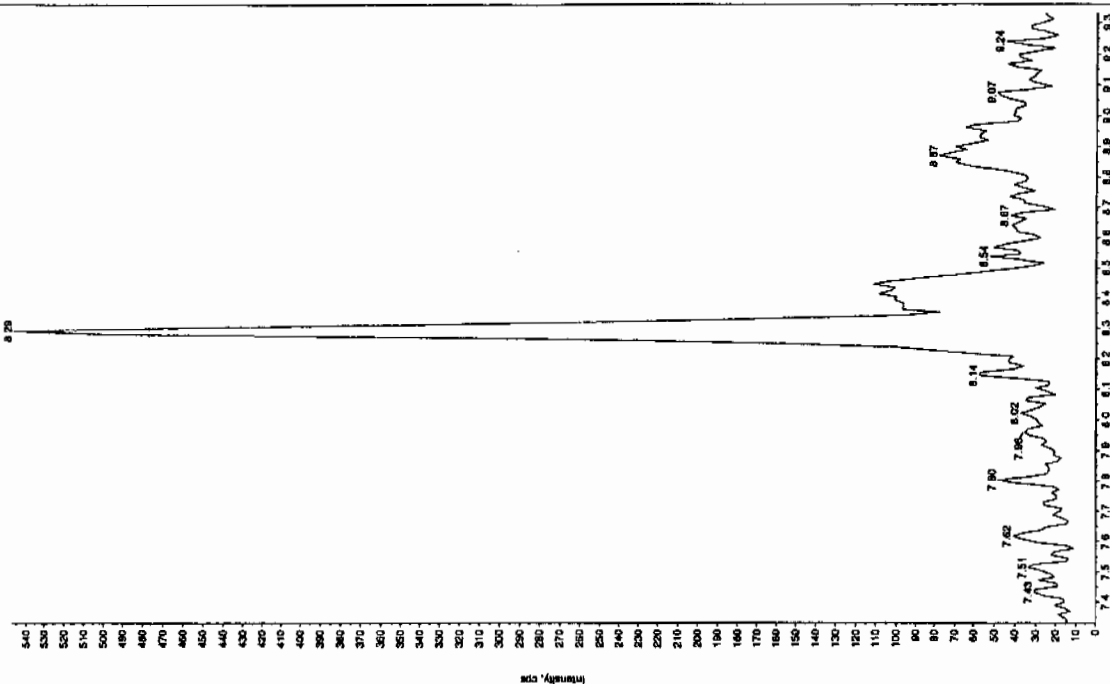
Sample Name: "XIBLK16" Sample ID: "JILLER" File: "EXS02260143.wil"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Date: 2/28/2010  
 Time: 4:04:22 AM  
 Filed: No

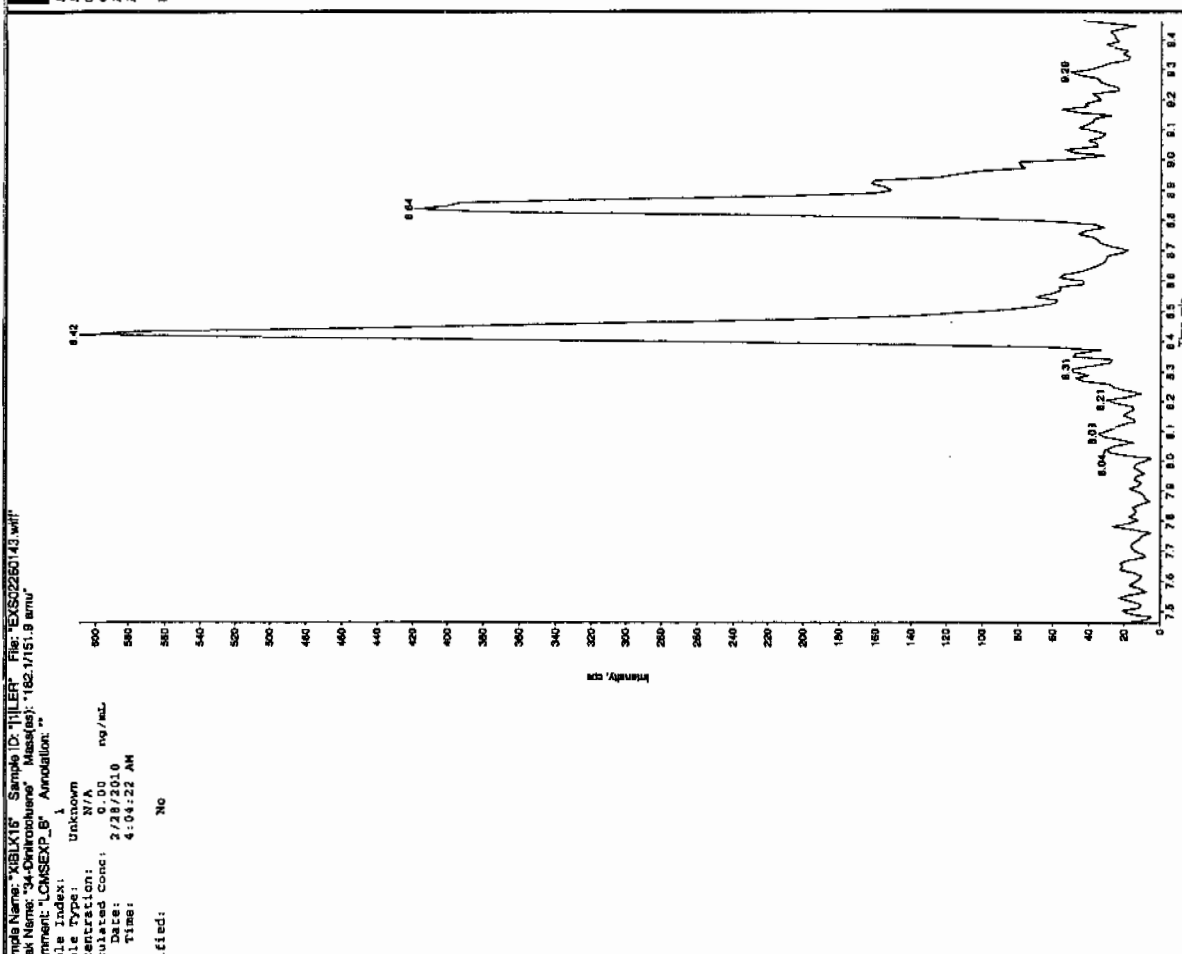
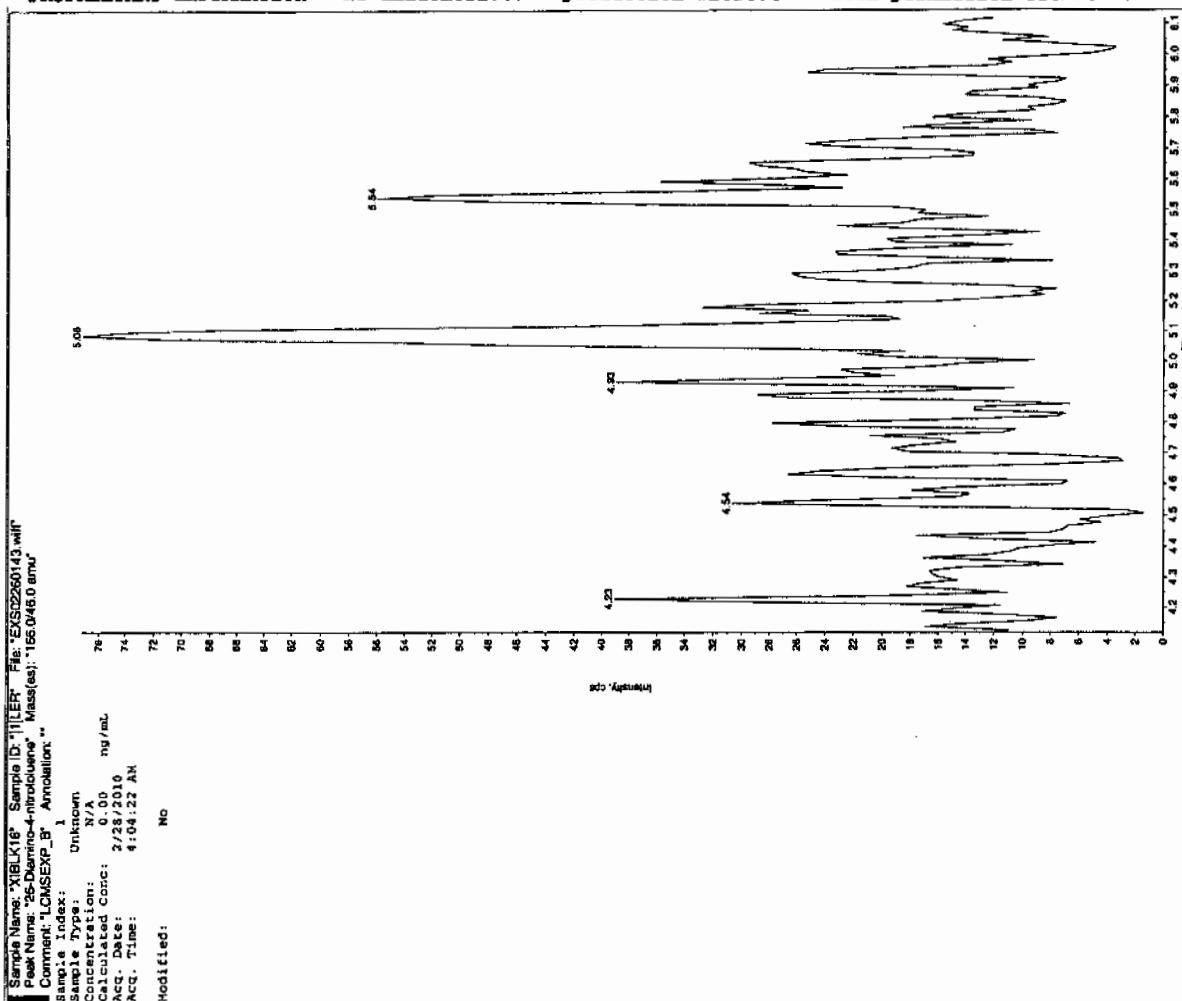


Sample Name: "XIBLK16" Sample ID: "JILLER" File: "EXS02260143.wil"  
 Peak Name: "3S-Chloroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCMSXP\_B" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Date: 2/28/2010  
 Time: 4:04:22 AM  
 Filed: No



few 3/1/10

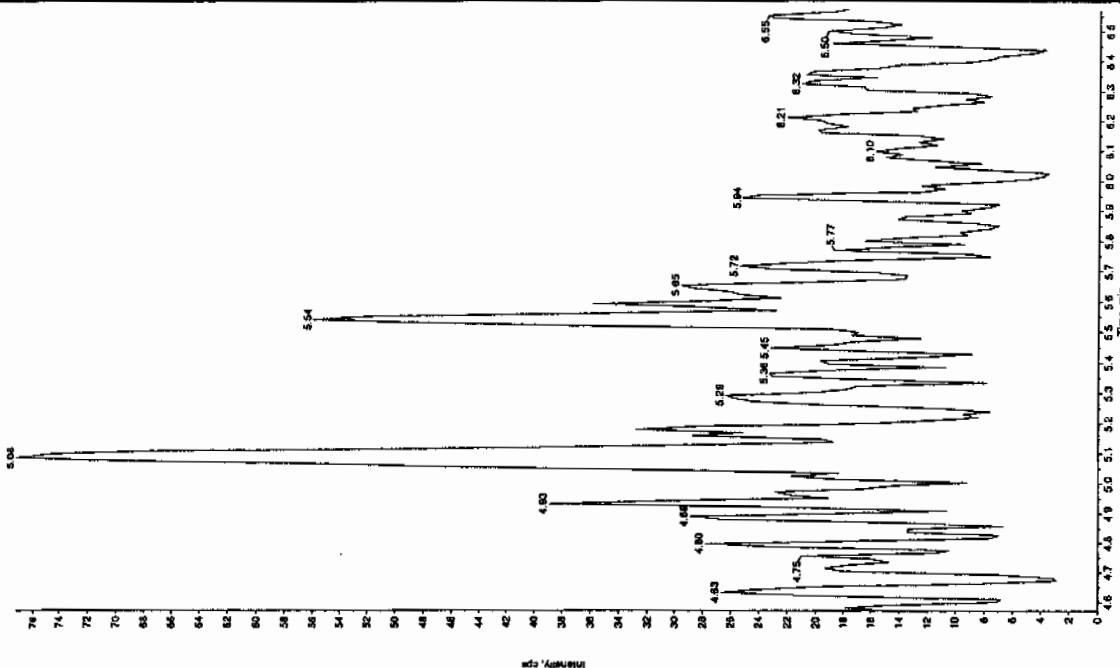


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK15" Sample ID: "111ER" File: "EXS02260143.wif"  
 Peak Name: "24-Dimetho-6-nitrochlorine" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Estimated Conc: 2/23/2010  
 Date: 4:04:22 AM  
 Time: 4:04:22 AM  
 .fied: No

Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 5.40e+006 counts  
 Height: 15474.279 cps  
 Start Time: 10.8 min  
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1545

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 28-FEB-10 05:54

GEL Data File: EXS02260150.wiff

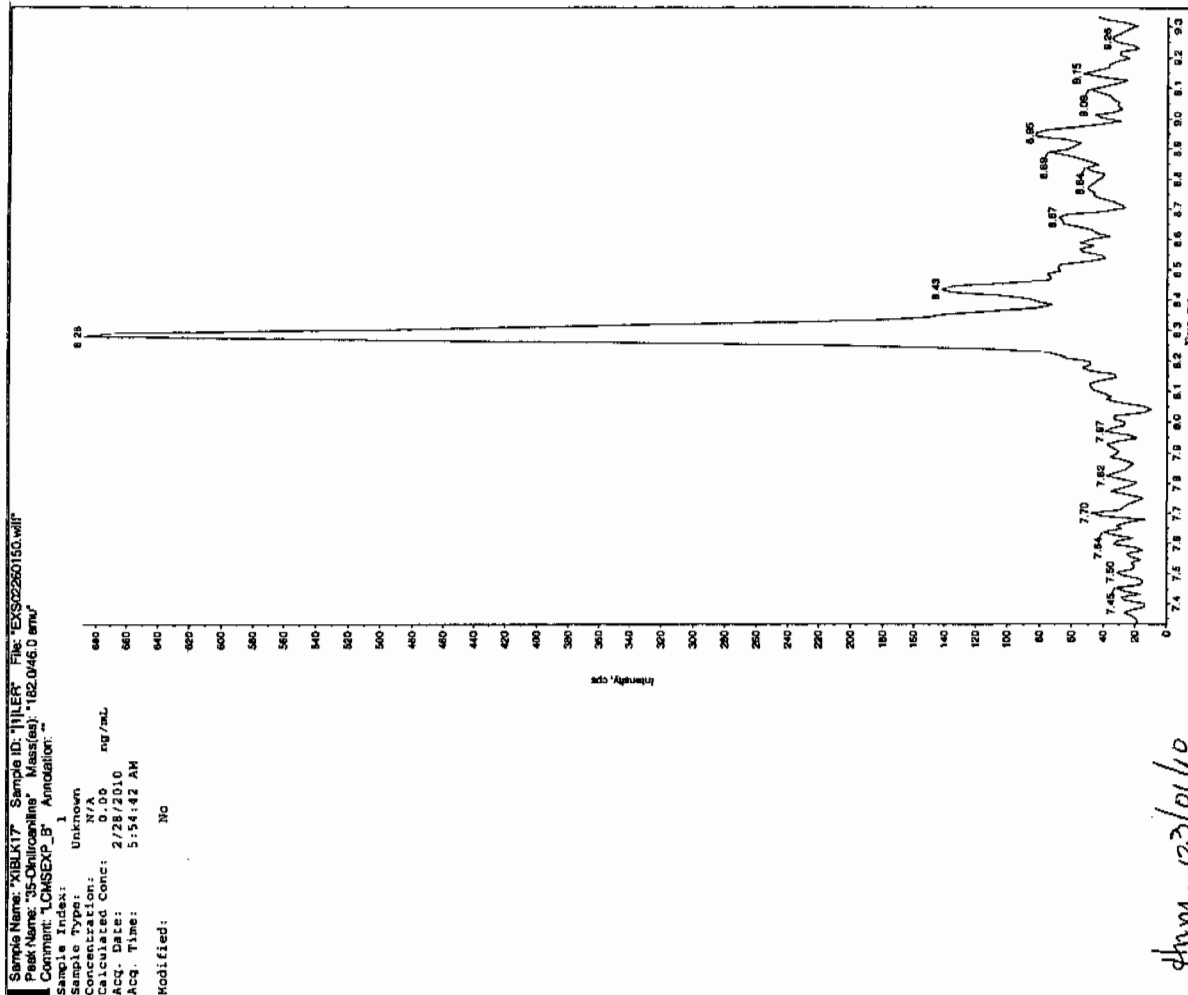
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

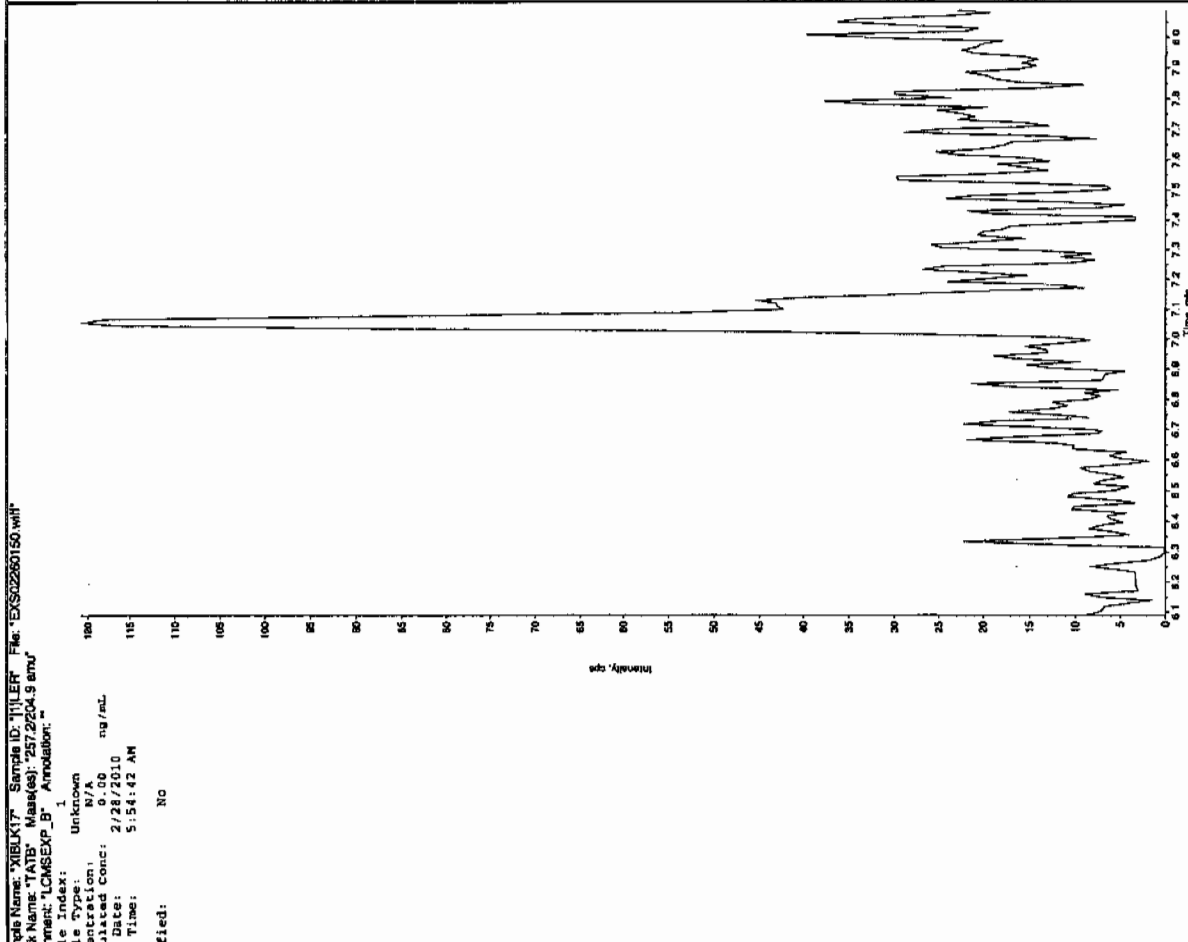
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



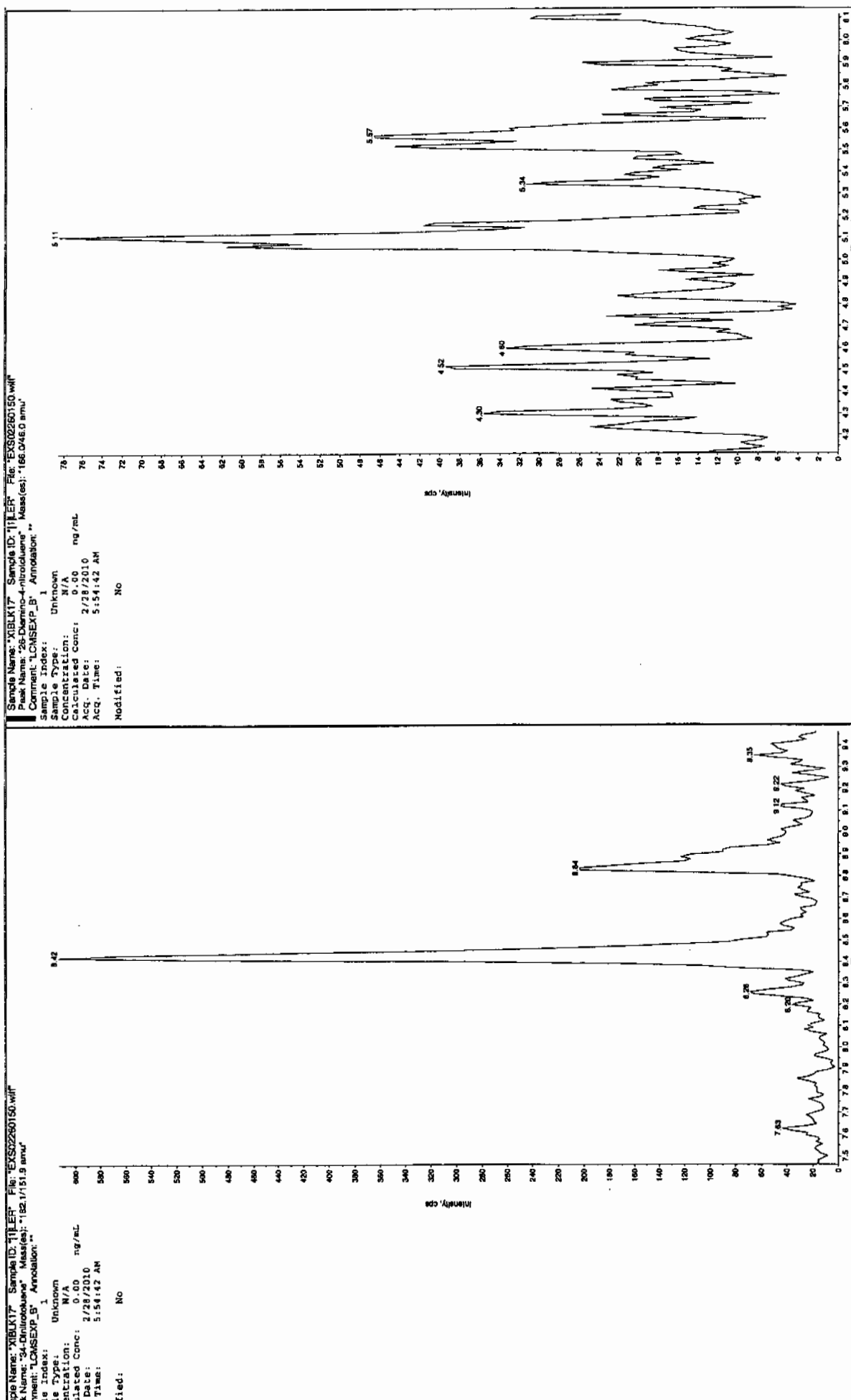
dm 3/1/10



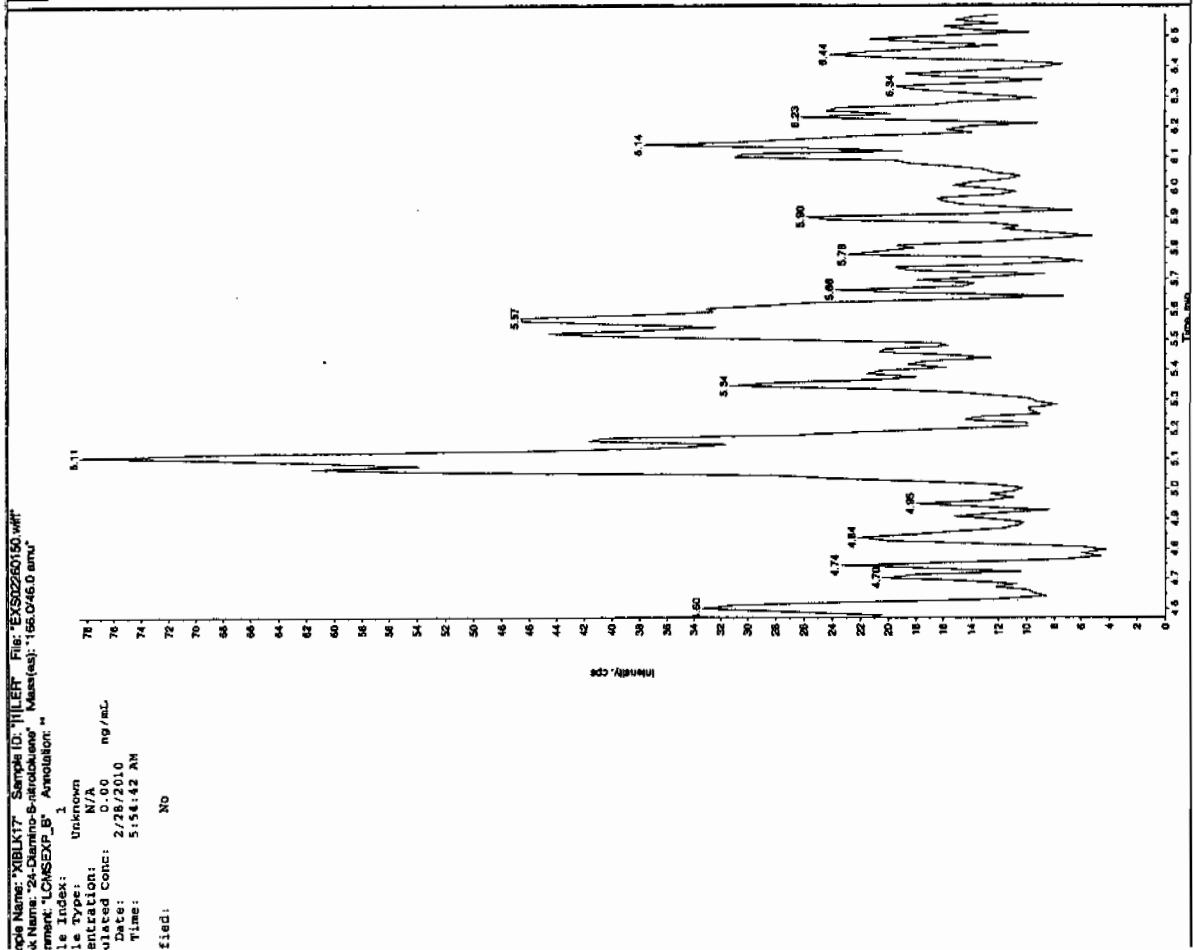
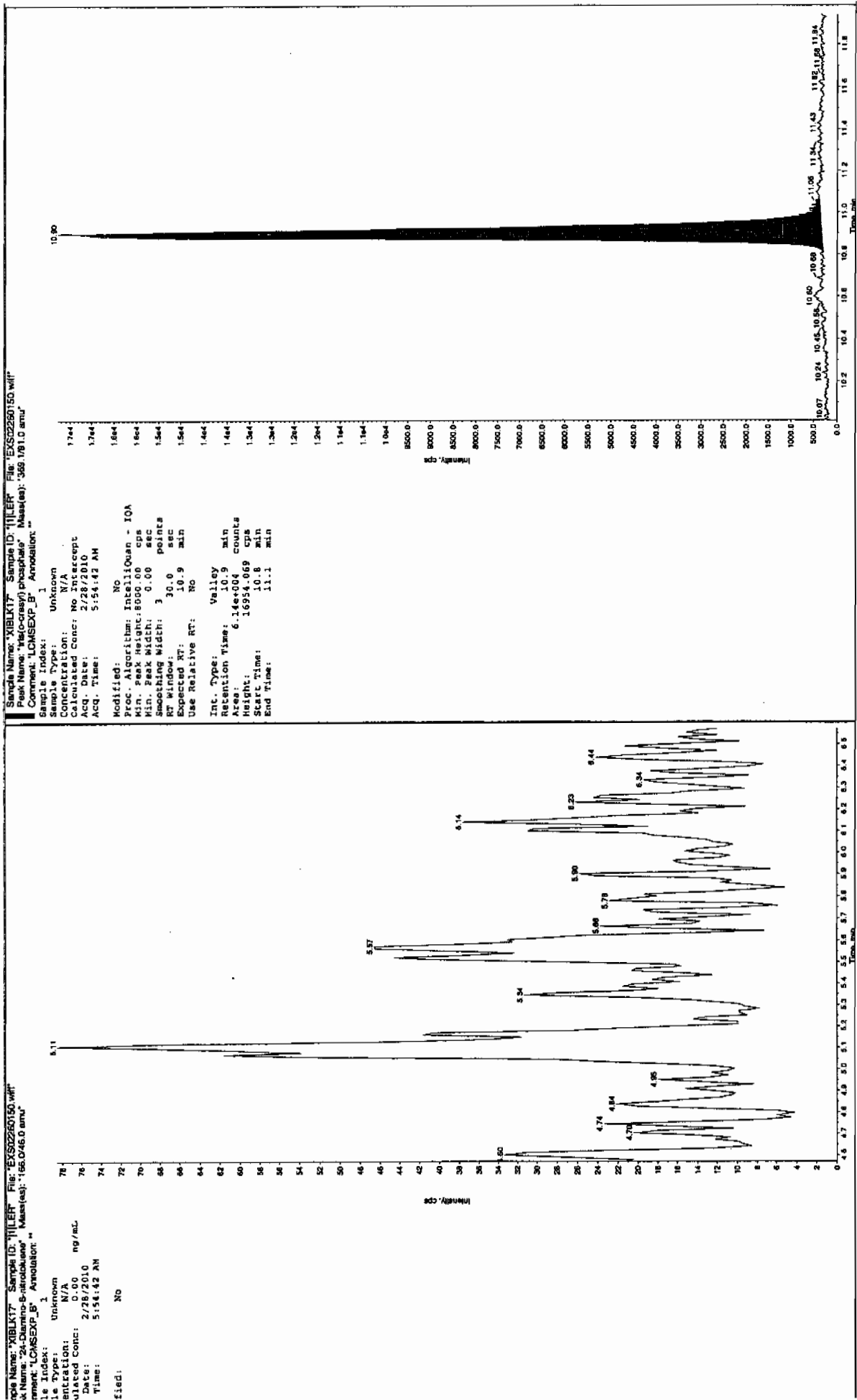
dm 12/30/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL 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/H2O.  
 ;Most useful general purpose calibrant for all low  
 ;MW applications, including MS/MS work.  
 ;At high resolution, readily covers from m/z 50-2000.  
 ;At reduced resolution, can be used to over m/z 3000.  
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.  
 Updated 20 April '95

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

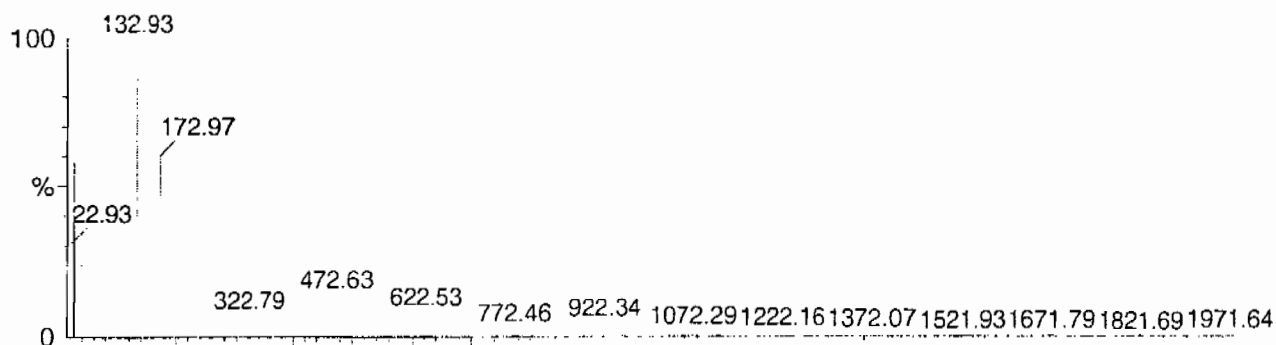
Calibration Report - MS1 Static

Page 1 of 1

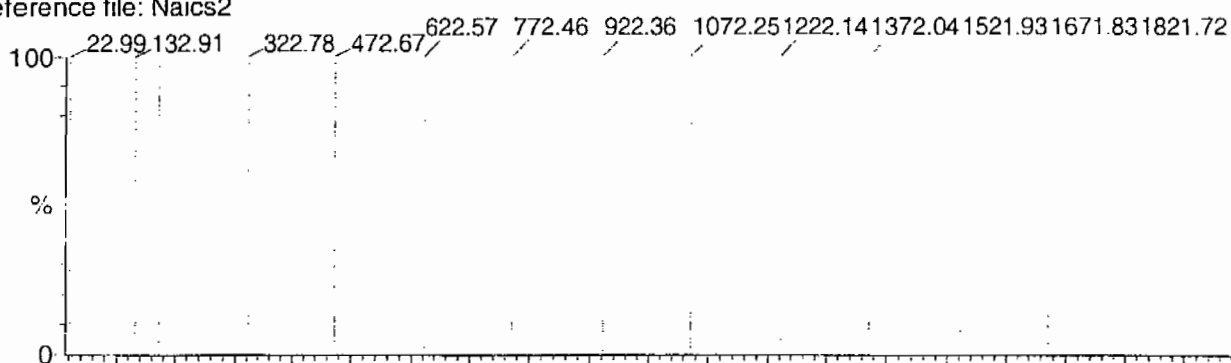
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

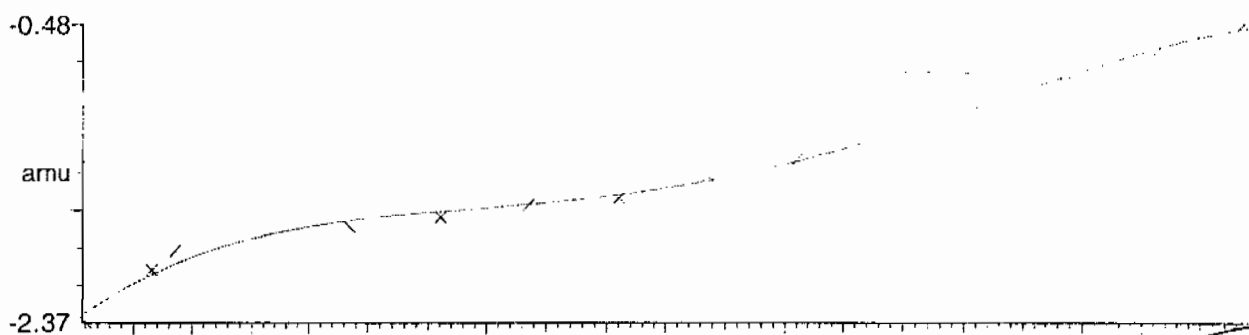
15 matches of 15 tested references



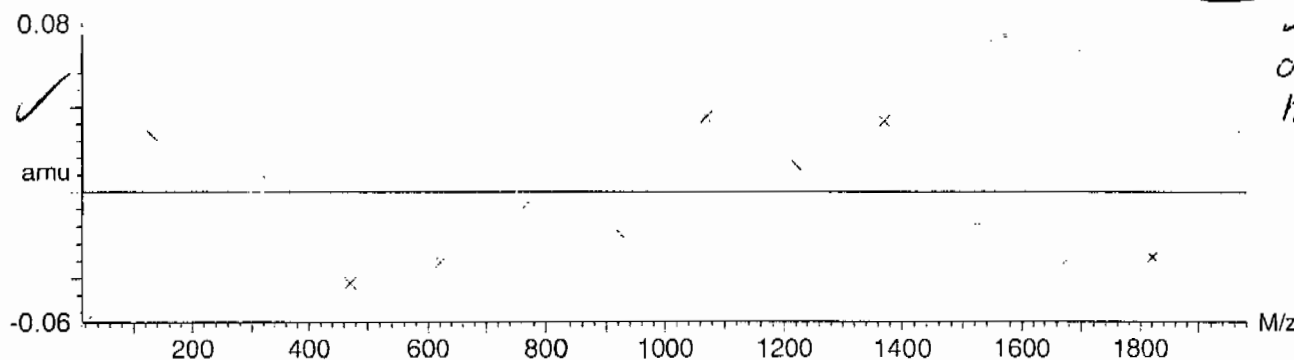
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals



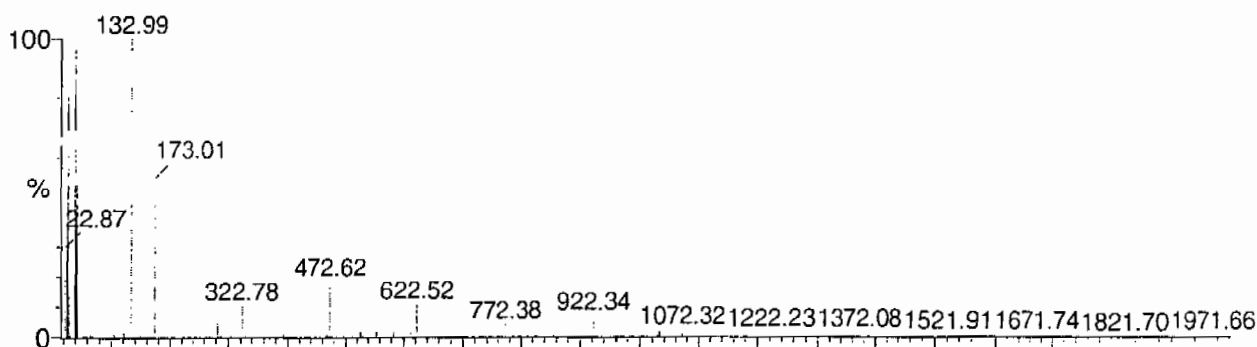
Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$

Calibration Report - MS1 Scanning

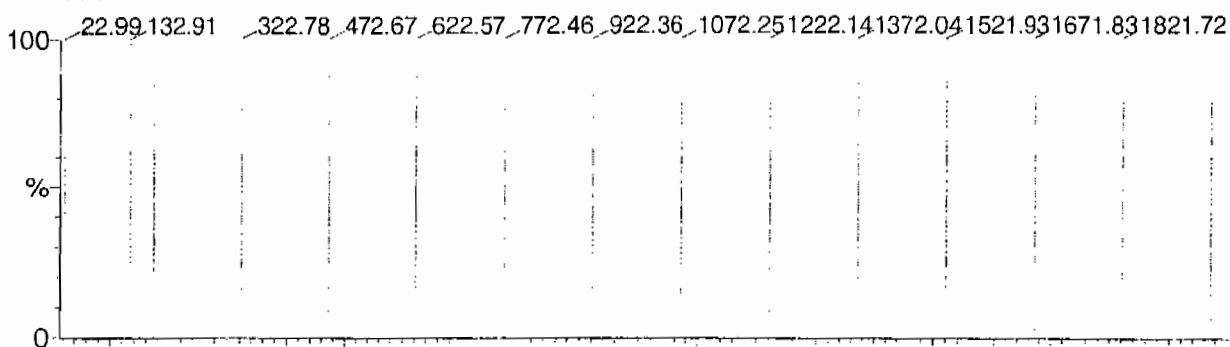
Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006

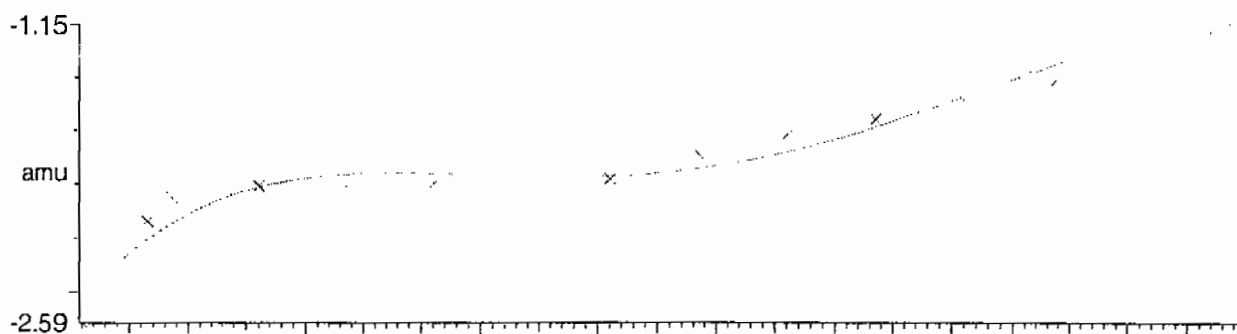
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



Reference file: Naics2

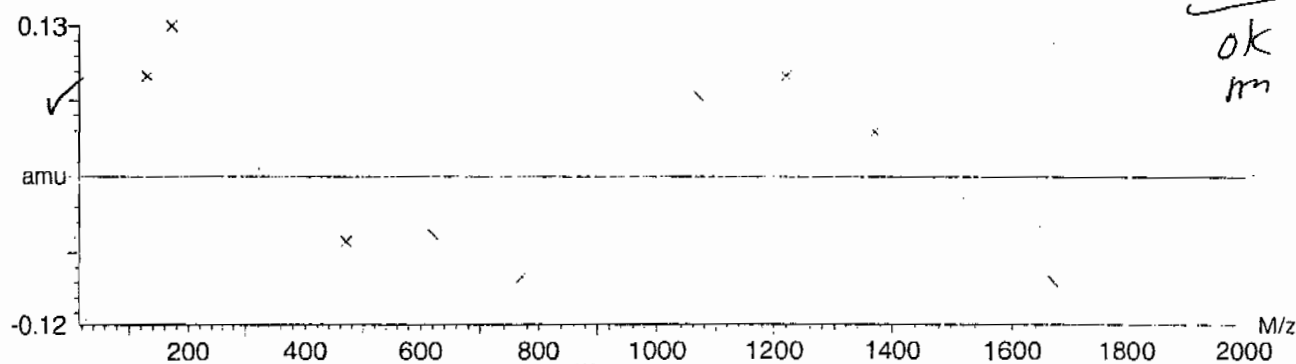


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715 \times 10^{-9} \pm 0.069858$



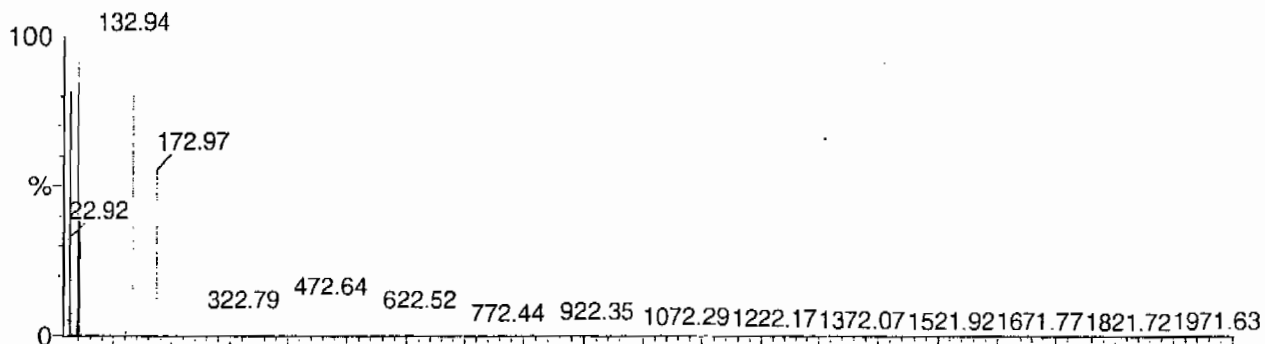
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

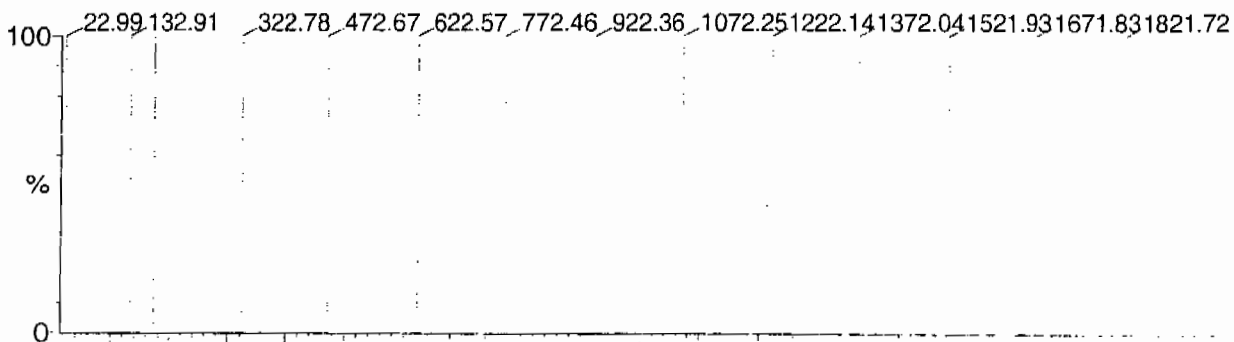
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

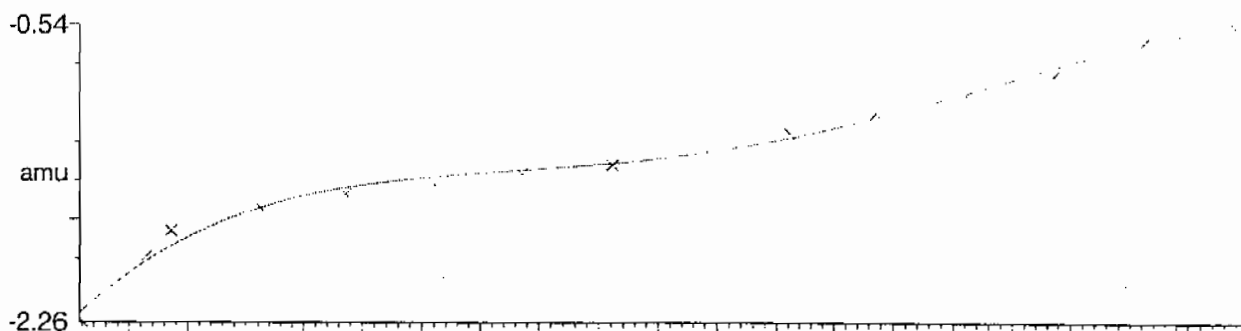
15 matches of 15 tested references



Reference file: Naics2

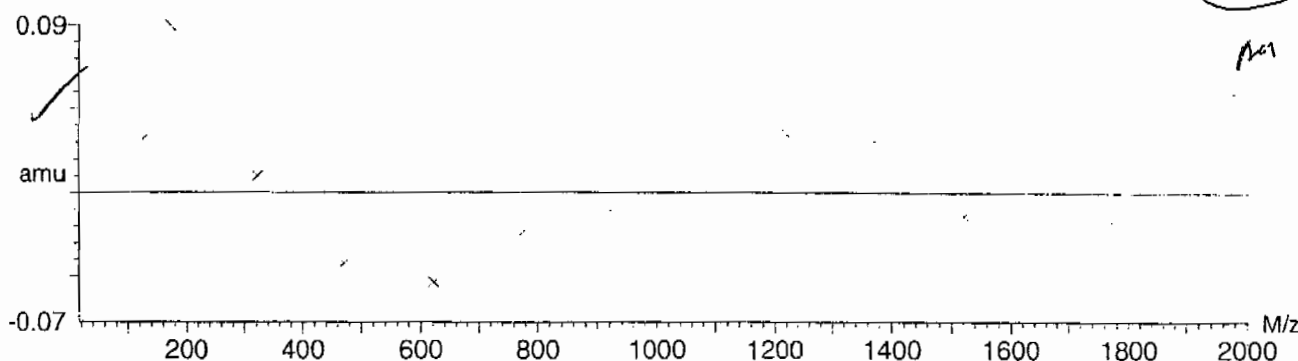


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$



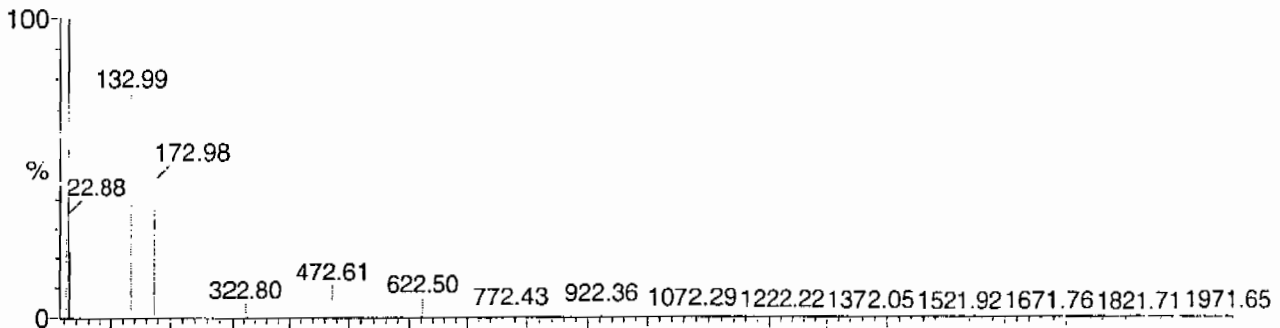
Calibration Report - MS2 Static

Page 1 of 1

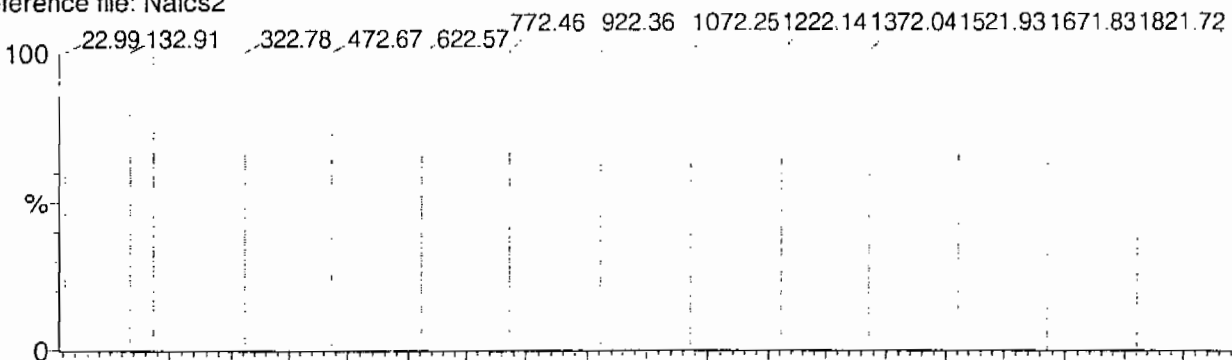
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

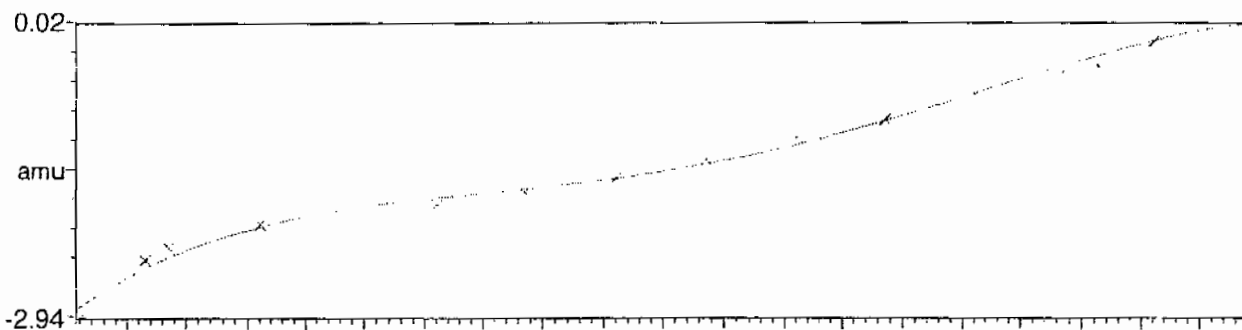
15 matches of 15 tested references



Reference file: Naics2

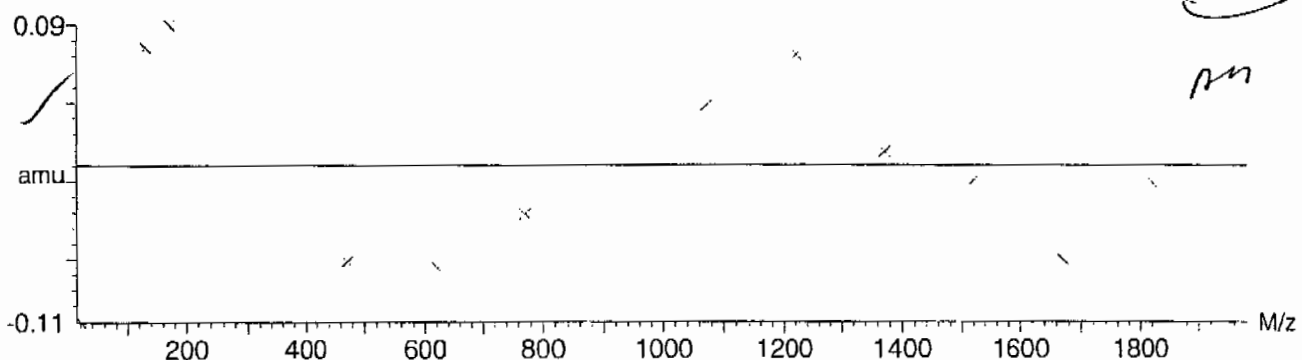


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$





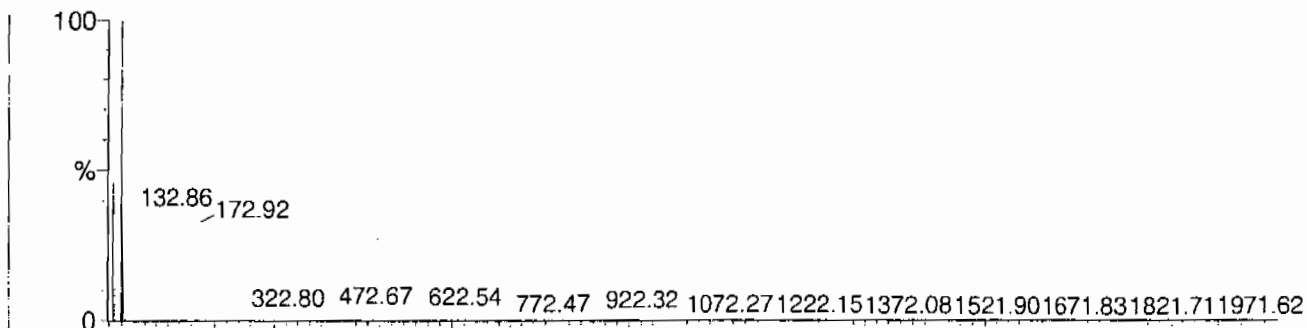
Calibration Report - MS2 Scanning

Page 1 of 1

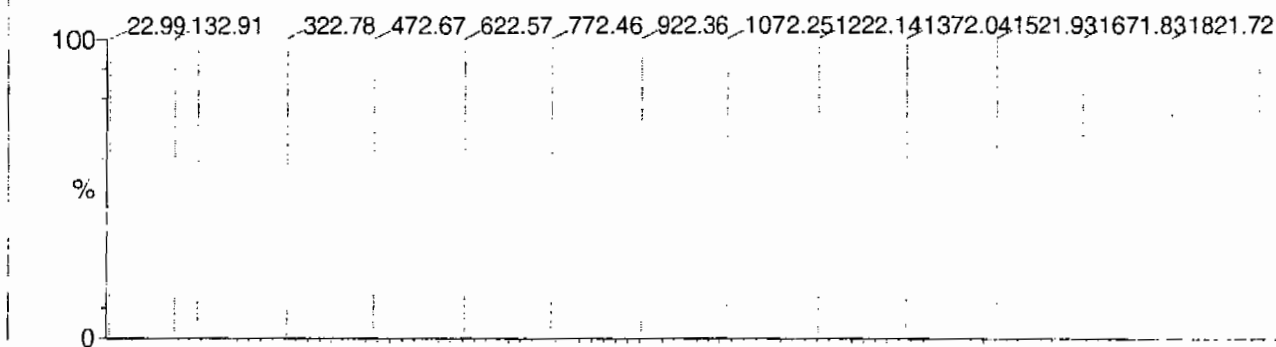
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

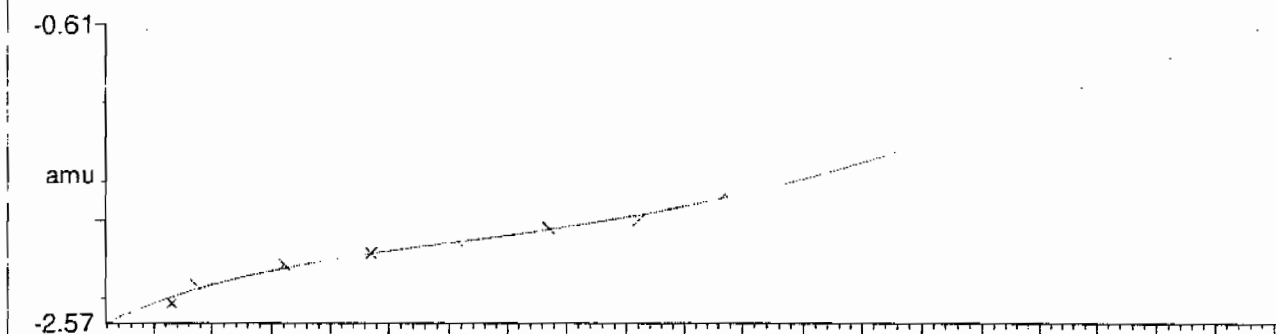
14 matches of 15 tested references



Reference file: Naics2

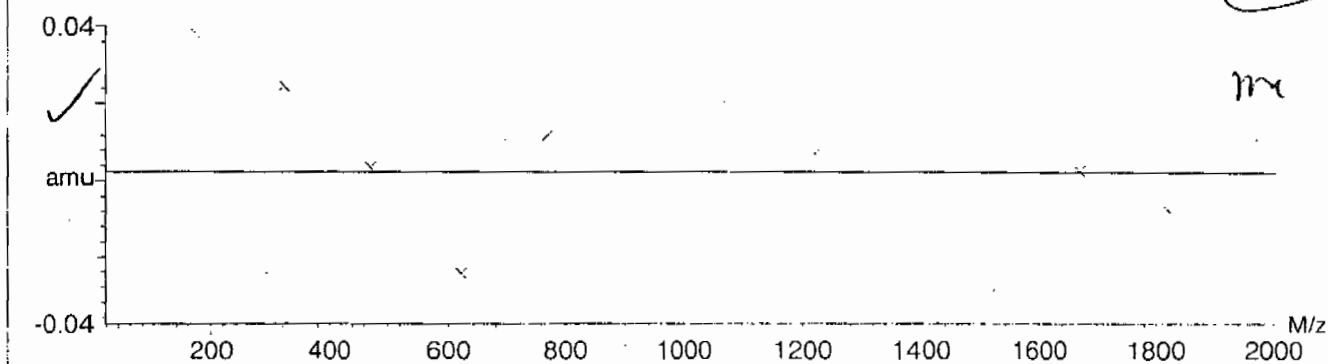


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502e-9 \pm 0.025622$



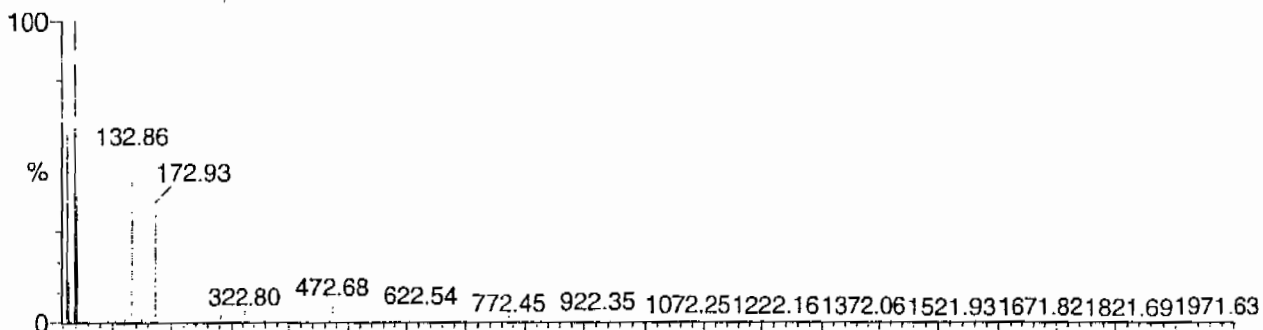
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

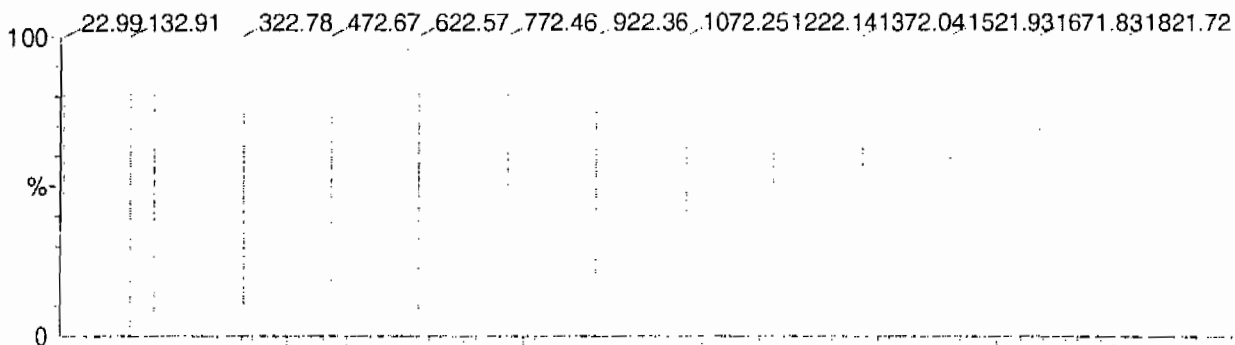
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

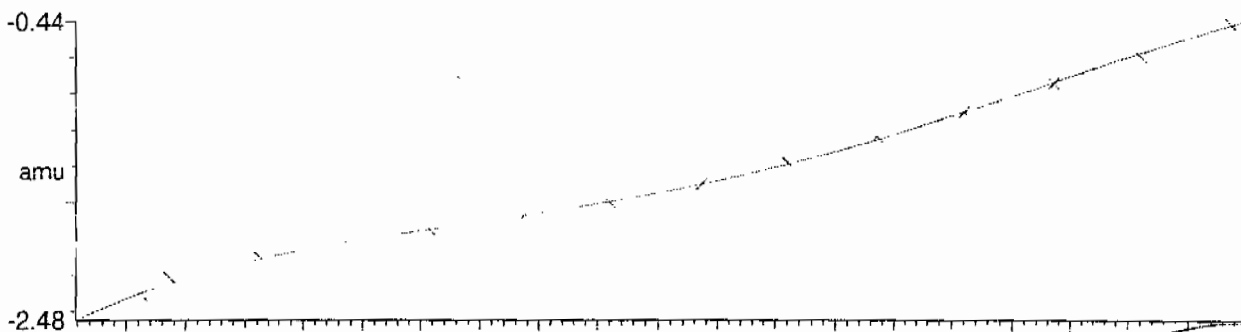
14 matches of 15 tested references



Reference file: Naics2

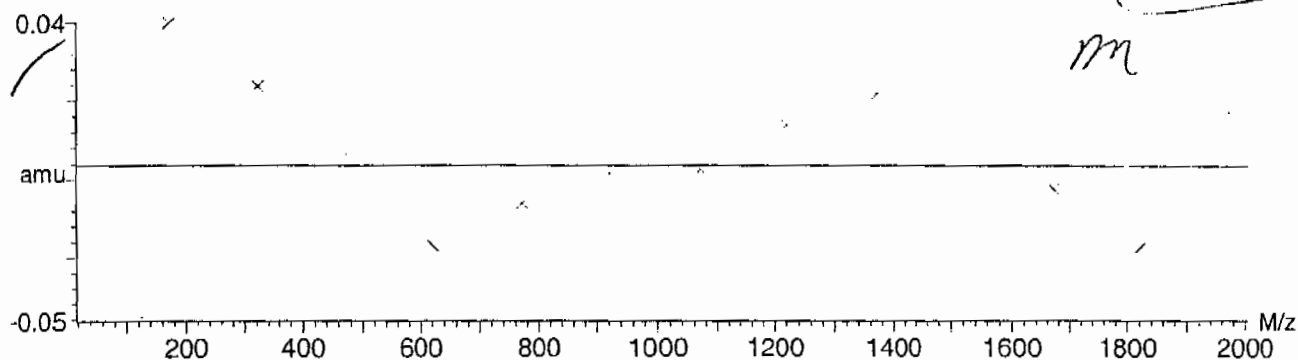


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

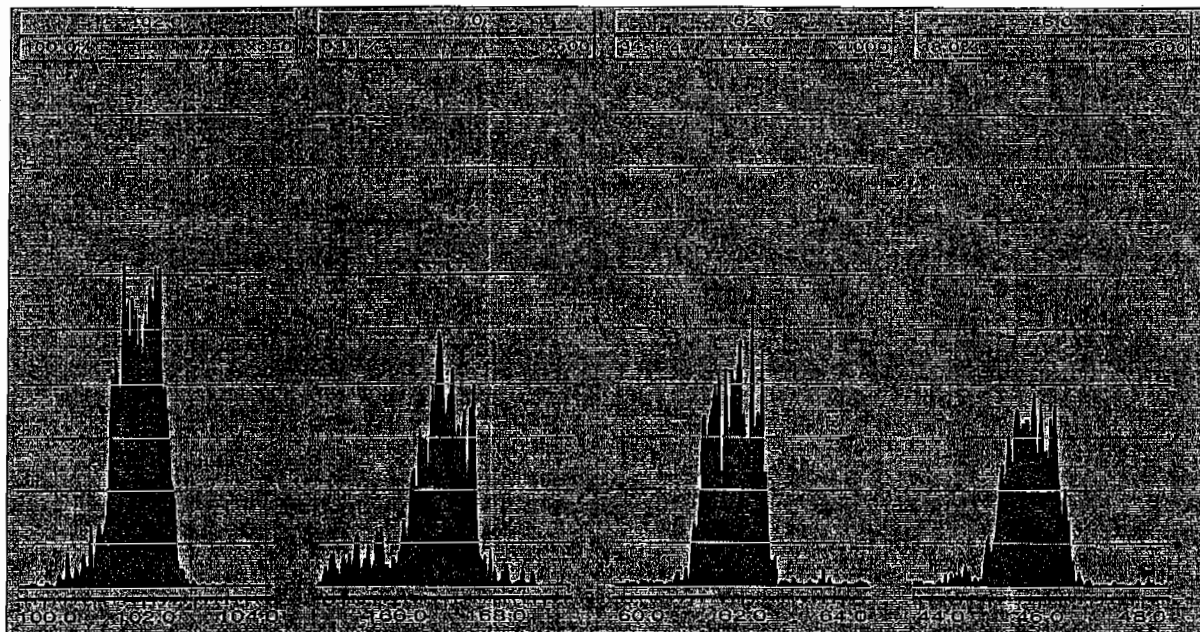


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Thu Mar 04 09:08:29 2010



# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

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) #
			3511.79	12.136	20560.6	17.579
Upper Limit			4565.327	12.636	26728.78	18.079
Lower Limit			2458.253	11.636	14392.42	17.079
MB for batch 948892	08-mar-10 07:17	EXP0304180a	3658.14	12.067	19488.9	17.465
LCS for batch 948892	08-mar-10 07:47	EXP0304181a	3688.87	12.067	21915.8	17.465
RE15-10-8170	08-mar-10 08:16	EXP0304182a	3541.4	12.067	20621.2	17.465
RE15-10-8170(246055001MS)	08-mar-10 08:46	EXP0304183a	3549.67	12.067	19988.9	17.465
RE15-10-8170(246055001MSD)	08-mar-10 09:15	EXP0304184a	3658.36	12.067	19742	17.465
RE15-10-8169	08-mar-10 11:13	EXP0304188a	3663.31	12.067	19132.4	17.466
RE15-10-8171	08-mar-10 11:43	EXP0304189a	3637.63	12.067	20723.2	17.465
RE15-10-8168	08-mar-10 12:12	EXP0304190a	3609.93	12.067	20879	17.465
RE15-10-8222	08-mar-10 12:42	EXP0304191a	3634.62	12.067	20040.5	17.465
RE15-10-8221	08-mar-10 13:11	EXP0304192a	3546.55	12.067	20176.8	17.487
RE15-10-8220	08-mar-10 13:41	EXP0304193a	3684.69	12.067	21949	17.465
RE15-10-8223	08-mar-10 14:10	EXP0304194a	3939.07	12.067	19893.2	17.466
RE15-10-8224	08-mar-10 14:40	EXP0304195a	3569.95	12.064	20061.7	17.477

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: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304182a

Date Analyzed: 08-MAR-10 08:16

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: Mon Mar 08 12:06:42 2010, Page 81 of 93

Identify Sample Report  
IEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304182a

Date: 08-Mar-2010

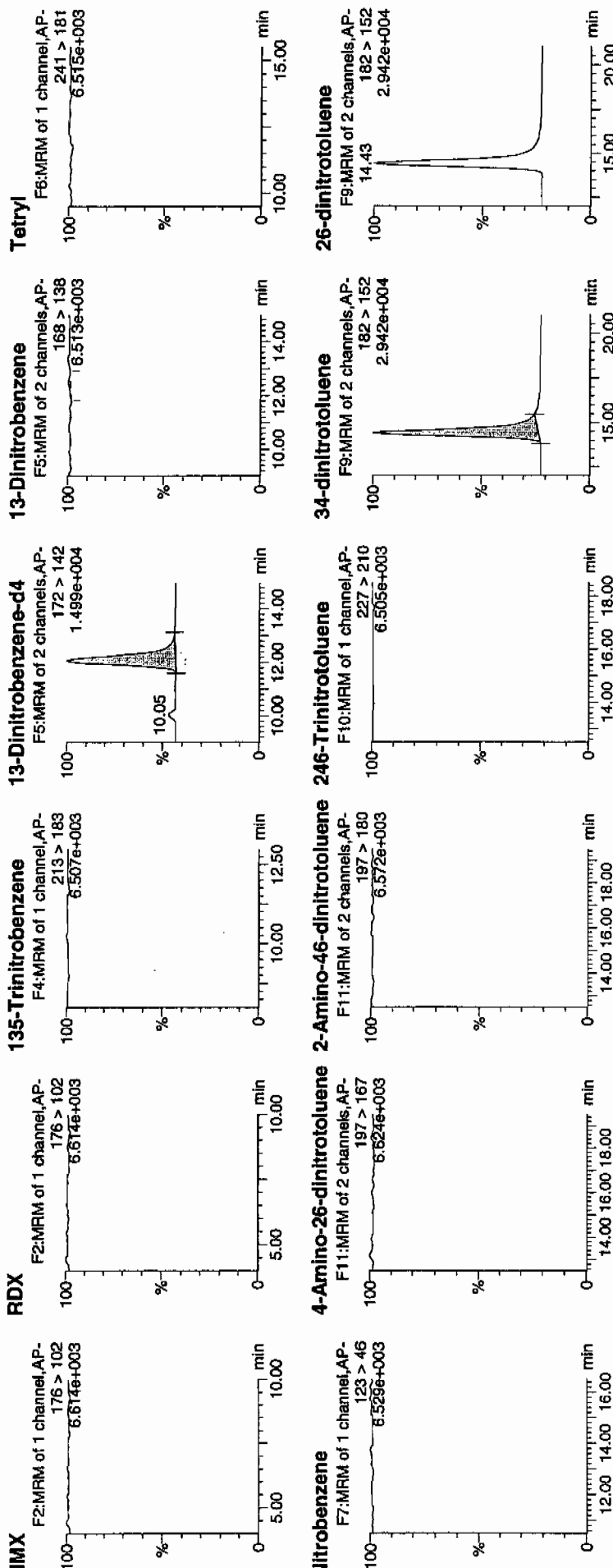
Time: 08:16:35

ID: 246055001

File: 4:5.C

447  
3/8/10

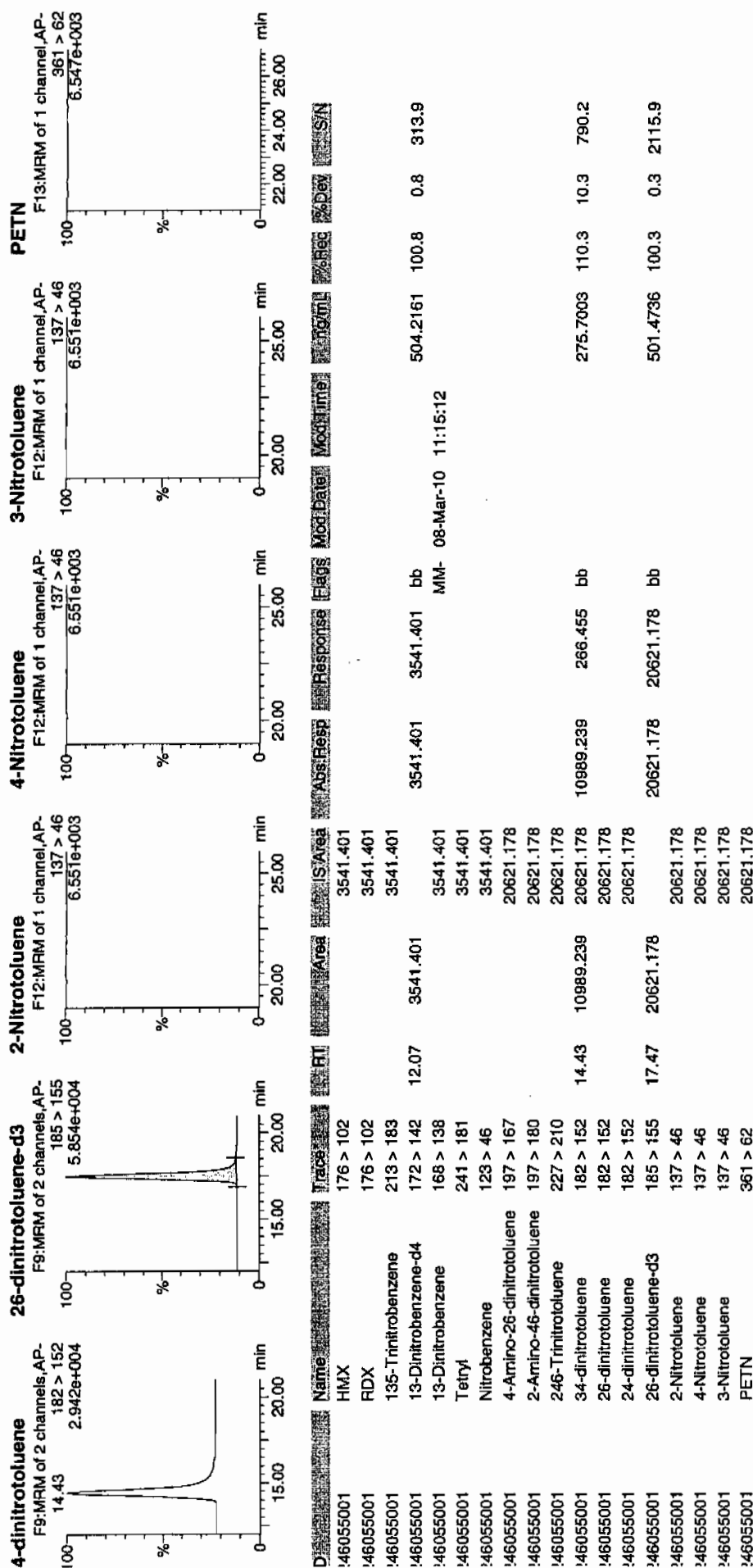
743593 / 80224 / 21



Handwritten signature

Quantify Sample Report  
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055001

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260128.wiff

Date Analyzed: 28-FEB-10 00:08

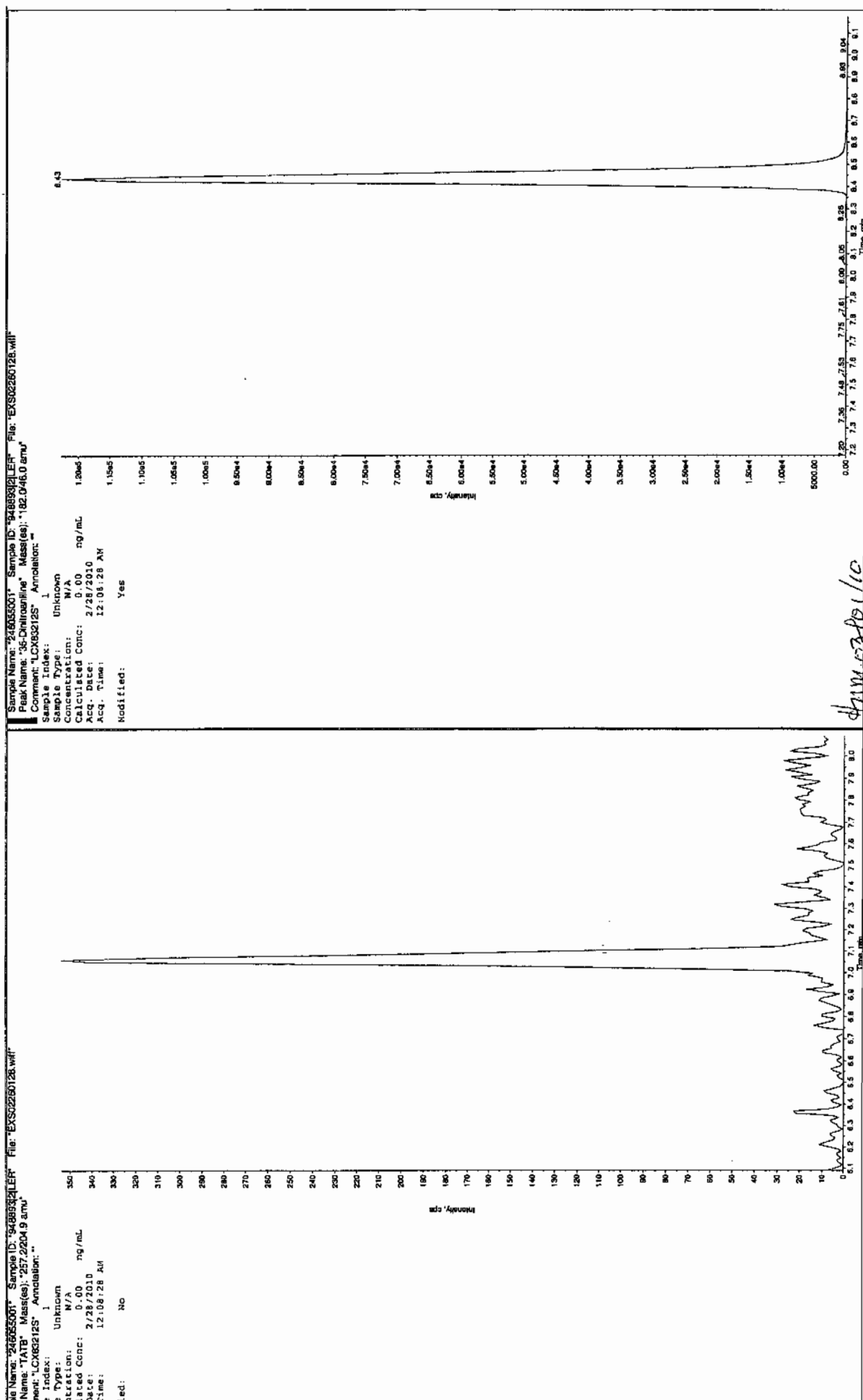
Units: ug/kg

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 =

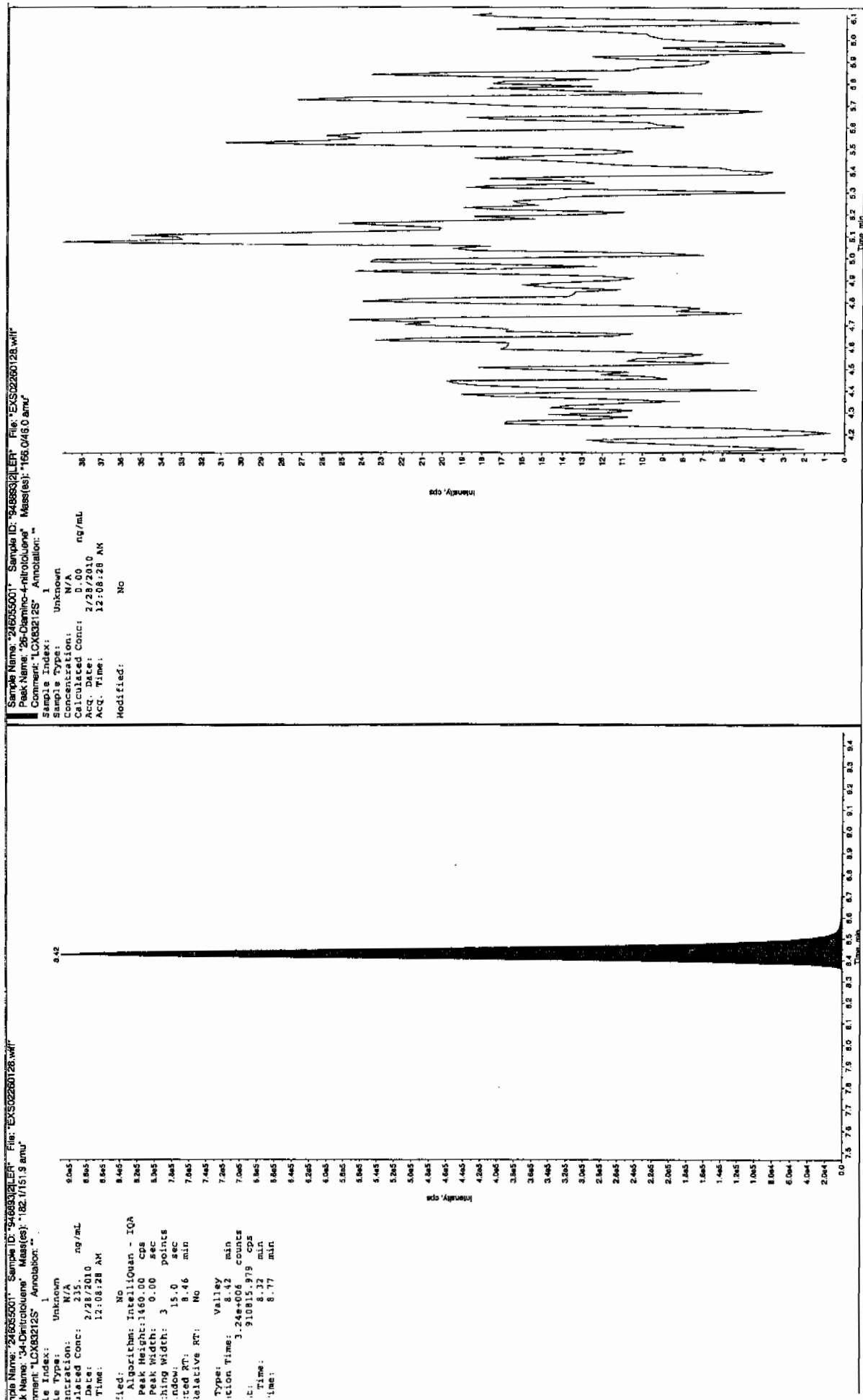
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 31/10

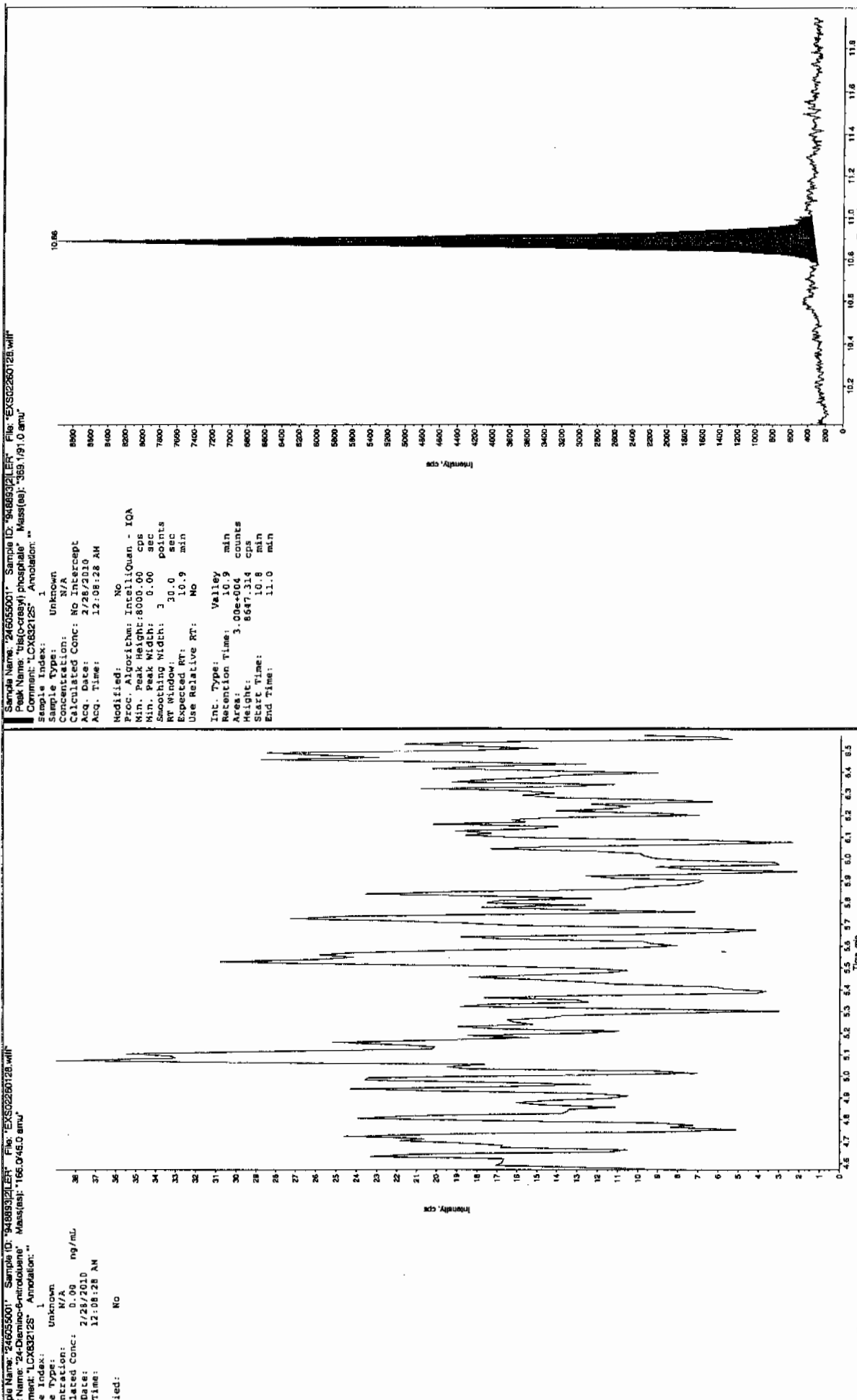


Jan 31/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304188a

Date Analyzed: 08-MAR-10 11:13

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  
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Method: C:\MASSLYNX\New\_Exp\PRO\MethDB\030410expa.mdb, Time: Fri Mar 05 09:18:46 2010  
Calibration: C:\MASSLYNX\New\_Exp\PRO\CurveDB\030410expa.cdb, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0304188a

Date: 08-Mar-2010

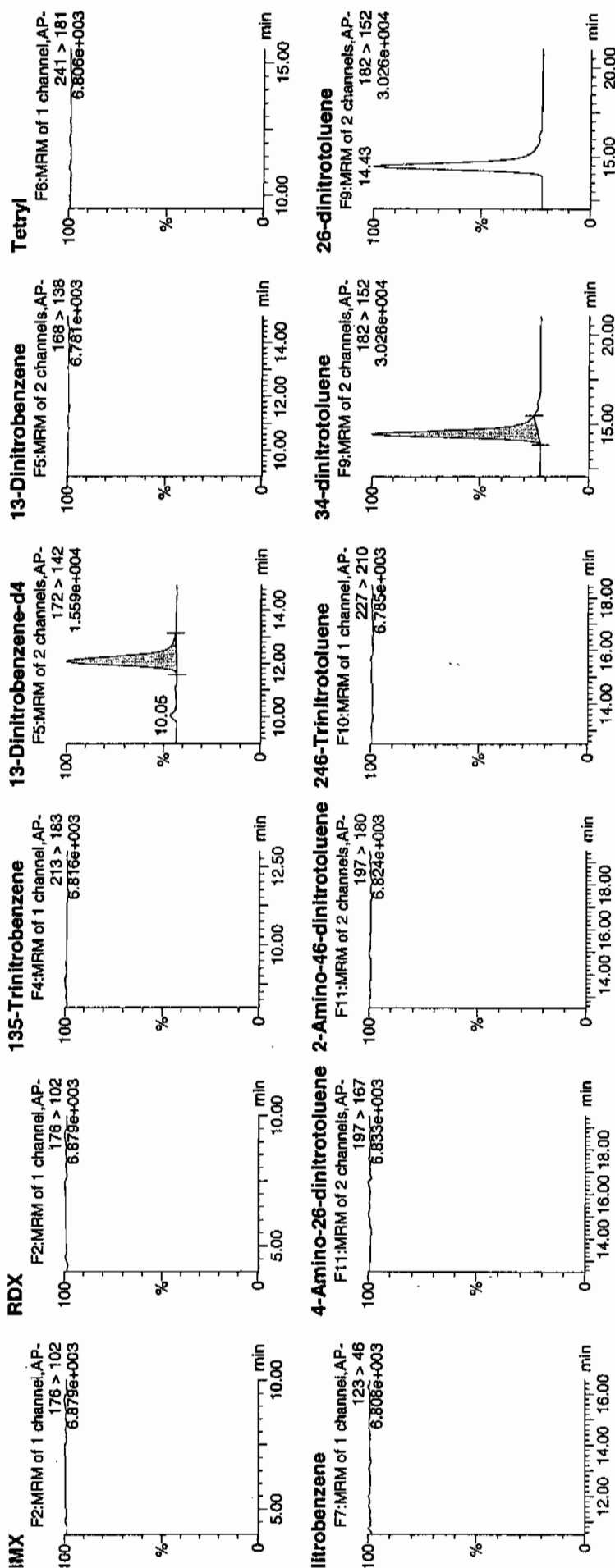
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1.577  
3/9/10

LAUW 940893 / 80123 / 21

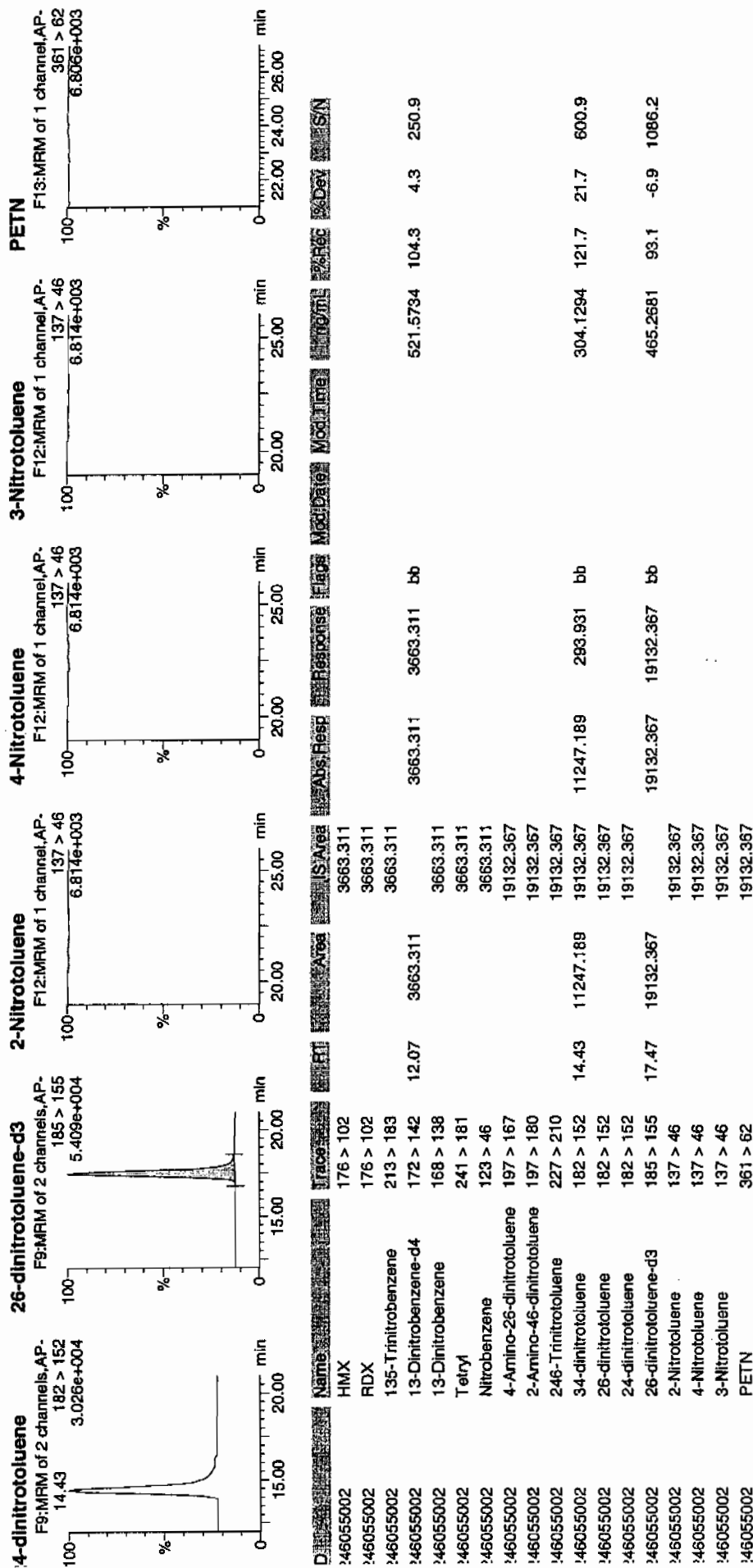


Handwritten signature and date: 3/9/10

Printed: Tue Mar 09 09:42:03 2010, Page 2 of 89

Quantify Sample Report  
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PROV030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



iEL 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: RE15-10-8169

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055002

Sample Amount 2

Moisture: 14.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260131.wiff

Date Analyzed: 28-FEB-10 00:55

Units: ug/kg

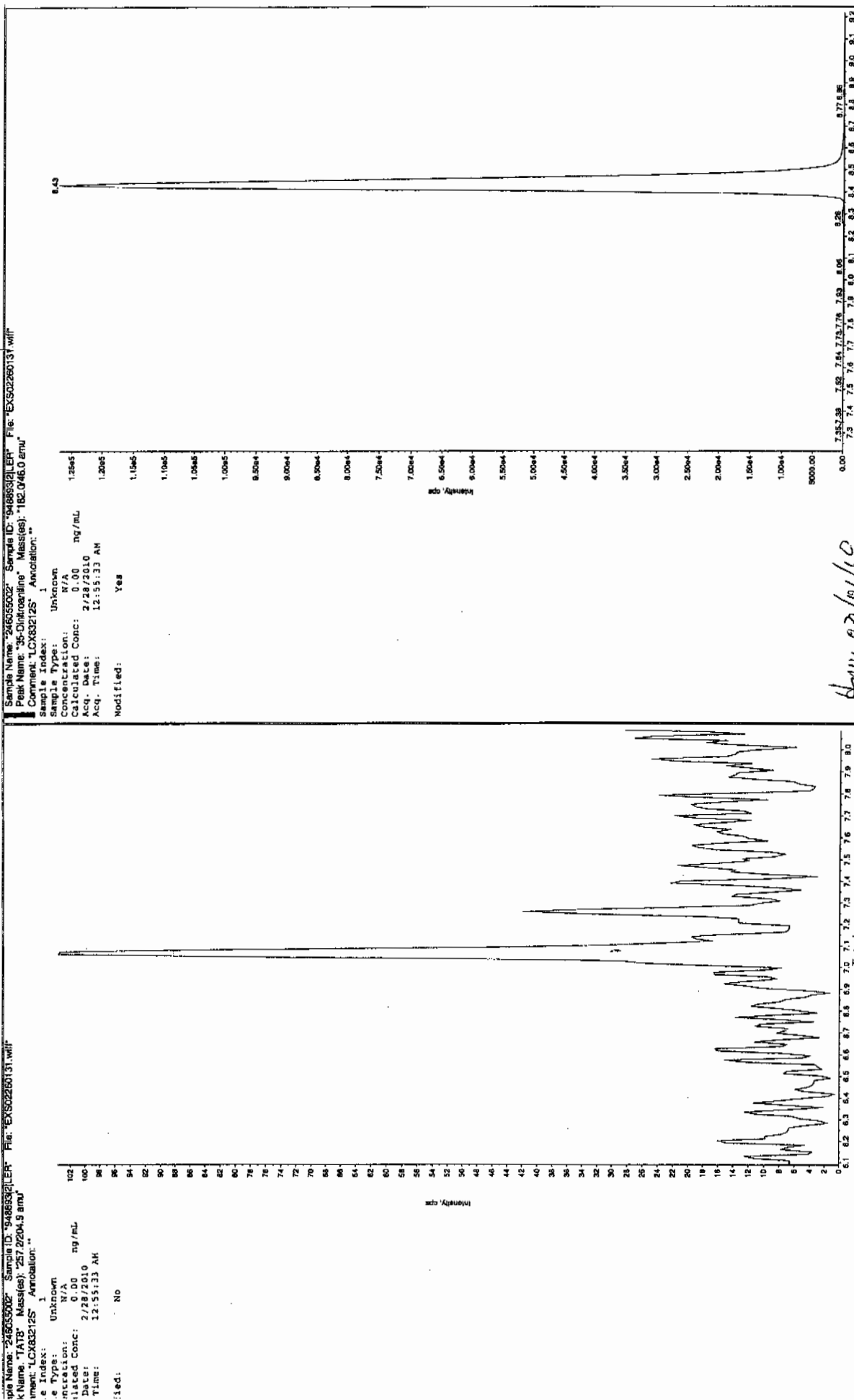
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

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

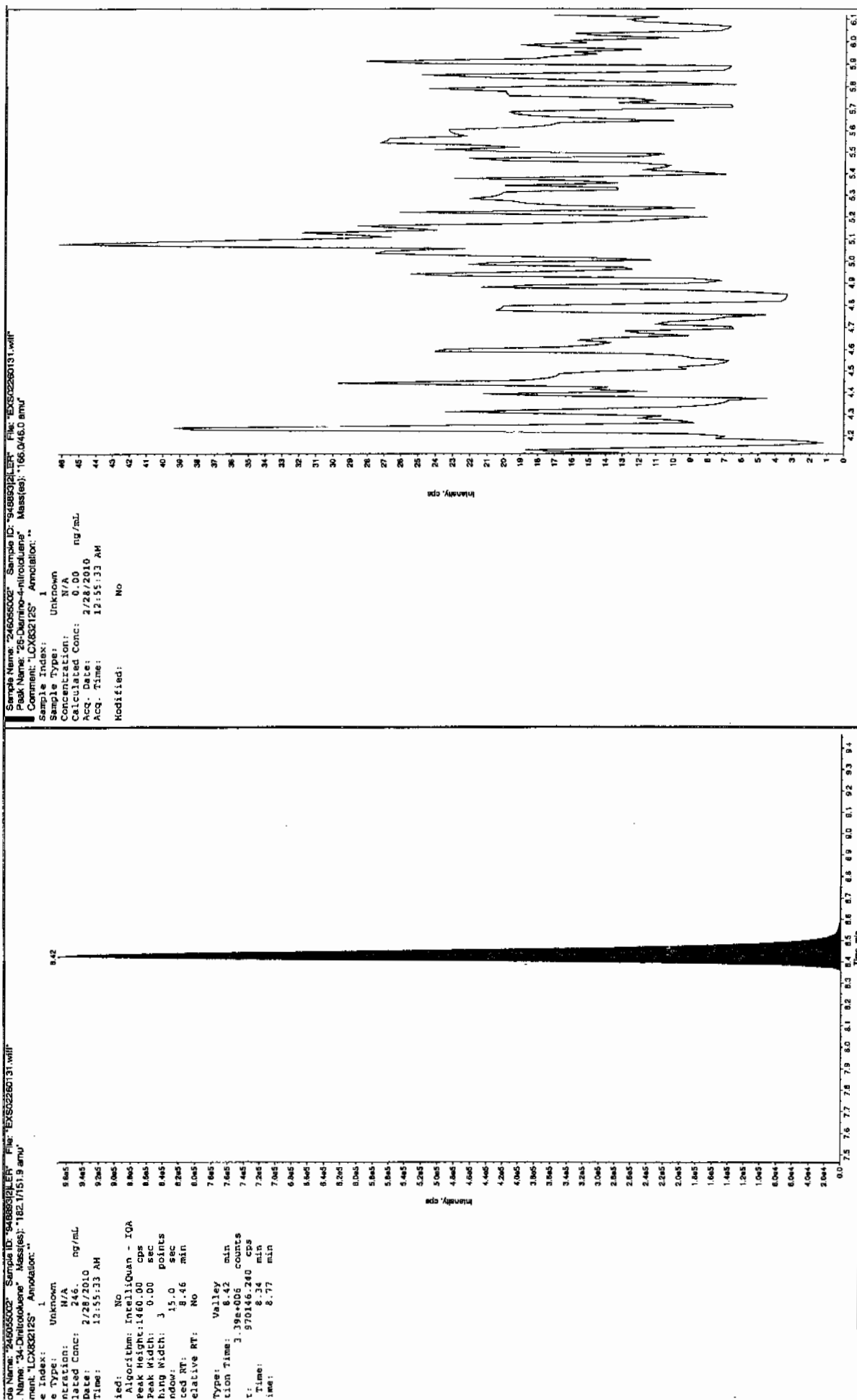


Jan 31/10

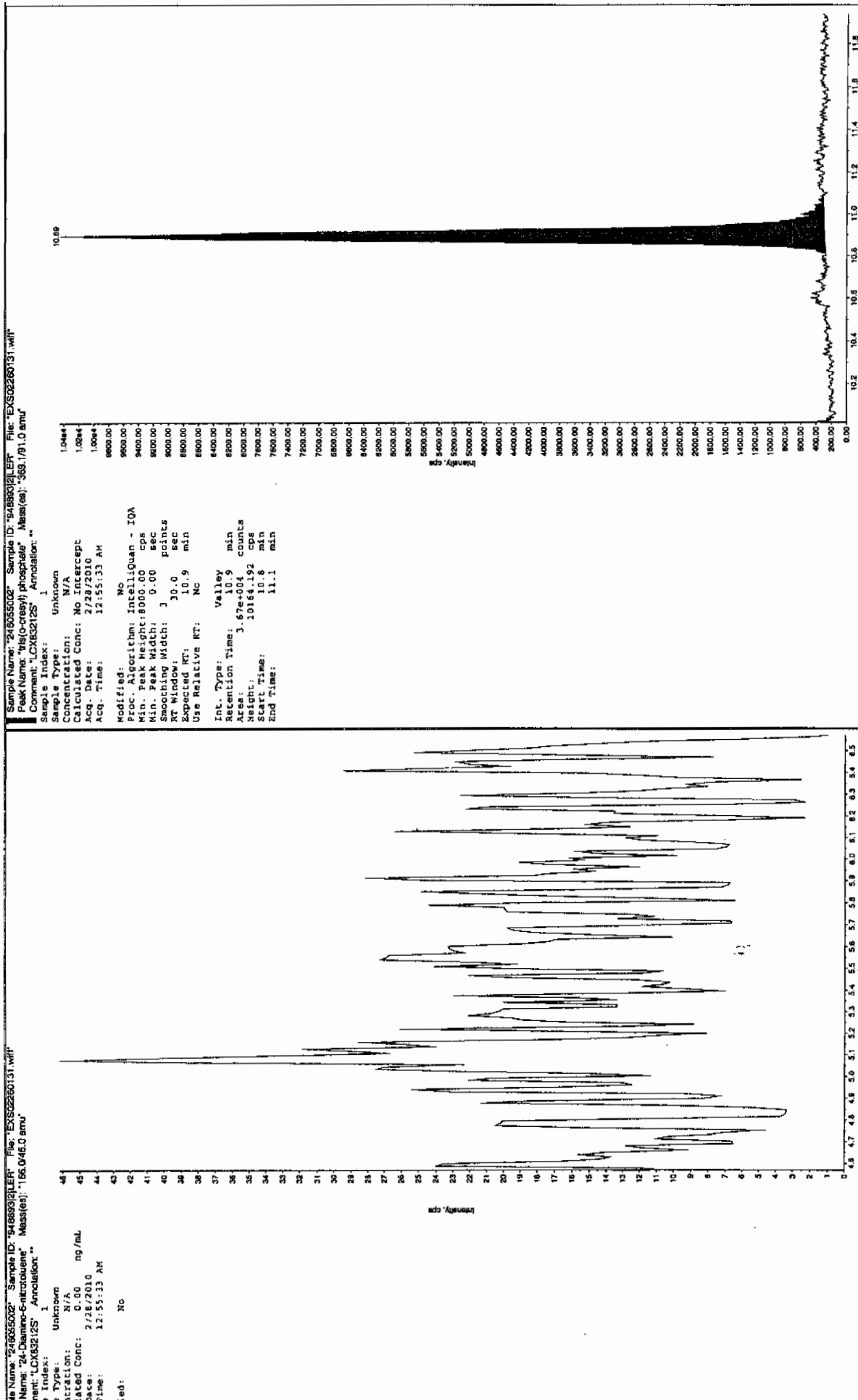


Jan 31/10

GL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304189a

Date Analyzed: 08-MAR-10 11:43

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: Tue Mar 09 09:42:03 2010, Page 3 of 89

Quantify Sample Report  
JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304189a

Date: 08-Mar-2010

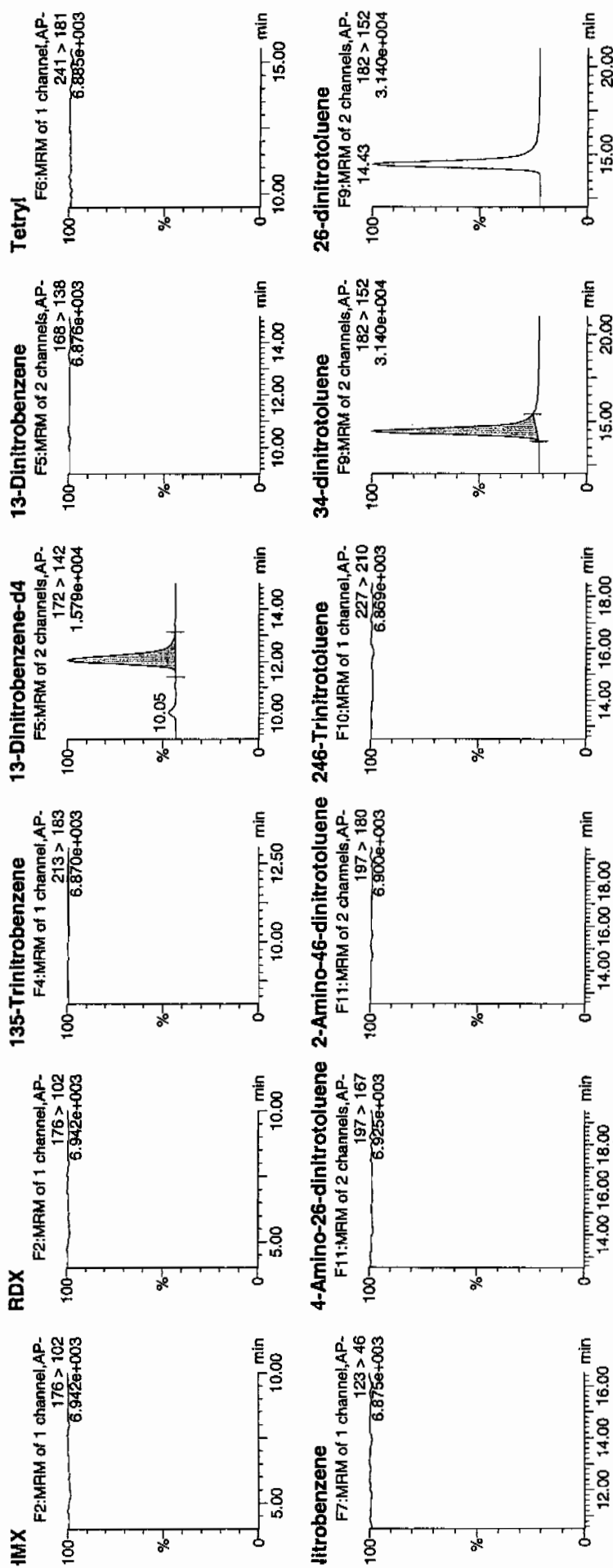
Time: 11:43:05

D: 246055003

File: 4:6,A

1077  
3/9/10

WAV 948893 / 8022 / 21

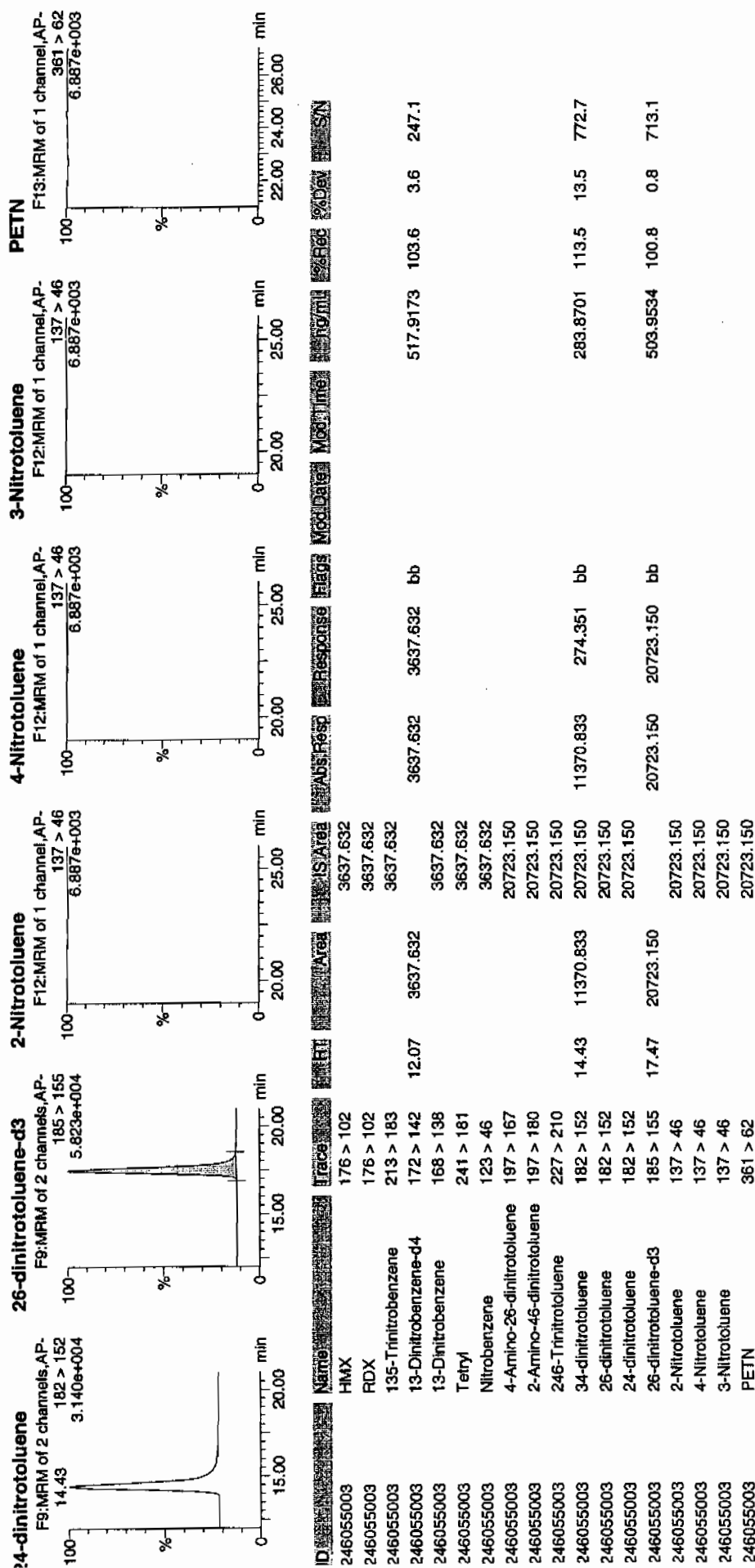


Handwritten signature: *Handwritten signature*

Printed: Tue Mar 09 09:42:03 2010, Page 4 of 89

Quantify Sample Report  
JCEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



JCEL 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: RE15-10-8171

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055003

Sample Amount 2

Molsture: 12.0

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260132.wiff

Date Analyzed: 28-FEB-10 01:11

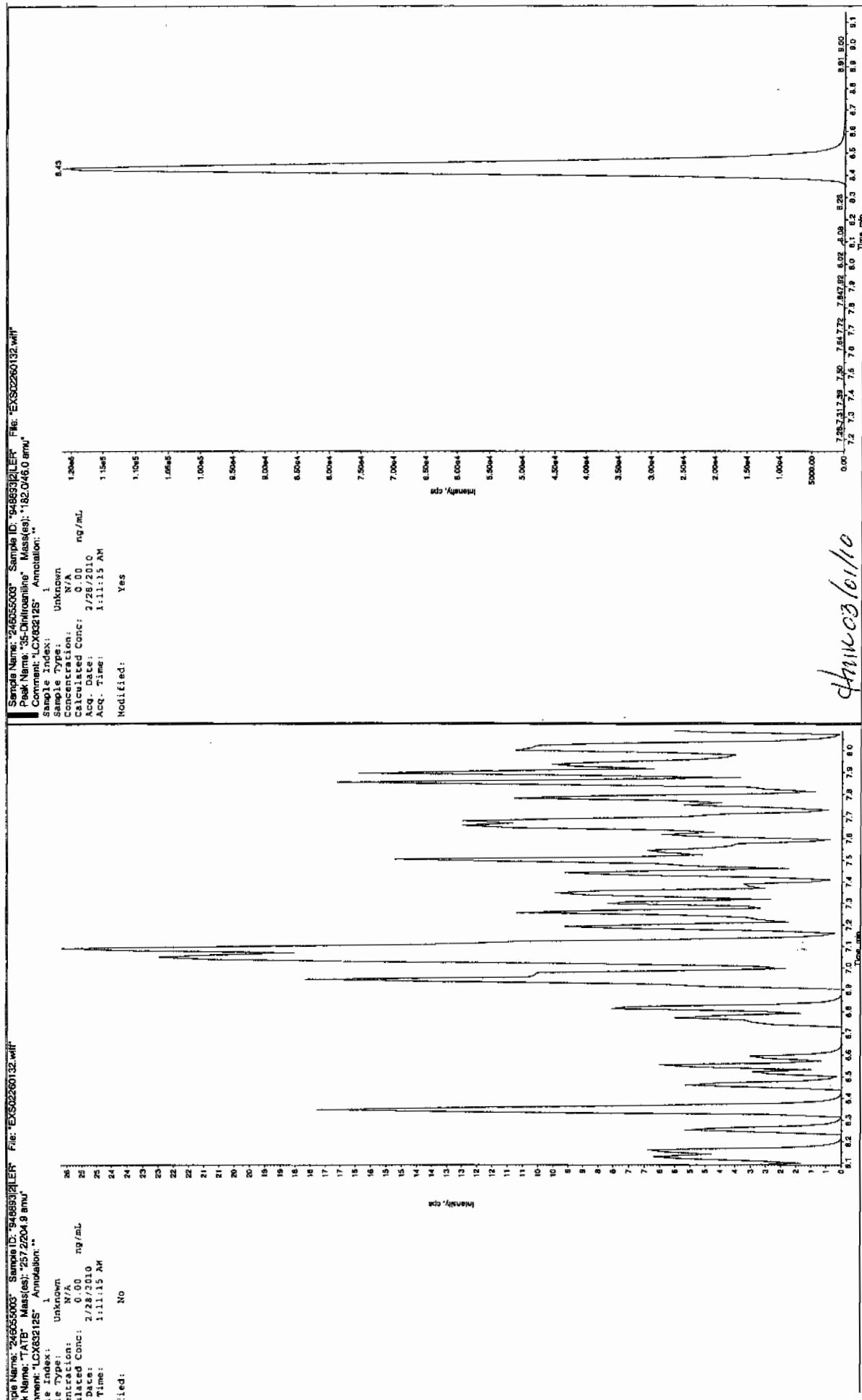
Units: ug/kg

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 =

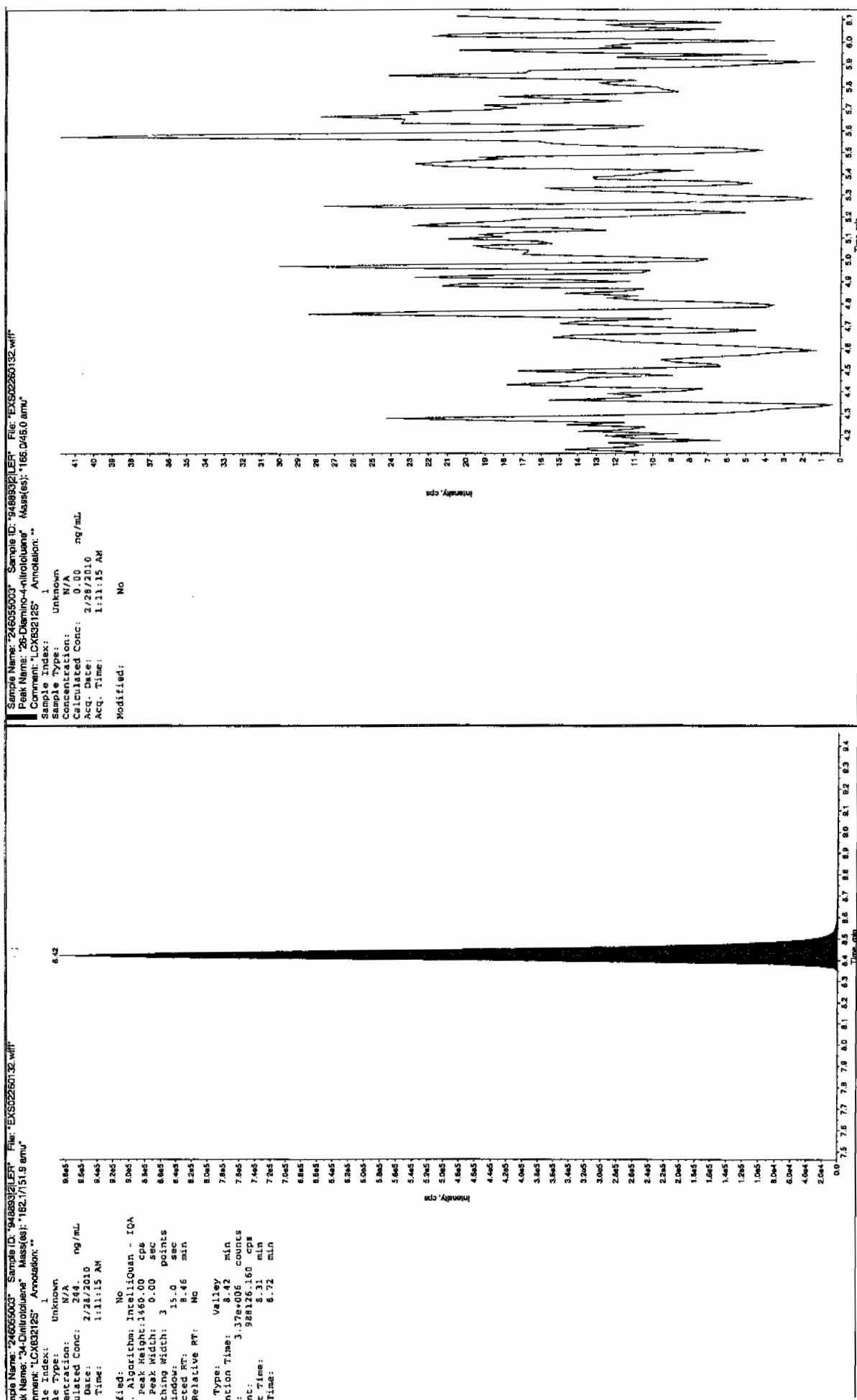
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

See 3/1/10

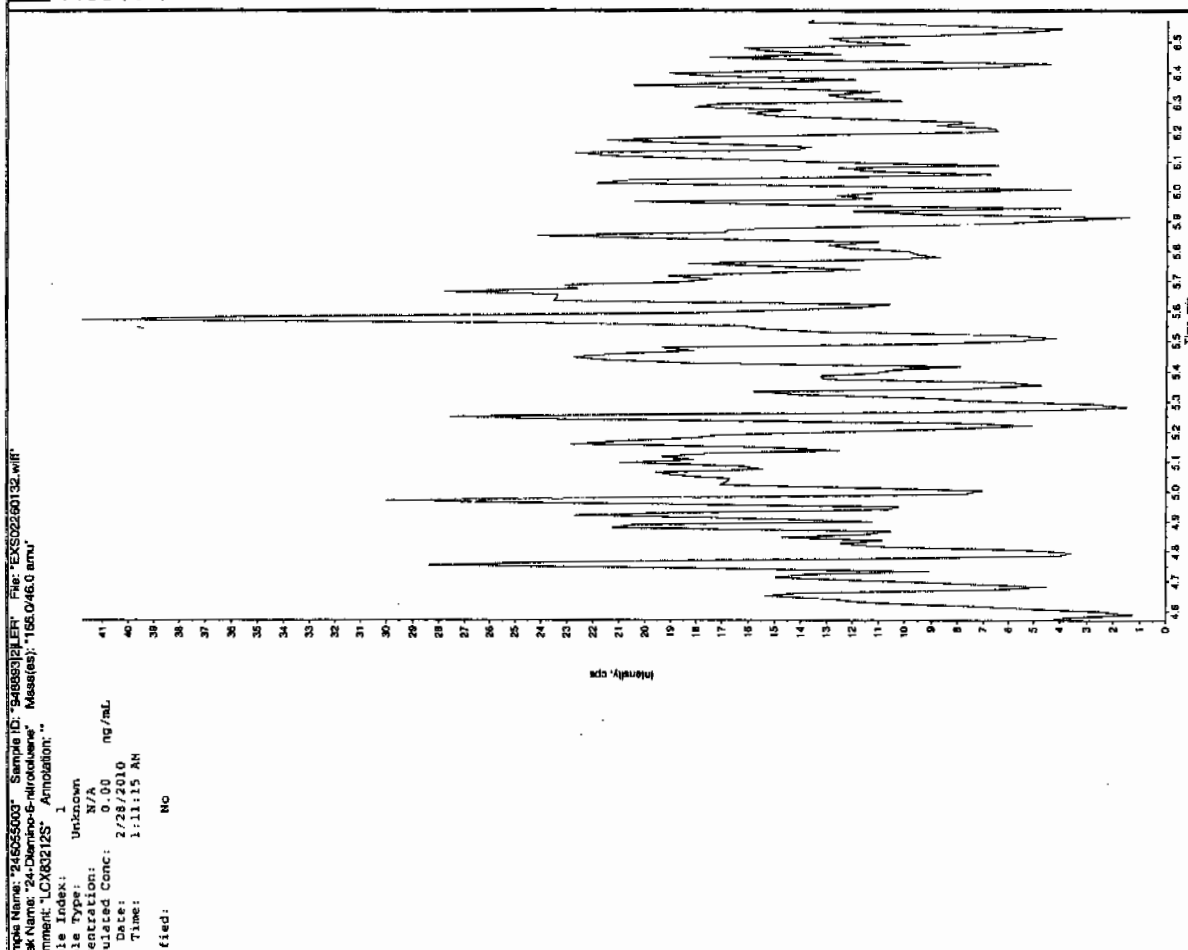
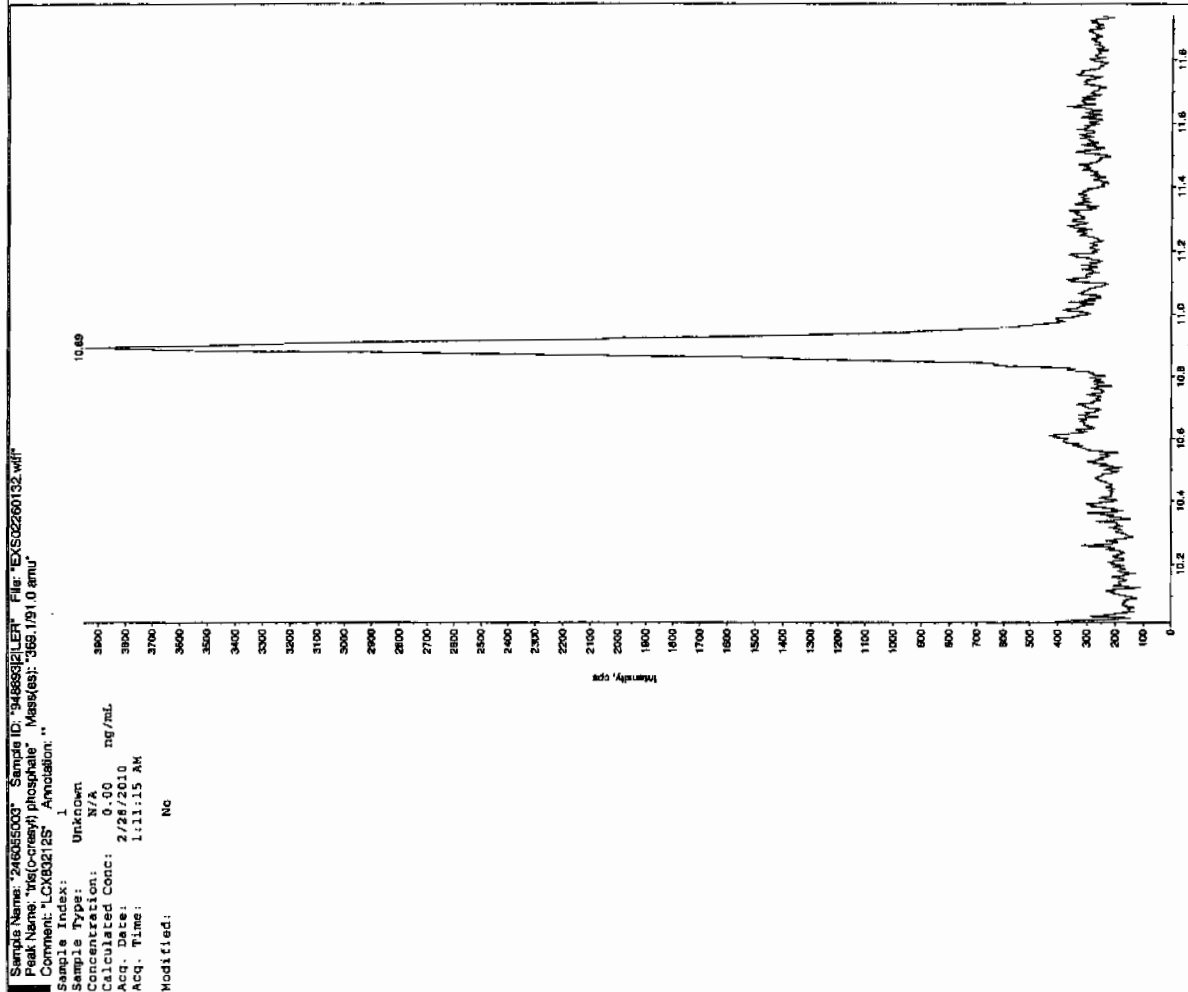


SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304190a

Date Analyzed: 08-MAR-10 12:12

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  
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304190a

Date: 08-Mar-2010

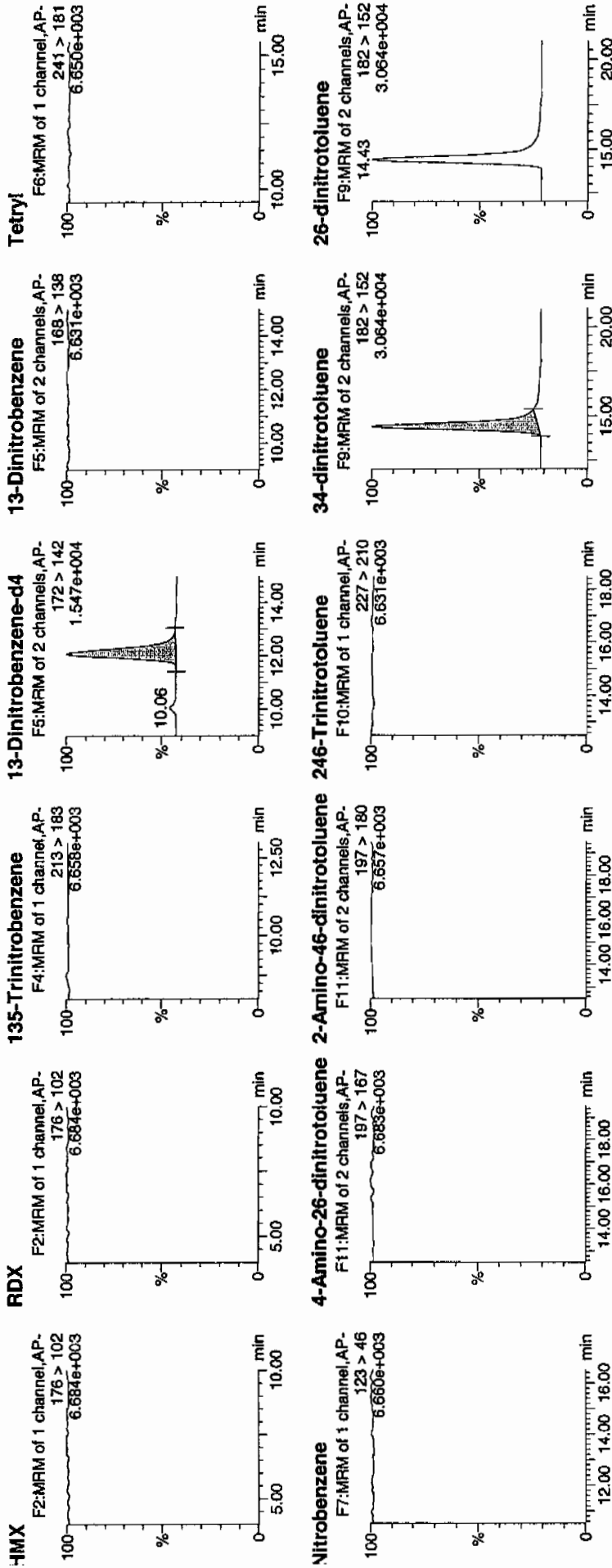
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D: 246055004

Vial: 4:6,B

100%  
 3/9/10

948893 / 121

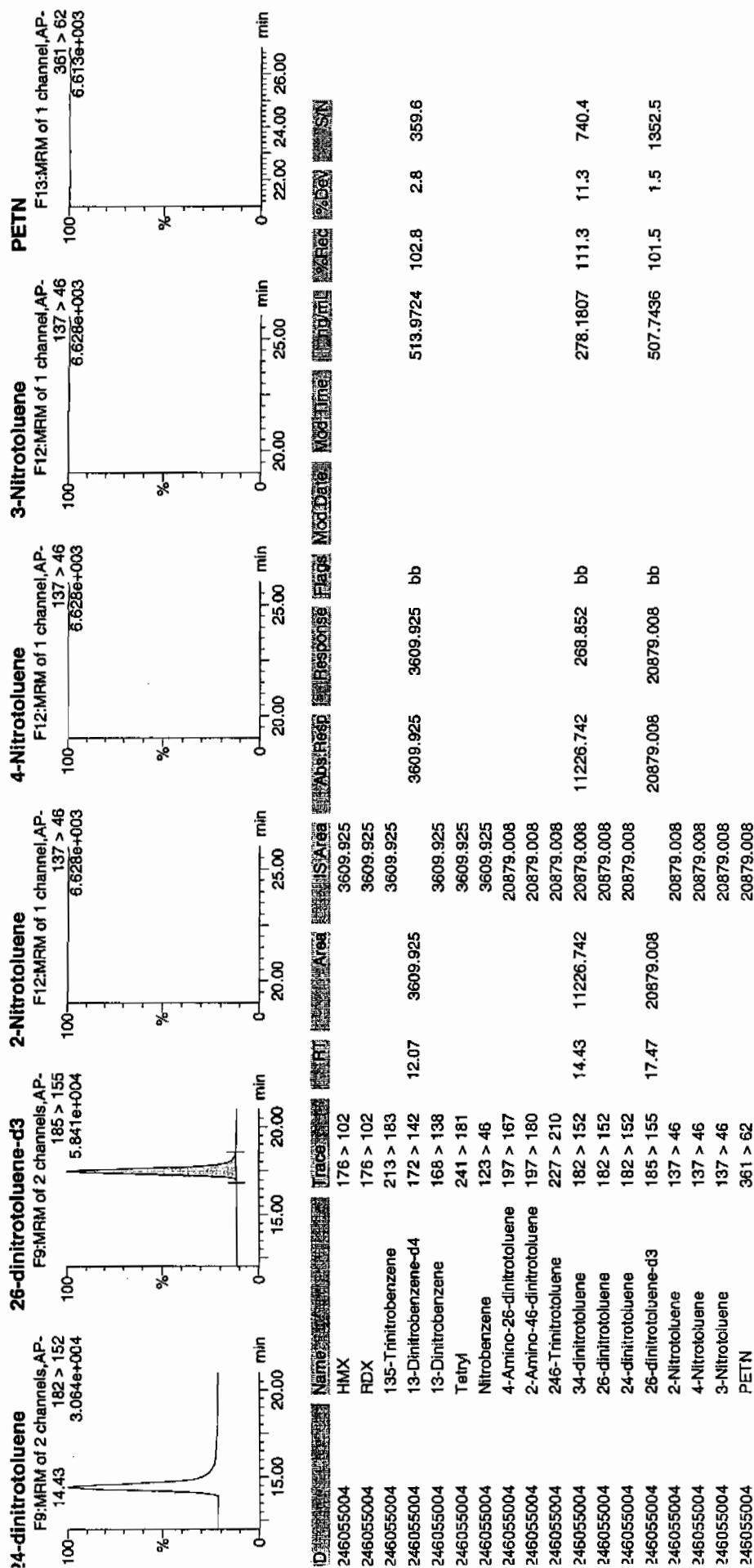


Handwritten signature: *Am*

Quantify Sample Report  
 JEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Mar 09 09:42:03 2010, Page 6 of 89

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



JEL 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: RE15-10-8168

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055004

Sample Amount 2

Moisture: 20.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260133.wiff

Date Analyzed: 28-FEB-10 01:26

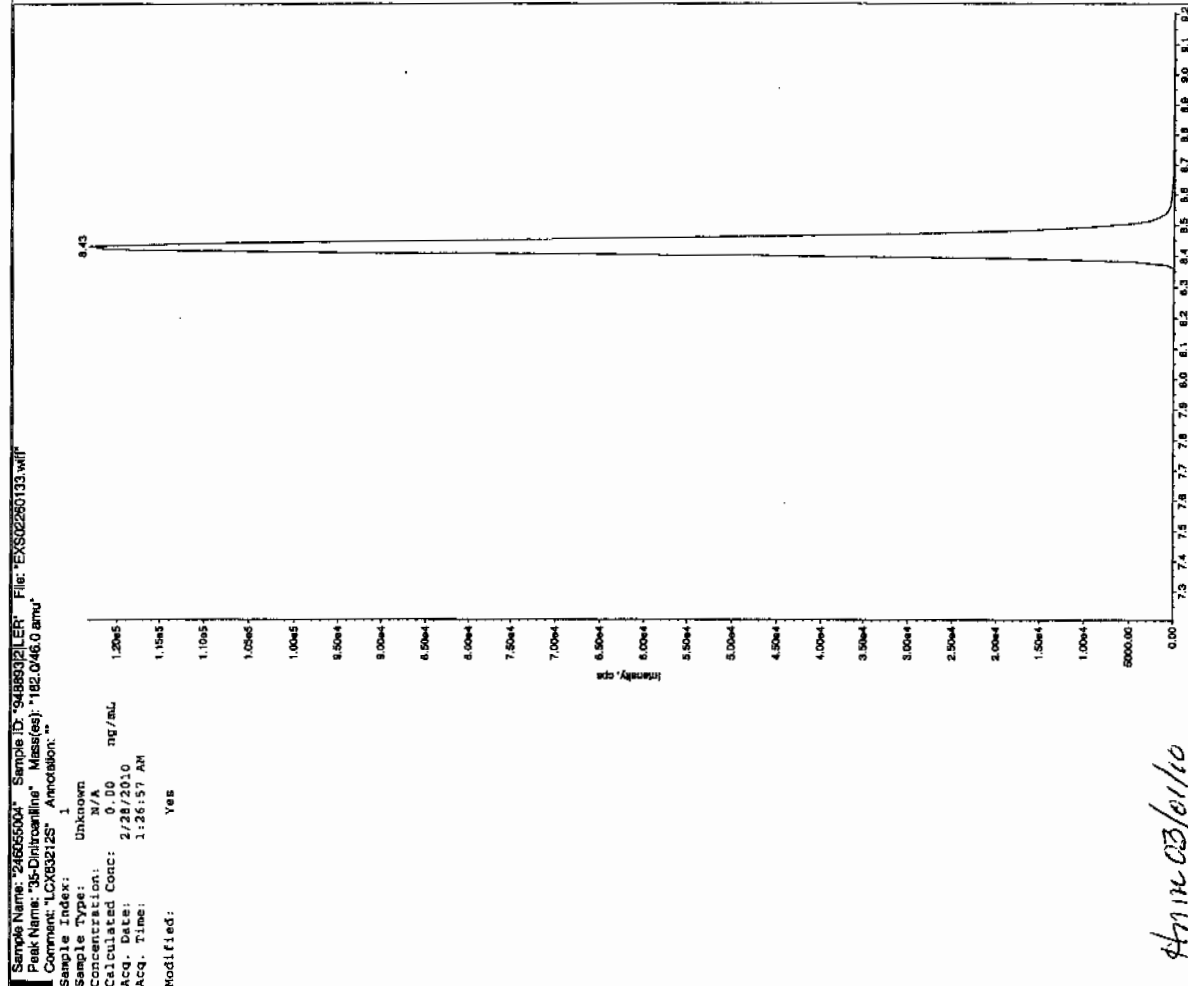
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	360	J
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

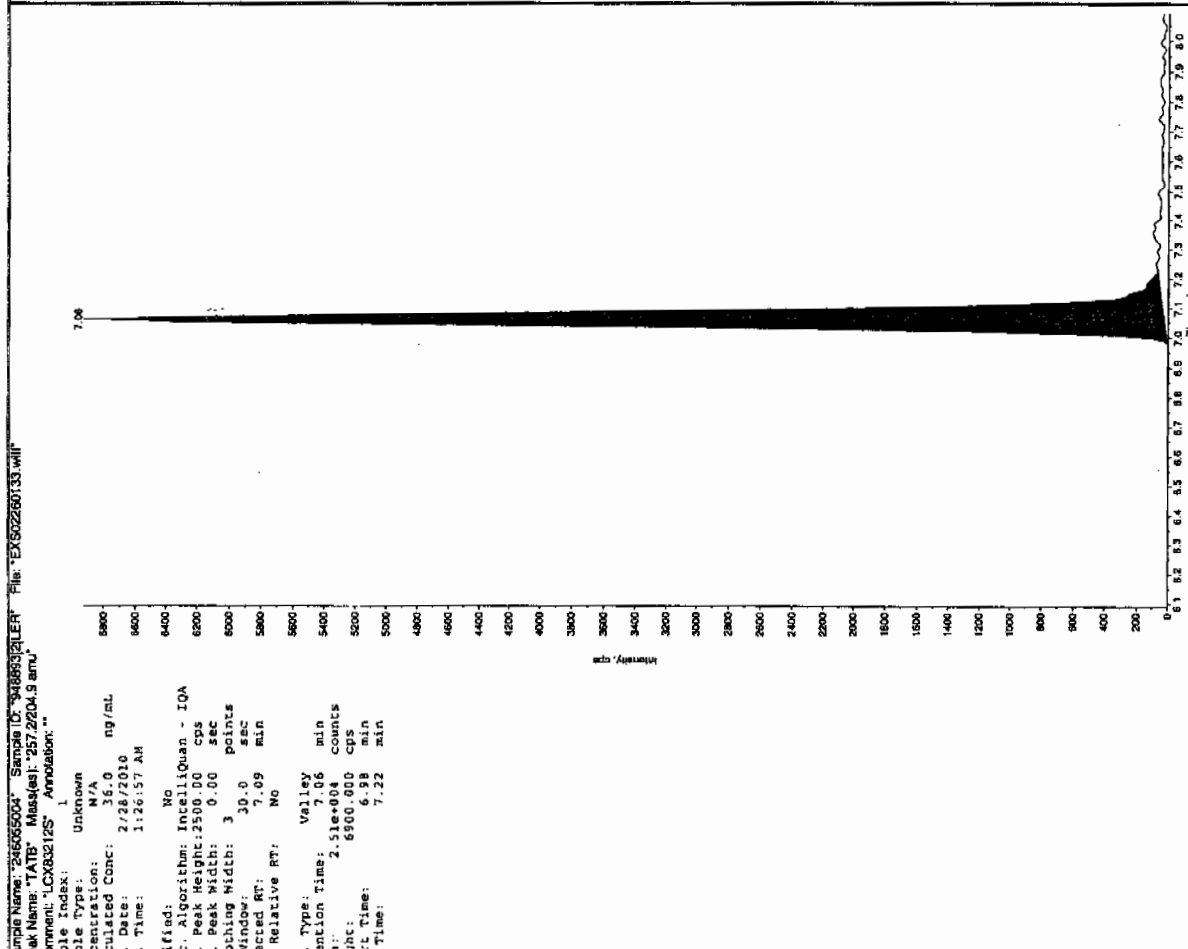
\*Concentration =

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

Run 3/1/10



Ann 03/01/10

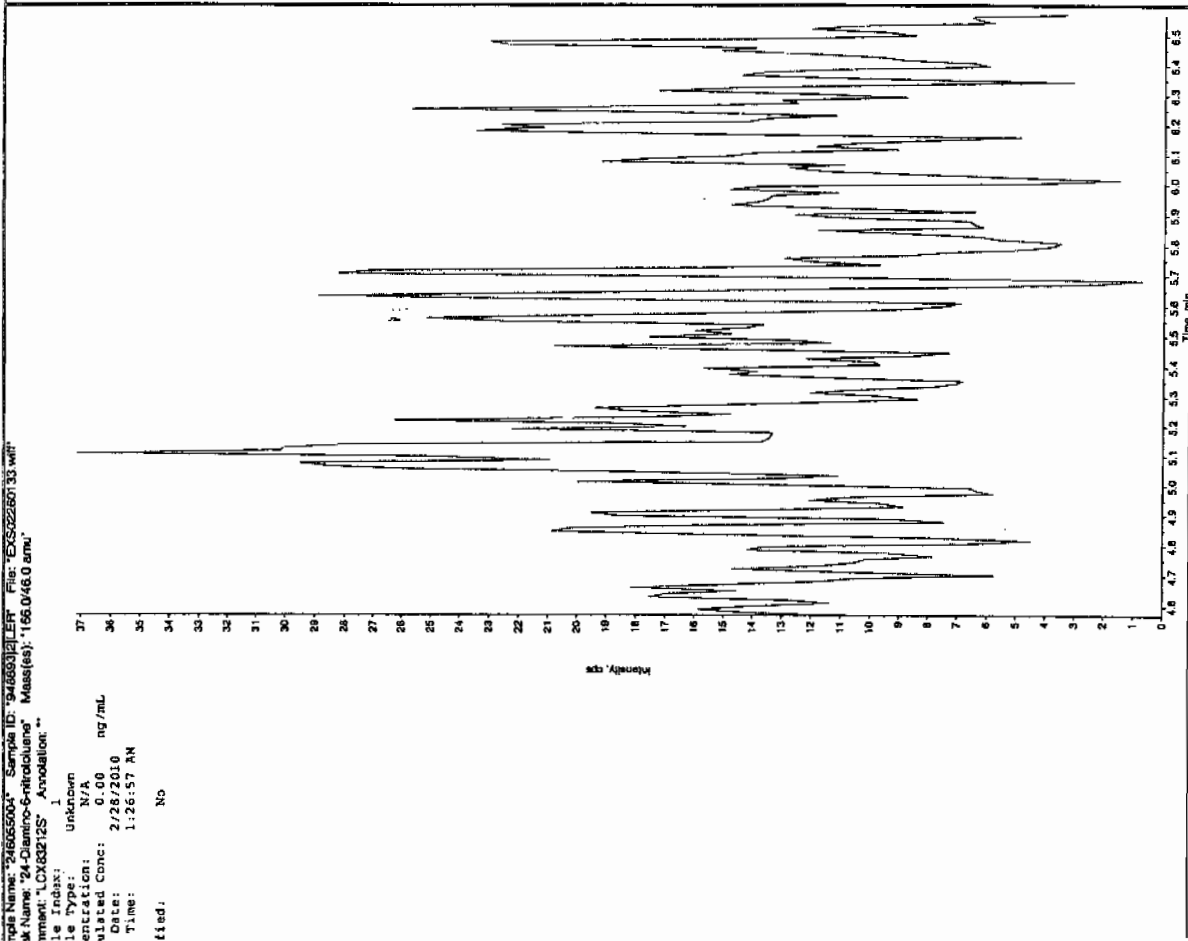
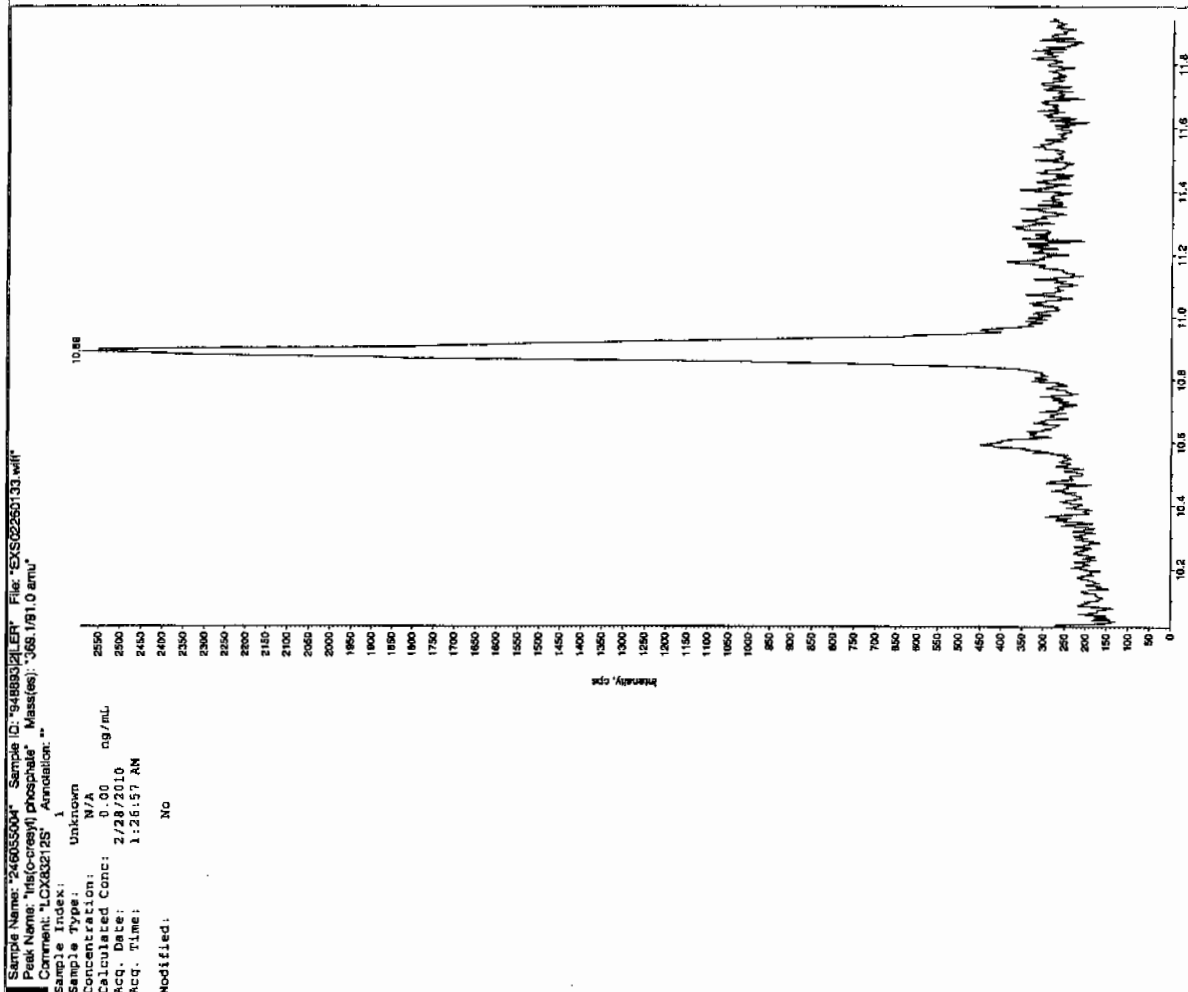


IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304191a

Date Analyzed: 08-MAR-10 12:42

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: Tue Mar 09 09:42:03 2010, Page 7 of 89

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304191a

Date: 08-Mar-2010

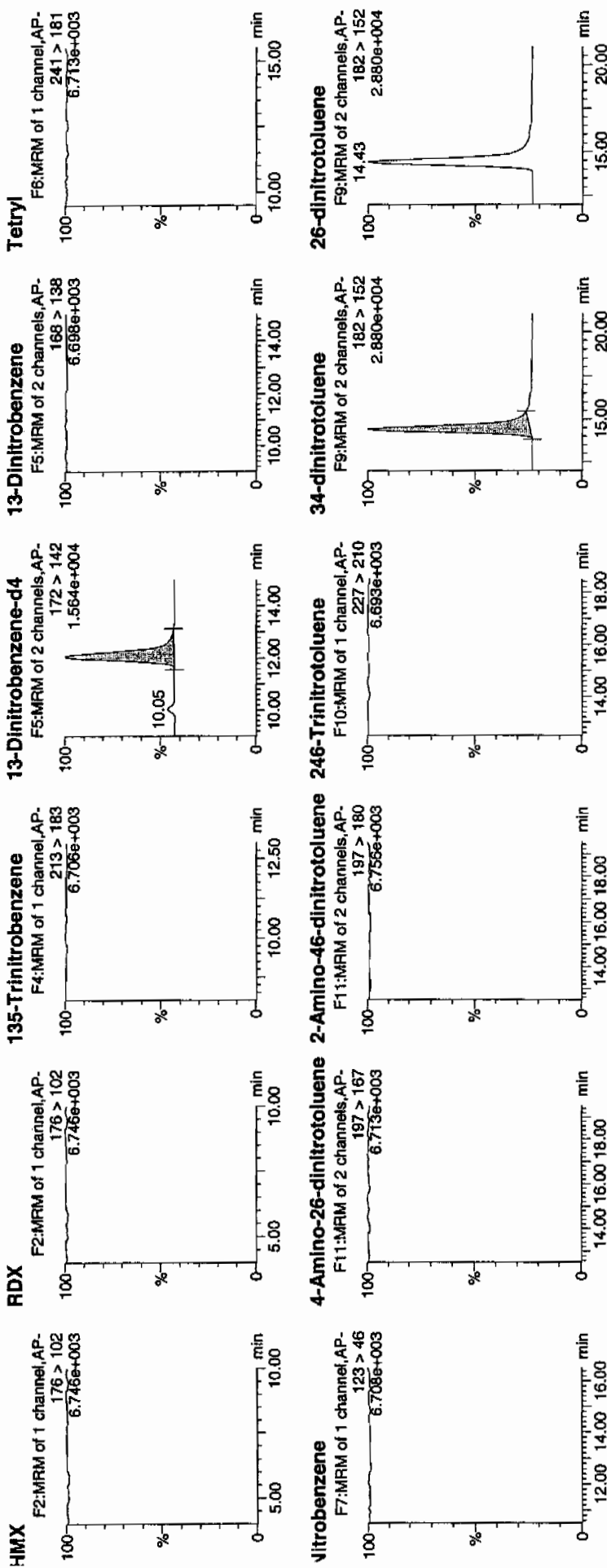
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Vial: 4:6,C

12/17/10  
3/9/10

1948393 / 2010 / 21

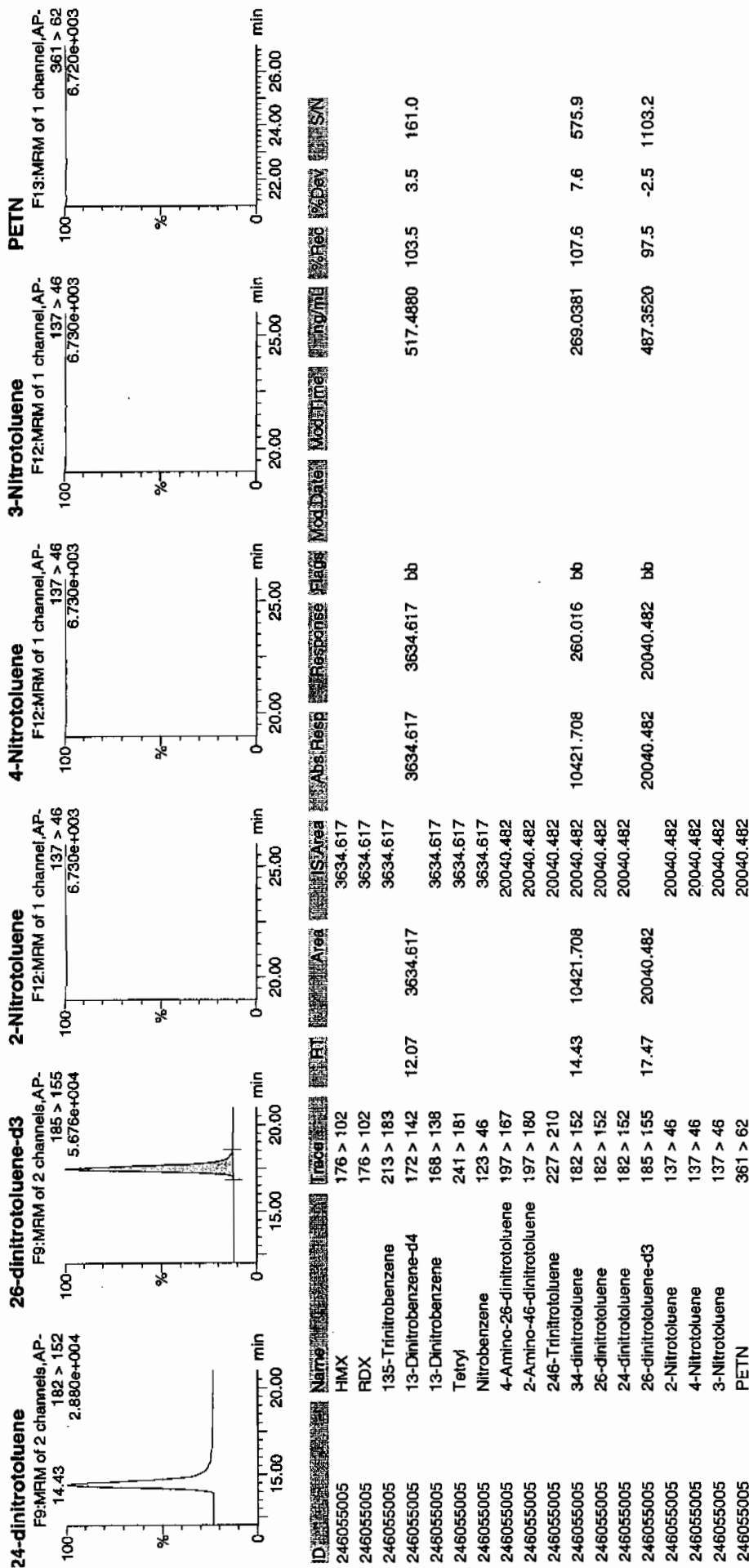


Handwritten signature

Printed: Tue Mar 09 09:42:03 2010, Page 8 of 89

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8222

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055005

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260134.wiff

Date Analyzed: 28-FEB-10 01:42

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

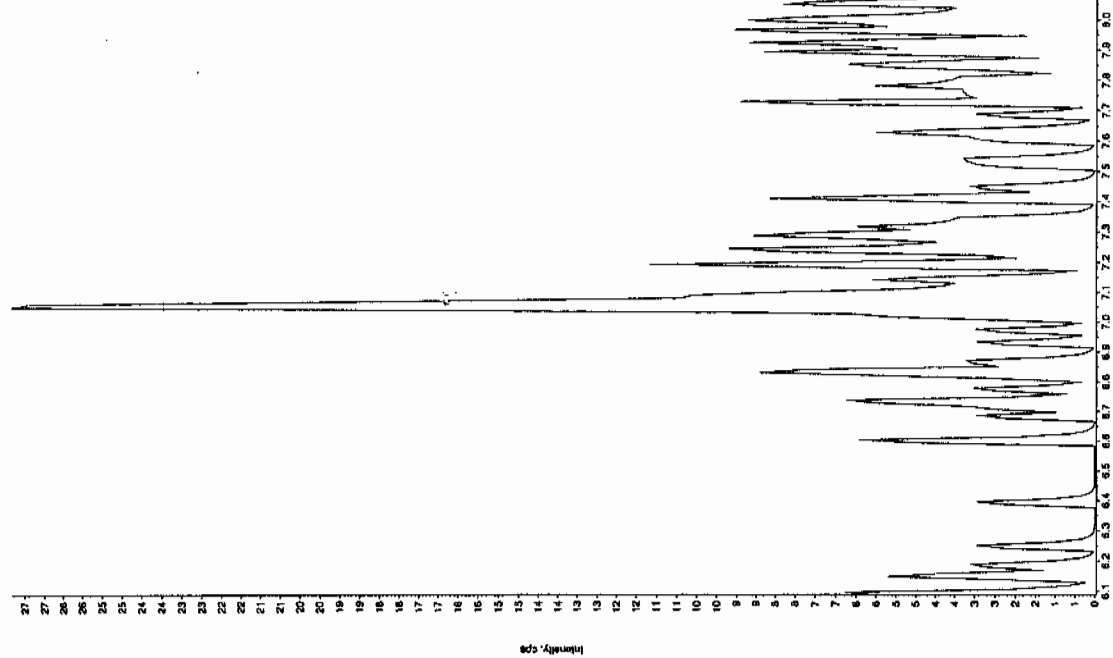
\*Concentration =

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

See 3/1/10

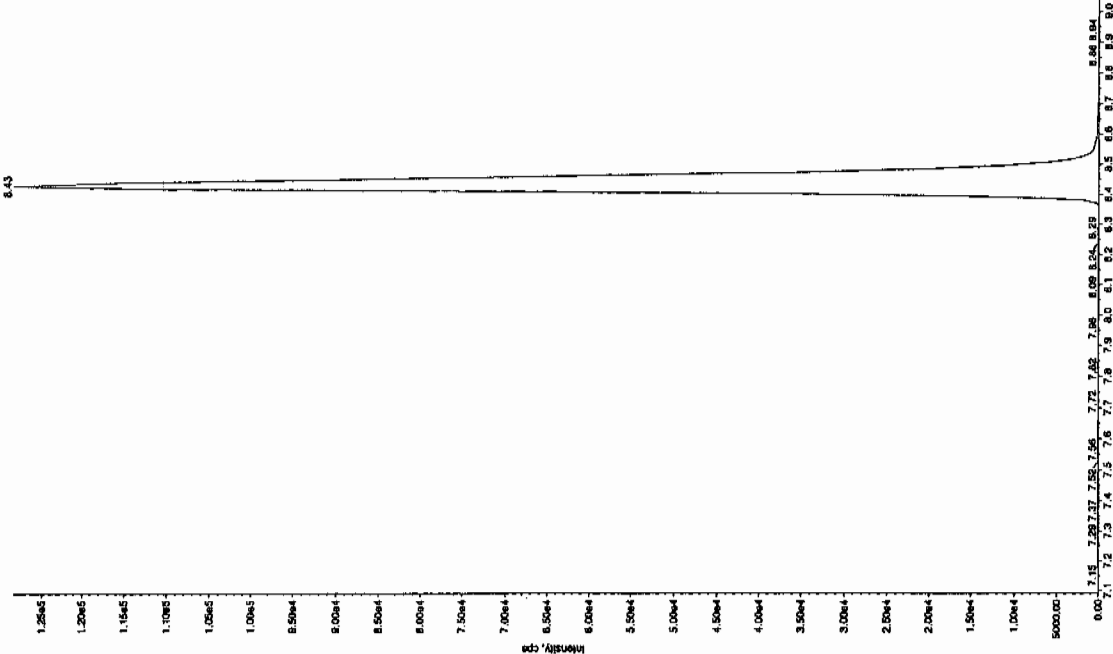
Sample Name: "24605005" Sample ID: "54685021ER" File: "EXS02260134.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Date: 1:42:39 AM  
 Acq. Time: 1:42:39 AM  
 Modified: No



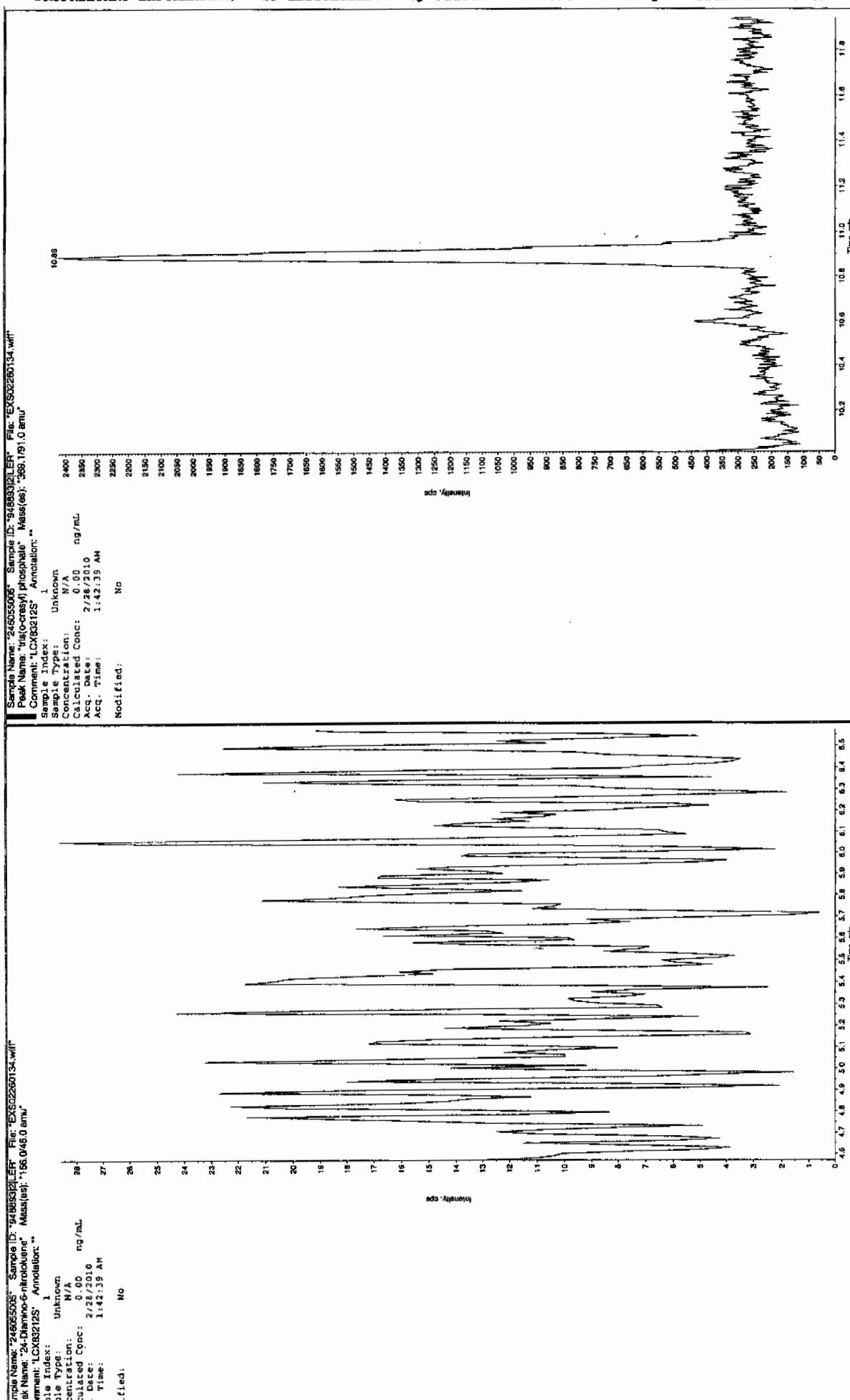
Sample Name: "24605005" Sample ID: "54685021ER" File: "EXS02260134.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX032125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Date: 1:42:39 AM  
 Acq. Time: 1:42:39 AM  
 Modified: Yes



See 3/1/10





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304192a

Date Analyzed: 08-MAR-10 13:11

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		

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304192a

Date: 08-Mar-2010

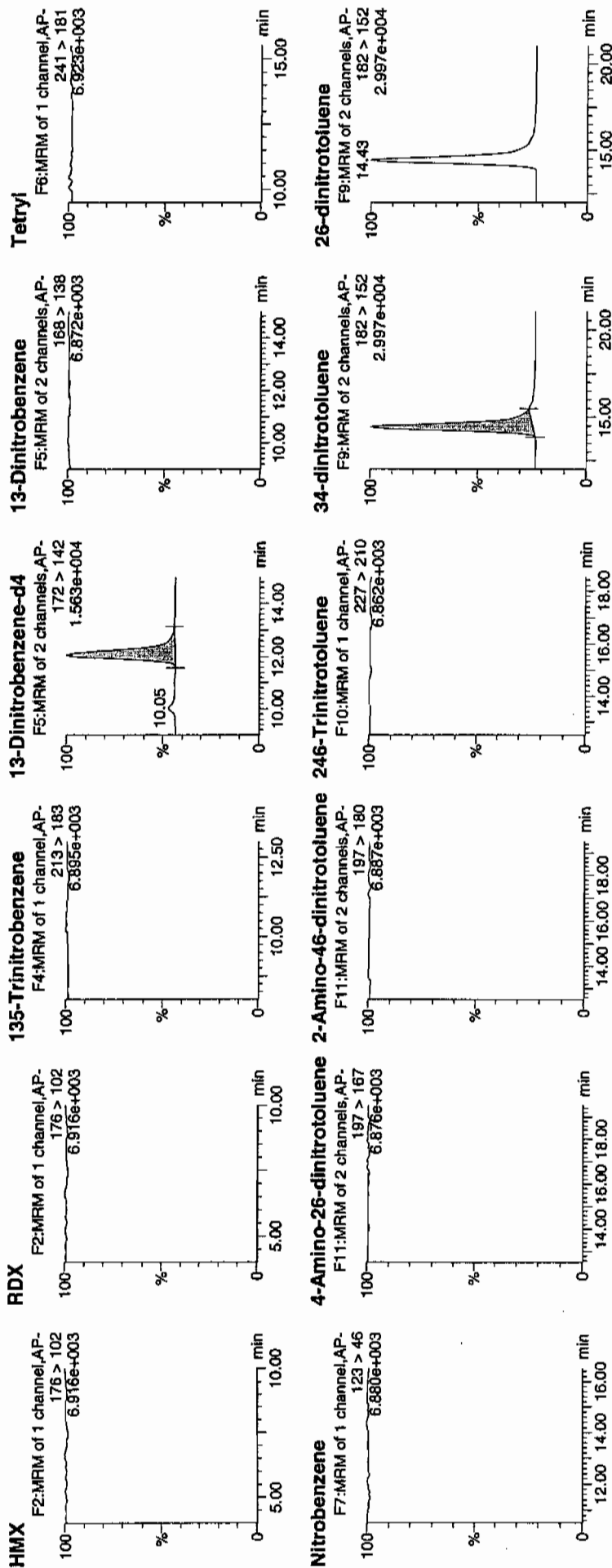
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Vial: 4:6,D

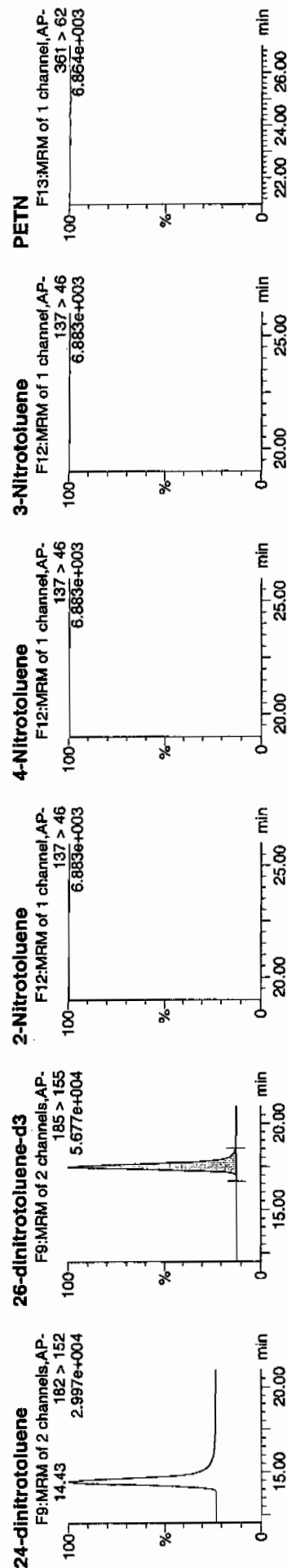
1077  
3/9/10

194093 / 2022 / 21



4/11/10  
03/09/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

[illegible]

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8221

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055006

Sample Amount 2

Moisture: 12.8

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260135.wiff

Date Analyzed: 28-FEB-10 01:58

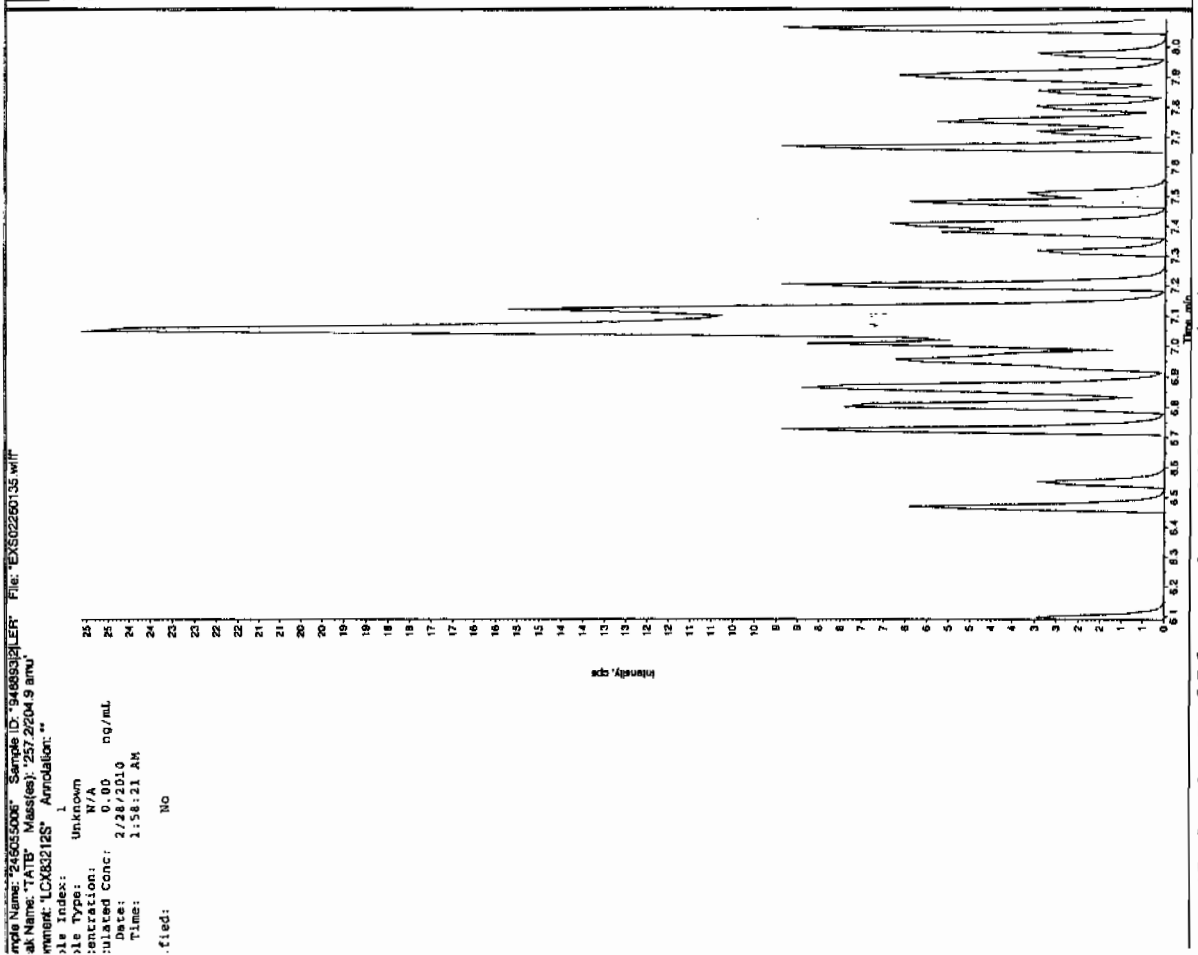
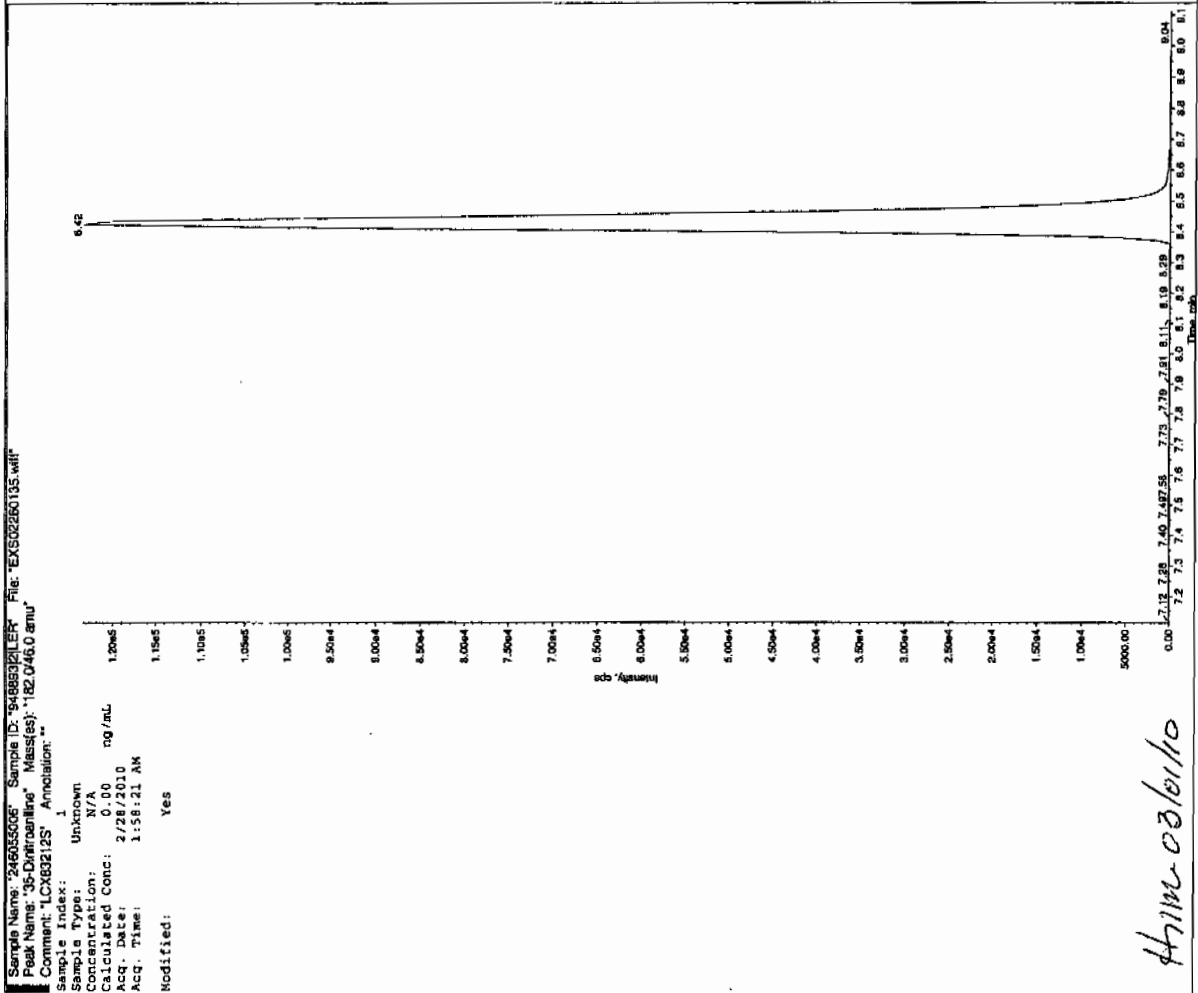
Units: ug/kg

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

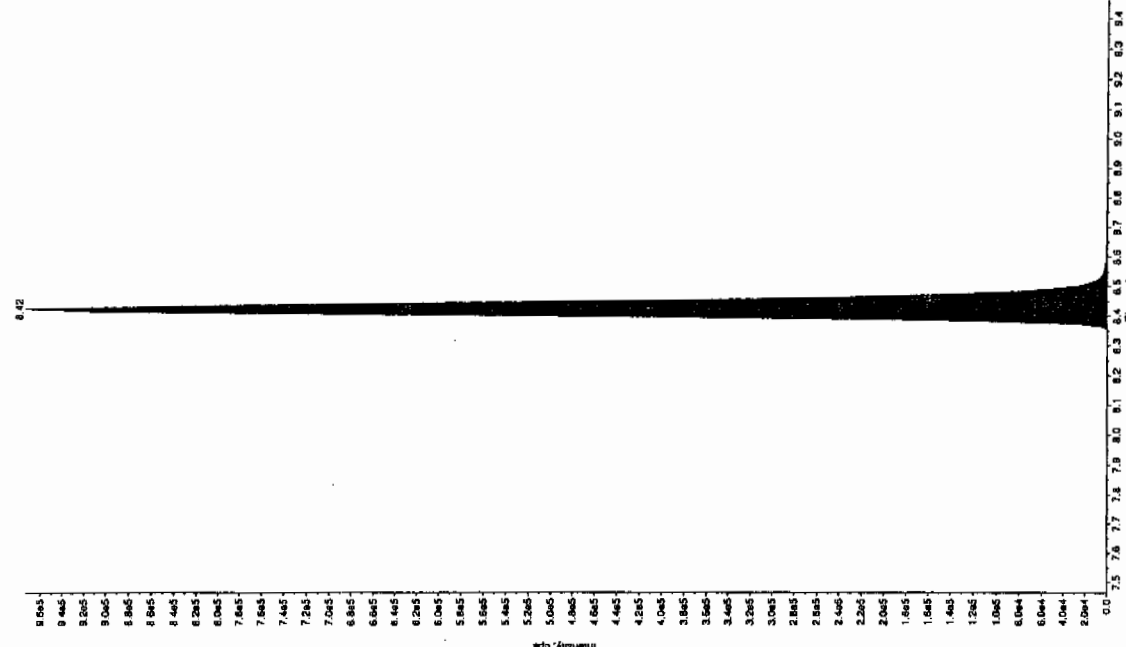
See 3/1/10



Method 8321A-Modified LCMSMS#4

Sample Name: "24505006" Sample ID: "94893021ER" File: "EXS02260135.wif"  
 Peak Name: "24-Oxobutanoic acid" Mass(es): "186.0460 amu"  
 Concentration: "0.00 ng/mL"  
 Sample Index: "1" Annotation: ""

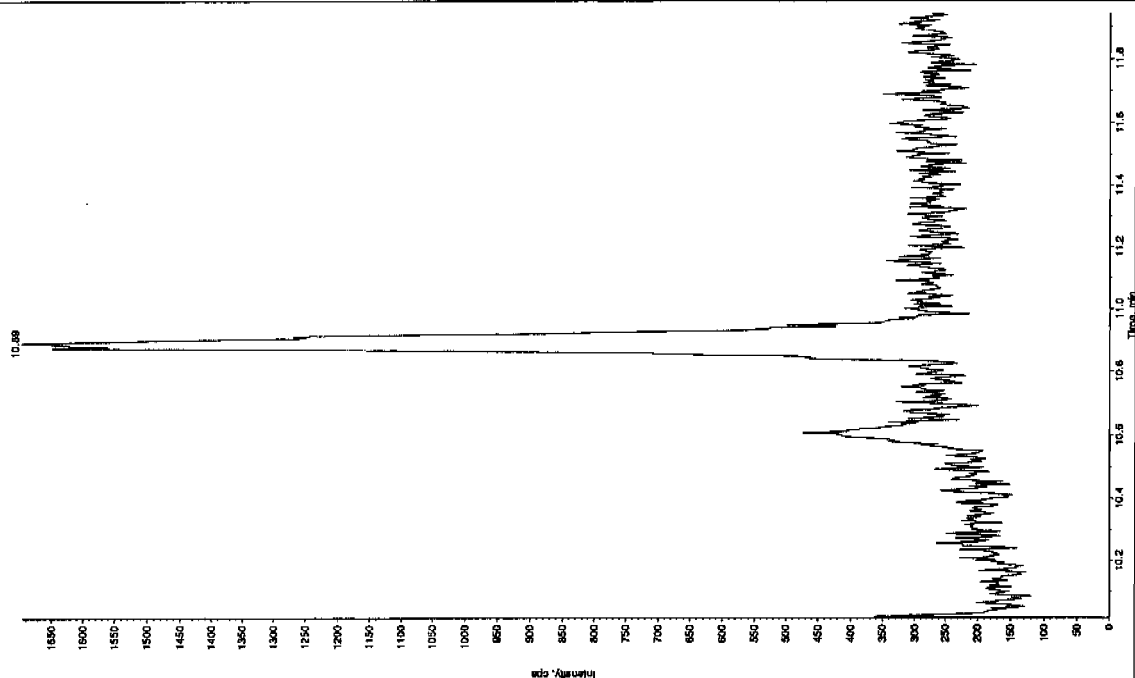
Sample Name: "24505006" Sample ID: "94893021ER" File: "EXS02260135.wif"  
 Peak Name: "24-Oxobutanoic acid" Mass(es): "186.0460 amu"  
 Concentration: "0.00 ng/mL"  
 Sample Index: "1" Annotation: ""  
 Sample Type: Unknown  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 1:58:21 AM  
 Modified: No



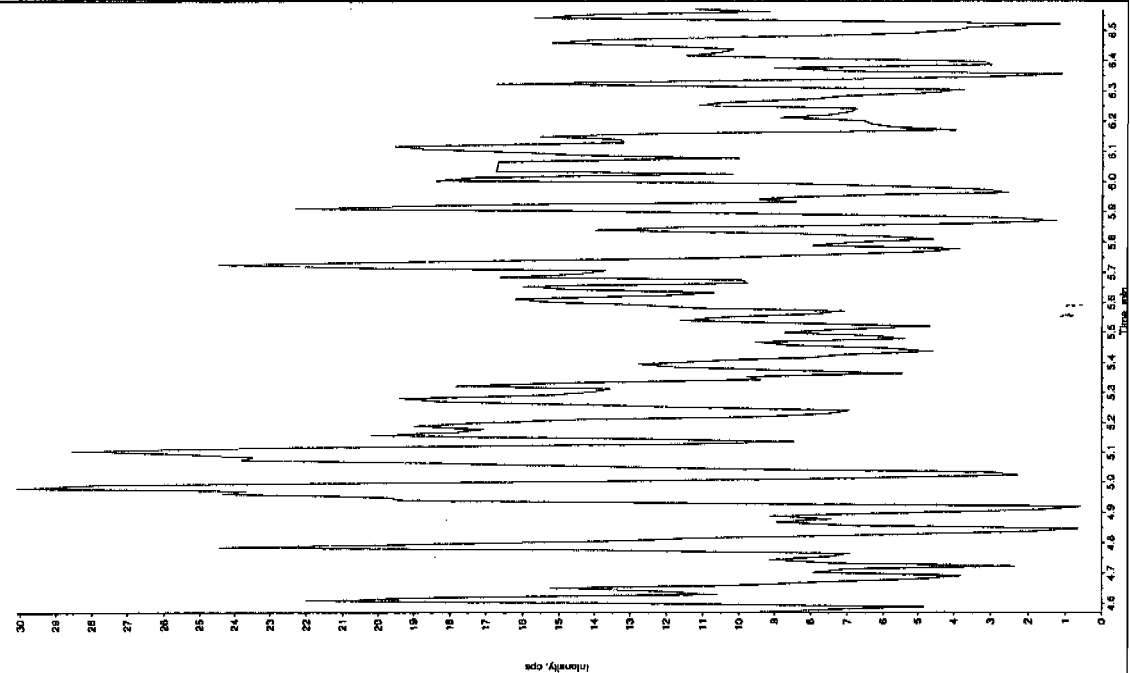
Sample Name: "24505006" Sample ID: "94893021ER" File: "EXS02260135.wif"  
 Peak Name: "24-Oxobutanoic acid" Mass(es): "186.0460 amu"  
 Concentration: "0.00 ng/mL"  
 Sample Index: "1" Annotation: ""

Sample Name: "24505006" Sample ID: "94893021ER" File: "EXS02260135.wif"  
 Peak Name: "24-Oxobutanoic acid" Mass(es): "186.0460 amu"  
 Concentration: "0.00 ng/mL"  
 Sample Index: "1" Annotation: ""  
 Sample Type: Unknown  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 1:58:21 AM  
 Modified: No  
 C. Algorithm: IntelliQuan - IQA  
 Peak Height: 1450.00 cps  
 Peak Width: 0.00 sec  
 Window: 3 points  
 Window: 15.0 sec  
 Ret. RT: 8.46 min  
 Relative RT: No  
 Type: Valley  
 Retention Time: 8.42 min  
 Abundance: 3.35e+006 counts  
 S/N: 973891.296 cps  
 Ret. Time: 8.28 min  
 Time: 8.76 min

IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "246055006" Sample ID: "948893121.ER" File: "EXS0260135.will"  
ak Name: "24-Diamino-6-nitrotoluene" Mass(as): "166.0/48.0 amu"



EL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304193a

Date Analyzed: 08-MAR-10 13:41

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\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

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Time: 13:41:13

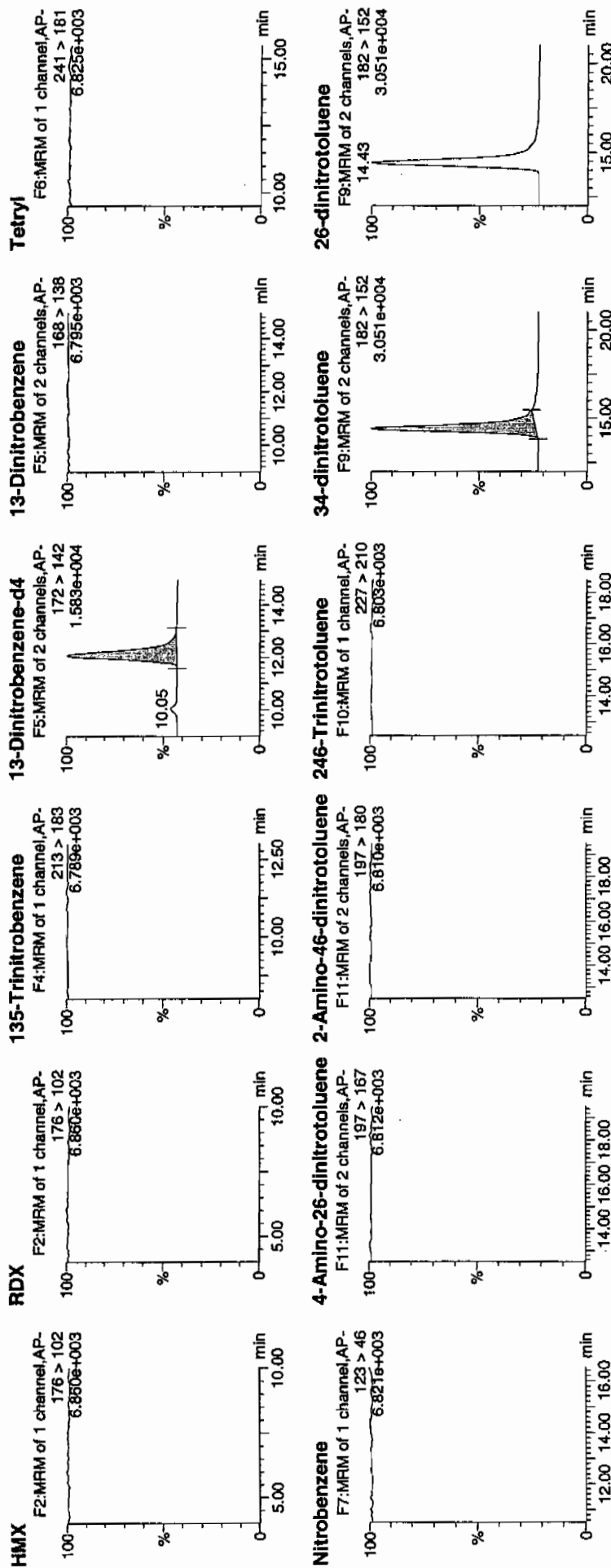
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Vial: 4:6,E

4077

3/9/10

943893 | 21

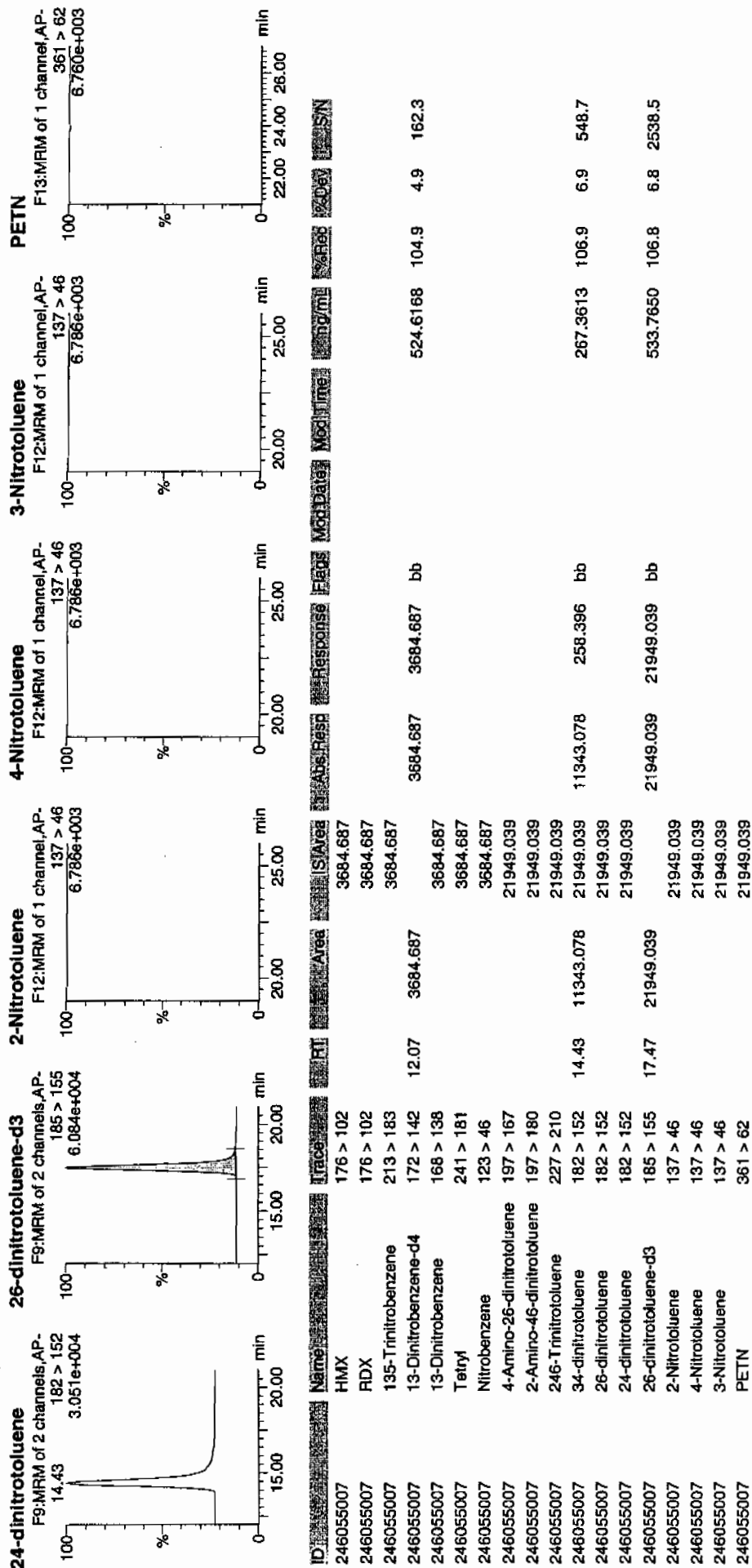


4077  
03/09/10

Printed: Tue Mar 09 09:42:03 2010, Page 12 of 89

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8220

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055007

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260139.wiff

Date Analyzed: 28-FEB-10 03:01

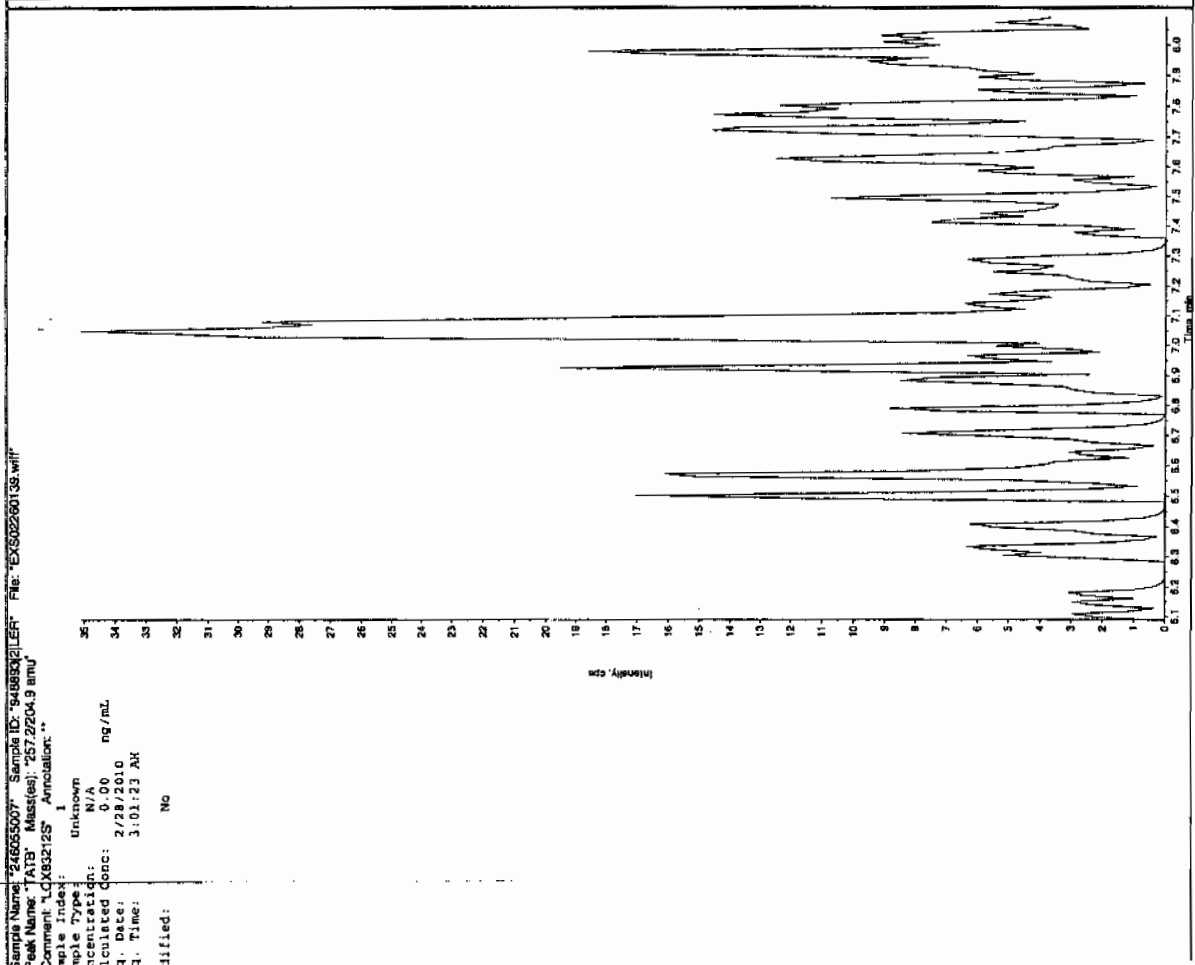
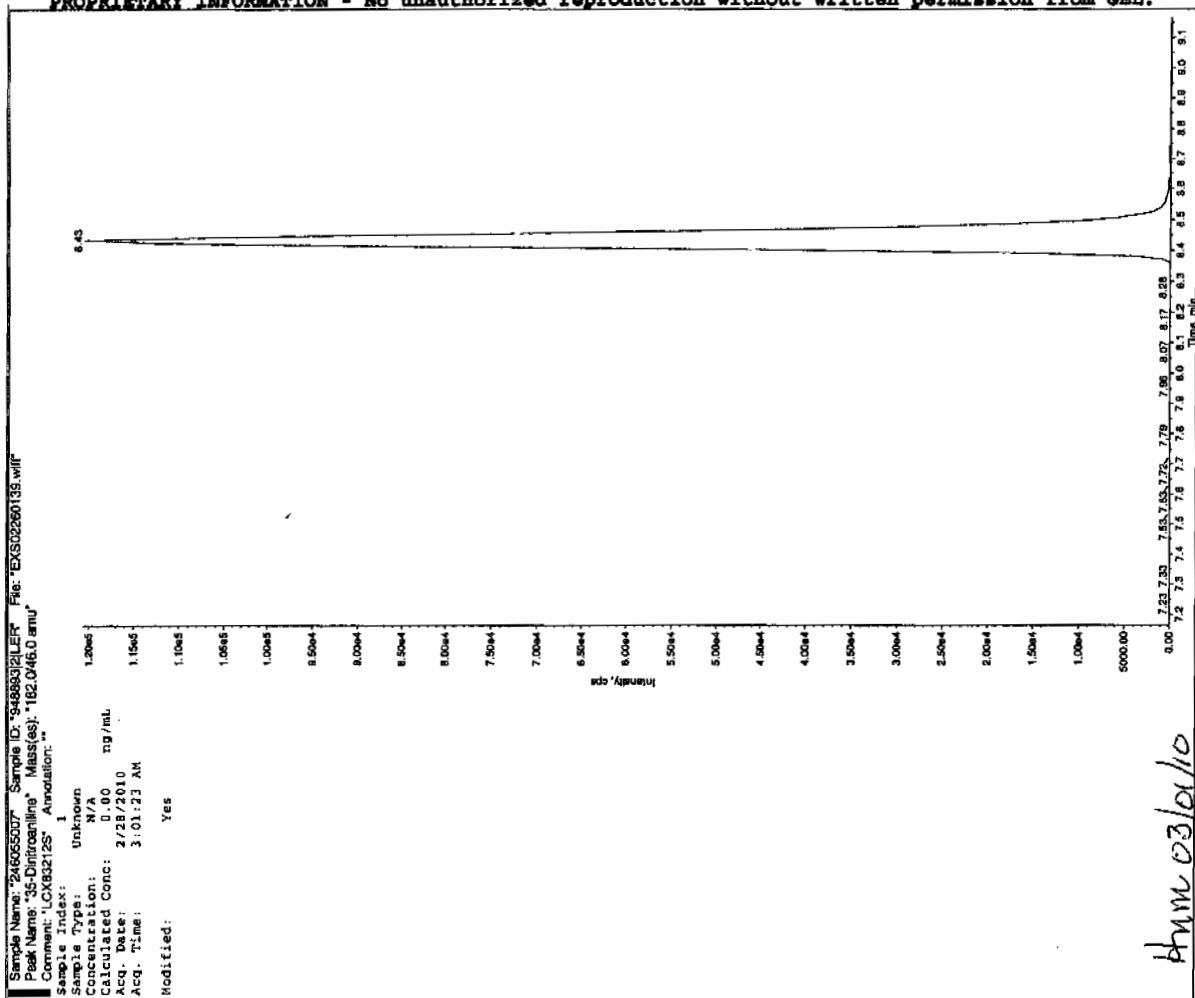
Units: ug/kg

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

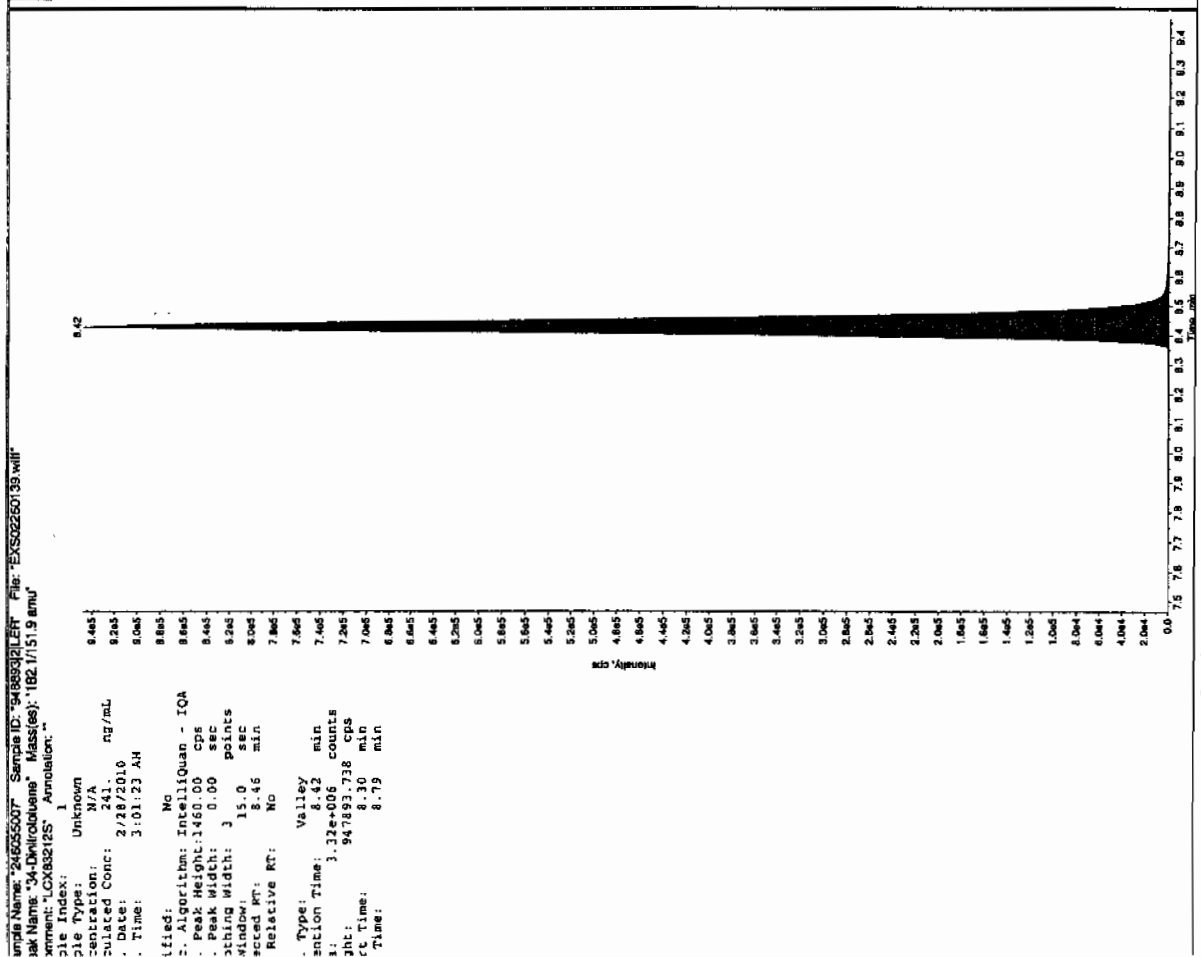
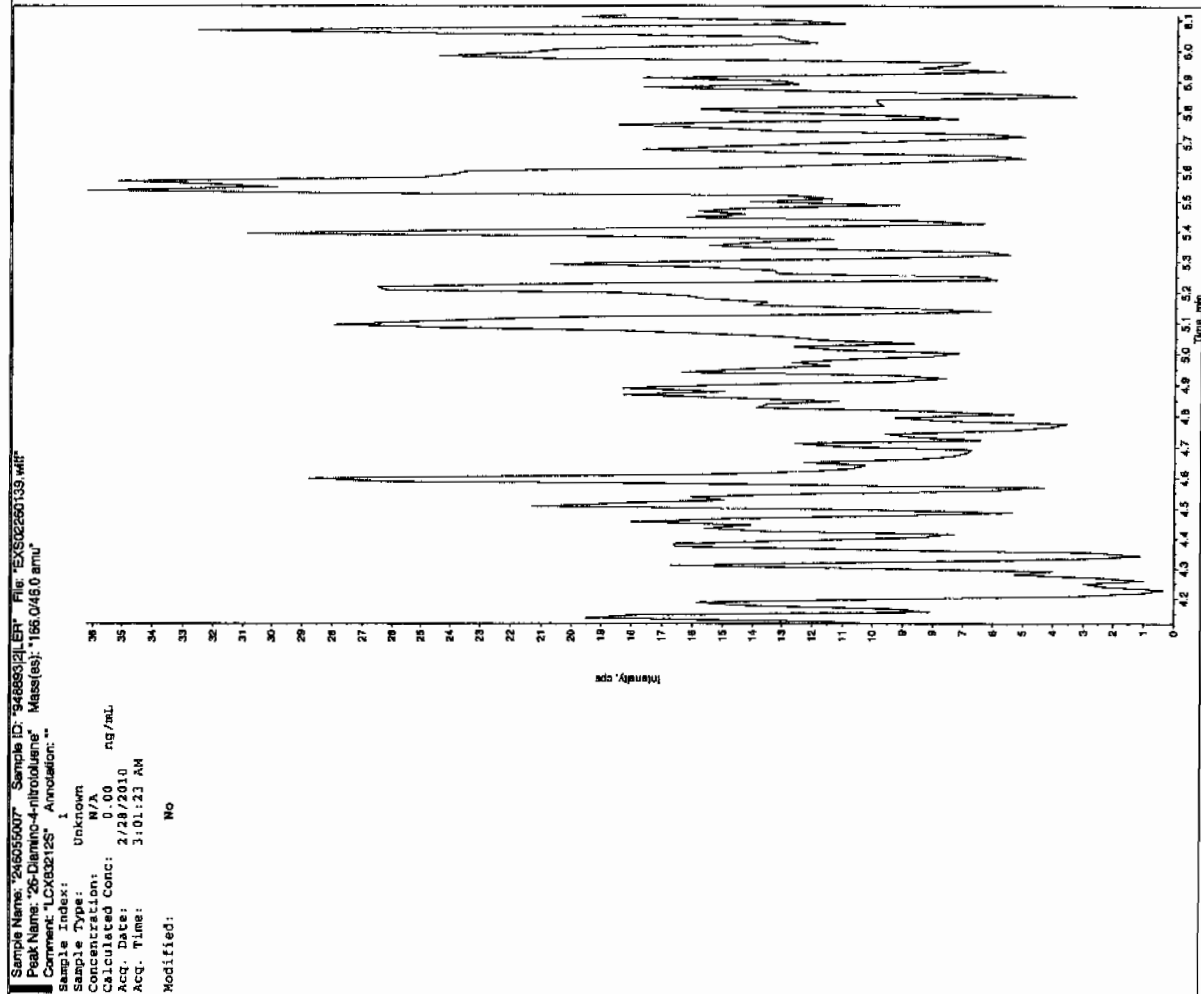
\*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

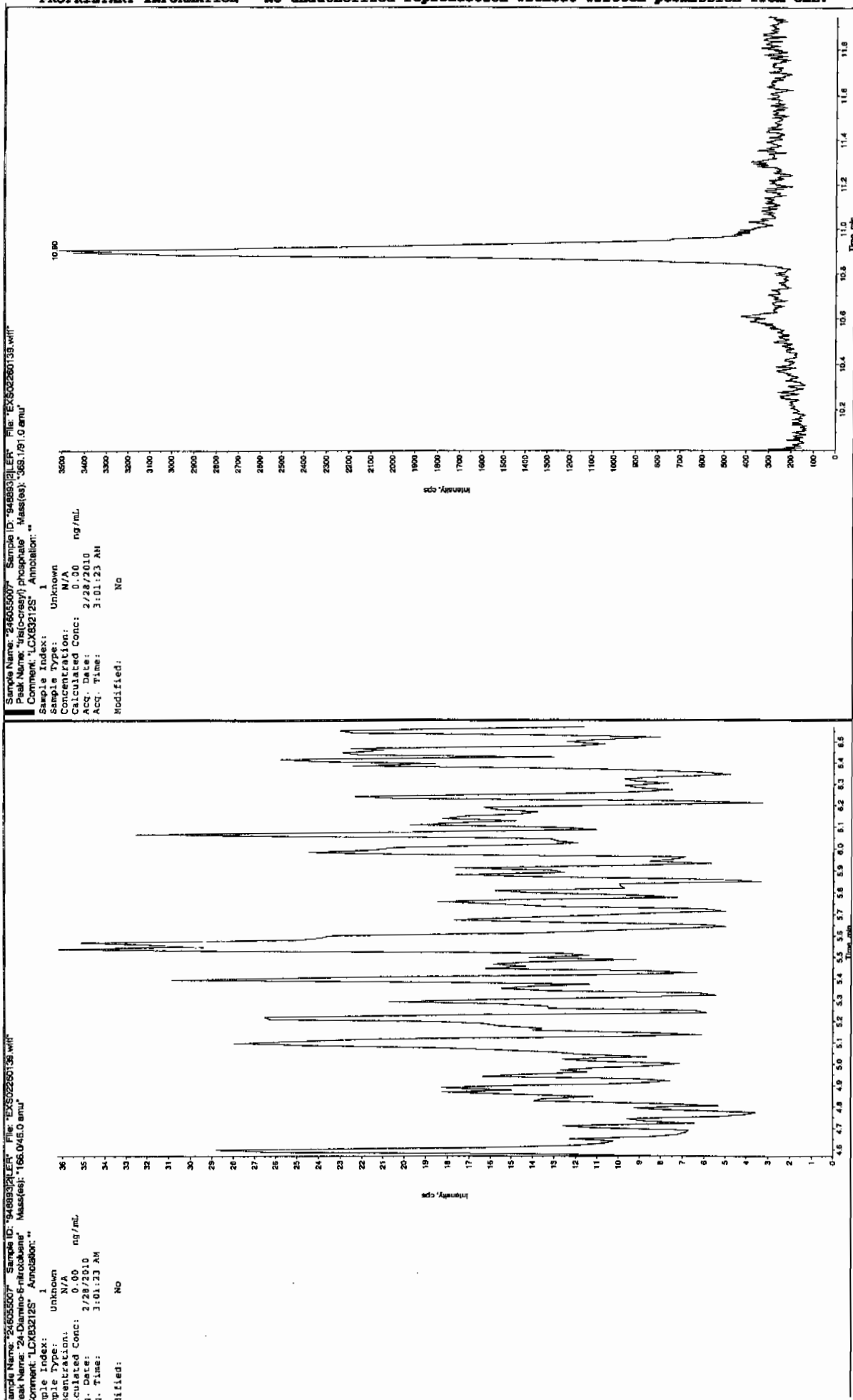
Gen 3/1/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304194a

Date Analyzed: 08-MAR-10 14:10

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\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0304194a

Date: 08-Mar-2010

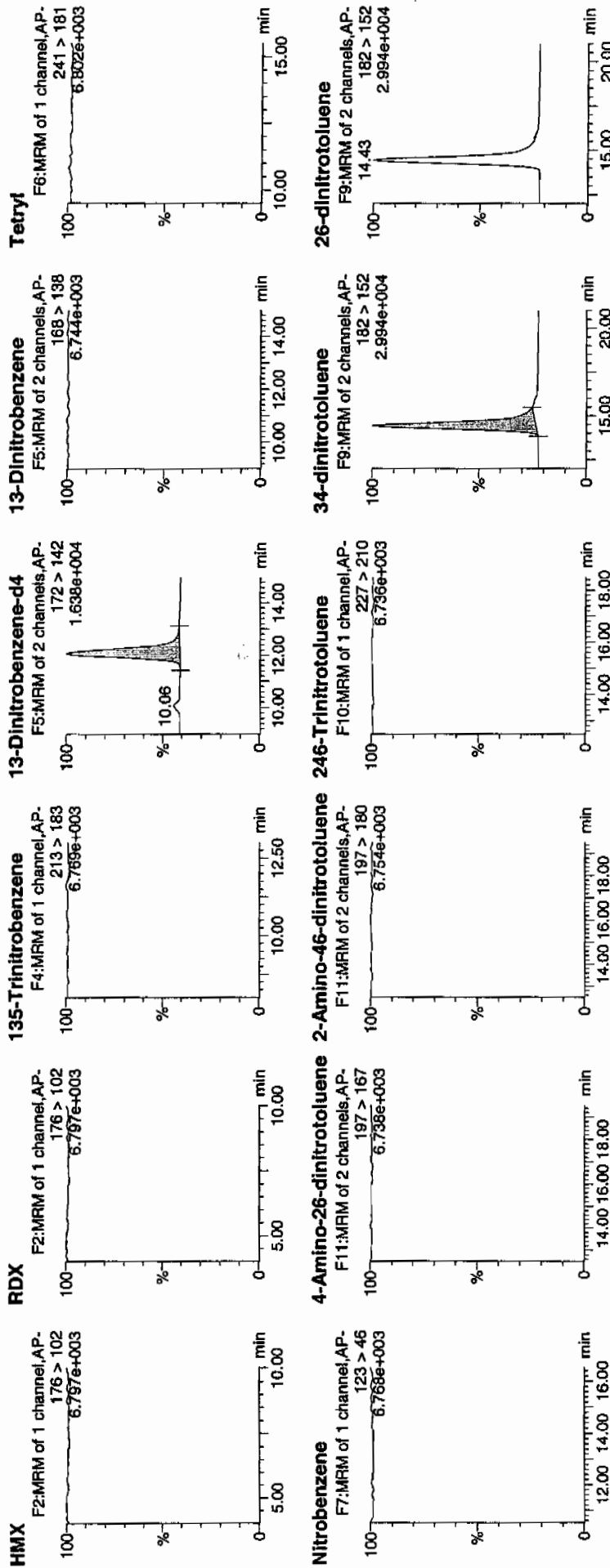
Time: 14:10:42

ID: 246055008

Vial: 4:6,F

not  
3/9/10

945893 / 802 / 21



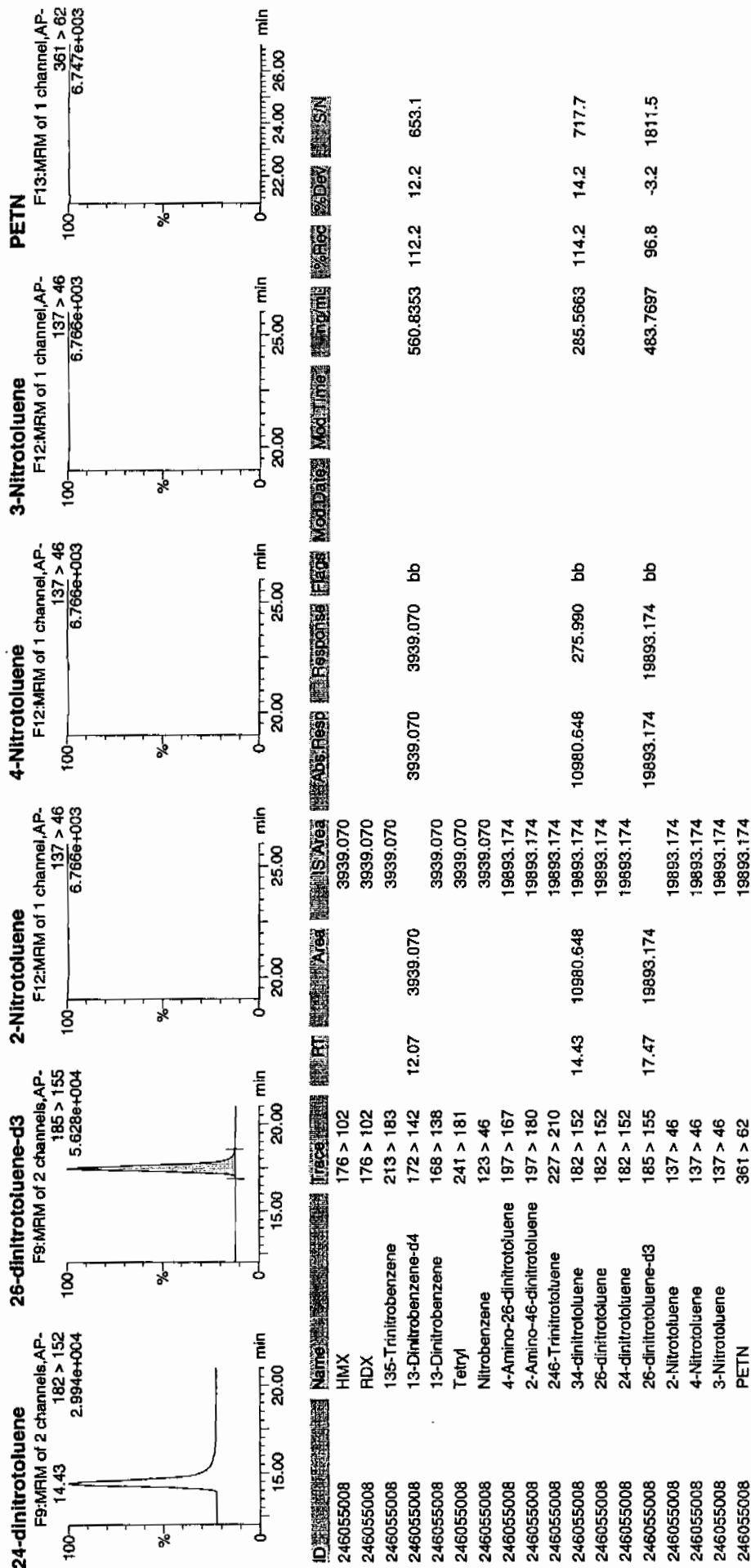
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03/09/10



Printed: Tue Mar 09 09:42:03 2010, Page 14 of 89

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1030410expA4.qld, Time: Tue Mar 09 09:38:40 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: RE15-10-8223

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055008

Sample Amount 2

Moisture: 19.5

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260140.wiff

Date Analyzed: 28-FEB-10 03:17

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

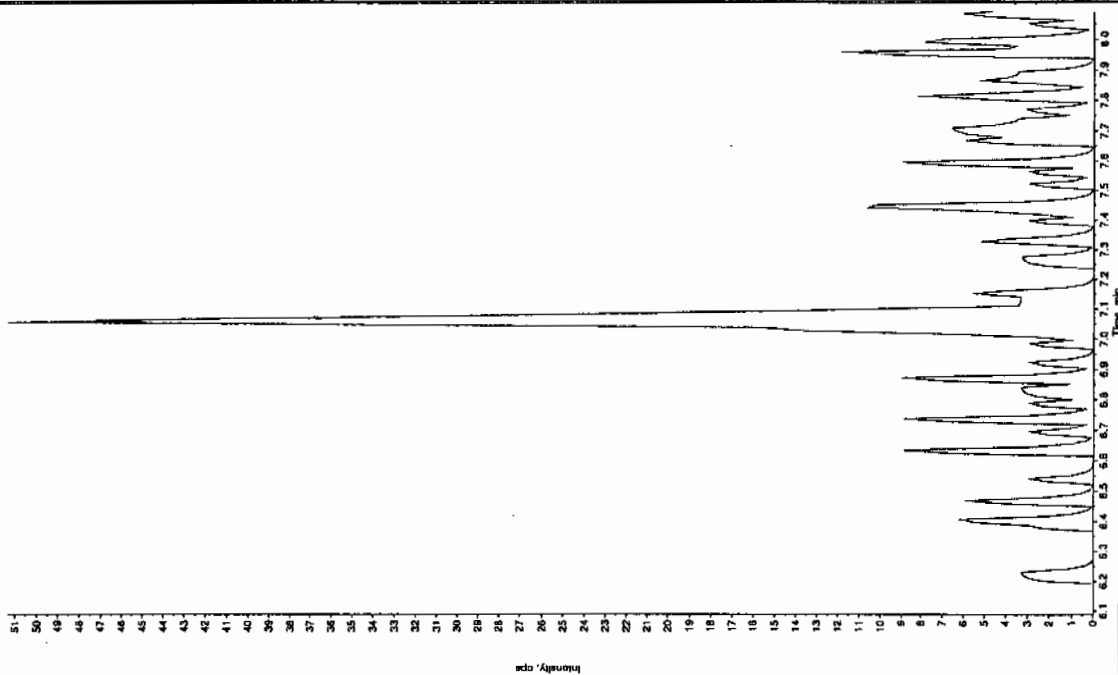
\*Concentration =

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

See 31110

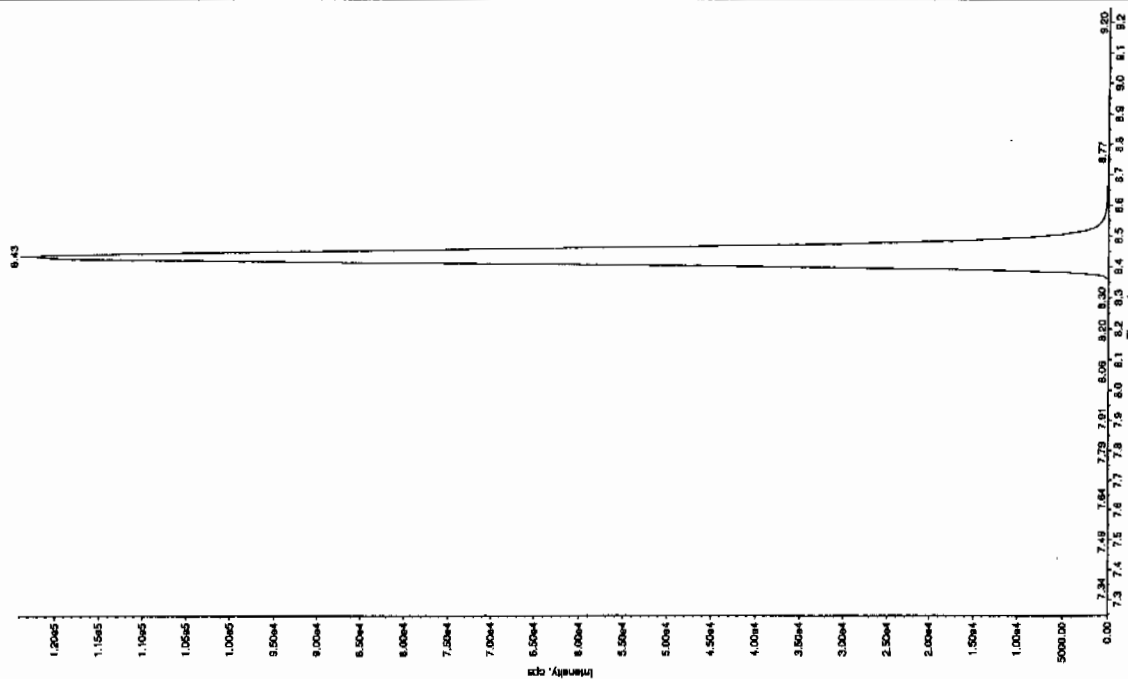
Sample Name: "246055008" Sample ID: "94889321.1" File: "EXS02260140.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Date: 3:17:13 AM  
 Acq. Time: 3:17:13 AM  
 Modified: No



Sample Name: "246055008" Sample ID: "94889321.1" File: "EXS02260140.wif"  
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Date: 3:17:13 AM  
 Acq. Time: 3:17:13 AM  
 Modified: Yes



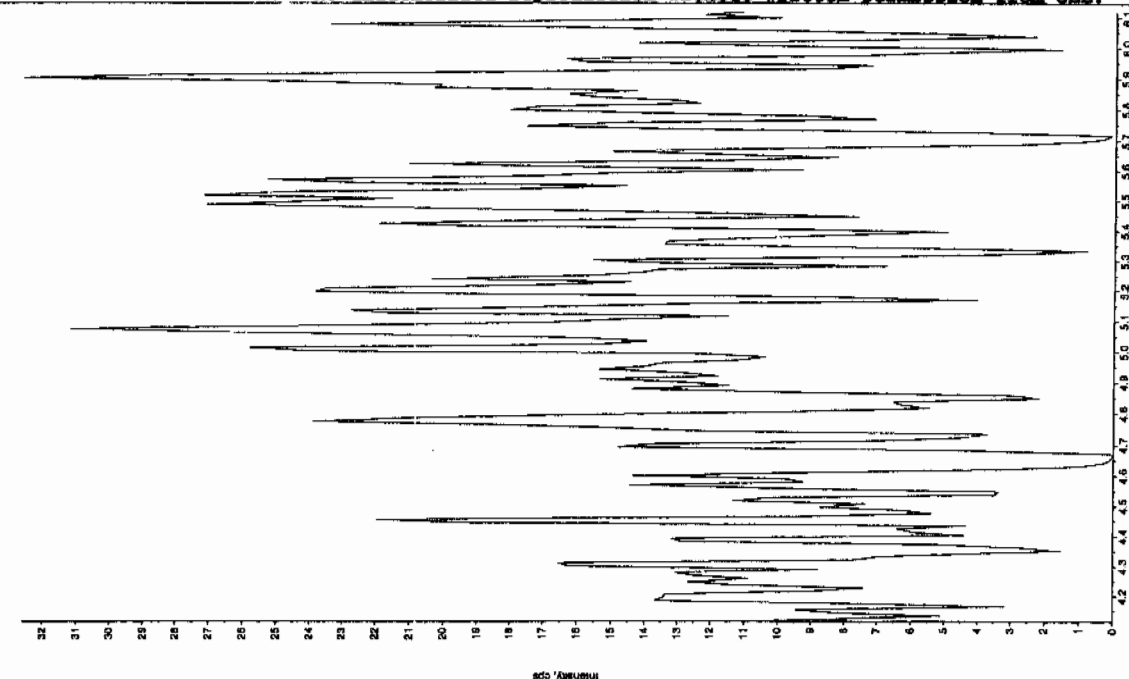
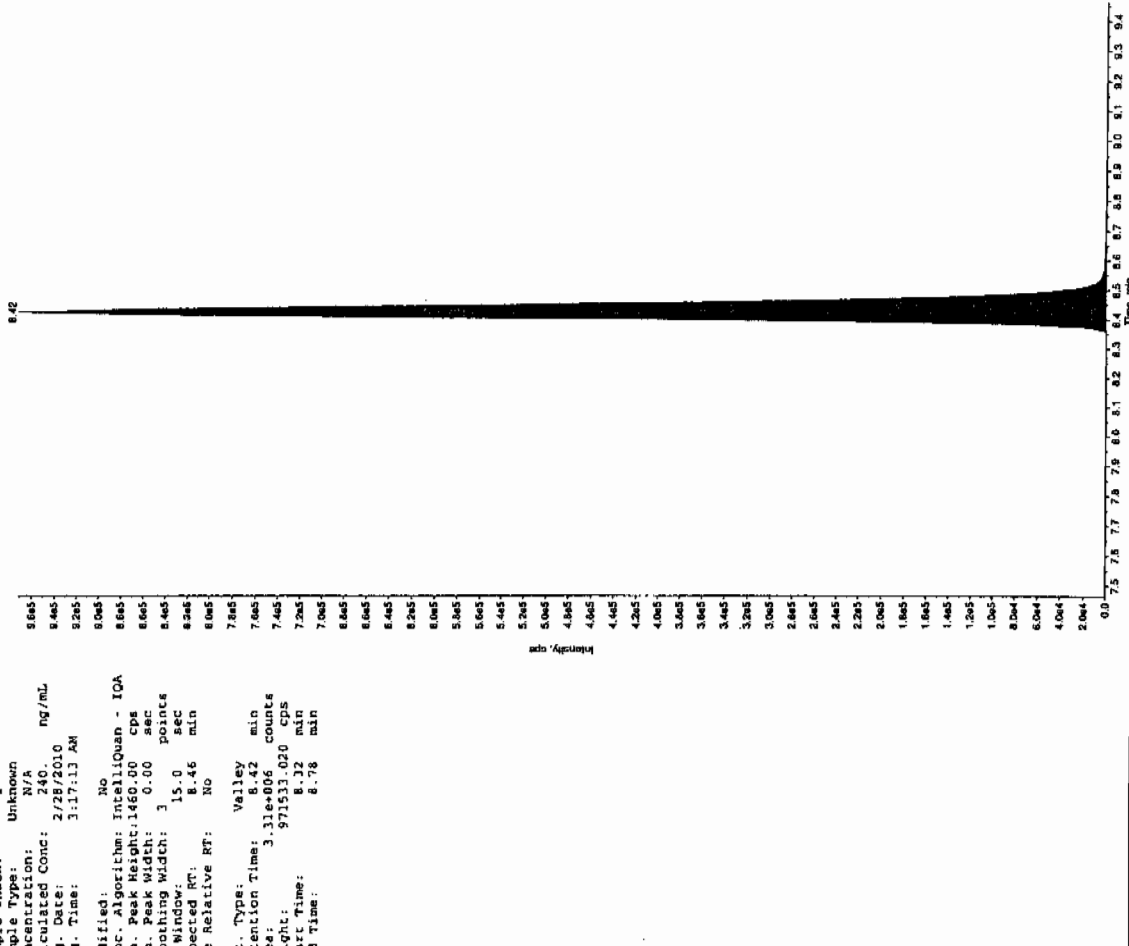
See 31110

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

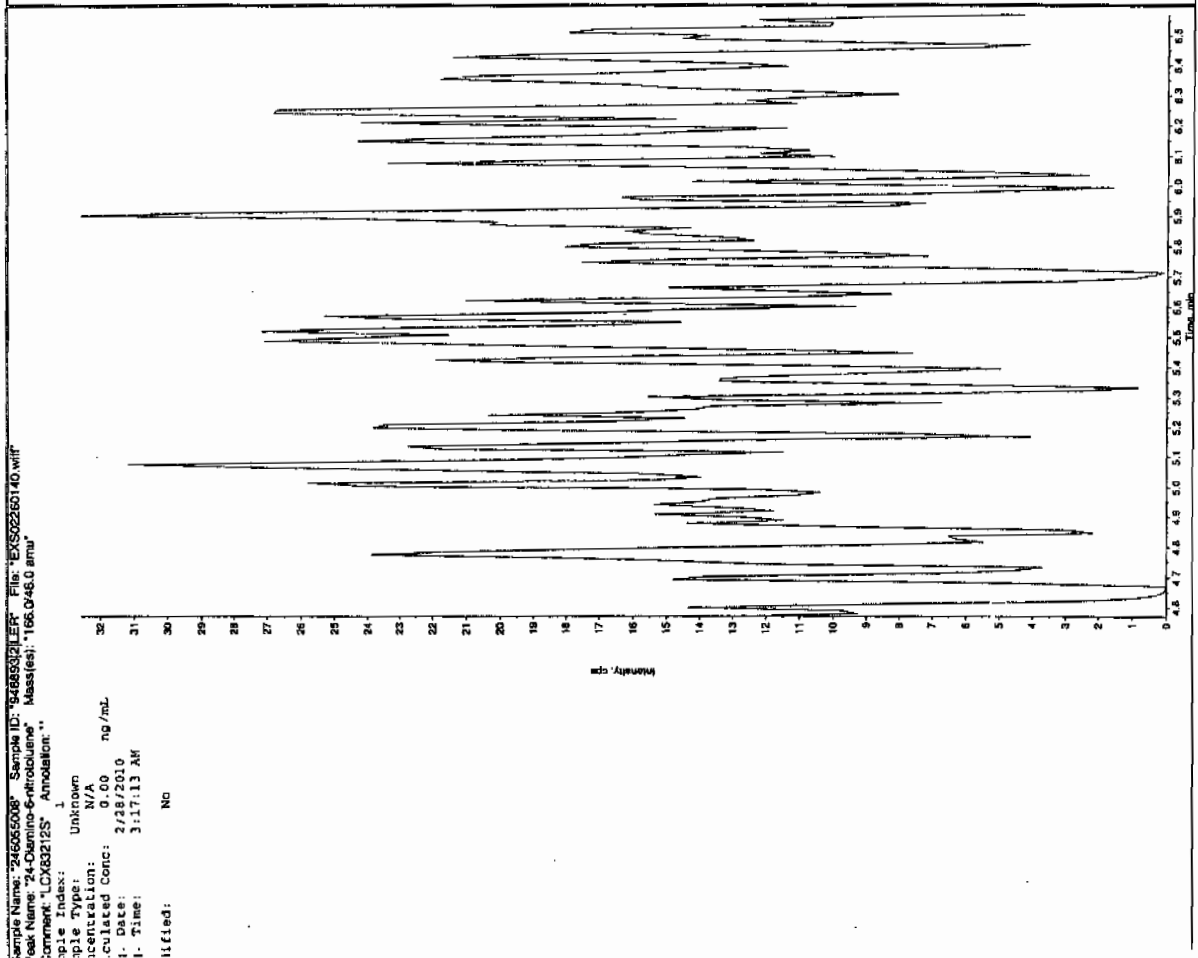
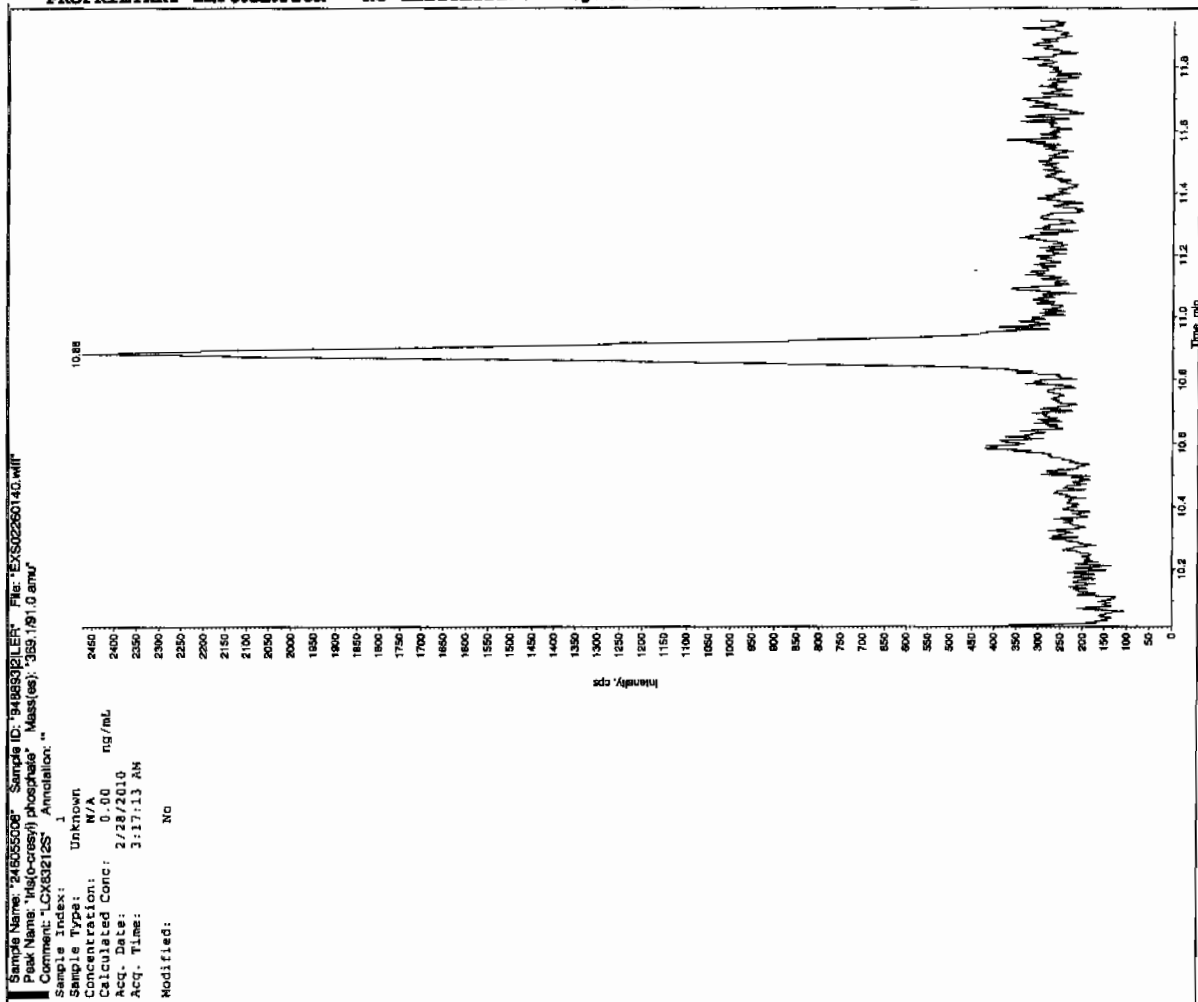
Sample Name: "245055008" Sample ID: "948593121EF" File: "EX502260140.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 240. ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 3:17:13 AM  
 Modified: No



IEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304195a

Date Analyzed: 08-MAR-10 14:40

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\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\030410expA4.qld

Date: 08-Mar-2010

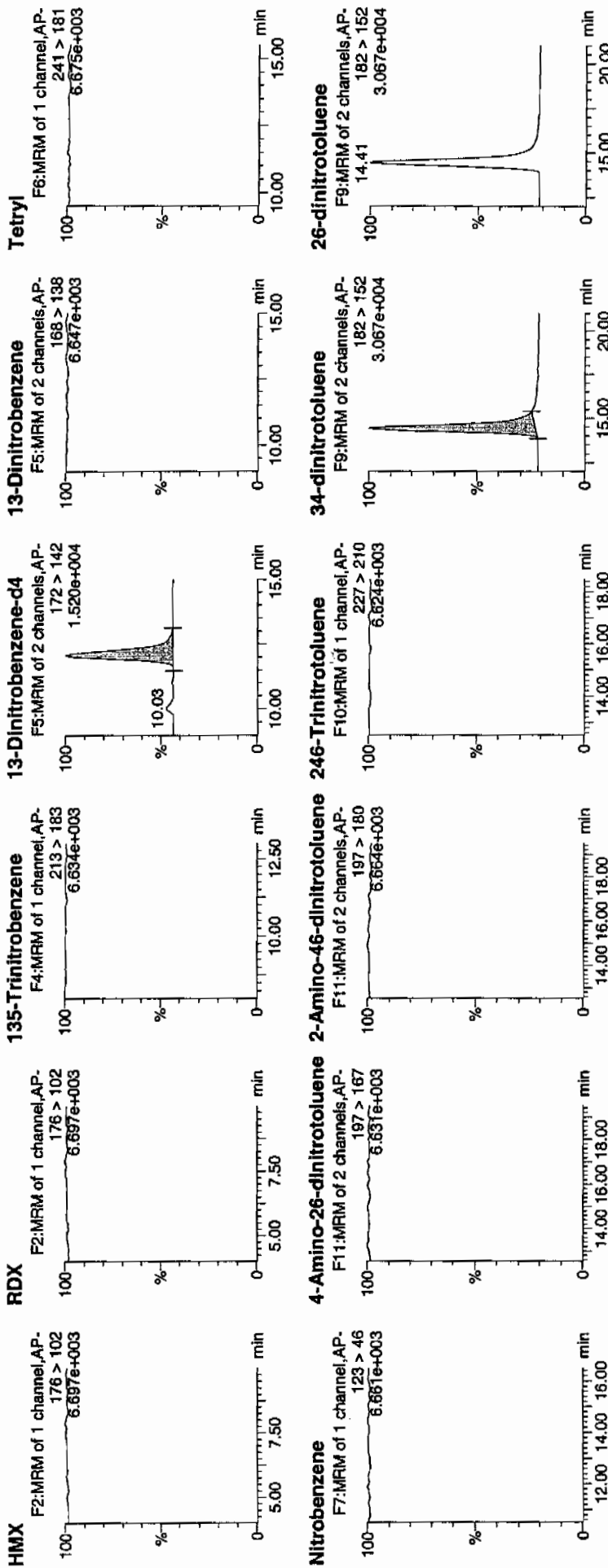
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ID: 246055009

Vial: 4:7,A

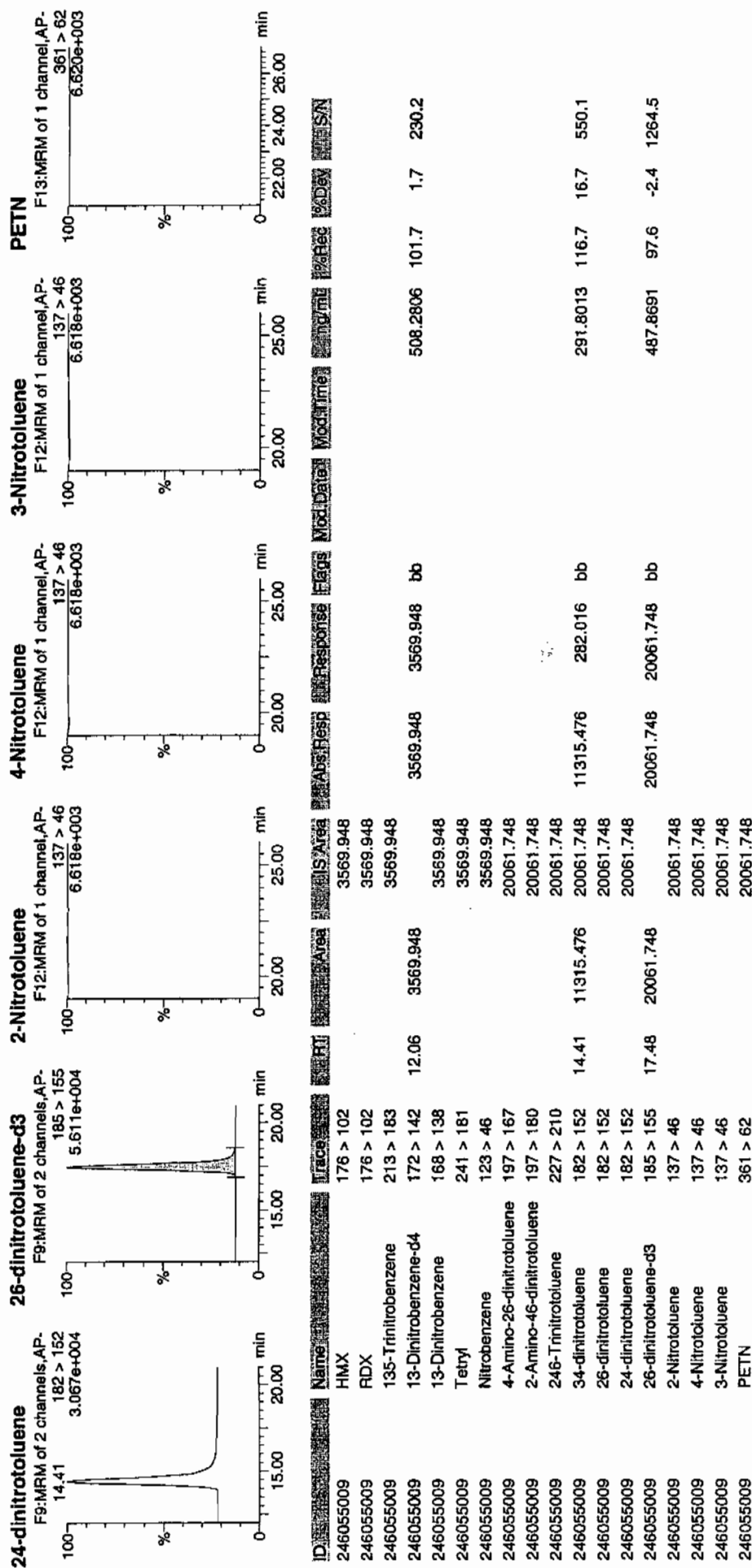
u77  
3/9/10

948893 / 8022 / 21



Handwritten signature: *Handwritten signature*

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8224

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 246055009

Sample Amount 2

Moisture: 15.9

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260141.wiff

Date Analyzed: 28-FEB-10 03:32

Units: ug/kg

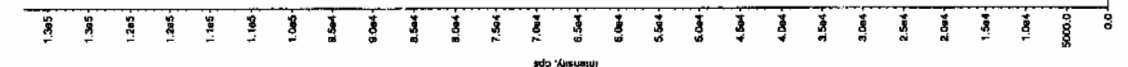
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

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

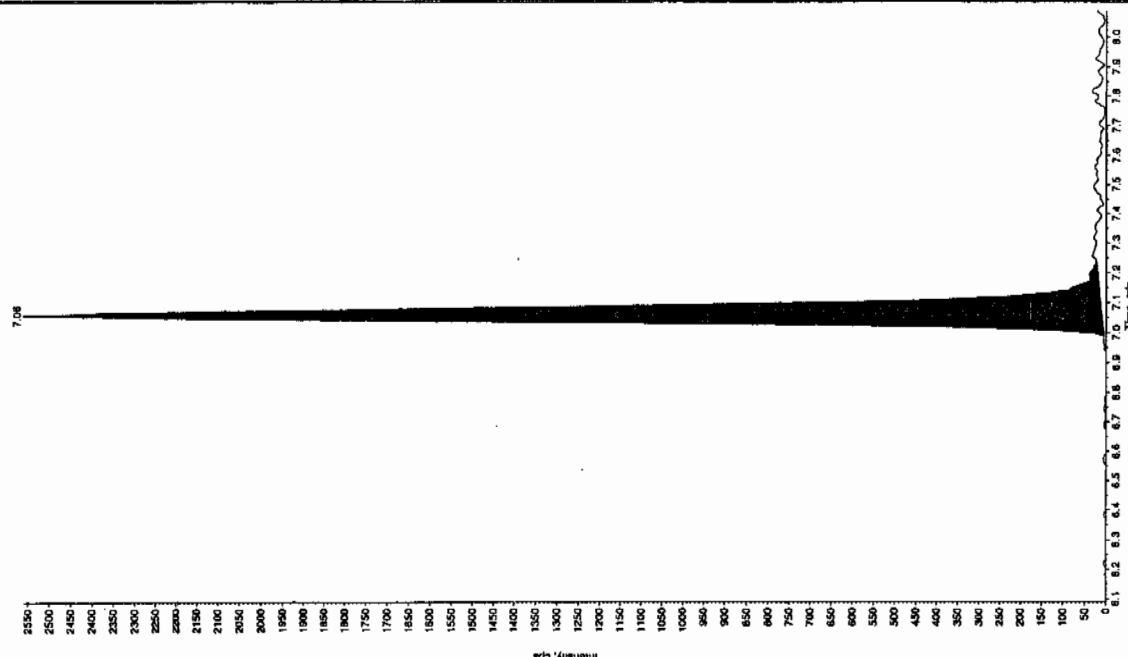
See 31110

Sample Name: "240505009" Sample ID: "349903212" File: "EXS02260141.wif"  
 Peak Name: "125-Dimethyl" Mass(es): "182.046.0 amu"  
 Concentration: "1.365" Annotation: ""  
 Sample Index: "1" Acquisition: ""  
 Sample Type: "Unknown" N/A  
 Concentration: "0.00" ng/mL  
 Calculated Conc: "2/28/2010"  
 Acq. Date: "3:32:56 AM"  
 Acq. Time: "Yes"  
 Modified: "Yes"



47140316110

Sample Name: "240505009" Sample ID: "349903212" File: "EXS02260141.wif"  
 Peak Name: "125-Dimethyl" Mass(es): "182.046.0 amu"  
 Concentration: "1.365" Annotation: ""  
 Sample Index: "1" Acquisition: ""  
 Sample Type: "Unknown" N/A  
 Concentration: "0.00" ng/mL  
 Calculated Conc: "2/28/2010"  
 Acq. Date: "3:32:56 AM"  
 Acq. Time: "Yes"  
 Modified: "Yes"

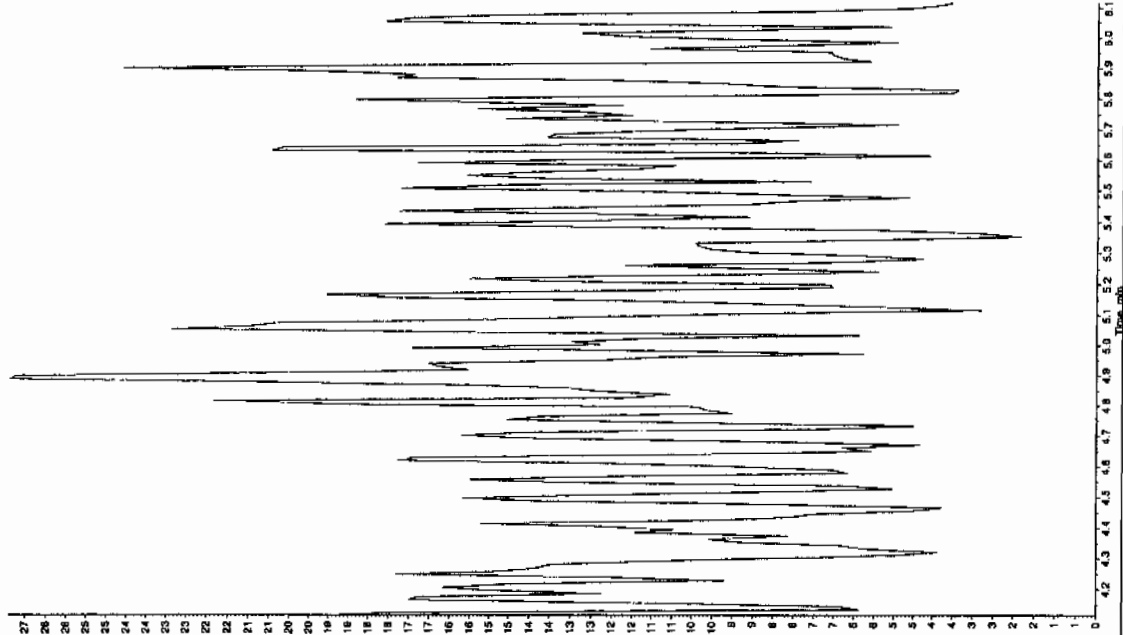


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "24605005" Sample ID: "64893212" File: "EXS02260141.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 3:32:56 AM  
 Modified: No

Intensity, cps



Sample Name: "24605005" Sample ID: "34893212" File: "EXS02260141.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX632125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 247. ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 3:32:56 AM  
 Modified: No

QC Algorithm: IntelliQuan - IQA  
 1. Peak Height: 1450.00 cps  
 1. Peak Width: 0.00 sec  
 1. Window Width: 15.0 points  
 Window: 15.0 sec  
 Window: 8.46 min  
 1. Relative RT: No

1. Type: Valley  
 1. Retention Time: 8.42 min  
 1. Peak Height: 1450.00 counts  
 1. Peak Width: 0.00 sec  
 1. Window Width: 15.0 points  
 Window: 15.0 sec  
 Window: 8.46 min  
 1. Relative RT: No

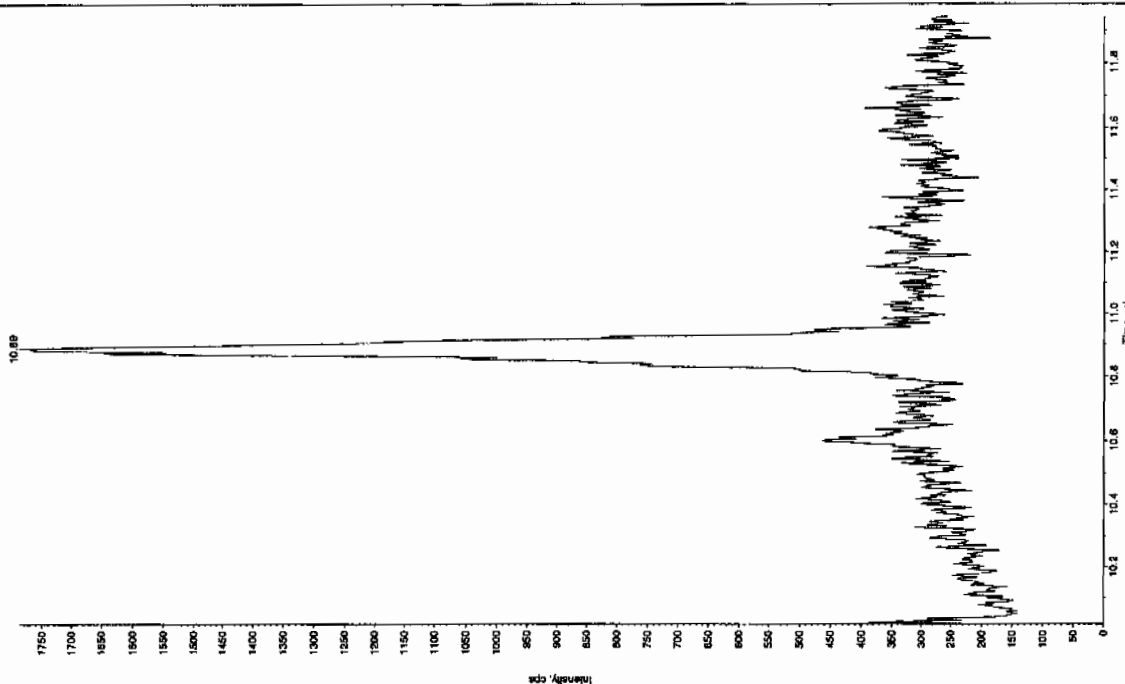
Intensity, cps



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

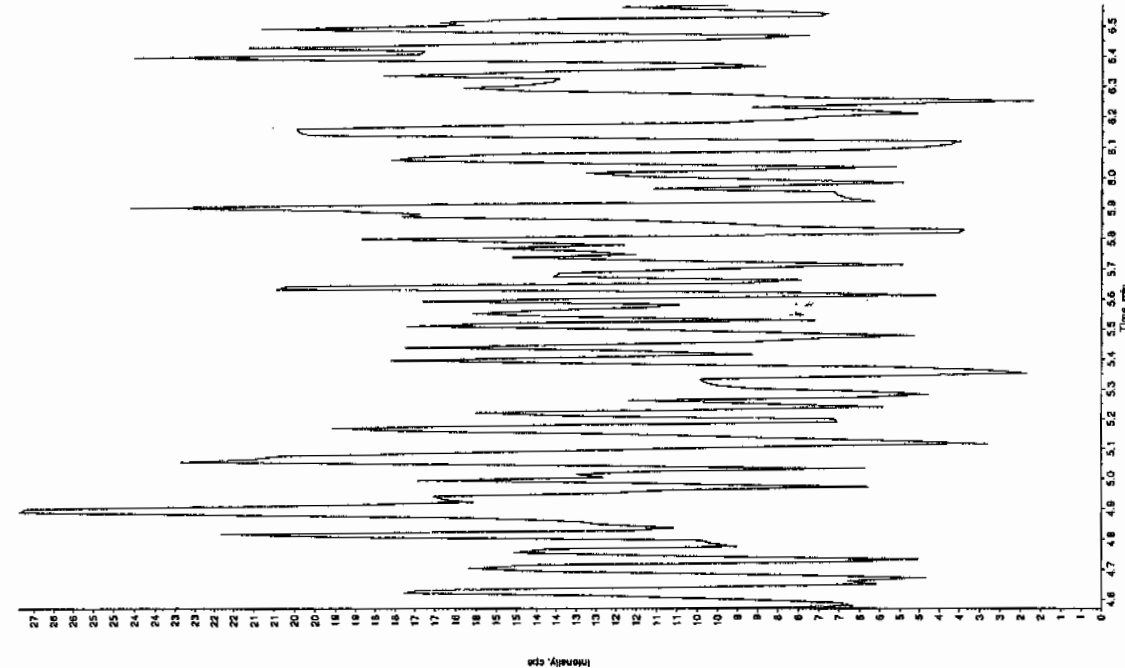
Sample Name: "246055009" Sample ID: "94889321ER" File: "EX502260141.wif"  
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "385.181.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 3:32:56 AM  
 Modified: No



Sample Name: "246055009" Sample ID: "94889321ER" File: "EX502260141.wif"  
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "166.045.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 3:32:56 AM  
 Modified: No



EL 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	an	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: 10-1545

Lab Code: GEL

Run Date: 04-MAR-10 26-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Parameter	1	2	3	4	5	6	Ave. RF	RSD	Q
Calibration Level:	EXP0304003a	EXP0304004a	EXP0304005a	EXP0304006a	EXP0304007a	EXP0304008a			
Data File:									
1,3,5-Trinitrobenzene	5.003	4.577	3.342	3.576	3.258	3.608	3.894	18.476	
1,3-Dinitrobenzene-d4	6.789	7.374	7.348	6.733	7.315	6.583	7.024	5.121	
2,4,6-Trinitrotoluene	.3	.336	.341	.337	.35	.308	0.329	6.027	
2,4-Dinitrotoluene	.281	.305	.251	.262	.282	.273	0.276	6.75	
2,6-Dinitrotoluene	1.138	1.111	1.096	1.102	1.137	1.11	1.116	1.607	
2,6-Dinitrotoluene-d3	43.655	42.215	41.583	39.474	40.005	39.795	41.121	4.004	
2-Amino-4,6-dinitrotoluene	.343	.423	.391	.415	.418	.441	0.405	8.534	
3,4-Dinitrotoluene	1.067	.913	.958	.95	1.085	.826	0.967	10.048	
4-Amino-2,6-dinitrotoluene	.248	.266	.292	.289	.283	.277	0.276	5.889	
HMX	5.7	4.915	4.501	4.556	4.433	3.881	4.664	13.011	
Nitrobenzene	.847	.822	.819	.885	.844	.737	0.826	5.999	
RDX	3.372	3.021	2.826	2.815	2.597	2.536	2.861	10.661	
Tetryl	1.148	1.088	.978	.967	.995	.93	1.018	8.121	
m-Dinitrobenzene	1.232	1.296	1.278	1.225	1.314	1.254	1.267	2.82	
m-Nitrotoluene	.108	.096	.087	.092	.093	.09	0.094	7.937	
o-Nitrotoluene	.162	.165	.148	.152	.152	.15	0.155	4.487	
p-Nitrotoluene	.078	.08	.073	.075	.076	.074	0.076	3.543	

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: 10-1545

Lab Code: GEL

Run Date: 04-MAR-10 26-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:	EXP0304003a	EXP0304004a	EXP0304005a	EXP0304006a	EXP0304007a	EXP0304008a					
Parname:											
PETN	3472.76	5897.1	19825.4	32819.1	49655	58513.4	2.265	-0008626	37.152	.9967	

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

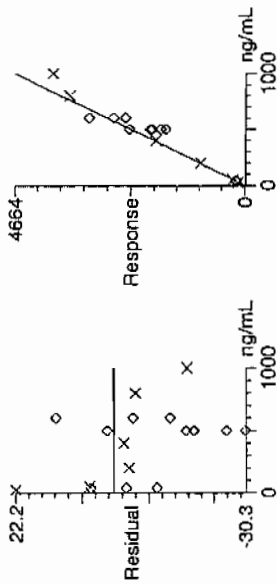


Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

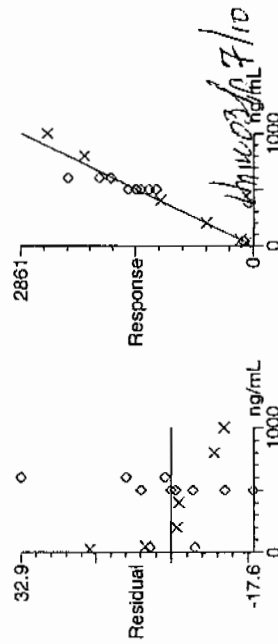
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Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\030410expa.mdb, Time: Fri Mar 05 09:18:46 2010  
Calibration: Untitled, Time: Fri Mar 05 10:16:18 2010

Compound name: HMX  
Response Factor: 4.66431  
RRF SD: 0.606877, % Relative SD: 13.0111  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



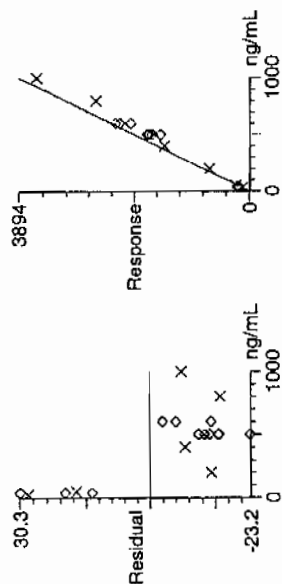
Compound name: RDX  
Response Factor: 2.8614  
RRF SD: 0.305061, % Relative SD: 10.6612  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



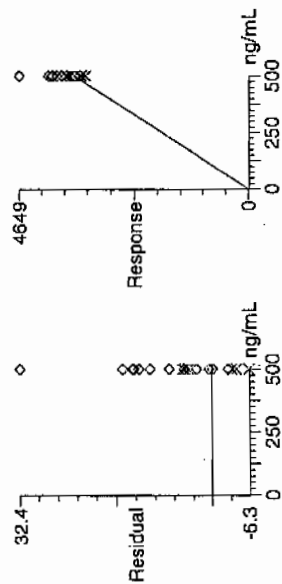
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 135-Trinitrobenzene  
Response Factor: 3.89381  
RRF SD: 0.719425, % Relative SD: 18.4761  
Response type: Internal Std ( Ret 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



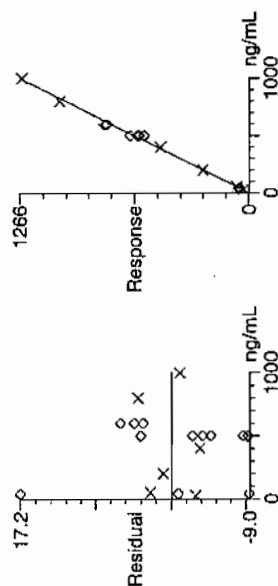
Compound name: 13-Dinitrobenzene-d4  
Response Factor: 7.02358  
RRF SD: 0.359695, % Relative SD: 5.12125  
Response type: External Std, Area  
Curve type: RF



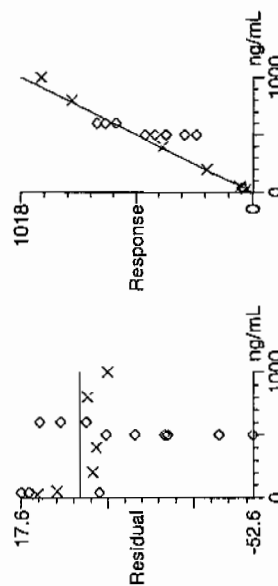
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 13-Dinitrobenzene  
Response Factor: 1.26846  
RRF SD: 0.0357173, % Relative SD: 2.82024  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



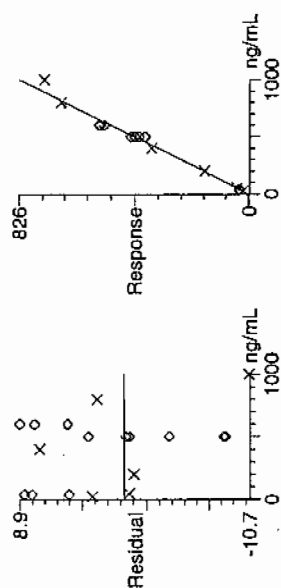
Compound name: Tetraol  
Response Factor: 1.01755  
RRF SD: 0.0826324, % Relative SD: 8.1207  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



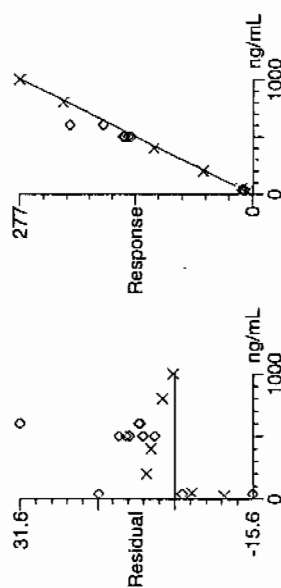
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: Nitrobenzene  
Response Factor: 0.825734  
RRF SD: 0.0495369, % Relative SD: 5.99913  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

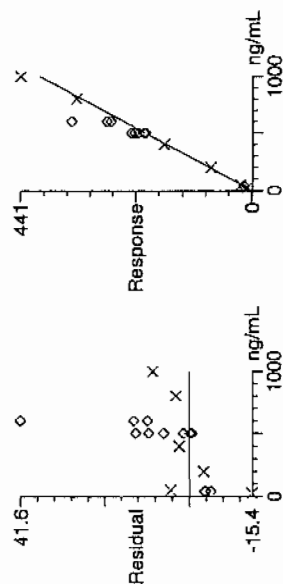


Compound name: 4-Amino-26-dinitrotoluene  
Response Factor: 0.275828  
RRF SD: 0.0162429, % Relative SD: 5.88879  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

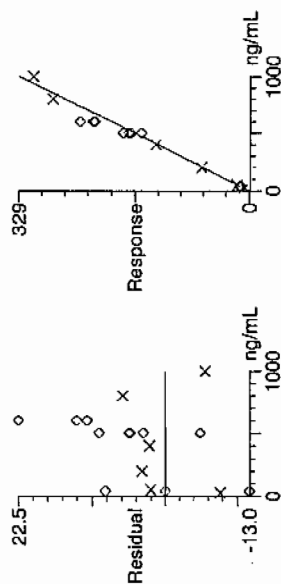


Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.405103  
RRF SD: 0.0345707, % Relative SD: 8.53382  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



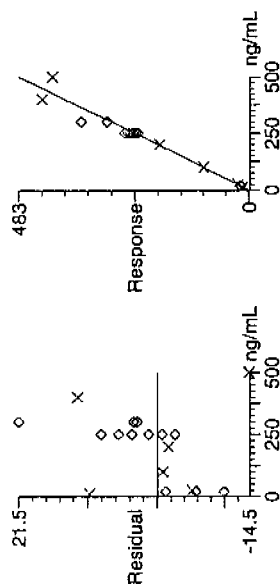
Compound name: 246-Trinitrotoluene  
Response Factor: 0.328607  
RRF SD: 0.0198061, % Relative SD: 6.02729  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



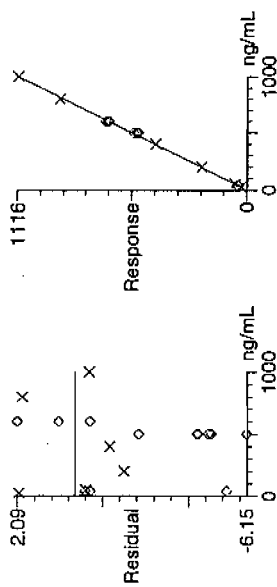
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 34-dinitrotoluene.  
Response Factor: 0.966467  
R<sup>2</sup> SD: 0.097114, % Relative SD: 10.0484  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

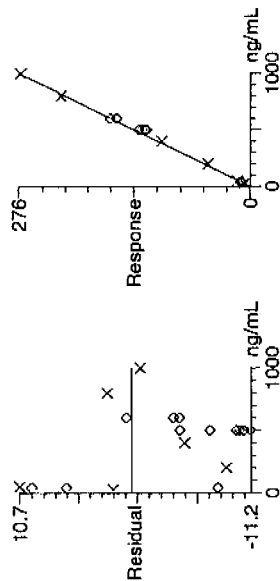


Compound name: 26-dinitrotoluene  
Response Factor: 1.11554  
R<sup>2</sup> SD: 0.0179296, % Relative SD: 1.60726  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

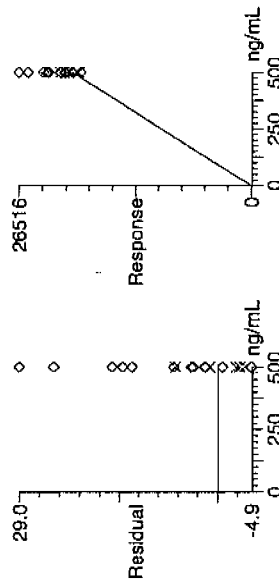


Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.275647  
RRF SD: 0.0186056, % Relative SD: 6.74978  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



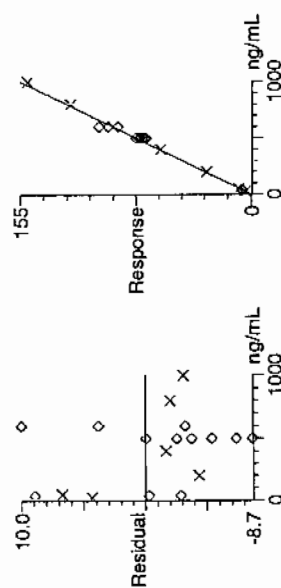
Compound name: 26-dinitrotoluene-d3  
Response Factor: 41.1212  
RRF SD: 1.6463, % Relative SD: 4.00354  
Response type: External Std, Area  
Curve type: RF



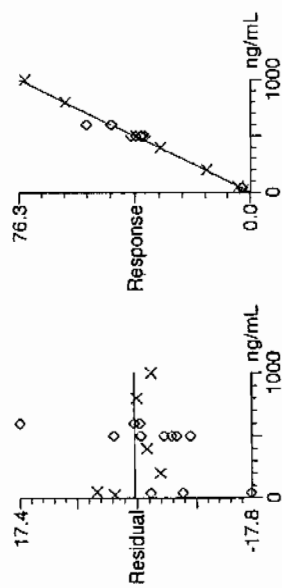
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 2-Nitrotoluene  
Response Factor: 0.154899  
RRF SD: 0.00695032, % Relative SD: 4.487  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: 4-Nitrotoluene  
Response Factor: 0.0762739  
RRF SD: 0.00270209, % Relative SD: 3.54261  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF

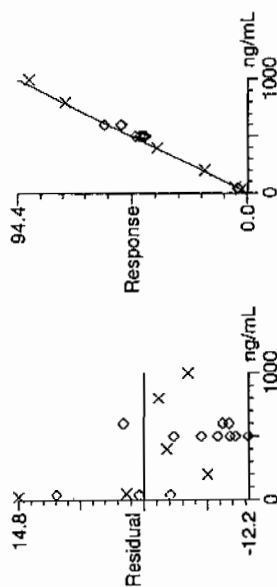




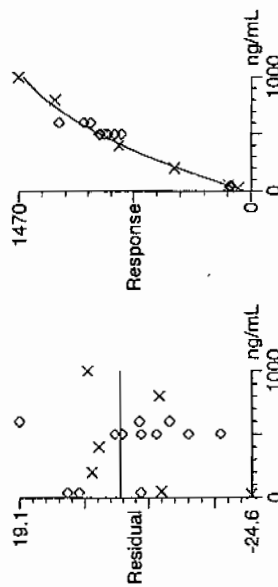
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Compound name: 3-Nitrotoluene  
Response Factor: 0.0943545  
RRF SD: 0.00748873, % Relative SD: 7.9368  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: R<sup>2</sup>



Compound name: PETN  
Coefficient of Determination: 0.996692  
Calibration curve:  $-0.00062571 \cdot x^2 + 2.26503 \cdot x + 37.1516$   
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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0304010a

Analysis Date: 04-MAR-10 19:41

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	309.423	103	
4-Amino-2,6-dinitrotoluene	600	641.886	107	
HMX	600	573.556	96	
Nitrobenzene	600	645.754	108	
PETN	600	544.002	91	
RDX	600	658.987	110	
Tetryl	600	634.792	106	
m-Dinitrobenzene	600	625.108	104	
m-Nitrotoluene	600	544.846	91	
o-Nitrotoluene	600	580.638	97	
p-Nitrotoluene	600	595.264	99	
1,3,5-Trinitrobenzene	600	563.54	94	
1,3-Dinitrobenzene-d4	500	499.497	100	
2,4,6-Trinitrotoluene	600	681.185	114	
2,4-Dinitrotoluene	600	576.449	96	
2,6-Dinitrotoluene	600	596.772	99	
2,6-Dinitrotoluene-d3	500	517.678	104	
2-Amino-4,6-dinitrotoluene	600	660.901	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\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304010a

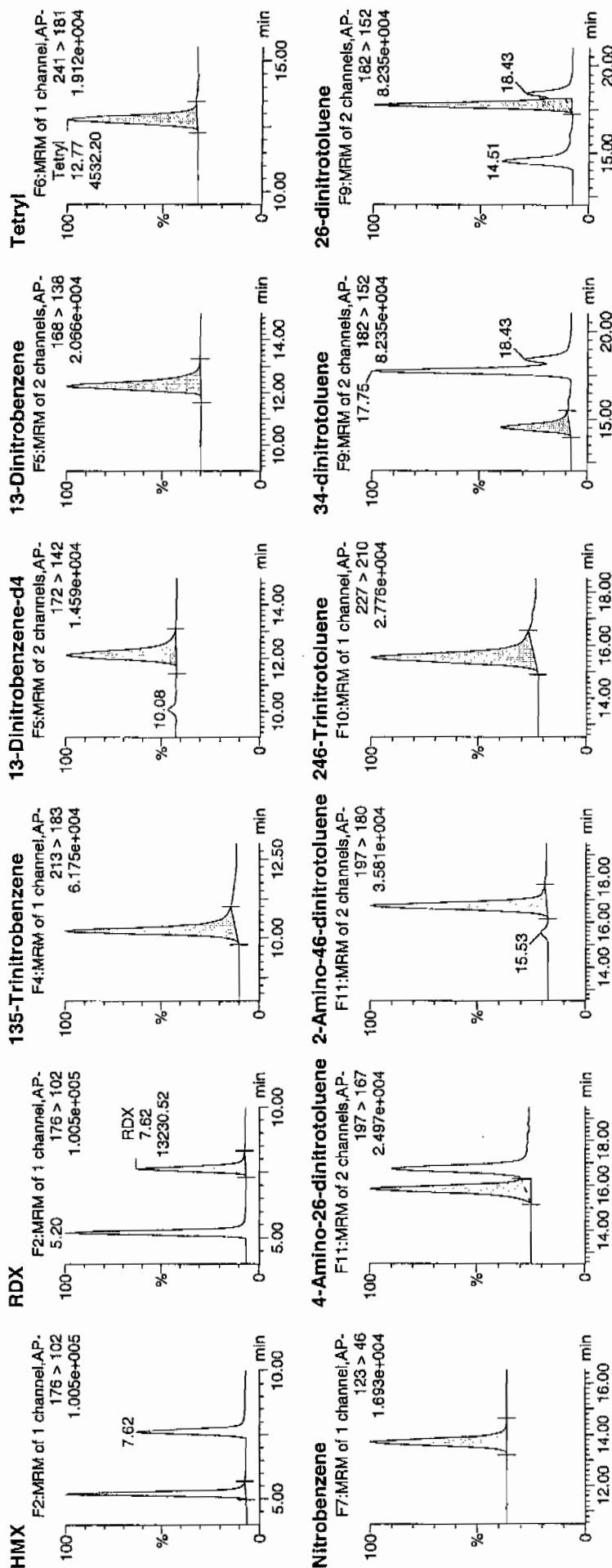
Date: 04-Mar-2010

Time: 19:41:56

ID: WXX100304-07ICV

Vial: 1:1,B

WXX  
3/6/10



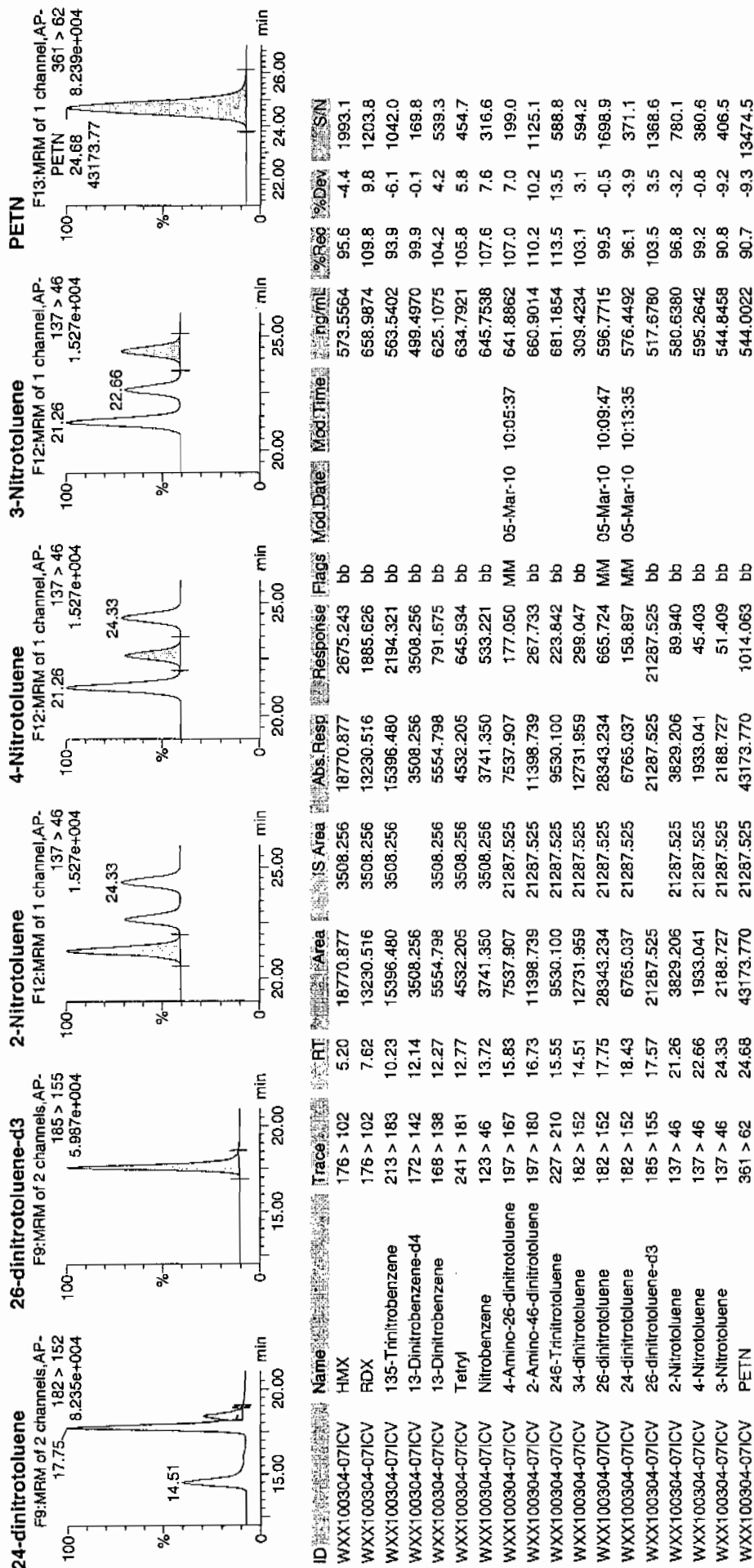
thru  
03/05/10

## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Mar 05 10:25:00 2010, Page 20 of 77

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/04/10  
 Time of Injection: 1941  
 Standard Number: WXX100304-07ICV  
 Data File: EXP0304010a

HMX	95.6
RDX	109.8
135-TNB	93.9
13-DNB	104.2
Tetryl	105.8
Nitrobenzene	107.6
4A-26-DNT	107.0
2A-46-DNT	110.2
246-TNT	113.5
34-DNT(surr)	103.1
26-DNT	99.5
24-DNT	96.1
2-NT	96.8
4-NT	99.2
3-NT	90.8
PETN	90.7

*with  
3/6/10*

Total 1623.8

Average 101.5

*WXX100304-07ICV*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC      GEL Job No: 10-1545  
 Lab Code: GEL      Run Date: 04-MAR-10 26-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:	EXS02260003.wif	EXS02260004.wif	EXS02260005.wif	EXS02260006.wif	EXS02260007.wif	EXS02260008.wif	EXS02260009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	80600	158000	383000	773000	1220000	1610000	3220000	-10100	1620	.001	.9999	
2,6-Diamino-4-nitrotoluene	113000	219000	551000	1070000	1680000	2170000	4260000	-5880	2240	-.055	.9999	
3,4-Dinitrotoluene	365000	719000	1740000	3170000	4890000	6230000	11300000	2650	14600	-3.26	.9979	
3,5-Dinitroaniline	531000	1010000	2370000	4530000	6700000	8310000	13900000	41000	9760	-1.41	.9999	
TATB	50800	103000	279000	574000	909000	1230000	2540000	-18200	1200	.04	.9999	
tris(o-cresyl) phosphate	893000	1730000	4120000	7610000	11100000	14100000	23200000	92000	16500	-2.46	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

022610ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.82e+004			
a1	1.2e+003			
a2	0.0401			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 35-Dinitroaniline  
No Internal Standard  
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	4.1e+004			
a1	9.76e+003			
a2	-1.41			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	2.65e+003			
a1	1.46e+004			
a2	-3.26			
Correlation coefficient 0.9979				
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	-5.88e+003			
a1	2.24e+003			
a2	-0.055			
Correlation coefficient 0.9999				
Use Area				

*Jun*  
*3/1/10*

*HW*  
*03/01/10*

022610ICAL

Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

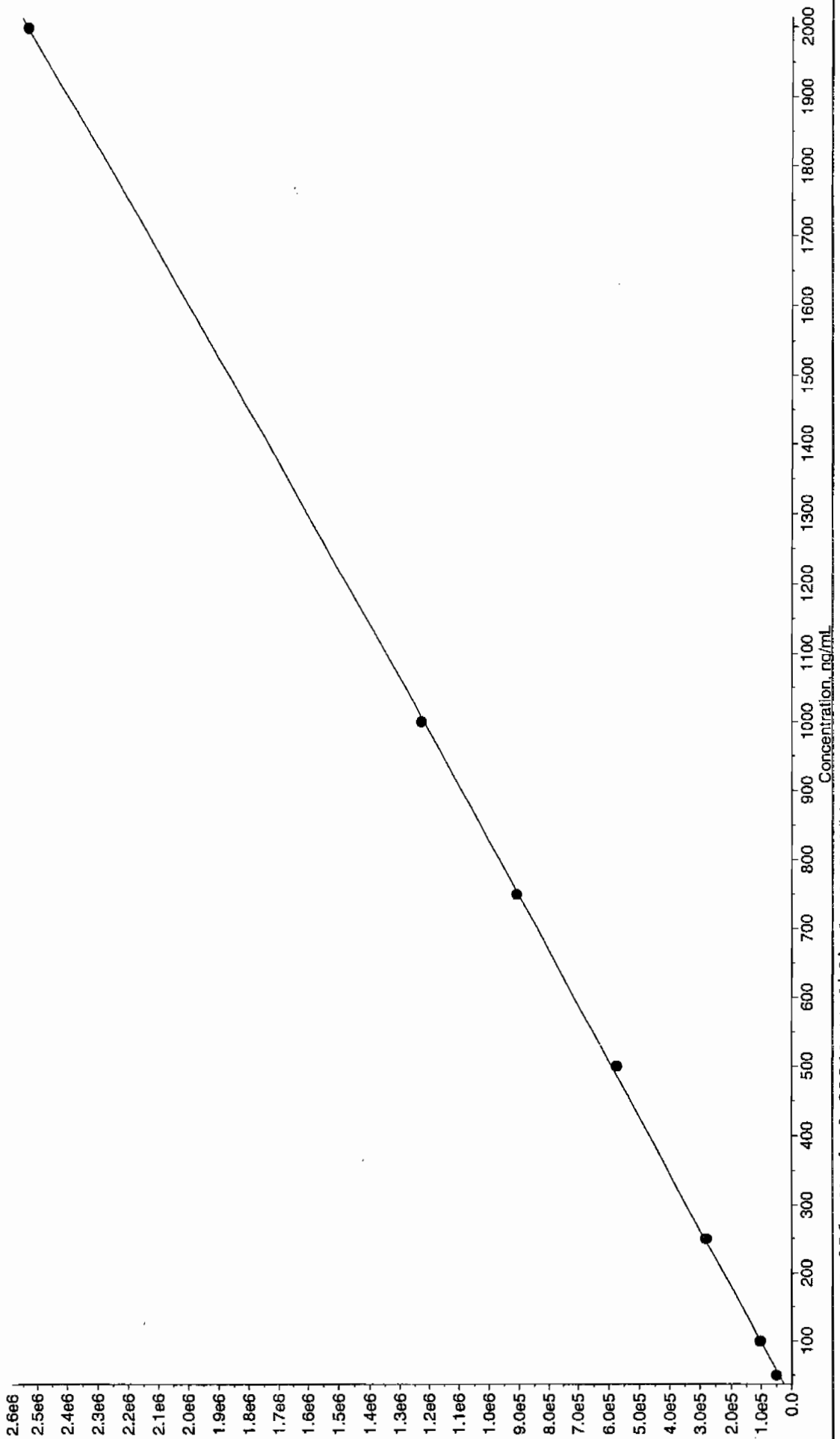
Fit	Quadratic	Weighting	None	Iterate No
a0	-1.01e+004			
a1	1.62e+003			
a2	0.000677			
Correlation coefficient 0.9999				
Use Area				

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	9.2e+004			
a1	1.65e+004			
a2	-2.46			
Correlation coefficient 1.0000				
Use Area				

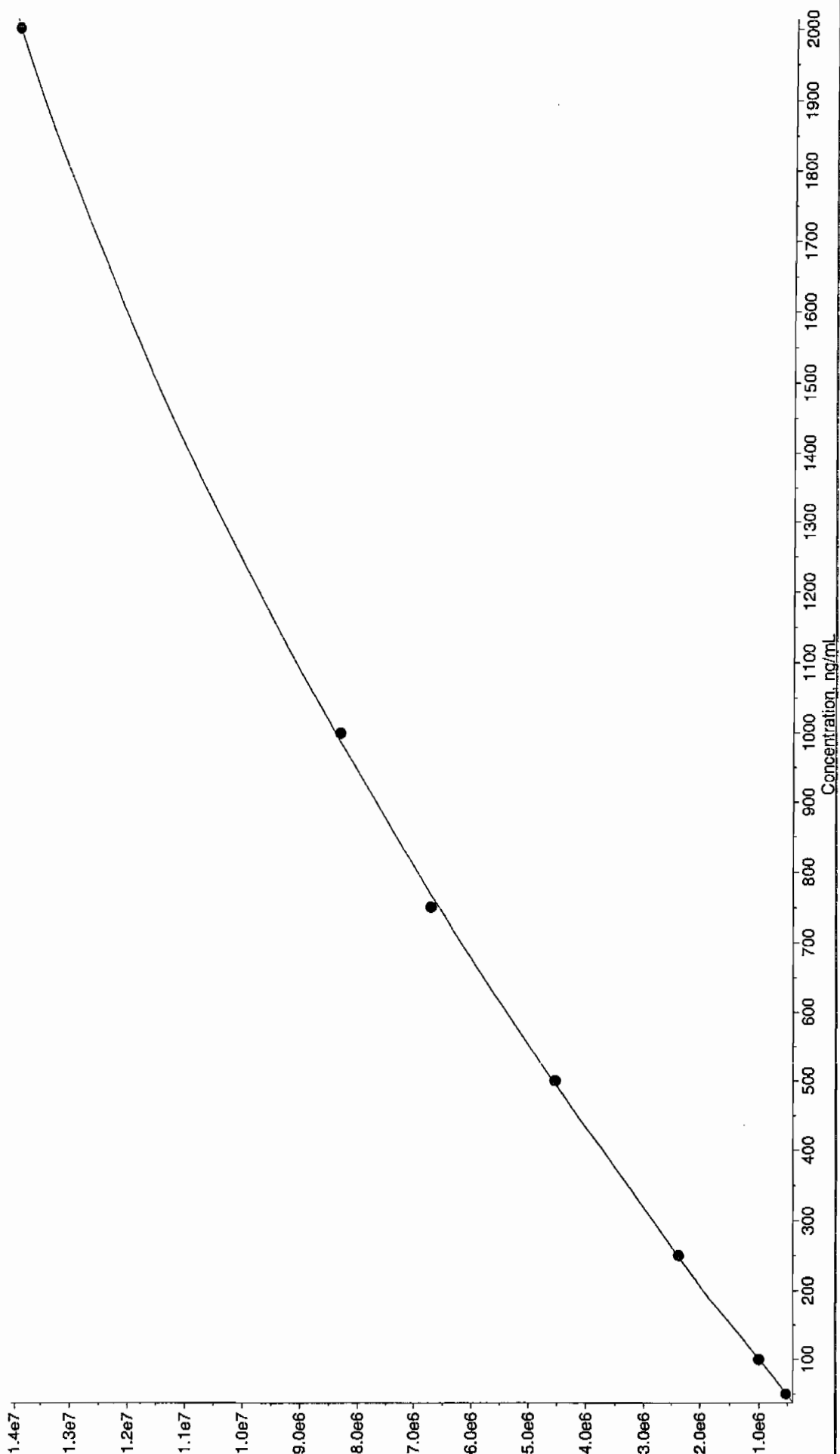


022610.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = 0.0401 x^2 + 1.2e+003 x + -1.82e+004$  ( $r = 0.9999$ )



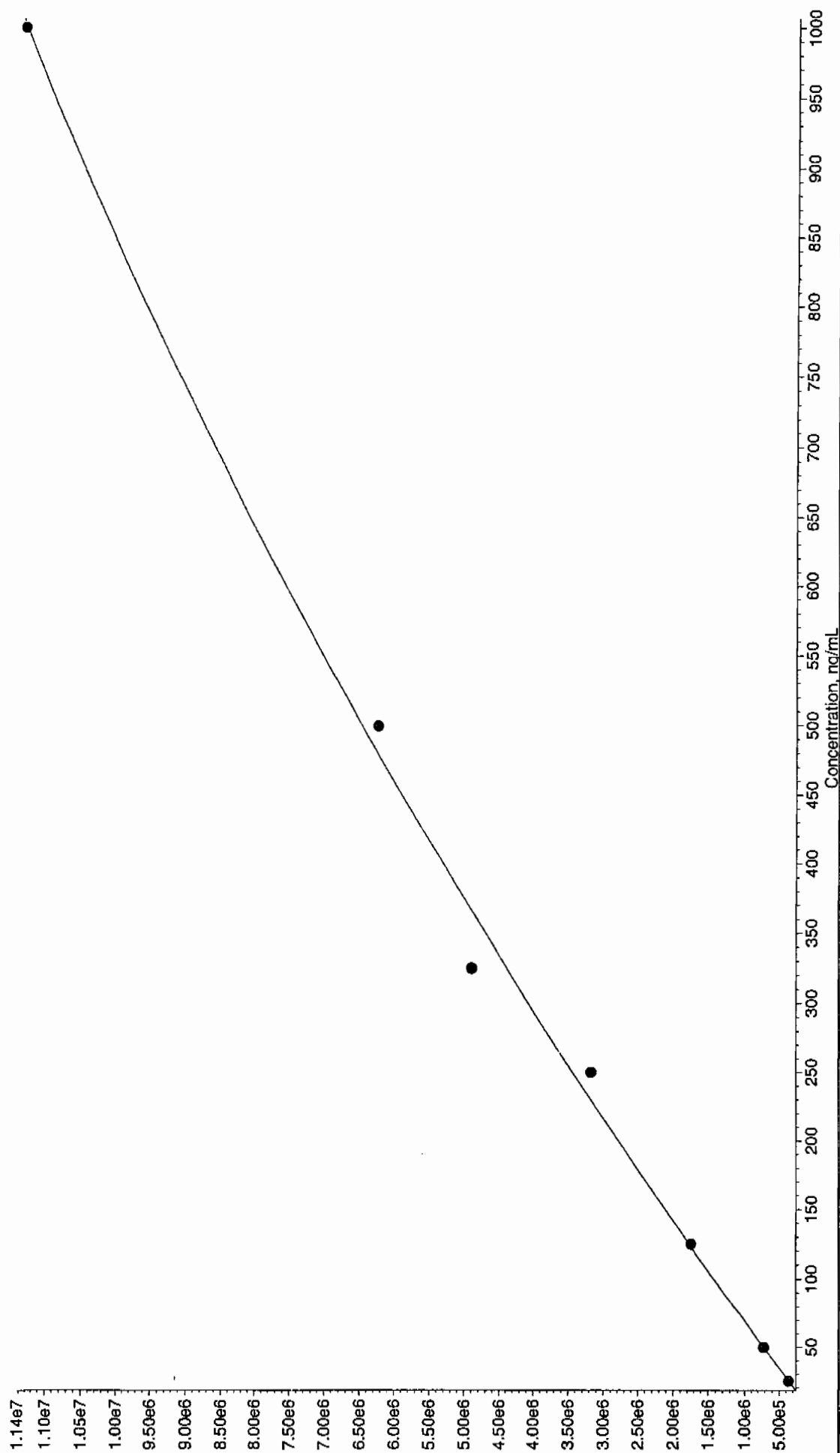
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022610.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -1.41 x^2 + 9.76e+003 x + 4.1e+004$  ( $r = 0.9999$ )



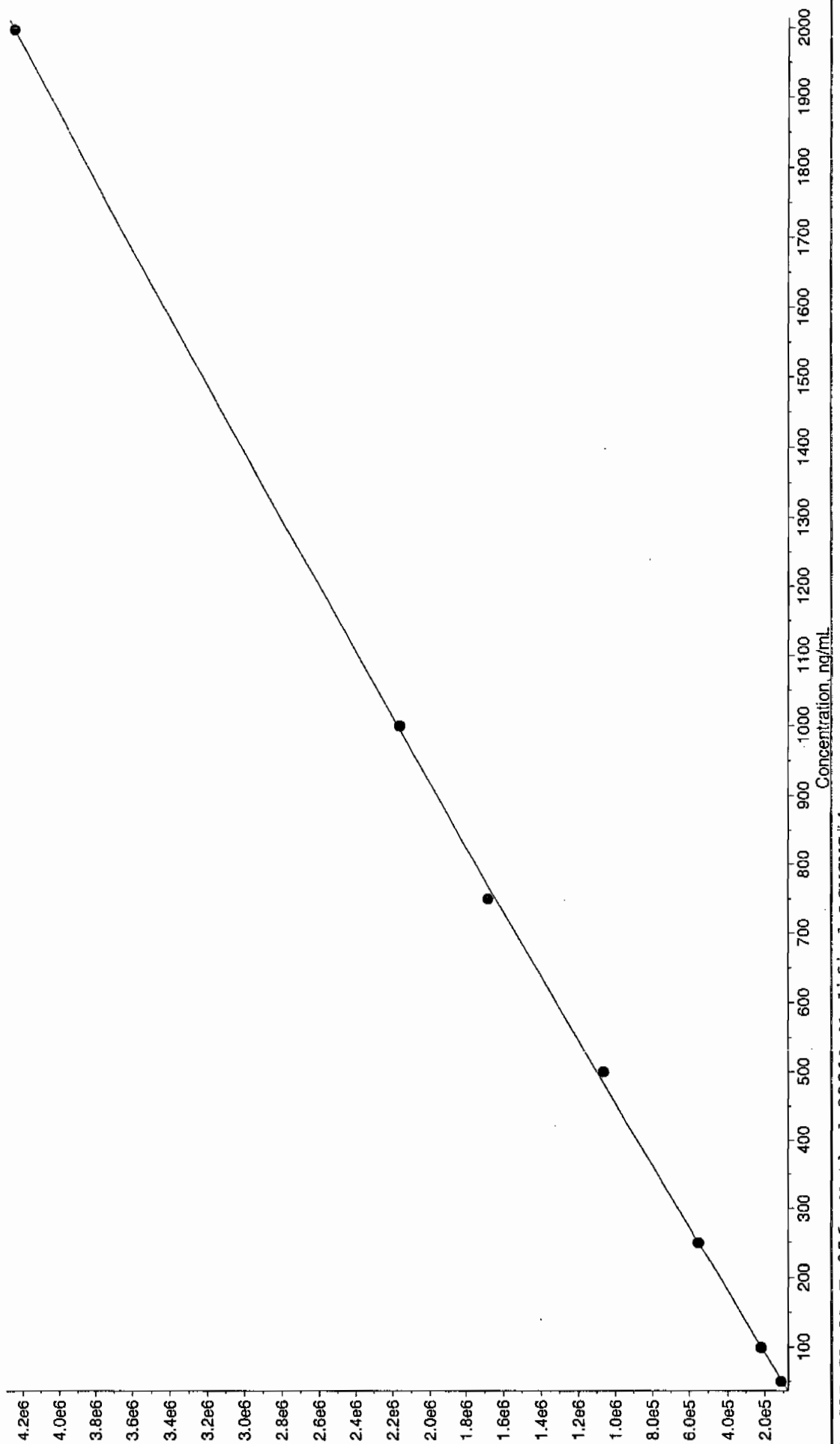
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022610.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -3.26 \times 10^{-2} x^2 + 1.46 \times 10^{-4} x + 2.65 \times 10^{-3}$  ( $r = 0.9979$ )



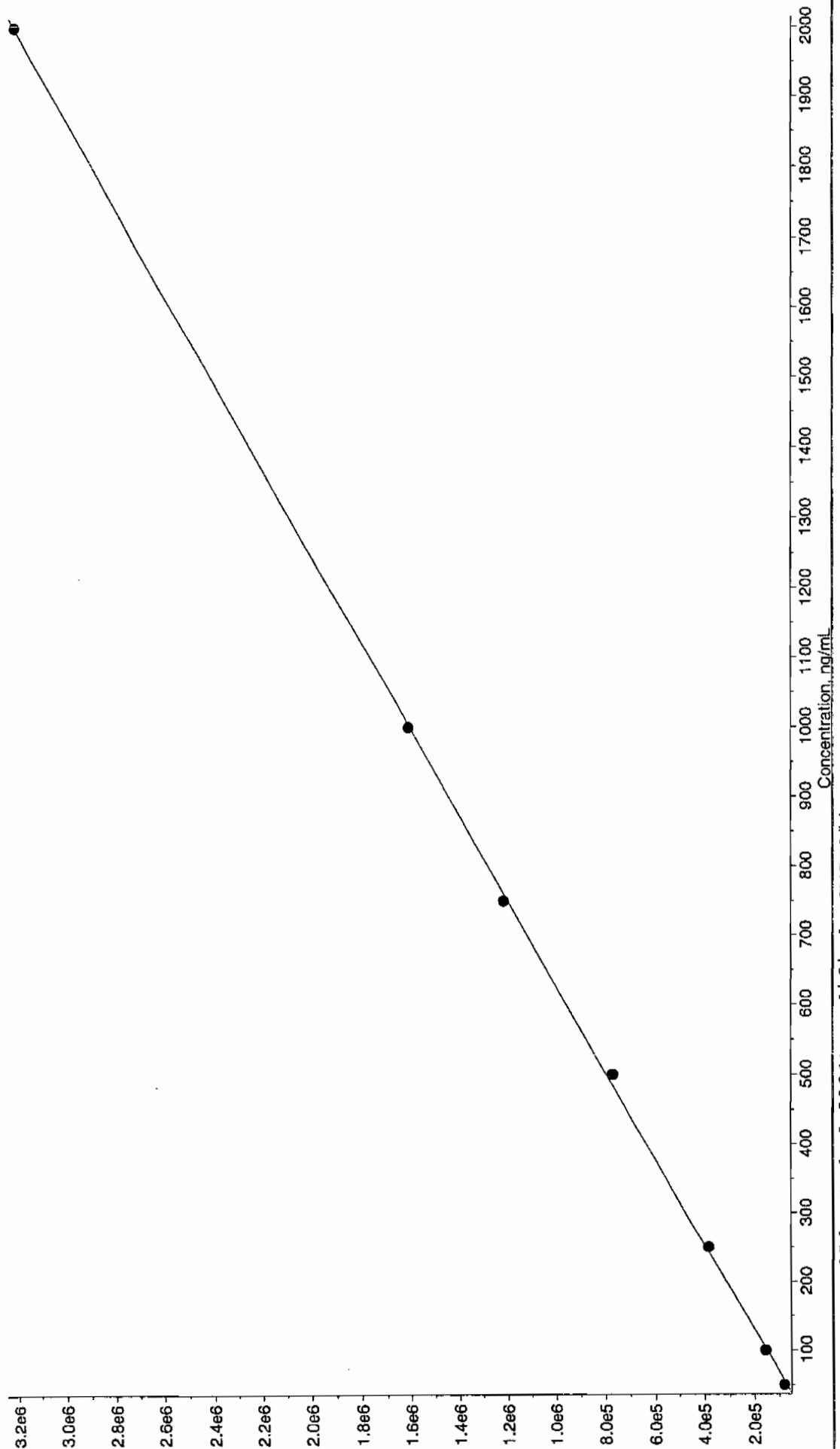
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022610.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -0.055 x^2 + 2.24e+003 x + -5.88e+003$  ( $r = 0.9999$ )



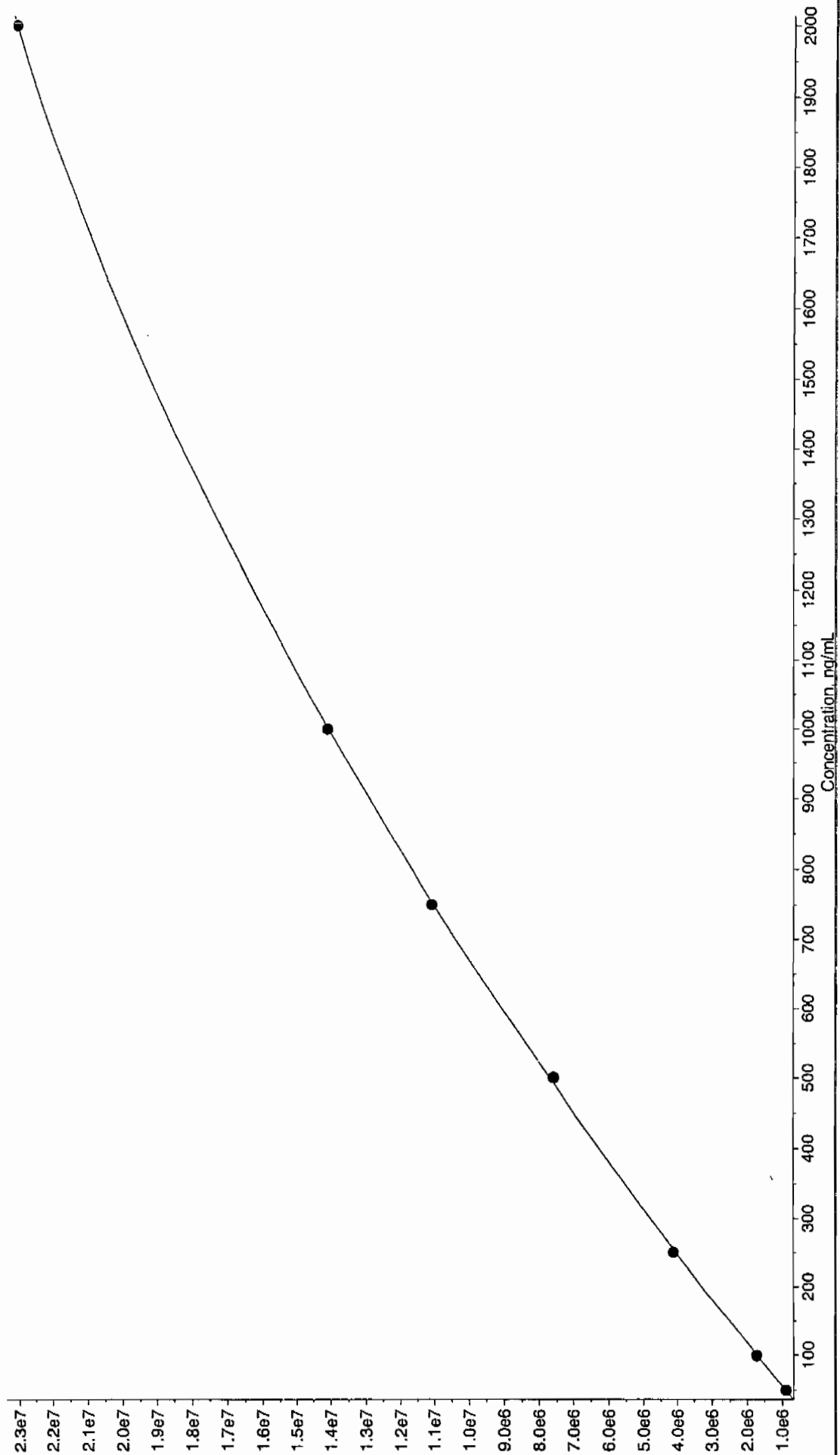
IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022610.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting):  $y = 0.000677 x^2 + 1.62e+003 x + -1.01e+004$  ( $r = 0.9999$ )



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022610.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -2.46 x^2 + 1.65e+004 x + 9.2e+004$  ( $r = 1.0000$ )



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02260011.wiff

Analysis Date: 26-FEB-10 17:31

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	483	97	
2,6-Diamino-4-nitrotoluene	500	465	93	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	474	95	
TATB	500	472	95	
tris(o-cresyl) phosphate	500	494	99	

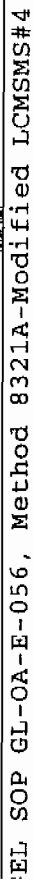
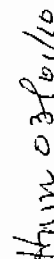
## Recovery Limits:

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

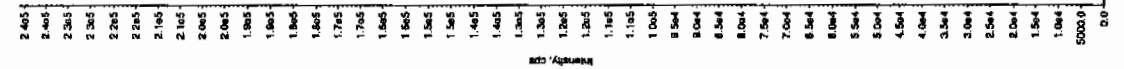
\* Value outside of Recovery Limits





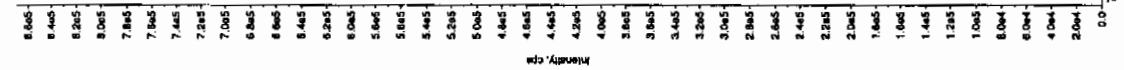
Sample Name: "WXX100226-261V" Sample ID: "JILLER" File: "EXS02260011.wif"  
 Peak Name: "26-Dienfio-4-nitrolovens" Mass(es): "166.046 0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

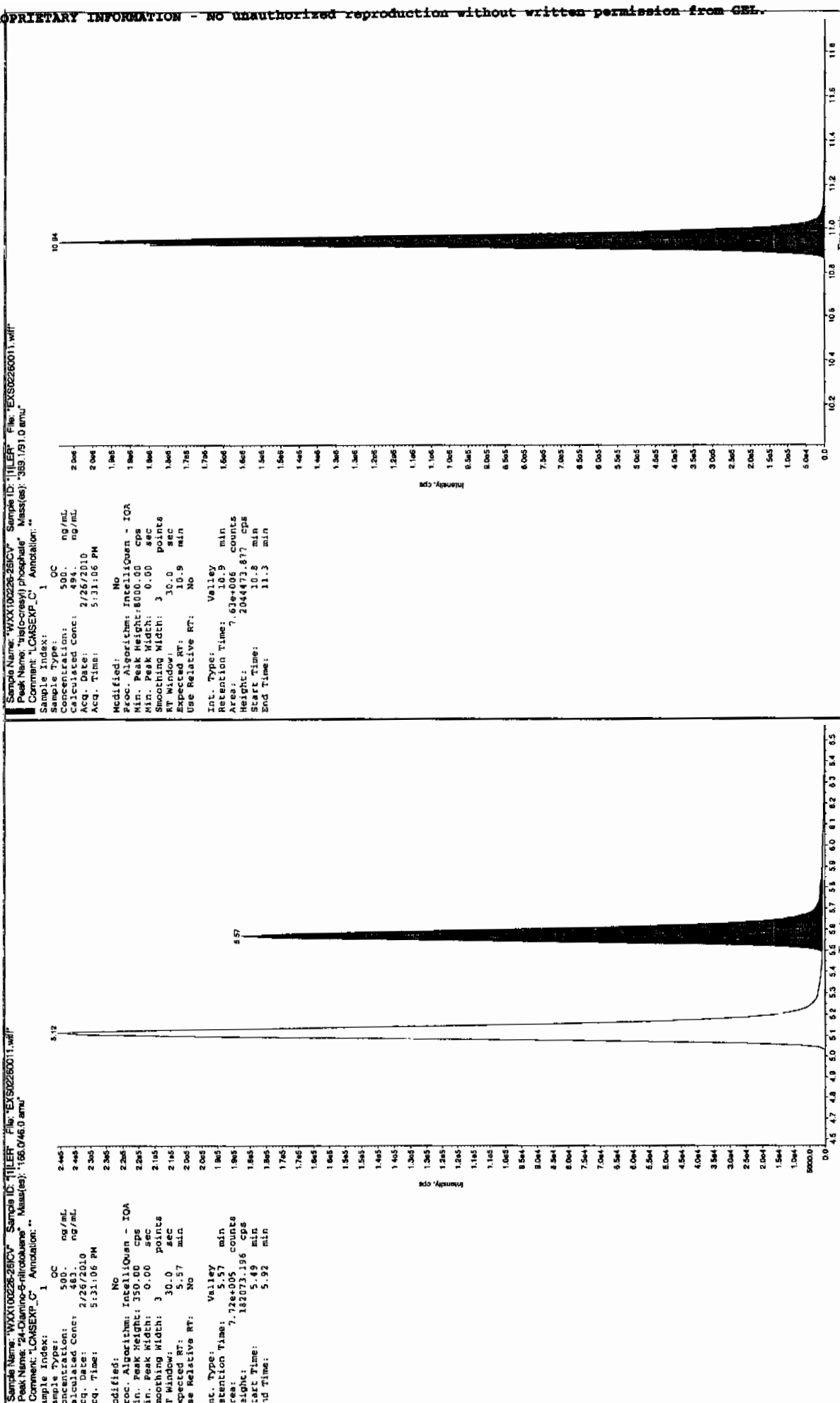
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 2/26/2010 ng/mL  
 Acq. Date: 5:31:06 PM  
 Acq. Time: 5:31:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Peak Height: 1.02e+003 counts  
 Start Time: 24095.003 cps  
 End Time: 5.01 min  
 End Time: 5.41 min



Sample Name: "WXX100226-261V" Sample ID: "JILLER" File: "EXS02260011.wif"  
 Peak Name: "34-Dinitrolovens" Mass(es): "182.151 9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 2/26/2010 ng/mL  
 Acq. Date: 5:31:06 PM  
 Acq. Time: 5:31:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Peak Height: 3.12e+006 counts  
 Start Time: 869437.378 cps  
 End Time: 8.40 min  
 End Time: 8.83 min





HEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXP0304012a

Analysis Date: 04-MAR-10 20:40

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	38.785	97	
o-Nitrotoluene	40	39.894	100	
p-Nitrotoluene	40	32.889	82	
1,3,5-Trinitrobenzene	40	52.132	130	*
1,3-Dinitrobenzene-d4	500	502.653	101	
2,4,6-Trinitrotoluene	40	43.716	109	
2,4-Dinitrotoluene	40	42.515	106	
2,6-Dinitrotoluene	40	39.781	99	
2,6-Dinitrotoluene-d3	500	509.301	102	
2-Amino-4,6-dinitrotoluene	40	37.902	95	
3,4-Dinitrotoluene	20	19.742	99	
4-Amino-2,6-dinitrotoluene	40	33.746	84	
HMX	40	42.046	105	
Nitrobenzene	40	43.151	108	
PETN	40	43.178	108	
RDX	40	41.86	105	
Tetryl	40	46.154	115	
m-Dinitrobenzene	40	46.893	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\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304012a

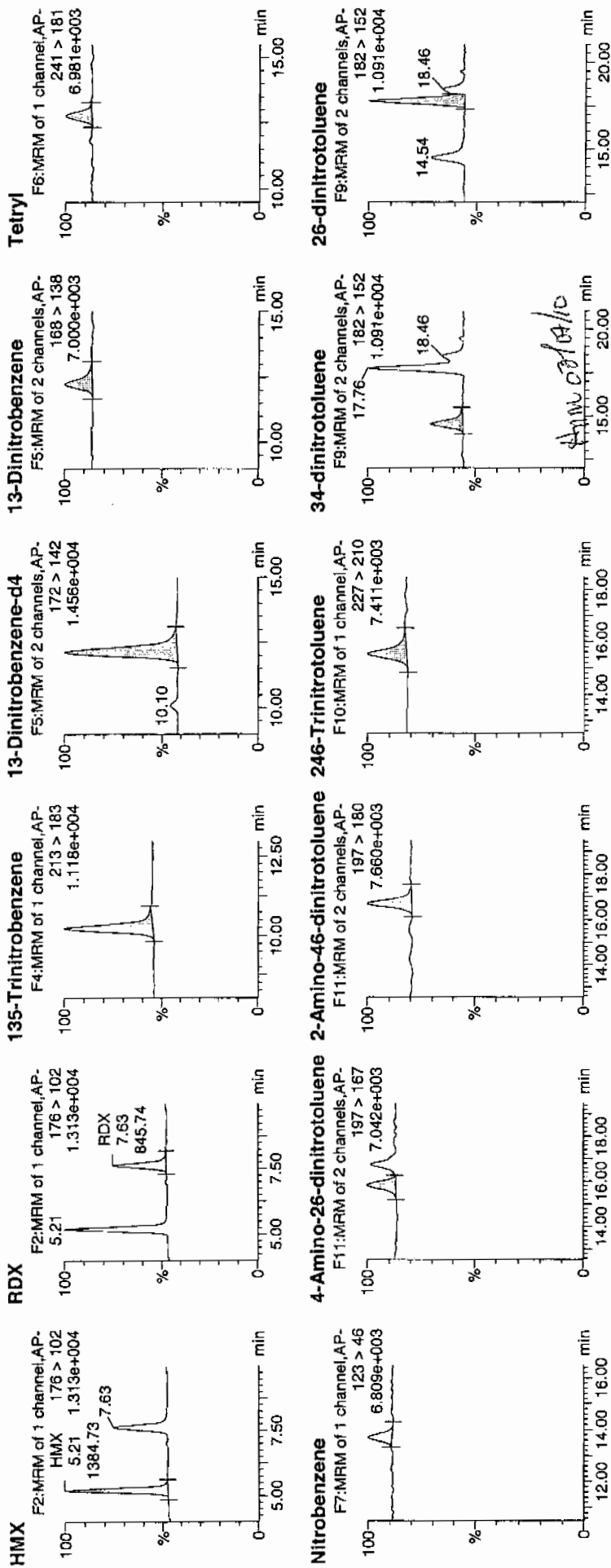
Date: 04-Mar-2010

Time: 20:40:53

ID: WXX100304-08CRI

Vial: 1:1,C

Handwritten: 1/10/10

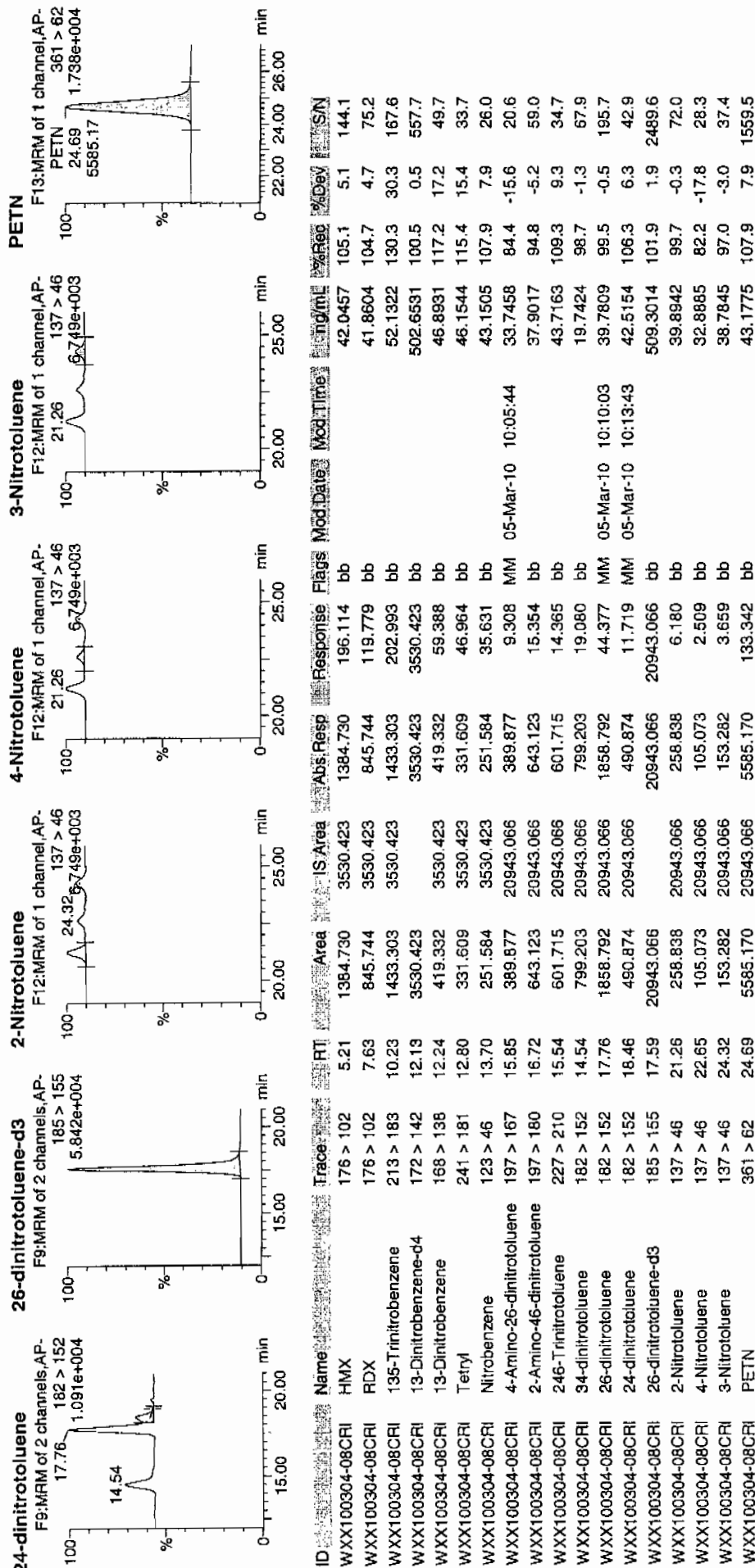


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

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GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/04/10  
 Time of Injection 2040  
 Standard Number WXX100304-08CRI  
 Data File EXP0304012a

HMX	105.1
RDX	104.7
135-TNB	130.3
13-DNB	117.2
Tetryl	115.4
Nitrobenzene	107.9
4A-26-DNT	84.4
2A-46-DNT	94.8
246-TNT	109.3
34-DNT(surr)	98.7
26-DNT	99.5
24-DNT	106.3
2-NT	99.7
4-NT	82.2
3-NT	97.0
PETN	107.9

*107.9  
3/6/10*

Total 1660.4

Average 103.8

*4/1/10 5:31/02/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304023a

Analysis Date: 05-MAR-10 02:05

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	300	364.434	121	*
4-Amino-2,6-dinitrotoluene	600	789.715	132	*
HMX	600	677.366	113	
Nitrobenzene	600	653.257	109	
PETN	600	714.882	119	
RDX	600	797.625	133	*
Tetryl	600	672.594	112	
m-Dinitrobenzene	600	619.329	103	
m-Nitrotoluene	600	614.199	102	
o-Nitrotoluene	600	660.057	110	
p-Nitrotoluene	600	704.198	117	
1,3,5-Trinitrobenzene	600	582.184	97	
1,3-Dinitrobenzene-d4	500	523.805	105	
2,4,6-Trinitrotoluene	600	735.028	123	*
2,4-Dinitrotoluene	600	602.974	100	
2,6-Dinitrotoluene	600	603.708	101	
2,6-Dinitrotoluene-d3	500	475.367	95	
2-Amino-4,6-dinitrotoluene	600	849.542	142	*

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\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304023a

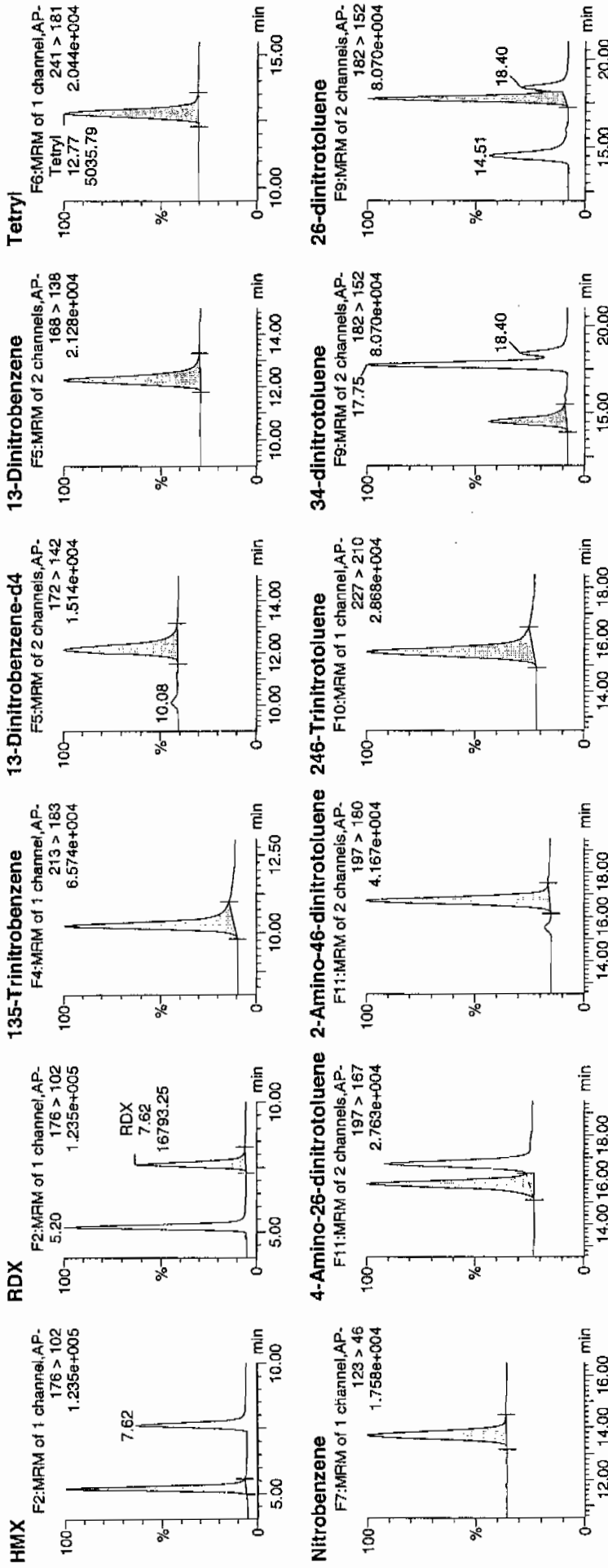
Date: 05-Mar-2010

Time: 02:05:17

ID: WXX100304-07CCV

Vial: 1:1,B

WXX  
3/5/10



Amc  
3/5/10

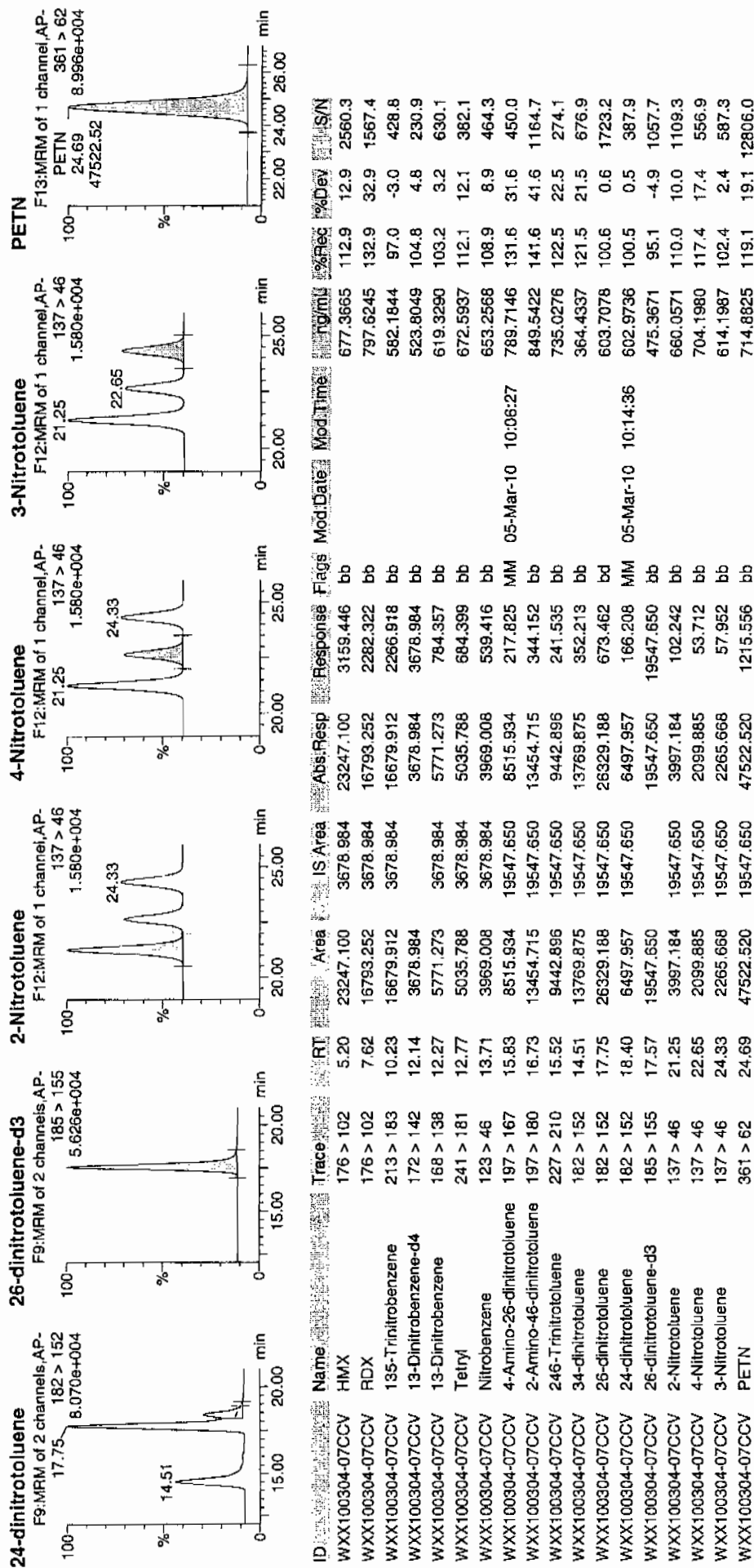


## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Mar 05 10:25:00 2010, Page 46 of 77

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/05/10  
 Time of Injection: 0205  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304023a

HMX	112.9
RDX	132.9
135-TNB	97.0
13-DNB	103.2
Tetryl	112.1
Nitrobenzene	108.9
4A-26-DNT	131.6
2A-46-DNT	141.6
246-TNT	122.5
34-DNT(surr)	121.5
26-DNT	100.6
24-DNT	100.5
2-NT	110.0
4-NT	117.4
3-NT	102.1
PETN	119.1

MEV  
3/6/10

Total 1833.9

*Handwritten signature*

Average 114.6

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304025a

Analysis Date: 05-MAR-10 03:04

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.531	114	
1,3-Dinitrobenzene-d4	500	486.162	97	
2,4,6-Trinitrotoluene	40	34.785	87	
2,4-Dinitrotoluene	40	43.839	110	
2,6-Dinitrotoluene	40	37.827	95	
2,6-Dinitrotoluene-d3	500	496.377	99	
2-Amino-4,6-dinitrotoluene	40	38.416	96	
3,4-Dinitrotoluene	20	18.756	94	
4-Amino-2,6-dinitrotoluene	40	39.423	99	
HMX	40	36.072	90	
Nitrobenzene	40	41.851	105	
PETN	40	44.092	110	
RDX	40	37.991	95	
Tetryl	40	37.595	94	
m-Dinitrobenzene	40	36.407	91	
m-Nitrotoluene	40	44.127	110	
o-Nitrotoluene	40	43.573	109	
p-Nitrotoluene	40	37.14	93	

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\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304025a

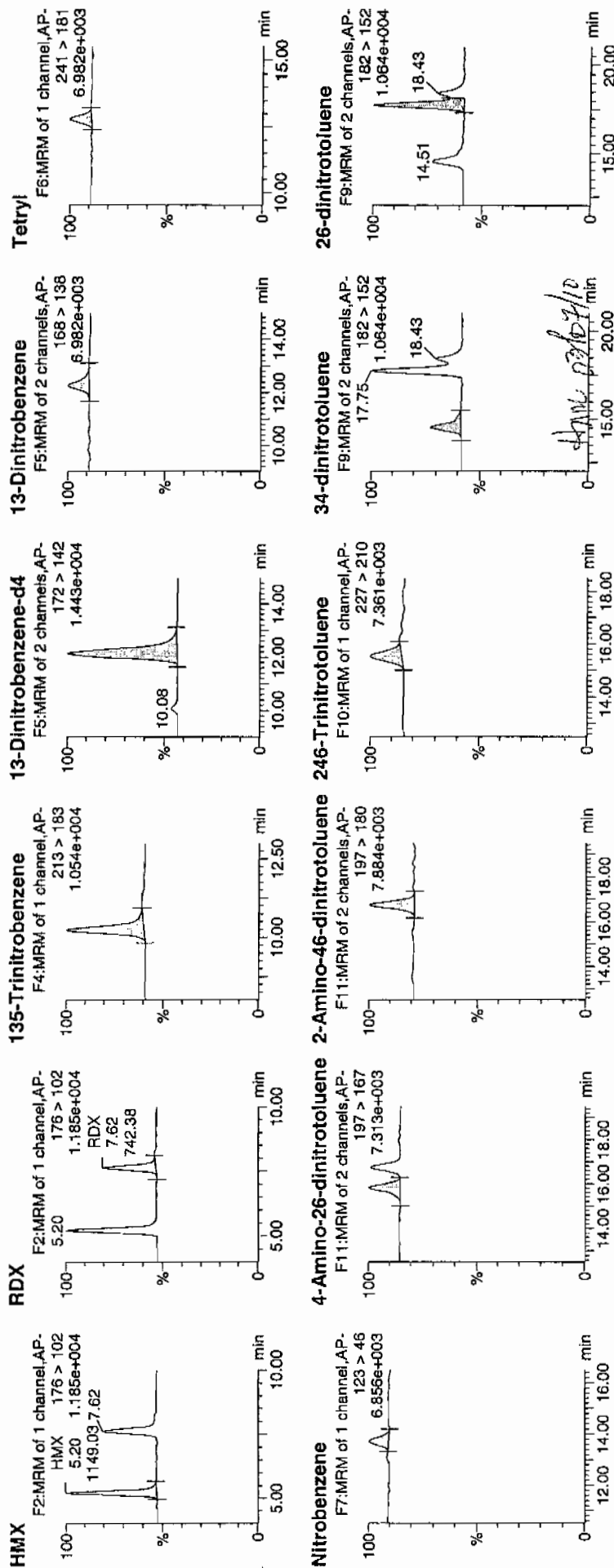
Date: 05-Mar-2010

Time: 03:04:14

ID: WXX100304-08CRI

Vial: 1:1,C

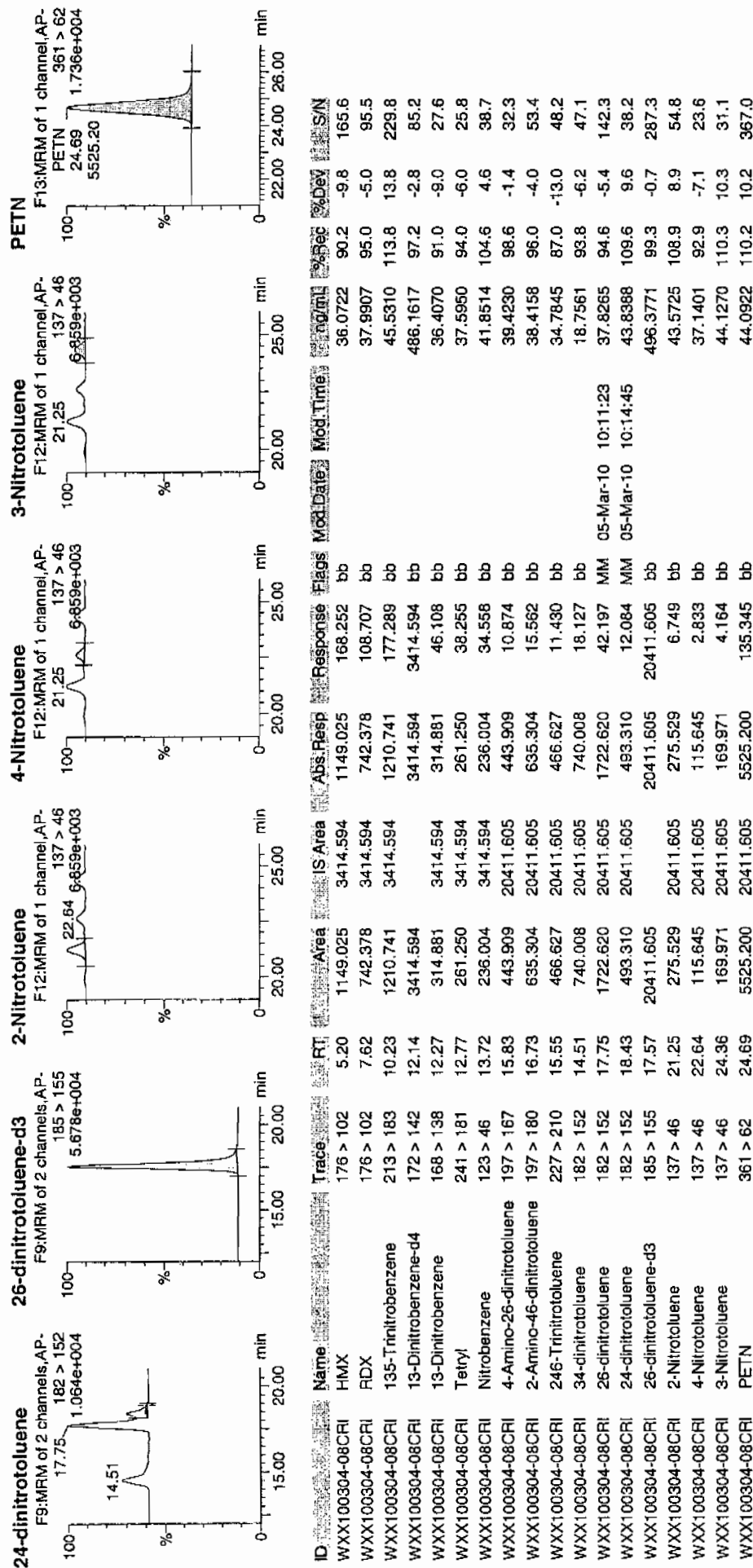
16/10



# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/05/10  
 Time of Injection 0304  
 Standard Number WXX100304-08CRI  
 Data File EXP0304025a

HMX	90.2
RDX	95.0
135-TNB	113.8
13-DNB	91.0
Tetryl	94.0
Nitrobenzene	104.6
4A-26-DNT	98.6
2A-46-DNT	96.0
246-TNT	87.0
34-DNT(surr)	93.8
26-DNT	94.6
24-DNT	109.6
2-NT	108.9
4-NT	92.9
3-NT	110.3
PETN	110.2

1057  
3/6/10

Total 1590.5

Average 99.4

4/11/10 03/07/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304036a

Analysis Date: 05-MAR-10 08:28

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	600.392	100	
1,3,5-Trinitrobenzene	600	515.274	86	
1,3-Dinitrobenzene-d4	500	536.623	107	
2,4,6-Trinitrotoluene	600	672.018	112	
2,4-Dinitrotoluene	600	572.889	95	
2,6-Dinitrotoluene	600	612.517	102	
2,6-Dinitrotoluene-d3	500	508.792	102	
2-Amino-4,6-dinitrotoluene	600	681.036	114	
3,4-Dinitrotoluene	300	311.088	104	
4-Amino-2,6-dinitrotoluene	600	643.868	107	
HMX	600	523.143	87	
Nitrobenzene	600	628.495	105	
PETN	600	577.567	96	
RDX	600	607.989	101	
Tetryl	600	588.724	98	
m-Dinitrobenzene	600	634.351	106	
m-Nitrotoluene	600	540.173	90	
o-Nitrotoluene	600	622.879	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

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp\PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYN\NEW\_EXP\PRO\Data\EXP0304036a

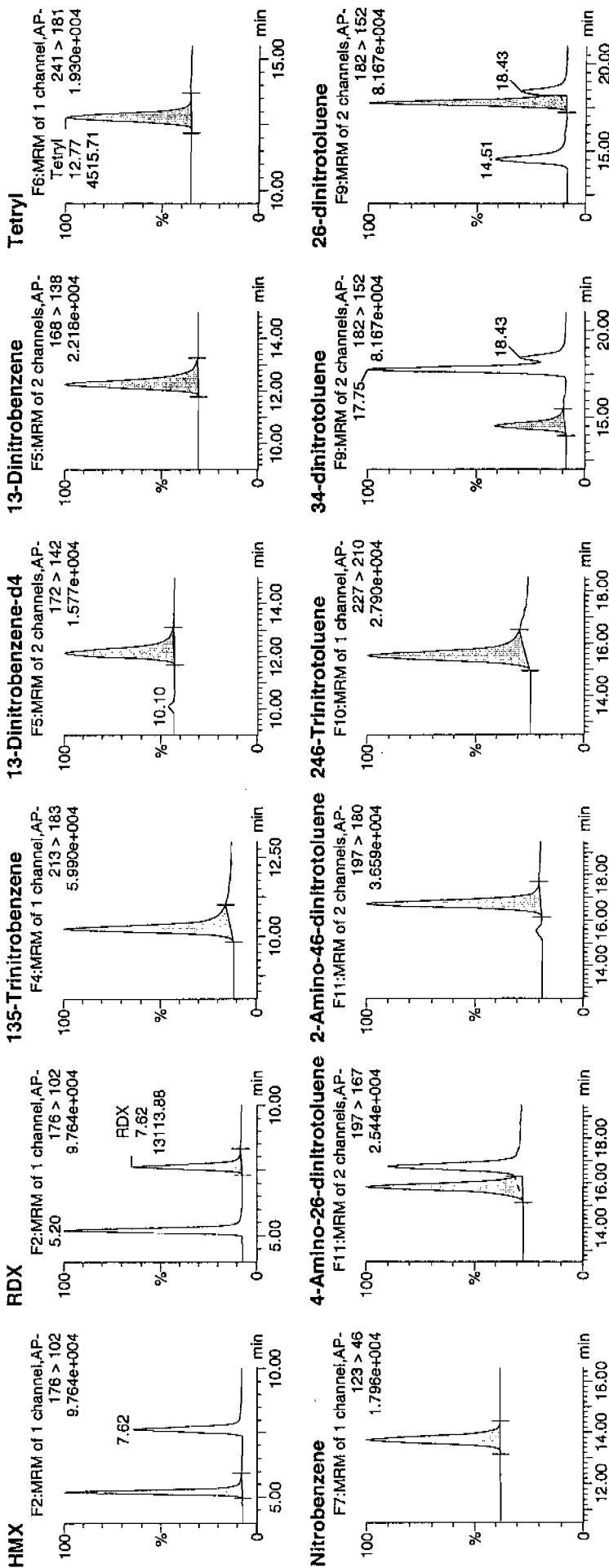
Date: 05-Mar-2010

Time: 08:28:30

ID: WXX100304-07CCV

Vial: 1:1,B

*Handwritten:* 3/5/10



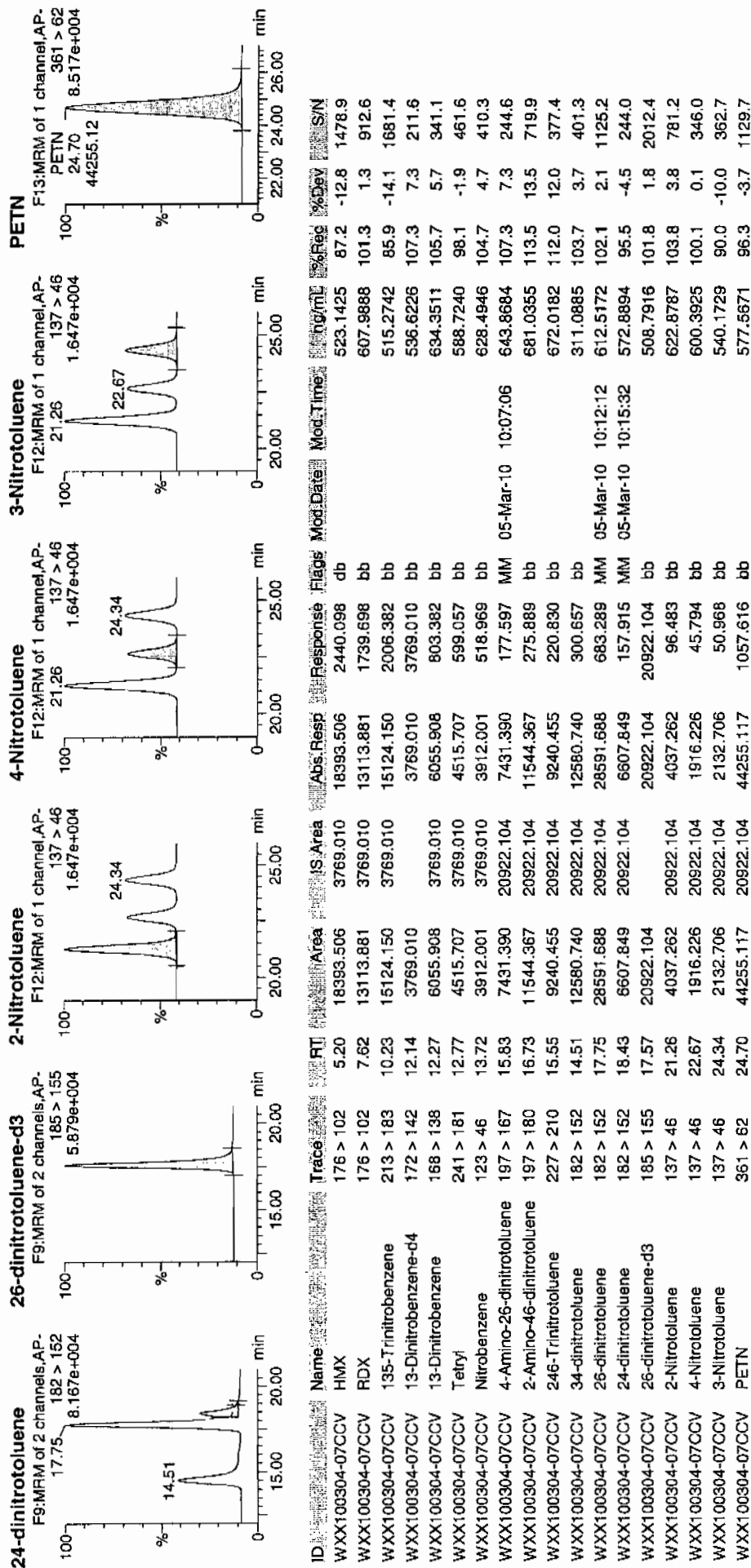
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Printed: Fri Mar 05 10:25:00 2010, Page 72 of 77

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/05/10  
 Time of Injection: 0828  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304036a

HMX	87.2
RDX	101.3
135-TNB	85.9
13-DNB	105.7
Tetryl	98.1
Nitrobenzene	104.7
4A-26-DNT	107.3
2A-46-DNT	113.5
246-TNT	112.0
34-DNT(surr)	103.7
26-DNT	102.1
24-DNT	95.5
2-NT	103.8
4-NT	100.1
3-NT	90.0
PETN	96.3
Total	1607.2

*Handwritten:* 1417  
3/6/10

Average

100.5

*Handwritten:* 03/07/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304038a

Analysis Date: 05-MAR-10 09:27

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	20	17.879	89	
4-Amino-2,6-dinitrotoluene	40	46.263	116	
HMX	40	38.837	97	
Nitrobenzene	40	43.406	109	
PETN	40	38.4	96	
RDX	40	41.881	105	
Tetryl	40	47.052	118	
m-Dinitrobenzene	40	39.692	99	
m-Nitrotoluene	40	40.239	101	
o-Nitrotoluene	40	38.86	97	
p-Nitrotoluene	40	39.046	98	
1,3,5-Trinitrobenzene	40	48.063	120	
1,3-Dinitrobenzene-d4	500	567.712	114	
2,4,6-Trinitrotoluene	40	40.001	100	
2,4-Dinitrotoluene	40	36.759	92	
2,6-Dinitrotoluene	40	39.855	100	
2,6-Dinitrotoluene-d3	500	569.834	114	
2-Amino-4,6-dinitrotoluene	40	38.546	96	

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\030410expA.qld, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304038a

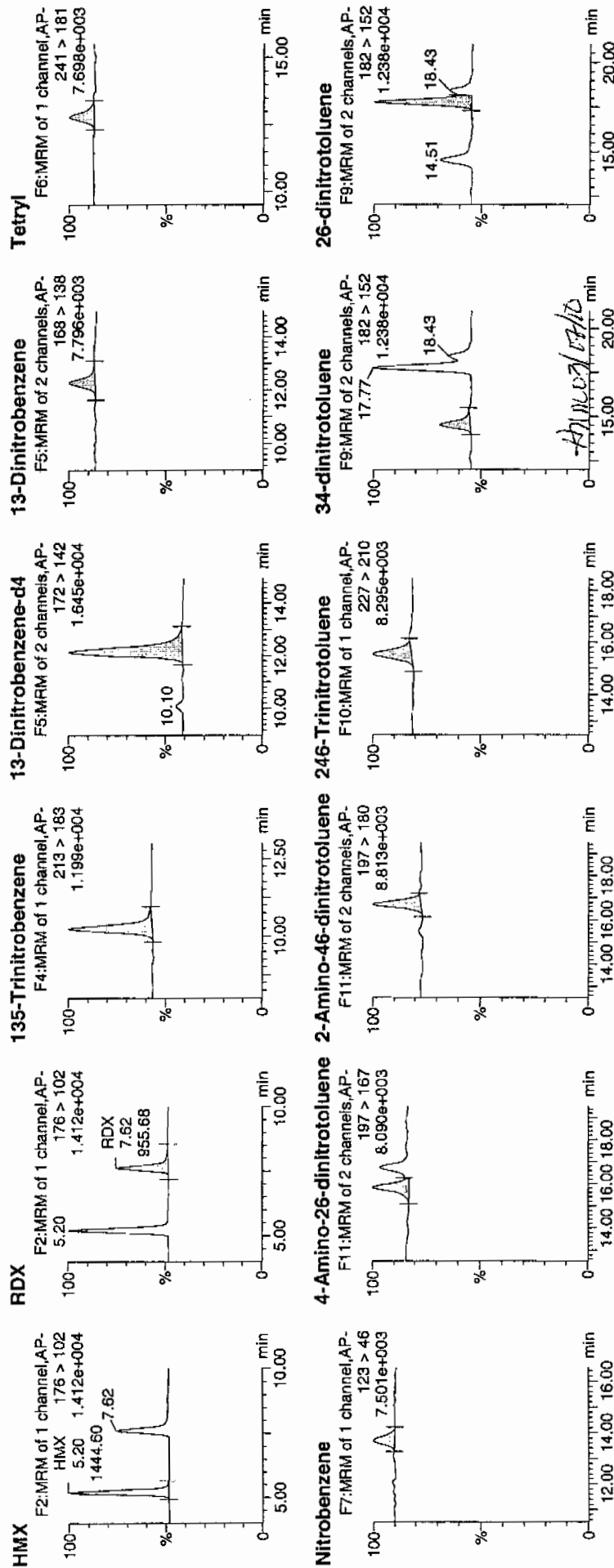
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Time: 09:27:34

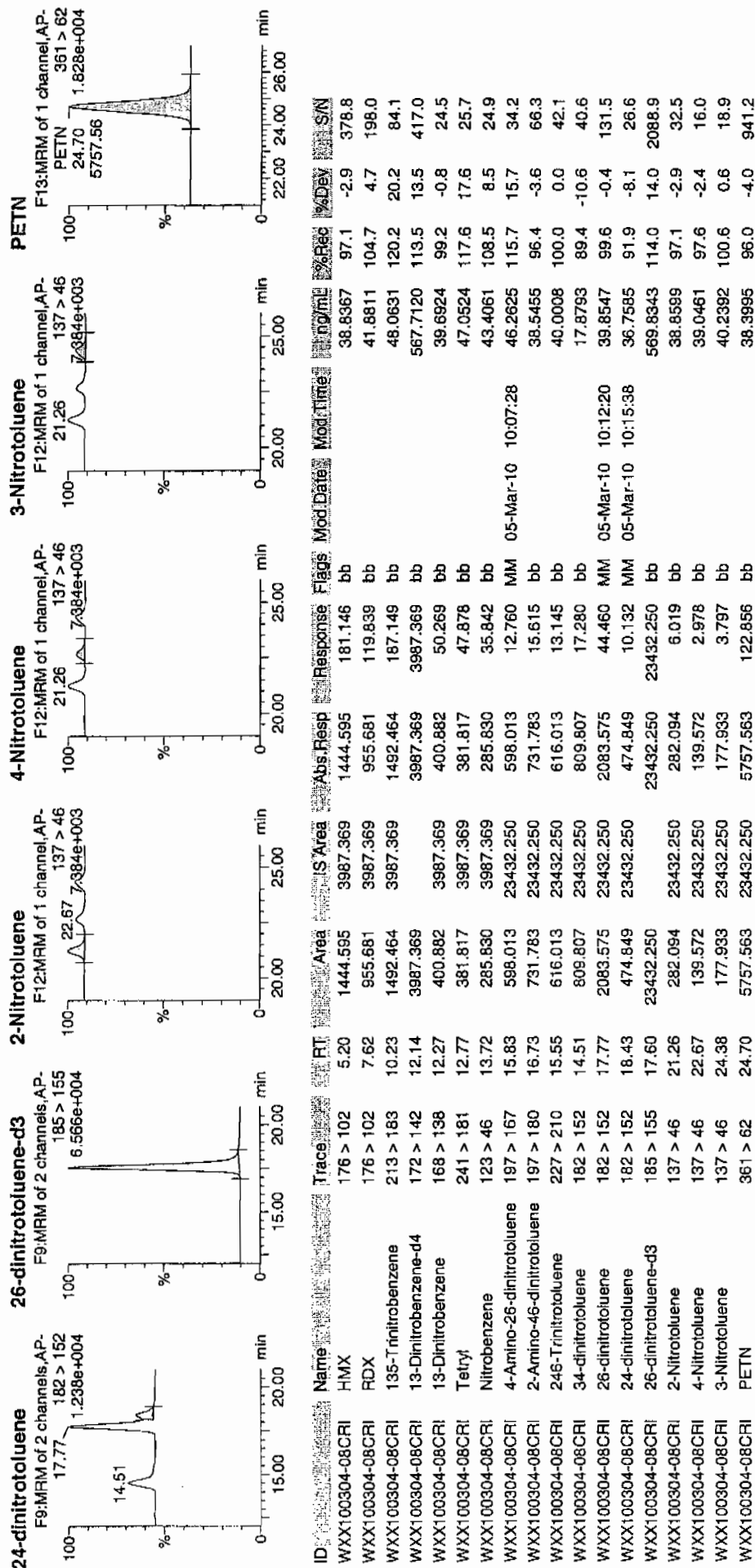
ID: WXX100304-08CRI

Vial: 1:1,C

3/6/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA.qld, Time: Fri Mar 05 10:16:18 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/05/10  
 Time of Injection 0927  
 Standard Number WXX100304-08CRI  
 Data File EXP0304038a

HMX	97.1
RDX	104.7
135-TNB	120.2
13-DNB	99.2
Tetryl	117.6
Nitrobenzene	108.5
4A-26-DNT	115.7
2A-46-DNT	96.4
246-TNT	100.0
34-DNT(surr)	89.4
26-DNT	99.6
24-DNT	91.9
2-NT	97.1
4-NT	97.6
3-NT	100.6
PETN	96.0

*diff  
3/6/10*

Total 1631.6

Average 102.0

*Hym 03/07/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304049a

Analysis Date: 05-MAR-10 14:52

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene-d3	500	516.322	103	
2-Amino-4,6-dinitrotoluene	600	640.403	107	
3,4-Dinitrotoluene	300	295.719	99	
4-Amino-2,6-dinitrotoluene	600	631.798	105	
HMX	600	537.583	90	
Nitrobenzene	600	626.896	104	
PETN	600	590.161	98	
RDX	600	630.1	105	
Tetryl	600	629.847	105	
m-Dinitrobenzene	600	598.536	100	
m-Nitrotoluene	600	561.186	94	
o-Nitrotoluene	600	596.576	99	
p-Nitrotoluene	600	615.575	103	
1,3,5-Trinitrobenzene	600	553.66	92	
1,3-Dinitrobenzene-d4	500	505.7	101	
2,4,6-Trinitrotoluene	600	658.826	110	
2,4-Dinitrotoluene	600	563.598	94	
2,6-Dinitrotoluene	600	590.275	98	

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\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304049a

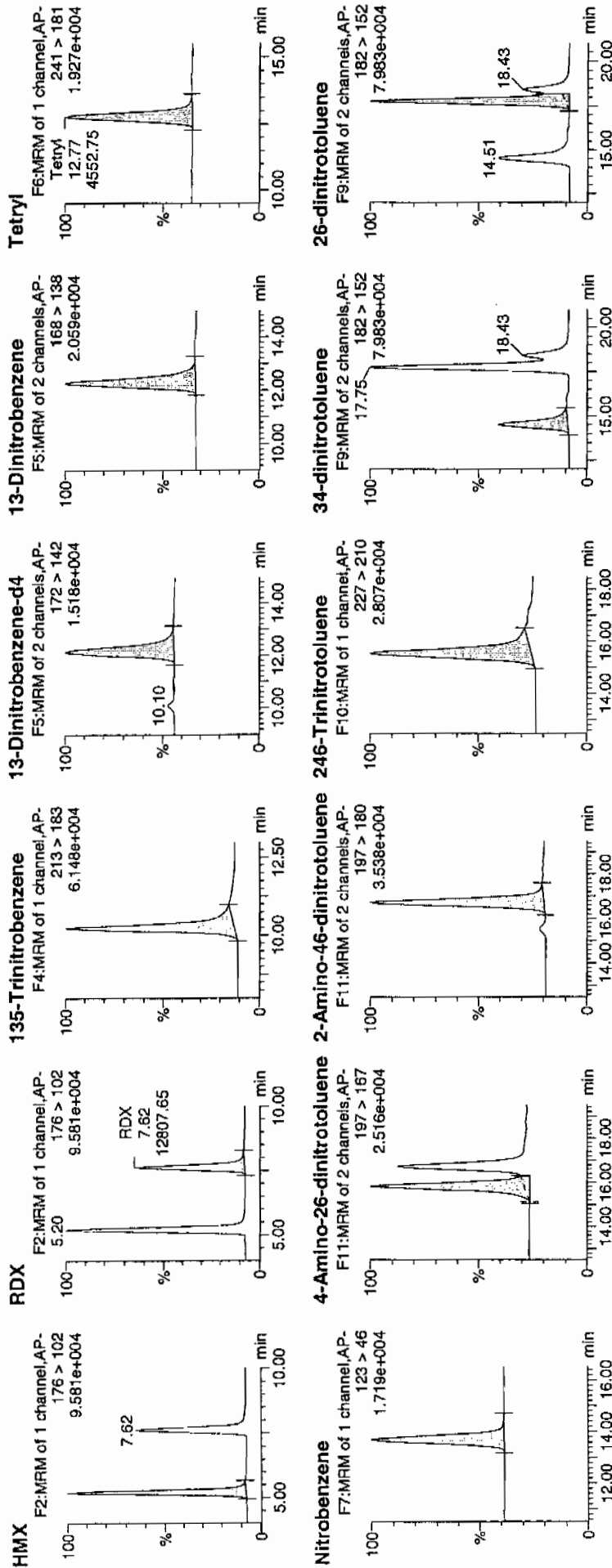
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Time: 14:52:12

ID: WXX100304-07CCV

Vial: 1:1,B

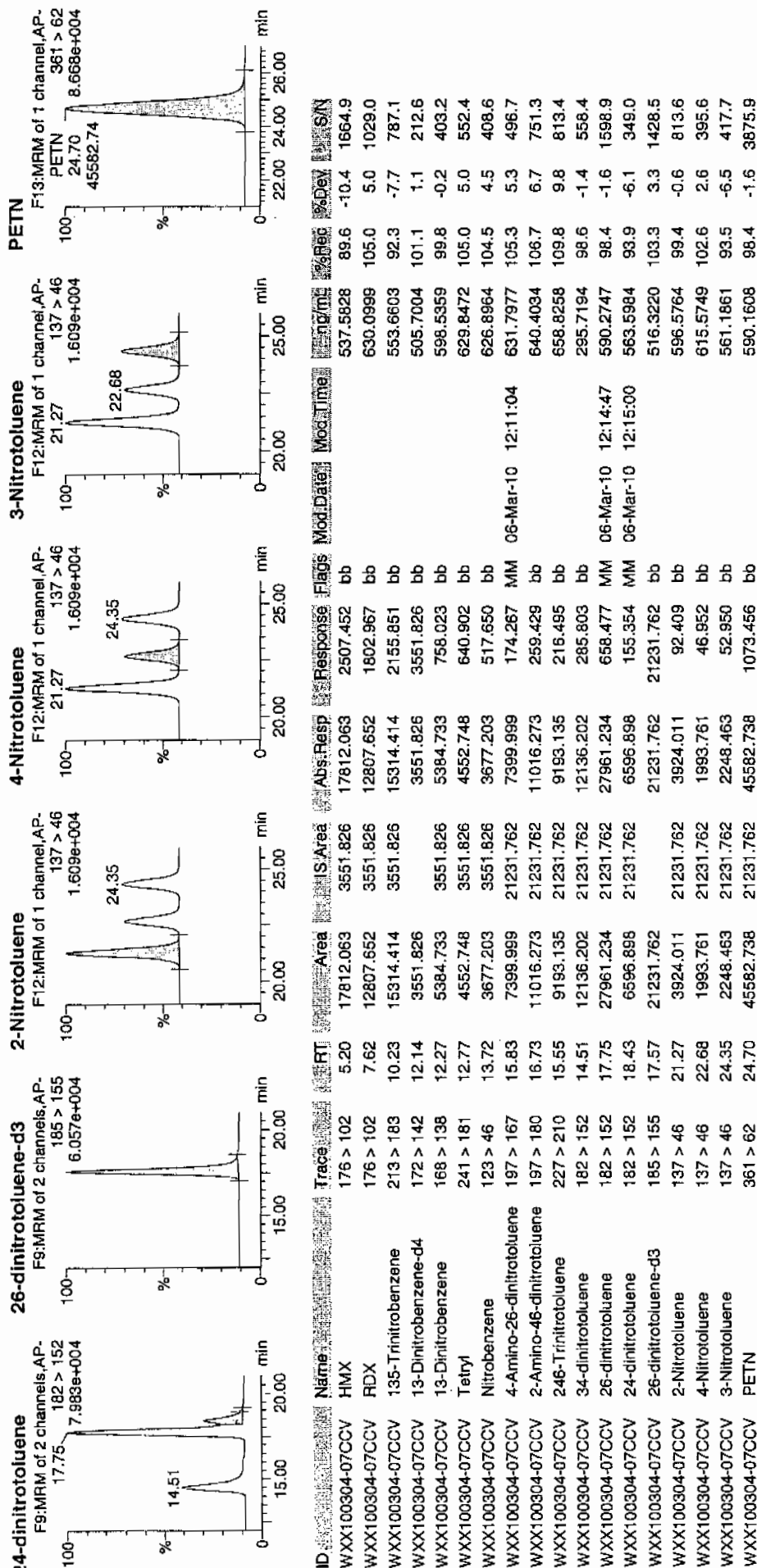
3/6/10



3/6/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/05/10  
 Time of Injection: 1452  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304049a

HMX	89.6	✓
RDX	105.0	✓
135-TNB	92.3	✓
13-DNB	99.8	
Tetryl	105.0	
Nitrobenzene	104.5	
4A-26-DNT	105.3	
2A-46-DNT	106.7	
246-TNT	109.8	
34-DNT(surr)	98.6	
26-DNT	98.4	
24-DNT	93.9	
2-NT	99.4	
4-NT	102.6	
3-NT	93.5	
PETN	98.4	

*MTT  
3/6/10*

Total 1602.8

Average 100.2

*HTM 03/05/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304051a

Analysis Date: 05-MAR-10 15:51

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.153	128	
1,3-Dinitrobenzene-d4	500	505.962	101	
2,4,6-Trinitrotoluene	40	43.019	108	
2,4-Dinitrotoluene	40	36.168	90	
2,6-Dinitrotoluene	40	40.992	102	
2,6-Dinitrotoluene-d3	500	562.467	112	
2-Amino-4,6-dinitrotoluene	40	41.661	104	
3,4-Dinitrotoluene	20	18.026	90	
4-Amino-2,6-dinitrotoluene	40	34.434	86	
HMX	40	42.762	107	
Nitrobenzene	40	43.048	108	
PETN	40	41.201	103	
RDX	40	42.966	107	
Tetryl	40	50.733	127	
m-Dinitrobenzene	40	39.555	99	
m-Nitrotoluene	40	42.174	105	
o-Nitrotoluene	40	36.513	91	
p-Nitrotoluene	40	41.047	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

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304051a

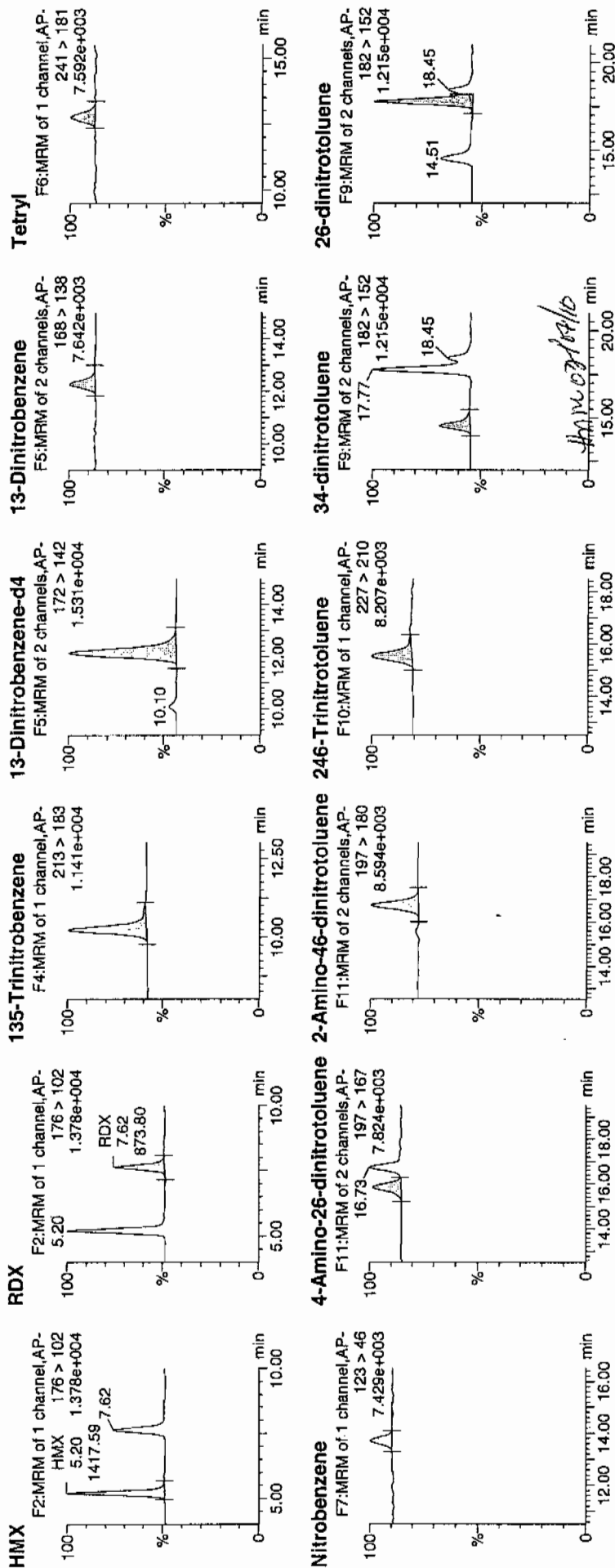
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Time: 15:51:17

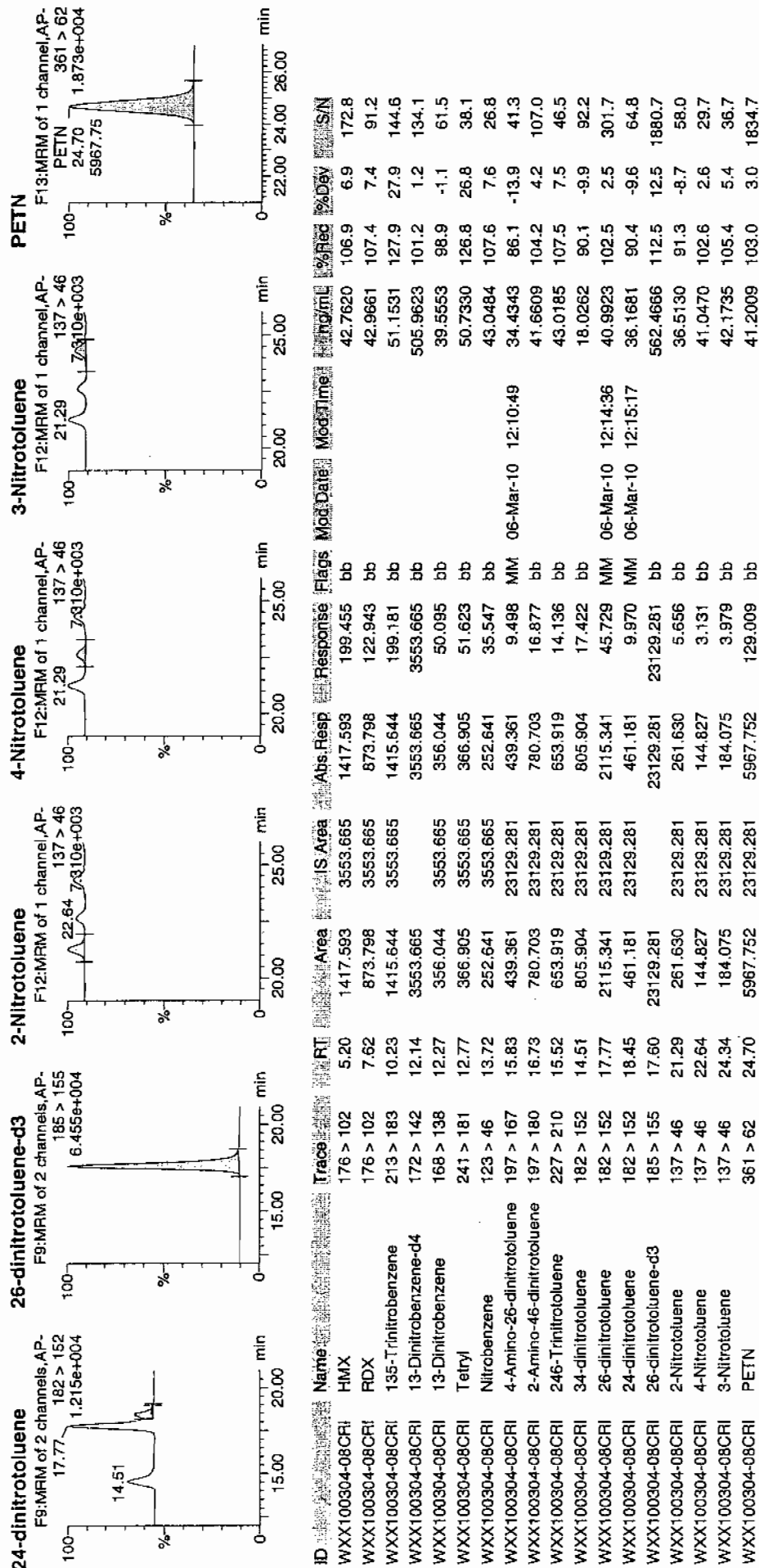
ID: WXX100304-08CRI

Vial: 1:1,C

1.477  
3/6/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/05/10  
 Time of Injection 1551  
 Standard Number WXX100304-08CRI  
 Data File EXP0304051a

HMX	106.9
RDX	107.4
135-TNB	127.9
13-DNB	98.9
Tetryl	126.8
Nitrobenzene	107.6
4A-26-DNT	86.1
2A-46-DNT	104.2
246-TNT	107.5
34-DNT(surr)	90.1
26-DNT	102.5
24-DNT	90.4
2-NT	91.3
4-NT	102.6
3-NT	105.4
PETN	103.0

✓  
✓  
✓

MA  
3/6/10

Total 1658.6

Average 103.7

Handwritten: 1658.6

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304064a

Analysis Date: 05-MAR-10 22:14

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	600	594.436	99	
o-Nitrotoluene	600	627.073	105	
p-Nitrotoluene	600	632.094	105	
1,3,5-Trinitrobenzene	600	563.548	94	
1,3-Dinitrobenzene-d4	500	511.802	102	
2,4,6-Trinitrotoluene	600	684.022	114	
2,4-Dinitrotoluene	600	572.807	95	
2,6-Dinitrotoluene	600	602.144	100	
2,6-Dinitrotoluene-d3	500	514.259	103	
2-Amino-4,6-dinitrotoluene	600	681.738	114	
3,4-Dinitrotoluene	300	308.574	103	
4-Amino-2,6-dinitrotoluene	600	672.822	112	
HMX	600	559.79	93	
Nitrobenzene	600	614.548	102	
PETN	600	770.241	128	*
RDX	600	631.612	105	
Tetryl	600	585.793	98	
m-Dinitrobenzene	600	571.183	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 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\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304064a

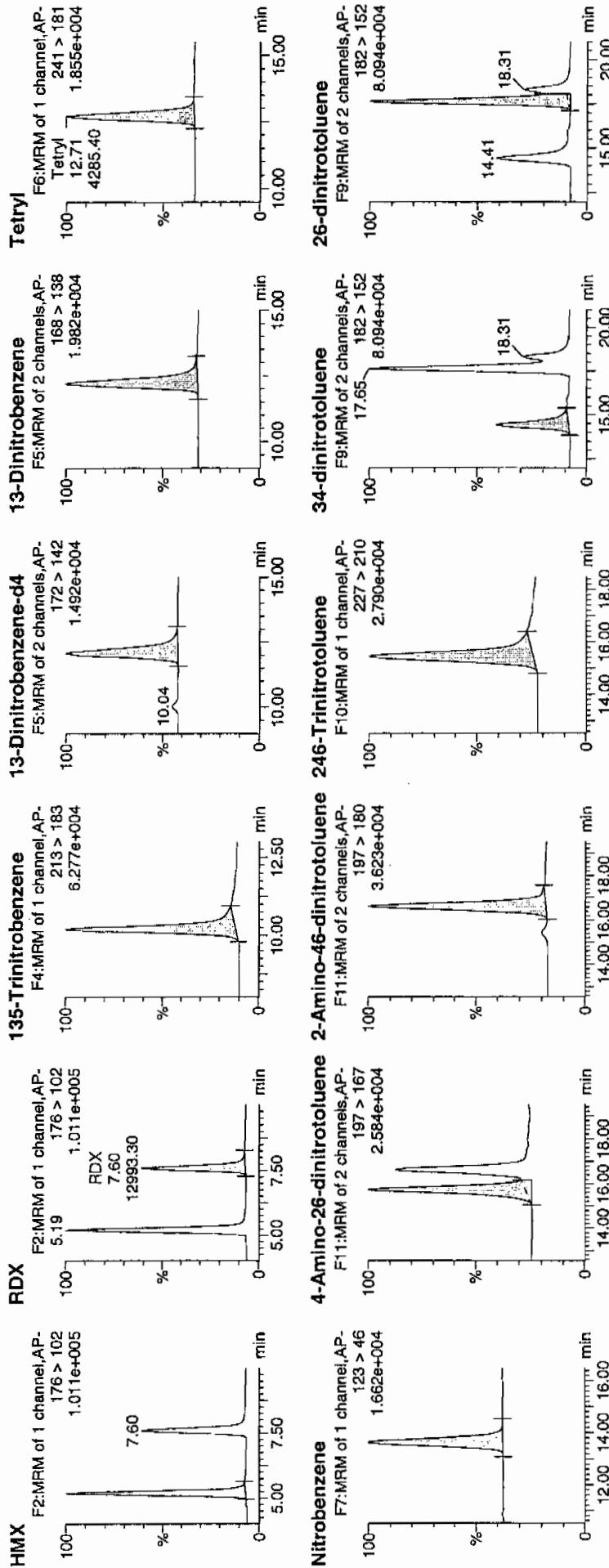
Date: 05-Mar-2010

Time: 22:14:55

ID: WXX100304-07CCV

Vial: 1:1,B

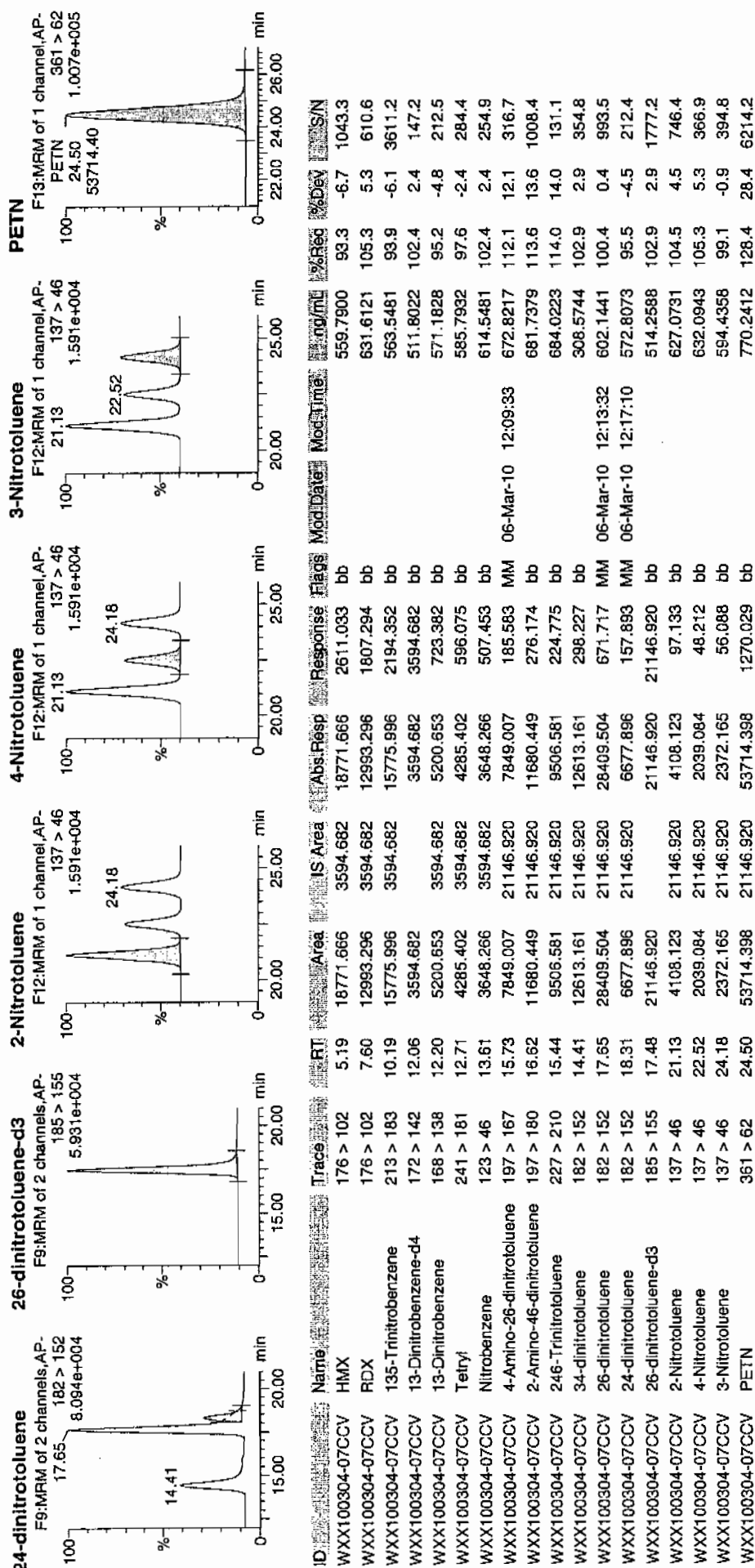
1.011e+005  
3/6/10



Handwritten signature: *Handwritten signature*



Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/05/10  
 Time of Injection: 2214  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304064a

HMX	93.3
RDX	105.3
135-TNB	93.9
13-DNB	95.2
Tetryl	97.6
Nitrobenzene	102.4
4A-26-DNT	112.1
2A-46-DNT	113.6
246-TNT	114.0
34-DNT(surr)	102.9
26-DNT	100.4
24-DNT	95.5
2-NT	104.5
4-NT	105.3
3-NT	99.1
PETN	128.4

*not  
3/16/10*

Total 1663.5

Average 104.0

*Hmm. 03/07/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304066a

Analysis Date: 05-MAR-10 23:13

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	45.259	113	
1,3-Dinitrobenzene-d4	500	507.864	102	
2,4,6-Trinitrotoluene	40	36.863	92	
2,4-Dinitrotoluene	40	36.208	91	
2,6-Dinitrotoluene	40	38.64	97	
2,6-Dinitrotoluene-d3	500	550.381	110	
2-Amino-4,6-dinitrotoluene	40	44.961	112	
3,4-Dinitrotoluene	20	22.033	110	
4-Amino-2,6-dinitrotoluene	40	40.967	102	
HMX	40	40.601	102	
Nitrobenzene	40	46.373	116	
PETN	40	50.567	126	
RDX	40	39.862	100	
Tetryl	40	44.962	112	
m-Dinitrobenzene	40	38.965	97	
m-Nitrotoluene	40	40.333	101	
o-Nitrotoluene	40	39.738	99	
p-Nitrotoluene	40	41.622	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  
 EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304066a

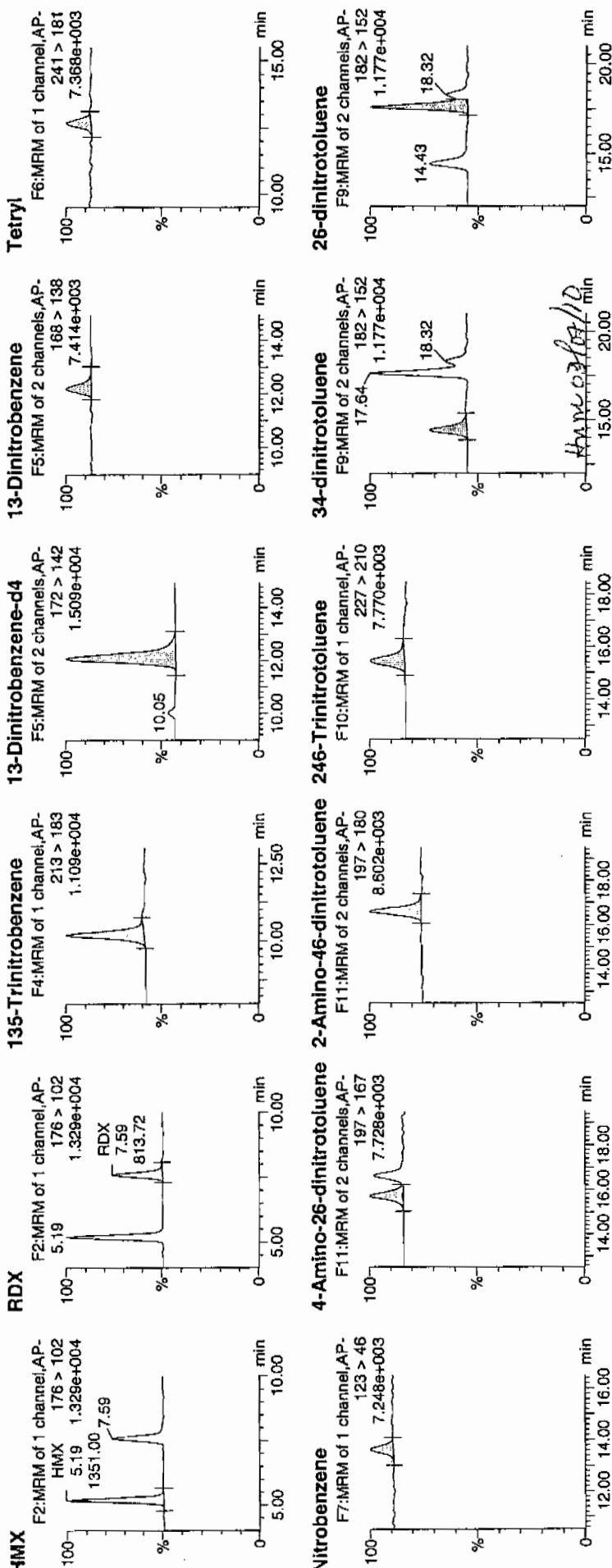
Date: 05-Mar-2010

Time: 23:13:59

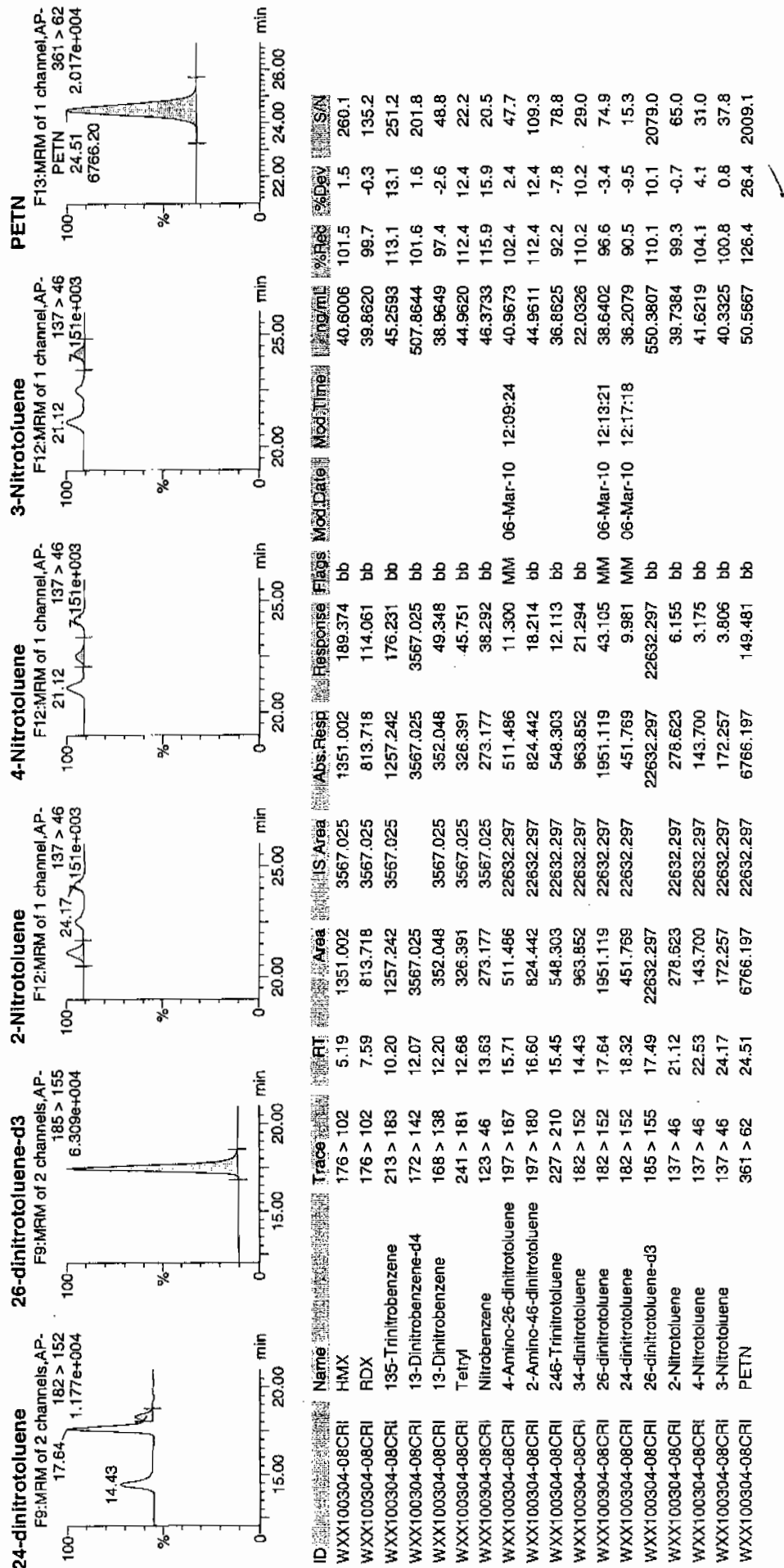
ID: WXX100304-08CRI

Ratio: 1:1,C

3/6/10  
 MAF



Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
Date of Analysis 03/05/10  
Time of Injection 2313  
Standard Number WXX100304-08CRI  
Data File EXP0304066a

HMX		101.5
RDX		99.7
135-TNB		113.1
13-DNB		97.4
Tetryl		112.4
Nitrobenzene		115.9
4A-26-DNT		102.4
2A-46-DNT		112.4
246-TNT		92.2
34-DNT(surr)		110.2
26-DNT		96.6
24-DNT		90.5
2-NT		99.3
4-NT		104.1
3-NT		100.8
PETN		126.4
Total		1674.9

with  
3/6/00

Total

1674.9

Финансовый

Average

104.7

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304076a

Analysis Date: 06-MAR-10 04:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	589.2	98	
1,3-Dinitrobenzene-d4	500	483.866	97	
2,4,6-Trinitrotoluene	600	655.326	109	
2,4-Dinitrotoluene	600	604.001	101	
2,6-Dinitrotoluene	600	599.969	100	
2,6-Dinitrotoluene-d3	500	511.697	102	
2-Amino-4,6-dinitrotoluene	600	680.408	113	
3,4-Dinitrotoluene	300	309.322	103	
4-Amino-2,6-dinitrotoluene	600	655.281	109	
HMX	600	622.243	104	
Nitrobenzene	600	610.192	102	
PETN	600	828.113	138	*
RDX	600	676.064	113	
Tetryl	600	623.054	104	
m-Dinitrobenzene	600	593.851	99	
m-Nitrotoluene	600	569.058	95	
o-Nitrotoluene	600	606.407	101	
p-Nitrotoluene	600	588.238	98	

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA1.qtd, Time: Sat Mar 06 12:19:13 2010

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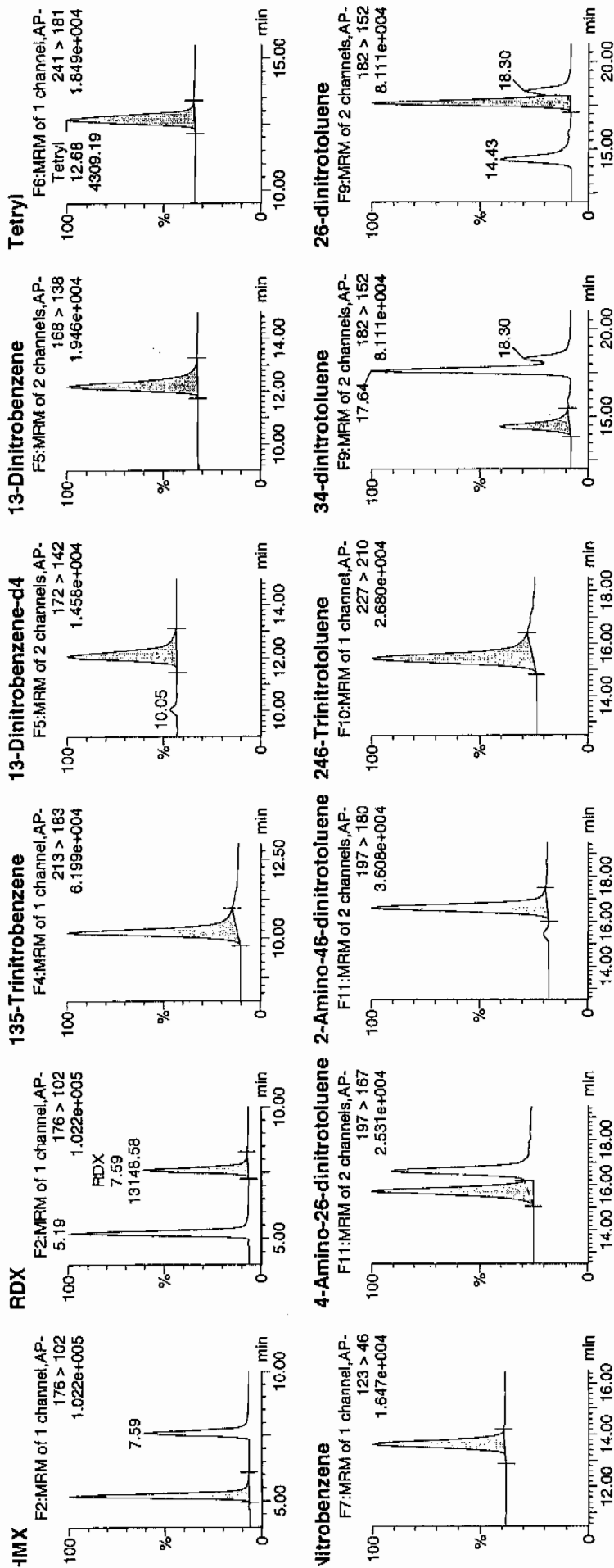
Date: 06-Mar-2010

Time: 04:08:58

D: WXX100304-07CCV

Ratio: 1:1,B

3/6/10



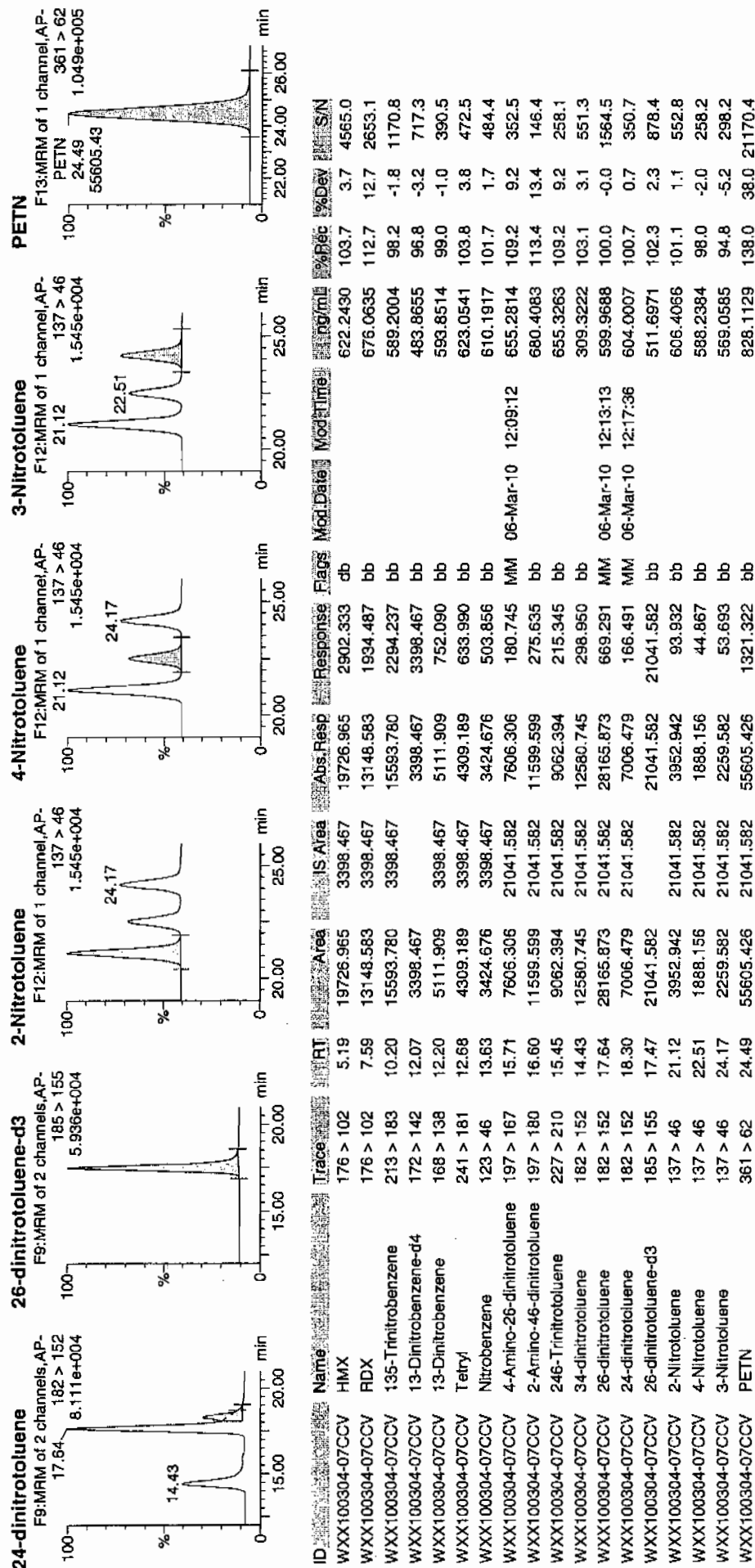
Handwritten note: 03/07/10



Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sat Mar 06 12:20:52 2010, Page 76 of 107

Dataset: C:\MASSLYNX\New\_Exp\PRO1030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/06/10  
 Time of Injection: 0408  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304076a

HMX	103.7
RDX	112.7
135-TNB	98.2
13-DNB	99.0
Tetryl	103.8
Nitrobenzene	101.7
4A-26-DNT	109.2
2A-46-DNT	113.4
246-TNT	109.2
34-DNT(surr)	103.1
26-DNT	100.0
24-DNT	100.7
2-NT	101.1
4-NT	98.0
3-NT	94.8
PETN	138.0

*not  
3/6/10*

Total 1686.6

*HMM 03/06/10*

Average 105.4

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304078a

Analysis Date: 06-MAR-10 05:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	44.712	112	
PETN	40	54.239	136	*
RDX	40	46.673	117	
Tetryl	40	40.325	101	
m-Dinitrobenzene	40	38.944	97	
m-Nitrotoluene	40	43.213	108	
o-Nitrotoluene	40	39.546	99	
p-Nitrotoluene	40	36.291	91	
1,3,5-Trinitrobenzene	40	48.824	122	
1,3-Dinitrobenzene-d4	500	497.56	100	
2,4,6-Trinitrotoluene	40	42.485	106	
2,4-Dinitrotoluene	40	37.142	93	
2,6-Dinitrotoluene	40	39.595	99	
2,6-Dinitrotoluene-d3	500	512.953	103	
2-Amino-4,6-dinitrotoluene	40	40.704	102	
3,4-Dinitrotoluene	20	18.958	95	
4-Amino-2,6-dinitrotoluene	40	44.438	111	
HMX	40	44.364	111	

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\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304078a

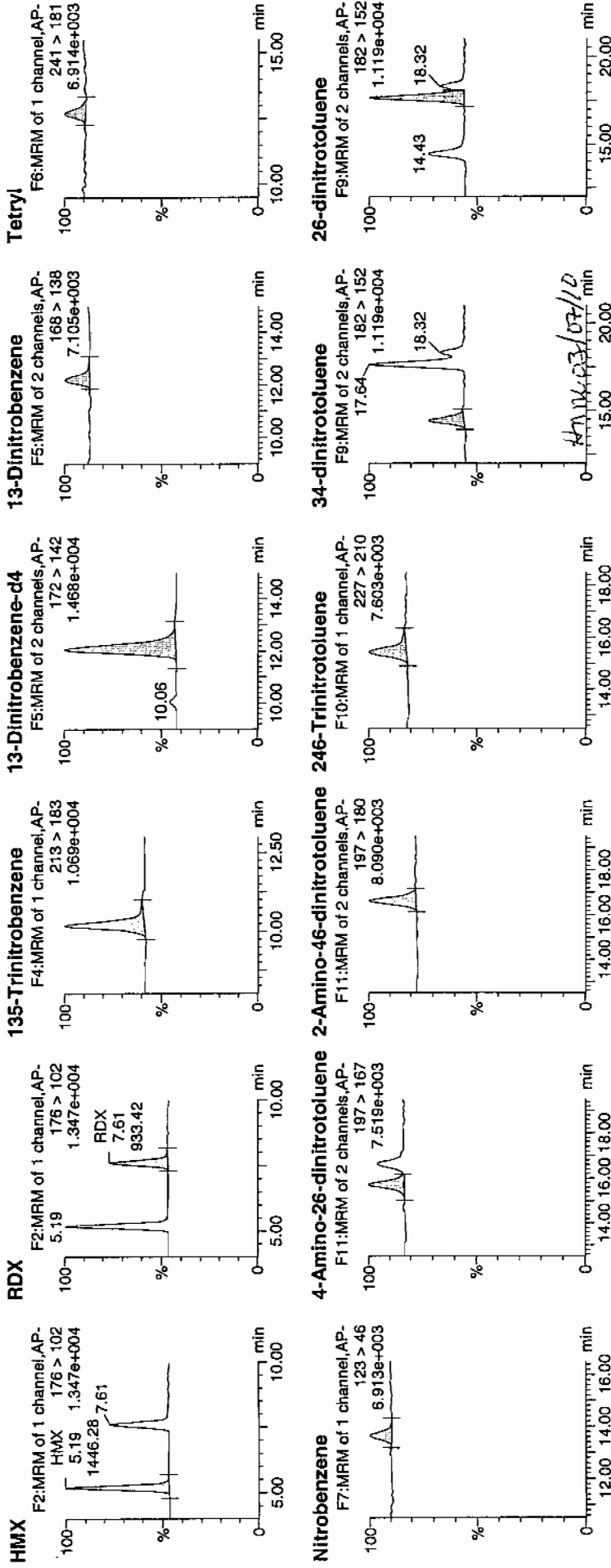
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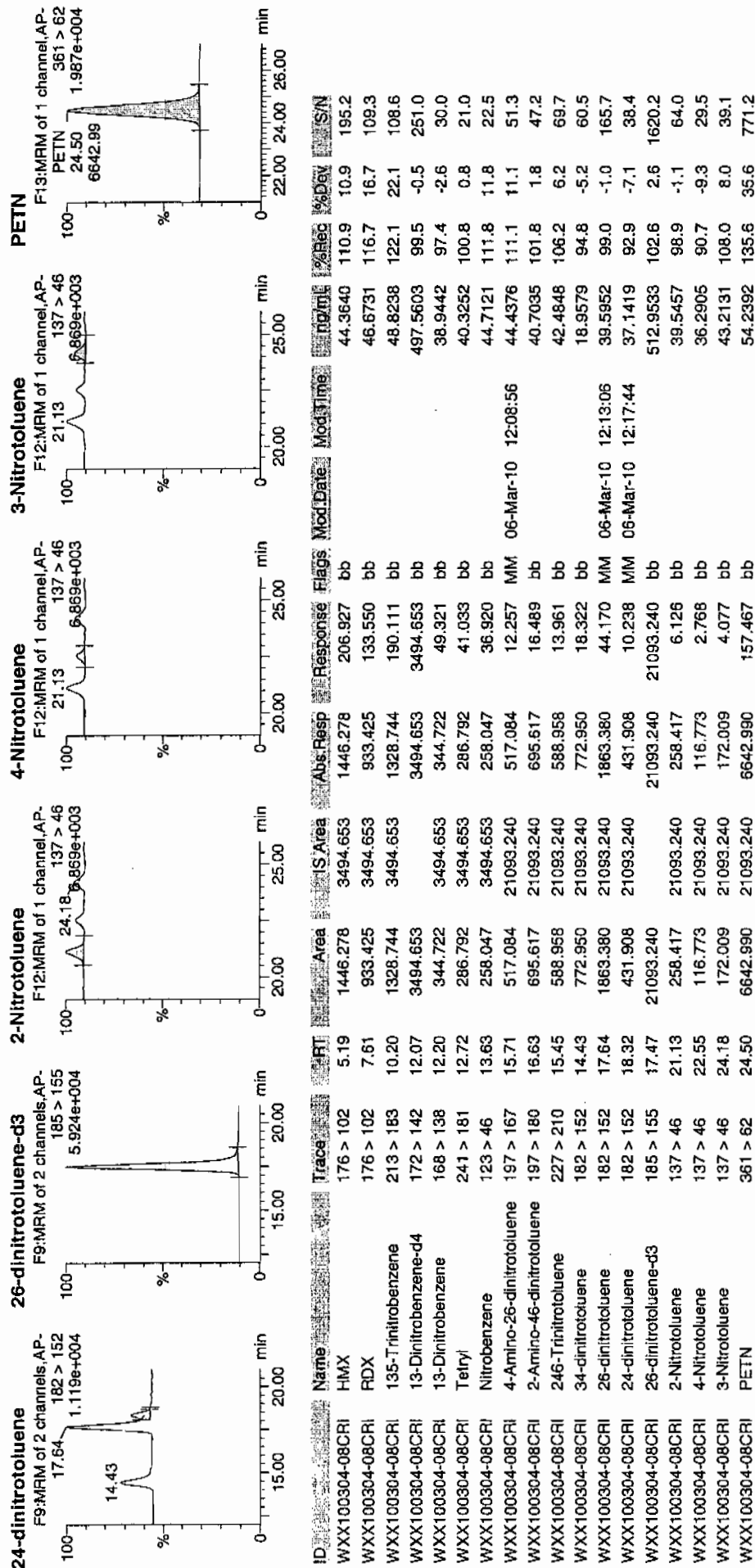
ID: WXX100304-08CRI

Vial: 1:1,C

10/17  
3/10/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/06/10  
 Time of Injection 0508  
 Standard Number WXX100304-08CRI  
 Data File EXP0304078a

HMX	110.9
RDX	116.7
135-TNB	122.1
13-DNB	97.4
Tetryl	100.8
Nitrobenzene	111.8
4A-26-DNT	111.1
2A-46-DNT	101.8
246-TNT	106.2
34-DNT(surr)	94.8
26-DNT	99.0
24-DNT	92.9
2-NT	98.9
4-NT	90.7
3-NT	108.0
PETN	135.6

*WXX  
3/6/10*

Total 1698.7

Average 106.2

*WXX 03/07/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304089a

Analysis Date: 06-MAR-10 10:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	553.473	92	
1,3-Dinitrobenzene-d4	500	503.069	101	
2,4,6-Trinitrotoluene	600	674.145	112	
2,4-Dinitrotoluene	600	580.325	97	
2,6-Dinitrotoluene	600	597.561	100	
2,6-Dinitrotoluene-d3	500	512.552	103	
2-Amino-4,6-dinitrotoluene	600	669.438	112	
3,4-Dinitrotoluene	300	311.876	104	
4-Amino-2,6-dinitrotoluene	600	656.337	109	
HMX	600	553.757	92	
Nitrobenzene	600	617.957	103	
PETN	600	732.772	122	*
RDX	600	630.521	105	
Tetryl	600	603.367	101	
m-Dinitrobenzene	600	584.838	97	
m-Nitrotoluene	600	548.387	91	
o-Nitrotoluene	600	591.399	99	
p-Nitrotoluene	600	580.434	97	

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\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304089a

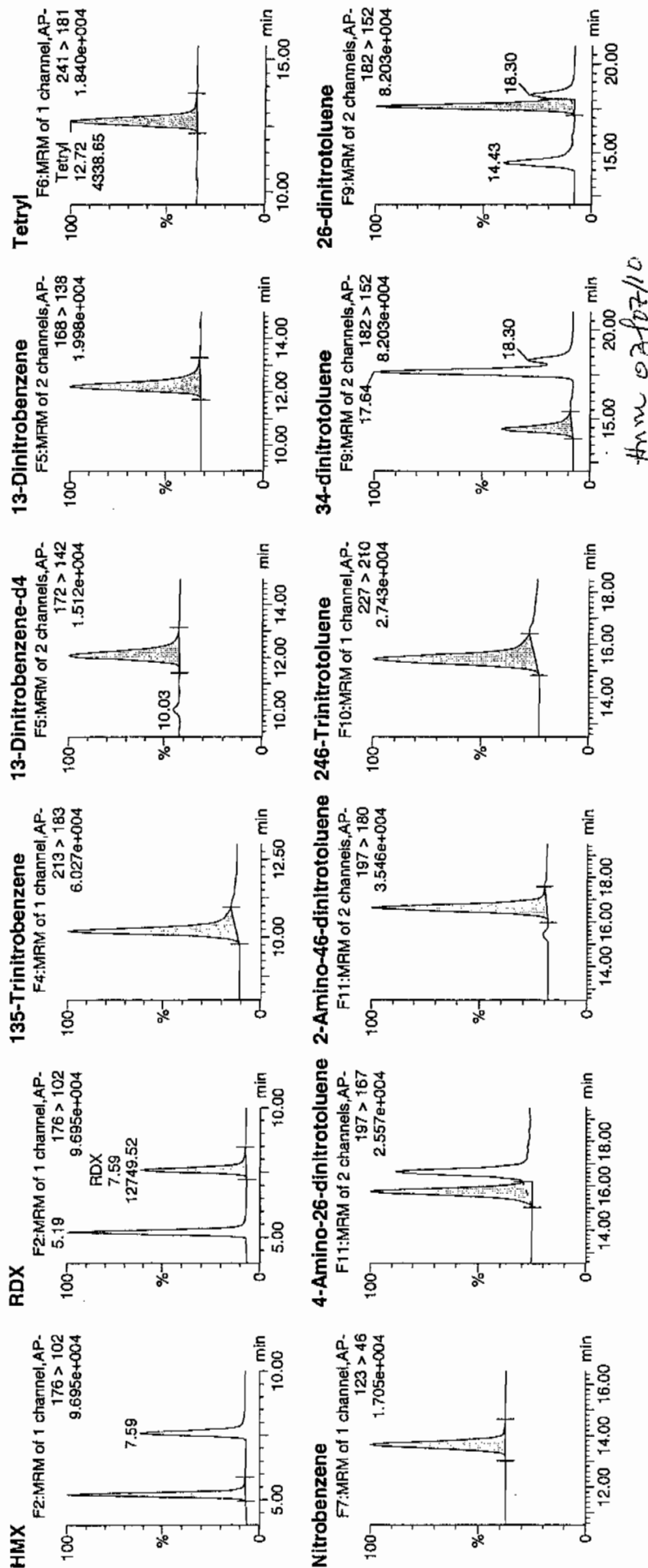
Date: 06-Mar-2010

Time: 10:32:42

ID: WXX100304-07CCV

Vial: 1:1,B

WXT  
3/6/10



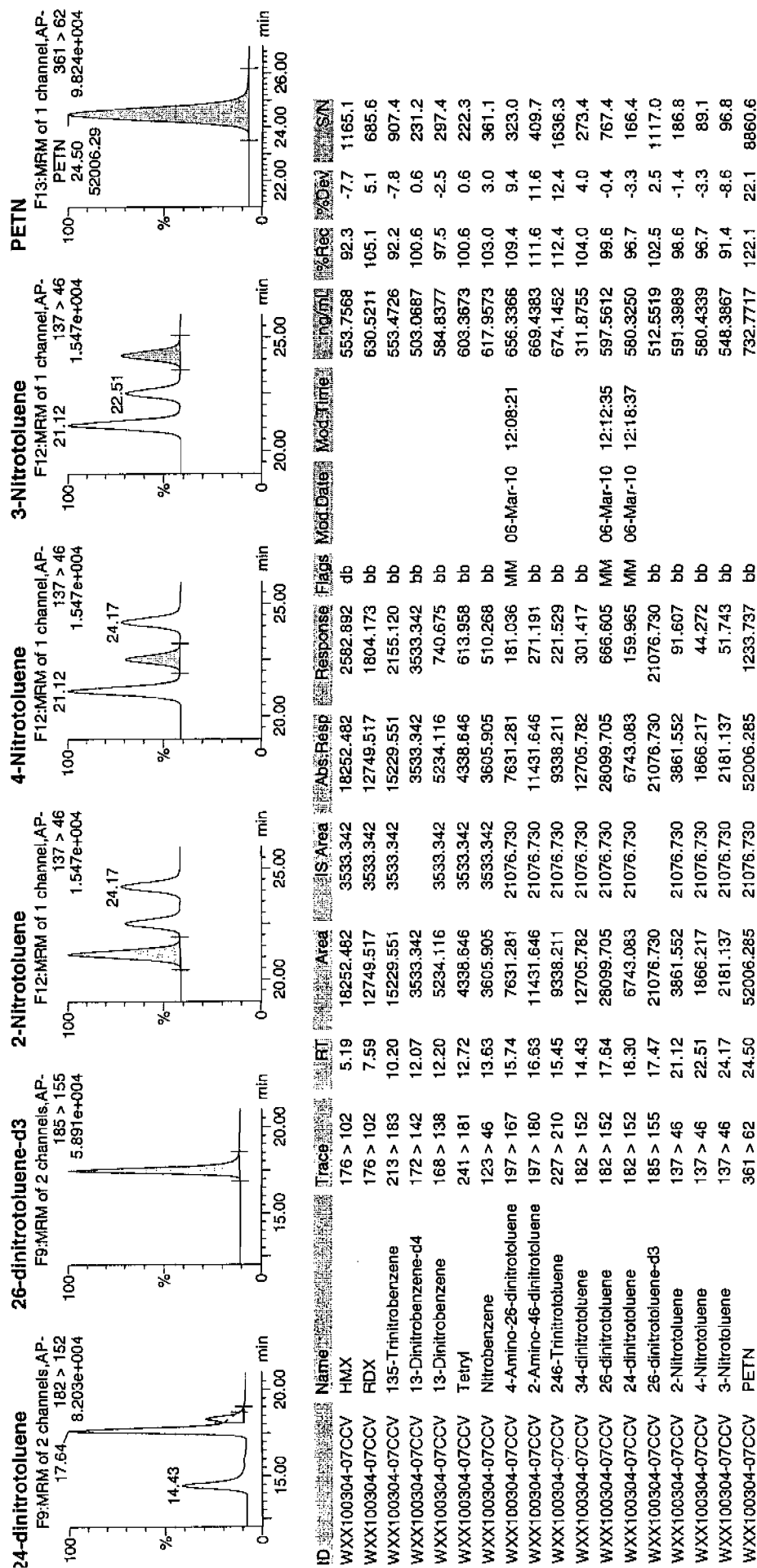


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Mar 06 12:20:52 2010, Page 102 of 107

Dataset: C:\MASSL\VN\New\_Exp\_PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/06/10  
 Time of Injection: 1032  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304089a

HMX	92.3
RDX	105.1
135-TNB	92.2
13-DNB	97.5
Tetryl	100.6
Nitrobenzene	103.0
4A-26-DNT	109.4
2A-46-DNT	111.6
246-TNT	112.4
34-DNT(surr)	104.0
26-DNT	99.6
24-DNT	96.7
2-NT	98.6
4-NT	96.7
3-NT	91.4
PETN	122.1

*MAP  
3/6/10*

Total 1633.2

Average 102.1

*Sum 03/06/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304091a

Analysis Date: 06-MAR-10 11:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.447	119	
1,3-Dinitrobenzene-d4	500	555.149	111	
2,4,6-Trinitrotoluene	40	43.328	108	
2,4-Dinitrotoluene	40	38.335	96	
2,6-Dinitrotoluene	40	40.616	102	
2,6-Dinitrotoluene-d3	500	541.704	108	
2-Amino-4,6-dinitrotoluene	40	48.053	120	
3,4-Dinitrotoluene	20	20.798	104	
4-Amino-2,6-dinitrotoluene	40	45.468	114	
HMX	40	42.165	105	
Nitrobenzene	40	42.58	106	
PETN	40	51.168	128	
RDX	40	43.537	109	
Tetryl	40	43.891	110	
m-Dinitrobenzene	40	41.557	104	
m-Nitrotoluene	40	38.735	97	
o-Nitrotoluene	40	46.96	117	
p-Nitrotoluene	40	44.509	111	

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:\MASSLYN\New\_Exp.PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010

Name: C:\MASSLYN\NEW\_EXP.PRO\Data\EXP0304091a

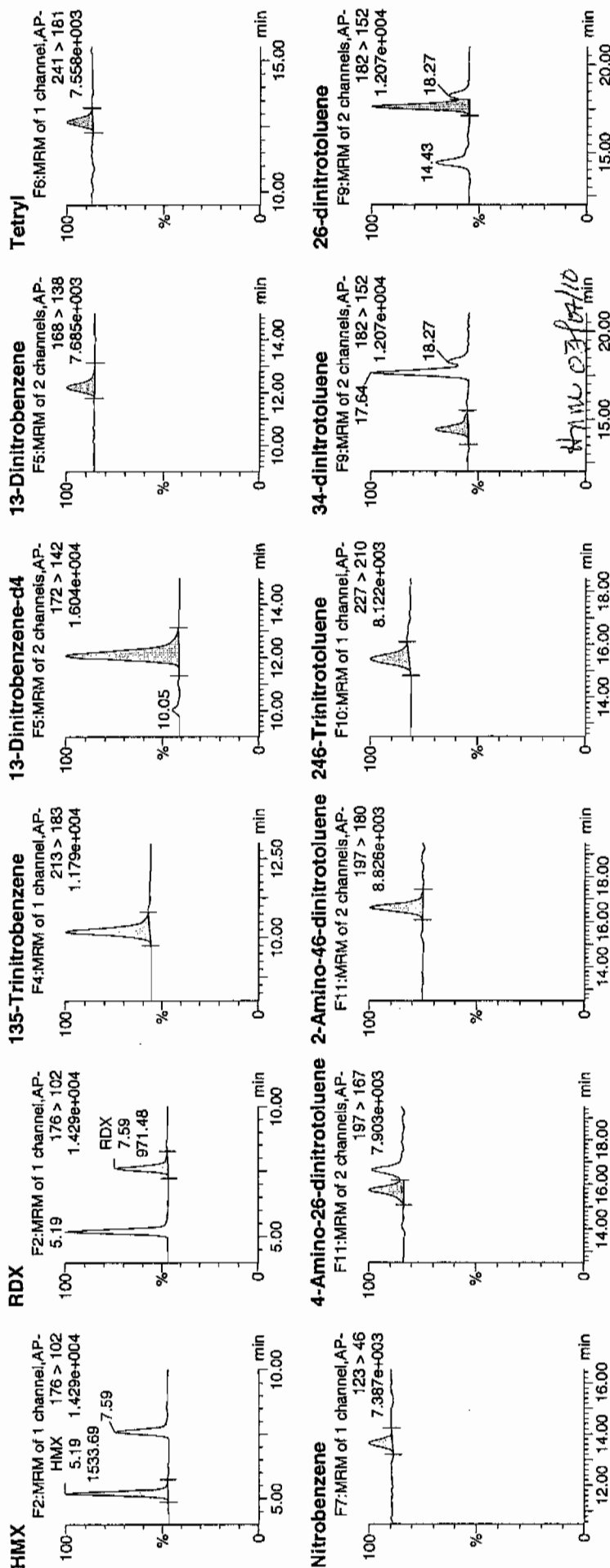
Date: 06-Mar-2010

Time: 11:31:45

ID: WXX100304-08CRI

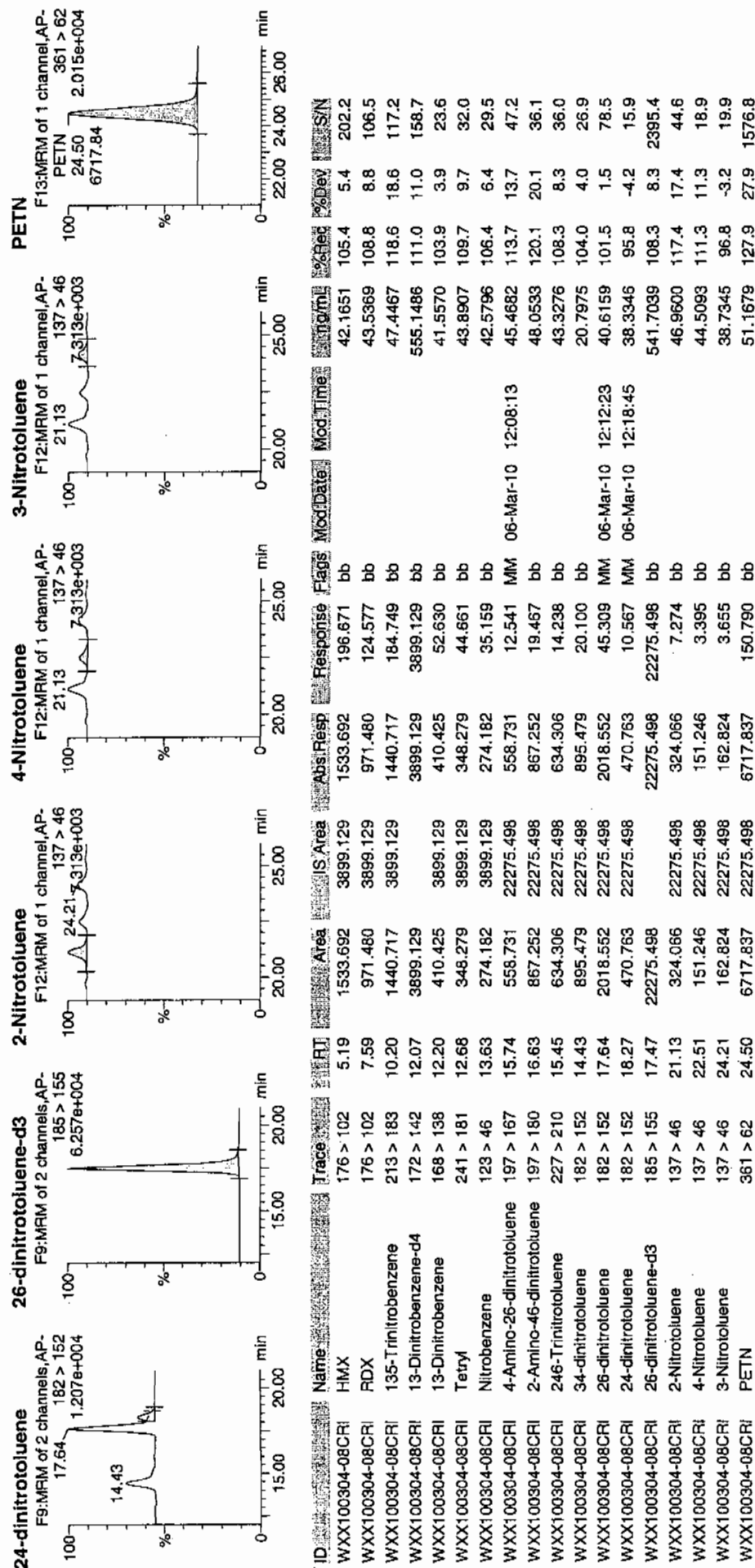
Vial: 1:1,C

3/6/10



Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA1.qld, Time: Sat Mar 06 12:19:13 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/06/10  
 Time of Injection 1131  
 Standard Number WXX100304-08CRI  
 Data File EXP0304091a

HMX	105.4
RDX	108.8
135-TNB	118.6
13-DNB	103.9
Tetryl	109.7
Nitrobenzene	106.4
4A-26-DNT	113.7
2A-46-DNT	120.1
246-TNT	108.3
34-DNT(surr)	104.0
26-DNT	101.5
24-DNT	95.8
2-NT	117.4
4-NT	111.3
3-NT	96.8
PETN	127.9

*with  
3/6/10*

Total 1749.6

Average 109.4

*thru 03/07/10*

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): 10-1545

Lab Code: GEI

GEL Sample ID: WXXCCV

GEL Data File EXP0304101a

Analysis Date: 06-MAR-10 16:26

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	600	549.111	92	
1,3,5-Trinitrobenzene	600	587.261	98	
1,3-Dinitrobenzene-d4	500	465.389	93	
2,4,6-Trinitrotoluene	600	683.072	114	
2,4-Dinitrotoluene	600	521.302	87	
2,6-Dinitrotoluene	600	601.174	100	
2,6-Dinitrotoluene-d3	500	580.685	116	
2-Amino-4,6-dinitrotoluene	600	708.501	118	
3,4-Dinitrotoluene	300	324.528	108	
4-Amino-2,6-dinitrotoluene	600	649.296	108	
HMX	600	614.149	102	
Nitrobenzene	600	698.592	116	
PETN	600	592.689	99	
RDX	600	791.111	132	*
Tetryl	600	592.657	99	
m-Dinitrobenzene	600	614.282	102	
m-Nitrotoluene	600	534.445	89	
o-Nitrotoluene	600	583.716	97	

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\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304101a

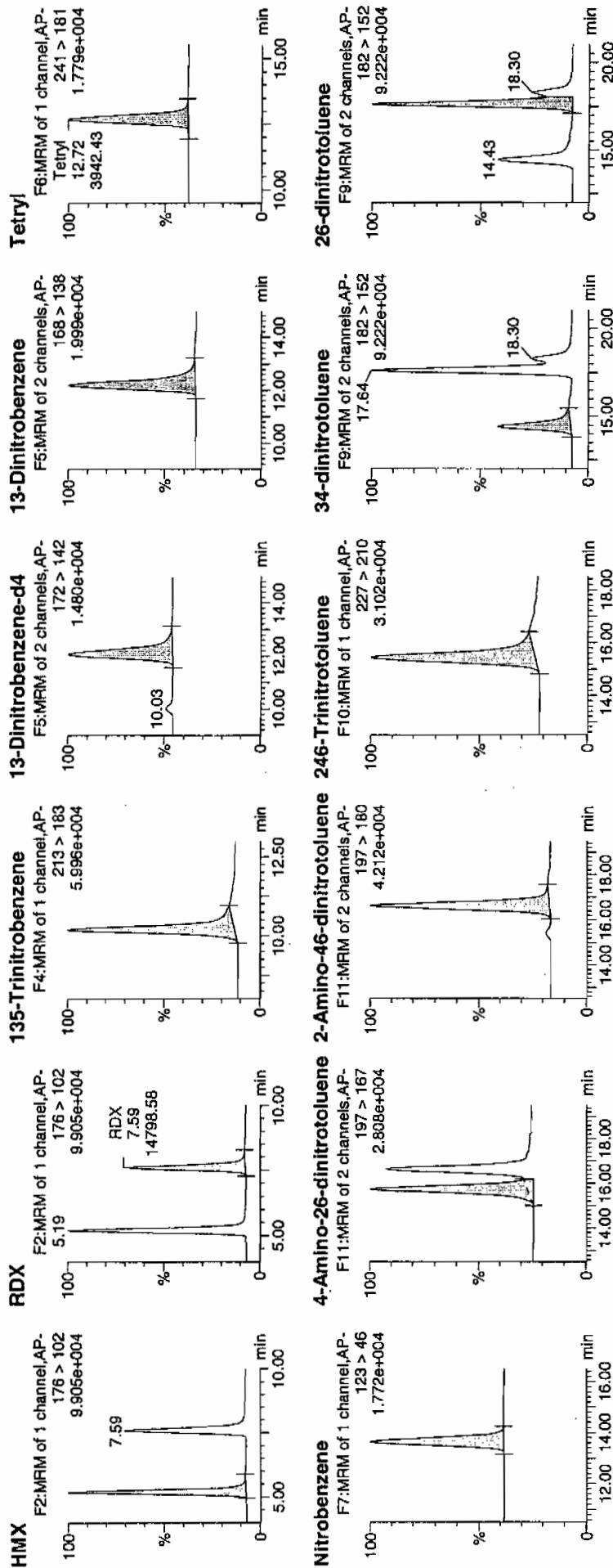
Date: 06-Mar-2010

Time: 16:26:43

ID: WXX100304-07CCV

Vial: 1:1,B

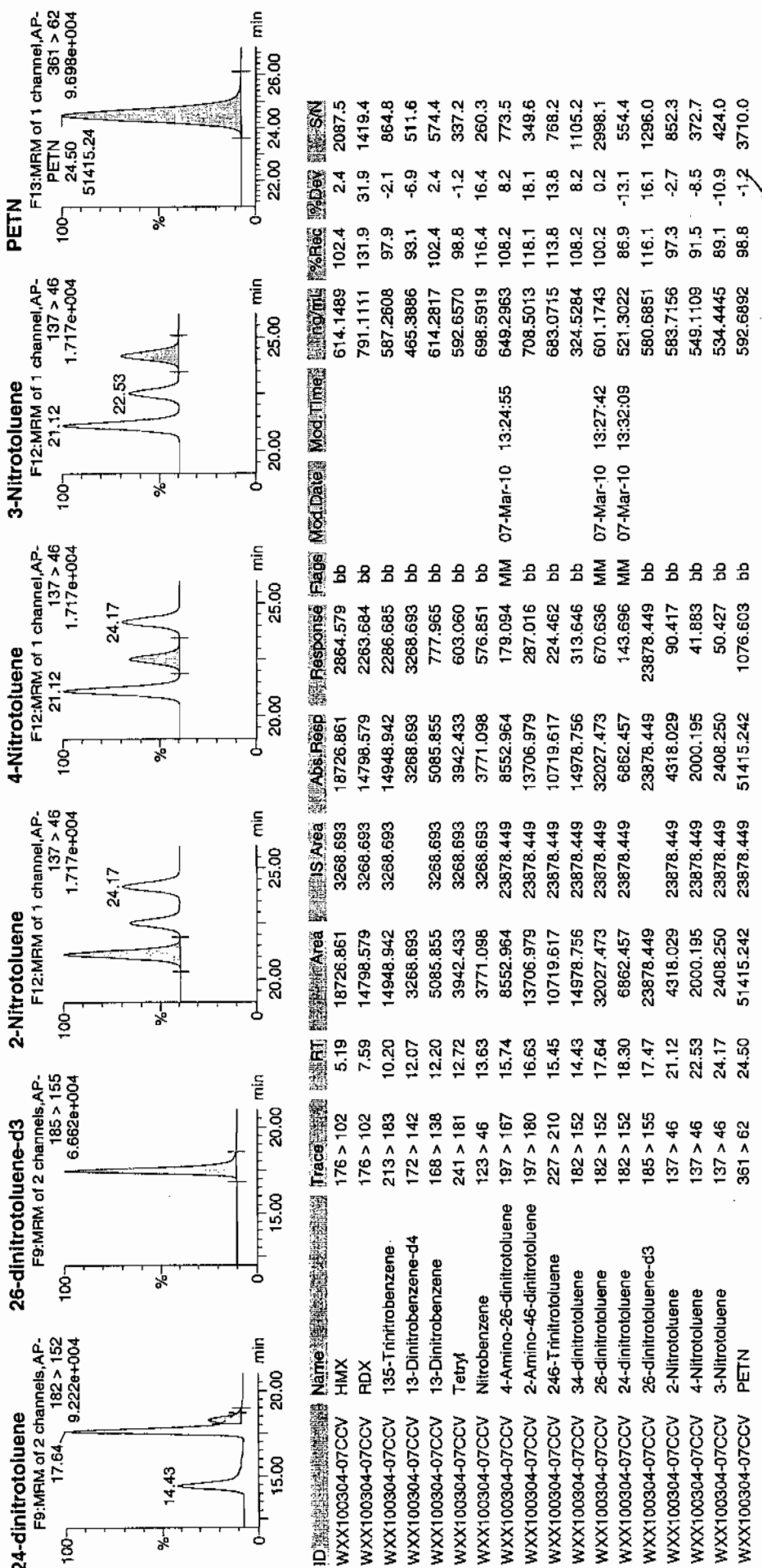
MM  
3/12/10



MM  
03/08/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/06/10  
 Time of Injection: 1626  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304101a

HMX	102.4	✓
RDX	131.9	✓
135-TNB	97.9	✓
13-DNB	102.4	
Tetryl	98.8	
Nitrobenzene	116.4	
4A-26-DNT	108.2	
2A-46-DNT	118.1	
246-TNT	113.8	
34-DNT(surr)	108.2	
26-DNT	100.2	
24-DNT	86.9	
2-NT	97.3	
4-NT	91.5	
3-NT	89.1	
PETN	98.8	

*not  
3/7/10*

Total 1661.9

*from 03-06-10*

Average 103.9

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304103a

Analysis Date: 06-MAR-10 17:25

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	34.956	87	
2,6-Dinitrotoluene	40	40.043	100	
2,6-Dinitrotoluene-d3	500	520.302	104	
2-Amino-4,6-dinitrotoluene	40	41.209	103	
3,4-Dinitrotoluene	20	23.339	117	
4-Amino-2,6-dinitrotoluene	40	46.12	115	
HMX	40	33.904	85	
Nitrobenzene	40	37.192	93	
PETN	40	49.668	124	
RDX	40	33.251	83	
Tetryl	40	40.4	101	
m-Dinitrobenzene	40	44.614	112	
m-Nitrotoluene	40	36.714	92	
o-Nitrotoluene	40	52.856	132	*
p-Nitrotoluene	40	50.186	125	
1,3,5-Trinitrobenzene	40	43.717	109	
1,3-Dinitrobenzene-d4	500	554.792	111	
2,4,6-Trinitrotoluene	40	39.922	100	

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\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304103a

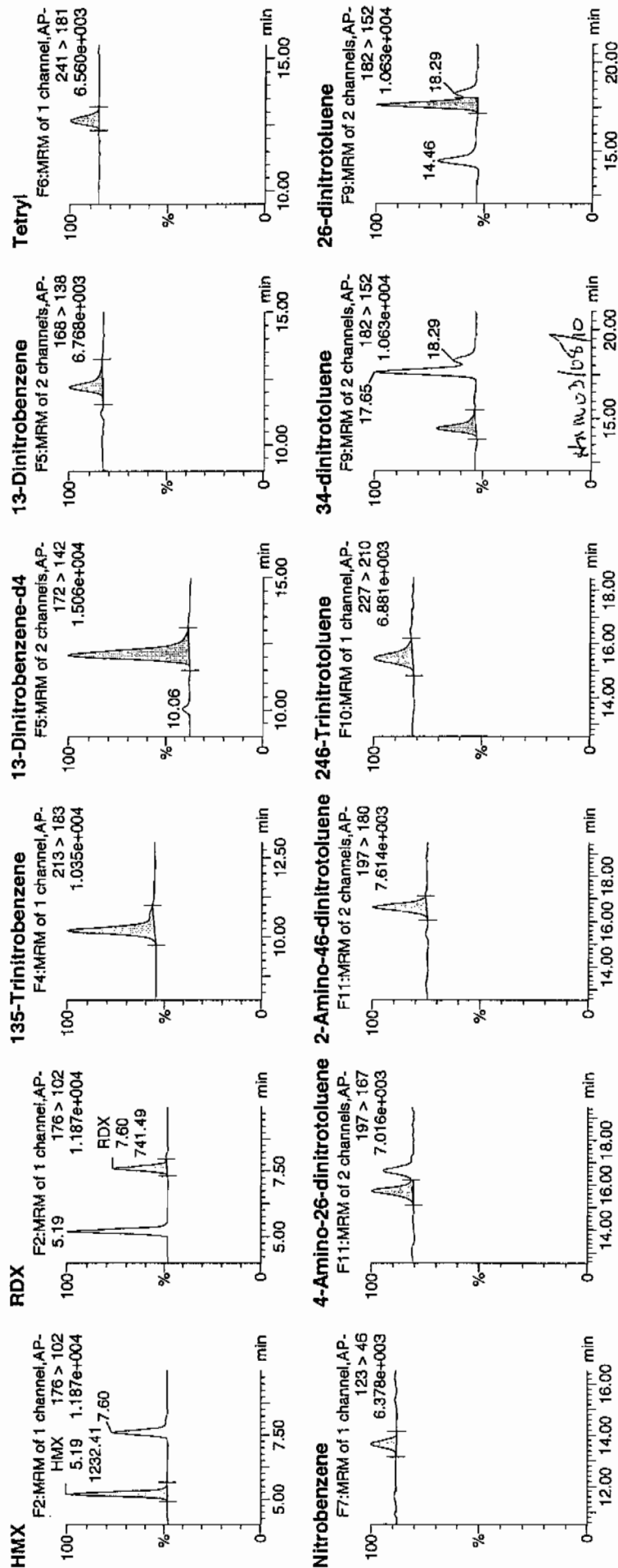
Date: 06-Mar-2010

Time: 17:25:45

ID: WXX100304-08CRI

Vial: 1:1,C

3/4/10



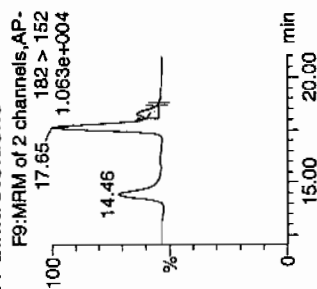
## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

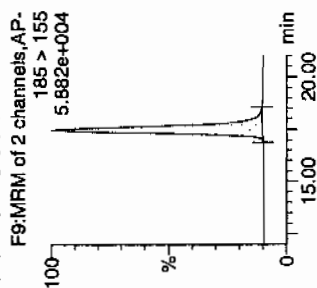
Printed: Sun Mar 07 13:34:18 2010, Page 24 of 101

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

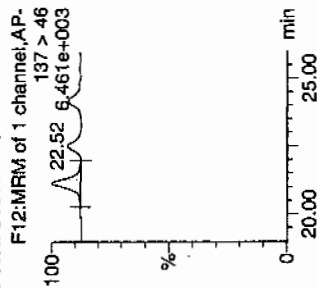
## 24-dinitrotoluene



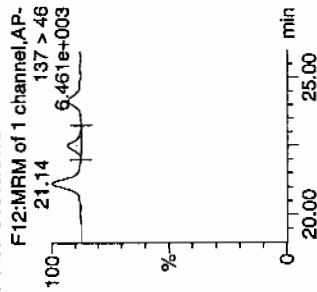
## 26-dinitrotoluene-d3



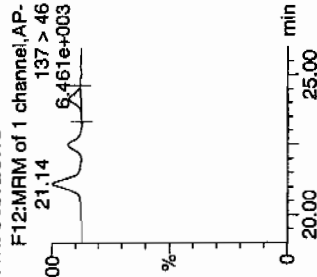
## 2-Nitrotoluene



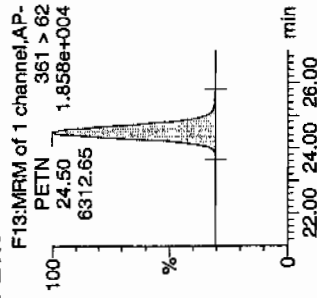
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc mg/ml	% Rec	% Dev	S/N
WXX100304-08CRI	HMX	176 > 102	5.19	1232.405	3896.626	1232.405	158.137	bb			33.9037	84.8	-15.2	190.0
WXX100304-08CRI	RDX	176 > 102	7.60	741.492	3896.626	741.492	95.145	bb			33.2514	83.1	-16.9	103.7
WXX100304-08CRI	135-Trinitrobenzene	213 > 183	10.19	1326.625	3896.626	1326.625	170.227	bb			43.7174	109.3	9.3	195.5
WXX100304-08CRI	13-Dinitrobenzene-d4	172 > 142	12.10	3896.626		3896.626		bb			554.7922	111.0	11.0	299.8
WXX100304-08CRI	13-Dinitrobenzene	168 > 138	12.20	440.335	3896.626	440.335	56.502	bb			44.6141	111.5	11.5	30.7
WXX100304-08CRI	Tetryl	241 > 181	12.71	320.374	3896.626	320.374	41.109	bb			40.4000	101.0	1.0	45.4
WXX100304-08CRI	Nitrobenzene	123 > 46	13.66	239.336	3896.626	239.336	30.711	bb	07-Mar-10	13:25:01	37.1920	93.0	-7.0	19.2
WXX100304-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.73	544.347	21395.426	544.347	12.721	MM			46.1198	115.3	15.3	29.7
WXX100304-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	714.343	21395.426	714.343	16.694	bb			41.2089	103.0	3.0	73.9
WXX100304-08CRI	246-Trinitrotoluene	227 > 210	15.44	561.354	21395.426	561.354	13.119	bb			39.9217	99.8	-0.2	62.9
WXX100304-08CRI	34-dinitrotoluene	182 > 152	14.46	965.184	21395.426	965.184	22.556	bb			23.3385	116.7	16.7	61.3
WXX100304-08CRI	26-dinitrotoluene	182 > 152	17.65	1911.469	21395.426	1911.469	44.670	MM	07-Mar-10	13:27:50	40.0433	100.1	0.1	155.0
WXX100304-08CRI	24-dinitrotoluene	182 > 152	18.29	412.308	21395.426	412.308	9.635	MM	07-Mar-10	13:31:56	34.9556	87.4	-12.6	31.2
WXX100304-08CRI	26-dinitrotoluene-d3	185 > 155	17.48	21395.426		21395.426		bb			520.3020	104.1	4.1	3319.8
WXX100304-08CRI	2-Nitrotoluene	137 > 46	21.14	350.345	21395.426	350.345	8.187	bb			52.8563	132.1	32.1	91.6
WXX100304-08CRI	4-Nitrotoluene	137 > 46	22.52	163.797	21395.426	163.797	3.828	bb			50.1856	125.5	25.5	43.3
WXX100304-08CRI	3-Nitrotoluene	137 > 46	24.17	148.233	21395.426	148.233	3.464	bb			36.7140	91.8	-8.2	37.5
WXX100304-08CRI	PETN	361 > 62	24.50	6312.647	21395.426	6312.647	147.523	bb			49.6681	124.2	24.2	2068.7

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/06/10  
 Time of Injection 1725  
 Standard Number WXX100304-08CRI  
 Data File EXP0304103a

HMX	84.8
RDX	83.1
135-TNB	109.3
13-DNB	111.5
Tetryl	101.0
Nitrobenzene	93.0
4A-26-DNT	115.3
2A-46-DNT	103.0
246-TNT	99.8
34-DNT(surr)	116.7
26-DNT	100.1
24-DNT	87.4
2-NT	132.1
4-NT	125.5
3-NT	91.8
PETN	124.2

104.9  
3/6/10

Total 1678.6

Average 104.9

Time 03/06/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304113a

Analysis Date: 06-MAR-10 22:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	540.591	90	
1,3-Dinitrobenzene-d4	500	533.105	107	
2,4,6-Trinitrotoluene	600	652.208	109	
2,4-Dinitrotoluene	600	560.172	93	
2,6-Dinitrotoluene	600	593.564	99	
2,6-Dinitrotoluene-d3	500	529.569	106	
2-Amino-4,6-dinitrotoluene	600	630.466	105	
3,4-Dinitrotoluene	300	315.943	105	
4-Amino-2,6-dinitrotoluene	600	633.97	106	
HMX	600	558.17	93	
Nitrobenzene	600	582.752	97	
PETN	600	719.523	120	
RDX	600	605.837	101	
Tetryl	600	566.333	94	
m-Dinitrobenzene	600	588.821	98	
m-Nitrotoluene	600	526.711	88	
o-Nitrotoluene	600	548.289	91	
p-Nitrotoluene	600	549.39	92	

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\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0304113a

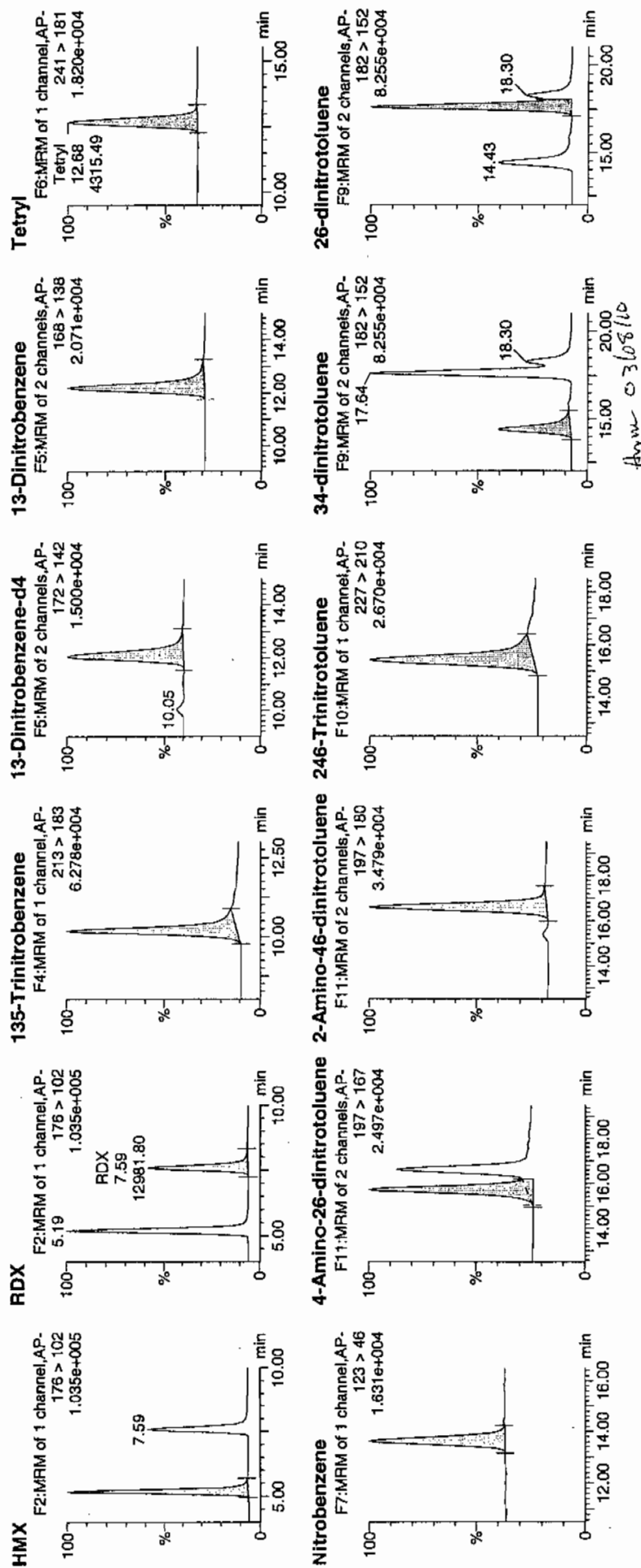
Date: 06-Mar-2010

Time: 22:20:37

ID: WXX100304-07CCV

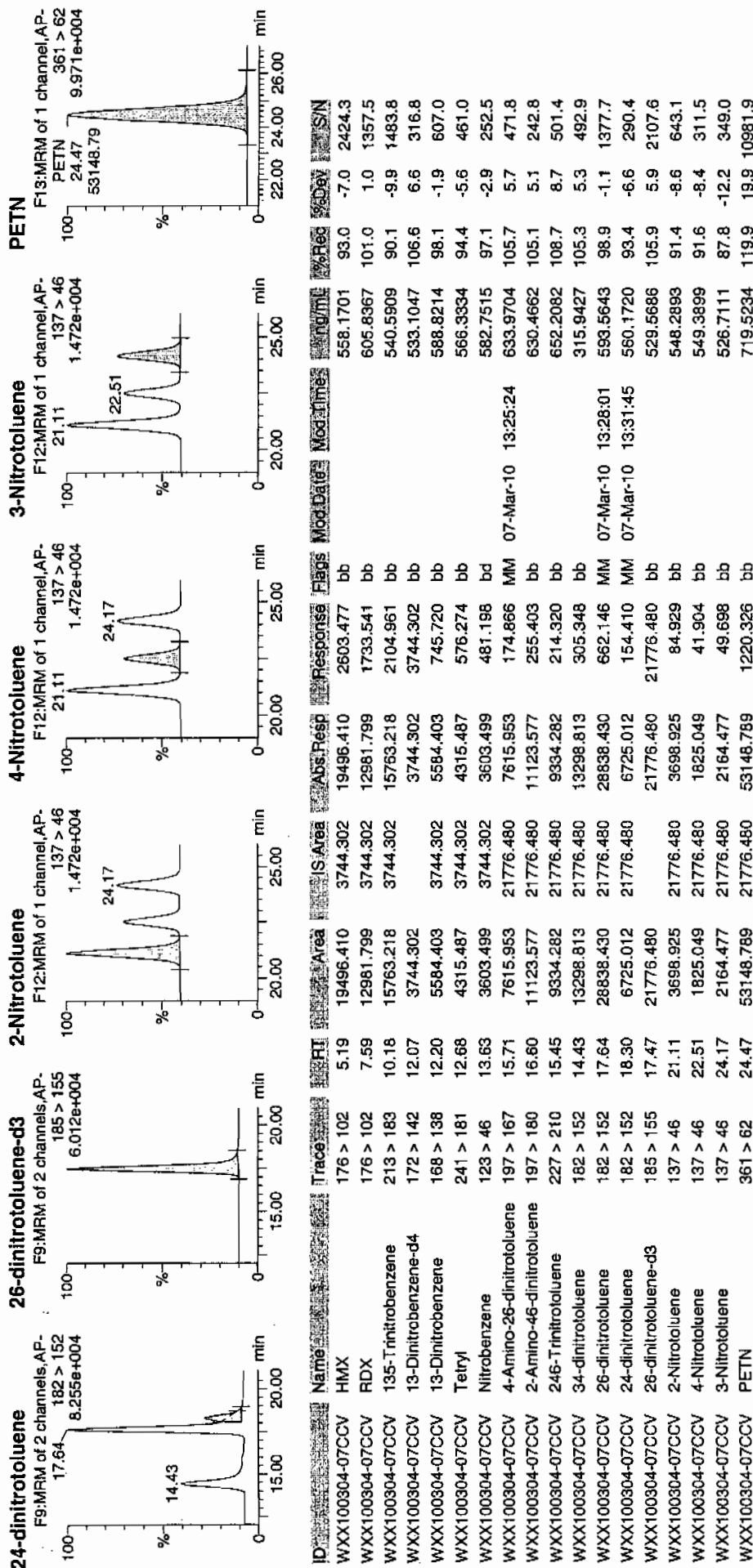
Vial: 1:1,B

17  
12/10





Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/06/10  
 Time of Injection: 2220  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304113a

HMX	93.0
RDX	101.0
135-TNB	90.1
13-DNB	98.1
Tetryl	94.4
Nitrobenzene	97.1
4A-26-DNT	105.7
2A-46-DNT	105.1
246-TNT	108.7
34-DNT(surr)	105.3
26-DNT	98.9
24-DNT	93.4
2-NT	91.4
4-NT	91.6
3-NT	87.8
PETN	119.9

*WTF  
3/9/10*

Total 1581.5

*467 m 03/08/10*

Average 98.8

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304115a

Analysis Date: 06-MAR-10 23:19

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	40	39.17	98	
m-Nitrotoluene	40	34.211	86	
o-Nitrotoluene	40	39.798	99	
p-Nitrotoluene	40	46.592	116	
1,3,5-Trinitrobenzene	40	43.572	109	
1,3-Dinitrobenzene-d4	500	549.103	110	
2,4,6-Trinitrotoluene	40	43.289	108	
2,4-Dinitrotoluene	40	32.71	82	
2,6-Dinitrotoluene	40	40.13	100	
2,6-Dinitrotoluene-d3	500	547.162	109	
2-Amino-4,6-dinitrotoluene	40	41.723	104	
3,4-Dinitrotoluene	20	21.531	108	
4-Amino-2,6-dinitrotoluene	40	42.41	106	
HMX	40	37.966	95	
Nitrobenzene	40	28.768	72	
PETN	40	49.806	125	
RDX	40	37.916	95	
Tetryl	40	44.352	111	

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  
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

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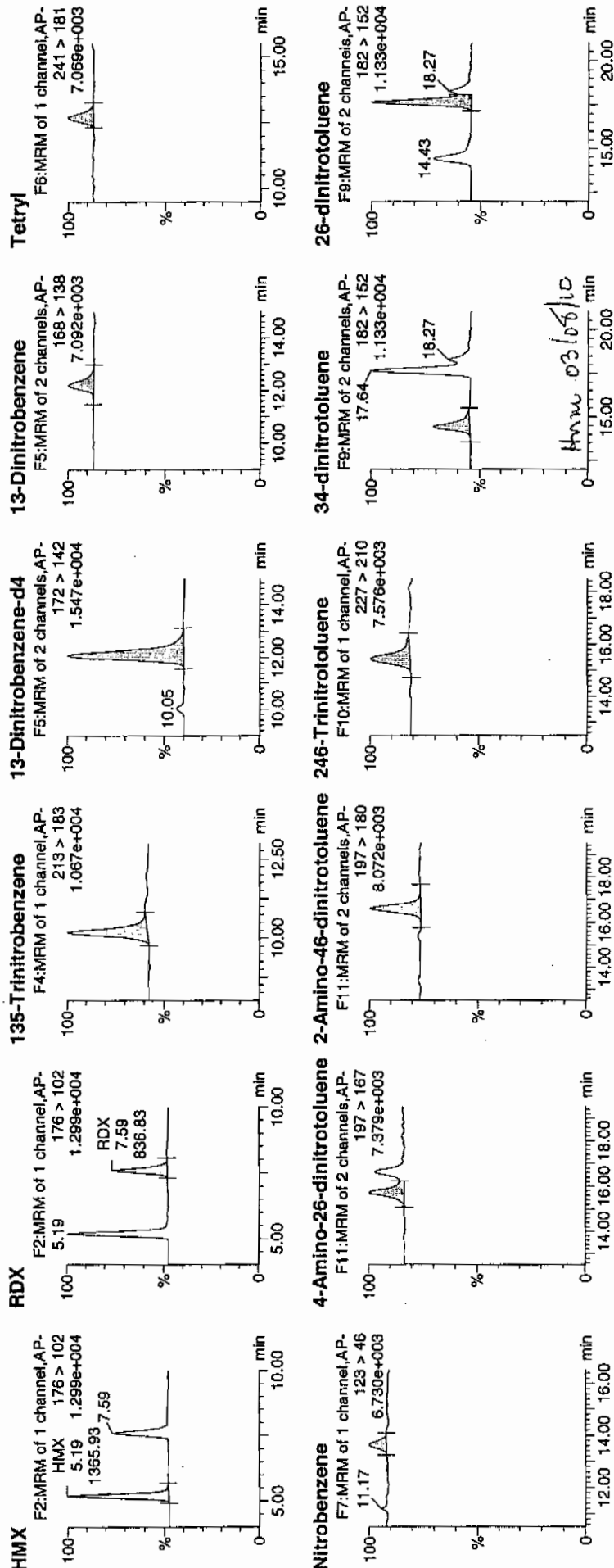
Date: 06-Mar-2010

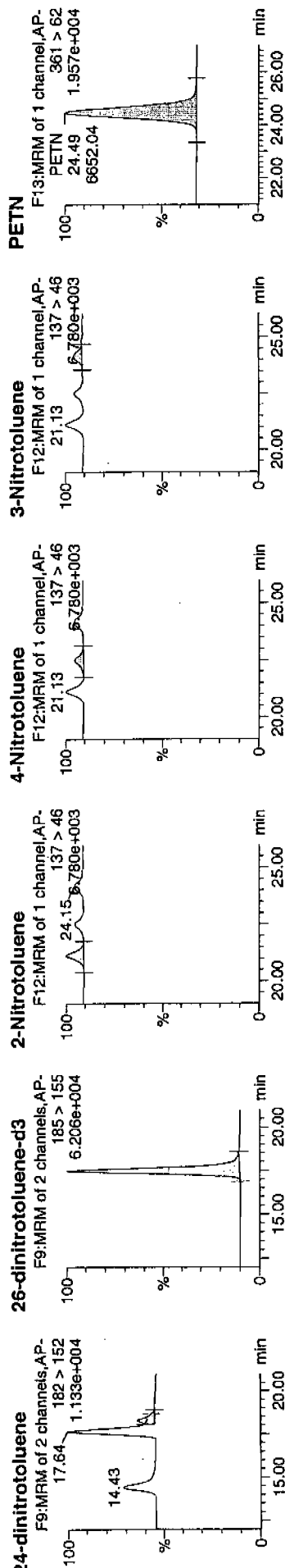
Time: 23:19:40

ID: WXX100304-08CRI

Vial: 1:1,C

WXX  
3/10/10





ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc	Rec	Dev	SN
WXX100304-08CRI	HMZ	176 > 102	5.19	1365.932	3856.666	1365.932	177.087	bb			37.9664	94.9	-5.1	230.0
WXX100304-08CRI	RDX	176 > 102	7.59	836.831	3856.666	836.831	108.492	bb			37.9155	94.8	-5.2	123.0
WXX100304-08CRI	135-Trinitrobenzene	213 > 183	10.18	1308.658	3856.666	1308.658	169.662	bb			43.5721	108.9	8.9	79.0
WXX100304-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3856.666		3856.666	3856.666	bb			549.1028	109.8	9.8	395.0
WXX100304-08CRI	13-Dinitrobenzene	168 > 138	12.20	382.634	3856.666	382.634	49.607	bb			39.1696	97.9	-2.1	59.0
WXX100304-08CRI	Tetryl	241 > 181	12.72	348.105	3856.666	348.105	45.130	bb			44.3518	110.9	10.9	30.8
WXX100304-08CRI	Nitrobenzene	123 > 46	13.63	183.230	3856.666	183.230	23.755	bb			28.7683	71.9	-28.1	22.7
WXX100304-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	526.396	22499.932	526.396	11.698	MM	07-Mar-10	13:25:38	42.4096	106.0	6.0	39.7
WXX100304-08CRI	2-Amino-46-dinitrotoluene	197 > 180	15.60	760.583	22499.932	760.583	16.902	bb			41.7225	104.3	4.3	40.0
WXX100304-08CRI	246-Trinitrotoluene	227 > 210	15.45	640.125	22499.932	640.125	14.225	bb			43.2889	108.2	8.2	44.4
WXX100304-08CRI	34-dinitrotoluene	182 > 152	14.43	936.421	22499.932	936.421	20.809	bb			21.5314	107.7	7.7	52.9
WXX100304-08CRI	26-dinitrotoluene	182 > 152	17.64	2014.470	22499.932	2014.470	44.766	MM	07-Mar-10	13:28:30	40.1295	100.3	0.3	145.5
WXX100304-08CRI	24-dinitrotoluene	182 > 152	18.27	405.736	22499.932	405.736	9.016	MM	07-Mar-10	13:31:35	32.7098	81.8	-18.2	29.3
WXX100304-08CRI	26-dinitrotoluene-d3	185 > 155	17.47	22499.932		22499.932	22499.932	bb			547.1618	109.4	9.4	1657.8
WXX100304-08CRI	2-Nitrotoluene	137 > 46	21.13	277.406	22499.932	277.406	6.165	bb			39.7976	99.5	-0.5	72.9
WXX100304-08CRI	4-Nitrotoluene	137 > 46	22.52	159.918	22499.932	159.918	3.554	bb			46.5919	116.5	16.5	35.8
WXX100304-08CRI	3-Nitrotoluene	137 > 46	24.15	145.256	22499.932	145.256	3.228	bb			34.2105	85.5	-14.5	32.8
WXX100304-08CRI	PETN	361 > 62	24.49	6652.039	22499.932	6652.039	147.824	bb			49.8059	124.5	24.5	2184.6

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/06/10  
 Time of Injection 2319  
 Standard Number WXX100304-08CRI  
 Data File EXP0304115a

HMX	94.9
RDX	94.8
135-TNB	108.9
13-DNB	97.9
Tetryl	110.9
Nitrobenzene	71.9
4A-26-DNT	106.0
2A-46-DNT	104.3
246-TNT	108.2
34-DNT(surr)	107.7
26-DNT	100.3
24-DNT	81.8
2-NT	99.5
4-NT	116.5
3-NT	85.5
PETN	124.5

MR  
3/11/10

Total 1613.6

Time 03/08/10

Average 100.9

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304126a

Analysis Date: 07-MAR-10 04:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	603.344	101	
2,6-Dinitrotoluene	600	597.429	100	
2,6-Dinitrotoluene-d3	500	528.041	106	
2-Amino-4,6-dinitrotoluene	600	816.024	136	*
3,4-Dinitrotoluene	300	346.312	115	
4-Amino-2,6-dinitrotoluene	600	741.134	124	*
HMX	600	692.406	115	
Nitrobenzene	600	605.334	101	
PETN	600	690.898	115	
RDX	600	736.312	123	*
Tetryl	600	619.275	103	
m-Dinitrobenzene	600	567.553	95	
m-Nitrotoluene	600	614.616	102	
o-Nitrotoluene	600	653.972	109	
p-Nitrotoluene	600	663.056	111	
1,3,5-Trinitrobenzene	600	568.57	95	
1,3-Dinitrobenzene-d4	500	558.522	112	
2,4,6-Trinitrotoluene	600	698.222	116	

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

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0304126a

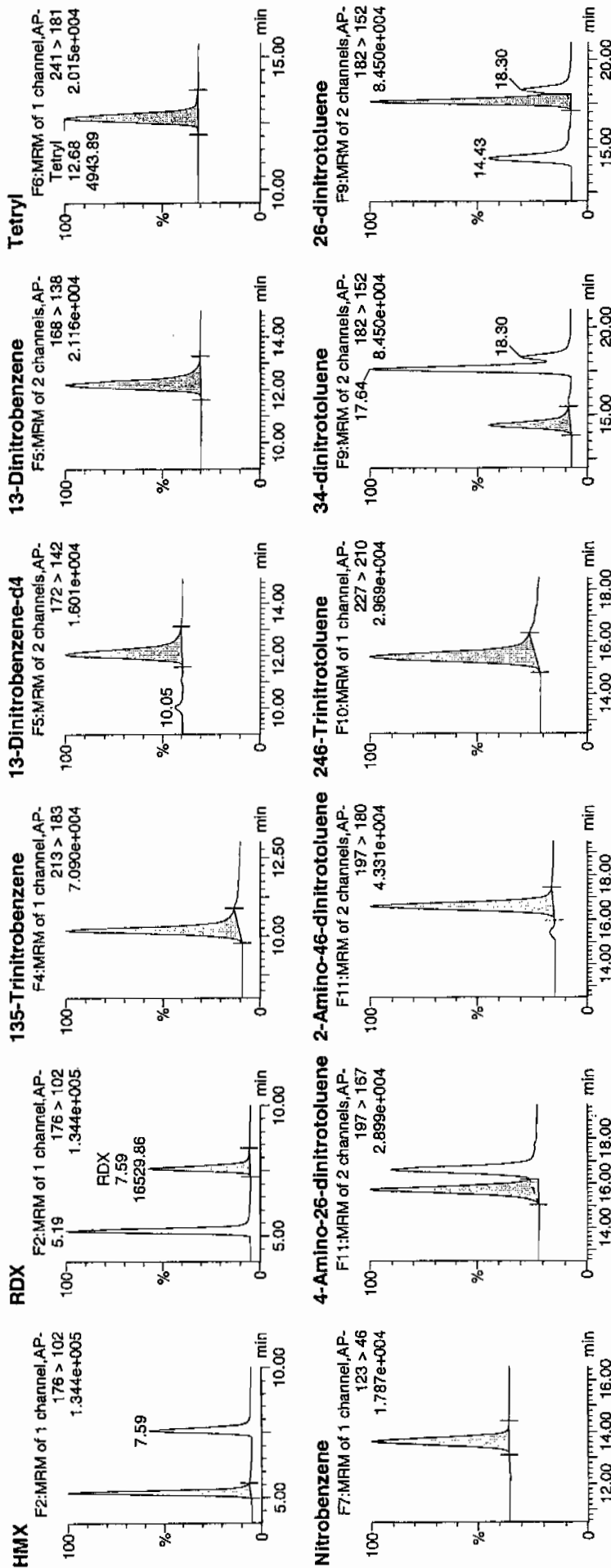
Date: 07-Mar-2010

Time: 04:44:13

ID: WXX100304-07CCV

Vial: 1:1,B

MM  
3/10



MM  
03/08/10

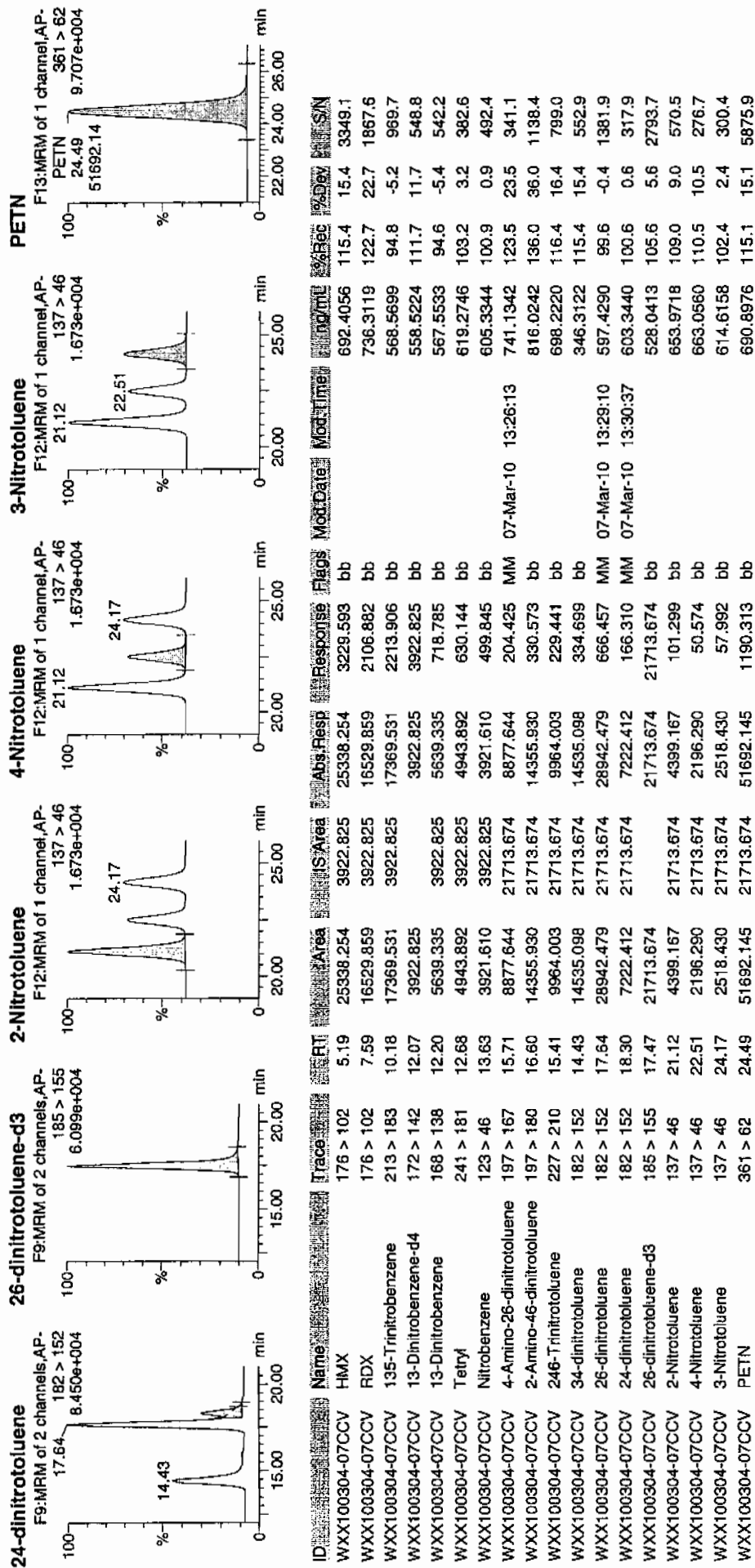


## Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Mar 07 13:34:18 2010, Page 70 of 101

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/07/10  
 Time of Injection: 0444  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304126a

HMX	115.4
RDX	122.7
135-TNB	94.8
13-DNB	94.6
Tetryl	103.2
Nitrobenzene	100.9
4A-26-DNT	123.5
2A-46-DNT	136.0
246-TNT	116.4
34-DNT(surr)	115.4
26-DNT	99.6
24-DNT	100.6
2-NT	109.0
4-NT	110.5
3-NT	102.4
PETN	115.1

110.0  
3/7/10

Total 1760.1

Average 110.0

110.0 03/08/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304128a

Analysis Date: 07-MAR-10 05:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40.314	101	
1,3-Dinitrobenzene-d4	500	526.897	105	
2,4,6-Trinitrotoluene	40	34.77	87	
2,4-Dinitrotoluene	40	32.591	81	
2,6-Dinitrotoluene	40	41.49	104	
2,6-Dinitrotoluene-d3	500	563.769	113	
2-Amino-4,6-dinitrotoluene	40	36.882	92	
3,4-Dinitrotoluene	20	21.251	106	
4-Amino-2,6-dinitrotoluene	40	39.317	98	
HMX	40	33.443	84	
Nitrobenzene	40	37.013	93	
PETN	40	41.779	104	
RDX	40	35.061	88	
Tetryl	40	39.432	99	
m-Dinitrobenzene	40	41.676	104	
m-Nitrotoluene	40	35.683	89	
o-Nitrotoluene	40	36.507	91	
p-Nitrotoluene	40	42.08	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

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304128a

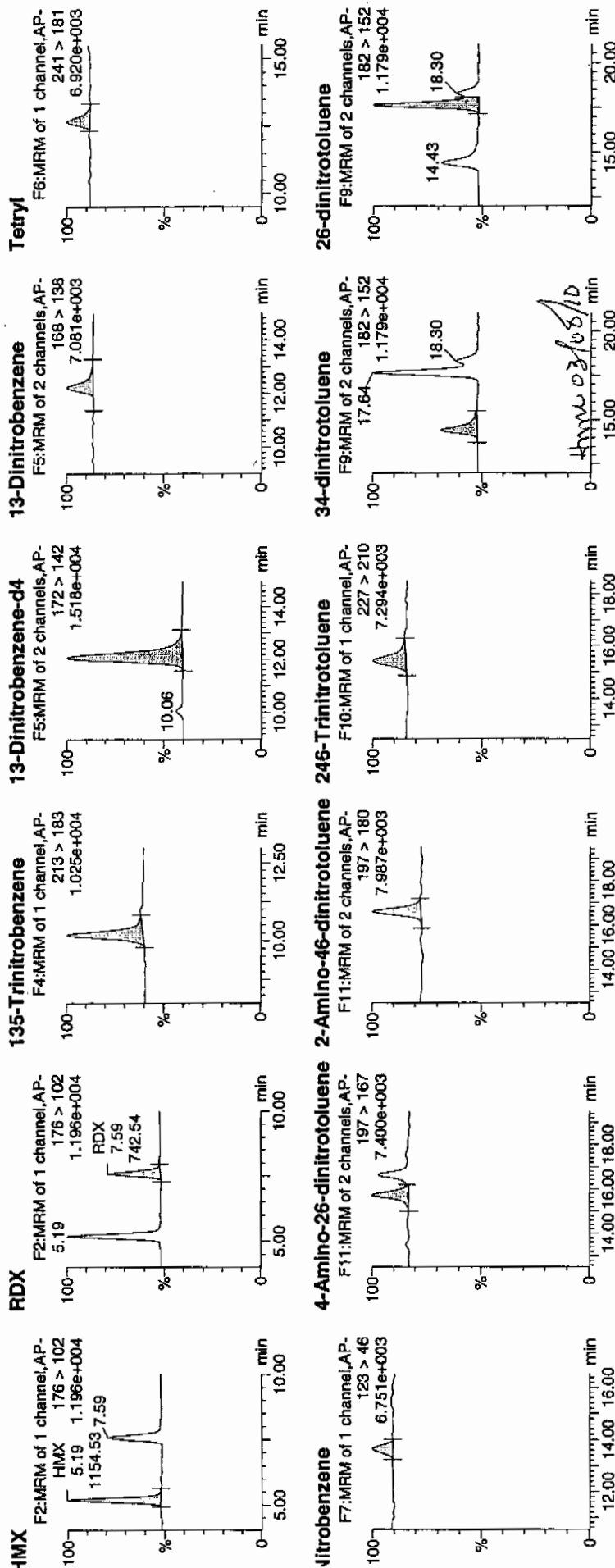
Date: 07-Mar-2010

Time: 05:43:15

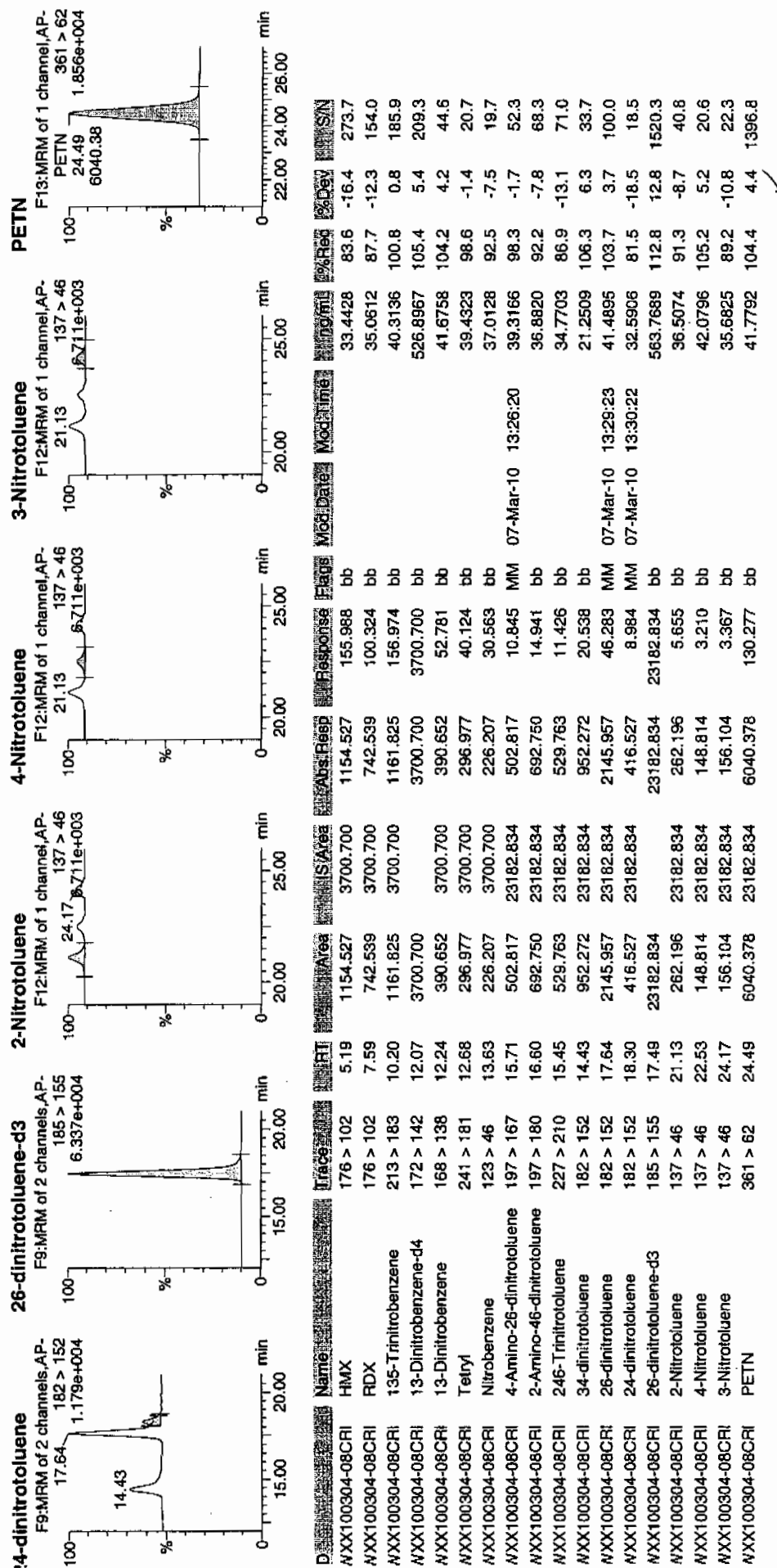
D: WXX100304-08CRI

/lal: 1:1,C

2/1/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/07/10  
 Time of Injection 0543  
 Standard Number WXX100304-08CRI  
 Data File EXP0304128a

HMX	83.6
RDX	87.7
135-TNB	100.8
13-DNB	104.2
Tetryl	98.6
Nitrobenzene	92.5
4A-26-DNT	98.3
2A-46-DNT	92.2
246-TNT	86.9
34-DNT(surr)	106.3
26-DNT	103.7
24-DNT	81.5
2-NT	91.3
4-NT	105.2
3-NT	89.2
PETN	104.4

*WXP  
3/7/10*

Total 1526.4

Average 95.4

*Ann-03/08/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304139a

Analysis Date: 07-MAR-10 11:07

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	600	552.331	92	
m-Dinitrobenzene	600	604.819	101	
m-Nitrotoluene	600	530.755	88	
o-Nitrotoluene	600	667.006	111	
p-Nitrotoluene	600	620.102	103	
1,3,5-Trinitrobenzene	600	576.366	96	
1,3-Dinitrobenzene-d4	500	493.791	99	
2,4,6-Trinitrotoluene	600	622.65	104	
2,4-Dinitrotoluene	600	620.507	103	
2,6-Dinitrotoluene	600	594.181	99	
2,6-Dinitrotoluene-d3	500	537.834	108	
2-Amino-4,6-dinitrotoluene	600	667.838	111	
3,4-Dinitrotoluene	300	299.843	100	
4-Amino-2,6-dinitrotoluene	600	633.205	106	
HMX	600	667.227	111	
Nitrobenzene	600	574.855	96	
PETN	600	533.256	89	
RDX	600	699.96	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

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304139a

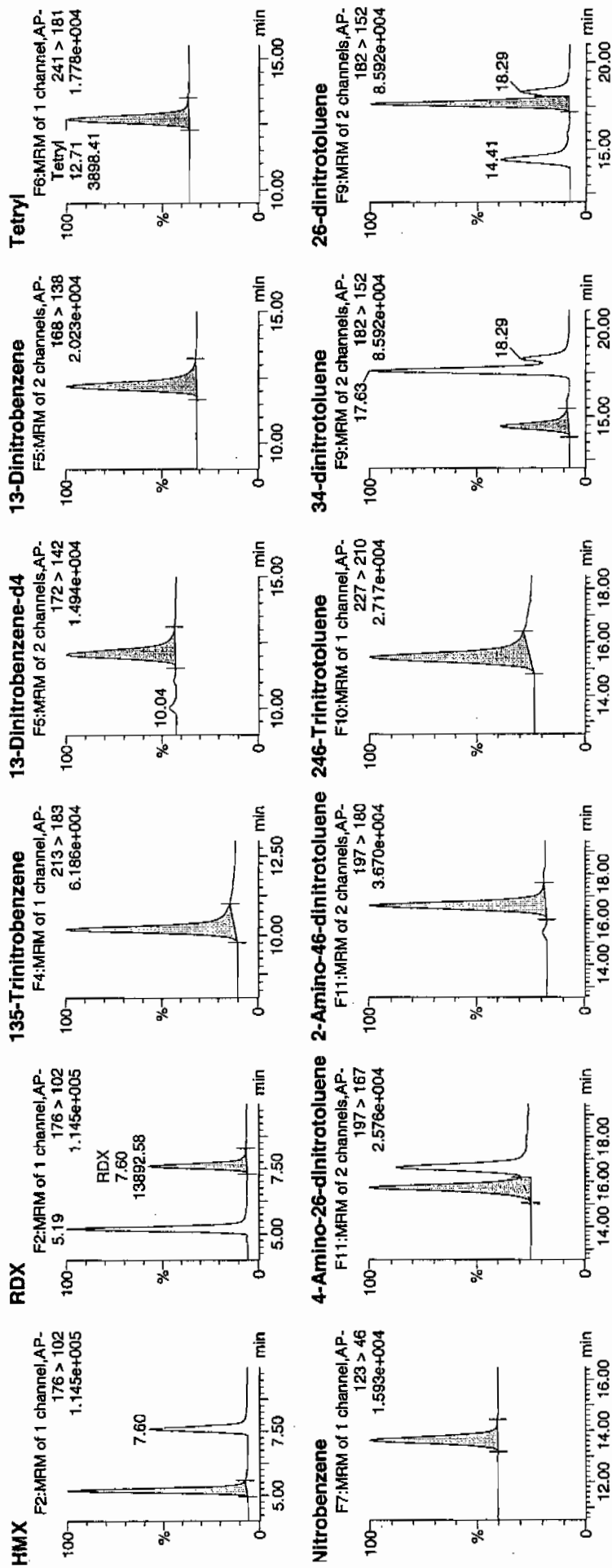
Date: 07-Mar-2010

Time: 11:07:52

ID: WXX100304-07CCV

Vial: 1:1,B

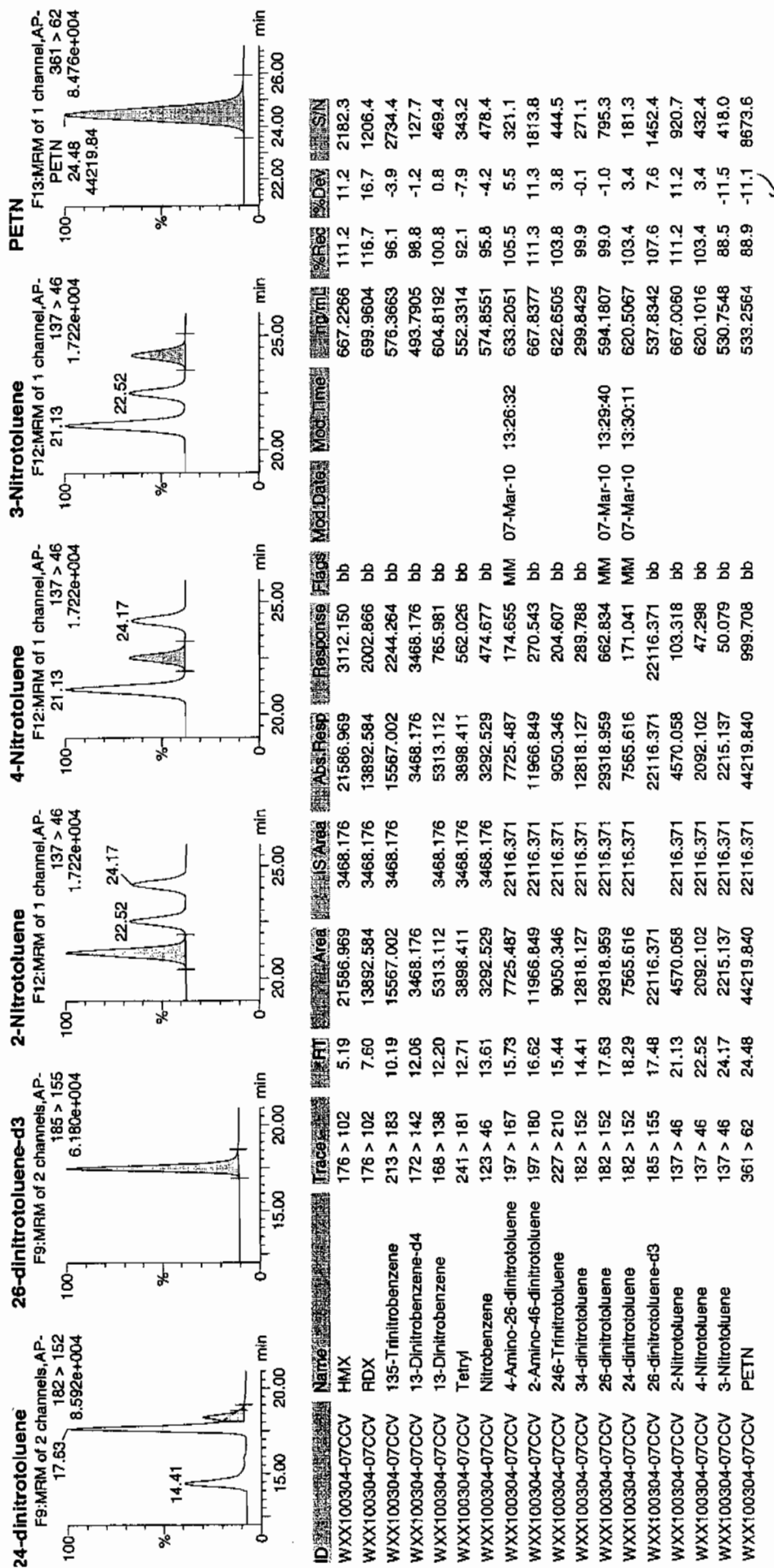
1077  
3/7/10



Ann 03/08/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/07/10  
 Time of Injection: 1107  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304139a

HMX	111.2
RDX	116.7
135-TNB	96.1
13-DNB	100.8
Tetryl	92.1
Nitrobenzene	95.8
4A-26-DNT	105.5
2A-46-DNT	111.3
246-TNT	103.8
34-DNT(surr)	99.9
26-DNT	99.0
24-DNT	103.4
2-NT	111.2
4-NT	103.4
3-NT	88.5
PETN	88.9

*MJR  
3/7/10*

Total 1627.6

Average 101.7

*HMM-03108/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304141a

Analysis Date: 07-MAR-10 12:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	46.396	116	
3,4-Dinitrotoluene	20	17.875	89	
4-Amino-2,6-dinitrotoluene	40	41.16	103	
HMX	40	36.496	91	
Nitrobenzene	40	38.472	96	
PETN	40	57.261	143	*
RDX	40	35.957	90	
Tetryl	40	39.267	98	
m-Dinitrobenzene	40	41.353	103	
m-Nitrotoluene	40	39.049	98	
o-Nitrotoluene	40	37.499	94	
p-Nitrotoluene	40	40.552	101	
1,3,5-Trinitrobenzene	40	42.864	107	
1,3-Dinitrobenzene-d4	500	543.802	109	
2,4,6-Trinitrotoluene	40	39.405	99	
2,4-Dinitrotoluene	40	34.117	85	
2,6-Dinitrotoluene	40	41.089	103	
2,6-Dinitrotoluene-d3	500	522.237	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  
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA2.qld, Time: Sun Mar 07 13:32:46 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304141a

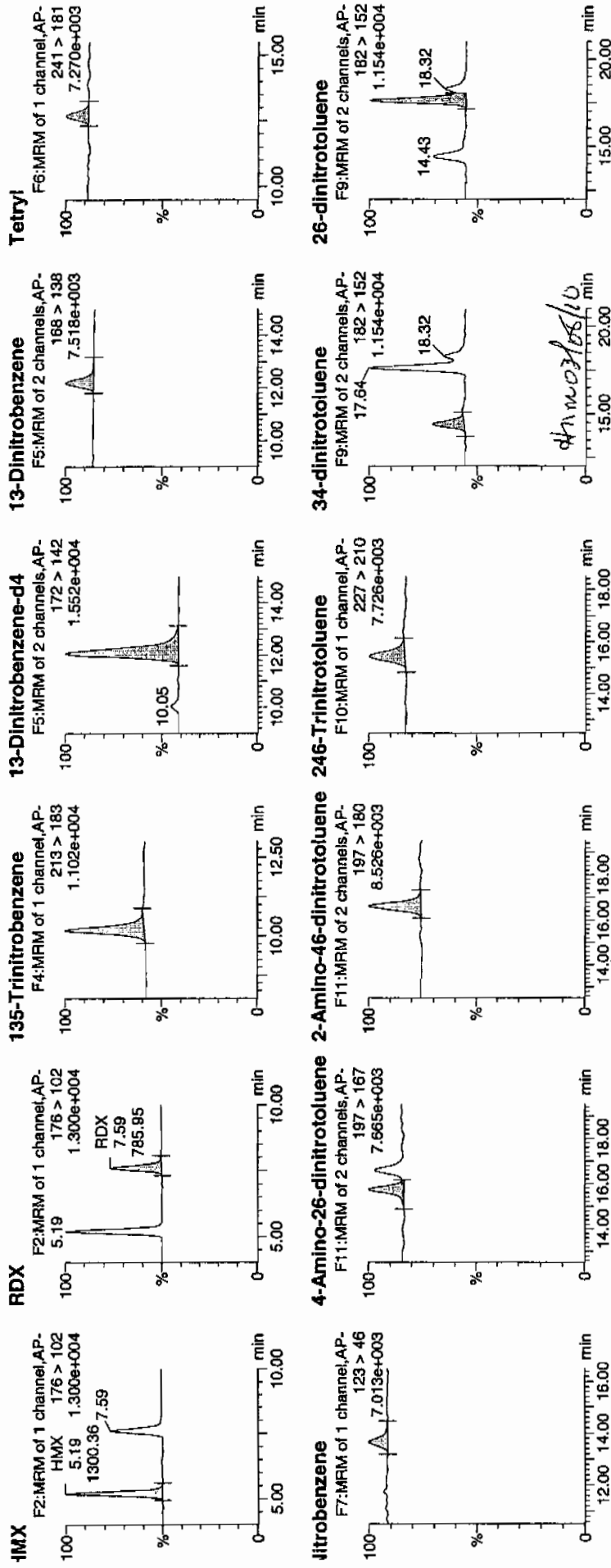
Date: 07-Mar-2010

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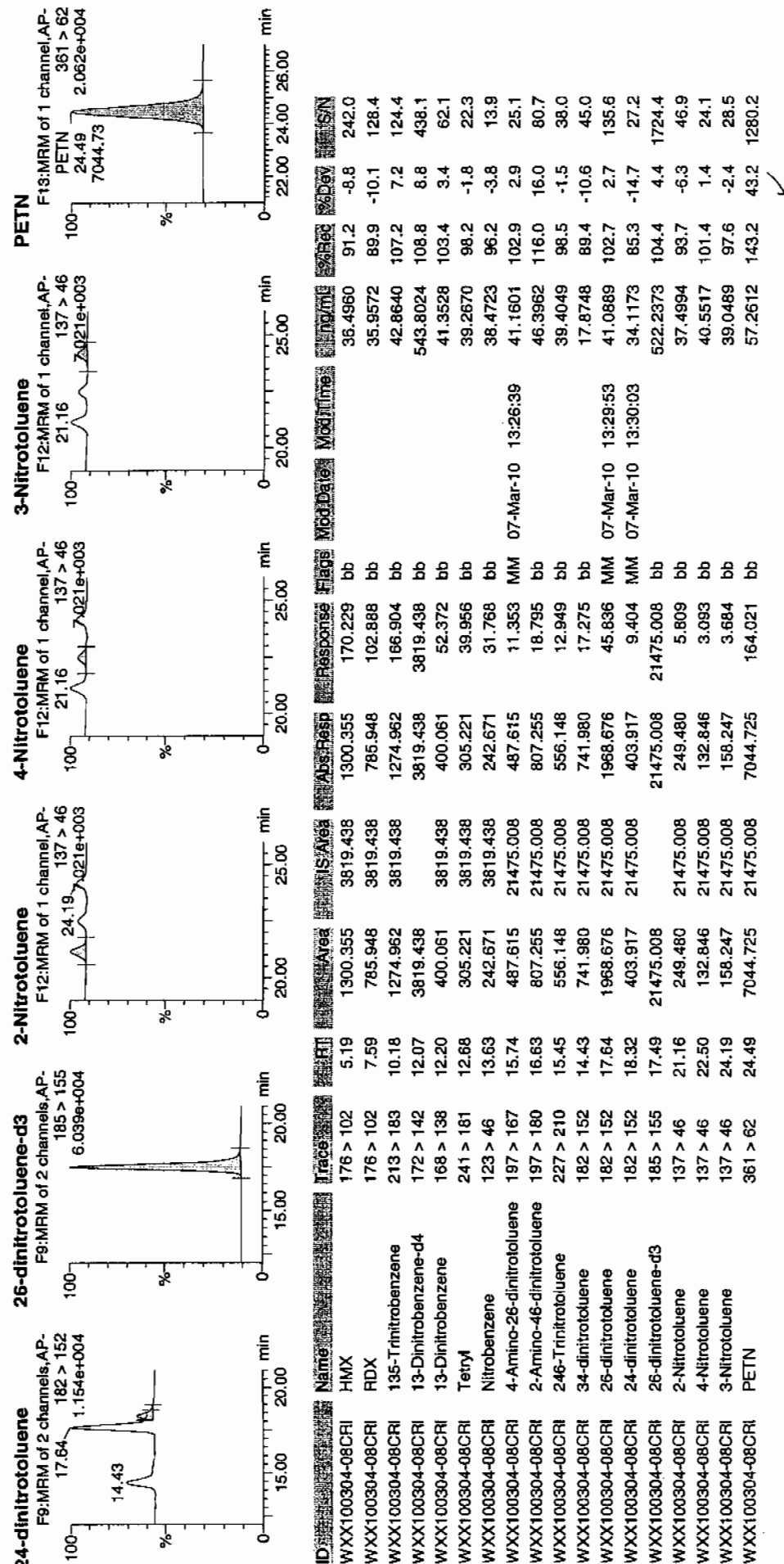
D: WXX100304-08CRI

/ial: 1:1,C

3/1/10



Dataset: C:\MASSLYNX\New\_Exp\PRO030410expA2.qld, Time: Sun Mar 07 13:32:46 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/07/10  
 Time of Injection 1206  
 Standard Number WXX100304-08CRI  
 Data File EXP0304141a

HMX	91.2
RDX	89.9
135-TNB	107.2
13-DNB	103.4
Tetryl	98.2
Nitrobenzene	96.2
4A-26-DNT	102.9
2A-46-DNT	116.0
246-TNT	98.5
34-DNT(surr)	89.4
26-DNT	102.7
24-DNT	85.3
2-NT	93.7
4-NT	101.4
3-NT	97.6
PETN	143.2

NOT  
3/7/10

Total 1616.8

Average 101.1

HMM 03/08/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304146a

Analysis Date: 07-MAR-10 14:34

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	558.926	93	
1,3-Dinitrobenzene-d4	500	556.32	111	
2,4,6-Trinitrotoluene	600	662.99	110	
2,4-Dinitrotoluene	600	604.969	101	
2,6-Dinitrotoluene	600	610.904	102	
2,6-Dinitrotoluene-d3	500	512.665	103	
2-Amino-4,6-dinitrotoluene	600	705.31	118	
3,4-Dinitrotoluene	300	316.867	106	
4-Amino-2,6-dinitrotoluene	600	683.603	114	
HMX	600	556.277	93	
Nitrobenzene	600	571.879	95	
PETN	600	618.034	103	
RDX	600	622.846	104	
Tetryl	600	548.624	91	
m-Dinitrobenzene	600	583.825	97	
m-Nitrotoluene	600	570.191	95	
o-Nitrotoluene	600	604.577	101	
p-Nitrotoluene	600	621.97	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

Quantify Sample Report  
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0304146a

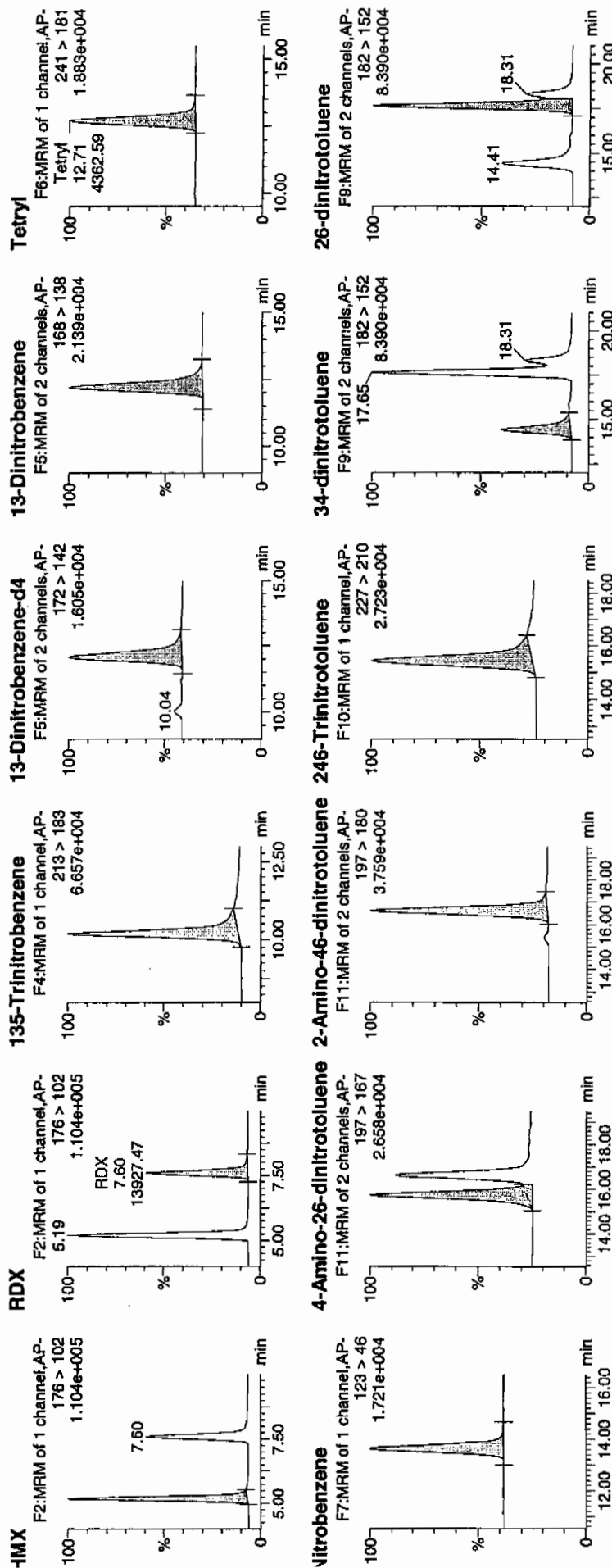
Date: 07-Mar-2010

Time: 14:34:39

D: WXX100304-07CCV

/ial: 1:1,B

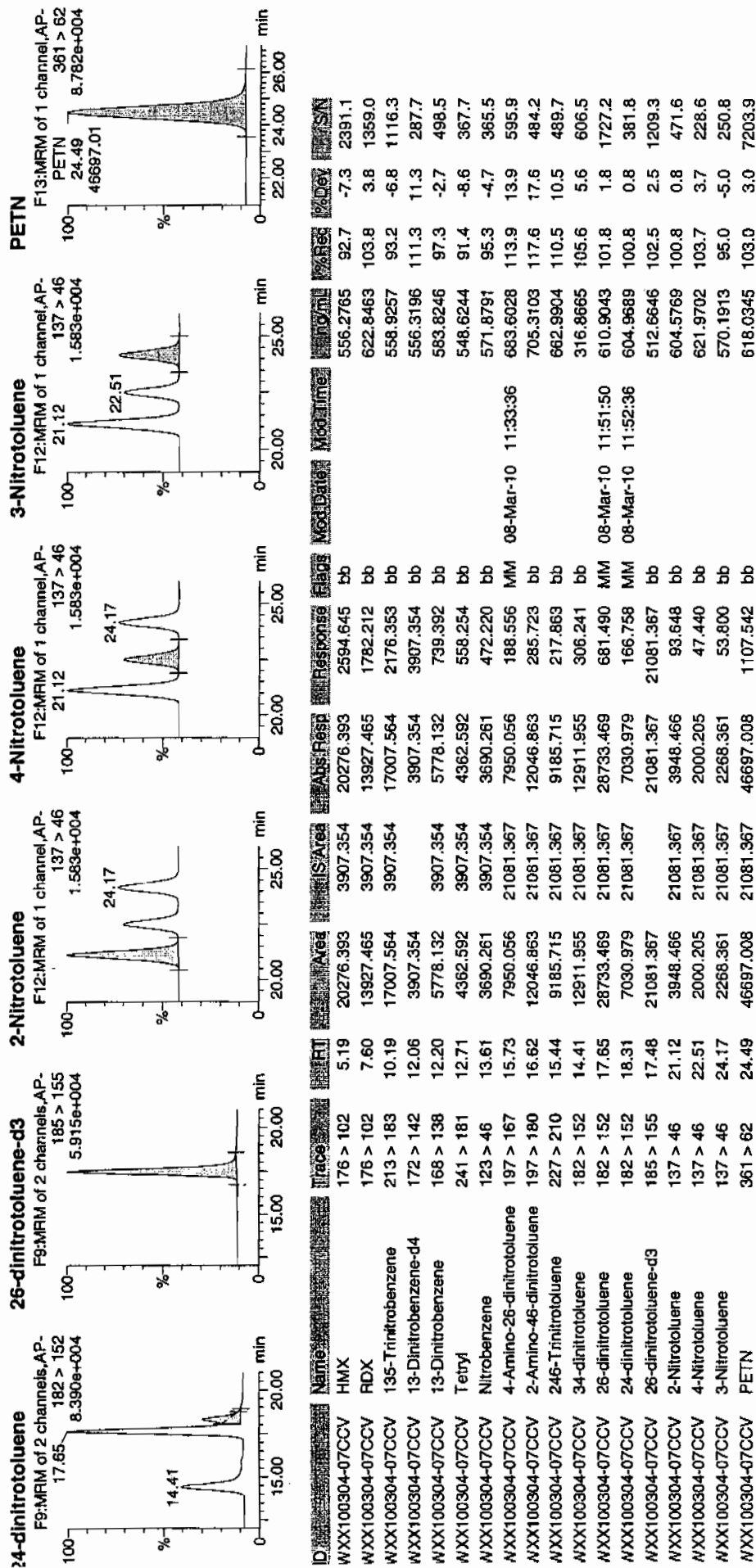
WTR  
 3/8/10



Handwritten signature/initials



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/07/10  
 Time of Injection: 1434  
 Standard Number: WXX100304-07CCV  
 Data File: EXP0304146a

HMX	92.7
RDX	103.8
135-TNB	93.2
13-DNB	97.3
Tetryl	91.4
Nitrobenzene	95.3
4A-26-DNT	113.9
2A-46-DNT	117.6
246-TNT	110.5
34-DNT(surr)	105.6
26-DNT	101.8
24-DNT	100.8
2-NT	100.8
4-NT	103.7
3-NT	95.0
PETN	103.0

*with  
3/8/10*

Total 1626.4

*sum 0308/10*

Average 101.7

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304148a

Analysis Date: 07-MAR-10 15:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
p-Nitrotoluene	40	43.464	109	
1,3,5-Trinitrobenzene	40	47.467	119	
1,3-Dinitrobenzene-d4	500	542.513	109	
2,4,6-Trinitrotoluene	40	38.864	97	
2,4-Dinitrotoluene	40	36.945	92	
2,6-Dinitrotoluene	40	38.784	97	
2,6-Dinitrotoluene-d3	500	550.313	110	
2-Amino-4,6-dinitrotoluene	40	47.189	118	
3,4-Dinitrotoluene	20	20.504	103	
4-Amino-2,6-dinitrotoluene	40	48.089	120	
HMX	40	45.84	115	
Nitrobenzene	40	41.167	103	
PETN	40	55.645	139	*
RDX	40	44.484	111	
Tetryl	40	36.664	92	
m-Dinitrobenzene	40	34.02	85	
m-Nitrotoluene	40	36.88	92	
o-Nitrotoluene	40	39.142	98	

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  
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304148a

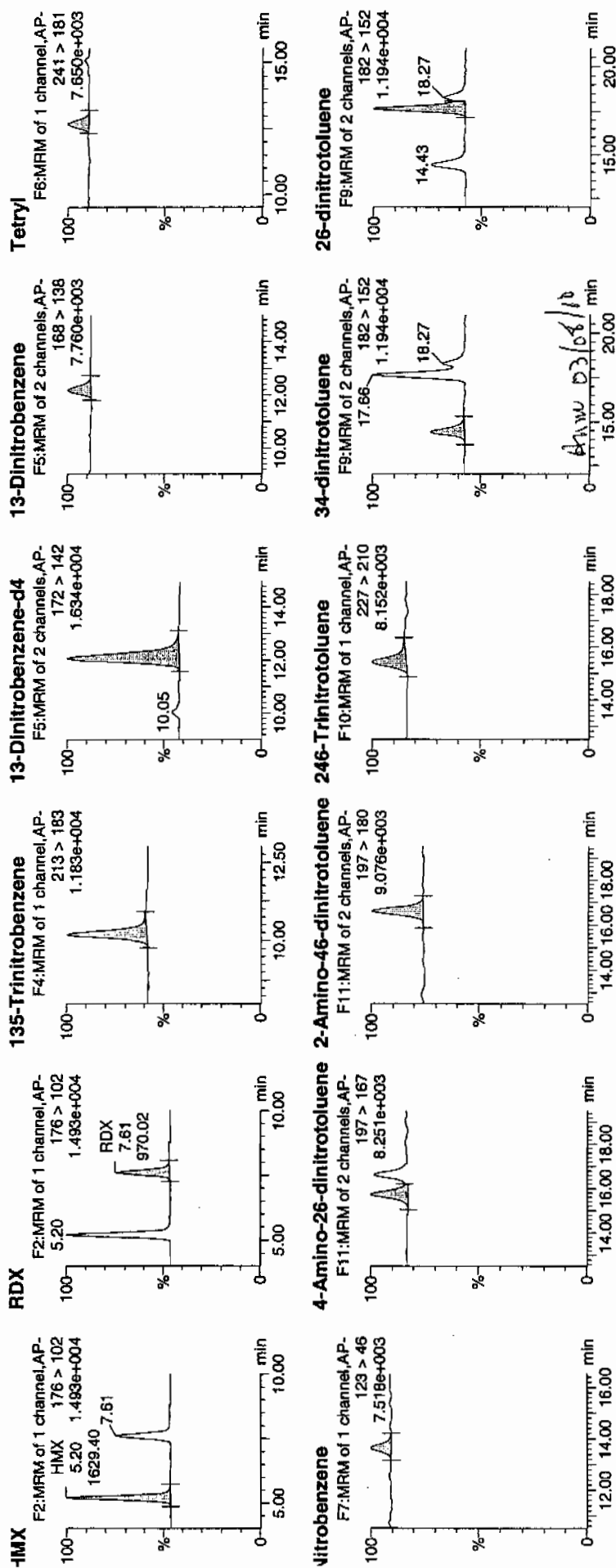
Date: 07-Mar-2010

Time: 15:33:40

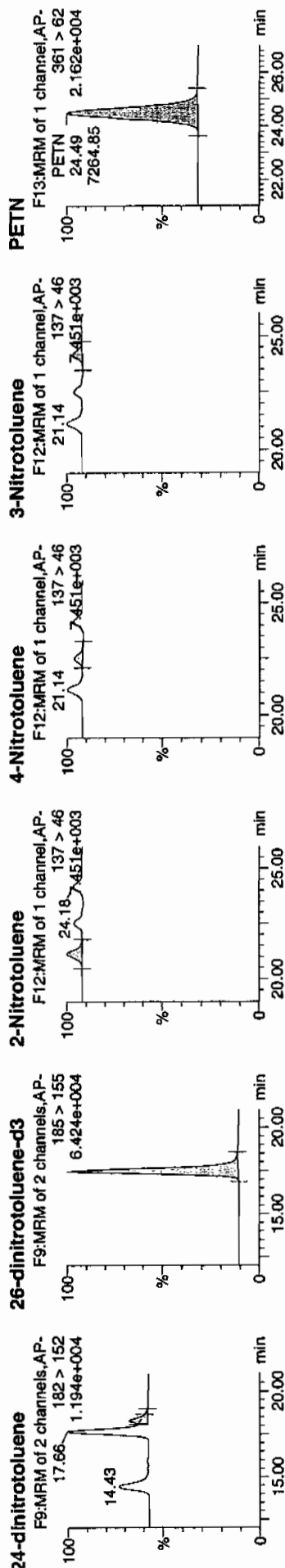
D: WXX100304-08CRI

/ial: 1:1,C

MRP  
3/8/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Inp/mL	%Rec	Abv	SN
WXX100304-08CRI	HMX	176 > 102	5.20	1629.401	3810.383	1629.401	213.811	bb			45.8397	114.6	14.6	388.1
WXX100304-08CRI	RDX	176 > 102	7.61	970.024	3810.383	970.024	127.287	bb			44.4842	111.2	11.2	203.5
WXX100304-08CRI	135-Trinitrobenzene	213 > 183	10.20	1408.539	3810.383	1408.539	184.829	bb			47.4673	118.7	18.7	246.9
WXX100304-08CRI	13-Dinitrobenzene-d4	172 > 142	12.07	3810.383		3810.383	3810.383	bb			542.5131	108.5	8.5	450.2
WXX100304-08CRI	13-Dinitrobenzene	168 > 138	12.20	328.342	3810.383	328.342	43.085	bb			34.0201	85.1	-14.9	41.2
WXX100304-08CRI	Tetryl	241 > 181	12.68	284.310	3810.383	284.310	37.307	bb			36.6637	91.7	-8.3	39.7
WXX100304-08CRI	Nitrobenzene	123 > 46	13.63	259.052	3810.383	259.052	33.983	bb			41.1669	102.9	2.9	25.6
WXX100304-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.74	600.325	22629.516	600.325	13.264	MM	08-Mar-10	11:33:46	48.0888	120.2	20.2	22.8
WXX100304-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.60	865.188	22629.516	865.188	19.116	bb			47.1889	118.0	18.0	57.4
WXX100304-08CRI	246-Trinitrotoluene	227 > 210	15.45	577.999	22629.516	577.999	12.771	bb			38.8638	97.2	-2.8	45.6
WXX100304-08CRI	34-dinitrotoluene	182 > 152	14.43	896.863	22629.516	896.863	19.816	bb			20.5038	102.5	2.5	70.8
WXX100304-08CRI	26-dinitrotoluene	182 > 152	17.66	1958.128	22629.516	1958.128	43.265	MM	08-Mar-10	11:51:38	38.7837	97.0	-3.0	188.7
WXX100304-08CRI	24-dinitrotoluene	182 > 152	18.27	460.912	22629.516	460.912	10.184	MM	08-Mar-10	11:54:42	36.9453	92.4	-7.6	43.3
WXX100304-08CRI	26-dinitrotoluene-d3	185 > 155	17.47	22629.516		22629.516	22629.516	bb			550.3131	110.1	10.1	1392.3
WXX100304-08CRI	2-Nitrotoluene	137 > 46	21.14	274.408	22629.516	274.408	6.063	bb			39.1420	97.9	-2.1	66.4
WXX100304-08CRI	4-Nitrotoluene	137 > 46	22.51	150.040	22629.516	150.040	3.315	bb			43.4636	108.7	8.7	37.1
WXX100304-08CRI	3-Nitrotoluene	137 > 46	24.18	157.494	22629.516	157.494	3.480	bb			36.8804	92.2	-7.8	39.8
WXX100304-08CRI	PETN	361 > 62	24.49	7264.852	22629.516	7264.852	160.517	bb			55.6445	139.1	39.1	2871.6

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/07/10  
 Time of Injection 1533  
 Standard Number WXX100304-08CRI  
 Data File EXP0304148a

HMX	114.6
RDX	111.2
135-TNB	118.7
13-DNB	85.1
Tetryl	91.7
Nitrobenzene	102.9
4A-26-DNT	120.2
2A-46-DNT	118.0
246-TNT	97.2
34-DNT(surr)	102.5
26-DNT	97.0
24-DNT	92.4
2-NT	97.9
4-NT	108.7
3-NT	92.2
PETN	139.1

WAF  
3/8/10

Total 1689.4

Average 105.6

Handwritten: HMM 03/08/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304159a

Analysis Date: 07-MAR-10 20:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
HMX	600	618.608	103	
Nitrobenzene	600	587.842	98	
PETN	600	713.827	119	
RDX	600	721.108	120	*
Tetryl	600	627.476	105	
m-Dinitrobenzene	600	599.197	100	
m-Nitrotoluene	600	525.179	88	
o-Nitrotoluene	600	549.102	92	
p-Nitrotoluene	600	592.181	99	
1,3,5-Trinitrobenzene	600	585.041	98	
1,3-Dinitrobenzene-d4	500	556.17	111	
2,4,6-Trinitrotoluene	600	673.261	112	
2,4-Dinitrotoluene	600	600.36	100	
2,6-Dinitrotoluene	600	601.1	100	
2,6-Dinitrotoluene-d3	500	560.036	112	
2-Amino-4,6-dinitrotoluene	600	674.068	112	
3,4-Dinitrotoluene	300	326.525	109	
4-Amino-2,6-dinitrotoluene	600	653.255	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

Quantify Sample Report  
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304159a

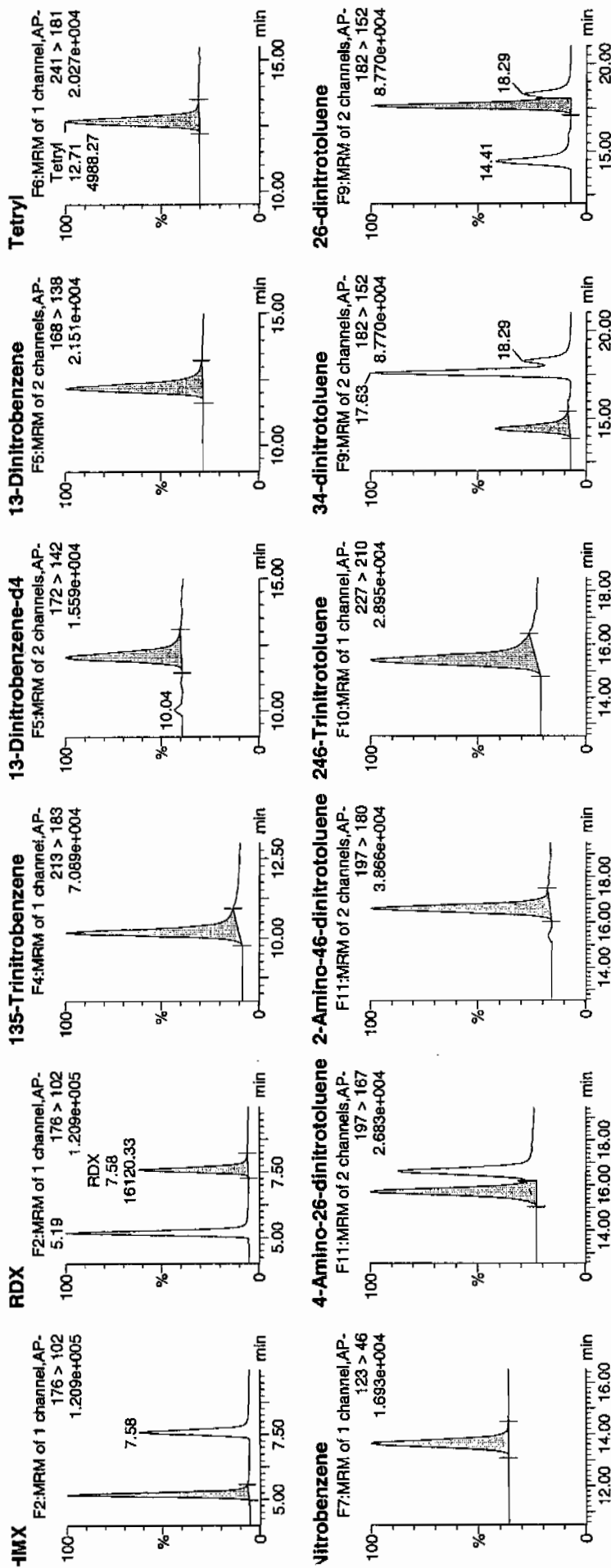
Date: 07-Mar-2010

Time: 20:58:00

D: WXX100307-07CCV

Vial: 1:1,D

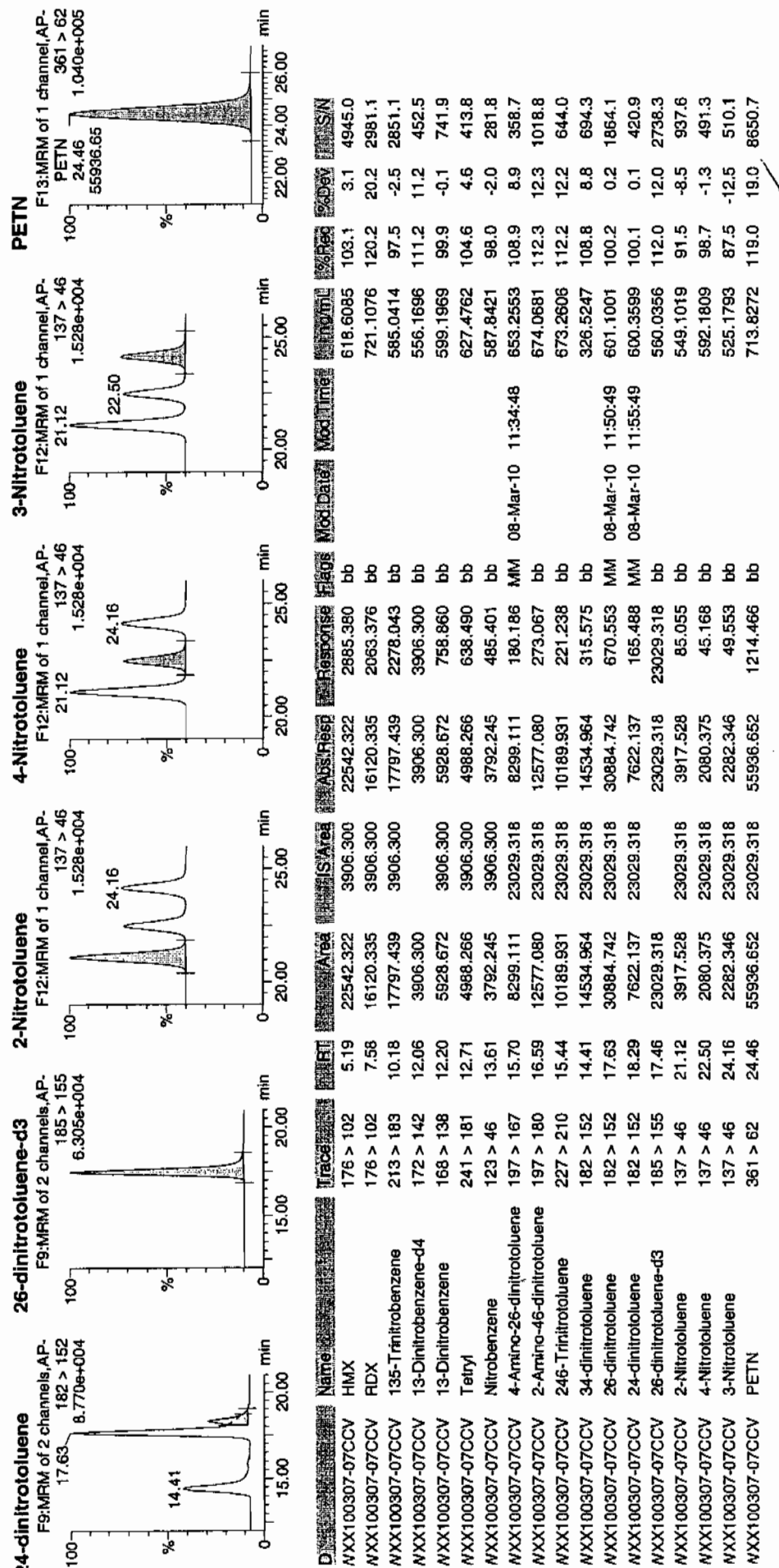
3/10/10



3/10/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/07/10  
 Time of Injection: 2058  
 Standard Number: WXX100307-07CCV  
 Data File: EXP0304159a

HMX	103.1
RDX	120.2
135-TNB	97.5
13-DNB	99.9
Tetryl	104.6
Nitrobenzene	98.0
4A-26-DNT	108.9
2A-46-DNT	112.3
246-TNT	112.2
34-DNT(surr)	108.8
26-DNT	100.2
24-DNT	100.1
2-NT	91.5
4-NT	98.7
3-NT	87.5
PETN	119.0

*mtf  
3/8/10*

Total 1662.5

Average 103.9

*Hum calc'd*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304161a

Analysis Date: 07-MAR-10 21:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.227	126	
1,3-Dinitrobenzene-d4	500	541.886	108	
2,4,6-Trinitrotoluene	40	44.85	112	
2,4-Dinitrotoluene	40	35.359	88	
2,6-Dinitrotoluene	40	40.272	101	
2,6-Dinitrotoluene-d3	500	549.235	110	
2-Amino-4,6-dinitrotoluene	40	47.998	120	
3,4-Dinitrotoluene	20	20.571	103	
4-Amino-2,6-dinitrotoluene	40	45.081	113	
HMX	40	40.951	102	
Nitrobenzene	40	47.556	119	
PETN	40	53.617	134	*
RDX	40	42.046	105	
Tetryl	40	49.527	124	
m-Dinitrobenzene	40	39.101	98	
m-Nitrotoluene	40	40.759	102	
o-Nitrotoluene	40	38.286	96	
p-Nitrotoluene	40	34.049	85	

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  
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304161a

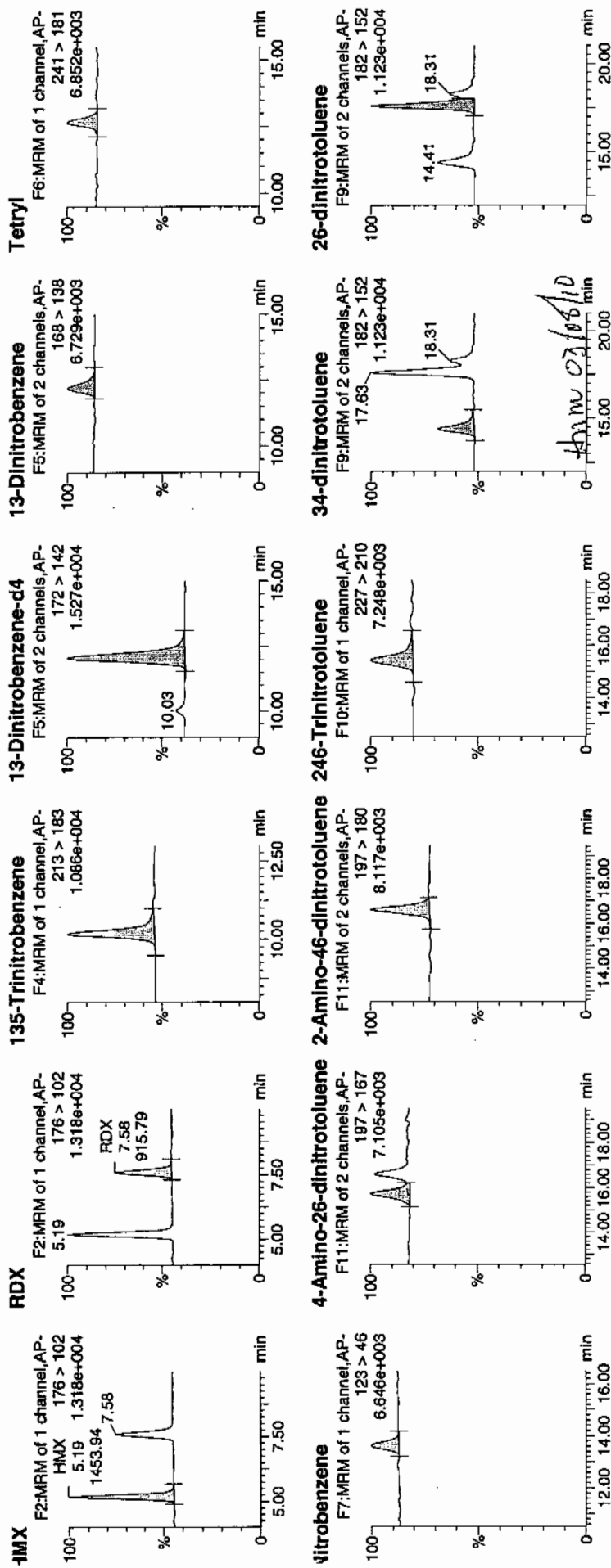
Date: 07-Mar-2010

Time: 21:57:01

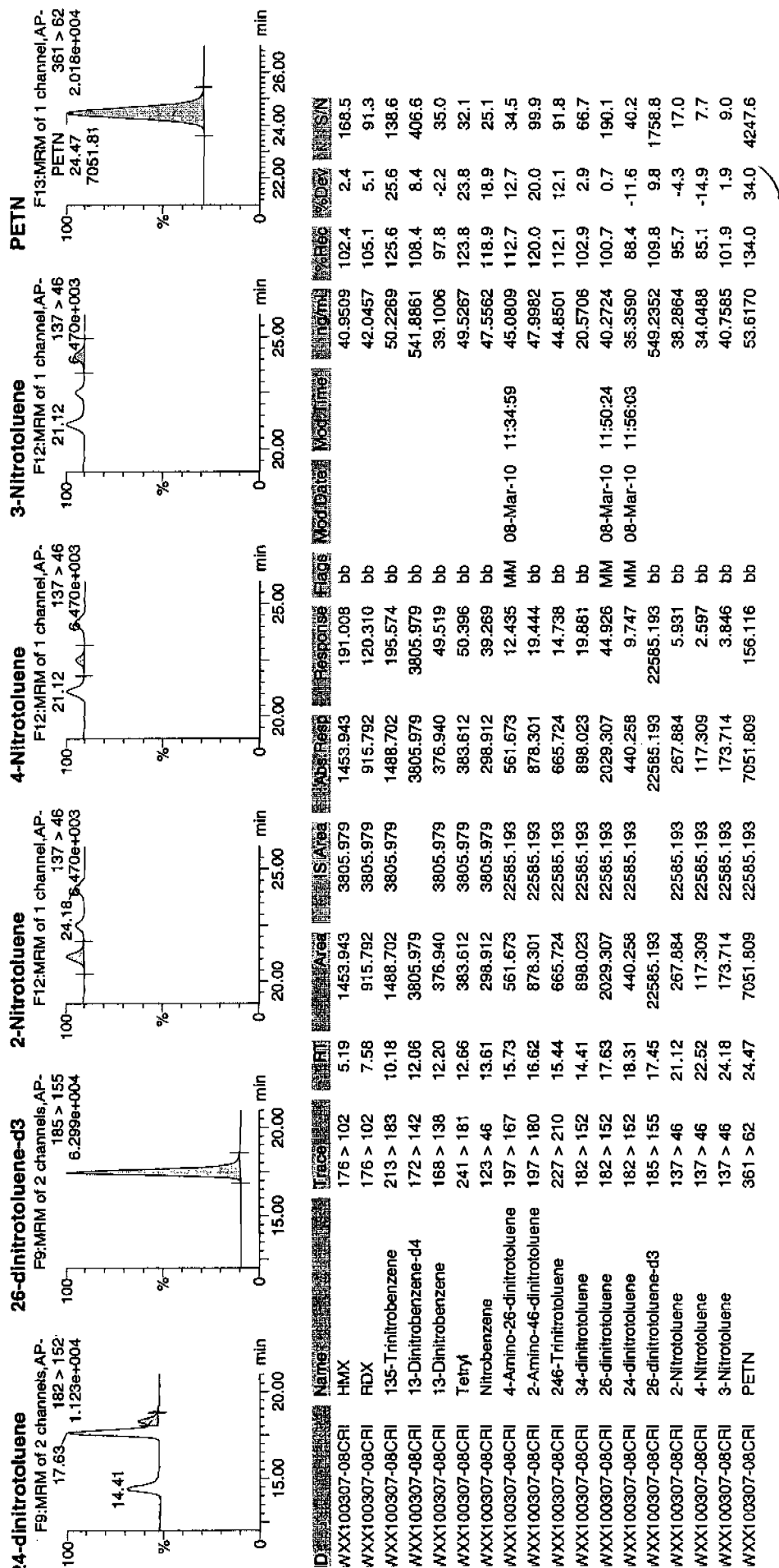
D: WXX100307-08CRI

/Inl: 1:1,E

WAT  
3/8/10



Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/07/10  
 Time of Injection 2157  
 Standard Number WXX100307-08CRI  
 Data File EXP0304161a

HMX	102.4
RDX	105.1
135-TNB	125.6
13-DNB	97.8
Tetryl	123.8
Nitrobenzene	118.9
4A-26-DNT	112.7
2A-46-DNT	120.0
246-TNT	112.1
34-DNT(surr)	102.9
26-DNT	100.7
24-DNT	88.4
2-NT	95.7
4-NT	85.1
3-NT	101.9
PETN	134.0

*Handwritten:* 3/8/10

Total 1727.1

Average 107.9

*Handwritten:* 03/08/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304172a

Analysis Date: 08-MAR-10 03:21

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	562.286	94	
1,3-Dinitrobenzene-d4	500	530.913	106	
2,4,6-Trinitrotoluene	600	611.063	102	
2,4-Dinitrotoluene	600	539.907	90	
2,6-Dinitrotoluene	600	612.576	102	
2,6-Dinitrotoluene-d3	500	477.512	96	
2-Amino-4,6-dinitrotoluene	600	738.793	123	*
3,4-Dinitrotoluene	300	367.23	122	*
4-Amino-2,6-dinitrotoluene	600	640.174	107	
HMX	600	536.302	89	
Nitrobenzene	600	566.687	94	
PETN	600	791.866	132	*
RDX	600	542.202	90	
Tetryl	600	585.702	98	
m-Dinitrobenzene	600	594.753	99	
m-Nitrotoluene	600	532.719	89	
o-Nitrotoluene	600	535.785	89	
p-Nitrotoluene	600	582.76	97	

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  
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Sample: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304172a

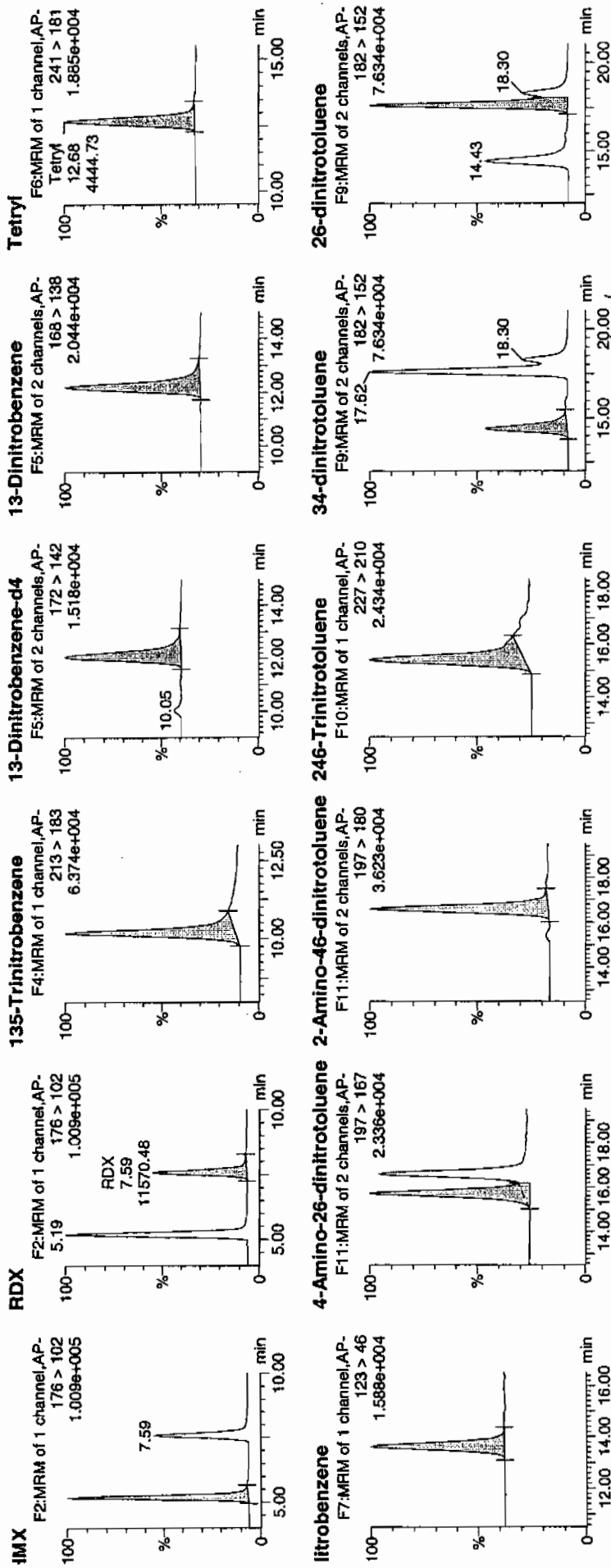
Date: 08-Mar-2010

Time: 03:21:23

D: WXX100307-07CCV

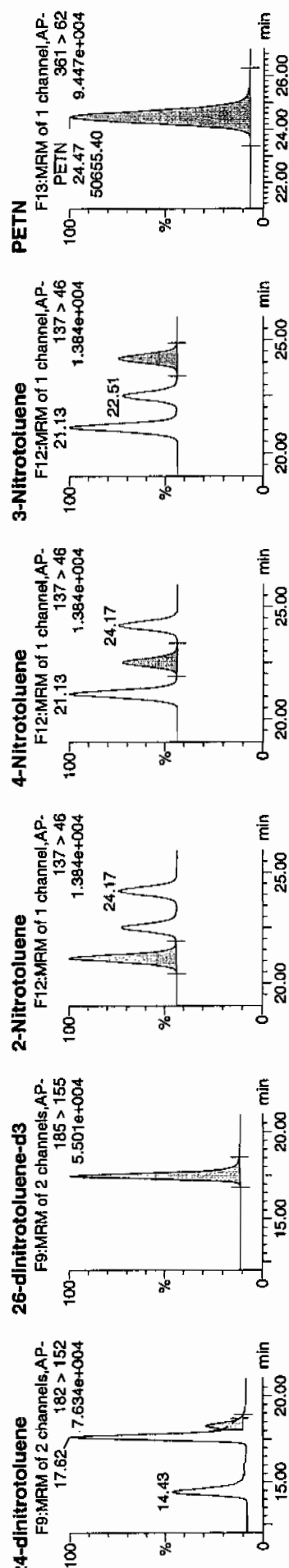
File: 1:1,D

11/18/10  
 3/18/10



Amw 03/05/10





Name	Dose	Treatment	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	In Time	Prec	%Dev	SIN
HMX	NXX100307-07CCV		176 > 102	5.19	18655.549	3728.907	18655.549	2501.477	bb			536.3018	89.4	-10.6	1954.2
RDX	NXX100307-07CCV		176 > 102	7.59	11570.481	3728.907	11570.481	1551.457	bb			542.2024	90.4	-9.6	1021.2
135-Trinitrobenzene	NXX100307-07CCV		213 > 183	10.18	16328.408	3728.907	16328.408	2189.436	bb			562.2857	93.7	-6.3	2624.4
13-Dinitrobenzene-d4	NXX100307-07CCV		172 > 142	12.07	3728.907		3728.907	3728.907	bb			530.9128	106.2	6.2	485.1
13-Dinitrobenzene	NXX100307-07CCV		168 > 138	12.20	5617.470	3728.907	5617.470	753.233	bb			594.7534	99.1	-0.9	290.3
Tetryl	NXX100307-07CCV		241 > 181	12.68	4444.726	3728.907	4444.726	595.982	bb			585.7020	97.6	-2.4	400.3
Nitrobenzene	NXX100307-07CCV		123 > 46	13.63	3489.753	3728.907	3489.753	467.932	bb			566.6867	94.4	-5.6	280.4
4-Amino-26-dinitrotoluene	NXX100307-07CCV		197 > 167	15.74	6934.497	19635.836	6934.497	176.578	MM	08-Mar-10	11:35:10	640.1739	106.7	6.7	333.4
2-Amino-46-dinitrotoluene	NXX100307-07CCV		197 > 180	16.60	11753.496	19635.836	11753.496	299.287	bb			738.7928	123.1	23.1	325.8
246-Trinitrotoluene	NXX100307-07CCV		227 > 210	15.41	7885.735	19635.836	7885.735	200.800	bb			611.0827	101.8	1.8	1411.5
34-dinitrotoluene	NXX100307-07CCV		182 > 152	14.43	13938.127	19635.836	13938.127	354.916	bb			367.2300	122.4	22.4	794.6
26-dinitrotoluene	NXX100307-07CCV		182 > 152	17.62	26836.455	19635.836	26836.455	683.354	MM	08-Mar-10	11:50:14	612.5755	102.1	2.1	1927.0
24-dinitrotoluene	NXX100307-07CCV		182 > 152	18.30	5844.563	19635.836	5844.563	148.824	MM	08-Mar-10	11:56:26	539.9066	90.0	-10.0	399.9
26-dinitrotoluene-d3	NXX100307-07CCV		185 > 155	17.47	19635.836		19635.836	19635.836	bb			477.5117	95.5	-4.5	1868.9
2-Nitrotoluene	NXX100307-07CCV		137 > 46	21.13	3259.251	19635.836	3259.251	82.992	bb			535.7847	89.3	-10.7	696.6
4-Nitrotoluene	NXX100307-07CCV		137 > 46	22.51	1745.601	19635.836	1745.601	44.449	bb			582.7596	97.1	-2.9	358.3
3-Nitrotoluene	NXX100307-07CCV		137 > 46	24.17	1973.970	19635.836	1973.970	50.264	bb			532.7192	88.8	-11.2	380.9
PETN	NXX100307-07CCV		361 > 62	24.47	50655.402	19635.836	50655.402	1289.871	bb			791.8655	132.0	32.0	11863.0

# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/08/10  
 Time of Injection: 0321  
 Standard Number: WXX100307-07CCV  
 Data File: EXP0304172a

HMX	89.4
RDX	90.4
135-TNB	93.7
13-DNB	99.1
Tetryl	97.6
Nitrobenzene	94.4
4A-26-DNT	106.7
2A-46-DNT	123.1
246-TNT	101.8
34-DNT(surr)	122.4
26-DNT	102.1
24-DNT	90.0
2-NT	89.3
4-NT	97.1
3-NT	88.8
PETN	132.0

*WXX  
3/8/10*

Total 1617.9

*WXX 03/08/10*

Average 101.1

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304174a

Analysis Date: 08-MAR-10 04:20

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	44.197	110	
PETN	40	54.182	135	*
RDX	40	40.661	102	
Tetryl	40	39.779	99	
m-Dinitrobenzene	40	36.194	90	
m-Nitrotoluene	40	35.913	90	
o-Nitrotoluene	40	43.601	109	
p-Nitrotoluene	40	41.759	104	
HMX	40	45.949	115	
1,3,5-Trinitrobenzene	40	53.114	133	*
1,3-Dinitrobenzene-d4	500	497.279	99	
2,4,6-Trinitrotoluene	40	43.446	109	
2,4-Dinitrotoluene	40	37.987	95	
2,6-Dinitrotoluene	40	40.715	102	
2,6-Dinitrotoluene-d3	500	475.178	95	
2-Amino-4,6-dinitrotoluene	40	42.13	105	
3,4-Dinitrotoluene	20	21.12	106	
4-Amino-2,6-dinitrotoluene	40	35.768	89	

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  
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304174a

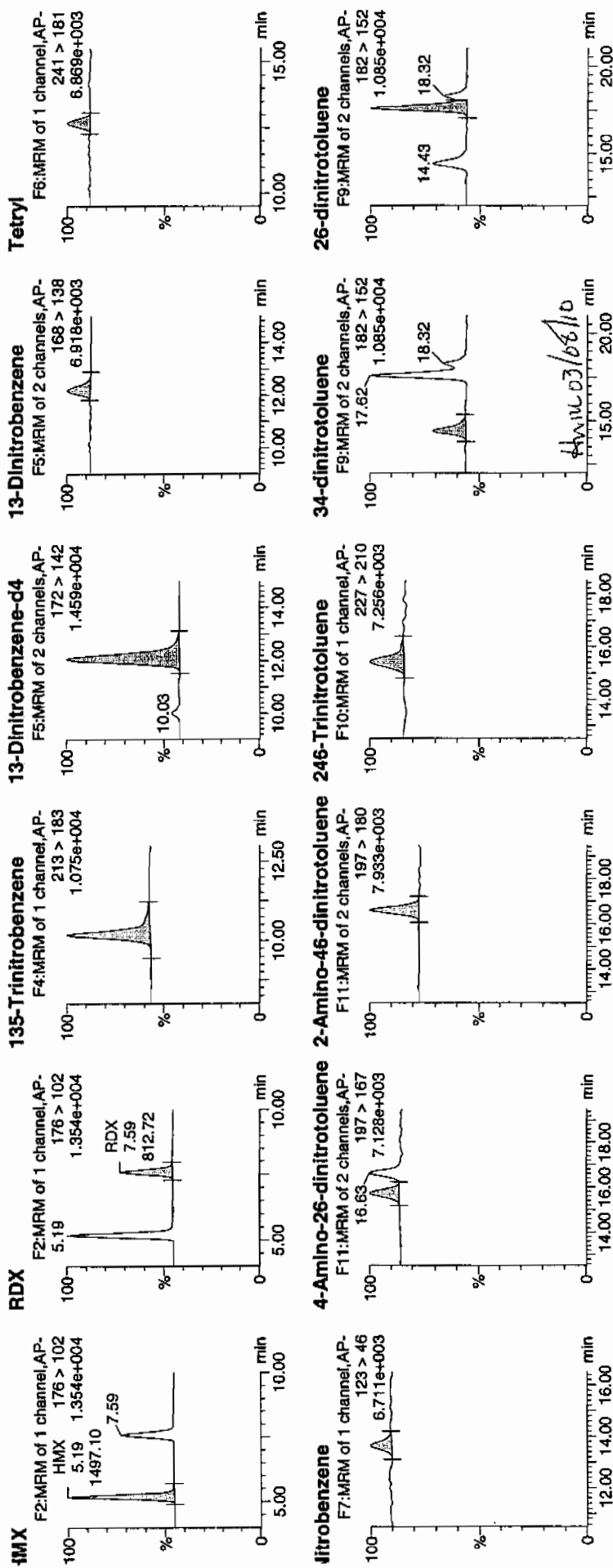
Date: 08-Mar-2010

Time: 04:20:23

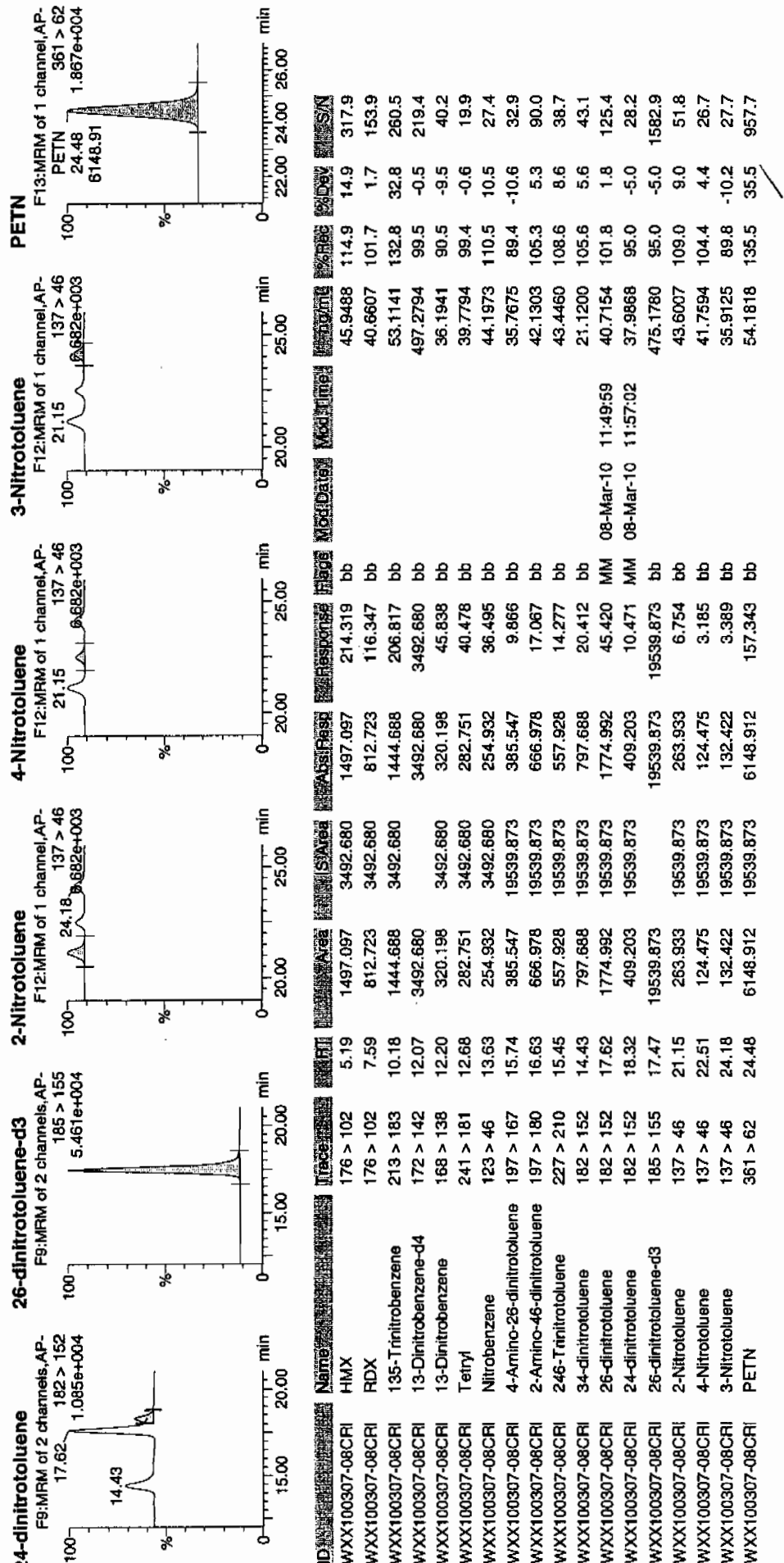
D: WXX100307-08CRI

/lat: 1:1,E

10/10  
3/10/10



Dataset: C:\MASSLYNX\New\_Exp\PRO030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/08/10  
 Time of Injection 0420  
 Standard Number WXX100307-08CRI  
 Data File EXP0304174a

HMX	114.9
RDX	101.7
135-TNB	132.8
13-DNB	90.5
Tetryl	99.4
Nitrobenzene	110.5
4A-26-DNT	89.4
2A-46-DNT	105.3
246-TNT	108.6
34-DNT(surr)	105.6
26-DNT	101.8
24-DNT	95.0
2-NT	109.0
4-NT	104.4
3-NT	89.8
PETN	135.5

*with  
3/8/10*

Total 1694.2

Average 105.9

*HTM 03/08/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304185a

Analysis Date: 08-MAR-10 09:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	522.535	105	
2,4,6-Trinitrotoluene	600	653.289	109	
2,4-Dinitrotoluene	600	607.279	101	
2,6-Dinitrotoluene	600	616.127	103	
2,6-Dinitrotoluene-d3	500	469.458	94	
2-Amino-4,6-dinitrotoluene	600	719.312	120	
3,4-Dinitrotoluene	300	317.062	106	
4-Amino-2,6-dinitrotoluene	600	649.726	108	
HMX	600	635.925	106	
Nitrobenzene	600	610.485	102	
PETN	600	806.82	134	*
RDX	600	667.924	111	
Tetryl	600	511.64	85	
m-Dinitrobenzene	600	594.115	99	
m-Nitrotoluene	600	590.365	98	
o-Nitrotoluene	600	602.331	100	
p-Nitrotoluene	600	616.672	103	
1,3,5-Trinitrobenzene	600	572.565	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 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Sample Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304185a

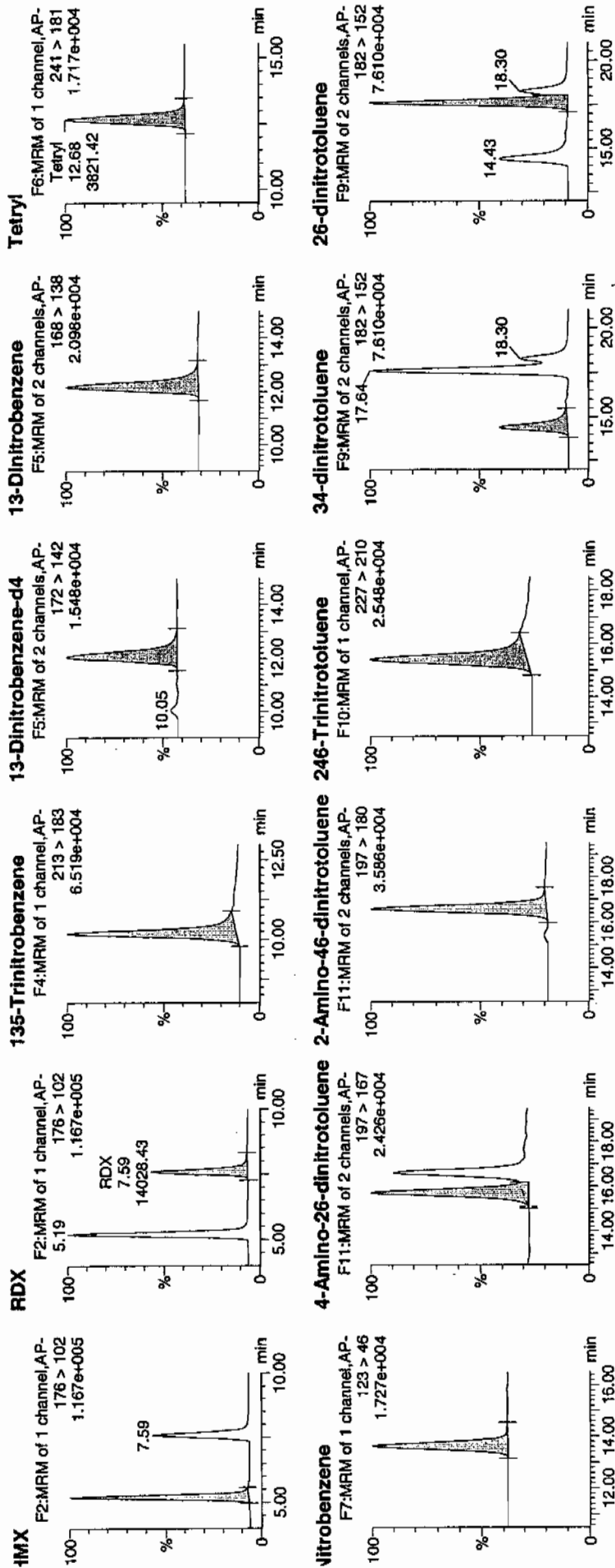
Date: 08-Mar-2010

Time: 09:45:03

ID: WXX100307-07CCV

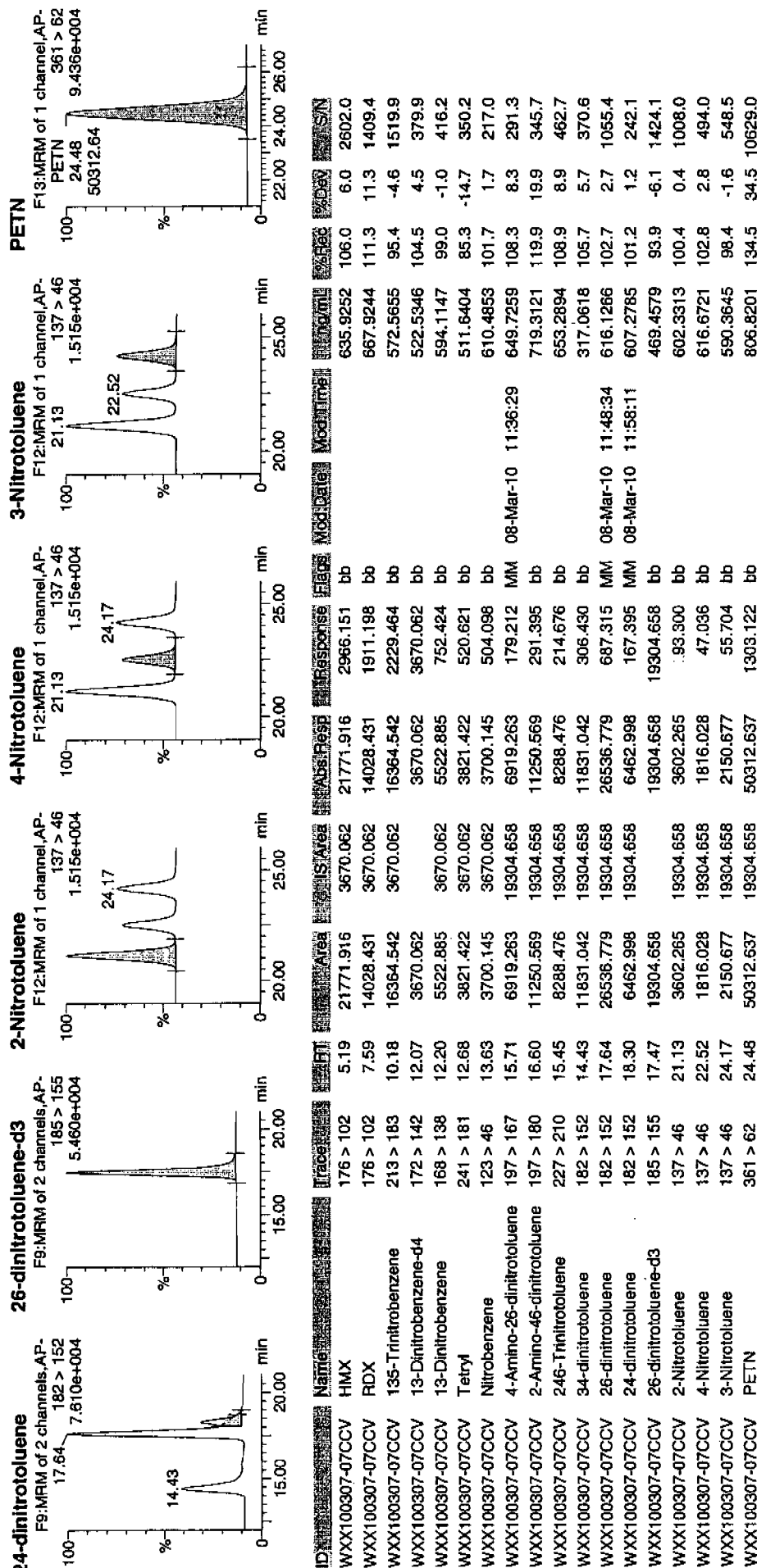
Ratio: 1:1,D

10/10  
3/10





Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/08/10  
 Time of Injection: 0945  
 Standard Number: WXX100307-07CCV  
 Data File: EXP0304185a

HMX	106.0
RDX	111.3
135-TNB	95.4
13-DNB	99.0
Tetryl	85.3
Nitrobenzene	101.7
4A-26-DNT	108.3
2A-46-DNT	119.9
246-TNT	108.9
34-DNT(surr)	105.7
26-DNT	102.7
24-DNT	101.2
2-NT	100.4
4-NT	102.8
3-NT	98.4
PETN	134.5

*MTT  
3/8/10*

Total 1681.5

Average 105.1

*HAN 03/08/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304187a

Analysis Date: 08-MAR-10 10:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.994	130	
1,3-Dinitrobenzene-d4	500	460.445	92	
2,4,6-Trinitrotoluene	40	39.776	99	
2,4-Dinitrotoluene	40	36.568	91	
2,6-Dinitrotoluene	40	41.086	103	
2,6-Dinitrotoluene-d3	500	508.042	102	
2-Amino-4,6-dinitrotoluene	40	47.707	119	
3,4-Dinitrotoluene	20	24.234	121	
4-Amino-2,6-dinitrotoluene	40	45.676	114	
HMX	40	39.354	98	
Nitrobenzene	40	39.828	100	
PETN	40	44.856	112	
RDX	40	43.65	109	
Tetryl	40	35.439	89	
m-Dinitrobenzene	40	45.241	113	
m-Nitrotoluene	40	39.609	99	
o-Nitrotoluene	40	36.13	90	
p-Nitrotoluene	40	39.566	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 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304187a

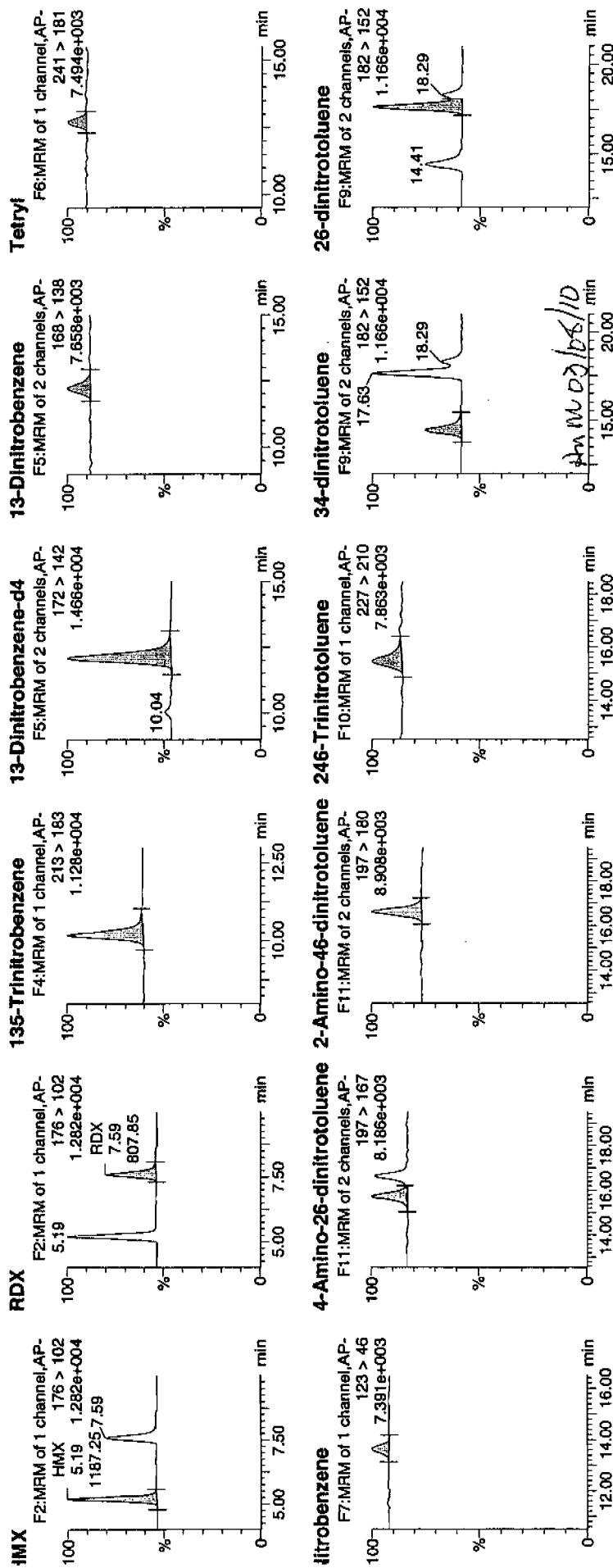
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Time: 10:44:02

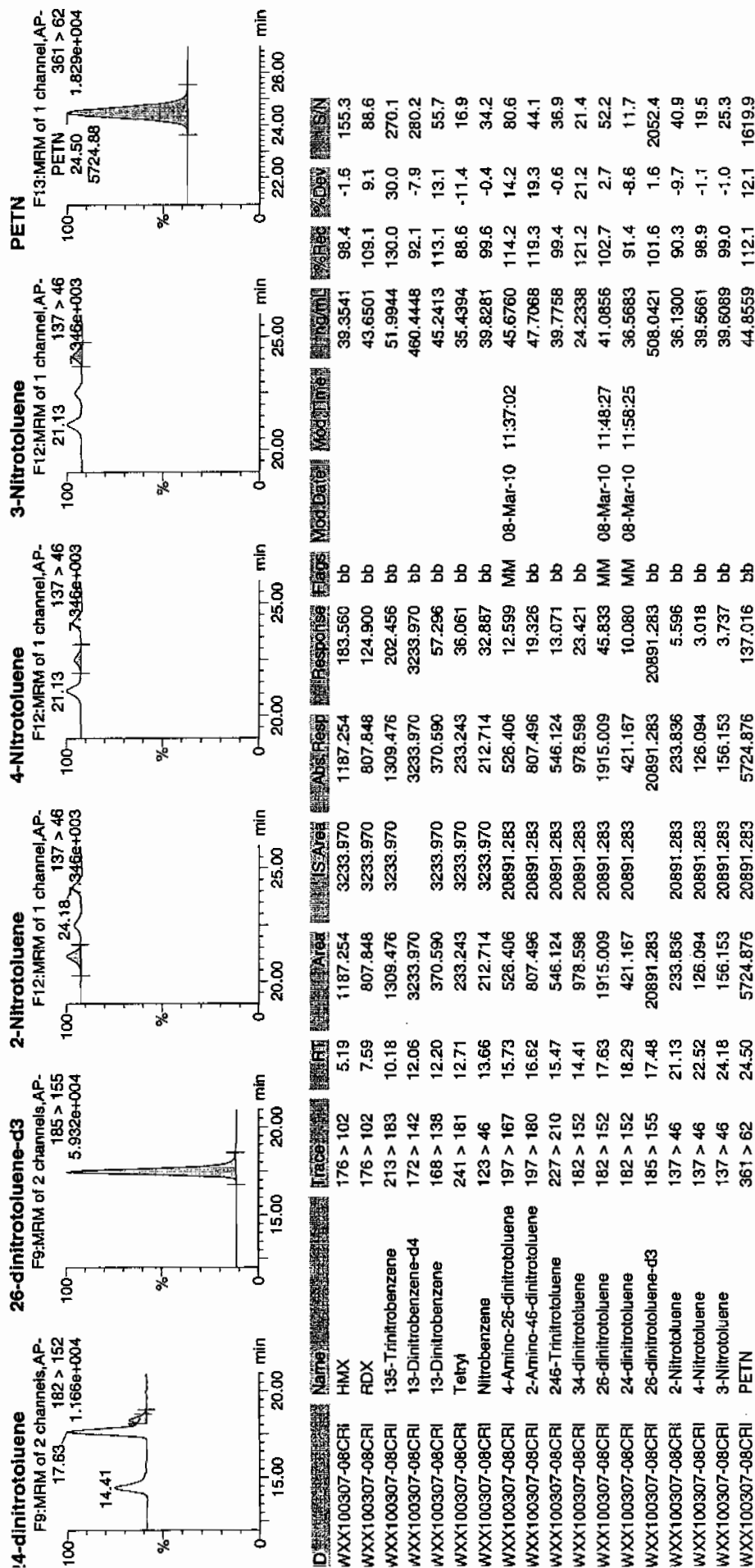
D: WXX100307-08CRI

Ratio: 1:1,E

WAT  
3/3/10



Dataset: C:\MASSLYNX\New\_Exp\PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/08/10  
 Time of Injection 1044  
 Standard Number WXX100307-08CRI  
 Data File EXP0304187a

HMX	98.4
RDX	109.1
135-TNB	130.0
13-DNB	113.1
Tetryl	88.6
Nitrobenzene	99.6
4A-26-DNT	114.2
2A-46-DNT	119.3
246-TNT	99.4
34-DNT(surr)	121.2
26-DNT	102.7
24-DNT	91.4
2-NT	90.3
4-NT	98.9
3-NT	99.0
PETN	112.1

*MTT  
3/8/10*

Total 1687.3

Average 105.5

*HM 03/08/10*

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0304196a

Analysis Date: 08-MAR-10 15:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	600	812.841	135	*
RDX	600	598.968	100	
Tetryl	600	587.175	98	
m-Dinitrobenzene	600	579.485	97	
m-Nitrotoluene	600	572.515	95	
o-Nitrotoluene	600	576.503	96	
p-Nitrotoluene	600	588.756	98	
1,3,5-Trinitrobenzene	600	567.534	95	
1,3-Dinitrobenzene-d4	500	490.078	98	
2,4,6-Trinitrotoluene	600	648.009	108	
2,4-Dinitrotoluene	600	591.601	99	
2,6-Dinitrotoluene	600	617.763	103	
2,6-Dinitrotoluene-d3	500	468.58	94	
2-Amino-4,6-dinitrotoluene	600	642.131	107	
3,4-Dinitrotoluene	300	325.286	108	
4-Amino-2,6-dinitrotoluene	600	627.467	105	
HMX	600	536.663	89	
Nitrobenzene	600	566.505	94	

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  
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0304196a

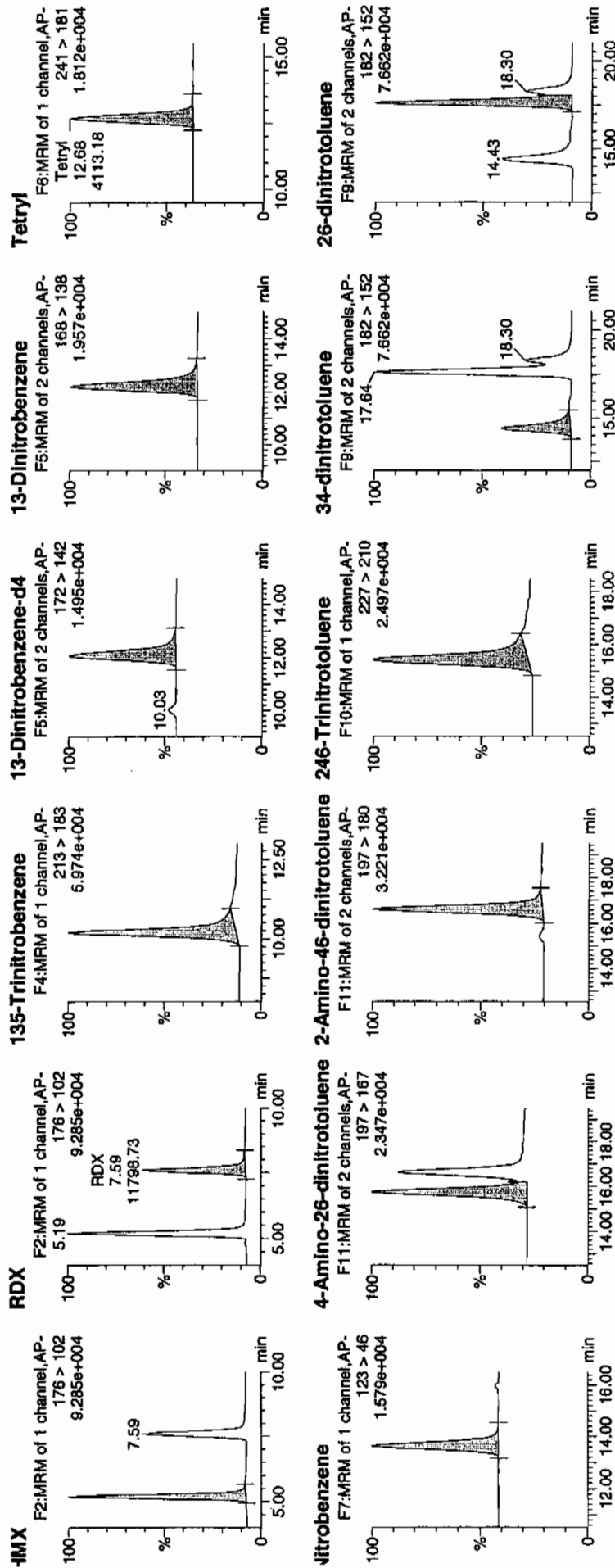
Date: 08-Mar-2010

Time: 15:09:43

D: WXX100307-07CCV

/ial: 1:1,D

3/9/10



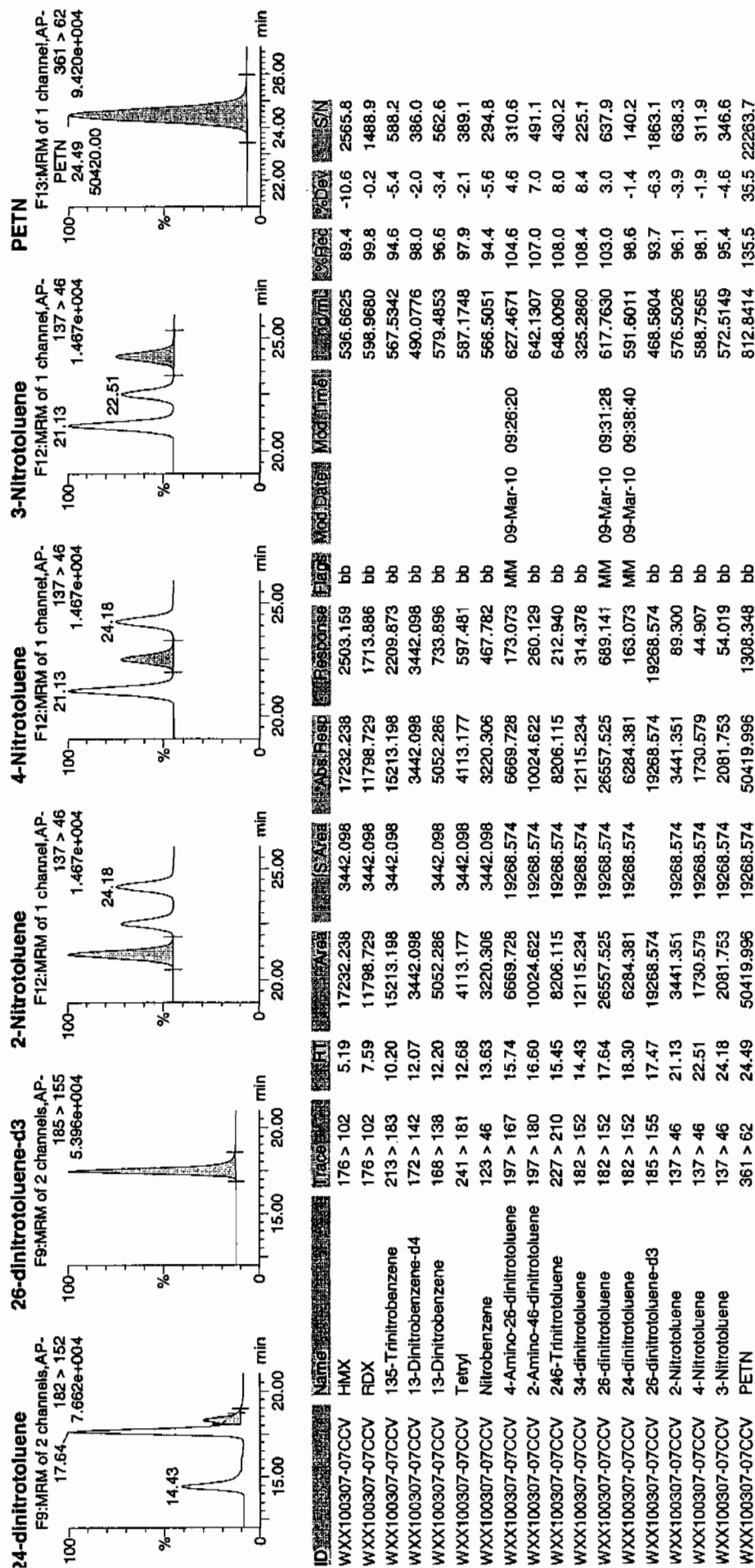
4/16/09



Printed: Tue Mar 09 09:42:03 2010, Page 18 of 89

Quantify Sample Report  
3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



3EL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/08/10  
 Time of Injection: 1509  
 Standard Number: WXX100307-07CCV  
 Data File: EXP0304196a

HMX	89.4
RDX	99.8
135-TNB	94.6
13-DNB	96.6
Tetryl	97.9
Nitrobenzene	94.4
4A-26-DNT	104.6
2A-46-DNT	107.0
246-TNT	108.0
34-DNT(surr)	108.4
26-DNT	103.0
24-DNT	98.6
2-NT	96.1
4-NT	98.1
3-NT	95.4
PETN	135.5

*Handwritten:*  
 101.7  
 3/9/10

Total 1627.4

Average 101.7

*Handwritten:* 101.7 03/08/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0304198a

Analysis Date: 08-MAR-10 16:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5µ ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	40	37.056	93	
2,4-Dinitrotoluene	40	35.751	89	
2,6-Dinitrotoluene	40	38.8	97	
2,6-Dinitrotoluene-d3	500	449.66	90	
2-Amino-4,6-dinitrotoluene	40	41.779	104	
3,4-Dinitrotoluene	20	21.513	108	
4-Amino-2,6-dinitrotoluene	40	45.91	115	
HMX	40	38.162	95	
Nitrobenzene	40	39.96	100	
PETN	40	58.657	147	*
RDX	40	38.206	96	
Tetryl	40	37.305	93	
m-Dinitrobenzene	40	42.466	106	
m-Nitrotoluene	40	40.152	100	
o-Nitrotoluene	40	40.758	102	
p-Nitrotoluene	40	34.536	86	
1,3,5-Trinitrobenzene	40	45.695	114	
1,3-Dinitrobenzene-d4	500	493.234	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 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Quantify Sample Report  
JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA4.qld, Time: Tue Mar 09 09:38:40 2010

Sample: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0304198a

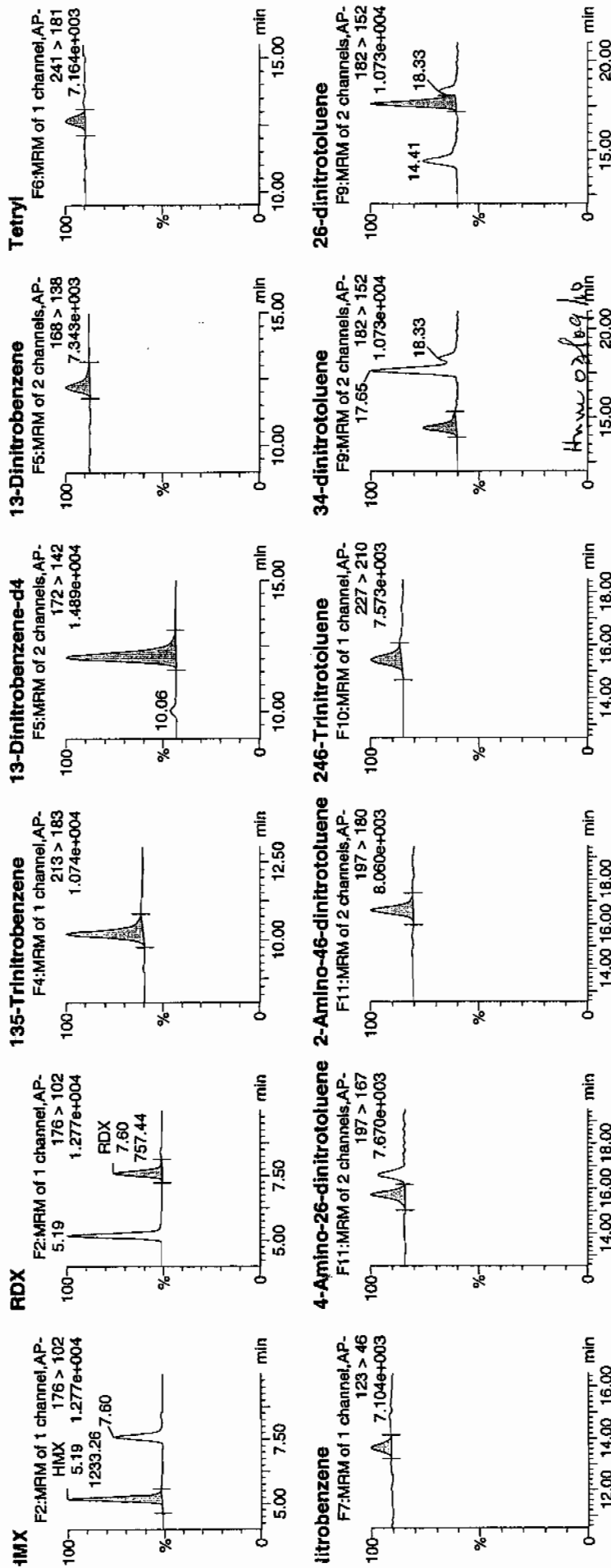
Date: 08-Mar-2010

Time: 16:08:43

D: WXX100307-08CRI

/ial: 1:1,E

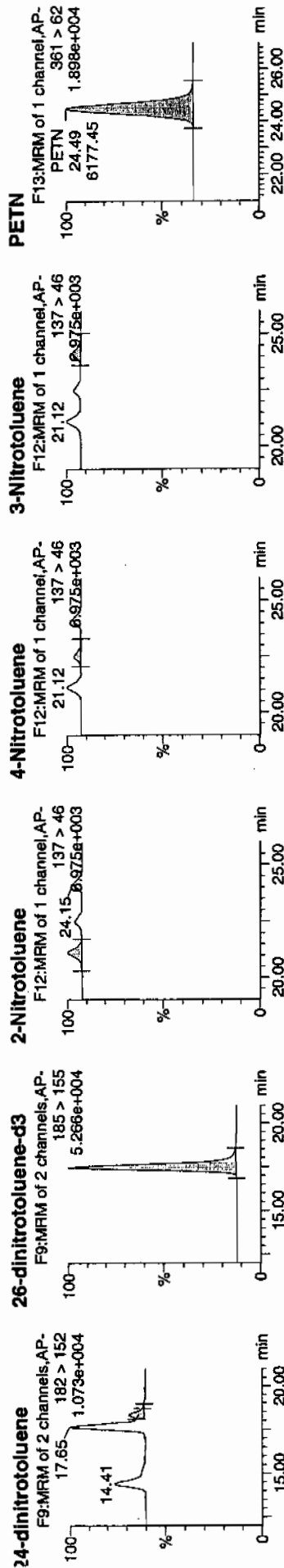
100%  
2.1e10



Printed: Tue Mar 09 09:42:03 2010, Page 22 of 89

Quantify Sample Report  
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO030410expA4.qld, Time: Tue Mar 09 09:38:40 2010



ID	Name	Trace	RT	Area	US Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Peak	%Dev	SN	
WXX100307-08CRI	HMX	176 > 102	5.19	1233.263	3464.265	1233.263	177.998	bb			38.1617	95.4	-4.6	323.8
WXX100307-08CRI	RDX	176 > 102	7.60	757.441	3464.265	757.441	109.322	bb			38.2058	95.5	-4.5	167.8
WXX100307-08CRI	135-Trinitrobenzene	213 > 183	10.19	1232.769	3464.265	1232.769	177.926	bb			45.6946	114.2	14.2	188.6
WXX100307-08CRI	13-Dinitrobenzene-d4	172 > 142	12.06	3464.265		3464.265	3464.265	bb			493.2337	98.6	-1.4	621.7
WXX100307-08CRI	13-Dinitrobenzene	168 > 138	12.20	372.631	3464.265	372.631	53.782	bb			42.4664	106.2	6.2	40.2
WXX100307-08CRI	Tetryl	241 > 181	12.71	263.005	3464.265	263.005	37.960	bb			37.3049	93.3	-6.7	18.7
WXX100307-08CRI	Nitrobenzene	123 > 46	13.66	228.614	3464.265	228.614	32.996	bb			39.9596	99.9	-0.1	31.8
WXX100307-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.73	468.296	18490.537	468.296	12.663	MM	09-Mar-10	09:25:48	45.9096	114.8	14.8	54.7
WXX100307-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.62	625.902	18490.537	625.902	16.925	bb			41.7794	104.4	4.4	48.0
WXX100307-08CRI	246-Trinitrotoluene	227 > 210	15.44	450.310	18490.537	450.310	12.177	bb			37.0557	92.6	-7.4	101.8
WXX100307-08CRI	34-dinitrotoluene	182 > 152	14.41	768.903	18490.537	768.903	20.792	bb			21.5132	107.6	7.6	32.0
WXX100307-08CRI	26-dinitrotoluene	182 > 152	17.65	1600.658	18490.537	1600.658	43.283	bd			38.8001	97.0	-3.0	81.1
WXX100307-08CRI	24-dinitrotoluene	182 > 152	18.33	364.440	18490.537	364.440	9.855	MM	09-Mar-10	09:38:30	35.7514	89.4	-10.6	16.8
WXX100307-08CRI	26-dinitrotoluene-d3	185 > 155	17.48	18490.537		18490.537	18490.537	bb			449.6598	89.9	-10.1	1567.7
WXX100307-08CRI	2-Nitrotoluene	137 > 46	21.12	233.477	18490.537	233.477	6.313	bb			40.7583	101.9	1.9	44.9
WXX100307-08CRI	4-Nitrotoluene	137 > 46	22.50	97.414	18490.537	97.414	2.634	bb			34.5355	86.3	-13.7	21.0
WXX100307-08CRI	3-Nitrotoluene	137 > 46	24.15	140.103	18490.537	140.103	3.789	bb			40.1518	100.4	0.4	25.8
WXX100307-08CRI	PETN	361 > 62	24.49	6177.449	18490.537	6177.449	167.044	bb			58.6570	146.6	46.6	1517.1

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/08/10  
 Time of Injection 1608  
 Standard Number WXX100307-08CRI  
 Data File EXP0304198a

HMX	95.4
RDX	95.5
135-TNB	114.2
13-DNB	106.2
Tetryl	93.3
Nitrobenzene	99.9
4A-26-DNT	114.8
2A-46-DNT	104.4
246-TNT	92.6
34-DNT(surr)	107.6
26-DNT	97.0
24-DNT	89.4
2-NT	101.9
4-NT	86.3
3-NT	100.4
PETN	146.6

not  
3/9/10

Total 1645.5

Average 102.8

HWK 03/09/10

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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260013.wiff

Analysis Date: 26-FEB-10 18:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	110	110	
2,6-Diamino-4-nitrotoluene	100	104	104	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	94.6	95	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

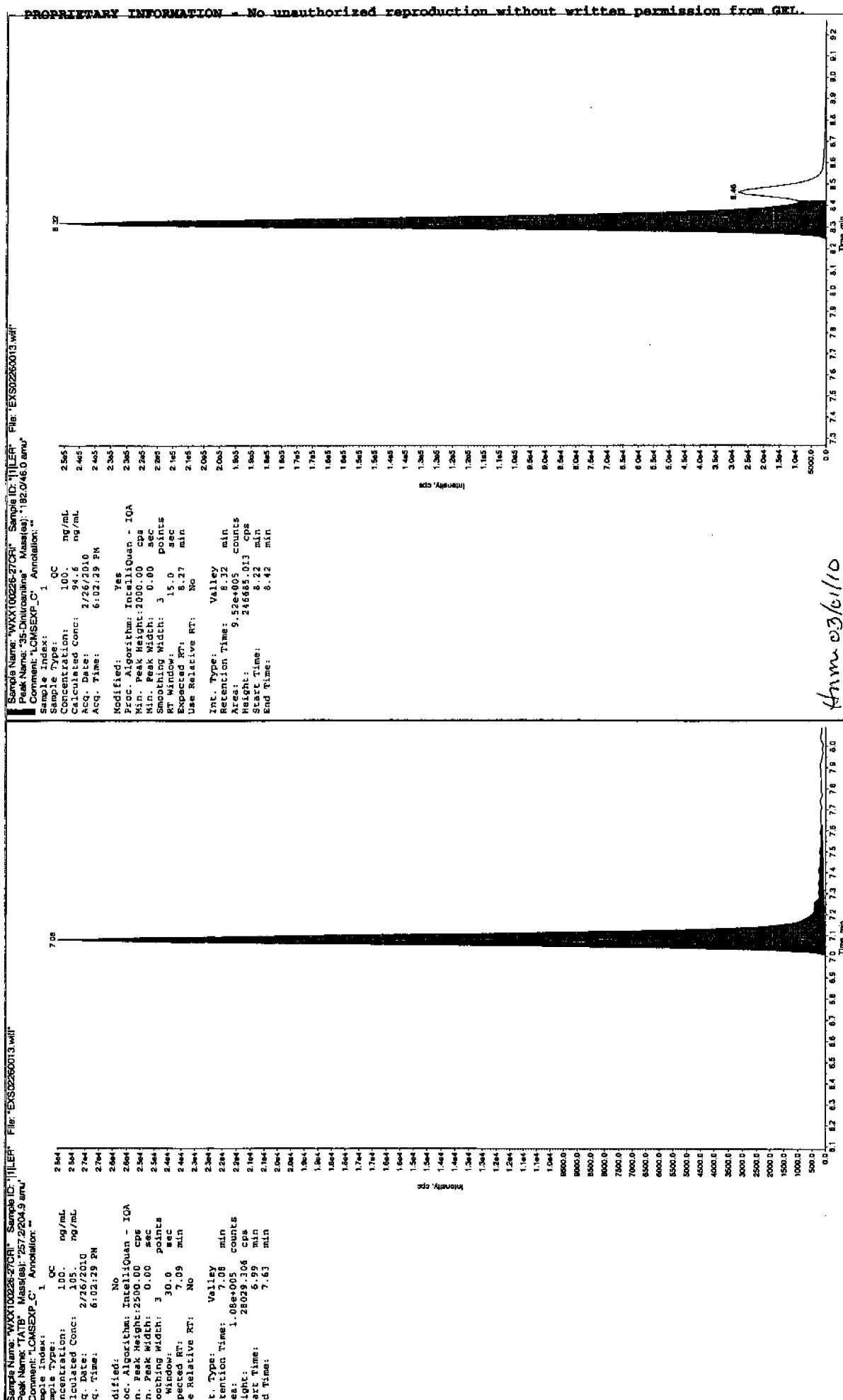
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Run 31/1/10

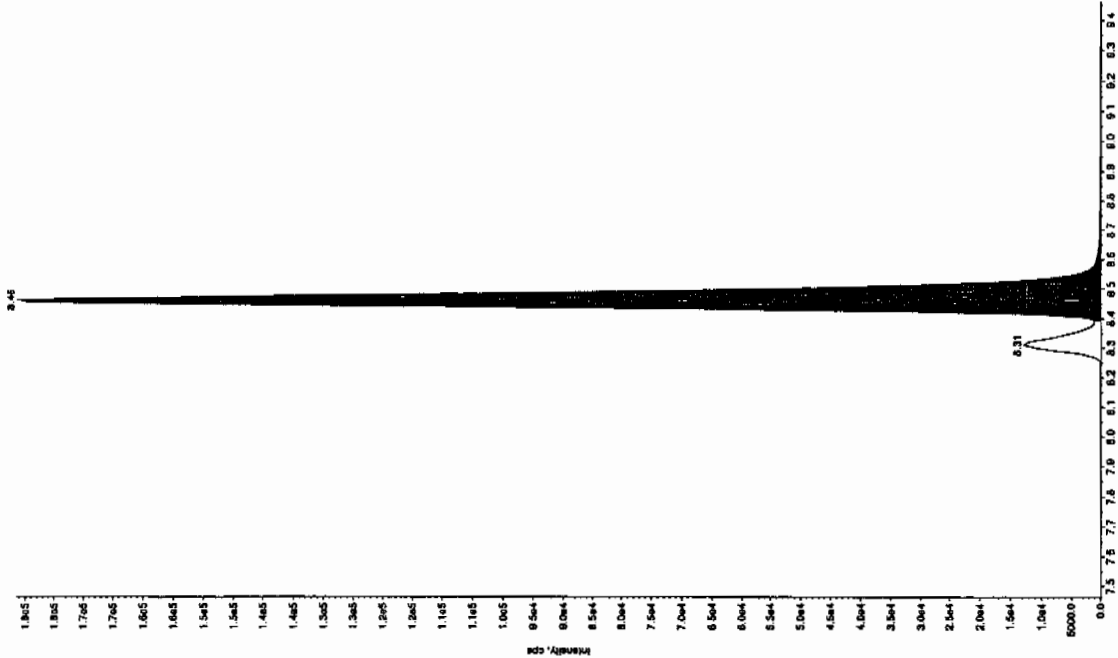


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

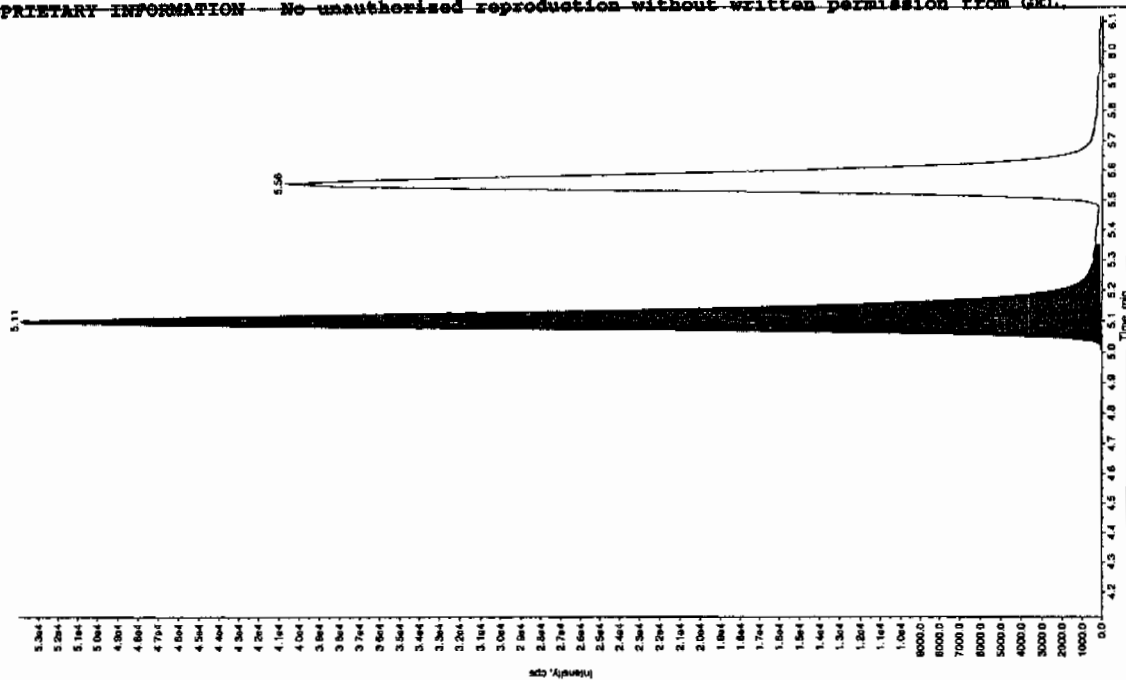


Sample Name: "WX100226-27CR" Sample ID: "JLBR" File: "EXS02260013.w" Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu" Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 45.1 ng/mL  
 Acq. Date: 2/25/2010  
 Acq. Time: 6:02:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 n. Peak Height: 1450.00 cps  
 n. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Area: 5.66e+005 counts  
 Height: 151473.355 cps  
 Start Time: 8.39 min  
 End Time: 8.79 min



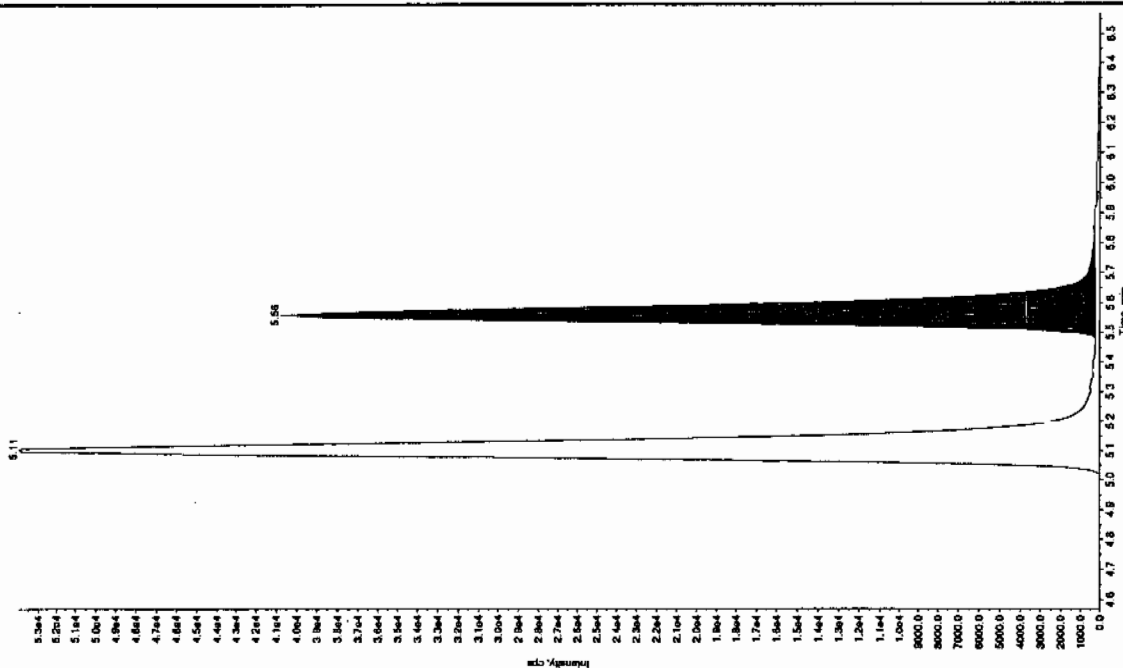
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 104. ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 5:02:29 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 n. Peak Height: 450.00 cps  
 n. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.11 min  
 Area: 2.28e+005 counts  
 Height: 53935.883 cps  
 Start Time: 5.01 min  
 End Time: 5.35 min



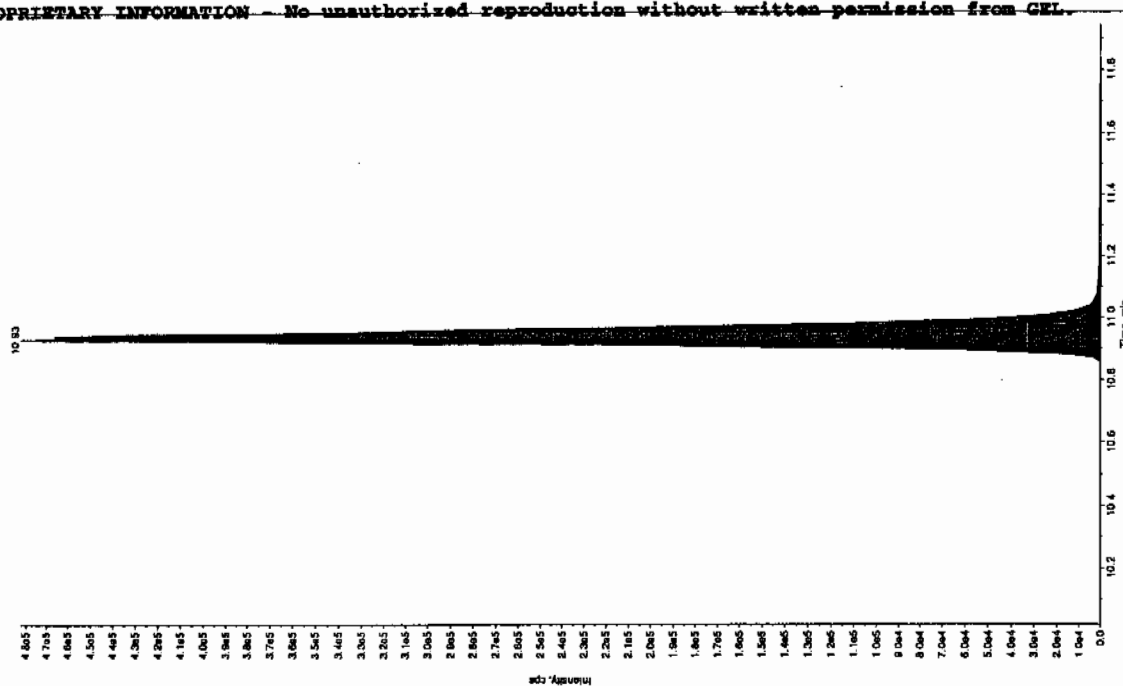
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100226-27C91" Sample ID: "111ER" File: "EXS02260013.wht"  
 Peak Name: "24-Diamine-6-nitrodiene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 103. ng/mL  
 Calculated Conc: 2/26/2010  
 Acq. Date: 6:02:29 PM  
 Acq. Time: 6:02:29 PM  
 Modified: No  
 QC Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.56 min  
 Area: 1.68e+005 counts  
 Height: 40613.808 cps  
 Start Time: 5.48 min  
 End Time: 5.80 min



Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Concentration: 103. ng/mL  
 Calculated Conc: 2/26/2010  
 Acq. Date: 6:02:29 PM  
 Acq. Time: 6:02:29 PM  
 Modified: No  
 QC Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 800.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 30.0 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.76e+006 counts  
 Height: 481600.250 cps  
 Start Time: 10.6 min  
 End Time: 11.2 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260024.wiff

Analysis Date: 26-FEB-10 20:55

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	536	107	
2,6-Diamino-4-nitrotoluene	500	541	108	
3,4-Dinitrotoluene	250	219	88	
3,5-Dinitroaniline	500	464	93	
TATB	500	493	99	
tris(o-cresyl) phosphate	500	498	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

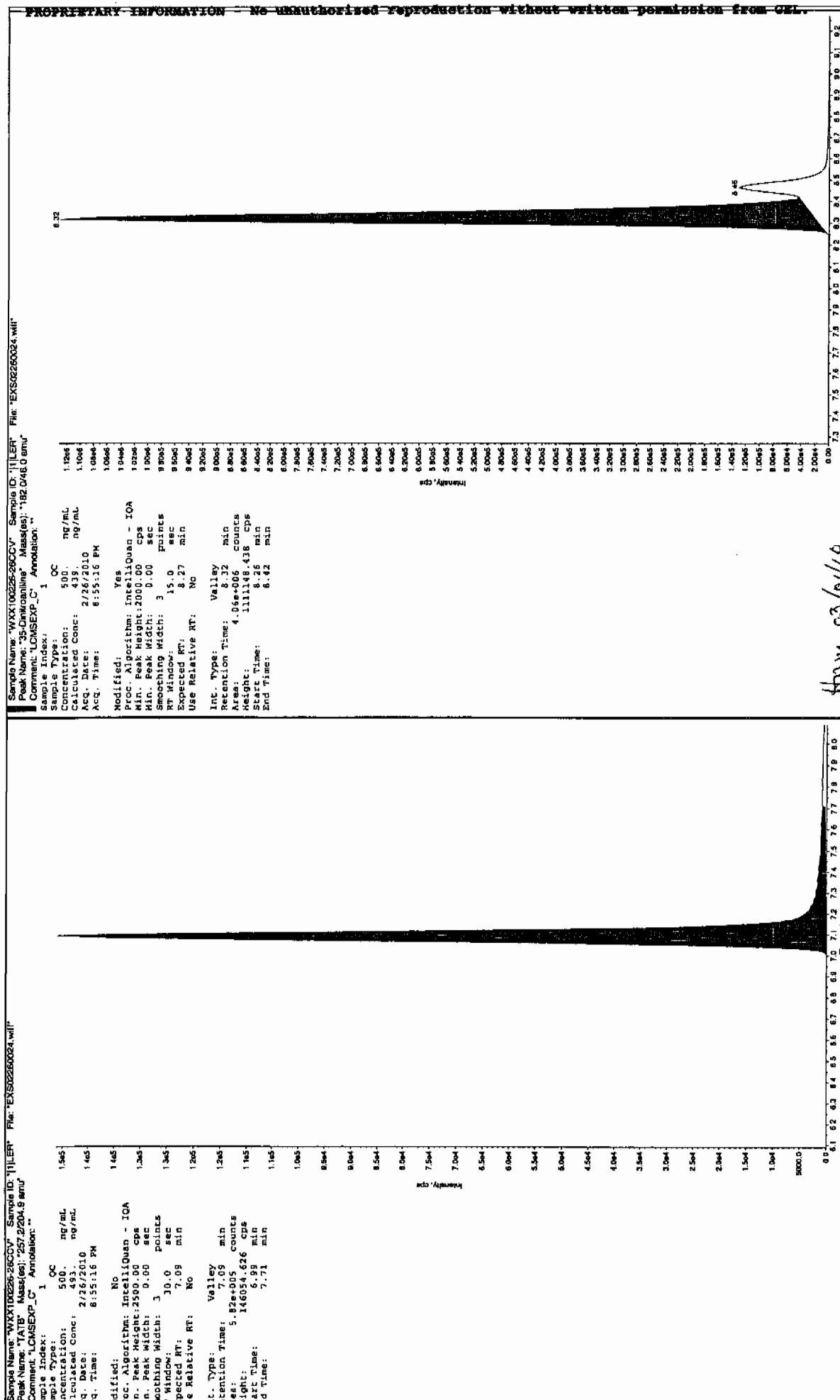
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

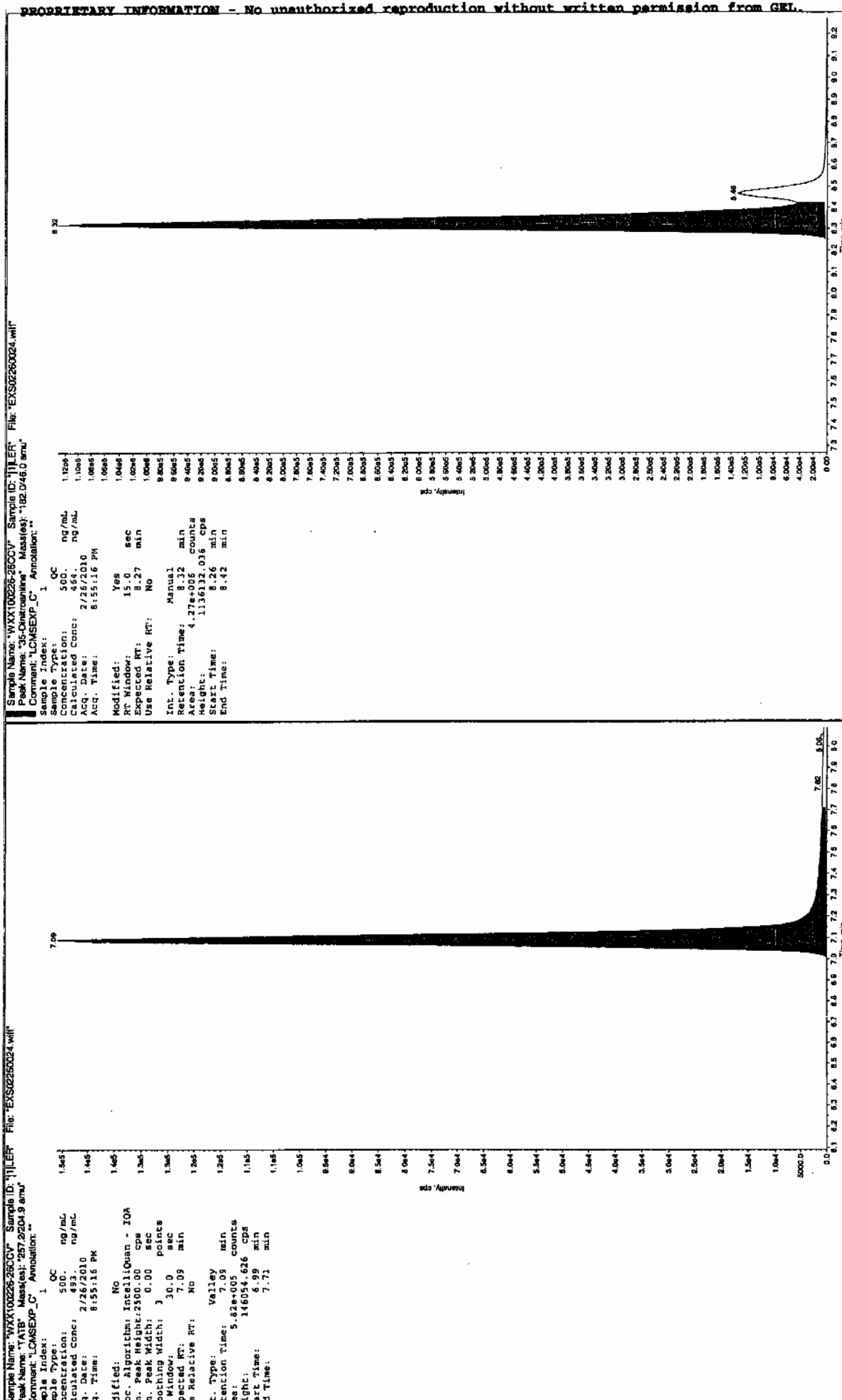
Before Jan 3/1/10



4/11/10 03/01/10

IEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

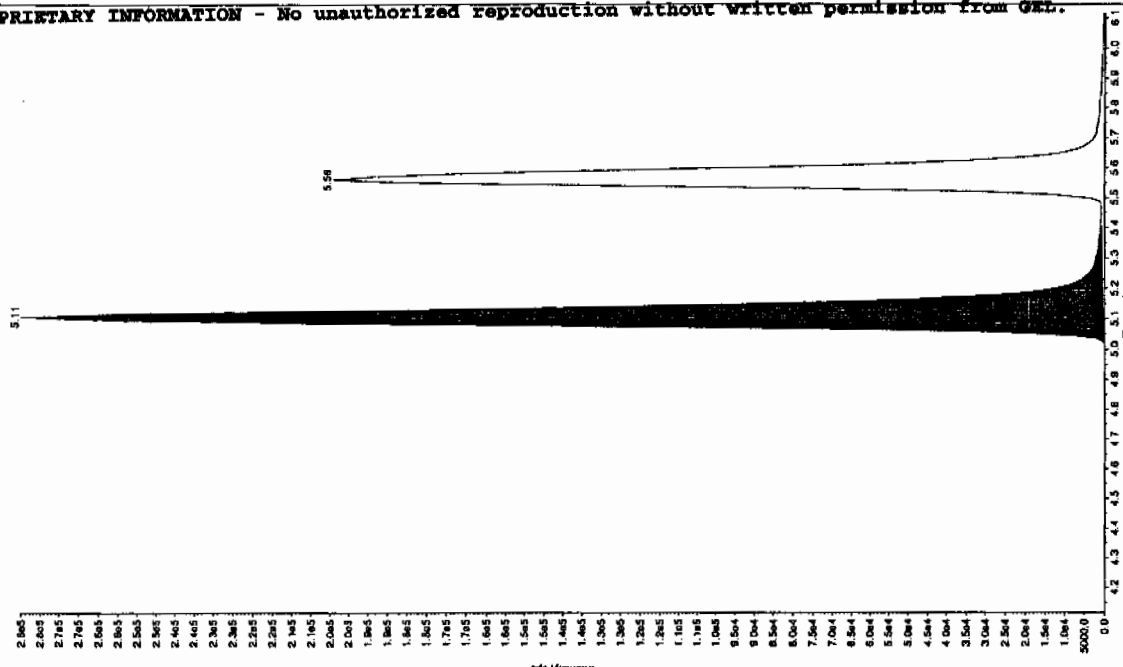
after 3/1/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

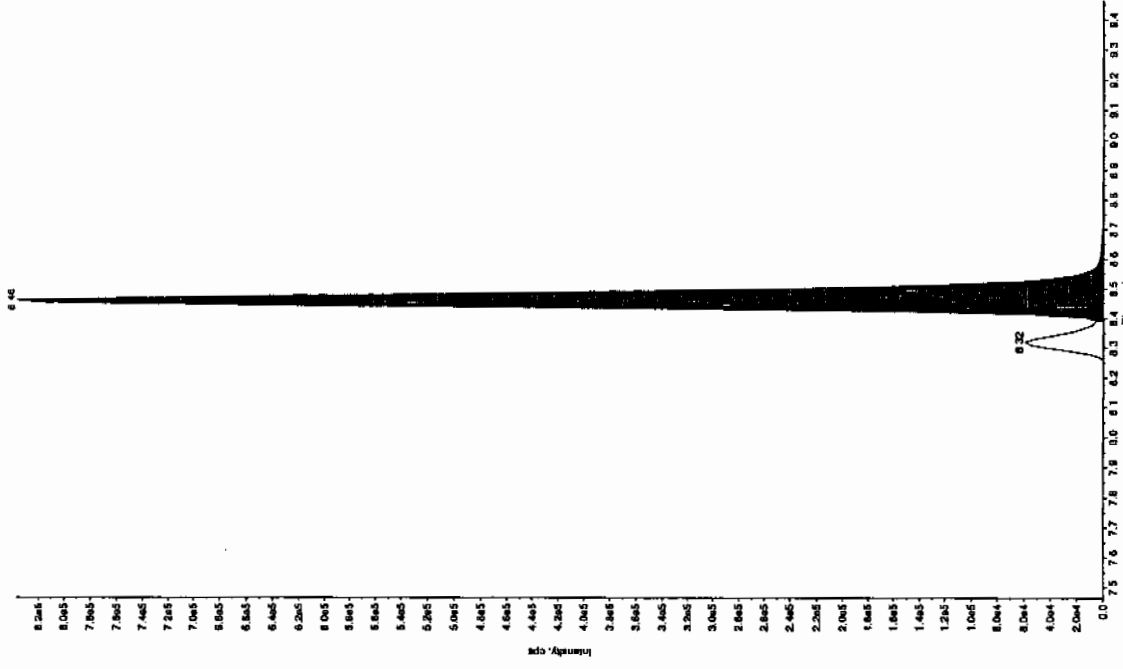
Sample Name: "WXY100226-260V" Sample ID: "111ER" File: "EX502260024.wif"  
 Peak Name: "26-Diamino-4-nitrobenzene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 541. ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 8:55:16 PM  
 Modified: No  
 Proc. Algorithm: IntallQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.11 min  
 Area: 1.19e+006 counts  
 Height: 280100.037 cps  
 Start Time: 5.01 min  
 End Time: 5.41 min



Sample Name: "WXY100226-260V" Sample ID: "111ER" File: "EX502260024.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: OC  
 Concentration: 250. ng/mL  
 Calculated Conc: 219. ng/mL  
 Acq. Date: 2/25/2010  
 Acq. Time: 8:55:16 PM  
 Modified: No  
 Proc. Algorithm: IntallQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Area: 3.04e+006 counts  
 Height: 837212.036 cps  
 Start Time: 8.39 min  
 End Time: 8.62 min

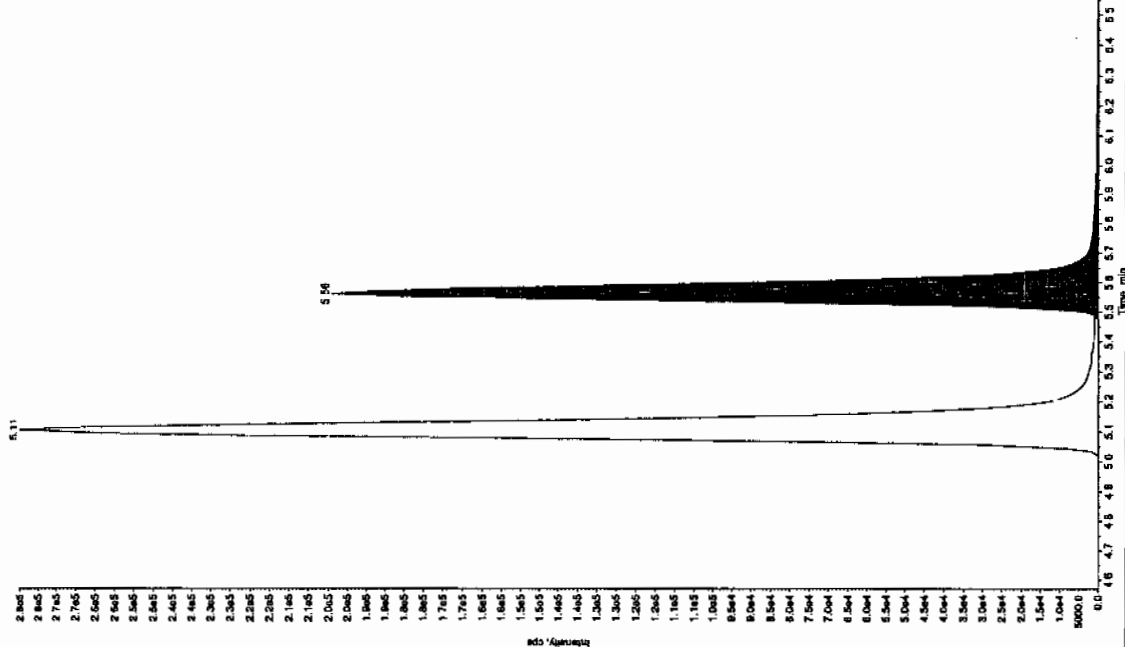


Sample Name: "WXX100225-28CCV" Sample ID: "11ER" File: "EX502250024.will"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 2/26/2010  
 Acq. Date: 8:55:16 PM  
 Acq. Time: 8:55:16 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: 5.57 min  
 Use Relative RT: No

RT Type: Valley  
 Retention Time: 5.56 min  
 Area: 8.57e+005 counts  
 Height: 199263.412 cps  
 Start Time: 5.48 min  
 End Time: 6.09 min

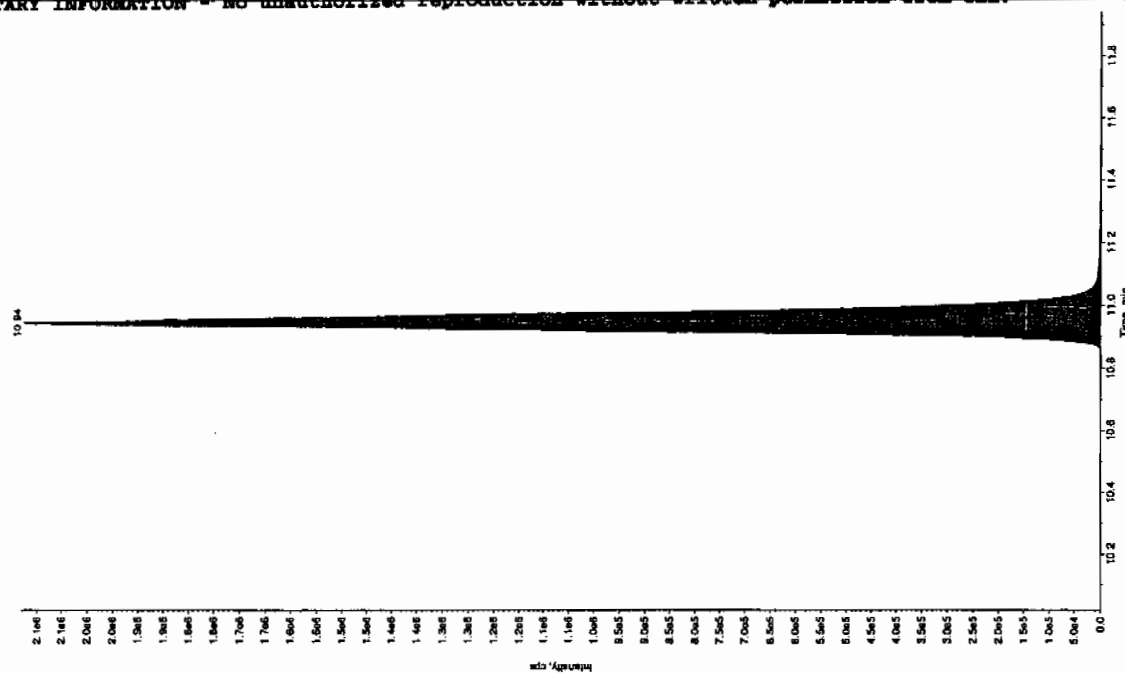


Sample Name: "WXX100225-28CCV" Sample ID: "11ER" File: "EX502250024.will"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.161.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 2/26/2010  
 Acq. Date: 8:55:16 PM  
 Acq. Time: 8:55:16 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No

RT Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.70e+005 counts  
 Height: 213050.791 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260026.wiff

Analysis Date: 26-FEB-10 21:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	43.5	87	
3,5-Dinitroaniline	100	91.3	91	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	104	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%

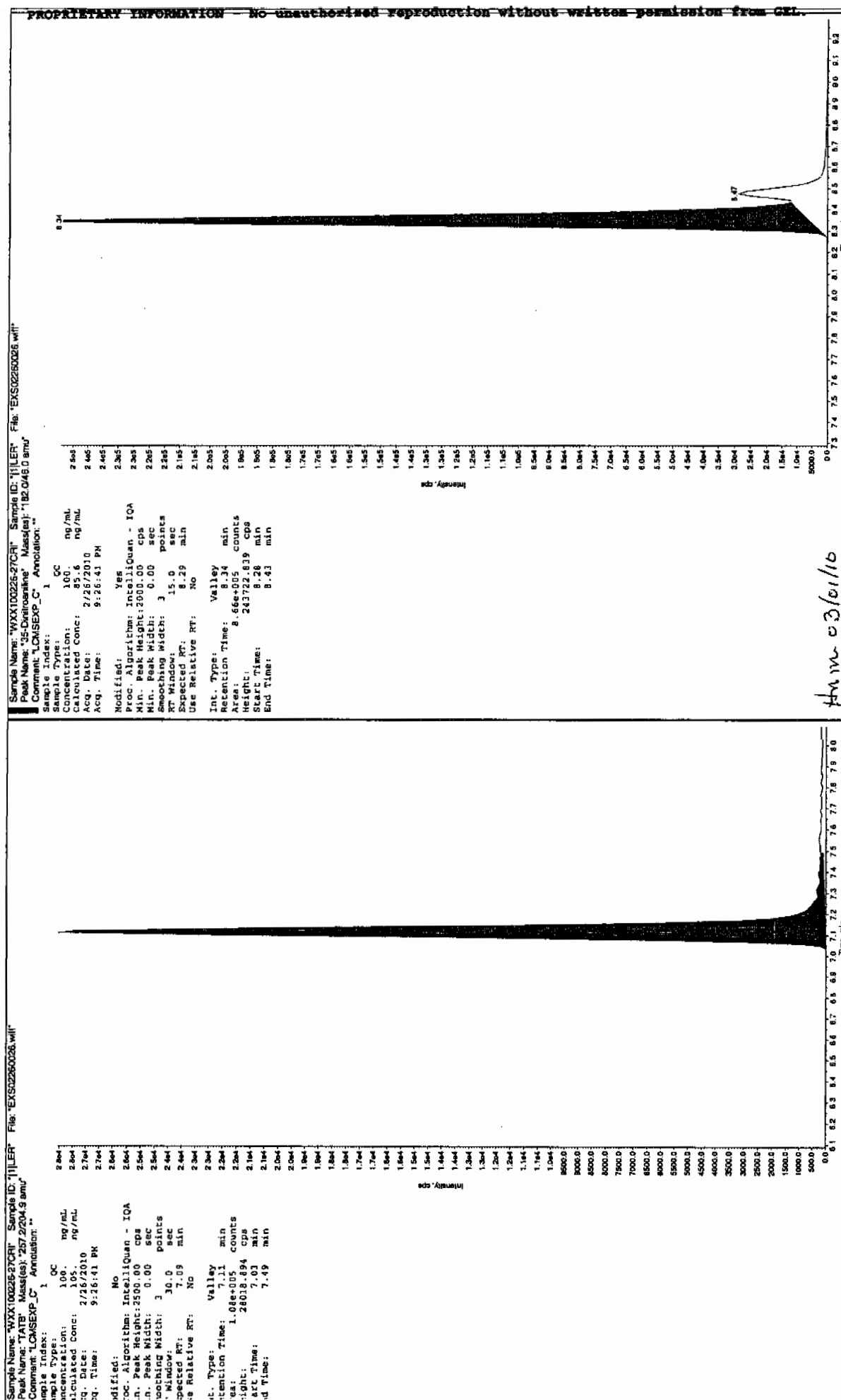
Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



Before Scan 3/1/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

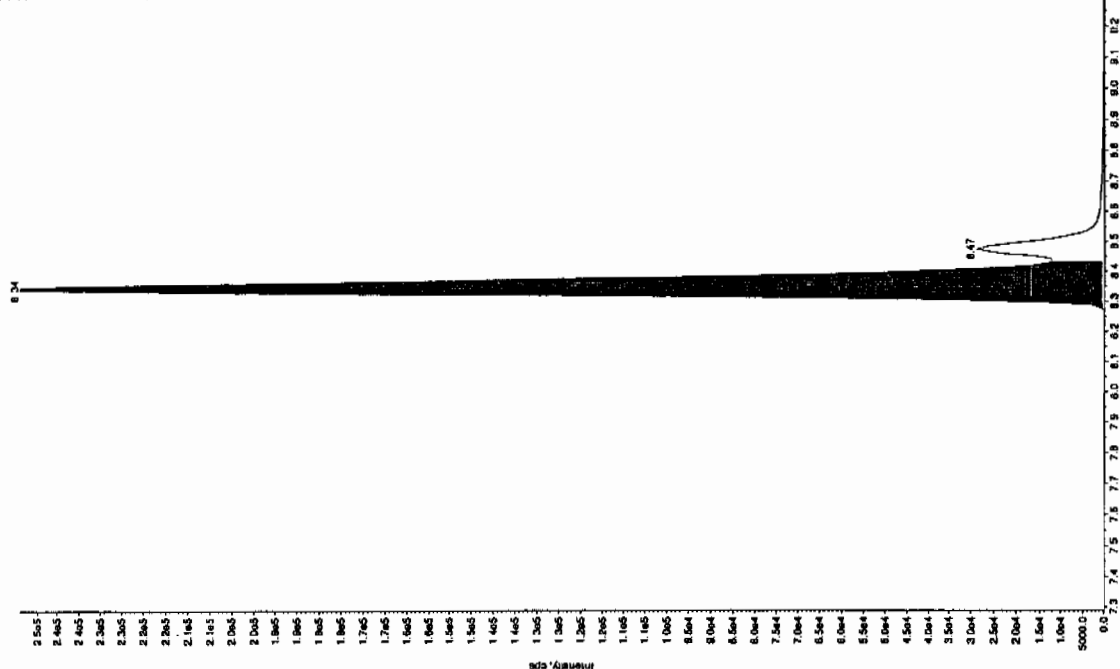
Am 03/01/10

after Jan 31/10

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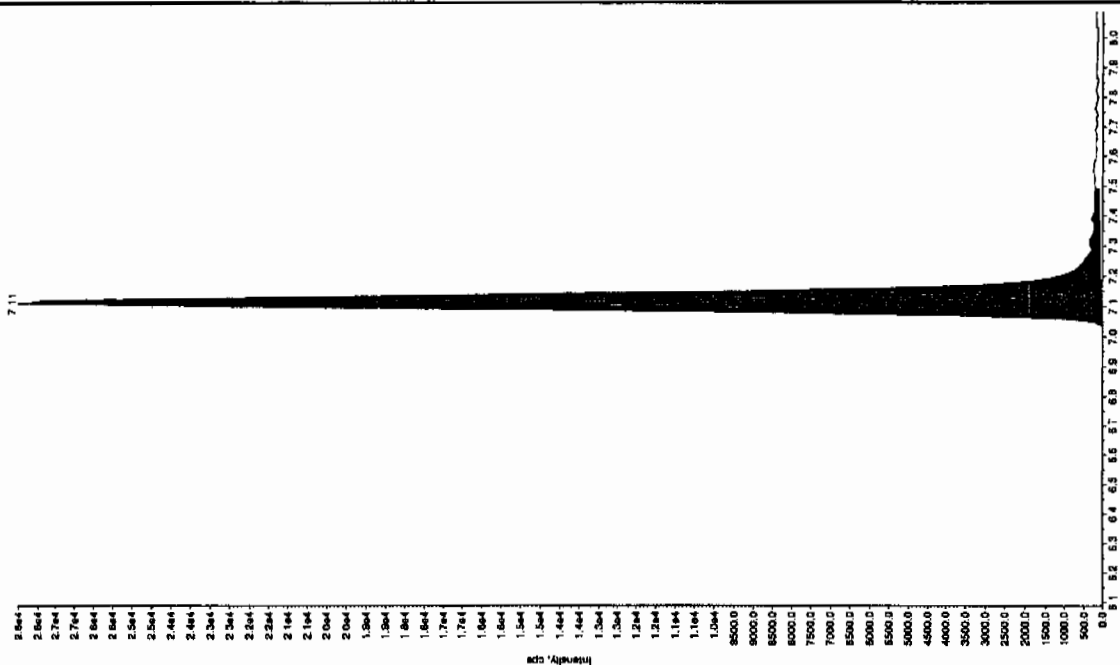
Sample Name: "WXX100226-2709" Sample ID: "11ER" File: "EXS02260026.wif"  
 Peak Name: "11ER" Method: "8321A-Modified LCMSMS#4"  
 Comment: "LCMSERP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 91.3 ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 9:26:41 PM  
 Modified: Yes  
 RT Window: 15.0 sec  
 Expected RT: 8.29 min  
 Use Relative RT: No  
 Int. Type: Manual  
 Retention Time: 8.35 min  
 Peak Height: 2165005 counts  
 Peak Width: 25529.664 cps  
 Start Time: 8.28 min  
 End Time: 8.43 min



Sample Name: "WXX100226-2709" Sample ID: "11ER" File: "EXS02260026.wif"  
 Peak Name: "11ER" Method: "8321A-Modified LCMSMS#4"  
 Comment: "LCMSERP\_C" Annotation: "

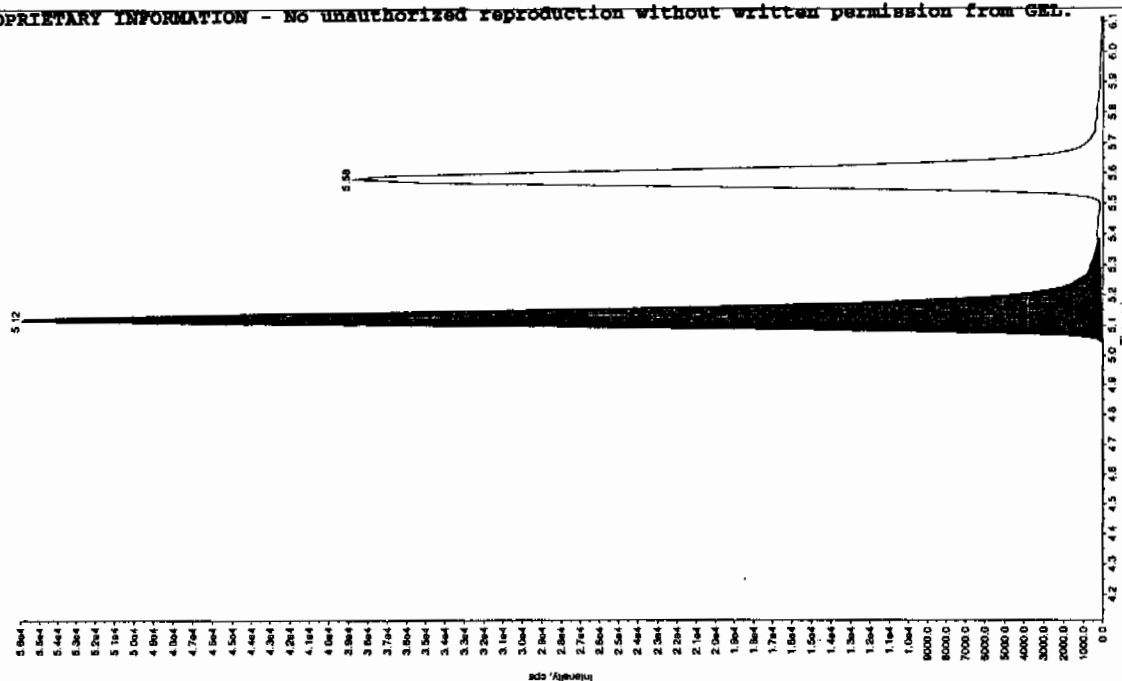
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 105. ng/mL  
 Acq. Date: 2/26/2010  
 Acq. Time: 9:26:41 PM  
 Modified: No  
 Int. Type: Valley  
 Retention Time: 7.11 min  
 Peak Height: 2500.00 cps  
 Peak Width: 0.00 sec  
 Start Time: 7.03 min  
 End Time: 7.19 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

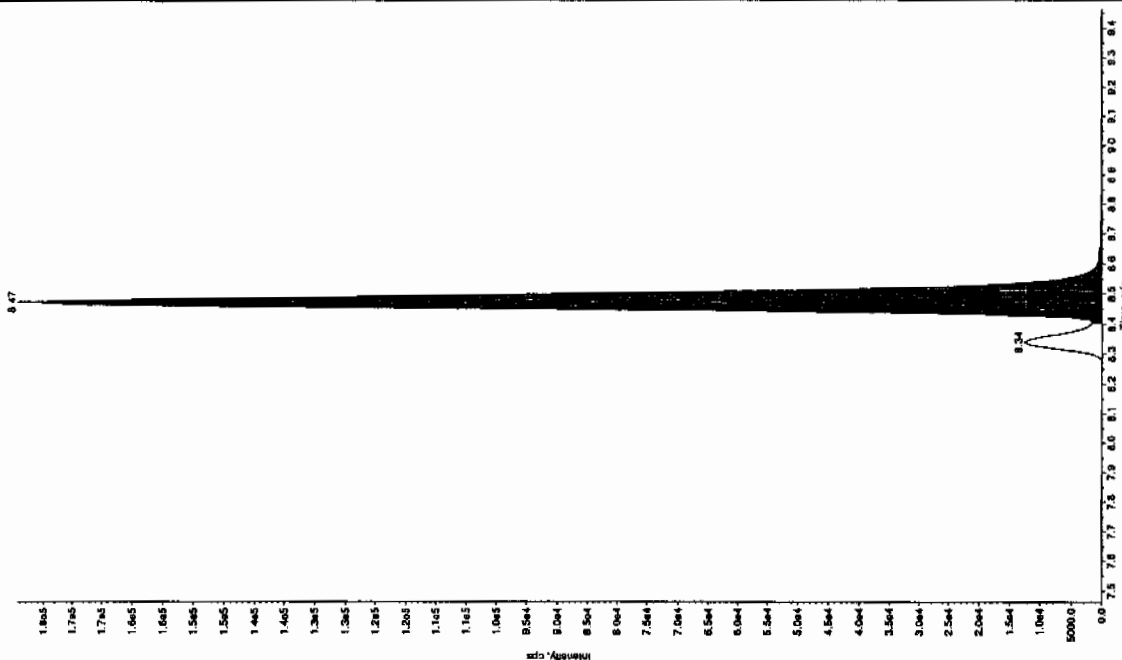
Sample Name: "WXX100225-27C8" Sample ID: "J1LER" File: "EX02250028.will"  
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "156.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100. ng/mL  
 Calculated Conc: 2/26/2010 ng/mL  
 Acq. Date: 9/26/11 PM  
 Acq. Time: 9:26:41 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Area: 2.38e+003 counts  
 Height: 35011.360 cps  
 Start Time: 1.00 min  
 End Time: 5.30 min



Sample Name: "WXX100225-27C8" Sample ID: "J1LER" File: "EX02250028.will"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

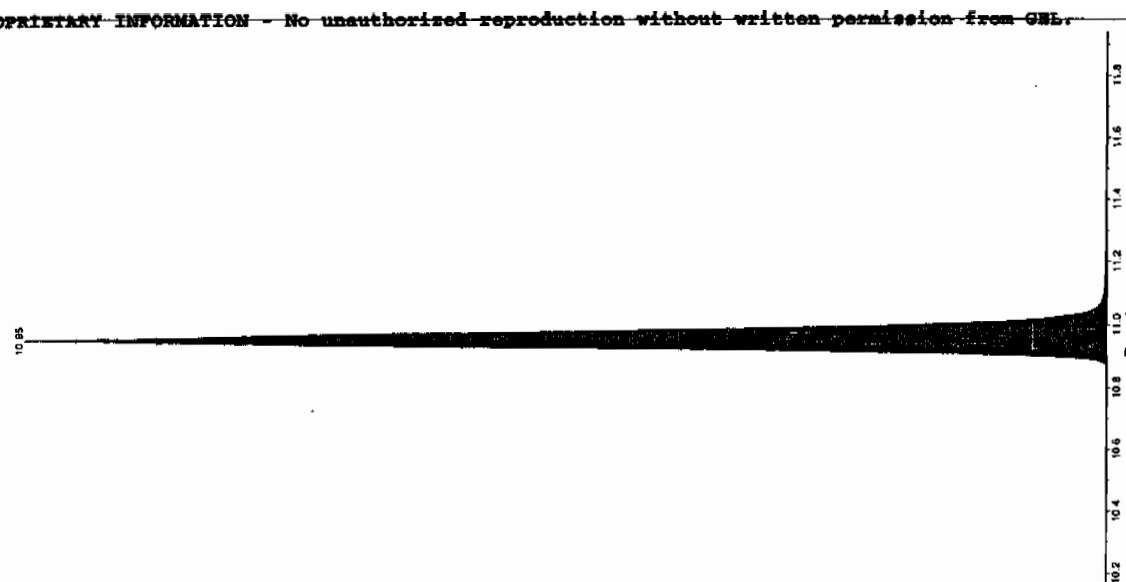
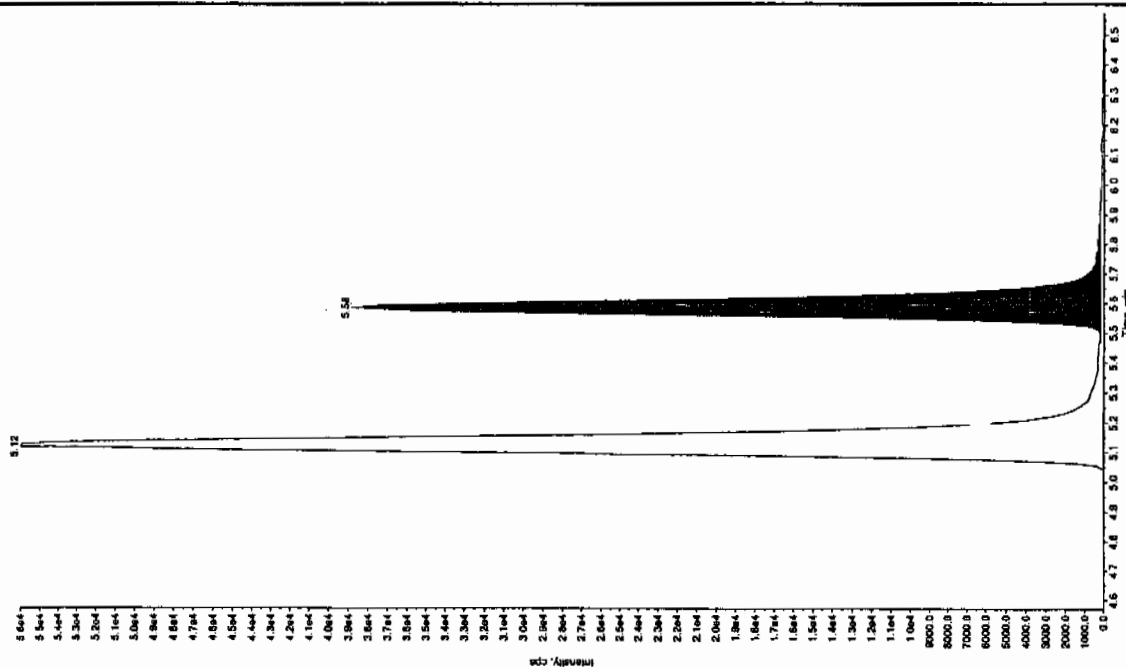
Sample Index: 1  
 Sample Type: OC  
 Concentration: 43.5 ng/mL  
 Calculated Conc: 2/26/2010 ng/mL  
 Acq. Date: 9/26/11 PM  
 Acq. Time: 9:26:41 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Area: 6.30e+005 counts  
 Height: 179327.957 cps  
 Start Time: 8.40 min  
 End Time: 8.81 min



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX10226-27091" Sample ID: "11111" File: "EXS02260026.wif"  
Peak Name: "2A-Darmino-Enitokawa" Mass(es): "166.046.0 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 100 ng/mL  
Calculated Conc: 104 ng/mL  
Acq. Date: 2/26/2010  
Acq. Time: 9:26:41 PM  
Modified: No  
Proc. Algorithm: IntelliQuan - IOA  
Min. Peak Height: 8000.00 cps  
Min. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
ST Window: 30.0 sec  
Expected RT: 10.9 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 10.9 min  
Area: 1.77e+086 counts  
Height: 501760.681 cps  
Start Time: 10.9 min  
End Time: 11.3 min



IEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260037.wiff

Analysis Date: 27-FEB-10 00:19

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	482	96	
2,6-Diamino-4-nitrotoluene	500	477	96	
3,4-Dinitrotoluene	250	222	89	
3,5-Dinitroaniline	500	469	94	
TATB	500	487	97	
tris(o-cresyl) phosphate	500	491	98	

Recovery Limits:

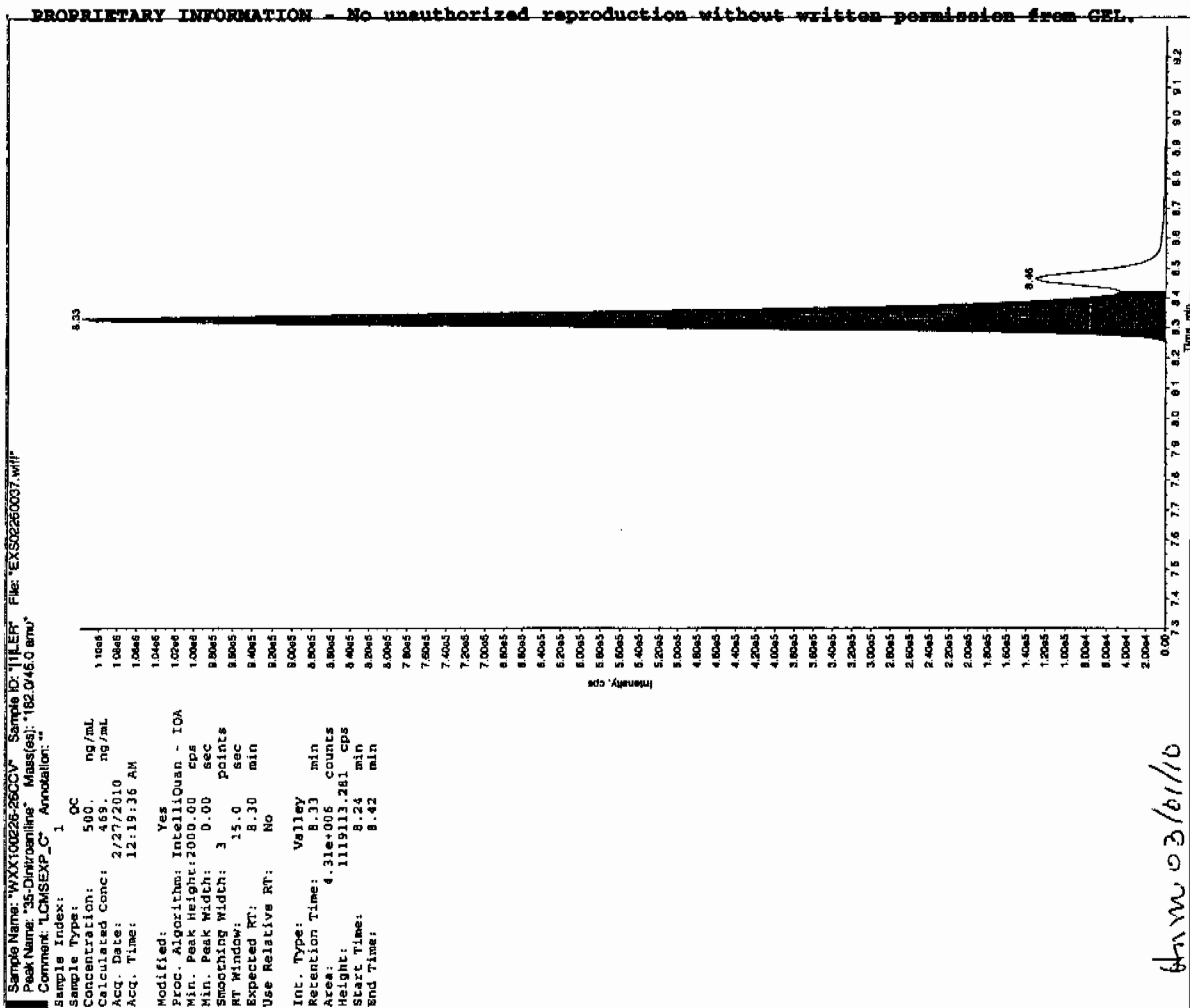
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

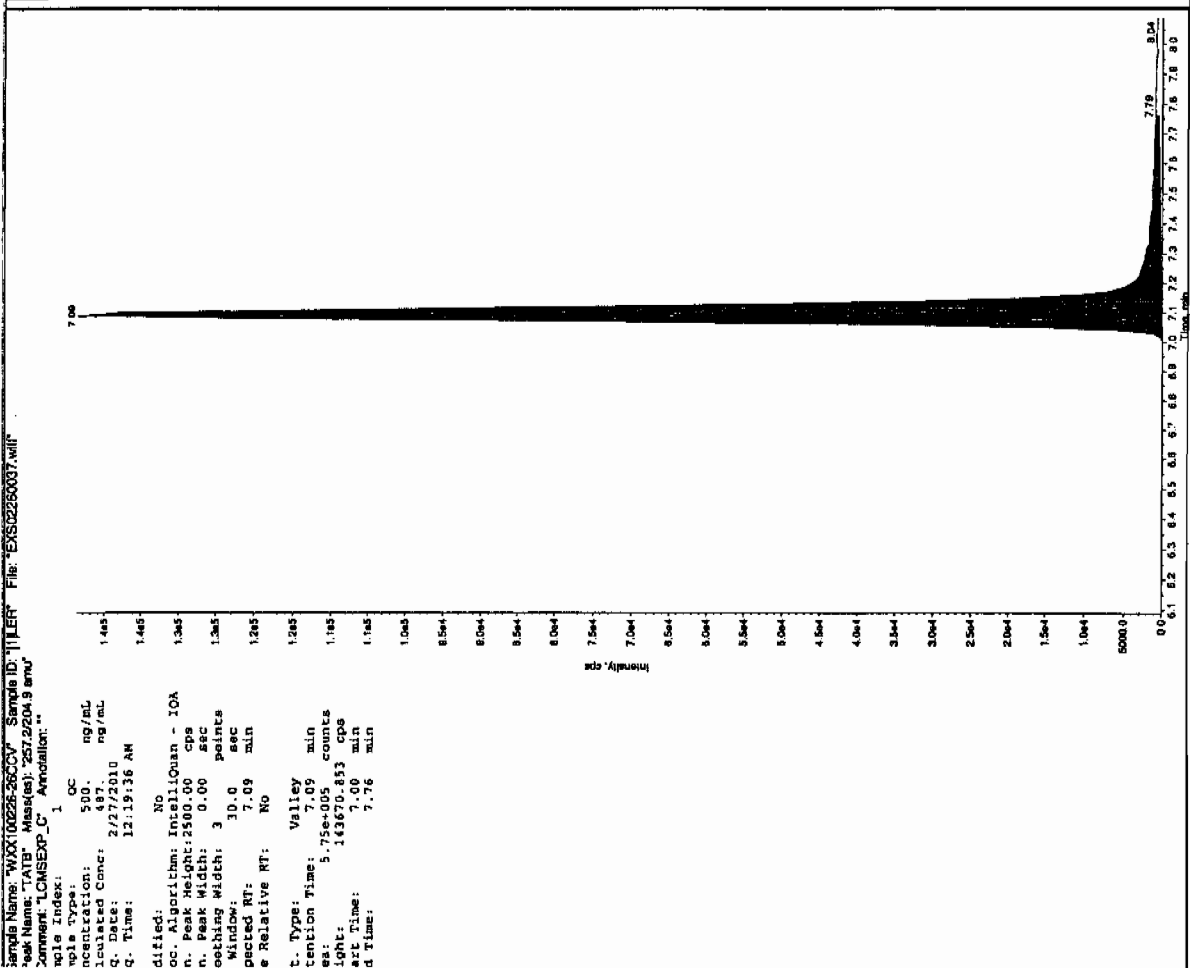
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Run 3/1/10



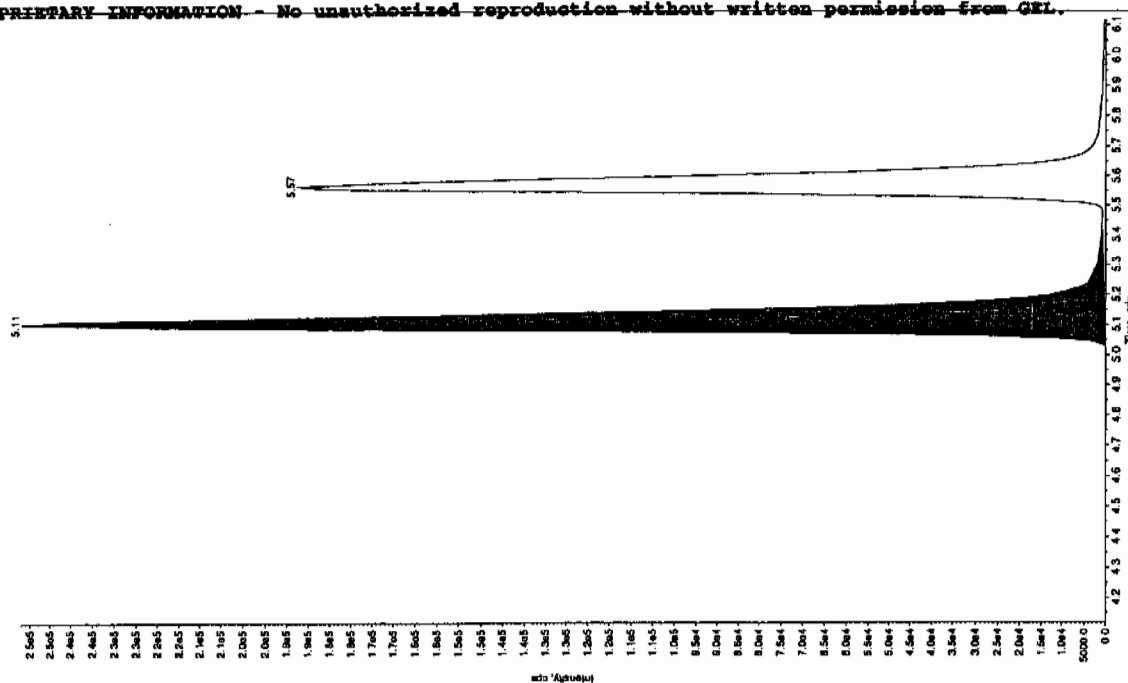
Run 03/01/10



REL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

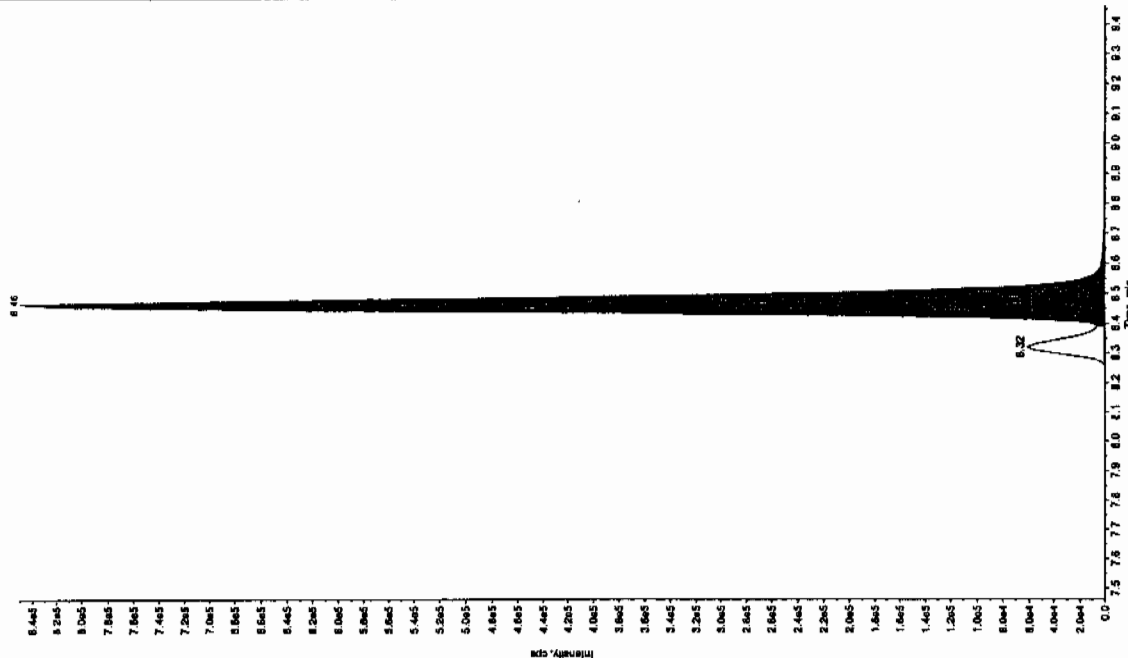
Sample Name: "WXX100226-260C" Sample ID: "JILR" File: "EXS02260037.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 1  
 Concentration: 500. ng/mL  
 Calculated Conc: 477. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:19:36 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.11 min  
 Height: 1.05e+006 counts  
 Area: 251884.293 cps  
 Start Time: 5.01 min  
 End Time: 5.42 min



Sample Name: "WXX100226-260C" Sample ID: "JILR" File: "EXS02260037.wif"  
 Peak Name: "34-Diamino-4-nitrofluorene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

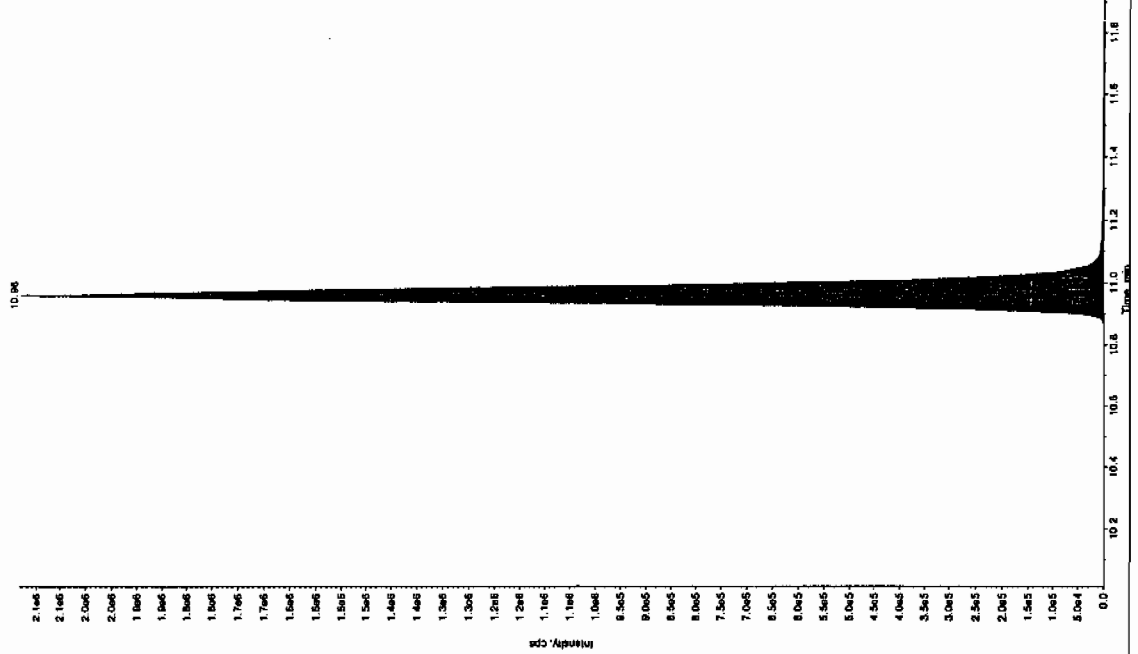
Sample Index: 1  
 Sample Type: 1  
 Concentration: 250. ng/mL  
 Calculated Conc: 222. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:19:36 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Height: 3.08e+006 counts  
 Area: 850868.896 cps  
 Start Time: 8.39 min  
 End Time: 8.79 min



HEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

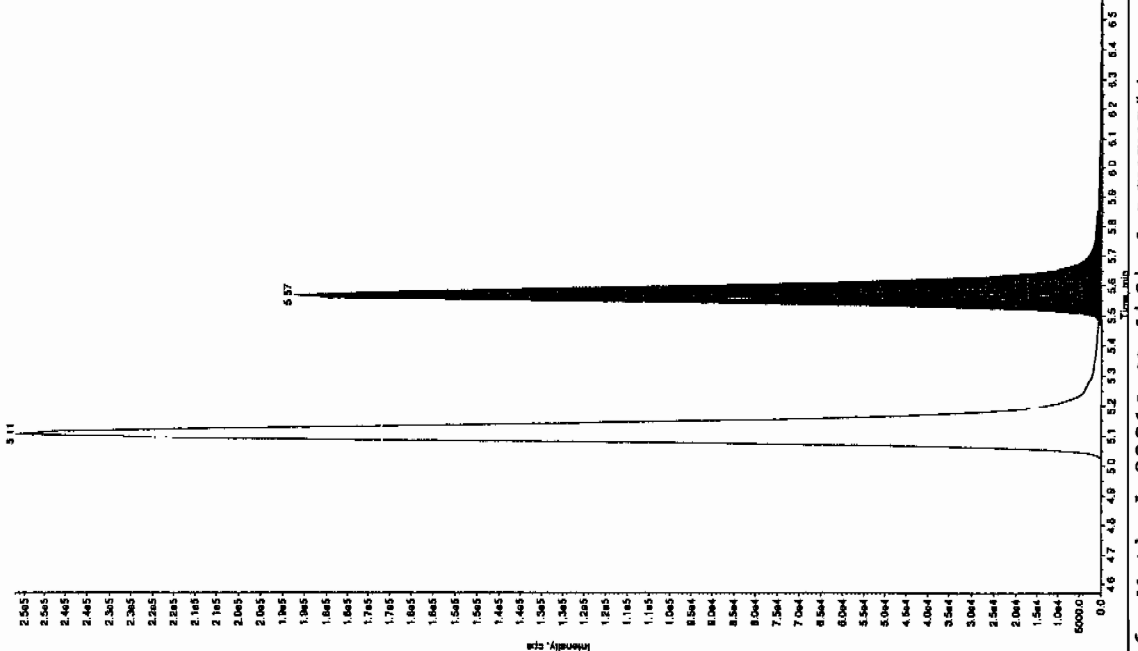
Sample Name: "WXX10025-260CV" Sample ID: "JLER" File: "EXS02260037.wif"  
 Peak Name: "tri(n-butyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 491. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:19:36 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 7.50e+005 counts  
 Height: 233710.449 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "WXX10025-260CV" Sample ID: "JLER" File: "EXS02260037.wif"  
 Peak Name: "tri(n-butyl) phosphate" Mass(es): "188.043.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 482. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:19:36 AM  
 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: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.57 min  
 Area: 7.69e+005 counts  
 Height: 187302.551 cps  
 Start Time: 5.47 min  
 End Time: 6.07 min





7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260039.wiff

Analysis Date: 27-FEB-10 00:51

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	102	102	
3,4-Dinitrotoluene	50	43.9	88	
3,5-Dinitroaniline	100	91.6	92	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	102	102	

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%

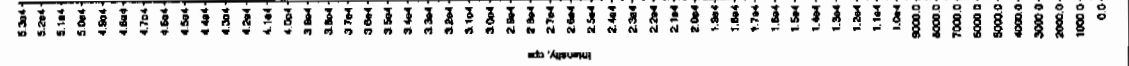
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



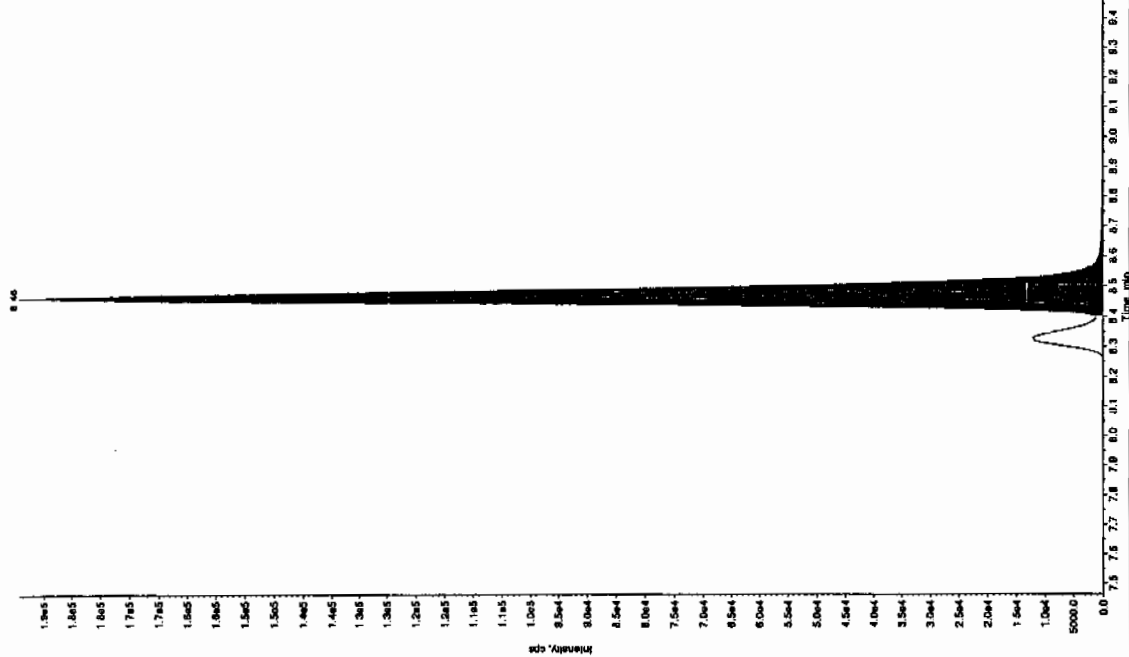
Sample Name: "WXX10026-2709" Sample ID: "111ER" File: "EX50260039.wit"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 102. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:51:00 AM  
 Modified: No  
 Proc. Algorithm: Integrate - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Area: 2.31e+005 counts  
 Height: 33184.658 cps  
 Start Time: 4.97 min  
 End Time: 5.42 min



Sample Name: "WXX10026-2709" Sample ID: "111ER" File: "EX50260039.wit"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

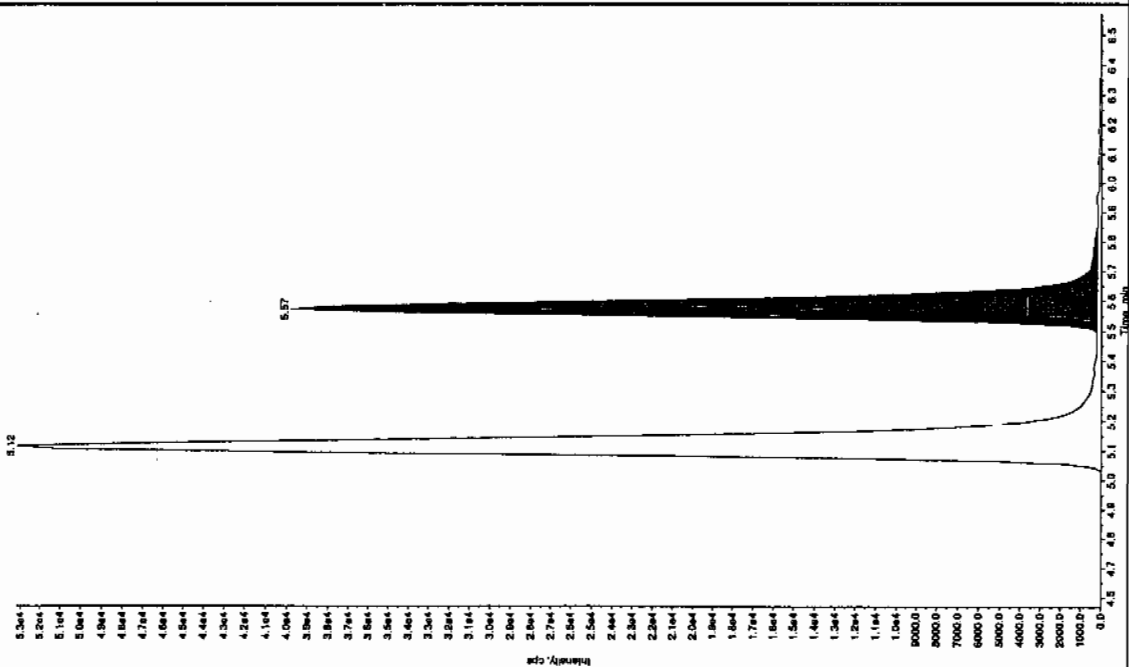
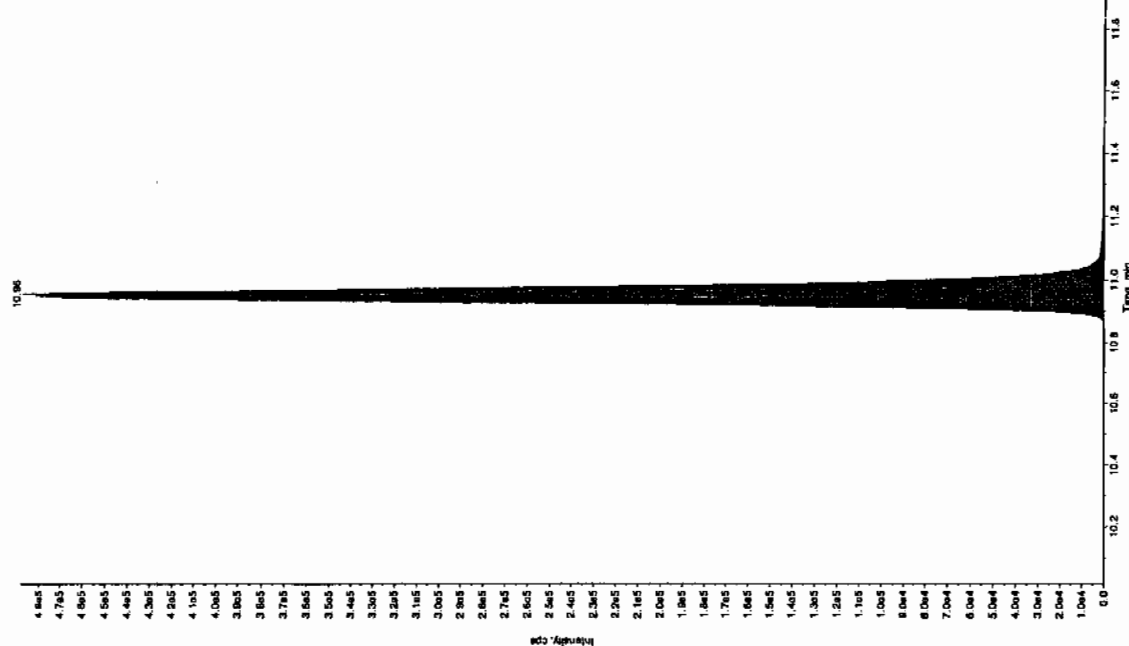
Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 43.9 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:51:00 AM  
 Modified: No  
 Proc. Algorithm: Integrate - IOA  
 Min. Peak Height: 146.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Area: 6.35e+005 counts  
 Height: 189587.891 cps  
 Start Time: 8.40 min  
 End Time: 8.76 min



DEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX10226-27CR" Sample ID: "111ER" File: "EXS0226038.wif"  
 Peak Name: "24-Diamino-6-nitrochlorine" Mass(es): "156.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:51:00 AM  
 Modified: NO  
 Proc. Algorithm: IntellQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 10.9 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 1.75e+006 counts  
 Height: 488172.638 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 12:51:00 AM  
 Modified: NO  
 Proc. Algorithm: IntellQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 5.57 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 5.57 min  
 Area: 1.57e+005 counts  
 Height: 39630.726 cps  
 Start Time: 5.46 min  
 End Time: 5.67 min

HEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260050.wiff

Analysis Date: 27-FEB-10 03:43

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	556	111	
2,6-Diamino-4-nitrotoluene	500	574	115	
3,4-Dinitrotoluene	250	226	91	
3,5-Dinitroaniline	500	482	96	
TATB	500	521	104	
tris(o-cresyl) phosphate	500	513	103	

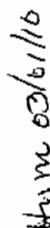
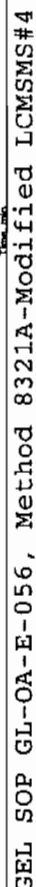
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

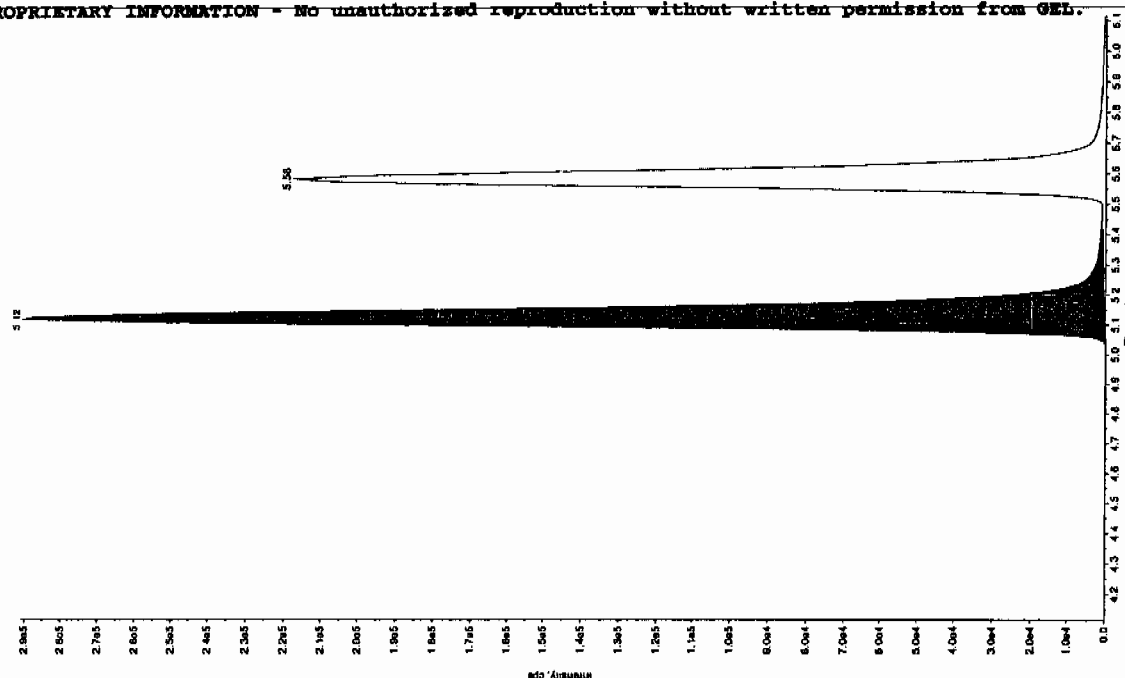
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



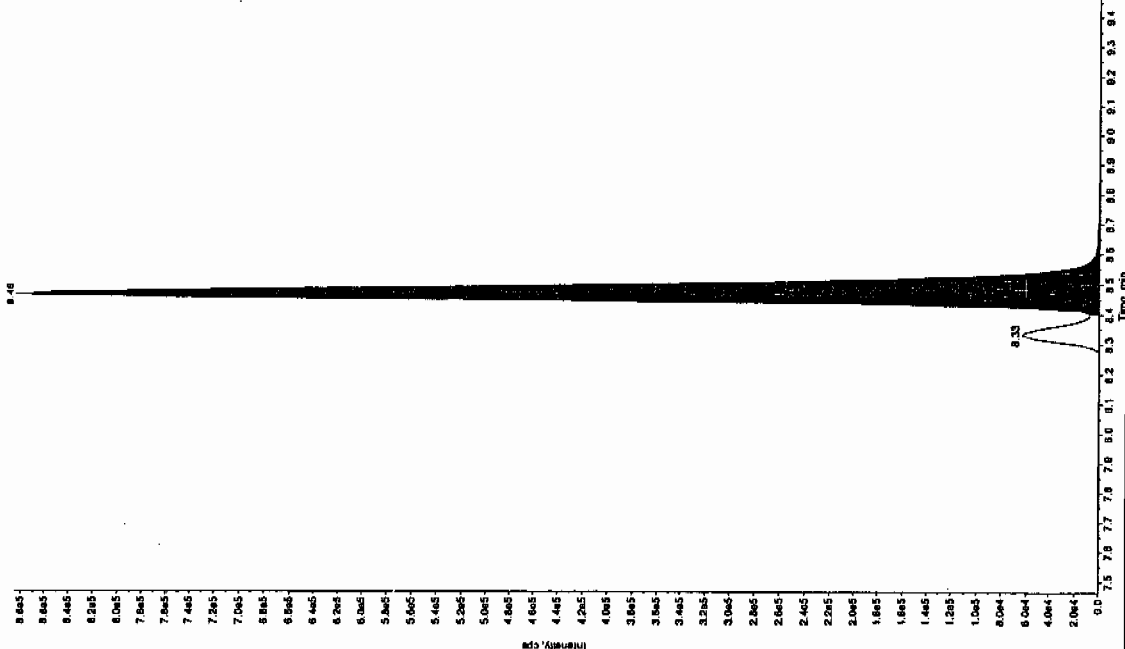
Sample Name: "WXX100226-280CV" Sample ID: "111ER" File: "EX02260050.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "156.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Concentration: 500 ng/mL  
 Calculated Conc: 574 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 3:43:44 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Area: 1.26e+006 counts  
 Height: 290750.040 cps  
 Start Time: 5.02 min  
 End Time: 5.43 min



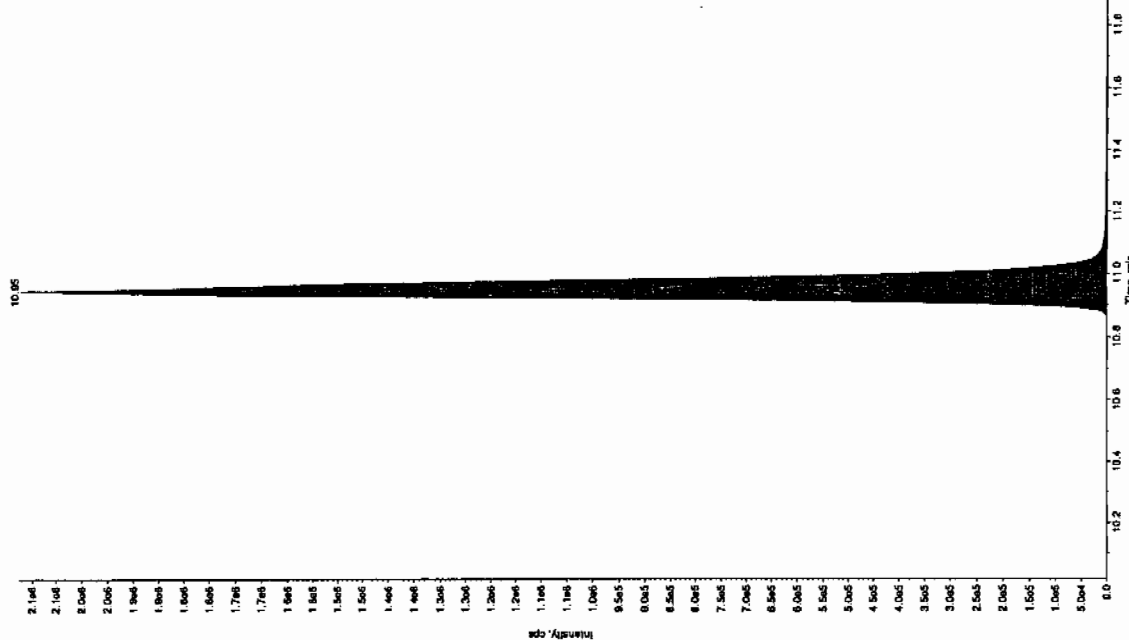
Sample Name: "WXX100226-280CV" Sample ID: "111ER" File: "EX02260050.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.115.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Concentration: 250 ng/mL  
 Calculated Conc: 216 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 3:43:44 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.45 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.45 min  
 Area: 3.13e+006 counts  
 Height: 884715.454 cps  
 Start Time: 8.40 min  
 End Time: 8.79 min



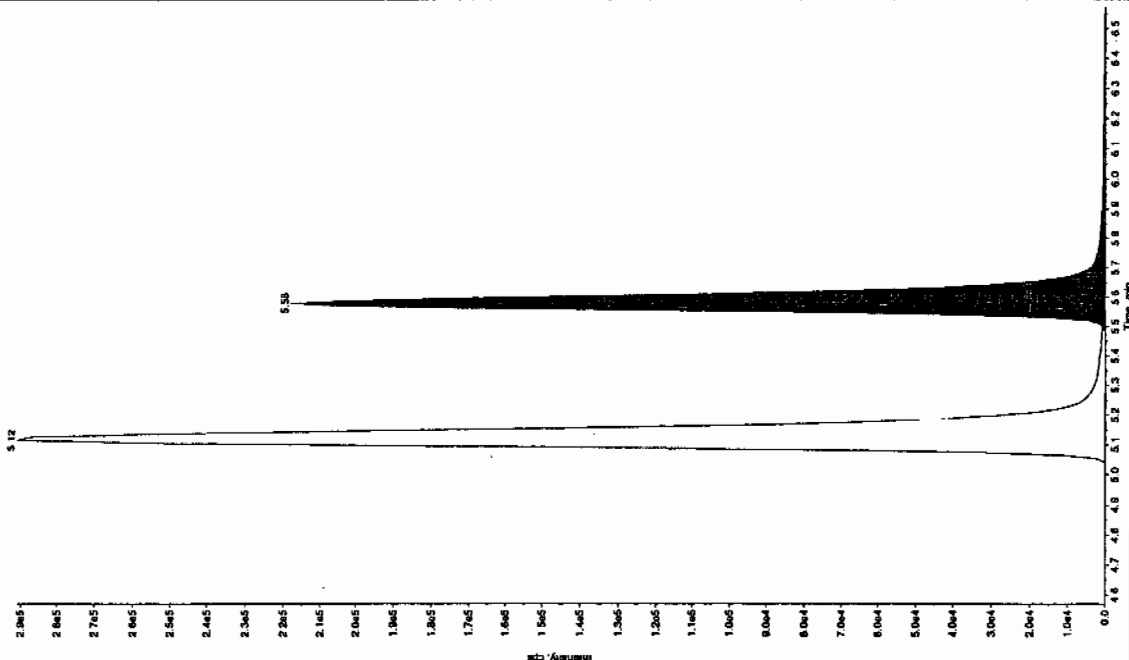
Sample Name: 'WXX100226-2603V' Sample ID: '111ER' File: 'EX022603030.will' Peak Name: '24-Diamino-6-nitrofluorene' Mass(es): '165.046.0 amu' Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
Sample Type: GC  
Concentration: 500. ng/mL  
Calculated Conc: 513. ng/mL  
Acq. Date: 2/27/2010  
Acq. Time: 3:43:44 AM  
Modified: No  
Proc. Algorithm: InCelliQuan - IOA  
Min. Peak Height: 8000.00 cps  
Min. Peak Width: 3.00 points  
Smoothing Width: 3.00 points  
Window: 30.0 sec  
Expected RT: 10.9 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 10.9 min  
Area: 7.90e+006 counts  
Height: 2125021.484 cps  
Start Time: 10.6 min  
End Time: 11.2 min



Sample Name: 'WXX100226-2603V' Sample ID: '111ER' File: 'EX022603030.will' Peak Name: '24-Diamino-6-nitrofluorene' Mass(es): '165.046.0 amu' Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
Sample Type: GC  
Concentration: 500. ng/mL  
Calculated Conc: 556. ng/mL  
Acq. Date: 2/27/2010  
Acq. Time: 3:43:44 AM  
Modified: No  
Proc. Algorithm: InCelliQuan - IOA  
Min. Peak Height: 350.00 cps  
Min. Peak Width: 3.00 points  
Smoothing Width: 3.00 points  
Window: 30.0 sec  
Expected RT: 5.59 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 5.59 min  
Area: 6.90e+005 counts  
Height: 217654.068 cps  
Start Time: 5.49 min  
End Time: 6.08 min



DEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260052.wiff

Analysis Date: 27-FEB-10 04:15

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	119	119	
2,6-Diamino-4-nitrotoluene	100	121	121	
3,4-Dinitrotoluene	50	46.3	93	
3,5-Dinitroaniline	100	92.4	92	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

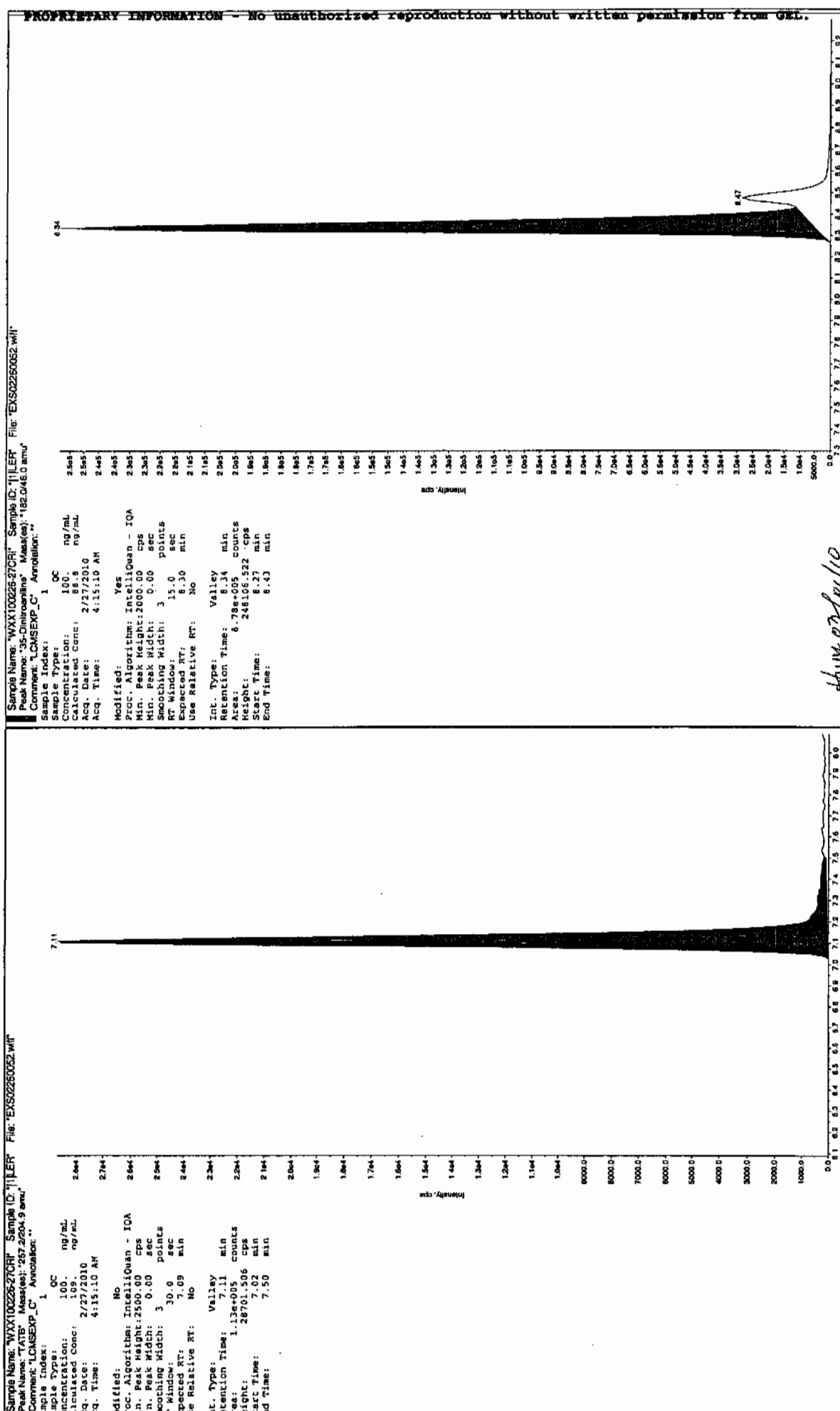
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10



4/11/07 8/1/10

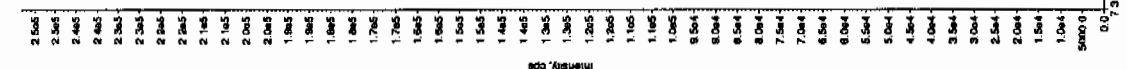
SEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 31/10

Sample Name: "WXX100226-27CR1" Sample ID: "J1LER" File: "EX502260052.will"

Peak Name: "35-Dinitroaniline" Mass(es): "182.0480 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

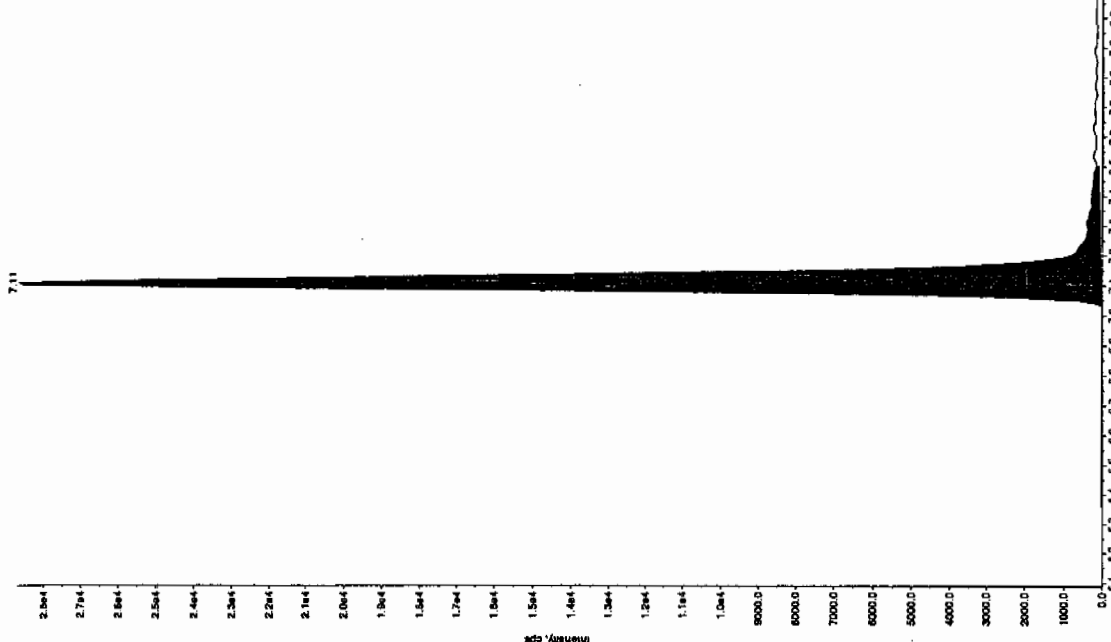
Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 92.4 ng/mL  
Acq. Date: 2/27/2010  
Acq. Time: 4:15:10 AM  
Modified: Yes  
RT Window: 15.0 sec  
Expected RT: 8.30 min  
Use Relative RT: No  
Int. Type: Manual  
Retention Time: 8.34 min  
Area: 9.31e+005 counts  
Height: 252758.637 cps  
Start Time: 8.27 min  
End Time: 8.43 min

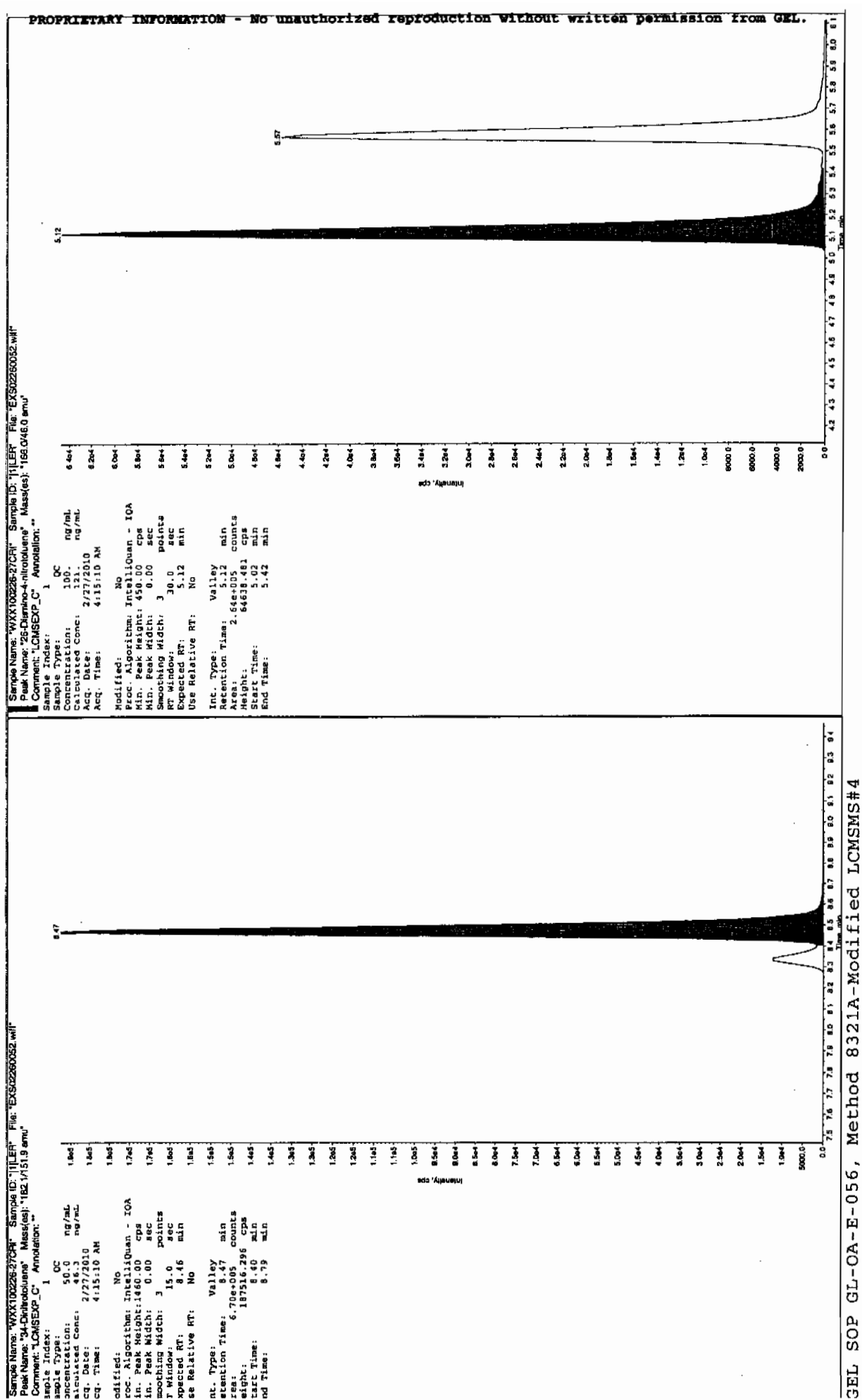


Sample Name: "WXX100226-27CR1" Sample ID: "J1LER" File: "EX502260052.will"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
Sample Type: QC  
Concentration: 100. ng/mL  
Calculated Conc: 2/27/2010  
Acq. Date: 4:15:10 AM  
Modified: No  
Proc. Algorithm: IntelliQuan - IQA  
n. Peak Height: 2500.00 cps  
n. Peak Width: 0.00 sec  
Smoothing Width: 3 points  
Window: 30.0 sec  
Expected RT: 7.09 min  
Use Relative RT: No  
Int. Type: Valley  
Retention Time: 7.11 min  
Area: 1.12e+005 counts  
Height: 28701.506 cps  
Start Time: 7.02 min  
End Time: 7.20 min

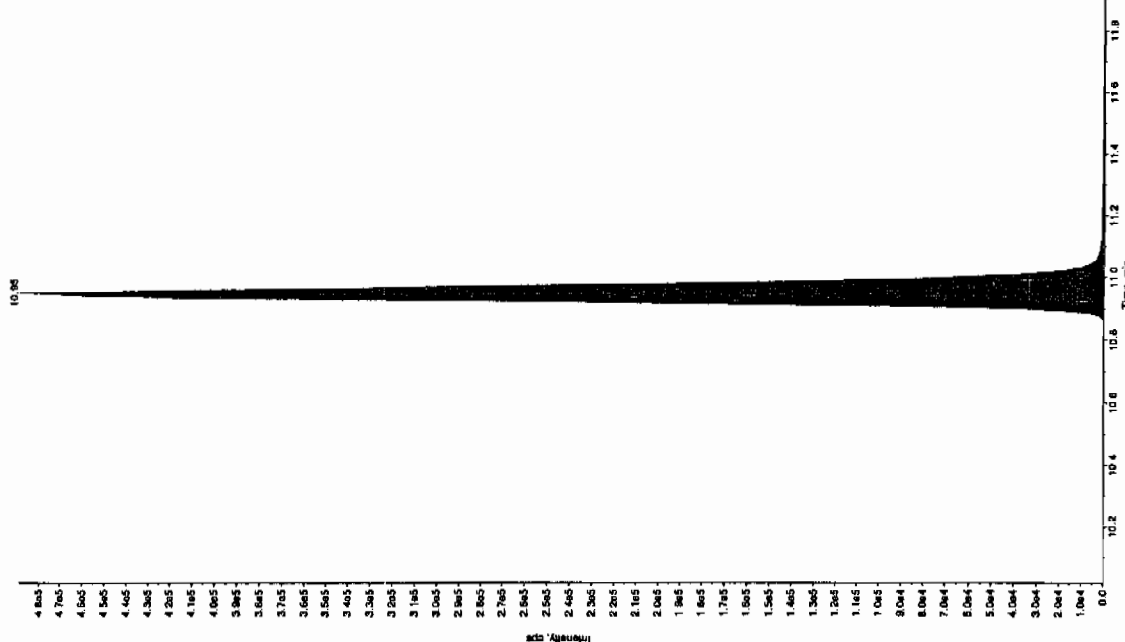




GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

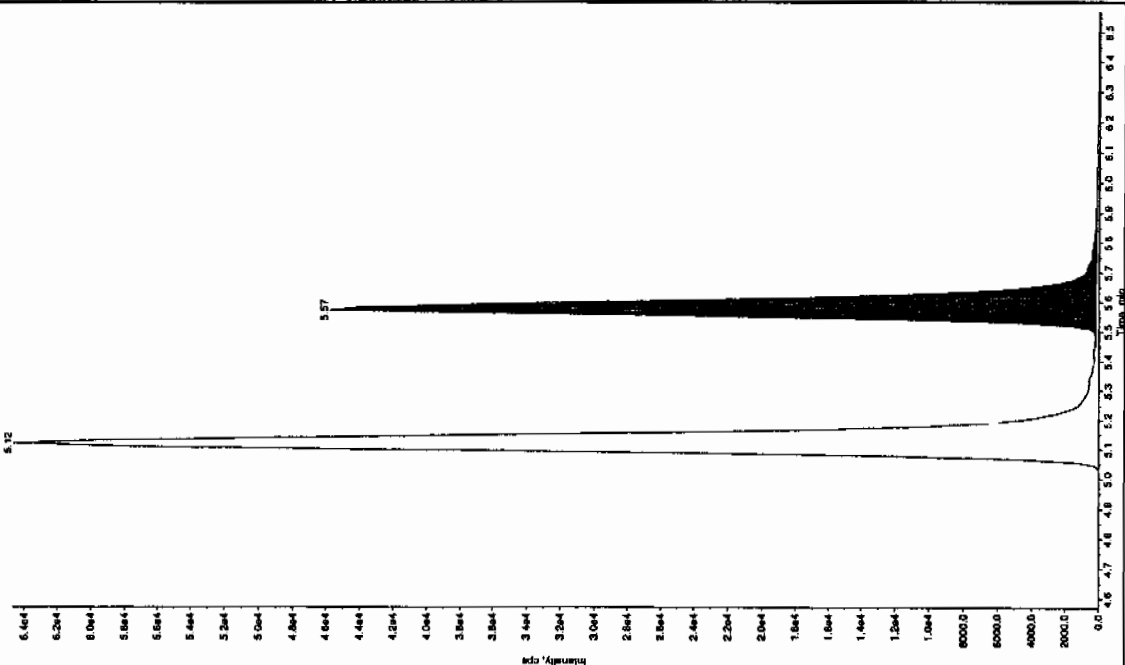
Sample Name: "WXX10026-27C9" Sample ID: "JLER" File: "EX0226002.wat"  
 Peak Name: "24-Diamino-6-nitrophenol" Mass(es): "365.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 100 ng/mL  
 Calculated Conc: 102 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 4:15:10 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 1.75e+005 counts  
 Height: 488648.682 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "WXX10026-27C9" Sample ID: "JLER" File: "EX0226002.wat"  
 Peak Name: "24-Diamino-6-nitrophenol" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 100 ng/mL  
 Calculated Conc: 119 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 4:15:10 AM  
 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: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.57 min  
 Area: 1.82e+005 counts  
 Height: 45569.886 cps  
 Start Time: 5.48 min  
 End Time: 5.93 min



JEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260060.wiff

Analysis Date: 27-FEB-10 06:20

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	571	114	
2,6-Diamino-4-nitrotoluene	500	590	118	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	480	96	
TATB	500	542	108	
tris(o-cresyl) phosphate	500	485	97	

Recovery Limits:

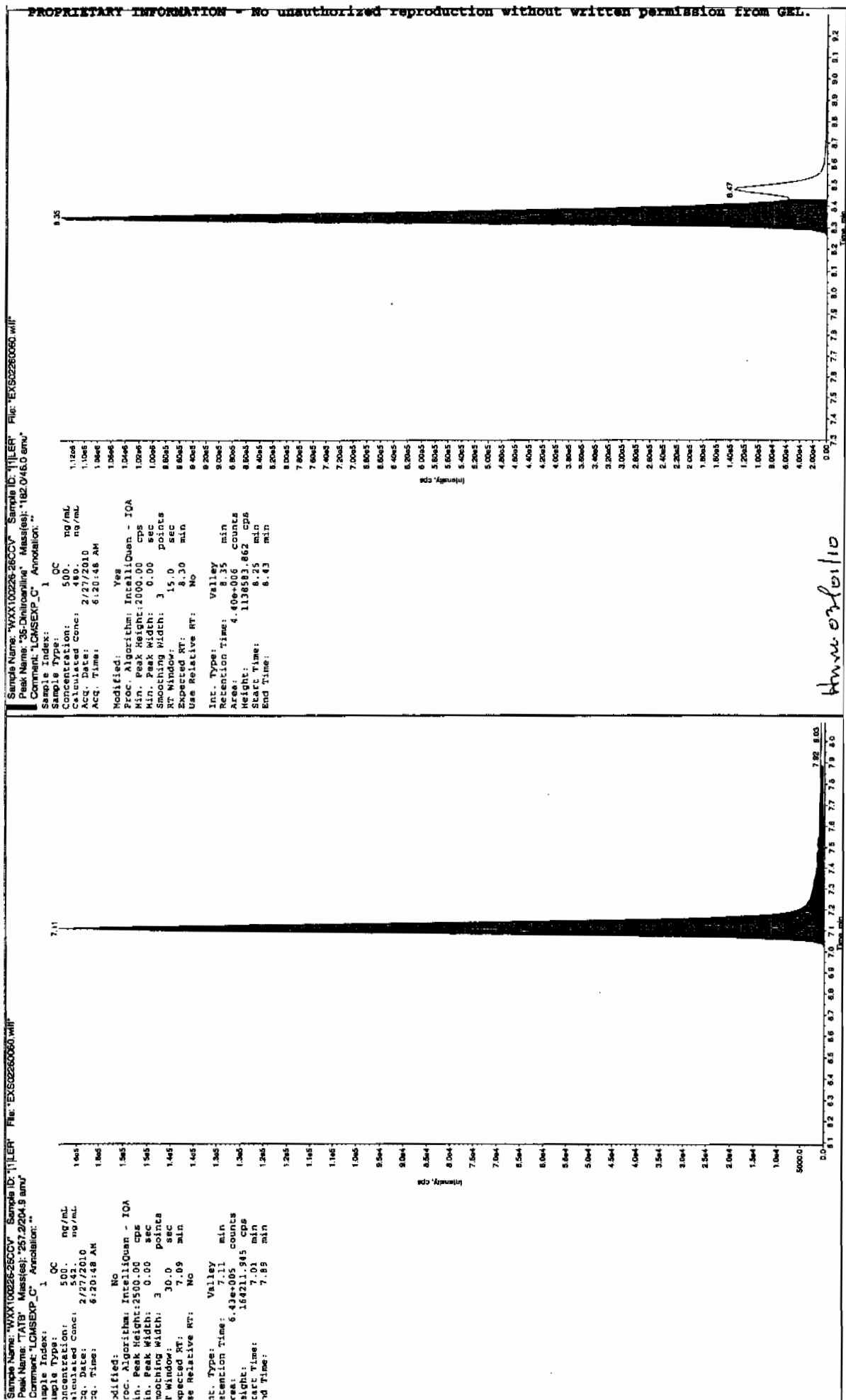
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jan 3/1/10

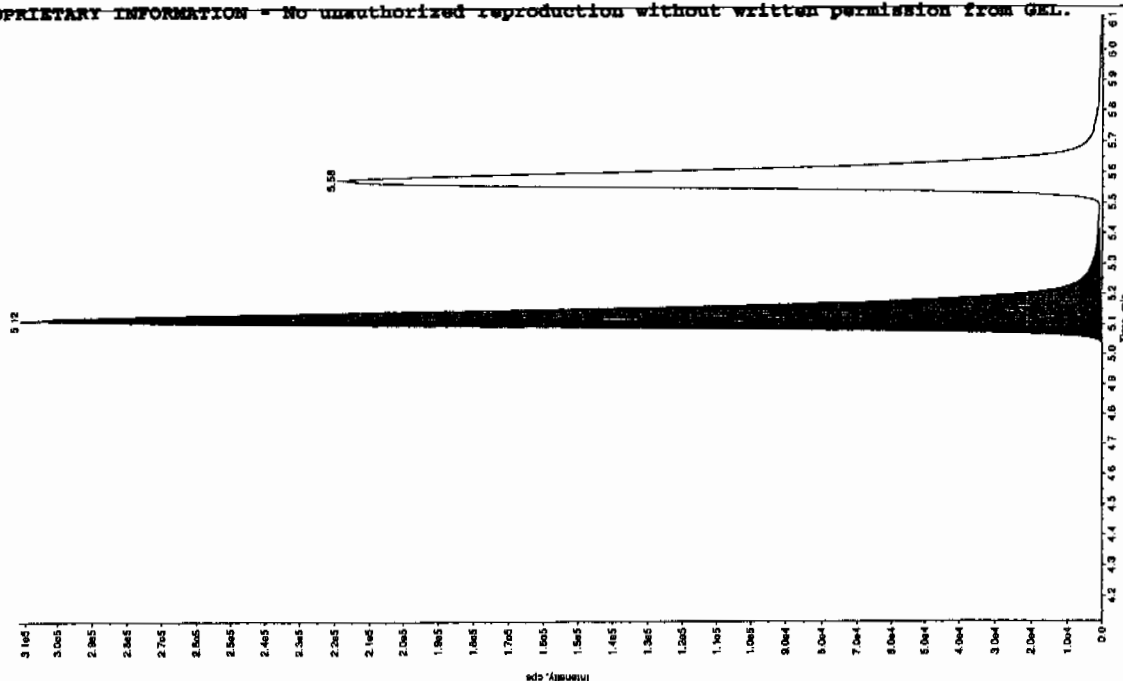


hmm or 3/1/10

JEL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

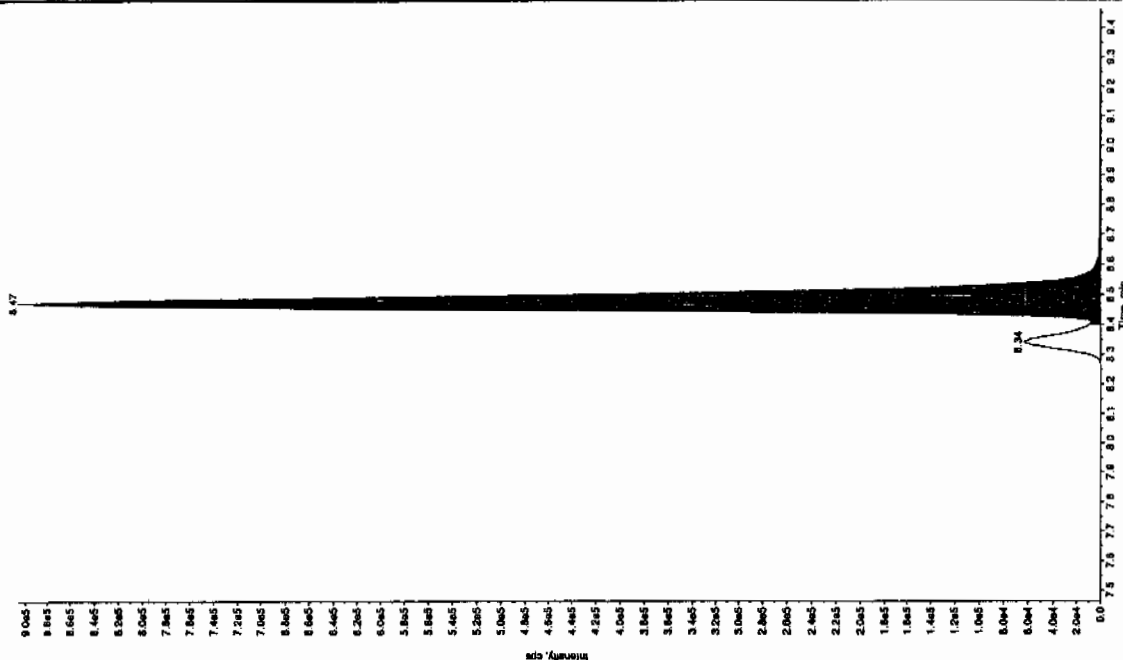
Sample Name: "WXX100226-260CV" Sample ID: "11LEF" File: "EXS02260060.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1715.9 amu"  
 Comment: "LONSEXP\_0" Annotation: ""

Sample Index: 1  
 Concentration: 500. ng/mL  
 Calculated Conc: 590. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:20:48 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Retention RT: 5.12 min  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Area: 1.30e+006 counts  
 Height: 311600.555 cps  
 Start Time: 5.02 min  
 End Time: 5.42 min



Sample Name: "WXX100226-260CV" Sample ID: "11LEF" File: "EXS02260060.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1715.9 amu"  
 Comment: "LONSEXP\_0" Annotation: ""

Sample Index: 1  
 Concentration: 250. ng/mL  
 Calculated Conc: 232. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:20:48 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Retention RT: 8.46 min  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.47 min  
 Area: 3.20e+006 counts  
 Height: 905951.782 cps  
 Start Time: 8.40 min  
 End Time: 8.84 min

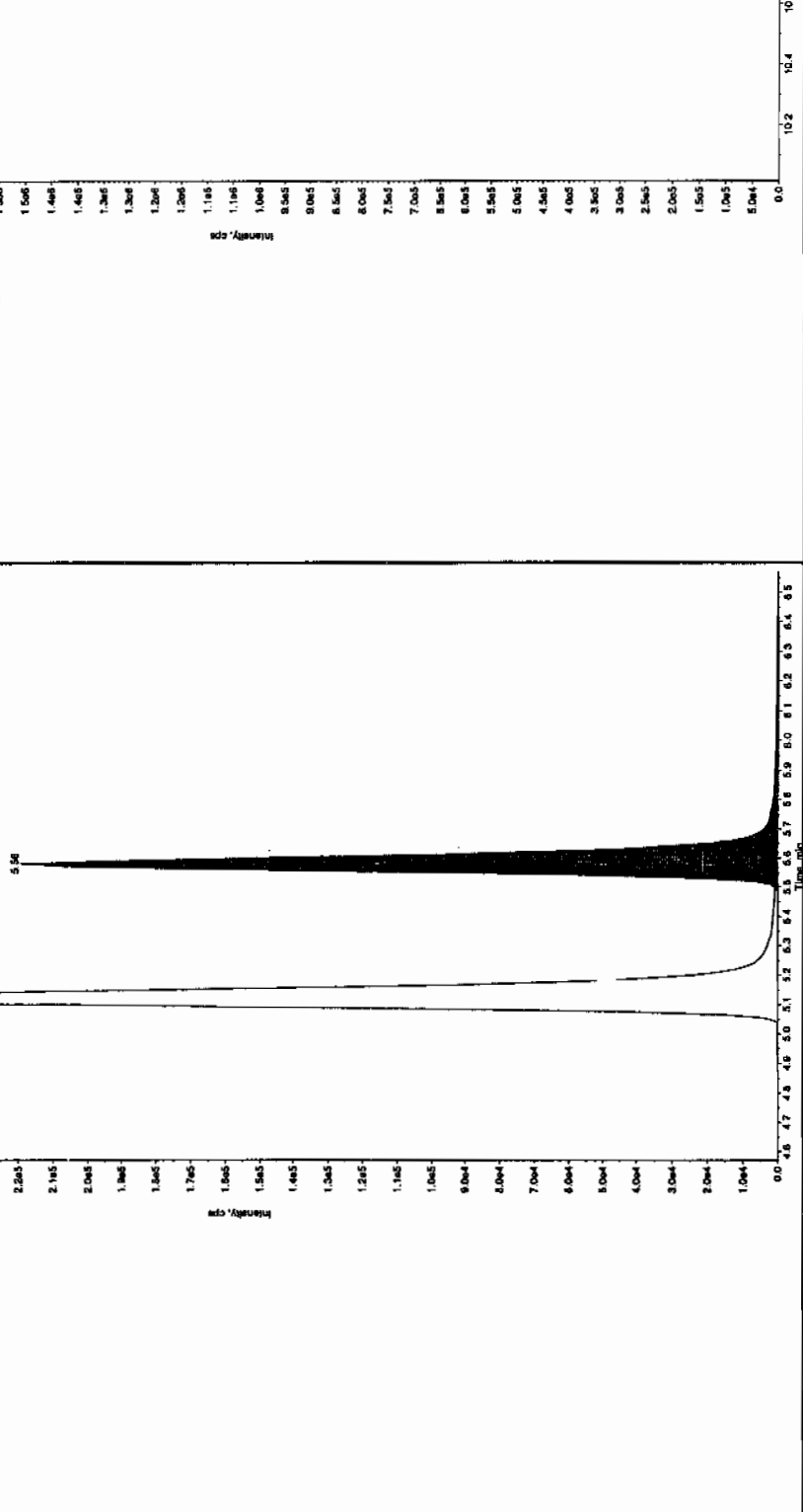


TEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



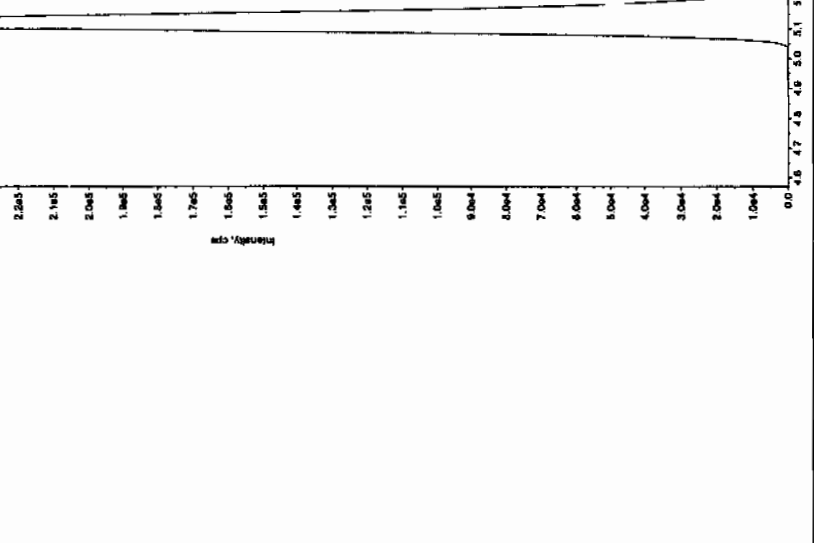
Sample Name: "WXX10026-250Cv" Sample ID: "J1LER" File: "EXS0260060.wif"  
 Peak Name: "24-Diamino-6-nitroindene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 485. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:20:46 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 7.50e+006 counts  
 Height: 2068702.393 cps  
 Start Time: 10.9 min  
 End Time: 11.2 min



Sample Name: "WXX10026-250Cv" Sample ID: "J1LER" File: "EXS0260060.wif"  
 Peak Name: "24-Diamino-6-nitroindene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 571. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:20:46 AM  
 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: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.56 min  
 Area: 9.14e+005 counts  
 Height: 219210.656 cps  
 Start Time: 5.48 min  
 End Time: 5.67 min



3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260062.wiff

Analysis Date: 27-FEB-10 06:52

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	45.9	92	
3,5-Dinitroaniline	100	93	93	
TATB	100	117	117	
tris(o-cresyl) phosphate	100	96.2	96	
2,4-Diamino-6-nitrotoluene	100	115	115	
2,6-Diamino-4-nitrotoluene	100	115	115	

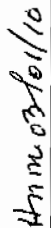
Recovery Limits:

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%

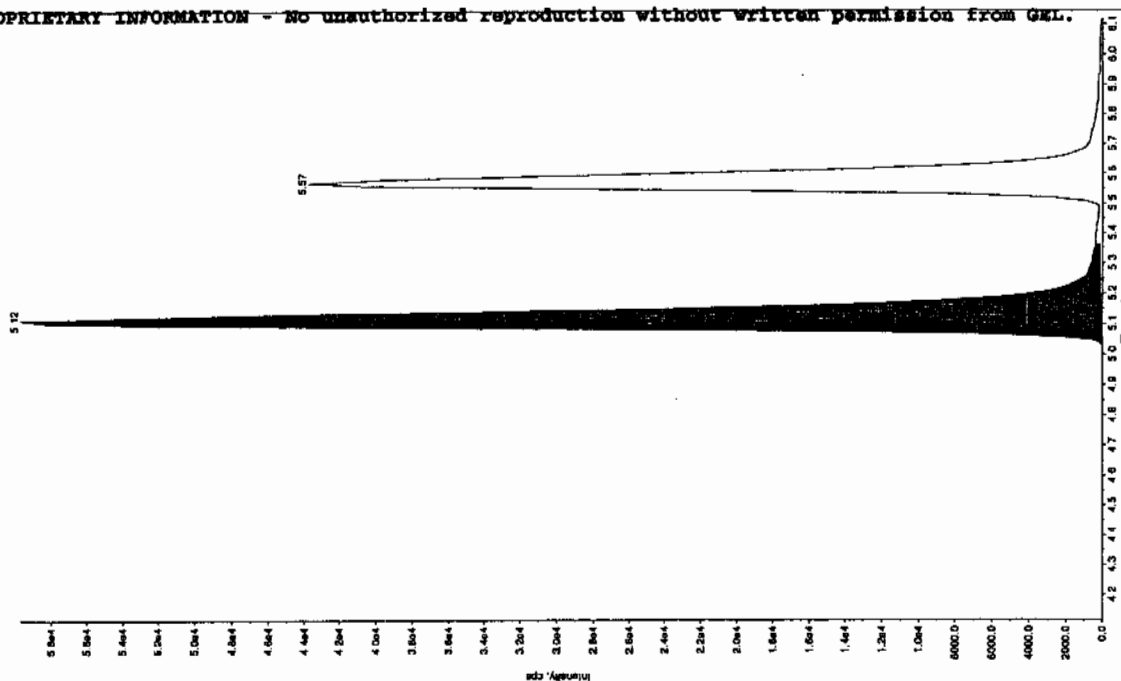
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



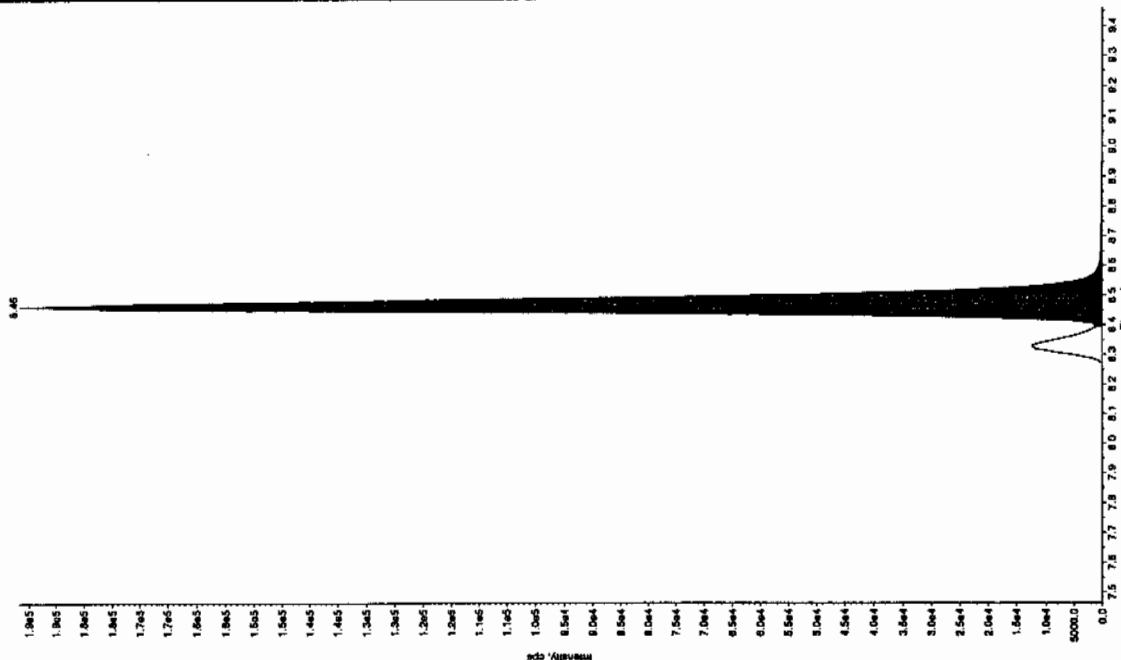
Sample Name: "WXX100226-27C01" Sample ID: "HLEP" File: "EX30226002.wif"  
 Peak Name: "26-Diamino-4-nitrobenzoic acid" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 115. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:52:11 AM  
 Modified: No  
 Proc. Algorithm: Inlet/Quan - IQA  
 Min. Peak Weight: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.12 min  
 Area: 2.52e+005 counts  
 Height: 59789.192 cps  
 Start Time: 5.00 min  
 End Time: 5.35 min



Sample Name: "WXX100226-27C01" Sample ID: "HLEP" File: "EX30226002.wif"  
 Peak Name: "34-Dinitrobenzoic acid" Mass(es): "182.051.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

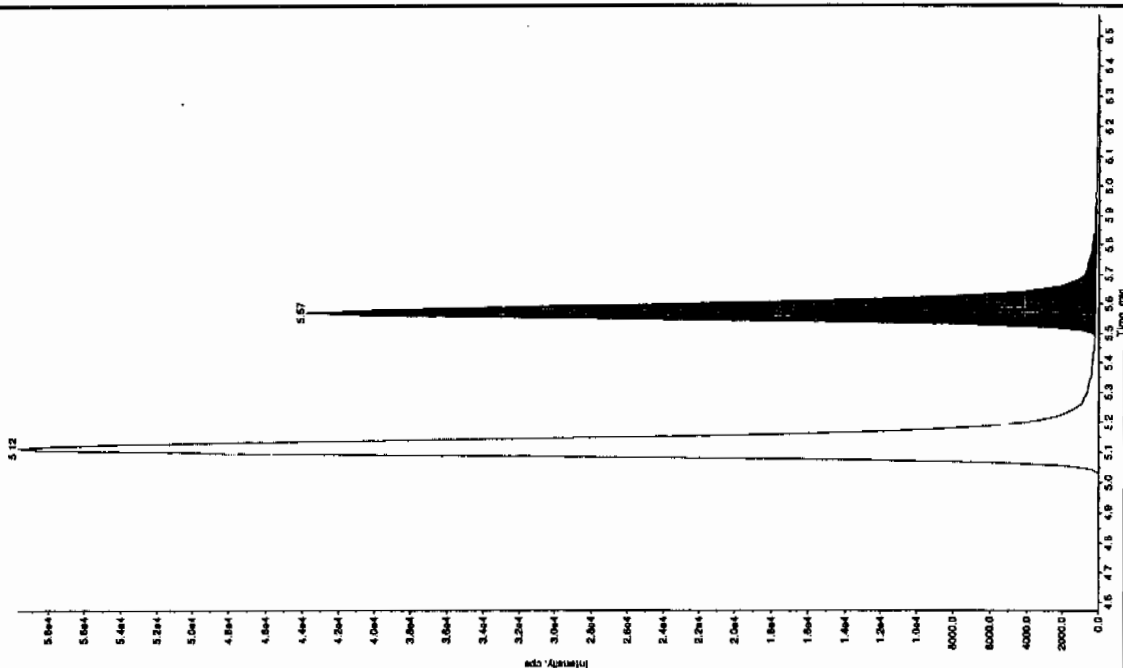
Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 45.9 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 6:52:11 AM  
 Modified: No  
 Proc. Algorithm: Inlet/Quan - IQA  
 Min. Peak Weight: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.46 min  
 Area: 6.63e+005 counts  
 Height: 191753.464 cps  
 Start Time: 8.39 min  
 End Time: 8.81 min



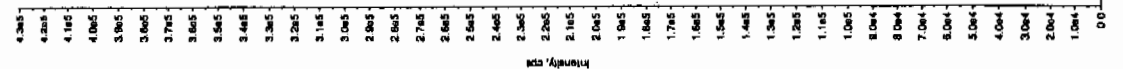
GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

Sample Name: "WXX100226-27C.R" Sample ID: "11LER" File: "EX502260062.wif"  
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 2/27/2010 ng/mL  
 Acq. Date: 6/12/11 AM  
 Acq. Time: 6/12/11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 n. Peak Height: 350.00 cps  
 n. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.57 min  
 Area: 1.76e+005 counts  
 Height: 43545.845 cps  
 Start Time: 5.45 min  
 End Time: 5.69 min



Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 2/27/2010 ng/mL  
 Acq. Date: 6/12/11 AM  
 Acq. Time: 6/12/11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 n. Peak Height: 8000.00 cps  
 n. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 11.0 min  
 Area: 1.66e+006 counts  
 Height: 430343.140 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260073.wiff

Analysis Date: 27-FEB-10 09:44

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	546	109	
2,6-Diamino-4-nitrotoluene	500	540	108	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	497	99	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	493	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%

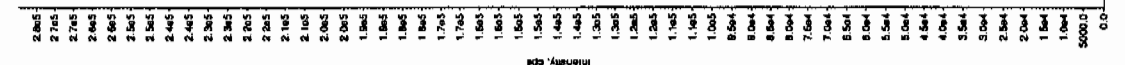
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



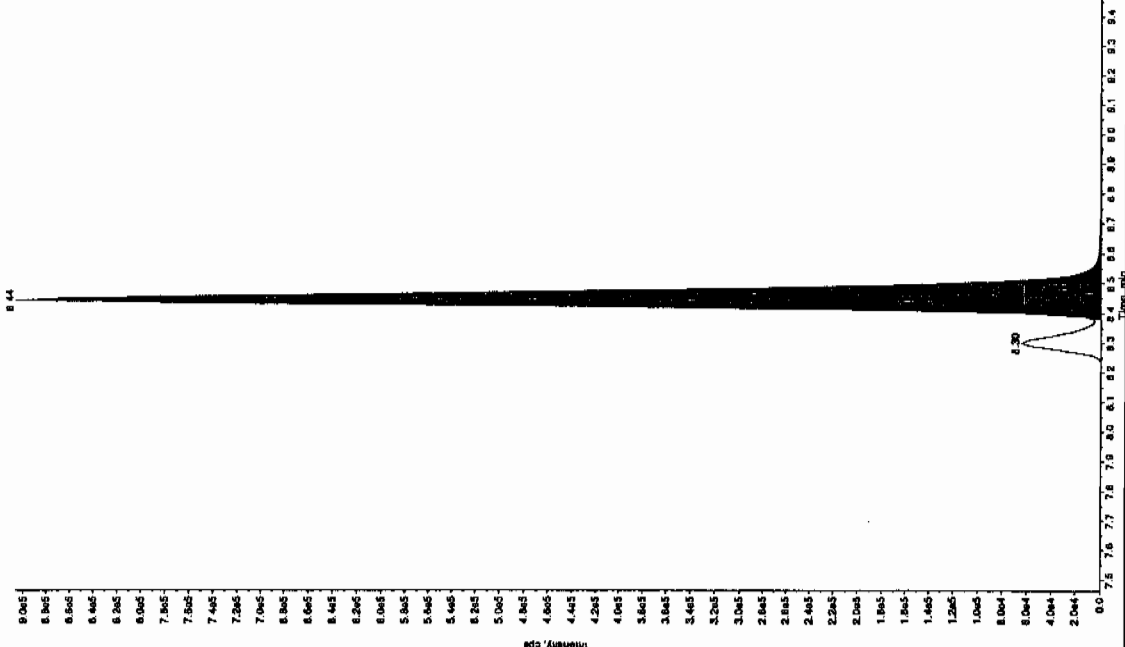
Sample Name: WXX100226-260V Sample ID: 111ER File: EX50226073.wif  
 Peak Name: 26-Diamino-4-nitrobenzene Mass(es): 186.046.0 amu  
 Comment: LCMSEXP\_C Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 540. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 9:44:55 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOL  
 Min. Peak Height: 450.0 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.09 min  
 Area: 1.19e+006 counts  
 Height: 279406.769 cps  
 Start Time: 4.99 min  
 End Time: 5.39 min



Sample Name: WXX100226-260V Sample ID: 111ER File: EX50226073.wif  
 Peak Name: 34-Diaminobenzene Mass(es): 182.151.9 amu  
 Comment: LCMSEXP\_C Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 237. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 9:44:55 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOL  
 Min. Peak Height: 1460.0 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.44 min  
 Area: 3.14e+006 counts  
 Height: 906181.472 cps  
 Start Time: 8.38 min  
 End Time: 8.77 min

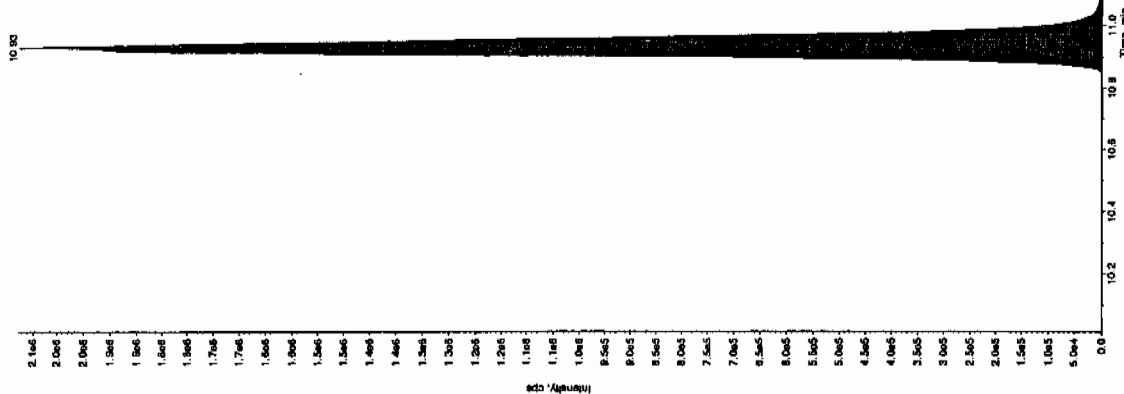


3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



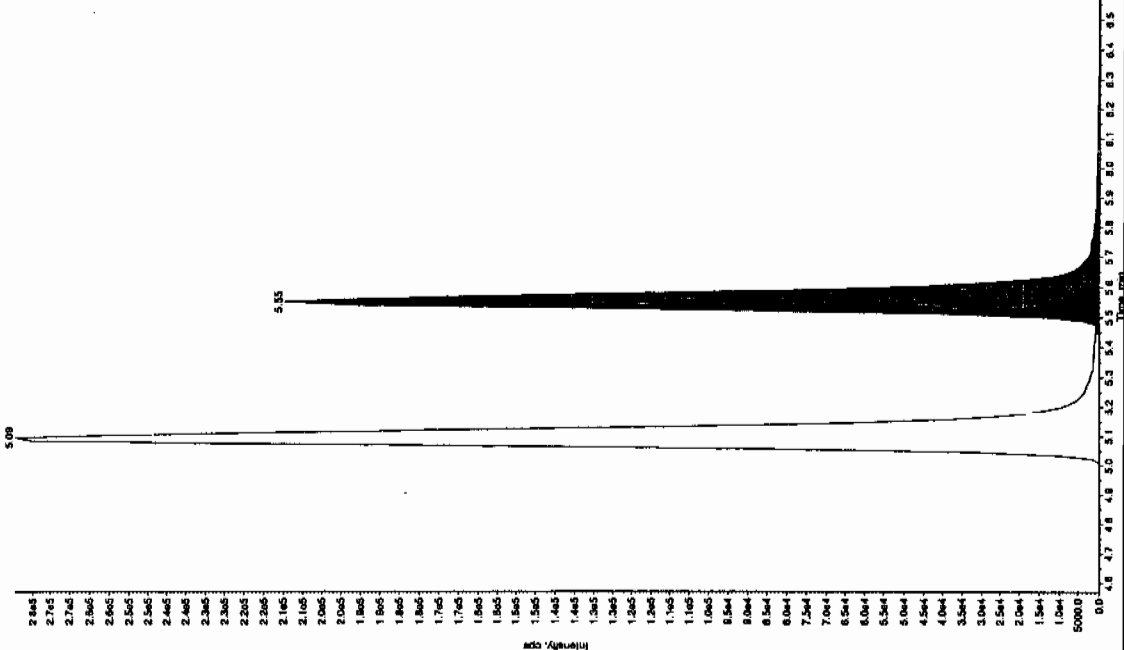
Sample Name: "WXX10226-26COP" Sample ID: "JL1ER" File: "EXS02260073.wif"  
 Peak Name: "180-046.0 amu" Mass(es): "358 161.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 493. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 9:44:55 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.62e+006 counts  
 Height: 2076728.516 cps  
 Start Time: 10.8 min  
 End Time: 11.3 min



Sample Name: "WXX10226-26COP" Sample ID: "JL1ER" File: "EXS02260073.wif"  
 Peak Name: "24-Dienino-6-nitrodiene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 546. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 9:44:55 AM  
 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: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.55 min  
 Area: 8.73e+005 counts  
 Height: 209572.876 cps  
 Start Time: 5.45 min  
 End Time: 6.03 min



**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260075.wiff

Analysis Date: 27-FEB-10 10:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	115	115	
2,6-Diamino-4-nitrotoluene	100	117	117	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	96.7	97	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	103	103	

**Recovery Limits:**

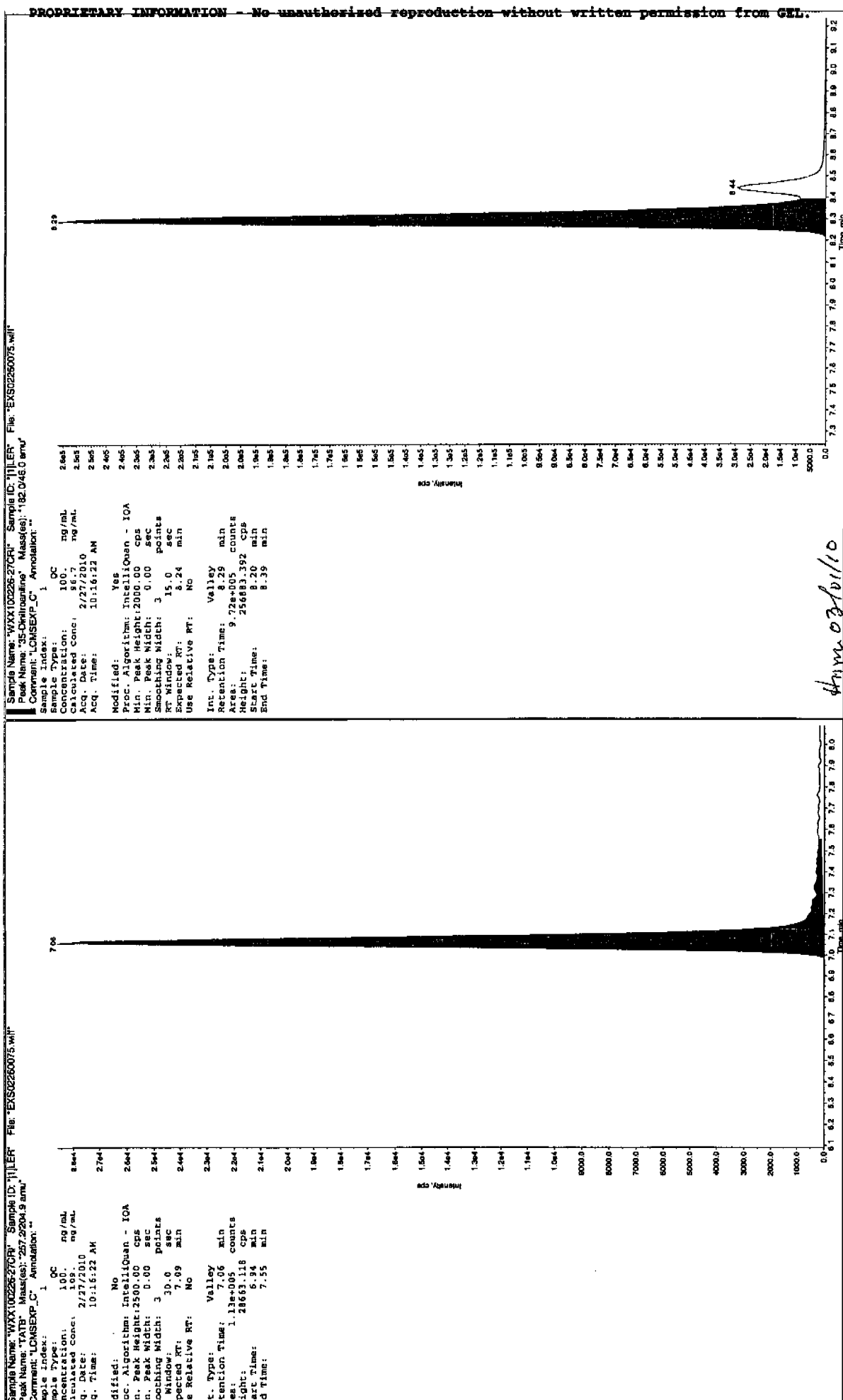
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

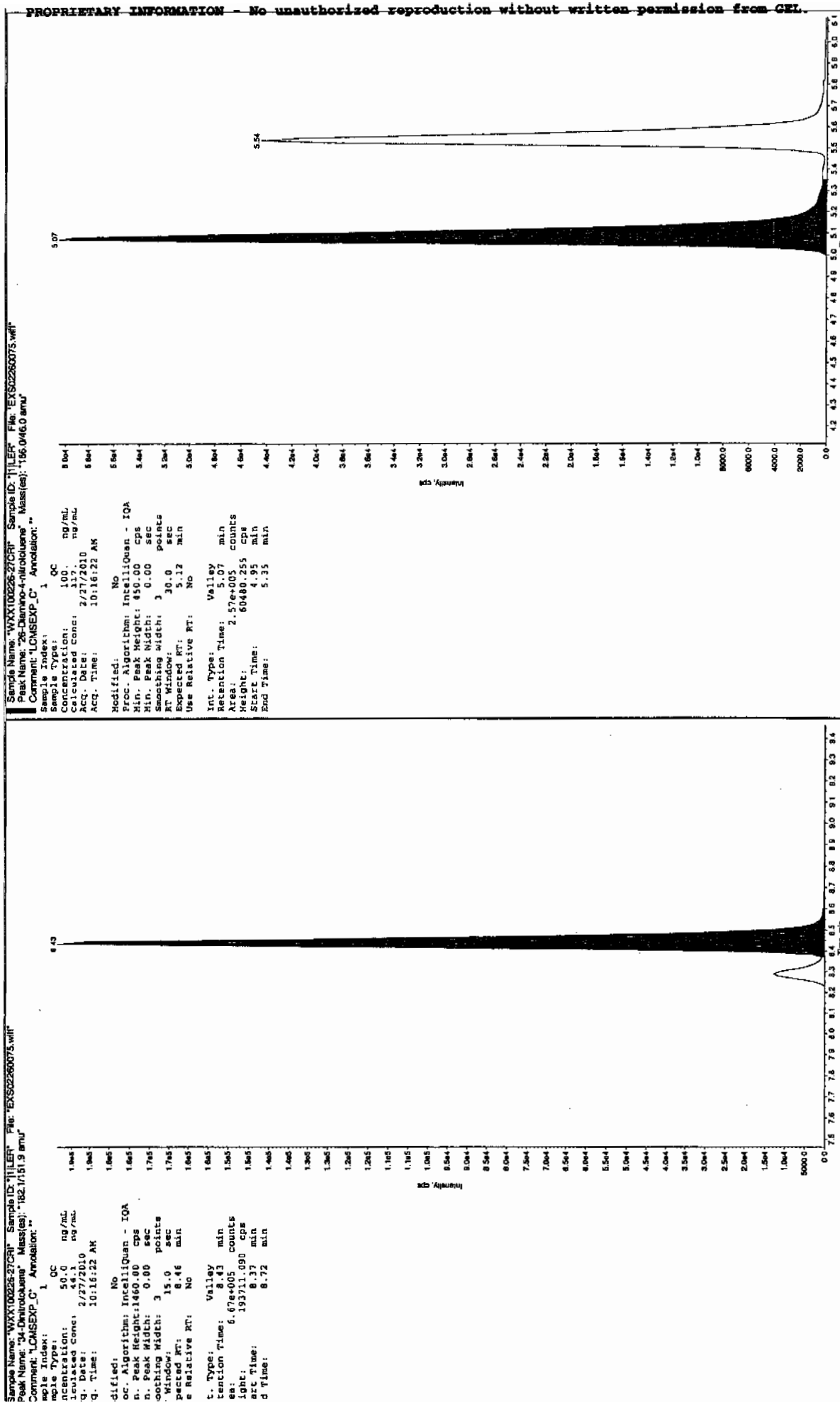
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jun 31/10



4mm.03/10



IEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: WXX100226-27031 Sample ID: 111ER File: EXS02260075.wml

Peak Name: 'Iso-octyl phosphate' Mass(es): 359.1910 amu

Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 103. ng/mL

Acq. Date: 2/27/2010

Acq. Time: 10:16:22 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 6000.00 cps

Min. Peak Width: 3.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

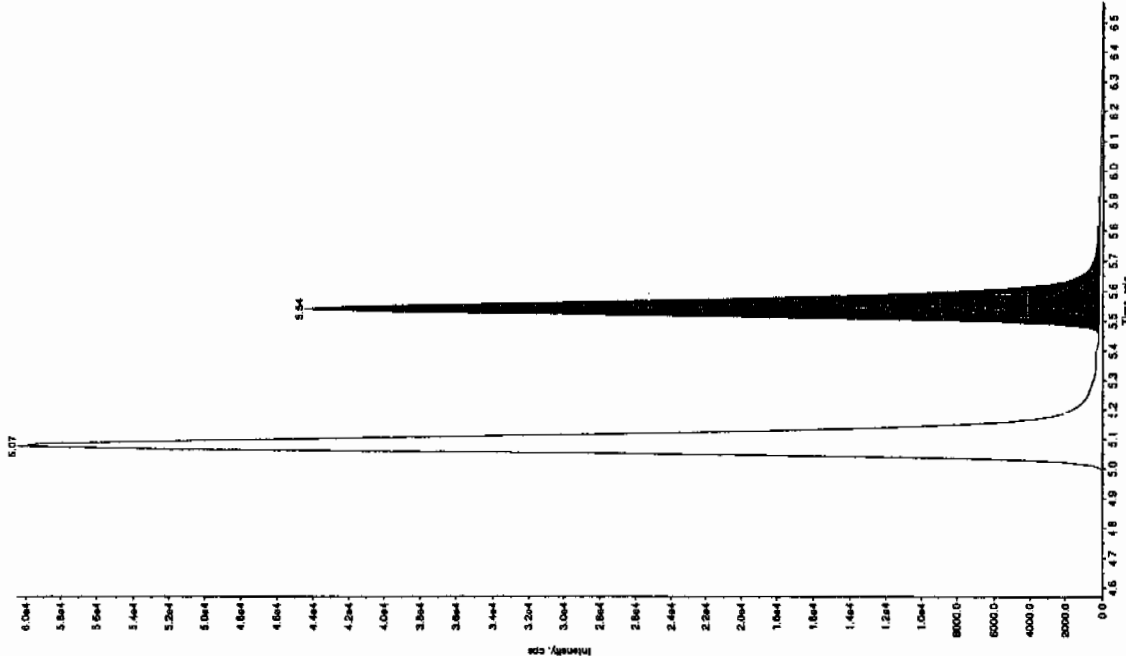
Retention Time: 10.9 min

Area: 1.77e+006 counts

Height: 503175.293 cps

Start Time: 10.8 min

End Time: 11.2 min



Sample Name: WXX100226-27031 Sample ID: 111ER File: EXS02260075.wml

Peak Name: '24-Diamino-5-nitrotoluene' Mass(es): 166.046.0 amu

Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 115. ng/mL

Acq. Date: 2/27/2010

Acq. Time: 10:16:22 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 350.00 cps

Min. Peak Width: 0.00 sec

Smoother Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.57 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 5.54 min

Area: 1.76e+005 counts

Height: 44263.847 cps

Start Time: 5.45 min

End Time: 5.85 min

3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260086.wiff

Analysis Date: 27-FEB-10 13:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	445	89	
2,6-Diamino-4-nitrotoluene	500	442	89	
3,4-Dinitrotoluene	250	218	87	
3,5-Dinitroaniline	500	452	90	
TATB	500	487	97	
tris(o-cresyl) phosphate	500	491	98	

Recovery Limits:

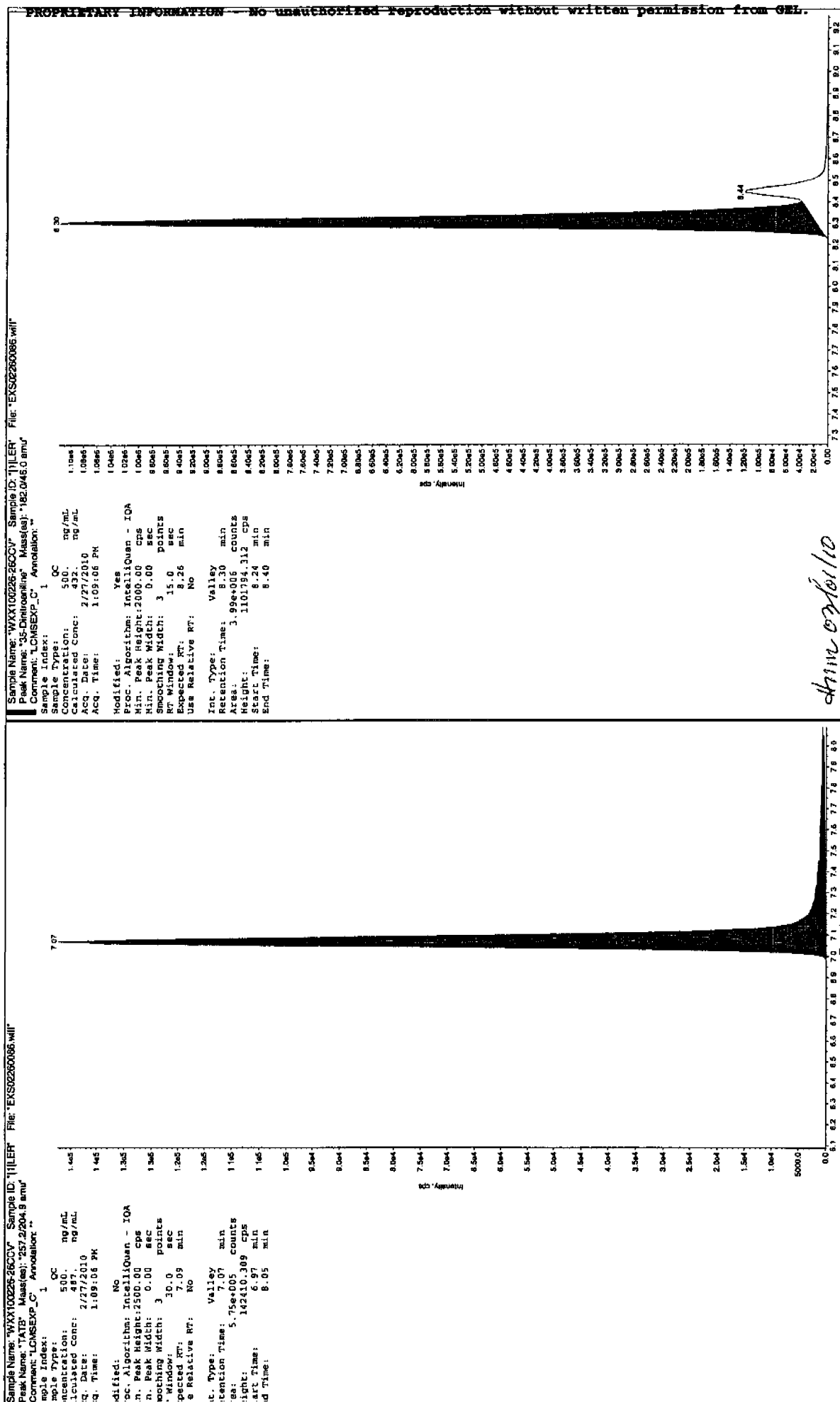
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

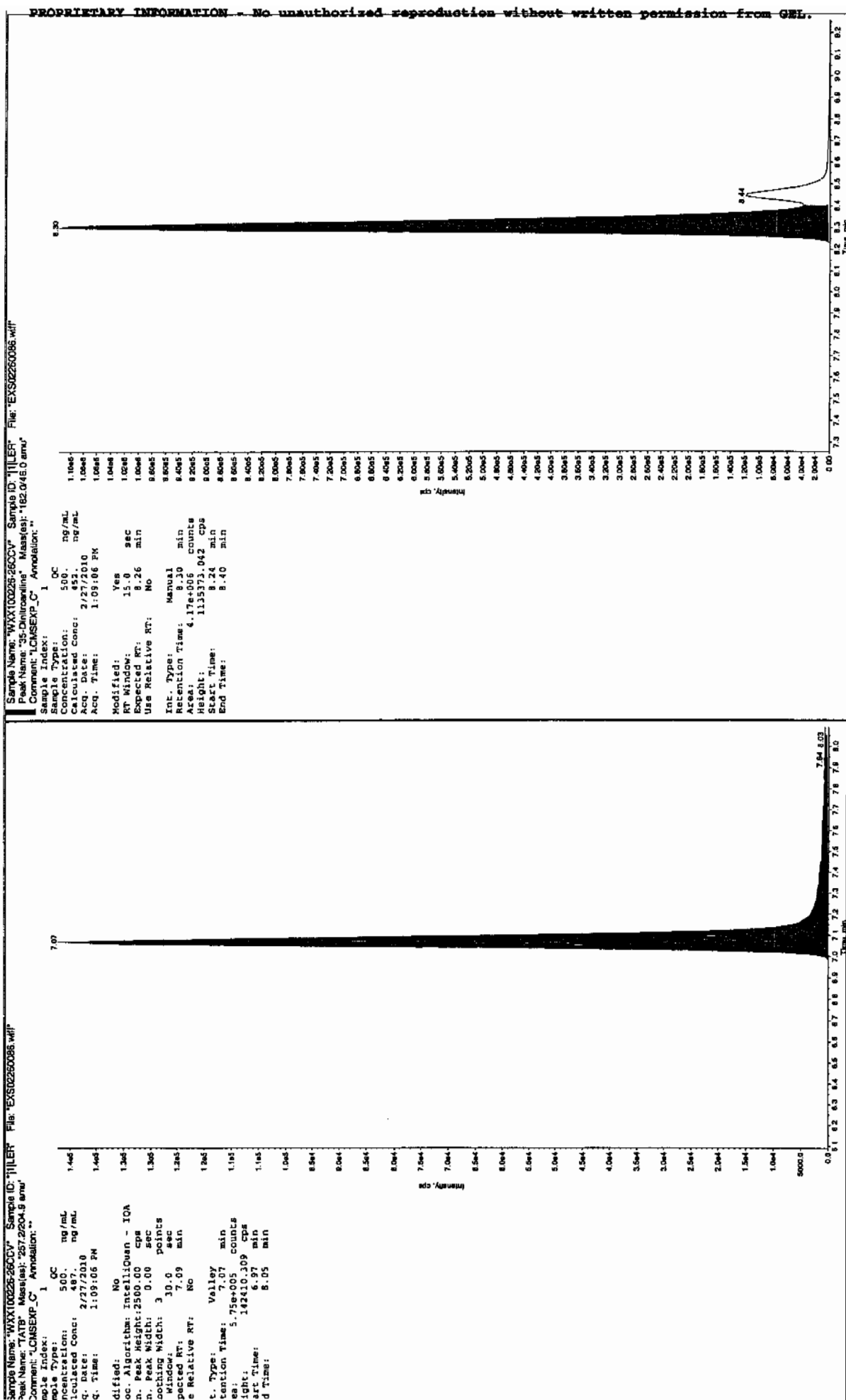
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/10



after Jan 31/10

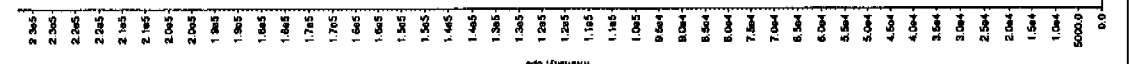


3EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



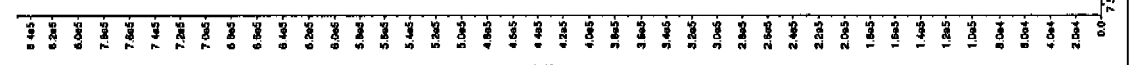
Sample Name: 'WXX100226-260CV' Sample ID: 'JILBR' File: 'EXS0250086.vht'  
 Peak Name: '26-Dinitro-4-nitrofluorene' Mass(es): '166.046.0 amu'  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: 1  
 Concentration: 500. ng/mL  
 Date: 2/27/2010  
 Acq. Date: 1:09:06 PM  
 Acq. Time: 1:09:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.08 min  
 Area: 9.75e+005 counts  
 Height: 233281.586 cps  
 Start Time: 4.99 min  
 End Time: 5.39 min



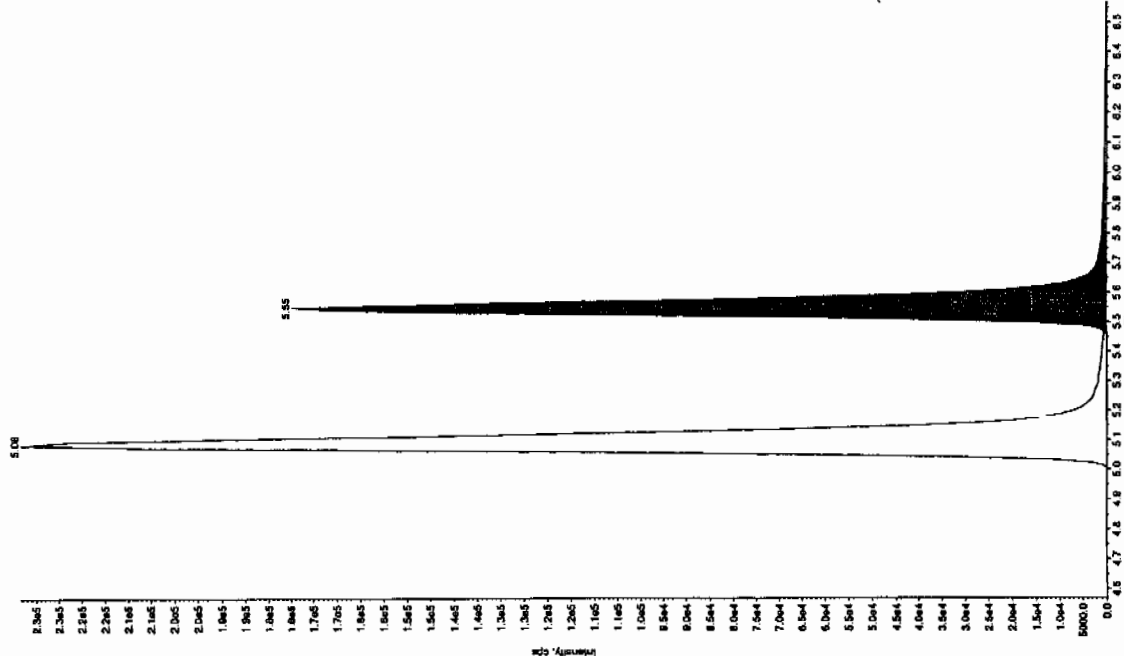
Sample Name: 'WXX100226-260CV' Sample ID: 'JILBR' File: 'EXS0250086.vht'  
 Peak Name: '34-Dinitrofluorene' Mass(es): '182.1151.9 amu'  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: 1  
 Concentration: 250. ng/mL  
 Date: 2/27/2010  
 Acq. Date: 1:09:06 PM  
 Acq. Time: 1:09:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.37 min  
 Area: 3.03e+005 counts  
 Height: 851000.977 cps  
 Start Time: 8.37 min  
 End Time: 8.78 min



Sample Name: "WXX100226-2600V" Sample ID: "111111" File: "EX02260086.wif"  
 Peak Name: "445.046-0.000" Peak Name: "445.046-0.000" Mass(es): "156.046.0 amu"  
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 491. ng/mL  
 Calculated Conc: 2/27/2010  
 Acq. Date: 1:09:06 PM  
 Acq. Time: 1:09:06 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.59e+006 counts  
 Height: 2110954.346 cps  
 Start Time: 10.8 min  
 End Time: 11.2 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): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260088.wiff

Analysis Date: 27-FEB-10 13:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	98.3	98	
2,6-Diamino-4-nitrotoluene	100	96.3	96	
3,4-Dinitrotoluene	50	43.9	88	
3,5-Dinitroaniline	100	89.2	89	
TATB	100	104	104	
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 ,

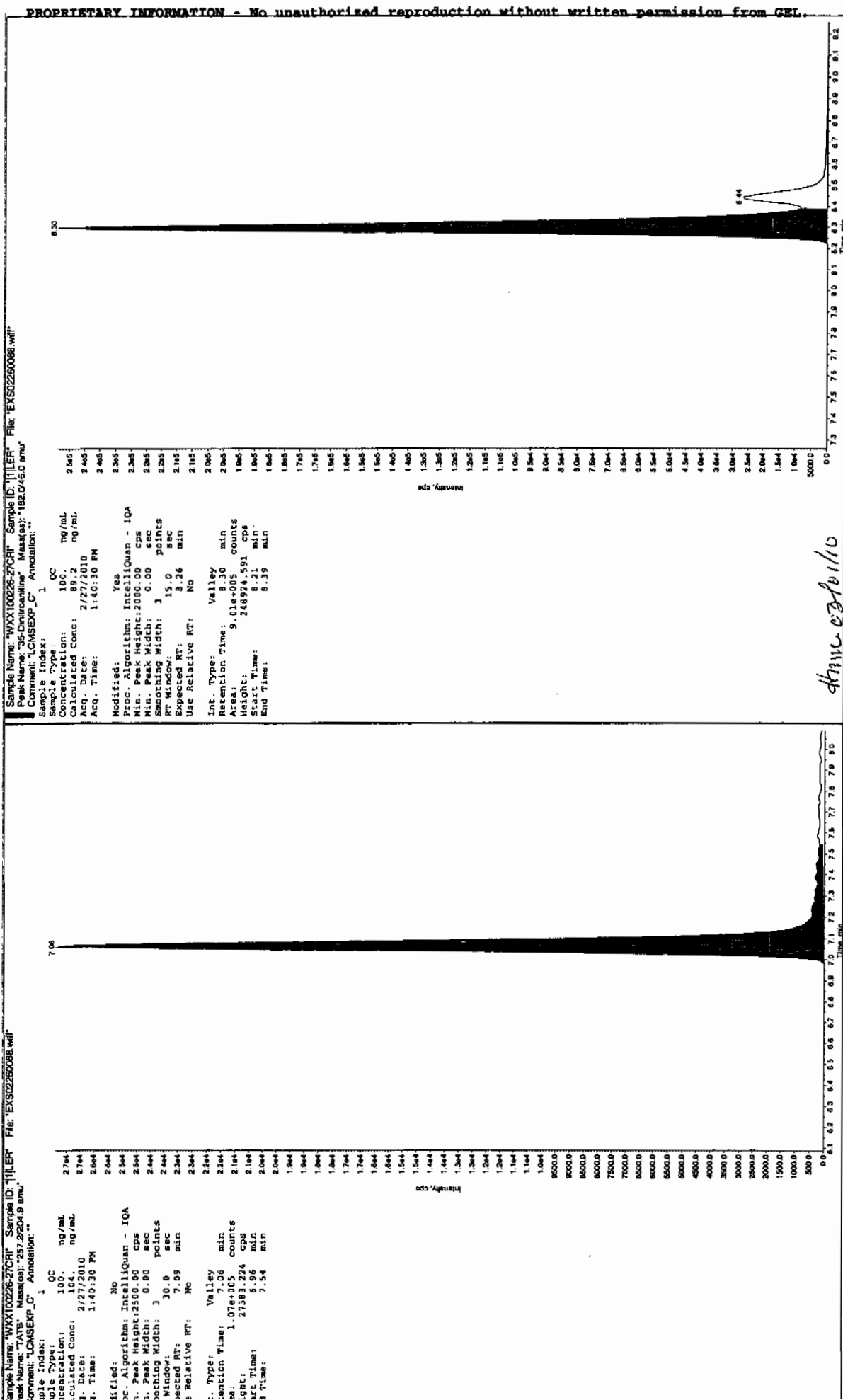
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

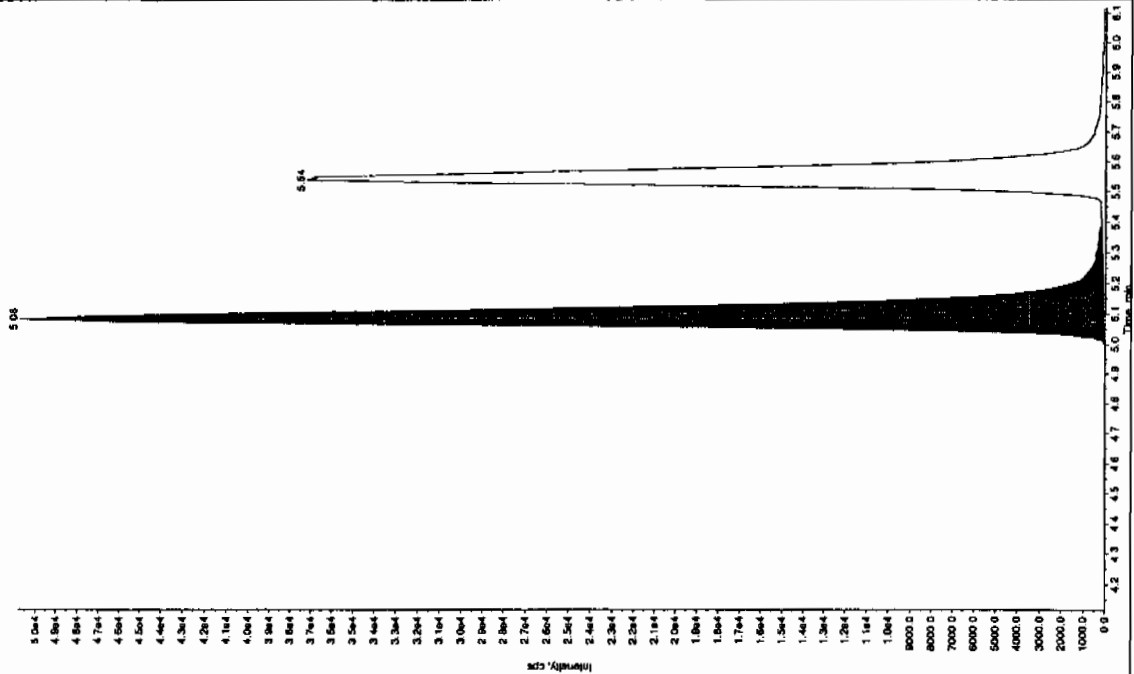
See 3/1/10



dmw 03/01/10

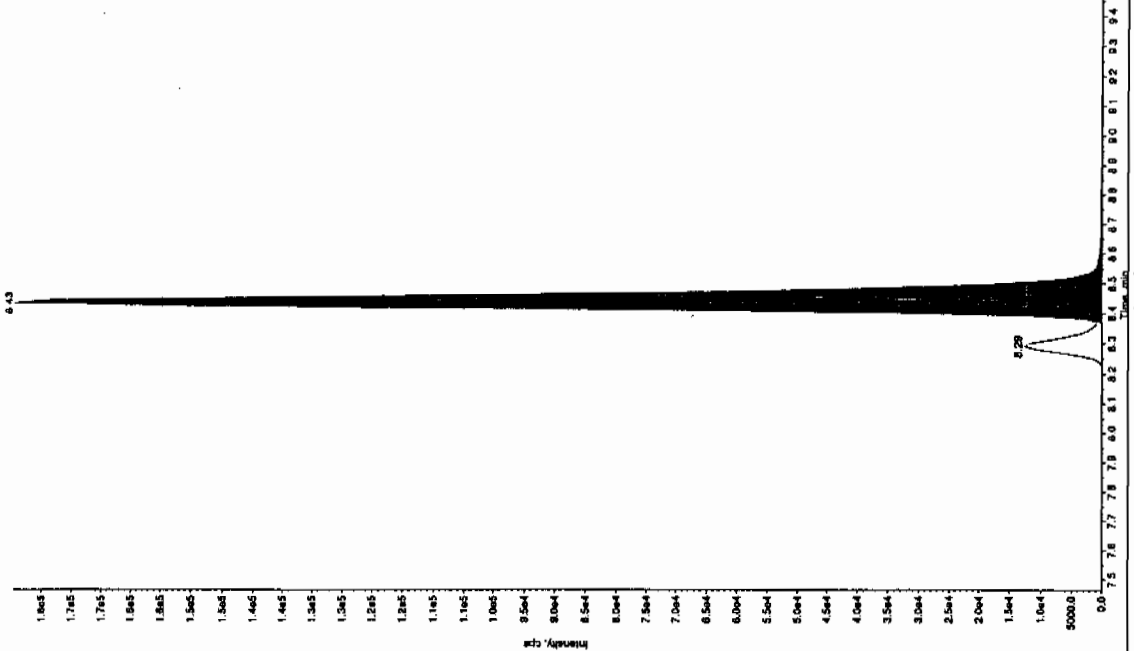
Sample Name: "WXX100226-27CH" Sample ID: "JILER" File: "EX100226008.wil"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "102.1/151.9 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 100  
 Concentration: 100 ng/mL  
 Calculated Conc: 85.3 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 1:40:30 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.08 min  
 Area: 2.15e+05 counts  
 Height: 50727360 cps  
 Start Time: 4.97 min  
 End Time: 5.39 min

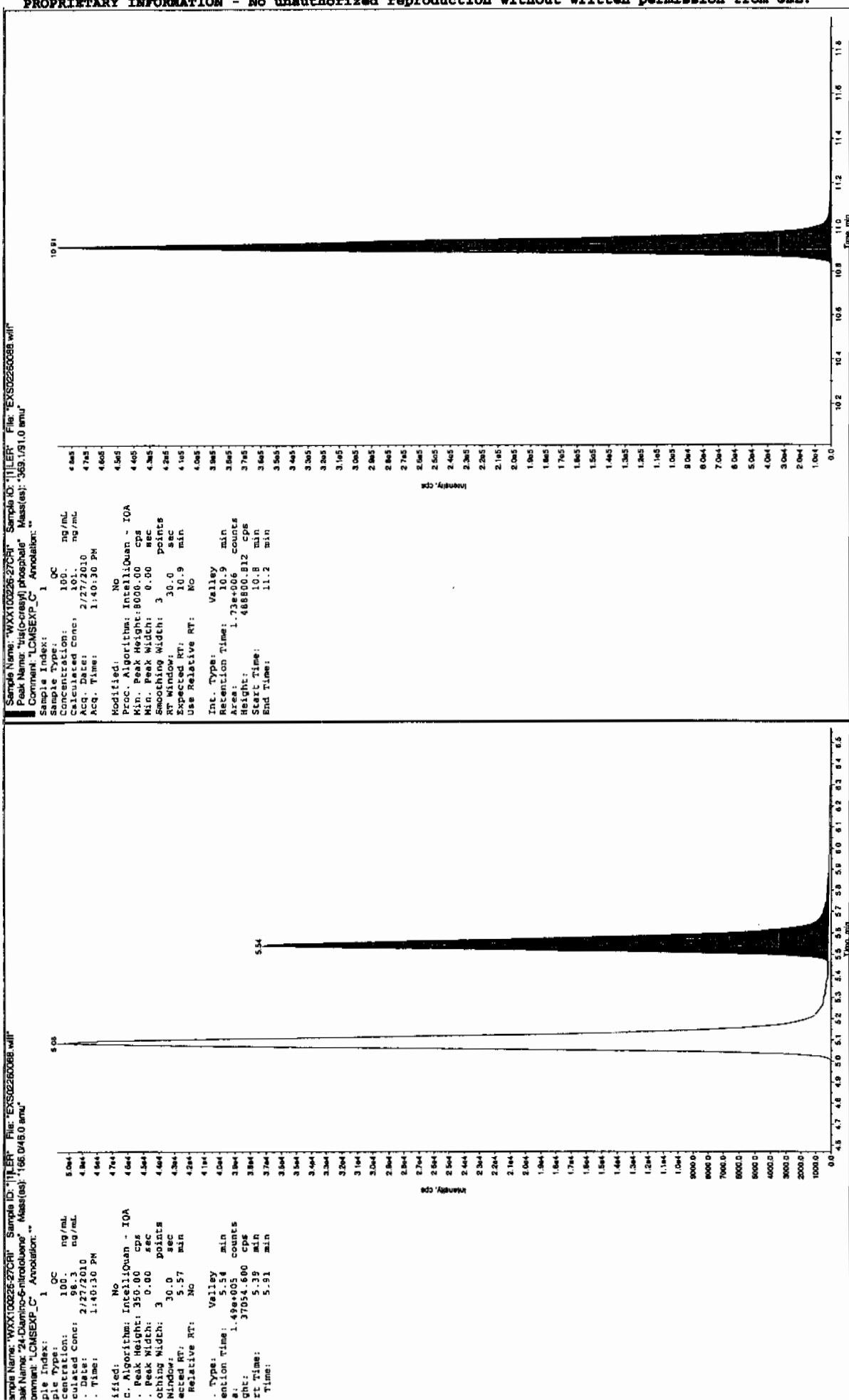


Sample Name: "WXX100226-27CH" Sample ID: "JILER" File: "EX100226008.wil"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "102.1/151.9 amu"  
 Comment: "LCMSXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: 100  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 43.9 ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 1:40:30 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.41 min  
 Area: 5.35e+05 counts  
 Height: 179588811 cps  
 Start Time: 8.37 min  
 End Time: 8.73 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260099.wiff

Analysis Date: 27-FEB-10 16:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	504	101	
2,6-Diamino-4-nitrotoluene	500	480	96	
3,4-Dinitrotoluene	250	212	85	
3,5-Dinitroaniline	500	448	90	
TATB	500	481	96	
tris(o-cresyl) phosphate	500	488	98	

Recovery Limits:

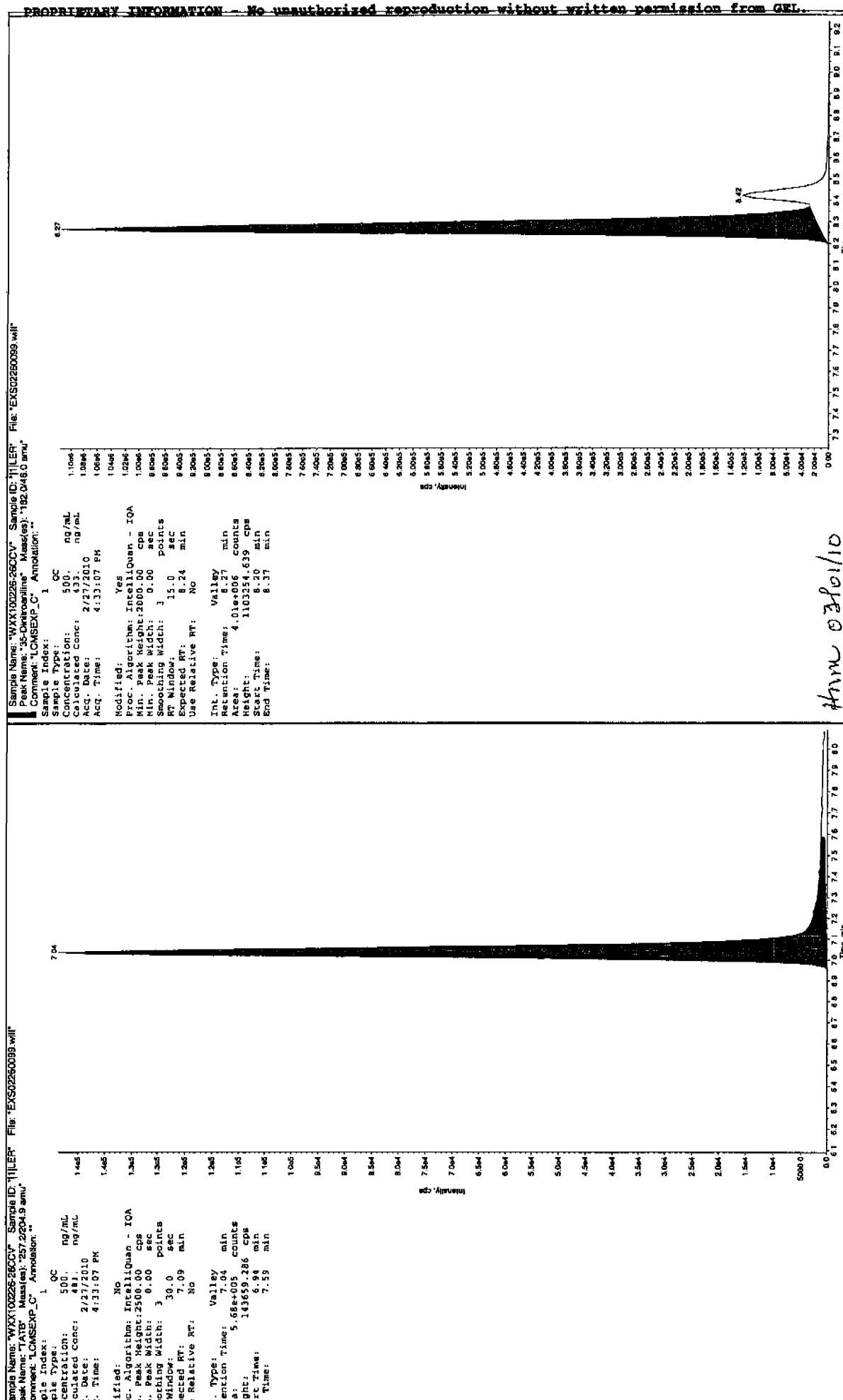
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

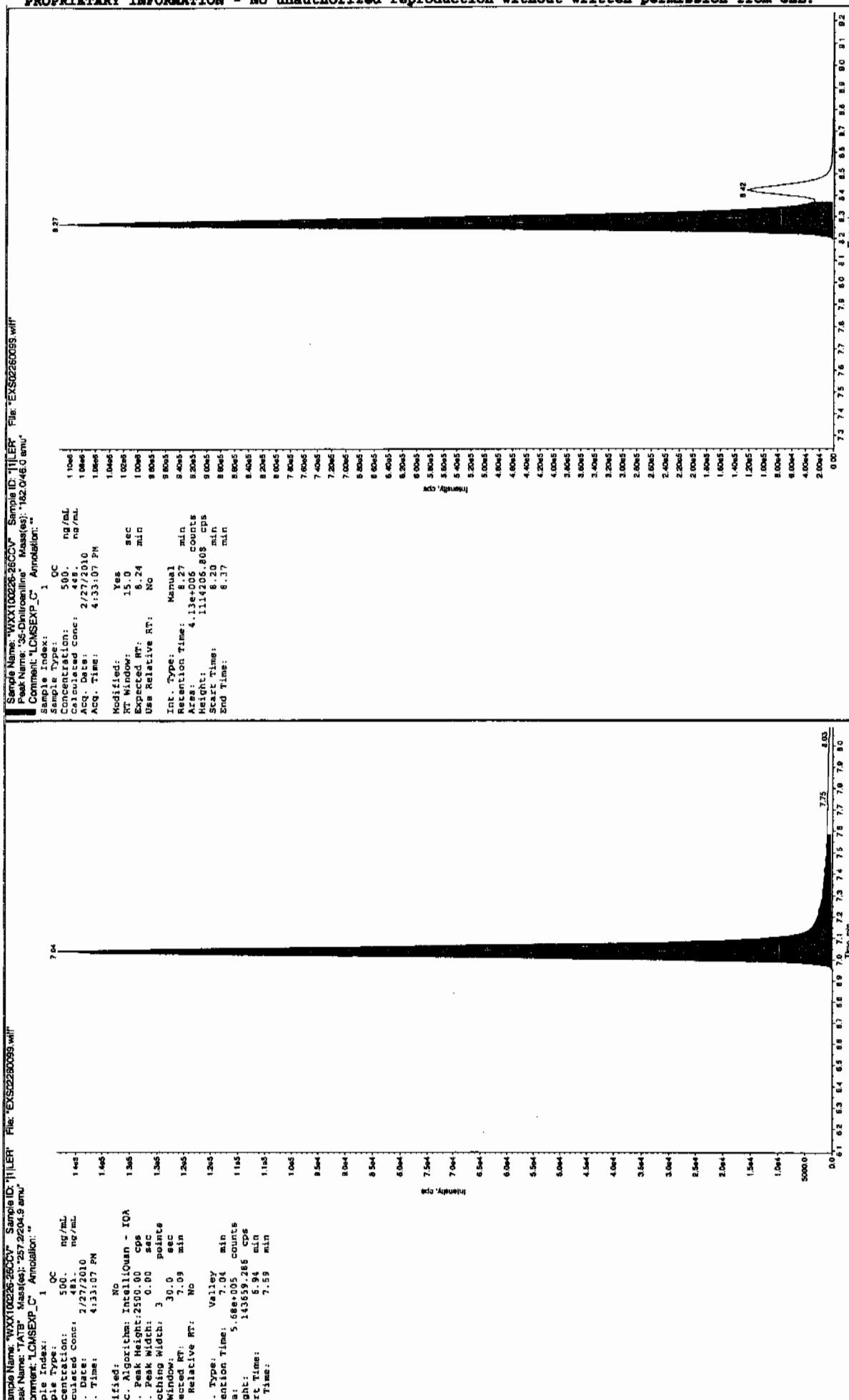
Before Jan 31/10



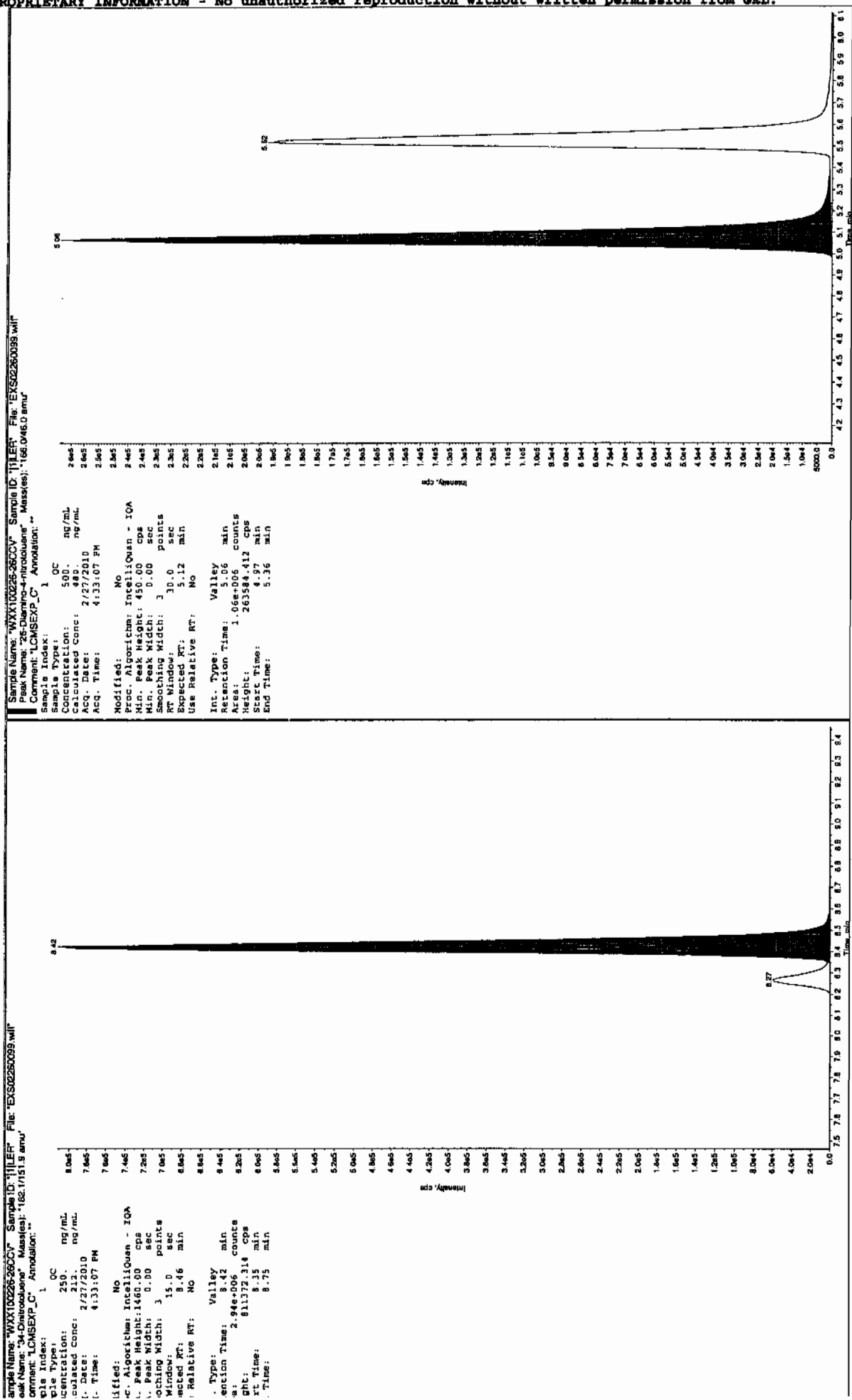
Ann 03/01/10

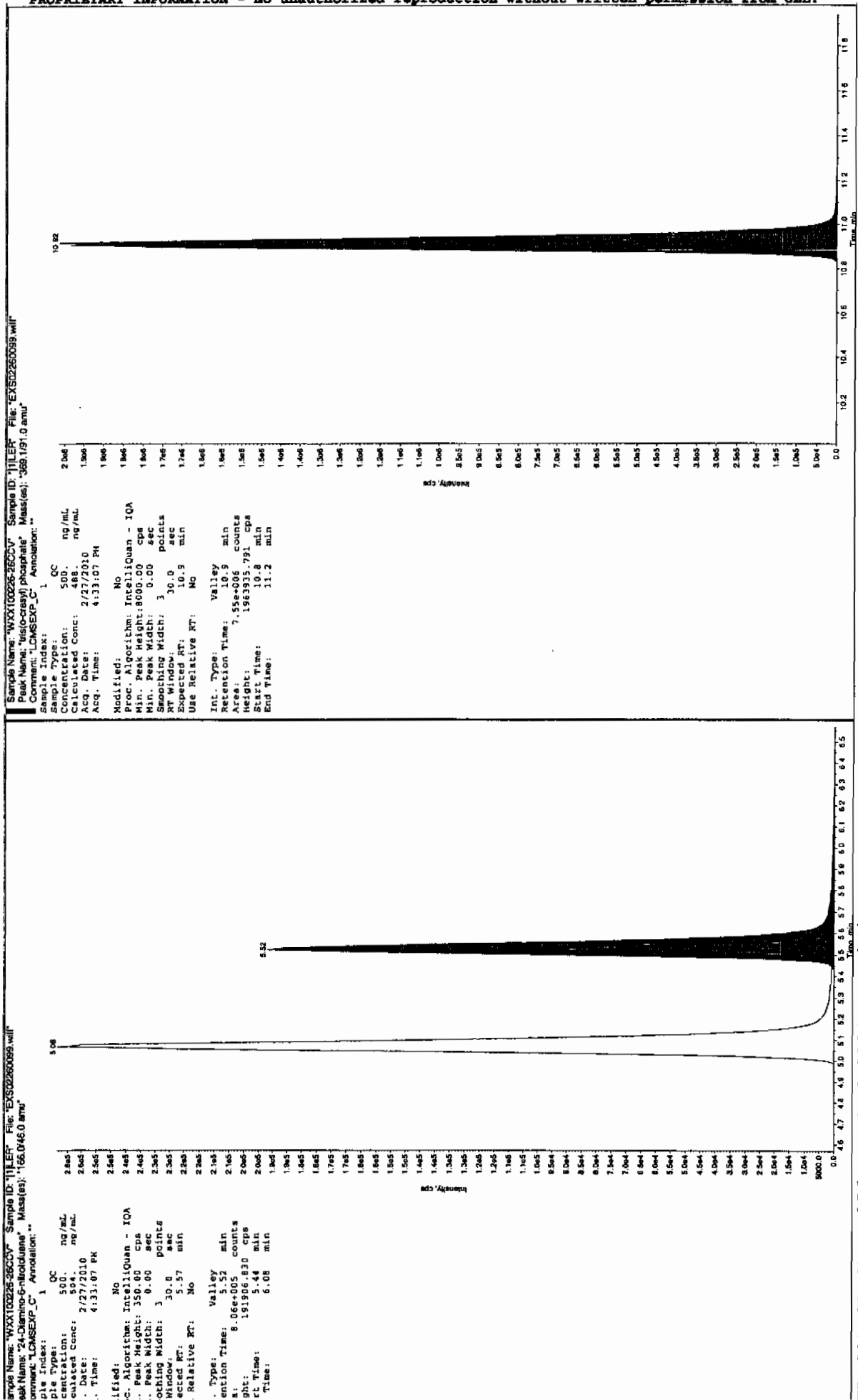


after Jan 31/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260101.wiff

Analysis Date: 27-FEB-10 17:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	109	109	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	43.3	87	
3,5-Dinitroaniline	100	85.9	86	
TATB	100	99.7	100	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:

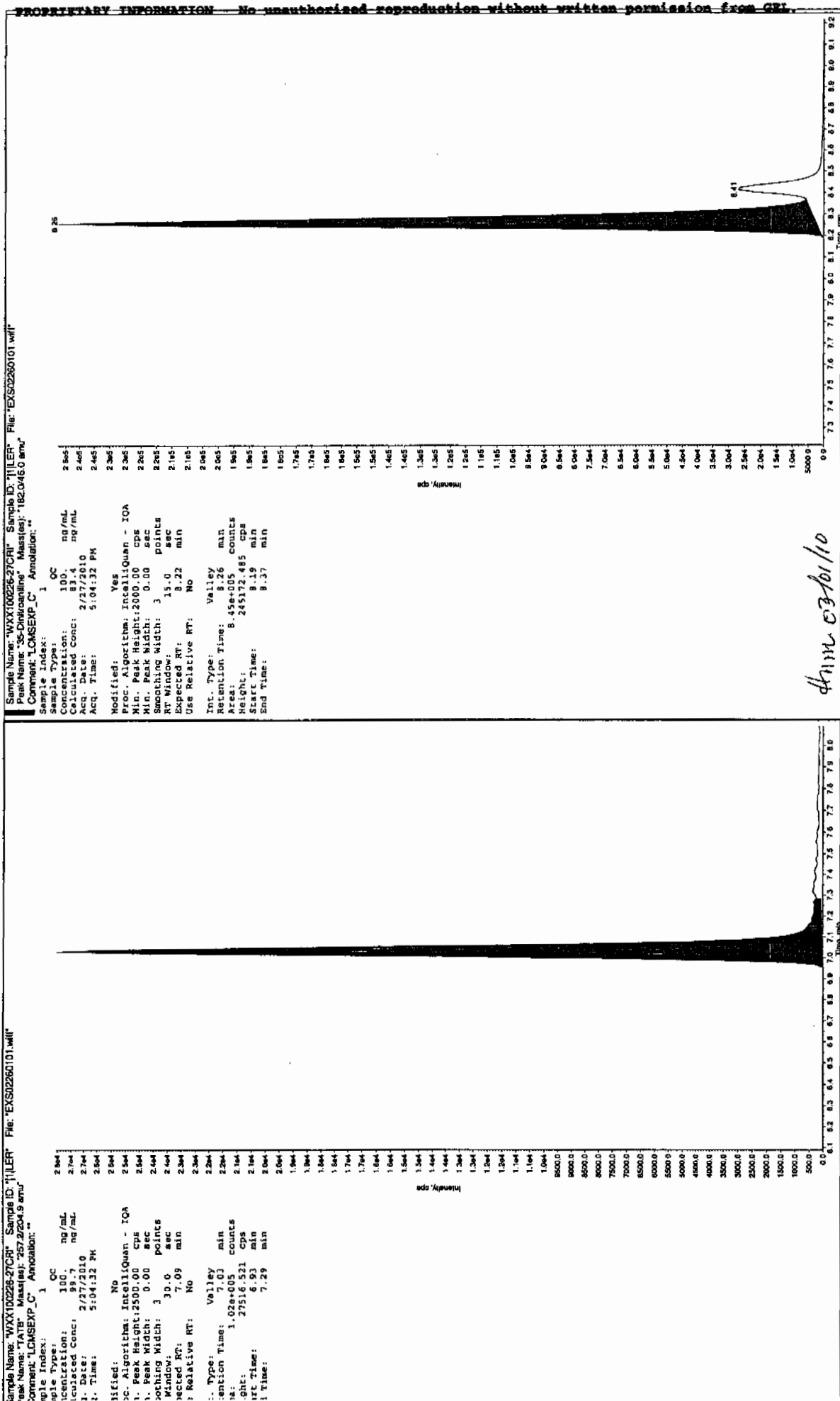
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

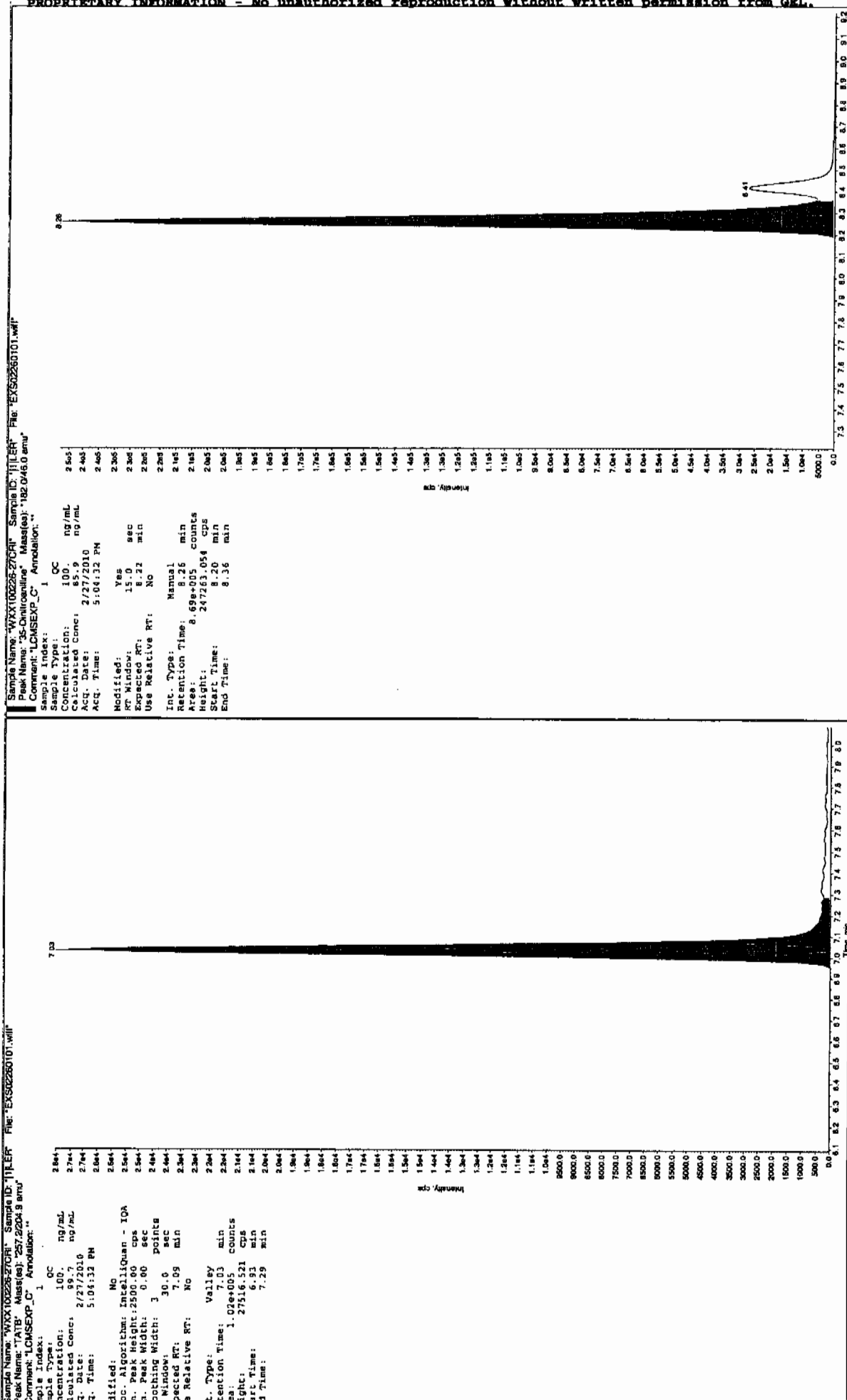
\* Value outside of Recovery Limits

Before Jan 31/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 31/10



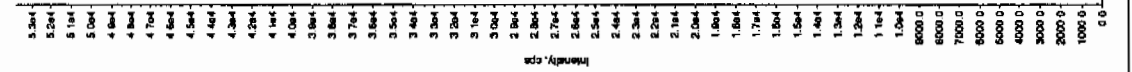
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100225-270R" Sample ID: "T1LER" File: "EXS02260101.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Estimated Conc: 2/27/2010  
 Acq. Date: 5:04:32 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.12 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 5.05 min  
 Area: 2.21e+005 counts  
 Height: 53787.364 cps  
 Width: 4.32 min  
 End Time: 5.36 min

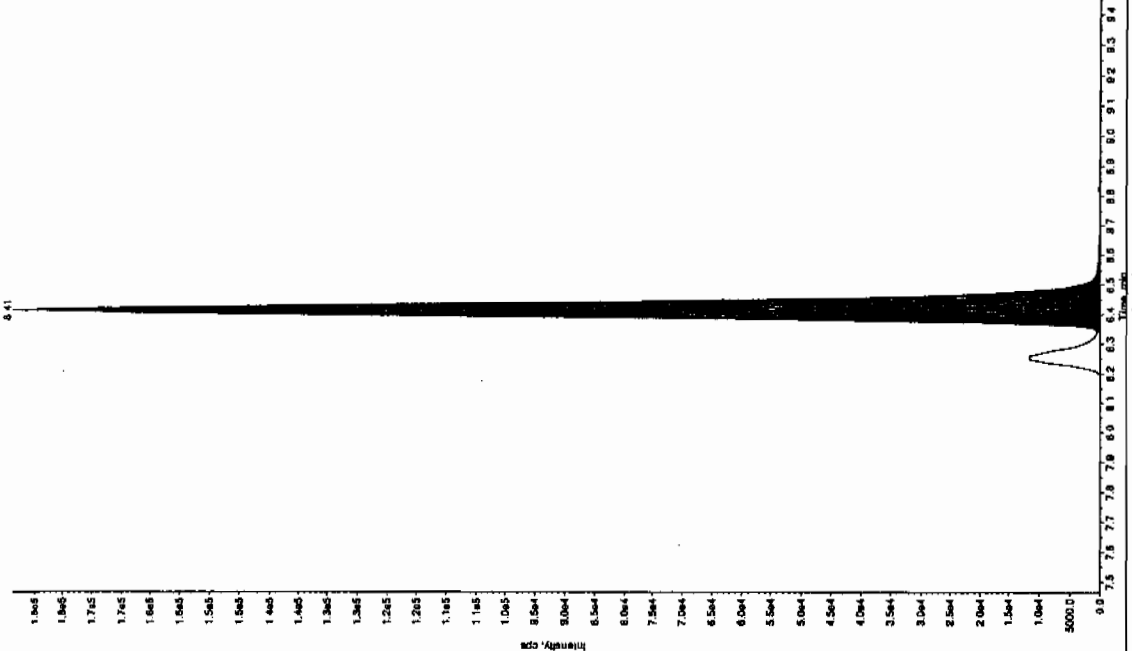


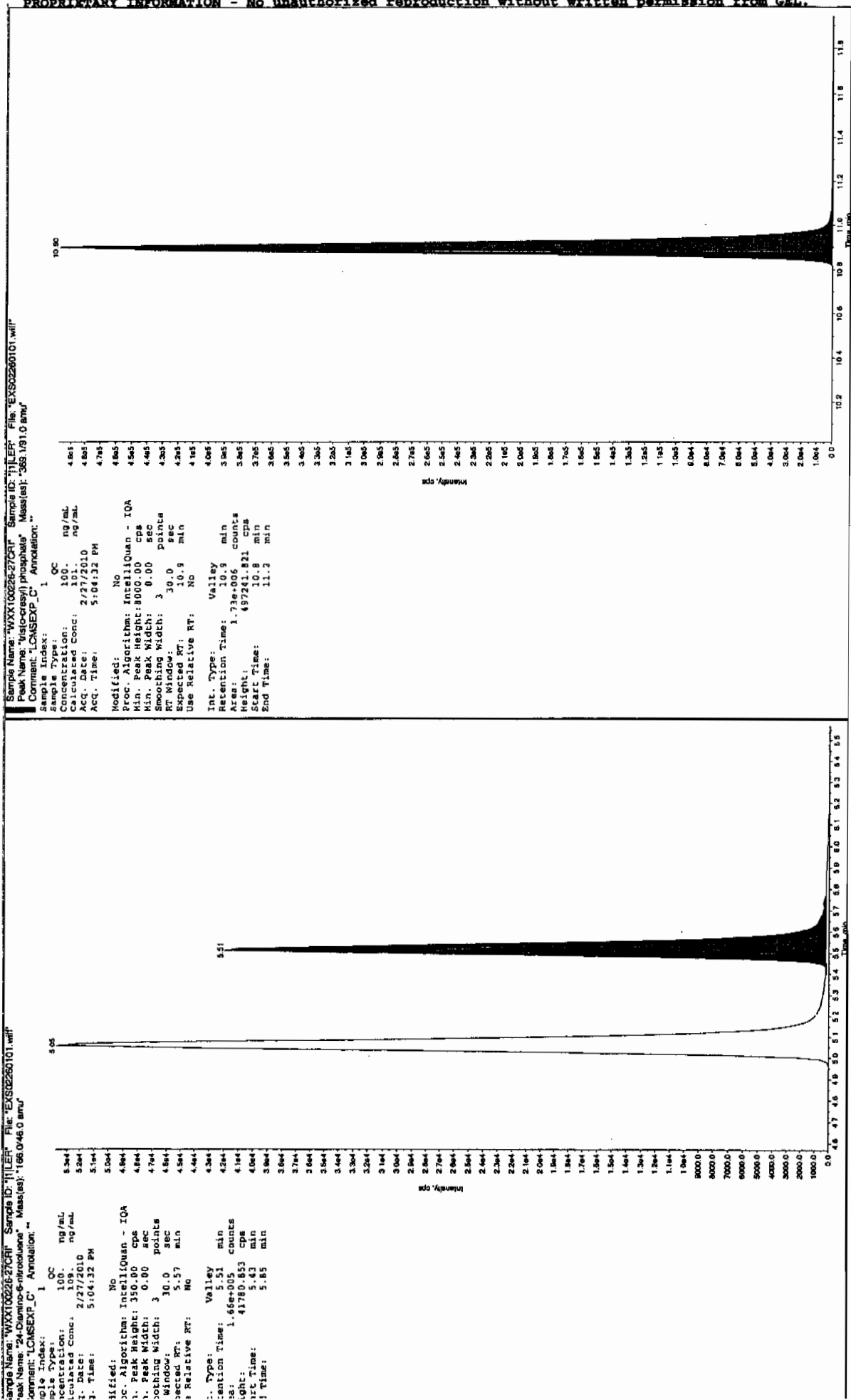
Sample Name: "WXX100225-270R" Sample ID: "T1LER" File: "EXS02260101.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50. ng/mL  
 Estimated Conc: 2/27/2010  
 Acq. Date: 5:04:32 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.46 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 8.41 min  
 Area: 6.27e+005 counts  
 Height: 183851.471 cps  
 Width: 8.34 min  
 End Time: 8.73 min





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260112.wiff

Analysis Date: 27-FEB-10 19:57

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	505	101	
2,6-Diamino-4-nitrotoluene	500	501	100	
3,4-Dinitrotoluene	250	206	82	
3,5-Dinitroaniline	500	444	89	
TATB	500	473	95	
tris(o-cresyl) phosphate	500	495	99	

Recovery Limits:

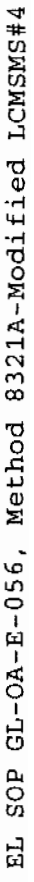
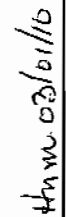
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

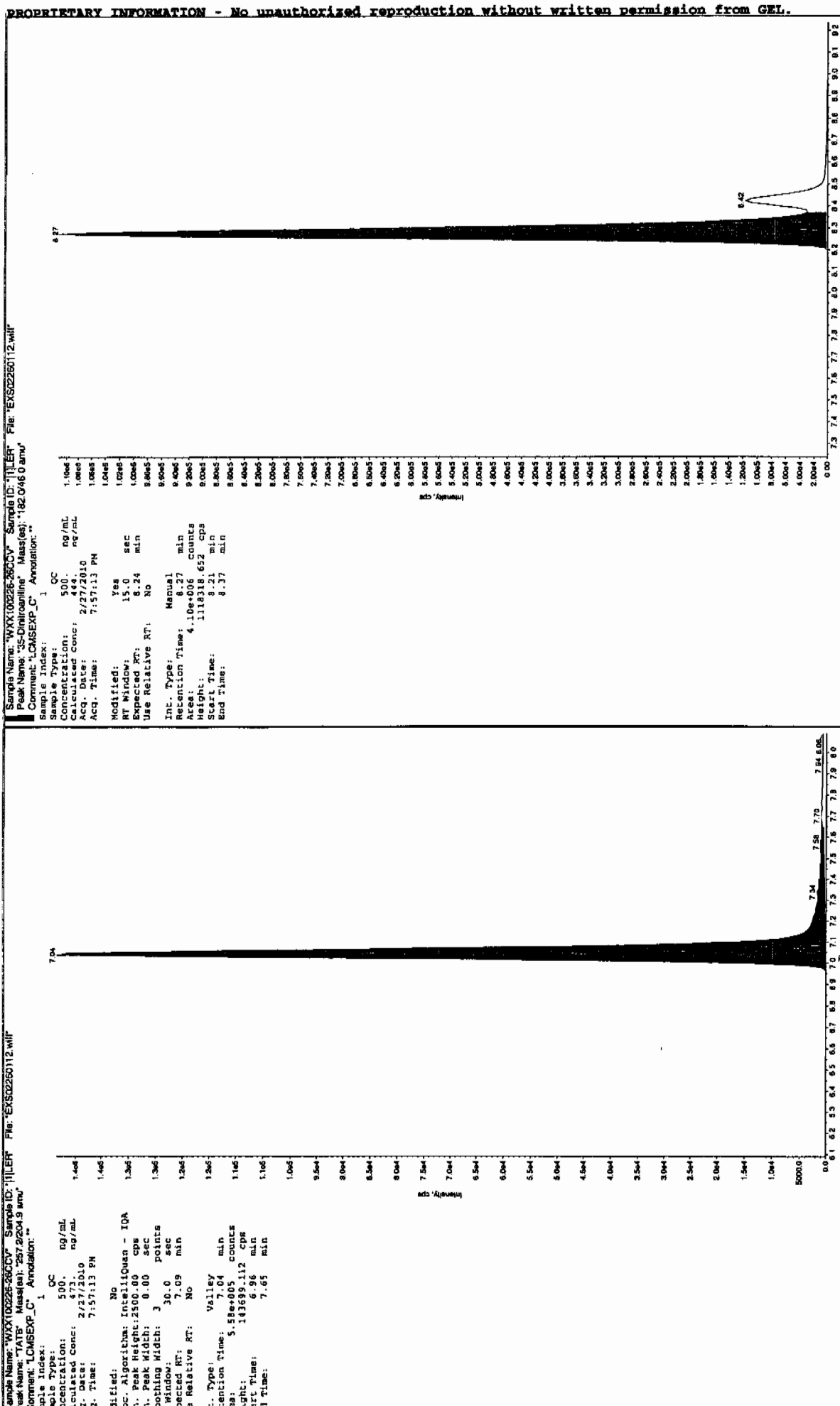
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits



after Jan 31/10

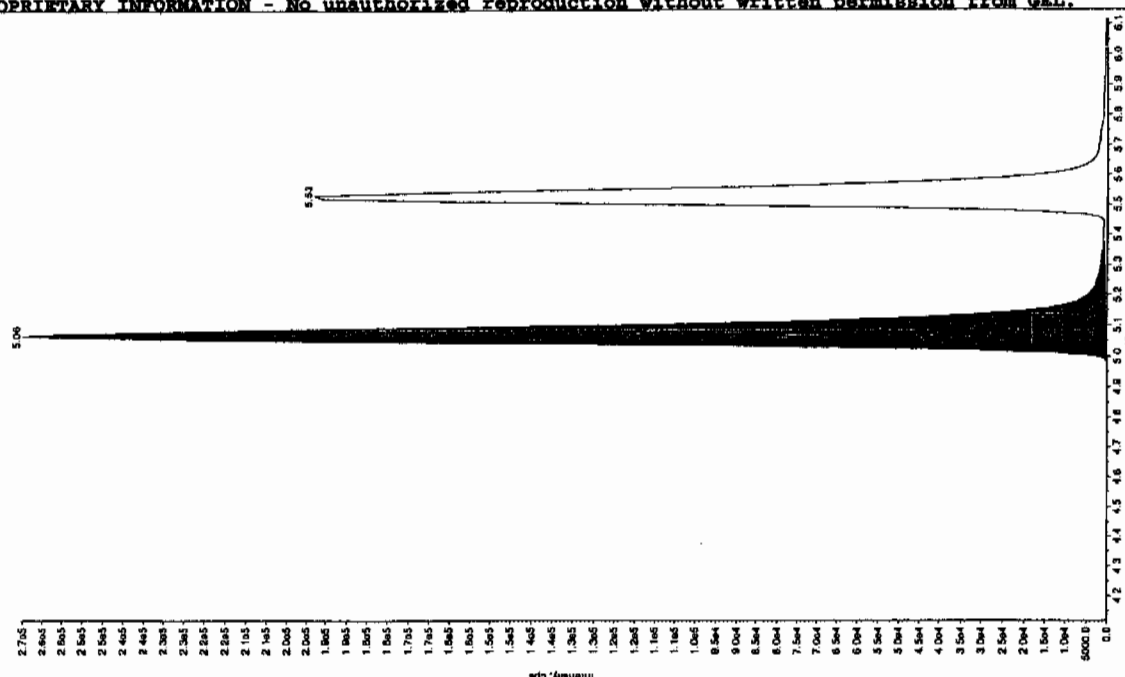
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

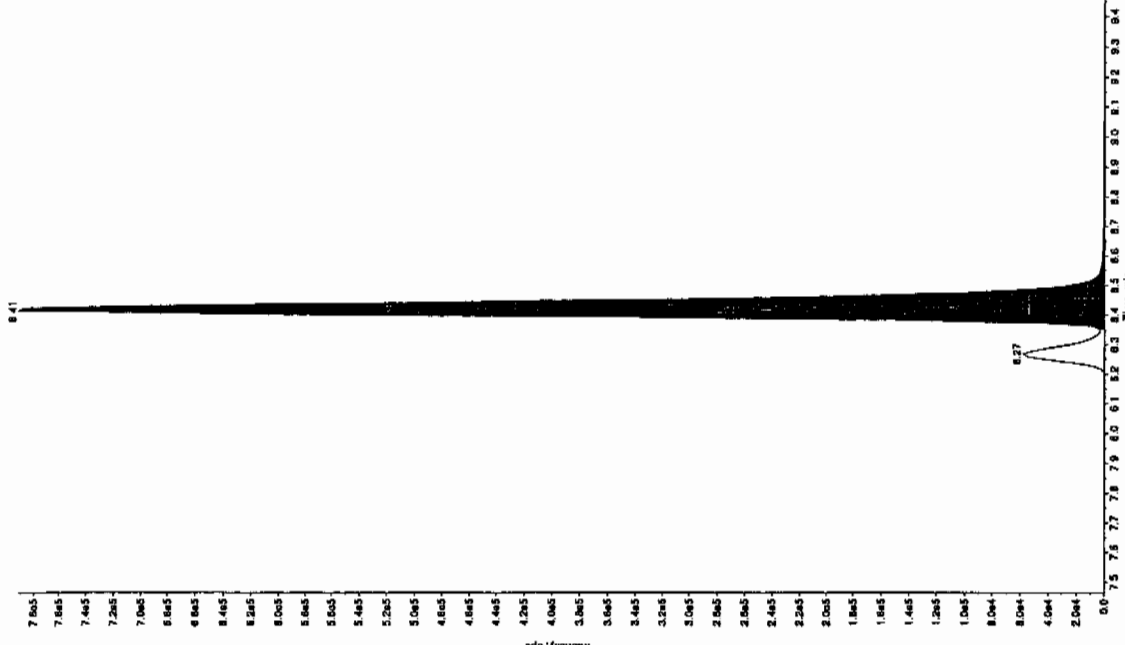
Sample Name: "WXX10026-2600" Sample ID: "11111" File: "EXS02260112.wif"  
 Peak Name: "34-Dinitrobenzoic Acid" Mass(es): "182.0450 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 501. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 7:57:13 PM  
 Modified: No  
 Proc. Algorithm: InCellQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Retention Window: 30.0 points  
 Expected RT: 5.12 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.06 min  
 Area: 1.10e+006 counts  
 Height: 265248.596 cps  
 Start Time: 4.97 min  
 End Time: 5.37 min

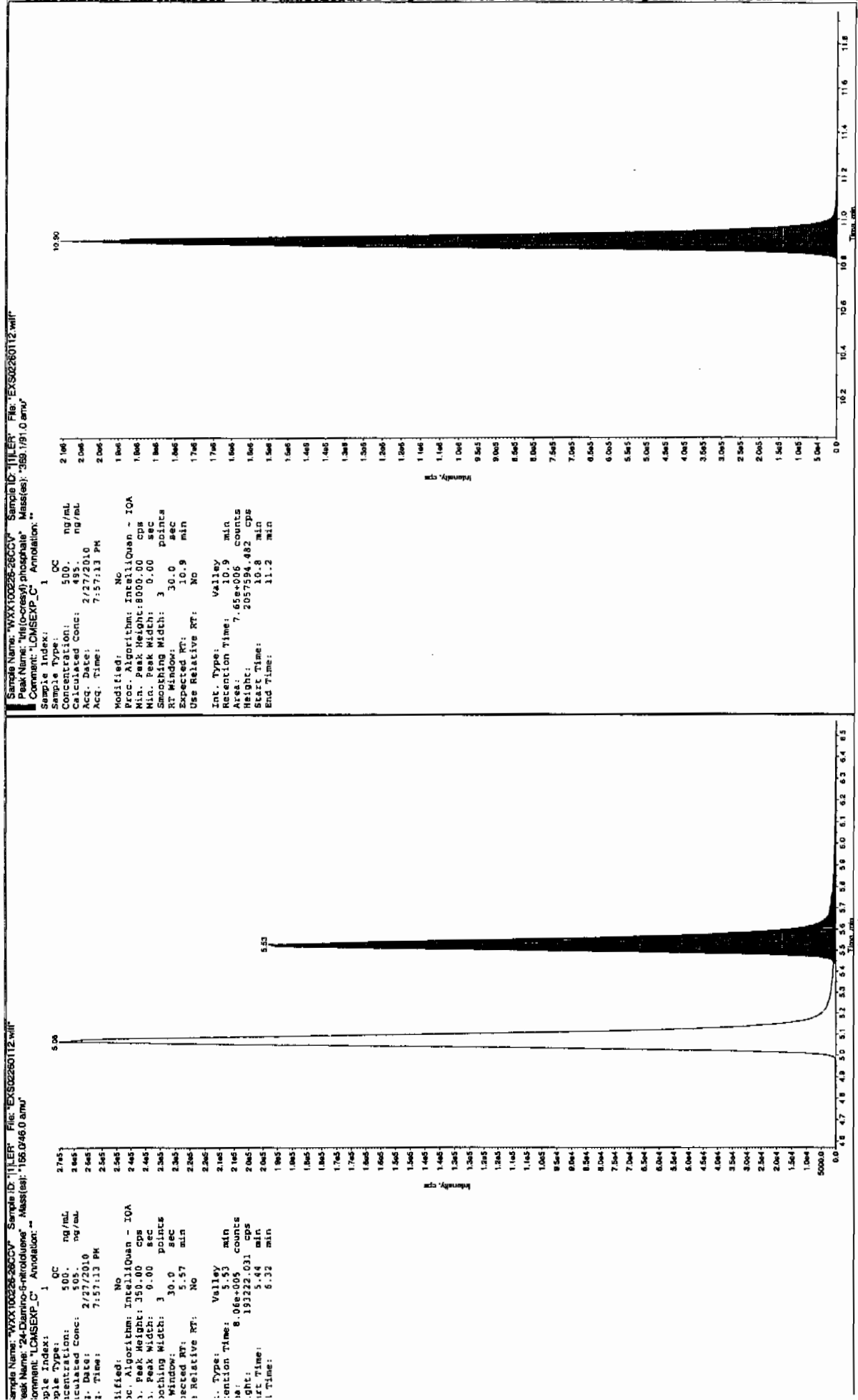


Sample Name: "WXX10026-2600" Sample ID: "11111" File: "EXS02260112.wif"  
 Peak Name: "34-Dinitrobenzoic Acid" Mass(es): "182.0450 amu"  
 Comment: "LCMS-EXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 256. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 7:57:13 PM  
 Modified: No  
 Proc. Algorithm: InCellQuan - IOA  
 Min. Peak Height: 140.00 cps  
 Min. Peak Width: 3.00 sec  
 Retention Window: 15.0 points  
 Expected RT: 8.46 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.41 min  
 Area: 2.66e+006 counts  
 Height: 791284.790 cps  
 Start Time: 8.35 min  
 End Time: 8.74 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

**7B**  
**Explosives CRI Standard**

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260114.wiff

Analysis Date: 27-FEB-10 20:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	98	98	
3,4-Dinitrotoluene	50	43.6	87	
3,5-Dinitroaniline	100	84.7	85	
TATB	100	97.3	97	
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 ,

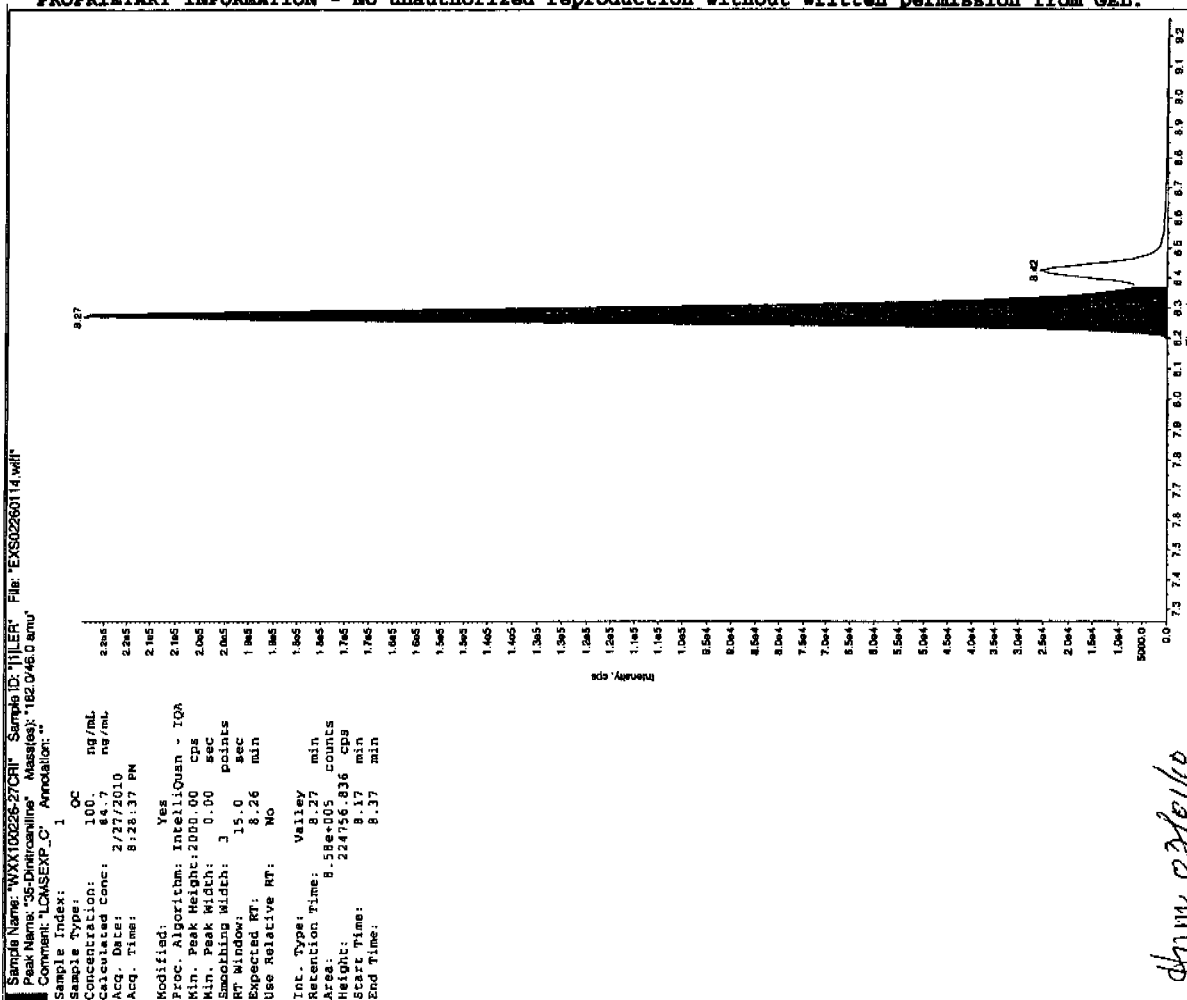
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

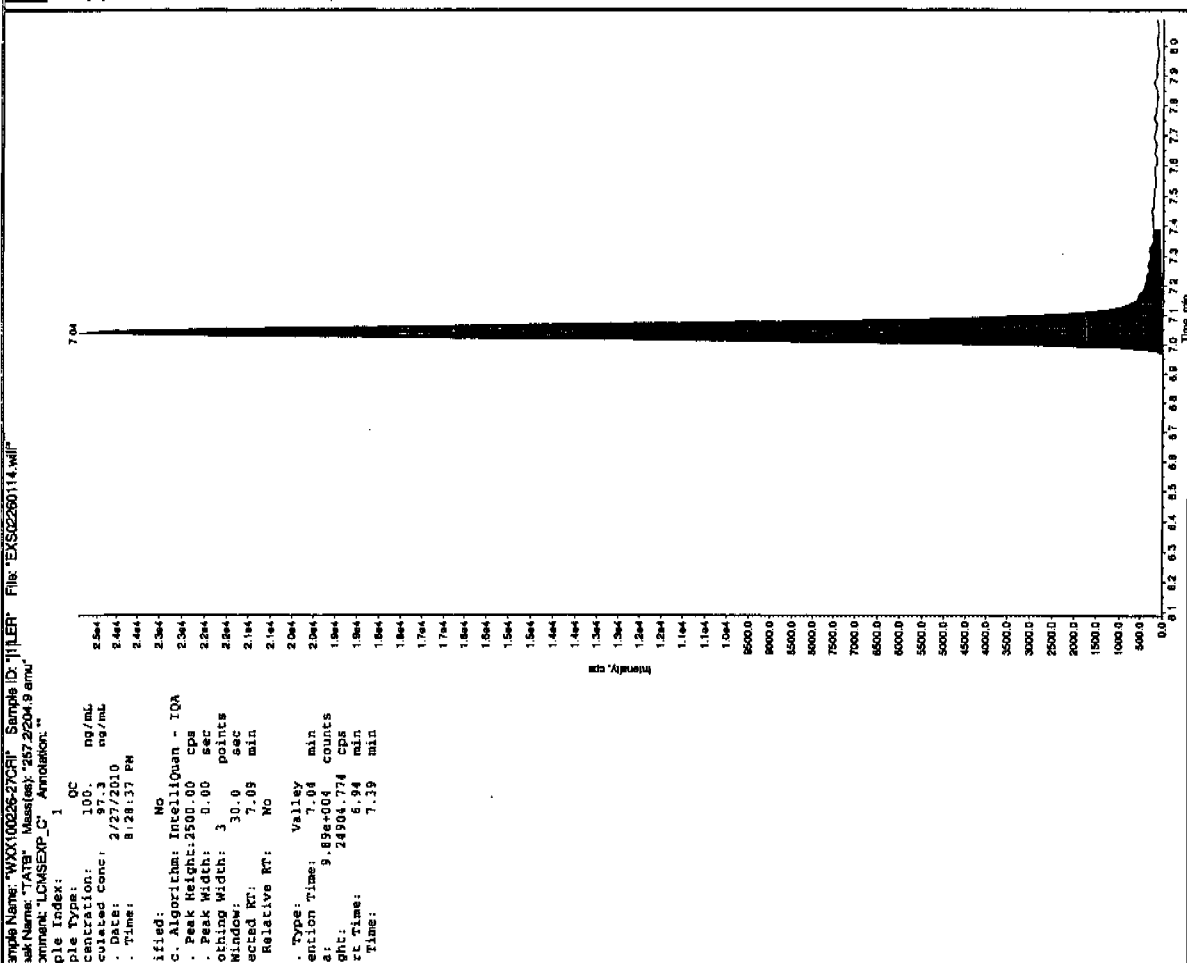
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

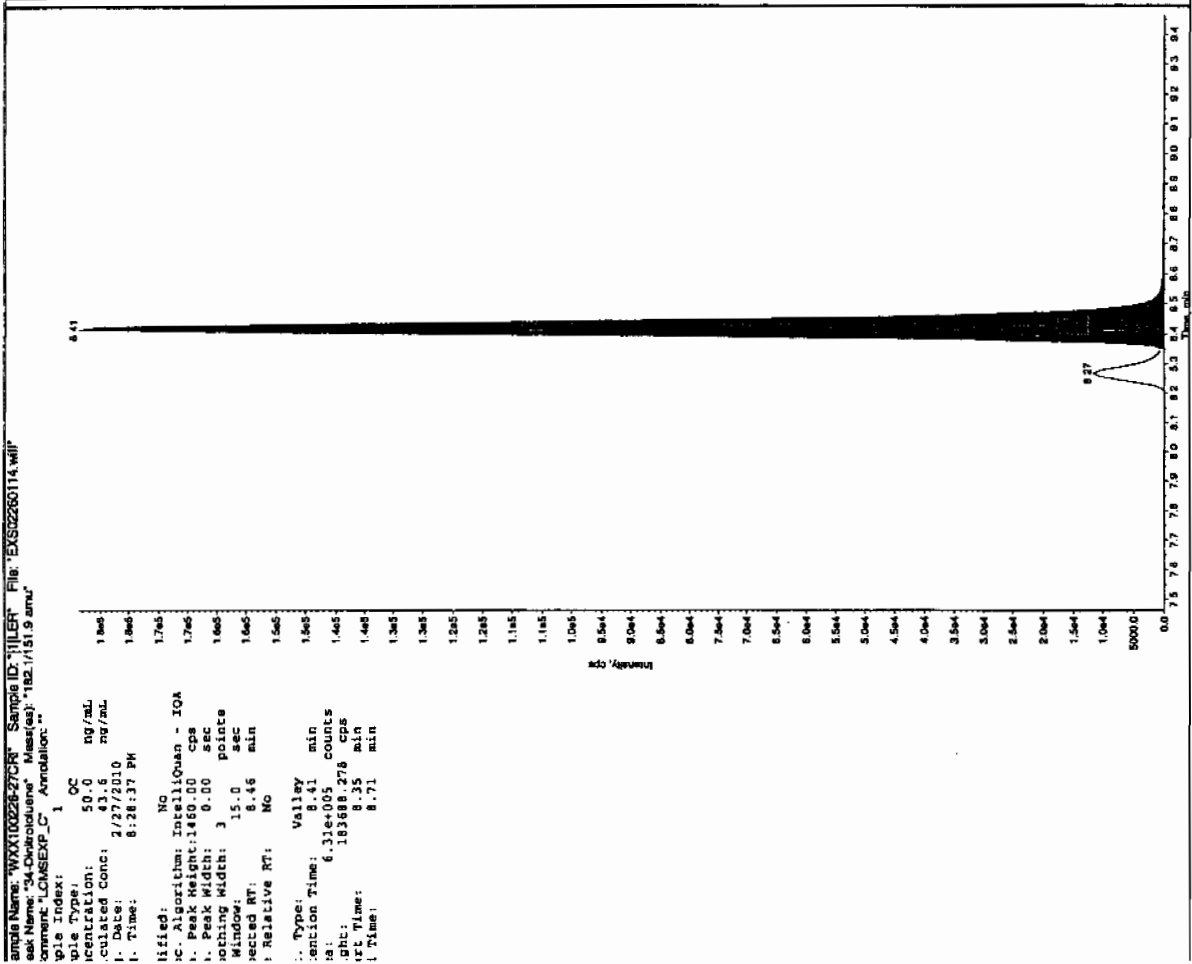
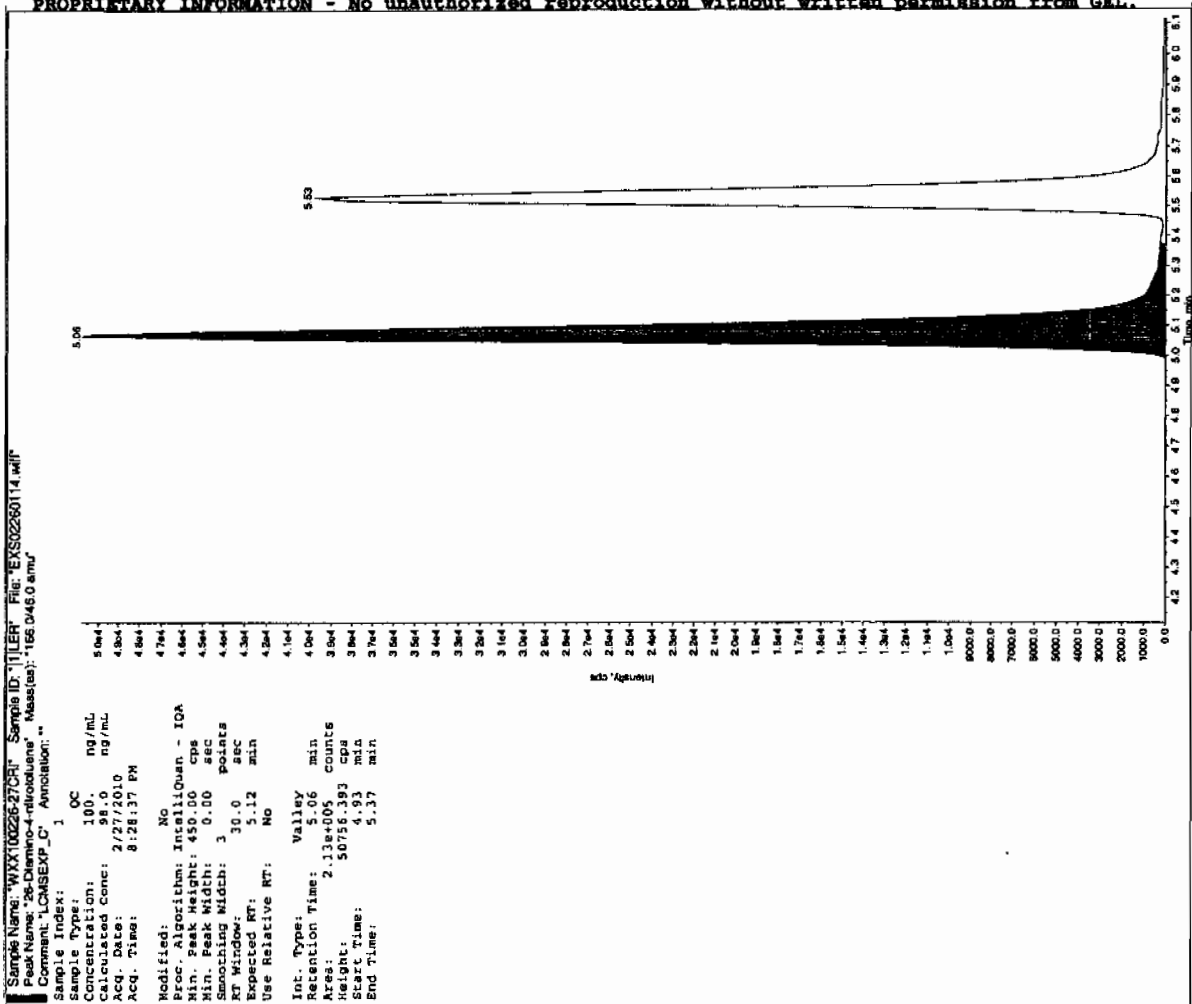
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EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

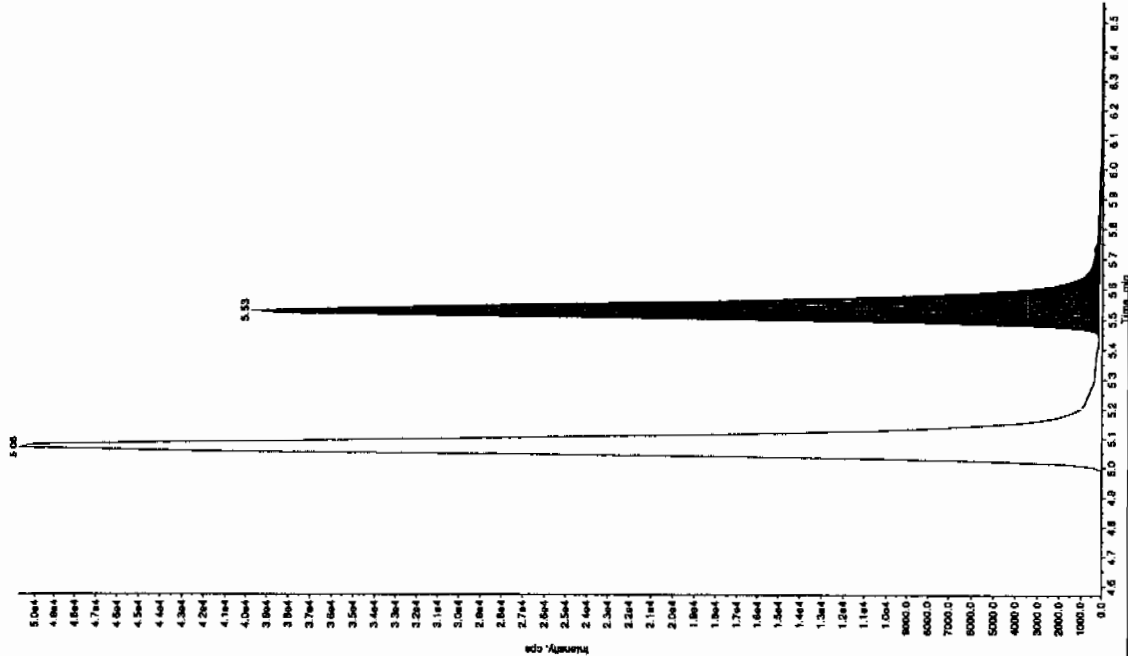


Sample Name: WXX10225-27C91 Sample ID: 111ER File: EXS02250114.wif  
 Peak Name: Val(ocresyl) phosphate Mass(es): 156.04610 amu  
 Comment: LOMSEXP\_C Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100. ng/mL  
 Calculated Conc: 2/27/2010  
 Acq. Date: 8:28:37 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - TOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.57 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 5.53 min  
 Area: 1.57e+005 counts  
 Height: 39637.032 cps  
 Start Time: 5.45 min  
 End Time: 6.12 min

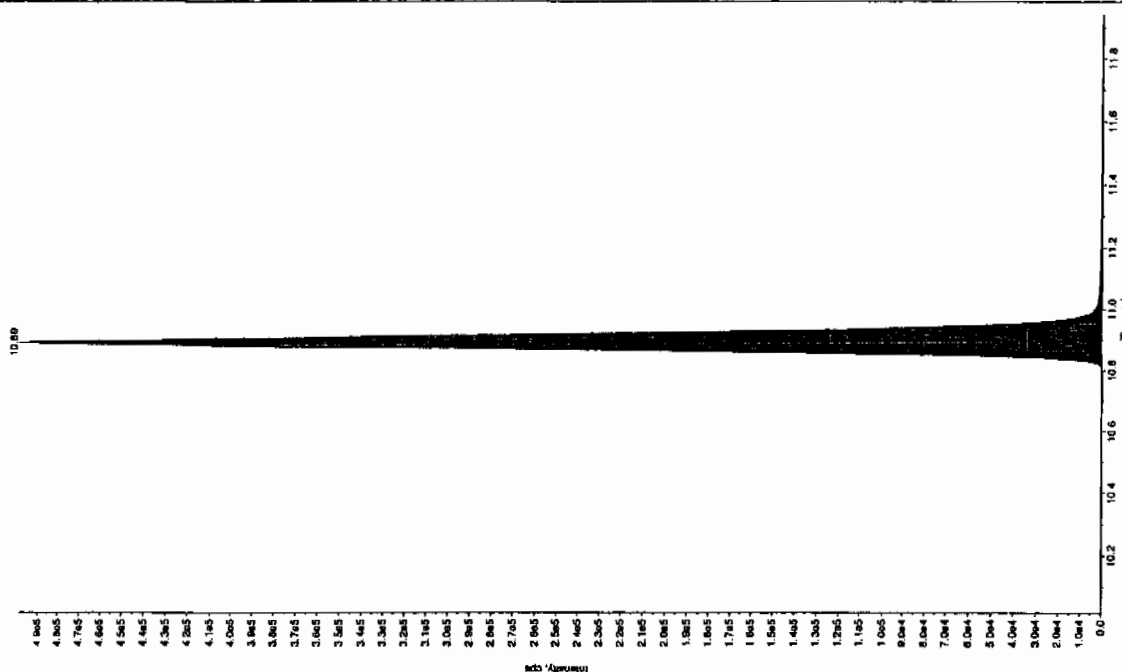


Sample Name: WXX10225-27C91 Sample ID: 111ER File: EXS02250114.wif  
 Peak Name: Val(ocresyl) phosphate Mass(es): 358.19110 amu  
 Comment: LOMSEXP\_C Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100. ng/mL  
 Calculated Conc: 2/27/2010  
 Acq. Date: 8:28:37 PM

Modified: No  
 Proc. Algorithm: IntelliQuan - TOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No

Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.73e+006 counts  
 Height: 498155.157 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260123.wiff

Analysis Date: 27-FEB-10 22:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	507	101	
2,6-Diamino-4-nitrotoluene	500	489	98	
3,4-Dinitrotoluene	250	209	84	
3,5-Dinitroaniline	500	447	89	
TATB	500	473	95	
tris(o-cresyl) phosphate	500	484	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

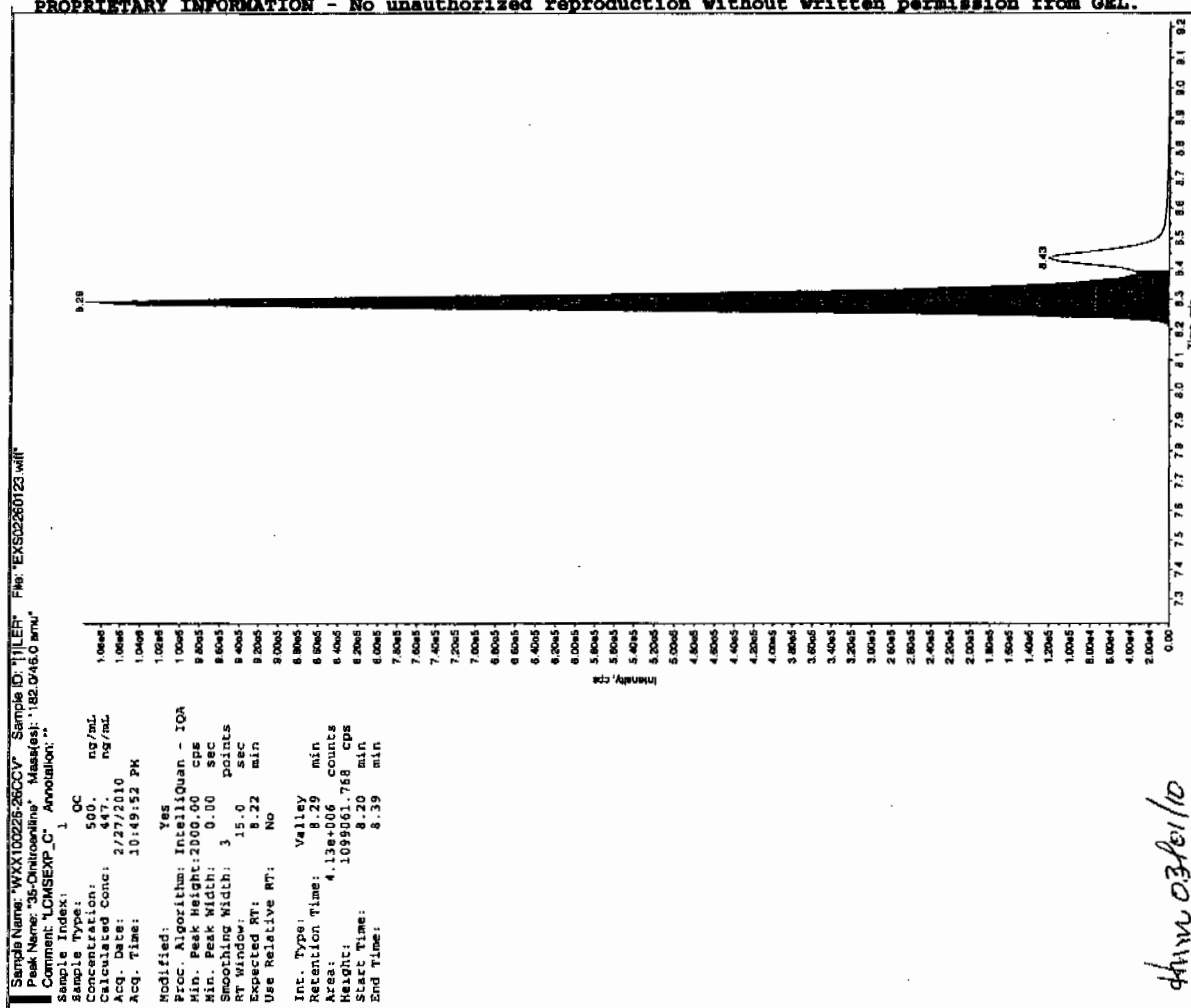
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

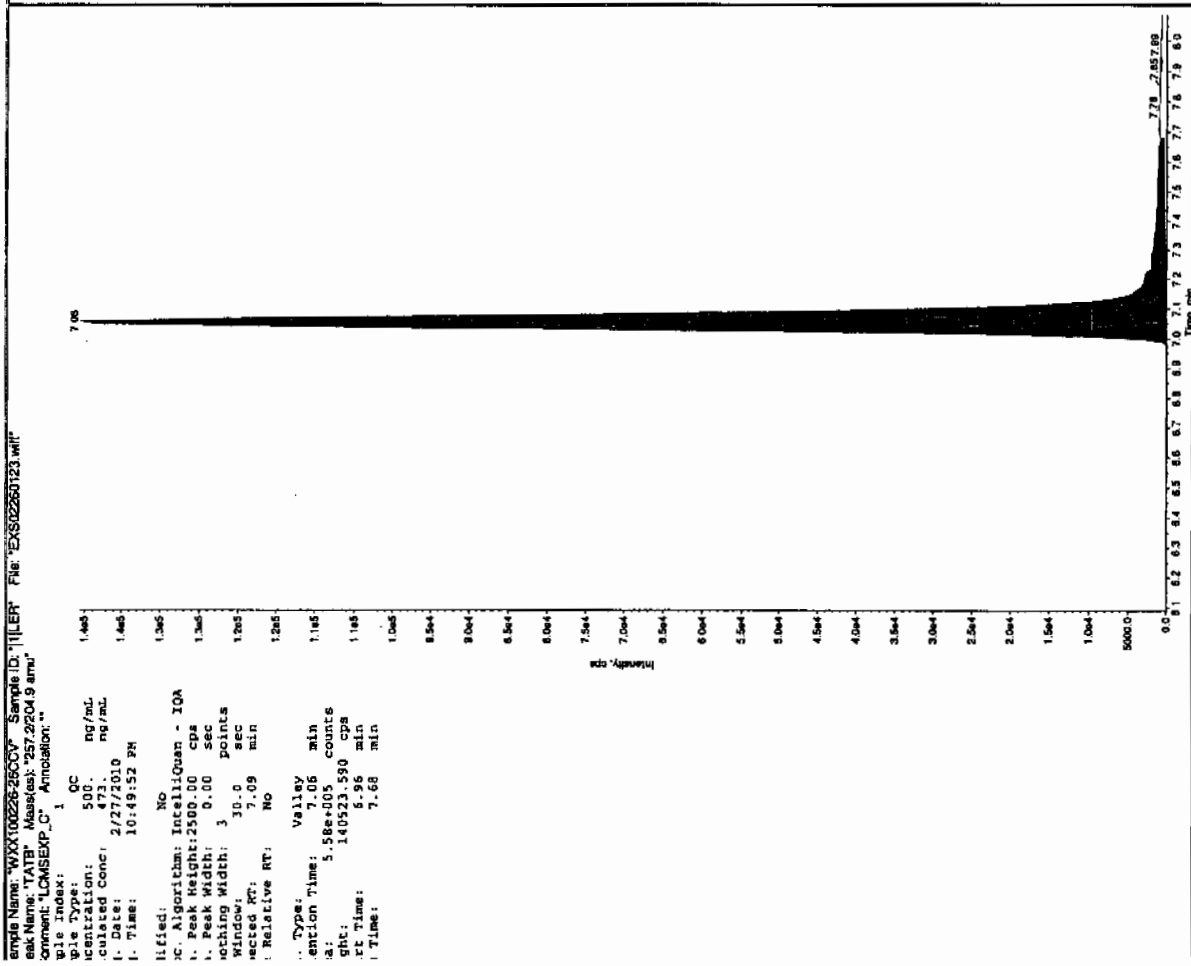
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

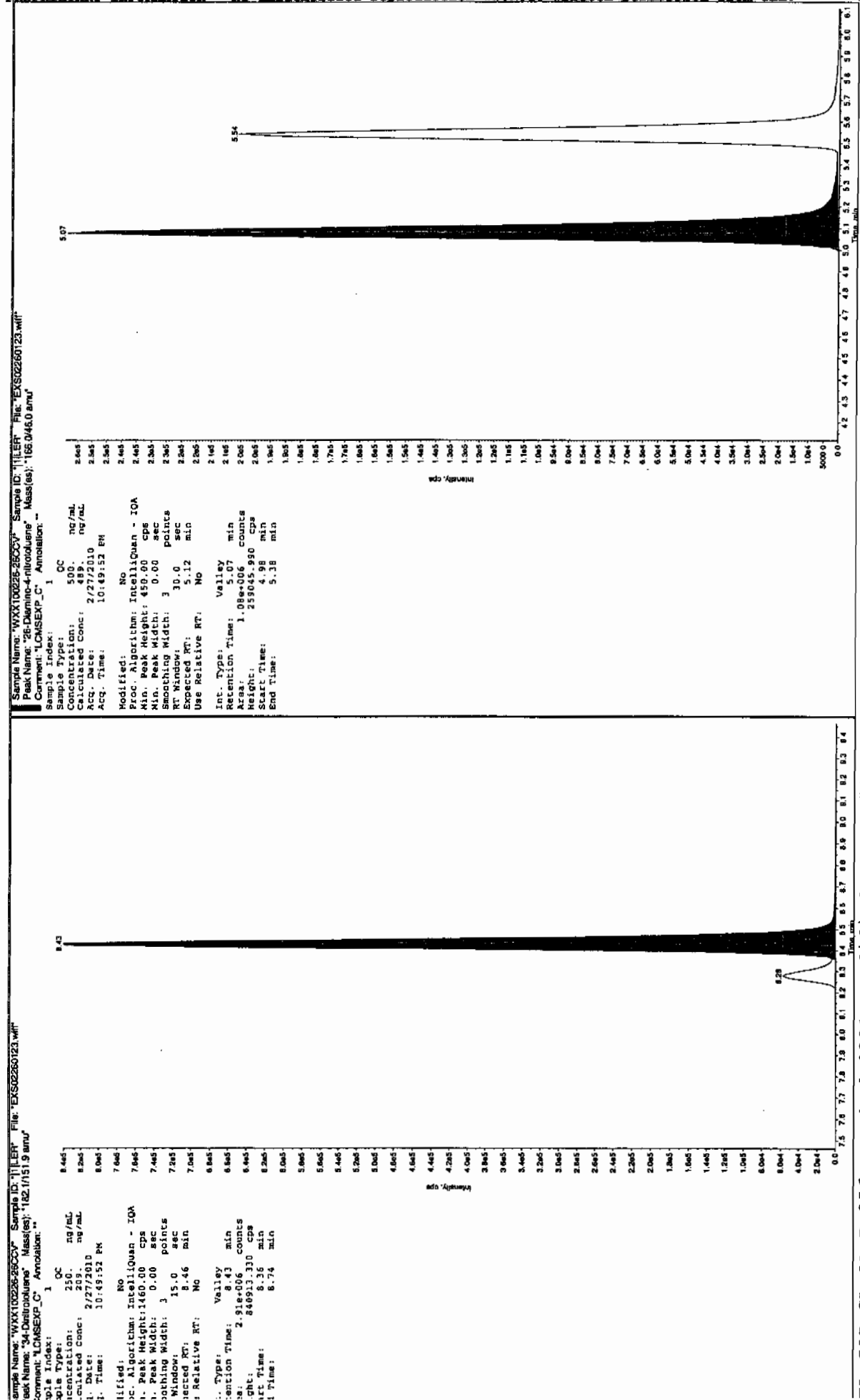
See 31110



44mm 03/01/10



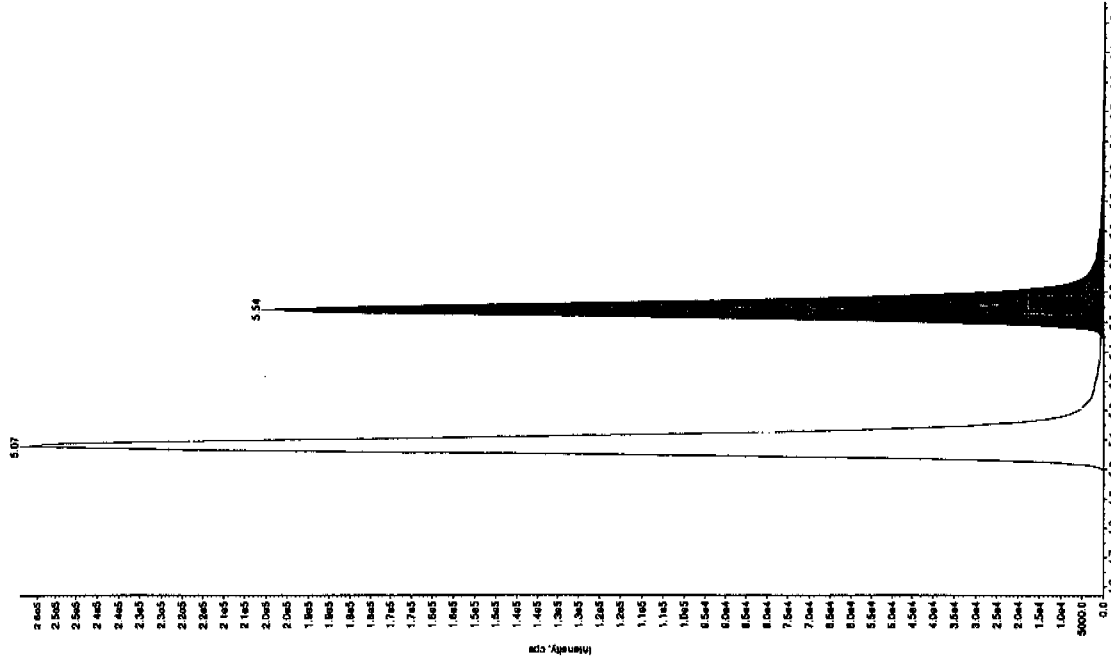
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMMS#4

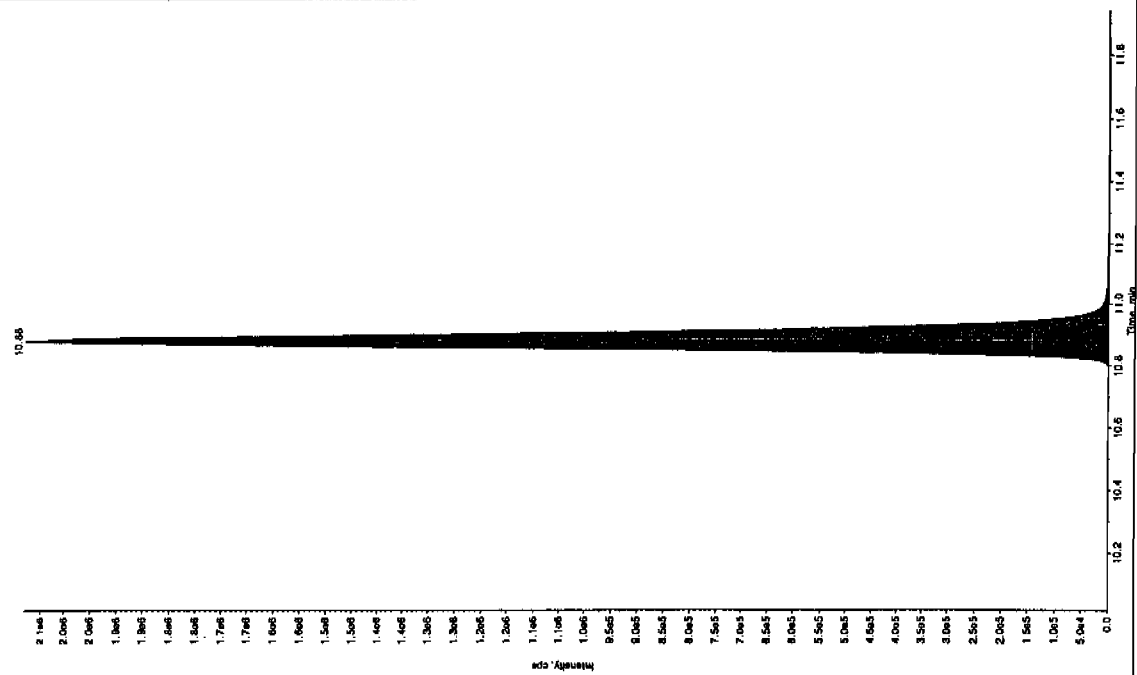
Sample Name: "WXX100226-2600V" Sample ID: "111ER" File: "EX502260123.wif"  
 Peak Name: "24-Diamino-6-Nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 489. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 10:49:52 PM  
 Modified: No  
 Proc Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 800.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.54 min  
 Area: 8.10e+005 counts  
 Height: 201070.770 cps  
 Start Time: 5.45 min  
 End Time: 6.26 min



Sample Name: "WXX100226-2600V" Sample ID: "111ER" File: "EX502260123.wif"  
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 489. ng/mL  
 Acq. Date: 2/27/2010  
 Acq. Time: 10:49:52 PM  
 Modified: No  
 Proc Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 800.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.50e+006 counts  
 Height: 2081064.453 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260125.wiff

Analysis Date: 27-FEB-10 23:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,5-Dinitroaniline	100	86.1	86	
TATB	100	101	101	
tris(o-cresyl) phosphate	100	102	102	
2,4-Diamino-6-nitrotoluene	100	116	116	
2,6-Diamino-4-nitrotoluene	100	113	113	
3,4-Dinitrotoluene	50	42.9	86	

Recovery Limits:

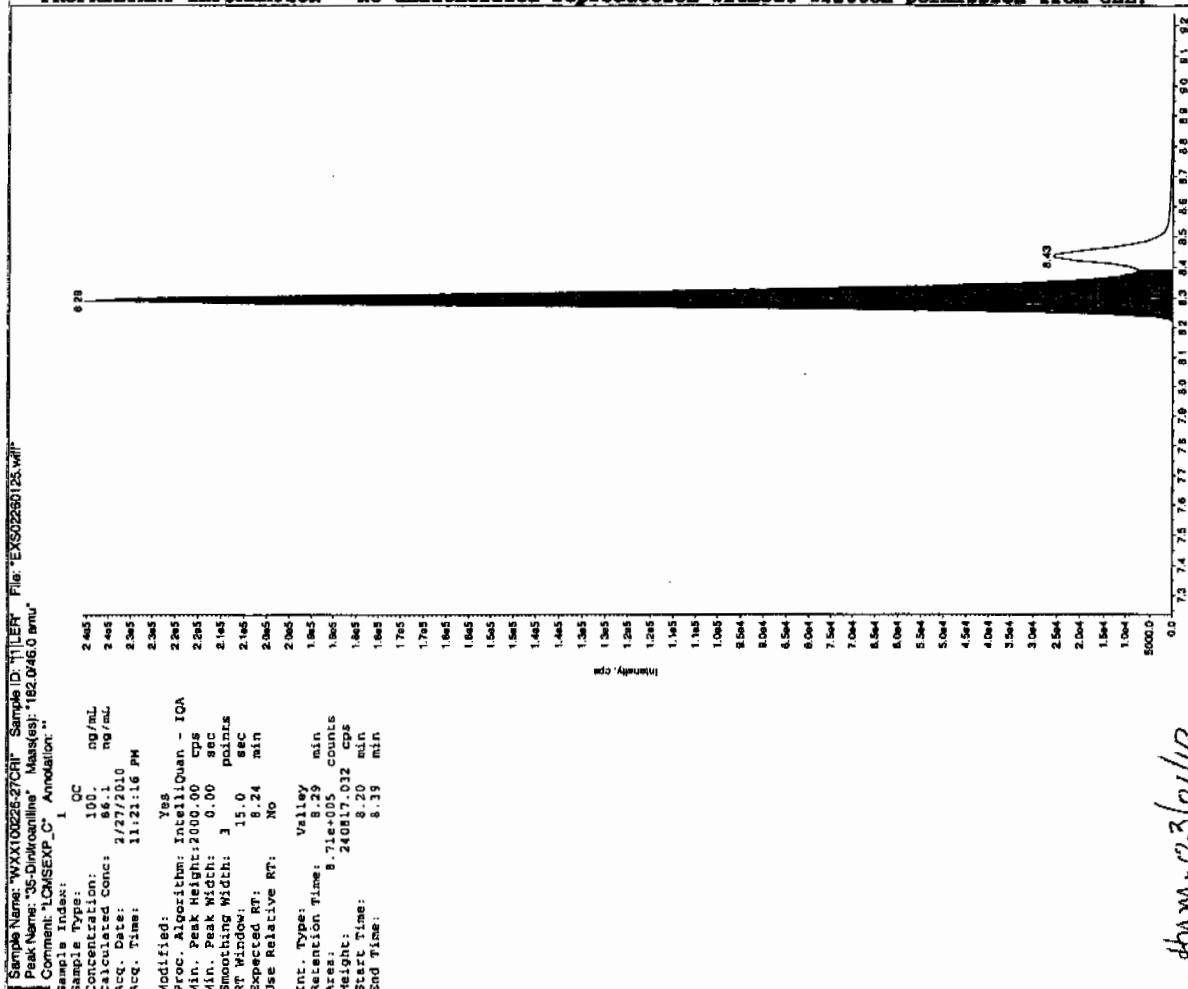
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

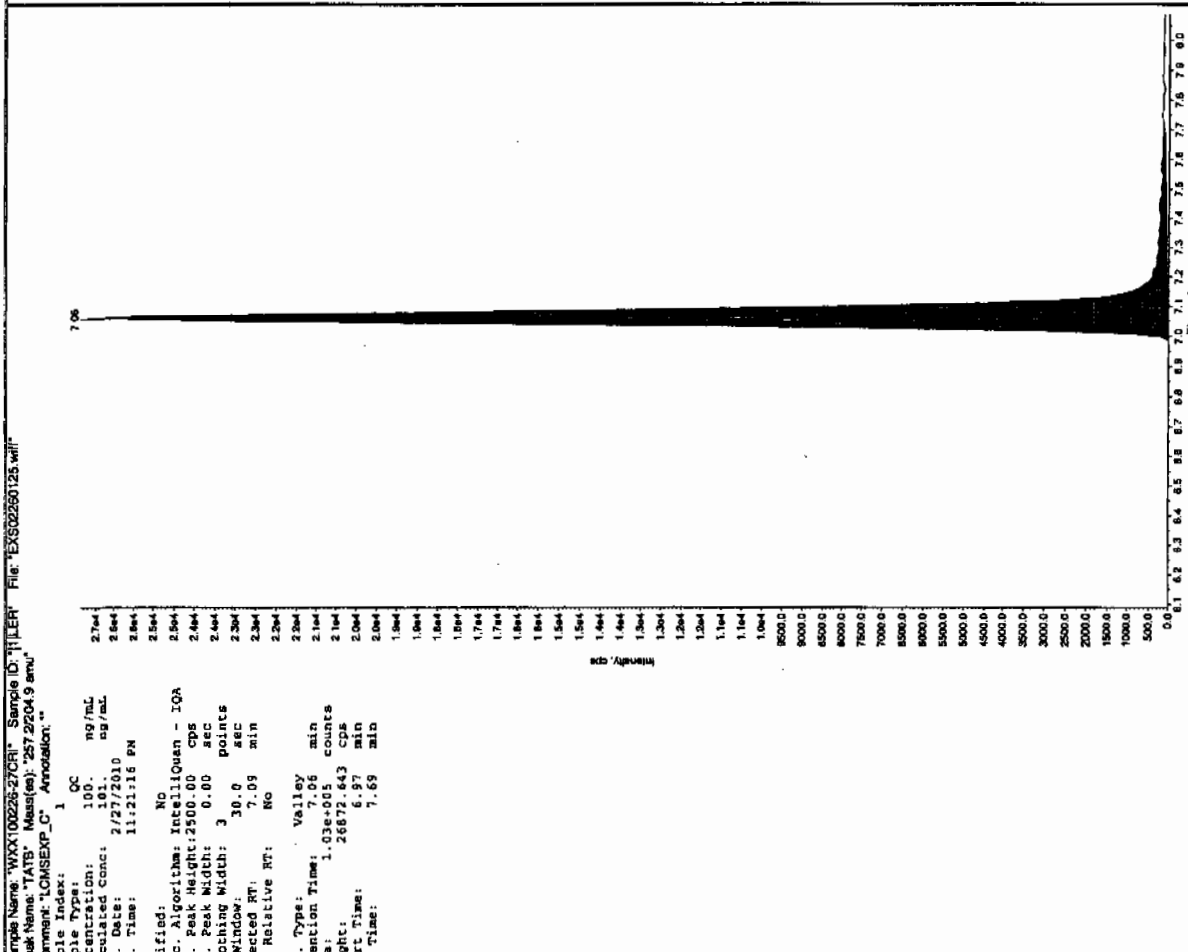
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

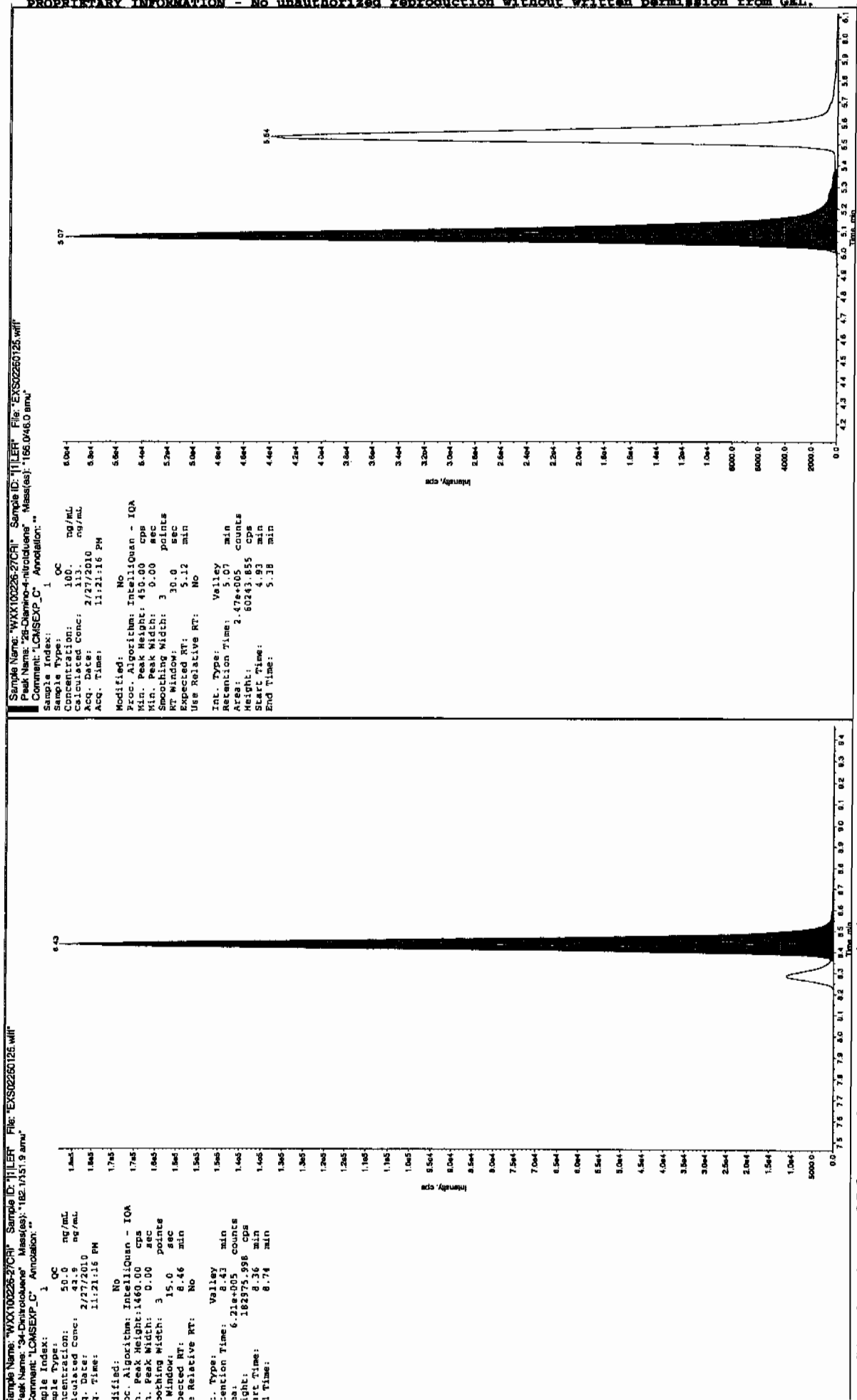
See 3/1/10



dmw-03/01/10

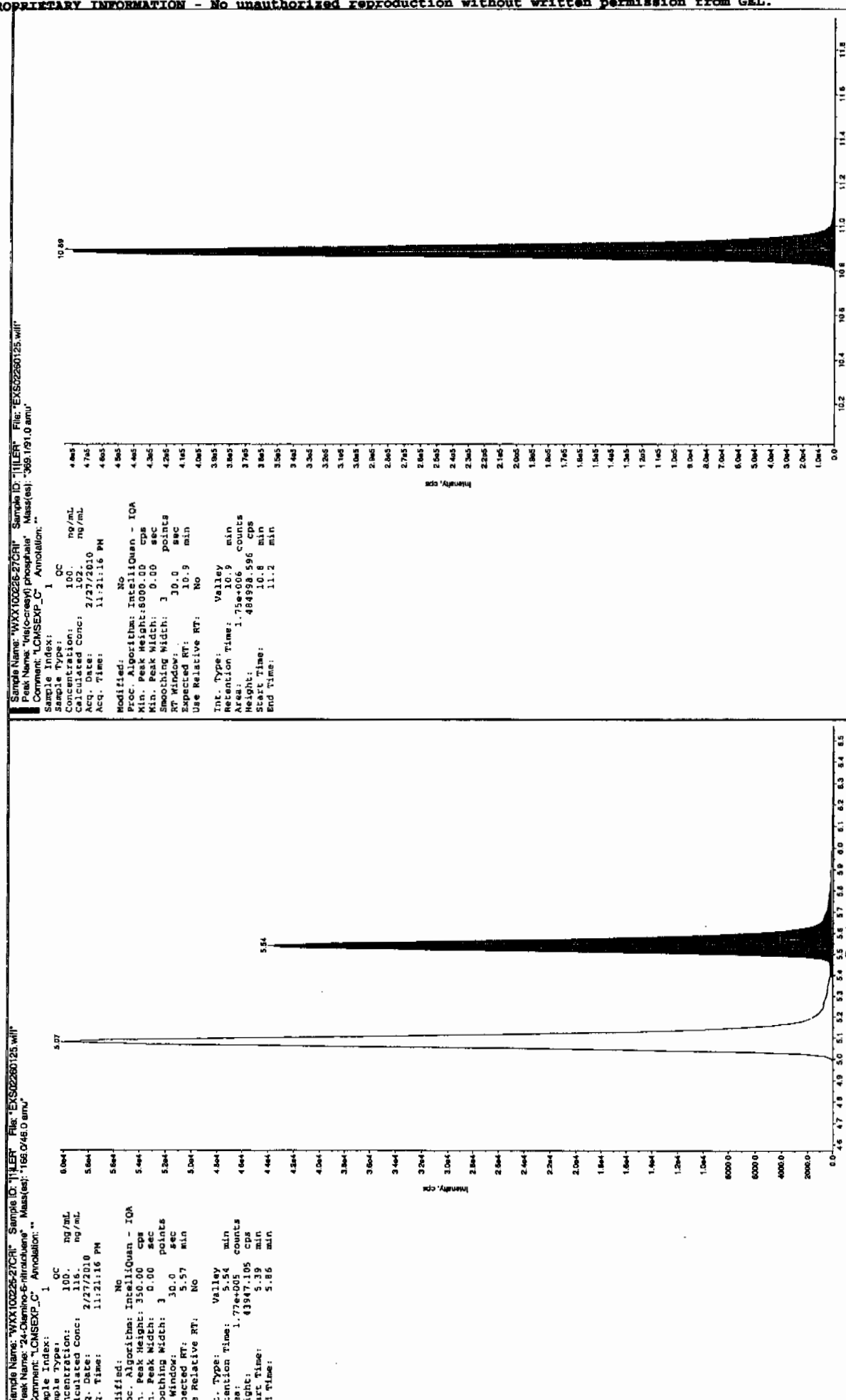


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260136.wiff

Analysis Date: 28-FEB-10 02:14

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	642	128	
2,6-Diamino-4-nitrotoluene	500	647	129	
3,4-Dinitrotoluene	250	213	85	
3,5-Dinitroaniline	500	439	88	
TATB	500	513	103	
tris(o-cresyl) phosphate	500	493	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 3/1/10

Sample Name: "WXX100227-260V" Sample ID: "JLERY" File: "EXS0250136.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Time: 2:14:05 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

Window: 30.0 sec

Expected RT: 7.09 min

Use Relative RT: No

Int. Type: Valley

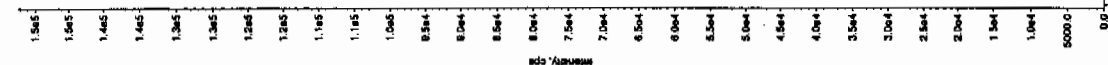
Retention Time: 7.06 min

Area: 6.07e+006 counts

Height: 13232431 cps

Scan Time: 0.07 min

End Time: 7.95 min



Sample Name: "WXX100227-260V" Sample ID: "JLERY" File: "EXS0250136.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500 ng/mL  
 Calculated Conc: 2/28/2010  
 Acq. Time: 2:14:05 AM

Modified: Yes

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

Window: 15.0 sec

Expected RT: 8.24 min

Use Relative RT: No

Int. Type: Valley

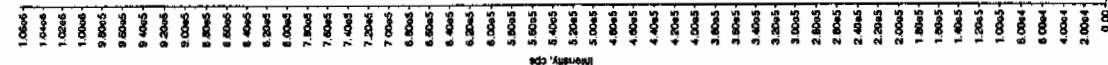
Retention Time: 8.29 min

Area: 4.05e+006 counts

Height: 105316.185 cps

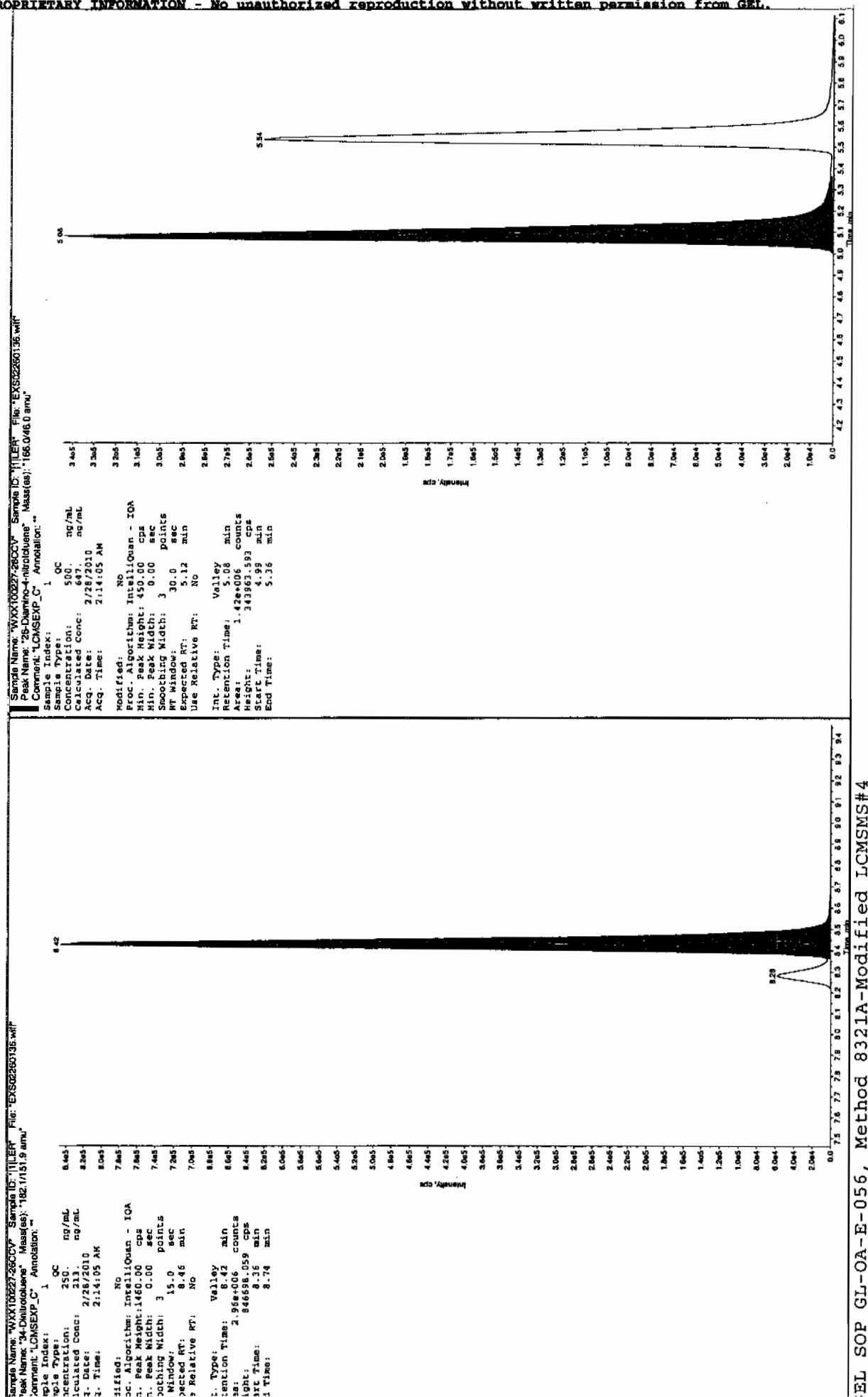
Scan Time: 8.23 min

End Time: 8.59 min



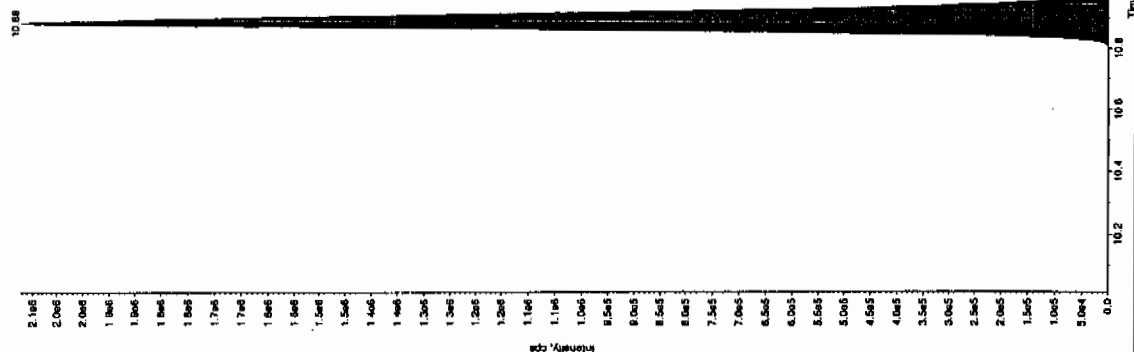
Jan 03/01/10

EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



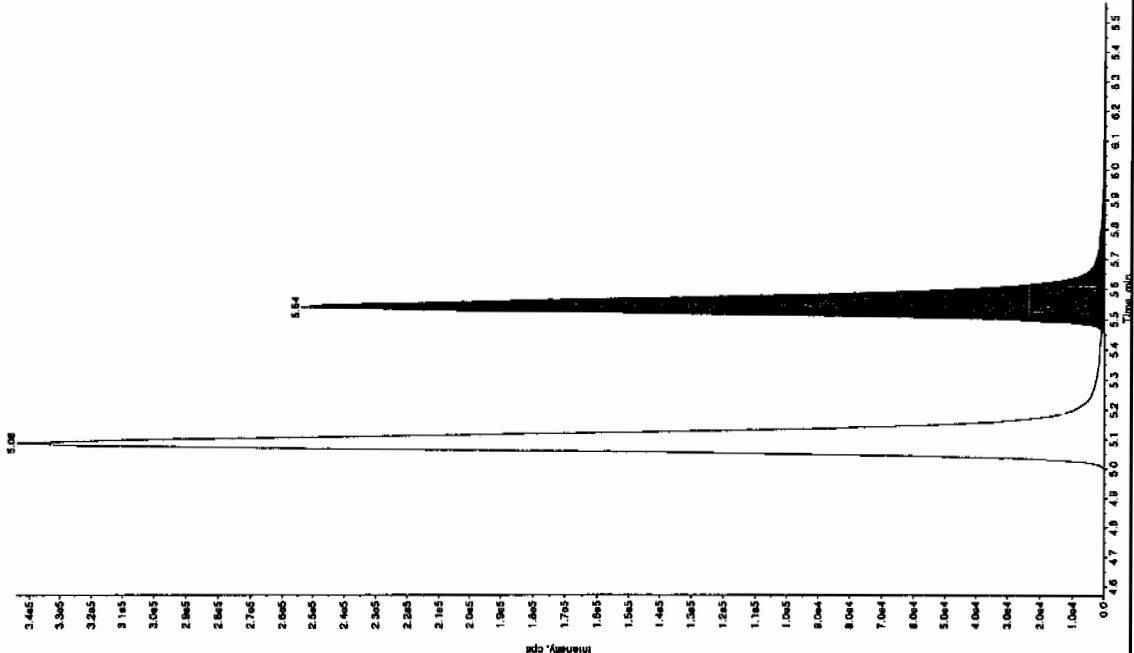
Sample Name: "WXX100227-260CV" Sample ID: "J1LER" File: "EX502260136.wif"  
 Peak Name: "tris(p-cresyl) phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500 ng/mL  
 Calculated Conc: 493 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 2:14:05 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 7.62e+06 counts  
 Height: 207398.193 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



Sample Name: "WXX100227-260CV" Sample ID: "J1LER" File: "EX502260136.wif"  
 Peak Name: "24-Diamino-5-norbornene" Mass(es): "156.046.0 amu"  
 Comment: "LONSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500 ng/mL  
 Calculated Conc: 642 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 2:14:05 AM  
 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: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.54 min  
 Area: 1.03e+06 counts  
 Height: 253787.354 cps  
 Start Time: 5.46 min  
 End Time: 5.65 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260138.wiff

Analysis Date: 28-FEB-10 02:45

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	134	134	
2,6-Diamino-4-nitrotoluene	100	135	135	
3,4-Dinitrotoluene	50	44.3	89	
3,5-Dinitroaniline	100	87.8	88	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	98.5	99	

Recovery Limits:

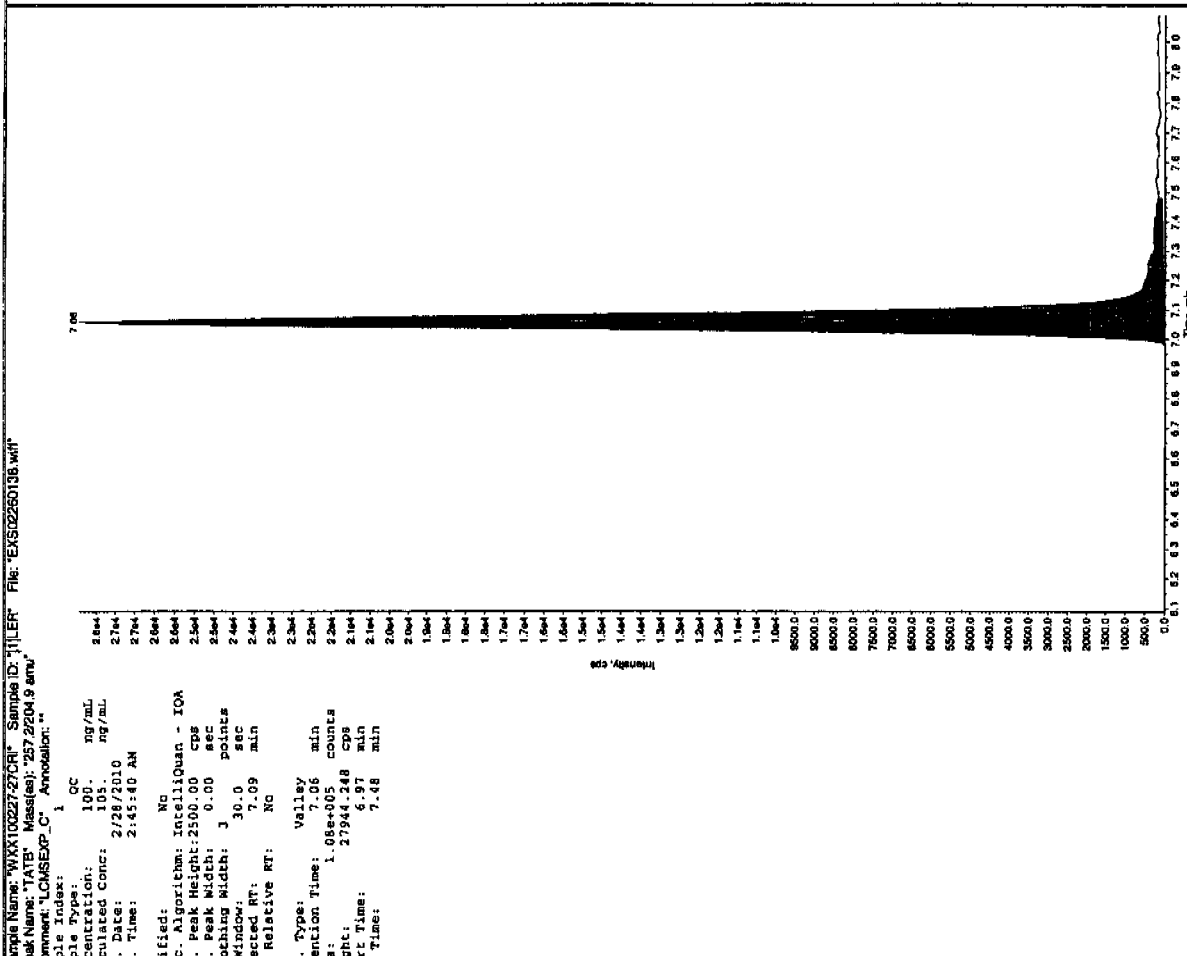
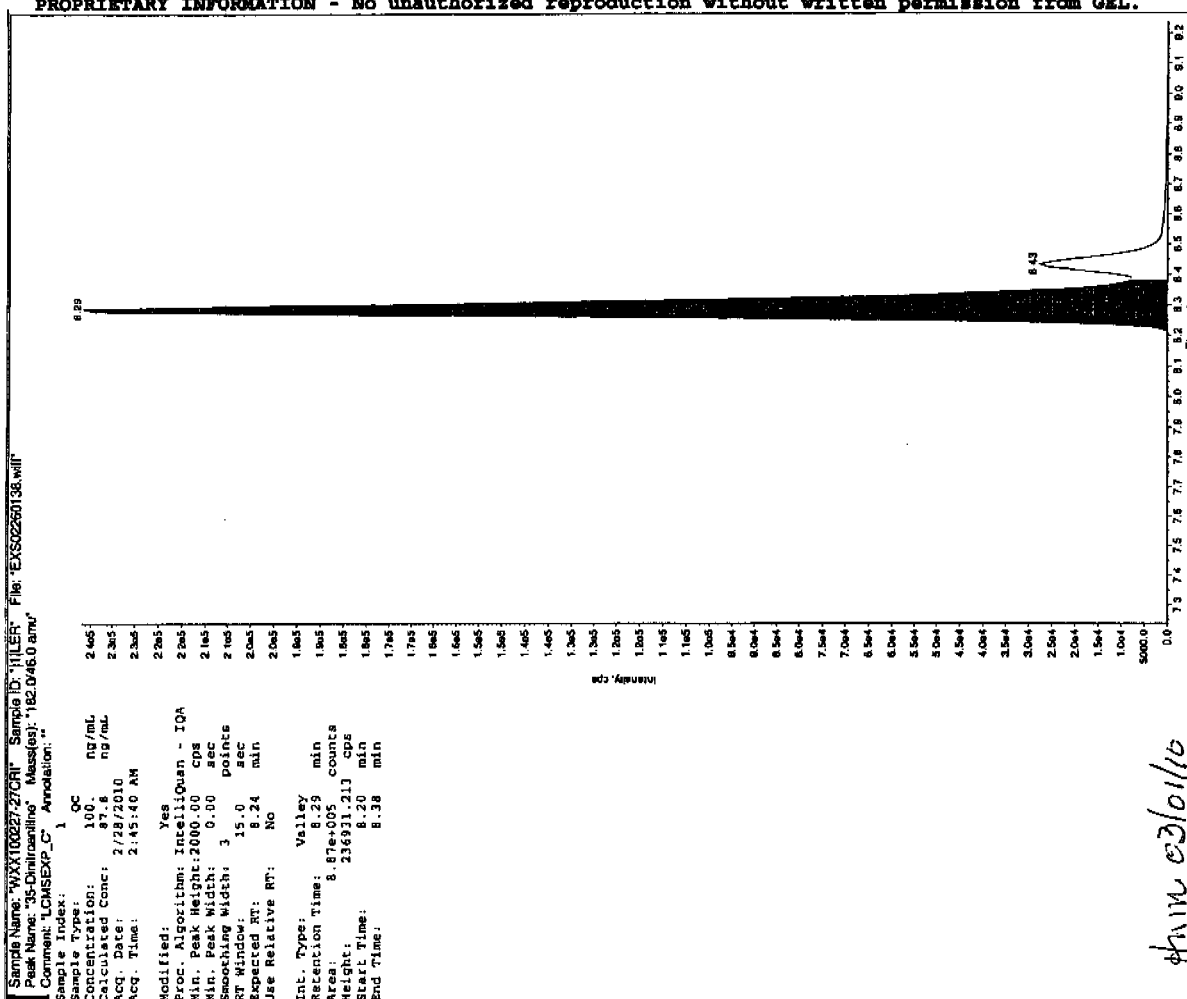
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

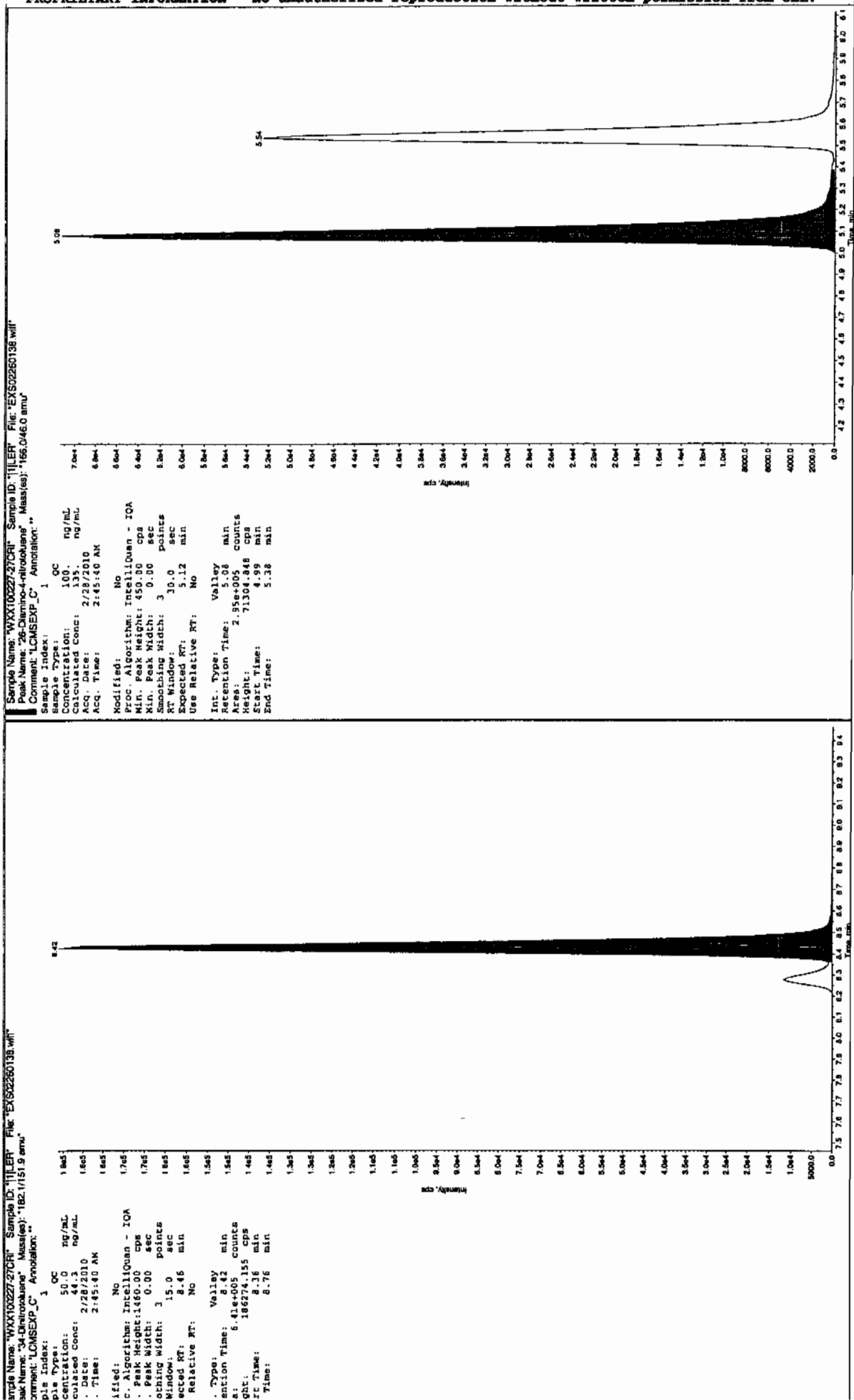
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Run 3/11/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

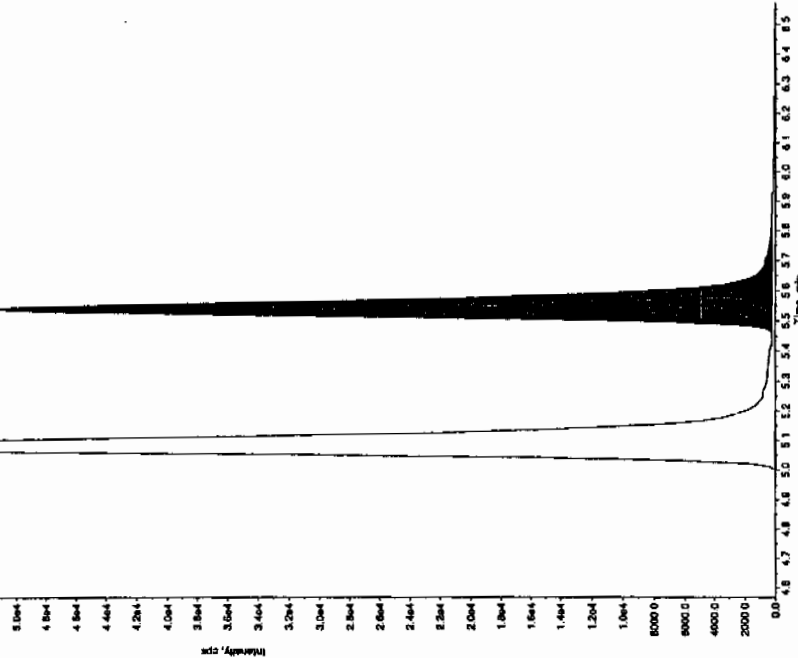


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: WXX100227-27CRP Sample ID: 111ERF File: EX00200138.wif  
 Peak Name: 24-Chloro-5-nitrobenzyl phosphine Mass(es): 186.046.0 amu  
 Comment: LCMSEXP\_C Annotation:

Sample Type: 1 QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 134. ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 2:45:40 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Window: 30.0 sec  
 Retention RT: 5.54 min  
 Expected RT: 5.57 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.54 min  
 Area: 2.05e+005 counts  
 Height: 52367.104 cps  
 Start Time: 5.44 min  
 End Time: 5.64 min



Sample Name: WXX100227-27CRP Sample ID: 111ERF File: EX00200138.wif  
 Peak Name: 24-Chloro-5-nitrobenzyl phosphine Mass(es): 358.151.0 amu  
 Comment: LCMSEXP\_C Annotation:

Sample Type: 1 QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 98.5 ng/mL  
 Acq. Date: 2/28/2010  
 Acq. Time: 2:45:40 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 800.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 30.0 points  
 Window: 30.0 sec  
 Retention RT: 10.9 min  
 Expected RT: 10.9 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.9 min  
 Area: 1.59e+006 counts  
 Height: 51395.264 cps  
 Start Time: 10.8 min  
 End Time: 11.2 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02260149.wiff

Analysis Date: 28-FEB-10 05:38

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	500	560	112	
3,4-Dinitrotoluene	250	220	88	
3,5-Dinitroaniline	500	456	91	
TATB	500	492	98	
tris(o-cresyl) phosphate	500	515	103	
2,4-Diamino-6-nitrotoluene	500	571	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

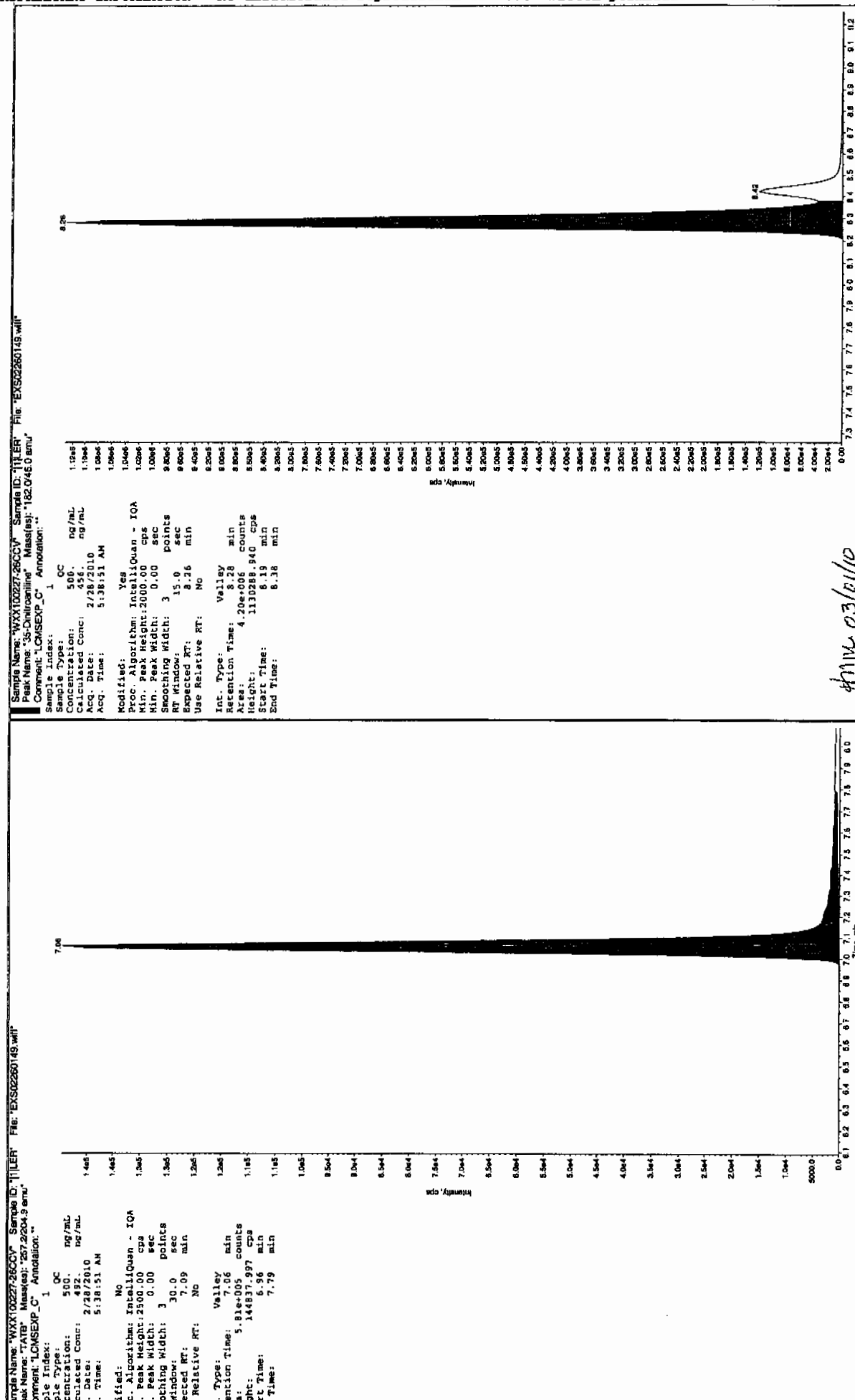
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

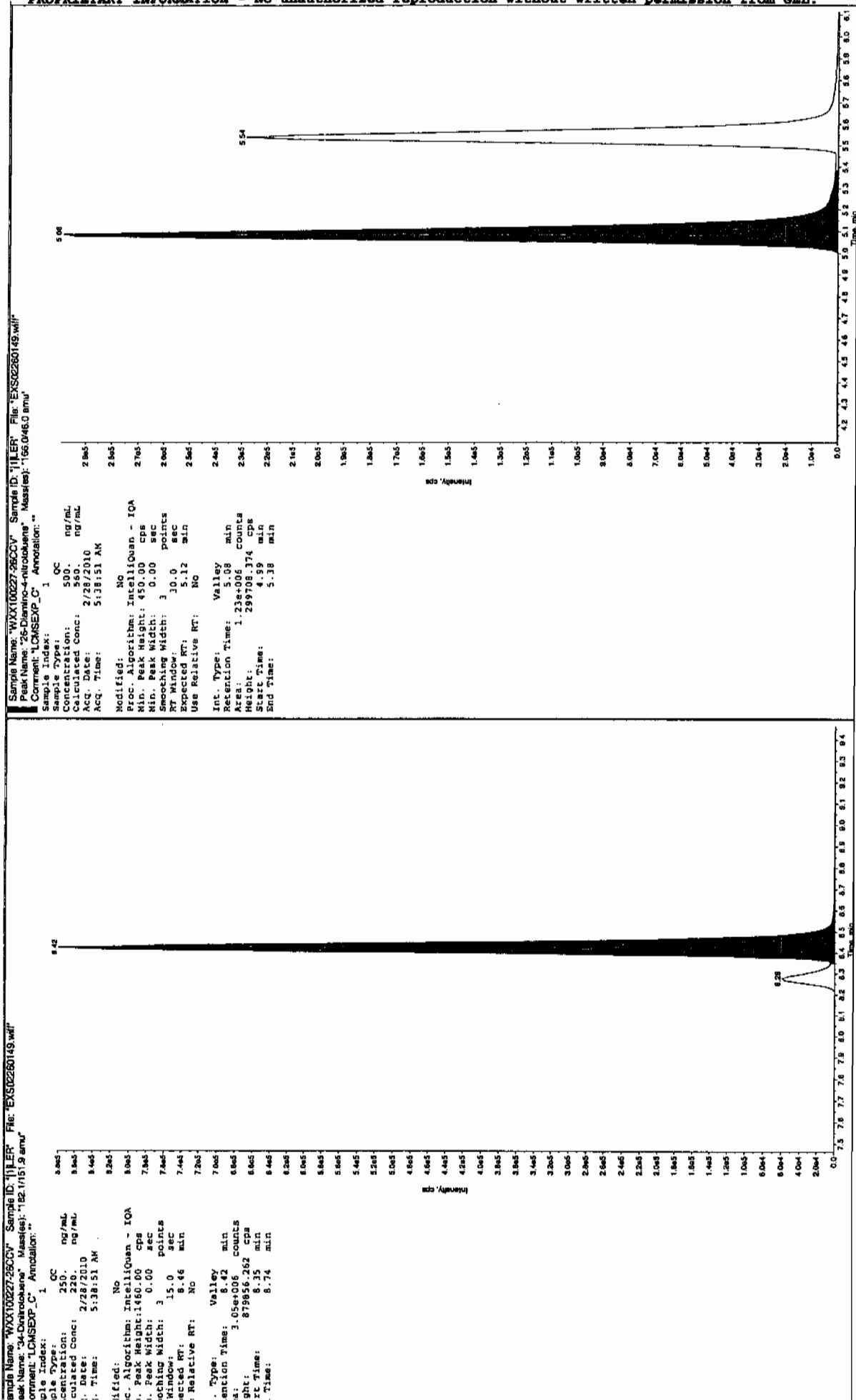
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

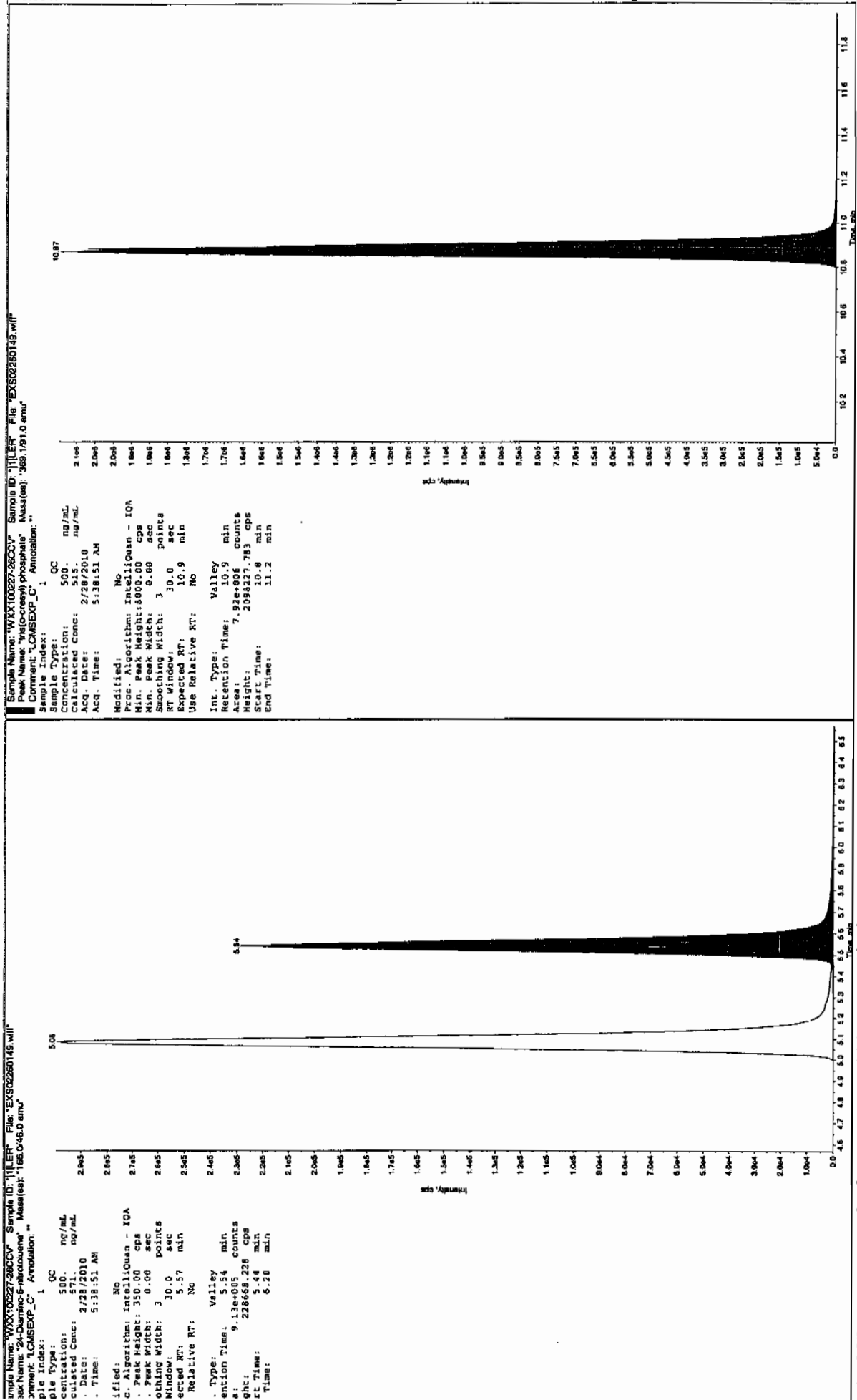
Gen 31/11/10



4/11/10 03/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1545

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02260151.wiff

Analysis Date: 28-FEB-10 06:10

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	123	123	
2,6-Diamino-4-nitrotoluene	100	114	114	
3,4-Dinitrotoluene	50	43.5	87	
3,5-Dinitroaniline	100	87.7	88	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	105	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

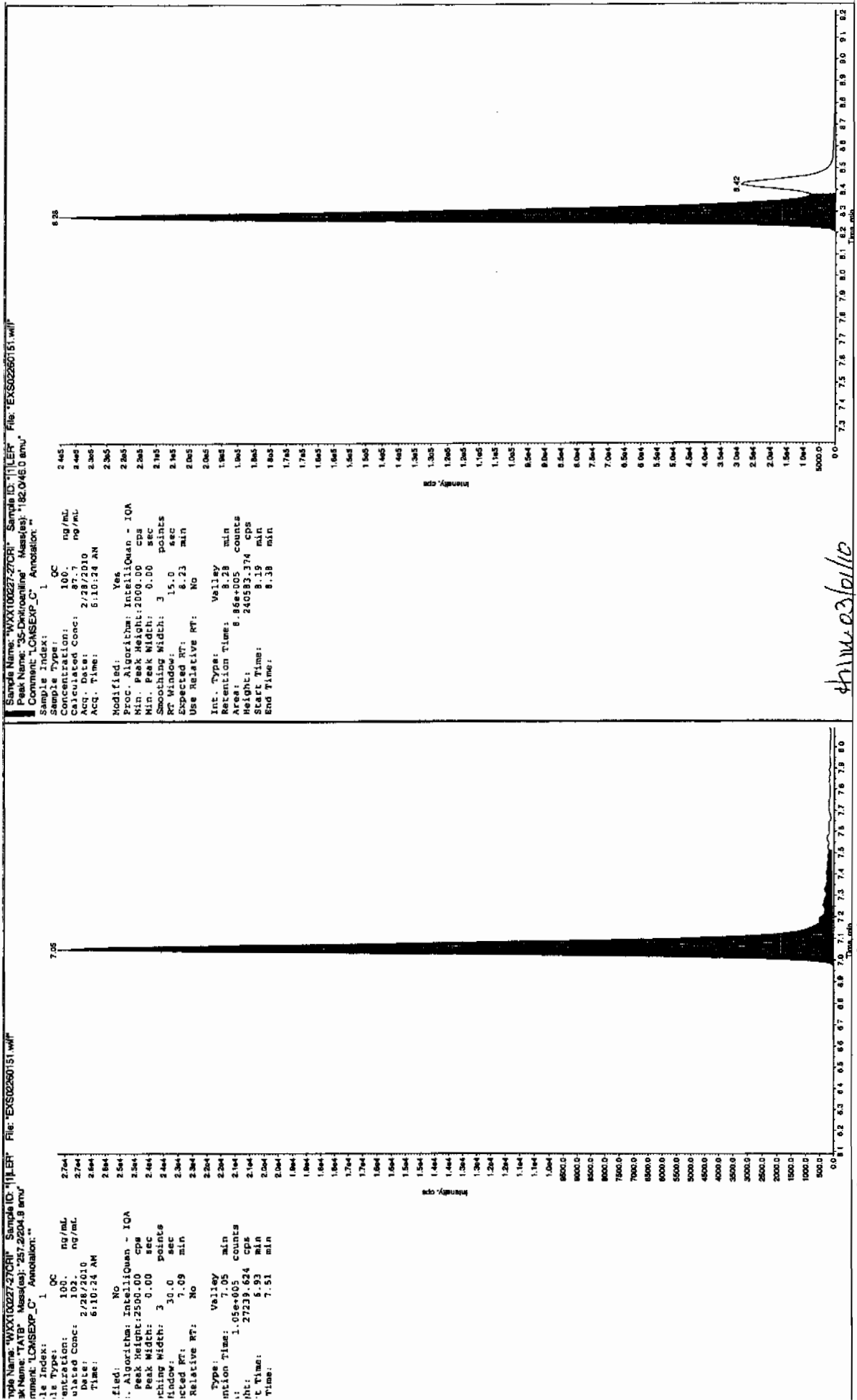
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

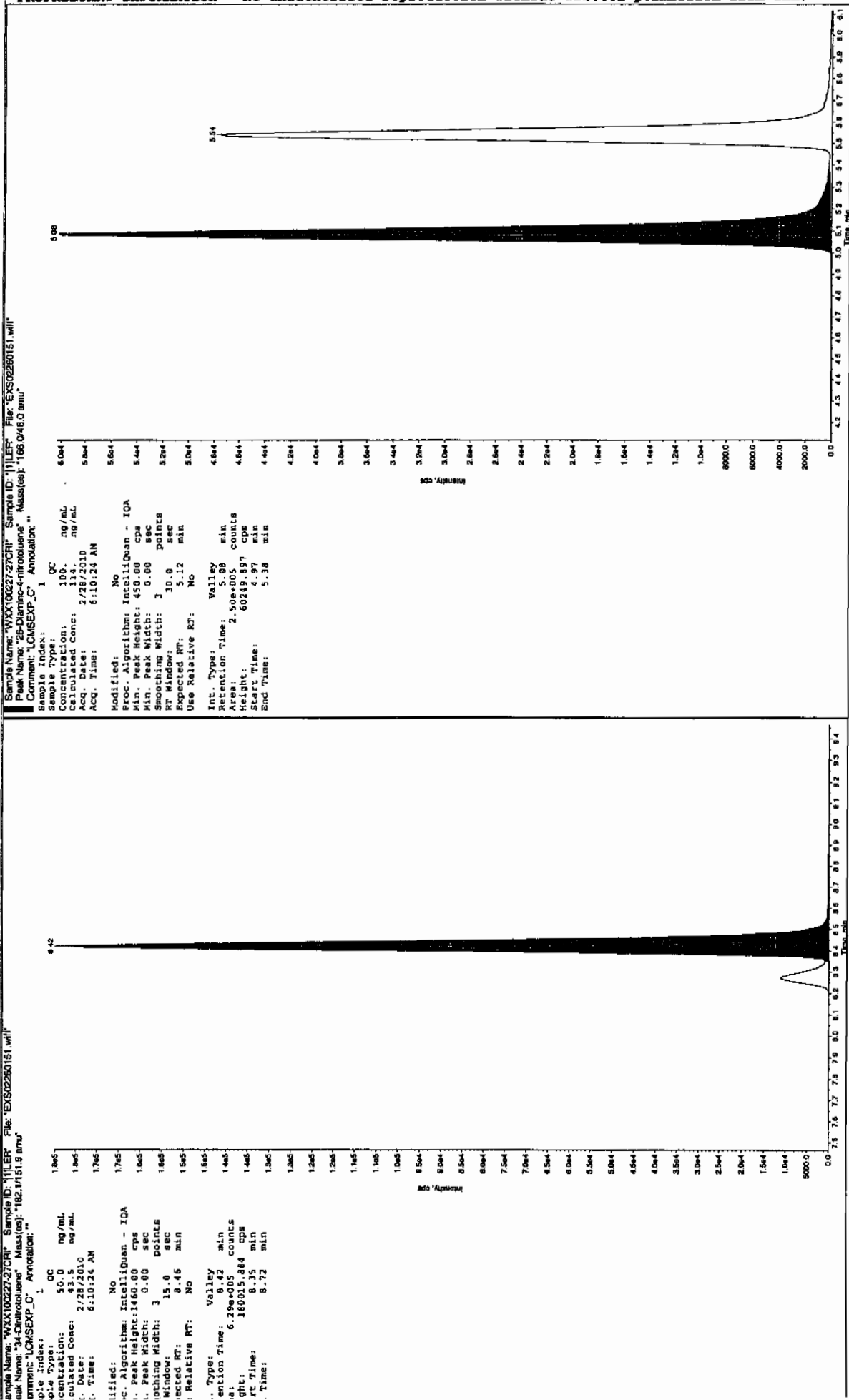
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Run 31/1/10

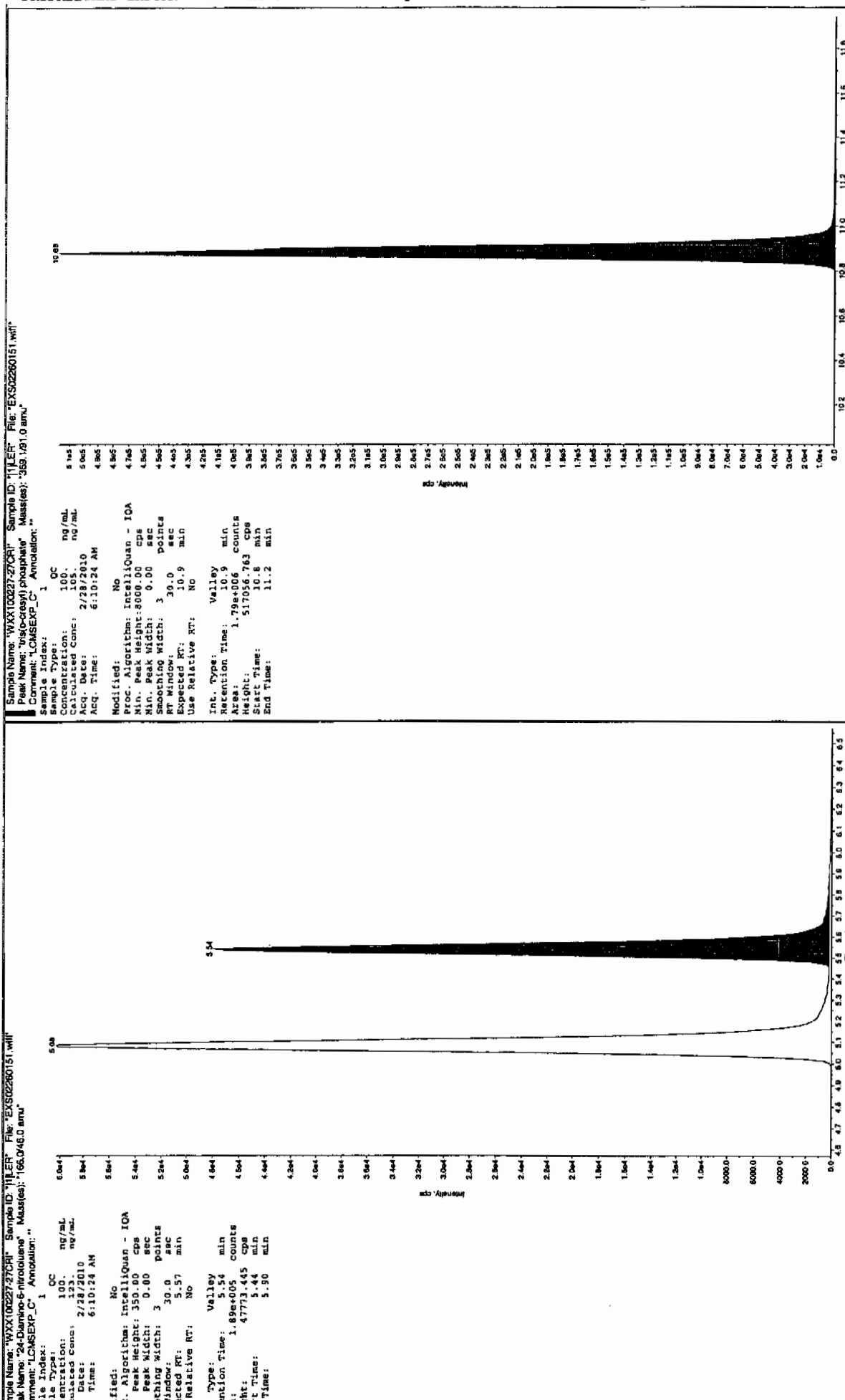


EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4





XL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

# QUALITY CONTROL DATA

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948892

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032884

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304180a

Date Analyzed: 08-MAR-10 07:17

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\030410expA3.qtd, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304180a

Date: 08-Mar-2010

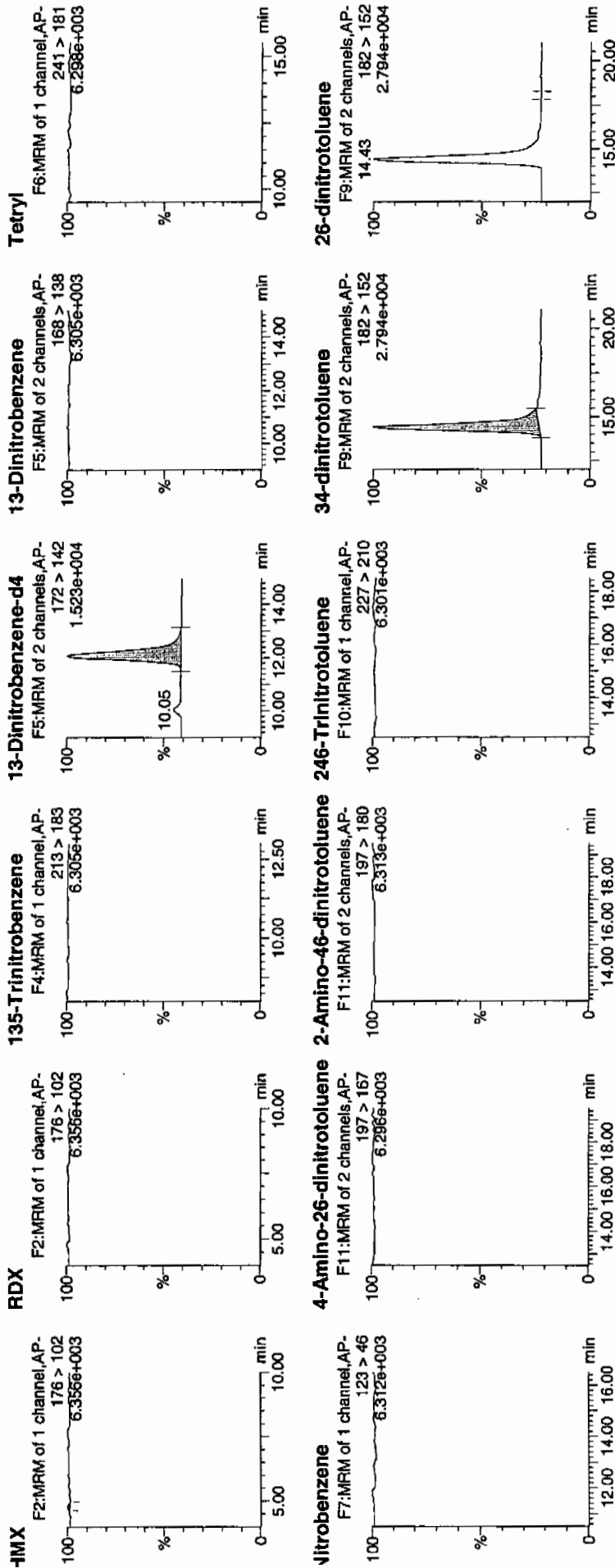
Time: 07:17:27

D: 1202032884

Vial: 4:5,A

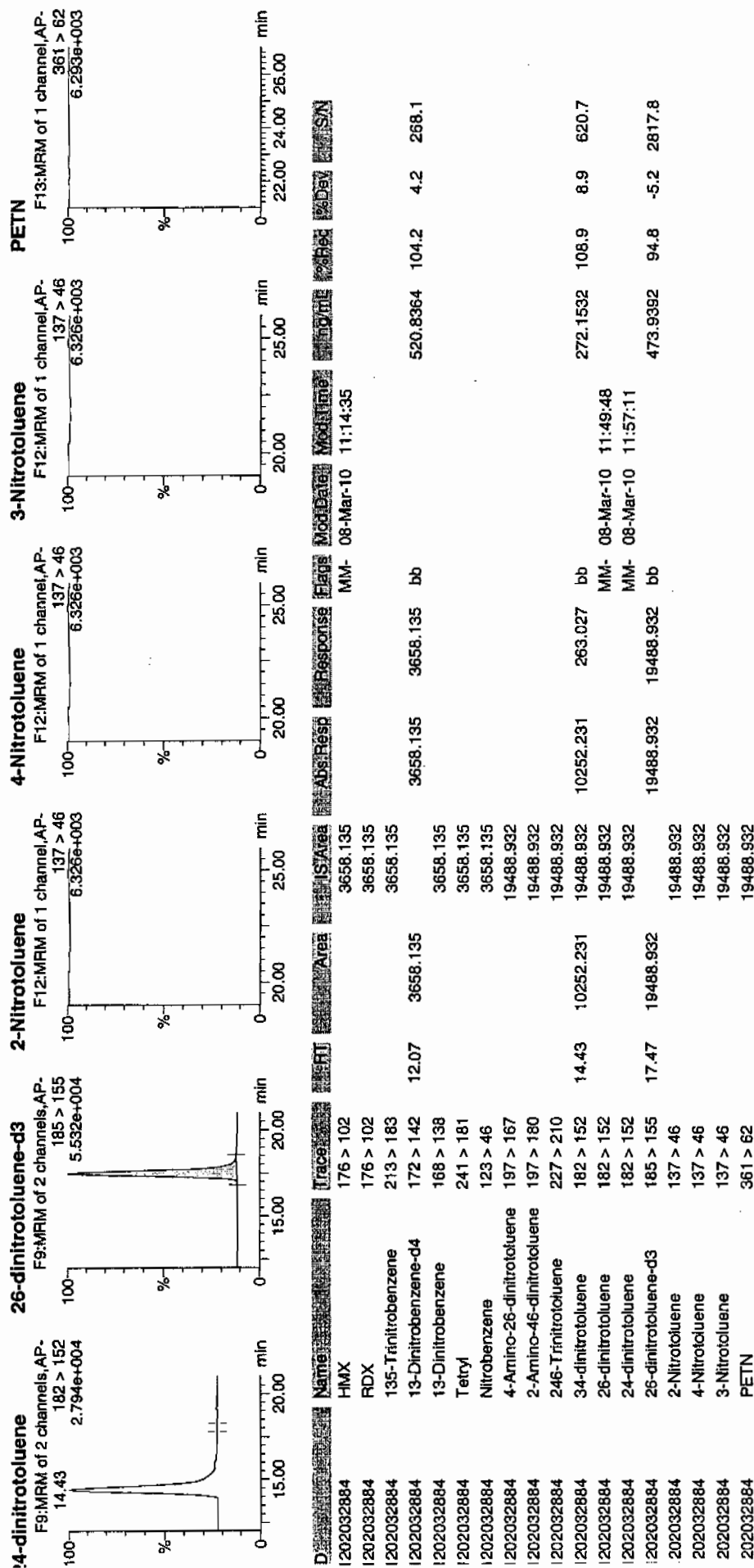
11/17/10  
3/8/10

WAW 948893 / Sou 11B / 21



2/16/10  
03/04/10

Dataset: C:\MASSLYNX\New\_Exp\PRO1030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948892

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032884

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260126.wiff

Date Analyzed: 27-FEB-10 23:36

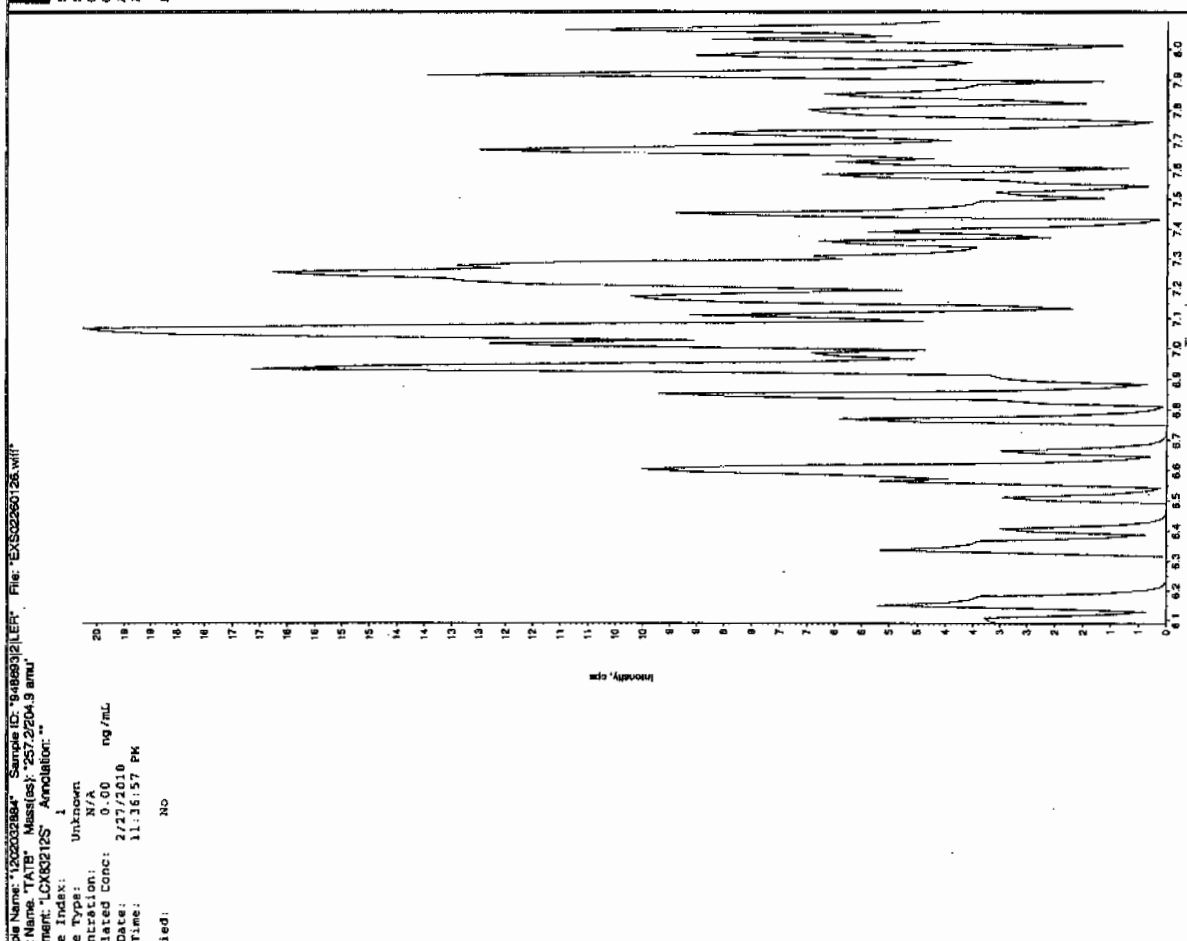
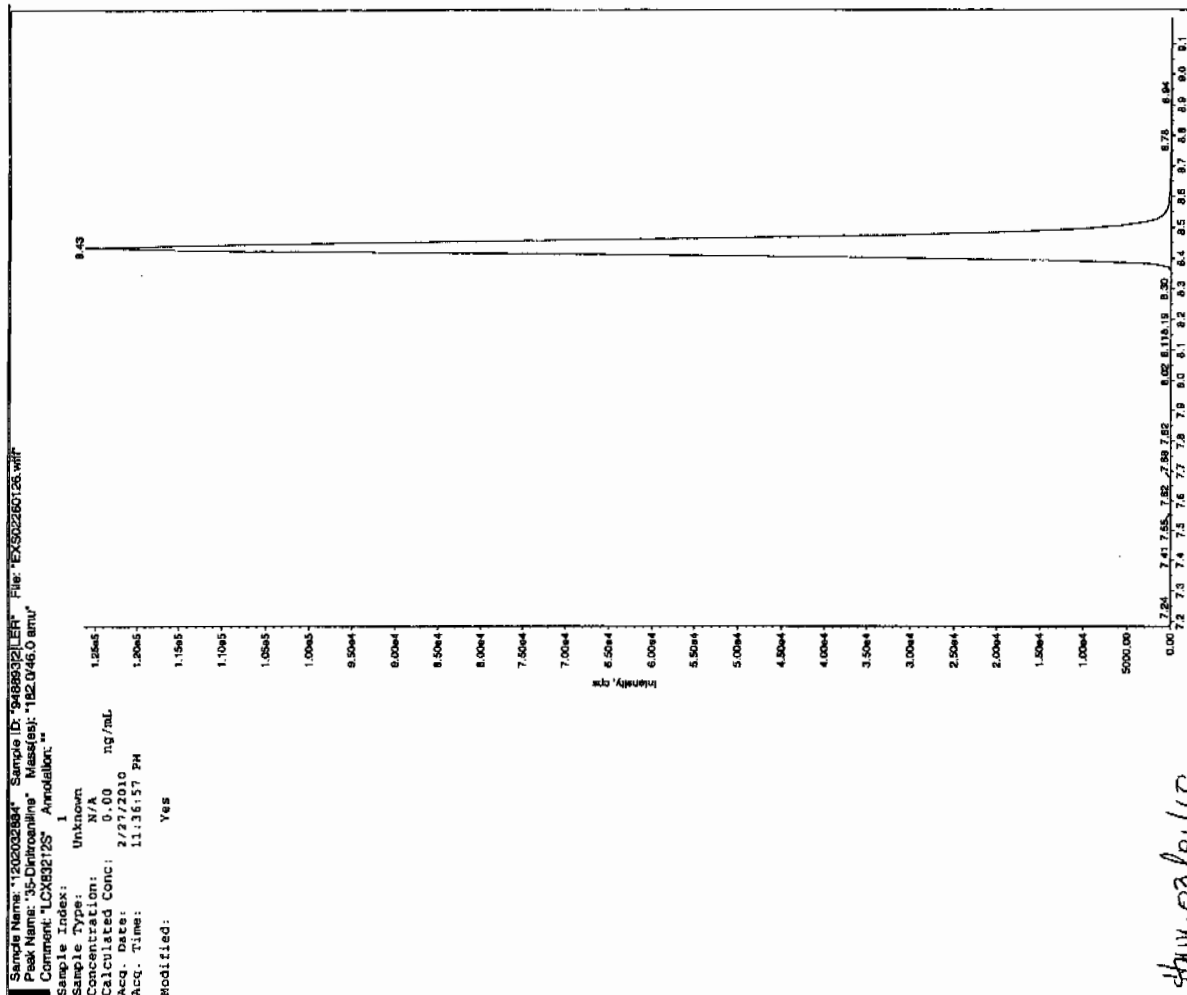
Units: ug/kg

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

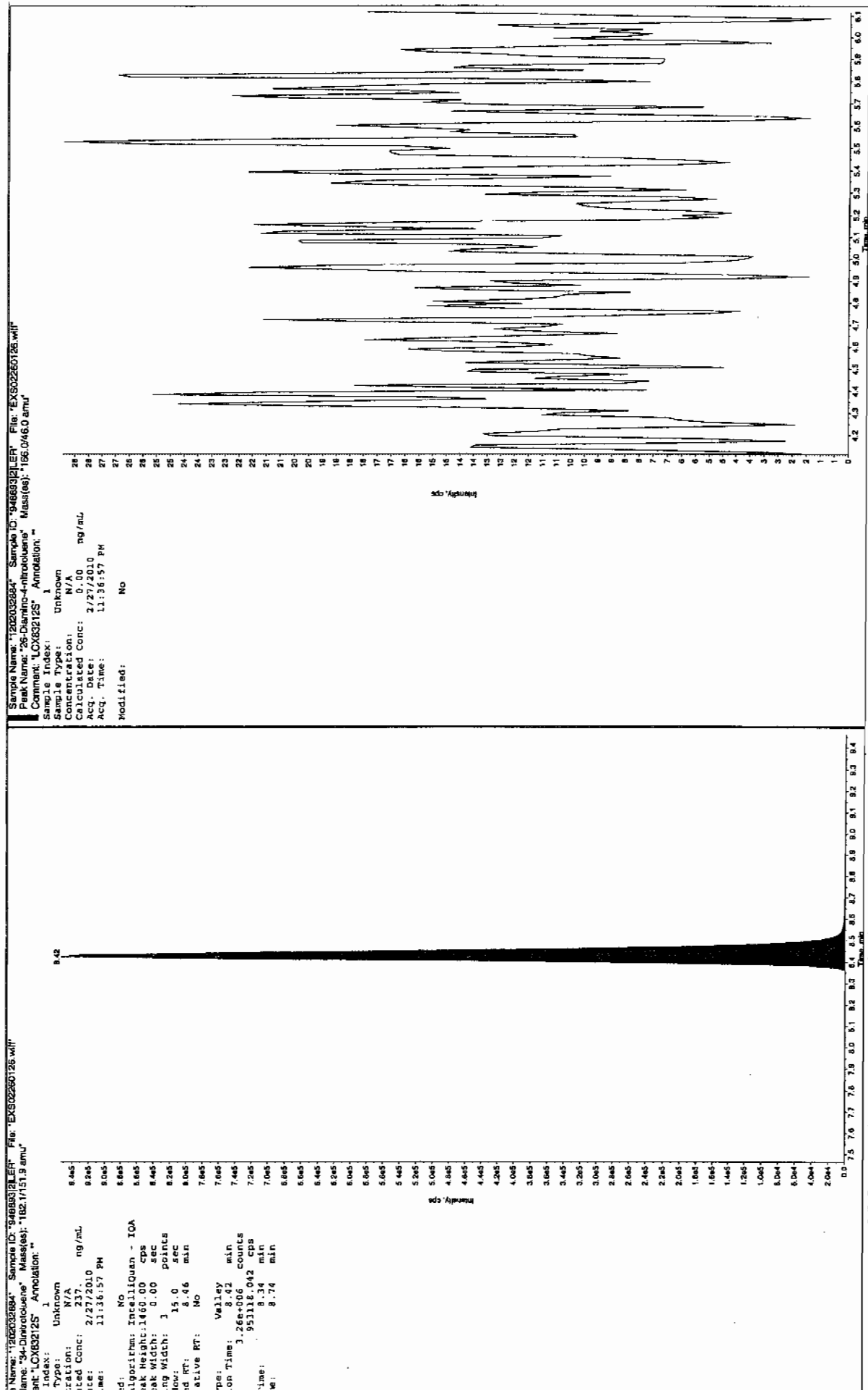
\*Concentration =

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

See 3/1/10

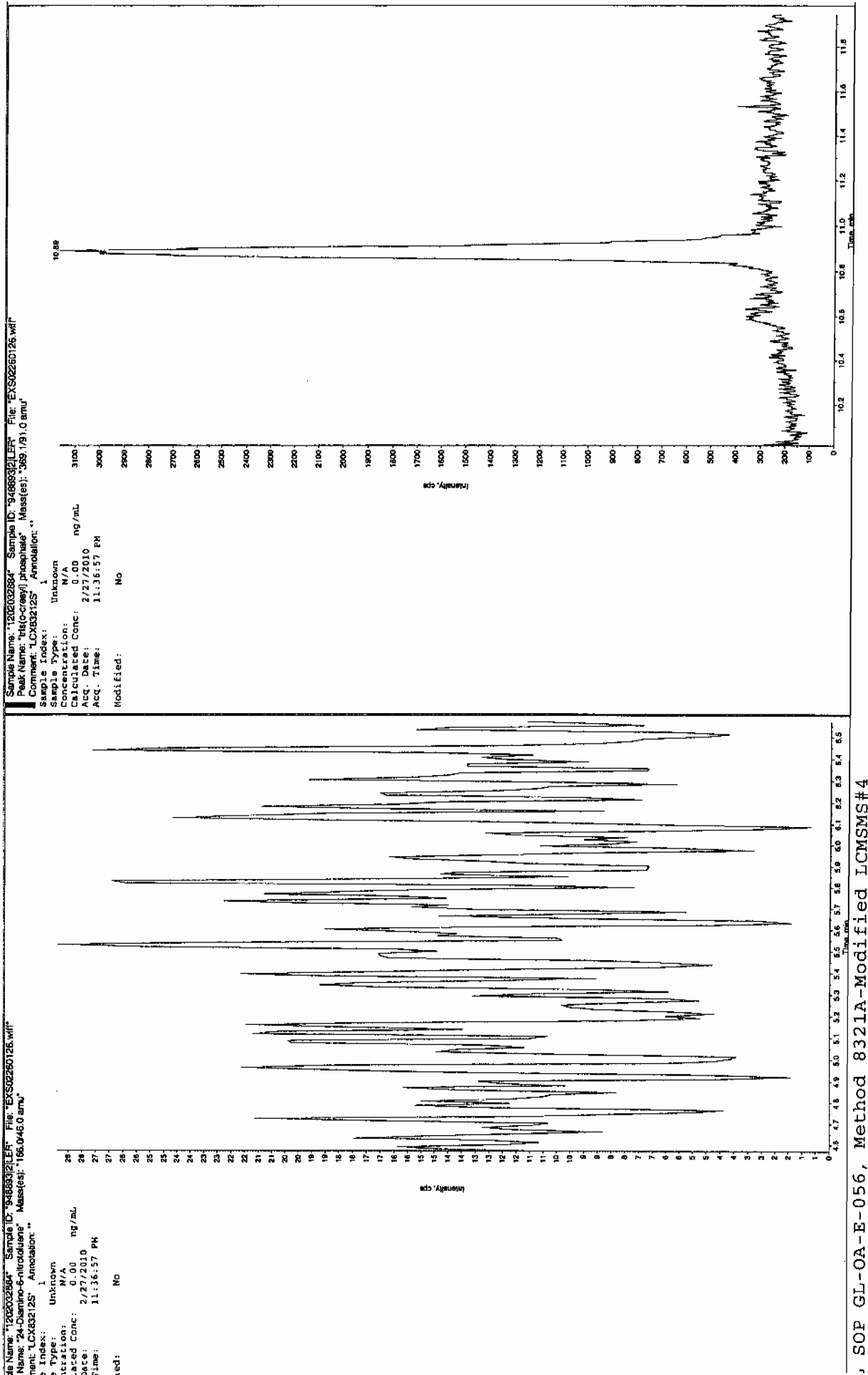


J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





, 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 948892

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032885

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304181a

Date Analyzed: 08-MAR-10 07:47

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4880	
121-14-2	2,4-Dinitrotoluene	4570	
121-82-4	RDX	4730	
19406-51-0	4-Amino-2,6-dinitrotoluene	5480	
2691-41-0	HMX	5530	
35572-78-2	2-Amino-4,6-dinitrotoluene	5550	
479-45-8	Tetryl	2600	
606-20-2	2,6-Dinitrotoluene	4700	
78-11-5	PETN	5130	
88-72-2	o-Nitrotoluene	4970	
98-95-3	Nitrobenzene	4840	
99-08-1	m-Nitrotoluene	4590	
99-35-4	1,3,5-Trinitrobenzene	4280	
99-65-0	m-Dinitrobenzene	4920	
99-99-0	p-Nitrotoluene	5000	

\*Concentration =

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

Quantify Sample Report  
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Sample: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304181a

Date: 08-Mar-2010

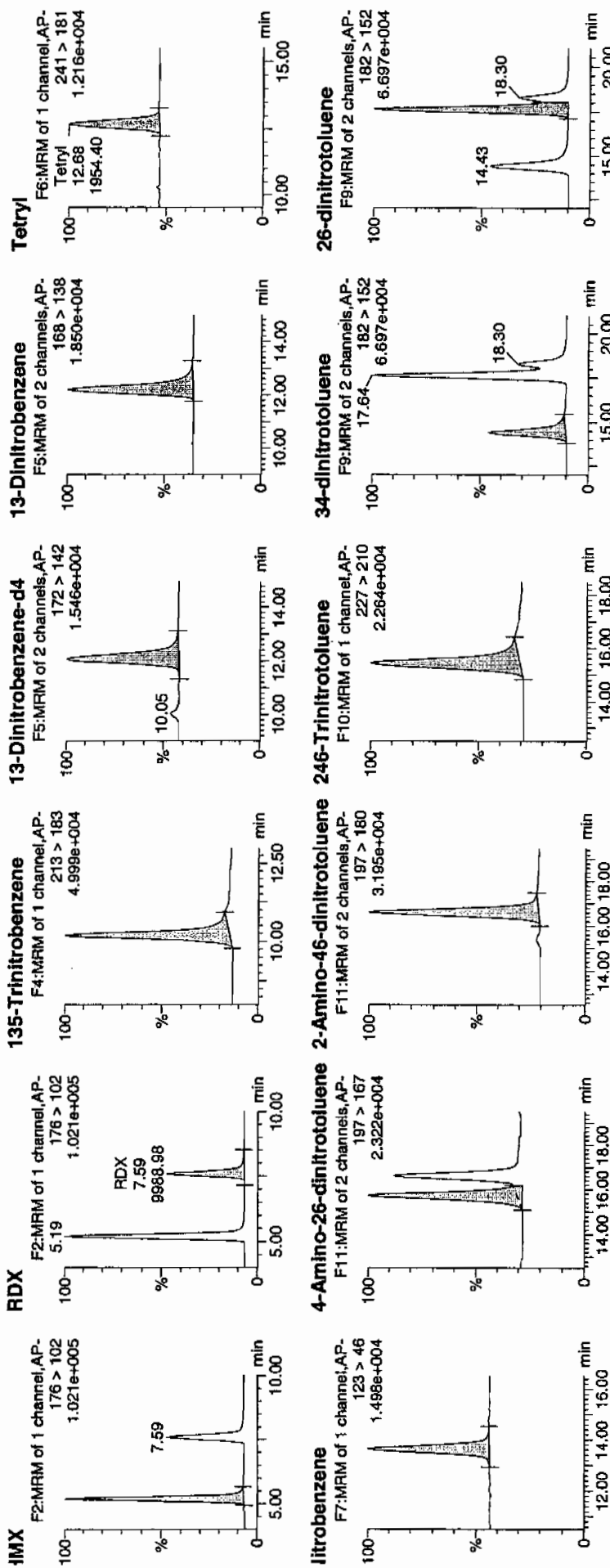
Time: 07:47:04

D: 1202032885

File: 4:5,B

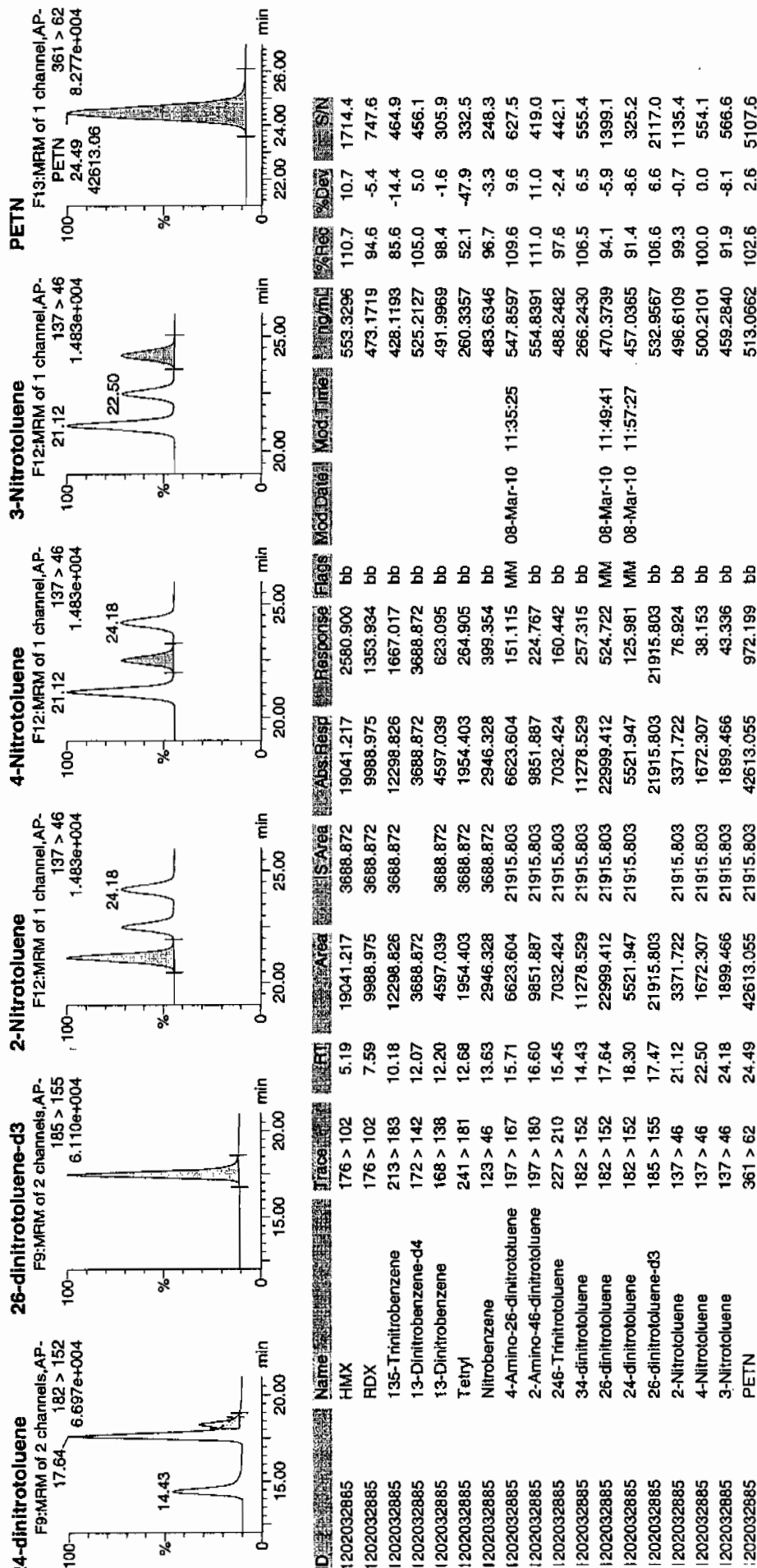
HA  
 3/8/10

1948993 / 8022 / 108 / 21



Handwritten signature

Dataset: C:\MASSLYNX\New\_Exp\PRO030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 948892

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032885

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260127.wiff

Date Analyzed: 27-FEB-10 23:52

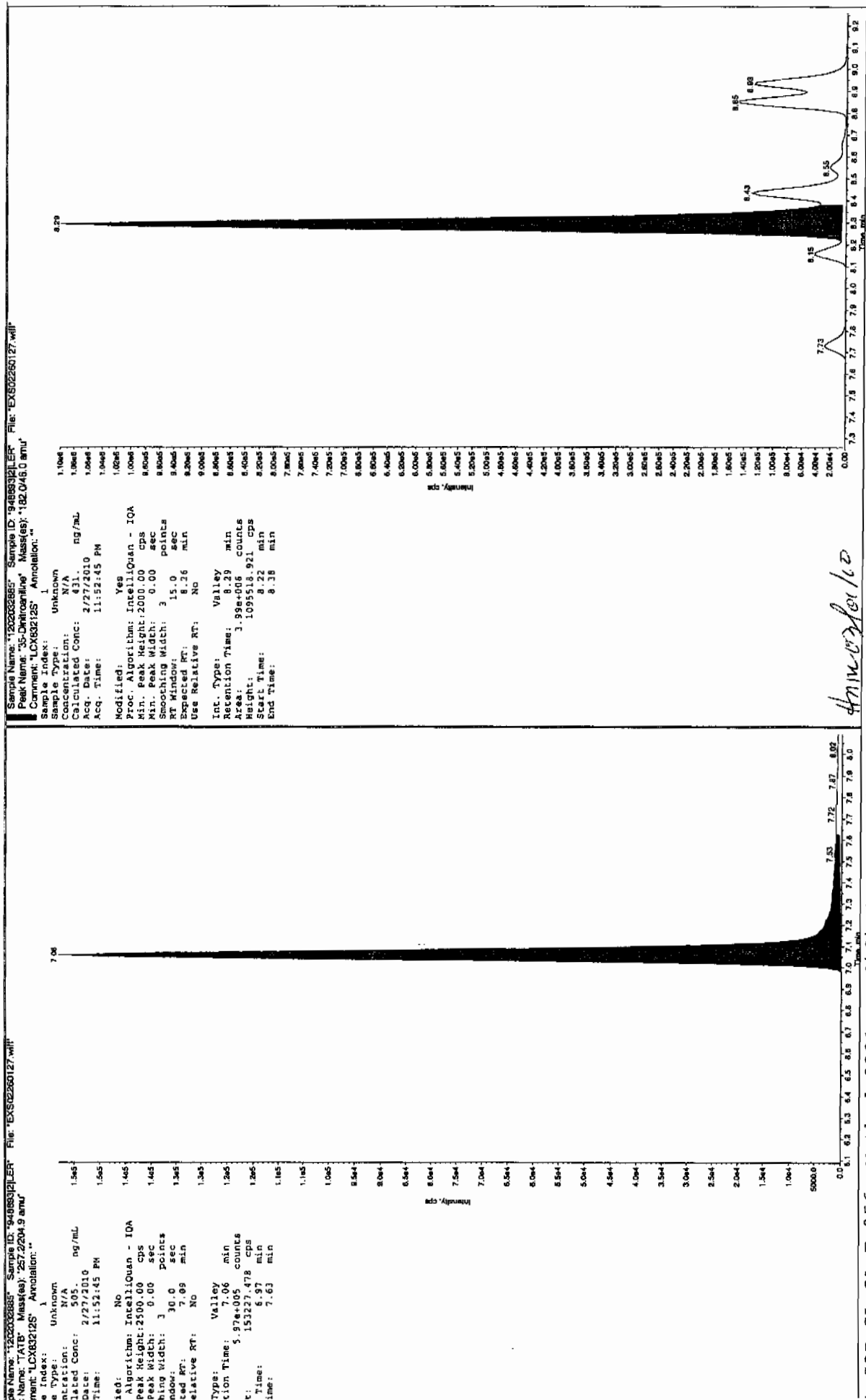
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5050	
59229-75-3	2,6-Diamino-4-nitrotoluene	5590	
618-87-1	3,5-Dinitroaniline	4310	
6629-29-4	2,4-Diamino-6-nitrotoluene	5210	
78-30-8	tris(o-cresyl) phosphate	5100	

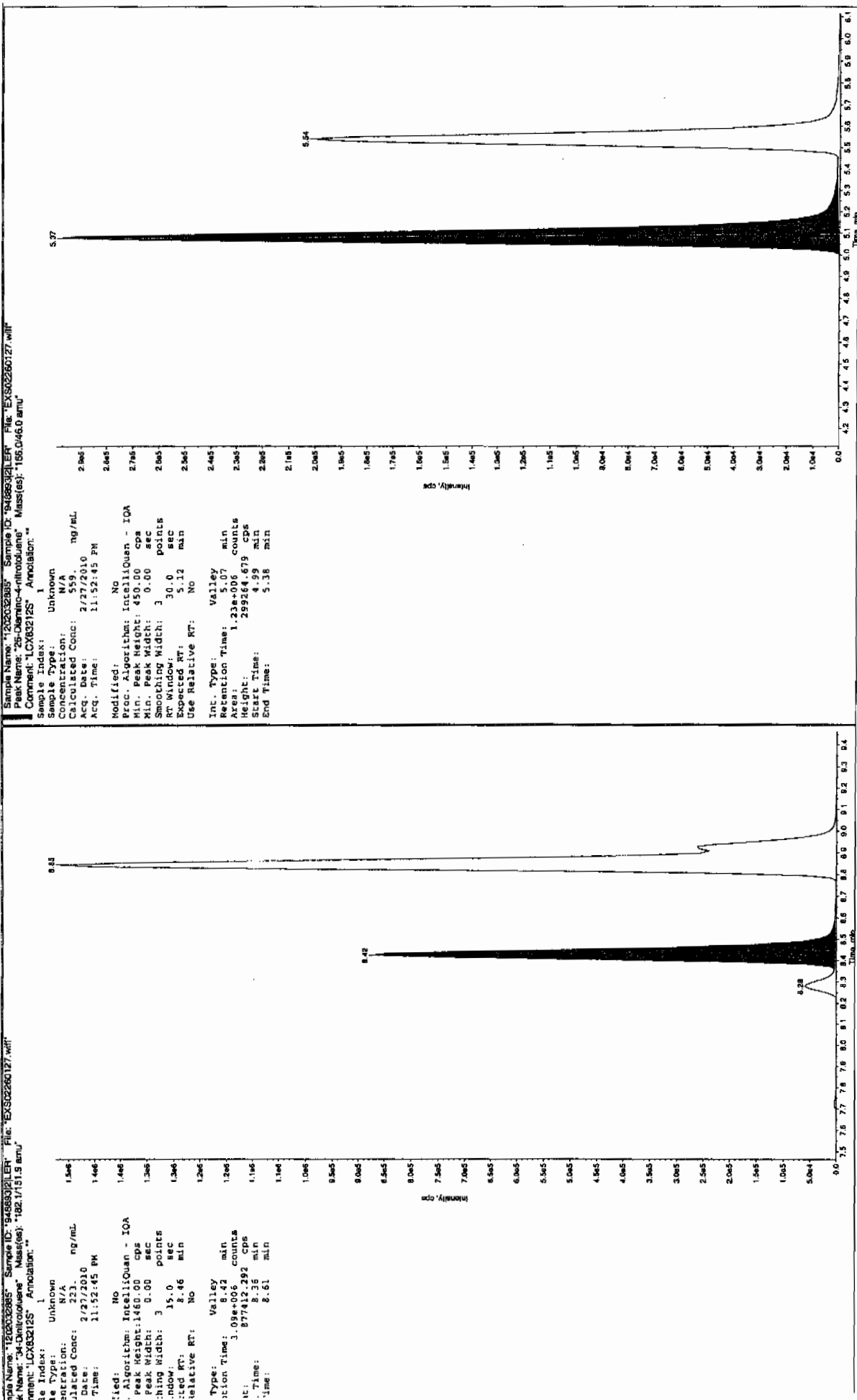
\*Concentration =

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

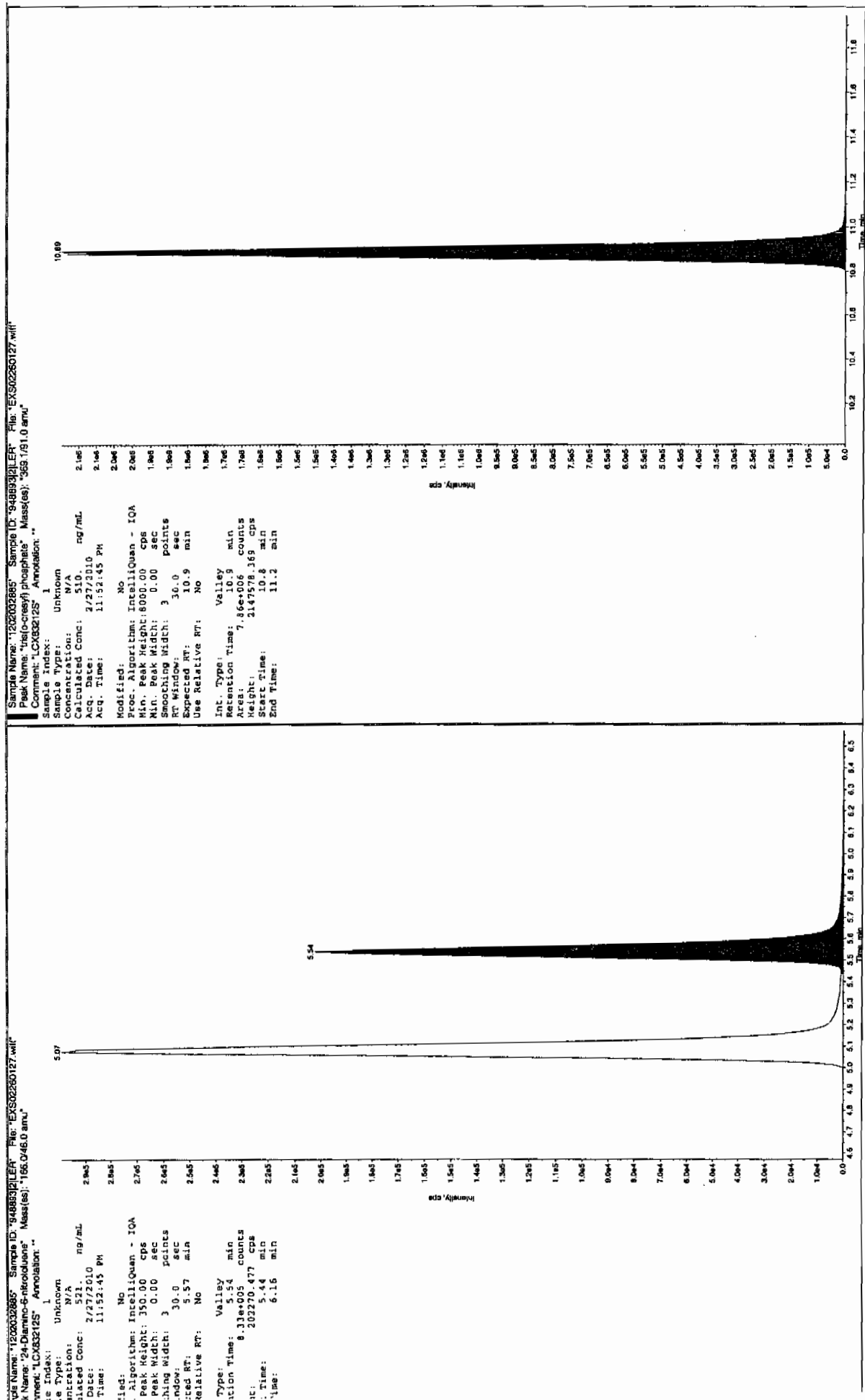
Run 311110



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170(246055001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032886

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304183a

Date Analyzed: 08-MAR-10 08:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5790	
121-14-2	2,4-Dinitrotoluene	4560	
121-82-4	RDX	4610	
19406-51-0	4-Amino-2,6-dinitrotoluene	5950	
2691-41-0	HMX	4350	
35572-78-2	2-Amino-4,6-dinitrotoluene	5580	
479-45-8	Tetryl	3280	
606-20-2	2,6-Dinitrotoluene	4960	
78-11-5	PETN	6870	
88-72-2	o-Nitrotoluene	5350	
98-95-3	Nitrobenzene	4970	
99-08-1	m-Nitrotoluene	4570	
99-35-4	1,3,5-Trinitrobenzene	4420	
99-65-0	m-Dinitrobenzene	4850	
99-99-0	p-Nitrotoluene	4720	

\*Concentration =

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

Quantify Sample Report  
JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDBI030410expa.mdb, Time: Fri Mar 05 09:18:46 2010  
Calibration: C:\MASSLYNX\New\_Exp.PRO\CurveDBI030410expa.cdb, Time: Fri Mar 05 10:16:18 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304183a

Date: 08-Mar-2010

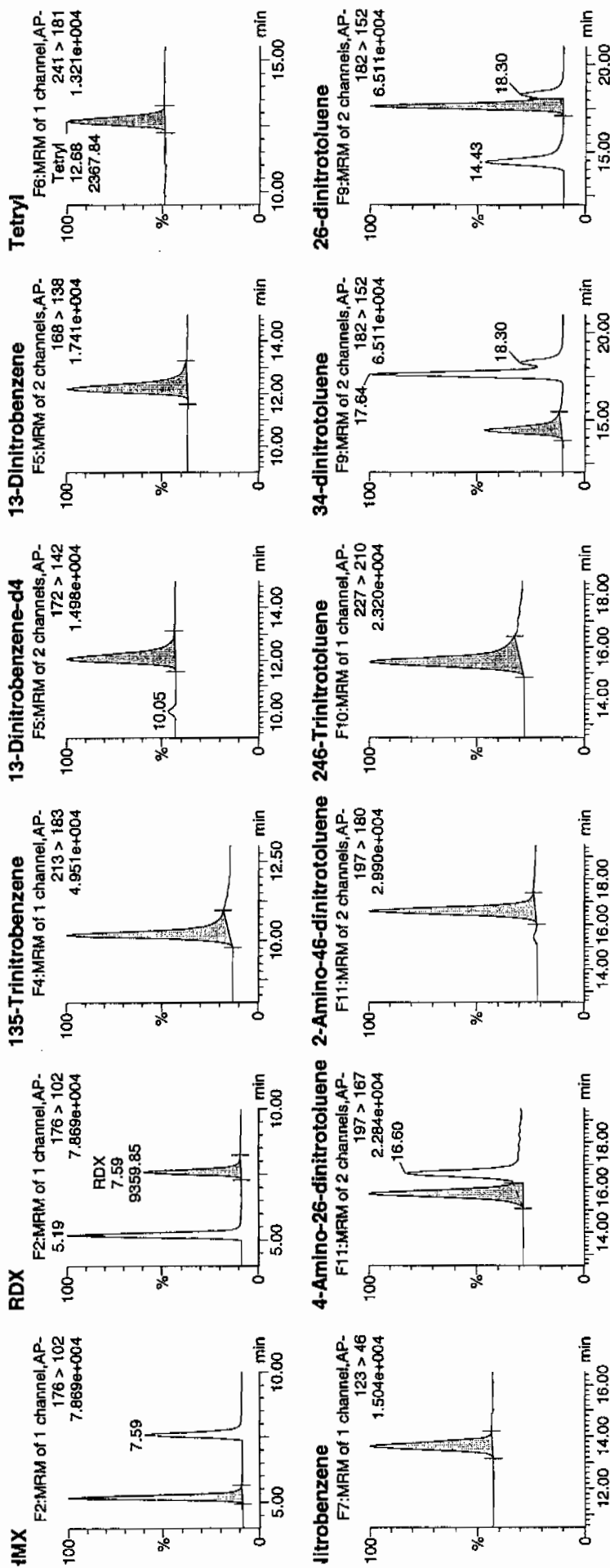
Time: 08:46:05

D: 1202032886

/lat: 4:5,D

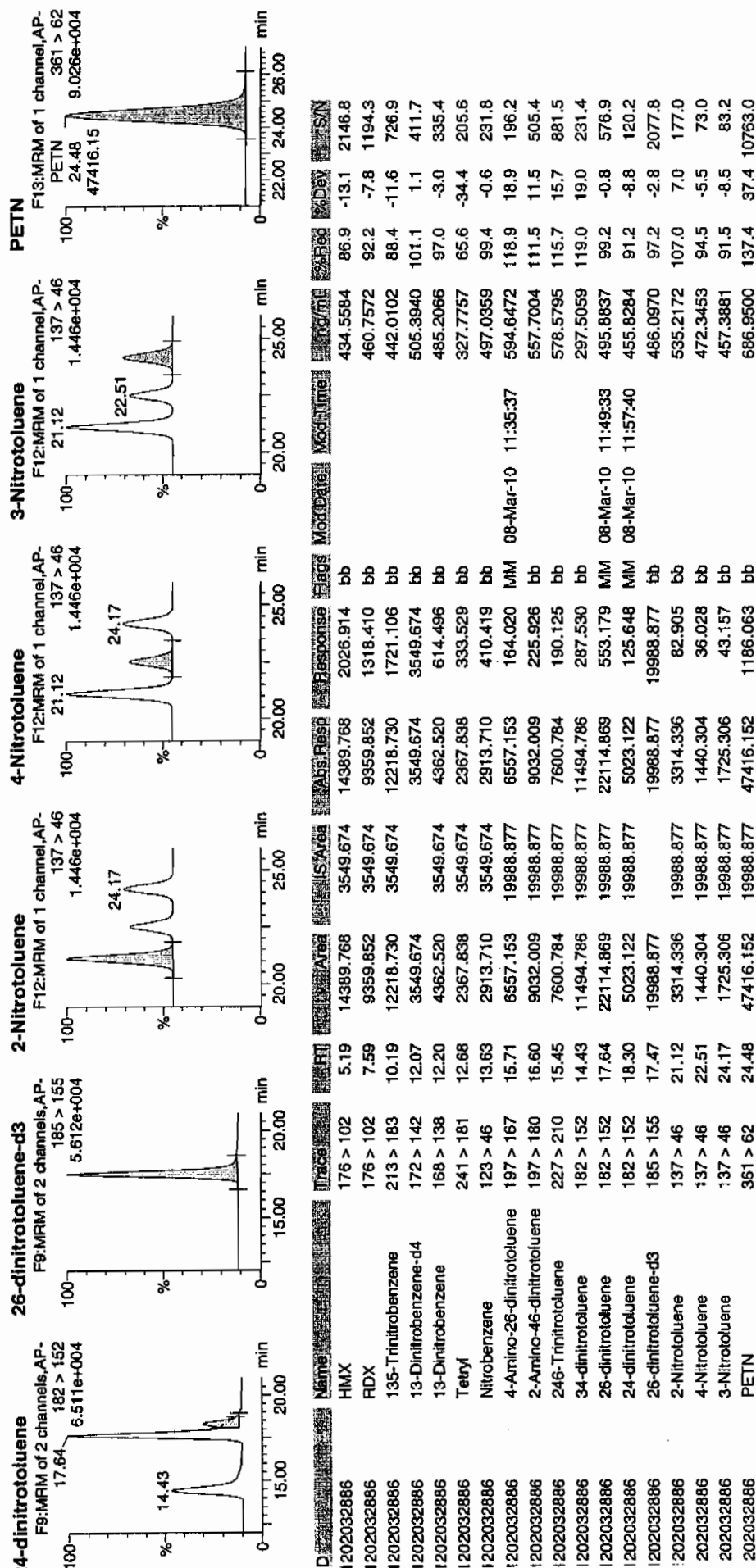
14577  
3/8/10

Lawrence / 948993 / 8022 / 24605500148 / 21



Amu  
07/09/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170(246055001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032886

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260129.wiff

Date Analyzed: 28-FEB-10 00:24

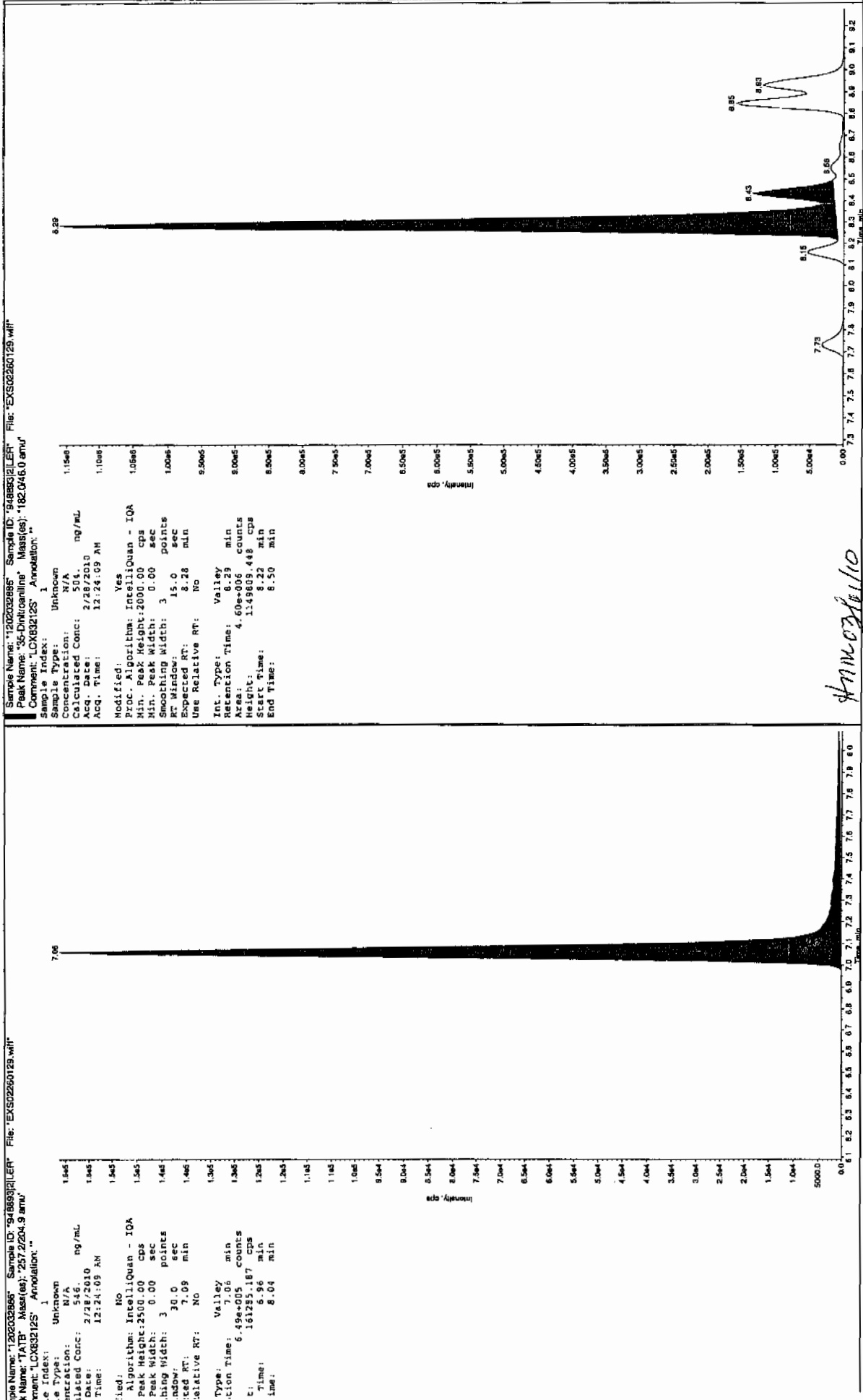
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5460	
59229-75-3	2,6-Diamino-4-nitrotoluene	5760	
618-87-1	3,5-Dinitroaniline	4670	
6629-29-4	2,4-Diamino-6-nitrotoluene	5220	
78-30-8	tris(o-cresyl) phosphate	5150	

\*Concentration =

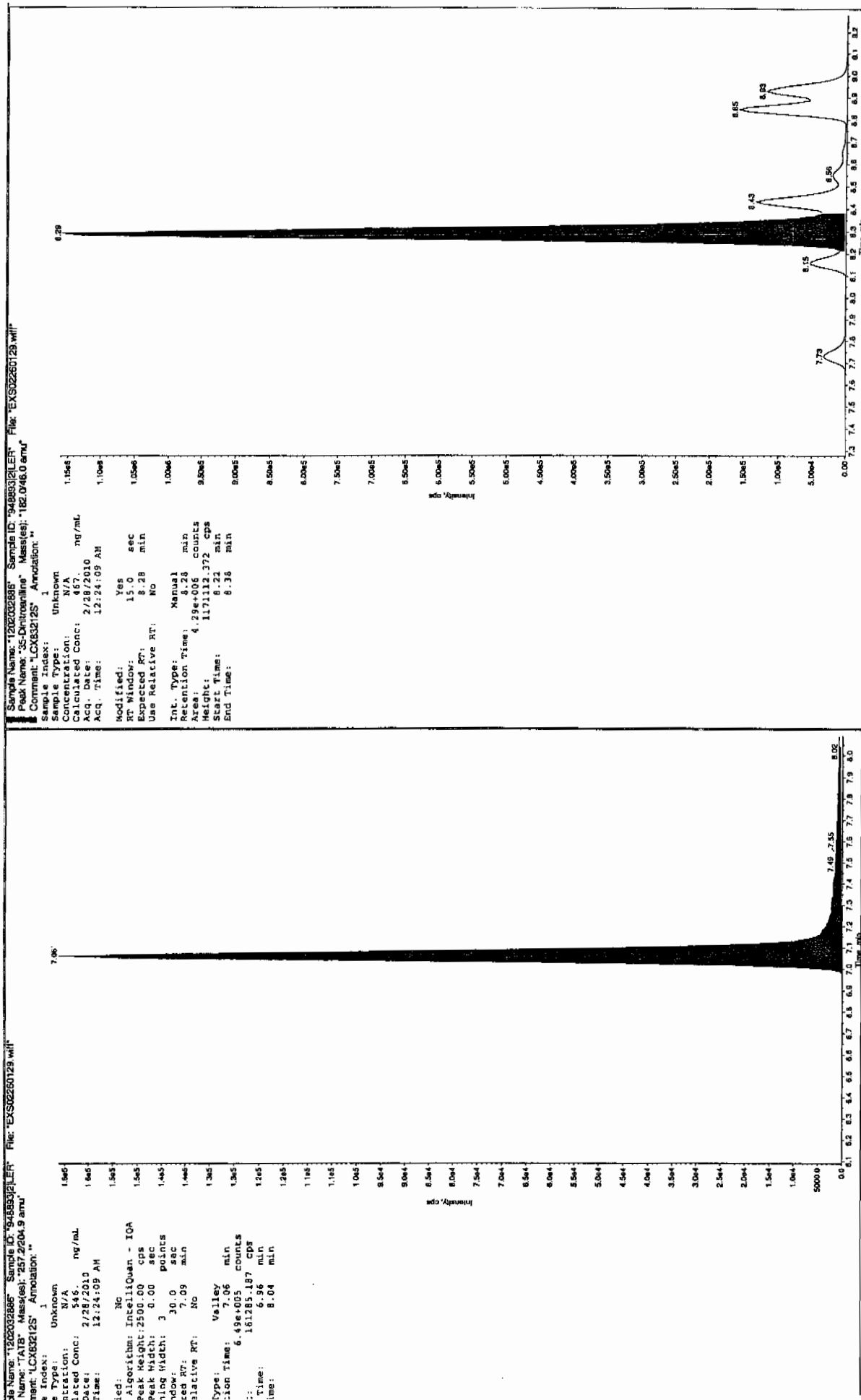
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Before Jan 31/10

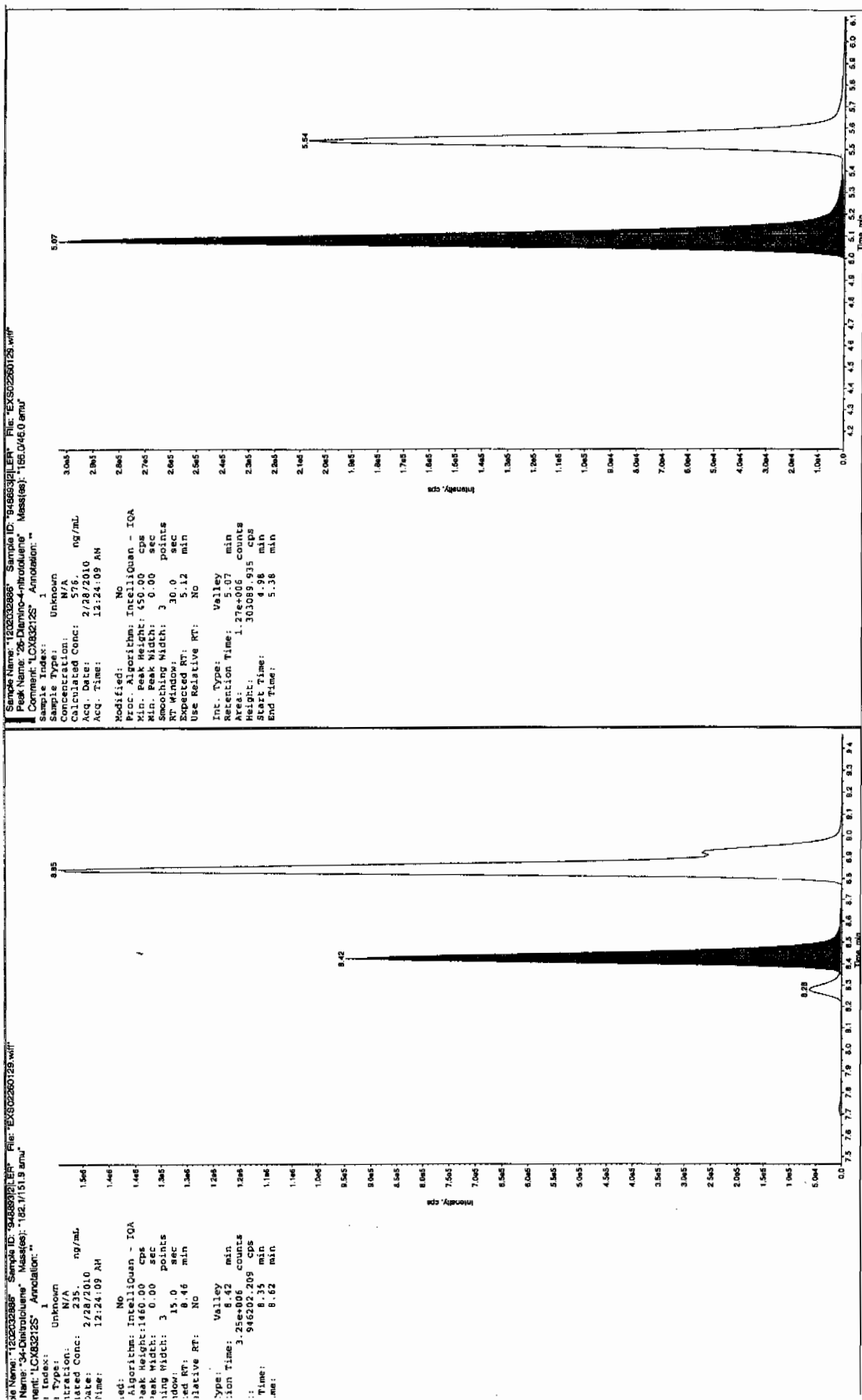


After Jan 31/10

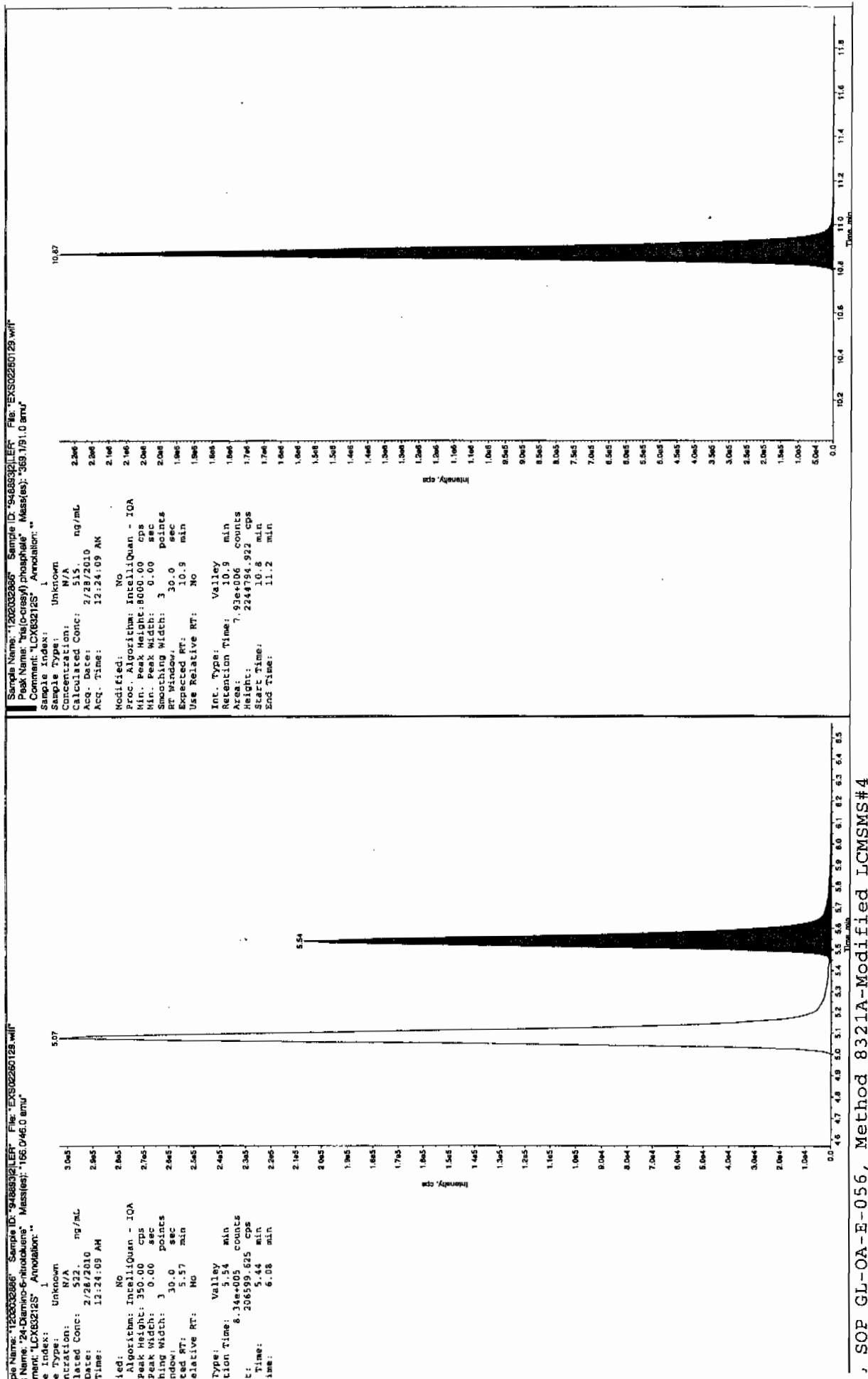
after Jan 31/10



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8170(246055001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032887

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0304184a

Date Analyzed: 08-MAR-10 09:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4960	
121-14-2	2,4-Dinitrotoluene	4850	
121-82-4	RDX	4960	
19406-51-0	4-Amino-2,6-dinitrotoluene	5290	
2691-41-0	HMX	4310	
35572-78-2	2-Amino-4,6-dinitrotoluene	5480	
479-45-8	Tetryl	3010	
606-20-2	2,6-Dinitrotoluene	5010	
78-11-5	PETN	6480	
88-72-2	o-Nitrotoluene	4760	
98-95-3	Nitrobenzene	4590	
99-08-1	m-Nitrotoluene	4390	
99-35-4	1,3,5-Trinitrobenzene	5170	
99-65-0	m-Dinitrobenzene	4820	
99-99-0	p-Nitrotoluene	4750	

\*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\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0304184a

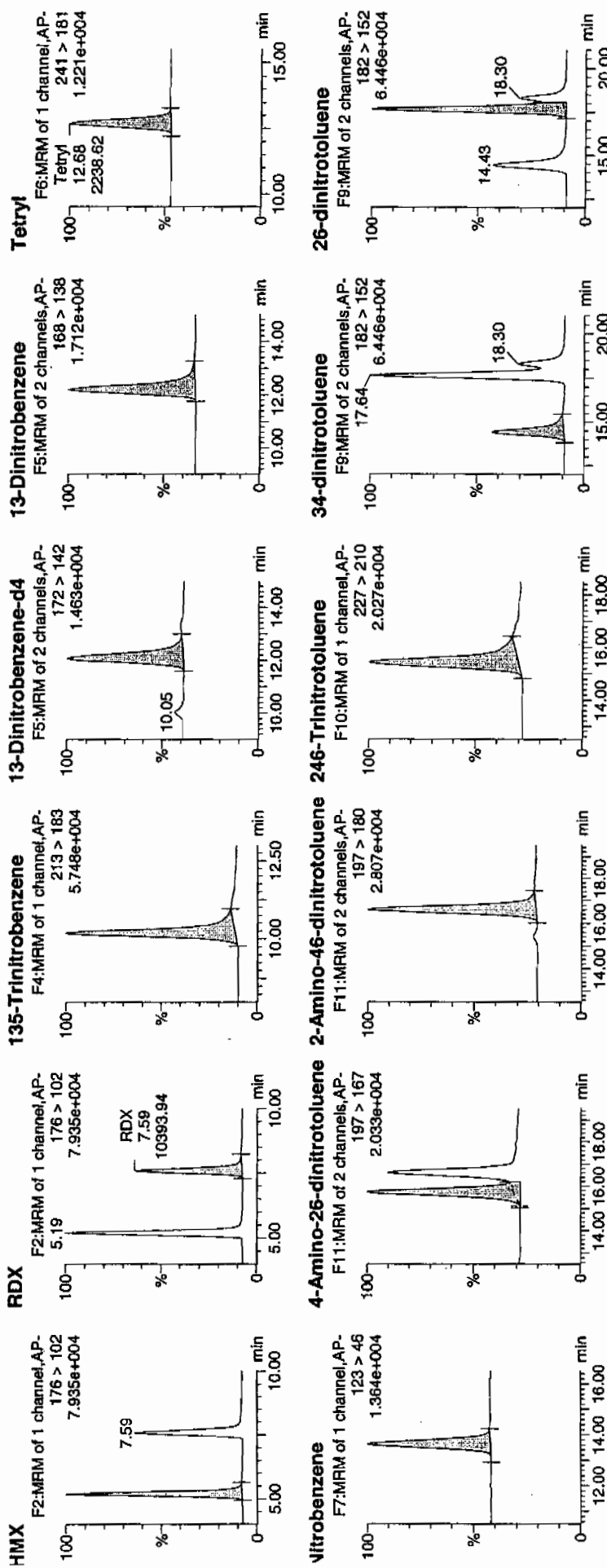
Date: 08-Mar-2010

Time: 09:15:34

ID: 1202032887

Vial: 4:5,E

Handwritten notes: *4:5E*, *3/8/10*, *246055001ms*, *21*



Handwritten note: *4:5E 03/09/10*

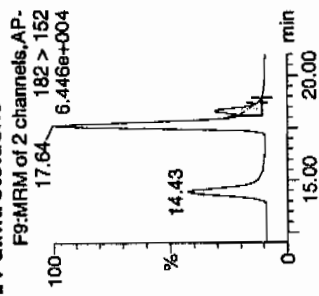
## Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

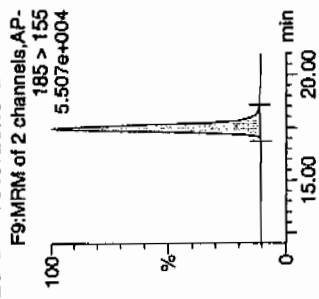
Printed: Mon Mar 08 12:06:42 2010, Page 86 of 93

Dataset: C:\MASSLYNX\New\_Exp\_PRO\030410expA3.qld, Time: Mon Mar 08 11:58:25 2010

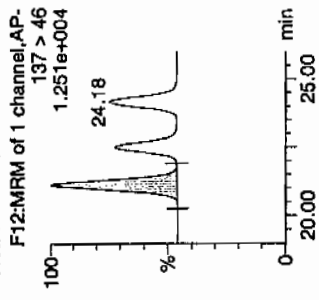
## 24-dinitrotoluene



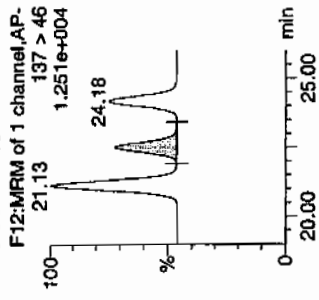
## 26-dinitrotoluene-d3



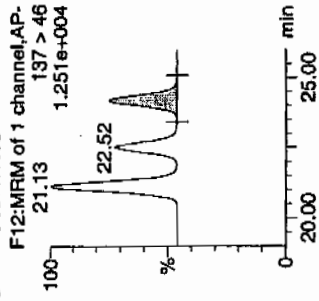
## 2-Nitrotoluene



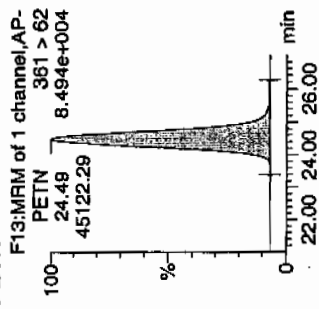
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Flags	Mod Date	Mod Time	Conc	Rec	%Dev	SN
1202032887	HMIX	176 > 102	5.19	14693.849	3658.358	14893.849	2008.257	bb		430.5585	86.1	-13.9	968.7
1202032887	RDX	176 > 102	7.59	10393.941	3658.358	10393.941	1420.575	bb		496.4616	99.3	-0.7	590.0
1202032887	135-Trinitrobenzene	213 > 183	10.20	14741.912	3658.358	14741.912	2014.826	bb		517.4428	103.5	3.5	1150.0
1202032887	13-Dinitrobenzene-d4	172 > 142	12.07	3658.358		3658.358	3658.358	bb		520.8682	104.2	4.2	165.1
1202032887	13-Dinitrobenzene	168 > 138	12.20	4463.994		4463.994	610.109	bb		481.7427	96.3	-3.7	363.1
1202032887	Tetryl	241 > 181	12.68	2238.616		2238.616	305.959	bb		300.6815	60.1	-39.8	158.6
1202032887	Nitrobenzene	129 > 46	13.63	2770.592		2770.592	378.666	bb		458.5812	91.7	-8.3	202.9
1202032887	4-Amino-26-dinitrotoluene	197 > 167	15.74	5757.702	19742.031	5757.702	145.823	MM	08-Mar-10 11:35:51	528.6762	105.7	5.7	762.0
1202032887	2-Amino-46-dinitrotoluene	197 > 180	16.60	8768.144	19742.031	8768.144	222.068	bb		548.1771	109.6	9.6	410.3
1202032887	246-Trinitrotoluene	227 > 210	15.45	6436.095	19742.031	6436.095	163.005	bb		496.0479	99.2	-0.8	267.1
1202032887	34-dinitrotoluene	182 > 152	14.43	10508.202	19742.031	10508.202	286.138	bb		275.3719	110.1	10.1	338.7
1202032887	26-dinitrotoluene	182 > 152	17.64	22069.340	19742.031	22069.340	558.943	MM	08-Mar-10 11:48:50	501.0504	100.2	0.2	912.9
1202032887	26-dinitrotoluene	182 > 152	18.30	5274.642	19742.031	5274.642	133.589	MM	08-Mar-10 11:57:56	484.6377	96.9	-3.1	207.1
1202032887	26-dinitrotoluene-d3	185 > 155	17.47	19742.031		19742.031	19742.031	bb		480.0941	96.0	-4.0	1399.2
1202032887	2-Nitrotoluene	137 > 46	21.13	2910.281	19742.031	2910.281	73.708	bb		475.8444	95.2	-4.8	308.0
1202032887	4-Nitrotoluene	137 > 46	22.52	1431.631	19742.031	1431.631	36.258	bb		475.3715	95.1	-4.9	147.7
1202032887	3-Nitrotoluene	137 > 46	24.18	1634.041	19742.031	1634.041	41.385	bb		438.6098	87.7	-12.3	162.0
1202032887	PETN	361 > 62	24.49	45122.293	19742.031	45122.293	1142.798	bb		648.0928	129.6	29.6	7542.9

JEL 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: RE15-10-8170(246055001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1545

Matrix: SOIL

GEL Sample ID: 1202032887

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948892

Concentrated Extract Volume (mL) 10

Date Extracted: 10-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02260130.wiff

Date Analyzed: 28-FEB-10 00:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5380	
59229-75-3	2,6-Diamino-4-nitrotoluene	6190	
618-87-1	3,5-Dinitroaniline	4470	
6629-29-4	2,4-Diamino-6-nitrotoluene	5600	
78-30-8	tris(o-cresyl) phosphate	5130	

\*Concentration =

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

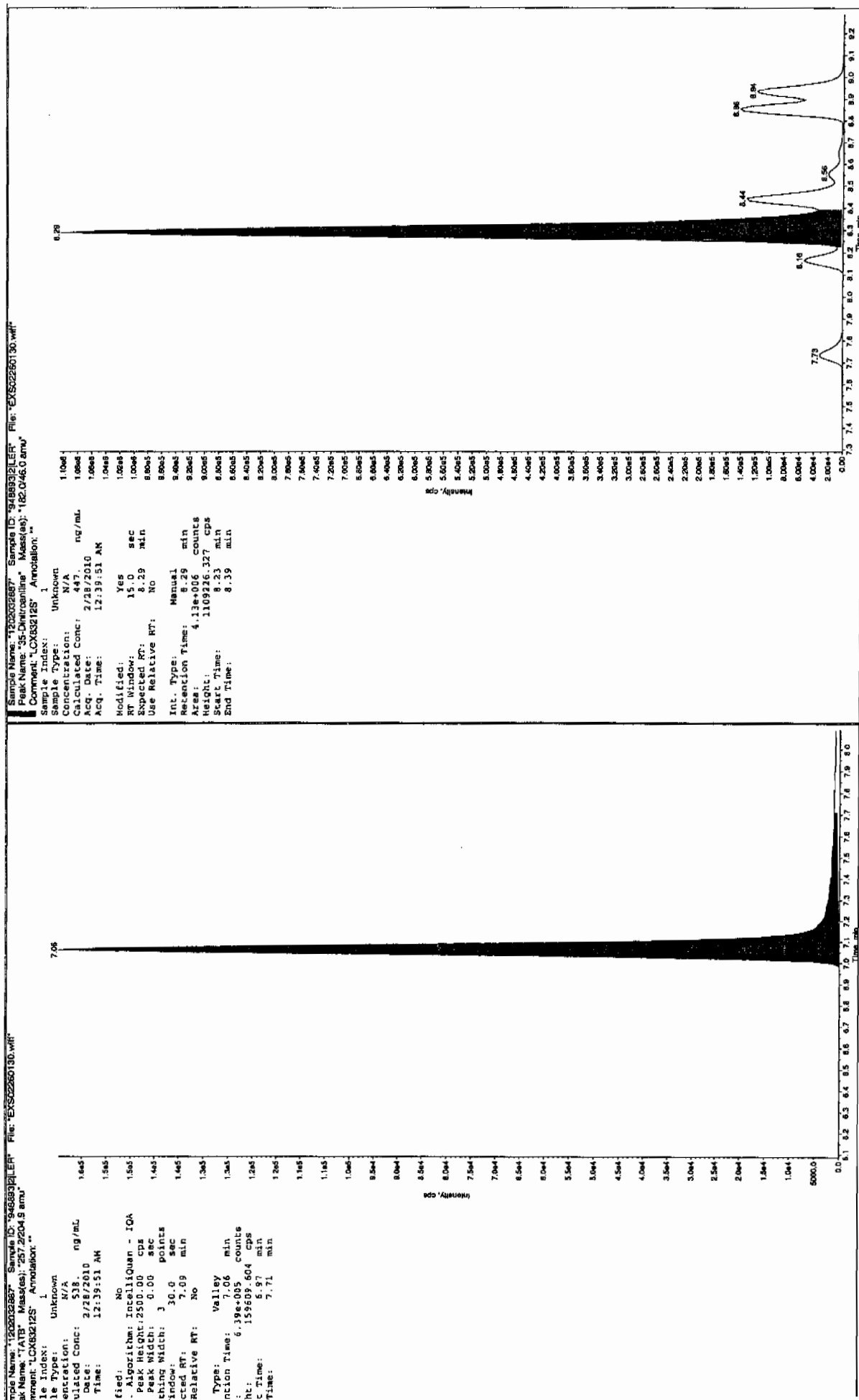
Before Scan 31110



Scan 03/01/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

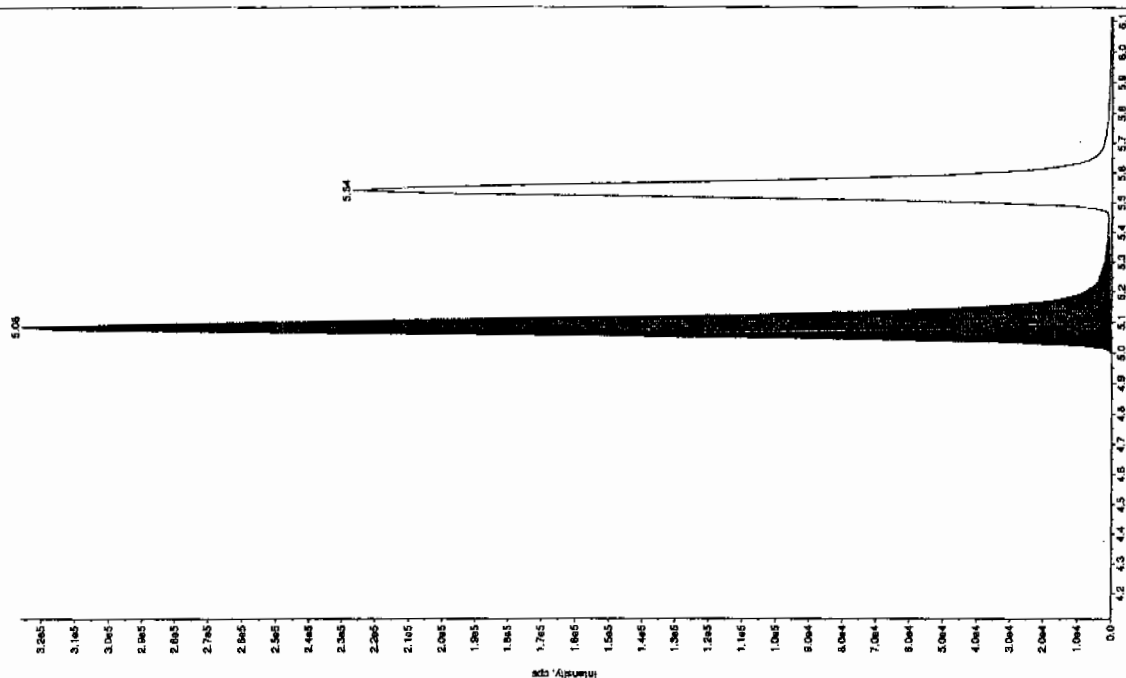
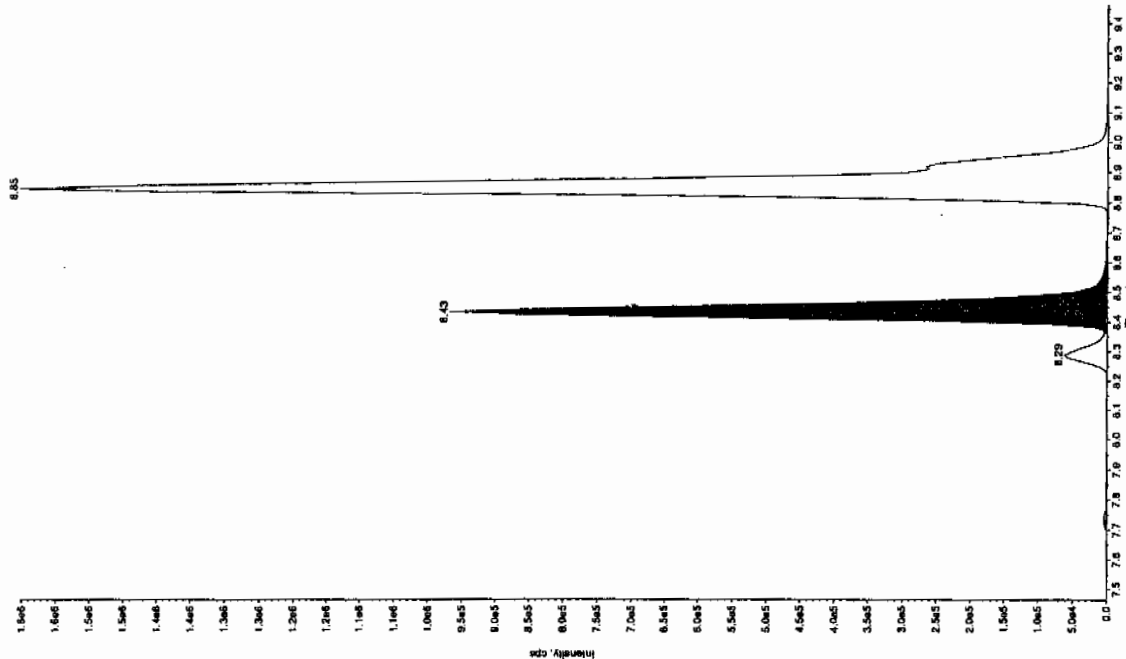
After Scan 3/1/10



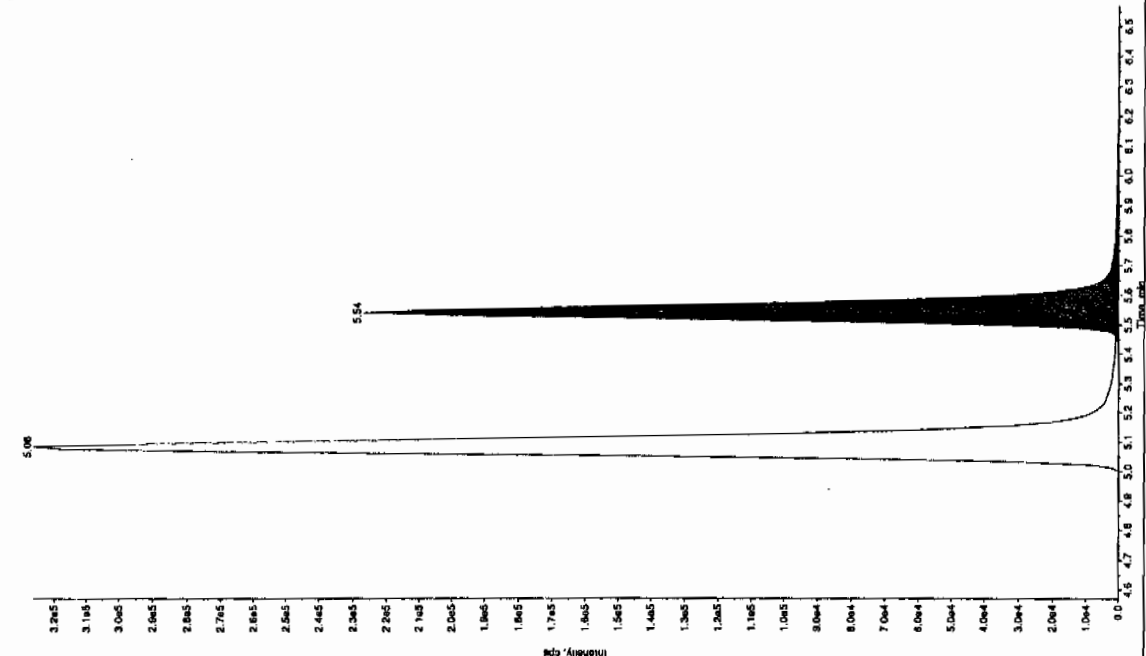
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1200032897" Sample ID: "9488932125" File: "EX502260130.wif"  
 Peak Name: "34-Diamino-4-nitrotoluene" Mass(es): "182.1/181.9 amu"  
 Comment: "LCX832125" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 215. ng/mL  
 Date: 2/28/2010  
 Time: 12:39:51 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 150.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 15.0 sec  
 RT Window: 8.46 min  
 Expected RT: 8.43 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.43 min  
 Area: 3.25e+006 counts  
 Height: 966415.710 cps  
 Start Time: 8.36 min  
 End Time: 8.67 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



LL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



# MISCELLANEOUS DATA

# Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 948892      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)
1202032884 MB	10-FEB-2010 17:18:00	2	10	5
1202032885 LCS	10-FEB-2010 17:18:00	2	10	5
246055001	10-FEB-2010 17:18:00	2	10	5
1202032886 MS (246055001)	10-FEB-2010 17:18:00	2	10	5
1202032887 MSD (246055001)	10-FEB-2010 17:18:00	2	10	5
246055002	10-FEB-2010 17:18:00	2	10	5
246055003	10-FEB-2010 17:18:00	2	10	5
246055004	10-FEB-2010 17:18:00	2	10	5
246055005	10-FEB-2010 17:18:00	2	10	5
246055006	10-FEB-2010 17:18:00	2	10	5
246055007	10-FEB-2010 17:18:00	2	10	5
246055008	10-FEB-2010 17:18:00	2	10	5
246055009	10-FEB-2010 17:18:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202032885	8321 Explosives LCS	DXC100125-03	.1	mL	Final Solvent: ACN
LCS	1202032885	8321 LANL Explosives Mix 10mg/L	UXX100122-01.3	1	mL	
MS	1202032886	8321 Explosives LCS	DXC100125-03	.1	mL	
MS	1202032886	8321 LANL Explosives Mix 10mg/L	UXX100122-01.3	1	mL	
MSD	1202032887	8321 Explosives LCS	DXC100125-03	.1	mL	
MSD	1202032887	8321 LANL Explosives Mix 10mg/L	UXX100122-01.3	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Surrogate)	DXP100204-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS #1

Date: 03/04/10  
 Extr. Injection Volume: 50ul  
 Sequence Number: 030410expA  
 Initial Calibration Date: 03/04/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX1000220-01  
 Mobile Phase Lot#: 1277087, 1268566  
 Standard-Samp Reagent Lot#: 1274562, 1271949  
 Reviewed BY: *Amie*  
 Date: *03/09/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100304-07&  
 WXX100307-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0304001a	XIBLK01	MAP	3/4/10 15:16			1		USE	B
EXP0304002a	XIBLK01	MAP	3/4/10 15:46			1		USE	B
EXP0304003a	WXXICAL-01	MAP	3/4/10 16:15			1		USE	I
EXP0304004a	WXXICAL-02	MAP	3/4/10 16:45			1		USE	I
EXP0304005a	WXXICAL-03	MAP	3/4/10 17:14			1		USE	I
EXP0304006a	WXXICAL-04	MAP	3/4/10 17:44			1		USE	I
EXP0304007a	WXXICAL-05	MAP	3/4/10 18:13			1		USE	I
EXP0304008a	WXXICAL-06	MAP	3/4/10 18:43			1		USE	I
EXP0304009a	XIBLK02	MAP	3/4/10 19:12			1		USE	B
EXP0304010a	WXXICV	MAP	3/4/10 19:41			1		USE	C
EXP0304011a	XIBLK03	MAP	3/4/10 20:11			1		USE	B
EXP0304012a	WXXCRI	MAP	3/4/10 20:40			1		USE	C
EXP0304013a	1202038795	MAP	3/4/10 21:10	951357	Various	2	LANL	USE	S
EXP0304014a	1202038796	MAP	3/4/10 21:39	951357	Various	2	LANL	USE	S
EXP0304015a	246610001	MAP	3/4/10 22:09	951357	10-1701	2	LANL	USE	S
EXP0304016a	1202038797	MAP	3/4/10 22:38	951357	10-1701	2	LANL	USE	S
EXP0304017a	1202038798	MAP	3/4/10 23:08	951357	10-1701	2	LANL	DUSE-RA	S
EXP0304018a	246610002	MAP	3/4/10 23:37	951357	10-1701	2	LANL	USE	S
EXP0304019a	246610003	MAP	3/5/10 0:07	951357	10-1701	2	LANL	USE	S
EXP0304020a	246611001	MAP	3/5/10 0:36	951357	10-1702	2	LANL	USE	S
EXP0304021a	246611002	MAP	3/5/10 1:06	951357	10-1702	2	LANL	USE	S
EXP0304022a	246611003	MAP	3/5/10 1:35	951357	10-1702	2	LANL	USE	S
EXP0304023a	WXXCCV	MAP	3/5/10 2:05			1		USE	C
EXP0304024a	XIBLK04	MAP	3/5/10 2:34			1		USE	B
EXP0304025a	WXXCRI	MAP	3/5/10 3:04			1		USE	C
EXP0304026a	1202038789	MAP	3/5/10 3:33	951353	Various	2	LANL	USE	S
EXP0304027a	1202038790	MAP	3/5/10 4:03	951353	Various	2	LANL	USE	S
EXP0304028a	246588002	MAP	3/5/10 4:32	951353	10-1688	2	LANL	USE	S
EXP0304029a	1202038791	MAP	3/5/10 5:02	951353	10-1688	2	LANL	USE	S

EXP0304030a	1202038792	MAP	3/5/10 5:31	951353	10-1688	2	LANL	USE	S
EXP0304031a	246588003	MAP	3/5/10 6:01	951353	10-1688	2	LANL	USE	S
EXP0304032a	246588004	MAP	3/5/10 6:30	951353	10-1688	2	LANL	USE	S
EXP0304033a	246588005	MAP	3/5/10 7:00	951353	10-1688	2	LANL	USE	S
EXP0304034a	246588006	MAP	3/5/10 7:29	951353	10-1688	2	LANL	USE	S
EXP0304035a	246588007	MAP	3/5/10 7:59	951353	10-1688	2	LANL	USE	S
EXP0304036a	WXXCCV	MAP	3/5/10 8:28			1		USE	C
EXP0304037a	XIBLK05	MAP	3/5/10 8:58			1		USE	B
EXP0304038a	WXXCRI	MAP	3/5/10 9:27			1		USE	C
EXP0304039a	246588008	MAP	3/5/10 9:57	951353	10-1688	2	LANL	USE	S
EXP0304040a	246588009	MAP	3/5/10 10:26	951353	10-1688	2	LANL	USE	S
EXP0304041a	246588010	MAP	3/5/10 10:56	951353	10-1688	2	LANL	USE	S
EXP0304042a	246588011	MAP	3/5/10 11:25	951353	10-1688	2	LANL	USE	S
EXP0304043a	246588012	MAP	3/5/10 11:55	951353	10-1688	2	LANL	USE	S
EXP0304044a	246605001	MAP	3/5/10 12:24	951353	10-1698-1	2	LANL	USE	S
EXP0304045a	246605002	MAP	3/5/10 12:54	951353	10-1698-1	2	LANL	USE	S
EXP0304046a	246605003	MAP	3/5/10 13:23	951353	10-1698-1	2	LANL	USE	S
EXP0304047a	246605004	MAP	3/5/10 13:53	951353	10-1698-1	2	LANL	USE	S
EXP0304048a	246605005	MAP	3/5/10 14:22	951353	10-1698-1	2	LANL	USE	S
EXP0304049a	WXXCCV	MAP	3/5/10 14:52			1	LANL	USE	C
EXP0304050a	XIBLK06	MAP	3/5/10 15:21			1	LANL	USE	B
EXP0304051a	WXXCRI	MAP	3/5/10 15:51			1	LANL	USE	C
EXP0304052a	246605006	MAP	3/5/10 16:20	951353	10-1698-1	2	LANL	USE	S
EXP0304053a	1202038798	MAP	3/5/10 16:50	951357	10-1701	2	LANL	USE	S
EXP0304054a	XIBLK07	MAP	3/5/10 17:19			1	LANL	USE	B
EXP0304055a	1202041901	MAP	3/5/10 17:49	952679	Various	2	LANL	USE	S
EXP0304056a	1202041902	MAP	3/5/10 18:18	952679	Various	2	LANL	USE	S
EXP0304057a	246721001	MAP	3/5/10 18:48	952679	10-1709	2	LANL	USE	S
EXP0304058a	1202041903	MAP	3/5/10 19:17	952679	10-1709	2	LANL	USE	S
EXP0304059a	1202041904	MAP	3/5/10 19:47	952679	10-1709	2	LANL	USE	S
EXP0304060a	246721002	MAP	3/5/10 20:16	952679	10-1709	2	LANL	USE	S
EXP0304061a	246837001	MAP	3/5/10 20:46	952679	10-1747	2	LANL	USE	S
EXP0304062a	246837002	MAP	3/5/10 21:15	952679	10-1747	2	LANL	USE	S
EXP0304063a	246837003	MAP	3/5/10 21:45	952679	10-1747	2	LANL	USE	S
EXP0304064a	WXXCCV	MAP	3/5/10 22:14			1		USE	C
EXP0304065a	XIBLK08	MAP	3/5/10 22:44			1		USE	B
EXP0304066a	WXXCRI	MAP	3/5/10 23:13			1		USE	C

EXP0304067a	246837004	MAP	3/5/10 23:43	952679	10-1747	2	LANL	USE	S
EXP0304068a	246837005	MAP	3/6/10 0:13	952679	10-1747	2	LANL	USE	S
EXP0304069a	246837006	MAP	3/6/10 0:42	952679	10-1747	2	LANL	USE	S
EXP0304070a	246841001	MAP	3/6/10 1:11	952679	10-1748	2	LANL	USE	S
EXP0304071a	246841002	MAP	3/6/10 1:41	952679	10-1748	2	LANL	USE	S
EXP0304072a	246841003	MAP	3/6/10 2:11	952679	10-1748	2	LANL	USE	S
EXP0304073a	246843002	MAP	3/6/10 2:40	952679	10-1749	2	LANL	USE	S
EXP0304074a	246843003	MAP	3/6/10 3:10	952679	10-1749	2	LANL	USE	S
EXP0304075a	246843004	MAP	3/6/10 3:39	952679	10-1749	2	LANL	USE	S
EXP0304076a	WXXCCV	MAP	3/6/10 4:08			1		USE	C
EXP0304077a	XIBLK09	MAP	3/6/10 4:38			1		USE	B
EXP0304078a	WXXCRI	MAP	3/6/10 5:08			1		USE	C
EXP0304079a	246846001	MAP	3/6/10 5:37	952679	10-1750	2	LANL	USE	S
EXP0304080a	246846002	MAP	3/6/10 6:07	952679	10-1750	2	LANL	USE	S
EXP0304081a	246847001	MAP	3/6/10 6:36	952679	10-1751	2	LANL	USE	S
EXP0304082a	246847002	MAP	3/6/10 7:06	952679	10-1751	2	LANL	USE	S
EXP0304083a	XIBLK10	MAP	3/6/10 7:35			1		USE	B
EXP0304084a	1202045764	MAP	3/6/10 8:05	954338	Various	2	LANL	USE	S
EXP0304085a	1202045765	MAP	3/6/10 8:34	954338	Various	2	LANL	USE	S
EXP0304086a	247083001	MAP	3/6/10 9:04	954338	10-1827	2	LANL	USE	S
EXP0304087a	1202045766	MAP	3/6/10 9:33	954338	10-1827	2	LANL	USE	S
EXP0304088a	1202045767	MAP	3/6/10 10:03	954338	10-1827	2	LANL	USE	S
EXP0304089a	WXXCCV	MAP	3/6/10 10:32			1		USE	C
EXP0304090a	XIBLK11	MAP	3/6/10 11:02			1		USE	B
EXP0304091a	WXXCRI	MAP	3/6/10 11:31			1		USE	C
EXP0304092a	247083002	MAP	3/6/10 12:01	954338	10-1827	2	LANL	USE	S
EXP0304093a	247083003	MAP	3/6/10 12:30	954338	10-1827	2	LANL	USE	S
EXP0304094a	247083004	MAP	3/6/10 13:00	954338	10-1827	2	LANL	USE	S
EXP0304095a	247084001	MAP	3/6/10 13:29	954338	10-1828	2	LANL	USE	S
EXP0304096a	247084002	MAP	3/6/10 13:59	954338	10-1828	2	LANL	USE	S
EXP0304097a	247086001	MAP	3/6/10 14:28	954338	10-1829	2	LANL	USE	S
EXP0304098a	247088001	MAP	3/6/10 14:58	954338	10-1830	2	LANL	USE	S
EXP0304099a	247088002	MAP	3/6/10 15:27	954338	10-1830	2	LANL	USE	S
EXP0304100a	247088003	MAP	3/6/10 15:57	954338	10-1830	2	LANL	USE	S
EXP0304101a	WXXCCV	MAP	3/6/10 16:26			1		USE	C
EXP0304102a	XIBLK12	MAP	3/6/10 16:56			1		USE	B
EXP0304103a	WXXCRI	MAP	3/6/10 17:25			1		USE	C

EXP0304104a	247091001	MAP	3/6/10 17:55	954338	10-1831	2	LANL	USE	S
EXP0304105a	247091002	MAP	3/6/10 18:24	954338	10-1831	2	LANL	USE	S
EXP0304106a	247094001	MAP	3/6/10 18:54	954338	10-1832	2	LANL	USE	S
EXP0304107a	247094002	MAP	3/6/10 19:23	954338	10-1832	2	LANL	USE	S
EXP0304108a	247121002	MAP	3/6/10 19:53	954338	10-1846	2	LANL	USE	S
EXP0304109a	247123001	MAP	3/6/10 20:22	954338	10-1848	2	LANL	USE	S
EXP0304110a	247123002	MAP	3/6/10 20:52	954338	10-1848	2	LANL	USE	S
EXP0304111a	247123003	MAP	3/6/10 21:21	954338	10-1848	2	LANL	USE	S
EXP0304112a	247123004	MAP	3/6/10 21:51	954338	10-1848	2	LANL	USE	S
EXP0304113a	WXXCCV	MAP	3/6/10 22:20			1		USE	C
EXP0304114a	XIBLK13	MAP	3/6/10 22:50			1		USE	B
EXP0304115a	WXXCRI	MAP	3/6/10 23:19			1		USE	C
EXP0304116a	1202032878	MAP	3/6/10 23:49	948890	10-1544	2	LANL	USE	S
EXP0304117a	1202032879	MAP	3/7/10 0:18	948890	10-1544	2	LANL	USE	S
EXP0304118a	246070001	MAP	3/7/10 0:48	948890	10-1544	2	LANL	USE	S
EXP0304119a	1202032880	MAP	3/7/10 1:17	948890	10-1544	2	LANL	USE	S
EXP0304120a	1202032881	MAP	3/7/10 1:47	948890	10-1544	2	LANL	USE	S
EXP0304121a	246070002	MAP	3/7/10 2:16	948890	10-1544	2	LANL	USE	S
EXP0304122a	246070003	MAP	3/7/10 2:46	948890	10-1544	2	LANL	USE	S
EXP0304123a	246070004	MAP	3/7/10 3:15	948890	10-1544	2	LANL	USE	S
EXP0304124a	246070005	MAP	3/7/10 3:45	948890	10-1544	2	LANL	USE	S
EXP0304125a	246070006	MAP	3/7/10 4:14	948890	10-1544	2	LANL	USE	S
EXP0304126a	WXXCCV	MAP	3/7/10 4:44			1		USE	C
EXP0304127a	XIBLK14	MAP	3/7/10 5:13			1		USE	B
EXP0304128a	WXXCRI	MAP	3/7/10 5:43			1		USE	C
EXP0304129a	246070007	MAP	3/7/10 6:12	948890	10-1544	2	LANL	USE	S
EXP0304130a	246070008	MAP	3/7/10 6:42	948890	10-1544	2	LANL	USE	S
EXP0304131a	246070009	MAP	3/7/10 7:11	948890	10-1544	2	LANL	USE	S
EXP0304132a	246070010	MAP	3/7/10 7:41	948890	10-1544	2	LANL	USE	S
EXP0304133a	246070011	MAP	3/7/10 8:10	948890	10-1544	2	LANL	USE	S
EXP0304134a	246070012	MAP	3/7/10 8:40	948890	10-1544	2	LANL	USE	S
EXP0304135a	246070013	MAP	3/7/10 9:09	948890	10-1544	2	LANL	USE	S
EXP0304136a	246070014	MAP	3/7/10 9:39	948890	10-1544	2	LANL	USE	S
EXP0304137a	246070015	MAP	3/7/10 10:08	948890	10-1544	2	LANL	USE	S
EXP0304138a	246070016	MAP	3/7/10 10:38	948890	10-1544	2	LANL	USE	S
EXP0304139a	WXXCCV	MAP	3/7/10 11:07			1		USE	C
EXP0304140a	XIBLK15	MAP	3/7/10 11:37			1		USE	B

EXP0304141a	WXXCRI	MAP	3/7/10 12:06	948890	10-1544	1	LANL	USE	C
EXP0304142a	246070017	MAP	3/7/10 12:36	948890	10-1544	2	LANL	USE	S
EXP0304143a	246070018	MAP	3/7/10 13:05	948890	10-1544	2	LANL	USE	S
EXP0304144a	246070019	MAP	3/7/10 13:35	948890	10-1544	2	LANL	USE	S
EXP0304145a	246070020	MAP	3/7/10 14:05	948890	10-1544	2	LANL	USE	S
EXP0304146a	WXXCCV	MAP	3/7/10 14:34			1		USE	C
EXP0304147a	XIBLK16	MAP	3/7/10 15:04			1		USE	B
EXP0304148a	WXXCRI	MAP	3/7/10 15:33			1		USE	C
EXP0304149a	1202032874	MAP	3/7/10 16:03	948888	10-1543	2	LANL	USE	S
EXP0304150a	1202032875	MAP	3/7/10 16:32	948888	10-1543	2	LANL	USE	S
EXP0304151a	246066001	MAP	3/7/10 17:02	948888	10-1543	2	LANL	USE	S
EXP0304152a	1202032876	MAP	3/7/10 17:31	948888	10-1543	2	LANL	USE	S
EXP0304153a	1202032877	MAP	3/7/10 18:01	948888	10-1543	2	LANL	USE	S
EXP0304154a	246066002	MAP	3/7/10 18:30	948888	10-1543	2	LANL	USE	S
EXP0304155a	246066003	MAP	3/7/10 19:00	948888	10-1543	2	LANL	USE	S
EXP0304156a	246066004	MAP	3/7/10 19:29	948888	10-1543	2	LANL	USE	S
EXP0304157a	246066005	MAP	3/7/10 19:59	948888	10-1543	2	LANL	USE	S
EXP0304158a	246066006	MAP	3/7/10 20:28	948888	10-1543	2	LANL	USE	S
EXP0304159a	WXXCCV	MAP	3/7/10 20:58			1		USE	C
EXP0304160a	XIBLK17	MAP	3/7/10 21:27			1		USE	B
EXP0304161a	WXXCRI	MAP	3/7/10 21:57			1		USE	C
EXP0304162a	246066007	MAP	3/7/10 22:26	948888	10-1543	2	LANL	USE	S
EXP0304163a	246066008	MAP	3/7/10 22:56	948888	10-1543	2	LANL	USE	S
EXP0304164a	246066009	MAP	3/7/10 23:25	948888	10-1543	2	LANL	USE	S
EXP0304165a	246066010	MAP	3/7/10 23:55	948888	10-1543	2	LANL	USE	S
EXP0304166a	246066011	MAP	3/8/10 0:24	948888	10-1543	2	LANL	USE	S
EXP0304167a	246066012	MAP	3/8/10 0:53	948888	10-1543	2	LANL	USE	S
EXP0304168a	246066013	MAP	3/8/10 1:23	948888	10-1543	2	LANL	USE	S
EXP0304169a	246066014	MAP	3/8/10 1:52	948888	10-1543	2	LANL	USE	S
EXP0304170a	246066015	MAP	3/8/10 2:22	948888	10-1543	2	LANL	USE	S
EXP0304171a	246066016	MAP	3/8/10 2:51	948888	10-1543	2	LANL	USE	S
EXP0304172a	WXXCCV	MAP	3/8/10 3:21			1		USE	C
EXP0304173a	XIBLK18	MAP	3/8/10 3:50			1		USE	B
EXP0304174a	WXXCRI	MAP	3/8/10 4:20			1		USE	C
EXP0304175a	246066017	MAP	3/8/10 4:49	948888	10-1543	2	LANL	USE	S
EXP0304176a	246066018	MAP	3/8/10 5:19	948888	10-1543	2	LANL	USE	S
EXP0304177a	246066019	MAP	3/8/10 5:48	948888	10-1543	2	LANL	USE	S

EXP0304178a	246066020	MAP	3/8/10 6:18	948888	10-1543	2	LANL	USE	S
EXP0304179a	XIBLK19	MAP	3/8/10 6:47			1		USE	B
EXP0304180a	1202032884	MAP	3/8/10 7:17	948893	10-1545	2	LANL	USE	S
EXP0304181a	1202032885	MAP	3/8/10 7:47	948893	10-1545	2	LANL	USE	S
EXP0304182a	246055001	MAP	3/8/10 8:16	948893	10-1545	2	LANL	USE	S
EXP0304183a	1202032886	MAP	3/8/10 8:46	948893	10-1545	2	LANL	USE	S
EXP0304184a	1202032887	MAP	3/8/10 9:15	948893	10-1545	2	LANL	USE	S
EXP0304185a	WXXCCV	MAP	3/8/10 9:45			1		USE	C
EXP0304186a	XIBLK20	MAP	3/8/10 10:14			1		USE	B
EXP0304187a	WXXCRI	MAP	3/8/10 10:44			1		USE	C
EXP0304188a	246055002	MAP	3/8/10 11:13	948893	10-1545	2	LANL	USE	S
EXP0304189a	246055003	MAP	3/8/10 11:43	948893	10-1545	2	LANL	USE	S
EXP0304190a	246055004	MAP	3/8/10 12:12	948893	10-1545	2	LANL	USE	S
EXP0304191a	246055005	MAP	3/8/10 12:42	948893	10-1545	2	LANL	USE	S
EXP0304192a	246055006	MAP	3/8/10 13:11	948893	10-1545	2	LANL	USE	S
EXP0304193a	246055007	MAP	3/8/10 13:41	948893	10-1545	2	LANL	USE	S
EXP0304194a	246055008	MAP	3/8/10 14:10	948893	10-1545	2	LANL	USE	S
EXP0304195a	246055009	MAP	3/8/10 14:40	948893	10-1545	2	LANL	USE	S
EXP0304196a	WXXCCV	MAP	3/8/10 15:09			1		USE	C
EXP0304197a	XIBLK21	MAP	3/8/10 15:39			1		USE	B
EXP0304198a	WXXCRI	MAP	3/8/10 16:08			1		USE	C
EXP0304199a	1202040473	MAP	3/8/10 16:38	952049	Various	2	LANL	USE	S
EXP0304200a	1202040474	MAP	3/8/10 17:07	952049	Various	2	LANL	USE	S
EXP0304201a	246713001	MAP	3/8/10 17:37	952049	10-1728	2	LANL	USE	S
EXP0304202a	1202040475	MAP	3/8/10 18:06	952049	10-1728	2	LANL	USE	S
EXP0304203a	1202040476	MAP	3/8/10 18:36	952049	10-1728	2	LANL	USE	S
EXP0304204a	246713002	MAP	3/8/10 19:05	952049	10-1728	2	LANL	USE	S
EXP0304205a	246713003	MAP	3/8/10 19:35	952049	10-1728	2	LANL	USE	S
EXP0304206a	246713004	MAP	3/8/10 20:04	952049	10-1728	2	LANL	USE	S
EXP0304207a	246713005	MAP	3/8/10 20:34	952049	10-1728	2	LANL	USE	S
EXP0304208a	246713006	MAP	3/8/10 21:03	952049	10-1728	2	LANL	USE	S
EXP0304209a	WXXCCV	MAP	3/8/10 21:33			1		USE	C
EXP0304210a	XIBLK22	MAP	3/8/10 22:02			1		USE	B
EXP0304211a	WXXCRI	MAP	3/8/10 22:32			1		USE	C
EXP0304212a	246713007	MAP	3/8/10 23:01	952049	10-1728	2	LANL	USE	S
EXP0304213a	246713008	MAP	3/8/10 23:30	952049	10-1728	2	LANL	USE	S
EXP0304214a	246734001	MAP	3/9/10 0:00	952049	10-1731-1	2	LANL	USE	S



EXP0304215a	246736001	MAP	3/9/10 0:29	952049	10-1732	2	LANL	USE	S
EXP0304216a	246736002	MAP	3/9/10 0:59	952049	10-1732	2	LANL	USE	S
EXP0304217a	246739002	MAP	3/9/10 1:28	952049	10-1733	2	LANL	USE	S
EXP0304218a	246739003	MAP	3/9/10 1:58	952049	10-1733	2	LANL	USE	S
EXP0304219a	246739004	MAP	3/9/10 2:27	952049	10-1733	2	LANL	USE	S
EXP0304220a	246739005	MAP	3/9/10 2:57	952049	10-1733	2	LANL	USE	S
EXP0304221a	246739006	MAP	3/9/10 3:26	952049	10-1733	2	LANL	USE	S
EXP0304222a	WXXCCV	MAP	3/9/10 3:56			1		USE	C
EXP0304223a	XIBLK23	MAP	3/9/10 4:25			1		USE	B
EXP0304224a	WXXCRI	MAP	3/9/10 4:55			1		USE	C
EXP0304225a	246739007	MAP	3/9/10 5:24	952049	10-1733	2	LANL	USE	S
EXP0304226a	246739008	MAP	3/9/10 5:54	952049	10-1733	2	LANL	USE	S
EXP0304227a	246739009	MAP	3/9/10 6:23	952049	10-1733	2	LANL	USE	S
EXP0304228a	246739010	MAP	3/9/10 6:53	952049	10-1733	2	LANL	USE	S
EXP0304229a	WXXCCV	MAP	3/9/10 7:22			1		USE	C
EXP0304230a	XIBLK24	MAP	3/9/10 7:52			1		USE	B
EXP0304231a	WXXCRI	MAP	3/9/10 8:21			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 02/26/10  
 Extr. Injection Volume: 10µL  
 Sequence Number: 022610  
 Initial Calibration Date: 022610  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1268566, 1268568  
 Standard-Samp Reagent Lot#: 1274562, 1261217  
 Reviewed By: *hml*  
 Date: 03/01/10  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100226-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02260001.wiff	XIBLK01	LER	2/26/2010 14:53			1		USE	B
EXS02260002.wiff	XIBLK01	LER	2/26/2010 15:09			1		USE	B
EXS02260003.wiff	WXXICAL-19	LER	2/26/2010 15:25			1		USE	I
EXS02260004.wiff	WXXICAL-20	LER	2/26/2010 15:41			1		USE	I
EXS02260005.wiff	WXXICAL-21	LER	2/26/2010 15:56			1		USE	I
EXS02260006.wiff	WXXICAL-22	LER	2/26/2010 16:12			1		USE	I
EXS02260007.wiff	WXXICAL-23	LER	2/26/2010 16:28			1		USE	I
EXS02260008.wiff	WXXICAL-24	LER	2/26/2010 16:43			1		USE	I
EXS02260009.wiff	WXXICAL-25	LER	2/26/2010 16:59			1		USE	I
EXS02260010.wiff	XIBLK02	LER	2/26/2010 17:15			1		USE	B
EXS02260011.wiff	WXXICV	LER	2/26/2010 17:31			1		USE	C
EXS02260012.wiff	XIBLK03	LER	2/26/2010 17:46			1		USE	B
EXS02260013.wiff	WXXCRI	LER	2/26/2010 18:02			1		USE	C
EXS02260014.wiff	246837005	LER	2/26/2010 18:18	952679	10-1747	2	LANL	USE	S
EXS02260015.wiff	246837006	LER	2/26/2010 18:33	952679	10-1747	2	LANL	USE	S
EXS02260016.wiff	246841001	LER	2/26/2010 18:49	952679	10-1748	2	LANL	USE	S
EXS02260017.wiff	246841002	LER	2/26/2010 19:05	952679	10-1748	2	LANL	USE	S
EXS02260018.wiff	246841003	LER	2/26/2010 19:21	952679	10-1748	2	LANL	USE	S
EXS02260019.wiff	246843002	LER	2/26/2010 19:36	952679	10-1749	2	LANL	USE	S
EXS02260020.wiff	246843003	LER	2/26/2010 19:52	952679	10-1749	2	LANL	USE	S
EXS02260021.wiff	246843004	LER	2/26/2010 20:08	952679	10-1749	2	LANL	USE	S
EXS02260022.wiff	246846001	LER	2/26/2010 20:23	952679	10-1750	2	LANL	USE	S
EXS02260023.wiff	246846002	LER	2/26/2010 20:39	952679	10-1750	2	LANL	USE	S
EXS02260024.wiff	WXXCCV	LER	2/26/2010 20:55			1		USE	C
EXS02260025.wiff	XIBLK04	LER	2/26/2010 21:10			1		USE	B
EXS02260026.wiff	WXXCRI	LER	2/26/2010 21:26			1		USE	C
EXS02260027.wiff	246847001	LER	2/26/2010 21:42	952679	10-1751	2	LANL	USE	S
EXS02260028.wiff	246847002	LER	2/26/2010 21:58	952679	10-1751	2	LANL	USE	S
EXS02260029.wiff	XIBLK05	LER	2/26/2010 22:13			1		USE	B
EXS02260030.wiff	1202032874	LER	2/26/2010 22:29	948888	10-1543	2	LANL	USE	S

EXS02260031.wiff	1202032875	LER	2/26/2010 22:45	948888	10-1543	2	LANL	USE	S
EXS02260032.wiff	246066001	LER	2/26/2010 23:01	948888	10-1543	2	LANL	USE	S
EXS02260033.wiff	1202032876	LER	2/26/2010 23:16	948888	10-1543	2	LANL	USE	S
EXS02260034.wiff	1202032877	LER	2/26/2010 23:32	948888	10-1543	2	LANL	USE	S
EXS02260035.wiff	246066002	LER	2/26/2010 23:48	948888	10-1543	2	LANL	USE	S
EXS02260036.wiff	246066003	LER	2/27/2010 0:03	948888	10-1543	2	LANL	USE	S
EXS02260037.wiff	WXXCCV	LER	2/27/2010 0:19			1		USE	C
EXS02260038.wiff	XIBLK06	LER	2/27/2010 0:35			1		USE	B
EXS02260039.wiff	WXXCRI	LER	2/27/2010 0:51			1		USE	C
EXS02260040.wiff	246066004	LER	2/27/2010 1:06	948888	10-1543	2	LANL	USE	S
EXS02260041.wiff	246066005	LER	2/27/2010 1:22	948888	10-1543	2	LANL	USE	S
EXS02260042.wiff	246066006	LER	2/27/2010 1:38	948888	10-1543	2	LANL	USE	S
EXS02260043.wiff	246066007	LER	2/27/2010 1:53	948888	10-1543	2	LANL	USE	S
EXS02260044.wiff	246066008	LER	2/27/2010 2:09	948888	10-1543	2	LANL	USE	S
EXS02260045.wiff	246066009	LER	2/27/2010 2:25	948888	10-1543	2	LANL	USE	S
EXS02260046.wiff	246066010	LER	2/27/2010 2:40	948888	10-1543	2	LANL	USE	S
EXS02260047.wiff	246066011	LER	2/27/2010 2:56	948888	10-1543	2	LANL	USE	S
EXS02260048.wiff	246066012	LER	2/27/2010 3:12	948888	10-1543	2	LANL	USE	S
EXS02260049.wiff	246066013	LER	2/27/2010 3:28	948888	10-1543	2	LANL	USE	S
EXS02260050.wiff	WXXCCV	LER	2/27/2010 3:43			1		USE	C
EXS02260051.wiff	XIBLK07	LER	2/27/2010 3:59			1		USE	B
EXS02260052.wiff	WXXCRI	LER	2/27/2010 4:15			1		USE	C
EXS02260053.wiff	246066014	LER	2/27/2010 4:30	948888	10-1543	2	LANL	USE	S
EXS02260054.wiff	246066015	LER	2/27/2010 4:46	948888	10-1543	2	LANL	USE	S
EXS02260055.wiff	246066016	LER	2/27/2010 5:02	948888	10-1543	2	LANL	USE	S
EXS02260056.wiff	246066017	LER	2/27/2010 5:18	948888	10-1543	2	LANL	USE	S
EXS02260057.wiff	246066018	LER	2/27/2010 5:33	948888	10-1543	2	LANL	USE	S
EXS02260058.wiff	246066019	LER	2/27/2010 5:49	948888	10-1543	2	LANL	USE	S
EXS02260059.wiff	246066020	LER	2/27/2010 6:05	948888	10-1543	2	LANL	USE	S
EXS02260060.wiff	WXXCCV	LER	2/27/2010 6:20			1		USE	C
EXS02260061.wiff	XIBLK08	LER	2/27/2010 6:36			1		USE	B
EXS02260062.wiff	WXXCRI	LER	2/27/2010 6:52			1		USE	C
EXS02260063.wiff	1202045764	LER	2/27/2010 7:07	954338	VARIOUS	2	LANL	USE	S
EXS02260064.wiff	1202045765	LER	2/27/2010 7:23	954338	VARIOUS	2	LANL	USE	S
EXS02260065.wiff	247083001	LER	2/27/2010 7:39	954338	10-1827	2	LANL	USE	S
EXS02260066.wiff	1202045766	LER	2/27/2010 7:55	954338	10-1827	2	LANL	USE	S
EXS02260067.wiff	1202045767	LER	2/27/2010 8:10	954338	10-1827	2	LANL	USE	S

EXS02260068.wiff	247083002	LER	2/27/2010 8:26	954338	10-1827	2	LANL	USE	S
EXS02260069.wiff	247083003	LER	2/27/2010 8:42	954338	10-1827	2	LANL	USE	S
EXS02260070.wiff	247083004	LER	2/27/2010 8:57	954338	10-1827	2	LANL	USE	S
EXS02260071.wiff	247084001	LER	2/27/2010 9:13	954338	10-1828	2	LANL	USE	S
EXS02260072.wiff	247084002	LER	2/27/2010 9:29	954338	10-1828	2	LANL	USE	S
EXS02260073.wiff	WXXCCV	LER	2/27/2010 9:44			1		USE	C
EXS02260074.wiff	XIBLK09	LER	2/27/2010 10:00			1		USE	B
EXS02260075.wiff	WXXCRI	LER	2/27/2010 10:16			1		USE	C
EXS02260076.wiff	247086001	LER	2/27/2010 10:32	954338	10-1829	2	LANL	USE	S
EXS02260077.wiff	247088001	LER	2/27/2010 10:47	954338	10-1830	2	LANL	USE	S
EXS02260078.wiff	247088002	LER	2/27/2010 11:03	954338	10-1830	2	LANL	USE	S
EXS02260079.wiff	247088003	LER	2/27/2010 11:19	954338	10-1830	2	LANL	USE	S
EXS02260080.wiff	247091001	LER	2/27/2010 11:34	954338	10-1831	2	LANL	USE	S
EXS02260081.wiff	247091002	LER	2/27/2010 11:50	954338	10-1831	2	LANL	USE	S
EXS02260082.wiff	247094001	LER	2/27/2010 12:06	954338	10-1832	2	LANL	USE	S
EXS02260083.wiff	247094002	LER	2/27/2010 12:21	954338	10-1832	2	LANL	USE	S
EXS02260084.wiff	247121002	LER	2/27/2010 12:37	954338	10-1846	2	LANL	USE	S
EXS02260085.wiff	247123001	LER	2/27/2010 12:53	954338	10-1848	2	LANL	USE	S
EXS02260086.wiff	WXXCCV	LER	2/27/2010 13:09			1		USE	C
EXS02260087.wiff	XIBLK10	LER	2/27/2010 13:24			1		USE	B
EXS02260088.wiff	WXXCRI	LER	2/27/2010 13:40			1		USE	C
EXS02260089.wiff	247123002	LER	2/27/2010 13:56	954338	10-1848	2	LANL	USE	S
EXS02260090.wiff	247123003	LER	2/27/2010 14:11	954338	10-1848	2	LANL	USE	S
EXS02260091.wiff	247123004	LER	2/27/2010 14:27	954338	10-1848	2	LANL	USE	S
EXS02260092.wiff	XIBLK11	LER	2/27/2010 14:43			1		USE	B
EXS02260093.wiff	1202032878	LER	2/27/2010 14:59	948890	10-1544	2	LANL	USE	S
EXS02260094.wiff	1202032879	LER	2/27/2010 15:14	948890	10-1544	2	LANL	USE	S
EXS02260095.wiff	246070001	LER	2/27/2010 15:30	948890	10-1544	2	LANL	USE	S
EXS02260096.wiff	1202032880	LER	2/27/2010 15:46	948890	10-1544	2	LANL	USE	S
EXS02260097.wiff	1202032881	LER	2/27/2010 16:01	948890	10-1544	2	LANL	USE	S
EXS02260098.wiff	246070002	LER	2/27/2010 16:17	948890	10-1544	2	LANL	USE	S
EXS02260099.wiff	WXXCCV	LER	2/27/2010 16:33			1		USE	C
EXS02260100.wiff	XIBLK12	LER	2/27/2010 16:48			1		USE	B
EXS02260101.wiff	WXXCRI	LER	2/27/2010 17:04			1		USE	C
EXS02260102.wiff	246070003	LER	2/27/2010 17:20	948890	10-1544	2	LANL	USE	S
EXS02260103.wiff	246070004	LER	2/27/2010 17:35	948890	10-1544	2	LANL	USE	S
EXS02260104.wiff	246070005	LER	2/27/2010 17:51	948890	10-1544	2	LANL	USE	S

EXS02260105.wiff	246070006	LER	2/27/2010 18:07	948890	10-1544	2	LANL	USE	S
EXS02260106.wiff	246070007	LER	2/27/2010 18:23	948890	10-1544	2	LANL	USE	S
EXS02260107.wiff	246070008	LER	2/27/2010 18:38	948890	10-1544	2	LANL	USE	S
EXS02260108.wiff	246070009	LER	2/27/2010 18:54	948890	10-1544	2	LANL	USE	S
EXS02260109.wiff	246070010	LER	2/27/2010 19:10	948890	10-1544	2	LANL	USE	S
EXS02260110.wiff	246070011	LER	2/27/2010 19:25	948890	10-1544	2	LANL	USE	S
EXS02260111.wiff	246070012	LER	2/27/2010 19:41	948890	10-1544	2	LANL	USE	S
EXS02260112.wiff	WXXCCV	LER	2/27/2010 19:57			1		USE	C
EXS02260113.wiff	XIBLK13	LER	2/27/2010 20:12			1		USE	B
EXS02260114.wiff	WXXCRI	LER	2/27/2010 20:28			1		USE	C
EXS02260115.wiff	246070013	LER	2/27/2010 20:44	948890	10-1544	2	LANL	USE	S
EXS02260116.wiff	246070014	LER	2/27/2010 21:00	948890	10-1544	2	LANL	USE	S
EXS02260117.wiff	246070015	LER	2/27/2010 21:15	948890	10-1544	2	LANL	USE	S
EXS02260118.wiff	246070016	LER	2/27/2010 21:31	948890	10-1544	2	LANL	USE	S
EXS02260119.wiff	246070017	LER	2/27/2010 21:47	948890	10-1544	2	LANL	USE	S
EXS02260120.wiff	246070018	LER	2/27/2010 22:02	948890	10-1544	2	LANL	USE	S
EXS02260121.wiff	246070019	LER	2/27/2010 22:18	948890	10-1544	2	LANL	USE	S
EXS02260122.wiff	246070020	LER	2/27/2010 22:34	948890	10-1544	2	LANL	USE	S
EXS02260123.wiff	WXXCCV	LER	2/27/2010 22:49			1		USE	C
EXS02260124.wiff	XIBLK14	LER	2/27/2010 23:05			1		USE	B
EXS02260125.wiff	WXXCRI	LER	2/27/2010 23:21			1		USE	C
EXS02260126.wiff	1202032884	LER	2/27/2010 23:36	948893	10-1545	2	LANL	USE	S
EXS02260127.wiff	1202032885	LER	2/27/2010 23:52	948893	10-1545	2	LANL	USE	S
EXS02260128.wiff	246055001	LER	2/28/2010 0:08	948893	10-1545	2	LANL	USE	S
EXS02260129.wiff	1202032886	LER	2/28/2010 0:24	948893	10-1545	2	LANL	USE	S
EXS02260130.wiff	1202032887	LER	2/28/2010 0:39	948893	10-1545	2	LANL	USE	S
EXS02260131.wiff	246055002	LER	2/28/2010 0:55	948893	10-1545	2	LANL	USE	S
EXS02260132.wiff	246055003	LER	2/28/2010 1:11	948893	10-1545	2	LANL	USE	S
EXS02260133.wiff	246055004	LER	2/28/2010 1:26	948893	10-1545	2	LANL	USE	S
EXS02260134.wiff	246055005	LER	2/28/2010 1:42	948893	10-1545	2	LANL	USE	S
EXS02260135.wiff	246055006	LER	2/28/2010 1:58	948893	10-1545	2	LANL	USE	S
EXS02260136.wiff	WXXCCV	LER	2/28/2010 2:14			1		USE	C
EXS02260137.wiff	XIBLK15	LER	2/28/2010 2:29			1		USE	B
EXS02260138.wiff	WXXCRI	LER	2/28/2010 2:45			1		USE	C
EXS02260139.wiff	246055007	LER	2/28/2010 3:01	948893	10-1545	2	LANL	USE	S
EXS02260140.wiff	246055008	LER	2/28/2010 3:17	948893	10-1545	2	LANL	USE	S
EXS02260141.wiff	246055009	LER	2/28/2010 3:32	948893	10-1545	2	LANL	USE	S

EXS02260142.wiff	UXX100122-01.3	LER	2/28/2010 3:48	SCREEN	SOLID	2	O2SI	USE	S
EXS02260143.wiff	XIBLK16	LER	2/28/2010 4:04			1		USE	B
EXS02260144.wiff	1202040473	LER	2/28/2010 4:20	952049	VARIOUS	2	LANL	USE	S
EXS02260145.wiff	1202040474	LER	2/28/2010 4:36	952049	VARIOUS	2	LANL	USE	S
EXS02260146.wiff	246713001	LER	2/28/2010 4:51	952049	10-1728	2	LANL	USE	S
EXS02260147.wiff	1202040475	LER	2/28/2010 5:07	952049	10-1728	2	LANL	USE	S
EXS02260148.wiff	1202040476	LER	2/28/2010 5:23	952049	10-1728	2	LANL	USE	S
EXS02260149.wiff	WXXCCV	LER	2/28/2010 5:38			1		USE	C
EXS02260150.wiff	XIBLK17	LER	2/28/2010 5:54			1		USE	B
EXS02260151.wiff	WXXCRI	LER	2/28/2010 6:10			1		USE	C
EXS02260152.wiff	246713002	LER	2/28/2010 6:26	952049	10-1728	2	LANL	USE	S
EXS02260153.wiff	246713003	LER	2/28/2010 6:41	952049	10-1728	2	LANL	USE	S
EXS02260154.wiff	246713004	LER	2/28/2010 6:57	952049	10-1728	2	LANL	USE	S
EXS02260155.wiff	246713005	LER	2/28/2010 7:13	952049	10-1728	2	LANL	USE	S
EXS02260156.wiff	246713006	LER	2/28/2010 7:29	952049	10-1728	2	LANL	USE	S
EXS02260157.wiff	246713007	LER	2/28/2010 7:44	952049	10-1728	2	LANL	USE	S
EXS02260158.wiff	246713008	LER	2/28/2010 8:00	952049	10-1728	2	LANL	USE	S
EXS02260159.wiff	246734001	LER	2/28/2010 8:16	952049	10-1731-1	2	LANL	USE	S
EXS02260160.wiff	246736001	LER	2/28/2010 8:31	952049	10-1732	2	LANL	USE	S
EXS02260161.wiff	246736002	LER	2/28/2010 8:47	952049	10-1732	2	LANL	USE	S
EXS02260162.wiff	WXXCCV	LER	2/28/2010 9:03			1		USE	C
EXS02260163.wiff	XIBLK18	LER	2/28/2010 9:19			1		USE	B
EXS02260164.wiff	WXXCRI	LER	2/28/2010 9:34			1		USE	C
EXS02260165.wiff	246739002	LER	2/28/2010 9:50	952049	10-1733	2	LANL	USE	S
EXS02260166.wiff	246739003	LER	2/28/2010 10:06	952049	10-1733	2	LANL	USE	S
EXS02260167.wiff	246739004	LER	2/28/2010 10:22	952049	10-1733	2	LANL	USE	S
EXS02260168.wiff	246739005	LER	2/28/2010 10:37	952049	10-1733	2	LANL	USE	S
EXS02260169.wiff	246739006	LER	2/28/2010 10:53	952049	10-1733	2	LANL	USE	S
EXS02260170.wiff	246739007	LER	2/28/2010 11:09	952049	10-1733	2	LANL	USE	S
EXS02260171.wiff	246739008	LER	2/28/2010 11:25	952049	10-1733	2	LANL	USE	S
EXS02260172.wiff	246739009	LER	2/28/2010 11:40	952049	10-1733	2	LANL	USE	S
EXS02260173.wiff	246739010	LER	2/28/2010 11:56	952049	10-1733	2	LANL	USE	S
EXS02260174.wiff	WXXCCV	LER	2/28/2010 12:12			1		USE	C
EXS02260175.wiff	XIBLK19	LER	2/28/2010 12:28			1		USE	B
EXS02260176.wiff	WXXCRI	LER	2/28/2010 12:43			1		USE	C
EXS02260177.wiff	1202040477	LER	2/28/2010 12:59	952051	VARIOUS	2	LANL	USE	S
EXS02260178.wiff	1202040478	LER	2/28/2010 13:15	952051	VARIOUS	2	LANL	USE	S

EXS02260179.wiff	246732002	LER	2/28/2010 13:30	952051	10-1742	2	LANL	USE	S
EXS02260180.wiff	246732003	LER	2/28/2010 13:46	952051	10-1742	2	LANL	USE	S
EXS02260181.wiff	246732004	LER	2/28/2010 14:02	952051	10-1742	2	LANL	USE	S
EXS02260182.wiff	246732005	LER	2/28/2010 14:18	952051	10-1742	2	LANL	USE	S
EXS02260183.wiff	246732006	LER	2/28/2010 14:33	952051	10-1742	2	LANL	USE	S
EXS02260184.wiff	246744002	LER	2/28/2010 14:49	952051	10-1736	2	LANL	USE	S
EXS02260185.wiff	1202040479	LER	2/28/2010 15:05	952051	10-1736	2	LANL	USE	S
EXS02260186.wiff	1202040480	LER	2/28/2010 15:20	952051	10-1736	2	LANL	USE	S
EXS02260187.wiff	WXXCCV	LER	2/28/2010 15:36			1		USE	C
EXS02260188.wiff	XIBLK20	LER	2/28/2010 15:52			1		USE	B
EXS02260189.wiff	WXXCRI	LER	2/28/2010 16:08			1		USE	C
EXS02260190.wiff	246744003	LER	2/28/2010 16:23	952051	10-1736	2	LANL	DUSE-RA	S
EXS02260191.wiff	246744004	LER	2/28/2010 16:39	952051	10-1736	2	LANL	DUSE-RA	S
EXS02260192.wiff	246752002	LER	2/28/2010 16:55	952051	10-1745	2	LANL	DUSE-RA	S
EXS02260193.wiff	246752003	LER	2/28/2010 17:11	952051	10-1745	2	LANL	DUSE-RA	S
EXS02260194.wiff	246760001	LER	2/28/2010 17:27	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260195.wiff	246760002	LER	2/28/2010 17:42	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260196.wiff	246760003	LER	2/28/2010 17:58	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260197.wiff	246760004	LER	2/28/2010 18:14	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260198.wiff	246760005	LER	2/28/2010 18:29	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260199.wiff	246760006	LER	2/28/2010 18:45	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260200.wiff	WXXCCV	LER	2/28/2010 19:01			1		DUSE-RA	C
EXS02260201.wiff	XIBLK21	LER	2/28/2010 19:17			1		DUSE-RA	B
EXS02260202.wiff	WXXCRI	LER	2/28/2010 19:32			1		DUSE-RA	C
EXS02260203.wiff	246760007	LER	2/28/2010 19:48	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260204.wiff	246760008	LER	2/28/2010 20:04	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260205.wiff	246760009	LER	2/28/2010 20:20	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260206.wiff	246760010	LER	2/28/2010 20:35	952051	10-1739	2	LANL	DUSE-RA	S
EXS02260207.wiff	XIBLK22	LER	2/28/2010 20:51			1		DUSE-RA	B
EXS02260208.wiff	1202040457	LER	2/28/2010 21:07	952043	VARIOUS	2	LANL	DUSE-RA	S
EXS02260209.wiff	1202040458	LER	2/28/2010 21:23	952043	VARIOUS	2	LANL	DUSE-RA	S
EXS02260210.wiff	246677001	LER	2/28/2010 21:38	952043	10-1703	2	LANL	DUSE-RA	S
EXS02260211.wiff	1202040459	LER	2/28/2010 21:54	952043	10-1703	2	LANL	DUSE-RA	S
EXS02260212.wiff	1202040460	LER	2/28/2010 22:10	952043	10-1703	2	LANL	DUSE-RA	S
EXS02260213.wiff	WXXCCV	LER	2/28/2010 22:26			1		USE	C
EXS02260214.wiff	XIBLK23	LER	2/28/2010 22:41			1		USE	B
EXS02260215.wiff	WXXCRI	LER	2/28/2010 22:57			1		USE	C

EXS02260216.wiff	246677002	LER	2/28/2010 23:13	952043	10-1703	2	LANL	USE	S
EXS02260217.wiff	246677003	LER	2/28/2010 23:29	952043	10-1703	2	LANL	USE	S
EXS02260218.wiff	246677004	LER	2/28/2010 23:44	952043	10-1703	2	LANL	USE	S
EXS02260219.wiff	246677005	LER	3/1/2010 0:00	952043	10-1703	2	LANL	USE	S
EXS02260220.wiff	246677006	LER	3/1/2010 0:16	952043	10-1703	2	LANL	USE	S
EXS02260221.wiff	246677007	LER	3/1/2010 0:31	952043	10-1703	2	LANL	USE	S
EXS02260222.wiff	246677008	LER	3/1/2010 0:47	952043	10-1703	2	LANL	USE	S
EXS02260223.wiff	246682002	LER	3/1/2010 1:03	952043	10-1703	2	LANL	USE	S
EXS02260224.wiff	WXXCVC	LER	3/1/2010 1:19	952043	10-1706	2	LANL	USE	S
EXS02260225.wiff	XIBLK24	LER	3/1/2010 1:34			1		USE	C
EXS02260226.wiff	WXXCRI	LER	3/1/2010 1:50			1		USE	B
EXS02260227.wiff	246682003	LER	3/1/2010 2:06	952043	10-1706	2	LANL	USE	C
EXS02260228.wiff	246682004	LER	3/1/2010 2:22	952043	10-1706	2	LANL	USE	S
EXS02260229.wiff	246682005	LER	3/1/2010 2:37	952043	10-1706	2	LANL	USE	S
EXS02260230.wiff	246682006	LER	3/1/2010 2:53	952043	10-1706	2	LANL	USE	S
EXS02260231.wiff	246682007	LER	3/1/2010 3:09	952043	10-1706	2	LANL	USE	S
EXS02260232.wiff	246682008	LER	3/1/2010 3:24	952043	10-1706	2	LANL	USE	S
EXS02260233.wiff	246682009	LER	3/1/2010 3:40	952043	10-1706	2	LANL	USE	S
EXS02260234.wiff	WXXCVC	LER	3/1/2010 3:56			1		USE	C
EXS02260235.wiff	XIBLK25	LER	3/1/2010 4:12			1		USE	B
EXS02260236.wiff	WXXCRI	LER	3/1/2010 4:27			1		USE	C
EXS02260237.wiff	UXX100210-02.3	LER	3/1/2010 4:43	SCREEN	SOLID	2	O2SI	USE	S
EXS02260238.wiff	XIBLK26	LER	3/1/2010 4:59			1		USE	B
EXS02260239.wiff	1202032038	LER	3/1/2010 5:15	948558	VARIOUS	2	LANL	USE	S
EXS02260240.wiff	1202032039	LER	3/1/2010 5:31	948558	VARIOUS	2	LANL	USE	S
EXS02260241.wiff	1202032154	LER	3/1/2010 5:46	948558	VARIOUS	2	LANL	USE	S
EXS02260242.wiff	245928018	LER	3/1/2010 6:02	948558	10-1495	2	LANL	USE	S
EXS02260243.wiff	245928025	LER	3/1/2010 6:18	948558	10-1495	2	LANL	USE	S
EXS02260244.wiff	245932006	LER	3/1/2010 6:33	948558	10-1501	2	LANL	USE	S
EXS02260245.wiff	1202032040	LER	3/1/2010 6:49	948558	10-1501	2	LANL	USE	S
EXS02260246.wiff	1202032041	LER	3/1/2010 7:05	948558	10-1501	2	LANL	USE	S
EXS02260247.wiff	WXXCVC	LER	3/1/2010 7:21			1		USE	C
EXS02260248.wiff	XIBLK27	LER	3/1/2010 7:36			1		USE	B
EXS02260249.wiff	WXXCRI	LER	3/1/2010 7:52			1		USE	C



GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1545**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 951946  
**Prep Batch Number:** 951941

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8082:

<b>Sample ID</b>	<b>Client ID</b>
246055005	RE15-10-8222
1202040223	Method Blank (MB)
1202040224	Laboratory Control Sample (LCS)
1202040225	246575003(WST15-10-11621) Matrix Spike (MS)
1202040226	246575003(WST15-10-11621) 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 (#10-1675) 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.

**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

SDG 10-1545-PCB

Page 2 of 3

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 report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

#### **Manual Integration**

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 VIIs 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>
ECD8A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide I)
ECD8A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

#### **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: Jimmy Cao

Date: 3/2/10

## Roadmap for LANL 10-1545 PCB

This roadmap was analyzed by jen01212 on 02-15-2010, 12:05.

This roadmap was reviewed by jim01140 on 02-18-2010, 11:06.

This roadmap was packaged by yml on 03-01-2010, 17:13.

This roadmap was validated by jim01140 on 03-02-2010, 09:22.

Front Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/014b1401.d	246055005	sample	12-FEB-2010	09:30	10-1545.sub	RE15 10-8222	1.00000	951946	UPLOAD BOTH, USE HIGHER

Back Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/014b1401.d	246055005	sample	12-FEB-2010	09:30	10-1545.sub	RE15-10-8222	1.00000	951946	UPLOAD BOTH, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/012f1201-1.d	1202040223	mb	12-FEB-2010	09:05	10-1545.sub	PBLK01	1.00000	951946	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/013f1301-1.d	1202040224	lcs	12-FEB-2010	09:18	10-1545.sub	PBLK01LCS	1.00000	951946	<input type="text"/>

Back QC Sample Column

exclude	manual	datafile	smid	sampletype	injdte	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/012b1201-1.d	1202040223	mb	12-FEB-2010	09:05	10-1545.sub	PBLK01	1.00000	951946	<input type="text"/>
<input type="checkbox"/>	N	/chem/ecd8a.i/021210.b/013b1301-1.d	1202040224	lcs	12-FEB-2010	09:18	10-1545.sub	PBLK01LCS	1.00000	951946	<input type="text"/>

# SAMPLE DATA SUMMARY

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number:	10-1545	Date Collected:	01/29/2010 12:00	Matrix:	R
Lab Sample ID:	246055005	Date Received:	02/03/2010 08:55	%Moisture:	25.8
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-8222	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	951946	Inst:	ECD8AJ	Dilution:	1
Run Date:	02/12/2010 09:30	Analyst:	JAOC	Inj. Vol:	1 uL
Prep Date:	02/11/2010 22:01	Aliquot:	30.18 g	Final Volume:	1 mL
Data File:	014f1401.d	Column:	1 CLP1	Level:	LOW
	014b1401.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.46	ug/kg	1.49	4.46	1
11104-28-2	Aroclor-1221	U	4.46	ug/kg	1.49	4.46	1
11141-16-5	Aroclor-1232	U	4.46	ug/kg	1.49	4.46	1
53469-21-9	Aroclor-1242	U	4.46	ug/kg	1.49	4.46	1
12672-29-6	Aroclor-1248	U	4.46	ug/kg	1.49	4.46	1
11097-69-1	Aroclor-1254		33.2	ug/kg	1.49	4.46	2
11096-82-5	Aroclor-1260		10.3	ug/kg	1.49	4.46	2



# QUALITY CONTROL SUMMARY

PCB  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1545

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1	4CMX 2	DCB 1	DCB 2
		%REC #	%REC #	%REC #	%REC #
1202040223	MB for batch 951941	64	64	67	70
1202040224	LCS for batch 951941	60	61	64	66
246055005	RE15-10-8222	60	54	61	64

**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

Page 1 of 1

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-1545

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951941

Matrix: SOIL

Lab Sample ID:1202040224

Instrument: ECD8A.I

Analysis Date: 02/12/2010 09:18

Dilution: 1

Analyst: JAOC

Pre Batch II 951941

Inj. Vol: 1 uL

Batch ID: 951946

CAS No	Paramname	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	18.6	56	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	22.7	68	45-118

PCB

Page 1 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1675

Client ID: WST15-10-11621MS

Lab Sample ID:1202040225

Instrument: ECD8A.I

Analyst: JAOC

Inj. Vol: 1 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 6.6

Analysis Date: 02/12/2010 14:02

Dilution: 1

Prep Batch ID: 951941

Batch ID: 951946

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	35.6	0.00 U	19.0	53	23-119
11096-82-5	MS Aroclor-1260	35.6	0.00 U	23.1	65	28-124

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1675

Sample Type: Matrix Spike Duplicate

Client ID: WST15-10-11621MSD

Matrix: R

Lab Sample ID:1202040226

%Moisture: 6.6

Instrument: ECD8A.I

Analysis Date: 02/12/2010 14:14

Dilution: 1

Analyst: JAOC

Pren Batch II 951941

Inj. Vol: 1 uL

Batch ID: 951946

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	35.6	0.00 U	19.4	54	23-119	2	0-28
11096-82-5	MSD Aroclor-1260	35.6	0.00 U	23.0	65	28-124	0	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1545	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 951941	Instrument ID:	ECD8AJ_2	Data File:	012b1201-1.d
Lab Sample ID:	1202040223		ECD8AJ_1		012f1201-1.d
Column:	CLP2	Prep Date:	02/11/2010 22:01	Analyzed:	02/12/10 09:05
	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 951941	1202040224	013f1301-1.d 013b1301-1.d	02/12/10	0918
02 RE15-10-8222	246055005	014f1401.d 014b1401.d	02/12/10	0930

# SAMPLE DATA

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

Page 1 of 1

SDG Number: 10-1545  
Lab Sample ID: 246055005

Date Collected: 01/29/2010 12:00  
Date Received: 02/03/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD8A.J  
Analyst: JAOC  
Aliquot: 30.18 g  
Column: 1 CLP1  
2 CLP2

Matrix: R  
% Moisture: 25.8  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8222  
Batch ID: 951946  
Run Date: 02/12/2010 09:30  
Prep Date: 02/11/2010 22:01  
Data File: 014f1401.d  
014b1401.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.46	ug/kg	1.49	4.46	1
11104-28-2	Aroclor-1221	U	4.46	ug/kg	1.49	4.46	1
11141-16-5	Aroclor-1232	U	4.46	ug/kg	1.49	4.46	1
53469-21-9	Aroclor-1242	U	4.46	ug/kg	1.49	4.46	1
12672-29-6	Aroclor-1248	U	4.46	ug/kg	1.49	4.46	1
11097-69-1	Aroclor-1254		33.2	ug/kg	1.49	4.46	2
11096-82-5	Aroclor-1260		10.3	ug/kg	1.49	4.46	2



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/014f1401.d  
Lab Smp Id: 246055005 Client Smp ID: RE15-10-8222  
Inj Date : 12-FEB-2010 09:30  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |246055005|1|  
Misc Info : |ECD82P\_1S|951946|SVA|LANL|SOIL|RE15-10-8222|||  
Comment :  
Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 14  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1545.sub  
Target Version: 3.50 Sample Matrix: Soil

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	30.18000	Weight of sample extracted (g)
M	25.75380	% 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	
2.255	2.252	0.003	15806309	120.286	5.4 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
6.245	6.245	0.000	12104166	121.064	5.4 80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1	
3.837	3.837	0.000	5001822	1045.32	46.6 80.00- 120.00	100.00
4.024	4.025	-0.001	5826807	886.962	39.6 115.47- 155.47	116.49
4.219	4.220	-0.001	4024385	783.240	35.0 82.45- 122.45	80.46
4.305	4.306	-0.001	4572938	519.812	23.2 157.78- 197.78	91.43
4.501	4.501	0.000	2793371	404.038	18.0 118.51- 158.51	55.85
Average of Peak Concentrations =				32.5		

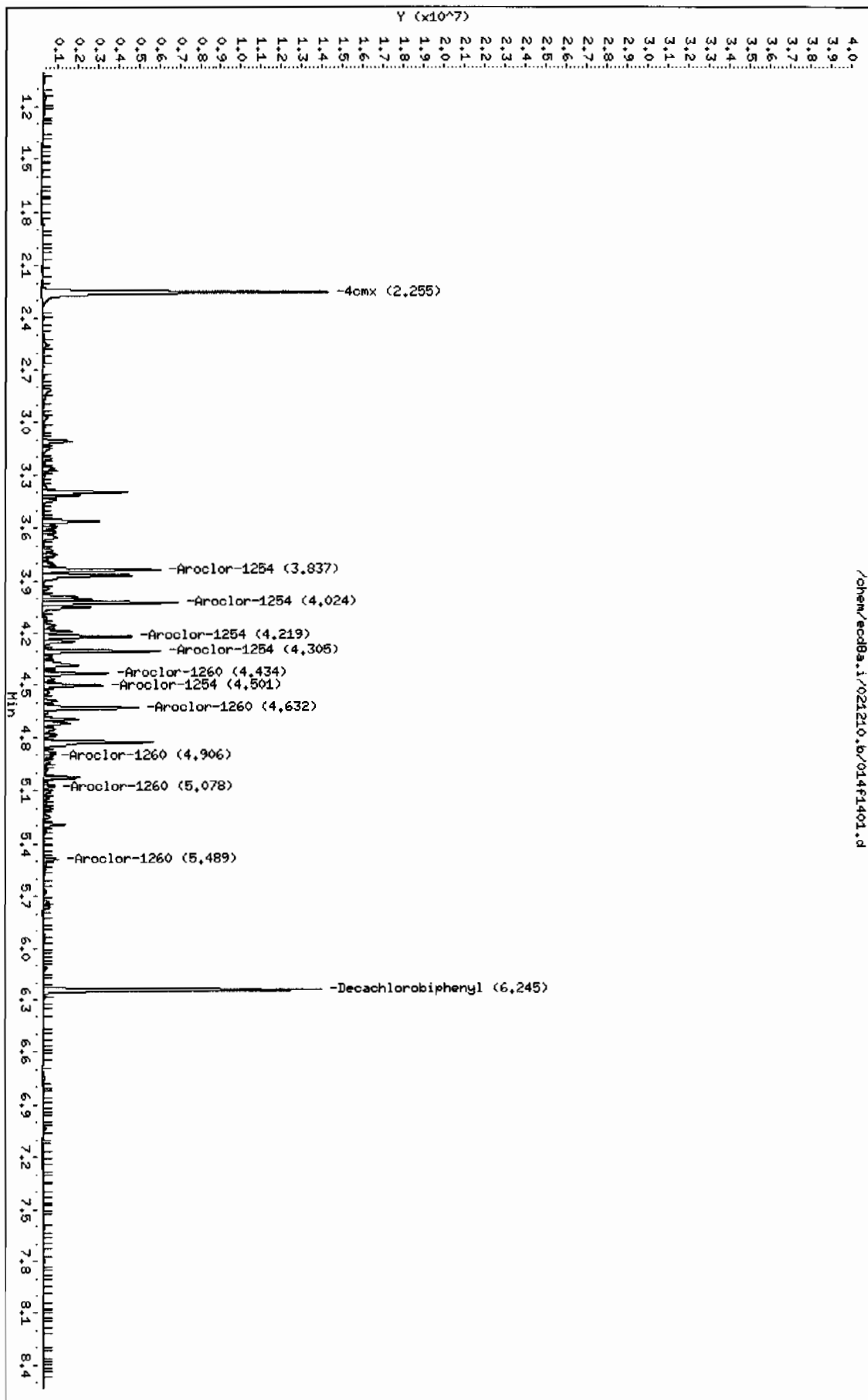
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL RESPONSE ( ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.434	4.435	-0.001	2704936 401.387	17.9	80.00- 120.00	100.00
4.632	4.631	0.001	4588789 447.259	20.0	131.83- 171.83	169.65
4.906	4.906	0.000	440879 71.9233	3.2	72.34- 112.34	16.30
5.078	5.078	0.000	519960 81.4236	3.6	79.25- 119.25	19.22
5.489	5.490	-0.001	717016 104.525	4.7	91.49- 131.49	26.51
Average of Peak Concentrations =				9.9		

Data File: /chem/ecd8a.i/021210.b/0141401.d  
Date: 12-FEB-2010 09:30  
Client ID: RE15-10-8222  
Sample Info: 12460500511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JADC  
Column diameter: 0.25

/chem/ecd8a.i/021210.b/0141401.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/021210.b/014b1401.d  
 Lab Smp Id: 246055005 Client Smp ID: RE15-10-8222  
 Inj Date : 12-FEB-2010 09:30  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |246055005|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|LANL|SOIL|RE15-10-8222|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1545.sub  
 Target Version: 3.50 Sample Matrix: Soil

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	30.18000	Weight of sample extracted (g)
M	25.75380	% Moisture

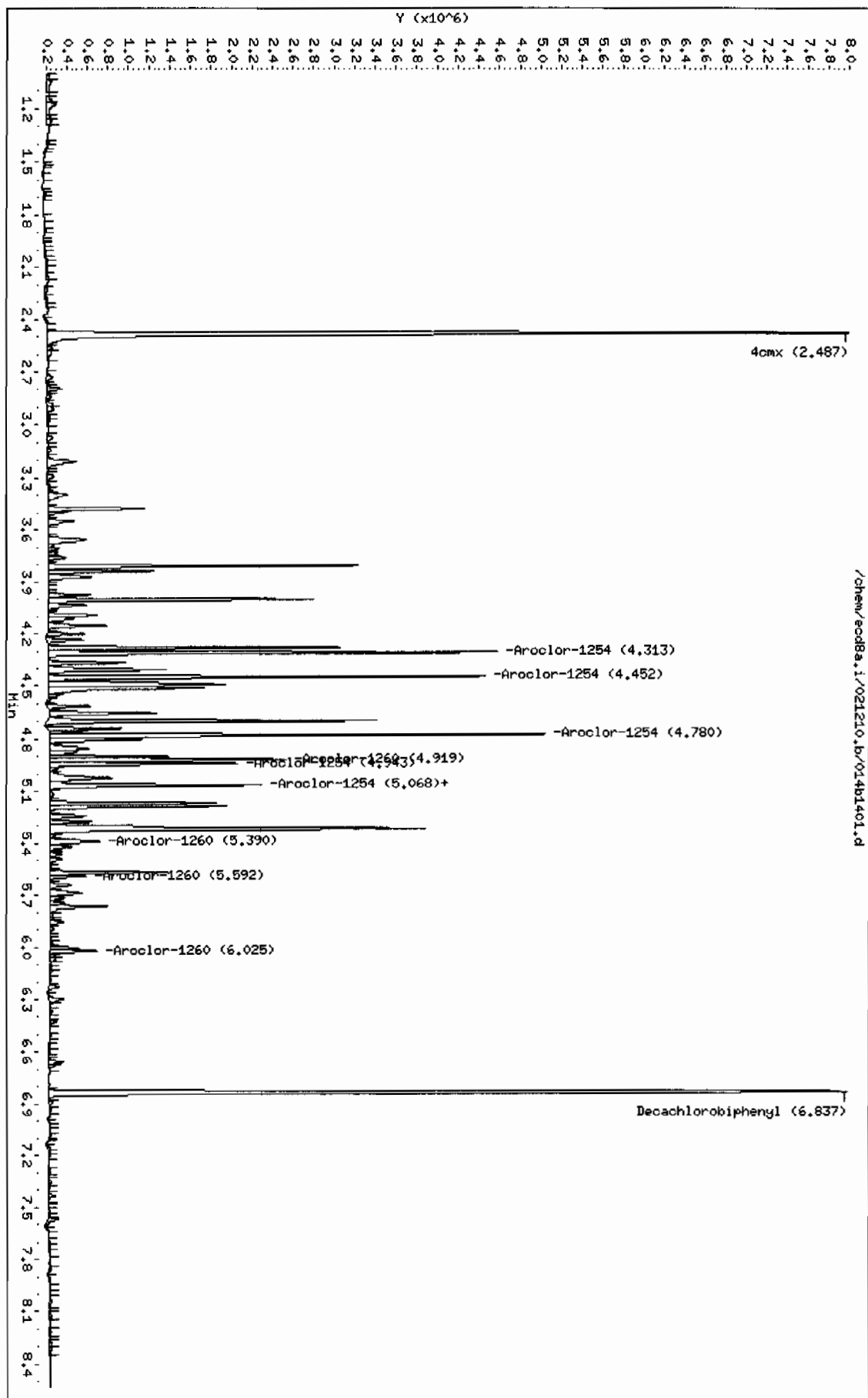
Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====		=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.487	2.486	0.001	9435601	108.651	4.8	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.837	6.836	0.001	8266725	127.487	5.7	80.00- 120.00	100.00	
-----								
6 Aroclor-1254					CAS #: 11097-69-1			
4.313	4.313	0.000	3673388	1064.73	47.5	80.00- 120.00	100.00	
4.452	4.451	0.001	3440024	879.778	39.3	92.68- 132.68	93.65	
4.780	4.780	0.000	3832089	696.749	31.1	140.87- 180.87	104.32	
4.943	4.942	0.001	1543986	384.964	17.2	96.68- 136.68	42.03	
5.068	5.068	0.000	1778667	697.826	31.1	53.90- 93.90	48.42	
Average of Peak Concentrations =					33.2			
-----								

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
4.919	4.919	0.000	2033879	497.961	22.2 80.00- 120.00	100.00
5.068	5.068	0.000	1778667	357.960	16.0 101.70- 141.70	87.45
5.390	5.384	0.006	592669	156.442	7.0 73.49- 113.49	29.14
5.592	5.591	0.001	311777	78.8689	3.5 76.84- 116.84	15.33
6.025	6.023	0.002	424694	68.1972	3.0 135.34- 175.34	20.88
Average of Peak Concentrations =			10.3			

Data File: /chem/ecob8a.i/021210.b/014b1401.d  
 Date: 12-FEB-2010 09:30  
 Client ID: RE15-10-8222  
 Sample Info: 12460500511  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ecob8a.i  
 Operator: JAC  
 Column diameter: 0.25



# STANDARDS DATA

Report Date: 15-Feb-2010 11:17

### Calibration History

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 03-FEB-2010 17:25

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028f2801.d
03-FEB-2010 14:07	AR1248	/chem/ecd8a.i/020310a.b/020f2001.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014f1401.d
03-FEB-2010 11:39	AR1254	/chem/ecd8a.i/020310a.b/008f0801.d
03-FEB-2010 10:24	AR1660	/chem/ecd8a.i/020310a.b/002f0201.d
Cal Level: 2 , Cal Amount: 250.00000		
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029f2901.d
03-FEB-2010 14:19	AR1248	/chem/ecd8a.i/020310a.b/021f2101.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015f1501.d
03-FEB-2010 11:51	AR1254	/chem/ecd8a.i/020310a.b/009f0901.d
03-FEB-2010 10:37	AR1660	/chem/ecd8a.i/020310a.b/003f0301.d
Cal Level: 3 , Cal Amount: 500.00000		
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030f3001.d
03-FEB-2010 14:32	AR1248	/chem/ecd8a.i/020310a.b/022f2201.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016f1601.d
03-FEB-2010 12:03	AR1254	/chem/ecd8a.i/020310a.b/010f1001.d
03-FEB-2010 10:49	AR1660	/chem/ecd8a.i/020310a.b/004f0401.d
Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036f3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034f3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031f3101.d
03-FEB-2010 15:34	AR1221	/chem/ecd8a.i/020310a.b/027f2701.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026f2601.d
03-FEB-2010 14:44	AR1248	/chem/ecd8a.i/020310a.b/023f2301.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017f1701.d
03-FEB-2010 12:16	AR1254	/chem/ecd8a.i/020310a.b/011f1101.d
03-FEB-2010 11:01	AR1660	/chem/ecd8a.i/020310a.b/005f0501.d
Cal Level: 5 , Cal Amount: 4000.00000		
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032f3201.d
03-FEB-2010 14:57	AR1248	/chem/ecd8a.i/020310a.b/024f2401.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018f1801.d
03-FEB-2010 12:28	AR1254	/chem/ecd8a.i/020310a.b/012f1201.d
03-FEB-2010 11:14	AR1660	/chem/ecd8a.i/020310a.b/006f0601.d



Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 15:04  AR1660	/chem/ecd8a.i/021210.b/041f4101.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 13:25  AR1660	/chem/ecd8a.i/021210.b/033f3301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 10:56  AR1660	/chem/ecd8a.i/021210.b/021f2101.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 08:28  AR1268	/chem/ecd8a.i/021210.b/009f0901.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 08:16  AR1262	/chem/ecd8a.i/021210.b/008f0801.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 08:03  AR1221	/chem/ecd8a.i/021210.b/007f0701.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 07:51  AR1232	/chem/ecd8a.i/021210.b/006f0601.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 07:38  AR1248	/chem/ecd8a.i/021210.b/005f0501.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 07:26  AR1242	/chem/ecd8a.i/021210.b/004f0401.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 07:14  AR1254	/chem/ecd8a.i/021210.b/003f0301.d	
+-----+-----+-----+		
Ccal Level: 4 , Ccal Amount: 1000		
+=====+		
12-FEB-2010 07:02  AR1660	/chem/ecd8a.i/021210.b/002f0201.d	
+-----+-----+-----+		

Report Date: 15-Feb-2010 11:17

### Calibration History

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
Start Cal Date: 03-FEB-2010 10:24  
End Cal Date : 03-FEB-2010 17:25

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
03-FEB-2010 15:46	AR1262	/chem/ecd8a.i/020310a.b/028b2801.d
03-FEB-2010 14:07	AR1248	/chem/ecd8a.i/020310a.b/020b2001.d
03-FEB-2010 12:53	AR1242	/chem/ecd8a.i/020310a.b/014b1401.d
03-FEB-2010 11:39	AR1254	/chem/ecd8a.i/020310a.b/008b0801.d
03-FEB-2010 10:24	AR1660	/chem/ecd8a.i/020310a.b/002b0201.d

Cal Level: 2 , Cal Amount: 250.00000		
03-FEB-2010 15:58	AR1262	/chem/ecd8a.i/020310a.b/029b2901.d
03-FEB-2010 14:19	AR1248	/chem/ecd8a.i/020310a.b/021b2101.d
03-FEB-2010 13:05	AR1242	/chem/ecd8a.i/020310a.b/015b1501.d
03-FEB-2010 11:51	AR1254	/chem/ecd8a.i/020310a.b/009b0901.d
03-FEB-2010 10:37	AR1660	/chem/ecd8a.i/020310a.b/003b0301.d

Cal Level: 3 , Cal Amount: 500.00000		
03-FEB-2010 16:11	AR1262	/chem/ecd8a.i/020310a.b/030b3001.d
03-FEB-2010 14:32	AR1248	/chem/ecd8a.i/020310a.b/022b2201.d
03-FEB-2010 13:18	AR1242	/chem/ecd8a.i/020310a.b/016b1601.d
03-FEB-2010 12:03	AR1254	/chem/ecd8a.i/020310a.b/010b1001.d
03-FEB-2010 10:49	AR1660	/chem/ecd8a.i/020310a.b/004b0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
03-FEB-2010 17:25	DDT	/chem/ecd8a.i/020310a.b/036b3601.d
03-FEB-2010 17:00	AR1268	/chem/ecd8a.i/020310a.b/034b3401.d
03-FEB-2010 16:23	AR1262	/chem/ecd8a.i/020310a.b/031b3101.d
03-FEB-2010 15:34	AR1221	/chem/ecd8a.i/020310a.b/027b2701.d
03-FEB-2010 15:21	AR1232	/chem/ecd8a.i/020310a.b/026b2601.d
03-FEB-2010 14:44	AR1248	/chem/ecd8a.i/020310a.b/023b2301.d
03-FEB-2010 13:30	AR1242	/chem/ecd8a.i/020310a.b/017b1701.d
03-FEB-2010 12:16	AR1254	/chem/ecd8a.i/020310a.b/011b1101.d
03-FEB-2010 11:01	AR1660	/chem/ecd8a.i/020310a.b/005b0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
03-FEB-2010 16:36	AR1262	/chem/ecd8a.i/020310a.b/032b3201.d
03-FEB-2010 14:57	AR1248	/chem/ecd8a.i/020310a.b/024b2401.d
03-FEB-2010 13:42	AR1242	/chem/ecd8a.i/020310a.b/018b1801.d
03-FEB-2010 12:28	AR1254	/chem/ecd8a.i/020310a.b/012b1201.d
03-FEB-2010 11:14	AR1660	/chem/ecd8a.i/020310a.b/006b0601.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 15:04  AR1660	/chem/ecd8a.i/021210.b/041b4101.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 13:25  AR1660	/chem/ecd8a.i/021210.b/033b3301.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 10:56  AR1660	/chem/ecd8a.i/021210.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 08:28  AR1268	/chem/ecd8a.i/021210.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 08:16  AR1262	/chem/ecd8a.i/021210.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 08:03  AR1221	/chem/ecd8a.i/021210.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 07:51  AR1232	/chem/ecd8a.i/021210.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 07:38  AR1248	/chem/ecd8a.i/021210.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 07:26  AR1242	/chem/ecd8a.i/021210.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 07:14  AR1254	/chem/ecd8a.i/021210.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
12-FEB-2010 07:02  AR1660	/chem/ecd8a.i/021210.b/002b0201.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 15-Feb-2010 06:50 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	758.000000
Initial:End Threshold	379.000000
Initial:Area Threshold	734.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.500000
6.500:Bunch Factor	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.811	2.781-2.841	4.665e+03
	3.163	3.133-3.193	5.770e+03
	3.306	3.276-3.336	2.454e+03
	3.399	3.369-3.429	2.198e+03
	3.561	3.531-3.591	3.142e+03
2 Aroclor-1221	1.855	1.825-1.885	1.100e+03
	2.394	2.364-2.424	1.460e+03
	2.541	2.511-2.571	3.385e+03
3 Aroclor-1232	2.541	2.511-2.571	2.601e+03
	2.812	2.782-2.842	2.261e+03
	3.308	3.278-3.338	1.243e+03
	3.562	3.532-3.592	1.479e+03
4 Aroclor-1242	3.624	3.594-3.654	9.227e+02
	2.812	2.782-2.842	3.974e+03
	3.164	3.134-3.194	4.796e+03
	3.400	3.369-3.430	1.805e+03
	3.417	3.387-3.447	1.889e+03
5 Aroclor-1248	3.562	3.532-3.592	2.645e+03
	3.148	3.118-3.178	2.990e+03
	3.399	3.369-3.429	3.823e+03
	3.562	3.532-3.592	5.000e+03
	3.867	3.837-3.897	5.990e+03
	4.027	3.997-4.057	4.826e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Compound	RT	RT Window	RF
6 Aroclor-1254	3.837	3.807-3.867	4.785e+03
	4.025	3.995-4.055	6.569e+03
	4.220	4.190-4.250	5.138e+03
	4.306	4.276-4.336	8.797e+03
	4.501	4.471-4.531	6.914e+03
7 Aroclor-1260	4.435	4.405-4.465	6.739e+03
	4.631	4.601-4.661	1.026e+04
	4.906	4.876-4.936	6.130e+03
	5.078	5.048-5.108	6.386e+03
	5.490	5.460-5.520	6.860e+03
8 Aroclor-1262	4.337	4.307-4.367	3.367e+03
	4.436	4.406-4.466	5.243e+03
	4.631	4.601-4.661	7.103e+03
	4.906	4.876-4.936	8.580e+03
	5.079	5.049-5.109	7.966e+03
9 Aroclor-1268	5.514	5.484-5.544	1.632e+04
	5.541	5.511-5.571	1.572e+04
	5.673	5.643-5.703	1.207e+04
	5.919	5.889-5.949	6.023e+03
	6.116	6.086-6.146	3.601e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.252	2.222-2.282	1.314e+05
\$ 12 Decachlorobiphenyl	6.245	6.215-6.275	9.998e+04
13 4,4'-DDT	4.852	4.832-4.872	2.393e+04
14 4,4'-DDD	4.658	4.638-4.678	1.570e+05
15 4,4'-DDE	4.234	4.214-4.254	1.340e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 15-Feb-2010 06:49 Number of Cpnds : 15  
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

-----  
Initial:Start Threshold 733.000000  
Initial:End Threshold 366.500000  
Initial:Area Threshold 522.000000  
Initial:P-P Resolution 0.000000  
Initial:Bunch Factor 2.000000  
Initial:Negative Peaks OFF  
Initial:Tension 2.000000  
9.000:Bunch Factor 2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.558	3.528-3.588	3.766e+03
	3.658	3.628-3.688	2.494e+03
	3.734	3.704-3.764	1.515e+03
	3.809	3.779-3.839	1.493e+03
	4.006	3.976-4.036	2.036e+03
2 Aroclor-1221	2.727	2.697-2.757	8.949e+02
	2.839	2.809-2.869	5.569e+02
	2.888	2.858-2.918	2.060e+03
3 Aroclor-1232	3.207	3.177-3.237	1.515e+03
	3.560	3.530-3.590	1.744e+03
	3.659	3.629-3.689	1.176e+03
	3.735	3.705-3.765	7.101e+02
4 Aroclor-1242	3.810	3.780-3.840	6.182e+02
	3.206	3.176-3.236	2.677e+03
	3.559	3.530-3.590	3.126e+03
	3.659	3.629-3.689	2.127e+03
5 Aroclor-1248	4.006	3.976-4.036	1.703e+03
	4.096	4.066-4.126	1.567e+03
	3.657	3.627-3.687	1.427e+03
	3.810	3.780-3.840	2.467e+03
	4.006	3.976-4.036	3.089e+03
	4.284	4.254-4.314	3.647e+03
	4.317	4.287-4.347	4.004e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Compound	RT	RT Window	RF
6 Aroclor-1254	4.313	4.283-4.343	3.450e+03
	4.451	4.421-4.481	3.910e+03
	4.780	4.750-4.810	5.500e+03
	4.942	4.912-4.972	4.011e+03
	5.068	5.038-5.098	2.549e+03
7 Aroclor-1260	4.919	4.889-4.949	4.084e+03
	5.068	5.038-5.098	4.969e+03
	5.384	5.354-5.414	3.788e+03
	5.591	5.561-5.621	3.953e+03
	6.023	5.993-6.053	6.227e+03
8 Aroclor-1262	4.920	4.890-4.950	3.276e+03
	5.068	5.038-5.098	3.827e+03
	5.386	5.356-5.416	5.446e+03
	5.592	5.562-5.622	5.047e+03
	6.021	5.991-6.051	7.196e+03
9 Aroclor-1268	6.018	5.988-6.048	1.138e+04
	6.051	6.021-6.081	1.041e+04
	6.230	6.200-6.260	8.192e+03
	6.427	6.397-6.457	4.057e+03
	6.656	6.626-6.686	2.464e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.486	2.456-2.516	8.684e+04
\$ 12 Decachlorobiphenyl	6.836	6.806-6.866	6.484e+04
13 4,4'-DDT	5.323	5.303-5.343	1.460e+04
14 4,4'-DDD	5.102	5.082-5.122	1.001e+05
15 4,4'-DDE	4.691	4.671-4.711	8.898e+04

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
 Cal Date : 15-Feb-2010 06:50 jen01212  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/020310a.b/028f2801.d  
 Level 2: /chem/ecd8a.i/020310a.b/029f2901.d  
 Level 3: /chem/ecd8a.i/020310a.b/030f3001.d  
 Level 4: /chem/ecd8a.i/020310a.b/036f3601.d  
 Level 5: /chem/ecd8a.i/020310a.b/032f3201.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)	5614	5138	4704	4321	3545	4665	16.943
(2)	6383	6264	5935	5475	4791	5770	11.275
(3)	2817	2639	2454	2319	2042	2454	12.124
(4)	2629	2406	2216	2019	1720	2198	15.914
(5)	3708	3411	3117	2938	2537	3142	14.248
2 Aroclor-1221(1)	+++++	+++++	+++++	1100	+++++	1100	0.000
(2)	+++++	+++++	+++++	1460	+++++	1460	0.000
(3)	+++++	+++++	+++++	3385	+++++	3385	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	2601	+++++	2601	0.000
(2)	+++++	+++++	+++++	2261	+++++	2261	0.000
(3)	+++++	+++++	+++++	1243	+++++	1243	0.000
(4)	+++++	+++++	+++++	1479	+++++	1479	0.000
(5)	+++++	+++++	+++++	923	+++++	923	0.000
4 Aroclor-1242(1)	4726	4372	4070	3706	2998	3974	16.680
(2)	5172	5152	4949	4680	4027	4796	9.873
(3)	2139	1968	1820	1683	1417	1805	15.251
(4)	2229	2050	1908	1759	1500	1889	14.735
(5)	3065	2855	2678	2500	2127	2645	13.507
5 Aroclor-1248(1)	3599	3150	2999	2805	2397	2990	14.793
(2)	4688	4030	3804	3549	3043	3823	15.884
(3)	6028	5281	4903	4737	4053	5000	14.533
(4)	7068	6330	5909	5676	4965	5990	13.024
(5)	5743	5075	4737	4591	3986	4826	13.394
6 Aroclor-1254(1)	5857	5096	4715	4450	3806	4785	15.921
(2)	7961	7038	6468	6172	5208	6569	15.558
(3)	6032	5571	5105	4741	4242	5138	13.582
(4)	10107	9649	8877	8173	7180	8797	13.271
(5)	7953	7619	6996	6322	5678	6914	13.452



GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
 Cal Date : 15-Feb-2010 06:50 jen01212  
 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
7 Aroclor-1260(1)	7706	7225	6868	6425	5470	6739	12.628
(2)	11735	10983	10481	9771	8329	10260	12.630
(3)	7075	6577	6171	5792	5035	6130	12.657
(4)	7317	6857	6397	6058	5301	6386	12.066
(5)	7655	7335	6855	6540	5914	6860	9.924
8 Aroclor-1262(1)	3851	3558	3311	3256	2859	3367	10.954
(2)	5935	5551	5239	5102	4386	5243	10.995
(3)	7996	7523	7022	6963	6012	7103	10.414
(4)	9555	9028	8567	8433	7318	8580	9.694
(5)	8875	8357	7946	7802	6850	7966	9.421
9 Aroclor-1268(1)	++++	++++	++++	16324	++++	16324	0.000
(2)	++++	++++	++++	15723	++++	15723	0.000
(3)	++++	++++	++++	12075	++++	12075	0.000
(4)	++++	++++	++++	6023	++++	6023	0.000
(5)	++++	++++	++++	36012	++++	36012	0.000
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	23929	++++	23929	0.000
14 4,4'-DDD	++++	++++	++++	157020	++++	157020	0.000
15 4,4'-DDE	++++	++++	++++	133975	++++	133975	0.000
11 4cmx	141196	137660	133177	129355	115643	131406	7.521
12 Decachlorobiphenyl	111693	106508	99006	96244	86457	99981	9.718

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
End Cal Date : 03-FEB-2010 17:25  
Quant Method : ESTD  
Origin : Disabled  
Target Version : 3.50  
Integrator : Falcon  
Method file : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
Cal Date : 15-Feb-2010 06:49 jen01212  
Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecd8a.i/020310a.b/028b2801.d  
Level 2: /chem/ecd8a.i/020310a.b/029b2901.d  
Level 3: /chem/ecd8a.i/020310a.b/030b3001.d  
Level 4: /chem/ecd8a.i/020310a.b/036b3601.d  
Level 5: /chem/ecd8a.i/020310a.b/032b3201.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)	3955	3879	3768	3829	3401	3766	5.726
(2)	2683	2623	2522	2463	2181	2494	7.814
(3)	1588	1565	1522	1510	1392	1515	5.000
(4)	1644	1573	1498	1453	1297	1493	8.812
(5)	2161	2107	2068	2025	1817	2036	6.473
2 Aroclor-1221(1)	++++	++++	++++	895	++++	895	0.000
(2)	++++	++++	++++	557	++++	557	0.000
(3)	++++	++++	++++	2060	++++	2060	0.000
3 Aroclor-1232(1)	++++	++++	++++	1515	++++	1515	0.000
(2)	++++	++++	++++	1744	++++	1744	0.000
(3)	++++	++++	++++	1176	++++	1176	0.000
(4)	++++	++++	++++	710	++++	710	0.000
(5)	++++	++++	++++	618	++++	618	0.000
4 Aroclor-1242(1)	2949	2857	2758	2609	2213	2677	10.779
(2)	3213	3196	3180	3232	2808	3126	5.721
(3)	2287	2232	2178	2099	1842	2127	8.178
(4)	1820	1782	1741	1678	1497	1703	7.463
(5)	1675	1595	1607	1522	1434	1567	5.872
5 Aroclor-1248(1)	1621	1511	1422	1366	1213	1427	10.773
(2)	2779	2594	2491	2383	2090	2467	10.392
(3)	3403	3233	3131	3022	2657	3089	9.043
(4)	3964	3788	3692	3588	3204	3647	7.785
(5)	4333	4155	4060	3948	3526	4004	7.553
6 Aroclor-1254(1)	3700	3695	3475	3389	2993	3450	8.395
(2)	4204	4194	3940	3836	3377	3910	8.648
(3)	5766	5885	5570	5452	4827	5500	7.494
(4)	4254	4252	4044	3942	3562	4011	7.104
(5)	2775	2711	2546	2462	2250	2549	8.187

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 03-FEB-2010 10:24  
 End Cal Date : 03-FEB-2010 17:25  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Cal Date : 15-Feb-2010 06:49 jen01212  
 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
7 Aroclor-1260(1)	4328	4278	4140	4064	3611	4084	6.976
(2)	5221	5198	5036	4963	4428	4969	6.467
(3)	3970	3947	3809	3790	3427	3788	5.744
(4)	4121	4108	3975	3957	3605	3953	5.268
(5)	6395	6455	6249	6250	5789	6227	4.190
8 Aroclor-1262(1)	3545	3367	3269	3249	2948	3276	6.635
(2)	4038	3929	3844	3825	3498	3827	5.277
(3)	5683	5613	5515	5463	4958	5446	5.255
(4)	5266	5178	5090	5067	4633	5047	4.838
(5)	7327	7356	7286	7270	6740	7196	3.572
9 Aroclor-1268(1)	++++	++++	++++	11384	++++	11384	0.000
(2)	++++	++++	++++	10412	++++	10412	0.000
(3)	++++	++++	++++	8192	++++	8192	0.000
(4)	++++	++++	++++	4057	++++	4057	0.000
(5)	++++	++++	++++	24640	++++	24640	0.000
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
13 4,4'-DDT	++++	++++	++++	14596	++++	14596	0.000
14 4,4'-DDD	++++	++++	++++	100145	++++	100145	0.000
15 4,4'-DDE	++++	++++	++++	88982	++++	88982	0.000
\$ 11 4cmx	86244	88409	88291	88885	82388	86843	3.097
\$ 12 Decachlorobiphenyl	68541	67257	64616	64263	59541	64844	5.342

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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 0702  
 Lab File ID: 002F0201 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4664.624	4548.503	0.01	-2.5	15.0
(2)	5769.588	5603.764	0.01	-2.9	15.0
(3)	2454.201	2323.075	0.01	-5.3	15.0
(4)	2198.179	2073.021	0.01	-5.7	15.0
(5)	3142.156	2985.422	0.01	-5.0	15.0
Aroclor-1260	6738.969	6360.304	0.01	-5.6	15.0
(2)	10259.796	9595.648	0.01	-6.5	15.0
(3)	6129.851	5825.535	0.01	-5.0	15.0
(4)	6385.867	6234.879	0.01	-2.4	15.0
(5)	6859.759	6996.429	0.01	2.0	15.0
4cmx	131406.10	139136.78	0.01	5.9	15.0
Decachlorobiphenyl	99981.358	97993.400	0.01	-2.0	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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 0702  
 Lab File ID: 002B0201 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	3766.401	3777.022	0.01	0.3	15.0
(2)	2494.427	2504.931	0.01	0.4	15.0
(3)	1515.492	1469.542	0.01	-3.0	15.0
(4)	1493.163	1424.438	0.01	-4.6	15.0
(5)	2035.618	1995.101	0.01	-2.0	15.0
Aroclor-1260	4084.417	4339.858	0.01	6.2	15.0
(2)	4968.902	5272.238	0.01	6.1	15.0
(3)	3788.418	4034.101	0.01	6.5	15.0
(4)	3953.106	4196.512	0.01	6.2	15.0
(5)	6227.437	6650.370	0.01	6.8	15.0
4cmx	86843.352	91859.720	0.01	5.8	15.0
Decachlorobiphenyl	64843.758	65029.570	0.01	0.3	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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 0714  
 Lab File ID: 003F0301 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1139 1228  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	4784.971	4792.956	0.01	0.2	15.0
(2)	6569.400	6493.193	0.01	-1.2	15.0
(3)	5138.123	4910.433	0.01	-4.4	15.0
(4)	8797.294	8520.921	0.01	-3.1	15.0
(5)	6913.634	6638.642	0.01	-4.0	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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 0714  
 Lab File ID: 003B0301 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1139 1228  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	3450.063	3619.477	0.01	4.9	15.0
(2)	3910.106	4078.317	0.01	4.3	15.0
(3)	5499.957	5822.784	0.01	5.9	15.0
(4)	4010.730	4223.179	0.01	5.3	15.0
(5)	2548.871	2674.832	0.01	4.9	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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 1056  
 Lab File ID: 021F2101 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	4664.624	4427.289	0.01	-5.1	15.0
(2)	5769.588	5231.669	0.01	-9.3	15.0
(3)	2454.201	2257.198	0.01	-8.0	15.0
(4)	2198.179	2027.637	0.01	-7.8	15.0
(5)	3142.156	2907.902	0.01	-7.4	15.0
Aroclor-1260	6738.969	6210.653	0.01	-7.8	15.0
(2)	10259.796	9429.792	0.01	-8.1	15.0
(3)	6129.851	5734.817	0.01	-6.4	15.0
(4)	6385.867	6164.329	0.01	-3.5	15.0
(5)	6859.759	6924.069	0.01	0.9	15.0
4cmx	131406.10	134284.87	0.01	2.2	15.0
Decachlorobiphenyl	99981.358	96393.950	0.01	-3.6	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.: 10-1545  
 Instrument ID: ECD8A Calibration Date: 02/12/10 Time: 1056  
 Lab File ID: 021B2101 Init. Calib. Date(s): 02/03/10 02/03/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 1024 1114  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	3766.401	3579.581	0.01	-5.0	15.0
(2)	2494.427	2425.109	0.01	-2.8	15.0
(3)	1515.492	1415.842	0.01	-6.6	15.0
(4)	1493.163	1374.673	0.01	-7.9	15.0
(5)	2035.618	1929.912	0.01	-5.2	15.0
Aroclor-1260	4084.417	4222.628	0.01	3.4	15.0
(2)	4968.902	5138.981	0.01	3.4	15.0
(3)	3788.418	3947.606	0.01	4.2	15.0
(4)	3953.106	4089.217	0.01	3.4	15.0
(5)	6227.437	6559.427	0.01	5.3	15.0
4cmx	86843.352	88065.490	0.01	1.4	15.0
Decachlorobiphenyl	64843.758	63780.140	0.01	-1.6	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/002f0201.d

Lab Smp Id: WAR100203-60 01

Client Smp ID: AR166001

Inj Date : 12-FEB-2010 07:02

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100203-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

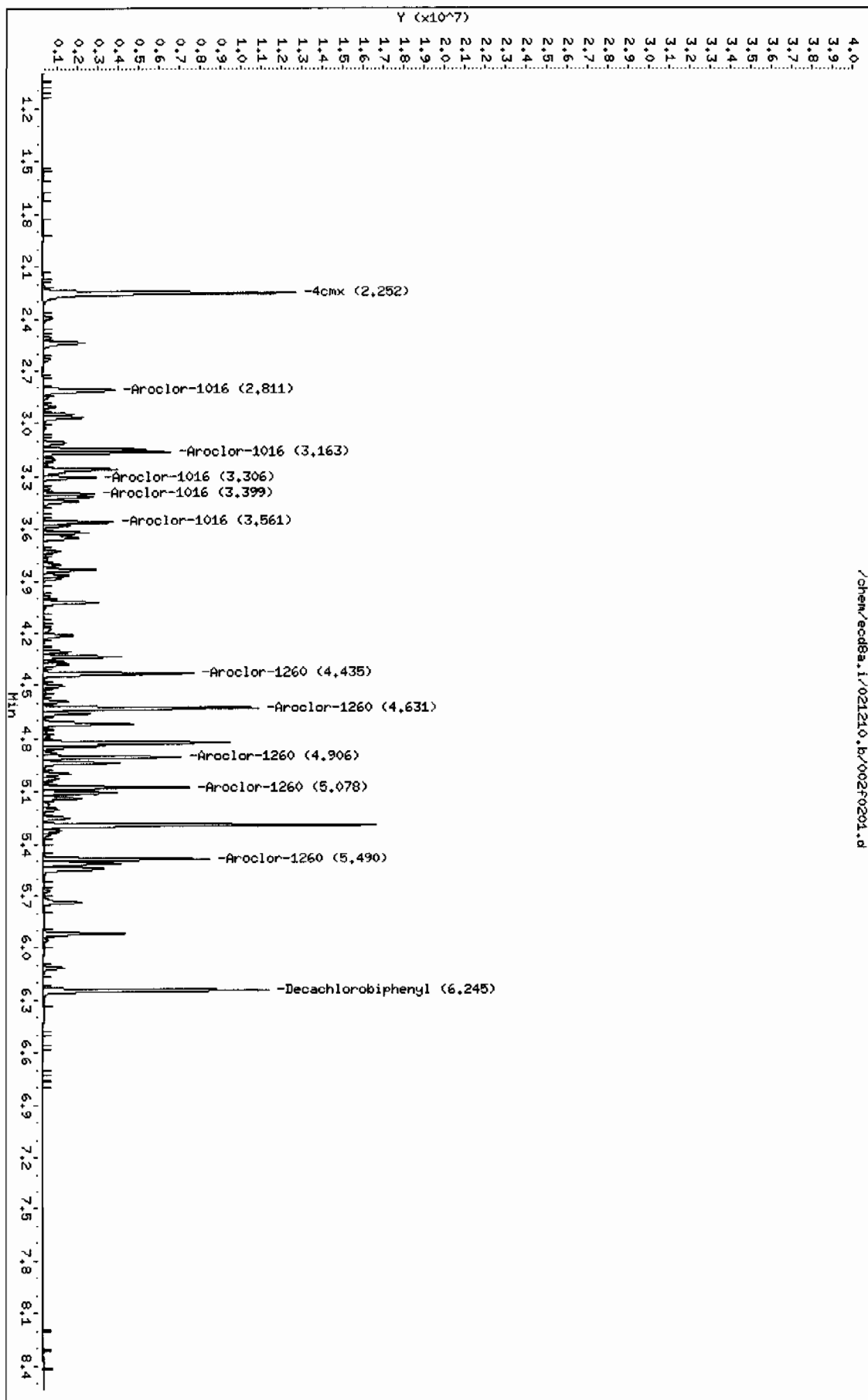
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
-----						
\$ 11 4cmx				CAS #: 877-09-8		
2.252	2.252	0.000	13913678 100.000	106	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.245	6.245	0.000	9799340 100.000	98.0	80.00- 120.00	100.00
-----						
1 Aroclor-1016				CAS #: 12674-11-2		
2.811	2.811	0.000	4548503 1000.00	975	80.00- 120.00	100.00
3.163	3.163	0.000	5603763 1000.00	971	98.17- 138.17	123.20
3.306	3.306	0.000	2323075 1000.00	946	30.98- 70.98	51.07
3.399	3.399	0.000	2073020 1000.00	943	25.80- 65.80	45.58
3.561	3.561	0.000	2985421 1000.00	950	45.68- 85.68	65.64
Average of Peak Amounts =				957		
-----						
7 Aroclor-1260				CAS #: 11096-82-5		
4.435	4.435	0.000	6360304 1000.00	944	80.00- 120.00	100.00
4.631	4.631	0.000	9595648 1000.00	935	131.83- 171.83	150.87
4.906	4.906	0.000	5825535 1000.00	950	72.34- 112.34	91.59
5.078	5.078	0.000	6234878 1000.00	976	79.25- 119.25	98.03
5.490	5.490	0.000	6996429 1000.00	1020	91.49- 131.49	110.00
Average of Peak Amounts =				965		
-----						

Data File: /chem/ecdb8a.i/021210.b/002f0201.d  
Date : 12-FEB-2010 07:02  
Client ID: AR166001  
Sample Info: 148R100203-60 01

Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JAUC  
Column diameter: 0.25

/chem/ecdb8a.i/021210.b/002f0201.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/002b0201.d

Lab Smp Id: WAR100203-60 01

Client Smp ID: AR166001

Inj Date : 12-FEB-2010 07:02

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100203-60 01

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====

\$ 11 4cmx				CAS #: 877-09-8		
2.486	2.486	0.000	9185972 100.000	106	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.836	6.836	0.000	6502957 100.000	100	80.00- 120.00	100.00

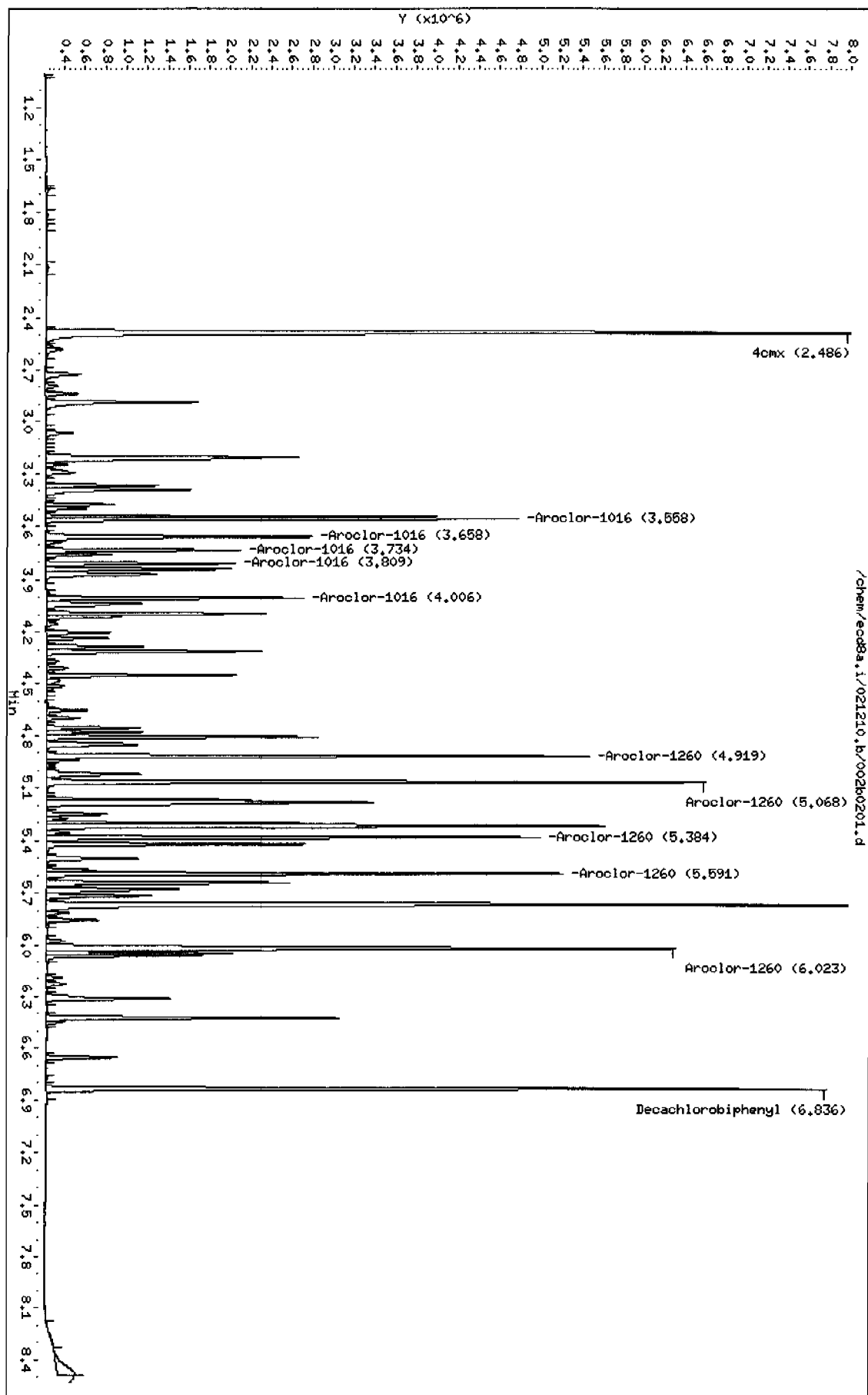
1 Aroclor-1016				CAS #: 12674-11-2		
3.558	3.558	0.000	3777022 1000.00	1000	80.00- 120.00	100.00
3.658	3.658	0.000	2504931 1000.00	1000	47.75- 87.75	66.32
3.734	3.734	0.000	1469541 1000.00	970	19.55- 59.55	38.91
3.809	3.809	0.000	1424437 1000.00	954	18.40- 58.40	37.71
4.006	4.006	0.000	1995100 1000.00	980	33.91- 73.91	52.82
Average of Peak Amounts =				982		

7 Aroclor-1260				CAS #: 11096-82-5		
4.919	4.919	0.000	4339858 1000.00	1060	80.00- 120.00	100.00
5.068	5.068	0.000	5272237 1000.00	1060	101.70- 141.70	121.48
5.384	5.384	0.000	4034100 1000.00	1060	73.49- 113.49	92.95
5.591	5.591	0.000	4196512 1000.00	1060	76.84- 116.84	96.70
6.023	6.023	0.000	6650370 1000.00	1070	135.34- 175.34	153.24
Average of Peak Amounts =				1.06e+03		

Data File: /chem/ecob8a.i/021210.b/002b0201.d  
Date: 12-FEB-2010 07:02  
Client ID: AR166001  
Sample Info: 11AR100203-60 01

Column phase: CLP2

Instrument: ecob8a.i  
Operator: J90C  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/003f0301.d

Lab Smp Id: WAR100201-54

Client Smp ID: AR125401

Inj Date : 12-FEB-2010 07:14

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100201-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

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	
3.837	3.837	0.000	4792955 1000.00	1000	80.00- 120.00	100.00
4.025	4.025	0.000	6493192 1000.00	988	115.47- 155.47	135.47
4.220	4.220	0.000	4910432 1000.00	956	82.45- 122.45	102.45
4.306	4.306	0.000	8520921 1000.00	968	157.78- 197.78	177.78
4.501	4.501	0.000	6638641 1000.00	960	118.51- 158.51	138.51
Average of Peak Amounts				975		

Data File: /chem/ecd8a.i/021210.b/003f0301.d

Date : 12-FEB-2010 07:14

Client ID: AR125401

Sample Info: 14AR100201-54

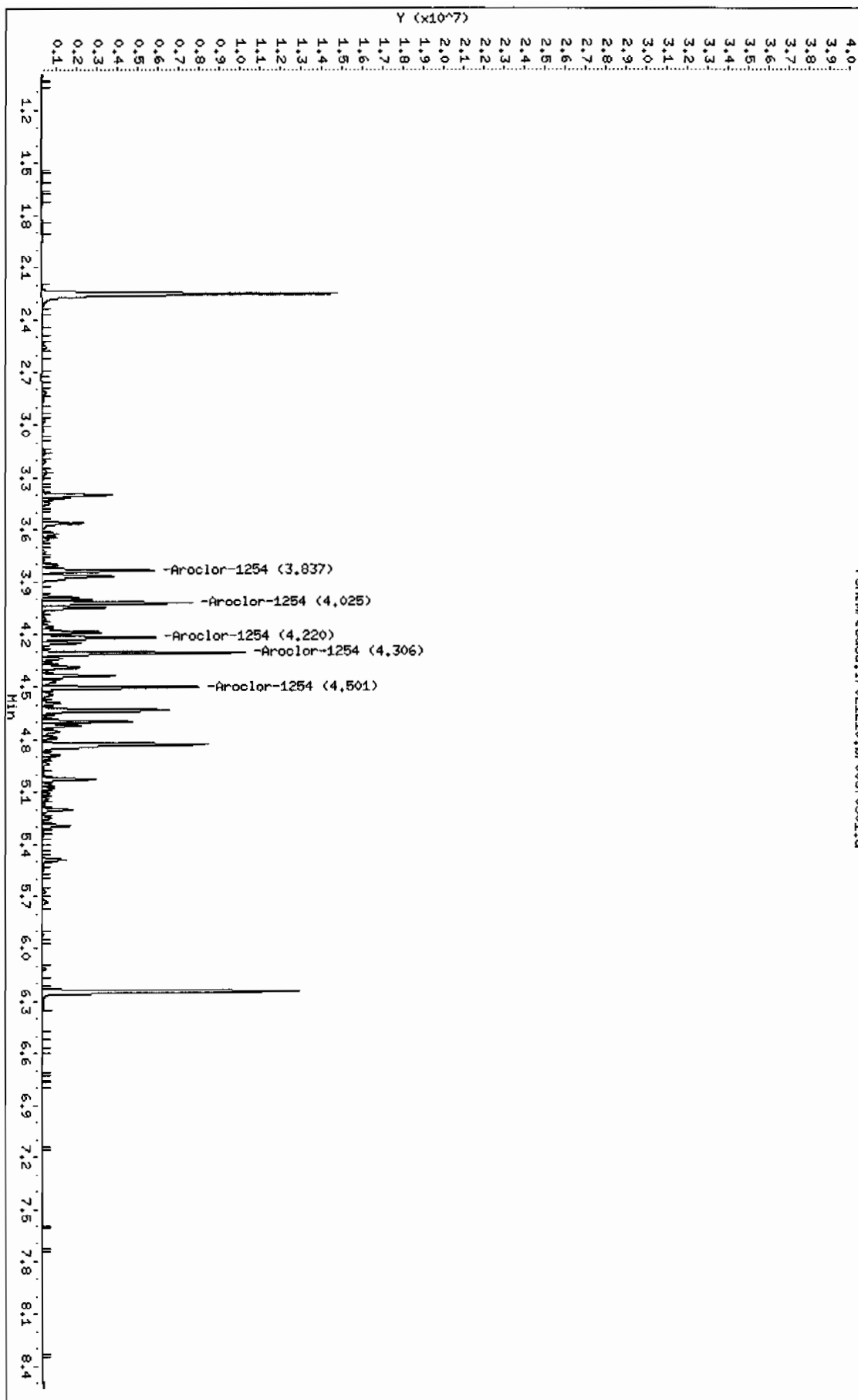
Column phase: CLP1

Instrument: ecd8a.i

Operator: JAC

Column diameter: 0.25

/chem/ecd8a.i/021210.b/003f0301.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/003b0301.d

Lab Smp Id: WAR100201-54

Client Smp ID: AR125401

Inj Date : 12-FEB-2010 07:14

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100201-54

Misc Info : |1254

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

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	
4.313	4.313	0.000	3619477 1000.00	1050	80.00- 120.00	100.00
4.451	4.451	0.000	4078317 1000.00	1040	92.68- 132.68	112.68
4.780	4.780	0.000	5822783 1000.00	1060	140.87- 180.87	160.87
4.942	4.942	0.000	4223178 1000.00	1050	96.68- 136.68	116.68
5.068	5.068	0.000	2674832 1000.00	1050	53.90- 93.90	73.90
Average of Peak Amounts				1.05e+03		



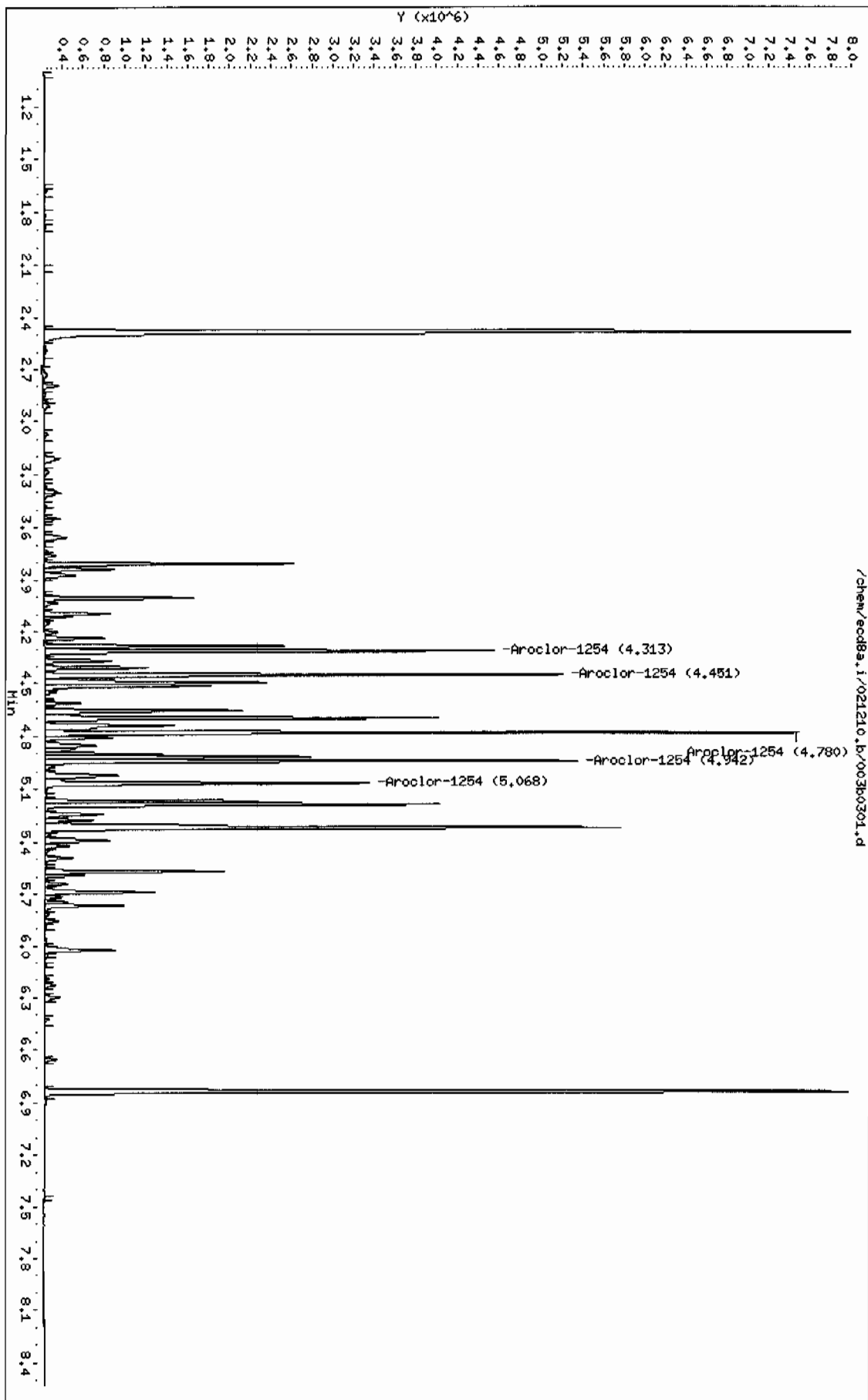
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Date: 12-FEB-2010 07:14  
Client ID: 6R125401  
Sample Info: 1MAR100201-54

Column phase: CLP2

Instrument: ecod8a.i

Operator: J6DC  
Column diameter: 0.25

Page 1



Data File: /chem/ecd8a.i/021210.b/004f0401.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 12-FEB-2010 07:26

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

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			
2.812	2.812	0.000	3721427 1000.00	936	80.00- 120.00	100.00
3.164	3.164	0.000	4447831 1000.00	927	99.52- 139.52	119.52
3.400	3.400	0.000	1643502 1000.00	910	24.16- 64.16	44.16
3.417	3.417	0.000	1688795 1000.00	894	25.38- 65.38	45.38
3.562	3.562	0.000	2416012 1000.00	913	44.92- 84.92	64.92
Average of Peak Amounts =			916			

Data File: /chem/ecdb8a.i/021210.b/004f0401.d

Date: 12-FEB-2010 07:26

Client ID: AR124201

Sample Info: 1MAR091217-42

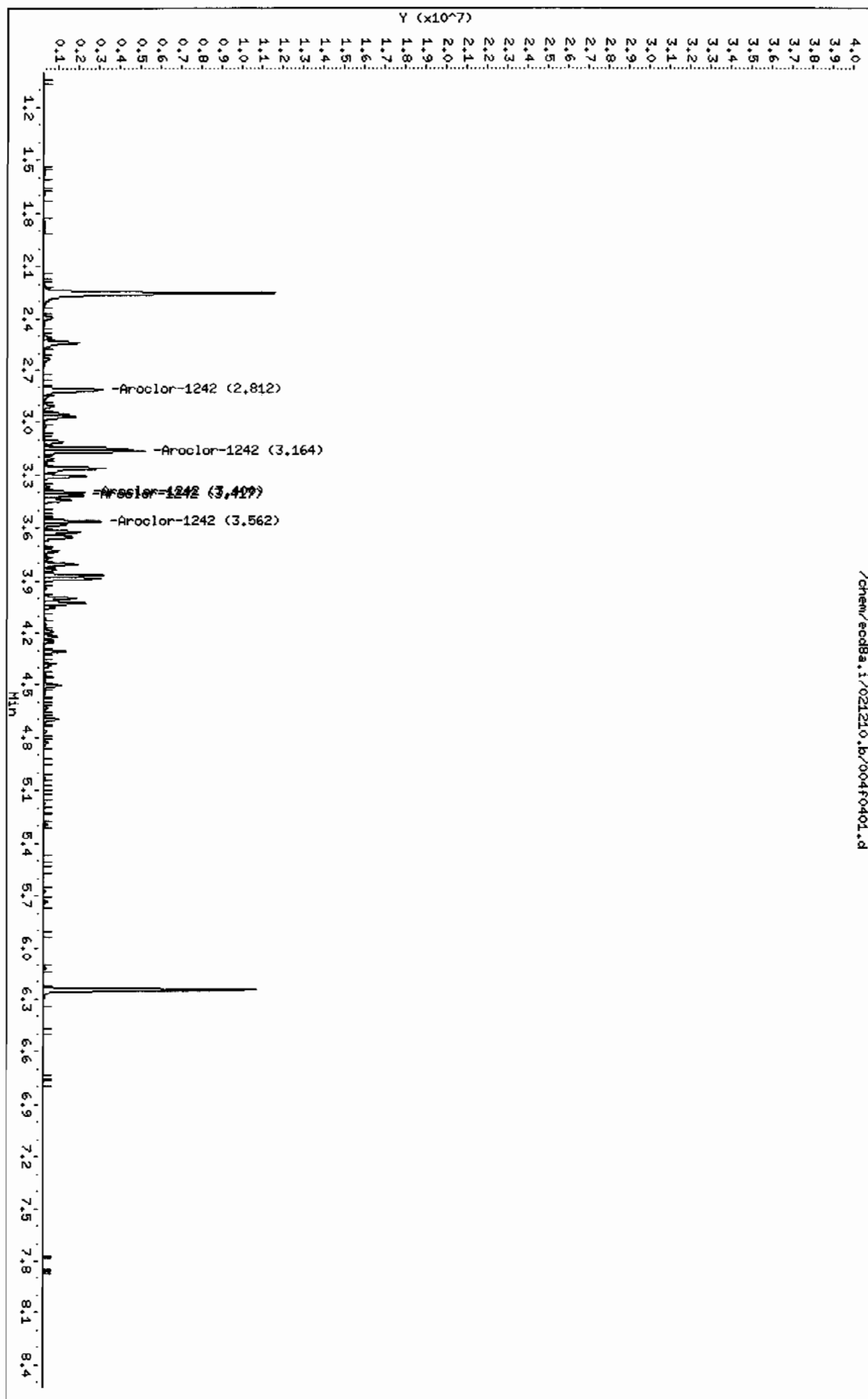
Column phase: CLP1

Instrument: ecdb8a.i

Operator: JROC

Column diameter: 0.25

/chem/ecdb8a.i/021210.b/004f0401.d



Data File: /chem/ecd8a.i/021210.b/004b0401.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 12-FEB-2010 07:26

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-42

Misc Info : |1242

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3.206	3.206	0.000	2518361 1000.00	941 80.00- 120.00	100.00	
3.559	3.559	0.000	2915172 1000.00	933 95.76- 135.76	115.76	
3.659	3.659	0.000	2010413 1000.00	945 59.83- 99.83	79.83	
4.006	4.006	0.000	1576801 1000.00	926 42.61- 82.61	62.61	
4.096	4.096	0.000	1486237 1000.00	949 39.02- 79.02	59.02	
Average of Peak Amounts =				939		

Data File: /chem/ecdb8a.i/021210.b/004b0401.d

Date: 12-FEB-2010 07:26

Client ID: KR124201

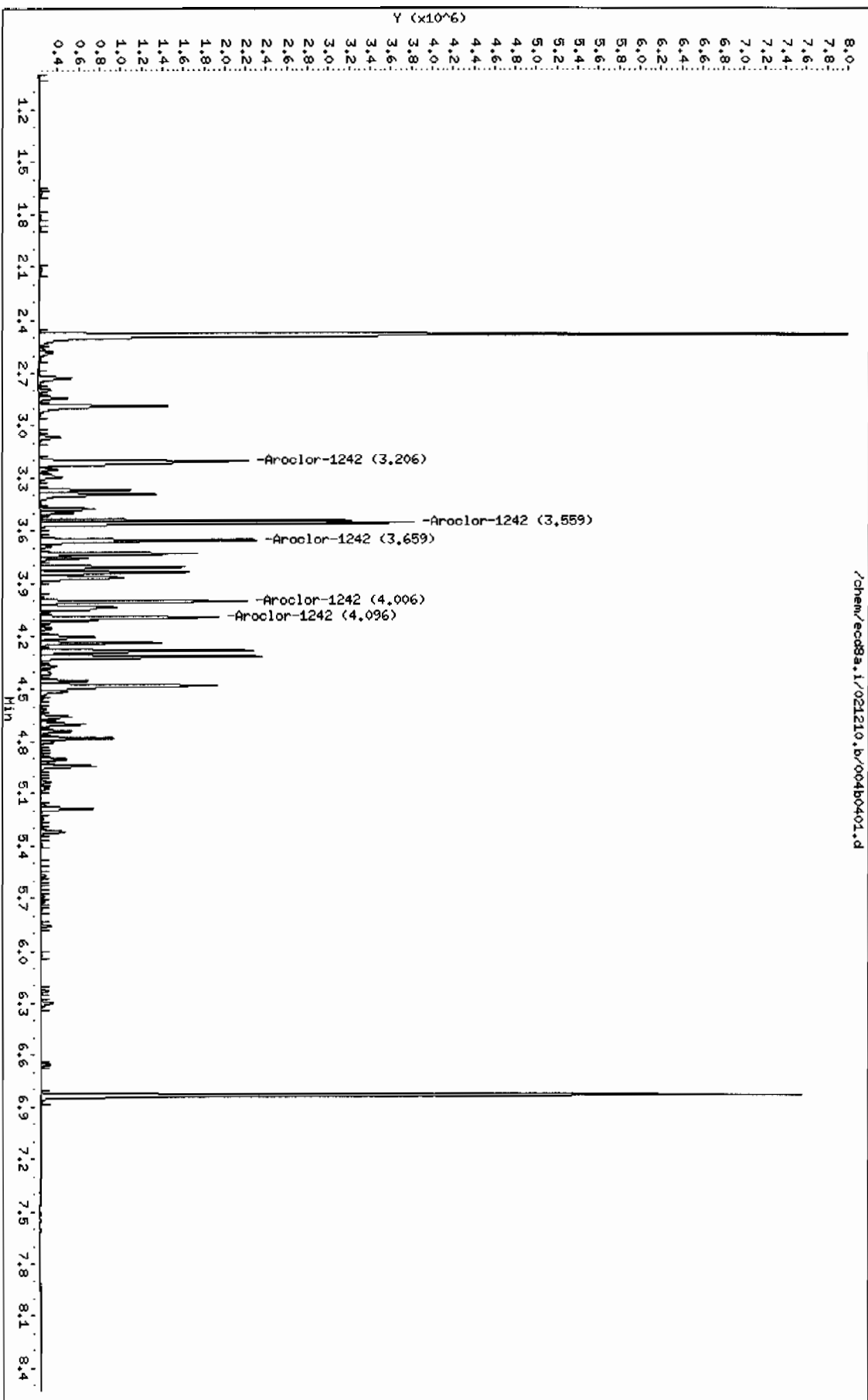
Sample Info: 146R091217-42

Column phase: CLP2

Instrument: ecdb8a.i

Operator: JADC

Column diameter: 0.25



Data File: /chem/ecd8a.i/021210.b/005f0501.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 12-FEB-2010 07:38

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR091217-48

Misc Info : |1248

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248			CAS #: 12672-29-6			
3.148	3.148	0.000	2353370 1000.00	787 80.00- 120.00	100.00	
3.399	3.399	0.000	3094483 1000.00	809 111.49- 151.49	131.49	
3.562	3.562	0.000	4049295 1000.00	810 152.06- 192.06	172.06	
3.867	3.867	0.000	4836876 1000.00	808 185.53- 225.53	205.53	
4.027	4.027	0.000	3828514 1000.00	793 142.68- 182.68	162.68	

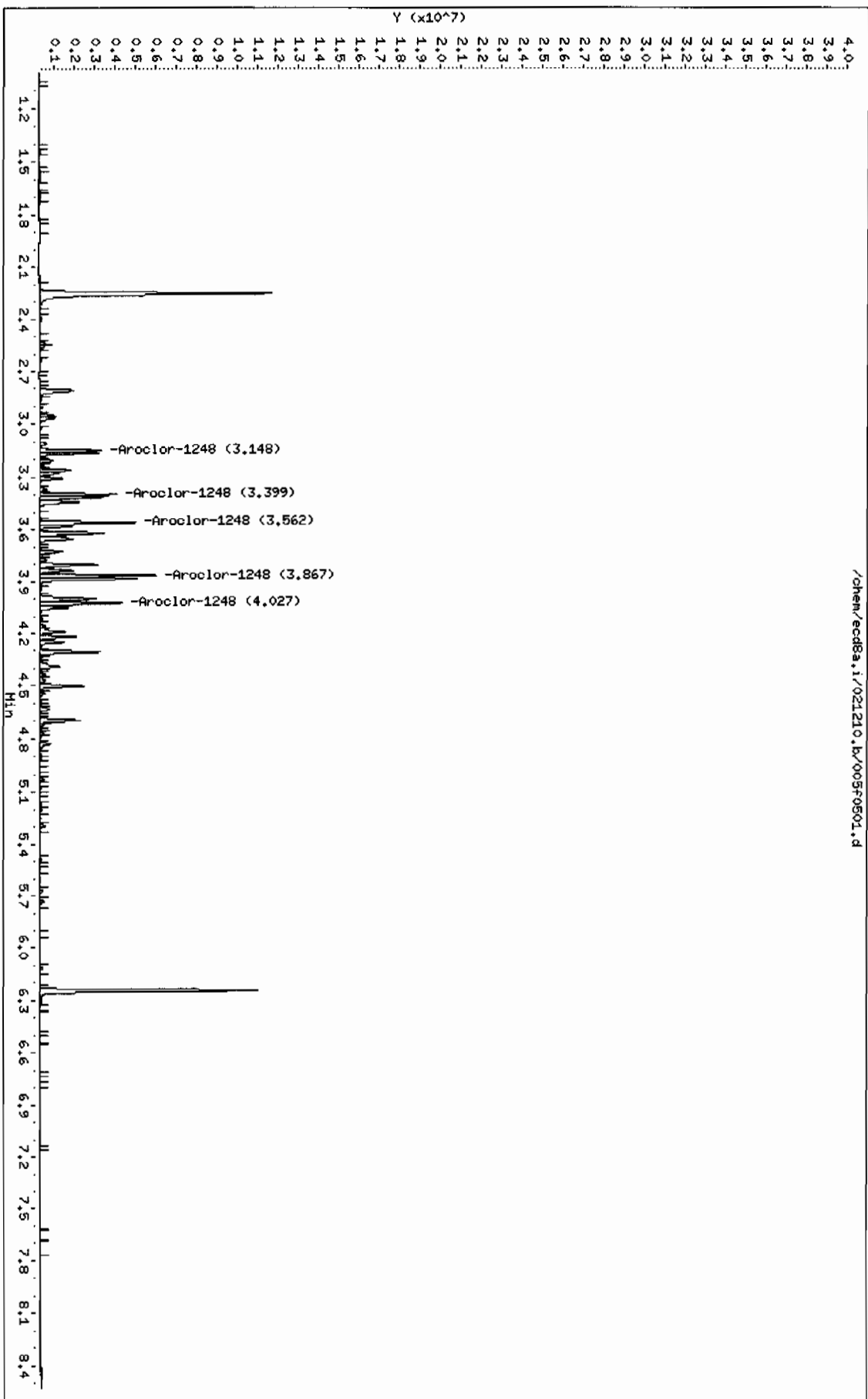
Average of Peak Amounts =

801

Data File: /chem/ecda8a.i/021210.b/005f0501.d  
Date : 12-FEB-2010 07:38  
Client ID: AR124801  
Sample Info: IMAR091217-48

Column Phase: CLP1

Instrument: ecda8a.i  
Operator: JAOC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/021210.b/005b0501.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/005b0501.d  
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801  
Inj Date : 12-FEB-2010 07:38  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |WAR091217-48  
Misc Info : |1248  
Comment :  
Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
Als bottle: 5 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1248.sub  
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
5 Aroclor-1248			CAS #: 12672-29-6			
3.657	3.657	0.000	1278541 1000.00	896	80.00- 120.00	100.00
3.810	3.810	0.000	2151154 1000.00	872	148.25- 188.25	168.25
4.006	4.006	0.000	2705822 1000.00	876	191.63- 231.63	211.63
4.284	4.284	0.000	3187472 1000.00	874	229.31- 269.31	249.31
4.317	4.317	0.000	3516359 1000.00	878	255.03- 295.03	275.03
Average of Peak Amounts =			879			



Data File: /chem/ecod8a.i/021210.b/005b0501.d

Date: 12-FEB-2010 07:38

Client ID: AR124801

Sample Info: IRR091217-48

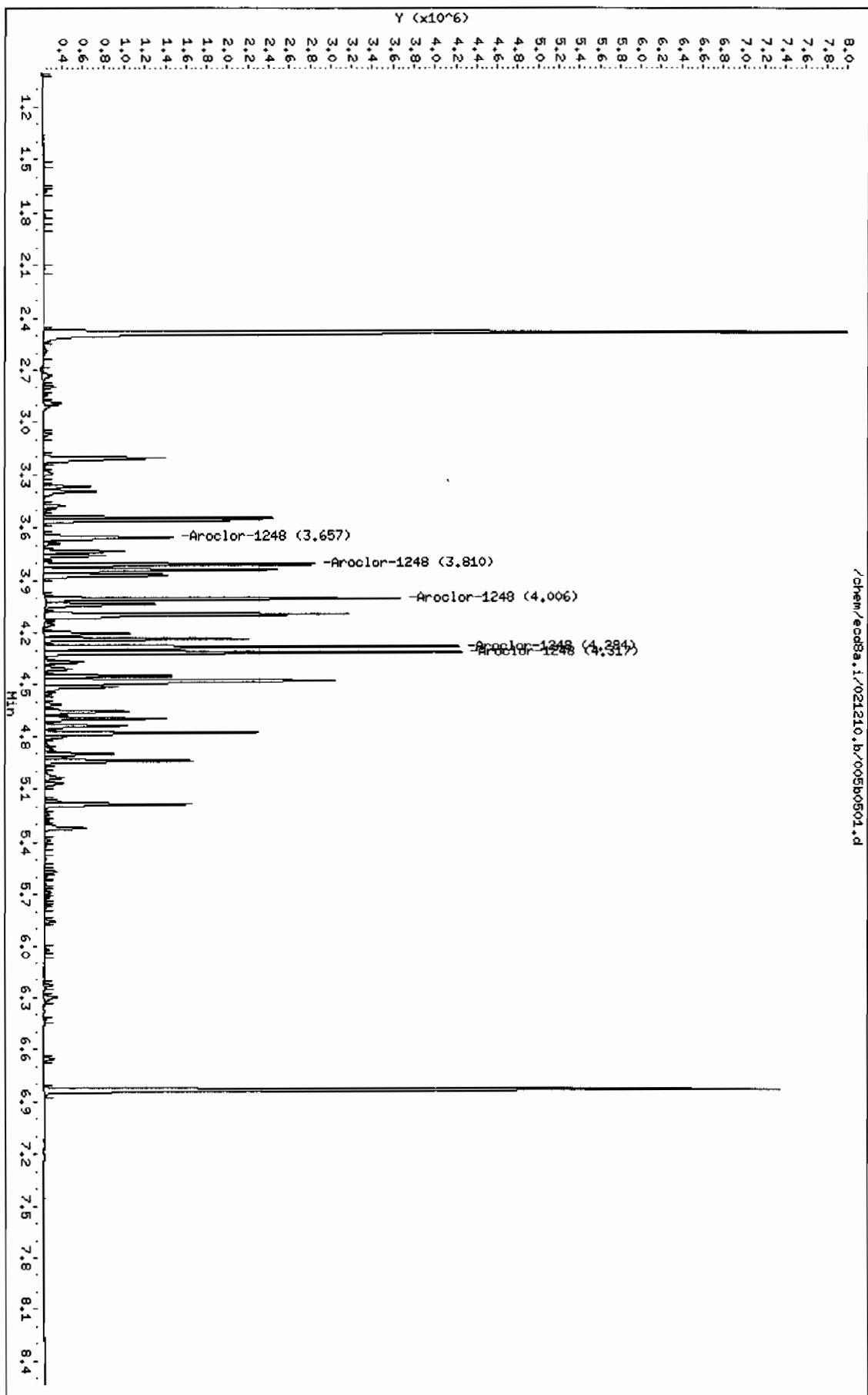
Column Phase: CLP2

Instrument: ecod8a.i

Operator: JHOC

Column diameter: 0.25

Page 1



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 12-FEB-2010 07:51

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-32

Misc Info : |1232

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

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

2.541	2.541	0.000	2439278	1000.00	938 80.00- 120.00	100.00
2.812	2.812	0.000	2151380	1000.00	952 68.20- 108.20	88.20
3.308	3.308	0.000	1097887	1000.00	883 25.01- 65.01	45.01
3.562	3.562	0.000	1342194	1000.00	908 35.02- 75.02	55.02
3.624	3.624	0.000	820349	1000.00	889 13.63- 53.63	33.63

Average of Peak Amounts =

914

Data File: /chem/ecodBa.i/021210.b/006f0601.d  
Date: 12-FEB-2010 07:51  
Client ID: AR123201  
Sample Info: MAR100104-32

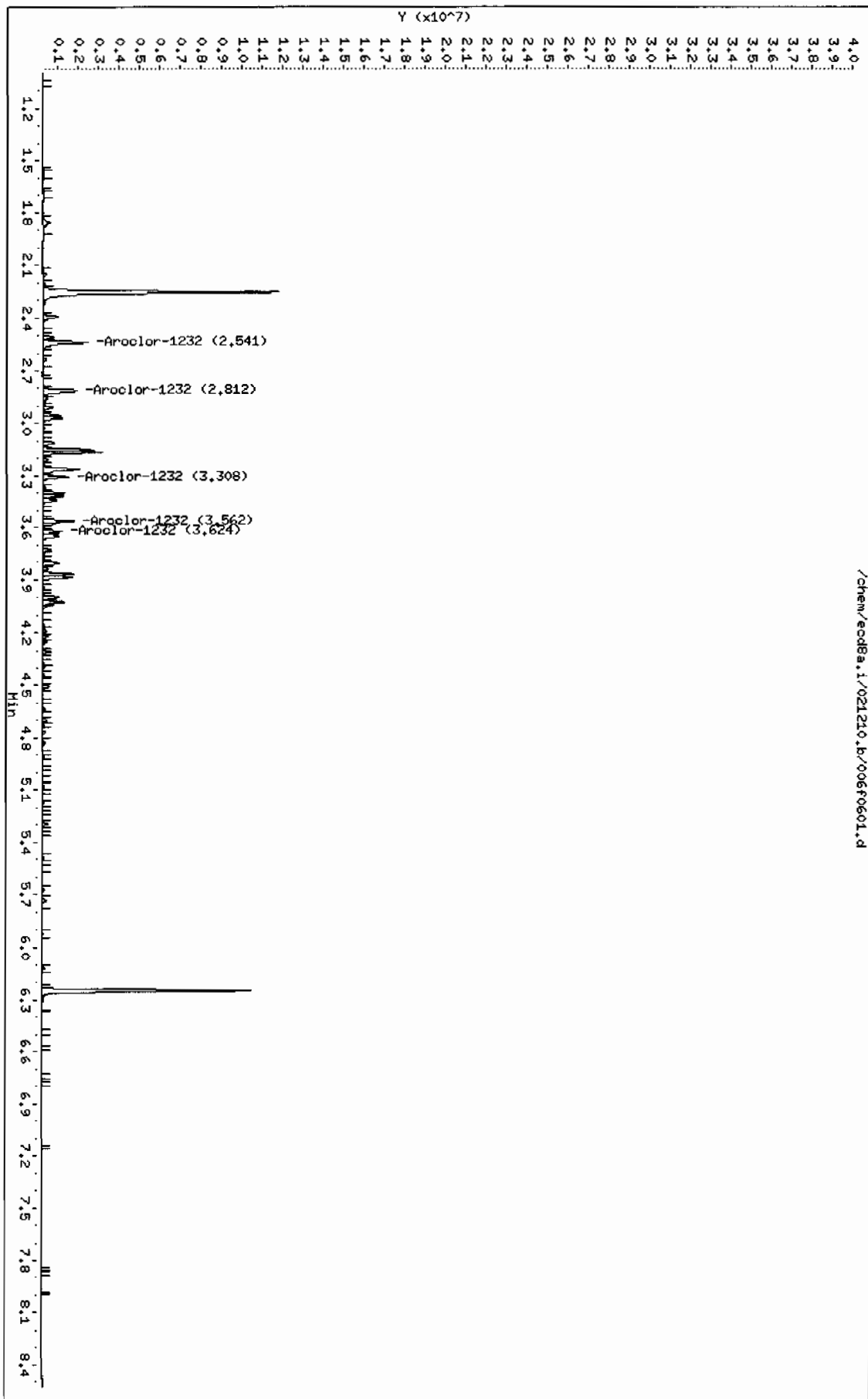
Instrument: ecodBa.i

Page 1

Column phase: CLP1

Operator: JROC  
Column diameter: 0.25

/chem/ecodBa.i/021210.b/006f0601.d



Data File: /chem/ecd8a.i/021210.b/006b0601.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 12-FEB-2010 07:51

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-32

Misc Info : |1232

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212

Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

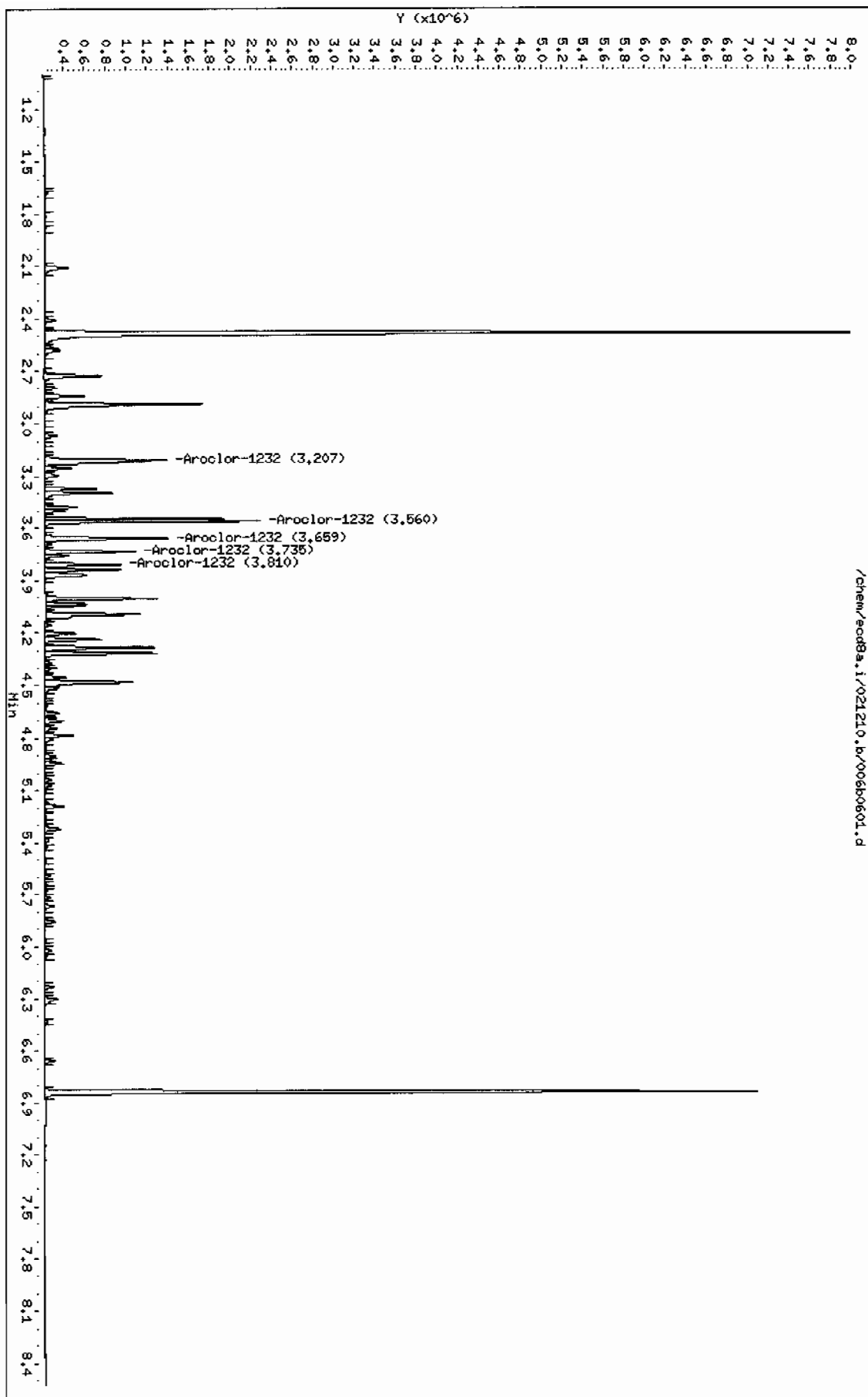
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
3 Aroclor-1232			CAS #: 11141-16-5			
3.207	3.207	0.000	1484066 1000.00	980	80.00- 120.00	100.00
3.560	3.560	0.000	1629700 1000.00	934	89.81- 129.81	109.81
3.659	3.659	0.000	1148925 1000.00	976	57.42- 97.42	77.42
3.735	3.735	0.000	677509 1000.00	954	25.65- 65.65	45.65
3.810	3.810	0.000	592816 1000.00	959	19.95- 59.95	39.95
Average of Peak Amounts =			961			

Data File: /chem/ecob8a.i/021210.b/00600601.d  
Date: 12-FEB-2010 07:51  
Client ID: AR123201  
Sample Info: (MR100104-32)

Column phase: CLP2

Instrument: ecob8a.i  
Operator: JAOC  
Column diameter: 0.25

Page 1



Data File: /chem/ecd8a.i/021210.b/007f0701.d  
Report Date: 12-Feb-2010 13:07

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 12-FEB-2010 08:03

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-21

Misc Info : |1221

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2 Aroclor-1221

CAS #: 11104-28-2

1.855	1.855	0.000	1199847	1000.00	1090 80.00- 120.00	100.00
2.394	2.394	0.000	1489304	1000.00	1020 104.12- 144.12	124.12
2.541	2.541	0.000	3334932	1000.00	985 257.95- 297.95	277.95

Average of Peak Amounts

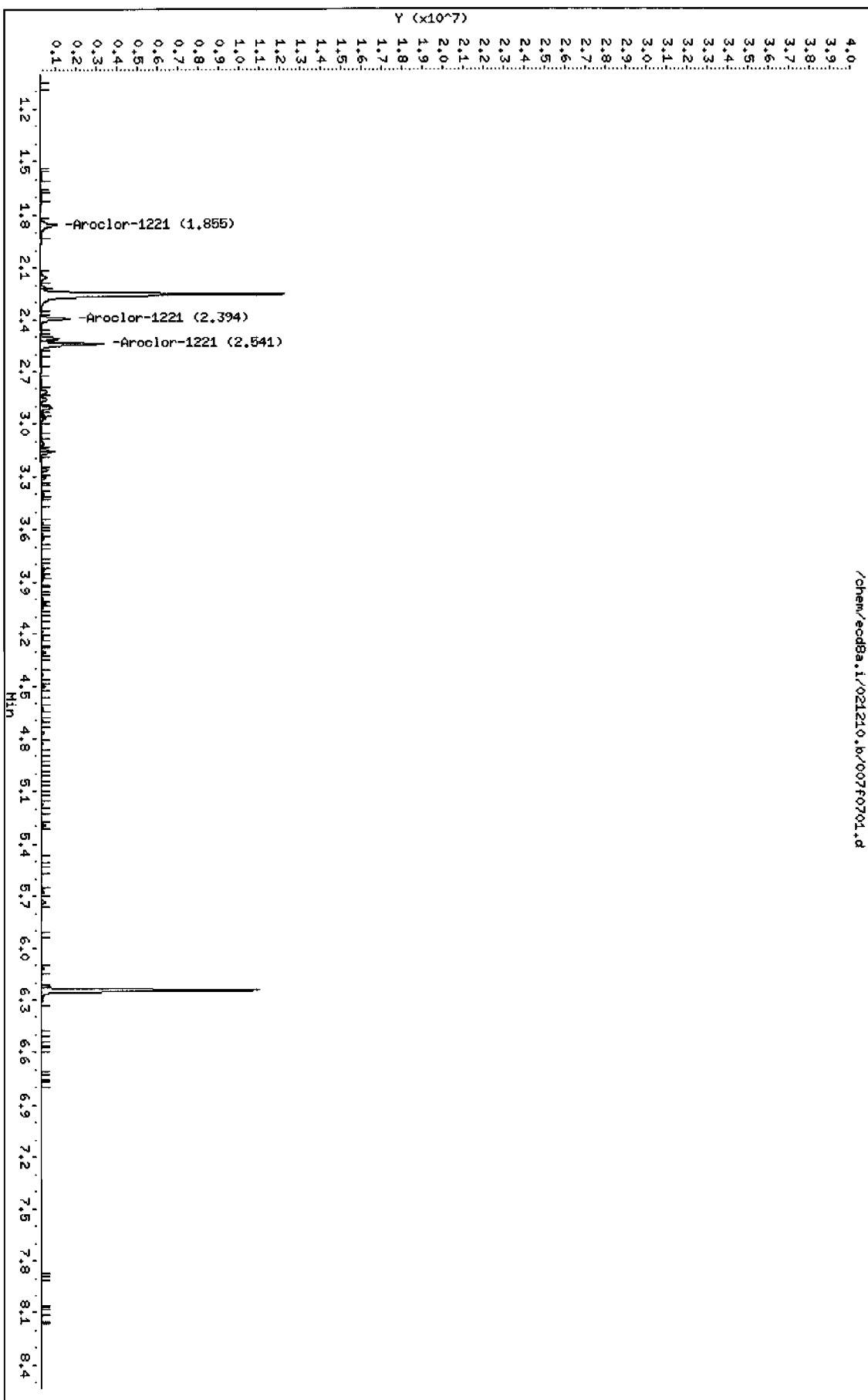
1.03e+03

Data File: /chem/ecod8a.i/021210.b/0070701.d  
Date : 12-FEB-2010 08:03  
Client ID: AR122101  
Sample Info: 1MAR100104-21

Column phase: CLP1

Instrument: ecod8a.i  
Operator: JAO  
Column diameter: 0.25

Page 1



Data File: /chem/ecd8a.i/021210.b/007b0701.d  
Report Date: 12-Feb-2010 13:06

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 12-FEB-2010 08:03

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100104-21

Misc Info : |1221

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
2.727	2.727	0.000	978372 1000.00	1090	80.00- 120.00	100.00
2.839	2.839	0.000	583525 1000.00	1050	39.64- 79.64	59.64
2.888	2.888	0.000	2087832 1000.00	1010	193.40- 233.40	213.40
Average of Peak Amounts =			1.05e+03			



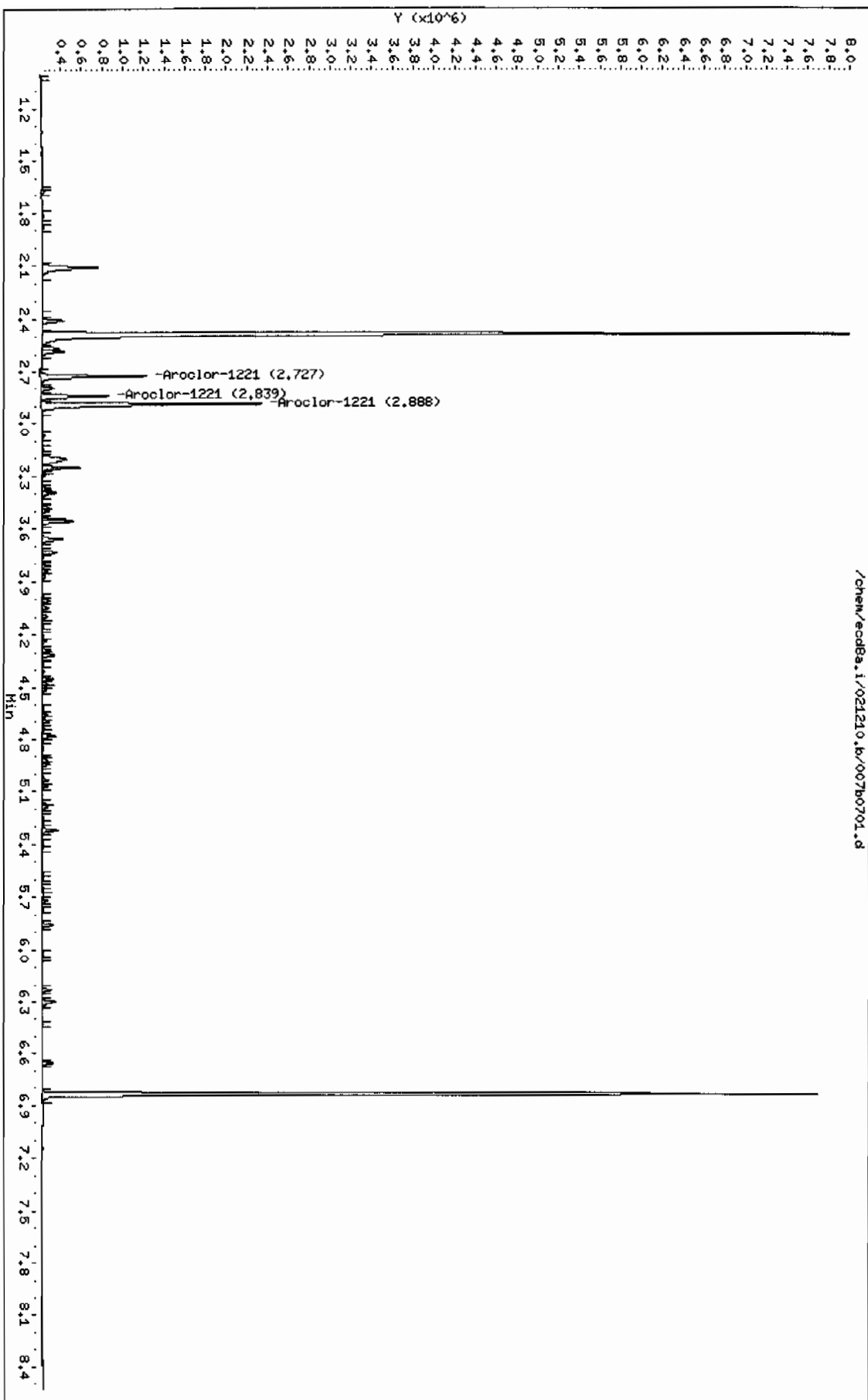
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Date: 12-FEB-2010 08:03  
Client ID: AR122101  
Sample Info: IMR100104-Z1

Instrument: ecdb8a.i

Page 1

Column phase: CLP2

Operator: JAOC  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/021f2101.d

Lab Smp Id: WAR100203-60 02

Client Smp ID: AR166002

Inj Date : 12-FEB-2010 10:56

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100203-60 02

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 21

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO		
-----	-----	-----	-----	-----	-----	-----		
\$ 11 4cmx				CAS #: 877-09-8				
2.254	2.252	0.002	13428487 100.000	102	80.00- 120.00	100.00		
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
6.247	6.245	0.002	9639395 100.000	96.4	80.00- 120.00	100.00 (M)		
1 Aroclor-1016				CAS #: 12674-11-2				
2.813	2.811	0.002	4427289 1000.00	949	80.00- 120.00	100.00		
3.164	3.163	0.001	5231669 1000.00	907	98.17- 138.17	118.17		
3.308	3.306	0.002	2257198 1000.00	920	30.98- 70.98	50.98		
3.399	3.399	0.000	2027637 1000.00	922	25.80- 65.80	45.80		
3.562	3.561	0.001	2907902 1000.00	925	45.68- 85.68	65.68		
Average of Peak Amounts =				925				
7 Aroclor-1260				CAS #: 11096-82-5				
4.436	4.435	0.001	6210653 1000.00	922	80.00- 120.00	100.00 (M)		
4.632	4.631	0.001	9429792 1000.00	919	131.83- 171.83	151.83		
4.907	4.906	0.001	5734817 1000.00	936	72.34- 112.34	92.34		
5.079	5.078	0.001	6164329 1000.00	965	79.25- 119.25	99.25		
5.490	5.490	0.000	6924069 1000.00	1010	91.49- 131.49	111.49		
Average of Peak Amounts =				950				

Data File: /chem/ecd8a.i/021210.b/021f2101.d  
Report Date: 12-Feb-2010 13:08

Page 2

#### QC Flag Legend

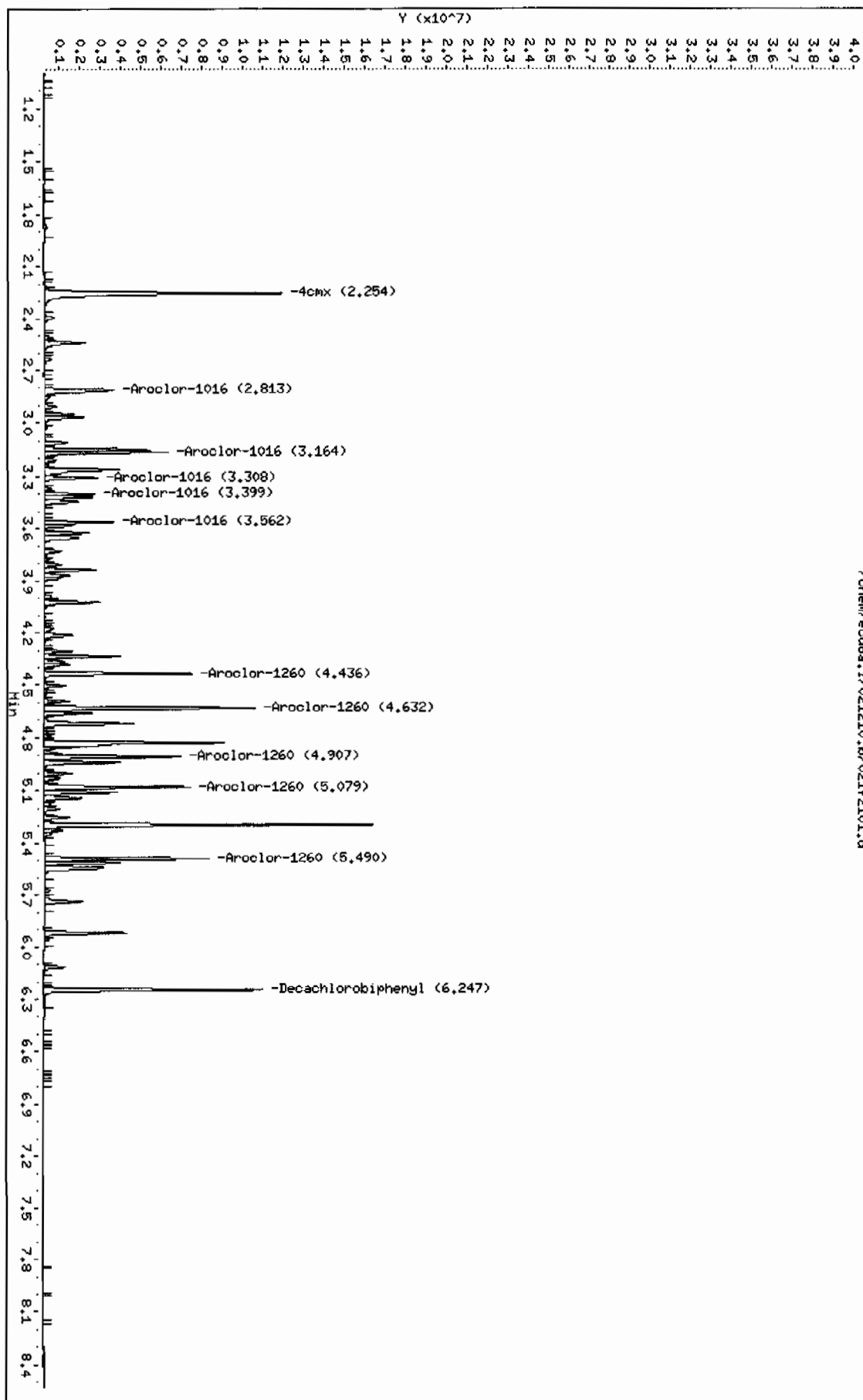
M - Compound response manually integrated.

Data File: /chem/ecdb8a.i/021210.b/021f2101.d  
Date: 12-FEB-2010 10:56  
Client ID: AR16002  
Sample Info: IAR100203-60 02

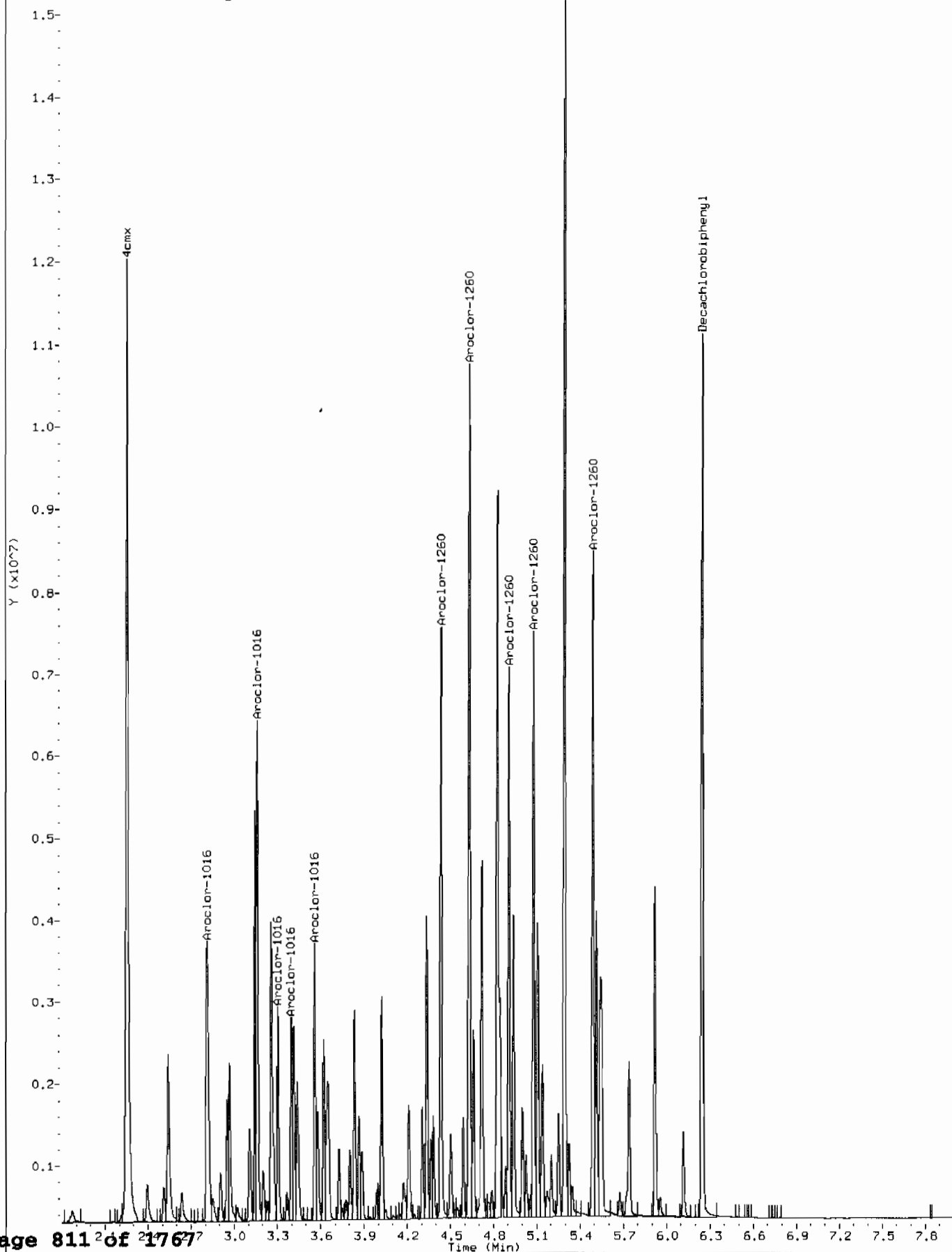
Column phase: CLP1

Instrument: ecdb8a.i  
Operator: JHOC  
Column diameter: 0.25

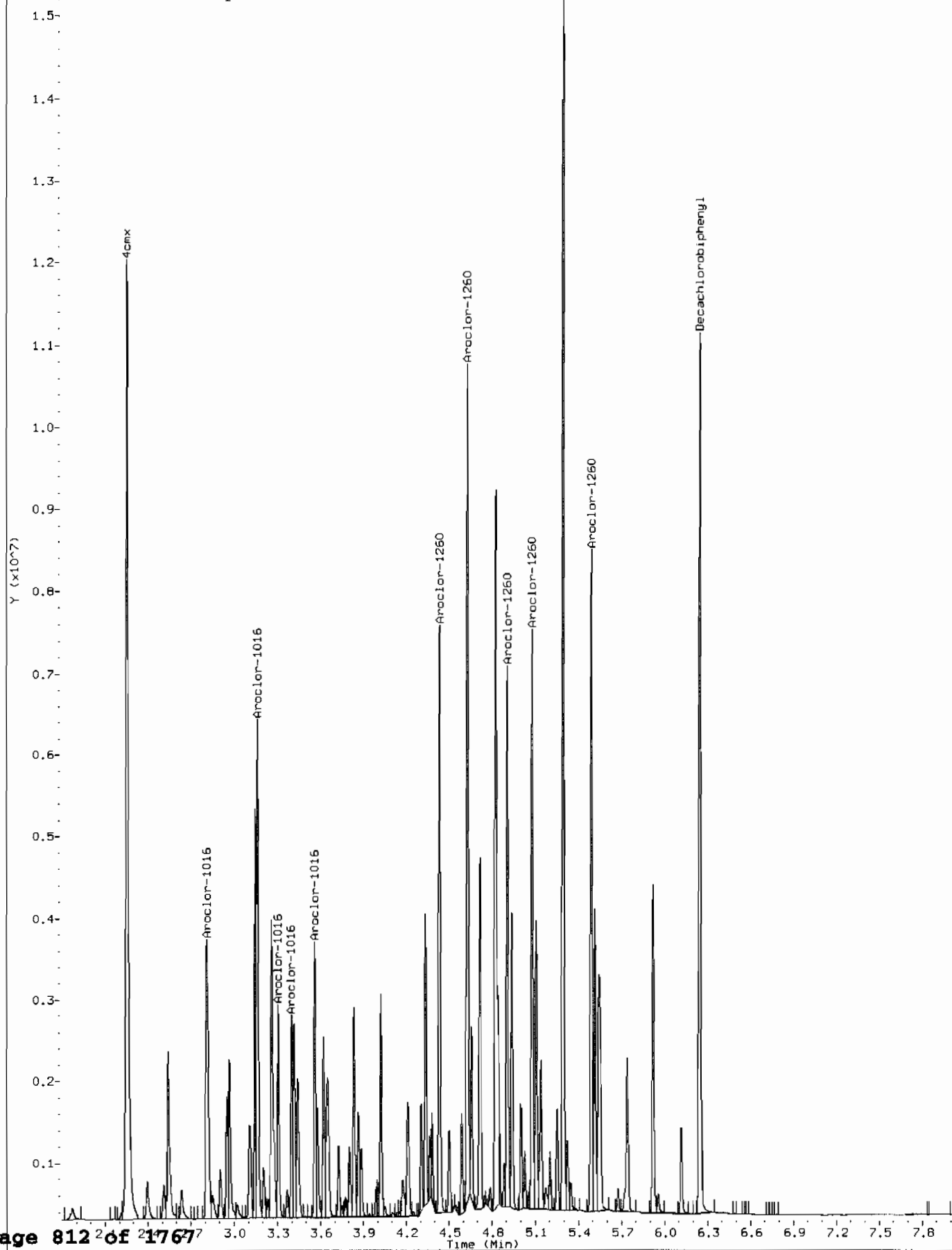
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Comment: Manually Integrated  
Data File: /chem/ecd8a.i/021210.b/021f2101.d  
Operator: JAOC  
Injection Date: 12-FEB-2010 10:56  
Instrument: ecd8a.i  
Client Sample ID: AR166002



Comment: Before manual integration  
Data File: /chem/ecd8a.i/021210.b/orig-021f2101.d  
Operator: JAOC  
Injection Date: 12-FEB-2010 10:56  
Instrument: ecd8a.i  
Client Sample ID: AR166002



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/021b2101.d

Lab Smp Id: WAR100203-60 02

Client Smp ID: AR166002

Inj Date : 12-FEB-2010 10:56

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |WAR100203-60 02

Misc Info : |1660

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m

Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036b3601.d

Als bottle: 21

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

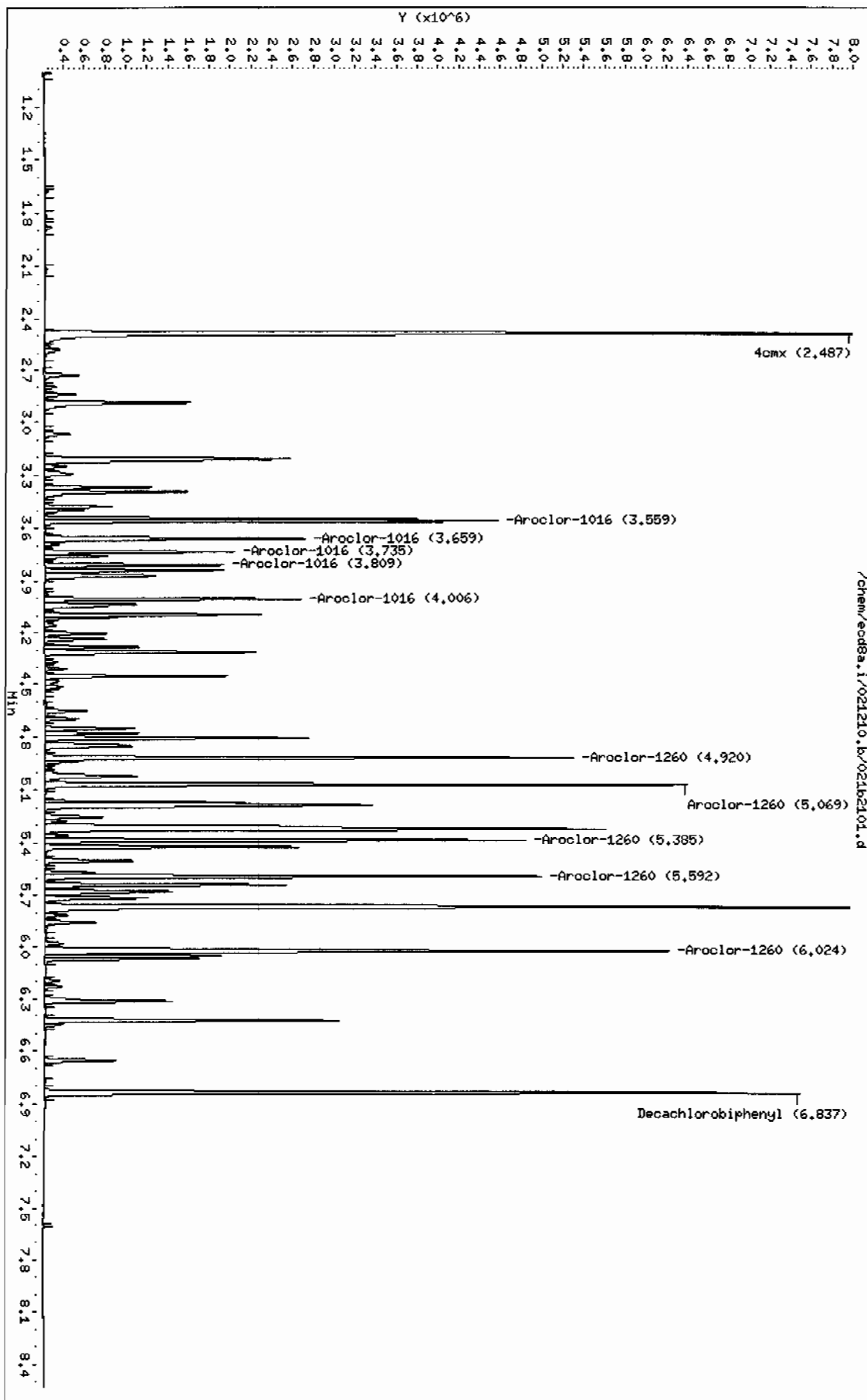
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.487	2.486	0.001	8806549 100.000	101	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.837	6.836	0.001	6378014 100.000	98.4	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.559	3.558	0.001	3579581 1000.00	950	80.00- 120.00	100.00	
3.659	3.658	0.001	2425108 1000.00	972	47.75- 87.75	67.75	
3.735	3.734	0.001	1415841 1000.00	934	19.55- 59.55	39.55	
3.809	3.809	0.000	1374673 1000.00	921	18.40- 58.40	38.40	
4.006	4.006	0.000	1929912 1000.00	948	33.91- 73.91	53.91	
Average of Peak Amounts =				945			
-----							
7 Aroclor-1260				CAS #: 11096-82-5			
4.920	4.919	0.001	4222628 1000.00	1030	80.00- 120.00	100.00	
5.069	5.068	0.001	5138980 1000.00	1030	101.70- 141.70	121.70	
5.385	5.384	0.001	3947606 1000.00	1040	73.49- 113.49	93.49	
5.592	5.591	0.001	4089217 1000.00	1030	76.84- 116.84	96.84	
6.024	6.023	0.001	6559427 1000.00	1050	135.34- 175.34	155.34	
Average of Peak Amounts =				1.04e+03			
-----							

Data File: /chem/ecd8a.i/021210.b/021b2101.d  
Date : 12-FEB-2010 10:56  
Client ID: AR166002  
Sample Info: I4AR100203-60 02

Column phase: CLP2

Instrument: ecd8a.i

Operator: JAOC  
Column diameter: 0.25





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.: 10-1545

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.26				DCB: 6.25			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT	#	DCB RT	#
01	PIBLK01	WAR091130-99	02/03/10	1012	2.25	6.24	
02	AR166001	WAR100203-01	02/03/10	1024	2.26	6.25	
03	AR166002	WAR100203-02	02/03/10	1037	2.26	6.25	
04	AR166003	WAR100203-03	02/03/10	1049	2.26	6.25	
05	AR166004	WAR100203-04	02/03/10	1101	2.26	6.25	
06	AR166005	IAR100104-01	02/03/10	1114	2.26	6.25	
07	AR166001	WAR100203-60	02/03/10	1126	2.26	6.25	
08	AR125401	WAR100203-05	02/03/10	1139			
09	AR125402	WAR100203-06	02/03/10	1151			
10	AR125403	WAR100203-07	02/03/10	1203			
11	AR125404	WAR100203-08	02/03/10	1216			
12	AR125405	IAR091027-01	02/03/10	1228			
13	AR125401	WAR091216-54	02/03/10	1240			
14	AR124201	WAR100203-09	02/03/10	1253			
15	AR124202	WAR100203-10	02/03/10	1305			
16	AR124203	WAR100203-11	02/03/10	1318			
17	AR124204	WAR100203-12	02/03/10	1330			
18	AR124205	IAR091111-01	02/03/10	1342			
19	AR124201	WAR091217-42	02/03/10	1355			
20	AR124801	WAR100203-13	02/03/10	1407			
21	AR124802	WAR100203-14	02/03/10	1419			
22	AR124803	WAR100203-15	02/03/10	1432			
23	AR124804	WAR100203-16	02/03/10	1444			
24	AR124805	IAR091027-02	02/03/10	1457			
25	AR124801	WAR091217-48	02/03/10	1509			
26	AR123201	WAR100104-32	02/03/10	1521			
27	AR122101	WAR100104-21	02/03/10	1534			
28	AR126201	WAR100203-17	02/03/10	1546			
29	AR126202	WAR100203-18	02/03/10	1558			
30	AR126203	WAR100203-19	02/03/10	1611			
31	AR126204	WAR100203-20	02/03/10	1623			
32	AR126205	IAR100104-04	02/03/10	1636			

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.: 10-1545

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.26			DCB: 6.25		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126201	WAR100104-62	02/03/10 1648		
02	AR126801	WAR091107-68	02/03/10 1700		
03	AR124801	WAR091217-48	02/03/10 1713		
04	DDTANALOGSTD	WAR091219-DD	02/03/10 1725		
05	PIBLK02	WAR091130-99	02/03/10 1738	2.26	6.25
06	ZZZZZ	ZZZZZ	02/03/10 1750	2.26	6.25
07	ZZZZZ	ZZZZZ	02/03/10 1802	2.26	6.25
08	ZZZZZ	ZZZZZ	02/03/10 1815	2.26	6.25
09	ZZZZZ	ZZZZZ	02/03/10 1827	2.26	6.25
10	ZZZZZ	ZZZZZ	02/03/10 1839	2.26	6.25
11	ZZZZZ	ZZZZZ	02/03/10 1852	2.26	6.25
12	ZZZZZ	ZZZZZ	02/03/10 1904	2.26	6.25
13	ZZZZZ	ZZZZZ	02/03/10 1916	2.26	6.25
14	ZZZZZ	ZZZZZ	02/03/10 1929	2.26	6.25
15	ZZZZZ	ZZZZZ	02/03/10 1941	2.26	6.25
16	AR166002	WAR100203-60	02/03/10 1954	2.26	6.25
17	PIBLK03	WAR091130-99	02/03/10 2006	2.26	6.25
18	ZZZZZ	ZZZZZ	02/03/10 2018	2.26	6.25
19	ZZZZZ	ZZZZZ	02/03/10 2031	2.26	6.25
20	ZZZZZ	ZZZZZ	02/03/10 2043	2.26	6.25
21	ZZZZZ	ZZZZZ	02/03/10 2055	2.26	6.25
22	AR166003	WAR100203-60	02/03/10 2108	2.26	6.25
23	PIBLK04	WAR091130-99	02/03/10 2120	2.26	6.25
24	ZZZZZ	ZZZZZ	02/03/10 2133	2.26	6.25
25	ZZZZZ	ZZZZZ	02/03/10 2145	2.26	6.25
26	ZZZZZ	ZZZZZ	02/03/10 2157	2.26	6.25
27	AR166004	WAR100203-60	02/03/10 2210	2.26	6.25
28	PIBLK05	WAR091130-99	02/03/10 2222	2.26	6.25
29	ZZZZZ	ZZZZZ	02/03/10 2234	2.26	6.25
30	ZZZZZ	ZZZZZ	02/03/10 2247	2.26	6.25
31	ZZZZZ	ZZZZZ	02/03/10 2259		
32	ZZZZZ	ZZZZZ	02/03/10 2312		

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.: 10-1545

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.49			DCB: 6.84		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR091130-99	02/03/10	1012	2.49 6.84
02	AR166001	WAR100203-01	02/03/10	1024	2.49 6.84
03	AR166002	WAR100203-02	02/03/10	1037	2.49 6.84
04	AR166003	WAR100203-03	02/03/10	1049	2.49 6.84
05	AR166004	WAR100203-04	02/03/10	1101	2.49 6.84
06	AR166005	IAR100104-01	02/03/10	1114	2.49 6.84
07	AR166001	WAR100203-60	02/03/10	1126	2.49 6.84
08	AR125401	WAR100203-05	02/03/10	1139	
09	AR125402	WAR100203-06	02/03/10	1151	
10	AR125403	WAR100203-07	02/03/10	1203	
11	AR125404	WAR100203-08	02/03/10	1216	
12	AR125405	IAR091027-01	02/03/10	1228	
13	AR125401	WAR091216-54	02/03/10	1240	
14	AR124201	WAR100203-09	02/03/10	1253	
15	AR124202	WAR100203-10	02/03/10	1305	
16	AR124203	WAR100203-11	02/03/10	1318	
17	AR124204	WAR100203-12	02/03/10	1330	
18	AR124205	IAR091111-01	02/03/10	1342	
19	AR124201	WAR091217-42	02/03/10	1355	
20	AR124801	WAR100203-13	02/03/10	1407	
21	AR124802	WAR100203-14	02/03/10	1419	
22	AR124803	WAR100203-15	02/03/10	1432	
23	AR124804	WAR100203-16	02/03/10	1444	
24	AR124805	IAR091027-02	02/03/10	1457	
25	AR124801	WAR091217-48	02/03/10	1509	
26	AR123201	WAR100104-32	02/03/10	1521	
27	AR122101	WAR100104-21	02/03/10	1534	
28	AR126201	WAR100203-17	02/03/10	1546	
29	AR126202	WAR100203-18	02/03/10	1558	
30	AR126203	WAR100203-19	02/03/10	1611	
31	AR126204	WAR100203-20	02/03/10	1623	
32	AR126205	IAR100104-04	02/03/10	1636	

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 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.: 10-1545

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.49 DCB: 6.84							
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	AR126201	WAR100104-62	02/03/10	1648			
02	AR126801	WAR091107-68	02/03/10	1700			
03	AR124801	WAR091217-48	02/03/10	1713			
04	DDTANALOGSTD	WAR091219-DD	02/03/10	1725			
05	PIBLK02	WAR091130-99	02/03/10	1738	2.49	6.84	
06	ZZZZZ	ZZZZZ	02/03/10	1750	2.49	6.84	
07	ZZZZZ	ZZZZZ	02/03/10	1802	2.49	6.84	
08	ZZZZZ	ZZZZZ	02/03/10	1815	2.49	6.84	
09	ZZZZZ	ZZZZZ	02/03/10	1827	2.49	6.84	
10	ZZZZZ	ZZZZZ	02/03/10	1839	2.49	6.84	
11	ZZZZZ	ZZZZZ	02/03/10	1852	2.49	6.84	
12	ZZZZZ	ZZZZZ	02/03/10	1904	2.49	6.84	
13	ZZZZZ	ZZZZZ	02/03/10	1916	2.49	6.84	
14	ZZZZZ	ZZZZZ	02/03/10	1929	2.49	6.84	
15	ZZZZZ	ZZZZZ	02/03/10	1941	2.49	6.84	
16	AR166002	WAR100203-60	02/03/10	1954	2.49	6.84	
17	PIBLK03	WAR091130-99	02/03/10	2006	2.49	6.84	
18	ZZZZZ	ZZZZZ	02/03/10	2018	2.49	6.84	
19	ZZZZZ	ZZZZZ	02/03/10	2031	2.49	6.84	
20	ZZZZZ	ZZZZZ	02/03/10	2043	2.49	6.84	
21	ZZZZZ	ZZZZZ	02/03/10	2055	2.49	6.84	
22	AR166003	WAR100203-60	02/03/10	2108	2.49	6.84	
23	PIBLK04	WAR091130-99	02/03/10	2120	2.49	6.84	
24	ZZZZZ	ZZZZZ	02/03/10	2133	2.49	6.84	
25	ZZZZZ	ZZZZZ	02/03/10	2145	2.49	6.84	
26	ZZZZZ	ZZZZZ	02/03/10	2157	2.49	6.84	
27	AR166004	WAR100203-60	02/03/10	2210	2.49	6.84	
28	PIBLK05	WAR091130-99	02/03/10	2222	2.49	6.84	
29	ZZZZZ	ZZZZZ	02/03/10	2234	2.49	6.84	
30	ZZZZZ	ZZZZZ	02/03/10	2247	2.49	6.84	
31	ZZZZZ	ZZZZZ	02/03/10	2259			
32	ZZZZZ	ZZZZZ	02/03/10	2312			

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.: 10-1545

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.25				DCB: 6.25			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#	#
01	PIBLK01	WAR100105-99	02/12/10	0649	2.25	6.24	
02	AR166001	WAR100203-60	02/12/10	0702	2.25	6.24	
03	AR125401	WAR100201-54	02/12/10	0714			
04	AR124201	WAR091217-42	02/12/10	0726			
05	AR124801	WAR091217-48	02/12/10	0738			
06	AR123201	WAR100104-32	02/12/10	0751			
07	AR122101	WAR100104-21	02/12/10	0803			
08	AR126201	WAR100104-62	02/12/10	0816			
09	AR126801	WAR100107-68	02/12/10	0828			
10	DDTANALOGSTD	WAR091219-DD	02/12/10	0840			
11	PIBLK02	WAR100105-99	02/12/10	0853	2.25	6.25	
12	PBLK01	1202040223	02/12/10	0905	2.25	6.25	
13	PBLK01LCS	1202040224	02/12/10	0918	2.25	6.25	
14	RE15-10-8222	246055005	02/12/10	0930	2.26	6.25	
15	ZZZZZ	ZZZZZ	02/12/10	0942	2.26	6.25	
16	ZZZZZ	ZZZZZ	02/12/10	0955	2.25	6.25	
17	ZZZZZ	ZZZZZ	02/12/10	1007	2.25	6.24	
18	ZZZZZ	ZZZZZ	02/12/10	1019	2.25	6.25	
19	ZZZZZ	ZZZZZ	02/12/10	1032	2.25	6.25	
20	ZZZZZ	ZZZZZ	02/12/10	1044	2.25	6.25	
21	AR166002	WAR100203-60	02/12/10	1056	2.25	6.25	
22	PIBLK03	WAR100105-99	02/12/10	1109	2.26	6.25	
23	ZZZZZ	ZZZZZ	02/12/10	1121	2.25	6.25	
24	ZZZZZ	ZZZZZ	02/12/10	1134	2.26	6.25	
25	ZZZZZ	ZZZZZ	02/12/10	1146	2.25	6.25	
26	ZZZZZ	ZZZZZ	02/12/10	1158	2.25	6.24	
27	ZZZZZ	ZZZZZ	02/12/10	1211	2.25	6.25	
28	ZZZZZ	ZZZZZ	02/12/10	1223	2.25	6.25	
29	ZZZZZ	ZZZZZ	02/12/10	1235	2.25	6.25	
30	ZZZZZ	ZZZZZ	02/12/10	1248	2.25	6.25	
31	ZZZZZ	ZZZZZ	02/12/10	1300	2.25	6.25	
32	ZZZZZ	ZZZZZ	02/12/10	1313	2.25	6.25	

S1 = 4cmx  
DCB = Decachlorobiphenyl

QC LIMITS  
(+/- 0.03 MINUTES)  
(+/- 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.: 10-1545

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/03/10 02/03/10

Instrument ID: ECD8A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.49			DCB: 6.84		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT #	DCB RT #
01	PIBLK01	WAR100105-99	02/12/10 0649	2.48	6.83
02	AR166001	WAR100203-60	02/12/10 0702	2.49	6.84
03	AR125401	WAR100201-54	02/12/10 0714		
04	AR124201	WAR091217-42	02/12/10 0726		
05	AR124801	WAR091217-48	02/12/10 0738		
06	AR123201	WAR100104-32	02/12/10 0751		
07	AR122101	WAR100104-21	02/12/10 0803		
08	AR126201	WAR100104-62	02/12/10 0816		
09	AR126801	WAR100107-68	02/12/10 0828		
10	DDTANALOGSTD	WAR091219-DD	02/12/10 0840		
11	PIBLK02	WAR100105-99	02/12/10 0853	2.49	6.84
12	PBLK01	1202040223	02/12/10 0905	2.49	6.84
13	PBLK01LCS	1202040224	02/12/10 0918	2.49	6.84
14	RE15-10-8222	246055005	02/12/10 0930	2.49	6.84
15	ZZZZZ	ZZZZZ	02/12/10 0942	2.49	6.84
16	ZZZZZ	ZZZZZ	02/12/10 0955	2.49	6.84
17	ZZZZZ	ZZZZZ	02/12/10 1007	2.49	6.84
18	ZZZZZ	ZZZZZ	02/12/10 1019	2.49	6.84
19	ZZZZZ	ZZZZZ	02/12/10 1032	2.49	6.84
20	ZZZZZ	ZZZZZ	02/12/10 1044	2.49	6.84
21	AR166002	WAR100203-60	02/12/10 1056	2.49	6.84
22	PIBLK03	WAR100105-99	02/12/10 1109	2.49	6.84
23	ZZZZZ	ZZZZZ	02/12/10 1121	2.49	6.84
24	ZZZZZ	ZZZZZ	02/12/10 1134	2.49	6.84
25	ZZZZZ	ZZZZZ	02/12/10 1146	2.49	6.84
26	ZZZZZ	ZZZZZ	02/12/10 1158	2.49	6.84
27	ZZZZZ	ZZZZZ	02/12/10 1211	2.49	6.84
28	ZZZZZ	ZZZZZ	02/12/10 1223	2.49	6.84
29	ZZZZZ	ZZZZZ	02/12/10 1235	2.49	6.84
30	ZZZZZ	ZZZZZ	02/12/10 1248	2.49	6.84
31	ZZZZZ	ZZZZZ	02/12/10 1300	2.49	6.84
32	ZZZZZ	ZZZZZ	02/12/10 1313	2.49	6.84

S1 = 4cmx  
 DCB = Decachlorobiphenyl

QC LIMITS  
 (+/- 0.03 MINUTES)  
 (+/- 0.03 MINUTES)

# Column used to flag retention time values with an asterisk.  
 \* Values outside of QC limits.

## Identification Summary

Page 1 of 1

SDG Number: 10-1545

Client ID: LCS for batch 951941

Lab Sample ID: 1202040224

Data File: 013f1301.d

Data File: 013b1301.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 12-FEB-10 09:18

Analyzed: 12-FEB-10 09:18

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							.119
Column 1	1	2.81	2.78 – 2.84	19.3		ug/kg	
	2	3.16	3.13 – 3.19	18.6		ug/kg	
	3	3.31	3.28 – 3.34	17.8		ug/kg	
	4	3.4	3.37 – 3.43	18.8		ug/kg	
	5	3.56	3.53 – 3.59	18.4		ug/kg	
					18.6		
Column 2	1	3.56	3.53 – 3.59	18.3		ug/kg	
	2	3.66	3.63 – 3.69	19.4		ug/kg	
	3	3.73	3.7 – 3.76	17.8		ug/kg	
	4	3.81	3.78 – 3.84	18.6		ug/kg	
	5	4.01	3.98 – 4.04	18.7		ug/kg	
					18.6		
Aroclor-1260							8.76
Column 1	1	4.44	4.4 – 4.46	19.6		ug/kg	
	2	4.63	4.6 – 4.66	20		ug/kg	
	3	4.91	4.88 – 4.94	20.8		ug/kg	
	4	5.08	5.05 – 5.11	21.1		ug/kg	
	5	5.49	5.46 – 5.52	22.7		ug/kg	
					20.8		
Column 2	1	4.92	4.89 – 4.95	21.9		ug/kg	
	2	5.07	5.04 – 5.1	22.5		ug/kg	
	3	5.38	5.35 – 5.41	23		ug/kg	
	4	5.59	5.56 – 5.62	22.6		ug/kg	
	5	6.02	5.99 – 6.05	23.7		ug/kg	
					22.8		

## Identification Summary

Page 1 of 1

SDG Number: 10-1545

Client ID: RE15-10-8222

Lab Sample ID: 246055005

Data File: 014f1401.d

Data File: 014b1401.d

Inst: ECD8A.I\_1

Inst: ECD8A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 12-FEB-10 09:30

Analyzed: 12-FEB-10 09:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							2.3
Column 1	1	3.84	3.81 - 3.87	46.6		ug/kg	
	2	4.02	3.99 - 4.05	39.6		ug/kg	
	3	4.22	4.19 - 4.25	34.9		ug/kg	
	4	4.31	4.28 - 4.34	23.2		ug/kg	
	5	4.5	4.47 - 4.53	18		ug/kg	
					32.5		
Column 2	1	4.31	4.28 - 4.34	47.5		ug/kg	
	2	4.45	4.42 - 4.48	39.3		ug/kg	
	3	4.78	4.75 - 4.81	31.1		ug/kg	
	4	4.94	4.91 - 4.97	17.2		ug/kg	
	5	5.07	5.04 - 5.1	31.1		ug/kg	
					33.2		
Aroclor-1260							4.67
Column 1	1	4.43	4.4 - 4.46	17.9		ug/kg	
	2	4.63	4.6 - 4.66	20		ug/kg	
	3	4.91	4.88 - 4.94	3.21		ug/kg	
	4	5.08	5.05 - 5.11	3.63		ug/kg	
	5	5.49	5.46 - 5.52	4.66		ug/kg	
					9.87		
Column 2	1	4.92	4.89 - 4.95	22.2		ug/kg	
	2	5.07	5.04 - 5.1	16		ug/kg	
	3	5.39	5.35 - 5.41	6.98		ug/kg	
	4	5.59	5.56 - 5.62	3.52		ug/kg	
	5	6.03	5.99 - 6.05	3.04		ug/kg	
					10.3		



# QUALITY CONTROL DATA

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

Page 1 of 1

<b>SDG Number:</b>	<b>10-1545</b>	<b>Matrix:</b>	<b>SOIL</b>
<b>Lab Sample ID:</b>	<b>1202040223</b>		
<b>Client Sample:</b>	<b>QC for batch 951941</b>	<b>Project:</b>	<b>QC</b>
<b>Client ID:</b>	<b>MB for batch 951941</b>	<b>SOP Ref:</b>	<b>GL-OA-E-040</b>
<b>Batch ID:</b>	<b>951946</b>	<b>Dilution:</b>	<b>1</b>
<b>Run Date:</b>	<b>02/12/2010 09:05</b>	<b>Inj. Vol:</b>	<b>1 uL</b>
<b>Prep Date:</b>	<b>02/11/2010 22:01</b>	<b>Final Volume:</b>	<b>1 mL</b>
<b>Data File:</b>	<b>012f1201-1.d</b>	<b>Level:</b>	<b>LOW</b>
	<b>012b1201-1.d</b>		
	<b>2 CLP2</b>		

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

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/021210.b/012f1201-1.d  
Lab Smp Id: 1202040223 Client Smp ID: PBLK01  
Inj Date : 12-FEB-2010 09:05  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202040223|1|  
Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
Meth Date : 15-Feb-2010 06:50 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 12 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1545.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vi \* Ws \* (100 - M)/100) \* CpndVariable

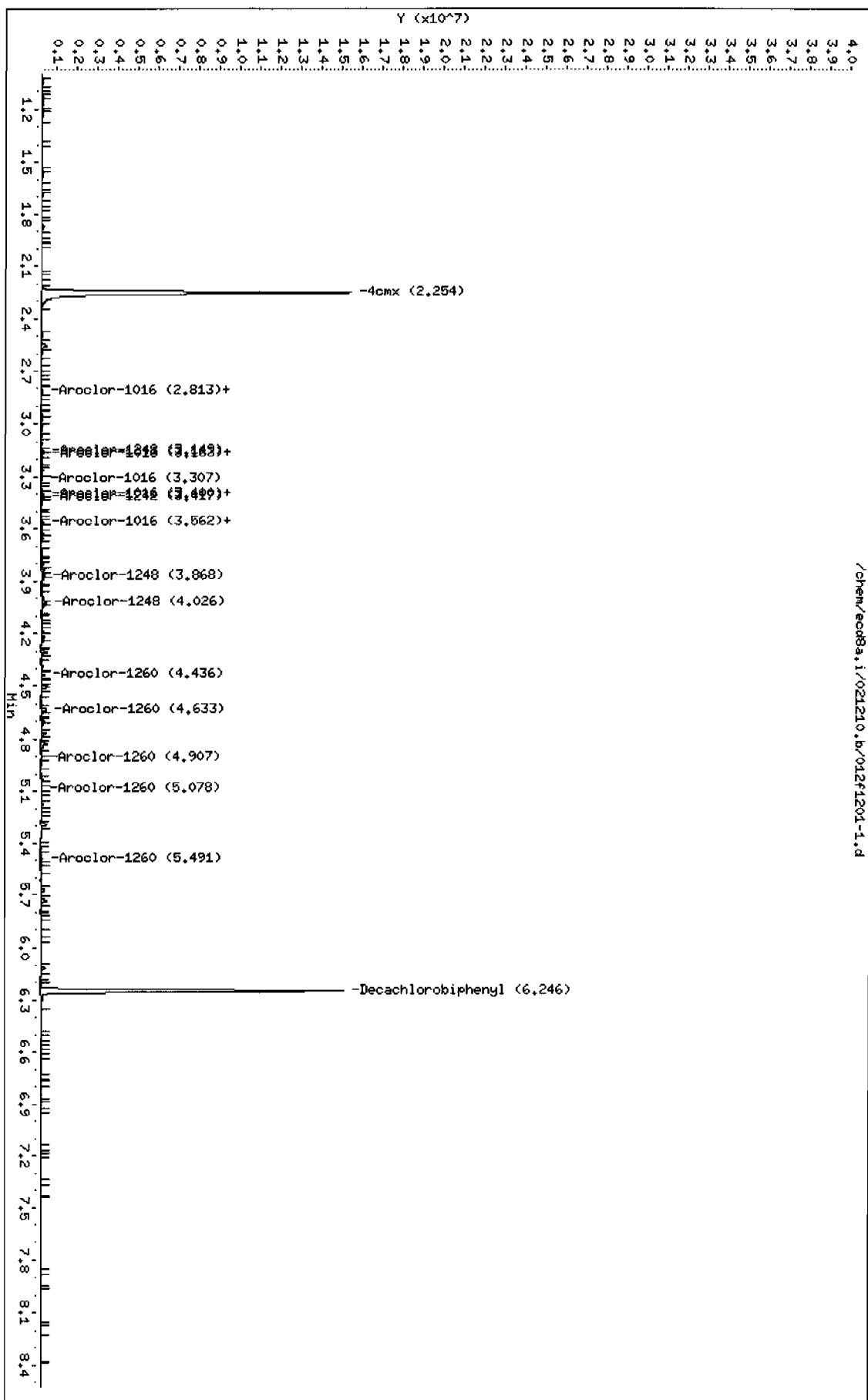
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
11	2.252	0.002	16792727	127.793	4.2 80.00- 120.00	100.00		
-----								
\$ 11 4cmx					CAS #: 877-09-8			
2.254	2.252	0.002	16792727	127.793	4.2 80.00- 120.00	100.00		
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.246	6.245	0.001	13359652	133.621	4.4 80.00- 120.00	100.00		
-----								

Data File: /chem/ecd8a.i/021210.b/012f1201-1.d  
Date : 12-FEB-2010 09:05  
Client ID: PBLK01  
Sample Info: 1120204022311  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecd8a.i  
Operator: JROC  
Column diameter: 0.25



Data File: /chem/ecd8a.i/021210.b/012b1201-1.d  
 Report Date: 18-Feb-2010 10:46

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/012b1201-1.d  
 Lab Smp Id: 1202040223 Client Smp ID: PBLK01  
 Inj Date : 12-FEB-2010 09:05  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202040223|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MB|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Meth Date : 15-Feb-2010 06:49 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
 Als bottle: 12 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1545.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	0.00000	% 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		
2.487	2.486	0.001	11165707 128.573	4.3	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
6.837	6.836	0.001	9020376 139.109	4.6	80.00- 120.00	100.00
-----						

Data File: /chem/eodba.i/021210.b/012b1201-1.d

Date: 12-FEB-2010 09:05

Client ID: PBLK01

Sample Info: 1120204022311

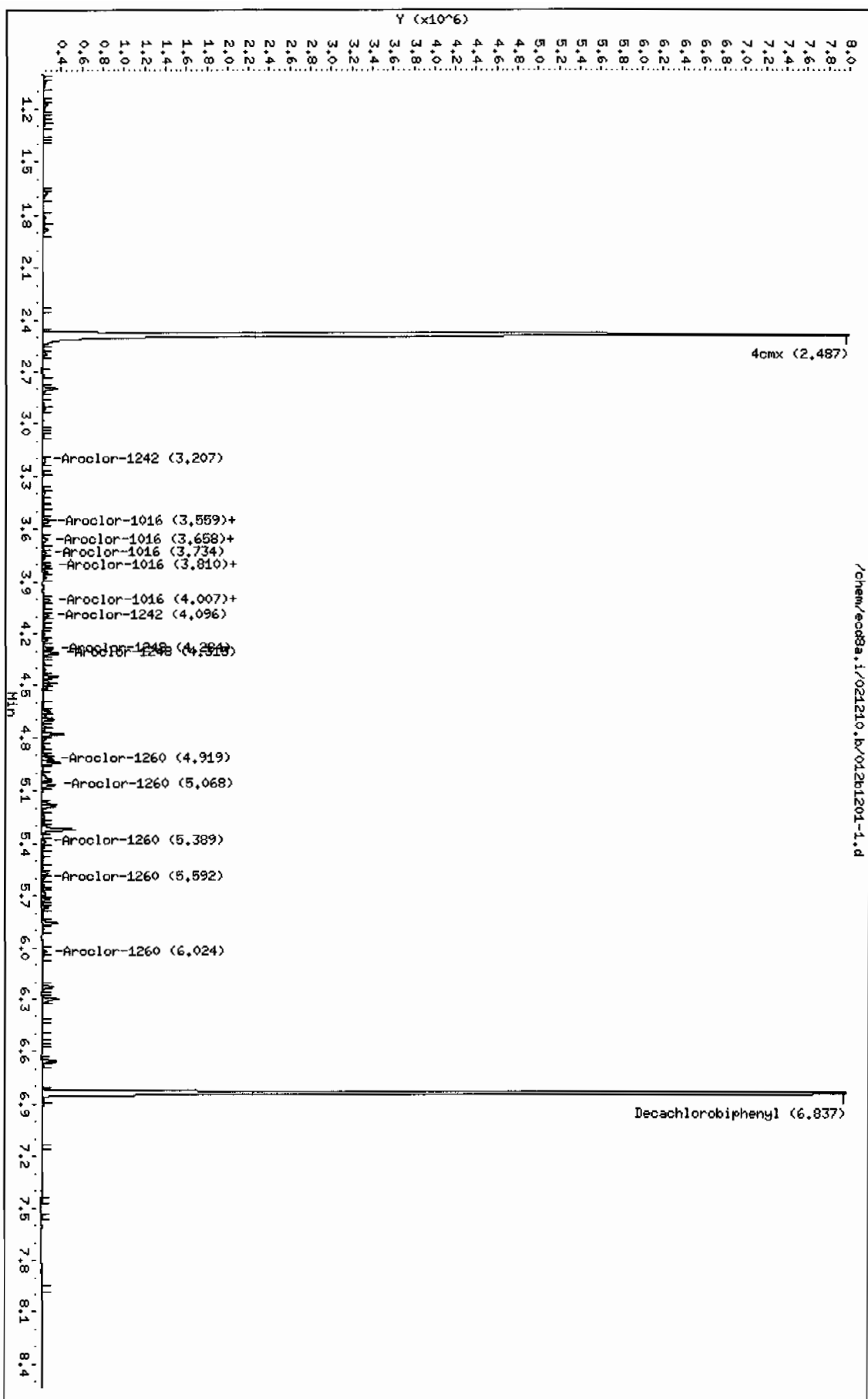
Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: eodba.i

Operator: JQC

Column diameter: 0.25



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

Page 1 of 1

SDG Number: 10-1545

Lab Sample ID: 1202040224

Client Sample: QC for batch 951941

Client ID: LCS for batch 951941

Batch ID: 951946

Run Date: 02/12/2010 09:18

Prep Date: 02/11/2010 22:01

Data File: 013f1301-1.d

013b1301-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD8A.I

Analyst: JAOC

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

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		18.6	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		22.7	ug/kg	1.11	3.33	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/013f1301-1.d

Lab Smp Id: 1202040224

Client Smp ID: PBLK01LCS

Inj Date : 12-FEB-2010 09:18

Operator : JAOC

Inst ID: ecd8a.i

Smp Info : |1202040224|1|

Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|LCS|

Comment :

Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m

Meth Date : 12-Feb-2010 11:13 jen01212 Quant Type: ESTD

Cal Date : 03-FEB-2010 17:25

Cal File: 036f3601.d

Als bottle: 13

QC Sample: LCS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1545.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	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8							
\$ 11 4cmx							
2.254	2.252	0.002	15865945	120.740	4.0	80.00- 120.00	100.00
CAS #: 2051-24-3							
\$ 12 Decachlorobiphenyl							
6.245	6.245	0.000	12800089	128.025	4.3	80.00- 120.00	100.00
CAS #: 12674-11-2							
1 Aroclor-1016							
2.812	2.811	0.001	2707124	580.352	19.3	80.00- 120.00	100.00
3.164	3.163	0.001	3212095	556.729	18.6	98.17- 138.17	118.65
3.307	3.306	0.001	1314074	535.439	17.8	30.98- 70.98	48.54
3.399	3.399	0.000	1238665	563.496	18.8	25.80- 65.80	45.76

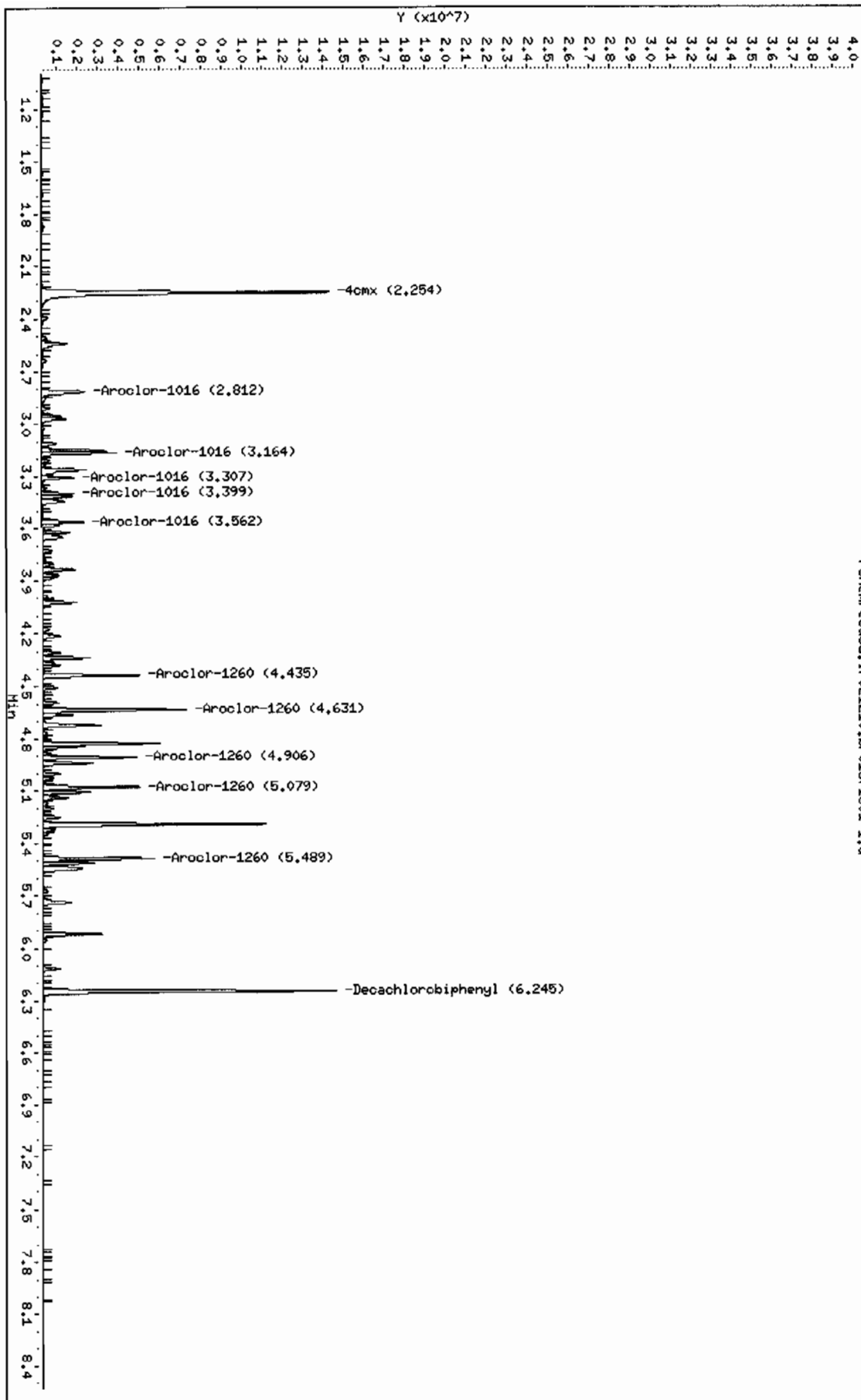


CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
3.562	3.561	0.001	1733760	551.774	18.4	45.68-	85.68	64.04	
Average of Peak Concentrations =					18.6				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.435	4.435	0.000	3969225	588.996	19.6	80.00-	120.00	100.00	
4.631	4.631	0.000	6164661	600.856	20.0	131.83-	171.83	155.31	
4.906	4.906	0.000	3821768	623.468	20.8	72.34-	112.34	96.28	
5.079	5.078	0.001	4049290	634.102	21.1	79.25-	119.25	102.02	
5.489	5.490	-0.001	4662565	679.698	22.6	91.49-	131.49	117.47	
Average of Peak Concentrations =					20.8				

Data File: /chem/ecod8a.i/021210.b/013F1301-1.d  
Date: 12-FEB-2010 09:18  
Client ID: PRK01LCS  
Sample Info: 1120204022411  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JADC  
Column diameter: 0.25

/chem/ecod8a.i/021210.b/013F1301-1.d



Data File: /chem/ecd8a.i/021210.b/013b1301-1.d  
 Report Date: 12-Feb-2010 13:30

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/021210.b/013b1301-1.d  
 Lab Smp Id: 1202040224 Client Smp ID: PBLK01LCS  
 Inj Date : 12-FEB-2010 09:18  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202040224|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|LCS|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Meth Date : 12-Feb-2010 11:06 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
 Als bottle: 13 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1545.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

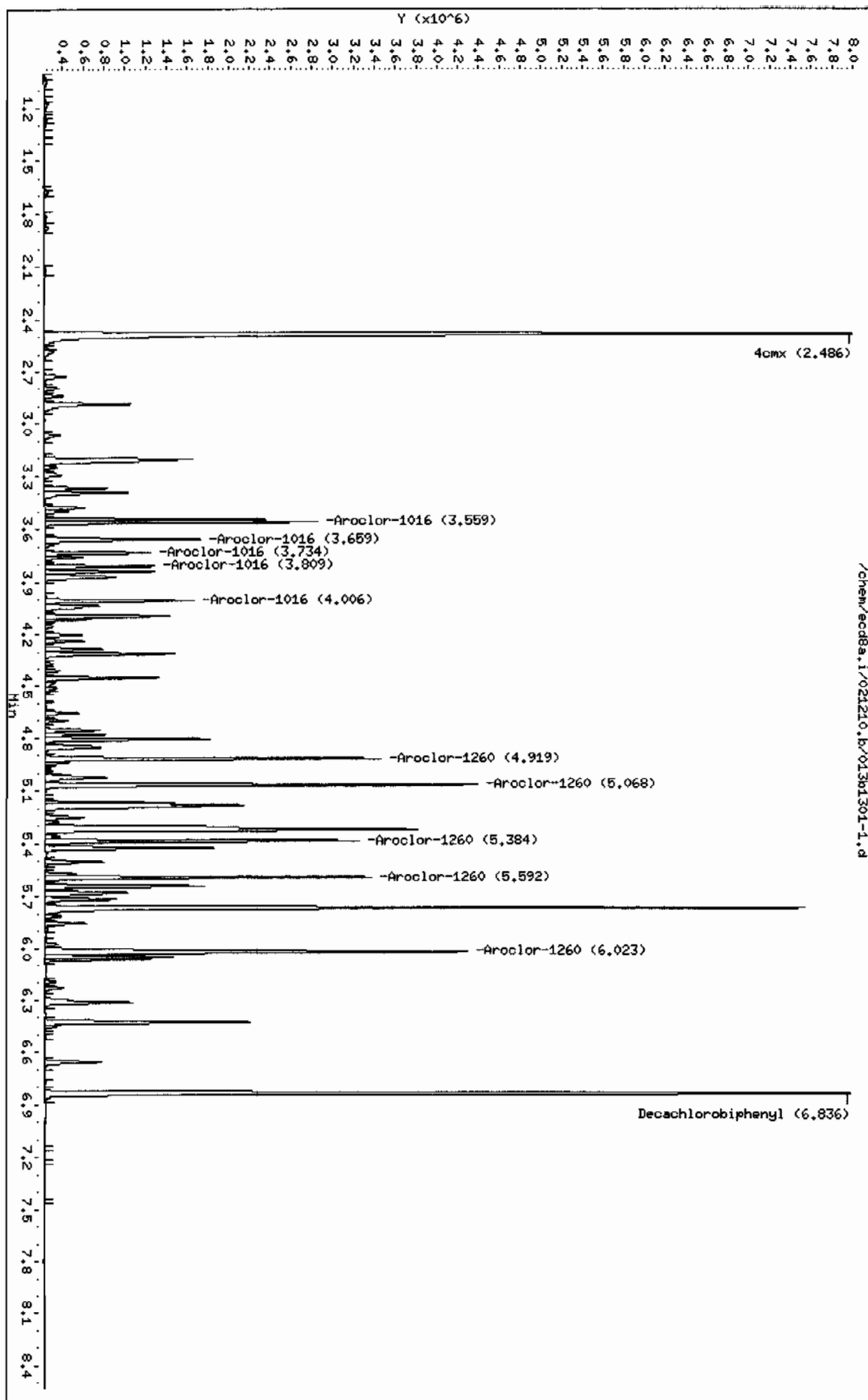
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8 2.486 2.486 0.000 10544249 121.417 4.0 80.00- 120.00 100.00							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3 6.836 6.836 0.000 8619569 132.928 4.4 80.00- 120.00 100.00							
1 Aroclor-1016 CAS #: 12674-11-2 3.559 3.558 0.001 2069472 549.456 18.3 80.00- 120.00 100.00 3.659 3.658 0.001 1448200 580.574 19.4 47.75- 87.75 69.98 3.734 3.734 0.000 810130 534.566 17.8 19.55- 59.55 39.15 3.809 3.809 0.000 835367 559.461 18.6 18.40- 58.40 40.37							

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
4.006	4.006	0.000	1140786	560.413	18.7	33.91-	73.91	55.12
Average of Peak Concentrations =					18.6			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.919	4.919	0.000	2684257	657.195	21.9	80.00-	120.00	100.00
5.068	5.068	0.000	3352987	674.794	22.5	101.70-	141.70	124.91
5.384	5.384	0.000	2616685	690.706	23.0	73.49-	113.49	97.48
5.592	5.591	0.001	2686088	679.488	22.6	76.84-	116.84	100.07
6.023	6.023	0.000	4430734	711.486	23.7	135.34-	175.34	165.06
Average of Peak Concentrations =					22.7			

Data File: /chem/ec08a.i/021210.b/01301301-1.d  
 Date: 12-FEB-2010 09:18  
 Client ID: PBLK01LCS  
 Sample Info: 1120204022411  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: ec08a.i  
 Operator: JNOC  
 Column diameter: 0.25



# MISCELLANEOUS DATA

# GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 02/04/2010 METHOD: ECD8-F-8082-020310a.m OPERATOR: JAOC REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699  
ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography  
Sequence Number: /chem/ecd8a.i/020310a.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR091130-99 01	JAOC	03-FEB-2010 10:12		020310a	1.0l	CLEAN	
002f0201.d	WAR100203-01 60	JAOC	03-FEB-2010 10:24		020310a	1.0l	1660 LEVEL 1	
003f0301.d	WAR100203-02 60	JAOC	03-FEB-2010 10:37		020310a	1.0l	1660 LEVEL 2	
004f0401.d	WAR100203-03 60	JAOC	03-FEB-2010 10:49		020310a	1.0l	1660 LEVEL 3	
005f0501.d	WAR100203-04 60	JAOC	03-FEB-2010 11:01		020310a	1.0l	1660 LEVEL 4	
006f0601.d	WAR100104-01 60	JAOC	03-FEB-2010 11:14		020310a	1.0l	1660 LEVEL 5	
007f0701.d	WAR100203-60 01	JAOC	03-FEB-2010 11:26		020310a	1.0l	PASSES BOTH COLUMNS	
008f0801.d	WAR100203-05 54	JAOC	03-FEB-2010 11:39		020310a	1.0l	1254 LEVEL 1	
009f0901.d	WAR100203-06 54	JAOC	03-FEB-2010 11:51		020310a	1.0l	1254 LEVEL 2	
010f1001.d	WAR100203-07 54	JAOC	03-FEB-2010 12:03		020310a	1.0l	1254 LEVEL 3	
011f1101.d	WAR100203-08 54	JAOC	03-FEB-2010 12:16		020310a	1.0l	1254 LEVEL 4	
012f1201.d	WAR091027-01 54	JAOC	03-FEB-2010 12:28		020310a	1.0l	1254 LEVEL 5	
013f1301.d	WAR100201-54	JAOC	03-FEB-2010 12:40		020310a	1.0l	PASSES BOTH COLUMNS	
014f1401.d	WAR100203-09 42	JAOC	03-FEB-2010 12:53		020310a	1.0l	1242 LEVEL 1	
015f1501.d	WAR100203-10 42	JAOC	03-FEB-2010 13:05		020310a	1.0l	1242 LEVEL 2	

Instrument Batch: /chem/ecd8a.i/020310a.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR100203-11 42	JAOC	03-FEB-2010 13:18		020310a	1.0l	1242 LEVEL 3	
017f1701.d	WAR100203-12 42	JAOC	03-FEB-2010 13:30		020310a	1.0l	1242 LEVEL 4	

1018f1901.d	IAR091111-01 42	IJAO	03-FEB-2010 13:42		020310a	1.0		1242 LEVEL 5	
1019f1901.d	IWAR091217-42	IJAO	03-FEB-2010 13:55		020310a	1.0		PASSES BOTH COLUMNS	
1020f2001.d	IWAR100203-13 48	IJAO	03-FEB-2010 14:07		020310a	1.0		1248 LEVEL 1	
1021f2101.d	IWAR100203-14 48	IJAO	03-FEB-2010 14:19		020310a	1.0		1248 LEVEL 2	
1022f2201.d	IWAR020203-15 48	IJAO	03-FEB-2010 14:32		020310a	1.0		1248 LEVEL 3	
1023f2301.d	IWAR100203-16 48	IJAO	03-FEB-2010 14:44		020310a	1.0		1248 LEVEL 4	
024f2401.d	IAR091027-02 48	IJAO	03-FEB-2010 14:57		020310a	1.0		1248 LEVEL 5	
1025f2501.d	IWAR091217-48	IJAO	03-FEB-2010 15:09		020310a	1.0		DUSE RE-RUN	
1026f2601.d	IWAR100104-32	IJAO	03-FEB-2010 15:21		020310a	1.0		PATTERN ONLY	
1027f2701.d	IWAR100104-21	IJAO	03-FEB-2010 15:34		020310a	1.0		PATTERN ONLY	
1028f2801.d	IWAR100203-17 62	IJAO	03-FEB-2010 15:46		020310a	1.0		1262 LEVEL 1	
1029f2901.d	IWAR100203-18 62	IJAO	03-FEB-2010 15:58		020310a	1.0		1262 LEVEL 2	
1030f3001.d	IWAR100203-19 62	IJAO	03-FEB-2010 16:11		020310a	1.0		1262 LEVEL 3	
1031f3101.d	IWAR100203-20 62	IJAO	03-FEB-2010 16:23		020310a	1.0		1262 LEVEL 4	
1032f3201.d	IAR100104-04 62	IJAO	03-FEB-2010 16:36		020310a	1.0		1262 LEVEL 5	
1033f3301.d	IWAR100104-62	IJAO	03-FEB-2010 16:48		020310a	1.0		PASSES BOTH COLUMNS	
1034f3401.d	IWAR091107-68	IJAO	03-FEB-2010 17:00		020310a	1.0		PATTERN ONLY	
1035f3501.d	IWAR091217-48	IJAO	03-FEB-2010 17:13		020310a	1.0		PASSES BOTH COLUMNS	

Instrument Batch: /chem/ecd8a.i/020310a.b

Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	IWAR091219-DDT	IJAO	03-FEB-2010 17:25		020310a	1.0		DDT
1037f3701.d	IWAR091130-99 C2	IJAO	03-FEB-2010 17:38		020310a	1.0		CLEAN
1038f3801.d	1202026314	IJAO	03-FEB-2010 17:50	946047	2010AR1262MDL-L	1.0	QC A	UPLOAD BOTH, USE BOTH
1039f3901.d	1202026315	IJAO	03-FEB-2010 18:02	946047	2010AR1262MDL-L	1.0	QC A	UPLOAD BOTH, USE BOTH
1040f4001.d	1243859001	IJAO	03-FEB-2010 18:15	946047	2010AR1262MDL-L	1.0	QCQA	UPLOAD BOTH, USE BOTH
1041f4101.d	1243859002	IJAO	03-FEB-2010 18:27	946047	2010AR1262MDL-L	1.0	QCQA	UPLOAD BOTH, USE BOTH





1067f6701.d	WARI00203-60 05	IJAOC	03-FEB-2010 23:49	I	.020310a	I	1.0	I	PASSES BOTH COLUMNS
1068f6801.d	WAR091130-99 06	IJAOC	04-FEB-2010 00:00	I	.020310a	I	1.0	I	CLEAN

## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD8

DATE: 02/15/2010 METHOD: ECD8-F-8082-020310a.m OPERATOR: JAOC 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 Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP GL-OA-E-040

EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography

Sequence Number: /chem/ecd8a.i/021210.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	IWAR100105-99 01	JAOC	12-FEB-2010 06:49		021210	1.0	CLEAN	
002f0201.d	IWAR100203-60 01	JAOC	12-FEB-2010 07:02		021210	1.0	PASSES BOTH COLUMNS	
003f0301.d	IWAR100201-54	JAOC	12-FEB-2010 07:14		021210	1.0	PASSES BOTH COLUMNS	
004f0401.d	IWAR091217-42	JAOC	12-FEB-2010 07:26		021210	1.0	PASSES BOTH COLUMNS	
005f0501.d	IWAR091217-48	JAOC	12-FEB-2010 07:38		021210	1.0	PASSES BOTH COLUMNS	
006f0601.d	IWAR100104-32	JAOC	12-FEB-2010 07:51		021210	1.0	PATTERN ONLY	
007f0701.d	IWAR100104-21	JAOC	12-FEB-2010 08:03		021210	1.0	PATTERN ONLY	
008f0801.d	IWAR100104-62	JAOC	12-FEB-2010 08:16		021210	1.0	PATTERN ONLY	
009f0901.d	IWAR100107-68	JAOC	12-FEB-2010 08:28		021210	1.0	PATTERN ONLY	
010f1001.d	IWAR091219-DDT	JAOC	12-FEB-2010 08:40		021210	1.0	DDT	
011f1101.d	IWAR100105-99 02	JAOC	12-FEB-2010 08:53		021210	1.0	CLEAN	
012f1201.d	I202040223	JAOC	12-FEB-2010 09:05	951946	10-1543	1.0	QC A	UPLOAD BOTH, USE HIGHER
013f1301.d	I202040224	JAOC	12-FEB-2010 09:18	951946	10-1543	1.0	QC A	UPLOAD BOTH, USE HIGHER
014f1401.d	I246055005	JAOC	12-FEB-2010 09:30	951946	10-1545	1.0	LANL	UPLOAD BOTH, USE HIGHER
015f1501.d	I246066001	JAOC	12-FEB-2010 09:42	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER

Instrument Batch: /chem/ecd8a.i/021210.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	I246066002	JAOC	12-FEB-2010 09:55	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER
017f1701.d	I246066003	JAOC	12-FEB-2010 10:07	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER

1018F1801.d	1246066004	IJAOC	12-FEB-2010 10:19	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1019F1901.d	1246066005	IJAOC	12-FEB-2010 10:32	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1020F2001.d	1246066006	IJAOC	12-FEB-2010 10:44	951946	10-1543	1.0	LANL	UPLOAD BOTH, USE HIGHER
1021F2101.d	IWAR00203-60 02	IJAOC	12-FEB-2010 10:56		1021210	1.0		PASSES BOTH COLUMNS
1022F2201.d	IWAR100105-99 03	IJAOC	12-FEB-2010 11:09		1021210	1.0		CLEAN
1023F2301.d	1246318001	IJAOC	12-FEB-2010 11:21	951946	10-1564	1.0	LANL	UPLOAD BOTH, USE HIGHER
1024F2401.d	1246318002	IJAOC	12-FEB-2010 11:34	951946	10-1564	1.0	LANL	UPLOAD BOTH, USE HIGHER
1025F2501.d	246318003	IJAOC	12-FEB-2010 11:46	951946	10-1564	1.0	LANL	UPLOAD BOTH, USE HIGHER
1026F2601.d	1246330008	IJAOC	12-FEB-2010 11:58	951946	10-1567	1.0	LANL	UPLOAD BOTH, USE HIGHER
1027F2701.d	1246330009	IJAOC	12-FEB-2010 12:11	951946	10-1567	1.0	LANL	UPLOAD BOTH, USE HIGHER
1028F2801.d	1246463002	IJAOC	12-FEB-2010 12:23	951946	10-1634	1.0	LANL	UPLOAD BOTH, USE HIGHER
1029F2901.d	1246463003	IJAOC	12-FEB-2010 12:35	951946	10-1634	5.0	LANL	DOSE, NEEDS A 5X
1030F3001.d	1246463004	IJAOC	12-FEB-2010 12:48	951946	10-1634	1.0	LANL	UPLOAD BOTH, USE HIGHER
1031F3101.d	1246463005	IJAOC	12-FEB-2010 13:00	951946	10-1634	5.0	LANL	UPLOAD BOTH, USE HIGHER
1032F3201.d	1246477002	IJAOC	12-FEB-2010 13:13	951946	10-1647	1.0	LANL	DOSE, NEEDS A 10X
1033F3301.d	IWAR100203-60 03	IJAOC	12-FEB-2010 13:25		1021210	1.0		PASSES BOTH COLUMNS
1034F3401.d	IWAR100105-99 04	IJAOC	12-FEB-2010 13:37		1021210	1.0		CLEAN
1035F3501.d	1246575003	IJAOC	12-FEB-2010 13:50	951946	10-1675	1.0	LANL	UPLOAD BOTH, USE HIGHER
1036F3601.d	1202040225	IJAOC	12-FEB-2010 14:02	951946	10-1675	1.0	QC A	UPLOAD BOTH, USE HIGHER
1037F3701.d	1202040226	IJAOC	12-FEB-2010 14:14	951946	10-1675	1.0	QC A	UPLOAD BOTH, USE HIGHER
1038F3801.d	1246575004	IJAOC	12-FEB-2010 14:27	951946	10-1675	1.0	LANL	UPLOAD BOTH, USE HIGHER
1039F3901.d	1246463003	IJAOC	12-FEB-2010 14:39	951946	10-1634	25.0	LANL	UPLOAD BOTH, USE HIGHER
1040F4001.d	1246477002	IJAOC	12-FEB-2010 14:51	951946	10-1647	10.0	LANL	UPLOAD BOTH, USE HIGHER
1041F4101.d	IWAR100203-60 04	IJAOC	12-FEB-2010 15:04		1021210	1.0		PASSES BOTH COLUMNS

Instrument Batch: /chem/ecd8a.i/021210.b

Page: 2



Data File: /chem/ecd8a.i/021210.b/036b3601.d  
 Report Date: 15-Feb-2010 11:10

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/021210.b/036b3601.d  
 Lab Smp Id: 1202040225 Client Smp ID: WST15-10-11621MS  
 Inj Date : 12-FEB-2010 14:02  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202040225|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Meth Date : 15-Feb-2010 06:49 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
 Als bottle: 36 QC Sample: MS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1675.sub  
 Target Version: 3.50 Sample Matrix: Soil

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	30.07000	Weight of sample extracted (g)
M	6.57170	% Moisture

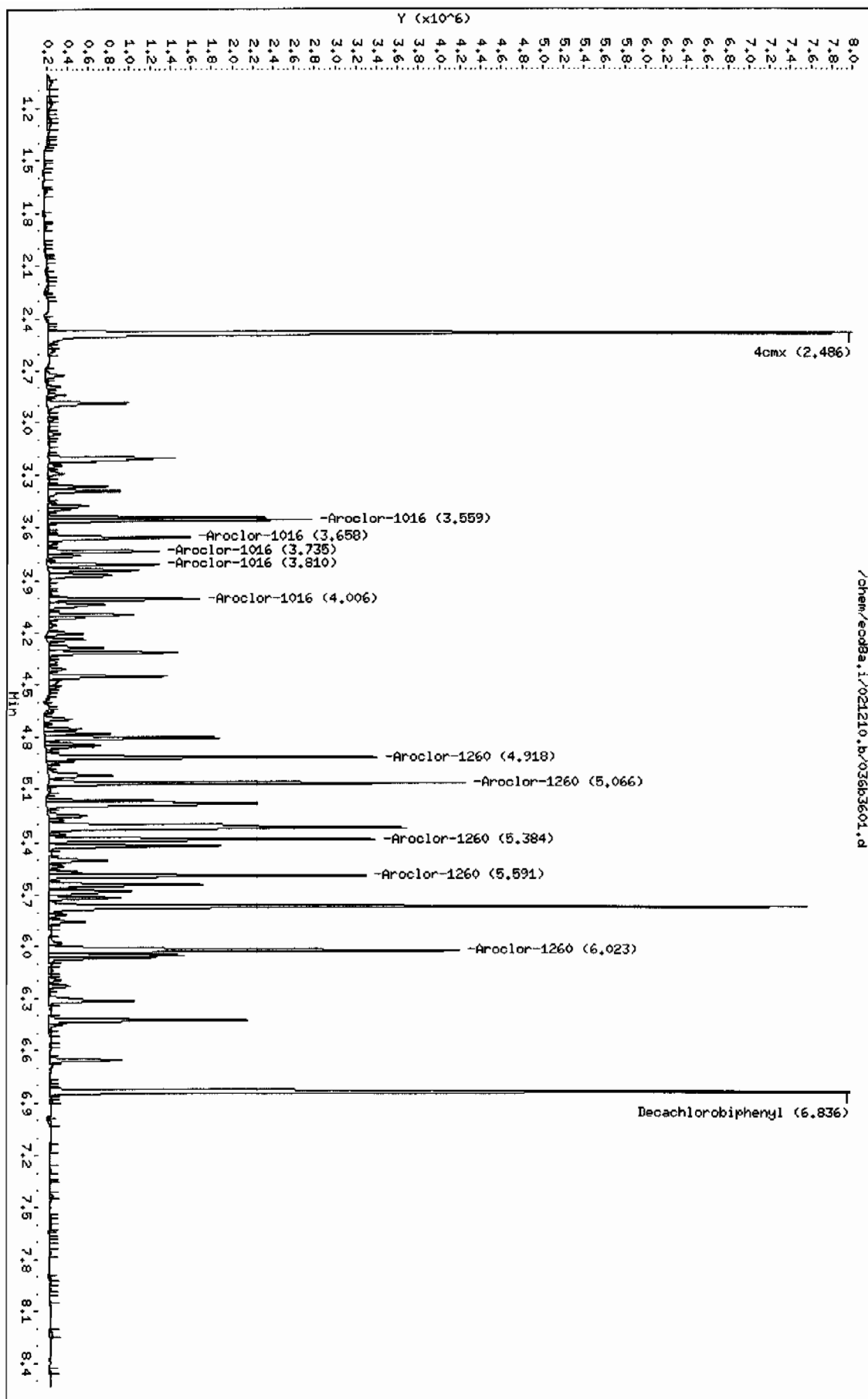
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx				CAS #: 877-09-8			
2.486	2.486	0.000	7818097 90.0253	3.2	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.836	6.836	0.000	8399553 129.535	4.6	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.559	3.558	0.001	2136861 567.348	20.2	80.00- 120.00	100.00	
3.658	3.658	0.000	1333132 534.444	19.0	45.12- 85.12	62.39	
3.735	3.734	0.001	838835 553.507	19.7	19.91- 59.91	39.26	
3.810	3.809	0.001	886981 594.028	21.1	18.22- 58.22	41.51	
4.006	4.006	0.000	1183238 581.267	20.7	33.52- 73.52	55.37	
Average of Peak Concentrations =				20.1			
-----							

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
-----	-----	-----	-----	-----	-----	-----	-----	-----
7 Aroclor-1260					CAS #: 11096-82-5			
4.918	4.919	-0.001	2738229	670.409	23.9	80.00-	120.00	100.00
5.066	5.068	-0.002	3114317	626.762	22.3	102.34-	142.34	113.73
5.384	5.384	0.000	2651239	699.827	24.9	74.38-	114.38	96.82
5.591	5.591	0.000	2645273	669.163	23.8	77.60-	117.60	96.61
6.023	6.023	0.000	4408302	707.884	25.2	139.44-	179.44	160.99
Average of Peak Concentrations =					24.0			

Data File: /chem/ecob8a.i/021210.b/036b3601.d  
Date: 12-FEB-2010 14:02  
Client ID: MST15-10-1162LMS  
Sample Info: 1120204022511  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecob8a.i  
Operator: JAC  
Column diameter: 0.25





Data File: /chem/ecd8a.i/021210.b/036f3601.d  
Report Date: 15-Feb-2010 11:11

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
Data file : /chem/ecd8a.i/021210.b/036f3601.d  
Lab Smp Id: 1202040225 Client Smp ID: WST15-10-11621MS  
Inj Date : 12-FEB-2010 14:02  
Operator : JAOC Inst ID: ecd8a.i  
Smp Info : |1202040225|1|  
Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MS|||  
Comment :  
Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
Meth Date : 15-Feb-2010 06:50 jen01212 Quant Type: ESTD  
Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
Als bottle: 36 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1675.sub  
Target Version: 3.50 Sample Matrix: Soil

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	30.07000	Weight of sample extracted (g)
M	6.57170	% Moisture

Cpnd Variable Local Compound Variable

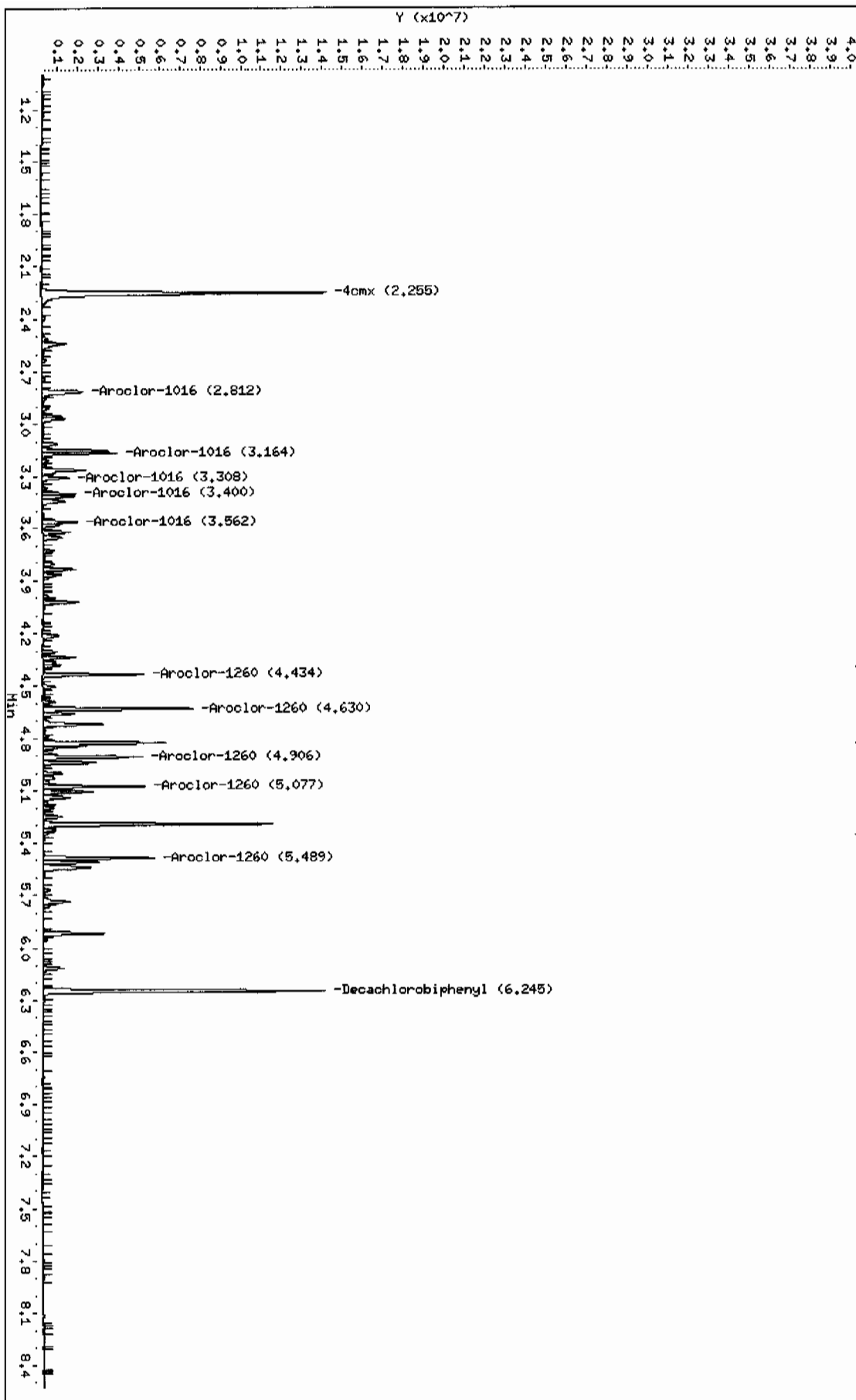
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
2.255	2.252	0.003	15651204	119.106	4.2 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
6.245	6.245	0.000	12370057	123.724	4.4 80.00- 120.00	100.00
-----						
1 Aroclor-1016			CAS #: 12674-11-2			
2.812	2.811	0.001	2650281	568.166	20.2 80.00- 120.00	100.00
3.164	3.163	0.001	3250319	563.354	20.0 110.21- 150.21	122.64
3.308	3.306	0.002	1225834	499.484	17.8 32.76- 72.76	46.25
3.400	3.399	0.001	1272487	578.882	20.6 26.33- 66.33	48.01
3.562	3.561	0.001	1448968	461.138	16.4 47.15- 87.15	54.67
Average of Peak Concentrations =			19.0			
-----						

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO
=====								
7 Aroclor-1260					CAS #: 11096-82-5			
4.434	4.435	-0.001	4026930	597.559	21.3	80.00-	120.00	100.00
4.630	4.631	-0.001	6495755	633.127	22.5	131.14-	171.14	161.31
4.906	4.906	0.000	4108716	670.280	23.8	71.88-	111.88	102.03
5.077	5.078	-0.001	4204853	658.462	23.4	78.48-	118.48	104.42
5.489	5.490	-0.001	4689455	683.618	24.3	91.90-	131.90	116.45
Average of Peak Concentrations =					23.1			

Data File: /chem/ecod8a.i/021210.b/036f3601.d  
Date : 12-FEB-2010 14:02  
Client ID: MST15-10-11621MS  
Sample Info: 1120204022511  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecod8a.i  
Operator: JAC  
Column diameter: 0.25

/chem/ecod8a.i/021210.b/036f3601.d



Data File: /chem/ecd8a.i/021210.b/037b3701.d  
 Report Date: 15-Feb-2010 11:11

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/021210.b/037b3701.d  
 Lab Smp Id: 1202040226 Client Smp ID: WST15-10-11621MSD  
 Inj Date : 12-FEB-2010 14:14  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202040226|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MSD|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-B-8082-020310a.m  
 Meth Date : 15-Feb-2010 06:49 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036b3601.d  
 Als bottle: 37 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1675.sub  
 Target Version: 3.50 Sample Matrix: Soil

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	30.03000	Weight of sample extracted (g)
M	6.57170	% Moisture

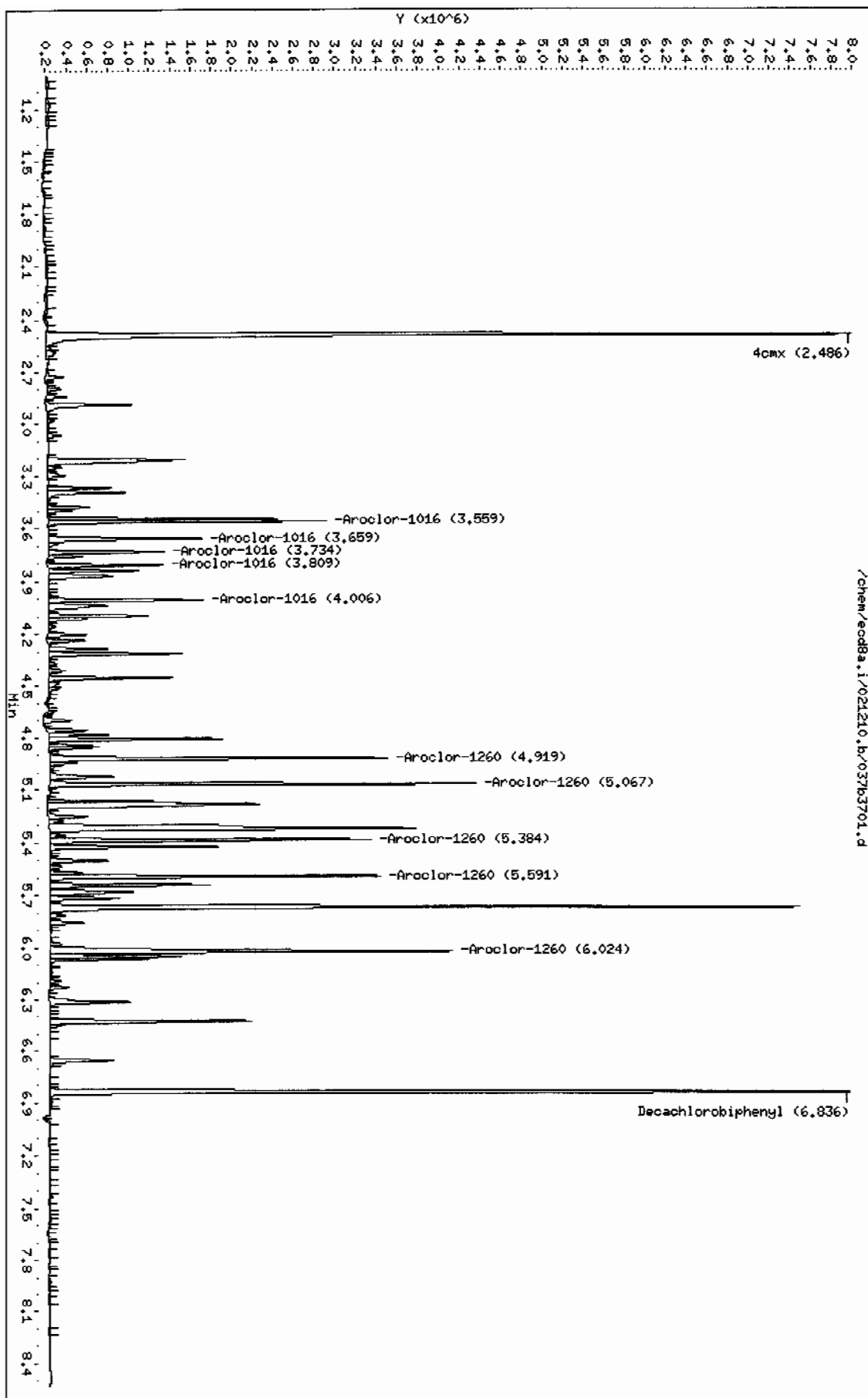
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.486	2.486	0.000	7915555 91.1475	3.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.836	6.836	0.000	8112348 125.106	4.4	80.00- 120.00	100.00	
1 Aroclor-1016				CAS #: 12674-11-2			
3.559	3.558	0.001	2159261 573.296	20.4	80.00- 120.00	100.00	
3.659	3.658	0.001	1431513 573.884	20.4	45.12- 85.12	66.30	
3.734	3.734	0.000	873605 576.450	20.5	19.91- 59.91	40.46	
3.809	3.809	0.000	891892 597.317	21.3	18.22- 58.22	41.31	
4.006	4.006	0.000	1205896 592.398	21.1	33.52- 73.52	55.85	
Average of Peak Concentrations =				20.7			

		CONCENTRATIONS							
		ON-COL		FINAL					
RT	EXP RT	DLT RT	RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260				CAS #: 11096-82-5					
4.919	4.919	0.000		2742802	671.528	23.9	80.00- 120.00	100.00	
5.067	5.068	-0.001		3222183	648.470	23.1	102.34- 142.34	117.48	
5.384	5.384	0.000		2633939	695.261	24.8	74.38- 114.38	96.03	
5.591	5.591	0.000		2702363	683.605	24.4	77.60- 117.60	98.53	
6.024	6.023	0.001		4396008	705.910	25.2	139.44- 179.44	160.27	
Average of Peak Concentrations =				24.3					

Data File: /chem/eod8a.i/021210.b/037b3701.d  
 Date: 12-FEB-2010 14:14  
 Client ID: MST15-10-1162LHSD  
 Sample Info: 11202040226111  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: eod8a.i  
 Operator: JMO  
 Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecd8a.i/021210.b/037f3701.d  
 Lab Smp Id: 1202040226 Client Smp ID: WST15-10-11621MSD  
 Inj Date : 12-FEB-2010 14:14  
 Operator : JAOC Inst ID: ecd8a.i  
 Smp Info : |1202040226|1|  
 Misc Info : |ECD82P\_1S|951946|SVA|QC A|SOIL|MSD|||  
 Comment :  
 Method : /chem/ecd8a.i/021210.b/ECD8-F-8082-020310a.m  
 Meth Date : 15-Feb-2010 06:50 jen01212 Quant Type: ESTD  
 Cal Date : 03-FEB-2010 17:25 Cal File: 036f3601.d  
 Als bottle: 37 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 10-1675.sub  
 Target Version: 3.50 Sample Matrix: Soil

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	30.03000	Weight of sample extracted (g)
M	6.57170	% Moisture

Cpnd Variable Local Compound Variable

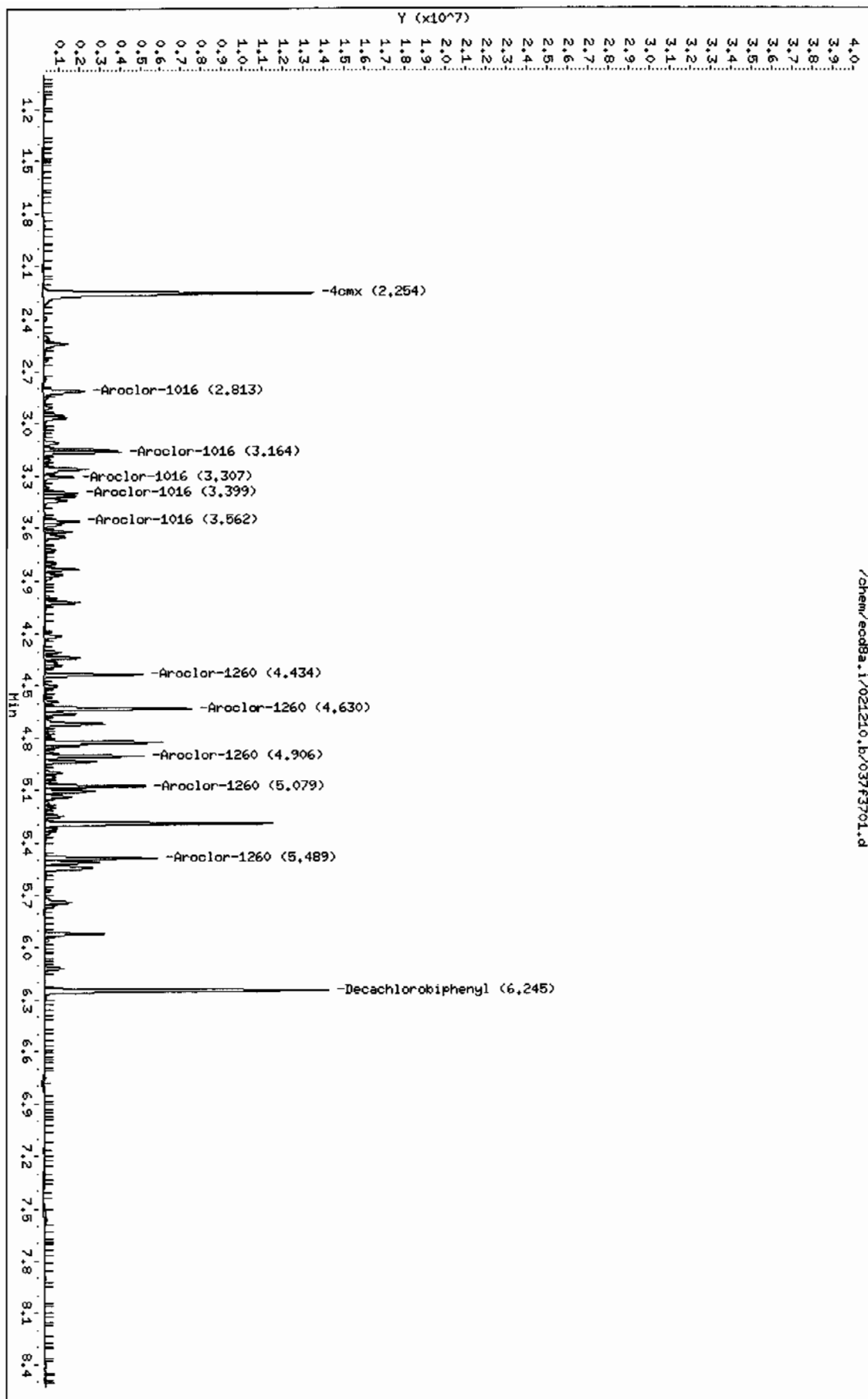
CONCENTRATIONS							
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO	
==	=====	=====	RESPONSE ( ug/L)	(ug/Kg)	=====	=====	=====
-----							
\$ 11 4cmx				CAS #: 877-09-8			
2.254	2.252	0.002	14945127 113.732	4.0	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
6.245	6.245	0.000	12312625 123.149	4.4	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
2.813	2.811	0.002	2629777 563.770	20.1	80.00- 120.00	100.00	
3.164	3.163	0.001	3389389 587.458	20.9	110.21- 150.21	128.89	
3.307	3.306	0.001	1250969 509.726	18.2	32.76- 72.76	47.57	
3.399	3.399	0.000	1315163 598.296	21.3	26.33- 66.33	50.01	
3.562	3.561	0.001	1458448 464.155	16.5	47.15- 87.15	55.46	
Average of Peak Concentrations =				19.4			
-----							

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE RATIO
=====						
7 Aroclor-1260			CAS #: 11096-82-5			
4.434	4.435	-0.001	4029047	597.873	21.3	80.00- 120.00 100.00
4.630	4.631	-0.001	6356744	619.578	22.1	131.14- 171.14 157.77
4.906	4.906	0.000	3997986	652.216	23.2	71.88- 111.88 99.23
5.079	5.078	0.001	4228363	662.144	23.6	78.48- 118.48 104.95
5.489	5.490	-0.001	4730617	689.619	24.6	91.90- 131.90 117.41
Average of Peak Concentrations =			23.0			



Data File: /chem/eod8a.i/021210.b/0373701.d  
Date : 12-FEB-2010 14:14  
Client ID: MS15-10-1162LHSD  
Sample Info: 1120204022611  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eod8a.i  
Operator: JHOC  
Column diameter: 0.25



# Prep Logbook Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 951941  
 Analyst: Andrew Schwennin  
 Method: SW846 3550B

Verified by: \_\_\_\_\_

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)
1202040223 MB	11-FEB-2010 22:01:00	30	H2SO4/KM2	2	9	1	0.03333	
1202040224 LCS	11-FEB-2010 22:01:00	30	H2SO4/KM2	2	9	1	0.03333	
246055005	11-FEB-2010 22:01:00	30.18	H2SO4/KM2	2	9	1	0.03313	
246066001	11-FEB-2010 22:01:00	30.02	H2SO4/KM2	2	9	1	0.03331	
246066002	11-FEB-2010 22:01:00	30.11	H2SO4/KM2	2	9	1	0.03321	
246066003	11-FEB-2010 22:01:00	30.06	H2SO4/KM2	2	9	1	0.03327	
246066004	11-FEB-2010 22:01:00	30.04	H2SO4/KM2	2	9	1	0.03329	
246066005	11-FEB-2010 22:01:00	30.12	H2SO4/KM2	2	9	1	0.0332	
246066006	11-FEB-2010 22:01:00	30.14	H2SO4/KM2	2	9	1	0.03318	
246318001	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246318002	11-FEB-2010 22:01:00	30.06	H2SO4/KM2	2	9	1	0.03327	
246318003	11-FEB-2010 22:01:00	30.07	H2SO4/KM2	2	9	1	0.03326	
246330008	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246330009	11-FEB-2010 22:01:00	30.13	H2SO4/KM2	2	9	1	0.03319	
246463002	11-FEB-2010 22:01:00	30.06	H2SO4/KM2	2	9	1	0.03327	
246463003	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246463004	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246463005	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246477002	11-FEB-2010 22:01:00	30.02	H2SO4/KM2	2	9	1	0.03331	
246575003	11-FEB-2010 22:01:00	30.01	H2SO4/KM2	2	9	1	0.03332	
1202040225 MS (246575003)	11-FEB-2010 22:01:00	30.07	H2SO4/KM2	2	9	1	0.03326	
1202040226 MSD (246575003)	11-FEB-2010 22:01:00	30.03	H2SO4/KM2	2	9	1	0.0333	
246575004	11-FEB-2010 22:01:00	30.12	H2SO4/KM2	2	9	1	0.0332	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202040224	PCB Laboratory Control	WE100126-07	1	mL	Clean up Date: 2/11/10		
MS	1202040225	PCB Laboratory Control	WE100126-07	1	mL	Clean up Initials: AIS		
MSD	1202040226	PCB Laboratory Control	WE100126-07	1	mL	Verified By: AV		
SURR	ALL	PEST LOW LEVEL SURROGATE 200 UG/L	UE100127-15	1	mL	Final Solvent: Hexane		
REGNT	ALL	Acetone	100211-B1	150	mL	Clean Up SOP: GL-OA-E-037		
REGNT	ALL	Hexane	100211-B2	150	mL			
REGNT	ALL	1:1 sulfuric acid	1266695a	5	mL			
REGNT	ALL	5% Potassium Permanganate	BI202457-F	5	mL			
SOURC	ALL	SODIUM SULFATE	1265308	30	g			

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1545**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246055001	RE15-10-8170
246055002	RE15-10-8169
246055003	RE15-10-8171
246055004	RE15-10-8168
246055005	RE15-10-8222
246055006	RE15-10-8221
246055007	RE15-10-8220
246055008	RE15-10-8223
246055009	RE15-10-8224
1202033898	Method Blank (MB) ICP
1202033903	Laboratory Control Sample (LCS)
1202033900	246055001(RE15-10-8170L) Serial Dilution (SD)
1202033899	246055001(RE15-10-8170D) Sample Duplicate (DUP)
1202033901	246055001(RE15-10-8170S) Matrix Spike (MS)
1202033902	246055001(RE15-10-8170SD) Matrix Spike Duplicate (MSD)
1202033908	Method Blank (MB) ICP-MS
1202033913	Laboratory Control Sample (LCS)
1202033910	246055001(RE15-10-8170L) Serial Dilution (SD)
1202033909	246055001(RE15-10-8170D) Sample Duplicate (DUP)
1202033911	246055001(RE15-10-8170S) Matrix Spike (MS)

1202033912	246055001(RE15-10-8170SD) Matrix Spike Duplicate (MSD)
1202039278	Method Blank (MB) CVAA
1202039279	Laboratory Control Sample (LCS)
1202039282	246055001(RE15-10-8170L) Serial Dilution (SD)
1202039280	246055001(RE15-10-8170D) Sample Duplicate (DUP)
1202039281	246055001(RE15-10-8170S) Matrix Spike (MS)
1202039283	246055001(RE15-10-8170SD) Matrix Spike Duplicate (MSD)

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

#### **Method/Analysis Information**

<b>Analytical Batch:</b>	949334, 949336 and 951546
<b>Prep Batch :</b>	949333, 949335 and 951544
<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 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-

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

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

### **Calibration Information**

#### **Instrument Calibration**

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

#### **CRDL Requirements**

All CRDL 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 verification (CCV) bracketing this SDG met the established acceptance criteria.

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

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

The MBs analyzed with this SDG met the acceptance criteria.

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

The LCS spike recoveries met the acceptance limits.

#### **Quality Control (QC) Sample Statement**

The following sample was selected as the quality control (QC) sample for this SDG: 246055001 (RE15-10-8170).

#### **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 barium, calcium, magnesium, manganese, potassium and zinc, 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 calcium, manganese, mercury and zinc, 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 aluminum, antimony, iron, manganese, zinc and mercury, 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, antimony, barium, calcium, chromium, lead, magnesium, manganese, potassium, silver and vanadium, as indicated by the "\*" qualifiers.

**Serial Dilution % Difference Statement**

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

**Technical Information****Holding Time Specifications**

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

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS. The samples 246055001 (RE15-10-8170) and 246055009 (RE15-10-8224) required dilutions for lead in order to bring over range concentrations within the linear calibration range of the instrument. Dilutions were required for 246055002 (RE15-10-8169) and 246055006 (RE15-10-8221) in order to minimize selenium suppression due to matrix interferences.



**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information****Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 794041 and 797668. A copy of each DER is included in the Miscellaneous Data section of this package.

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**

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

**Review Validation:**

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

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

Reviewer: Kristen Pearson Date: 3/2/10

# Sample Data Summary

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055001

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8170

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3200000	ug/kg	*	8090	23800	23800	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-36-0	Antimony	243000	ug/kg	*	393	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-38-2	Arsenic	3630	ug/kg		234	1170	1170	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-39-3	Barium	49500	ug/kg	*N	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-41-7	Beryllium	470	ug/kg		23.4	117	117	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-43-9	Cadmium	313	ug/kg	J	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-70-2	Calcium	1550000	ug/kg	*N	9520	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-47-3	Chromium	6340	ug/kg	*	178	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-48-4	Cobalt	2210	ug/kg		178	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-50-8	Copper	9110	ug/kg		357	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-89-6	Iron	10500000	ug/kg	*	9520	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-92-1	Lead	63700000	ug/kg	*	14900	59500	59500	50	P	HSC	03/01/10 20:10	030110A-2	949334
7439-95-4	Magnesium	749000	ug/kg	*N	10100	35700	35700	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-96-5	Manganese	177000	ug/kg	*N	238	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334
7439-97-6	Mercury	14.3	ug/kg	*N	4.14	12.2	12.2	1	AV	JXL1	02/22/10 10:24	022210S1-4	951546
7440-02-0	Nickel	5230	ug/kg		117	468	468	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-09-7	Potassium	726000	ug/kg	*N	7610	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7782-49-2	Selenium	1170	ug/kg	U	586	1170	1170	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-22-4	Silver	743	ug/kg	*	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-23-5	Sodium	116000	ug/kg		8330	29700	29700	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-28-0	Thallium	107	ug/kg	J	70.3	234	234	2	MS	RMJ	02/26/10 01:23	100225-3	949336
7440-62-2	Vanadium	9990	ug/kg	*	119	595	595	1	P	HSC	02/25/10 00:01	022410-1	949334
7440-66-6	Zinc	206000	ug/kg	*N	393	1190	1190	1	P	HSC	02/25/10 00:01	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.598	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055002

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8169

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	13900000	ug/kg	*	6910	20300	20300	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-36-0	Antimony	1760	ug/kg	*	335	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-38-2	Arsenic	3280	ug/kg		211	1050	1050	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-39-3	Barium	173000	ug/kg	*N	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-41-7	Beryllium	1560	ug/kg		21.1	105	105	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-43-9	Cadmium	226	ug/kg	J	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-70-2	Calcium	2480000	ug/kg	*N	8130	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-47-3	Chromium	17400	ug/kg	*	152	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-48-4	Cobalt	5160	ug/kg		152	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-50-8	Copper	8100	ug/kg		305	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-89-6	Iron	12500000	ug/kg	*	8130	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-92-1	Lead	180000	ug/kg	*	254	1020	1020	1	P	HSC	03/01/10 20:58	030110A-2	949334
7439-95-4	Magnesium	1890000	ug/kg	*N	8640	30500	30500	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-96-5	Manganese	282000	ug/kg	*N	203	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334
7439-97-6	Mercury	18.8	ug/kg	*N	4.38	12.9	12.9	1	AV	JXL1	02/22/10 10:35	022210S1-4	951546
7440-02-0	Nickel	11500	ug/kg		105	421	421	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-09-7	Potassium	1690000	ug/kg	*N	6510	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7782-49-2	Selenium	2110	ug/kg	U	1050	2110	2110	4	MS	RMJ	02/26/10 02:28	100225-3	949336
7440-22-4	Silver	508	ug/kg	U*	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-23-5	Sodium	71900	ug/kg		7110	25400	25400	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-28-0	Thallium	278	ug/kg		63.2	211	211	2	MS	RMJ	02/26/10 01:44	100225-3	949336
7440-62-2	Vanadium	26600	ug/kg	*	102	508	508	1	P	HSC	02/25/10 00:51	022410-1	949334
7440-66-6	Zinc	24500	ug/kg	*N	335	1020	1020	1	P	HSC	02/25/10 00:51	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.578	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.558	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.547	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055003

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8171

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15100000	ug/kg	*	7000	20600	20600	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-36-0	Antimony	414	ug/kg	J*	340	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-38-2	Arsenic	2720	ug/kg		211	1050	1050	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-39-3	Barium	180000	ug/kg	*N	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-41-7	Beryllium	1130	ug/kg		21.1	105	105	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-43-9	Cadmium	159	ug/kg	J	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-70-2	Calcium	22400000	ug/kg	*N	8230	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-47-3	Chromium	15500	ug/kg	*	154	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-48-4	Cobalt	6750	ug/kg		154	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-50-8	Copper	8990	ug/kg		309	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-89-6	Iron	14700000	ug/kg	*	8230	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-92-1	Lead	90600	ug/kg	*	257	1030	1030	1	P	HSC	03/01/10 21:05	030110A-2	949334
7439-95-4	Magnesium	2400000	ug/kg	*N	8750	30900	30900	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-96-5	Manganese	364000	ug/kg	*N	206	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334
7439-97-6	Mercury	19.2	ug/kg	*N	4.39	12.9	12.9	1	AV	JXL1	02/22/10 10:37	022210S1-4	951546
7440-02-0	Nickel	9150	ug/kg		105	422	422	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-09-7	Potassium	2060000	ug/kg	*N	6590	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7782-49-2	Selenium	1050	ug/kg	U	527	1050	1050	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-22-4	Silver	515	ug/kg	U*	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-23-5	Sodium	1030000	ug/kg		7200	25700	25700	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-28-0	Thallium	223	ug/kg		63.2	211	211	2	MS	RMJ	02/26/10 01:48	100225-3	949336
7440-62-2	Vanadium	30900	ug/kg	*	103	515	515	1	P	HSC	02/25/10 00:58	022410-1	949334
7440-66-6	Zinc	37200	ug/kg	*N	340	1030	1030	1	P	HSC	02/25/10 00:58	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.552	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.539	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.528	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055004

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8168

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4640000	ug/kg	*	7860	23100	23100	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-36-0	Antimony	1160	ug/kg	U*	381	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-38-2	Arsenic	1270	ug/kg		245	1230	1230	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-39-3	Barium	83300	ug/kg	*N	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-41-7	Beryllium	423	ug/kg		24.5	123	123	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-43-9	Cadmium	122	ug/kg	J	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-70-2	Calcium	3110000	ug/kg	*N	9240	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-47-3	Chromium	12800	ug/kg	*	173	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-48-4	Cobalt	3140	ug/kg		173	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-50-8	Copper	6580	ug/kg		347	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-89-6	Iron	8740000	ug/kg	*	9240	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-92-1	Lead	45900	ug/kg	*	289	1160	1160	1	P	HSC	03/01/10 21:12	030110A-2	949334
7439-95-4	Magnesium	1240000	ug/kg	*N	9820	34700	34700	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-96-5	Manganese	242000	ug/kg	*N	231	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334
7439-97-6	Mercury	14.4	ug/kg	U*N	4.91	14.4	14.4	1	AV	JXL1	02/22/10 10:39	022210S1-4	951546
7440-02-0	Nickel	4940	ug/kg		123	491	491	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-09-7	Potassium	1090000	ug/kg	*N	7390	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7782-49-2	Selenium	1230	ug/kg	U	614	1230	1230	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-22-4	Silver	578	ug/kg	U*	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-23-5	Sodium	83000	ug/kg		8090	28900	28900	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-28-0	Thallium	84.2	ug/kg	J	73.6	245	245	2	MS	RMJ	02/26/10 02:00	100225-3	949336
7440-62-2	Vanadium	18800	ug/kg	*	116	578	578	1	P	HSC	02/25/10 01:05	022410-1	949334
7440-66-6	Zinc	23500	ug/kg	*N	381	1160	1160	1	P	HSC	02/25/10 01:05	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.545	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.513	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055005

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8222

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	12900000	ug/kg	*	8670	25500	25500	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-36-0	Antimony	1280	ug/kg	U*	421	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-38-2	Arsenic	5360	ug/kg		264	1320	1320	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-39-3	Barium	168000	ug/kg	*N	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-41-7	Beryllium	998	ug/kg		26.4	132	132	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-43-9	Cadmium	140	ug/kg	J	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-70-2	Calcium	2350000	ug/kg	*N	10200	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-47-3	Chromium	11900	ug/kg	*	191	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-48-4	Cobalt	5810	ug/kg		191	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-50-8	Copper	8950	ug/kg		383	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-89-6	Iron	13700000	ug/kg	*	10200	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-92-1	Lead	72900	ug/kg	*	319	1280	1280	1	P	HSC	03/01/10 21:19	030110A-2	949334
7439-95-4	Magnesium	2180000	ug/kg	*N	10800	38300	38300	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-96-5	Manganese	332000	ug/kg	*N	255	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334
7439-97-6	Mercury	15.7	ug/kg	*N	4.66	13.7	13.7	1	AV	JXL1	02/22/10 10:40	022210S1-4	951546
7440-02-0	Nickel	9020	ug/kg		132	528	528	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-09-7	Potassium	2080000	ug/kg	*N	8160	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7782-49-2	Selenium	1320	ug/kg	U	660	1320	1320	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-22-4	Silver	638	ug/kg	U*	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-23-5	Sodium	106000	ug/kg		8930	31900	31900	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-28-0	Thallium	200	ug/kg	J	79.2	264	264	2	MS	RMJ	02/26/10 02:04	100225-3	949336
7440-62-2	Vanadium	29000	ug/kg	*	128	638	638	1	P	HSC	02/25/10 01:12	022410-1	949334
7440-66-6	Zinc	30800	ug/kg	*N	421	1280	1280	1	P	HSC	02/25/10 01:12	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.528	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.59	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055006

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8221

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	16900000	ug/kg	*	7210	21200	21200	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-36-0	Antimony	1060	ug/kg	U*	350	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-38-2	Arsenic	2830	ug/kg		221	1110	1110	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-39-3	Barium	190000	ug/kg	*N	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-41-7	Beryllium	1590	ug/kg		22.1	111	111	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-43-9	Cadmium	214	ug/kg	J	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-70-2	Calcium	2650000	ug/kg	*N	8480	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-47-3	Chromium	14800	ug/kg	*	159	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-48-4	Cobalt	5660	ug/kg		159	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-50-8	Copper	8100	ug/kg		318	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-89-6	Iron	13600000	ug/kg	*	8480	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-92-1	Lead	45700	ug/kg	*	265	1060	1060	1	P	HSC	03/01/10 21:26	030110A-2	949334
7439-95-4	Magnesium	2370000	ug/kg	*N	9010	31800	31800	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-96-5	Manganese	290000	ug/kg	*N	212	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334
7439-97-6	Mercury	19.1	ug/kg	*N	4.47	13.2	13.2	1	AV	JXLI	02/22/10 10:42	022210S1-4	951546
7440-02-0	Nickel	11500	ug/kg		111	443	443	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-09-7	Potassium	2210000	ug/kg	*N	6790	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7782-49-2	Selenium	2210	ug/kg	U	1110	2210	2210	4	MS	RMJ	02/26/10 02:32	100225-3	949336
7440-22-4	Silver	530	ug/kg	U*	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-23-5	Sodium	97100	ug/kg		7420	26500	26500	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-28-0	Thallium	273	ug/kg		66.4	221	221	2	MS	RMJ	02/26/10 02:08	100225-3	949336
7440-62-2	Vanadium	30000	ug/kg	*	106	530	530	1	P	HSC	02/25/10 01:19	022410-1	949334
7440-66-6	Zinc	27400	ug/kg	*N	350	1060	1060	1	P	HSC	02/25/10 01:19	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.541	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3



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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055007

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8220

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10200000	ug/kg	*	7000	20600	20600	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-36-0	Antimony	1030	ug/kg	U*	340	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-38-2	Arsenic	2100	ug/kg		201	1000	1000	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-39-3	Barium	123000	ug/kg	*N	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-41-7	Beryllium	888	ug/kg		20.1	100	100	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-43-9	Cadmium	118	ug/kg	J	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-70-2	Calcium	1600000	ug/kg	*N	8240	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-47-3	Chromium	14500	ug/kg	*	154	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-48-4	Cobalt	3710	ug/kg		154	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-50-8	Copper	5820	ug/kg		309	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-89-6	Iron	11600000	ug/kg	*	8240	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-92-1	Lead	41200	ug/kg	*	257	1030	1030	1	P	HSC	03/01/10 21:33	030110A-2	949334
7439-95-4	Magnesium	1610000	ug/kg	*N	8750	30900	30900	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-96-5	Manganese	292000	ug/kg	*N	206	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334
7439-97-6	Mercury	12	ug/kg	J*N	4.15	12.2	12.2	1	AV	JXL	02/22/10 10:44	022210S1-4	951546
7440-02-0	Nickel	7790	ug/kg		100	402	402	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-09-7	Potassium	1210000	ug/kg	*N	6590	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-22-4	Silver	515	ug/kg	U*	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-23-5	Sodium	102000	ug/kg		7210	25700	25700	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-28-0	Thallium	166	ug/kg	J	60.3	201	201	2	MS	RMJ	02/26/10 02:12	100225-3	949336
7440-62-2	Vanadium	19800	ug/kg	*	103	515	515	1	P	HSC	02/25/10 01:27	022410-1	949334
7440-66-6	Zinc	34800	ug/kg	*N	340	1030	1030	1	P	HSC	02/25/10 01:27	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.532	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.545	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.539	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055008

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8223

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7670000	ug/kg	*	8120	23900	23900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-36-0	Antimony	1190	ug/kg	U*	394	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-38-2	Arsenic	1900	ug/kg		243	1210	1210	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-39-3	Barium	128000	ug/kg	*N	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-41-7	Beryllium	754	ug/kg		24.3	121	121	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-43-9	Cadmium	191	ug/kg	J	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-70-2	Calcium	2810000	ug/kg	*N	9550	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-47-3	Chromium	9860	ug/kg	*	179	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-48-4	Cobalt	4110	ug/kg		179	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-50-8	Copper	8380	ug/kg		358	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-89-6	Iron	10700000	ug/kg	*	9550	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-92-1	Lead	48200	ug/kg	*	299	1190	1190	1	P	HSC	03/01/10 21:40	030110A-2	949334
7439-95-4	Magnesium	1570000	ug/kg	*N	10200	35800	35800	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-96-5	Manganese	293000	ug/kg	*N	239	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334
7439-97-6	Mercury	9.51	ug/kg	J*N	4.49	13.2	13.2	1	AV	JXL1	02/22/10 10:45	022210S1-4	951546
7440-02-0	Nickel	7060	ug/kg		121	485	485	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-09-7	Potassium	1710000	ug/kg	*N	7640	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7782-49-2	Selenium	1210	ug/kg	U	607	1210	1210	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-22-4	Silver	164	ug/kg	J*	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-23-5	Sodium	55100	ug/kg		8360	29900	29900	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-28-0	Thallium	150	ug/kg	J	72.8	243	243	2	MS	RMJ	02/26/10 02:16	100225-3	949336
7440-62-2	Vanadium	21400	ug/kg	*	119	597	597	1	P	HSC	02/25/10 01:34	022410-1	949334
7440-66-6	Zinc	30300	ug/kg	*N	394	1190	1190	1	P	HSC	02/25/10 01:34	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.52	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.512	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.564	g	30	mL	02/19/10	TXB3

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

SDG No: 10-1545

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246055009

BASIS: Dry Weight

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8224

LEVEL: Low

DATE RECEIVED 03-FEB-10

MATRIX: SOIL

%SOLIDS: 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3060000	ug/kg	*	7930	23300	23300	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-36-0	Antimony	176000	ug/kg	*	385	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-38-2	Arsenic	4000	ug/kg		230	1150	1150	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-39-3	Barium	52900	ug/kg	*N	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-41-7	Beryllium	460	ug/kg		23	115	115	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-43-9	Cadmium	273	ug/kg	J	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-70-2	Calcium	1430000	ug/kg	*N	9330	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-47-3	Chromium	5950	ug/kg	*	175	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-48-4	Cobalt	1910	ug/kg		175	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-50-8	Copper	7440	ug/kg		350	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-89-6	Iron	7910000	ug/kg	*	9330	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-92-1	Lead	66500000	ug/kg	*	29200	117000	117000	100	P	HSC	03/01/10 21:47	030110A-2	949334
7439-95-4	Magnesium	660000	ug/kg	*N	9910	35000	35000	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-96-5	Manganese	200000	ug/kg	*N	233	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334
7439-97-6	Mercury	18.2	ug/kg	*N	4.24	12.5	12.5	1	AV	JXL1	02/22/10 10:50	022210S1-4	951546
7440-02-0	Nickel	4590	ug/kg		115	459	459	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-09-7	Potassium	717000	ug/kg	*N	7460	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7782-49-2	Selenium	1150	ug/kg	U	574	1150	1150	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-22-4	Silver	411	ug/kg	J*	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-23-5	Sodium	135000	ug/kg		8160	29200	29200	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-28-0	Thallium	112	ug/kg	J	68.9	230	230	2	MS	RMJ	02/26/10 02:20	100225-3	949336
7440-62-2	Vanadium	10100	ug/kg	*	117	583	583	1	P	HSC	02/25/10 01:41	022410-1	949334
7440-66-6	Zinc	194000	ug/kg	*N	385	1170	1170	1	P	HSC	02/25/10 01:41	022410-1	949334

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949334	949333	SW846 3050B	0.51	g	50	mL	02/16/10	AXG2
949336	949335	SW846 3050B	0.518	g	50	mL	02/16/10	AXG2
951546	951544	SW846 7471A Prep	0.572	g	30	mL	02/19/10	TXB3

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,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	5.15	ug/L	5	ug/L	103	90.0 – 110.0	AV	22-FEB-10 09:22	022210S1-4
	Aluminum	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Antimony	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Barium	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Cadmium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Calcium	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Chromium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Cobalt	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Copper	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Iron	5310	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Potassium	2540	ug/L	2500	ug/L	101.7	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Silver	253	ug/L	250	ug/L	101.3	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Sodium	2600	ug/L	2500	ug/L	103.8	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Zinc	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	24-FEB-10 13:14	022410-1
	Arsenic	47.7	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	26-FEB-10 00:39	100225-3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	26-FEB-10 00:39	100225-3
	Nickel	50.7	ug/L	50	ug/L	101.3	90.0 – 110.0	MS	26-FEB-10 00:39	100225-3
	Selenium	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	26-FEB-10 00:39	100225-3
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	26-FEB-10 00:39	100225-3
	Lead	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	01-MAR-10 12:04	030110A-2
CCV01										
	Mercury	5.06	ug/L	5	ug/L	101.1	80.0 – 120.0	AV	22-FEB-10 09:27	022210S1-4
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Antimony	515	ug/L	500	ug/L	103.1	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	24-FEB-10 14:02	022410-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Cobalt	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Copper	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Iron	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Magnesium	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Potassium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Silver	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Zinc	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	24-FEB-10 14:02	022410-1
	Arsenic	46.9	ug/L	50	ug/L	93.9	90.0 – 110.0	MS	26-FEB-10 00:59	100225-3
	Beryllium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	26-FEB-10 00:59	100225-3
	Nickel	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	26-FEB-10 00:59	100225-3
	Selenium	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	26-FEB-10 00:59	100225-3
	Thallium	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	26-FEB-10 00:59	100225-3
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	01-MAR-10 12:51	030110A-2
CCV02	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	22-FEB-10 09:47	022210S1-4
	Aluminum	5100	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Antimony	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Cadmium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 14:39	022410-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,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>
	Potassium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Silver	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Sodium	10300	ug/L	10000	ug/L	103	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Zinc	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	24-FEB-10 14:39	022410-1
	Arsenic	46.2	ug/L	50	ug/L	92.5	90.0 – 110.0	MS	26-FEB-10 01:15	100225-3
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	26-FEB-10 01:15	100225-3
	Nickel	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	26-FEB-10 01:15	100225-3
	Selenium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	26-FEB-10 01:15	100225-3
	Thallium	48.5	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	26-FEB-10 01:15	100225-3
	Lead	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	01-MAR-10 13:12	030110A-2
CCV03										
	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 – 120.0	AV	22-FEB-10 10:07	022210S1-4
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Antimony	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Cadmium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Cobalt	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Copper	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Magnesium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Manganese	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Silver	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Vanadium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	24-FEB-10 16:03	022410-1
	Arsenic	47	ug/L	50	ug/L	94	90.0 – 110.0	MS	26-FEB-10 01:52	100225-3

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,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>
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	26-FEB-10 01:52	100225-3
	Nickel	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	26-FEB-10 01:52	100225-3
	Selenium	47.6	ug/L	50	ug/L	95.2	90.0 – 110.0	MS	26-FEB-10 01:52	100225-3
	Thallium	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	26-FEB-10 01:52	100225-3
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	01-MAR-10 14:20	030110A-2
CCV04										
	Mercury	5.11	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	22-FEB-10 10:27	022210S1-4
	Aluminum	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Antimony	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Cadmium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Calcium	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Cobalt	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Copper	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Iron	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Potassium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Silver	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	24-FEB-10 16:32	022410-1
	Arsenic	47.7	ug/L	50	ug/L	95.4	90.0 – 110.0	MS	26-FEB-10 02:36	100225-3
	Beryllium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	26-FEB-10 02:36	100225-3
	Nickel	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	26-FEB-10 02:36	100225-3
	Selenium	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	26-FEB-10 02:36	100225-3
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	26-FEB-10 02:36	100225-3
	Lead	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	01-MAR-10 15:27	030110A-2



## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 - 120.0	AV	22-FEB-10 10:47	022210S1-4
	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Antimony	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Barium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Cadmium	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Chromium	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Cobalt	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Copper	476	ug/L	500	ug/L	95.3	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Iron	4890	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Magnesium	4960	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Potassium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Silver	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Zinc	480	ug/L	500	ug/L	96	90.0 - 110.0	P	24-FEB-10 16:52	022410-1
	Arsenic	46.8	ug/L	50	ug/L	93.6	90.0 - 110.0	MS	26-FEB-10 02:48	100225-3
	Beryllium	49.2	ug/L	50	ug/L	98.3	90.0 - 110.0	MS	26-FEB-10 02:48	100225-3
	Nickel	51.9	ug/L	50	ug/L	103.9	90.0 - 110.0	MS	26-FEB-10 02:48	100225-3
	Selenium	48.5	ug/L	50	ug/L	97	90.0 - 110.0	MS	26-FEB-10 02:48	100225-3
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 - 110.0	MS	26-FEB-10 02:48	100225-3
	Lead	515	ug/L	500	ug/L	103	90.0 - 110.0	P	01-MAR-10 16:37	030110A-2
CCV06										
	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 - 120.0	AV	22-FEB-10 11:07	022210S1-4
	Aluminum	4930	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	24-FEB-10 18:15	022410-1
	Antimony	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	24-FEB-10 18:15	022410-1
	Barium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	24-FEB-10 18:15	022410-1
	Cadmium	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	24-FEB-10 18:15	022410-1
	Calcium	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	24-FEB-10 18:15	022410-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Cobalt	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Copper	500	ug/L	500	ug/L	100	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Manganese	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Silver	505	ug/L	500	ug/L	101	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Sodium	10200	ug/L	10000	ug/L	102	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Vanadium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	24-FEB-10 18:15	022410-1
	Lead	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	01-MAR-10 17:48	030110A-2
CCV07	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Antimony	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Barium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Cadmium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Cobalt	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Iron	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Magnesium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Potassium	4960	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Silver	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Sodium	9990	ug/L	10000	ug/L	99.9	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	24-FEB-10 19:39	022410-1
	Lead	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	01-MAR-10 18:22	030110A-2

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,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>
CCV08										
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Cadmium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Calcium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Chromium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Iron	4810	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Manganese	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Potassium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Silver	490	ug/L	500	ug/L	98	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Sodium	9520	ug/L	10000	ug/L	95.2	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Vanadium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	24-FEB-10 21:01	022410-1
	Lead	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	01-MAR-10 19:43	030110A-2
CCV09										
	Aluminum	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Antimony	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Barium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Cadmium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Calcium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Copper	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Manganese	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Potassium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	24-FEB-10 22:16	022410-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3.ICPMS6.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>
	Silver	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Sodium	10600	ug/L	10000	ug/L	105.7	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Zinc	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	24-FEB-10 22:16	022410-1
	Lead	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	01-MAR-10 20:44	030110A-2
CCV10	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Antimony	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Barium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Cadmium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Calcium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Copper	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Iron	4870	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Magnesium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Silver	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Sodium	9890	ug/L	10000	ug/L	98.9	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Vanadium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Zinc	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	24-FEB-10 23:34	022410-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	01-MAR-10 21:54	030110A-2
CCV11	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Antimony	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	25-FEB-10 00:37	022410-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,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	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Iron	4720	ug/L	5000	ug/L	94.4	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Magnesium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Manganese	500	ug/L	500	ug/L	100	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Silver	500	ug/L	500	ug/L	100	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Vanadium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
	Zinc	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	25-FEB-10 00:37	022410-1
CCV12										
	Aluminum	5370	ug/L	5000	ug/L	107.3	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Cadmium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Calcium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Cobalt	510	ug/L	500	ug/L	102	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Manganese	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Potassium	5380	ug/L	5000	ug/L	107.6	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Vanadium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	25-FEB-10 01:48	022410-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 01:48	022410-1

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS6,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	.151	ug/L	.2	ug/L	75.5	70.0 – 130.0	AV	22-FEB-10 09:25	022210S1-4
	Nickel	2.31	ug/L	2	ug/L	115.5	70.0 – 130.0	MS	26-FEB-10 00:47	100225-3
	Thallium	1.11	ug/L	1	ug/L	111.3	70.0 – 130.0	MS	26-FEB-10 00:47	100225-3
	Arsenic	5.72	ug/L	5	ug/L	114.5	70.0 – 130.0	MS	26-FEB-10 00:47	100225-3
	Selenium	6.04	ug/L	5	ug/L	120.8	70.0 – 130.0	MS	26-FEB-10 00:47	100225-3
	Beryllium	.615	ug/L	.5	ug/L	123	70.0 – 130.0	MS	26-FEB-10 00:47	100225-3
PQL01										
	Magnesium	253	ug/L	300	ug/L	84.5	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Manganese	10.4	ug/L	10	ug/L	104.3	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Potassium	162	ug/L	150	ug/L	107.9	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Silver	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Sodium	317	ug/L	300	ug/L	105.8	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Antimony	11.4	ug/L	10	ug/L	114.3	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Barium	5.11	ug/L	5	ug/L	102.3	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Iron	103	ug/L	100	ug/L	103.2	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Aluminum	204	ug/L	200	ug/L	102.1	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Cadmium	5.3	ug/L	5	ug/L	106	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Chromium	4.81	ug/L	5	ug/L	96.3	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Cobalt	5.02	ug/L	5	ug/L	100.4	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Copper	9.61	ug/L	10	ug/L	96.1	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Vanadium	5.28	ug/L	5	ug/L	105.6	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Zinc	9.96	ug/L	10	ug/L	99.6	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Calcium	209	ug/L	200	ug/L	104.4	70.0 – 130.0	P	24-FEB-10 13:28	022410-1
	Lead	10.8	ug/L	10	ug/L	107.7	70.0 – 130.0	P	01-MAR-10 12:18	030110A-2

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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>
<b>ICB01</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 09:23	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 13:21	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 13:21	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 13:21	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 13:21	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 13:21	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 13:21	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 13:21	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 13:21	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 13:21	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 13:21	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 13:21	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 00:43	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 00:43	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 00:43	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 00:43	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 00:43	100225-3
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 12:11	030110A-2
<b>CCB01</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 09:28	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 14:09	022410-1
	Antimony	7.02	+/-10	J	3.3	10.0	SOL	P	24-FEB-10 14:09	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:09	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:09	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 14:09	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 14:09	022410-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 14:09	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 14:09	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 14:09	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 14:09	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 14:09	022410-1
	Potassium	110.64	+/-250	J	64.0	250	SOL	P	24-FEB-10 14:09	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:09	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 14:09	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:09	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 14:09	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 01:03	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 01:03	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 01:03	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 01:03	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 01:03	100225-3
	Lead	6.08	+/-10	J	2.5	10.0	SOL	P	01-MAR-10 12:58	030110A-2
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 09:48	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 14:46	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 14:46	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:46	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:46	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 14:46	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 14:46	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 14:46	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 14:46	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 14:46	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 14:46	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 14:46	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 14:46	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:46	022410-1



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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>
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 14:46	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 14:46	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 14:46	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 01:19	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 01:19	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 01:19	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 01:19	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 01:19	100225-3
	Lead	2.54	+/-10	J	2.5	10.0	SOL	P	01-MAR-10 13:19	030110A-2
<b>CCB03</b>	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 10:09	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 16:10	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 16:10	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 16:10	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 16:10	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 16:10	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 16:10	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 16:10	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 16:10	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 16:10	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:10	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 16:10	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 01:56	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 01:56	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 01:56	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 01:56	100225-3

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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>
CCB04	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 01:56	100225-3
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 14:27	030110A-2
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 10:29	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 16:39	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 16:39	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 16:39	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 16:39	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 16:39	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 16:39	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 16:39	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 16:39	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 16:39	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 16:39	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 16:39	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 02:40	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 02:40	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 02:40	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 02:40	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 02:40	100225-3
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 15:34	030110A-2
CCB05	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 10:49	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 17:00	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 17:00	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 17:00	022410-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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>
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 17:00	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 17:00	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 17:00	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 17:00	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 17:00	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 17:00	022410-1
	Magnesium	-136.6	+/-300	J	85.0	300	SOL	P	24-FEB-10 17:00	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 17:00	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 17:00	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 17:00	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 17:00	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 17:00	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 17:00	022410-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	26-FEB-10 02:52	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	26-FEB-10 02:52	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	26-FEB-10 02:52	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	26-FEB-10 02:52	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	26-FEB-10 02:52	100225-3
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 16:44	030110A-2
<b>CCB06</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 11:09	022210S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 18:22	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 18:22	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 18:22	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 18:22	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 18:22	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 18:22	022410-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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	24-FEB-10 18:22	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 18:22	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 18:22	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 18:22	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 18:22	022410-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 17:55	030110A-2
<b>CCB07</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 19:46	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 19:46	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 19:46	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 19:46	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 19:46	022410-1
	Magnesium	-85.33	+/-300	J	85.0	300	SOL	P	24-FEB-10 19:46	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 19:46	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 19:46	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 19:46	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 19:46	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 19:46	022410-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 18:29	030110A-2
<b>CCB08</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 21:08	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 21:08	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 21:08	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 21:08	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 21:08	022410-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1545

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	24-FEB-10 21:08	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 21:08	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 21:08	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 21:08	022410-1
	Magnesium	-134.18	+/-300	J	85.0	300	SOL	P	24-FEB-10 21:08	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 21:08	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 21:08	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 21:08	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 21:08	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 21:08	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 21:08	022410-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	01-MAR-10 19:50	030110A-2
<b>CCB09</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 22:23	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 22:23	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 22:23	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 22:23	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 22:23	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 22:23	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 22:23	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 22:23	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 22:23	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 22:23	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 22:23	022410-1
	Lead	6.12	+/-10	J	2.5	10.0	SOL	P	01-MAR-10 20:51	030110A-2

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1545

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>
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	24-FEB-10 23:41	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 23:41	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 23:41	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	24-FEB-10 23:41	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 23:41	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 23:41	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	24-FEB-10 23:41	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	24-FEB-10 23:41	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	24-FEB-10 23:41	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	24-FEB-10 23:41	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	24-FEB-10 23:41	022410-1
	Lead	4.72	+/-10	J	2.5	10.0	SOL	P	01-MAR-10 22:01	030110A-2
CCB11	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-FEB-10 00:44	022410-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-FEB-10 00:44	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 00:44	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 00:44	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-FEB-10 00:44	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-FEB-10 00:44	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-FEB-10 00:44	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-FEB-10 00:44	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-FEB-10 00:44	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-FEB-10 00:44	022410-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-FEB-10 00:44	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-FEB-10 00:44	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 00:44	022410-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545

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>
CCB12	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-FEB-10 00:44	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 00:44	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-FEB-10 00:44	022410-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-FEB-10 01:55	022410-1
	Antimony	3.34	+/-10	J	3.3	10.0	SOL	P	25-FEB-10 01:55	022410-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-FEB-10 01:55	022410-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-FEB-10 01:55	022410-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-FEB-10 01:55	022410-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-FEB-10 01:55	022410-1
	Manganesec	2.0	+/-10	U	2.0	10.0	SOL	P	25-FEB-10 01:55	022410-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-FEB-10 01:55	022410-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-FEB-10 01:55	022410-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-FEB-10 01:55	022410-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-FEB-10 01:55	022410-1

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1545  
**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>
1202033898	Aluminum	5460	ug/kg	+/-16100	U	P	5460	16100
	Antimony	265	ug/kg	+/-803	U	P	265	803
	Barium	80.3	ug/kg	+/-401	U	P	80.3	401
	Cadmium	80.3	ug/kg	+/-401	U	P	80.3	401
	Calcium	6420	ug/kg	+/-20100	U	P	6420	20100
	Chromium	120	ug/kg	+/-401	U	P	120	401
	Cobalt	120	ug/kg	+/-401	U	P	120	401
	Copper	241	ug/kg	+/-803	U	P	241	803
	Iron	6420	ug/kg	+/-20100	U	P	6420	20100
	Lead	201	ug/kg	+/-803	U	P	201	803
	Magnesium	6820	ug/kg	+/-24100	U	P	6820	24100
	Manganese	161	ug/kg	+/-803	U	P	161	803
	Potassium	5140	ug/kg	+/-20100	U	P	5140	20100
	Silver	80.3	ug/kg	+/-401	U	P	80.3	401
	Sodium	5620	ug/kg	+/-20100	U	P	5620	20100
	Vanadium	80.3	ug/kg	+/-401	U	P	80.3	401
	Zinc	265	ug/kg	+/-803	U	P	265	803
1202033908	Arsenic	193	ug/kg	+/-965	U	MS	193	965
	Beryllium	19.3	ug/kg	+/-96.5	U	MS	19.3	96.5
	Nickel	96.5	ug/kg	+/-386	U	MS	96.5	386
	Selenium	483	ug/kg	+/-965	U	MS	483	965
	Thallium	57.9	ug/kg	+/-193	U	MS	57.9	193
1202039278	Mercury	3.92	ug/kg	+/-11.5	U	AV	3.92	11.5



**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545

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>
<b>ICSA01</b>									
	Aluminum	520000	ug/L	500000	ug/L	104	80.0 – 120.0	24-FEB-10 13:35	022410-1
	Antimony	-5.41	ug/L					24-FEB-10 13:35	022410-1
	Barium	1.08	ug/L					24-FEB-10 13:35	022410-1
	Cadmium	-1.24	ug/L					24-FEB-10 13:35	022410-1
	Calcium	487000	ug/L	500000	ug/L	97.5	80.0 – 120.0	24-FEB-10 13:35	022410-1
	Chromium	3.41	ug/L					24-FEB-10 13:35	022410-1
	Cobalt	-1.42	ug/L					24-FEB-10 13:35	022410-1
	Copper	3.17	ug/L					24-FEB-10 13:35	022410-1
	Iron	190000	ug/L	200000	ug/L	95.1	80.0 – 120.0	24-FEB-10 13:35	022410-1
	Magnesium	501000	ug/L	500000	ug/L	100	80.0 – 120.0	24-FEB-10 13:35	022410-1
	Manganese	-0.422	ug/L					24-FEB-10 13:35	022410-1
	Potassium	-180.0	ug/L					24-FEB-10 13:35	022410-1
	Silver	-1.2	ug/L					24-FEB-10 13:35	022410-1
	Sodium	64.0	ug/L					24-FEB-10 13:35	022410-1
	Vanadium	-0.642	ug/L					24-FEB-10 13:35	022410-1
	Zinc	-2.44	ug/L					24-FEB-10 13:35	022410-1
<b>ICSAB01</b>									
	Aluminum	518000	ug/L	500000	ug/L	104	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Antimony	536	ug/L	500	ug/L	107	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Barium	485	ug/L	500	ug/L	97	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Cadmium	447	ug/L	500	ug/L	89.4	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Calcium	483000	ug/L	500000	ug/L	96.7	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Chromium	475	ug/L	500	ug/L	95.1	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Cobalt	428	ug/L	500	ug/L	85.6	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Copper	538	ug/L	500	ug/L	108	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Iron	187000	ug/L	200000	ug/L	93.5	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Magnesium	493000	ug/L	500000	ug/L	98.7	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Manganese	472	ug/L	500	ug/L	94.5	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Potassium	5440	ug/L	5000	ug/L	109	80.0 – 120.0	24-FEB-10 13:41	022410-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545

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>
	Silver	266	ug/L	250	ug/L	107	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Sodium	5520	ug/L	5000	ug/L	110	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Vanadium	499	ug/L	500	ug/L	99.9	80.0 – 120.0	24-FEB-10 13:41	022410-1
	Zinc	479	ug/L	500	ug/L	95.9	80.0 – 120.0	24-FEB-10 13:41	022410-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545

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	Lead	9.4	ug/L					01-MAR-10 12:25	030110A-2
ICSAB01	Lead	485	ug/L	500	ug/L	97.1	80.0 - 120.0	01-MAR-10 12:31	030110A-2

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<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	0.33	ug/L					26-FEB-10 00:51	100225-3
	Beryllium	0.125	ug/L					26-FEB-10 00:51	100225-3
	Nickel	4.65	ug/L					26-FEB-10 00:51	100225-3
	Selenium	-2.4	ug/L					26-FEB-10 00:51	100225-3
	Thallium	0.014	ug/L					26-FEB-10 00:51	100225-3
<b>ICSAB01</b>									
	Arsenic	24.0	ug/L	20	ug/L	120	80.0 - 120.0	26-FEB-10 00:55	100225-3
	Beryllium	22.2	ug/L	20	ug/L	111	80.0 - 120.0	26-FEB-10 00:55	100225-3
	Nickel	25.2	ug/L	23.31	ug/L	108	80.0 - 120.0	26-FEB-10 00:55	100225-3
	Selenium	21.6	ug/L	20	ug/L	108	80.0 - 120.0	26-FEB-10 00:55	100225-3
	Thallium	20.5	ug/L	20	ug/L	103	80.0 - 120.0	26-FEB-10 00:55	100225-3

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1545 Client ID RE15-10-8170S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202033901

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg		7900000		3200000		590000	797	N/A	P
Antimony	ug/kg		526000		243000		59000	479	N/A	P
Barium	ug/kg	75-125	128000		49500		59000	133	N	P
Cadmium	ug/kg	75-125	58700		313	J	59000	98.9		P
Calcium	ug/kg	75-125	2390000		1550000		590000	142	N	P
Chromium	ug/kg	75-125	67300		6340		59000	103		P
Cobalt	ug/kg	75-125	59300		2210		59000	96.7		P
Copper	ug/kg	75-125	77000		9110		59000	115		P
Iron	ug/kg		11000000		10500000		590000	79.7	N/A	P
Lead	ug/kg		83500000		63700000		59000	33500	N/A	P
Magnesium	ug/kg	75-125	1700000		749000		590000	161	N	P
Manganese	ug/kg	75-125	273000		177000		59000	162	N	P
Potassium	ug/kg	75-125	1640000		726000		590000	155	N	P
Silver	ug/kg	75-125	59600		743		59000	99.7		P
Sodium	ug/kg	75-125	744000		116000		590000	106		P
Vanadium	ug/kg	75-125	74200		9990		59000	109		P
Zinc	ug/kg	75-125	470000		206000		59000	447	N	P

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1545 Client ID RE15-10-8170SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202033902

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Aluminum	ug/kg		6210000		3200000		580000	518	N/A	P
Antimony	ug/kg		2020000		243000		58000	3060	N/A	P
Barium	ug/kg	75-125	105000		49500		58000	96.2		P
Cadmium	ug/kg	75-125	58000		313	J	58000	99.4		P
Calcium	ug/kg	75-125	1980000		1550000		580000	73.9	N	P
Chromium	ug/kg	75-125	64700		6340		58000	101		P
Cobalt	ug/kg	75-125	57900		2210		58000	96.1		P
Copper	ug/kg	75-125	70600		9110		58000	106		P
Iron	ug/kg		7460000		10500000		580000	-525	N/A	P
Lead	ug/kg		92300000		63700000		58000	49200	N/A	P
Magnesium	ug/kg	75-125	1420000		749000		580000	115		P
Manganese	ug/kg	75-125	216000		177000		58000	67.1	N	P
Potassium	ug/kg	75-125	1400000		726000		580000	116		P
Silver	ug/kg	75-125	58400		743		58000	99.4		P
Sodium	ug/kg	75-125	661000		116000		580000	93.9		P
Vanadium	ug/kg	75-125	68800		9990		58000	101		P
Zinc	ug/kg	75-125	588000		206000		58000	658	N	P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1545 Client ID RE15-10-8170S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202033911

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75-125	13100		3630		9460	100		MS
Beryllium	ug/kg	75-125	6370		470		5910	99.8		MS
Nickel	ug/kg	75-125	12300		5230		5910	120		MS
Selenium	ug/kg	75-125	2070		586	U	2370	86.8		MS
Thallium	ug/kg	75-125	11200		107	J	11800	93.6		MS

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1545 Client ID RE15-10-8170SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202033912

<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	13500		3630		9460	105		MS
Beryllium	ug/kg	75-125	6390		470		5910	100		MS
Nickel	ug/kg	75-125	11700		5230		5910	109		MS
Selenium	ug/kg	75-125	1840		586	U	2370	77		MS
Thallium	ug/kg	75-125	11000		107	J	11800	92.4		MS



## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1545 Client ID RE15-10-8170S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202039281

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	156		14.3		143	99.2		AV

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1545 Client ID RE15-10-8170SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 82

Sample ID: 246055001 Spike ID: 1202039283

<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	87		14.3		127	57.1	N	AV

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8170D

Sample ID: 246055001

Duplicate ID: 1202033899

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20%	3200000		4360000		30.6	*	P
Antimony	ug/kg	+/-1180	243000		4710		192	*	P
Barium	ug/kg	+/-20%	49500		64400		26.1	*	P
Cadmium	ug/kg	+/-591	313 J		324 J		3.33		P
Calcium	ug/kg	+/-20%	1550000		2020000		26.2	*	P
Chromium	ug/kg	+/-20%	6340		8830		32.8	*	P
Cobalt	ug/kg	+/-591	2210		2680		19.1		P
Copper	ug/kg	+/-20%	9110		10200		11.2		P
Iron	ug/kg	+/-20%	10500000		9610000		8.89		P
Lead	ug/kg	+/-20%	63700000		3840000		177	*	P
Magnesium	ug/kg	+/-20%	749000		1030000		31.1	*	P
Manganese	ug/kg	+/-20%	177000		233000		27.6	*	P
Potassium	ug/kg	+/-20%	726000		970000		28.7	*	P
Silver	ug/kg	+/-591	743		118 U		216	*	P
Sodium	ug/kg	+/-29600	116000		136000		16.1		P
Vanadium	ug/kg	+/-20%	9990		15000		39.9	*	P
Zinc	ug/kg	+/-20%	206000		247000		17.9		P

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8170SD

Sample ID: 1202033901

Duplicate ID: 1202033902

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20	7900000		6210000		24.1	*	P
Antimony	ug/kg	+/-20	526000		2020000		117	*	P
Barium	ug/kg	+/-20	128000		105000		19.6		P
Cadmium	ug/kg	+/-20	58700		58000		1.22		P
Calcium	ug/kg	+/-20	2390000		1980000		18.6		P
Chromium	ug/kg	+/-20	67300		64700		3.98		P
Cobalt	ug/kg	+/-20	59300		57900		2.32		P
Copper	ug/kg	+/-20	77000		70600		8.77		P
Iron	ug/kg	+/-20	11000000		7460000		38.2	*	P
Lead	ug/kg	+/-20	83500000		92300000		9.98		P
Magnesium	ug/kg	+/-20	1700000		1420000		18.1		P
Manganese	ug/kg	+/-20	273000		216000		23.3	*	P
Potassium	ug/kg	+/-20	1640000		1400000		16.1		P
Silver	ug/kg	+/-20	59600		58400		1.99		P
Sodium	ug/kg	+/-20	744000		661000		11.8		P
Vanadium	ug/kg	+/-20	74200		68800		7.61		P
Zinc	ug/kg	+/-20	470000		588000		22.2	*	P

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8170D

Sample ID: 246055001

Duplicate ID: 1202033909

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-1170	3630		3740		3.01		MS
Beryllium	ug/kg	+/-117	470		470		.106		MS
Nickel	ug/kg	+/-20%	5230		5440		3.98		MS
Selenium	ug/kg		586 U		587 U				MS
Thallium	ug/kg	+/-235	107 J		111 J		3.64		MS

**Metals**  
**—6—**  
**Duplicate Sample Summary**

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8170SD

Sample ID: 1202033911

Duplicate ID: 1202033912

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-20	13100		13500		3.18		MS
Beryllium	ug/kg	+/-20	6370		6390		.308		MS
Nickel	ug/kg	+/-20	12300		11700		5.29		MS
Selenium	ug/kg	+/-20	2070		1840		11.8		MS
Thallium	ug/kg	+/-20	11200		11000		1.28		MS

**Percent Solids for Dup: 82**

**Metals**  
**—6—**  
**Duplicate Sample Summary**

SDG No.: 10-1545

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8170SD

Sample ID: 1202039281

Duplicate ID: 1202039283

Percent Solids for Dup: 82

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	156		87		56.7	*	AV



## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1545

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>
1202033903								
	Aluminum	ug/kg	10500000	8880000		84.5	56-144	P
	Antimony	ug/kg	173000	161000		93.1	71-130	P
	Barium	ug/kg	198000	183000		92.6	80-120	P
	Cadmium	ug/kg	60700	58200		96	81-120	P
	Calcium	ug/kg	9870000	9770000		99	83-117	P
	Chromium	ug/kg	236000	236000		100	80-120	P
	Cobalt	ug/kg	91200	89300		97.9	81-120	P
	Copper	ug/kg	174000	183000		105	81-118	P
	Iron	ug/kg	18000000	17000000		94.5	51-149	P
	Lead	ug/kg	86000	80500		93.6	79-121	P
	Magnesium	ug/kg	4000000	3740000		93.6	79-122	P
	Manganese	ug/kg	558000	522000		93.6	81-119	P
	Potassium	ug/kg	4300000	4200000		97.7	74-127	P
	Silver	ug/kg	30100	29800		98.9	66-134	P
	Sodium	ug/kg	1020000	1030000		101	74-127	P
	Vanadium	ug/kg	115000	119000		103	79-121	P
	Zinc	ug/kg	594000	571000		96.2	80-121	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1545

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>
1202033913	Arsenic	ug/kg	104000	105000		101	78-123	MS
	Beryllium	ug/kg	77600	82500		106	84-116	MS
	Nickel	ug/kg	134000	143000		107	78-123	MS
	Selenium	ug/kg	286000	283000		98.9	77-123	MS
	Thallium	ug/kg	121000	126000		104	78-122	MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1545

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>
1202039279	Mercury	ug/kg	5150	5470		106	71.6-128.3	AV

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1545 Client ID RE15-10-8170L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246055001 Serial Dilution ID: 1202033900

<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	26900		26400		1.86		10	P
Antimony	2040		2030		.735		10	P
Barium	417		416		.24		10	P
Cadmium	2.63	J	5	U	100			P
Calcium	13100		12800		2.67		10	P
Chromium	53.3		54.5		2.25			P
Cobalt	18.6		18.9	J	1.34			P
Copper	76.6		72.5		5.35			P
Iron	88300		87000		1.47		10	P
Lead	10700		10800		.935		10	P
Magnesium	6300		6250		.794		10	P
Manganese	1490		1500		.671		10	P
Potassium	6110		6150		.655		10	P
Silver	6.25		5	U	100			P
Sodium	976		910	J	6.76			P
Vanadium	84		84.5		.595		10	P
Zinc	1740		1750		.575		10	P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1545 Client ID RE15-10-8170L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246055001 Serial Dilution ID: 1202033910

<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>
Arsenic	15.5		15.7	J	.968			MS
Beryllium	2.01		2.17	J	7.96			MS
Nickel	22.3		23.1		3.59			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.456	J	1.5	U	100			MS

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1545 Client ID RE15-10-8170L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246055001 Serial Dilution ID: 1202039282

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.235		.34	U	100			AV

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1545

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 949333							
1202033898	MB for batch 949333	MB	S	16-FEB-10	.623g	50mL	
1202033903	LCS for batch 949333	LCS	S	16-FEB-10	.521g	50mL	
1202033901	RE15-10-8170S	MS	S	16-FEB-10	.514g	50mL	
1202033902	RE15-10-8170SD	MSD	S	16-FEB-10	.523g	50mL	
1202033899	RE15-10-8170D	DUP	S	16-FEB-10	.513g	50mL	
246055001	RE15-10-8170	SAMPLE	S	16-FEB-10	.51g	50mL	
246055002	RE15-10-8169	SAMPLE	S	16-FEB-10	.578g	50mL	
246055003	RE15-10-8171	SAMPLE	S	16-FEB-10	.552g	50mL	
246055004	RE15-10-8168	SAMPLE	S	16-FEB-10	.545g	50mL	
246055005	RE15-10-8222	SAMPLE	S	16-FEB-10	.528g	50mL	
246055006	RE15-10-8221	SAMPLE	S	16-FEB-10	.541g	50mL	
246055007	RE15-10-8220	SAMPLE	S	16-FEB-10	.532g	50mL	
246055008	RE15-10-8223	SAMPLE	S	16-FEB-10	.52g	50mL	
246055009	RE15-10-8224	SAMPLE	S	16-FEB-10	.51g	50mL	

SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1545

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>
<b>Batch Number</b> 949335							
1202033908	MB for batch 949335	MB	S	16-FEB-10	.518g	50mL	
1202033913	LCS for batch 949335	LCS	S	16-FEB-10	.518g	50mL	
1202033911	RE15-10-8170S	MS	S	16-FEB-10	.513g	50mL	
1202033912	RE15-10-8170SD	MSD	S	16-FEB-10	.513g	50mL	
1202033909	RE15-10-8170D	DUP	S	16-FEB-10	.517g	50mL	
246055001	RE15-10-8170	SAMPLE	S	16-FEB-10	.518g	50mL	
246055002	RE15-10-8169	SAMPLE	S	16-FEB-10	.558g	50mL	
246055003	RE15-10-8171	SAMPLE	S	16-FEB-10	.539g	50mL	
246055004	RE15-10-8168	SAMPLE	S	16-FEB-10	.513g	50mL	
246055005	RE15-10-8222	SAMPLE	S	16-FEB-10	.51g	50mL	
246055006	RE15-10-8221	SAMPLE	S	16-FEB-10	.518g	50mL	
246055007	RE15-10-8220	SAMPLE	S	16-FEB-10	.545g	50mL	
246055008	RE15-10-8223	SAMPLE	S	16-FEB-10	.512g	50mL	
246055009	RE15-10-8224	SAMPLE	S	16-FEB-10	.518g	50mL	

SW846



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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1545

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	951544						
1202039278	MB for batch 951544	MB	S	19-FEB-10	.521g	30mL	
1202039279	LCS for batch 951544	LCS	S	19-FEB-10	.202g	30mL	
1202039281	RE15-10-8170S	MS	S	19-FEB-10	.51g	30mL	
1202039283	RE15-10-8170SD	MSD	S	19-FEB-10	.572g	30mL	
1202039280	RE15-10-8170D	DUP	S	19-FEB-10	.531g	30mL	
246055001	RE15-10-8170	SAMPLE	S	19-FEB-10	.598g	30mL	
246055002	RE15-10-8169	SAMPLE	S	19-FEB-10	.547g	30mL	
246055003	RE15-10-8171	SAMPLE	S	19-FEB-10	.528g	30mL	
246055004	RE15-10-8168	SAMPLE	S	19-FEB-10	.523g	30mL	
246055005	RE15-10-8222	SAMPLE	S	19-FEB-10	.59g	30mL	
246055006	RE15-10-8221	SAMPLE	S	19-FEB-10	.523g	30mL	
246055007	RE15-10-8220	SAMPLE	S	19-FEB-10	.539g	30mL	
246055008	RE15-10-8223	SAMPLE	S	19-FEB-10	.564g	30mL	
246055009	RE15-10-8224	SAMPLE	S	19-FEB-10	.572g	30mL	

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SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 26-FEB-10

End Date: 26-FEB-10

Client Sdg: 10-1545

Method: MS

Data File: 100225-3

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	00:27			X		X											X	X			X			
S10	1	00:31			X		X											X	X			X			
S100	1	00:35			X		X											X	X			X			
ICV01	1	00:39			X		X											X	X			X			
ICB01	1	00:43			X		X											X	X			X			
CRDL01	1	00:47			X		X											X	X			X			
ICSA01	1	00:51			X		X											X	X			X			
ICSAB01	1	00:55			X		X											X	X			X			
CCV01	1	00:59			X		X											X	X			X			
CCB01	1	01:03			X		X											X	X			X			
1202033908	2	01:07			X		X											X	X			X			
1202033913	40	01:11			X		X											X	X			X			
CCV02	1	01:15			X		X											X	X			X			
CCB02	1	01:19			X		X											X	X			X			
246055001	2	01:23			X		X											X	X			X			
ZZZZZZ	2	01:28																							
1202033911	2	01:32			X		X											X	X			X			
1202033912	2	01:36			X		X											X	X			X			
1202033910	10	01:40			X		X											X	X			X			
246055002	2	01:44			X		X											X				X			
246055003	2	01:48			X		X											X	X			X			
CCV03	1	01:52			X		X											X	X			X			
CCB03	1	01:56			X		X											X	X			X			
246055004	2	02:00			X		X											X	X			X			
246055005	2	02:04			X		X											X	X			X			
246055006	2	02:08			X		X											X				X			
246055007	2	02:12			X		X											X	X			X			
246055008	2	02:16			X		X											X	X			X			
246055009	2	02:20			X		X											X	X			X			
246055002	4	02:28																	X						
246055006	4	02:32																	X						
CCV04	1	02:36			X		X											X	X			X			
CCB04	1	02:40			X		X											X	X			X			
1202033909	2	02:44			X		X											X	X			X			
CCV05	1	02:48			X		X											X	X			X			
CCB05	1	02:52			X		X											X	X			X			

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 24-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1545

Method: P

Data File: 022410-1

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	12:41	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
S0.1	1	12:47		X		X		X		X	X	X					X		X		X			X	X
S0.5	1	12:54	X	X		X		X	X	X	X	X			X	X			X		X			X	X
SCAL	1	13:01	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
S10	1	13:09	X					X					X		X							X			
ICV01	1	13:14	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ICB01	1	13:21	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
PQL01	1	13:28	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ICSA01	1	13:35	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ICSAB01	1	13:41	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
LR01	1	13:48	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
LR02	1	13:55	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCV01	1	14:02	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB01	1	14:09	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
LR03	1	14:25	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
LR04	1	14:32	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCV02	1	14:39	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB02	1	14:46	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ZZZZZZ	1	14:55																							
ZZZZZZ	1	15:01																							
ZZZZZZ	1	15:08																							
ZZZZZZ	1	15:15																							
ZZZZZZ	1	15:22																							
ZZZZZZ	1	15:29																							
ZZZZZZ	1	15:36																							
ZZZZZZ	1	15:43																							
ZZZZZZ	1	15:49																							
ZZZZZZ	1	15:56																							
CCV03	1	16:03	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB03	1	16:10	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ZZZZZZ	1	16:18																							
ZZZZZZ	1	16:25																							
CCV04	1	16:32	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB04	1	16:39	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCV05	1	16:52	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB05	1	17:00	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ZZZZZZ	1	17:07																							
ZZZZZZ	1	17:14																							
ZZZZZZ	1	17:20																							
ZZZZZZ	1	17:27																							

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time																
ZZZZZZ	1	17:34																
ZZZZZZ	1	17:41																
ZZZZZZ	1	17:48																
ZZZZZZ	1	17:55																
ZZZZZZ	1	18:01																
ZZZZZZ	1	18:08																
CCV06	1	18:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB06	1	18:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	18:29																
ZZZZZZ	1	18:36																
ZZZZZZ	1	18:43																
ZZZZZZ	1	18:50																
ZZZZZZ	1	18:57																
ZZZZZZ	1	19:04																
ZZZZZZ	1	19:11																
ZZZZZZ	1	19:18																
ZZZZZZ	1	19:25																
ZZZZZZ	1	19:32																
CCV07	1	19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB07	1	19:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	19:53																
ZZZZZZ	1	19:59																
ZZZZZZ	1	20:06																
ZZZZZZ	1	20:13																
ZZZZZZ	1	20:20																
ZZZZZZ	1	20:27																
ZZZZZZ	1	20:34																
ZZZZZZ	1	20:40																
ZZZZZZ	1	20:47																
ZZZZZZ	1	20:54																
CCV08	1	21:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB08	1	21:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	21:15																
ZZZZZZ	1	21:22																
ZZZZZZ	1	21:28																
ZZZZZZ	1	21:35																
ZZZZZZ	1	21:42																
ZZZZZZ	1	21:49																
ZZZZZZ	1	21:56																
ZZZZZZ	1	22:03																

**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	5	22:10																							
CCV09	1	22:16	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB09	1	22:23	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
ZZZZZZ	1	22:30																							
ZZZZZZ	1	22:37																							
ZZZZZZ	1	22:45																							
ZZZZZZ	1	22:52																							
ZZZZZZ	1	22:59																							
ZZZZZZ	1	23:06																							
ZZZZZZ	1	23:13																							
ZZZZZZ	1	23:20																							
ZZZZZZ	1	23:27																							
CCV10	1	23:34	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB10	1	23:41	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033898	1	23:48	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033903	1	23:55	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055001	1	00:01	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033899	1	00:08	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033901	1	00:15	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033902	1	00:23	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
1202033900	5	00:30	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCV11	1	00:37	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB11	1	00:44	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055002	1	00:51	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055003	1	00:58	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055004	1	01:05	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055005	1	01:12	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055006	1	01:19	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055007	1	01:27	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055008	1	01:34	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
246055009	1	01:41	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCV12	1	01:48	X	X		X		X	X	X	X	X	X		X	X			X		X	X		X	X
CCB12	1	01:55	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: OPTIMA3

Start Date: 01-MAR-10

End Date: 01-MAR-10

Client Sdg: 10-1545

Method: P

Data File: 030110A-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	11:32												X											
S0.1	1	11:38												X											
S0.5	1	11:44												X											
SCAL	1	11:52												X											
S10	1	11:59																							
ICV01	1	12:04												X											
ICB01	1	12:11												X											
PQL01	1	12:18												X											
ICSA01	1	12:25												X											
ICSAB01	1	12:31												X											
LR01	1	12:37												X											
LR02	1	12:44												X											
CCV01	1	12:51												X											
CCB01	1	12:58												X											
LR03	1	13:05												X											
CCV02	1	13:12												X											
CCB02	1	13:19												X											
ZZZZZ	1	13:31																							
ZZZZZ	1	13:38																							
ZZZZZ	1	13:45																							
ZZZZZ	1	13:52																							
ZZZZZ	1	13:59																							
ZZZZZ	1	14:06																							
ZZZZZ	1	14:13																							
CCV03	1	14:20												X											
CCB03	1	14:27												X											
ZZZZZ	1	14:32																							
ZZZZZ	1	14:38																							
ZZZZZ	1	14:45																							
ZZZZZ	1	14:52																							
ZZZZZ	1	14:59																							
ZZZZZ	1	15:06																							
ZZZZZ	5	15:13																							
ZZZZZ	1	15:20																							
CCV04	1	15:27												X											
CCB04	1	15:34												X											
ZZZZZ	1	15:40																							
ZZZZZ	1	15:48																							
ZZZZZ	1	15:55																							
ZZZZZ	1	16:02																							

**Metals**  
**-14-**  
**Analysis Run Log**

[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
246055003	1	21:05												X											
246055004	1	21:12												X											
246055005	1	21:19												X											
246055006	1	21:26												X											
246055007	1	21:33												X											
246055008	1	21:40												X											
246055009	100	21:47												X											
CCV10	1	21:54												X											
CCB10	1	22:01												X											



**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 22-FEB-10

End Date: 22-FEB-10

Client Sdg: 10-1545

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	09:12															X								
S0.2	1	09:13															X								
S0.5	1	09:15															X								
S2.0	1	09:17															X								
S5.0	1	09:18															X								
S10.0	1	09:20															X								
ICV01	1	09:22															X								
ICB01	1	09:23															X								
CRDL01	1	09:25															X								
CCV01	1	09:27															X								
CCB01	1	09:28															X								
ZZZZZZ	1	09:30																							
ZZZZZZ	10	09:32																							
ZZZZZZ	1	09:34																							
ZZZZZZ	1	09:35																							
ZZZZZZ	1	09:37																							
ZZZZZZ	1	09:38																							
ZZZZZZ	1	09:40																							
ZZZZZZ	1	09:42																							
ZZZZZZ	1	09:43																							
ZZZZZZ	1	09:45																							
CCV02	1	09:47															X								
CCB02	1	09:48															X								
ZZZZZZ	1	09:50																							
ZZZZZZ	1	09:52																							
ZZZZZZ	1	09:54																							
ZZZZZZ	1	09:55																							
ZZZZZZ	1	09:57																							
ZZZZZZ	1	09:59																							
ZZZZZZ	1	10:00																							
ZZZZZZ	5	10:02																							
ZZZZZZ	1	10:04																							
ZZZZZZ	1	10:05																							
CCV03	1	10:07															X								
CCB03	1	10:09															X								
ZZZZZZ	1	10:10																							
ZZZZZZ	1	10:12																							
ZZZZZZ	1	10:14																							
ZZZZZZ	1	10:15																							
ZZZZZZ	1	10:17																							

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time
ZZZZZZ	1	10:19
1202039278	1	10:20
1202039279	10	10:22
246055001	1	10:24
1202039280	1	10:25
CCV04	1	10:27
CCB04	1	10:29
1202039281	1	10:30
1202039283	1	10:32
1202039282	5	10:34
246055002	1	10:35
246055003	1	10:37
246055004	1	10:39
246055005	1	10:40
246055006	1	10:42
246055007	1	10:44
246055008	1	10:45
CCV05	1	10:47
CCB05	1	10:49
246055009	1	10:50
ZZZZZZ	1	10:52
ZZZZZZ	10	10:54
ZZZZZZ	1	10:56
ZZZZZZ	1	10:57
ZZZZZZ	1	10:59
ZZZZZZ	1	11:01
ZZZZZZ	5	11:02
ZZZZZZ	1	11:04
ZZZZZZ	1	11:06
CCV06	1	11:07
CCB06	1	11:09

# Standards

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1545

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Vanadium		2.0	10
	Zinc		2.0	10

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METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1545

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. 10-1545

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1545**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1545

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Boron	Cadmium	Chromium	Cobalt	Copper
Parmname	Wavelength					
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
Tiu	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: GELGEL Job No: **10-1545**

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: GELGEL Job No: **10-1545**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1545**

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: **10-1545**

Contract: LANL01004

Instrument: OPTIMA3

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Tin	Titanium	Uranium	Vanadium	Zinc
Parmname	Wavelength					
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. 10-1545

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS6

<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. 10-1545

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

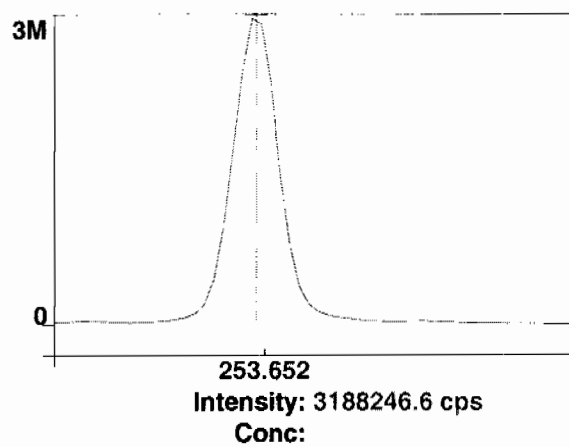
# Raw Data

Method: Hg\_ReAlign  
Result: 030110

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1



=====  
Analysis Begun

Start Time: 2/24/2010 12:41:03

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\022410.sif

Batch ID:

Results Data Set: 022410

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

=====  
Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/24/2010 12:41:05

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	3896.6	3896.6	99.4 %	12:43:18
1	Y RADIAL	4390.8	4390.8	99.54 %	12:42:58
1	Al 396.153Radial†	-128.6	-129.3	[0.00] ug/L	12:42:58
1	Ca 317.933Radial†	18.8	18.9	[0.00] ug/L	12:43:18
1	Fe 238.204 Radial†	11.3	11.3	[0.00] ug/L	12:43:18
1	K 766.490 Radial†	2645.3	2660.3	[0.00] ug/L	12:42:58
1	Mg 279.077 IEC†	3.1	3.1	[0.00] ug/L	12:43:18
1	Na 589.592 Radial†	-826.1	-830.8	[0.00] ug/L	12:42:58
1	Sr 421.552†	71.0	71.4	[0.00] ug/L	12:42:58
1	Sc 361.383	877876.1	877876.1	100.07 %	12:44:14
1	Y 371.029	757025.6	757025.6	100.16 %	12:44:14
1	Ag 328.068†	216.3	216.1	[0.00] ug/L	12:44:14
1	As 188.979†	-23.1	-23.1	[0.00] ug/L	12:44:34
1	B 249.677†	-385.0	-384.7	[0.00] ug/L	12:44:34
1	Ba 233.527†	0.0	0.0	[0.00] ug/L	12:44:34
1	Be 313.107†	-3714.2	-3711.5	[0.00] ug/L	12:44:14
1	Cd 226.502†	-194.6	-194.4	[0.00] ug/L	12:44:34
1	Co 228.616†	-57.4	-57.3	[0.00] ug/L	12:44:34
1	Cr 267.716†	72.2	72.1	[0.00] ug/L	12:44:34
1	Cu 324.752†	6029.5	6025.1	[0.00] ug/L	12:44:14
1	Mn 257.610†	440.8	440.4	[0.00] ug/L	12:44:34
1	Mo 202.031†	15.1	15.1	[0.00] ug/L	12:44:34
1	Ni 231.604†	63.6	63.5	[0.00] ug/L	12:44:34
1	P 214.914†	215.4	215.2	[0.00] ug/L	12:44:34
1	Pb 220.353†	-56.7	-56.7	[0.00] ug/L	12:44:34
1	S 181.975 Axial†	38.6	38.6	[0.00] ug/L	12:44:34
1	Sb 206.836†	37.5	37.5	[0.00] ug/L	12:44:34
1	Se 196.026†	-32.0	-31.9	[0.00] ug/L	12:44:34
1	Si 251.611†	557.4	557.0	[0.00] ug/L	12:44:34
1	Sn 189.927†	17.3	17.3	[0.00] ug/L	12:44:34
1	Ti 334.940†	-1321.0	-1320.1	[0.00] ug/L	12:44:14
1	Tl 190.801†	-31.5	-31.4	[0.00] ug/L	12:44:34
1	U 409.014†	-2936.7	-2934.6	[0.00] ug/L	12:44:14
1	V 292.402†	-1480.7	-1479.6	[0.00] ug/L	12:44:14
1	Zn 213.857†	606.9	606.4	[0.00] ug/L	12:44:34
1	SiO2†	548.2	547.8	[0.00] ug/L	12:45:30
2	Sc Radial	3933.1	3933.1	100 %	12:43:43
2	Y RADIAL	4456.7	4456.7	101.0 %	12:43:23
2	Al 396.153Radial†	-92.2	-91.8	[0.00] ug/L	12:43:23
2	Ca 317.933Radial†	20.4	20.4	[0.00] ug/L	12:43:43
2	Fe 238.204 Radial†	10.6	10.6	[0.00] ug/L	12:43:43
2	K 766.490 Radial†	2597.3	2587.9	[0.00] ug/L	12:43:23
2	Mg 279.077 IEC†	5.5	5.4	[0.00] ug/L	12:43:43
2	Na 589.592 Radial†	-800.9	-798.0	[0.00] ug/L	12:43:23
2	Sr 421.552†	21.6	21.6	[0.00] ug/L	12:43:23
2	Sc 361.383	880112.3	880112.3	100.33 %	12:44:40
2	Y 371.029	760544.3	760544.3	100.62 %	12:44:40

2	Ag 328.068†	279.3	278.4	[0.00]	ug/L	12:44:40
2	As 188.979†	-17.2	-17.2	[0.00]	ug/L	12:45:00
2	B 249.677†	-387.2	-385.9	[0.00]	ug/L	12:45:00
2	Ba 233.527†	2.1	2.1	[0.00]	ug/L	12:45:00
2	Be 313.107†	-3758.8	-3746.5	[0.00]	ug/L	12:44:40
2	Cd 226.502†	-206.9	-206.2	[0.00]	ug/L	12:45:00
2	Co 228.616†	-66.3	-66.0	[0.00]	ug/L	12:45:00
2	Cr 267.716†	88.2	87.9	[0.00]	ug/L	12:45:00
2	Cu 324.752†	6059.3	6039.5	[0.00]	ug/L	12:44:40
2	Mn 257.610†	467.5	466.0	[0.00]	ug/L	12:45:00
2	Mo 202.031†	5.7	5.7	[0.00]	ug/L	12:45:00
2	Ni 231.604†	64.4	64.2	[0.00]	ug/L	12:45:00
2	P 214.914†	222.5	221.8	[0.00]	ug/L	12:45:00
2	Pb 220.353†	-54.4	-54.3	[0.00]	ug/L	12:45:00
2	S 181.975 Axial†	43.0	42.8	[0.00]	ug/L	12:45:00
2	Sb 206.836†	34.3	34.2	[0.00]	ug/L	12:45:00
2	Se 196.026†	-28.5	-28.4	[0.00]	ug/L	12:45:00
2	Si 251.611†	547.2	545.4	[0.00]	ug/L	12:45:00
2	Sn 189.927†	5.6	5.6	[0.00]	ug/L	12:45:00
2	Ti 334.940†	-1450.8	-1446.1	[0.00]	ug/L	12:44:40
2	Tl 190.801†	-33.6	-33.5	[0.00]	ug/L	12:45:00
2	U 409.014†	-2845.2	-2835.9	[0.00]	ug/L	12:44:40
2	V 292.402†	-1518.7	-1513.8	[0.00]	ug/L	12:44:40
2	Zn 213.857†	610.6	608.6	[0.00]	ug/L	12:45:00
2	SiO2†	580.4	578.5	[0.00]	ug/L	12:45:35
3	Sc Radial	3926.7	3926.7	100 %		12:44:08
3	Y RADIAL	4385.1	4385.1	99.42 %		12:43:48
3	Al 396.153Radial†	-116.4	-116.1	[0.00]	ug/L	12:43:48
3	Ca 317.933Radial†	19.8	19.8	[0.00]	ug/L	12:44:08
3	Fe 238.204 Radial†	12.0	12.0	[0.00]	ug/L	12:44:08
3	K 766.490 Radial†	2676.0	2670.6	[0.00]	ug/L	12:43:48
3	Mg 279.077 IEC†	3.7	3.7	[0.00]	ug/L	12:44:08
3	Na 589.592 Radial†	-832.2	-830.5	[0.00]	ug/L	12:43:48
3	Sr 421.552†	14.3	14.2	[0.00]	ug/L	12:43:48
3	Sc 361.383	873705.1	873705.1	99.598 %		12:45:05
3	Y 371.029	749962.1	749962.1	99.222 %		12:45:05
3	Ag 328.068†	225.8	226.8	[0.00]	ug/L	12:45:05
3	As 188.979†	-14.4	-14.5	[0.00]	ug/L	12:45:25
3	B 249.677†	-422.3	-424.0	[0.00]	ug/L	12:45:25
3	Ba 233.527†	-6.3	-6.4	[0.00]	ug/L	12:45:25
3	Be 313.107†	-3813.2	-3828.6	[0.00]	ug/L	12:45:05
3	Cd 226.502†	-187.4	-188.2	[0.00]	ug/L	12:45:25
3	Co 228.616†	-75.9	-76.2	[0.00]	ug/L	12:45:25
3	Cr 267.716†	72.7	73.0	[0.00]	ug/L	12:45:25
3	Cu 324.752†	5884.0	5907.8	[0.00]	ug/L	12:45:05
3	Mn 257.610†	467.9	469.8	[0.00]	ug/L	12:45:25
3	Mo 202.031†	9.6	9.6	[0.00]	ug/L	12:45:25
3	Ni 231.604†	59.4	59.6	[0.00]	ug/L	12:45:25
3	P 214.914†	193.8	194.5	[0.00]	ug/L	12:45:25
3	Pb 220.353†	-63.1	-63.4	[0.00]	ug/L	12:45:25
3	S 181.975 Axial†	40.8	41.0	[0.00]	ug/L	12:45:25
3	Sb 206.836†	38.3	38.4	[0.00]	ug/L	12:45:25
3	Se 196.026†	-22.8	-22.9	[0.00]	ug/L	12:45:25
3	Si 251.611†	570.2	572.5	[0.00]	ug/L	12:45:25
3	Sn 189.927†	8.5	8.6	[0.00]	ug/L	12:45:25
3	Ti 334.940†	-1350.6	-1356.1	[0.00]	ug/L	12:45:05
3	Tl 190.801†	-32.7	-32.8	[0.00]	ug/L	12:45:25
3	U 409.014†	-2877.8	-2889.4	[0.00]	ug/L	12:45:05
3	V 292.402†	-1517.6	-1523.7	[0.00]	ug/L	12:45:05
3	Zn 213.857†	600.7	603.1	[0.00]	ug/L	12:45:25
3	SiO2†	534.7	536.9	[0.00]	ug/L	12:45:41

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Mean Data: S0

Analyte	Mean Corrected		RSD		Calib
	Intensity	Std.Dev.			Conc. Units
Sc 361.383	877231.2	3251.90	0.37%		100.00 %
Sc Radial	3918.8	19.47	0.50%		100 %
Y 371.029	755844.0	5389.12	0.71%		100.00 %
Y RADIAL	4410.9	39.77	0.90%		100.0 %
Ag 328.068†	240.4	33.31	13.85%		[0.00] ug/L

Al 396.153Radial†	-112.4	19.01	16.91%	[0.00]	ug/L
As 188.979†	-18.2	4.39	24.06%	[0.00]	ug/L
B 249.677†	-398.2	22.32	5.61%	[0.00]	ug/L
Ba 233.527†	-1.4	4.39	310.28%	[0.00]	ug/L
Be 313.107†	-3762.2	60.09	1.60%	[0.00]	ug/L
Ca 317.933Radial†	19.7	0.74	3.76%	[0.00]	ug/L
Cd 226.502†	-196.3	9.16	4.67%	[0.00]	ug/L
Co 228.616†	-66.5	9.45	14.20%	[0.00]	ug/L
Cr 267.716†	77.7	8.87	11.42%	[0.00]	ug/L
Cu 324.752†	5990.8	72.25	1.21%	[0.00]	ug/L
Fe 238.204 Radial†	11.3	0.71	6.25%	[0.00]	ug/L
K 766.490 Radial†	2639.6	45.10	1.71%	[0.00]	ug/L
Mg 279.077 IEC†	4.1	1.22	29.95%	[0.00]	ug/L
Mn 257.610†	458.7	15.96	3.48%	[0.00]	ug/L
Mo 202.031†	10.1	4.73	46.62%	[0.00]	ug/L
Na 589.592 Radial†	-819.8	18.85	2.30%	[0.00]	ug/L
Ni 231.604†	62.4	2.49	3.99%	[0.00]	ug/L
P 214.914†	210.5	14.20	6.75%	[0.00]	ug/L
Pb 220.353†	-58.1	4.73	8.14%	[0.00]	ug/L
S 181.975 Axial†	40.8	2.13	5.23%	[0.00]	ug/L
Sb 206.836†	36.7	2.22	6.05%	[0.00]	ug/L
Se 196.026†	-27.7	4.54	16.36%	[0.00]	ug/L
Si 251.611†	558.3	13.60	2.44%	[0.00]	ug/L
Sn 189.927†	10.5	6.10	58.21%	[0.00]	ug/L
Sr 421.552†	35.7	31.09	87.02%	[0.00]	ug/L
Ti 334.940†	-1374.1	64.90	4.72%	[0.00]	ug/L
Tl 190.801†	-32.6	1.05	3.21%	[0.00]	ug/L
U 409.014†	-2886.6	49.42	1.71%	[0.00]	ug/L
V 292.402†	-1505.7	23.15	1.54%	[0.00]	ug/L
Zn 213.857†	606.0	2.76	0.46%	[0.00]	ug/L
SiO2†	554.4	21.58	3.89%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/24/2010 12:47:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Analysis Time
1	Sc Radial	4005.8	4005.8	102 %	12:50:03
1	Y RADIAL	4421.1	4421.1	100.2 %	12:50:03
1	K 766.490 Radial†	7828.1	5018.5	[1000] ug/L	12:49:43
1	Sr 421.552†	14342.5	13995.4	[100] ug/L	12:50:03
1	Sc 361.383	912251.6	912251.6	103.99 %	12:51:00
1	Y 371.029	767312.1	767312.1	101.52 %	12:51:00
1	Ag 328.068†	21835.8	20757.1	[100] ug/L	12:51:05
1	As 188.979†	198.9	209.5	[100] ug/L	12:51:25
1	B 249.677†	3460.9	3726.2	[100] ug/L	12:51:05
1	Ba 233.527†	12816.7	12326.1	[100] ug/L	12:51:05
1	Be 313.107†	261235.4	254969.0	[100] ug/L	12:51:00
1	Cd 226.502†	8472.7	8343.7	[100] ug/L	12:51:05
1	Co 228.616†	4664.2	4551.7	[100] ug/L	12:51:25
1	Cr 267.716†	9056.1	8630.8	[100] ug/L	12:51:05
1	Cu 324.752†	38425.7	30959.8	[100] ug/L	12:51:05
1	Mn 257.610†	89289.5	85403.0	[100] ug/L	12:51:05
1	Mo 202.031†	1368.6	1305.9	[100] ug/L	12:51:25
1	Ni 231.604†	3925.6	3712.5	[100] ug/L	12:51:25
1	P 214.914†	1032.8	782.6	[500] ug/L	12:51:25
1	Pb 220.353†	757.9	786.9	[100] ug/L	12:51:25
1	S 181.975 Axial†	173.6	126.2	[200] ug/L	12:51:25
1	Sb 206.836†	319.8	270.9	[100] ug/L	12:51:25
1	Se 196.026†	114.7	138.1	[100] ug/L	12:51:25
1	Si 251.611†	15820.1	14654.5	[500] ug/L	12:51:05
1	Sn 189.927†	563.2	531.1	[100] ug/L	12:51:25
1	Ti 334.940†	62252.0	61236.3	[100] ug/L	12:51:05
1	Tl 190.801†	284.5	306.2	[100] ug/L	12:51:25
1	U 409.014†	823.0	3678.0	[100] ug/L	12:51:00
1	V 292.402†	12731.0	13747.9	[100] ug/L	12:51:05
1	Zn 213.857†	10501.6	9492.4	[100] ug/L	12:51:05
1	SiO2†	15859.3	14696.0	[1069.5] ug/L	12:52:31
2	Sc Radial	4014.4	4014.4	102 %	12:50:28
2	Y RADIAL	4429.4	4429.4	100.4 %	12:50:28
2	K 766.490 Radial†	7827.2	5001.2	[1000] ug/L	12:50:08
2	Sr 421.552†	14370.6	13992.6	[100] ug/L	12:50:28
2	Sc 361.383	913537.5	913537.5	104.14 %	12:51:31
2	Y 371.029	770025.1	770025.1	101.88 %	12:51:31
2	Ag 328.068†	22061.3	20944.1	[100] ug/L	12:51:36
2	As 188.979†	191.0	201.6	[100] ug/L	12:51:56
2	B 249.677†	3542.8	3800.2	[100] ug/L	12:51:36
2	Ba 233.527†	12960.8	12447.1	[100] ug/L	12:51:36
2	Be 313.107†	262476.2	255807.0	[100] ug/L	12:51:31
2	Cd 226.502†	8580.1	8435.4	[100] ug/L	12:51:36
2	Co 228.616†	4674.2	4555.0	[100] ug/L	12:51:56
2	Cr 267.716†	9092.1	8653.1	[100] ug/L	12:51:36
2	Cu 324.752†	38833.0	31298.9	[100] ug/L	12:51:36
2	Mn 257.610†	90310.7	86262.8	[100] ug/L	12:51:36
2	Mo 202.031†	1386.0	1320.7	[100] ug/L	12:51:56
2	Ni 231.604†	3948.1	3728.8	[100] ug/L	12:51:56
2	P 214.914†	1023.5	772.3	[500] ug/L	12:51:56
2	Pb 220.353†	753.7	781.9	[100] ug/L	12:51:56
2	S 181.975 Axial†	178.6	130.7	[200] ug/L	12:51:56
2	Sb 206.836†	328.6	278.8	[100] ug/L	12:51:56
2	Se 196.026†	131.5	154.0	[100] ug/L	12:51:56
2	Si 251.611†	15981.8	14788.3	[500] ug/L	12:51:36
2	Sn 189.927†	567.0	534.0	[100] ug/L	12:51:56
2	Ti 334.940†	62812.3	61690.1	[100] ug/L	12:51:36
2	Tl 190.801†	288.1	309.2	[100] ug/L	12:51:56
2	U 409.014†	775.5	3631.3	[100] ug/L	12:51:31

2	V 292.402†	12904.7	13897.5	[100]	ug/L	12:51:36
2	Zn 213.857†	10628.4	9600.0	[100]	ug/L	12:51:36
2	SiO2†	15791.1	14609.1	[1069.5]	ug/L	12:52:37
3	Sc Radial	4034.1	4034.1	103	%	12:50:53
3	Y RADIAL	4460.1	4460.1	101.1	%	12:50:53
3	K 766.490 Radial†	7747.9	4886.8	[1000]	ug/L	12:50:33
3	Sr 421.552†	14406.4	13958.9	[100]	ug/L	12:50:53
3	Sc 361.383	917853.3	917853.3	104.63	%	12:52:01
3	Y 371.029	772132.1	772132.1	102.15	%	12:52:01
3	Ag 328.068†	21942.6	20731.0	[100]	ug/L	12:52:06
3	As 188.979†	203.5	212.7	[100]	ug/L	12:52:26
3	B 249.677†	3497.8	3741.2	[100]	ug/L	12:52:06
3	Ba 233.527†	12850.1	12282.8	[100]	ug/L	12:52:06
3	Be 313.107†	263723.4	255813.8	[100]	ug/L	12:52:01
3	Cd 226.502†	8478.9	8299.9	[100]	ug/L	12:52:06
3	Co 228.616†	4695.0	4553.8	[100]	ug/L	12:52:26
3	Cr 267.716†	9036.4	8558.7	[100]	ug/L	12:52:06
3	Cu 324.752†	38599.7	30900.6	[100]	ug/L	12:52:06
3	Mn 257.610†	89449.5	85031.9	[100]	ug/L	12:52:06
3	Mo 202.031†	1376.6	1305.6	[100]	ug/L	12:52:26
3	Ni 231.604†	3946.9	3709.8	[100]	ug/L	12:52:26
3	P 214.914†	1025.1	769.2	[500]	ug/L	12:52:26
3	Pb 220.353†	759.5	784.0	[100]	ug/L	12:52:26
3	S 181.975 Axial†	177.3	128.6	[200]	ug/L	12:52:26
3	Sb 206.836†	318.4	267.6	[100]	ug/L	12:52:26
3	Se 196.026†	122.0	144.4	[100]	ug/L	12:52:26
3	Si 251.611†	15853.0	14593.1	[500]	ug/L	12:52:06
3	Sn 189.927†	568.3	532.7	[100]	ug/L	12:52:26
3	Ti 334.940†	62266.2	60884.5	[100]	ug/L	12:52:06
3	Tl 190.801†	284.5	304.5	[100]	ug/L	12:52:26
3	U 409.014†	873.3	3721.2	[100]	ug/L	12:52:01
3	V 292.402†	12660.5	13605.9	[100]	ug/L	12:52:06
3	Zn 213.857†	10587.7	9513.1	[100]	ug/L	12:52:06
3	SiO2†	15645.8	14399.0	[1069.5]	ug/L	12:52:42

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	914547.5	2934.26	0.32%	104.25	%
Sc Radial	4018.1	14.52	0.36%	103	%
Y 371.029	769823.1	2416.34	0.31%	101.85	%
Y RADIAL	4436.9	20.55	0.46%	100.6	%
Ag 328.068†	20810.8	116.25	0.56%	[100]	ug/L
As 188.979†	208.0	5.71	2.75%	[100]	ug/L
B 249.677†	3755.9	39.08	1.04%	[100]	ug/L
Ba 233.527†	12352.0	85.16	0.69%	[100]	ug/L
Be 313.107†	255529.9	485.76	0.19%	[100]	ug/L
Cd 226.502†	8359.7	69.12	0.83%	[100]	ug/L
Co 228.616†	4553.5	1.67	0.04%	[100]	ug/L
Cr 267.716†	8614.2	49.31	0.57%	[100]	ug/L
Cu 324.752†	31053.1	214.93	0.69%	[100]	ug/L
K 766.490 Radial†	4968.8	71.55	1.44%	[1000]	ug/L
Mn 257.610†	85565.9	631.38	0.74%	[100]	ug/L
Mo 202.031†	1310.7	8.66	0.66%	[100]	ug/L
Ni 231.604†	3717.0	10.29	0.28%	[100]	ug/L
P 214.914†	774.7	7.02	0.91%	[500]	ug/L
Pb 220.353†	784.3	2.54	0.32%	[100]	ug/L
S 181.975 Axial†	128.5	2.26	1.76%	[200]	ug/L
Sb 206.836†	272.4	5.80	2.13%	[100]	ug/L
Se 196.026†	145.5	8.02	5.51%	[100]	ug/L
Si 251.611†	14678.6	99.81	0.68%	[500]	ug/L
Sn 189.927†	532.6	1.47	0.28%	[100]	ug/L
Sr 421.552†	13982.3	20.28	0.15%	[100]	ug/L
Ti 334.940†	61270.3	403.85	0.66%	[100]	ug/L
Tl 190.801†	306.6	2.39	0.78%	[100]	ug/L
U 409.014†	3676.8	45.00	1.22%	[100]	ug/L
V 292.402†	13750.4	145.82	1.06%	[100]	ug/L
Zn 213.857†	9535.2	57.07	0.60%	[100]	ug/L
SiO2†	14568.0	152.72	1.05%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/24/2010 12:54:52

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	3959.7	3959.7	101 %	12:57:04
1	Y RADIAL	4531.2	4531.2	102.7 %	12:56:44
1	Al 396.153Radial†	5299.7	5357.4	[5000] ug/L	12:56:44
1	Ca 317.933Radial†	2504.8	2459.2	[5000] ug/L	12:57:04
1	K 766.490 Radial†	28970.2	26031.7	[5000] ug/L	12:56:44
1	Mg 279.077 IEC†	114.3	109.0	[5000] ug/L	12:57:04
1	Sr 421.552†	74496.5	73692.2	[500] ug/L	12:56:44
1	Sc 361.383	897125.4	897125.4	102.27 %	12:58:02
1	Y 371.029	748525.9	748525.9	99.032 %	12:58:02
1	Ag 328.068†	107053.3	104438.9	[500] ug/L	12:58:07
1	As 188.979†	1070.9	1065.4	[500] ug/L	12:58:27
1	B 249.677†	19759.8	19719.9	[500] ug/L	12:58:07
1	Ba 233.527†	63021.1	61625.0	[500] ug/L	12:58:07
1	Be 313.107†	1311064.9	1285753.6	[500] ug/L	12:58:02
1	Cd 226.502†	42580.3	41832.3	[500] ug/L	12:58:07
1	Co 228.616†	23629.3	23171.9	[500] ug/L	12:58:07
1	Cr 267.716†	44167.4	43110.3	[500] ug/L	12:58:07
1	Cu 324.752†	168199.0	158478.3	[500] ug/L	12:58:07
1	Mn 257.610†	435613.3	425494.6	[500] ug/L	12:58:02
1	Mo 202.031†	6724.4	6565.1	[500] ug/L	12:58:27
1	Ni 231.604†	19643.7	19145.6	[500] ug/L	12:58:07
1	P 214.914†	4299.3	3993.5	[2500] ug/L	12:58:27
1	Pb 220.353†	3963.4	3933.6	[500] ug/L	12:58:27
1	S 181.975 Axial†	723.9	667.0	[1000] ug/L	12:58:27
1	Sb 206.836†	1435.8	1367.3	[500] ug/L	12:58:27
1	Se 196.026†	731.1	742.6	[500] ug/L	12:58:27
1	Si 251.611†	76752.3	74491.9	[2500] ug/L	12:58:07
1	Sn 189.927†	2742.3	2671.0	[500] ug/L	12:58:27
1	Ti 334.940†	312680.9	307121.1	[500] ug/L	12:58:07
1	Tl 190.801†	1515.9	1514.9	[500] ug/L	12:58:27
1	U 409.014†	15062.9	17615.5	[500] ug/L	12:58:07
1	V 292.402†	69312.6	69281.2	[500] ug/L	12:58:07
1	Zn 213.857†	49818.2	48107.4	[500] ug/L	12:58:07
1	SiO2†	76507.0	74256.1	[5347.5] ug/L	12:59:34
2	Sc Radial	3933.2	3933.2	100 %	12:57:29
2	Y RADIAL	4459.3	4459.3	101.1 %	12:57:09
2	Al 396.153Radial†	5244.5	5337.7	[5000] ug/L	12:57:09
2	Ca 317.933Radial†	2485.6	2456.8	[5000] ug/L	12:57:29
2	K 766.490 Radial†	28957.5	26211.9	[5000] ug/L	12:57:09
2	Mg 279.077 IEC†	114.5	110.0	[5000] ug/L	12:57:29
2	Sr 421.552†	73720.2	73414.8	[500] ug/L	12:57:09
2	Sc 361.383	905003.4	905003.4	103.17 %	12:58:33
2	Y 371.029	755053.0	755053.0	99.895 %	12:58:33
2	Ag 328.068†	107573.6	104032.0	[500] ug/L	12:58:38
2	As 188.979†	1079.9	1065.0	[500] ug/L	12:58:58
2	B 249.677†	19869.0	19657.5	[500] ug/L	12:58:38
2	Ba 233.527†	63498.4	61551.2	[500] ug/L	12:58:38
2	Be 313.107†	1324029.2	1287160.3	[500] ug/L	12:58:33
2	Cd 226.502†	42949.2	41827.5	[500] ug/L	12:58:38
2	Co 228.616†	23774.0	23111.0	[500] ug/L	12:58:38
2	Cr 267.716†	44412.4	42971.8	[500] ug/L	12:58:38
2	Cu 324.752†	168924.0	157749.4	[500] ug/L	12:58:38
2	Mn 257.610†	439858.6	425901.7	[500] ug/L	12:58:33
2	Mo 202.031†	6721.4	6505.0	[500] ug/L	12:58:58
2	Ni 231.604†	19793.6	19123.7	[500] ug/L	12:58:38
2	P 214.914†	4301.9	3959.3	[2500] ug/L	12:58:58
2	Pb 220.353†	3958.2	3894.8	[500] ug/L	12:58:58
2	S 181.975 Axial†	735.7	672.3	[1000] ug/L	12:58:58
2	Sb 206.836†	1436.7	1355.9	[500] ug/L	12:58:58

2	Se 196.026†	726.6	732.0	[500]	ug/L	12:58:58
2	Si 251.611†	77292.3	74362.0	[2500]	ug/L	12:58:38
2	Sn 189.927†	2746.6	2651.9	[500]	ug/L	12:58:58
2	Ti 334.940†	314167.7	305900.8	[500]	ug/L	12:58:38
2	Tl 190.801†	1521.2	1507.1	[500]	ug/L	12:58:58
2	U 409.014†	15023.8	17449.3	[500]	ug/L	12:58:38
2	V 292.402†	69648.6	69017.0	[500]	ug/L	12:58:38
2	Zn 213.857†	50222.2	48075.0	[500]	ug/L	12:58:38
2	SiO2†	76326.3	73429.6	[5347.5]	ug/L	12:59:40
3	Sc Radial	3958.2	3958.2	101	%	12:57:55
3	Y RADIAL	4421.5	4421.5	100.2	%	12:57:35
3	Al 396.153Radial†	5185.2	5246.0	[5000]	ug/L	12:57:35
3	Ca 317.933Radial†	2501.0	2456.4	[5000]	ug/L	12:57:55
3	K 766.490 Radial†	28377.0	25454.7	[5000]	ug/L	12:57:35
3	Mg 279.077 IEC†	113.2	108.0	[5000]	ug/L	12:57:55
3	Sr 421.552†	72815.9	72054.9	[500]	ug/L	12:57:35
3	Sc 361.383	899796.5	899796.5	102.57	%	12:59:04
3	Y 371.029	750250.2	750250.2	99.260	%	12:59:04
3	Ag 328.068†	107424.7	104490.3	[500]	ug/L	12:59:09
3	As 188.979†	1092.1	1082.9	[500]	ug/L	12:59:29
3	B 249.677†	19835.0	19735.8	[500]	ug/L	12:59:09
3	Ba 233.527†	63425.2	61836.0	[500]	ug/L	12:59:09
3	Be 313.107†	1311646.2	1282514.5	[500]	ug/L	12:59:04
3	Cd 226.502†	42936.9	42056.3	[500]	ug/L	12:59:09
3	Co 228.616†	23728.0	23199.5	[500]	ug/L	12:59:09
3	Cr 267.716†	44364.5	43174.2	[500]	ug/L	12:59:09
3	Cu 324.752†	167878.7	157677.8	[500]	ug/L	12:59:09
3	Mn 257.610†	436632.8	425224.0	[500]	ug/L	12:59:04
3	Mo 202.031†	6787.8	6607.4	[500]	ug/L	12:59:29
3	Ni 231.604†	19669.6	19113.8	[500]	ug/L	12:59:09
3	P 214.914†	4317.1	3998.3	[2500]	ug/L	12:59:29
3	Pb 220.353†	3990.8	3948.8	[500]	ug/L	12:59:29
3	S 181.975 Axial†	729.2	670.1	[1000]	ug/L	12:59:29
3	Sb 206.836†	1442.2	1369.4	[500]	ug/L	12:59:29
3	Se 196.026†	729.7	739.2	[500]	ug/L	12:59:29
3	Si 251.611†	77120.7	74628.3	[2500]	ug/L	12:59:09
3	Sn 189.927†	2757.9	2678.2	[500]	ug/L	12:59:29
3	Ti 334.940†	313399.4	306913.9	[500]	ug/L	12:59:09
3	Tl 190.801†	1530.3	1524.5	[500]	ug/L	12:59:29
3	U 409.014†	14852.9	17367.0	[500]	ug/L	12:59:09
3	V 292.402†	69433.5	69197.9	[500]	ug/L	12:59:09
3	Zn 213.857†	50097.8	48235.4	[500]	ug/L	12:59:09
3	SiO2†	76717.8	74239.4	[5347.5]	ug/L	12:59:45

## Mean Data: S0.5

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	900641.8	4006.45	0.44%	102.67	%
Sc Radial	3950.4	14.89	0.38%	101	%
Y 371.029	751276.3	3382.41	0.45%	99.396	%
Y RADIAL	4470.7	55.69	1.25%	101.4	%
Ag 328.068†	104320.4	251.07	0.24%	[500]	ug/L
Al 396.153Radial†	5313.7	59.46	1.12%	[5000]	ug/L
As 188.979†	1071.1	10.25	0.96%	[500]	ug/L
B 249.677†	19704.4	41.40	0.21%	[500]	ug/L
Ba 233.527†	61670.7	147.80	0.24%	[500]	ug/L
Be 313.107†	1285142.8	2382.35	0.19%	[500]	ug/L
Ca 317.933Radial†	2457.5	1.55	0.06%	[5000]	ug/L
Cd 226.502†	41905.4	130.75	0.31%	[500]	ug/L
Co 228.616†	23160.8	45.28	0.20%	[500]	ug/L
Cr 267.716†	43085.4	103.50	0.24%	[500]	ug/L
Cu 324.752†	157968.5	442.96	0.28%	[500]	ug/L
K 766.490 Radial†	25899.5	395.55	1.53%	[5000]	ug/L
Mg 279.077 IEC†	109.0	1.01	0.92%	[5000]	ug/L
Mn 257.610†	425540.1	341.15	0.08%	[500]	ug/L
Mo 202.031†	6559.2	51.47	0.78%	[500]	ug/L
Ni 231.604†	19127.7	16.28	0.09%	[500]	ug/L
P 214.914†	3983.7	21.24	0.53%	[2500]	ug/L
Pb 220.353†	3925.8	27.83	0.71%	[500]	ug/L
S 181.975 Axial†	669.8	2.64	0.39%	[1000]	ug/L

Sb 206.836†	1364.2	7.24	0.53%	[500]	ug/L
Se 196.026†	737.9	5.41	0.73%	[500]	ug/L
Si 251.611†	74494.1	133.14	0.18%	[2500]	ug/L
Sn 189.927†	2667.0	13.62	0.51%	[500]	ug/L
Sr 421.552†	73054.0	876.27	1.20%	[500]	ug/L
Ti 334.940†	306645.3	653.00	0.21%	[500]	ug/L
Tl 190.801†	1515.5	8.69	0.57%	[500]	ug/L
U 409.014†	17477.3	126.58	0.72%	[500]	ug/L
V 292.402†	69165.3	135.09	0.20%	[500]	ug/L
Zn 213.857†	48139.3	84.84	0.18%	[500]	ug/L
SiO2†	73975.0	472.42	0.64%	[5347.5]	ug/L



Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/24/2010 13:01:56

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	3880.9	3880.9	99.0 %		13:04:09
1	Y RADIAL	4366.3	4366.3	98.99 %		13:03:49
1	Al 396.153Radial†	10508.7	10723.7	[10000] ug/L		13:03:49
1	Ca 317.933Radial†	4948.7	4977.4	[10000] ug/L		13:03:49
1	Fe 238.204 Radial†	739.4	735.3	[10000] ug/L		13:04:09
1	K 766.490 Radial†	54503.6	52395.8	[10000] ug/L		13:03:49
1	Mg 279.077 IEC†	217.4	215.4	[10000] ug/L		13:04:09
1	Na 589.592 Radial†	31922.6	33053.9	[10000] ug/L		13:03:49
1	Sr 421.552†	143109.9	144470.8	[1000] ug/L		13:03:49
1	Sc 361.383	862098.1	862098.1	98.275 %		13:05:12
1	Y 371.029	730592.8	730592.8	96.659 %		13:05:12
1	Ag 328.068†	213991.6	217507.6	[1000] ug/L		13:05:12
1	As 188.979†	2199.7	2256.5	[1000] ug/L		13:05:32
1	B 249.677†	40577.2	41687.7	[1000] ug/L		13:05:12
1	Ba 233.527†	126278.9	128497.0	[1000] ug/L		13:05:12
1	Be 313.107†	2643845.8	2694017.5	[1000] ug/L		13:05:07
1	Cd 226.502†	85249.3	86942.0	[1000] ug/L		13:05:12
1	Co 228.616†	47146.8	48040.9	[1000] ug/L		13:05:12
1	Cr 267.716†	88467.4	89942.6	[1000] ug/L		13:05:12
1	Cu 324.752†	331740.6	331573.1	[1000] ug/L		13:05:12
1	Mn 257.610†	873120.1	887987.9	[1000] ug/L		13:05:07
1	Mo 202.031†	13513.2	13740.3	[1000] ug/L		13:05:32
1	Ni 231.604†	39004.7	39626.9	[1000] ug/L		13:05:12
1	P 214.914†	8438.2	8375.9	[5000] ug/L		13:05:32
1	Pb 220.353†	8018.1	8217.0	[1000] ug/L		13:05:32
1	S 181.975 Axial†	1417.0	1401.1	[2000] ug/L		13:05:32
1	Sb 206.836†	2869.6	2883.3	[1000] ug/L		13:05:32
1	Se 196.026†	1473.1	1526.7	[1000] ug/L		13:05:32
1	Si 251.611†	153638.7	155777.3	[5000] ug/L		13:05:12
1	Sn 189.927†	5532.1	5618.7	[1000] ug/L		13:05:32
1	Ti 334.940†	629710.8	642138.6	[1000] ug/L		13:05:12
1	Tl 190.801†	3059.8	3146.1	[1000] ug/L		13:05:32
1	U 409.014†	33013.1	36479.2	[1000] ug/L		13:05:12
1	V 292.402†	140898.6	144877.6	[1000] ug/L		13:05:12
1	Zn 213.857†	98955.1	100086.1	[1000] ug/L		13:05:12
1	SiO2†	154057.4	156207.2	[10695] ug/L		13:06:41
2	Sc Radial	3870.6	3870.6	98.8 %		13:04:34
2	Y RADIAL	4379.4	4379.4	99.29 %		13:04:14
2	Al 396.153Radial†	10539.9	10783.7	[10000] ug/L		13:04:14
2	Ca 317.933Radial†	4960.3	5002.4	[10000] ug/L		13:04:14
2	Fe 238.204 Radial†	735.6	733.4	[10000] ug/L		13:04:34
2	K 766.490 Radial†	54665.8	52707.5	[10000] ug/L		13:04:14
2	Mg 279.077 IEC†	221.2	219.8	[10000] ug/L		13:04:34
2	Na 589.592 Radial†	32289.0	33511.2	[10000] ug/L		13:04:14
2	Sr 421.552†	144136.6	145897.3	[1000] ug/L		13:04:14
2	Sc 361.383	862519.3	862519.3	98.323 %		13:05:44
2	Y 371.029	730370.7	730370.7	96.630 %		13:05:44
2	Ag 328.068†	214513.9	217932.4	[1000] ug/L		13:05:44
2	As 188.979†	2212.0	2268.0	[1000] ug/L		13:06:04
2	B 249.677†	40609.6	41700.5	[1000] ug/L		13:05:44
2	Ba 233.527†	126652.9	128814.6	[1000] ug/L		13:05:44
2	Be 313.107†	2629012.2	2677617.0	[1000] ug/L		13:05:38
2	Cd 226.502†	85562.0	87217.7	[1000] ug/L		13:05:44
2	Co 228.616†	47342.7	48216.7	[1000] ug/L		13:05:44
2	Cr 267.716†	88487.6	89919.2	[1000] ug/L		13:05:44
2	Cu 324.752†	332651.7	332334.9	[1000] ug/L		13:05:44
2	Mn 257.610†	868761.6	883121.1	[1000] ug/L		13:05:38
2	Mo 202.031†	13507.4	13727.7	[1000] ug/L		13:06:04
2	Ni 231.604†	39139.1	39744.2	[1000] ug/L		13:05:44

2	P 214.914†	8465.6	8399.4	[5000]	ug/L	13:06:04
2	Pb 220.353†	7995.5	8190.0	[1000]	ug/L	13:06:04
2	S 181.975 Axial†	1420.9	1404.3	[2000]	ug/L	13:06:04
2	Sb 206.836†	2875.8	2888.2	[1000]	ug/L	13:06:04
2	Se 196.026†	1486.2	1539.3	[1000]	ug/L	13:06:04
2	Si 251.611†	154172.3	156243.7	[5000]	ug/L	13:05:44
2	Sn 189.927†	5555.0	5639.2	[1000]	ug/L	13:06:04
2	Ti 334.940†	631308.0	643450.1	[1000]	ug/L	13:05:44
2	Tl 190.801†	3069.3	3154.2	[1000]	ug/L	13:06:04
2	U 409.014†	33087.8	36538.8	[1000]	ug/L	13:05:44
2	V 292.402†	140835.9	144743.8	[1000]	ug/L	13:05:44
2	Zn 213.857†	99266.4	100353.5	[1000]	ug/L	13:05:44
2	SiO2†	151317.5	153344.1	[10695]	ug/L	13:06:46
3	Sc Radial	3888.1	3888.1	99.2	%	13:04:59
3	Y RADIAL	4297.5	4297.5	97.43	%	13:04:39
3	Al 396.153Radial†	10402.0	10596.6	[10000]	ug/L	13:04:39
3	Ca 317.933Radial†	4857.0	4875.7	[10000]	ug/L	13:04:39
3	Fe 238.204 Radial†	737.7	732.2	[10000]	ug/L	13:04:59
3	K 766.490 Radial†	53748.1	51533.5	[10000]	ug/L	13:04:39
3	Mg 279.077 IEC†	220.0	217.7	[10000]	ug/L	13:04:59
3	Na 589.592 Radial†	31437.0	32505.4	[10000]	ug/L	13:04:39
3	Sr 421.552†	141054.9	142134.5	[1000]	ug/L	13:04:39
3	Sc 361.383	859586.0	859586.0	97.989	%	13:06:15
3	Y 371.029	727059.1	727059.1	96.192	%	13:06:15
3	Ag 328.068†	213575.5	217719.3	[1000]	ug/L	13:06:15
3	As 188.979†	2207.6	2271.2	[1000]	ug/L	13:06:35
3	B 249.677†	40605.4	41837.2	[1000]	ug/L	13:06:15
3	Ba 233.527†	125588.7	128168.1	[1000]	ug/L	13:06:15
3	Be 313.107†	2624977.6	2682624.1	[1000]	ug/L	13:06:10
3	Cd 226.502†	84961.5	86901.8	[1000]	ug/L	13:06:15
3	Co 228.616†	47045.8	48078.0	[1000]	ug/L	13:06:15
3	Cr 267.716†	87921.2	89648.3	[1000]	ug/L	13:06:15
3	Cu 324.752†	331178.0	331985.5	[1000]	ug/L	13:06:15
3	Mn 257.610†	869310.7	886696.8	[1000]	ug/L	13:06:10
3	Mo 202.031†	13519.7	13787.1	[1000]	ug/L	13:06:35
3	Ni 231.604†	38715.6	39447.9	[1000]	ug/L	13:06:15
3	P 214.914†	8449.3	8412.3	[5000]	ug/L	13:06:35
3	Pb 220.353†	7981.9	8203.9	[1000]	ug/L	13:06:35
3	S 181.975 Axial†	1416.6	1404.9	[2000]	ug/L	13:06:35
3	Sb 206.836†	2891.6	2914.3	[1000]	ug/L	13:06:35
3	Se 196.026†	1494.8	1553.2	[1000]	ug/L	13:06:35
3	Si 251.611†	153322.8	155911.9	[5000]	ug/L	13:06:15
3	Sn 189.927†	5545.6	5648.9	[1000]	ug/L	13:06:35
3	Ti 334.940†	627308.7	641559.9	[1000]	ug/L	13:06:15
3	Tl 190.801†	3061.7	3157.1	[1000]	ug/L	13:06:35
3	U 409.014†	32986.5	36550.2	[1000]	ug/L	13:06:15
3	V 292.402†	140217.5	144601.5	[1000]	ug/L	13:06:15
3	Zn 213.857†	98578.6	99996.2	[1000]	ug/L	13:06:15
3	SiO2†	154226.8	156838.3	[10695]	ug/L	13:06:51

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	861401.1	1586.02	0.18%	98.195 %
Sc Radial	3879.9	8.80	0.23%	99.0 %
Y 371.029	729340.9	1979.20	0.27%	96.494 %
Y RADIAL	4347.7	43.98	1.01%	98.57 %
Ag 328.068†	217719.8	212.42	0.10%	[1000] ug/L
Al 396.153Radial†	10701.3	95.53	0.89%	[10000] ug/L
As 188.979†	2265.2	7.71	0.34%	[1000] ug/L
B 249.677†	41741.8	82.83	0.20%	[1000] ug/L
Ba 233.527†	128493.2	323.24	0.25%	[1000] ug/L
Be 313.107†	2684752.8	8404.92	0.31%	[1000] ug/L
Ca 317.933Radial†	4951.8	67.11	1.36%	[10000] ug/L
Cd 226.502†	87020.5	171.97	0.20%	[1000] ug/L
Co 228.616†	48111.9	92.67	0.19%	[1000] ug/L
Cr 267.716†	89836.7	163.59	0.18%	[1000] ug/L
Cu 324.752†	331964.5	381.32	0.11%	[1000] ug/L
Fe 238.204 Radial†	733.7	1.59	0.22%	[10000] ug/L
K 766.490 Radial†	52212.3	608.15	1.16%	[10000] ug/L

Mg 279.077 IEC†	217.6	2.22	1.02%	[10000]	ug/L
Mn 257.610†	885935.3	2521.17	0.28%	[1000]	ug/L
Mo 202.031†	13751.7	31.30	0.23%	[1000]	ug/L
Na 589.592 Radial†	33023.5	503.61	1.53%	[10000]	ug/L
Ni 231.604†	39606.3	149.23	0.38%	[1000]	ug/L
P 214.914†	8395.9	18.47	0.22%	[5000]	ug/L
Pb 220.353†	8203.6	13.53	0.16%	[1000]	ug/L
S 181.975 Axial†	1403.4	2.07	0.15%	[2000]	ug/L
Sb 206.836†	2895.2	16.67	0.58%	[1000]	ug/L
Se 196.026†	1539.7	13.25	0.86%	[1000]	ug/L
Si 251.611†	155977.6	240.04	0.15%	[5000]	ug/L
Sn 189.927†	5635.6	15.44	0.27%	[1000]	ug/L
Sr 421.552†	144167.5	1899.60	1.32%	[1000]	ug/L
Ti 334.940†	642382.9	968.50	0.15%	[1000]	ug/L
Tl 190.801†	3152.5	5.73	0.18%	[1000]	ug/L
U 409.014†	36522.7	38.15	0.10%	[1000]	ug/L
V 292.402†	144741.0	138.09	0.10%	[1000]	ug/L
Zn 213.857†	100145.3	185.88	0.19%	[1000]	ug/L
SiO2†	155463.2	1862.13	1.20%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/24/2010 13:09:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	3780.3	3780.3	96.5 %		13:11:16
1	Y RADIAL	4156.9	4156.9	94.24 %		13:11:16
1	Al 396.153Radial†	52348.5	54379.2	[50000] ug/L		13:10:56
1	Ca 317.933Radial†	23503.8	24345.4	[50000] ug/L		13:10:56
1	Fe 238.204 Radial†	1374.2	1413.2	[20000] ug/L		13:11:16
1	Mg 279.077 IEC†	1004.5	1037.2	[50000] ug/L		13:11:16
1	Na 589.592 Radial†	62730.7	65849.2	[20000] ug/L		13:10:56
1	Sc 361.383	860273.3	860273.3	98.067 %		13:12:13
1	Y 371.029	713382.4	713382.4	94.382 %		13:12:13
2	Sc Radial	3848.6	3848.6	98.2 %		13:11:41
2	Y RADIAL	4208.0	4208.0	95.40 %		13:11:41
2	Al 396.153Radial†	52279.8	53346.7	[50000] ug/L		13:11:21
2	Ca 317.933Radial†	23456.6	23865.2	[50000] ug/L		13:11:21
2	Fe 238.204 Radial†	1390.5	1404.5	[20000] ug/L		13:11:41
2	Mg 279.077 IEC†	1013.0	1027.4	[50000] ug/L		13:11:41
2	Na 589.592 Radial†	62730.1	64695.1	[20000] ug/L		13:11:21
2	Sc 361.383	871844.5	871844.5	99.386 %		13:12:19
2	Y 371.029	722628.9	722628.9	95.606 %		13:12:19
3	Sc Radial	3854.8	3854.8	98.4 %		13:12:06
3	Y RADIAL	4211.5	4211.5	95.48 %		13:12:06
3	Al 396.153Radial†	51229.1	52192.0	[50000] ug/L		13:11:46
3	Ca 317.933Radial†	23058.4	23421.6	[50000] ug/L		13:11:46
3	Fe 238.204 Radial†	1383.5	1395.1	[20000] ug/L		13:12:06
3	Mg 279.077 IEC†	1007.7	1020.4	[50000] ug/L		13:12:06
3	Na 589.592 Radial†	61330.9	63168.9	[20000] ug/L		13:11:46
3	Sc 361.383	865956.5	865956.5	98.715 %		13:12:24
3	Y 371.029	717851.7	717851.7	94.974 %		13:12:24

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	866024.8	5785.90	0.67%	98.723 %	
Sc Radial	3827.9	41.34	1.08%	97.7 %	
Y 371.029	717954.3	4624.13	0.64%	94.987 %	
Y RADIAL	4192.1	30.56	0.73%	95.04 %	
Al 396.153Radial†	53306.0	1094.15	2.05%	[50000] ug/L	
Ca 317.933Radial†	23877.4	462.04	1.94%	[50000] ug/L	
Fe 238.204 Radial†	1404.3	9.05	0.64%	[20000] ug/L	
Mg 279.077 IEC†	1028.3	8.45	0.82%	[50000] ug/L	
Na 589.592 Radial†	64571.1	1344.43	2.08%	[20000] ug/L	

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	215.8	0.00000	0.999854	
Al 396.153Radial	3	Lin Thru 0	0.0	1.066	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.239	0.00000	0.999740	
B 249.677	3	Lin Thru 0	0.0	41.25	0.00000	0.999714	
Ba 233.527	3	Lin Thru 0	0.0	127.4	0.00000	0.999867	
Be 313.107	3	Lin Thru 0	0.0	2661	0.00000	0.999847	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4784	0.00000	0.999971	
Cd 226.502	3	Lin Thru 0	0.0	86.36	0.00000	0.999886	
Co 228.616	3	Lin Thru 0	0.0	47.74	0.00000	0.999880	
Cr 267.716	3	Lin Thru 0	0.0	89.08	0.00000	0.999861	
Cu 324.752	3	Lin Thru 0	0.0	328.6	0.00000	0.999799	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0708	0.00000	0.999842	
K 766.490 Radial	3	Lin Thru 0	0.0	5.211	0.00000	0.999986	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0206	0.00000	0.999923
Mn 257.610	3	Lin Thru 0	0.0	878.8	0.00000	0.999872
Mo 202.031	3	Lin Thru 0	0.0	13.62	0.00000	0.999823
Na 589.592 Radia	2	Lin Thru 0	0.0	3.243	0.00000	0.999959
Ni 231.604	3	Lin Thru 0	0.0	39.32	0.00000	0.999894
P 214.914	3	Lin Thru 0	0.0	1.661	0.00000	0.999771
Pb 220.353	3	Lin Thru 0	0.0	8.131	0.00000	0.999846
S 181.975 Axial	3	Lin Thru 0	0.0	0.6949	0.00000	0.999810
Sb 206.836	3	Lin Thru 0	0.0	2.861	0.00000	0.999721
Se 196.026	3	Lin Thru 0	0.0	1.526	0.00000	0.999852
Si 251.611	3	Lin Thru 0	0.0	30.90	0.00000	0.999828
Sn 189.927	3	Lin Thru 0	0.0	5.573	0.00000	0.999760
Sr 421.552	3	Lin Thru 0	0.0	144.5	0.00000	0.999981
Ti 334.940	3	Lin Thru 0	0.0	636.4	0.00000	0.999829
Tl 190.801	3	Lin Thru 0	0.0	3.128	0.00000	0.999879
U 409.014	3	Lin Thru 0	0.0	36.21	0.00000	0.999850
V 292.402	3	Lin Thru 0	0.0	143.4	0.00000	0.999835
Zn 213.857	3	Lin Thru 0	0.0	99.34	0.00000	0.999873
SiO2	3	Lin Thru 0	0.0	14.39	0.00000	0.999800

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/24/2010 13:14:36

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	4002.5	4002.5	102 %		13:16:28
1	Y RADIAL	4387.7	4387.7	99.47 %		13:16:28
1	Al 396.153Radial†	5568.5	5564.5	5193.6 ug/L	5193.6 ppb	13:16:28
1	Ca 317.933Radial†	2581.1	2507.4	5241.7 ug/L	5241.7 ppb	13:16:49
1	Fe 238.204 Radial†	390.7	371.2	5255.5 ug/L	5255.5 ppb	13:16:49
1	K 766.490 Radial†	16204.1	13225.5	2534.4 ug/L	2534.4 ppb	13:16:28
1	Mg 279.077 IEC†	115.3	108.8	5276.4 ug/L	5276.4 ppb	13:16:49
1	Na 589.592 Radial†	7802.4	8459.0	2608.1 ug/L	2608.1 ppb	13:16:28
1	Sr 421.552†	79385.6	77689.3	537.54 ug/L	537.54 ppb	13:16:28
1	Sc 361.383	910091.3	910091.3	103.75 %		13:17:46
1	Y 371.029	762006.8	762006.8	100.82 %		13:17:46
1	Ag 328.068†	56217.1	53946.9	253.08 ug/L	253.08 ppb	13:17:46
1	As 188.979†	1087.5	1066.5	480.49 ug/L	480.49 ppb	13:18:06
1	B 249.677†	22056.9	21658.7	522.80 ug/L	522.80 ppb	13:17:46
1	Ba 233.527†	69368.8	66865.6	525.97 ug/L	525.97 ppb	13:17:46
1	Be 313.107†	698166.4	676720.3	255.43 ug/L	255.43 ppb	13:17:46
1	Cd 226.502†	44207.9	42807.9	495.57 ug/L	495.57 ppb	13:18:06
1	Co 228.616†	25271.8	24425.8	511.81 ug/L	511.81 ppb	13:18:06
1	Cr 267.716†	46315.4	44565.5	501.29 ug/L	501.29 ppb	13:17:46
1	Cu 324.752†	184507.5	171854.9	522.98 ug/L	522.98 ppb	13:17:46
1	Mn 257.610†	459927.2	442862.2	504.25 ug/L	504.25 ppb	13:17:46
1	Mo 202.031†	7354.4	7078.7	520.16 ug/L	520.16 ppb	13:18:06
1	Ni 231.604†	19739.1	18964.0	482.00 ug/L	482.00 ppb	13:18:06
1	P 214.914†	4633.2	4255.4	2459.8 ug/L	2459.8 ppb	13:18:06
1	Pb 220.353†	4263.1	4167.3	514.11 ug/L	514.11 ppb	13:18:06
1	S 181.975 Axial†	1781.8	1676.7	2411.8 ug/L	2411.8 ppb	13:18:06
1	Sb 206.836†	1471.8	1382.0	501.73 ug/L	501.73 ppb	13:18:06
1	Se 196.026†	4059.6	3940.8	2599.6 ug/L	2599.6 ppb	13:18:06
1	Si 251.611†	156795.7	150576.0	4866.1 ug/L	4866.1 ppb	13:17:46
1	Sn 189.927†	3008.1	2889.0	518.99 ug/L	518.99 ppb	13:18:06
1	Ti 334.940†	324728.6	314377.8	493.89 ug/L	493.89 ppb	13:17:46
1	Tl 190.801†	1627.4	1601.2	515.28 ug/L	515.28 ppb	13:18:06
1	U 409.014†	15221.6	17558.6	483.15 ug/L	483.15 ppb	13:17:46
1	V 292.402†	72012.9	70918.4	501.41 ug/L	501.41 ppb	13:17:46
1	Zn 213.857†	51785.9	49310.1	491.81 ug/L	491.81 ppb	13:17:46
1	SiO2†	153306.5	147216.7	10217 ug/L	10217 ppb	13:19:04
2	Sc Radial	4016.6	4016.6	102 %		13:16:54
2	Y RADIAL	4409.0	4409.0	99.96 %		13:16:54
2	Al 396.153Radial†	5568.1	5544.9	5175.0 ug/L	5175.0 ppb	13:16:54
2	Ca 317.933Radial†	2593.7	2510.8	5248.9 ug/L	5248.9 ppb	13:17:14
2	Fe 238.204 Radial†	396.0	375.0	5308.8 ug/L	5308.8 ppb	13:17:14
2	K 766.490 Radial†	16360.7	13322.6	2553.0 ug/L	2553.0 ppb	13:16:54
2	Mg 279.077 IEC†	112.8	106.0	5140.6 ug/L	5140.6 ppb	13:17:14
2	Na 589.592 Radial†	7843.2	8472.0	2612.1 ug/L	2612.1 ppb	13:16:54
2	Sr 421.552†	79566.0	77592.3	536.86 ug/L	536.86 ppb	13:16:54
2	Sc 361.383	897996.3	897996.3	102.37 %		13:18:12
2	Y 371.029	751687.1	751687.1	99.450 %		13:18:12
2	Ag 328.068†	55639.3	54112.3	253.87 ug/L	253.87 ppb	13:18:12
2	As 188.979†	1097.5	1090.3	491.16 ug/L	491.16 ppb	13:18:32
2	B 249.677†	21785.1	21679.6	523.29 ug/L	523.29 ppb	13:18:12
2	Ba 233.527†	68356.1	66776.9	525.27 ug/L	525.27 ppb	13:18:12
2	Be 313.107†	688510.6	676351.8	255.29 ug/L	255.29 ppb	13:18:12
2	Cd 226.502†	44012.9	43191.5	500.01 ug/L	500.01 ppb	13:18:32
2	Co 228.616†	25177.8	24662.1	516.77 ug/L	516.77 ppb	13:18:32
2	Cr 267.716†	45780.1	44643.8	502.18 ug/L	502.18 ppb	13:18:12
2	Cu 324.752†	182271.7	172066.1	523.62 ug/L	523.62 ppb	13:18:12
2	Mn 257.610†	453911.4	442956.5	504.37 ug/L	504.37 ppb	13:18:12
2	Mo 202.031†	7316.1	7136.8	524.43 ug/L	524.43 ppb	13:18:32
2	Ni 231.604†	19677.9	19160.4	486.99 ug/L	486.99 ppb	13:18:32

2	P 214.914†	4596.9	4280.1	2474.5 ug/L	2474.5 ppb	13:18:32
2	Pb 220.353†	4237.4	4197.5	517.83 ug/L	517.83 ppb	13:18:32
2	S 181.975 Axial†	1757.4	1676.0	2410.8 ug/L	2410.8 ppb	13:18:32
2	Sb 206.836†	1461.5	1391.0	505.04 ug/L	505.04 ppb	13:18:32
2	Se 196.026†	4056.1	3990.0	2632.1 ug/L	2632.1 ppb	13:18:32
2	Si 251.611†	154707.8	150572.1	4865.9 ug/L	4865.9 ppb	13:18:12
2	Sn 189.927†	2993.6	2913.9	523.46 ug/L	523.46 ppb	13:18:32
2	Ti 334.940†	320615.0	314575.2	494.22 ug/L	494.22 ppb	13:18:12
2	Tl 190.801†	1619.2	1614.3	519.45 ug/L	519.45 ppb	13:18:32
2	U 409.014†	14892.7	17434.9	479.72 ug/L	479.72 ppb	13:18:12
2	V 292.402†	71135.6	70996.3	502.00 ug/L	502.00 ppb	13:18:12
2	Zn 213.857†	51226.3	49435.7	493.04 ug/L	493.04 ppb	13:18:12
2	SiO2†	153714.0	149605.1	10383 ug/L	10383 ppb	13:19:09
3	Sc Radial	3969.6	3969.6	101 %		13:17:19
3	Y RADIAL	4372.6	4372.6	99.13 %		13:17:19
3	Al 396.153Radial†	5517.9	5559.6	5189.2 ug/L	5189.2 ppb	13:17:19
3	Ca 317.933Radial†	2573.3	2520.7	5269.5 ug/L	5269.5 ppb	13:17:39
3	Fe 238.204 Radial†	394.6	378.2	5354.1 ug/L	5354.1 ppb	13:17:39
3	K 766.490 Radial†	16096.4	13250.7	2539.2 ug/L	2539.2 ppb	13:17:19
3	Mg 279.077 IEC†	111.9	106.4	5156.7 ug/L	5156.7 ppb	13:17:39
3	Na 589.592 Radial†	7604.2	8326.6	2567.3 ug/L	2567.3 ppb	13:17:19
3	Sr 421.552†	78330.9	77292.4	534.79 ug/L	534.79 ppb	13:17:19
3	Sc 361.383	909994.2	909994.2	103.73 %		13:18:38
3	Y 371.029	760463.9	760463.9	100.61 %		13:18:38
3	Ag 328.068†	56219.3	53954.8	253.15 ug/L	253.15 ppb	13:18:38
3	As 188.979†	1095.7	1074.5	484.12 ug/L	484.12 ppb	13:18:58
3	B 249.677†	22183.4	21782.9	525.80 ug/L	525.80 ppb	13:18:38
3	Ba 233.527†	69189.4	66699.8	524.67 ug/L	524.67 ppb	13:18:38
3	Be 313.107†	696913.9	675584.7	255.00 ug/L	255.00 ppb	13:18:38
3	Cd 226.502†	44019.2	42630.7	493.51 ug/L	493.51 ppb	13:18:58
3	Co 228.616†	25198.2	24357.5	510.37 ug/L	510.37 ppb	13:18:58
3	Cr 267.716†	46286.1	44542.0	501.04 ug/L	501.04 ppb	13:18:38
3	Cu 324.752†	184903.4	172255.5	524.20 ug/L	524.20 ppb	13:18:38
3	Mn 257.610†	459425.8	442426.1	503.77 ug/L	503.77 ppb	13:18:38
3	Mo 202.031†	7310.3	7036.9	517.10 ug/L	517.10 ppb	13:18:58
3	Ni 231.604†	19679.0	18908.1	480.58 ug/L	480.58 ppb	13:18:58
3	P 214.914†	4580.5	4205.0	2429.1 ug/L	2429.1 ppb	13:18:58
3	Pb 220.353†	4232.3	4138.0	510.49 ug/L	510.49 ppb	13:18:58
3	S 181.975 Axial†	1777.9	1673.1	2406.6 ug/L	2406.6 ppb	13:18:58
3	Sb 206.836†	1475.7	1385.9	502.96 ug/L	502.96 ppb	13:18:58
3	Se 196.026†	4052.3	3934.1	2595.6 ug/L	2595.6 ppb	13:18:58
3	Si 251.611†	156929.5	150721.2	4870.8 ug/L	4870.8 ppb	13:18:38
3	Sn 189.927†	2978.9	2861.2	514.00 ug/L	514.00 ppb	13:18:58
3	Ti 334.940†	324622.4	314309.0	493.80 ug/L	493.80 ppb	13:18:38
3	Tl 190.801†	1629.4	1603.3	515.94 ug/L	515.94 ppb	13:18:58
3	U 409.014†	15231.2	17569.5	483.44 ug/L	483.44 ppb	13:18:38
3	V 292.402†	71959.9	70874.7	501.05 ug/L	501.05 ppb	13:18:38
3	Zn 213.857†	51795.2	49324.3	491.95 ug/L	491.95 ppb	13:18:38
3	SiO2†	155095.5	148957.1	10338 ug/L	10338 ppb	13:19:14

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906027.3	103.28 %	0.793			0.77%
Sc Radial	3996.3	102 %	0.6			0.60%
Y 371.029	758052.6	100.29 %	0.736			0.73%
Y RADIAL	4389.8	99.52 %	0.415			0.42%
Ag 328.068†	54004.6	253.36 ug/L	0.437	253.36 ppb	0.437	0.17%
QC value within limits for Ag 328.068 Recovery = 101.35%						
Al 396.153Radial†	5556.3	5185.9 ug/L	9.69	5185.9 ppb	9.69	0.19%
QC value within limits for Al 396.153Radial Recovery = 103.72%						
As 188.979†	1077.1	485.26 ug/L	5.424	485.26 ppb	5.424	1.12%
QC value within limits for As 188.979 Recovery = 97.05%						
B 249.677†	21707.1	523.96 ug/L	1.611	523.96 ppb	1.611	0.31%
QC value within limits for B 249.677 Recovery = 104.79%						
Ba 233.527†	66780.7	525.30 ug/L	0.650	525.30 ppb	0.650	0.12%
QC value within limits for Ba 233.527 Recovery = 105.06%						
Be 313.107†	676218.9	255.24 ug/L	0.218	255.24 ppb	0.218	0.09%
QC value within limits for Be 313.107 Recovery = 102.10%						
Ca 317.933Radial†	2513.0	5253.4 ug/L	14.44	5253.4 ppb	14.44	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 105.07%							
Cd 226.502†	42876.7	496.36 ug/L	3.322	496.36 ppb	3.322	0.67%	
QC value within limits for Cd 226.502 Recovery = 99.27%							
Co 228.616†	24481.8	512.99 ug/L	3.356	512.99 ppb	3.356	0.65%	
QC value within limits for Co 228.616 Recovery = 102.60%							
Cr 267.716†	44583.7	501.50 ug/L	0.599	501.50 ppb	0.599	0.12%	
QC value within limits for Cr 267.716 Recovery = 100.30%							
Cu 324.752†	172058.8	523.60 ug/L	0.612	523.60 ppb	0.612	0.12%	
QC value within limits for Cu 324.752 Recovery = 104.72%							
Fe 238.204 Radial†	374.8	5306.1 ug/L	49.34	5306.1 ppb	49.34	0.93%	
QC value within limits for Fe 238.204 Radial Recovery = 106.12%							
K 766.490 Radial†	13266.3	2542.2 ug/L	9.66	2542.2 ppb	9.66	0.38%	
QC value within limits for K 766.490 Radial Recovery = 101.69%							
Mg 279.077 IEC†	107.1	5191.2 ug/L	74.19	5191.2 ppb	74.19	1.43%	
QC value within limits for Mg 279.077 IEC Recovery = 103.82%							
Mn 257.610†	442748.2	504.13 ug/L	0.318	504.13 ppb	0.318	0.06%	
QC value within limits for Mn 257.610 Recovery = 100.83%							
Mo 202.031†	7084.1	520.57 ug/L	3.680	520.57 ppb	3.680	0.71%	
QC value within limits for Mo 202.031 Recovery = 104.11%							
Na 589.592 Radial†	8419.2	2595.9 ug/L	24.81	2595.9 ppb	24.81	0.96%	
QC value within limits for Na 589.592 Radial Recovery = 103.83%							
Ni 231.604†	19010.8	483.19 ug/L	3.368	483.19 ppb	3.368	0.70%	
QC value within limits for Ni 231.604 Recovery = 96.64%							
P 214.914†	4246.9	2454.5 ug/L	23.18	2454.5 ppb	23.18	0.94%	
QC value within limits for P 214.914 Recovery = 98.18%							
Pb 220.353†	4167.6	514.15 ug/L	3.669	514.15 ppb	3.669	0.71%	
QC value within limits for Pb 220.353 Recovery = 102.83%							
S 181.975 Axial†	1675.2	2409.7 ug/L	2.73	2409.7 ppb	2.73	0.11%	
QC value within limits for S 181.975 Axial Recovery = 96.39%							
Sb 206.836†	1386.3	503.25 ug/L	1.671	503.25 ppb	1.671	0.33%	
QC value within limits for Sb 206.836 Recovery = 100.65%							
Se 196.026†	3955.0	2609.1 ug/L	20.01	2609.1 ppb	20.01	0.77%	
QC value within limits for Se 196.026 Recovery = 104.36%							
Si 251.611†	150623.1	4867.6 ug/L	2.79	4867.6 ppb	2.79	0.06%	
QC value within limits for Si 251.611 Recovery = 97.35%							
Sn 189.927†	2888.0	518.82 ug/L	4.734	518.82 ppb	4.734	0.91%	
QC value within limits for Sn 189.927 Recovery = 103.76%							
Sr 421.552†	77524.7	536.40 ug/L	1.432	536.40 ppb	1.432	0.27%	
QC value within limits for Sr 421.552 Recovery = 107.28%							
Ti 334.940†	314420.7	493.97 ug/L	0.219	493.97 ppb	0.219	0.04%	
QC value within limits for Ti 334.940 Recovery = 98.79%							
Tl 190.801†	1606.3	516.89 ug/L	2.239	516.89 ppb	2.239	0.43%	
QC value within limits for Tl 190.801 Recovery = 103.38%							
U 409.014†	17521.0	482.10 ug/L	2.065	482.10 ppb	2.065	0.43%	
QC value within limits for U 409.014 Recovery = 96.42%							
V 292.402†	70929.8	501.49 ug/L	0.479	501.49 ppb	0.479	0.10%	
QC value within limits for V 292.402 Recovery = 100.30%							
Zn 213.857†	49356.7	492.27 ug/L	0.671	492.27 ppb	0.671	0.14%	
QC value within limits for Zn 213.857 Recovery = 98.45%							
SiO2†	148593.0	10312 ug/L	85.8	10312 ppb	85.8	0.83%	
QC value within limits for SiO2 Recovery = 96.42%							
All analyte(s) passed QC.							



Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/24/2010 13:21:25

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	3888.0	3888.0	99.2 %		13:23:38
1	Y RADIAL	4425.2	4425.2	100.3 %		13:23:18
1	Al 396.153Radial†	-125.8	-14.4	-13.548 ug/L	-13.548 ppb	13:23:18
1	Ca 317.933Radial†	15.2	-4.4	-9.1159 ug/L	-9.1159 ppb	13:23:38
1	Fe 238.204 Radial†	10.0	-1.2	-17.144 ug/L	-17.144 ppb	13:23:38
1	K 766.490 Radial†	2698.9	80.7	15.469 ug/L	15.469 ppb	13:23:18
1	Mg 279.077 IEC†	3.2	-0.8	-39.302 ug/L	-39.302 ppb	13:23:38
1	Na 589.592 Radial†	-711.1	103.0	31.763 ug/L	31.763 ppb	13:23:18
1	Sr 421.552†	28.0	-7.5	-0.0519 ug/L	-0.0519 ppb	13:23:18
1	Sc 361.383	889352.7	889352.7	101.38 %		13:24:35
1	Y 371.029	752996.9	752996.9	99.623 %		13:24:35
1	Ag 328.068†	285.8	41.5	0.1870 ug/L	0.1870 ppb	13:24:35
1	As 188.979†	-14.8	3.7	1.6321 ug/L	1.6321 ppb	13:24:55
1	B 249.677†	-200.2	200.8	4.8708 ug/L	4.8708 ppb	13:24:55
1	Ba 233.527†	6.7	8.0	0.0622 ug/L	0.0622 ppb	13:24:55
1	Be 313.107†	-3638.6	173.2	0.0648 ug/L	0.0648 ppb	13:24:35
1	Cd 226.502†	-192.8	6.0	0.0718 ug/L	0.0718 ppb	13:24:55
1	Co 228.616†	-65.4	2.1	0.0444 ug/L	0.0444 ppb	13:24:55
1	Cr 267.716†	63.8	-14.8	-0.1677 ug/L	-0.1677 ppb	13:24:55
1	Cu 324.752†	5979.5	-92.8	-0.2829 ug/L	-0.2829 ppb	13:24:35
1	Mn 257.610†	471.7	6.5	0.0073 ug/L	0.0073 ppb	13:24:55
1	Mo 202.031†	14.3	4.0	0.2904 ug/L	0.2904 ppb	13:24:55
1	Ni 231.604†	64.6	1.2	0.0317 ug/L	0.0317 ppb	13:24:55
1	P 214.914†	210.3	-3.1	-1.7875 ug/L	-1.7875 ppb	13:24:55
1	Pb 220.353†	-39.7	19.0	2.3329 ug/L	2.3329 ppb	13:24:55
1	S 181.975 Axial†	33.4	-7.9	-11.298 ug/L	-11.298 ppb	13:24:55
1	Sb 206.836†	42.2	4.9	1.7528 ug/L	1.7528 ppb	13:24:55
1	Se 196.026†	-26.3	1.8	1.1257 ug/L	1.1257 ppb	13:24:55
1	Si 251.611†	587.7	21.4	0.6887 ug/L	0.6887 ppb	13:24:55
1	Sn 189.927†	17.1	6.4	1.1457 ug/L	1.1457 ppb	13:24:55
1	Ti 334.940†	-1475.1	-81.0	-0.1250 ug/L	-0.1250 ppb	13:24:35
1	Tl 190.801†	-27.6	5.4	1.7165 ug/L	1.7165 ppb	13:24:55
1	U 409.014†	-2941.4	-14.7	-0.4036 ug/L	-0.4036 ppb	13:24:35
1	V 292.402†	-1540.9	-14.3	-0.0942 ug/L	-0.0942 ppb	13:24:35
1	Zn 213.857†	618.7	4.2	0.0455 ug/L	0.0455 ppb	13:24:55
1	SiO2†	612.6	49.8	3.4541 ug/L	3.4541 ppb	13:25:51
2	Sc Radial	3974.7	3974.7	101 %		13:24:03
2	Y RADIAL	4459.8	4459.8	101.1 %		13:23:43
2	Al 396.153Radial†	-95.5	18.3	17.171 ug/L	17.171 ppb	13:23:43
2	Ca 317.933Radial†	16.0	-3.9	-8.2566 ug/L	-8.2566 ppb	13:24:03
2	Fe 238.204 Radial†	11.2	-0.3	-4.1237 ug/L	-4.1237 ppb	13:24:03
2	K 766.490 Radial†	2661.5	-15.5	-2.9732 ug/L	-2.9732 ppb	13:23:43
2	Mg 279.077 IEC†	1.8	-2.3	-110.94 ug/L	-110.94 ppb	13:24:03
2	Na 589.592 Radial†	-764.7	65.9	20.305 ug/L	20.305 ppb	13:23:43
2	Sr 421.552†	32.3	-3.9	-0.0266 ug/L	-0.0266 ppb	13:23:43
2	Sc 361.383	894802.7	894802.7	102.00 %		13:25:00
2	Y 371.029	757537.6	757537.6	100.22 %		13:25:00
2	Ag 328.068†	246.6	1.4	0.0092 ug/L	0.0092 ppb	13:25:00
2	As 188.979†	-18.4	0.2	0.0777 ug/L	0.0777 ppb	13:25:21
2	B 249.677†	-214.2	188.2	4.5643 ug/L	4.5643 ppb	13:25:21
2	Ba 233.527†	16.1	17.2	0.1359 ug/L	0.1359 ppb	13:25:21
2	Be 313.107†	-3693.5	141.2	0.0526 ug/L	0.0526 ppb	13:25:00
2	Cd 226.502†	-188.1	11.9	0.1374 ug/L	0.1374 ppb	13:25:21
2	Co 228.616†	-61.7	6.1	0.1270 ug/L	0.1270 ppb	13:25:21
2	Cr 267.716†	71.7	-7.4	-0.0817 ug/L	-0.0817 ppb	13:25:21
2	Cu 324.752†	5911.2	-195.6	-0.5940 ug/L	-0.5940 ppb	13:25:00
2	Mn 257.610†	450.9	-16.7	-0.0148 ug/L	-0.0148 ppb	13:25:21
2	Mo 202.031†	8.4	-1.9	-0.1378 ug/L	-0.1378 ppb	13:25:21
2	Ni 231.604†	72.1	8.2	0.2083 ug/L	0.2083 ppb	13:25:21

2	P 214.914†	213.4	-1.3	-0.6319 ug/L	-0.6319 ppb	13:25:21
2	Pb 220.353†	-37.2	21.6	2.6617 ug/L	2.6617 ppb	13:25:21
2	S 181.975 Axial†	39.8	-1.8	-2.6215 ug/L	-2.6215 ppb	13:25:21
2	Sb 206.836†	46.4	8.8	3.1197 ug/L	3.1197 ppb	13:25:21
2	Se 196.026†	-15.5	12.6	8.2171 ug/L	8.2171 ppb	13:25:21
2	Si 251.611†	599.1	29.0	0.9412 ug/L	0.9412 ppb	13:25:21
2	Sn 189.927†	25.4	14.4	2.5852 ug/L	2.5852 ppb	13:25:21
2	Ti 334.940†	-1531.3	-127.1	-0.1906 ug/L	-0.1906 ppb	13:25:00
2	Tl 190.801†	-27.7	5.5	1.7437 ug/L	1.7437 ppb	13:25:21
2	U 409.014†	-3046.0	-99.6	-2.7487 ug/L	-2.7487 ppb	13:25:00
2	V 292.402†	-1472.3	62.3	0.4260 ug/L	0.4260 ppb	13:25:00
2	Zn 213.857†	627.0	8.6	0.0869 ug/L	0.0869 ppb	13:25:21
2	SiO2†	578.2	12.5	0.8715 ug/L	0.8715 ppb	13:25:56
3	Sc Radial	3920.0	3920.0	100 %		13:24:29
3	Y RADIAL	4491.9	4491.9	101.8 %		13:24:08
3	Al 396.153Radial†	-113.0	-0.5	-0.4953 ug/L	-0.4953 ppb	13:24:08
3	Ca 317.933Radial†	18.1	-1.6	-3.2438 ug/L	-3.2438 ppb	13:24:29
3	Fe 238.204 Radial†	9.2	-2.2	-30.471 ug/L	-30.471 ppb	13:24:29
3	K 766.490 Radial†	2722.4	82.0	15.724 ug/L	15.724 ppb	13:24:08
3	Mg 279.077 IEC†	4.2	0.1	6.6210 ug/L	6.6210 ppb	13:24:29
3	Na 589.592 Radial†	-783.4	36.6	11.299 ug/L	11.299 ppb	13:24:08
3	Sr 421.552†	33.5	-2.2	-0.0152 ug/L	-0.0152 ppb	13:24:08
3	Sc 361.383	878206.7	878206.7	100.11 %		13:25:26
3	Y 371.029	743925.8	743925.8	98.423 %		13:25:26
3	Ag 328.068†	260.2	19.5	0.0848 ug/L	0.0848 ppb	13:25:26
3	As 188.979†	-21.9	-3.6	-1.6279 ug/L	-1.6279 ppb	13:25:46
3	B 249.677†	-188.0	210.5	5.1077 ug/L	5.1077 ppb	13:25:46
3	Ba 233.527†	8.6	10.0	0.0774 ug/L	0.0774 ppb	13:25:46
3	Be 313.107†	-3636.2	130.1	0.0489 ug/L	0.0489 ppb	13:25:26
3	Cd 226.502†	-193.6	2.8	0.0353 ug/L	0.0353 ppb	13:25:46
3	Co 228.616†	-62.8	3.8	0.0815 ug/L	0.0815 ppb	13:25:46
3	Cr 267.716†	52.0	-25.7	-0.2899 ug/L	-0.2899 ppb	13:25:46
3	Cu 324.752†	5930.1	-67.2	-0.2035 ug/L	-0.2035 ppb	13:25:26
3	Mn 257.610†	460.3	1.1	-0.0021 ug/L	-0.0021 ppb	13:25:46
3	Mo 202.031†	12.2	2.0	0.1472 ug/L	0.1472 ppb	13:25:46
3	Ni 231.604†	72.8	10.2	0.2605 ug/L	0.2605 ppb	13:25:46
3	P 214.914†	197.3	-13.4	-7.9870 ug/L	-7.9870 ppb	13:25:46
3	Pb 220.353†	-64.7	-6.5	-0.7917 ug/L	-0.7917 ppb	13:25:46
3	S 181.975 Axial†	35.9	-4.9	-7.0867 ug/L	-7.0867 ppb	13:25:46
3	Sb 206.836†	32.9	-3.9	-1.3173 ug/L	-1.3173 ppb	13:25:46
3	Se 196.026†	-19.3	8.5	5.4677 ug/L	5.4677 ppb	13:25:46
3	Si 251.611†	616.0	57.0	1.8421 ug/L	1.8421 ppb	13:25:46
3	Sn 189.927†	22.1	11.5	2.0730 ug/L	2.0730 ppb	13:25:46
3	Ti 334.940†	-1381.2	-5.5	-0.0075 ug/L	-0.0075 ppb	13:25:26
3	Tl 190.801†	-39.0	-6.4	-2.0518 ug/L	-2.0518 ppb	13:25:46
3	U 409.014†	-3063.6	-173.6	-4.7906 ug/L	-4.7906 ppb	13:25:26
3	V 292.402†	-1519.0	-11.7	-0.0838 ug/L	-0.0838 ppb	13:25:26
3	Zn 213.857†	612.3	5.6	0.0593 ug/L	0.0593 ppb	13:25:46
3	SiO2†	572.9	17.9	1.2380 ug/L	1.2380 ppb	13:26:01

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	887454.0	101.17 %	0.964			0.95%
Sc Radial	3927.6	100 %	1.1			1.12%
Y 371.029	751486.8	99.424 %	0.9169			0.92%
Y RADIAL	4459.0	101.1 %	0.76			0.75%
Ag 328.068†	20.8	0.0937 ug/L	0.08922	0.0937 ppb	0.08922	95.22%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.1	1.0426 ug/L	15.41673	1.0426 ppb	15.41673	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.0273 ug/L	1.63058	0.0273 ppb	1.63058	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	199.8	4.8476 ug/L	0.27246	4.8476 ppb	0.27246	5.62%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.7	0.0918 ug/L	0.03894	0.0918 ppb	0.03894	42.39%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	148.1	0.0554 ug/L	0.00833	0.0554 ppb	0.00833	15.04%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.3	-6.8721 ug/L	3.17145	-6.8721 ppb	3.17145	46.15%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	6.9	0.0815 ug/L	0.05175	0.0815 ppb	0.05175	63.50%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.0	0.0843 ug/L	0.04140	0.0843 ppb	0.04140	49.11%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-16.0	-0.1798 ug/L	0.10464	-0.1798 ppb	0.10464	58.21%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-118.5	-0.3601 ug/L	0.20638	-0.3601 ppb	0.20638	57.30%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.2	-17.246 ug/L	13.1738	-17.246 ppb	13.1738	76.39%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	49.1	9.4068 ug/L	10.72214	9.4068 ppb	10.72214	113.98%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.0	-47.873 ug/L	59.2467	-47.873 ppb	59.2467	123.76%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-3.0	-0.0032 ug/L	0.01112	-0.0032 ppb	0.01112	347.96%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.4	0.0999 ug/L	0.21798	0.0999 ppb	0.21798	218.14%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	68.5	21.122 ug/L	10.2562	21.122 ppb	10.2562	48.56%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	6.6	0.1668 ug/L	0.11988	0.1668 ppb	0.11988	71.85%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.9	-3.4688 ug/L	3.95530	-3.4688 ppb	3.95530	114.02%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	11.4	1.4010 ug/L	1.90603	1.4010 ppb	1.90603	136.05%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-4.9	-7.0019 ug/L	4.33863	-7.0019 ppb	4.33863	61.96%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.3	1.1850 ug/L	2.27230	1.1850 ppb	2.27230	191.75%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	7.6	4.9368 ug/L	3.57535	4.9368 ppb	3.57535	72.42%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	35.8	1.1574 ug/L	0.60631	1.1574 ppb	0.60631	52.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.8	1.9346 ug/L	0.72965	1.9346 ppb	0.72965	37.72%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-4.5	-0.0313 ug/L	0.01879	-0.0313 ppb	0.01879	60.12%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-71.2	-0.1077 ug/L	0.09277	-0.1077 ppb	0.09277	86.16%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.5	0.4695 ug/L	2.18352	0.4695 ppb	2.18352	465.10%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-96.0	-2.6476 ug/L	2.19521	-2.6476 ppb	2.19521	82.91%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	12.1	0.0827 ug/L	0.29738	0.0827 ppb	0.29738	359.63%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	6.1	0.0639 ug/L	0.02108	0.0639 ppb	0.02108	32.99%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	26.7	1.8545 ug/L	1.39736	1.8545 ppb	1.39736	75.35%	
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: 2/24/2010 13:28:12

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	3886.9	3886.9	99.2 %		13:30:26
1	Y RADIAL	4390.7	4390.7	99.54 %		13:30:06
1	Al 396.153Radial†	106.1	219.4	205.29 ug/L	205.29 ppb	13:30:06
1	Ca 317.933Radial†	120.0	101.3	211.78 ug/L	211.78 ppb	13:30:26
1	Fe 238.204 Radial†	17.0	5.8	82.580 ug/L	82.580 ppb	13:30:26
1	K 766.490 Radial†	3487.9	877.0	168.08 ug/L	168.08 ppb	13:30:06
1	Mg 279.077 IEC†	11.6	7.7	371.90 ug/L	371.90 ppb	13:30:26
1	Na 589.592 Radial†	168.2	989.4	305.06 ug/L	305.06 ppb	13:30:06
1	Sr 421.552†	744.5	714.9	4.9454 ug/L	4.9454 ppb	13:30:06
1	Sc 361.383	884473.5	884473.5	100.83 %		13:31:23
1	Y 371.029	750126.1	750126.1	99.244 %		13:31:23
1	Ag 328.068†	1296.3	1045.3	4.8408 ug/L	4.8408 ppb	13:31:23
1	As 188.979†	41.1	59.1	26.412 ug/L	26.412 ppb	13:31:43
1	B 249.677†	1615.1	2000.1	48.463 ug/L	48.463 ppb	13:31:23
1	Ba 233.527†	663.7	659.7	5.1902 ug/L	5.1902 ppb	13:31:43
1	Be 313.107†	9757.7	13439.9	5.0621 ug/L	5.0621 ppb	13:31:23
1	Cd 226.502†	267.8	461.9	5.3541 ug/L	5.3541 ppb	13:31:43
1	Co 228.616†	182.3	247.4	5.1947 ug/L	5.1947 ppb	13:31:43
1	Cr 267.716†	514.9	433.0	4.8546 ug/L	4.8546 ppb	13:31:43
1	Cu 324.752†	9250.5	3184.0	9.6636 ug/L	9.6636 ppb	13:31:23
1	Mn 257.610†	9733.2	9194.7	10.456 ug/L	10.456 ppb	13:31:23
1	Mo 202.031†	151.4	140.1	10.292 ug/L	10.292 ppb	13:31:43
1	Ni 231.604†	279.6	214.8	5.4604 ug/L	5.4604 ppb	13:31:43
1	P 214.914†	449.7	235.5	139.92 ug/L	139.92 ppb	13:31:43
1	Pb 220.353†	32.5	90.4	11.173 ug/L	11.173 ppb	13:31:43
1	S 181.975 Axial†	107.6	65.9	94.759 ug/L	94.759 ppb	13:31:43
1	Sb 206.836†	63.8	26.6	9.6596 ug/L	9.6596 ppb	13:31:43
1	Se 196.026†	26.5	54.0	35.666 ug/L	35.666 ppb	13:31:43
1	Si 251.611†	3725.9	3137.1	101.39 ug/L	101.39 ppb	13:31:23
1	Sn 189.927†	65.4	54.4	9.7926 ug/L	9.7926 ppb	13:31:43
1	Ti 334.940†	1839.9	3198.9	4.9993 ug/L	4.9993 ppb	13:31:23
1	Tl 190.801†	35.9	68.2	21.869 ug/L	21.869 ppb	13:31:43
1	U 409.014†	-935.5	1958.7	54.068 ug/L	54.068 ppb	13:31:23
1	V 292.402†	-811.4	700.9	5.1240 ug/L	5.1240 ppb	13:31:23
1	Zn 213.857†	1628.5	1009.1	10.098 ug/L	10.098 ppb	13:31:43
1	SiO2†	3713.8	3129.0	217.17 ug/L	217.17 ppb	13:32:39
2	Sc Radial	3953.9	3953.9	101 %		13:30:51
2	Y RADIAL	4543.6	4543.6	103.0 %		13:30:31
2	Al 396.153Radial†	110.7	222.1	207.83 ug/L	207.83 ppb	13:30:31
2	Ca 317.933Radial†	119.3	98.6	206.13 ug/L	206.13 ppb	13:30:51
2	Fe 238.204 Radial†	19.5	8.0	113.72 ug/L	113.72 ppb	13:30:51
2	K 766.490 Radial†	3515.0	844.2	161.80 ug/L	161.80 ppb	13:30:31
2	Mg 279.077 IEC†	7.2	3.1	148.44 ug/L	148.44 ppb	13:30:51
2	Na 589.592 Radial†	245.5	1063.1	327.79 ug/L	327.79 ppb	13:30:31
2	Sr 421.552†	781.2	738.6	5.1092 ug/L	5.1092 ppb	13:30:31
2	Sc 361.383	890366.7	890366.7	101.50 %		13:31:48
2	Y 371.029	754202.4	754202.4	99.783 %		13:31:48
2	Ag 328.068†	1343.0	1082.8	5.0298 ug/L	5.0298 ppb	13:31:48
2	As 188.979†	48.7	66.3	29.639 ug/L	29.639 ppb	13:32:08
2	B 249.677†	1596.7	1971.4	47.764 ug/L	47.764 ppb	13:31:48
2	Ba 233.527†	661.8	653.5	5.1424 ug/L	5.1424 ppb	13:32:08
2	Be 313.107†	9826.4	13443.6	5.0636 ug/L	5.0636 ppb	13:31:48
2	Cd 226.502†	267.4	459.7	5.3248 ug/L	5.3248 ppb	13:32:08
2	Co 228.616†	166.8	230.9	4.8486 ug/L	4.8486 ppb	13:32:08
2	Cr 267.716†	498.5	413.4	4.6399 ug/L	4.6399 ppb	13:32:08
2	Cu 324.752†	9281.3	3153.6	9.5760 ug/L	9.5760 ppb	13:31:48
2	Mn 257.610†	9753.0	9150.4	10.418 ug/L	10.418 ppb	13:31:48
2	Mo 202.031†	147.4	135.1	9.9289 ug/L	9.9289 ppb	13:32:08
2	Ni 231.604†	274.1	207.6	5.2770 ug/L	5.2770 ppb	13:32:08

2	P 214.914†	457.1	239.9	142.58 ug/L	142.58 ppb	13:32:08
2	Pb 220.353†	32.5	90.1	11.136 ug/L	11.136 ppb	13:32:08
2	S 181.975 Axial†	116.1	73.6	105.92 ug/L	105.92 ppb	13:32:08
2	Sb 206.836†	72.9	35.1	12.645 ug/L	12.645 ppb	13:32:08
2	Se 196.026†	19.7	47.2	31.285 ug/L	31.285 ppb	13:32:08
2	Si 251.611†	3700.9	3088.0	99.802 ug/L	99.802 ppb	13:31:48
2	Sn 189.927†	72.8	61.3	11.024 ug/L	11.024 ppb	13:32:08
2	Ti 334.940†	1876.9	3223.3	5.0579 ug/L	5.0579 ppb	13:31:48
2	Tl 190.801†	32.2	64.3	20.608 ug/L	20.608 ppb	13:32:08
2	U 409.014†	-1166.5	1737.3	47.952 ug/L	47.952 ppb	13:31:48
2	V 292.402†	-797.0	720.5	5.2349 ug/L	5.2349 ppb	13:31:48
2	Zn 213.857†	1611.9	982.1	9.8224 ug/L	9.8224 ppb	13:32:08
2	SiO2†	3770.4	3160.4	219.36 ug/L	219.36 ppb	13:32:44
3	Sc Radial	3892.5	3892.5	99.3 %		13:31:16
3	Y RADIAL	4435.2	4435.2	100.6 %		13:30:56
3	Al 396.153Radial†	99.9	213.0	199.28 ug/L	199.28 ppb	13:30:56
3	Ca 317.933Radial†	118.6	99.7	208.46 ug/L	208.46 ppb	13:31:16
3	Fe 238.204 Radial†	19.2	8.0	113.34 ug/L	113.34 ppb	13:31:16
3	K 766.490 Radial†	3428.5	812.1	155.64 ug/L	155.64 ppb	13:30:56
3	Mg 279.077 IEC†	9.0	4.9	239.90 ug/L	239.90 ppb	13:31:16
3	Na 589.592 Radial†	213.9	1035.1	319.16 ug/L	319.16 ppb	13:30:56
3	Sr 421.552†	747.3	716.6	4.9573 ug/L	4.9573 ppb	13:30:56
3	Sc 361.383	883324.4	883324.4	100.69 %		13:32:13
3	Y 371.029	748072.9	748072.9	98.972 %		13:32:13
3	Ag 328.068†	1334.7	1085.0	5.0386 ug/L	5.0386 ppb	13:32:13
3	As 188.979†	47.1	65.0	29.068 ug/L	29.068 ppb	13:32:33
3	B 249.677†	1640.0	2026.9	49.109 ug/L	49.109 ppb	13:32:13
3	Ba 233.527†	639.5	636.5	5.0101 ug/L	5.0101 ppb	13:32:33
3	Be 313.107†	9556.6	13252.9	4.9918 ug/L	4.9918 ppb	13:32:13
3	Cd 226.502†	255.9	450.4	5.2179 ug/L	5.2179 ppb	13:32:33
3	Co 228.616†	173.6	238.9	5.0151 ug/L	5.0151 ppb	13:32:33
3	Cr 267.716†	522.3	441.0	4.9489 ug/L	4.9489 ppb	13:32:33
3	Cu 324.752†	9210.2	3155.9	9.5813 ug/L	9.5813 ppb	13:32:13
3	Mn 257.610†	9689.8	9164.2	10.430 ug/L	10.430 ppb	13:32:13
3	Mo 202.031†	138.0	126.9	9.3305 ug/L	9.3305 ppb	13:32:33
3	Ni 231.604†	290.7	226.3	5.7517 ug/L	5.7517 ppb	13:32:33
3	P 214.914†	438.2	224.6	133.37 ug/L	133.37 ppb	13:32:33
3	Pb 220.353†	29.9	87.8	10.850 ug/L	10.850 ppb	13:32:33
3	S 181.975 Axial†	106.6	65.1	93.592 ug/L	93.592 ppb	13:32:33
3	Sb 206.836†	70.5	33.3	11.987 ug/L	11.987 ppb	13:32:33
3	Se 196.026†	29.4	57.0	37.703 ug/L	37.703 ppb	13:32:33
3	Si 251.611†	3660.2	3076.6	99.441 ug/L	99.441 ppb	13:32:13
3	Sn 189.927†	68.2	57.2	10.302 ug/L	10.302 ppb	13:32:33
3	Ti 334.940†	1836.3	3197.7	5.0090 ug/L	5.0090 ppb	13:32:13
3	Tl 190.801†	29.7	62.1	19.913 ug/L	19.913 ppb	13:32:33
3	U 409.014†	-1043.1	1850.7	51.082 ug/L	51.082 ppb	13:32:13
3	V 292.402†	-755.6	755.3	5.4770 ug/L	5.4770 ppb	13:32:13
3	Zn 213.857†	1612.7	995.5	9.9546 ug/L	9.9546 ppb	13:32:33
3	SiO2†	3695.2	3115.3	216.25 ug/L	216.25 ppb	13:32:49

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Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	886054.8	101.01 %	0.431			0.43%
Sc Radial	3911.1	99.8 %	0.95			0.95%
Y 371.029	750800.5	99.333 %	0.4128			0.42%
Y RADIAL	4456.5	101.0 %	1.78			1.76%
Ag 328.068†	1071.0	4.9697 ug/L	0.11176	4.9697 ppb	0.11176	2.25%
QC value within limits for Ag 328.068 Recovery = 99.39%						
Al 396.153Radial†	218.2	204.13 ug/L	4.392	204.13 ppb	4.392	2.15%
QC value within limits for Al 396.153Radial Recovery = 102.07%						
As 188.979†	63.4	28.373 ug/L	1.7222	28.373 ppb	1.7222	6.07%
QC value within limits for As 188.979 Recovery = 94.58%						
B 249.677†	1999.4	48.445 ug/L	0.6727	48.445 ppb	0.6727	1.39%
QC value within limits for B 249.677 Recovery = 96.89%						
Ba 233.527†	649.9	5.1142 ug/L	0.09327	5.1142 ppb	0.09327	1.82%
QC value within limits for Ba 233.527 Recovery = 102.28%						
Be 313.107†	13378.8	5.0392 ug/L	0.04101	5.0392 ppb	0.04101	0.81%
QC value within limits for Be 313.107 Recovery = 100.78%						
Ca 317.933Radial†	99.9	208.79 ug/L	2.840	208.79 ppb	2.840	1.36%

QC value within limits for Ca 317.933 Radial Recovery = 104.40%							
Cd 226.502†	457.4	5.2989 ug/L	0.07172	5.2989 ppb	0.07172	1.35%	
QC value within limits for Cd 226.502 Recovery = 105.98%							
Co 228.616†	239.1	5.0195 ug/L	0.17310	5.0195 ppb	0.17310	3.45%	
QC value within limits for Co 228.616 Recovery = 100.39%							
Cr 267.716†	429.2	4.8145 ug/L	0.15835	4.8145 ppb	0.15835	3.29%	
QC value within limits for Cr 267.716 Recovery = 96.29%							
Cu 324.752†	3164.5	9.6070 ug/L	0.04909	9.6070 ppb	0.04909	0.51%	
QC value within limits for Cu 324.752 Recovery = 96.07%							
Fe 238.204 Radial†	7.3	103.21 ug/L	17.871	103.21 ppb	17.871	17.31%	
QC value within limits for Fe 238.204 Radial Recovery = 103.21%							
K 766.490 Radial†	844.4	161.84 ug/L	6.222	161.84 ppb	6.222	3.84%	
QC value within limits for K 766.490 Radial Recovery = 107.89%							
Mg 279.077 IEC†	5.2	253.41 ug/L	112.343	253.41 ppb	112.343	44.33%	
QC value within limits for Mg 279.077 IEC Recovery = 84.47%							
Mn 257.610†	9169.8	10.434 ug/L	0.0196	10.434 ppb	0.0196	0.19%	
QC value within limits for Mn 257.610 Recovery = 104.34%							
Mo 202.031†	134.0	9.8503 ug/L	0.48540	9.8503 ppb	0.48540	4.93%	
QC value within limits for Mo 202.031 Recovery = 98.50%							
Na 589.592 Radial†	1029.2	317.34 ug/L	11.472	317.34 ppb	11.472	3.62%	
QC value within limits for Na 589.592 Radial Recovery = 105.78%							
Ni 231.604†	216.2	5.4964 ug/L	0.23936	5.4964 ppb	0.23936	4.35%	
QC value within limits for Ni 231.604 Recovery = 109.93%							
P 214.914†	233.3	138.62 ug/L	4.736	138.62 ppb	4.736	3.42%	
QC value within limits for P 214.914 Recovery = 92.41%							
Pb 220.353†	89.4	11.053 ug/L	0.1771	11.053 ppb	0.1771	1.60%	
QC value within limits for Pb 220.353 Recovery = 110.53%							
S 181.975 Axial†	68.2	98.091 ug/L	6.8062	98.091 ppb	6.8062	6.94%	
QC value within limits for S 181.975 Axial Recovery = 98.09%							
Sb 206.836†	31.7	11.430 ug/L	1.5685	11.430 ppb	1.5685	13.72%	
QC value within limits for Sb 206.836 Recovery = 114.30%							
Se 196.026†	52.7	34.884 ug/L	3.2797	34.884 ppb	3.2797	9.40%	
QC value within limits for Se 196.026 Recovery = 116.28%							
Si 251.611†	3100.6	100.21 ug/L	1.034	100.21 ppb	1.034	1.03%	
QC value within limits for Si 251.611 Recovery = 100.21%							
Sn 189.927†	57.6	10.373 ug/L	0.6188	10.373 ppb	0.6188	5.97%	
QC value within limits for Sn 189.927 Recovery = 103.73%							
Sr 421.552†	723.4	5.0040 ug/L	0.09134	5.0040 ppb	0.09134	1.83%	
QC value within limits for Sr 421.552 Recovery = 100.08%							
Ti 334.940†	3206.6	5.0221 ug/L	0.03144	5.0221 ppb	0.03144	0.63%	
QC value within limits for Ti 334.940 Recovery = 100.44%							
Tl 190.801†	64.9	20.797 ug/L	0.9919	20.797 ppb	0.9919	4.77%	
QC value within limits for Tl 190.801 Recovery = 103.98%							
U 409.014†	1848.9	51.034 ug/L	3.0584	51.034 ppb	3.0584	5.99%	
QC value within limits for U 409.014 Recovery = 102.07%							
V 292.402†	725.5	5.2786 ug/L	0.18053	5.2786 ppb	0.18053	3.42%	
QC value within limits for V 292.402 Recovery = 105.57%							
Zn 213.857†	995.6	9.9583 ug/L	0.13788	9.9583 ppb	0.13788	1.38%	
QC value within limits for Zn 213.857 Recovery = 99.58%							
SiO2†	3134.9	217.59 ug/L	1.601	217.59 ppb	1.601	0.74%	
QC value within limits for SiO2 Recovery = 102.16%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/24/2010 13:35:01

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	3579.0	3579.0	91.3 %		13:37:14
1	Y RADIAL	3936.7	3936.7	89.25 %		13:37:14
1	Al 396.153Radial†	498697.7	546158.2	512230 ug/L	512230 ppb	13:36:54
1	Ca 317.933Radial†	210027.0	229948.0	480710 ug/L	480710 ppb	13:36:54
1	Fe 238.204 Radial†	12266.0	13419.2	189420 ug/L	189420 ppb	13:37:14
1	K 766.490 Radial†	2317.6	-102.0	-180.37 ug/L	-180.37 ppb	13:36:54
1	Mg 279.077 IEC†	9430.8	10322.2	500290 ug/L	500290 ppb	13:37:14
1	Na 589.592 Radial†	-578.6	186.2	57.412 ug/L	57.412 ppb	13:37:14
1	Sr 421.552†	540.5	556.0	0.2581 ug/L	0.2581 ppb	13:37:14
1	Sc 361.383	752109.3	752109.3	85.737 %		13:38:11
1	Y 371.029	620836.9	620836.9	82.138 %		13:38:11
1	Ag 328.068†	-9722.3	-11580.1	-1.9309 ug/L	-1.9309 ppb	13:38:11
1	As 188.979†	-83.7	-79.4	8.7794 ug/L	8.7794 ppb	13:38:31
1	B 249.677†	453.9	927.7	-8.2727 ug/L	-8.2727 ppb	13:38:11
1	Ba 233.527†	-512.4	-596.3	1.1226 ug/L	1.1226 ppb	13:38:31
1	Be 313.107†	-3937.2	-830.0	-0.3618 ug/L	-0.3618 ppb	13:38:11
1	Cd 226.502†	1201.2	1597.3	-1.0580 ug/L	-1.0580 ppb	13:38:31
1	Co 228.616†	1.0	67.6	-1.3196 ug/L	-1.3196 ppb	13:38:31
1	Cr 267.716†	-1035.5	-1285.5	3.5901 ug/L	3.5901 ppb	13:38:31
1	Cu 324.752†	3172.2	-2290.8	3.0294 ug/L	3.0294 ppb	13:38:11
1	Mn 257.610†	1340.3	1104.6	-0.4986 ug/L	-0.4986 ppb	13:38:11
1	Mo 202.031†	-246.5	-297.6	-1.4261 ug/L	-1.4261 ppb	13:38:31
1	Ni 231.604†	174.0	140.4	3.5711 ug/L	3.5711 ppb	13:38:31
1	P 214.914†	184.9	5.1	-21.112 ug/L	-21.112 ppb	13:38:31
1	Pb 220.353†	-770.5	-840.6	-10.497 ug/L	-10.497 ppb	13:38:31
1	S 181.975 Axial†	67.8	38.3	-40.887 ug/L	-40.887 ppb	13:38:31
1	Sb 206.836†	62.4	36.1	-4.8098 ug/L	-4.8098 ppb	13:38:31
1	Se 196.026†	-795.8	-900.4	-4.1061 ug/L	-4.1061 ppb	13:38:31
1	Si 251.611†	487.9	10.8	0.6173 ug/L	0.6173 ppb	13:38:31
1	Sn 189.927†	-358.6	-428.7	-2.3916 ug/L	-2.3916 ppb	13:38:31
1	Ti 334.940†	-13166.7	-13983.0	1.6088 ug/L	1.6088 ppb	13:38:11
1	Tl 190.801†	-84.7	-66.2	-21.395 ug/L	-21.395 ppb	13:38:31
1	U 409.014†	-1052.0	1659.6	24.268 ug/L	24.268 ppb	13:38:11
1	V 292.402†	875.7	2527.1	-0.4927 ug/L	-0.4927 ppb	13:38:31
1	Zn 213.857†	2741.2	2591.2	-2.2750 ug/L	-2.2750 ppb	13:38:31
1	SiO2†	512.4	43.2	3.5965 ug/L	3.5965 ppb	13:39:28
2	Sc Radial	3527.7	3527.7	90.0 %		13:37:39
2	Y RADIAL	3875.7	3875.7	87.87 %		13:37:39
2	Al 396.153Radial†	496990.4	552197.0	517890 ug/L	517890 ppb	13:37:19
2	Ca 317.933Radial†	208493.4	231586.4	484130 ug/L	484130 ppb	13:37:19
2	Fe 238.204 Radial†	12191.7	13531.9	191010 ug/L	191010 ppb	13:37:39
2	K 766.490 Radial†	2326.8	-54.9	-172.49 ug/L	-172.49 ppb	13:37:19
2	Mg 279.077 IEC†	9342.6	10374.2	502810 ug/L	502810 ppb	13:37:39
2	Na 589.592 Radial†	-541.5	218.2	67.285 ug/L	67.285 ppb	13:37:39
2	Sr 421.552†	552.6	578.1	0.3851 ug/L	0.3851 ppb	13:37:39
2	Sc 361.383	757243.3	757243.3	86.322 %		13:38:37
2	Y 371.029	625612.2	625612.2	82.770 %		13:38:37
2	Ag 328.068†	-9548.5	-11302.0	-0.1941 ug/L	-0.1941 ppb	13:38:37
2	As 188.979†	-94.6	-91.3	3.8179 ug/L	3.8179 ppb	13:38:57
2	B 249.677†	422.3	887.5	-9.5048 ug/L	-9.5048 ppb	13:38:37
2	Ba 233.527†	-507.3	-586.2	1.2494 ug/L	1.2494 ppb	13:38:57
2	Be 313.107†	-3887.3	-741.0	-0.3277 ug/L	-0.3277 ppb	13:38:37
2	Cd 226.502†	1205.8	1593.1	-1.2718 ug/L	-1.2718 ppb	13:38:57
2	Co 228.616†	-4.2	61.7	-1.4662 ug/L	-1.4662 ppb	13:38:57
2	Cr 267.716†	-1051.2	-1295.5	3.6318 ug/L	3.6318 ppb	13:38:57
2	Cu 324.752†	3191.0	-2294.1	3.1082 ug/L	3.1082 ppb	13:38:37
2	Mn 257.610†	1313.4	1062.8	-0.4924 ug/L	-0.4924 ppb	13:38:37
2	Mo 202.031†	-240.9	-289.2	-0.6460 ug/L	-0.6460 ppb	13:38:57
2	Ni 231.604†	183.0	149.5	3.8021 ug/L	3.8021 ppb	13:38:57

2	P 214.914†	168.6	-15.2	-33.149 ug/L	-33.149 ppb	13:38:57
2	Pb 220.353†	-795.0	-862.8	-12.176 ug/L	-12.176 ppb	13:38:57
2	S 181.975 Axial†	62.0	31.0	-52.486 ug/L	-52.486 ppb	13:38:57
2	Sb 206.836†	56.6	28.9	-7.4361 ug/L	-7.4361 ppb	13:38:57
2	Se 196.026†	-793.2	-891.2	6.8776 ug/L	6.8776 ppb	13:38:57
2	Si 251.611†	497.2	17.7	0.8340 ug/L	0.8340 ppb	13:38:57
2	Sn 189.927†	-337.7	-401.7	2.9641 ug/L	2.9641 ppb	13:38:57
2	Ti 334.940†	-13091.6	-13791.9	2.1660 ug/L	2.1660 ppb	13:38:37
2	Tl 190.801†	-64.3	-41.9	-13.609 ug/L	-13.609 ppb	13:38:57
2	U 409.014†	-1323.7	1353.1	15.623 ug/L	15.623 ppb	13:38:37
2	V 292.402†	857.6	2499.2	-0.8777 ug/L	-0.8777 ppb	13:38:57
2	Zn 213.857†	2774.9	2608.6	-2.3394 ug/L	-2.3394 ppb	13:38:57
2	SiO2†	495.7	19.9	1.9590 ug/L	1.9590 ppb	13:39:33
3	Sc Radial	3526.0	3526.0	90.0 %		13:38:05
3	Y RADIAL	3875.8	3875.8	87.87 %		13:38:05
3	Al 396.153Radial†	509370.4	566227.4	531050 ug/L	531050 ppb	13:37:45
3	Ca 317.933Radial†	214024.4	237847.4	497220 ug/L	497220 ppb	13:37:45
3	Fe 238.204 Radial†	12116.2	13454.6	189920 ug/L	189920 ppb	13:38:05
3	K 766.490 Radial†	2276.8	-109.1	-187.27 ug/L	-187.27 ppb	13:37:45
3	Mg 279.077 IEC†	9289.7	10320.5	500210 ug/L	500210 ppb	13:38:05
3	Na 589.592 Radial†	-541.2	218.2	67.291 ug/L	67.291 ppb	13:38:05
3	Sr 421.552†	548.3	573.6	0.2566 ug/L	0.2566 ppb	13:38:05
3	Sc 361.383	755740.9	755740.9	86.151 %		13:39:02
3	Y 371.029	623884.9	623884.9	82.541 %		13:39:02
3	Ag 328.068†	-9673.4	-11468.9	-1.4795 ug/L	-1.4795 ppb	13:39:02
3	As 188.979†	-75.6	-69.5	13.323 ug/L	13.323 ppb	13:39:22
3	B 249.677†	399.9	862.4	-9.9362 ug/L	-9.9362 ppb	13:39:02
3	Ba 233.527†	-543.3	-629.2	0.8794 ug/L	0.8794 ppb	13:39:22
3	Be 313.107†	-3936.8	-807.5	-0.3540 ug/L	-0.3540 ppb	13:39:02
3	Cd 226.502†	1186.2	1573.2	-1.3897 ug/L	-1.3897 ppb	13:39:22
3	Co 228.616†	-5.4	60.2	-1.4823 ug/L	-1.4823 ppb	13:39:22
3	Cr 267.716†	-1089.8	-1342.7	2.9988 ug/L	2.9988 ppb	13:39:22
3	Cu 324.752†	3272.9	-2191.7	3.3624 ug/L	3.3624 ppb	13:39:02
3	Mn 257.610†	1475.6	1254.0	-0.2761 ug/L	-0.2761 ppb	13:39:02
3	Mo 202.031†	-251.3	-301.8	-1.5005 ug/L	-1.5005 ppb	13:39:22
3	Ni 231.604†	196.4	165.5	4.2092 ug/L	4.2092 ppb	13:39:22
3	P 214.914†	155.1	-30.4	-38.275 ug/L	-38.275 ppb	13:39:22
3	Pb 220.353†	-774.0	-840.4	-6.3731 ug/L	-6.3731 ppb	13:39:22
3	S 181.975 Axial†	64.8	34.4	-50.051 ug/L	-50.051 ppb	13:39:22
3	Sb 206.836†	66.0	39.9	-3.9982 ug/L	-3.9982 ppb	13:39:22
3	Se 196.026†	-801.0	-902.0	-3.7489 ug/L	-3.7489 ppb	13:39:22
3	Si 251.611†	461.6	-22.5	-0.4560 ug/L	-0.4560 ppb	13:39:22
3	Sn 189.927†	-360.8	-429.3	0.3998 ug/L	0.3998 ppb	13:39:22
3	Ti 334.940†	-13393.6	-14172.7	3.5363 ug/L	3.5363 ppb	13:39:02
3	Tl 190.801†	-85.7	-66.9	-21.615 ug/L	-21.615 ppb	13:39:22
3	U 409.014†	-1336.9	1334.8	15.241 ug/L	15.241 ppb	13:39:02
3	V 292.402†	884.0	2531.8	-0.5548 ug/L	-0.5548 ppb	13:39:22
3	Zn 213.857†	2725.5	2557.6	-2.6931 ug/L	-2.6931 ppb	13:39:22
3	SiO2†	452.6	-29.1	-1.4188 ug/L	-1.4188 ppb	13:39:38

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	755031.2	86.070 %		0.3009			0.35%
Sc Radial	3544.3	90.4 %		0.77			0.85%
Y 371.029	623444.7	82.483 %		0.3199			0.39%
Y RADIAL	3896.1	88.33 %		0.797			0.90%
Ag 328.068†	-11450.3	-1.2015 ug/L		0.90116	-1.2015 ppb	0.90116	75.00%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	554860.9	520390 ug/L		9656.7	520390 ppb	9656.7	1.86%
QC value within limits for Al 396.153Radial Recovery = 104.08%							
As 188.979†	-80.1	8.6402 ug/L		4.75425	8.6402 ppb	4.75425	55.02%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	892.5	-9.2379 ug/L		0.86328	-9.2379 ppb	0.86328	9.34%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-603.9	1.0838 ug/L		0.18798	1.0838 ppb	0.18798	17.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-792.8	-0.3478 ug/L		0.01788	-0.3478 ppb	0.01788	5.14%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	233127.3	487350 ug/L		8715.4	487350 ppb	8715.4	1.79%



QC value within limits for Ca 317.933 Radial Recovery = 97.47%

Cd 226.502†	1587.8	-1.2399 ug/L	0.16812	-1.2399 ppb	0.16812	13.56%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	63.2	-1.4227 ug/L	0.08966	-1.4227 ppb	0.08966	6.30%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1307.9	3.4069 ug/L	0.35405	3.4069 ppb	0.35405	10.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2258.9	3.1667 ug/L	0.17402	3.1667 ppb	0.17402	5.50%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	13468.6	190110 ug/L	812.9	190110 ppb	812.9	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 95.06%						
K 766.490 Radial†	-88.7	-180.04 ug/L	7.397	-180.04 ppb	7.397	4.11%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	10339.0	501100 ug/L	1479.9	501100 ppb	1479.9	0.30%
QC value within limits for Mg 279.077 IEC Recovery = 100.22%						
Mn 257.610†	1140.5	-0.4224 ug/L	0.12673	-0.4224 ppb	0.12673	30.01%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-296.2	-1.1909 ug/L	0.47334	-1.1909 ppb	0.47334	39.75%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	207.6	63.996 ug/L	5.7020	63.996 ppb	5.7020	8.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	151.8	3.8608 ug/L	0.32308	3.8608 ppb	0.32308	8.37%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-13.5	-30.845 ug/L	8.8106	-30.845 ppb	8.8106	28.56%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-847.9	-9.6820 ug/L	2.98596	-9.6820 ppb	2.98596	30.84%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	34.6	-47.808 ug/L	6.1164	-47.808 ppb	6.1164	12.79%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	35.0	-5.4147 ug/L	1.79698	-5.4147 ppb	1.79698	33.19%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-897.9	-0.3258 ug/L	6.24089	-0.3258 ppb	6.24089	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	2.0	0.3318 ug/L	0.69081	0.3318 ppb	0.69081	208.23%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-419.9	0.3241 ug/L	2.67867	0.3241 ppb	2.67867	826.51%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	569.3	0.2999 ug/L	0.07378	0.2999 ppb	0.07378	24.60%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13982.5	2.4370 ug/L	0.99191	2.4370 ppb	0.99191	40.70%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-58.4	-18.873 ug/L	4.5599	-18.873 ppb	4.5599	24.16%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1449.2	18.377 ug/L	5.1050	18.377 ppb	5.1050	27.78%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2519.3	-0.6417 ug/L	0.20670	-0.6417 ppb	0.20670	32.21%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2585.8	-2.4358 ug/L	0.22510	-2.4358 ppb	0.22510	9.24%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	11.3	1.3789 ug/L	2.55748	1.3789 ppb	2.55748	185.47%
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: 2/24/2010 13:41:50  
 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	3544.0	3544.0	90.4 %		13:44:03
1	Y RADIAL	3889.0	3889.0	88.17 %		13:44:03
1	Al 396.153Radial†	502369.0	555616.9	521080 ug/L	521080 ppb	13:43:43
1	Ca 317.933Radial†	210391.1	232624.5	486300 ug/L	486300 ppb	13:43:43
1	Fe 238.204 Radial†	11970.1	13224.8	186680 ug/L	186680 ppb	13:44:03
1	K 766.490 Radial†	28907.3	29325.2	5462.0 ug/L	5462.0 ppb	13:43:43
1	Mg 279.077 IEC†	9207.4	10177.2	493270 ug/L	493270 ppb	13:44:03
1	Na 589.592 Radial†	15629.9	18102.9	5581.6 ug/L	5581.6 ppb	13:43:43
1	Sr 421.552†	66679.5	73696.4	506.31 ug/L	506.31 ppb	13:43:43
1	Sc 361.383	771349.2	771349.2	87.930 %		13:45:01
1	Y 371.029	635031.0	635031.0	84.016 %		13:45:01
1	Ag 328.068†	40762.5	46117.5	266.06 ug/L	266.06 ppb	13:45:01
1	As 188.979†	906.5	1049.2	515.34 ug/L	515.34 ppb	13:45:21
1	B 249.677†	18899.9	21892.5	499.24 ug/L	499.24 ppb	13:45:01
1	Ba 233.527†	53585.0	60941.9	485.03 ug/L	485.03 ppb	13:45:01
1	Be 313.107†	560557.9	641267.1	242.09 ug/L	242.09 ppb	13:45:01
1	Cd 226.502†	35237.2	40270.4	447.42 ug/L	447.42 ppb	13:45:21
1	Co 228.616†	18018.5	20558.3	428.05 ug/L	428.05 ppb	13:45:21
1	Cr 267.716†	35779.9	40613.6	474.19 ug/L	474.19 ppb	13:45:01
1	Cu 324.752†	158407.7	174161.4	539.58 ug/L	539.58 ppb	13:45:01
1	Mn 257.610†	366309.0	416133.0	471.80 ug/L	471.80 ppb	13:45:01
1	Mo 202.031†	5509.0	6255.1	479.51 ug/L	479.51 ppb	13:45:21
1	Ni 231.604†	15024.1	17024.0	432.71 ug/L	432.71 ppb	13:45:21
1	P 214.914†	3798.5	4109.4	2352.0 ug/L	2352.0 ppb	13:45:21
1	Pb 220.353†	2439.7	2832.7	444.38 ug/L	444.38 ppb	13:45:21
1	S 181.975 Axial†	1669.9	1858.4	2576.6 ug/L	2576.6 ppb	13:45:21
1	Sb 206.836†	1362.0	1512.3	528.40 ug/L	528.40 ppb	13:45:21
1	Se 196.026†	2531.7	2907.0	2483.1 ug/L	2483.1 ppb	13:45:21
1	Si 251.611†	140010.4	158671.1	5128.7 ug/L	5128.7 ppb	13:45:01
1	Sn 189.927†	2002.9	2267.3	482.49 ug/L	482.49 ppb	13:45:21
1	Ti 334.940†	270764.6	309306.2	510.57 ug/L	510.57 ppb	13:45:01
1	Tl 190.801†	1146.4	1336.3	430.70 ug/L	430.70 ppb	13:45:21
1	U 409.014†	14157.0	18986.9	502.00 ug/L	502.00 ppb	13:45:01
1	V 292.402†	62854.5	72988.1	498.09 ug/L	498.09 ppb	13:45:01
1	Zn 213.857†	45128.8	50717.5	479.13 ug/L	479.13 ppb	13:45:01
1	SiO2†	140658.7	159412.3	11066 ug/L	11066 ppb	13:46:19
2	Sc Radial	3552.5	3552.5	90.7 %		13:44:29
2	Y RADIAL	3877.9	3877.9	87.92 %		13:44:29
2	Al 396.153Radial†	508992.0	561586.1	526680 ug/L	526680 ppb	13:44:08
2	Ca 317.933Radial†	212481.2	234370.2	489950 ug/L	489950 ppb	13:44:08
2	Fe 238.204 Radial†	12008.0	13234.8	186820 ug/L	186820 ppb	13:44:29
2	K 766.490 Radial†	29295.8	29676.8	5528.2 ug/L	5528.2 ppb	13:44:08
2	Mg 279.077 IEC†	9219.7	10166.2	492740 ug/L	492740 ppb	13:44:29
2	Na 589.592 Radial†	15603.6	18032.2	5559.8 ug/L	5559.8 ppb	13:44:08
2	Sr 421.552†	67349.1	74257.7	510.17 ug/L	510.17 ppb	13:44:08
2	Sc 361.383	768844.9	768844.9	87.645 %		13:45:27
2	Y 371.029	633977.1	633977.1	83.877 %		13:45:27
2	Ag 328.068†	40655.2	46146.1	266.20 ug/L	266.20 ppb	13:45:27
2	As 188.979†	901.6	1046.9	514.36 ug/L	514.36 ppb	13:45:47
2	B 249.677†	18586.9	21605.3	492.26 ug/L	492.26 ppb	13:45:27
2	Ba 233.527†	53366.3	60890.9	484.64 ug/L	484.64 ppb	13:45:27
2	Be 313.107†	560843.3	643669.2	242.99 ug/L	242.99 ppb	13:45:27
2	Cd 226.502†	34895.0	40010.5	444.40 ug/L	444.40 ppb	13:45:47
2	Co 228.616†	17845.7	20428.0	425.31 ug/L	425.31 ppb	13:45:47
2	Cr 267.716†	35787.6	40755.0	475.79 ug/L	475.79 ppb	13:45:27
2	Cu 324.752†	156939.6	173073.0	536.28 ug/L	536.28 ppb	13:45:27
2	Mn 257.610†	365173.9	416194.7	471.90 ug/L	471.90 ppb	13:45:27
2	Mo 202.031†	5466.6	6227.1	477.50 ug/L	477.50 ppb	13:45:47
2	Ni 231.604†	14898.0	16935.8	430.47 ug/L	430.47 ppb	13:45:47

2	P 214.914†	3761.0	4080.7	2336.6 ug/L	2336.6 ppb	13:45:47
2	Pb 220.353†	2428.1	2828.5	445.06 ug/L	445.06 ppb	13:45:47
2	S 181.975 Axial†	1619.7	1807.2	2502.0 ug/L	2502.0 ppb	13:45:47
2	Sb 206.836†	1383.5	1541.8	538.47 ug/L	538.47 ppb	13:45:47
2	Se 196.026†	2472.8	2849.1	2445.6 ug/L	2445.6 ppb	13:45:47
2	Si 251.611†	139473.1	158576.7	5125.7 ug/L	5125.7 ppb	13:45:27
2	Sn 189.927†	1978.4	2246.8	479.46 ug/L	479.46 ppb	13:45:47
2	Ti 334.940†	269310.3	308649.8	510.07 ug/L	510.07 ppb	13:45:27
2	Tl 190.801†	1146.6	1340.8	432.13 ug/L	432.13 ppb	13:45:47
2	U 409.014†	13819.2	18653.9	492.79 ug/L	492.79 ppb	13:45:27
2	V 292.402†	62858.7	73225.7	499.67 ug/L	499.67 ppb	13:45:27
2	Zn 213.857†	44974.0	50708.1	479.04 ug/L	479.04 ppb	13:45:27
2	SiO2†	140832.5	160131.6	11116 ug/L	11116 ppb	13:46:24
3	Sc Radial	3562.2	3562.2	90.9 %		13:44:54
3	Y RADIAL	3908.3	3908.3	88.61 %		13:44:54
3	Al 396.153Radial†	491528.9	540851.0	507230 ug/L	507230 ppb	13:44:34
3	Ca 317.933Radial†	206193.9	226817.4	474160 ug/L	474160 ppb	13:44:34
3	Fe 238.204 Radial†	12072.2	13269.5	187310 ug/L	187310 ppb	13:44:54
3	K 766.490 Radial†	28351.1	28549.9	5317.3 ug/L	5317.3 ppb	13:44:34
3	Mg 279.077 IEC†	9271.3	10195.5	494150 ug/L	494150 ppb	13:44:54
3	Na 589.592 Radial†	15205.4	17547.5	5410.4 ug/L	5410.4 ppb	13:44:34
3	Sr 421.552†	65002.1	71474.1	491.03 ug/L	491.03 ppb	13:44:34
3	Sc 361.383	773529.9	773529.9	88.179 %		13:45:53
3	Y 371.029	636974.7	636974.7	84.273 %		13:45:53
3	Ag 328.068†	40958.4	46209.0	266.85 ug/L	266.85 ppb	13:45:53
3	As 188.979†	908.4	1048.5	515.17 ug/L	515.17 ppb	13:46:13
3	B 249.677†	18901.7	21833.9	497.71 ug/L	497.71 ppb	13:45:53
3	Ba 233.527†	53818.9	61035.4	485.79 ug/L	485.79 ppb	13:45:53
3	Be 313.107†	564385.8	643810.9	243.05 ug/L	243.05 ppb	13:45:53
3	Cd 226.502†	35486.2	40439.8	449.32 ug/L	449.32 ppb	13:46:13
3	Co 228.616†	18169.6	20671.9	430.42 ug/L	430.42 ppb	13:46:13
3	Cr 267.716†	35994.8	40742.6	475.70 ug/L	475.70 ppb	13:45:53
3	Cu 324.752†	158602.6	173874.4	538.74 ug/L	538.74 ppb	13:45:53
3	Mn 257.610†	368718.0	417690.4	473.59 ug/L	473.59 ppb	13:45:53
3	Mo 202.031†	5549.3	6283.1	481.47 ug/L	481.47 ppb	13:46:13
3	Ni 231.604†	15178.9	17151.4	435.95 ug/L	435.95 ppb	13:46:13
3	P 214.914†	3790.8	4088.4	2335.6 ug/L	2335.6 ppb	13:46:13
3	Pb 220.353†	2482.3	2873.2	446.25 ug/L	446.25 ppb	13:46:13
3	S 181.975 Axial†	1671.0	1854.2	2573.2 ug/L	2573.2 ppb	13:46:13
3	Sb 206.836†	1397.3	1548.0	541.30 ug/L	541.30 ppb	13:46:13
3	Se 196.026†	2539.2	2907.3	2485.4 ug/L	2485.4 ppb	13:46:13
3	Si 251.611†	140631.7	158926.7	5137.0 ug/L	5137.0 ppb	13:45:53
3	Sn 189.927†	2009.9	2268.8	480.57 ug/L	480.57 ppb	13:46:13
3	Ti 334.940†	271430.4	309193.1	508.69 ug/L	508.69 ppb	13:45:53
3	Tl 190.801†	1173.2	1363.1	439.26 ug/L	439.26 ppb	13:46:13
3	U 409.014†	14112.1	18890.7	499.27 ug/L	499.27 ppb	13:45:53
3	V 292.402†	63290.8	73281.4	500.09 ug/L	500.09 ppb	13:45:53
3	Zn 213.857†	45344.3	50817.2	480.02 ug/L	480.02 ppb	13:45:53
3	SiO2†	140723.0	159034.3	11040 ug/L	11040 ppb	13:46:29

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	771241.4	87.918 %	0.2672			0.30%
Sc Radial	3552.9	90.7 %	0.23			0.26%
Y 371.029	635327.6	84.055 %	0.2012			0.24%
Y RADIAL	3891.8	88.23 %	0.348			0.39%
Ag 328.068†	46157.5	266.37 ug/L	0.423	266.37 ppb	0.423	0.16%
QC value within limits for Ag 328.068 Recovery = 106.55%						
Al 396.153Radial†	552684.7	518330 ug/L	10011.0	518330 ppb	10011.0	1.93%
QC value within limits for Al 396.153Radial Recovery = 103.67%						
As 188.979†	1048.2	514.96 ug/L	0.524	514.96 ppb	0.524	0.10%
QC value within limits for As 188.979 Recovery = 102.99%						
B 249.677†	21777.3	496.40 ug/L	3.668	496.40 ppb	3.668	0.74%
QC value within limits for B 249.677 Recovery = 99.28%						
Ba 233.527†	60956.1	485.15 ug/L	0.585	485.15 ppb	0.585	0.12%
QC value within limits for Ba 233.527 Recovery = 97.03%						
Be 313.107†	642915.7	242.71 ug/L	0.536	242.71 ppb	0.536	0.22%
QC value within limits for Be 313.107 Recovery = 97.08%						
Ca 317.933Radial†	231270.7	483470 ug/L	8266.3	483470 ppb	8266.3	1.71%

QC value within limits for Ca 317.933 Radial Recovery = 96.69%							
Cd 226.502†	40240.2	447.05 ug/L	2.484	447.05 ppb	2.484	0.56%	
QC value within limits for Cd 226.502 Recovery = 89.41%							
Co 228.616†	20552.8	427.93 ug/L	2.558	427.93 ppb	2.558	0.60%	
QC value within limits for Co 228.616 Recovery = 85.59%							
Cr 267.716†	40703.7	475.23 ug/L	0.901	475.23 ppb	0.901	0.19%	
QC value within limits for Cr 267.716 Recovery = 95.05%							
Cu 324.752†	173702.9	538.20 ug/L	1.715	538.20 ppb	1.715	0.32%	
QC value within limits for Cu 324.752 Recovery = 107.64%							
Fe 238.204 Radial†	13243.0	186940 ug/L	331.0	186940 ppb	331.0	0.18%	
QC value within limits for Fe 238.204 Radial Recovery = 93.47%							
K 766.490 Radial†	29184.0	5435.8 ug/L	107.86	5435.8 ppb	107.86	1.98%	
QC value within limits for K 766.490 Radial Recovery = 108.72%							
Mg 279.077 IEC†	10179.6	493390 ug/L	716.2	493390 ppb	716.2	0.15%	
QC value within limits for Mg 279.077 IEC Recovery = 98.68%							
Mn 257.610†	416672.7	472.43 ug/L	1.009	472.43 ppb	1.009	0.21%	
QC value within limits for Mn 257.610 Recovery = 94.49%							
Mo 202.031†	6255.1	479.49 ug/L	1.982	479.49 ppb	1.982	0.41%	
QC value within limits for Mo 202.031 Recovery = 95.90%							
Na 589.592 Radial†	17894.2	5517.3 ug/L	93.22	5517.3 ppb	93.22	1.69%	
QC value within limits for Na 589.592 Radial Recovery = 110.35%							
Ni 231.604†	17037.1	433.04 ug/L	2.755	433.04 ppb	2.755	0.64%	
QC value within limits for Ni 231.604 Recovery = 86.61%							
P 214.914†	4092.9	2341.4 ug/L	9.19	2341.4 ppb	9.19	0.39%	
QC value within limits for P 214.914 Recovery = 93.66%							
Pb 220.353†	2844.8	445.23 ug/L	0.943	445.23 ppb	0.943	0.21%	
QC value within limits for Pb 220.353 Recovery = 89.05%							
S 181.975 Axial†	1839.9	2550.6 ug/L	42.14	2550.6 ppb	42.14	1.65%	
QC value within limits for S 181.975 Axial Recovery = 102.02%							
Sb 206.836†	1534.0	536.06 ug/L	6.780	536.06 ppb	6.780	1.26%	
QC value within limits for Sb 206.836 Recovery = 107.21%							
Se 196.026†	2887.8	2471.4 ug/L	22.39	2471.4 ppb	22.39	0.91%	
QC value within limits for Se 196.026 Recovery = 98.86%							
Si 251.611†	158724.9	5130.5 ug/L	5.84	5130.5 ppb	5.84	0.11%	
QC value within limits for Si 251.611 Recovery = 102.61%							
Sn 189.927†	2261.0	480.84 ug/L	1.536	480.84 ppb	1.536	0.32%	
QC value within limits for Sn 189.927 Recovery = 96.17%							
Sr 421.552†	73142.7	502.50 ug/L	10.124	502.50 ppb	10.124	2.01%	
QC value within limits for Sr 421.552 Recovery = 100.50%							
Ti 334.940†	309049.7	509.78 ug/L	0.973	509.78 ppb	0.973	0.19%	
QC value within limits for Ti 334.940 Recovery = 101.96%							
Tl 190.801†	1346.7	434.03 ug/L	4.587	434.03 ppb	4.587	1.06%	
QC value within limits for Tl 190.801 Recovery = 86.81%							
U 409.014†	18843.8	498.02 ug/L	4.732	498.02 ppb	4.732	0.95%	
QC value within limits for U 409.014 Recovery = 99.60%							
V 292.402†	73165.1	499.28 ug/L	1.052	499.28 ppb	1.052	0.21%	
QC value within limits for V 292.402 Recovery = 99.86%							
Zn 213.857†	50747.6	479.40 ug/L	0.544	479.40 ppb	0.544	0.11%	
QC value within limits for Zn 213.857 Recovery = 95.88%							
SiO2†	159526.1	11074 ug/L	38.8	11074 ppb	38.8	0.35%	
QC value within limits for SiO2 Recovery = 103.54%							
All analyte(s) passed QC.							

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

Autosampler Location: 15  
 Date Collected: 2/24/2010 13:48:39  
 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	3468.7	3468.7	88.5 %		13:50:52
1	Y RADIAL	3837.9	3837.9	87.01 %		13:50:52
1	Al 396.153Radial†	488307.2	551778.7	517500 ug/L	517500 ppb	13:50:32
1	Ca 317.933Radial†	203936.0	230377.5	481610 ug/L	481610 ppb	13:50:32
1	Fe 238.204 Radial†	27514.6	31073.4	438610 ug/L	438610 ppb	13:50:52
1	K 766.490 Radial†	2419.3	93.6	-346.34 ug/L	-346.34 ppb	13:50:32
1	Mg 279.077 IEC†	9016.2	10182.1	493240 ug/L	493240 ppb	13:50:52
1	Na 589.592 Radial†	1495172.9	1689995.2	521070 ug/L	521070 ppb	13:50:32
1	Sr 421.552†	754.1	816.3	2.0521 ug/L	2.0521 ppb	13:50:52
1	Sc 361.383	750786.8	750786.8	85.586 %		13:51:50
1	Y 371.029	622054.4	622054.4	82.299 %		13:51:50
1	Ag 328.068†	-23006.2	-27121.2	-8.3338 ug/L	-8.3338 ppb	13:51:50
1	As 188.979†	-192.1	-206.2	10.666 ug/L	10.666 ppb	13:52:11
1	B 249.677†	1496.8	2147.1	-19.189 ug/L	-19.189 ppb	13:51:50
1	Ba 233.527†	-1560.8	-1822.2	-0.8859 ug/L	-0.8859 ppb	13:52:11
1	Be 313.107†	-9848.1	-7744.5	-2.9341 ug/L	-2.9341 ppb	13:51:50
1	Cd 226.502†	3079.5	3794.4	1.2798 ug/L	1.2798 ppb	13:52:11
1	Co 228.616†	208.2	309.8	0.0800 ug/L	0.0800 ppb	13:52:11
1	Cr 267.716†	-994.7	-1239.9	22.458 ug/L	22.458 ppb	13:52:11
1	Cu 324.752†	373.2	-5554.8	-1.1997 ug/L	-1.1997 ppb	13:51:50
1	Mn 257.610†	-19933.2	-23749.0	-3.8910 ug/L	-3.8910 ppb	13:51:50
1	Mo 202.031†	-468.7	-557.8	-1.1730 ug/L	-1.1730 ppb	13:52:11
1	Ni 231.604†	253.9	234.2	5.9514 ug/L	5.9514 ppb	13:52:11
1	P 214.914†	512.3	388.1	12.004 ug/L	12.004 ppb	13:52:11
1	Pb 220.353†	-538.6	-571.1	-3.2250 ug/L	-3.2250 ppb	13:52:11
1	S 181.975 Axial†	74.0	45.7	-31.241 ug/L	-31.241 ppb	13:52:11
1	Sb 206.836†	104.7	85.6	9.1558 ug/L	9.1558 ppb	13:52:11
1	Se 196.026†	-1910.7	-2204.7	-81.423 ug/L	-81.423 ppb	13:52:11
1	Si 251.611†	-490.0	-1130.8	-36.087 ug/L	-36.087 ppb	13:52:11
1	Sn 189.927†	-368.8	-441.4	-18.820 ug/L	-18.820 ppb	13:52:11
1	Ti 334.940†	-6880.1	-6664.7	7.8453 ug/L	7.8453 ppb	13:51:50
1	Tl 190.801†	-88.5	-70.8	-22.942 ug/L	-22.942 ppb	13:52:11
1	U 409.014†	418077.4	491374.9	13519 ug/L	13519 ppb	13:51:50
1	V 292.402†	2566.6	4504.5	2.4700 ug/L	2.4700 ppb	13:52:11
1	Zn 213.857†	5217.9	5490.6	-10.382 ug/L	-10.382 ppb	13:52:11
1	SiO2†	-432.6	-1059.8	-72.538 ug/L	-72.538 ppb	13:53:07
2	Sc Radial	3478.3	3478.3	88.8 %		13:51:18
2	Y RADIAL	3838.2	3838.2	87.02 %		13:51:18
2	Al 396.153Radial†	487020.0	548813.7	514720 ug/L	514720 ppb	13:50:58
2	Ca 317.933Radial†	203394.4	229134.7	479010 ug/L	479010 ppb	13:50:58
2	Fe 238.204 Radial†	27553.2	31031.5	438020 ug/L	438020 ppb	13:51:18
2	K 766.490 Radial†	2572.8	259.0	-312.90 ug/L	-312.90 ppb	13:50:58
2	Mg 279.077 IEC†	9021.2	10159.7	492150 ug/L	492150 ppb	13:51:18
2	Na 589.592 Radial†	1493113.0	1683036.1	518920 ug/L	518920 ppb	13:50:58
2	Sr 421.552†	740.4	798.4	1.9480 ug/L	1.9480 ppb	13:51:18
2	Sc 361.383	742911.5	742911.5	84.688 %		13:52:16
2	Y 371.029	615612.6	615612.6	81.447 %		13:52:16
2	Ag 328.068†	-22744.4	-27097.1	-8.3287 ug/L	-8.3287 ppb	13:52:16
2	As 188.979†	-191.1	-207.4	9.9744 ug/L	9.9744 ppb	13:52:36
2	B 249.677†	1338.8	1979.1	-23.168 ug/L	-23.168 ppb	13:52:16
2	Ba 233.527†	-1541.5	-1818.8	-0.8785 ug/L	-0.8785 ppb	13:52:36
2	Be 313.107†	-9714.6	-7708.9	-2.9234 ug/L	-2.9234 ppb	13:52:16
2	Cd 226.502†	3043.1	3789.6	1.2751 ug/L	1.2751 ppb	13:52:36
2	Co 228.616†	206.2	310.0	0.0929 ug/L	0.0929 ppb	13:52:36
2	Cr 267.716†	-1010.1	-1270.4	22.080 ug/L	22.080 ppb	13:52:36
2	Cu 324.752†	371.4	-5552.2	-1.1944 ug/L	-1.1944 ppb	13:52:16
2	Mn 257.610†	-19556.0	-23550.5	-3.6791 ug/L	-3.6791 ppb	13:52:16
2	Mo 202.031†	-483.7	-581.3	-2.9767 ug/L	-2.9767 ppb	13:52:36
2	Ni 231.604†	248.5	230.9	5.8697 ug/L	5.8697 ppb	13:52:36

2	P 214.914†	502.1	382.4	8.3391 ug/L	8.3391 ppb	13:52:36
2	Pb 220.353†	-576.5	-622.7	-10.118 ug/L	-10.118 ppb	13:52:36
2	S 181.975 Axial†	77.4	50.6	-23.588 ug/L	-23.588 ppb	13:52:36
2	Sb 206.836†	57.5	31.1	-9.8311 ug/L	-9.8311 ppb	13:52:36
2	Se 196.026†	-1874.9	-2186.1	-71.076 ug/L	-71.076 ppb	13:52:36
2	Si 251.611†	-430.8	-1067.0	-34.001 ug/L	-34.001 ppb	13:52:36
2	Sn 189.927†	-360.6	-436.3	-18.333 ug/L	-18.333 ppb	13:52:36
2	Ti 334.940†	-7442.4	-7413.9	6.4309 ug/L	6.4309 ppb	13:52:16
2	Tl 190.801†	-104.1	-90.4	-29.202 ug/L	-29.202 ppb	13:52:36
2	U 409.014†	412102.3	489497.7	13467 ug/L	13467 ppb	13:52:16
2	V 292.402†	2453.3	4402.5	1.7016 ug/L	1.7016 ppb	13:52:36
2	Zn 213.857†	5168.7	5497.2	-10.227 ug/L	-10.227 ppb	13:52:36
2	SiO2†	-492.2	-1135.6	-77.760 ug/L	-77.760 ppb	13:53:12
3	Sc Radial	3489.1	3489.1	89.0 %		13:51:43
3	Y RADIAL	3863.1	3863.1	87.58 %		13:51:43
3	Al 396.153Radial†	487601.6	547765.9	513740 ug/L	513740 ppb	13:51:23
3	Ca 317.933Radial†	203078.5	228069.5	476780 ug/L	476780 ppb	13:51:23
3	Fe 238.204 Radial†	27513.9	30891.1	436040 ug/L	436040 ppb	13:51:43
3	K 766.490 Radial†	2457.1	120.1	-337.68 ug/L	-337.68 ppb	13:51:23
3	Mg 279.077 IEC†	8999.2	10103.5	489430 ug/L	489430 ppb	13:51:43
3	Na 589.592 Radial†	1489428.8	1673683.2	516040 ug/L	516040 ppb	13:51:23
3	Sr 421.552†	767.1	825.9	2.1544 ug/L	2.1544 ppb	13:51:43
3	Sc 361.383	756603.2	756603.2	86.249 %		13:52:42
3	Y 371.029	626649.0	626649.0	82.907 %		13:52:42
3	Ag 328.068†	-23278.8	-27230.7	-9.5249 ug/L	-9.5249 ppb	13:52:42
3	As 188.979†	-196.8	-210.0	8.3641 ug/L	8.3641 ppb	13:53:02
3	B 249.677†	1443.2	2071.6	-20.604 ug/L	-20.604 ppb	13:52:42
3	Ba 233.527†	-1573.6	-1823.0	-0.9702 ug/L	-0.9702 ppb	13:53:02
3	Be 313.107†	-9779.0	-7575.9	-2.8781 ug/L	-2.8781 ppb	13:52:42
3	Cd 226.502†	3081.5	3769.1	1.2428 ug/L	1.2428 ppb	13:53:02
3	Co 228.616†	210.2	310.3	0.1318 ug/L	0.1318 ppb	13:53:02
3	Cr 267.716†	-1020.1	-1260.4	22.004 ug/L	22.004 ppb	13:53:02
3	Cu 324.752†	389.6	-5539.0	-1.2604 ug/L	-1.2604 ppb	13:52:42
3	Mn 257.610†	-19815.4	-23433.4	-3.6302 ug/L	-3.6302 ppb	13:52:42
3	Mo 202.031†	-488.9	-577.0	-2.8368 ug/L	-2.8368 ppb	13:53:02
3	Ni 231.604†	247.1	224.0	5.6939 ug/L	5.6939 ppb	13:53:02
3	P 214.914†	504.5	374.4	4.9145 ug/L	4.9145 ppb	13:53:02
3	Pb 220.353†	-530.8	-557.3	-2.0945 ug/L	-2.0945 ppb	13:53:02
3	S 181.975 Axial†	75.7	46.9	-28.770 ug/L	-28.770 ppb	13:53:02
3	Sb 206.836†	73.8	48.9	-3.5421 ug/L	-3.5421 ppb	13:53:02
3	Se 196.026†	-1873.7	-2144.7	-50.134 ug/L	-50.134 ppb	13:53:02
3	Si 251.611†	-380.0	-999.0	-31.803 ug/L	-31.803 ppb	13:53:02
3	Sn 189.927†	-359.5	-427.3	-17.006 ug/L	-17.006 ppb	13:53:02
3	Ti 334.940†	-8714.7	-8730.1	4.2858 ug/L	4.2858 ppb	13:52:42
3	Tl 190.801†	-123.5	-110.6	-35.681 ug/L	-35.681 ppb	13:53:02
3	U 409.014†	419759.0	489569.3	13469 ug/L	13469 ppb	13:52:42
3	V 292.402†	2602.8	4523.5	2.7917 ug/L	2.7917 ppb	13:53:02
3	Zn 213.857†	5190.5	5411.9	-10.787 ug/L	-10.787 ppb	13:53:02
3	SiO2†	-420.5	-1042.0	-71.260 ug/L	-71.260 ppb	13:53:18

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	750100.5	85.508 %		0.7833			0.92%
Sc Radial	3478.7	88.8 %		0.26			0.29%
Y 371.029	621438.7	82.218 %		0.7335			0.89%
Y RADIAL	3846.4	87.20 %		0.328			0.38%
Ag 328.068†	-27149.6	-8.7291 ug/L		0.68915	-8.7291 ppb	0.68915	7.89%
Al 396.153Radial†	549452.8	515320 ug/L		1952.0	515320 ppb	1952.0	0.38%
QC value within limits for Al 396.153Radial Recovery = 103.06%							
As 188.979†	-207.9	9.6682 ug/L		1.18114	9.6682 ppb	1.18114	12.22%
B 249.677†	2065.9	-20.987 ug/L		2.0170	-20.987 ppb	2.0170	9.61%
Ba 233.527†	-1821.4	-0.9115 ug/L		0.05096	-0.9115 ppb	0.05096	5.59%
Be 313.107†	-7676.4	-2.9119 ug/L		0.02973	-2.9119 ppb	0.02973	1.02%
Ca 317.933Radial†	229193.9	479130 ug/L		2414.8	479130 ppb	2414.8	0.50%
QC value within limits for Ca 317.933Radial Recovery = 95.83%							
Cd 226.502†	3784.4	1.2659 ug/L		0.02015	1.2659 ppb	0.02015	1.59%
Co 228.616†	310.0	0.1016 ug/L		0.02695	0.1016 ppb	0.02695	26.53%
Cr 267.716†	-1256.9	22.181 ug/L		0.2434	22.181 ppb	0.2434	1.10%
Cu 324.752†	-5548.7	-1.2182 ug/L		0.03668	-1.2182 ppb	0.03668	3.01%

Fe 238.204 Radial†	30998.7	437550 ug/L	1347.6	437550 ppb	1347.6	0.31%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.51%						
K 766.490 Radial†	157.6	-332.31 ug/L	17.357	-332.31 ppb	17.357	5.22%
Mg 279.077 IEC†	10148.4	491610 ug/L	1961.9	491610 ppb	1961.9	0.40%
QC value within limits for Mg 279.077 IEC Recovery = 98.32%						
Mn 257.610†	-23577.6	-3.7334 ug/L	0.13866	-3.7334 ppb	0.13866	3.71%
Mo 202.031†	-572.0	-2.3288 ug/L	1.00344	-2.3288 ppb	1.00344	43.09%
Na 589.592 Radial†	1682238.2	518680 ug/L	2523.7	518680 ppb	2523.7	0.49%
QC value within limits for Na 589.592 Radial Recovery = 103.74%						
Ni 231.604†	229.7	5.8383 ug/L	0.13156	5.8383 ppb	0.13156	2.25%
P 214.914†	381.6	8.4194 ug/L	3.54567	8.4194 ppb	3.54567	42.11%
Pb 220.353†	-583.7	-5.1458 ug/L	4.34301	-5.1458 ppb	4.34301	84.40%
S 181.975 Axial†	47.7	-27.866 ug/L	3.9058	-27.866 ppb	3.9058	14.02%
Sb 206.836†	55.2	-1.4058 ug/L	9.67201	-1.4058 ppb	9.67201	688.00%
Se 196.026†	-2178.5	-67.544 ug/L	15.9409	-67.544 ppb	15.9409	23.60%
Si 251.611†	-1065.6	-33.964 ug/L	2.1422	-33.964 ppb	2.1422	6.31%
Sn 189.927†	-435.0	-18.053 ug/L	0.9387	-18.053 ppb	0.9387	5.20%
Sr 421.552†	813.5	2.0515 ug/L	0.10322	2.0515 ppb	0.10322	5.03%
Ti 334.940†	-7602.9	6.1874 ug/L	1.79220	6.1874 ppb	1.79220	28.97%
Tl 190.801†	-90.6	-29.275 ug/L	6.3698	-29.275 ppb	6.3698	21.76%
U 409.014†	490147.3	13485 ug/L	29.3	13485 ppb	29.3	0.22%
QC value less than the lower limit for U 409.014 Recovery = 89.90%						
V 292.402†	4476.8	2.3211 ug/L	0.56011	2.3211 ppb	0.56011	24.13%
Zn 213.857†	5466.6	-10.465 ug/L	0.2894	-10.465 ppb	0.2894	2.77%
SiO2†	-1079.2	-73.852 ug/L	3.4436	-73.852 ppb	3.4436	4.66%
QC Failed. Continue with analysis.						

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/24/2010 13:55:28

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	3755.1	3755.1	95.8 %		13:57:46
1	Y RADIAL	4233.7	4233.7	95.98 %		13:57:26
1	Al 396.153Radial†	373.7	502.4	12.258 ug/L	12.258 ppb	13:57:26
1	Ca 317.933Radial†	30.3	12.0	25.045 ug/L	25.045 ppb	13:57:46
1	Fe 238.204 Radial†	-7.0	-18.6	9.4874 ug/L	9.4874 ppb	13:57:46
1	K 766.490 Radial†	1536547.3	1600901.5	307200 ug/L	307200 ppb	13:57:21
1	Mg 279.077 IEC†	-4.6	-8.9	-332.35 ug/L	-332.35 ppb	13:57:46
1	Na 589.592 Radial†	-207.8	602.9	185.88 ug/L	185.88 ppb	13:57:26
1	Sr 421.552†	1357129.4	1416264.8	9799.9 ug/L	9799.9 ppb	13:57:21
1	Sc 361.383	867704.4	867704.4	98.914 %		13:59:03
1	Y 371.029	715999.5	715999.5	94.728 %		13:59:03
1	Ag 328.068†	-8007.1	-8335.4	0.7870 ug/L	0.7870 ppb	13:59:08
1	As 188.979†	20923.1	21171.1	9515.8 ug/L	9515.8 ppb	13:59:08
1	B 249.677†	197438.5	200004.5	4823.1 ug/L	4823.1 ppb	13:59:08
1	Ba 233.527†	1631925.0	1649843.7	12968 ug/L	12968 ppb	13:59:03
1	Be 313.107†	7328086.3	7412305.2	2807.7 ug/L	2807.7 ppb	13:58:56
1	Cd 226.502†	802576.9	811584.9	9404.0 ug/L	9404.0 ppb	13:59:03
1	Co 228.616†	429667.2	434451.1	9098.6 ug/L	9098.6 ppb	13:59:08
1	Cr 267.716†	2048510.5	2070923.9	23262 ug/L	23262 ppb	13:59:03
1	Cu 324.752†	6395075.1	6459297.3	19656 ug/L	19656 ppb	13:58:56
1	Mn 257.610†	8000483.7	8087864.0	9203.5 ug/L	9203.5 ppb	13:58:56
1	Mo 202.031†	127518.1	128908.0	9464.0 ug/L	9464.0 ppb	13:59:08
1	Ni 231.604†	361475.3	365381.6	9287.3 ug/L	9287.3 ppb	13:59:08
1	P 214.914†	29896.6	30014.4	14259 ug/L	14259 ppb	13:59:08
1	Pb 220.353†	191166.1	193323.1	23789 ug/L	23789 ppb	13:59:08
1	S 181.975 Axial†	35706.3	36057.5	51888 ug/L	51888 ppb	13:59:08
1	Sb 206.836†	29721.4	30011.1	10844 ug/L	10844 ppb	13:59:08
1	Se 196.026†	14821.8	15012.2	9863.3 ug/L	9863.3 ppb	13:59:08
1	Si 251.611†	1415805.2	1430791.3	46182 ug/L	46182 ppb	13:59:03
1	Sn 189.927†	55584.4	56184.2	10081 ug/L	10081 ppb	13:59:08
1	Ti 334.940†	6151049.1	6219956.9	9765.7 ug/L	9765.7 ppb	13:58:56
1	Tl 190.801†	28932.1	29282.4	9429.1 ug/L	9429.1 ppb	13:59:08
1	U 409.014†	-1761.6	1105.6	-21.464 ug/L	-21.464 ppb	13:59:08
1	V 292.402†	1384474.8	1401180.9	9885.2 ug/L	9885.2 ppb	13:59:03
1	Zn 213.857†	1348344.9	1362542.6	13630 ug/L	13630 ppb	13:59:03
1	SiO2†	1424198.9	1439281.1	99766 ug/L	99766 ppb	13:59:53
2	Sc Radial	3762.7	3762.7	96.0 %		13:58:16
2	Y RADIAL	4105.6	4105.6	93.08 %		13:57:56
2	Al 396.153Radial†	361.4	488.8	-0.2516 ug/L	-0.2516 ppb	13:57:56
2	Ca 317.933Radial†	28.2	9.7	20.219 ug/L	20.219 ppb	13:58:16
2	Fe 238.204 Radial†	-7.7	-19.3	-0.5570 ug/L	-0.5570 ppb	13:58:16
2	K 766.490 Radial†	1554297.3	1616159.3	310130 ug/L	310130 ppb	13:57:51
2	Mg 279.077 IEC†	-2.6	-6.7	-227.63 ug/L	-227.63 ppb	13:58:16
2	Na 589.592 Radial†	-264.2	544.7	167.93 ug/L	167.93 ppb	13:57:56
2	Sr 421.552†	1369933.4	1426748.5	9872.5 ug/L	9872.5 ppb	13:57:51
2	Sc 361.383	861919.3	861919.3	98.255 %		13:59:22
2	Y 371.029	711492.0	711492.0	94.132 %		13:59:22
2	Ag 328.068†	-8021.4	-8404.3	0.5572 ug/L	0.5572 ppb	13:59:27
2	As 188.979†	20787.2	21174.7	9519.1 ug/L	9519.1 ppb	13:59:27
2	B 249.677†	196145.7	200028.4	4823.7 ug/L	4823.7 ppb	13:59:27
2	Ba 233.527†	1628256.0	1657183.1	13026 ug/L	13026 ppb	13:59:22
2	Be 313.107†	7432593.3	7568394.2	2866.8 ug/L	2866.8 ppb	13:59:16
2	Cd 226.502†	801317.0	815748.5	9452.2 ug/L	9452.2 ppb	13:59:22
2	Co 228.616†	427144.6	434799.3	9105.4 ug/L	9105.4 ppb	13:59:27
2	Cr 267.716†	2042538.8	2078746.4	23350 ug/L	23350 ppb	13:59:22
2	Cu 324.752†	6475808.6	6584859.4	20038 ug/L	20038 ppb	13:59:16
2	Mn 257.610†	8104106.2	8247615.4	9385.3 ug/L	9385.3 ppb	13:59:16
2	Mo 202.031†	126598.8	128837.6	9458.8 ug/L	9458.8 ppb	13:59:27
2	Ni 231.604†	359202.1	365520.8	9290.8 ug/L	9290.8 ppb	13:59:27



2	P 214.914†	29727.0	30044.6	14202 ug/L	14202 ppb	13:59:27
2	Pb 220.353†	190171.6	193608.1	23824 ug/L	23824 ppb	13:59:27
2	S 181.975 Axial†	35472.2	36061.6	51894 ug/L	51894 ppb	13:59:27
2	Sb 206.836†	29516.1	30003.7	10841 ug/L	10841 ppb	13:59:27
2	Se 196.026†	14688.4	14977.1	9840.2 ug/L	9840.2 ppb	13:59:27
2	Si 251.611†	1408873.0	1433343.0	46265 ug/L	46265 ppb	13:59:22
2	Sn 189.927†	55282.5	56254.1	10093 ug/L	10093 ppb	13:59:27
2	Ti 334.940†	6228525.0	6340547.7	9955.1 ug/L	9955.1 ppb	13:59:16
2	Tl 190.801†	28737.0	29280.0	9430.7 ug/L	9430.7 ppb	13:59:27
2	U 409.014†	-1701.3	1155.1	-20.294 ug/L	-20.294 ppb	13:59:27
2	V 292.402†	1378505.8	1404500.4	9908.1 ug/L	9908.1 ppb	13:59:22
2	Zn 213.857†	1345230.6	1368522.3	13690 ug/L	13690 ppb	13:59:22
2	SiO2†	1411018.3	1435530.4	99505 ug/L	99505 ppb	13:59:59
3	Sc Radial	3788.7	3788.7	96.7 %		13:58:47
3	Y RADIAL	4223.7	4223.7	95.76 %		13:58:27
3	Al 396.153Radial†	370.8	495.9	-2.2803 ug/L	-2.2803 ppb	13:58:27
3	Ca 317.933Radial†	25.3	6.5	13.519 ug/L	13.519 ppb	13:58:47
3	Fe 238.204 Radial†	-7.2	-18.8	11.971 ug/L	11.971 ppb	13:58:47
3	K 766.490 Radial†	1559142.3	1610028.7	308950 ug/L	308950 ppb	13:58:22
3	Mg 279.077 IEC†	-3.0	-7.2	-247.42 ug/L	-247.42 ppb	13:58:47
3	Na 589.592 Radial†	-221.0	591.1	182.27 ug/L	182.27 ppb	13:58:27
3	Sr 421.552†	1373522.5	1420640.4	9830.2 ug/L	9830.2 ppb	13:58:22
3	Sc 361.383	860982.1	860982.1	98.148 %		13:59:42
3	Y 371.029	709940.5	709940.5	93.927 %		13:59:42
3	Ag 328.068†	-8138.1	-8532.1	-0.0355 ug/L	-0.0355 ppb	13:59:47
3	As 188.979†	21300.3	21720.6	9762.6 ug/L	9762.6 ppb	13:59:47
3	B 249.677†	200239.4	204416.6	4929.6 ug/L	4929.6 ppb	13:59:47
3	Ba 233.527†	1627336.3	1658049.8	13033 ug/L	13033 ppb	13:59:42
3	Be 313.107†	7439530.6	7583696.5	2872.6 ug/L	2872.6 ppb	13:59:35
3	Cd 226.502†	801403.9	816724.8	9463.7 ug/L	9463.7 ppb	13:59:42
3	Co 228.616†	434713.0	442983.7	9277.3 ug/L	9277.3 ppb	13:59:47
3	Cr 267.716†	2039723.8	2078141.1	23343 ug/L	23343 ppb	13:59:42
3	Cu 324.752†	6458784.5	6574688.1	20007 ug/L	20007 ppb	13:59:35
3	Mn 257.610†	8121943.3	8274767.2	9416.2 ug/L	9416.2 ppb	13:59:35
3	Mo 202.031†	128860.9	131282.8	9638.3 ug/L	9638.3 ppb	13:59:47
3	Ni 231.604†	365882.0	372724.8	9473.9 ug/L	9473.9 ppb	13:59:47
3	P 214.914†	30446.3	30810.4	14671 ug/L	14671 ppb	13:59:47
3	Pb 220.353†	193738.8	197453.3	24297 ug/L	24297 ppb	13:59:47
3	S 181.975 Axial†	36311.7	36956.2	53181 ug/L	53181 ppb	13:59:47
3	Sb 206.836†	30113.5	30645.1	11072 ug/L	11072 ppb	13:59:47
3	Se 196.026†	15158.0	15471.8	10165 ug/L	10165 ppb	13:59:47
3	Si 251.611†	1412452.1	1438550.5	46431 ug/L	46431 ppb	13:59:42
3	Sn 189.927†	56386.5	57440.2	10306 ug/L	10306 ppb	13:59:47
3	Ti 334.940†	6231589.1	6350569.8	9970.9 ug/L	9970.9 ppb	13:59:35
3	Tl 190.801†	29248.4	29833.0	9607.1 ug/L	9607.1 ppb	13:59:47
3	U 409.014†	-1667.4	1187.7	-19.379 ug/L	-19.379 ppb	13:59:47
3	V 292.402†	1376930.5	1404422.5	9910.1 ug/L	9910.1 ppb	13:59:42
3	Zn 213.857†	1346478.4	1371284.0	13717 ug/L	13717 ppb	13:59:42
3	SiO2†	1395286.9	1421065.3	98495 ug/L	98495 ppb	14:00:05

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	863535.3	98.439 %		0.4150			0.42%
Sc Radial	3768.8	96.2 %		0.45			0.47%
Y 371.029	712477.3	94.262 %		0.4164			0.44%
Y RADIAL	4187.7	94.94 %		1.614			1.70%
Ag 328.068†	-8424.0	0.4362 ug/L		0.42440	0.4362 ppb	0.42440	97.29%
Al 396.153Radial†	495.7	3.2420 ug/L		7.87361	3.2420 ppb	7.87361	242.86%
As 188.979†	21355.5	9599.2 ug/L		141.52	9599.2 ppb	141.52	1.47%
QC value within limits for As 188.979 Recovery = 95.99%							
B 249.677†	201483.2	4858.8 ug/L		61.31	4858.8 ppb	61.31	1.26%
QC value within limits for B 249.677 Recovery = 97.18%							
Ba 233.527†	1655025.6	13009 ug/L		35.4	13009 ppb	35.4	0.27%
QC value less than the lower limit for Ba 233.527 Recovery = 86.73%							
Be 313.107†	7521465.3	2849.0 ug/L		35.90	2849.0 ppb	35.90	1.26%
QC value within limits for Be 313.107 Recovery = 94.97%							
Ca 317.933Radial†	9.4	19.594 ug/L		5.7887	19.594 ppb	5.7887	29.54%
Cd 226.502†	814686.1	9440.0 ug/L		31.65	9440.0 ppb	31.65	0.34%
QC value within limits for Cd 226.502 Recovery = 94.40%							

Co 228.616†	437411.4	9160.4 ug/L	101.26	9160.4 ppb	101.26	1.11%
QC value within limits for Co 228.616 Recovery = 91.60%						
Cr 267.716†	2075937.2	23318 ug/L	48.9	23318 ppb	48.9	0.21%
QC value within limits for Cr 267.716 Recovery = 93.27%						
Cu 324.752†	6539615.0	19901 ug/L	212.2	19901 ppb	212.2	1.07%
QC value within limits for Cu 324.752 Recovery = 99.50%						
Fe 238.204 Radial†	-18.9	6.9670 ug/L	6.63327	6.9670 ppb	6.63327	95.21%
K 766.490 Radial†	1609029.8	308760 ug/L	1473.3	308760 ppb	1473.3	0.48%
QC value within limits for K 766.490 Radial Recovery = 102.92%						
Mg 279.077 IEC†	-7.6	-269.13 ug/L	55.636	-269.13 ppb	55.636	20.67%
Mn 257.610†	8203415.5	9335.0 ug/L	114.92	9335.0 ppb	114.92	1.23%
QC value within limits for Mn 257.610 Recovery = 93.35%						
Mo 202.031†	129676.1	9520.4 ug/L	102.18	9520.4 ppb	102.18	1.07%
QC value within limits for Mo 202.031 Recovery = 95.20%						
Na 589.592 Radial†	579.6	178.69 ug/L	9.494	178.69 ppb	9.494	5.31%
Ni 231.604†	367875.7	9350.7 ug/L	106.76	9350.7 ppb	106.76	1.14%
QC value within limits for Ni 231.604 Recovery = 93.51%						
P 214.914†	30289.8	14377 ug/L	255.9	14377 ppb	255.9	1.78%
QC value within limits for P 214.914 Recovery = 95.85%						
Pb 220.353†	194794.8	23970 ug/L	283.9	23970 ppb	283.9	1.18%
QC value within limits for Pb 220.353 Recovery = 95.88%						
S 181.975 Axial†	36358.4	52321 ug/L	745.0	52321 ppb	745.0	1.42%
QC value within limits for S 181.975 Axial Recovery = 104.64%						
Sb 206.836†	30220.0	10919 ug/L	132.7	10919 ppb	132.7	1.22%
QC value within limits for Sb 206.836 Recovery = 109.19%						
Se 196.026†	15153.7	9956.2 ug/L	181.18	9956.2 ppb	181.18	1.82%
QC value within limits for Se 196.026 Recovery = 99.56%						
Si 251.611†	1434228.3	46293 ug/L	126.8	46293 ppb	126.8	0.27%
QC value within limits for Si 251.611 Recovery = 92.59%						
Sn 189.927†	56626.2	10160 ug/L	126.6	10160 ppb	126.6	1.25%
QC value within limits for Sn 189.927 Recovery = 101.60%						
Sr 421.552†	1421217.9	9834.2 ug/L	36.44	9834.2 ppb	36.44	0.37%
QC value within limits for Sr 421.552 Recovery = 98.34%						
Ti 334.940†	6303691.5	9897.2 ug/L	114.20	9897.2 ppb	114.20	1.15%
QC value within limits for Ti 334.940 Recovery = 98.97%						
Tl 190.801†	29465.1	9489.0 ug/L	102.27	9489.0 ppb	102.27	1.08%
QC value within limits for Tl 190.801 Recovery = 94.89%						
U 409.014†	1149.5	-20.379 ug/L	1.0450	-20.379 ppb	1.0450	5.13%
V 292.402†	1403367.9	9901.1 ug/L	13.80	9901.1 ppb	13.80	0.14%
QC value within limits for V 292.402 Recovery = 99.01%						
Zn 213.857†	1367449.6	13679 ug/L	44.2	13679 ppb	44.2	0.32%
QC value within limits for Zn 213.857 Recovery = 91.19%						
SiO2†	1431958.9	99255 ug/L	671.2	99255 ppb	671.2	0.68%
QC value within limits for SiO2 Recovery = 92.76%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/24/2010 14:02:15

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	3833.5	3833.5	97.8 %		14:04:28
1	Y RADIAL	4288.4	4288.4	97.22 %		14:04:08
1	Al 396.153Radial†	5161.8	5389.1	5030.7 ug/L	5030.7 ppb	14:04:08
1	Ca 317.933Radial†	2438.7	2473.3	5170.5 ug/L	5170.5 ppb	14:04:28
1	Fe 238.204 Radial†	358.5	355.2	5028.5 ug/L	5028.5 ppb	14:04:28
1	K 766.490 Radial†	29347.8	27361.6	5244.2 ug/L	5244.2 ppb	14:04:08
1	Mg 279.077 IEC†	108.8	107.1	5193.3 ug/L	5193.3 ppb	14:04:28
1	Na 589.592 Radial†	32043.9	33577.1	10353 ug/L	10353 ppb	14:04:08
1	Sr 421.552†	71002.9	72548.1	501.96 ug/L	501.96 ppb	14:04:08
1	Sc 361.383	889079.5	889079.5	101.35 %		14:05:25
1	Y 371.029	740429.7	740429.7	97.961 %		14:05:25
1	Ag 328.068†	107283.0	105612.9	492.35 ug/L	492.35 ppb	14:05:30
1	As 188.979†	1165.0	1167.7	525.67 ug/L	525.67 ppb	14:05:50
1	B 249.677†	21245.2	21360.3	515.65 ug/L	515.65 ppb	14:05:30
1	Ba 233.527†	63506.2	62661.3	492.95 ug/L	492.95 ppb	14:05:30
1	Be 313.107†	1313103.7	1299366.8	489.40 ug/L	489.40 ppb	14:05:25
1	Cd 226.502†	43099.5	42721.4	494.60 ug/L	494.60 ppb	14:05:30
1	Co 228.616†	23840.3	23589.1	494.22 ug/L	494.22 ppb	14:05:30
1	Cr 267.716†	44460.3	43790.1	492.55 ug/L	492.55 ppb	14:05:30
1	Cu 324.752†	167969.2	159740.0	486.10 ug/L	486.10 ppb	14:05:30
1	Mn 257.610†	437818.1	431524.8	491.33 ug/L	491.33 ppb	14:05:25
1	Mo 202.031†	6739.0	6639.1	487.87 ug/L	487.87 ppb	14:05:50
1	Ni 231.604†	19747.3	19421.7	493.65 ug/L	493.65 ppb	14:05:30
1	P 214.914†	4296.1	4028.3	2330.3 ug/L	2330.3 ppb	14:05:50
1	Pb 220.353†	4047.6	4051.8	499.83 ug/L	499.83 ppb	14:05:50
1	S 181.975 Axial†	743.1	692.4	995.41 ug/L	995.41 ppb	14:05:50
1	Sb 206.836†	1481.6	1425.2	515.75 ug/L	515.75 ppb	14:05:50
1	Se 196.026†	727.5	745.5	505.50 ug/L	505.50 ppb	14:05:50
1	Si 251.611†	77428.7	75838.5	2448.0 ug/L	2448.0 ppb	14:05:30
1	Sn 189.927†	2773.6	2726.2	489.78 ug/L	489.78 ppb	14:05:50
1	Ti 334.940†	312897.5	310101.7	487.17 ug/L	487.17 ppb	14:05:30
1	Tl 190.801†	1510.5	1522.9	490.21 ug/L	490.21 ppb	14:05:50
1	U 409.014†	15037.5	17723.7	487.75 ug/L	487.75 ppb	14:05:30
1	V 292.402†	69425.5	70006.0	494.64 ug/L	494.64 ppb	14:05:30
1	Zn 213.857†	50577.8	49297.7	491.70 ug/L	491.70 ppb	14:05:30
1	SiO2†	77322.4	75737.6	5250.1 ug/L	5250.1 ppb	14:06:58
2	Sc Radial	3795.3	3795.3	96.8 %		14:04:53
2	Y RADIAL	4344.0	4344.0	98.48 %		14:04:33
2	Al 396.153Radial†	5215.6	5497.7	5132.5 ug/L	5132.5 ppb	14:04:33
2	Ca 317.933Radial†	2425.2	2484.4	5193.6 ug/L	5193.6 ppb	14:04:53
2	Fe 238.204 Radial†	356.9	357.2	5056.7 ug/L	5056.7 ppb	14:04:53
2	K 766.490 Radial†	29771.1	28100.0	5385.8 ug/L	5385.8 ppb	14:04:33
2	Mg 279.077 IEC†	109.5	109.0	5285.0 ug/L	5285.0 ppb	14:04:53
2	Na 589.592 Radial†	32466.0	34341.9	10589 ug/L	10589 ppb	14:04:33
2	Sr 421.552†	71942.8	74247.5	513.72 ug/L	513.72 ppb	14:04:33
2	Sc 361.383	896321.6	896321.6	102.18 %		14:05:56
2	Y 371.029	747444.8	747444.8	98.889 %		14:05:56
2	Ag 328.068†	107173.2	104650.2	487.89 ug/L	487.89 ppb	14:06:01
2	As 188.979†	1153.5	1147.2	516.49 ug/L	516.49 ppb	14:06:21
2	B 249.677†	21168.3	21115.7	509.74 ug/L	509.74 ppb	14:06:01
2	Ba 233.527†	63467.3	62116.9	488.68 ug/L	488.68 ppb	14:06:01
2	Be 313.107†	1321919.5	1297526.6	488.70 ug/L	488.70 ppb	14:05:56
2	Cd 226.502†	43082.9	42361.5	490.43 ug/L	490.43 ppb	14:06:01
2	Co 228.616†	23765.2	23325.6	488.70 ug/L	488.70 ppb	14:06:01
2	Cr 267.716†	44397.2	43373.9	487.88 ug/L	487.88 ppb	14:06:01
2	Cu 324.752†	167536.0	157976.9	480.74 ug/L	480.74 ppb	14:06:01
2	Mn 257.610†	439584.9	429763.6	489.33 ug/L	489.33 ppb	14:05:56
2	Mo 202.031†	6775.7	6621.2	486.56 ug/L	486.56 ppb	14:06:21
2	Ni 231.604†	19775.7	19292.1	490.36 ug/L	490.36 ppb	14:06:01

2	P 214.914†	4344.4	4041.4	2339.2 ug/L	2339.2 ppb	14:06:21
2	Pb 220.353†	4056.8	4028.5	496.99 ug/L	496.99 ppb	14:06:21
2	S 181.975 Axial†	752.7	695.9	1000.4 ug/L	1000.4 ppb	14:06:21
2	Sb 206.836†	1480.8	1412.5	511.27 ug/L	511.27 ppb	14:06:21
2	Se 196.026†	742.9	754.8	511.68 ug/L	511.68 ppb	14:06:21
2	Si 251.611†	77312.0	75107.1	2424.4 ug/L	2424.4 ppb	14:06:01
2	Sn 189.927†	2786.4	2716.5	488.05 ug/L	488.05 ppb	14:06:21
2	Ti 334.940†	312816.0	307527.5	483.13 ug/L	483.13 ppb	14:06:01
2	Tl 190.801†	1531.3	1531.3	492.88 ug/L	492.88 ppb	14:06:21
2	U 409.014†	14962.7	17530.6	482.43 ug/L	482.43 ppb	14:06:01
2	V 292.402†	69546.2	69570.6	491.58 ug/L	491.58 ppb	14:06:01
2	Zn 213.857†	50377.3	48698.3	485.69 ug/L	485.69 ppb	14:06:01
2	SiO2†	76690.7	74502.9	5164.4 ug/L	5164.4 ppb	14:07:03
3	Sc Radial	3784.2	3784.2	96.6 %		14:05:18
3	Y RADIAL	4338.3	4338.3	98.35 %		14:04:58
3	Al 396.153Radial†	5230.2	5528.6	5161.4 ug/L	5161.4 ppb	14:04:58
3	Ca 317.933Radial†	2411.6	2477.7	5179.6 ug/L	5179.6 ppb	14:05:18
3	Fe 238.204 Radial†	357.4	358.8	5078.9 ug/L	5078.9 ppb	14:05:18
3	K 766.490 Radial†	29550.1	27961.3	5359.2 ug/L	5359.2 ppb	14:04:58
3	Mg 279.077 IEC†	108.6	108.3	5253.0 ug/L	5253.0 ppb	14:05:18
3	Na 589.592 Radial†	32234.9	34201.0	10545 ug/L	10545 ppb	14:04:58
3	Sr 421.552†	71668.6	74181.4	513.26 ug/L	513.26 ppb	14:04:58
3	Sc 361.383	894225.6	894225.6	101.94 %		14:06:27
3	Y 371.029	746441.3	746441.3	98.756 %		14:06:27
3	Ag 328.068†	107579.6	105294.7	490.90 ug/L	490.90 ppb	14:06:32
3	As 188.979†	1168.7	1164.8	524.35 ug/L	524.35 ppb	14:06:53
3	B 249.677†	21172.1	21168.0	510.99 ug/L	510.99 ppb	14:06:32
3	Ba 233.527†	63649.9	62441.6	491.23 ug/L	491.23 ppb	14:06:32
3	Be 313.107†	1322527.0	1301155.0	490.07 ug/L	490.07 ppb	14:06:27
3	Cd 226.502†	43299.7	42673.0	494.03 ug/L	494.03 ppb	14:06:32
3	Co 228.616†	23872.3	23485.2	492.05 ug/L	492.05 ppb	14:06:32
3	Cr 267.716†	44612.2	43686.7	491.40 ug/L	491.40 ppb	14:06:32
3	Cu 324.752†	167868.2	158687.2	482.90 ug/L	482.90 ppb	14:06:32
3	Mn 257.610†	439438.9	430628.8	490.32 ug/L	490.32 ppb	14:06:27
3	Mo 202.031†	6797.4	6658.1	489.27 ug/L	489.27 ppb	14:06:53
3	Ni 231.604†	19835.6	19396.2	493.01 ug/L	493.01 ppb	14:06:32
3	P 214.914†	4359.8	4066.4	2353.9 ug/L	2353.9 ppb	14:06:53
3	Pb 220.353†	4077.3	4057.9	500.62 ug/L	500.62 ppb	14:06:53
3	S 181.975 Axial†	742.6	687.7	988.69 ug/L	988.69 ppb	14:06:53
3	Sb 206.836†	1500.0	1434.8	519.16 ug/L	519.16 ppb	14:06:53
3	Se 196.026†	749.0	762.5	516.80 ug/L	516.80 ppb	14:06:53
3	Si 251.611†	77715.2	75679.9	2442.9 ug/L	2442.9 ppb	14:06:32
3	Sn 189.927†	2802.8	2739.0	492.08 ug/L	492.08 ppb	14:06:53
3	Ti 334.940†	313382.3	308800.7	485.13 ug/L	485.13 ppb	14:06:32
3	Tl 190.801†	1529.6	1533.1	493.46 ug/L	493.46 ppb	14:06:53
3	U 409.014†	14645.9	17254.1	474.78 ug/L	474.78 ppb	14:06:32
3	V 292.402†	69568.2	69751.8	492.86 ug/L	492.86 ppb	14:06:32
3	Zn 213.857†	50536.9	48970.4	488.40 ug/L	488.40 ppb	14:06:32
3	SiO2†	76671.2	74659.7	5175.2 ug/L	5175.2 ppb	14:07:08

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893208.9	101.82 %	0.425			0.42%
Sc Radial	3804.4	97.1 %	0.66			0.68%
Y 371.029	744771.9	98.535 %	0.5019			0.51%
Y RADIAL	4323.5	98.02 %	0.694			0.71%
Ag 328.068†	105185.9	490.38 ug/L	2.274	490.38 ppb	2.274	0.46%
QC value within limits for Ag 328.068 Recovery = 98.08%						
Al 396.153Radial†	5471.8	5108.2 ug/L	68.69	5108.2 ppb	68.69	1.34%
QC value within limits for Al 396.153Radial Recovery = 102.16%						
As 188.979†	1159.9	522.17 ug/L	4.961	522.17 ppb	4.961	0.95%
QC value within limits for As 188.979 Recovery = 104.43%						
B 249.677†	21214.7	512.13 ug/L	3.119	512.13 ppb	3.119	0.61%
QC value within limits for B 249.677 Recovery = 102.43%						
Ba 233.527†	62406.6	490.95 ug/L	2.152	490.95 ppb	2.152	0.44%
QC value within limits for Ba 233.527 Recovery = 98.19%						
Be 313.107†	1299349.5	489.39 ug/L	0.684	489.39 ppb	0.684	0.14%
QC value within limits for Be 313.107 Recovery = 97.88%						
Ca 317.933Radial†	2478.5	5181.2 ug/L	11.62	5181.2 ppb	11.62	0.22%

QC value within limits for Ca 317.933 Radial Recovery = 103.62%							
Cd 226.502†	42585.3	493.02 ug/L	2.263	493.02 ppb	2.263	0.46%	
QC value within limits for Cd 226.502 Recovery = 98.60%							
Co 228.616†	23466.6	491.65 ug/L	2.779	491.65 ppb	2.779	0.57%	
QC value within limits for Co 228.616 Recovery = 98.33%							
Cr 267.716†	43616.9	490.61 ug/L	2.433	490.61 ppb	2.433	0.50%	
QC value within limits for Cr 267.716 Recovery = 98.12%							
Cu 324.752†	158801.4	483.24 ug/L	2.697	483.24 ppb	2.697	0.56%	
QC value within limits for Cu 324.752 Recovery = 96.65%							
Fe 238.204 Radial†	357.1	5054.7 ug/L	25.24	5054.7 ppb	25.24	0.50%	
QC value within limits for Fe 238.204 Radial Recovery = 101.09%							
K 766.490 Radial†	27807.6	5329.7 ug/L	75.26	5329.7 ppb	75.26	1.41%	
QC value within limits for K 766.490 Radial Recovery = 106.59%							
Mg 279.077 IEC†	108.2	5243.8 ug/L	46.57	5243.8 ppb	46.57	0.89%	
QC value within limits for Mg 279.077 IEC Recovery = 104.88%							
Mn 257.610†	430639.0	490.33 ug/L	1.003	490.33 ppb	1.003	0.20%	
QC value within limits for Mn 257.610 Recovery = 98.07%							
Mo 202.031†	6639.5	487.90 ug/L	1.354	487.90 ppb	1.354	0.28%	
QC value within limits for Mo 202.031 Recovery = 97.58%							
Na 589.592 Radial†	34040.0	10495 ug/L	125.5	10495 ppb	125.5	1.20%	
QC value within limits for Na 589.592 Radial Recovery = 104.95%							
Ni 231.604†	19370.0	492.34 ug/L	1.745	492.34 ppb	1.745	0.35%	
QC value within limits for Ni 231.604 Recovery = 98.47%							
P 214.914†	4045.4	2341.1 ug/L	11.91	2341.1 ppb	11.91	0.51%	
QC value within limits for P 214.914 Recovery = 93.64%							
Pb 220.353†	4046.1	499.15 ug/L	1.906	499.15 ppb	1.906	0.38%	
QC value within limits for Pb 220.353 Recovery = 99.83%							
S 181.975 Axial†	692.0	994.83 ug/L	5.874	994.83 ppb	5.874	0.59%	
QC value within limits for S 181.975 Axial Recovery = 99.48%							
Sb 206.836†	1424.2	515.39 ug/L	3.959	515.39 ppb	3.959	0.77%	
QC value within limits for Sb 206.836 Recovery = 103.08%							
Se 196.026†	754.3	511.33 ug/L	5.660	511.33 ppb	5.660	1.11%	
QC value within limits for Se 196.026 Recovery = 102.27%							
Si 251.611†	75541.8	2438.4 ug/L	12.44	2438.4 ppb	12.44	0.51%	
QC value within limits for Si 251.611 Recovery = 97.54%							
Sn 189.927†	2727.2	489.97 ug/L	2.021	489.97 ppb	2.021	0.41%	
QC value within limits for Sn 189.927 Recovery = 97.99%							
Sr 421.552†	73659.0	509.65 ug/L	6.661	509.65 ppb	6.661	1.31%	
QC value within limits for Sr 421.552 Recovery = 101.93%							
Ti 334.940†	308810.0	485.14 ug/L	2.023	485.14 ppb	2.023	0.42%	
QC value within limits for Ti 334.940 Recovery = 97.03%							
Tl 190.801†	1529.1	492.19 ug/L	1.732	492.19 ppb	1.732	0.35%	
QC value within limits for Tl 190.801 Recovery = 98.44%							
U 409.014†	17502.8	481.65 ug/L	6.520	481.65 ppb	6.520	1.35%	
QC value within limits for U 409.014 Recovery = 96.33%							
V 292.402†	69776.1	493.03 ug/L	1.537	493.03 ppb	1.537	0.31%	
QC value within limits for V 292.402 Recovery = 98.61%							
Zn 213.857†	48988.8	488.60 ug/L	3.009	488.60 ppb	3.009	0.62%	
QC value within limits for Zn 213.857 Recovery = 97.72%							
SiO2†	74966.7	5196.6 ug/L	46.71	5196.6 ppb	46.71	0.90%	
QC value within limits for SiO2 Recovery = 97.18%							
All analyte(s) passed QC.							

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/24/2010 14:09:18  
 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	3915.0	3915.0	99.9 %		14:11:32
1	Y RADIAL	4487.3	4487.3	101.7 %		14:11:12
1	Al 396.153Radial†	-103.6	8.8	8.1442 ug/L	8.1442 ppb	14:11:12
1	Ca 317.933Radial†	18.1	-1.6	-3.2969 ug/L	-3.2969 ppb	14:11:32
1	Fe 238.204 Radial†	9.2	-2.1	-29.731 ug/L	-29.731 ppb	14:11:32
1	K 766.490 Radial†	3144.3	507.7	97.413 ug/L	97.413 ppb	14:11:12
1	Mg 279.077 IEC†	3.0	-1.1	-51.712 ug/L	-51.712 ppb	14:11:32
1	Na 589.592 Radial†	-618.1	201.1	62.009 ug/L	62.009 ppb	14:11:12
1	Sr 421.552†	55.2	19.5	0.1352 ug/L	0.1352 ppb	14:11:12
1	Sc 361.383	875131.7	875131.7	99.761 %		14:12:28
1	Y 371.029	751129.4	751129.4	99.376 %		14:12:28
1	Ag 328.068†	295.7	56.0	0.2515 ug/L	0.2515 ppb	14:12:28
1	As 188.979†	3.0	21.3	9.4927 ug/L	9.4927 ppb	14:12:48
1	B 249.677†	301.4	700.3	16.985 ug/L	16.985 ppb	14:12:28
1	Ba 233.527†	21.8	23.3	0.1822 ug/L	0.1822 ppb	14:12:48
1	Be 313.107†	-3672.0	81.3	0.0302 ug/L	0.0302 ppb	14:12:28
1	Cd 226.502†	-137.0	58.9	0.6853 ug/L	0.6853 ppb	14:12:48
1	Co 228.616†	-64.3	2.1	0.0471 ug/L	0.0471 ppb	14:12:48
1	Cr 267.716†	96.4	19.0	0.2107 ug/L	0.2107 ppb	14:12:48
1	Cu 324.752†	6170.2	194.2	0.5899 ug/L	0.5899 ppb	14:12:28
1	Mn 257.610†	503.6	46.1	0.0516 ug/L	0.0516 ppb	14:12:48
1	Mo 202.031†	27.6	17.5	1.2836 ug/L	1.2836 ppb	14:12:48
1	Ni 231.604†	66.6	4.4	0.1106 ug/L	0.1106 ppb	14:12:48
1	P 214.914†	208.0	-2.0	-1.2717 ug/L	-1.2717 ppb	14:12:48
1	Pb 220.353†	-13.6	44.5	5.4815 ug/L	5.4815 ppb	14:12:48
1	S 181.975 Axial†	37.1	-3.6	-5.2194 ug/L	-5.2194 ppb	14:12:48
1	Sb 206.836†	55.8	19.2	6.7557 ug/L	6.7557 ppb	14:12:48
1	Se 196.026†	-15.5	12.2	7.9006 ug/L	7.9006 ppb	14:12:48
1	Si 251.611†	686.7	130.0	4.1915 ug/L	4.1915 ppb	14:12:48
1	Sn 189.927†	18.3	7.8	1.4029 ug/L	1.4029 ppb	14:12:48
1	Ti 334.940†	-1483.4	-112.9	-0.1734 ug/L	-0.1734 ppb	14:12:28
1	Tl 190.801†	-29.0	3.5	1.1061 ug/L	1.1061 ppb	14:12:48
1	U 409.014†	-2906.3	-26.6	-0.7325 ug/L	-0.7325 ppb	14:12:28
1	V 292.402†	-1476.5	25.6	0.1990 ug/L	0.1990 ppb	14:12:28
1	Zn 213.857†	771.9	167.7	1.6913 ug/L	1.6913 ppb	14:12:48
1	SiO2†	677.2	124.5	8.6144 ug/L	8.6144 ppb	14:13:45
2	Sc Radial	3899.3	3899.3	99.5 %		14:11:57
2	Y RADIAL	4476.7	4476.7	101.5 %		14:11:37
2	Al 396.153Radial†	-132.6	-20.9	-19.589 ug/L	-19.589 ppb	14:11:37
2	Ca 317.933Radial†	21.3	1.7	3.5520 ug/L	3.5520 ppb	14:11:57
2	Fe 238.204 Radial†	12.8	1.6	21.930 ug/L	21.930 ppb	14:11:57
2	K 766.490 Radial†	3272.7	649.5	124.62 ug/L	124.62 ppb	14:11:37
2	Mg 279.077 IEC†	2.9	-1.2	-56.011 ug/L	-56.011 ppb	14:11:57
2	Na 589.592 Radial†	-685.1	131.2	40.466 ug/L	40.466 ppb	14:11:37
2	Sr 421.552†	48.2	12.7	0.0882 ug/L	0.0882 ppb	14:11:37
2	Sc 361.383	878637.4	878637.4	100.16 %		14:12:54
2	Y 371.029	758602.1	758602.1	100.36 %		14:12:54
2	Ag 328.068†	209.1	-31.7	-0.1422 ug/L	-0.1422 ppb	14:12:54
2	As 188.979†	-0.1	18.2	8.1167 ug/L	8.1167 ppb	14:13:14
2	B 249.677†	348.6	746.2	18.088 ug/L	18.088 ppb	14:12:54
2	Ba 233.527†	14.5	15.9	0.1238 ug/L	0.1238 ppb	14:13:14
2	Be 313.107†	-3699.0	69.1	0.0256 ug/L	0.0256 ppb	14:12:54
2	Cd 226.502†	-147.0	49.6	0.5717 ug/L	0.5717 ppb	14:13:14
2	Co 228.616†	-57.3	9.3	0.1957 ug/L	0.1957 ppb	14:13:14
2	Cr 267.716†	83.4	5.6	0.0639 ug/L	0.0639 ppb	14:13:14
2	Cu 324.752†	5936.0	-64.2	-0.1942 ug/L	-0.1942 ppb	14:12:54
2	Mn 257.610†	494.5	34.9	0.0442 ug/L	0.0442 ppb	14:13:14
2	Mo 202.031†	17.0	6.9	0.5056 ug/L	0.5056 ppb	14:13:14
2	Ni 231.604†	75.9	13.4	0.3401 ug/L	0.3401 ppb	14:13:14

2	P 214.914†	205.6	-5.3	-3.1380 ug/L	-3.1380 ppb	14:13:14
2	Pb 220.353†	-7.5	50.6	6.2233 ug/L	6.2233 ppb	14:13:14
2	S 181.975 Axial†	49.5	8.6	12.352 ug/L	12.352 ppb	14:13:14
2	Sb 206.836†	56.8	20.0	7.0381 ug/L	7.0381 ppb	14:13:14
2	Se 196.026†	-19.0	8.8	5.8099 ug/L	5.8099 ppb	14:13:14
2	Si 251.611†	699.6	140.1	4.5277 ug/L	4.5277 ppb	14:13:14
2	Sn 189.927†	22.0	11.5	2.0645 ug/L	2.0645 ppb	14:13:14
2	Ti 334.940†	-1462.5	-86.1	-0.1302 ug/L	-0.1302 ppb	14:12:54
2	Tl 190.801†	-25.3	7.4	2.3529 ug/L	2.3529 ppb	14:13:14
2	U 409.014†	-2896.0	-4.8	-0.1345 ug/L	-0.1345 ppb	14:12:54
2	V 292.402†	-1587.8	-79.6	-0.5521 ug/L	-0.5521 ppb	14:12:54
2	Zn 213.857†	788.1	180.9	1.8154 ug/L	1.8154 ppb	14:13:14
2	SiO2†	723.3	167.8	11.646 ug/L	11.646 ppb	14:13:50
3	Sc Radial	3841.4	3841.4	98.0 %		14:12:22
3	Y RADIAL	4383.9	4383.9	99.39 %		14:12:02
3	Al 396.153Radial†	-96.4	14.1	13.186 ug/L	13.186 ppb	14:12:02
3	Ca 317.933Radial†	22.3	3.1	6.5002 ug/L	6.5002 ppb	14:12:22
3	Fe 238.204 Radial†	11.6	0.5	7.4480 ug/L	7.4480 ppb	14:12:22
3	K 766.490 Radial†	3148.9	572.7	109.88 ug/L	109.88 ppb	14:12:02
3	Mg 279.077 IEC†	3.3	-0.7	-31.994 ug/L	-31.994 ppb	14:12:22
3	Na 589.592 Radial†	-650.0	156.7	48.306 ug/L	48.306 ppb	14:12:02
3	Sr 421.552†	74.8	40.6	0.2808 ug/L	0.2808 ppb	14:12:02
3	Sc 361.383	872334.1	872334.1	99.442 %		14:13:19
3	Y 371.029	751244.0	751244.0	99.391 %		14:13:19
3	Ag 328.068†	253.4	14.4	0.0742 ug/L	0.0742 ppb	14:13:19
3	As 188.979†	5.6	23.8	10.641 ug/L	10.641 ppb	14:13:39
3	B 249.677†	326.7	726.7	17.619 ug/L	17.619 ppb	14:13:19
3	Ba 233.527†	10.8	12.2	0.0960 ug/L	0.0960 ppb	14:13:39
3	Be 313.107†	-3587.8	154.3	0.0575 ug/L	0.0575 ppb	14:13:19
3	Cd 226.502†	-170.7	24.7	0.2833 ug/L	0.2833 ppb	14:13:39
3	Co 228.616†	-68.1	-1.9	-0.0376 ug/L	-0.0376 ppb	14:13:39
3	Cr 267.716†	96.7	19.5	0.2225 ug/L	0.2225 ppb	14:13:39
3	Cu 324.752†	5973.1	15.9	0.0525 ug/L	0.0525 ppb	14:13:19
3	Mn 257.610†	487.8	31.8	0.0382 ug/L	0.0382 ppb	14:13:39
3	Mo 202.031†	23.3	13.3	0.9794 ug/L	0.9794 ppb	14:13:39
3	Ni 231.604†	57.8	-4.3	-0.1092 ug/L	-0.1092 ppb	14:13:39
3	P 214.914†	192.1	-17.4	-10.454 ug/L	-10.454 ppb	14:13:39
3	Pb 220.353†	-17.9	40.2	4.9428 ug/L	4.9428 ppb	14:13:39
3	S 181.975 Axial†	39.0	-1.6	-2.3318 ug/L	-2.3318 ppb	14:13:39
3	Sb 206.836†	57.1	20.7	7.2786 ug/L	7.2786 ppb	14:13:39
3	Se 196.026†	-16.2	11.5	7.5398 ug/L	7.5398 ppb	14:13:39
3	Si 251.611†	674.1	119.6	3.8565 ug/L	3.8565 ppb	14:13:39
3	Sn 189.927†	21.3	10.9	1.9641 ug/L	1.9641 ppb	14:13:39
3	Ti 334.940†	-1498.1	-132.5	-0.2017 ug/L	-0.2017 ppb	14:13:19
3	Tl 190.801†	-38.8	-6.5	-2.0738 ug/L	-2.0738 ppb	14:13:39
3	U 409.014†	-3119.6	-250.5	-6.9178 ug/L	-6.9178 ppb	14:13:19
3	V 292.402†	-1511.1	-13.9	-0.0980 ug/L	-0.0980 ppb	14:13:19
3	Zn 213.857†	791.7	190.1	1.9135 ug/L	1.9135 ppb	14:13:39
3	SiO2†	679.9	129.3	8.9599 ug/L	8.9599 ppb	14:13:55

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	875367.7	99.788 %	0.3600			0.36%
Sc Radial	3885.3	99.1 %	0.99			1.00%
Y 371.029	753658.5	99.711 %	0.5665			0.57%
Y RADIAL	4449.3	100.9 %	1.29			1.28%
Ag 328.068†	12.9	0.0612 ug/L	0.19715	0.0612 ppb	0.19715	322.37%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.7	0.5802 ug/L	17.64831	0.5802 ppb	17.64831	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	21.1	9.4167 ug/L	1.26369	9.4167 ppb	1.26369	13.42%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	724.4	17.564 ug/L	0.5539	17.564 ppb	0.5539	3.15%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	17.1	0.1340 ug/L	0.04400	0.1340 ppb	0.04400	32.84%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.6	0.0378 ug/L	0.01723	0.0378 ppb	0.01723	45.63%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.1	2.2518 ug/L	5.02630	2.2518 ppb	5.02630	223.21%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	44.4	0.5134 ug/L	0.20725	0.5134 ppb	0.20725	40.37%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.1	0.0684 ug/L	0.11807	0.0684 ppb	0.11807	172.64%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	14.7	0.1657 ug/L	0.08840	0.1657 ppb	0.08840	53.35%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	48.6	0.1494 ug/L	0.40095	0.1494 ppb	0.40095	268.38%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.0	-0.1176 ug/L	26.64871	-0.1176 ppb	26.64871	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	576.6	110.64 ug/L	13.619	110.64 ppb	13.619	12.31%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.0	-46.572 ug/L	12.8072	-46.572 ppb	12.8072	27.50%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	37.6	0.0447 ug/L	0.00673	0.0447 ppb	0.00673	15.06%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	12.6	0.9229 ug/L	0.39207	0.9229 ppb	0.39207	42.48%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	163.0	50.260 ug/L	10.9036	50.260 ppb	10.9036	21.69%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	4.5	0.1138 ug/L	0.22467	0.1138 ppb	0.22467	197.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-8.2	-4.9545 ug/L	4.85312	-4.9545 ppb	4.85312	97.95%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	45.1	5.5492 ug/L	0.64290	5.5492 ppb	0.64290	11.59%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.1	1.6001 ug/L	9.42233	1.6001 ppb	9.42233	588.84%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	20.0	7.0241 ug/L	0.26176	7.0241 ppb	0.26176	3.73%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	10.8	7.0834 ug/L	1.11755	7.0834 ppb	1.11755	15.78%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	129.9	4.1919 ug/L	0.33561	4.1919 ppb	0.33561	8.01%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.1	1.8105 ug/L	0.35656	1.8105 ppb	0.35656	19.69%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	24.3	0.1681 ug/L	0.10046	0.1681 ppb	0.10046	59.77%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-110.5	-0.1684 ug/L	0.03603	-0.1684 ppb	0.03603	21.39%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.4	0.4617 ug/L	2.28263	0.4617 ppb	2.28263	494.36%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-94.0	-2.5949 ug/L	3.75567	-2.5949 ppb	3.75567	144.73%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-22.6	-0.1504 ug/L	0.37829	-0.1504 ppb	0.37829	251.59%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	179.6	1.8067 ug/L	0.11135	1.8067 ppb	0.11135	6.16%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	140.5	9.7401 ug/L	1.65962	9.7401 ppb	1.65962	17.04%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							



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Analysis Begun

Start Time: 2/24/2010 14:25:36

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\022410.sif

Batch ID:

Results Data Set: 022410

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

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/24/2010 12:00:19

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: 2/24/2010 14:25:37

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	3815.2	3815.2	97.4 %		14:27:31
1	Y RADIAL	4260.9	4260.9	96.60 %		14:27:31
1	Al 396.153Radial†	-126.4	-17.5	-15.092 ug/L	-15.092 ppb	14:27:31

1	Ca 317.933Radial†	22.0	2.9	6.0589 ug/L	6.0589 ppb	14:27:51
1	Fe 238.204 Radial†	25520.2	26201.8	369850 ug/L	369850 ppb	14:27:31
1	K 766.490 Radial†	2681.6	114.8	22.061 ug/L	22.061 ppb	14:27:31
1	Mg 279.077 IEC†	12.4	8.7	32.450 ug/L	32.450 ppb	14:27:51
1	Na 589.592 Radial†	-637.2	165.3	50.954 ug/L	50.954 ppb	14:27:31
1	Sr 421.552†	139.2	107.3	0.7424 ug/L	0.7424 ppb	14:27:31
1	Sc 361.383	868251.3	868251.3	98.976 %		14:28:48
1	Y 371.029	730637.8	730637.8	96.665 %		14:28:48
1	Ag 328.068†	-25133.1	-25633.5	-4.9088 ug/L	-4.9088 ppb	14:28:48
1	As 188.979†	-197.8	-181.6	5.6062 ug/L	5.6062 ppb	14:29:08
1	B 249.677†	2055.0	2474.5	-0.1135 ug/L	-0.1135 ppb	14:28:48
1	Ba 233.527†	-1749.1	-1765.7	-2.4777 ug/L	-2.4777 ppb	14:28:48
1	Be 313.107†	-3624.2	100.5	0.0375 ug/L	0.0375 ppb	14:28:48
1	Cd 226.502†	2941.5	3168.2	-1.4997 ug/L	-1.4997 ppb	14:28:48
1	Co 228.616†	716.8	790.7	11.158 ug/L	11.158 ppb	14:29:08
1	Cr 267.716†	-602.7	-686.7	27.516 ug/L	27.516 ppb	14:28:48
1	Cu 324.752†	-898.4	-6898.5	-1.4577 ug/L	-1.4577 ppb	14:28:48
1	Mn 257.610†	-32391.6	-33185.4	-1.2521 ug/L	-1.2521 ppb	14:28:48
1	Mo 202.031†	-344.3	-358.0	2.4277 ug/L	2.4277 ppb	14:28:48
1	Ni 231.604†	133.9	72.9	1.8435 ug/L	1.8435 ppb	14:29:08
1	P 214.914†	664.5	460.8	-16.342 ug/L	-16.342 ppb	14:29:08
1	Pb 220.353†	213.4	273.8	-6.3651 ug/L	-6.3651 ppb	14:29:08
1	S 181.975 Axial†	54.7	14.5	20.860 ug/L	20.860 ppb	14:29:08
1	Sb 206.836†	33.2	-3.2	-5.6674 ug/L	-5.6674 ppb	14:29:08
1	Se 196.026†	-1671.2	-1660.7	65.515 ug/L	65.515 ppb	14:29:08
1	Si 251.611†	-527.3	-1091.0	-34.981 ug/L	-34.981 ppb	14:28:48
1	Sn 189.927†	-14.1	-24.7	-25.668 ug/L	-25.668 ppb	14:29:08
1	Ti 334.940†	-1423.0	-63.7	-0.1632 ug/L	-0.1632 ppb	14:28:48
1	Tl 190.801†	-43.2	-11.1	-3.8950 ug/L	-3.8950 ppb	14:29:08
1	U 409.014†	-202.3	2682.2	31.921 ug/L	31.921 ppb	14:28:48
1	V 292.402†	6640.4	8214.7	3.1969 ug/L	3.1969 ppb	14:28:48
1	Zn 213.857†	4062.2	3498.2	-20.117 ug/L	-20.117 ppb	14:29:08
1	SiO2†	-463.0	-1022.2	-70.320 ug/L	-70.320 ppb	14:30:05
2	Sc Radial	3865.8	3865.8	98.6 %		14:27:56
2	Y RADIAL	4274.0	4274.0	96.90 %		14:27:56
2	Al 396.153Radial†	-128.4	-17.8	-15.426 ug/L	-15.426 ppb	14:27:56
2	Ca 317.933Radial†	20.0	0.6	1.2557 ug/L	1.2557 ppb	14:28:16
2	Fe 238.204 Radial†	25670.8	26011.6	367160 ug/L	367160 ppb	14:27:56
2	K 766.490 Radial†	2652.8	49.5	9.5321 ug/L	9.5321 ppb	14:27:56
2	Mg 279.077 IEC†	9.9	5.9	-97.232 ug/L	-97.232 ppb	14:28:16
2	Na 589.592 Radial†	-642.2	168.8	52.030 ug/L	52.030 ppb	14:27:56
2	Sr 421.552†	140.2	106.4	0.7363 ug/L	0.7363 ppb	14:27:56
2	Sc 361.383	868044.1	868044.1	98.953 %		14:29:14
2	Y 371.029	729533.9	729533.9	96.519 %		14:29:14
2	Ag 328.068†	-25207.2	-25714.4	-6.1038 ug/L	-6.1038 ppb	14:29:14
2	As 188.979†	-192.0	-175.8	7.5739 ug/L	7.5739 ppb	14:29:34
2	B 249.677†	2100.3	2520.7	1.4424 ug/L	1.4424 ppb	14:29:14
2	Ba 233.527†	-1821.8	-1839.7	-3.1400 ug/L	-3.1400 ppb	14:29:14
2	Be 313.107†	-3663.9	59.5	0.0217 ug/L	0.0217 ppb	14:29:14
2	Cd 226.502†	2956.7	3184.3	-1.0372 ug/L	-1.0372 ppb	14:29:14
2	Co 228.616†	712.9	787.0	11.121 ug/L	11.121 ppb	14:29:34
2	Cr 267.716†	-562.2	-645.8	27.721 ug/L	27.721 ppb	14:29:14
2	Cu 324.752†	-881.3	-6881.4	-1.5443 ug/L	-1.5443 ppb	14:29:14
2	Mn 257.610†	-32193.8	-32993.3	-1.2932 ug/L	-1.2932 ppb	14:29:14
2	Mo 202.031†	-329.9	-343.5	3.2835 ug/L	3.2835 ppb	14:29:14
2	Ni 231.604†	127.8	66.7	1.6856 ug/L	1.6856 ppb	14:29:34
2	P 214.914†	653.2	449.6	-20.948 ug/L	-20.948 ppb	14:29:34
2	Pb 220.353†	210.9	271.2	-6.3836 ug/L	-6.3836 ppb	14:29:34
2	S 181.975 Axial†	38.7	-1.7	-2.4662 ug/L	-2.4662 ppb	14:29:34
2	Sb 206.836†	33.5	-2.9	-5.5268 ug/L	-5.5268 ppb	14:29:34
2	Se 196.026†	-1674.4	-1664.4	54.714 ug/L	54.714 ppb	14:29:34
2	Si 251.611†	-573.4	-1137.8	-36.507 ug/L	-36.507 ppb	14:29:14
2	Sn 189.927†	-18.0	-28.7	-26.218 ug/L	-26.218 ppb	14:29:34
2	Ti 334.940†	-1558.5	-200.9	-0.3661 ug/L	-0.3661 ppb	14:29:14
2	Tl 190.801†	-43.0	-10.9	-3.8401 ug/L	-3.8401 ppb	14:29:34
2	U 409.014†	-430.1	2452.0	25.867 ug/L	25.867 ppb	14:29:14
2	V 292.402†	6631.4	8207.2	3.5360 ug/L	3.5360 ppb	14:29:14
2	Zn 213.857†	4092.5	3529.8	-19.396 ug/L	-19.396 ppb	14:29:34
2	SiO2†	-527.4	-1087.3	-74.878 ug/L	-74.878 ppb	14:30:11
3	Sc Radial	3918.9	3918.9	100 %		14:28:21
3	Y RADIAL	4324.4	4324.4	98.04 %		14:28:21

3	Al 396.153Radial†	-135.1	-22.7	-19.994 ug/L	-19.994 ppb	14:28:21
3	Ca 317.933Radial†	14.8	-4.9	-10.250 ug/L	-10.250 ppb	14:28:41
3	Fe 238.204 Radial†	25752.7	25740.7	363340 ug/L	363340 ppb	14:28:21
3	K 766.490 Radial†	2662.1	22.5	4.3457 ug/L	4.3457 ppb	14:28:21
3	Mg 279.077 IEC†	10.3	6.2	-79.162 ug/L	-79.162 ppb	14:28:41
3	Na 589.592 Radial†	-709.0	110.7	34.146 ug/L	34.146 ppb	14:28:21
3	Sr 421.552†	100.3	64.6	0.4471 ug/L	0.4471 ppb	14:28:21
3	Sc 361.383	868469.9	868469.9	99.001 %		14:29:40
3	Y 371.029	729469.5	729469.5	96.511 %		14:29:40
3	Ag 328.068†	-25196.2	-25690.8	-7.1714 ug/L	-7.1714 ppb	14:29:40
3	As 188.979†	-208.3	-192.2	-0.6545 ug/L	-0.6545 ppb	14:30:00
3	B 249.677†	2130.9	2550.6	2.7890 ug/L	2.7890 ppb	14:29:40
3	Ba 233.527†	-1770.5	-1787.0	-2.8428 ug/L	-2.8428 ppb	14:29:40
3	Be 313.107†	-3638.3	87.2	0.0323 ug/L	0.0323 ppb	14:29:40
3	Cd 226.502†	2939.0	3164.9	-0.8661 ug/L	-0.8661 ppb	14:29:40
3	Co 228.616†	718.7	792.5	11.287 ug/L	11.287 ppb	14:30:00
3	Cr 267.716†	-606.6	-690.4	26.857 ug/L	26.857 ppb	14:29:40
3	Cu 324.752†	-923.9	-6923.9	-1.8769 ug/L	-1.8769 ppb	14:29:40
3	Mn 257.610†	-32222.7	-33006.5	-1.6865 ug/L	-1.6865 ppb	14:29:40
3	Mo 202.031†	-354.9	-368.6	1.1440 ug/L	1.1440 ppb	14:29:40
3	Ni 231.604†	147.5	86.6	2.1913 ug/L	2.1913 ppb	14:30:00
3	P 214.914†	673.5	469.8	-5.7264 ug/L	-5.7264 ppb	14:30:00
3	Pb 220.353†	215.6	275.8	-5.4080 ug/L	-5.4080 ppb	14:30:00
3	S 181.975 Axial†	51.8	11.5	16.524 ug/L	16.524 ppb	14:30:00
3	Sb 206.836†	24.8	-11.7	-8.5985 ug/L	-8.5985 ppb	14:30:00
3	Se 196.026†	-1661.9	-1650.9	51.625 ug/L	51.625 ppb	14:30:00
3	Si 251.611†	-456.1	-1019.1	-32.643 ug/L	-32.643 ppb	14:29:40
3	Sn 189.927†	-20.8	-31.5	-26.506 ug/L	-26.506 ppb	14:30:00
3	Ti 334.940†	-1501.2	-142.2	-0.2770 ug/L	-0.2770 ppb	14:29:40
3	Tl 190.801†	-46.3	-14.1	-4.8844 ug/L	-4.8844 ppb	14:30:00
3	U 409.014†	-384.8	2497.9	27.574 ug/L	27.574 ppb	14:29:40
3	V 292.402†	6607.1	8179.5	3.8763 ug/L	3.8763 ppb	14:29:40
3	Zn 213.857†	4037.0	3471.7	-19.411 ug/L	-19.411 ppb	14:30:00
3	SiO2†	-570.3	-1130.4	-77.824 ug/L	-77.824 ppb	14:30:16

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	868255.1	98.977 %		0.0243			0.02%
Sc Radial	3866.6	98.7 %		1.32			1.34%
Y 371.029	729880.4	96.565 %		0.0869			0.09%
Y RADIAL	4286.4	97.18 %		0.761			0.78%
Ag 328.068†	-25679.6	-6.0613 ug/L		1.13191	-6.0613 ppb	1.13191	18.67%
Al 396.153Radial†	-19.3	-16.837 ug/L		2.7385	-16.837 ppb	2.7385	16.26%
As 188.979†	-183.2	4.1752 ug/L		4.29678	4.1752 ppb	4.29678	102.91%
B 249.677†	2515.3	1.3726 ug/L		1.45253	1.3726 ppb	1.45253	105.82%
Ba 233.527†	-1797.5	-2.8202 ug/L		0.33174	-2.8202 ppb	0.33174	11.76%
Be 313.107†	82.4	0.0305 ug/L		0.00809	0.0305 ppb	0.00809	26.54%
Ca 317.933Radial†	-0.5	-0.9785 ug/L		8.38093	-0.9785 ppb	8.38093	856.47%
Cd 226.502†	3172.4	-1.1343 ug/L		0.32777	-1.1343 ppb	0.32777	28.90%
Co 228.616†	790.0	11.189 ug/L		0.0872	11.189 ppb	0.0872	0.78%
Cr 267.716†	-674.3	27.365 ug/L		0.4519	27.365 ppb	0.4519	1.65%
Cu 324.752†	-6901.3	-1.6263 ug/L		0.22129	-1.6263 ppb	0.22129	13.61%
Fe 238.204 Radial†	25984.7	366780 ug/L		3270.9	366780 ppb	3270.9	0.89%
K 766.490 Radial†	62.3	11.980 ug/L		9.1077	11.980 ppb	9.1077	76.03%
Mg 279.077 IEC†	6.9	-47.981 ug/L		70.2390	-47.981 ppb	70.2390	146.39%
Mn 257.610†	-33061.7	-1.4106 ug/L		0.23983	-1.4106 ppb	0.23983	17.00%
Mo 202.031†	-356.7	2.2850 ug/L		1.07689	2.2850 ppb	1.07689	47.13%
Na 589.592 Radial†	148.3	45.710 ug/L		10.0293	45.710 ppb	10.0293	21.94%
Ni 231.604†	75.4	1.9068 ug/L		0.25871	1.9068 ppb	0.25871	13.57%
P 214.914†	460.1	-14.339 ug/L		7.8061	-14.339 ppb	7.8061	54.44%
Pb 220.353†	273.6	-6.0522 ug/L		0.55801	-6.0522 ppb	0.55801	9.22%
S 181.975 Axial†	8.1	11.639 ug/L		12.4064	11.639 ppb	12.4064	106.59%
Sb 206.836†	-5.9	-6.5975 ug/L		1.73429	-6.5975 ppb	1.73429	26.29%
Se 196.026†	-1658.7	57.285 ug/L		7.2930	57.285 ppb	7.2930	12.73%
Si 251.611†	-1082.6	-34.710 ug/L		1.9464	-34.710 ppb	1.9464	5.61%
Sn 189.927†	-28.3	-26.131 ug/L		0.4257	-26.131 ppb	0.4257	1.63%
Sr 421.552†	92.8	0.6419 ug/L		0.16875	0.6419 ppb	0.16875	26.29%
Ti 334.940†	-135.6	-0.2688 ug/L		0.10169	-0.2688 ppb	0.10169	37.83%
Tl 190.801†	-12.0	-4.2065 ug/L		0.58771	-4.2065 ppb	0.58771	13.97%

U 409.014†	2544.0	28.454 ug/L	3.1211	28.454 ppb	3.1211	10.97%
V 292.402†	8200.5	3.5364 ug/L	0.33968	3.5364 ppb	0.33968	9.61%
Zn 213.857†	3499.9	-19.641 ug/L	0.4119	-19.641 ppb	0.4119	2.10%
SiO2†	-1080.0	-74.341 ug/L	3.7807	-74.341 ppb	3.7807	5.09%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 2/24/2010 14:32:27

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	3829.7	3829.7	97.7 %		14:34:41
1	Y RADIAL	4261.6	4261.6	96.62 %		14:34:21
1	Al 396.153Radial†	-126.7	-17.2	-16.187 ug/L	-16.187 ppb	14:34:21
1	Ca 317.933Radial†	20.6	1.4	2.8867 ug/L	2.8867 ppb	14:34:41
1	Fe 238.204 Radial†	10.3	-0.8	-11.290 ug/L	-11.290 ppb	14:34:41
1	K 766.490 Radial†	2831.9	258.2	49.543 ug/L	49.543 ppb	14:34:21
1	Mg 279.077 IEC†	-0.6	-4.7	-227.51 ug/L	-227.51 ppb	14:34:41
1	Na 589.592 Radial†	-766.7	35.3	10.880 ug/L	10.880 ppb	14:34:21
1	Sr 421.552†	47.1	12.4	0.0859 ug/L	0.0859 ppb	14:34:21
1	Sc 361.383	902919.9	902919.9	102.93 %		14:35:38
1	Y 371.029	764651.5	764651.5	101.17 %		14:35:38
1	Ag 328.068†	242.6	-4.7	-0.0105 ug/L	-0.0105 ppb	14:35:43
1	As 188.979†	-8.4	10.1	4.5036 ug/L	4.5036 ppb	14:36:03
1	B 249.677†	-240.7	164.3	3.9979 ug/L	3.9979 ppb	14:36:03
1	Ba 233.527†	1268344.7	1232260.8	9670.0 ug/L	9670.0 ppb	14:35:38
1	Be 313.107†	-3678.8	188.0	0.0706 ug/L	0.0706 ppb	14:35:43
1	Cd 226.502†	-165.8	35.2	0.4052 ug/L	0.4052 ppb	14:36:03
1	Co 228.616†	-274.0	-199.7	0.4738 ug/L	0.4738 ppb	14:36:03
1	Cr 267.716†	92.8	12.4	0.1459 ug/L	0.1459 ppb	14:36:03
1	Cu 324.752†	6070.7	-92.8	-0.2730 ug/L	-0.2730 ppb	14:35:43
1	Mn 257.610†	478.4	6.0	0.0150 ug/L	0.0150 ppb	14:36:03
1	Mo 202.031†	13.1	2.6	0.1894 ug/L	0.1894 ppb	14:36:03
1	Ni 231.604†	59.7	-4.5	-0.1111 ug/L	-0.1111 ppb	14:36:03
1	P 214.914†	218.6	1.9	1.2048 ug/L	1.2048 ppb	14:36:03
1	Pb 220.353†	-67.9	-7.9	-0.9689 ug/L	-0.9689 ppb	14:36:03
1	S 181.975 Axial†	40.0	-1.9	-2.7547 ug/L	-2.7547 ppb	14:36:03
1	Sb 206.836†	41.4	3.6	1.2606 ug/L	1.2606 ppb	14:36:03
1	Se 196.026†	-21.2	7.1	4.6308 ug/L	4.6308 ppb	14:36:03
1	Si 251.611†	608.5	32.9	1.0610 ug/L	1.0610 ppb	14:36:03
1	Sn 189.927†	16.0	5.1	0.9165 ug/L	0.9165 ppb	14:36:03
1	Ti 334.940†	-1428.4	-13.7	0.0054 ug/L	0.0054 ppb	14:35:43
1	Tl 190.801†	-39.0	-5.3	-1.6870 ug/L	-1.6870 ppb	14:36:03
1	U 409.014†	-3647.6	-657.2	-18.146 ug/L	-18.146 ppb	14:35:38
1	V 292.402†	-1548.5	1.2	-0.0263 ug/L	-0.0263 ppb	14:35:43
1	Zn 213.857†	623.8	0.0	0.0031 ug/L	0.0031 ppb	14:36:03
1	SiO2†	590.1	18.9	1.3113 ug/L	1.3113 ppb	14:37:09
2	Sc Radial	3860.9	3860.9	98.5 %		14:35:06
2	Y RADIAL	4356.5	4356.5	98.77 %		14:34:46
2	Al 396.153Radial†	-107.2	3.6	3.3425 ug/L	3.3425 ppb	14:34:46
2	Ca 317.933Radial†	24.5	5.2	10.883 ug/L	10.883 ppb	14:35:06
2	Fe 238.204 Radial†	11.8	0.7	9.2609 ug/L	9.2609 ppb	14:35:06
2	K 766.490 Radial†	2981.7	386.8	74.218 ug/L	74.218 ppb	14:34:46
2	Mg 279.077 IEC†	0.1	-3.9	-190.26 ug/L	-190.26 ppb	14:35:06
2	Na 589.592 Radial†	-742.8	65.9	20.305 ug/L	20.305 ppb	14:34:46
2	Sr 421.552†	54.5	19.6	0.1358 ug/L	0.1358 ppb	14:34:46
2	Sc 361.383	901041.5	901041.5	102.71 %		14:36:08
2	Y 371.029	761397.1	761397.1	100.73 %		14:36:08
2	Ag 328.068†	272.3	24.7	0.1317 ug/L	0.1317 ppb	14:36:13
2	As 188.979†	-11.5	7.0	3.1307 ug/L	3.1307 ppb	14:36:33
2	B 249.677†	-247.4	157.4	3.8264 ug/L	3.8264 ppb	14:36:33
2	Ba 233.527†	1270090.4	1236529.3	9703.5 ug/L	9703.5 ppb	14:36:08
2	Be 313.107†	-3645.0	213.5	0.0798 ug/L	0.0798 ppb	14:36:13
2	Cd 226.502†	-168.8	31.9	0.3656 ug/L	0.3656 ppb	14:36:33
2	Co 228.616†	-280.0	-206.1	0.3553 ug/L	0.3553 ppb	14:36:33
2	Cr 267.716†	87.8	7.8	0.0950 ug/L	0.0950 ppb	14:36:33
2	Cu 324.752†	5880.9	-265.3	-0.7980 ug/L	-0.7980 ppb	14:36:13
2	Mn 257.610†	451.9	-18.8	-0.0127 ug/L	-0.0127 ppb	14:36:33
2	Mo 202.031†	12.7	2.2	0.1645 ug/L	0.1645 ppb	14:36:33
2	Ni 231.604†	80.2	15.6	0.3997 ug/L	0.3997 ppb	14:36:33

2	P 214.914†	205.8	-10.1	-5.9263 ug/L	-5.9263 ppb	14:36:33
2	Pb 220.353†	-40.3	18.9	2.3272 ug/L	2.3272 ppb	14:36:33
2	S 181.975 Axial†	40.0	-1.8	-2.6595 ug/L	-2.6595 ppb	14:36:33
2	Sb 206.836†	40.1	2.4	0.8471 ug/L	0.8471 ppb	14:36:33
2	Se 196.026†	-22.7	5.7	3.7529 ug/L	3.7529 ppb	14:36:33
2	Si 251.611†	561.2	-11.9	-0.3886 ug/L	-0.3886 ppb	14:36:33
2	Sn 189.927†	15.4	4.5	0.8111 ug/L	0.8111 ppb	14:36:33
2	Ti 334.940†	-1533.4	-118.8	-0.1628 ug/L	-0.1628 ppb	14:36:13
2	Tl 190.801†	-32.0	1.4	0.4730 ug/L	0.4730 ppb	14:36:33
2	U 409.014†	-3552.7	-572.2	-15.803 ug/L	-15.803 ppb	14:36:08
2	V 292.402†	-1491.4	53.7	0.3417 ug/L	0.3417 ppb	14:36:13
2	Zn 213.857†	625.0	2.5	0.0222 ug/L	0.0222 ppb	14:36:33
2	SiO2†	641.3	70.0	4.8600 ug/L	4.8600 ppb	14:37:15
3	Sc Radial	3860.5	3860.5	98.5 %		14:35:31
3	Y RADIAL	4376.3	4376.3	99.22 %		14:35:11
3	Al 396.153Radial†	-134.0	-23.6	-22.081 ug/L	-22.081 ppb	14:35:11
3	Ca 317.933Radial†	19.7	0.3	0.6806 ug/L	0.6806 ppb	14:35:31
3	Fe 238.204 Radial†	12.2	1.1	15.397 ug/L	15.397 ppb	14:35:31
3	K 766.490 Radial†	2735.9	137.6	26.405 ug/L	26.405 ppb	14:35:11
3	Mg 279.077 IEC†	2.5	-1.5	-73.448 ug/L	-73.448 ppb	14:35:31
3	Na 589.592 Radial†	-747.7	60.7	18.724 ug/L	18.724 ppb	14:35:11
3	Sr 421.552†	27.4	-7.9	-0.0544 ug/L	-0.0544 ppb	14:35:11
3	Sc 361.383	900331.6	900331.6	102.63 %		14:36:39
3	Y 371.029	760478.0	760478.0	100.61 %		14:36:39
3	Ag 328.068†	245.9	-0.8	0.0182 ug/L	0.0182 ppb	14:36:44
3	As 188.979†	-20.5	-1.7	-0.7568 ug/L	-0.7568 ppb	14:37:04
3	B 249.677†	-231.9	172.3	4.1865 ug/L	4.1865 ppb	14:37:04
3	Ba 233.527†	1266018.5	1233536.9	9680.0 ug/L	9680.0 ppb	14:36:39
3	Be 313.107†	-3728.4	129.4	0.0485 ug/L	0.0485 ppb	14:36:44
3	Cd 226.502†	-153.7	46.5	0.5336 ug/L	0.5336 ppb	14:37:04
3	Co 228.616†	-277.3	-203.6	0.3944 ug/L	0.3944 ppb	14:37:04
3	Cr 267.716†	106.7	26.3	0.3047 ug/L	0.3047 ppb	14:37:04
3	Cu 324.752†	6125.7	-22.3	-0.0572 ug/L	-0.0572 ppb	14:36:44
3	Mn 257.610†	465.5	-5.2	-0.0014 ug/L	-0.0014 ppb	14:37:04
3	Mo 202.031†	6.6	-3.7	-0.2735 ug/L	-0.2735 ppb	14:37:04
3	Ni 231.604†	70.2	5.9	0.1529 ug/L	0.1529 ppb	14:37:04
3	P 214.914†	208.8	-7.1	-4.2655 ug/L	-4.2655 ppb	14:37:04
3	Pb 220.353†	-41.4	17.8	2.1849 ug/L	2.1849 ppb	14:37:04
3	S 181.975 Axial†	38.6	-3.2	-4.6504 ug/L	-4.6504 ppb	14:37:04
3	Sb 206.836†	31.2	-6.3	-2.2044 ug/L	-2.2044 ppb	14:37:04
3	Se 196.026†	-19.9	8.4	5.5368 ug/L	5.5368 ppb	14:37:04
3	Si 251.611†	572.9	-0.1	-0.0003 ug/L	-0.0003 ppb	14:37:04
3	Sn 189.927†	11.8	1.0	0.1836 ug/L	0.1836 ppb	14:37:04
3	Ti 334.940†	-1436.3	-25.4	-0.0261 ug/L	-0.0261 ppb	14:36:44
3	Tl 190.801†	-40.2	-6.6	-2.0880 ug/L	-2.0880 ppb	14:37:04
3	U 409.014†	-3616.7	-637.3	-17.600 ug/L	-17.600 ppb	14:36:39
3	V 292.402†	-1445.9	96.9	0.6341 ug/L	0.6341 ppb	14:36:44
3	Zn 213.857†	640.2	17.8	0.1756 ug/L	0.1756 ppb	14:37:04
3	SiO2†	586.1	16.7	1.1660 ug/L	1.1660 ppb	14:37:20

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Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901431.0	102.76 %		0.152			0.15%
Sc Radial	3850.4	98.3 %		0.46			0.46%
Y 371.029	762175.5	100.84 %		0.290			0.29%
Y RADIAL	4331.5	98.20 %		1.390			1.42%
Ag 328.068†	6.4	0.0465 ug/L		0.07523	0.0465 ppb	0.07523	161.94%
Al 396.153Radial†	-12.4	-11.642 ug/L		13.3074	-11.642 ppb	13.3074	114.31%
As 188.979†	5.1	2.2925 ug/L		2.72852	2.2925 ppb	2.72852	119.02%
B 249.677†	164.7	4.0036 ug/L		0.18013	4.0036 ppb	0.18013	4.50%
Ba 233.527†	1234109.0	9684.5 ug/L		17.19	9684.5 ppb	17.19	0.18%
Be 313.107†	177.0	0.0663 ug/L		0.01607	0.0663 ppb	0.01607	24.23%
Ca 317.933Radial†	2.3	4.8168 ug/L		5.36809	4.8168 ppb	5.36809	111.45%
Cd 226.502†	37.9	0.4348 ug/L		0.08779	0.4348 ppb	0.08779	20.19%
Co 228.616†	-203.1	0.4078 ug/L		0.06035	0.4078 ppb	0.06035	14.80%
Cr 267.716†	15.5	0.1818 ug/L		0.10938	0.1818 ppb	0.10938	60.15%
Cu 324.752†	-126.8	-0.3761 ug/L		0.38102	-0.3761 ppb	0.38102	101.32%
Fe 238.204 Radial†	0.3	4.4561 ug/L		13.97703	4.4561 ppb	13.97703	313.66%
K 766.490 Radial†	260.9	50.056 ug/L		23.9107	50.056 ppb	23.9107	47.77%

Mg 279.077 IEC†	-3.4	-163.74 ug/L	80.383	-163.74 ppb	80.383	49.09%
Mn 257.610†	-6.0	0.0003 ug/L	0.01395	0.0003 ppb	0.01395	>999.9%
Mo 202.031†	0.4	0.0268 ug/L	0.26038	0.0268 ppb	0.26038	971.71%
Na 589.592 Radial†	54.0	16.636 ug/L	5.0473	16.636 ppb	5.0473	30.34%
Ni 231.604†	5.7	0.1472 ug/L	0.25546	0.1472 ppb	0.25546	173.58%
P 214.914†	-5.1	-2.9957 ug/L	3.73127	-2.9957 ppb	3.73127	124.56%
Pb 220.353†	9.6	1.1811 ug/L	1.86330	1.1811 ppb	1.86330	157.76%
S 181.975 Axial†	-2.3	-3.3548 ug/L	1.12297	-3.3548 ppb	1.12297	33.47%
Sb 206.836†	-0.1	-0.0322 ug/L	1.89244	-0.0322 ppb	1.89244	>999.9%
Se 196.026†	7.1	4.6402 ug/L	0.89196	4.6402 ppb	0.89196	19.22%
Si 251.611†	6.9	0.2241 ug/L	0.75039	0.2241 ppb	0.75039	334.91%
Sn 189.927†	3.5	0.6371 ug/L	0.39622	0.6371 ppb	0.39622	62.19%
Sr 421.552†	8.1	0.0558 ug/L	0.09862	0.0558 ppb	0.09862	176.89%
Ti 334.940†	-52.6	-0.0612 ug/L	0.08943	-0.0612 ppb	0.08943	146.15%
Tl 190.801†	-3.5	-1.1007 ug/L	1.37751	-1.1007 ppb	1.37751	125.15%
U 409.014†	-622.2	-17.183 ug/L	1.2262	-17.183 ppb	1.2262	7.14%
V 292.402†	50.6	0.3165 ug/L	0.33093	0.3165 ppb	0.33093	104.56%
Zn 213.857†	6.8	0.0670 ug/L	0.09459	0.0670 ppb	0.09459	141.20%
SiO2†	35.2	2.4458 ug/L	2.09207	2.4458 ppb	2.09207	85.54%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/24/2010 14:39:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3813.6	3813.6	97.3 %		14:41:43
1	Y RADIAL	4271.0	4271.0	96.83 %		14:41:23
1	Al 396.153Radial†	5208.5	5464.7	5101.7 ug/L	5101.7 ppb	14:41:23
1	Ca 317.933Radial†	2425.6	2472.9	5169.5 ug/L	5169.5 ppb	14:41:43
1	Fe 238.204 Radial†	357.8	356.3	5044.2 ug/L	5044.2 ppb	14:41:43
1	K 766.490 Radial†	28527.0	26674.4	5112.3 ug/L	5112.3 ppb	14:41:23
1	Mg 279.077 IEC†	105.5	104.3	5058.9 ug/L	5058.9 ppb	14:41:43
1	Na 589.592 Radial†	31800.0	33497.1	10328 ug/L	10328 ppb	14:41:23
1	Sr 421.552†	71096.1	73021.8	505.24 ug/L	505.24 ppb	14:41:23
1	Sc 361.383	897318.0	897318.0	102.29 %		14:42:40
1	Y 371.029	748412.4	748412.4	99.017 %		14:42:40
1	Ag 328.068†	107466.1	104820.0	488.68 ug/L	488.68 ppb	14:42:45
1	As 188.979†	1091.7	1085.5	488.93 ug/L	488.93 ppb	14:43:05
1	B 249.677†	19987.5	19938.3	481.19 ug/L	481.19 ppb	14:42:45
1	Ba 233.527†	63683.8	62259.6	489.80 ug/L	489.80 ppb	14:42:45
1	Be 313.107†	1334439.9	1308330.1	492.77 ug/L	492.77 ppb	14:42:40
1	Cd 226.502†	43040.7	42273.4	489.41 ug/L	489.41 ppb	14:42:45
1	Co 228.616†	23858.7	23391.2	490.07 ug/L	490.07 ppb	14:42:45
1	Cr 267.716†	44493.9	43420.2	488.40 ug/L	488.40 ppb	14:42:45
1	Cu 324.752†	168486.9	158724.5	483.01 ug/L	483.01 ppb	14:42:45
1	Mn 257.610†	443160.9	432781.8	492.77 ug/L	492.77 ppb	14:42:40
1	Mo 202.031†	6762.2	6600.7	485.05 ug/L	485.05 ppb	14:43:05
1	Ni 231.604†	19832.5	19326.1	491.23 ug/L	491.23 ppb	14:42:45
1	P 214.914†	4313.8	4006.8	2317.9 ug/L	2317.9 ppb	14:43:05
1	Pb 220.353†	4001.0	3969.5	489.73 ug/L	489.73 ppb	14:43:05
1	S 181.975 Axial†	741.7	684.3	983.78 ug/L	983.78 ppb	14:43:05
1	Sb 206.836†	1426.6	1358.0	492.08 ug/L	492.08 ppb	14:43:05
1	Se 196.026†	730.5	741.9	503.19 ug/L	503.19 ppb	14:43:05
1	Si 251.611†	77333.7	75044.2	2422.4 ug/L	2422.4 ppb	14:42:45
1	Sn 189.927†	2752.7	2680.6	481.60 ug/L	481.60 ppb	14:43:05
1	Ti 334.940†	313933.6	308280.1	484.32 ug/L	484.32 ppb	14:42:45
1	Tl 190.801†	1524.2	1522.7	490.16 ug/L	490.16 ppb	14:43:05
1	U 409.014†	14843.8	17398.1	478.77 ug/L	478.77 ppb	14:42:45
1	V 292.402†	69782.5	69726.1	492.63 ug/L	492.63 ppb	14:42:45
1	Zn 213.857†	50248.6	48517.7	483.86 ug/L	483.86 ppb	14:42:45
1	SiO2†	76980.2	74702.6	5178.3 ug/L	5178.3 ppb	14:44:13
2	Sc Radial	3801.6	3801.6	97.0 %		14:42:08
2	Y RADIAL	4267.4	4267.4	96.75 %		14:41:48
2	Al 396.153Radial†	5185.3	5457.6	5094.9 ug/L	5094.9 ppb	14:41:48
2	Ca 317.933Radial†	2420.4	2475.3	5174.7 ug/L	5174.7 ppb	14:42:08
2	Fe 238.204 Radial†	356.8	356.5	5046.7 ug/L	5046.7 ppb	14:42:08
2	K 766.490 Radial†	28525.8	26765.4	5129.8 ug/L	5129.8 ppb	14:41:48
2	Mg 279.077 IEC†	110.3	109.6	5316.2 ug/L	5316.2 ppb	14:42:08
2	Na 589.592 Radial†	31683.7	33480.1	10323 ug/L	10323 ppb	14:41:48
2	Sr 421.552†	70922.6	73072.9	505.59 ug/L	505.59 ppb	14:41:48
2	Sc 361.383	897850.4	897850.4	102.35 %		14:43:11
2	Y 371.029	747514.0	747514.0	98.898 %		14:43:11
2	Ag 328.068†	107690.3	104976.8	489.40 ug/L	489.40 ppb	14:43:16
2	As 188.979†	1097.8	1090.8	491.30 ug/L	491.30 ppb	14:43:36
2	B 249.677†	20055.8	19993.5	482.52 ug/L	482.52 ppb	14:43:16
2	Ba 233.527†	63750.8	62288.1	490.02 ug/L	490.02 ppb	14:43:16
2	Be 313.107†	1336788.7	1309851.4	493.34 ug/L	493.34 ppb	14:43:11
2	Cd 226.502†	43138.2	42343.8	490.22 ug/L	490.22 ppb	14:43:16
2	Co 228.616†	23940.2	23456.9	491.45 ug/L	491.45 ppb	14:43:16
2	Cr 267.716†	44587.4	43485.8	489.14 ug/L	489.14 ppb	14:43:16
2	Cu 324.752†	168542.3	158681.0	482.88 ug/L	482.88 ppb	14:43:16
2	Mn 257.610†	444660.3	433989.9	494.13 ug/L	494.13 ppb	14:43:11
2	Mo 202.031†	6792.1	6626.0	486.91 ug/L	486.91 ppb	14:43:36
2	Ni 231.604†	19773.0	19256.4	489.45 ug/L	489.45 ppb	14:43:16



2	P 214.914†	4360.6	4049.9	2343.9 ug/L	2343.9 ppb	14:43:36
2	Pb 220.353†	4021.3	3987.1	491.89 ug/L	491.89 ppb	14:43:36
2	S 181.975 Axial†	742.4	684.6	984.14 ug/L	984.14 ppb	14:43:36
2	Sb 206.836†	1453.3	1383.2	501.03 ug/L	501.03 ppb	14:43:36
2	Se 196.026†	748.6	759.2	514.51 ug/L	514.51 ppb	14:43:36
2	Si 251.611†	77481.0	75143.4	2425.6 ug/L	2425.6 ppb	14:43:16
2	Sn 189.927†	2795.1	2720.4	488.75 ug/L	488.75 ppb	14:43:36
2	Ti 334.940†	313873.3	308039.3	483.92 ug/L	483.92 ppb	14:43:16
2	Tl 190.801†	1531.9	1529.3	492.26 ug/L	492.26 ppb	14:43:36
2	U 409.014†	14953.9	17497.1	481.50 ug/L	481.50 ppb	14:43:16
2	V 292.402†	69592.1	69499.6	491.09 ug/L	491.09 ppb	14:43:16
2	Zn 213.857†	50418.8	48654.8	485.25 ug/L	485.25 ppb	14:43:16
2	SiO2†	76690.2	74374.6	5155.5 ug/L	5155.5 ppb	14:44:18
3	Sc Radial	3795.4	3795.4	96.9 %		14:42:33
3	Y RADIAL	4265.4	4265.4	96.70 %		14:42:13
3	Al 396.153Radial†	5173.9	5454.6	5092.0 ug/L	5092.0 ppb	14:42:13
3	Ca 317.933Radial†	2424.4	2483.5	5191.9 ug/L	5191.9 ppb	14:42:33
3	Fe 238.204 Radial†	355.3	355.5	5032.9 ug/L	5032.9 ppb	14:42:33
3	K 766.490 Radial†	28354.5	26637.0	5105.1 ug/L	5105.1 ppb	14:42:13
3	Mg 279.077 IEC†	105.9	105.2	5102.2 ug/L	5102.2 ppb	14:42:33
3	Na 589.592 Radial†	31397.3	33238.1	10248 ug/L	10248 ppb	14:42:13
3	Sr 421.552†	70498.2	72755.1	503.39 ug/L	503.39 ppb	14:42:13
3	Sc 361.383	888451.7	888451.7	101.28 %		14:43:42
3	Y 371.029	740912.2	740912.2	98.024 %		14:43:42
3	Ag 328.068†	107485.0	105887.1	493.63 ug/L	493.63 ppb	14:43:47
3	As 188.979†	1102.4	1106.8	498.45 ug/L	498.45 ppb	14:44:08
3	B 249.677†	19977.4	20123.3	485.67 ug/L	485.67 ppb	14:43:47
3	Ba 233.527†	63409.9	62610.5	492.56 ug/L	492.56 ppb	14:43:47
3	Be 313.107†	1315040.4	1302194.5	490.47 ug/L	490.47 ppb	14:43:42
3	Cd 226.502†	42954.6	42608.4	493.29 ug/L	493.29 ppb	14:43:47
3	Co 228.616†	23716.2	23483.3	492.00 ug/L	492.00 ppb	14:43:47
3	Cr 267.716†	44432.6	43793.8	492.60 ug/L	492.60 ppb	14:43:47
3	Cu 324.752†	168005.5	159892.9	486.57 ug/L	486.57 ppb	14:43:47
3	Mn 257.610†	438325.3	432330.8	492.25 ug/L	492.25 ppb	14:43:42
3	Mo 202.031†	6776.8	6681.1	490.95 ug/L	490.95 ppb	14:44:08
3	Ni 231.604†	19707.0	19395.7	492.99 ug/L	492.99 ppb	14:43:47
3	P 214.914†	4353.0	4087.5	2365.8 ug/L	2365.8 ppb	14:44:08
3	Pb 220.353†	3999.9	4007.5	494.41 ug/L	494.41 ppb	14:44:08
3	S 181.975 Axial†	736.1	686.0	986.27 ug/L	986.27 ppb	14:44:08
3	Sb 206.836†	1447.1	1392.1	504.21 ug/L	504.21 ppb	14:44:08
3	Se 196.026†	740.1	758.5	514.01 ug/L	514.01 ppb	14:44:08
3	Si 251.611†	77186.3	75653.2	2442.0 ug/L	2442.0 ppb	14:43:47
3	Sn 189.927†	2764.6	2719.2	488.52 ug/L	488.52 ppb	14:44:08
3	Ti 334.940†	313106.9	310526.6	487.85 ug/L	487.85 ppb	14:43:47
3	Tl 190.801†	1532.7	1545.9	497.60 ug/L	497.60 ppb	14:44:08
3	U 409.014†	14747.7	17448.0	480.14 ug/L	480.14 ppb	14:43:47
3	V 292.402†	69442.5	70071.2	495.12 ug/L	495.12 ppb	14:43:47
3	Zn 213.857†	50140.7	48901.4	487.71 ug/L	487.71 ppb	14:43:47
3	SiO2†	76994.2	75467.4	5231.3 ug/L	5231.3 ppb	14:44:23

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	894540.0	101.97 %	0.602			0.59%
Sc Radial	3803.5	97.1 %	0.24			0.24%
Y 371.029	745612.9	98.646 %	0.5419			0.55%
Y RADIAL	4267.9	96.76 %	0.065			0.07%
Ag 328.068†	105228.0	490.57 ug/L	2.674	490.57 ppb	2.674	0.55%
QC value within limits for Ag 328.068 Recovery = 98.11%						
Al 396.153Radial†	5458.9	5096.2 ug/L	4.98	5096.2 ppb	4.98	0.10%
QC value within limits for Al 396.153Radial Recovery = 101.92%						
As 188.979†	1094.3	492.89 ug/L	4.955	492.89 ppb	4.955	1.01%
QC value within limits for As 188.979 Recovery = 98.58%						
B 249.677†	20018.4	483.13 ug/L	2.301	483.13 ppb	2.301	0.48%
QC value within limits for B 249.677 Recovery = 96.63%						
Ba 233.527†	62386.1	490.79 ug/L	1.533	490.79 ppb	1.533	0.31%
QC value within limits for Ba 233.527 Recovery = 98.16%						
Be 313.107†	1306792.0	492.19 ug/L	1.518	492.19 ppb	1.518	0.31%
QC value within limits for Be 313.107 Recovery = 98.44%						
Ca 317.933Radial†	2477.2	5178.7 ug/L	11.69	5178.7 ppb	11.69	0.23%

QC value within limits for Ca 317.933Radial Recovery = 103.57%							
Cd	226.502†	42408.6	490.97 ug/L	2.047	490.97 ppb	2.047	0.42%
QC value within limits for Cd 226.502 Recovery = 98.19%							
Co	228.616†	23443.8	491.18 ug/L	0.997	491.18 ppb	0.997	0.20%
QC value within limits for Co 228.616 Recovery = 98.24%							
Cr	267.716†	43566.6	490.05 ug/L	2.241	490.05 ppb	2.241	0.46%
QC value within limits for Cr 267.716 Recovery = 98.01%							
Cu	324.752†	159099.5	484.15 ug/L	2.092	484.15 ppb	2.092	0.43%
QC value within limits for Cu 324.752 Recovery = 96.83%							
Fe	238.204 Radial†	356.1	5041.3 ug/L	7.36	5041.3 ppb	7.36	0.15%
QC value within limits for Fe 238.204 Radial Recovery = 100.83%							
K	766.490 Radial†	26692.3	5115.7 ug/L	12.67	5115.7 ppb	12.67	0.25%
QC value within limits for K 766.490 Radial Recovery = 102.31%							
Mg	279.077 IEC†	106.4	5159.1 ug/L	137.75	5159.1 ppb	137.75	2.67%
QC value within limits for Mg 279.077 IEC Recovery = 103.18%							
Mn	257.610†	433034.1	493.05 ug/L	0.972	493.05 ppb	0.972	0.20%
QC value within limits for Mn 257.610 Recovery = 98.61%							
Mo	202.031†	6635.9	487.64 ug/L	3.017	487.64 ppb	3.017	0.62%
QC value within limits for Mo 202.031 Recovery = 97.53%							
Na	589.592 Radial†	33405.1	10300 ug/L	44.7	10300 ppb	44.7	0.43%
QC value within limits for Na 589.592 Radial Recovery = 103.00%							
Ni	231.604†	19326.1	491.22 ug/L	1.771	491.22 ppb	1.771	0.36%
QC value within limits for Ni 231.604 Recovery = 98.24%							
P	214.914†	4048.1	2342.5 ug/L	24.01	2342.5 ppb	24.01	1.03%
QC value within limits for P 214.914 Recovery = 93.70%							
Pb	220.353†	3988.0	492.01 ug/L	2.345	492.01 ppb	2.345	0.48%
QC value within limits for Pb 220.353 Recovery = 98.40%							
S	181.975 Axial†	685.0	984.73 ug/L	1.346	984.73 ppb	1.346	0.14%
QC value within limits for S 181.975 Axial Recovery = 98.47%							
Sb	206.836†	1377.8	499.10 ug/L	6.292	499.10 ppb	6.292	1.26%
QC value within limits for Sb 206.836 Recovery = 99.82%							
Se	196.026†	753.2	510.57 ug/L	6.397	510.57 ppb	6.397	1.25%
QC value within limits for Se 196.026 Recovery = 102.11%							
Si	251.611†	75280.3	2430.0 ug/L	10.54	2430.0 ppb	10.54	0.43%
QC value within limits for Si 251.611 Recovery = 97.20%							
Sn	189.927†	2706.7	486.29 ug/L	4.066	486.29 ppb	4.066	0.84%
QC value within limits for Sn 189.927 Recovery = 97.26%							
Sr	421.552†	72949.9	504.74 ug/L	1.181	504.74 ppb	1.181	0.23%
QC value within limits for Sr 421.552 Recovery = 100.95%							
Ti	334.940†	308948.7	485.37 ug/L	2.161	485.37 ppb	2.161	0.45%
QC value within limits for Ti 334.940 Recovery = 97.07%							
Tl	190.801†	1532.6	493.34 ug/L	3.838	493.34 ppb	3.838	0.78%
QC value within limits for Tl 190.801 Recovery = 98.67%							
U	409.014†	17447.7	480.13 ug/L	1.366	480.13 ppb	1.366	0.28%
QC value within limits for U 409.014 Recovery = 96.03%							
V	292.402†	69765.6	492.95 ug/L	2.035	492.95 ppb	2.035	0.41%
QC value within limits for V 292.402 Recovery = 98.59%							
Zn	213.857†	48691.3	485.61 ug/L	1.948	485.61 ppb	1.948	0.40%
QC value within limits for Zn 213.857 Recovery = 97.12%							
SiO2†		74848.2	5188.3 ug/L	38.90	5188.3 ppb	38.90	0.75%
QC value within limits for SiO2 Recovery = 97.02%							
All analyte(s) passed QC.							

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 14:46:33

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	3682.8	3682.8	94.0 %		14:48:46
1	Y RADIAL	4067.2	4067.2	92.21 %		14:48:26
1	Al 396.153Radial†	-98.8	7.2	6.7744 ug/L	6.7744 ppb	14:48:26
1	Ca 317.933Radial†	16.7	-1.9	-3.9722 ug/L	-3.9722 ppb	14:48:46
1	Fe 238.204 Radial†	9.7	-1.0	-14.139 ug/L	-14.139 ppb	14:48:46
1	K 766.490 Radial†	2748.3	284.9	54.664 ug/L	54.664 ppb	14:48:26
1	Mg 279.077 IEC†	2.9	-1.0	-49.993 ug/L	-49.993 ppb	14:48:46
1	Na 589.592 Radial†	-718.7	55.0	16.959 ug/L	16.959 ppb	14:48:26
1	Sr 421.552†	41.3	8.2	0.0570 ug/L	0.0570 ppb	14:48:26
1	Sc 361.383	895247.1	895247.1	102.05 %		14:49:43
1	Y 371.029	758562.0	758562.0	100.36 %		14:49:43
1	Ag 328.068†	198.4	-46.0	-0.2156 ug/L	-0.2156 ppb	14:49:43
1	As 188.979†	-17.6	1.0	0.4478 ug/L	0.4478 ppb	14:50:03
1	B 249.677†	-209.5	193.0	4.6808 ug/L	4.6808 ppb	14:50:03
1	Ba 233.527†	29.4	30.2	0.2380 ug/L	0.2380 ppb	14:50:03
1	Be 313.107†	-3586.5	247.9	0.0933 ug/L	0.0933 ppb	14:49:43
1	Cd 226.502†	-179.4	20.5	0.2394 ug/L	0.2394 ppb	14:50:03
1	Co 228.616†	-64.7	3.1	0.0665 ug/L	0.0665 ppb	14:50:03
1	Cr 267.716†	73.5	-5.7	-0.0646 ug/L	-0.0646 ppb	14:50:03
1	Cu 324.752†	5986.4	-124.8	-0.3813 ug/L	-0.3813 ppb	14:49:43
1	Mn 257.610†	448.7	-19.1	-0.0211 ug/L	-0.0211 ppb	14:50:03
1	Mo 202.031†	16.9	6.4	0.4684 ug/L	0.4684 ppb	14:50:03
1	Ni 231.604†	74.2	10.2	0.2604 ug/L	0.2604 ppb	14:50:03
1	P 214.914†	206.4	-8.3	-4.8584 ug/L	-4.8584 ppb	14:50:03
1	Pb 220.353†	-61.6	-2.3	-0.2752 ug/L	-0.2752 ppb	14:50:03
1	S 181.975 Axial†	35.4	-6.1	-8.8491 ug/L	-8.8491 ppb	14:50:03
1	Sb 206.836†	42.3	4.7	1.6931 ug/L	1.6931 ppb	14:50:03
1	Se 196.026†	-28.5	-0.2	-0.1591 ug/L	-0.1591 ppb	14:50:03
1	Si 251.611†	578.2	8.3	0.2613 ug/L	0.2613 ppb	14:50:03
1	Sn 189.927†	23.4	12.5	2.2394 ug/L	2.2394 ppb	14:50:03
1	Ti 334.940†	-1358.1	43.3	0.0710 ug/L	0.0710 ppb	14:49:43
1	Tl 190.801†	-31.9	1.4	0.4307 ug/L	0.4307 ppb	14:50:03
1	U 409.014†	-2900.2	44.8	1.2389 ug/L	1.2389 ppb	14:49:43
1	V 292.402†	-1430.6	103.9	0.7346 ug/L	0.7346 ppb	14:49:43
1	Zn 213.857†	661.7	42.3	0.4268 ug/L	0.4268 ppb	14:50:03
1	SiO2†	627.2	60.2	4.1714 ug/L	4.1714 ppb	14:50:59
2	Sc Radial	3902.0	3902.0	99.6 %		14:49:11
2	Y RADIAL	4377.1	4377.1	99.24 %		14:48:51
2	Al 396.153Radial†	-126.9	-15.0	-14.101 ug/L	-14.101 ppb	14:48:51
2	Ca 317.933Radial†	21.8	2.2	4.5475 ug/L	4.5475 ppb	14:49:11
2	Fe 238.204 Radial†	12.5	1.2	16.803 ug/L	16.803 ppb	14:49:11
2	K 766.490 Radial†	2756.1	128.4	24.634 ug/L	24.634 ppb	14:48:51
2	Mg 279.077 IEC†	0.6	-3.5	-168.77 ug/L	-168.77 ppb	14:49:11
2	Na 589.592 Radial†	-774.7	41.8	12.877 ug/L	12.877 ppb	14:48:51
2	Sr 421.552†	25.9	-9.8	-0.0676 ug/L	-0.0676 ppb	14:48:51
2	Sc 361.383	889931.0	889931.0	101.45 %		14:50:08
2	Y 371.029	753903.0	753903.0	99.743 %		14:50:08
2	Ag 328.068†	289.7	45.2	0.2204 ug/L	0.2204 ppb	14:50:08
2	As 188.979†	-23.1	-4.5	-1.9988 ug/L	-1.9988 ppb	14:50:28
2	B 249.677†	-228.0	173.5	4.2030 ug/L	4.2030 ppb	14:50:28
2	Ba 233.527†	32.9	33.8	0.2675 ug/L	0.2675 ppb	14:50:28
2	Be 313.107†	-3670.0	144.6	0.0540 ug/L	0.0540 ppb	14:50:08
2	Cd 226.502†	-167.9	30.8	0.3542 ug/L	0.3542 ppb	14:50:28
2	Co 228.616†	-62.3	5.1	0.1074 ug/L	0.1074 ppb	14:50:28
2	Cr 267.716†	74.3	-4.4	-0.0454 ug/L	-0.0454 ppb	14:50:28
2	Cu 324.752†	6105.8	27.9	0.0878 ug/L	0.0878 ppb	14:50:08
2	Mn 257.610†	444.9	-20.2	-0.0144 ug/L	-0.0144 ppb	14:50:28
2	Mo 202.031†	13.3	3.0	0.2214 ug/L	0.2214 ppb	14:50:28
2	Ni 231.604†	57.9	-5.4	-0.1370 ug/L	-0.1370 ppb	14:50:28

2	P 214.914†	197.6	-15.7	-9.4878 ug/L	-9.4878 ppb	14:50:28
2	Pb 220.353†	-48.9	9.9	1.2151 ug/L	1.2151 ppb	14:50:28
2	S 181.975 Axial†	37.6	-3.7	-5.3510 ug/L	-5.3510 ppb	14:50:28
2	Sb 206.836†	48.0	10.6	3.7416 ug/L	3.7416 ppb	14:50:28
2	Se 196.026†	-21.0	7.1	4.6764 ug/L	4.6764 ppb	14:50:28
2	Si 251.611†	586.1	19.4	0.6263 ug/L	0.6263 ppb	14:50:28
2	Sn 189.927†	25.9	15.0	2.6994 ug/L	2.6994 ppb	14:50:28
2	Ti 334.940†	-1498.5	-103.0	-0.1459 ug/L	-0.1459 ppb	14:50:08
2	Tl 190.801†	-35.5	-2.4	-0.7751 ug/L	-0.7751 ppb	14:50:28
2	U 409.014†	-3065.5	-135.2	-3.7348 ug/L	-3.7348 ppb	14:50:08
2	V 292.402†	-1421.2	104.7	0.7206 ug/L	0.7206 ppb	14:50:08
2	Zn 213.857†	662.5	47.0	0.4714 ug/L	0.4714 ppb	14:50:28
2	SiO2†	619.8	56.5	3.9239 ug/L	3.9239 ppb	14:51:04
3	Sc Radial	3896.8	3896.8	99.4 %		14:49:36
3	Y RADIAL	4548.4	4548.4	103.1 %		14:49:16
3	Al 396.153Radial†	-99.8	12.1	11.328 ug/L	11.328 ppb	14:49:16
3	Ca 317.933Radial†	19.9	0.4	0.7604 ug/L	0.7604 ppb	14:49:36
3	Fe 238.204 Radial†	10.7	-0.6	-8.1655 ug/L	-8.1655 ppb	14:49:36
3	K 766.490 Radial†	2738.7	114.5	21.975 ug/L	21.975 ppb	14:49:16
3	Mg 279.077 IEC†	4.7	0.7	32.689 ug/L	32.689 ppb	14:49:36
3	Na 589.592 Radial†	-766.2	49.2	15.174 ug/L	15.174 ppb	14:49:16
3	Sr 421.552†	66.1	30.7	0.2127 ug/L	0.2127 ppb	14:49:16
3	Sc 361.383	900462.2	900462.2	102.65 %		14:50:33
3	Y 371.029	761741.5	761741.5	100.78 %		14:50:33
3	Ag 328.068†	290.7	42.8	0.1976 ug/L	0.1976 ppb	14:50:33
3	As 188.979†	-23.4	-4.5	-2.0280 ug/L	-2.0280 ppb	14:50:53
3	B 249.677†	-241.7	162.7	3.9456 ug/L	3.9456 ppb	14:50:53
3	Ba 233.527†	33.7	34.2	0.2693 ug/L	0.2693 ppb	14:50:53
3	Be 313.107†	-3760.7	98.5	0.0369 ug/L	0.0369 ppb	14:50:33
3	Cd 226.502†	-173.8	27.0	0.3130 ug/L	0.3130 ppb	14:50:53
3	Co 228.616†	-53.8	14.1	0.2956 ug/L	0.2956 ppb	14:50:53
3	Cr 267.716†	92.9	12.8	0.1433 ug/L	0.1433 ppb	14:50:53
3	Cu 324.752†	6036.2	-110.3	-0.3361 ug/L	-0.3361 ppb	14:50:33
3	Mn 257.610†	439.1	-30.9	-0.0373 ug/L	-0.0373 ppb	14:50:53
3	Mo 202.031†	9.9	-0.5	-0.0345 ug/L	-0.0345 ppb	14:50:53
3	Ni 231.604†	63.2	-0.9	-0.0223 ug/L	-0.0223 ppb	14:50:53
3	P 214.914†	200.8	-14.9	-8.8541 ug/L	-8.8541 ppb	14:50:53
3	Pb 220.353†	-56.3	3.2	0.4003 ug/L	0.4003 ppb	14:50:53
3	S 181.975 Axial†	38.4	-3.4	-4.9324 ug/L	-4.9324 ppb	14:50:53
3	Sb 206.836†	50.0	12.0	4.2034 ug/L	4.2034 ppb	14:50:53
3	Se 196.026†	-24.1	4.2	2.7418 ug/L	2.7418 ppb	14:50:53
3	Si 251.611†	568.1	-4.9	-0.1587 ug/L	-0.1587 ppb	14:50:53
3	Sn 189.927†	16.6	5.6	1.0137 ug/L	1.0137 ppb	14:50:53
3	Ti 334.940†	-1433.9	-22.8	-0.0384 ug/L	-0.0384 ppb	14:50:33
3	Tl 190.801†	-28.3	5.0	1.5859 ug/L	1.5859 ppb	14:50:53
3	U 409.014†	-2971.3	-8.1	-0.2222 ug/L	-0.2222 ppb	14:50:33
3	V 292.402†	-1486.5	57.5	0.4017 ug/L	0.4017 ppb	14:50:33
3	Zn 213.857†	665.1	41.9	0.4237 ug/L	0.4237 ppb	14:50:53
3	SiO2†	602.1	32.2	2.2358 ug/L	2.2358 ppb	14:51:09

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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	895213.4	102.05 %	0.600			0.59%
Sc Radial	3827.2	97.7 %	3.19			3.27%
Y 371.029	758068.8	100.29 %	0.522			0.52%
Y RADIAL	4330.9	98.19 %	5.530			5.63%
Ag 328.068†	14.0	0.0675 ug/L	0.24541	0.0675 ppb	0.24541	363.82%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.4	1.3337 ug/L	13.55939	1.3337 ppb	13.55939	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.7	-1.1930 ug/L	1.42102	-1.1930 ppb	1.42102	119.11%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	176.4	4.2765 ug/L	0.37307	4.2765 ppb	0.37307	8.72%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	32.7	0.2583 ug/L	0.01757	0.2583 ppb	0.01757	6.80%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	163.6	0.0614 ug/L	0.02891	0.0614 ppb	0.02891	47.10%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.2	0.4452 ug/L	4.26860	0.4452 ppb	4.26860	958.76%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	26.1	0.3022 ug/L	0.05816	0.3022 ppb	0.05816	19.25%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	7.4	0.1565 ug/L	0.12221	0.1565 ppb	0.12221	78.10%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	0.9	0.0111 ug/L	0.11487	0.0111 ppb	0.11487	>999.9%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-69.1	-0.2099 ug/L	0.25882	-0.2099 ppb	0.25882	123.33%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.1	-1.8337 ug/L	16.41405	-1.8337 ppb	16.41405	895.15%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	175.9	33.758 ug/L	18.1542	33.758 ppb	18.1542	53.78%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.3	-62.024 ug/L	101.2660	-62.024 ppb	101.2660	163.27%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-23.4	-0.0243 ug/L	0.01179	-0.0243 ppb	0.01179	48.56%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.0	0.2184 ug/L	0.25146	0.2184 ppb	0.25146	115.12%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	48.7	15.003 ug/L	2.0464	15.003 ppb	2.0464	13.64%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	1.3	0.0337 ug/L	0.20455	0.0337 ppb	0.20455	606.54%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-12.9	-7.7335 ug/L	2.50992	-7.7335 ppb	2.50992	32.46%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	3.6	0.4468 ug/L	0.74623	0.4468 ppb	0.74623	167.03%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-4.4	-6.3775 ug/L	2.15070	-6.3775 ppb	2.15070	33.72%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	9.1	3.2127 ug/L	1.33610	3.2127 ppb	1.33610	41.59%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.7	2.4197 ug/L	2.43378	2.4197 ppb	2.43378	100.58%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	7.6	0.2430 ug/L	0.39286	0.2430 ppb	0.39286	161.69%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	11.1	1.9842 ug/L	0.87138	1.9842 ppb	0.87138	43.92%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.7	0.0674 ug/L	0.14043	0.0674 ppb	0.14043	208.48%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-27.5	-0.0377 ug/L	0.10845	-0.0377 ppb	0.10845	287.42%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.3	0.4138 ug/L	1.18060	0.4138 ppb	1.18060	285.30%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-32.8	-0.9060 ug/L	2.55637	-0.9060 ppb	2.55637	282.15%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	88.7	0.6190 ug/L	0.18828	0.6190 ppb	0.18828	30.42%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	43.7	0.4406 ug/L	0.02666	0.4406 ppb	0.02666	6.05%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	49.6	3.4437 ug/L	1.05336	3.4437 ppb	1.05336	30.59%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/24/2010 16:03:42

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	3841.1	3841.1	98.0 %		16:05:54
1	Y RADIAL	4330.5	4330.5	98.18 %		16:05:34
1	Al 396.153Radial†	5213.3	5431.1	5070.2 ug/L	5070.2 ppb	16:05:34
1	Ca 317.933Radial†	2445.7	2475.5	5175.1 ug/L	5175.1 ppb	16:05:54
1	Fe 238.204 Radial†	358.5	354.4	5017.6 ug/L	5017.6 ppb	16:05:54
1	K 766.490 Radial†	28720.2	26661.5	5109.8 ug/L	5109.8 ppb	16:05:34
1	Mg 279.077 IEC†	105.2	103.3	5007.4 ug/L	5007.4 ppb	16:05:54
1	Na 589.592 Radial†	32199.8	33670.9	10382 ug/L	10382 ppb	16:05:34
1	Sr 421.552†	71792.3	73208.6	506.53 ug/L	506.53 ppb	16:05:34
1	Sc 361.383	902357.4	902357.4	102.86 %		16:06:51
1	Y 371.029	751235.4	751235.4	99.390 %		16:06:51
1	Ag 328.068†	107390.8	104160.1	485.60 ug/L	485.60 ppb	16:06:56
1	As 188.979†	1088.0	1075.9	484.63 ug/L	484.63 ppb	16:07:16
1	B 249.677†	19507.4	19362.5	467.24 ug/L	467.24 ppb	16:06:56
1	Ba 233.527†	63509.9	61742.9	485.73 ug/L	485.73 ppb	16:06:56
1	Be 313.107†	1340459.0	1306896.0	492.22 ug/L	492.22 ppb	16:06:51
1	Cd 226.502†	42994.2	41993.3	486.16 ug/L	486.16 ppb	16:06:56
1	Co 228.616†	23824.9	23228.0	486.66 ug/L	486.66 ppb	16:06:56
1	Cr 267.716†	44373.9	43060.6	484.36 ug/L	484.36 ppb	16:06:56
1	Cu 324.752†	167995.8	157327.2	478.76 ug/L	478.76 ppb	16:06:56
1	Mn 257.610†	447043.3	434136.6	494.31 ug/L	494.31 ppb	16:06:51
1	Mo 202.031†	6800.2	6600.7	485.05 ug/L	485.05 ppb	16:07:16
1	Ni 231.604†	19731.3	19119.4	485.97 ug/L	485.97 ppb	16:06:56
1	P 214.914†	4336.4	4005.2	2317.8 ug/L	2317.8 ppb	16:07:16
1	Pb 220.353†	3989.6	3936.7	485.68 ug/L	485.68 ppb	16:07:16
1	S 181.975 Axial†	721.1	660.3	949.18 ug/L	949.18 ppb	16:07:16
1	Sb 206.836†	1439.3	1362.5	493.67 ug/L	493.67 ppb	16:07:16
1	Se 196.026†	733.5	740.9	502.41 ug/L	502.41 ppb	16:07:16
1	Si 251.611†	77075.7	74371.2	2400.6 ug/L	2400.6 ppb	16:06:56
1	Sn 189.927†	2771.5	2683.8	482.18 ug/L	482.18 ppb	16:07:16
1	Ti 334.940†	313695.9	306335.0	481.27 ug/L	481.27 ppb	16:06:56
1	Tl 190.801†	1512.6	1503.1	483.89 ug/L	483.89 ppb	16:07:16
1	U 409.014†	15037.1	17505.0	481.73 ug/L	481.73 ppb	16:06:56
1	V 292.402†	69513.5	69083.5	488.17 ug/L	488.17 ppb	16:06:56
1	Zn 213.857†	50103.7	48102.5	479.73 ug/L	479.73 ppb	16:06:56
1	SiO2†	77571.6	74857.2	5189.0 ug/L	5189.0 ppb	16:08:24
2	Sc Radial	3834.5	3834.5	97.8 %		16:06:19
2	Y RADIAL	4298.3	4298.3	97.45 %		16:05:59
2	Al 396.153Radial†	5173.1	5399.2	5040.4 ug/L	5040.4 ppb	16:05:59
2	Ca 317.933Radial†	2451.7	2485.9	5196.8 ug/L	5196.8 ppb	16:06:19
2	Fe 238.204 Radial†	364.8	361.5	5116.5 ug/L	5116.5 ppb	16:06:19
2	K 766.490 Radial†	28536.2	26523.8	5083.4 ug/L	5083.4 ppb	16:05:59
2	Mg 279.077 IEC†	105.5	103.7	5028.3 ug/L	5028.3 ppb	16:06:19
2	Na 589.592 Radial†	31734.1	33251.4	10252 ug/L	10252 ppb	16:05:59
2	Sr 421.552†	70979.7	72503.9	501.66 ug/L	501.66 ppb	16:05:59
2	Sc 361.383	900895.4	900895.4	102.70 %		16:07:22
2	Y 371.029	750805.6	750805.6	99.333 %		16:07:22
2	Ag 328.068†	107666.1	104597.6	487.66 ug/L	487.66 ppb	16:07:27
2	As 188.979†	1089.6	1079.2	486.15 ug/L	486.15 ppb	16:07:47
2	B 249.677†	19683.4	19564.6	472.13 ug/L	472.13 ppb	16:07:27
2	Ba 233.527†	63487.9	61821.7	486.35 ug/L	486.35 ppb	16:07:27
2	Be 313.107†	1336402.5	1305060.8	491.53 ug/L	491.53 ppb	16:07:22
2	Cd 226.502†	42944.5	42012.7	486.38 ug/L	486.38 ppb	16:07:27
2	Co 228.616†	23767.9	23210.1	486.27 ug/L	486.27 ppb	16:07:27
2	Cr 267.716†	44293.0	43051.9	484.27 ug/L	484.27 ppb	16:07:27
2	Cu 324.752†	168429.2	158014.2	480.85 ug/L	480.85 ppb	16:07:27
2	Mn 257.610†	444761.5	432620.0	492.59 ug/L	492.59 ppb	16:07:22
2	Mo 202.031†	6757.0	6569.4	482.76 ug/L	482.76 ppb	16:07:47
2	Ni 231.604†	19703.6	19123.5	486.08 ug/L	486.08 ppb	16:07:27

2	P 214.914†	4327.9	4003.7	2316.4 ug/L	2316.4 ppb	16:07:47
2	Pb 220.353†	3987.1	3940.5	486.13 ug/L	486.13 ppb	16:07:47
2	S 181.975 Axial†	730.7	670.7	964.20 ug/L	964.20 ppb	16:07:47
2	Sb 206.836†	1447.9	1373.1	497.31 ug/L	497.31 ppb	16:07:47
2	Se 196.026†	732.3	740.8	502.70 ug/L	502.70 ppb	16:07:47
2	Si 251.611†	77198.1	74612.0	2408.4 ug/L	2408.4 ppb	16:07:27
2	Sn 189.927†	2768.1	2684.9	482.38 ug/L	482.38 ppb	16:07:47
2	Ti 334.940†	313857.3	306987.1	482.30 ug/L	482.30 ppb	16:07:27
2	Tl 190.801†	1523.9	1516.4	488.15 ug/L	488.15 ppb	16:07:47
2	U 409.014†	14941.6	17435.7	479.81 ug/L	479.81 ppb	16:07:27
2	V 292.402†	69460.5	69141.6	488.52 ug/L	488.52 ppb	16:07:27
2	Zn 213.857†	49985.0	48066.0	479.34 ug/L	479.34 ppb	16:07:27
2	SiO2†	78536.4	75919.0	5262.9 ug/L	5262.9 ppb	16:08:29
3	Sc Radial	3779.8	3779.8	96.5 %		16:06:44
3	Y RADIAL	4247.4	4247.4	96.29 %		16:06:24
3	Al 396.153Radial†	5109.2	5409.5	5049.9 ug/L	5049.9 ppb	16:06:24
3	Ca 317.933Radial†	2420.0	2489.4	5204.0 ug/L	5204.0 ppb	16:06:44
3	Fe 238.204 Radial†	354.6	356.4	5044.7 ug/L	5044.7 ppb	16:06:44
3	K 766.490 Radial†	28088.4	26481.6	5075.3 ug/L	5075.3 ppb	16:06:24
3	Mg 279.077 IEC†	109.6	109.6	5313.2 ug/L	5313.2 ppb	16:06:44
3	Na 589.592 Radial†	31453.5	33429.9	10307 ug/L	10307 ppb	16:06:24
3	Sr 421.552†	70139.8	72683.3	502.90 ug/L	502.90 ppb	16:06:24
3	Sc 361.383	897093.6	897093.6	102.26 %		16:07:53
3	Y 371.029	748254.4	748254.4	98.996 %		16:07:53
3	Ag 328.068†	107614.9	104991.8	489.47 ug/L	489.47 ppb	16:07:58
3	As 188.979†	1084.3	1078.6	485.86 ug/L	485.86 ppb	16:08:18
3	B 249.677†	19676.2	19638.7	473.93 ug/L	473.93 ppb	16:07:58
3	Ba 233.527†	63449.4	62046.0	488.12 ug/L	488.12 ppb	16:07:58
3	Be 313.107†	1337824.5	1311966.1	494.13 ug/L	494.13 ppb	16:07:53
3	Cd 226.502†	42925.9	42171.7	488.23 ug/L	488.23 ppb	16:07:58
3	Co 228.616†	23790.7	23330.5	488.80 ug/L	488.80 ppb	16:07:58
3	Cr 267.716†	44526.3	43462.8	488.88 ug/L	488.88 ppb	16:07:58
3	Cu 324.752†	168129.0	158415.7	482.07 ug/L	482.07 ppb	16:07:58
3	Mn 257.610†	444244.4	433949.7	494.09 ug/L	494.09 ppb	16:07:53
3	Mo 202.031†	6755.4	6595.7	484.69 ug/L	484.69 ppb	16:08:18
3	Ni 231.604†	19698.0	19199.4	488.00 ug/L	488.00 ppb	16:07:58
3	P 214.914†	4341.5	4034.9	2335.0 ug/L	2335.0 ppb	16:08:18
3	Pb 220.353†	3982.6	3952.5	487.62 ug/L	487.62 ppb	16:08:18
3	S 181.975 Axial†	739.8	682.7	981.43 ug/L	981.43 ppb	16:08:18
3	Sb 206.836†	1439.1	1370.5	496.50 ug/L	496.50 ppb	16:08:18
3	Se 196.026†	737.3	748.7	507.62 ug/L	507.62 ppb	16:08:18
3	Si 251.611†	77059.1	74794.6	2414.3 ug/L	2414.3 ppb	16:07:58
3	Sn 189.927†	2772.3	2700.5	485.17 ug/L	485.17 ppb	16:08:18
3	Ti 334.940†	314103.5	308523.0	484.69 ug/L	484.69 ppb	16:07:58
3	Tl 190.801†	1518.4	1517.3	488.45 ug/L	488.45 ppb	16:08:18
3	U 409.014†	14995.9	17550.5	482.97 ug/L	482.97 ppb	16:07:58
3	V 292.402†	69613.4	69577.7	491.61 ug/L	491.61 ppb	16:07:58
3	Zn 213.857†	50031.8	48318.0	481.87 ug/L	481.87 ppb	16:07:58
3	SiO2†	77394.1	75126.1	5207.7 ug/L	5207.7 ppb	16:08:34

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900115.5	102.61 %		0.310			0.30%
Sc Radial	3818.5	97.4 %		0.86			0.88%
Y 371.029	750098.5	99.240 %		0.2132			0.21%
Y RADIAL	4292.0	97.31 %		0.950			0.98%
Ag 328.068†	104583.2	487.57 ug/L		1.938	487.57 ppb	1.938	0.40%
QC value within limits for Ag 328.068 Recovery = 97.51%							
Al 396.153Radial†	5413.3	5053.5 ug/L		15.26	5053.5 ppb	15.26	0.30%
QC value within limits for Al 396.153Radial Recovery = 101.07%							
As 188.979†	1077.9	485.55 ug/L		0.809	485.55 ppb	0.809	0.17%
QC value within limits for As 188.979 Recovery = 97.11%							
B 249.677†	19521.9	471.10 ug/L		3.460	471.10 ppb	3.460	0.73%
QC value within limits for B 249.677 Recovery = 94.22%							
Ba 233.527†	61870.2	486.73 ug/L		1.238	486.73 ppb	1.238	0.25%
QC value within limits for Ba 233.527 Recovery = 97.35%							
Be 313.107†	1307974.3	492.63 ug/L		1.348	492.63 ppb	1.348	0.27%
QC value within limits for Be 313.107 Recovery = 98.53%							
Ca 317.933Radial†	2483.6	5192.0 ug/L		15.06	5192.0 ppb	15.06	0.29%

QC value within limits for Ca 317.933 Radial Recovery = 103.84%							
Cd 226.502†	42059.2	486.92 ug/L	1.136	486.92 ppb	1.136	0.23%	
QC value within limits for Cd 226.502 Recovery = 97.38%							
Co 228.616†	23256.2	487.24 ug/L	1.358	487.24 ppb	1.358	0.28%	
QC value within limits for Co 228.616 Recovery = 97.45%							
Cr 267.716†	43191.8	485.84 ug/L	2.636	485.84 ppb	2.636	0.54%	
QC value within limits for Cr 267.716 Recovery = 97.17%							
Cu 324.752†	157919.0	480.56 ug/L	1.676	480.56 ppb	1.676	0.35%	
QC value within limits for Cu 324.752 Recovery = 96.11%							
Fe 238.204 Radial†	357.4	5059.6 ug/L	51.12	5059.6 ppb	51.12	1.01%	
QC value within limits for Fe 238.204 Radial Recovery = 101.19%							
K 766.490 Radial†	26555.6	5089.5 ug/L	18.03	5089.5 ppb	18.03	0.35%	
QC value within limits for K 766.490 Radial Recovery = 101.79%							
Mg 279.077 IEC†	105.5	5116.3 ug/L	170.84	5116.3 ppb	170.84	3.34%	
QC value within limits for Mg 279.077 IEC Recovery = 102.33%							
Mn 257.610†	433568.7	493.67 ug/L	0.934	493.67 ppb	0.934	0.19%	
QC value within limits for Mn 257.610 Recovery = 98.73%							
Mo 202.031†	6588.6	484.17 ug/L	1.232	484.17 ppb	1.232	0.25%	
QC value within limits for Mo 202.031 Recovery = 96.83%							
Na 589.592 Radial†	33450.7	10314 ug/L	64.9	10314 ppb	64.9	0.63%	
QC value within limits for Na 589.592 Radial Recovery = 103.14%							
Ni 231.604†	19147.5	486.68 ug/L	1.145	486.68 ppb	1.145	0.24%	
QC value within limits for Ni 231.604 Recovery = 97.34%							
P 214.914†	4014.6	2323.0 ug/L	10.39	2323.0 ppb	10.39	0.45%	
QC value within limits for P 214.914 Recovery = 92.92%							
Pb 220.353†	3943.2	486.48 ug/L	1.014	486.48 ppb	1.014	0.21%	
QC value within limits for Pb 220.353 Recovery = 97.30%							
S 181.975 Axial†	671.2	964.94 ug/L	16.136	964.94 ppb	16.136	1.67%	
QC value within limits for S 181.975 Axial Recovery = 96.49%							
Sb 206.836†	1368.7	495.83 ug/L	1.913	495.83 ppb	1.913	0.39%	
QC value within limits for Sb 206.836 Recovery = 99.17%							
Se 196.026†	743.5	504.24 ug/L	2.923	504.24 ppb	2.923	0.58%	
QC value within limits for Se 196.026 Recovery = 100.85%							
Si 251.611†	74592.6	2407.8 ug/L	6.88	2407.8 ppb	6.88	0.29%	
QC value within limits for Si 251.611 Recovery = 96.31%							
Sn 189.927†	2689.7	483.24 ug/L	1.670	483.24 ppb	1.670	0.35%	
QC value within limits for Sn 189.927 Recovery = 96.65%							
Sr 421.552†	72798.6	503.69 ug/L	2.534	503.69 ppb	2.534	0.50%	
QC value within limits for Sr 421.552 Recovery = 100.74%							
Ti 334.940†	307281.7	482.75 ug/L	1.752	482.75 ppb	1.752	0.36%	
QC value within limits for Ti 334.940 Recovery = 96.55%							
Tl 190.801†	1512.3	486.83 ug/L	2.549	486.83 ppb	2.549	0.52%	
QC value within limits for Tl 190.801 Recovery = 97.37%							
U 409.014†	17497.1	481.50 ug/L	1.596	481.50 ppb	1.596	0.33%	
QC value within limits for U 409.014 Recovery = 96.30%							
V 292.402†	69267.6	489.43 ug/L	1.892	489.43 ppb	1.892	0.39%	
QC value within limits for V 292.402 Recovery = 97.89%							
Zn 213.857†	48162.2	480.31 ug/L	1.365	480.31 ppb	1.365	0.28%	
QC value within limits for Zn 213.857 Recovery = 96.06%							
SiO2†	75300.8	5219.9 ug/L	38.40	5219.9 ppb	38.40	0.74%	
QC value within limits for SiO2 Recovery = 97.61%							
All analyte(s) passed QC.							



Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 16:10:44

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	3909.4	3909.4	99.8 %		16:12:57
1	Y RADIAL	4434.3	4434.3	100.5 %		16:12:37
1	Al 396.153Radial†	-128.8	-16.7	-15.623 ug/L	-15.623 ppb	16:12:37
1	Ca 317.933Radial†	17.3	-2.3	-4.8296 ug/L	-4.8296 ppb	16:12:57
1	Fe 238.204 Radial†	8.7	-2.6	-37.022 ug/L	-37.022 ppb	16:12:57
1	K 766.490 Radial†	2699.8	66.7	12.793 ug/L	12.793 ppb	16:12:37
1	Mg 279.077 IEC†	5.3	1.2	59.058 ug/L	59.058 ppb	16:12:57
1	Na 589.592 Radial†	-721.7	96.3	29.691 ug/L	29.691 ppb	16:12:37
1	Sr 421.552†	49.5	13.9	0.0963 ug/L	0.0963 ppb	16:12:37
1	Sc 361.383	888069.3	888069.3	101.24 %		16:13:54
1	Y 371.029	752015.1	752015.1	99.493 %		16:13:54
1	Ag 328.068†	309.0	64.8	0.2892 ug/L	0.2892 ppb	16:13:54
1	As 188.979†	-18.0	0.4	0.1817 ug/L	0.1817 ppb	16:14:14
1	B 249.677†	-407.6	-4.5	-0.1026 ug/L	-0.1026 ppb	16:14:14
1	Ba 233.527†	25.7	26.8	0.2091 ug/L	0.2091 ppb	16:14:14
1	Be 313.107†	-3718.2	89.3	0.0334 ug/L	0.0334 ppb	16:13:54
1	Cd 226.502†	-192.5	6.2	0.0751 ug/L	0.0751 ppb	16:14:14
1	Co 228.616†	-55.1	12.1	0.2528 ug/L	0.2528 ppb	16:14:14
1	Cr 267.716†	65.5	-13.0	-0.1491 ug/L	-0.1491 ppb	16:14:14
1	Cu 324.752†	5932.4	-130.8	-0.3995 ug/L	-0.3995 ppb	16:13:54
1	Mn 257.610†	458.0	-6.3	-0.0133 ug/L	-0.0133 ppb	16:14:14
1	Mo 202.031†	5.3	-4.9	-0.3632 ug/L	-0.3632 ppb	16:14:14
1	Ni 231.604†	71.0	7.7	0.1951 ug/L	0.1951 ppb	16:14:14
1	P 214.914†	224.9	11.6	7.0984 ug/L	7.0984 ppb	16:14:14
1	Pb 220.353†	-53.1	5.7	0.7017 ug/L	0.7017 ppb	16:14:14
1	S 181.975 Axial†	34.8	-6.4	-9.2214 ug/L	-9.2214 ppb	16:14:14
1	Sb 206.836†	38.3	1.2	0.4075 ug/L	0.4075 ppb	16:14:14
1	Se 196.026†	-17.7	10.2	6.5978 ug/L	6.5978 ppb	16:14:14
1	Si 251.611†	554.1	-11.0	-0.3501 ug/L	-0.3501 ppb	16:14:14
1	Sn 189.927†	12.7	2.1	0.3714 ug/L	0.3714 ppb	16:14:14
1	Ti 334.940†	-1438.0	-46.4	-0.0779 ug/L	-0.0779 ppb	16:13:54
1	Tl 190.801†	-19.5	13.3	4.2655 ug/L	4.2655 ppb	16:14:14
1	U 409.014†	-2954.2	-31.6	-0.8671 ug/L	-0.8671 ppb	16:13:54
1	V 292.402†	-1540.4	-15.9	-0.1111 ug/L	-0.1111 ppb	16:13:54
1	Zn 213.857†	628.9	15.2	0.1576 ug/L	0.1576 ppb	16:14:14
1	SiO2†	542.1	-18.9	-1.3044 ug/L	-1.3044 ppb	16:15:10
2	Sc Radial	3921.9	3921.9	100 %		16:13:22
2	Y RADIAL	4392.9	4392.9	99.59 %		16:13:02
2	Al 396.153Radial†	-102.0	10.4	9.8029 ug/L	9.8029 ppb	16:13:02
2	Ca 317.933Radial†	20.5	0.8	1.6838 ug/L	1.6838 ppb	16:13:22
2	Fe 238.204 Radial†	13.3	2.0	27.919 ug/L	27.919 ppb	16:13:22
2	K 766.490 Radial†	2735.2	93.5	17.924 ug/L	17.924 ppb	16:13:02
2	Mg 279.077 IEC†	2.2	-1.8	-89.541 ug/L	-89.541 ppb	16:13:22
2	Na 589.592 Radial†	-750.1	70.3	21.673 ug/L	21.673 ppb	16:13:02
2	Sr 421.552†	71.6	35.8	0.2475 ug/L	0.2475 ppb	16:13:02
2	Sc 361.383	879313.6	879313.6	100.24 %		16:14:19
2	Y 371.029	744024.7	744024.7	98.436 %		16:14:19
2	Ag 328.068†	352.9	111.7	0.5289 ug/L	0.5289 ppb	16:14:19
2	As 188.979†	-11.5	6.8	3.0231 ug/L	3.0231 ppb	16:14:39
2	B 249.677†	-415.8	-16.6	-0.4061 ug/L	-0.4061 ppb	16:14:39
2	Ba 233.527†	-7.0	-5.6	-0.0421 ug/L	-0.0421 ppb	16:14:39
2	Be 313.107†	-3658.2	112.6	0.0420 ug/L	0.0420 ppb	16:14:19
2	Cd 226.502†	-184.2	12.5	0.1414 ug/L	0.1414 ppb	16:14:39
2	Co 228.616†	-69.1	-2.4	-0.0504 ug/L	-0.0504 ppb	16:14:39
2	Cr 267.716†	69.3	-8.6	-0.0922 ug/L	-0.0922 ppb	16:14:39
2	Cu 324.752†	5898.0	-106.7	-0.3227 ug/L	-0.3227 ppb	16:14:19
2	Mn 257.610†	466.7	6.9	0.0142 ug/L	0.0142 ppb	16:14:39
2	Mo 202.031†	9.3	-0.9	-0.0624 ug/L	-0.0624 ppb	16:14:39
2	Ni 231.604†	62.8	0.2	0.0060 ug/L	0.0060 ppb	16:14:39

2	P 214.914†	195.7	-15.2	-9.1169 ug/L	-9.1169 ppb	16:14:39
2	Pb 220.353†	-64.1	-5.9	-0.7229 ug/L	-0.7229 ppb	16:14:39
2	S 181.975 Axial†	41.0	0.1	0.1469 ug/L	0.1469 ppb	16:14:39
2	Sb 206.836†	50.0	13.2	4.6398 ug/L	4.6398 ppb	16:14:39
2	Se 196.026†	-19.5	8.3	5.4936 ug/L	5.4936 ppb	16:14:39
2	Si 251.611†	559.5	-0.1	-0.0025 ug/L	-0.0025 ppb	16:14:39
2	Sn 189.927†	18.7	8.2	1.4718 ug/L	1.4718 ppb	16:14:39
2	Ti 334.940†	-1469.0	-91.4	-0.1356 ug/L	-0.1356 ppb	16:14:19
2	Tl 190.801†	-27.0	5.6	1.7947 ug/L	1.7947 ppb	16:14:39
2	U 409.014†	-2938.0	-44.5	-1.2310 ug/L	-1.2310 ppb	16:14:19
2	V 292.402†	-1441.9	67.1	0.4594 ug/L	0.4594 ppb	16:14:19
2	Zn 213.857†	627.3	19.8	0.1953 ug/L	0.1953 ppb	16:14:39
2	SiO2†	535.3	-20.4	-1.4163 ug/L	-1.4163 ppb	16:15:15
3	Sc Radial	3903.4	3903.4	99.6 %		16:13:47
3	Y RADIAL	4392.0	4392.0	99.57 %		16:13:27
3	Al 396.153Radial†	-130.4	-18.5	-17.375 ug/L	-17.375 ppb	16:13:27
3	Ca 317.933Radial†	16.2	-3.4	-7.1550 ug/L	-7.1550 ppb	16:13:47
3	Fe 238.204 Radial†	11.4	0.2	2.3723 ug/L	2.3723 ppb	16:13:47
3	K 766.490 Radial†	2730.8	102.0	19.569 ug/L	19.569 ppb	16:13:27
3	Mg 279.077 IEC†	0.3	-3.8	-185.31 ug/L	-185.31 ppb	16:13:47
3	Na 589.592 Radial†	-759.8	57.0	17.572 ug/L	17.572 ppb	16:13:27
3	Sr 421.552†	79.2	43.8	0.3033 ug/L	0.3033 ppb	16:13:27
3	Sc 361.383	898768.4	898768.4	102.46 %		16:14:44
3	Y 371.029	761250.3	761250.3	100.72 %		16:14:44
3	Ag 328.068†	368.1	118.9	0.5555 ug/L	0.5555 ppb	16:14:44
3	As 188.979†	-29.5	-10.6	-4.7208 ug/L	-4.7208 ppb	16:15:04
3	B 249.677†	-431.5	-23.0	-0.5572 ug/L	-0.5572 ppb	16:15:04
3	Ba 233.527†	12.7	13.9	0.1116 ug/L	0.1116 ppb	16:15:04
3	Be 313.107†	-3665.7	184.3	0.0691 ug/L	0.0691 ppb	16:14:44
3	Cd 226.502†	-177.7	22.9	0.2651 ug/L	0.2651 ppb	16:15:04
3	Co 228.616†	-62.1	5.9	0.1236 ug/L	0.1236 ppb	16:15:04
3	Cr 267.716†	71.9	-7.5	-0.0826 ug/L	-0.0826 ppb	16:15:04
3	Cu 324.752†	6104.8	-32.3	-0.0989 ug/L	-0.0989 ppb	16:14:44
3	Mn 257.610†	454.2	-15.4	-0.0098 ug/L	-0.0098 ppb	16:15:04
3	Mo 202.031†	9.4	-1.0	-0.0711 ug/L	-0.0711 ppb	16:15:04
3	Ni 231.604†	80.5	16.1	0.4089 ug/L	0.4089 ppb	16:15:04
3	P 214.914†	201.5	-13.9	-8.3280 ug/L	-8.3280 ppb	16:15:04
3	Pb 220.353†	-58.8	0.7	0.0831 ug/L	0.0831 ppb	16:15:04
3	S 181.975 Axial†	41.7	-0.1	-0.0892 ug/L	-0.0892 ppb	16:15:04
3	Sb 206.836†	37.3	-0.3	-0.0662 ug/L	-0.0662 ppb	16:15:04
3	Se 196.026†	-26.9	1.5	0.9995 ug/L	0.9995 ppb	16:15:04
3	Si 251.611†	543.4	-28.0	-0.9037 ug/L	-0.9037 ppb	16:15:04
3	Sn 189.927†	18.8	7.9	1.4164 ug/L	1.4164 ppb	16:15:04
3	Ti 334.940†	-1457.8	-48.7	-0.0630 ug/L	-0.0630 ppb	16:14:44
3	Tl 190.801†	-28.5	4.8	1.5278 ug/L	1.5278 ppb	16:15:04
3	U 409.014†	-2907.2	49.1	1.3562 ug/L	1.3562 ppb	16:14:44
3	V 292.402†	-1356.3	181.9	1.2661 ug/L	1.2661 ppb	16:14:44
3	Zn 213.857†	632.2	11.0	0.1083 ug/L	0.1083 ppb	16:15:04
3	SiO2†	600.6	31.8	2.2124 ug/L	2.2124 ppb	16:15:20

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	888717.1	101.31 %		1.111			1.10%
Sc Radial	3911.6	99.8 %		0.24			0.24%
Y 371.029	752430.0	99.548 %		1.1405			1.15%
Y RADIAL	4406.4	99.90 %		0.548			0.55%
Ag 328.068†	98.5	0.4579 ug/L		0.14672	0.4579 ppb	0.14672	32.04%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-8.3	-7.7317 ug/L		15.21069	-7.7317 ppb	15.21069	196.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.1	-0.5053 ug/L		3.91738	-0.5053 ppb	3.91738	775.22%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-14.7	-0.3553 ug/L		0.23149	-0.3553 ppb	0.23149	65.15%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.7	0.0929 ug/L		0.12665	0.0929 ppb	0.12665	136.37%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	128.7	0.0482 ug/L		0.01862	0.0482 ppb	0.01862	38.67%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.6	-3.4336 ug/L		4.58179	-3.4336 ppb	4.58179	133.44%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	13.8	0.1605 ug/L	0.09644	0.1605 ppb	0.09644	60.07%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	5.2	0.1087 ug/L	0.15217	0.1087 ppb	0.15217	140.01%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-9.7	-0.1079 ug/L	0.03595	-0.1079 ppb	0.03595	33.31%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-89.9	-0.2737 ug/L	0.15619	-0.2737 ppb	0.15619	57.07%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.2	-2.2437 ug/L	32.71547	-2.2437 ppb	32.71547	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	87.4	16.762 ug/L	3.5344	16.762 ppb	3.5344	21.09%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.5	-71.931 ug/L	123.1320	-71.931 ppb	123.1320	171.18%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-5.0	-0.0029 ug/L	0.01498	-0.0029 ppb	0.01498	508.80%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-2.3	-0.1656 ug/L	0.17119	-0.1656 ppb	0.17119	103.39%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	74.5	22.979 ug/L	6.1638	22.979 ppb	6.1638	26.82%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	8.0	0.2033 ug/L	0.20159	0.2033 ppb	0.20159	99.14%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.8	-3.4489 ug/L	9.14267	-3.4489 ppb	9.14267	265.09%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	0.2	0.0206 ug/L	0.71433	0.0206 ppb	0.71433	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.1	-3.0546 ug/L	5.34192	-3.0546 ppb	5.34192	174.88%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.7	1.6604 ug/L	2.59115	1.6604 ppb	2.59115	156.06%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	6.7	4.3636 ug/L	2.96529	4.3636 ppb	2.96529	67.95%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-13.0	-0.4188 ug/L	0.45452	-0.4188 ppb	0.45452	108.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	6.1	1.0865 ug/L	0.61997	1.0865 ppb	0.61997	57.06%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	31.2	0.2157 ug/L	0.10710	0.2157 ppb	0.10710	49.65%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-62.2	-0.0922 ug/L	0.03832	-0.0922 ppb	0.03832	41.58%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	7.9	2.5293 ug/L	1.50950	2.5293 ppb	1.50950	59.68%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-9.0	-0.2473 ug/L	1.40053	-0.2473 ppb	1.40053	566.31%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	77.7	0.5381 ug/L	0.69197	0.5381 ppb	0.69197	128.60%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	15.3	0.1537 ug/L	0.04364	0.1537 ppb	0.04364	28.39%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-2.5	-0.1694 ug/L	2.06350	-0.1694 ppb	2.06350	>999.9%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 3  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 16:32:10  
 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	3853.4	3853.4	98.3 %			16:34:22
1	Y RADIAL	4424.2	4424.2	100.3 %			16:34:02
1	Al 396.153Radial†	5304.3	5506.8	5141.0 ug/L		5141.0 ppb	16:34:02
1	Ca 317.933Radial†	2466.3	2488.5	5202.2 ug/L		5202.2 ppb	16:34:22
1	Fe 238.204 Radial†	365.6	360.4	5102.3 ug/L		5102.3 ppb	16:34:22
1	K 766.490 Radial†	29180.7	27036.7	5181.7 ug/L		5181.7 ppb	16:34:02
1	Mg 279.077 IEC†	111.6	109.4	5303.4 ug/L		5303.4 ppb	16:34:22
1	Na 589.592 Radial†	33016.6	34397.1	10606 ug/L		10606 ppb	16:34:02
1	Sr 421.552†	72921.7	74124.3	512.87 ug/L		512.87 ppb	16:34:02
1	Sc 361.383	901308.0	901308.0	102.74 %			16:35:19
1	Y 371.029	750322.1	750322.1	99.269 %			16:35:19
1	Ag 328.068†	107679.0	104562.1	487.49 ug/L		487.49 ppb	16:35:24
1	As 188.979†	1114.6	1103.1	496.79 ug/L		496.79 ppb	16:35:44
1	B 249.677†	19767.7	19637.8	473.90 ug/L		473.90 ppb	16:35:24
1	Ba 233.527†	63808.6	62105.5	488.58 ug/L		488.58 ppb	16:35:24
1	Be 313.107†	1335058.8	1303157.3	490.82 ug/L		490.82 ppb	16:35:19
1	Cd 226.502†	43267.4	42307.9	489.80 ug/L		489.80 ppb	16:35:24
1	Co 228.616†	23882.2	23310.8	488.40 ug/L		488.40 ppb	16:35:24
1	Cr 267.716†	44640.8	43370.6	487.85 ug/L		487.85 ppb	16:35:24
1	Cu 324.752†	168309.1	157822.3	480.27 ug/L		480.27 ppb	16:35:24
1	Mn 257.610†	444999.6	432653.5	492.62 ug/L		492.62 ppb	16:35:19
1	Mo 202.031†	6849.3	6656.2	489.13 ug/L		489.13 ppb	16:35:44
1	Ni 231.604†	19833.2	19241.0	489.06 ug/L		489.06 ppb	16:35:24
1	P 214.914†	4400.2	4072.1	2357.8 ug/L		2357.8 ppb	16:35:44
1	Pb 220.353†	4052.5	4002.4	493.78 ug/L		493.78 ppb	16:35:44
1	S 181.975 Axial†	754.6	693.6	997.20 ug/L		997.20 ppb	16:35:44
1	Sb 206.836†	1452.5	1377.0	498.90 ug/L		498.90 ppb	16:35:44
1	Se 196.026†	754.3	761.9	516.46 ug/L		516.46 ppb	16:35:44
1	Si 251.611†	77439.0	74812.0	2414.8 ug/L		2414.8 ppb	16:35:24
1	Sn 189.927†	2800.2	2715.0	487.77 ug/L		487.77 ppb	16:35:44
1	Ti 334.940†	314411.8	307386.9	482.90 ug/L		482.90 ppb	16:35:24
1	Tl 190.801†	1548.9	1540.1	495.73 ug/L		495.73 ppb	16:35:44
1	U 409.014†	14982.1	17468.5	480.70 ug/L		480.70 ppb	16:35:24
1	V 292.402†	69674.2	69318.7	489.85 ug/L		489.85 ppb	16:35:24
1	Zn 213.857†	50309.0	48359.0	482.27 ug/L		482.27 ppb	16:35:24
1	SiO2†	77254.5	74636.4	5173.6 ug/L		5173.6 ppb	16:36:52
2	Sc Radial	3866.7	3866.7	98.7 %			16:34:47
2	Y RADIAL	4351.8	4351.8	98.66 %			16:34:27
2	Al 396.153Radial†	5255.4	5438.7	5077.2 ug/L		5077.2 ppb	16:34:27
2	Ca 317.933Radial†	2498.1	2512.1	5251.6 ug/L		5251.6 ppb	16:34:47
2	Fe 238.204 Radial†	367.8	361.4	5116.1 ug/L		5116.1 ppb	16:34:47
2	K 766.490 Radial†	28697.8	26445.0	5068.2 ug/L		5068.2 ppb	16:34:27
2	Mg 279.077 IEC†	106.7	104.1	5047.5 ug/L		5047.5 ppb	16:34:47
2	Na 589.592 Radial†	32554.4	33812.9	10425 ug/L		10425 ppb	16:34:27
2	Sr 421.552†	71796.4	72728.4	503.21 ug/L		503.21 ppb	16:34:27
2	Sc 361.383	900354.2	900354.2	102.64 %			16:35:50
2	Y 371.029	750012.2	750012.2	99.228 %			16:35:50
2	Ag 328.068†	108731.7	105698.8	492.78 ug/L		492.78 ppb	16:35:55
2	As 188.979†	1098.6	1088.7	490.40 ug/L		490.40 ppb	16:36:15
2	B 249.677†	20067.6	19950.4	481.46 ug/L		481.46 ppb	16:35:55
2	Ba 233.527†	64499.6	62844.5	494.40 ug/L		494.40 ppb	16:35:55
2	Be 313.107†	1336059.5	1305508.8	491.72 ug/L		491.72 ppb	16:35:50
2	Cd 226.502†	43705.3	42779.1	495.26 ug/L		495.26 ppb	16:35:55
2	Co 228.616†	24163.0	23609.0	494.63 ug/L		494.63 ppb	16:35:55
2	Cr 267.716†	45019.4	43785.6	492.51 ug/L		492.51 ppb	16:35:55
2	Cu 324.752†	170258.0	159894.7	486.57 ug/L		486.57 ppb	16:35:55
2	Mn 257.610†	444794.7	432912.7	492.93 ug/L		492.93 ppb	16:35:50
2	Mo 202.031†	6798.7	6614.0	486.04 ug/L		486.04 ppb	16:36:15
2	Ni 231.604†	20052.8	19475.4	495.02 ug/L		495.02 ppb	16:35:55

2	P 214.914†	4378.9	4056.0	2346.8 ug/L	2346.8 ppb	16:36:15
2	Pb 220.353†	4027.4	3982.1	491.26 ug/L	491.26 ppb	16:36:15
2	S 181.975 Axial†	741.9	682.1	980.55 ug/L	980.55 ppb	16:36:15
2	Sb 206.836†	1461.6	1387.4	502.49 ug/L	502.49 ppb	16:36:15
2	Se 196.026†	743.1	751.7	509.85 ug/L	509.85 ppb	16:36:15
2	Si 251.611†	78425.0	75852.6	2448.5 ug/L	2448.5 ppb	16:35:55
2	Sn 189.927†	2808.4	2725.8	489.72 ug/L	489.72 ppb	16:36:15
2	Ti 334.940†	317758.5	310971.9	488.56 ug/L	488.56 ppb	16:35:55
2	Tl 190.801†	1535.5	1528.6	492.06 ug/L	492.06 ppb	16:36:15
2	U 409.014†	15128.6	17626.6	485.06 ug/L	485.06 ppb	16:35:55
2	V 292.402†	70473.6	70169.4	495.73 ug/L	495.73 ppb	16:35:55
2	Zn 213.857†	50906.2	48992.8	488.61 ug/L	488.61 ppb	16:35:55
2	SiO2†	77229.7	74691.8	5177.5 ug/L	5177.5 ppb	16:36:57
3	Sc Radial	3865.6	3865.6	98.6 %		16:35:12
3	Y RADIAL	4300.0	4300.0	97.49 %		16:34:52
3	Al 396.153Radial†	5207.1	5391.1	5032.5 ug/L	5032.5 ppb	16:34:52
3	Ca 317.933Radial†	2482.6	2497.1	5220.2 ug/L	5220.2 ppb	16:35:12
3	Fe 238.204 Radial†	362.1	355.7	5036.1 ug/L	5036.1 ppb	16:35:12
3	K 766.490 Radial†	28576.3	26329.8	5046.1 ug/L	5046.1 ppb	16:34:52
3	Mg 279.077 IEC†	108.7	106.1	5145.5 ug/L	5145.5 ppb	16:35:12
3	Na 589.592 Radial†	32323.8	33588.2	10356 ug/L	10356 ppb	16:34:52
3	Sr 421.552†	71283.5	72228.4	499.75 ug/L	499.75 ppb	16:34:52
3	Sc 361.383	902180.9	902180.9	102.84 %		16:36:21
3	Y 371.029	749784.8	749784.8	99.198 %		16:36:21
3	Ag 328.068†	109651.1	106378.3	495.91 ug/L	495.91 ppb	16:36:26
3	As 188.979†	1112.2	1099.7	495.31 ug/L	495.31 ppb	16:36:46
3	B 249.677†	20203.0	20042.6	483.69 ug/L	483.69 ppb	16:36:26
3	Ba 233.527†	64876.6	63083.8	496.27 ug/L	496.27 ppb	16:36:26
3	Be 313.107†	1335885.2	1302703.6	490.67 ug/L	490.67 ppb	16:36:21
3	Cd 226.502†	44068.7	43046.3	498.36 ug/L	498.36 ppb	16:36:26
3	Co 228.616†	24377.4	23769.7	497.99 ug/L	497.99 ppb	16:36:26
3	Cr 267.716†	45340.8	44009.2	495.02 ug/L	495.02 ppb	16:36:26
3	Cu 324.752†	171734.6	160994.5	489.91 ug/L	489.91 ppb	16:36:26
3	Mn 257.610†	446112.7	433316.8	493.37 ug/L	493.37 ppb	16:36:21
3	Mo 202.031†	6840.8	6641.4	488.04 ug/L	488.04 ppb	16:36:46
3	Ni 231.604†	20175.0	19554.6	497.03 ug/L	497.03 ppb	16:36:26
3	P 214.914†	4406.9	4074.5	2357.3 ug/L	2357.3 ppb	16:36:46
3	Pb 220.353†	4060.2	4006.1	494.21 ug/L	494.21 ppb	16:36:46
3	S 181.975 Axial†	745.9	684.4	983.98 ug/L	983.98 ppb	16:36:46
3	Sb 206.836†	1467.9	1390.6	503.62 ug/L	503.62 ppb	16:36:46
3	Se 196.026†	744.1	751.3	509.31 ug/L	509.31 ppb	16:36:46
3	Si 251.611†	79050.2	76305.8	2463.2 ug/L	2463.2 ppb	16:36:26
3	Sn 189.927†	2807.8	2719.7	488.62 ug/L	488.62 ppb	16:36:46
3	Ti 334.940†	320019.6	312543.6	491.02 ug/L	491.02 ppb	16:36:26
3	Tl 190.801†	1542.0	1531.9	493.12 ug/L	493.12 ppb	16:36:46
3	U 409.014†	15277.4	17741.5	488.24 ug/L	488.24 ppb	16:36:26
3	V 292.402†	70853.3	70399.5	497.38 ug/L	497.38 ppb	16:36:26
3	Zn 213.857†	51225.1	49202.4	490.71 ug/L	490.71 ppb	16:36:26
3	SiO2†	77939.4	75229.6	5214.8 ug/L	5214.8 ppb	16:37:02

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901281.0	102.74 %	0.104			0.10%
Sc Radial	3861.9	98.5 %	0.19			0.19%
Y 371.029	750039.7	99.232 %	0.0357			0.04%
Y RADIAL	4358.6	98.82 %	1.414			1.43%
Ag 328.068†	105546.4	492.06 ug/L	4.255	492.06 ppb	4.255	0.86%
QC value within limits for Ag 328.068 Recovery = 98.41%						
Al 396.153Radial†	5445.5	5083.6 ug/L	54.50	5083.6 ppb	54.50	1.07%
QC value within limits for Al 396.153Radial Recovery = 101.67%						
As 188.979†	1097.1	494.17 ug/L	3.344	494.17 ppb	3.344	0.68%
QC value within limits for As 188.979 Recovery = 98.83%						
B 249.677†	19876.9	479.68 ug/L	5.133	479.68 ppb	5.133	1.07%
QC value within limits for B 249.677 Recovery = 95.94%						
Ba 233.527†	62678.0	493.08 ug/L	4.010	493.08 ppb	4.010	0.81%
QC value within limits for Ba 233.527 Recovery = 98.62%						
Be 313.107†	1303789.9	491.07 ug/L	0.567	491.07 ppb	0.567	0.12%
QC value within limits for Be 313.107 Recovery = 98.21%						
Ca 317.933Radial†	2499.2	5224.7 ug/L	25.01	5224.7 ppb	25.01	0.48%

QC value within limits for Ca 317.933 Radial Recovery = 104.49%							
Cd	226.502†	42711.1	494.48 ug/L	4.336	494.48 ppb	4.336	0.88%
QC value within limits for Cd 226.502 Recovery = 98.90%							
Co	228.616†	23563.2	493.67 ug/L	4.869	493.67 ppb	4.869	0.99%
QC value within limits for Co 228.616 Recovery = 98.73%							
Cr	267.716†	43721.8	491.79 ug/L	3.639	491.79 ppb	3.639	0.74%
QC value within limits for Cr 267.716 Recovery = 98.36%							
Cu	324.752†	159570.5	485.59 ug/L	4.898	485.59 ppb	4.898	1.01%
QC value within limits for Cu 324.752 Recovery = 97.12%							
Fe	238.204 Radial†	359.2	5084.9 ug/L	42.74	5084.9 ppb	42.74	0.84%
QC value within limits for Fe 238.204 Radial Recovery = 101.70%							
K	766.490 Radial†	26603.8	5098.7 ug/L	72.73	5098.7 ppb	72.73	1.43%
QC value within limits for K 766.490 Radial Recovery = 101.97%							
Mg	279.077 IEC†	106.5	5165.5 ug/L	129.08	5165.5 ppb	129.08	2.50%
QC value within limits for Mg 279.077 IEC Recovery = 103.31%							
Mn	257.610†	432961.0	492.97 ug/L	0.380	492.97 ppb	0.380	0.08%
QC value within limits for Mn 257.610 Recovery = 98.59%							
Mo	202.031†	6637.2	487.74 ug/L	1.571	487.74 ppb	1.571	0.32%
QC value within limits for Mo 202.031 Recovery = 97.55%							
Na	589.592 Radial†	33932.7	10462 ug/L	128.7	10462 ppb	128.7	1.23%
QC value within limits for Na 589.592 Radial Recovery = 104.62%							
Ni	231.604†	19423.6	493.70 ug/L	4.144	493.70 ppb	4.144	0.84%
QC value within limits for Ni 231.604 Recovery = 98.74%							
P	214.914†	4067.5	2354.0 ug/L	6.22	2354.0 ppb	6.22	0.26%
QC value within limits for P 214.914 Recovery = 94.16%							
Pb	220.353†	3996.8	493.08 ug/L	1.596	493.08 ppb	1.596	0.32%
QC value within limits for Pb 220.353 Recovery = 98.62%							
S	181.975 Axial†	686.7	987.24 ug/L	8.790	987.24 ppb	8.790	0.89%
QC value within limits for S 181.975 Axial Recovery = 98.72%							
Sb	206.836†	1385.0	501.67 ug/L	2.468	501.67 ppb	2.468	0.49%
QC value within limits for Sb 206.836 Recovery = 100.33%							
Se	196.026†	755.0	511.87 ug/L	3.980	511.87 ppb	3.980	0.78%
QC value within limits for Se 196.026 Recovery = 102.37%							
Si	251.611†	75656.8	2442.2 ug/L	24.79	2442.2 ppb	24.79	1.02%
QC value within limits for Si 251.611 Recovery = 97.69%							
Sn	189.927†	2720.1	488.70 ug/L	0.978	488.70 ppb	0.978	0.20%
QC value within limits for Sn 189.927 Recovery = 97.74%							
Sr	421.552†	73027.0	505.28 ug/L	6.799	505.28 ppb	6.799	1.35%
QC value within limits for Sr 421.552 Recovery = 101.06%							
Ti	334.940†	310300.8	487.49 ug/L	4.160	487.49 ppb	4.160	0.85%
QC value within limits for Ti 334.940 Recovery = 97.50%							
Tl	190.801†	1533.6	493.64 ug/L	1.890	493.64 ppb	1.890	0.38%
QC value within limits for Tl 190.801 Recovery = 98.73%							
U	409.014†	17612.2	484.67 ug/L	3.781	484.67 ppb	3.781	0.78%
QC value within limits for U 409.014 Recovery = 96.93%							
V	292.402†	69962.5	494.32 ug/L	3.959	494.32 ppb	3.959	0.80%
QC value within limits for V 292.402 Recovery = 98.86%							
Zn	213.857†	48851.4	487.20 ug/L	4.391	487.20 ppb	4.391	0.90%
QC value within limits for Zn 213.857 Recovery = 97.44%							
SiO2†		74852.6	5188.6 ug/L	22.77	5188.6 ppb	22.77	0.44%
QC value within limits for SiO2 Recovery = 97.03%							
All analyte(s) passed QC.							

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 16:39:12

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	3847.2	3847.2	98.2 %		16:41:25
1	Y RADIAL	4338.5	4338.5	98.36 %		16:41:05
1	Al 396.153Radial†	-107.9	2.5	2.3419 ug/L	2.3419 ppb	16:41:05
1	Ca 317.933Radial†	26.6	7.4	15.478 ug/L	15.478 ppb	16:41:25
1	Fe 238.204 Radial†	11.4	0.3	3.5917 ug/L	3.5917 ppb	16:41:25
1	K 766.490 Radial†	2656.1	65.9	12.634 ug/L	12.634 ppb	16:41:05
1	Mg 279.077 IEC†	5.4	1.4	68.977 ug/L	68.977 ppb	16:41:25
1	Na 589.592 Radial†	-767.7	37.7	11.635 ug/L	11.635 ppb	16:41:05
1	Sr 421.552†	87.5	53.4	0.3694 ug/L	0.3694 ppb	16:41:05
1	Sc 361.383	882214.3	882214.3	100.57 %		16:42:22
1	Y 371.029	746032.5	746032.5	98.702 %		16:42:22
1	Ag 328.068†	229.8	-11.9	-0.0508 ug/L	-0.0508 ppb	16:42:22
1	As 188.979†	-27.7	-9.3	-4.1508 ug/L	-4.1508 ppb	16:42:42
1	B 249.677†	-422.9	-22.3	-0.5418 ug/L	-0.5418 ppb	16:42:42
1	Ba 233.527†	0.8	2.2	0.0188 ug/L	0.0188 ppb	16:42:42
1	Be 313.107†	-3723.1	60.1	0.0224 ug/L	0.0224 ppb	16:42:22
1	Cd 226.502†	-192.4	5.0	0.0570 ug/L	0.0570 ppb	16:42:42
1	Co 228.616†	-69.1	-2.2	-0.0466 ug/L	-0.0466 ppb	16:42:42
1	Cr 267.716†	65.5	-12.5	-0.1389 ug/L	-0.1389 ppb	16:42:42
1	Cu 324.752†	5968.2	-56.3	-0.1701 ug/L	-0.1701 ppb	16:42:22
1	Mn 257.610†	447.4	-13.8	-0.0182 ug/L	-0.0182 ppb	16:42:42
1	Mo 202.031†	7.2	-3.0	-0.2222 ug/L	-0.2222 ppb	16:42:42
1	Ni 231.604†	54.7	-8.1	-0.2059 ug/L	-0.2059 ppb	16:42:42
1	P 214.914†	202.5	-9.1	-5.4517 ug/L	-5.4517 ppb	16:42:42
1	Pb 220.353†	-42.1	16.3	1.9991 ug/L	1.9991 ppb	16:42:42
1	S 181.975 Axial†	47.9	6.8	9.7815 ug/L	9.7815 ppb	16:42:42
1	Sb 206.836†	47.0	10.0	3.5256 ug/L	3.5256 ppb	16:42:42
1	Se 196.026†	-22.4	5.5	3.6271 ug/L	3.6271 ppb	16:42:42
1	Si 251.611†	546.0	-15.4	-0.4943 ug/L	-0.4943 ppb	16:42:42
1	Sn 189.927†	18.0	7.5	1.3400 ug/L	1.3400 ppb	16:42:42
1	Ti 334.940†	-1428.9	-46.8	-0.0762 ug/L	-0.0762 ppb	16:42:22
1	Tl 190.801†	-39.1	-6.3	-2.0129 ug/L	-2.0129 ppb	16:42:42
1	U 409.014†	-2972.9	-69.5	-1.9188 ug/L	-1.9188 ppb	16:42:22
1	V 292.402†	-1444.1	69.7	0.4801 ug/L	0.4801 ppb	16:42:22
1	Zn 213.857†	630.8	21.2	0.2144 ug/L	0.2144 ppb	16:42:42
1	SiO2†	563.6	6.0	0.4238 ug/L	0.4238 ppb	16:43:38
2	Sc Radial	3840.5	3840.5	98.0 %		16:41:50
2	Y RADIAL	4332.1	4332.1	98.21 %		16:41:30
2	Al 396.153Radial†	-118.7	-8.7	-8.1576 ug/L	-8.1576 ppb	16:41:30
2	Ca 317.933Radial†	24.4	5.2	10.948 ug/L	10.948 ppb	16:41:50
2	Fe 238.204 Radial†	12.2	1.1	15.961 ug/L	15.961 ppb	16:41:50
2	K 766.490 Radial†	2839.3	257.6	49.429 ug/L	49.429 ppb	16:41:30
2	Mg 279.077 IEC†	3.3	-0.7	-32.415 ug/L	-32.415 ppb	16:41:50
2	Na 589.592 Radial†	-829.3	-26.4	-8.1372 ug/L	-8.1372 ppb	16:41:30
2	Sr 421.552†	49.5	14.8	0.1022 ug/L	0.1022 ppb	16:41:30
2	Sc 361.383	907960.1	907960.1	103.50 %		16:42:47
2	Y 371.029	768066.0	768066.0	101.62 %		16:42:47
2	Ag 328.068†	339.1	87.2	0.4113 ug/L	0.4113 ppb	16:42:47
2	As 188.979†	-21.2	-2.3	-1.0083 ug/L	-1.0083 ppb	16:43:07
2	B 249.677†	-347.9	62.1	1.5044 ug/L	1.5044 ppb	16:43:07
2	Ba 233.527†	95.8	94.0	0.7400 ug/L	0.7400 ppb	16:43:07
2	Be 313.107†	-3863.4	29.5	0.0113 ug/L	0.0113 ppb	16:42:47
2	Cd 226.502†	-187.6	15.0	0.1725 ug/L	0.1725 ppb	16:43:07
2	Co 228.616†	-76.2	-7.1	-0.1471 ug/L	-0.1471 ppb	16:43:07
2	Cr 267.716†	72.6	-7.5	-0.0820 ug/L	-0.0820 ppb	16:43:07
2	Cu 324.752†	6100.4	-96.8	-0.2946 ug/L	-0.2946 ppb	16:42:47
2	Mn 257.610†	529.5	52.8	0.0630 ug/L	0.0630 ppb	16:43:07
2	Mo 202.031†	14.7	4.1	0.3023 ug/L	0.3023 ppb	16:43:07
2	Ni 231.604†	68.9	4.2	0.1061 ug/L	0.1061 ppb	16:43:07

2	P 214.914†	208.5	-9.1	-5.4381 ug/L	-5.4381 ppb	16:43:07
2	Pb 220.353†	-47.7	12.0	1.4725 ug/L	1.4725 ppb	16:43:07
2	S 181.975 Axial†	40.9	-1.2	-1.7952 ug/L	-1.7952 ppb	16:43:07
2	Sb 206.836†	40.4	2.4	0.8321 ug/L	0.8321 ppb	16:43:07
2	Se 196.026†	-27.2	1.5	1.0025 ug/L	1.0025 ppb	16:43:07
2	Si 251.611†	607.3	28.4	0.9148 ug/L	0.9148 ppb	16:43:07
2	Sn 189.927†	11.4	0.5	0.0913 ug/L	0.0913 ppb	16:43:07
2	Ti 334.940†	-1367.6	52.8	0.0863 ug/L	0.0863 ppb	16:42:47
2	Tl 190.801†	-28.4	5.1	1.6415 ug/L	1.6415 ppb	16:43:07
2	U 409.014†	-2926.4	59.2	1.6333 ug/L	1.6333 ppb	16:42:47
2	V 292.402†	-1421.1	132.7	0.9293 ug/L	0.9293 ppb	16:42:47
2	Zn 213.857†	654.5	26.3	0.2623 ug/L	0.2623 ppb	16:43:07
2	SiO2†	548.9	-24.1	-1.6825 ug/L	-1.6825 ppb	16:43:43
3	Sc Radial	3854.5	3854.5	98.4 %		16:42:15
3	Y RADIAL	4387.9	4387.9	99.48 %		16:41:55
3	Al 396.153Radial†	-123.6	-13.3	-12.481 ug/L	-12.481 ppb	16:41:55
3	Ca 317.933Radial†	23.6	4.3	8.9288 ug/L	8.9288 ppb	16:42:15
3	Fe 238.204 Radial†	10.7	-0.4	-5.9007 ug/L	-5.9007 ppb	16:42:15
3	K 766.490 Radial†	2772.7	179.3	34.404 ug/L	34.404 ppb	16:41:55
3	Mg 279.077 IEC†	2.2	-1.9	-90.064 ug/L	-90.064 ppb	16:42:15
3	Na 589.592 Radial†	-748.1	59.2	18.254 ug/L	18.254 ppb	16:41:55
3	Sr 421.552†	50.4	15.5	0.1073 ug/L	0.1073 ppb	16:41:55
3	Sc 361.383	890931.8	890931.8	101.56 %		16:43:12
3	Y 371.029	754044.7	754044.7	99.762 %		16:43:12
3	Ag 328.068†	298.4	53.4	0.2538 ug/L	0.2538 ppb	16:43:12
3	As 188.979†	-29.4	-10.7	-4.7749 ug/L	-4.7749 ppb	16:43:32
3	B 249.677†	-376.7	27.3	0.6627 ug/L	0.6627 ppb	16:43:32
3	Ba 233.527†	22.4	23.4	0.1852 ug/L	0.1852 ppb	16:43:32
3	Be 313.107†	-3661.4	157.1	0.0591 ug/L	0.0591 ppb	16:43:12
3	Cd 226.502†	-173.9	25.0	0.2890 ug/L	0.2890 ppb	16:43:32
3	Co 228.616†	-71.4	-3.8	-0.0789 ug/L	-0.0789 ppb	16:43:32
3	Cr 267.716†	81.4	2.5	0.0308 ug/L	0.0308 ppb	16:43:32
3	Cu 324.752†	6028.7	-54.8	-0.1632 ug/L	-0.1632 ppb	16:43:12
3	Mn 257.610†	472.9	6.9	0.0109 ug/L	0.0109 ppb	16:43:32
3	Mo 202.031†	16.8	6.4	0.4686 ug/L	0.4686 ppb	16:43:32
3	Ni 231.604†	75.8	12.2	0.3108 ug/L	0.3108 ppb	16:43:32
3	P 214.914†	210.3	-3.4	-2.0373 ug/L	-2.0373 ppb	16:43:32
3	Pb 220.353†	-61.0	-1.9	-0.2377 ug/L	-0.2377 ppb	16:43:32
3	S 181.975 Axial†	43.8	2.4	3.4054 ug/L	3.4054 ppb	16:43:32
3	Sb 206.836†	40.8	3.4	1.2035 ug/L	1.2035 ppb	16:43:32
3	Se 196.026†	-25.5	2.6	1.6989 ug/L	1.6989 ppb	16:43:32
3	Si 251.611†	556.5	-10.3	-0.3401 ug/L	-0.3401 ppb	16:43:32
3	Sn 189.927†	8.4	-2.2	-0.3951 ug/L	-0.3951 ppb	16:43:32
3	Ti 334.940†	-1373.1	22.1	0.0463 ug/L	0.0463 ppb	16:43:12
3	Tl 190.801†	-32.9	0.2	0.0615 ug/L	0.0615 ppb	16:43:32
3	U 409.014†	-3188.9	-253.3	-6.9938 ug/L	-6.9938 ppb	16:43:12
3	V 292.402†	-1436.0	91.8	0.6321 ug/L	0.6321 ppb	16:43:12
3	Zn 213.857†	636.3	20.5	0.2053 ug/L	0.2053 ppb	16:43:32
3	SiO2†	579.6	16.3	1.1216 ug/L	1.1216 ppb	16:43:48

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	893702.1	101.88 %		1.493				1.47%
Sc Radial	3847.4	98.2 %		0.18				0.18%
Y 371.029	756047.7	100.03 %		1.475				1.48%
Y RADIAL	4352.8	98.68 %		0.692				0.70%
Ag 328.068†	42.9	0.2048 ug/L		0.23492	0.2048 ppb		0.23492	114.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.5	-6.0990 ug/L		7.62303	-6.0990 ppb		7.62303	124.99%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.4	-3.3113 ug/L		2.01876	-3.3113 ppb		2.01876	60.97%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	22.4	0.5417 ug/L		1.02842	0.5417 ppb		1.02842	189.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	39.9	0.3147 ug/L		0.37765	0.3147 ppb		0.37765	120.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	82.2	0.0309 ug/L		0.02502	0.0309 ppb		0.02502	80.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.6	11.785 ug/L		3.3536	11.785 ppb		3.3536	28.46%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	15.0	0.1729 ug/L	0.11604	0.1729 ppb	0.11604	67.13%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-4.4	-0.0909 ug/L	0.05127	-0.0909 ppb	0.05127	56.43%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-5.9	-0.0634 ug/L	0.08641	-0.0634 ppb	0.08641	136.36%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-69.3	-0.2093 ug/L	0.07399	-0.2093 ppb	0.07399	35.35%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.3	4.5508 ug/L	10.96251	4.5508 ppb	10.96251	240.89%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	167.6	32.156 ug/L	18.5000	32.156 ppb	18.5000	57.53%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.4	-17.834 ug/L	80.5169	-17.834 ppb	80.5169	451.48%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	15.3	0.0186 ug/L	0.04115	0.0186 ppb	0.04115	221.52%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.5	0.1829 ug/L	0.36053	0.1829 ppb	0.36053	197.11%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	23.5	7.2507 ug/L	13.73103	7.2507 ppb	13.73103	189.38%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	2.8	0.0703 ug/L	0.26023	0.0703 ppb	0.26023	370.03%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-7.2	-4.3090 ug/L	1.96737	-4.3090 ppb	1.96737	45.66%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	8.8	1.0780 ug/L	1.16941	1.0780 ppb	1.16941	108.48%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.6	3.7972 ug/L	5.79828	3.7972 ppb	5.79828	152.70%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.3	1.8537 ug/L	1.45977	1.8537 ppb	1.45977	78.75%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.2	2.1095 ug/L	1.35961	2.1095 ppb	1.35961	64.45%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	0.9	0.0268 ug/L	0.77289	0.0268 ppb	0.77289	>999.9%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.9	0.3454 ug/L	0.89502	0.3454 ppb	0.89502	259.14%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	27.9	0.1930 ug/L	0.15281	0.1930 ppb	0.15281	79.19%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	9.4	0.0188 ug/L	0.08466	0.0188 ppb	0.08466	449.74%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.3	-0.1033 ug/L	1.83278	-0.1033 ppb	1.83278	>999.9%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-87.9	-2.4264 ug/L	4.33588	-2.4264 ppb	4.33588	178.69%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	98.0	0.6805 ug/L	0.22849	0.6805 ppb	0.22849	33.58%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	22.7	0.2273 ug/L	0.03064	0.2273 ppb	0.03064	13.48%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-0.6	-0.0457 ug/L	1.45981	-0.0457 ppb	1.45981	>999.9%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

## =====

## Analysis Begun

Start Time: 2/24/2010 16:52:57

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\022410.sif

Batch ID:

Results Data Set: 022410

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

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/24/2010 16:52:58

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	3874.5	3874.5	98.9 %		16:54:51
1	Y RADIAL	4228.4	4228.4	95.86 %		16:54:51
1	Al 396.153Radial†	5087.0	5257.7	4907.9 ug/L	4907.9 ppb	16:54:51
1	Ca 317.933Radial†	2422.1	2430.1	5080.2 ug/L	5080.2 ppb	16:55:11
1	Fe 238.204 Radial†	358.6	351.4	4974.4 ug/L	4974.4 ppb	16:55:11
1	K 766.490 Radial†	28051.4	25733.0	4931.9 ug/L	4931.9 ppb	16:54:51
1	Mg 279.077 IEC†	104.0	101.1	4902.6 ug/L	4902.6 ppb	16:55:11
1	Na 589.592 Radial†	30584.6	31754.6	9790.8 ug/L	9790.8 ppb	16:54:51
1	Sr 421.552†	68864.7	69617.5	481.68 ug/L	481.68 ppb	16:54:51
1	Sc 361.383	900794.5	900794.5	102.69 %		16:56:08
1	Y 371.029	747978.0	747978.0	98.959 %		16:56:08
1	Ag 328.068†	105774.9	102767.5	479.11 ug/L	479.11 ppb	16:56:14
1	As 188.979†	1082.4	1072.3	483.11 ug/L	483.11 ppb	16:56:34
1	B 249.677†	19361.3	19253.1	464.61 ug/L	464.61 ppb	16:56:14
1	Ba 233.527†	62708.4	61069.4	480.43 ug/L	480.43 ppb	16:56:14
1	Be 313.107†	1318956.9	1288217.3	485.22 ug/L	485.22 ppb	16:56:08
1	Cd 226.502†	42591.0	41673.2	482.46 ug/L	482.46 ppb	16:56:14
1	Co 228.616†	23606.0	23055.1	483.00 ug/L	483.00 ppb	16:56:14
1	Cr 267.716†	43734.7	42512.9	478.20 ug/L	478.20 ppb	16:56:14
1	Cu 324.752†	165690.3	155365.4	472.79 ug/L	472.79 ppb	16:56:14
1	Mn 257.610†	440704.6	428717.7	488.15 ug/L	488.15 ppb	16:56:08
1	Mo 202.031†	6682.9	6497.9	477.50 ug/L	477.50 ppb	16:56:34
1	Ni 231.604†	19517.2	18944.2	481.52 ug/L	481.52 ppb	16:56:14
1	P 214.914†	4323.8	4000.2	2315.9 ug/L	2315.9 ppb	16:56:34
1	Pb 220.353†	3980.4	3934.4	485.35 ug/L	485.35 ppb	16:56:34
1	S 181.975 Axial†	731.5	671.6	965.50 ug/L	965.50 ppb	16:56:34
1	Sb 206.836†	1432.1	1357.9	491.83 ug/L	491.83 ppb	16:56:34
1	Se 196.026†	725.3	734.0	497.79 ug/L	497.79 ppb	16:56:34
1	Si 251.611†	76328.8	73773.8	2381.4 ug/L	2381.4 ppb	16:56:14
1	Sn 189.927†	2759.7	2677.0	480.94 ug/L	480.94 ppb	16:56:34
1	Ti 334.940†	319498.4	312514.9	490.99 ug/L	490.99 ppb	16:56:08
1	Tl 190.801†	1514.1	1507.0	485.23 ug/L	485.23 ppb	16:56:34
1	U 409.014†	14604.0	17108.6	470.80 ug/L	470.80 ppb	16:56:14
1	V 292.402†	68353.2	68070.9	480.97 ug/L	480.97 ppb	16:56:14
1	Zn 213.857†	49584.7	47681.6	475.53 ug/L	475.53 ppb	16:56:14
1	SiO2†	75891.3	73351.7	5084.6 ug/L	5084.6 ppb	16:57:42
2	Sc Radial	3897.9	3897.9	99.5 %		16:55:16
2	Y RADIAL	4283.1	4283.1	97.10 %		16:55:16
2	Al 396.153Radial†	5112.2	5252.1	4902.6 ug/L	4902.6 ppb	16:55:16
2	Ca 317.933Radial†	2426.7	2420.0	5059.1 ug/L	5059.1 ppb	16:55:36
2	Fe 238.204 Radial†	352.7	343.3	4860.0 ug/L	4860.0 ppb	16:55:36
2	K 766.490 Radial†	28235.2	25747.2	4934.6 ug/L	4934.6 ppb	16:55:16
2	Mg 279.077 IEC†	108.5	105.0	5093.3 ug/L	5093.3 ppb	16:55:36
2	Na 589.592 Radial†	30796.8	31782.0	9799.2 ug/L	9799.2 ppb	16:55:16
2	Sr 421.552†	69281.5	69617.9	481.69 ug/L	481.69 ppb	16:55:16
2	Sc 361.383	896537.7	896537.7	102.20 %		16:56:40
2	Y 371.029	745698.4	745698.4	98.658 %		16:56:40

2	Ag 328.068†	106225.4	103697.4	483.40 ug/L	483.40 ppb	16:56:45
2	As 188.979†	1082.0	1076.9	485.12 ug/L	485.12 ppb	16:57:05
2	B 249.677†	19604.5	19580.6	472.55 ug/L	472.55 ppb	16:56:45
2	Ba 233.527†	63095.5	61738.2	485.68 ug/L	485.68 ppb	16:56:45
2	Be 313.107†	1312700.1	1288193.9	485.21 ug/L	485.21 ppb	16:56:40
2	Cd 226.502†	42788.6	42063.4	486.99 ug/L	486.99 ppb	16:56:45
2	Co 228.616†	23694.6	23250.9	487.11 ug/L	487.11 ppb	16:56:45
2	Cr 267.716†	44056.5	43030.0	484.00 ug/L	484.00 ppb	16:56:45
2	Cu 324.752†	166290.3	156718.6	476.90 ug/L	476.90 ppb	16:56:45
2	Mn 257.610†	437477.9	427598.2	486.85 ug/L	486.85 ppb	16:56:40
2	Mo 202.031†	6684.4	6530.3	479.87 ug/L	479.87 ppb	16:57:05
2	Ni 231.604†	19572.9	19088.9	485.19 ug/L	485.19 ppb	16:56:45
2	P 214.914†	4324.1	4020.5	2327.4 ug/L	2327.4 ppb	16:57:05
2	Pb 220.353†	3967.1	3939.8	486.04 ug/L	486.04 ppb	16:57:05
2	S 181.975 Axial†	732.2	675.6	971.30 ug/L	971.30 ppb	16:57:05
2	Sb 206.836†	1427.2	1359.8	492.58 ug/L	492.58 ppb	16:57:05
2	Se 196.026†	726.0	738.1	500.07 ug/L	500.07 ppb	16:57:05
2	Si 251.611†	76736.4	74525.6	2405.7 ug/L	2405.7 ppb	16:56:45
2	Sn 189.927†	2759.1	2689.2	483.13 ug/L	483.13 ppb	16:57:05
2	Ti 334.940†	316820.6	311372.1	489.17 ug/L	489.17 ppb	16:56:40
2	Tl 190.801†	1525.1	1524.9	490.88 ug/L	490.88 ppb	16:57:05
2	U 409.014†	14523.9	17097.7	470.50 ug/L	470.50 ppb	16:56:45
2	V 292.402†	68650.1	68677.5	485.26 ug/L	485.26 ppb	16:56:45
2	Zn 213.857†	49793.9	48115.5	479.89 ug/L	479.89 ppb	16:56:45
2	SiO2†	76285.1	74087.9	5135.7 ug/L	5135.7 ppb	16:57:47
3	Sc Radial	3889.2	3889.2	99.2 %		16:55:41
3	Y RADIAL	4279.8	4279.8	97.03 %		16:55:41
3	Al 396.153Radial†	5112.7	5264.0	4913.5 ug/L	4913.5 ppb	16:55:41
3	Ca 317.933Radial†	2391.8	2390.4	4997.1 ug/L	4997.1 ppb	16:56:01
3	Fe 238.204 Radial†	349.1	340.5	4820.6 ug/L	4820.6 ppb	16:56:01
3	K 766.490 Radial†	28327.7	25903.6	4964.6 ug/L	4964.6 ppb	16:55:41
3	Mg 279.077 IEC†	104.3	101.0	4895.9 ug/L	4895.9 ppb	16:56:01
3	Na 589.592 Radial†	30968.1	32023.4	9873.7 ug/L	9873.7 ppb	16:55:41
3	Sr 421.552†	69314.1	69805.5	482.99 ug/L	482.99 ppb	16:55:41
3	Sc 361.383	887434.2	887434.2	101.16 %		16:57:11
3	Y 371.029	737924.1	737924.1	97.629 %		16:57:11
3	Ag 328.068†	105879.3	104421.6	486.76 ug/L	486.76 ppb	16:57:16
3	As 188.979†	1085.1	1090.9	491.37 ug/L	491.37 ppb	16:57:36
3	B 249.677†	19499.3	19673.3	474.80 ug/L	474.80 ppb	16:57:16
3	Ba 233.527†	62800.9	62080.3	488.37 ug/L	488.37 ppb	16:57:16
3	Be 313.107†	1302369.7	1291158.3	486.33 ug/L	486.33 ppb	16:57:11
3	Cd 226.502†	42781.2	42485.6	491.89 ug/L	491.89 ppb	16:57:16
3	Co 228.616†	23644.5	23439.1	491.06 ug/L	491.06 ppb	16:57:16
3	Cr 267.716†	43894.5	43312.1	487.17 ug/L	487.17 ppb	16:57:16
3	Cu 324.752†	165499.8	157606.3	479.60 ug/L	479.60 ppb	16:57:16
3	Mn 257.610†	435384.8	429920.4	489.50 ug/L	489.50 ppb	16:57:11
3	Mo 202.031†	6671.3	6584.4	483.84 ug/L	483.84 ppb	16:57:36
3	Ni 231.604†	19565.8	19278.4	490.01 ug/L	490.01 ppb	16:57:16
3	P 214.914†	4311.6	4051.5	2345.6 ug/L	2345.6 ppb	16:57:36
3	Pb 220.353†	3950.2	3962.9	488.89 ug/L	488.89 ppb	16:57:36
3	S 181.975 Axial†	732.3	683.1	982.04 ug/L	982.04 ppb	16:57:36
3	Sb 206.836†	1432.1	1378.9	499.40 ug/L	499.40 ppb	16:57:36
3	Se 196.026†	727.7	747.1	505.86 ug/L	505.86 ppb	16:57:36
3	Si 251.611†	76288.7	74853.3	2416.2 ug/L	2416.2 ppb	16:57:16
3	Sn 189.927†	2748.0	2705.9	486.13 ug/L	486.13 ppb	16:57:36
3	Ti 334.940†	314858.3	312612.4	491.13 ug/L	491.13 ppb	16:57:11
3	Tl 190.801†	1507.3	1522.6	490.16 ug/L	490.16 ppb	16:57:36
3	U 409.014†	14397.3	17118.4	471.07 ug/L	471.07 ppb	16:57:16
3	V 292.402†	68487.9	69206.1	489.00 ug/L	489.00 ppb	16:57:16
3	Zn 213.857†	49701.0	48523.5	483.97 ug/L	483.97 ppb	16:57:16
3	SiO2†	77026.9	75586.9	5239.8 ug/L	5239.8 ppb	16:57:52

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	894922.1	102.02 %	0.778			0.76%
Sc Radial	3887.2	99.2 %	0.30			0.30%
Y 371.029	743866.8	98.415 %	0.6974			0.71%
Y RADIAL	4263.8	96.67 %	0.696			0.72%
Ag 328.068†	103628.8	483.09 ug/L	3.834	483.09 ppb	3.834	0.79%

QC value within limits for Ag 328.068 Recovery = 96.62%							
Al	396.153Radial†	5257.9	4908.0 ug/L	5.47	4908.0 ppb	5.47	0.11%
QC value within limits for Al 396.153Radial Recovery = 98.16%							
As	188.979†	1080.0	486.53 ug/L	4.309	486.53 ppb	4.309	0.89%
QC value within limits for As 188.979 Recovery = 97.31%							
B	249.677†	19502.3	470.65 ug/L	5.354	470.65 ppb	5.354	1.14%
QC value within limits for B 249.677 Recovery = 94.13%							
Ba	233.527†	61629.3	484.83 ug/L	4.041	484.83 ppb	4.041	0.83%
QC value within limits for Ba 233.527 Recovery = 96.97%							
Be	313.107†	1289189.8	485.59 ug/L	0.642	485.59 ppb	0.642	0.13%
QC value within limits for Be 313.107 Recovery = 97.12%							
Ca	317.933Radial†	2413.5	5045.4 ug/L	43.21	5045.4 ppb	43.21	0.86%
QC value within limits for Ca 317.933Radial Recovery = 100.91%							
Cd	226.502†	42074.1	487.11 ug/L	4.716	487.11 ppb	4.716	0.97%
QC value within limits for Cd 226.502 Recovery = 97.42%							
Co	228.616†	23248.4	487.06 ug/L	4.031	487.06 ppb	4.031	0.83%
QC value within limits for Co 228.616 Recovery = 97.41%							
Cr	267.716†	42951.7	483.12 ug/L	4.548	483.12 ppb	4.548	0.94%
QC value within limits for Cr 267.716 Recovery = 96.62%							
Cu	324.752†	156563.4	476.43 ug/L	3.430	476.43 ppb	3.430	0.72%
QC value within limits for Cu 324.752 Recovery = 95.29%							
Fe	238.204 Radial†	345.0	4885.0 ug/L	79.92	4885.0 ppb	79.92	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 97.70%							
K	766.490 Radial†	25794.6	4943.7 ug/L	18.16	4943.7 ppb	18.16	0.37%
QC value within limits for K 766.490 Radial Recovery = 98.87%							
Mg	279.077 IEC†	102.4	4963.9 ug/L	112.06	4963.9 ppb	112.06	2.26%
QC value within limits for Mg 279.077 IEC Recovery = 99.28%							
Mn	257.610†	428745.4	488.17 ug/L	1.323	488.17 ppb	1.323	0.27%
QC value within limits for Mn 257.610 Recovery = 97.63%							
Mo	202.031†	6537.5	480.40 ug/L	3.203	480.40 ppb	3.203	0.67%
QC value within limits for Mo 202.031 Recovery = 96.08%							
Na	589.592 Radial†	31853.3	9821.2 ug/L	45.61	9821.2 ppb	45.61	0.46%
QC value within limits for Na 589.592 Radial Recovery = 98.21%							
Ni	231.604†	19103.8	485.57 ug/L	4.261	485.57 ppb	4.261	0.88%
QC value within limits for Ni 231.604 Recovery = 97.11%							
P	214.914†	4024.1	2329.7 ug/L	14.98	2329.7 ppb	14.98	0.64%
QC value within limits for P 214.914 Recovery = 93.19%							
Pb	220.353†	3945.7	486.76 ug/L	1.877	486.76 ppb	1.877	0.39%
QC value within limits for Pb 220.353 Recovery = 97.35%							
S	181.975 Axial†	676.8	972.95 ug/L	8.392	972.95 ppb	8.392	0.86%
QC value within limits for S 181.975 Axial Recovery = 97.29%							
Sb	206.836†	1365.5	494.60 ug/L	4.171	494.60 ppb	4.171	0.84%
QC value within limits for Sb 206.836 Recovery = 98.92%							
Se	196.026†	739.7	501.24 ug/L	4.159	501.24 ppb	4.159	0.83%
QC value within limits for Se 196.026 Recovery = 100.25%							
Si	251.611†	74384.3	2401.1 ug/L	17.87	2401.1 ppb	17.87	0.74%
QC value within limits for Si 251.611 Recovery = 96.04%							
Sn	189.927†	2690.7	483.40 ug/L	2.602	483.40 ppb	2.602	0.54%
QC value within limits for Sn 189.927 Recovery = 96.68%							
Sr	421.552†	69680.3	482.12 ug/L	0.751	482.12 ppb	0.751	0.16%
QC value within limits for Sr 421.552 Recovery = 96.42%							
Ti	334.940†	312166.4	490.43 ug/L	1.091	490.43 ppb	1.091	0.22%
QC value within limits for Ti 334.940 Recovery = 98.09%							
Tl	190.801†	1518.2	488.76 ug/L	3.077	488.76 ppb	3.077	0.63%
QC value within limits for Tl 190.801 Recovery = 97.75%							
U	409.014†	17108.2	470.79 ug/L	0.284	470.79 ppb	0.284	0.06%
QC value within limits for U 409.014 Recovery = 94.16%							
V	292.402†	68651.5	485.08 ug/L	4.016	485.08 ppb	4.016	0.83%
QC value within limits for V 292.402 Recovery = 97.02%							
Zn	213.857†	48106.9	479.80 ug/L	4.218	479.80 ppb	4.218	0.88%
QC value within limits for Zn 213.857 Recovery = 95.96%							
SiO2†		74342.2	5153.4 ug/L	79.07	5153.4 ppb	79.07	1.53%
QC value within limits for SiO2 Recovery = 96.37%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 17:00:01

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	3852.2	3852.2	98.3 %		17:02:13
1	Y RADIAL	4377.8	4377.8	99.25 %		17:01:53
1	Al 396.153Radial†	-110.2	0.3	0.2697 ug/L	0.2697 ppb	17:01:53
1	Ca 317.933Radial†	24.1	4.8	10.091 ug/L	10.091 ppb	17:02:13
1	Fe 238.204 Radial†	11.8	0.7	9.7941 ug/L	9.7941 ppb	17:02:13
1	K 766.490 Radial†	2757.5	165.6	31.763 ug/L	31.763 ppb	17:01:53
1	Mg 279.077 IEC†	0.3	-3.7	-181.48 ug/L	-181.48 ppb	17:02:13
1	Na 589.592 Radial†	-777.0	29.3	9.0403 ug/L	9.0403 ppb	17:01:53
1	Sr 421.552†	76.4	42.0	0.2907 ug/L	0.2907 ppb	17:01:53
1	Sc 361.383	900409.9	900409.9	102.64 %		17:03:10
1	Y 371.029	760595.5	760595.5	100.63 %		17:03:10
1	Ag 328.068†	340.0	90.8	0.4225 ug/L	0.4225 ppb	17:03:15
1	As 188.979†	-24.7	-5.8	-2.5798 ug/L	-2.5798 ppb	17:03:35
1	B 249.677†	-362.4	45.1	1.0929 ug/L	1.0929 ppb	17:03:35
1	Ba 233.527†	-5.1	-3.5	-0.0274 ug/L	-0.0274 ppb	17:03:35
1	Be 313.107†	-3767.8	91.4	0.0342 ug/L	0.0342 ppb	17:03:15
1	Cd 226.502†	-182.4	18.5	0.2142 ug/L	0.2142 ppb	17:03:35
1	Co 228.616†	-74.8	-6.3	-0.1327 ug/L	-0.1327 ppb	17:03:35
1	Cr 267.716†	74.4	-5.2	-0.0575 ug/L	-0.0575 ppb	17:03:35
1	Cu 324.752†	6038.4	-107.8	-0.3282 ug/L	-0.3282 ppb	17:03:15
1	Mn 257.610†	467.6	-3.2	0.0048 ug/L	0.0048 ppb	17:03:35
1	Mo 202.031†	8.8	-1.6	-0.1154 ug/L	-0.1154 ppb	17:03:35
1	Ni 231.604†	82.5	17.9	0.4558 ug/L	0.4558 ppb	17:03:35
1	P 214.914†	211.6	-4.3	-2.5174 ug/L	-2.5174 ppb	17:03:35
1	Pb 220.353†	-62.4	-2.6	-0.3254 ug/L	-0.3254 ppb	17:03:35
1	S 181.975 Axial†	43.8	1.8	2.6235 ug/L	2.6235 ppb	17:03:35
1	Sb 206.836†	40.3	2.6	0.9401 ug/L	0.9401 ppb	17:03:35
1	Se 196.026†	-22.3	6.1	3.9981 ug/L	3.9981 ppb	17:03:35
1	Si 251.611†	569.3	-3.7	-0.1183 ug/L	-0.1183 ppb	17:03:35
1	Sn 189.927†	29.3	18.0	3.2339 ug/L	3.2339 ppb	17:03:35
1	Ti 334.940†	-1438.0	-26.9	-0.0266 ug/L	-0.0266 ppb	17:03:15
1	Tl 190.801†	-28.1	5.2	1.6536 ug/L	1.6536 ppb	17:03:35
1	U 409.014†	-2916.7	45.0	1.2410 ug/L	1.2410 ppb	17:03:10
1	V 292.402†	-1552.0	-6.4	-0.0485 ug/L	-0.0485 ppb	17:03:15
1	Zn 213.857†	838.0	210.3	2.1135 ug/L	2.1135 ppb	17:03:35
1	SiO2†	569.5	0.5	0.0351 ug/L	0.0351 ppb	17:04:41
2	Sc Radial	3844.3	3844.3	98.1 %		17:02:38
2	Y RADIAL	4449.9	4449.9	100.9 %		17:02:18
2	Al 396.153Radial†	-116.9	-6.8	-6.3661 ug/L	-6.3661 ppb	17:02:18
2	Ca 317.933Radial†	16.2	-3.2	-6.6141 ug/L	-6.6141 ppb	17:02:38
2	Fe 238.204 Radial†	10.8	-0.3	-4.1409 ug/L	-4.1409 ppb	17:02:38
2	K 766.490 Radial†	2663.2	75.2	14.419 ug/L	14.419 ppb	17:02:18
2	Mg 279.077 IEC†	1.9	-2.2	-105.81 ug/L	-105.81 ppb	17:02:38
2	Na 589.592 Radial†	-750.4	54.8	16.909 ug/L	16.909 ppb	17:02:18
2	Sr 421.552†	27.9	-7.3	-0.0503 ug/L	-0.0503 ppb	17:02:18
2	Sc 361.383	901998.5	901998.5	102.82 %		17:03:40
2	Y 371.029	761476.1	761476.1	100.75 %		17:03:40
2	Ag 328.068†	326.6	77.3	0.3584 ug/L	0.3584 ppb	17:03:45
2	As 188.979†	-27.2	-8.2	-3.6601 ug/L	-3.6601 ppb	17:04:06
2	B 249.677†	-390.4	18.5	0.4488 ug/L	0.4488 ppb	17:04:06
2	Ba 233.527†	6.5	7.7	0.0618 ug/L	0.0618 ppb	17:04:06
2	Be 313.107†	-3797.5	68.9	0.0255 ug/L	0.0255 ppb	17:03:45
2	Cd 226.502†	-182.6	18.7	0.2169 ug/L	0.2169 ppb	17:04:06
2	Co 228.616†	-53.7	14.3	0.3013 ug/L	0.3013 ppb	17:04:06
2	Cr 267.716†	65.5	-14.0	-0.1568 ug/L	-0.1568 ppb	17:04:06
2	Cu 324.752†	6039.0	-117.6	-0.3586 ug/L	-0.3586 ppb	17:03:45
2	Mn 257.610†	467.4	-4.2	-0.0009 ug/L	-0.0009 ppb	17:04:06
2	Mo 202.031†	17.9	7.3	0.5340 ug/L	0.5340 ppb	17:04:06
2	Ni 231.604†	84.5	19.7	0.5017 ug/L	0.5017 ppb	17:04:06

2	P 214.914†	214.8	-1.6	-0.9130 ug/L	-0.9130 ppb	17:04:06
2	Pb 220.353†	-59.5	0.2	0.0301 ug/L	0.0301 ppb	17:04:06
2	S 181.975 Axial†	38.5	-3.3	-4.7860 ug/L	-4.7860 ppb	17:04:06
2	Sb 206.836†	56.7	18.4	6.4562 ug/L	6.4562 ppb	17:04:06
2	Se 196.026†	-24.3	4.1	2.6565 ug/L	2.6565 ppb	17:04:06
2	Si 251.611†	562.5	-11.3	-0.3708 ug/L	-0.3708 ppb	17:04:06
2	Sn 189.927†	13.3	2.4	0.4323 ug/L	0.4323 ppb	17:04:06
2	Ti 334.940†	-1522.1	-106.2	-0.1594 ug/L	-0.1594 ppb	17:03:45
2	Tl 190.801†	-38.9	-5.2	-1.6802 ug/L	-1.6802 ppb	17:04:06
2	U 409.014†	-2936.9	30.4	0.8394 ug/L	0.8394 ppb	17:03:40
2	V 292.402†	-1462.2	83.6	0.5912 ug/L	0.5912 ppb	17:03:45
2	Zn 213.857†	834.6	205.6	2.0681 ug/L	2.0681 ppb	17:04:06
2	SiO2†	601.4	30.5	2.1033 ug/L	2.1033 ppb	17:04:46
3	Sc Radial	3832.9	3832.9	97.8 %		17:03:04
3	Y RADIAL	4350.0	4350.0	98.62 %		17:02:44
3	Al 396.153Radial†	-123.5	-13.8	-12.957 ug/L	-12.957 ppb	17:02:44
3	Ca 317.933Radial†	20.2	0.9	1.9596 ug/L	1.9596 ppb	17:03:04
3	Fe 238.204 Radial†	12.6	1.6	22.079 ug/L	22.079 ppb	17:03:04
3	K 766.490 Radial†	2846.6	270.7	51.962 ug/L	51.962 ppb	17:02:44
3	Mg 279.077 IBC†	1.5	-2.5	-122.52 ug/L	-122.52 ppb	17:03:04
3	Na 589.592 Radial†	-889.2	-89.3	-27.540 ug/L	-27.540 ppb	17:02:44
3	Sr 421.552†	29.9	-5.2	-0.0357 ug/L	-0.0357 ppb	17:02:44
3	Sc 361.383	903980.0	903980.0	103.05 %		17:04:11
3	Y 371.029	762638.1	762638.1	100.90 %		17:04:11
3	Ag 328.068†	344.8	94.2	0.4434 ug/L	0.4434 ppb	17:04:16
3	As 188.979†	-21.5	-2.6	-1.1479 ug/L	-1.1479 ppb	17:04:36
3	B 249.677†	-397.4	12.6	0.3017 ug/L	0.3017 ppb	17:04:36
3	Ba 233.527†	12.6	13.6	0.1076 ug/L	0.1076 ppb	17:04:36
3	Be 313.107†	-3797.5	77.1	0.0289 ug/L	0.0289 ppb	17:04:16
3	Cd 226.502†	-189.2	12.6	0.1438 ug/L	0.1438 ppb	17:04:36
3	Co 228.616†	-67.4	1.1	0.0226 ug/L	0.0226 ppb	17:04:36
3	Cr 267.716†	79.4	-0.6	-0.0048 ug/L	-0.0048 ppb	17:04:36
3	Cu 324.752†	6022.9	-146.1	-0.4436 ug/L	-0.4436 ppb	17:04:16
3	Mn 257.610†	504.4	30.7	0.0421 ug/L	0.0421 ppb	17:04:36
3	Mo 202.031†	11.1	0.6	0.0449 ug/L	0.0449 ppb	17:04:36
3	Ni 231.604†	57.6	-6.6	-0.1673 ug/L	-0.1673 ppb	17:04:36
3	P 214.914†	214.8	-2.1	-1.1683 ug/L	-1.1683 ppb	17:04:36
3	Pb 220.353†	-40.0	19.3	2.3688 ug/L	2.3688 ppb	17:04:36
3	S 181.975 Axial†	39.7	-2.3	-3.2499 ug/L	-3.2499 ppb	17:04:36
3	Sb 206.836†	38.6	0.7	0.2578 ug/L	0.2578 ppb	17:04:36
3	Se 196.026†	-23.3	5.2	3.4507 ug/L	3.4507 ppb	17:04:36
3	Si 251.611†	567.9	-7.2	-0.2350 ug/L	-0.2350 ppb	17:04:36
3	Sn 189.927†	14.3	3.4	0.6142 ug/L	0.6142 ppb	17:04:36
3	Ti 334.940†	-1437.6	-21.0	-0.0229 ug/L	-0.0229 ppb	17:04:16
3	Tl 190.801†	-32.5	1.0	0.3191 ug/L	0.3191 ppb	17:04:36
3	U 409.014†	-2967.8	6.7	0.1816 ug/L	0.1816 ppb	17:04:11
3	V 292.402†	-1537.0	14.2	0.0943 ug/L	0.0943 ppb	17:04:16
3	Zn 213.857†	815.8	185.6	1.8668 ug/L	1.8668 ppb	17:04:36
3	SiO2†	572.6	1.2	0.0855 ug/L	0.0855 ppb	17:04:51

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902129.5	102.84 %		0.204			0.20%
Sc Radial	3843.2	98.1 %		0.25			0.25%
Y 371.029	761569.9	100.76 %		0.136			0.13%
Y RADIAL	4392.5	99.58 %		1.169			1.17%
Ag 328.068†	87.4	0.4081 ug/L		0.04427	0.4081 ppb	0.04427	10.85%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.8	-6.3511 ug/L		6.61330	-6.3511 ppb	6.61330	104.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-5.5	-2.4626 ug/L		1.26019	-2.4626 ppb	1.26019	51.17%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	25.4	0.6145 ug/L		0.42084	0.6145 ppb	0.42084	68.49%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.9	0.0473 ug/L		0.06867	0.0473 ppb	0.06867	145.08%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	79.1	0.0296 ug/L		0.00440	0.0296 ppb	0.00440	14.89%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.9	1.8121 ug/L		8.35340	1.8121 ppb	8.35340	460.98%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.6	0.1916 ug/L	0.04145	0.1916 ppb	0.04145	21.63%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.0	0.0637 ug/L	0.21988	0.0637 ppb	0.21988	344.96%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-6.6	-0.0730 ug/L	0.07716	-0.0730 ppb	0.07716	105.63%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-123.8	-0.3768 ug/L	0.05982	-0.3768 ppb	0.05982	15.88%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.7	9.2439 ug/L	13.11841	9.2439 ppb	13.11841	141.91%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	170.5	32.715 ug/L	18.7895	32.715 ppb	18.7895	57.43%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.8	-136.60 ug/L	39.756	-136.60 ppb	39.756	29.10%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	7.8	0.0154 ug/L	0.02337	0.0154 ppb	0.02337	152.23%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.1	0.1545 ug/L	0.33830	0.1545 ppb	0.33830	218.95%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-1.7	-0.5305 ug/L	23.71980	-0.5305 ppb	23.71980	>999.9%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	10.4	0.2634 ug/L	0.37373	0.2634 ppb	0.37373	141.88%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.7	-1.5329 ug/L	0.86212	-1.5329 ppb	0.86212	56.24%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.6	0.6912 ug/L	1.46373	0.6912 ppb	1.46373	211.78%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.3	-1.8042 ug/L	3.91063	-1.8042 ppb	3.91063	216.76%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	7.2	2.5514 ug/L	3.39886	2.5514 ppb	3.39886	133.22%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	5.1	3.3684 ug/L	0.67455	3.3684 ppb	0.67455	20.03%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-7.4	-0.2414 ug/L	0.12639	-0.2414 ppb	0.12639	52.37%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	8.0	1.4268 ug/L	1.56764	1.4268 ppb	1.56764	109.87%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.9	0.0682 ug/L	0.19277	0.0682 ppb	0.19277	282.49%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-51.4	-0.0696 ug/L	0.07779	-0.0696 ppb	0.07779	111.70%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.3	0.0975 ug/L	1.67795	0.0975 ppb	1.67795	>999.9%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	27.3	0.7540 ug/L	0.53483	0.7540 ppb	0.53483	70.93%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	30.5	0.2123 ug/L	0.33577	0.2123 ppb	0.33577	158.14%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	200.5	2.0161 ug/L	0.13130	2.0161 ppb	0.13130	6.51%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	10.7	0.7413 ug/L	1.17979	0.7413 ppb	1.17979	159.16%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 18:15:25

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	4007.2	4007.2	102 %		18:17:17
1	Y RADIAL	4427.1	4427.1	100.4 %		18:17:17
1	Al 396.153Radial†	5205.1	5202.8	4856.0 ug/L	4856.0 ppb	18:17:17
1	Ca 317.933Radial†	2451.6	2377.8	4970.9 ug/L	4970.9 ppb	18:17:37
1	Fe 238.204 Radial†	363.8	344.5	4878.0 ug/L	4878.0 ppb	18:17:37
1	K 766.490 Radial†	28844.7	25569.2	4900.4 ug/L	4900.4 ppb	18:17:17
1	Mg 279.077 IEC†	109.2	102.7	4979.4 ug/L	4979.4 ppb	18:17:37
1	Na 589.592 Radial†	32811.6	32908.0	10146 ug/L	10146 ppb	18:17:17
1	Sr 421.552†	71918.3	70297.0	486.39 ug/L	486.39 ppb	18:17:17
1	Sc 361.383	900772.2	900772.2	102.68 %		18:18:35
1	Y 371.029	746520.2	746520.2	98.766 %		18:18:35
1	Ag 328.068†	110303.0	107179.9	499.61 ug/L	499.61 ppb	18:18:40
1	As 188.979†	1110.8	1100.0	495.49 ug/L	495.49 ppb	18:19:00
1	B 249.677†	20331.5	20198.4	487.47 ug/L	487.47 ppb	18:18:40
1	Ba 233.527†	65882.3	64162.0	504.75 ug/L	504.75 ppb	18:18:40
1	Be 313.107†	1345256.2	1313861.1	494.88 ug/L	494.88 ppb	18:18:35
1	Cd 226.502†	44997.0	44017.3	509.63 ug/L	509.63 ppb	18:18:40
1	Co 228.616†	24898.3	24314.2	509.38 ug/L	509.38 ppb	18:18:40
1	Cr 267.716†	46063.9	44782.4	503.69 ug/L	503.69 ppb	18:18:40
1	Cu 324.752†	173440.5	162916.9	495.76 ug/L	495.76 ppb	18:18:40
1	Mn 257.610†	451130.3	438881.6	499.70 ug/L	499.70 ppb	18:18:35
1	Mo 202.031†	6811.9	6623.7	486.73 ug/L	486.73 ppb	18:19:00
1	Ni 231.604†	20620.4	20019.1	508.84 ug/L	508.84 ppb	18:18:40
1	P 214.914†	4436.6	4110.1	2377.7 ug/L	2377.7 ppb	18:19:00
1	Pb 220.353†	4061.1	4013.1	495.04 ug/L	495.04 ppb	18:19:00
1	S 181.975 Axial†	747.2	686.9	987.54 ug/L	987.54 ppb	18:19:00
1	Sb 206.836†	1470.0	1394.9	505.23 ug/L	505.23 ppb	18:19:00
1	Se 196.026†	741.3	749.7	507.74 ug/L	507.74 ppb	18:19:00
1	Si 251.611†	80233.3	77578.1	2504.3 ug/L	2504.3 ppb	18:18:40
1	Sn 189.927†	2842.8	2758.1	495.47 ug/L	495.47 ppb	18:19:00
1	Ti 334.940†	324453.0	317347.7	498.54 ug/L	498.54 ppb	18:18:40
1	Tl 190.801†	1553.9	1545.9	497.61 ug/L	497.61 ppb	18:19:00
1	U 409.014†	15252.1	17740.1	488.20 ug/L	488.20 ppb	18:18:40
1	V 292.402†	71727.8	71358.9	504.06 ug/L	504.06 ppb	18:18:40
1	Zn 213.857†	52252.8	50281.2	501.51 ug/L	501.51 ppb	18:18:40
1	SiO2†	78244.6	75645.3	5243.8 ug/L	5243.8 ppb	18:20:07
2	Sc Radial	3906.6	3906.6	99.7 %		18:17:42
2	Y RADIAL	4280.9	4280.9	97.05 %		18:17:42
2	Al 396.153Radial†	5145.4	5273.9	4922.6 ug/L	4922.6 ppb	18:17:42
2	Ca 317.933Radial†	2469.9	2458.0	5138.4 ug/L	5138.4 ppb	18:18:02
2	Fe 238.204 Radial†	363.6	353.4	5003.1 ug/L	5003.1 ppb	18:18:02
2	K 766.490 Radial†	28194.8	25643.5	4914.5 ug/L	4914.5 ppb	18:17:42
2	Mg 279.077 IEC†	109.5	105.7	5127.1 ug/L	5127.1 ppb	18:18:02
2	Na 589.592 Radial†	32140.8	33061.3	10194 ug/L	10194 ppb	18:17:42
2	Sr 421.552†	70756.3	70942.4	490.85 ug/L	490.85 ppb	18:17:42
2	Sc 361.383	904006.0	904006.0	103.05 %		18:19:06
2	Y 371.029	749349.6	749349.6	99.141 %		18:19:06
2	Ag 328.068†	108179.6	104735.1	488.28 ug/L	488.28 ppb	18:19:11
2	As 188.979†	1118.4	1103.5	496.96 ug/L	496.96 ppb	18:19:31
2	B 249.677†	19877.4	19686.9	475.08 ug/L	475.08 ppb	18:19:11
2	Ba 233.527†	64530.8	62620.9	492.63 ug/L	492.63 ppb	18:19:11
2	Be 313.107†	1339035.3	1303138.0	490.82 ug/L	490.82 ppb	18:19:06
2	Cd 226.502†	44007.8	42900.6	496.68 ug/L	496.68 ppb	18:19:11
2	Co 228.616†	24371.3	23716.0	496.88 ug/L	496.88 ppb	18:19:11
2	Cr 267.716†	44890.2	43482.9	489.10 ug/L	489.10 ppb	18:19:11
2	Cu 324.752†	169242.2	158238.9	481.54 ug/L	481.54 ppb	18:19:11
2	Mn 257.610†	448671.0	434923.5	495.20 ug/L	495.20 ppb	18:19:06
2	Mo 202.031†	6855.6	6642.4	488.11 ug/L	488.11 ppb	18:19:31
2	Ni 231.604†	20115.7	19457.5	494.56 ug/L	494.56 ppb	18:19:11



2	P 214.914†	4463.4	4120.7	2386.8 ug/L	2386.8 ppb	18:19:31
2	Pb 220.353†	4098.9	4035.6	497.83 ug/L	497.83 ppb	18:19:31
2	S 181.975 Axial†	754.1	691.0	993.38 ug/L	993.38 ppb	18:19:31
2	Sb 206.836†	1497.1	1416.0	512.60 ug/L	512.60 ppb	18:19:31
2	Se 196.026†	737.4	743.3	503.95 ug/L	503.95 ppb	18:19:31
2	Si 251.611†	78408.5	75527.8	2438.0 ug/L	2438.0 ppb	18:19:11
2	Sn 189.927†	2836.5	2742.0	492.62 ug/L	492.62 ppb	18:19:31
2	Ti 334.940†	316707.3	308701.2	484.98 ug/L	484.98 ppb	18:19:11
2	Tl 190.801†	1565.5	1551.7	499.43 ug/L	499.43 ppb	18:19:31
2	U 409.014†	14653.4	17106.0	470.70 ug/L	470.70 ppb	18:19:11
2	V 292.402†	70012.4	69444.4	490.70 ug/L	490.70 ppb	18:19:11
2	Zn 213.857†	51078.0	48959.1	488.29 ug/L	488.29 ppb	18:19:11
2	SiO2†	78790.6	75902.6	5261.6 ug/L	5261.6 ppb	18:20:13
3	Sc Radial	3918.5	3918.5	100.0 %		18:18:08
3	Y RADIAL	4310.4	4310.4	97.72 %		18:18:08
3	Al 396.153Radial†	5243.1	5356.0	4998.1 ug/L	4998.1 ppb	18:18:08
3	Ca 317.933Radial†	2467.6	2448.1	5117.8 ug/L	5117.8 ppb	18:18:28
3	Fe 238.204 Radial†	364.3	353.1	4999.5 ug/L	4999.5 ppb	18:18:28
3	K 766.490 Radial†	28596.9	25959.7	4975.2 ug/L	4975.2 ppb	18:18:08
3	Mg 279.077 IEC†	109.4	105.3	5106.4 ug/L	5106.4 ppb	18:18:28
3	Na 589.592 Radial†	32437.9	33260.5	10255 ug/L	10255 ppb	18:18:08
3	Sr 421.552†	71686.1	71656.5	495.79 ug/L	495.79 ppb	18:18:08
3	Sc 361.383	846314.1	846314.1	96.476 %		18:19:37
3	Y 371.029	702011.8	702011.8	92.878 %		18:19:37
3	Ag 328.068†	109395.2	113151.1	527.40 ug/L	527.40 ppb	18:19:42
3	As 188.979†	1108.4	1167.2	525.67 ug/L	525.67 ppb	18:20:02
3	B 249.677†	20208.9	21345.4	515.18 ug/L	515.18 ppb	18:19:42
3	Ba 233.527†	65352.4	67741.2	532.89 ug/L	532.89 ppb	18:19:42
3	Be 313.107†	1345878.2	1398807.2	526.86 ug/L	526.86 ppb	18:19:37
3	Cd 226.502†	44497.7	46319.5	536.30 ug/L	536.30 ppb	18:19:42
3	Co 228.616†	24653.6	25620.7	536.77 ug/L	536.77 ppb	18:19:42
3	Cr 267.716†	45547.9	47134.2	530.13 ug/L	530.13 ppb	18:19:42
3	Cu 324.752†	171682.2	171963.2	523.28 ug/L	523.28 ppb	18:19:42
3	Mn 257.610†	450107.7	466092.0	530.67 ug/L	530.67 ppb	18:19:37
3	Mo 202.031†	6810.2	7048.8	517.95 ug/L	517.95 ppb	18:20:02
3	Ni 231.604†	20259.6	20937.3	532.17 ug/L	532.17 ppb	18:19:42
3	P 214.914†	4432.7	4384.2	2537.4 ug/L	2537.4 ppb	18:20:02
3	Pb 220.353†	4035.0	4240.5	523.10 ug/L	523.10 ppb	18:20:02
3	S 181.975 Axial†	743.7	730.1	1049.7 ug/L	1049.7 ppb	18:20:02
3	Sb 206.836†	1459.4	1476.1	534.65 ug/L	534.65 ppb	18:20:02
3	Se 196.026†	761.1	816.7	552.12 ug/L	552.12 ppb	18:20:02
3	Si 251.611†	79523.7	81870.5	2642.9 ug/L	2642.9 ppb	18:19:42
3	Sn 189.927†	2812.6	2904.9	521.84 ug/L	521.84 ppb	18:20:02
3	Ti 334.940†	321086.3	334190.1	525.00 ug/L	525.00 ppb	18:19:42
3	Tl 190.801†	1537.0	1625.8	523.35 ug/L	523.35 ppb	18:20:02
3	U 409.014†	15003.5	18438.2	507.40 ug/L	507.40 ppb	18:19:42
3	V 292.402†	71004.7	75104.3	530.61 ug/L	530.61 ppb	18:19:42
3	Zn 213.857†	51669.4	52950.9	528.18 ug/L	528.18 ppb	18:19:42
3	SiO2†	78130.5	80430.3	5575.5 ug/L	5575.5 ppb	18:20:18

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	883697.4	100.74 %	3.695			3.67%
Sc Radial	3944.1	101 %	1.4			1.39%
Y 371.029	732627.2	96.928 %	3.5128			3.62%
Y RADIAL	4339.5	98.38 %	1.753			1.78%
Ag 328.068†	108355.4	505.09 ug/L	20.129	505.09 ppb	20.129	3.99%
QC value within limits for Ag 328.068 Recovery = 101.02%						
Al 396.153Radial†	5277.6	4925.6 ug/L	71.12	4925.6 ppb	71.12	1.44%
QC value within limits for Al 396.153Radial Recovery = 98.51%						
As 188.979†	1123.5	506.04 ug/L	17.020	506.04 ppb	17.020	3.36%
QC value within limits for As 188.979 Recovery = 101.21%						
B 249.677†	20410.3	492.57 ug/L	20.530	492.57 ppb	20.530	4.17%
QC value within limits for B 249.677 Recovery = 98.51%						
Ba 233.527†	64841.4	510.09 ug/L	20.659	510.09 ppb	20.659	4.05%
QC value within limits for Ba 233.527 Recovery = 102.02%						
Be 313.107†	1338602.1	504.18 ug/L	19.742	504.18 ppb	19.742	3.92%
QC value within limits for Be 313.107 Recovery = 100.84%						
Ca 317.933Radial†	2428.0	5075.7 ug/L	91.34	5075.7 ppb	91.34	1.80%

QC value within limits for Ca 317.933 Radial Recovery = 101.51%							
Cd 226.502†	44412.5	514.20 ug/L	20.202	514.20 ppb	20.202	3.93%	
QC value within limits for Cd 226.502 Recovery = 102.84%							
Co 228.616†	24550.3	514.34 ug/L	20.402	514.34 ppb	20.402	3.97%	
QC value within limits for Co 228.616 Recovery = 102.87%							
Cr 267.716†	45133.2	507.64 ug/L	20.798	507.64 ppb	20.798	4.10%	
QC value within limits for Cr 267.716 Recovery = 101.53%							
Cu 324.752†	164373.0	500.19 ug/L	21.222	500.19 ppb	21.222	4.24%	
QC value within limits for Cu 324.752 Recovery = 100.04%							
Fe 238.204 Radial†	350.3	4960.2 ug/L	71.22	4960.2 ppb	71.22	1.44%	
QC value within limits for Fe 238.204 Radial Recovery = 99.20%							
K 766.490 Radial†	25724.2	4930.0 ug/L	39.73	4930.0 ppb	39.73	0.81%	
QC value within limits for K 766.490 Radial Recovery = 98.60%							
Mg 279.077 IEC†	104.6	5071.0 ug/L	80.01	5071.0 ppb	80.01	1.58%	
QC value within limits for Mg 279.077 IEC Recovery = 101.42%							
Mn 257.610†	446632.4	508.52 ug/L	19.311	508.52 ppb	19.311	3.80%	
QC value within limits for Mn 257.610 Recovery = 101.70%							
Mo 202.031†	6771.6	497.60 ug/L	17.639	497.60 ppb	17.639	3.54%	
QC value within limits for Mo 202.031 Recovery = 99.52%							
Na 589.592 Radial†	33076.6	10198 ug/L	54.5	10198 ppb	54.5	0.53%	
QC value within limits for Na 589.592 Radial Recovery = 101.98%							
Ni 231.604†	20138.0	511.86 ug/L	18.987	511.86 ppb	18.987	3.71%	
QC value within limits for Ni 231.604 Recovery = 102.37%							
P 214.914†	4205.0	2434.0 ug/L	89.69	2434.0 ppb	89.69	3.69%	
QC value within limits for P 214.914 Recovery = 97.36%							
Pb 220.353†	4096.4	505.32 ug/L	15.456	505.32 ppb	15.456	3.06%	
QC value within limits for Pb 220.353 Recovery = 101.06%							
S 181.975 Axial†	702.7	1010.2 ug/L	34.33	1010.2 ppb	34.33	3.40%	
QC value within limits for S 181.975 Axial Recovery = 101.02%							
Sb 206.836†	1429.0	517.49 ug/L	15.305	517.49 ppb	15.305	2.96%	
QC value within limits for Sb 206.836 Recovery = 103.50%							
Se 196.026†	769.9	521.27 ug/L	26.782	521.27 ppb	26.782	5.14%	
QC value within limits for Se 196.026 Recovery = 104.25%							
Si 251.611†	78325.5	2528.4 ug/L	104.53	2528.4 ppb	104.53	4.13%	
QC value within limits for Si 251.611 Recovery = 101.14%							
Sn 189.927†	2801.7	503.31 ug/L	16.109	503.31 ppb	16.109	3.20%	
QC value within limits for Sn 189.927 Recovery = 100.66%							
Sr 421.552†	70965.3	491.01 ug/L	4.705	491.01 ppb	4.705	0.96%	
QC value within limits for Sr 421.552 Recovery = 98.20%							
Ti 334.940†	320079.7	502.84 ug/L	20.354	502.84 ppb	20.354	4.05%	
QC value within limits for Ti 334.940 Recovery = 100.57%							
Tl 190.801†	1574.5	506.80 ug/L	14.362	506.80 ppb	14.362	2.83%	
QC value within limits for Tl 190.801 Recovery = 101.36%							
U 409.014†	17761.5	488.77 ug/L	18.354	488.77 ppb	18.354	3.76%	
QC value within limits for U 409.014 Recovery = 97.75%							
V 292.402†	71969.2	508.46 ug/L	20.310	508.46 ppb	20.310	3.99%	
QC value within limits for V 292.402 Recovery = 101.69%							
Zn 213.857†	50730.4	505.99 ug/L	20.319	505.99 ppb	20.319	4.02%	
QC value within limits for Zn 213.857 Recovery = 101.20%							
SiO2†	77326.1	5360.3 ug/L	186.56	5360.3 ppb	186.56	3.48%	
QC value within limits for SiO2 Recovery = 100.24%							
All analyte(s) passed QC.							

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/24/2010 18:22:27  
 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	3866.6	3866.6	98.7 %		18:24:39
1	Y RADIAL	4306.0	4306.0	97.62 %		18:24:19
1	Al 396.153Radial†	-103.1	7.9	7.4068 ug/L	7.4068 ppb	18:24:19
1	Ca 317.933Radial†	20.5	1.1	2.3703 ug/L	2.3703 ppb	18:24:39
1	Fe 238.204 Radial†	10.7	-0.5	-7.4116 ug/L	-7.4116 ppb	18:24:39
1	K 766.490 Radial†	2776.0	173.9	33.366 ug/L	33.366 ppb	18:24:19
1	Mg 279.077 IEC†	5.0	1.0	46.301 ug/L	46.301 ppb	18:24:39
1	Na 589.592 Radial†	-775.2	34.1	10.522 ug/L	10.522 ppb	18:24:19
1	Sr 421.552†	40.9	5.7	0.0395 ug/L	0.0395 ppb	18:24:19
1	Sc 361.383	912740.2	912740.2	104.05 %		18:25:36
1	Y 371.029	767528.5	767528.5	101.55 %		18:25:36
1	Ag 328.068†	335.8	82.4	0.3785 ug/L	0.3785 ppb	18:25:41
1	As 188.979†	-24.0	-4.8	-2.1542 ug/L	-2.1542 ppb	18:26:01
1	B 249.677†	-471.9	-55.3	-1.3401 ug/L	-1.3401 ppb	18:26:01
1	Ba 233.527†	14.2	15.1	0.1196 ug/L	0.1196 ppb	18:26:01
1	Be 313.107†	-3792.0	117.7	0.0441 ug/L	0.0441 ppb	18:25:41
1	Cd 226.502†	-190.6	13.1	0.1534 ug/L	0.1534 ppb	18:26:01
1	Co 228.616†	-66.4	2.8	0.0579 ug/L	0.0579 ppb	18:26:01
1	Cr 267.716†	90.0	8.8	0.0970 ug/L	0.0970 ppb	18:26:01
1	Cu 324.752†	5923.7	-297.6	-0.9081 ug/L	-0.9081 ppb	18:25:41
1	Mn 257.610†	447.8	-28.3	-0.0349 ug/L	-0.0349 ppb	18:26:01
1	Mo 202.031†	9.8	-0.8	-0.0570 ug/L	-0.0570 ppb	18:26:01
1	Ni 231.604†	73.3	8.0	0.2045 ug/L	0.2045 ppb	18:26:01
1	P 214.914†	214.0	-4.8	-2.6866 ug/L	-2.6866 ppb	18:26:01
1	Pb 220.353†	-57.5	2.9	0.3576 ug/L	0.3576 ppb	18:26:01
1	S 181.975 Axial†	44.9	2.3	3.3471 ug/L	3.3471 ppb	18:26:01
1	Sb 206.836†	41.6	3.3	1.1617 ug/L	1.1617 ppb	18:26:01
1	Se 196.026†	-21.8	6.8	4.4580 ug/L	4.4580 ppb	18:26:01
1	Si 251.611†	580.6	-0.3	-0.0085 ug/L	-0.0085 ppb	18:26:01
1	Sn 189.927†	20.0	8.8	1.5755 ug/L	1.5755 ppb	18:26:01
1	Ti 334.940†	-1479.5	-47.9	-0.0805 ug/L	-0.0805 ppb	18:25:41
1	Tl 190.801†	-44.9	-10.6	-3.3780 ug/L	-3.3780 ppb	18:26:01
1	U 409.014†	-2857.0	140.7	3.8867 ug/L	3.8867 ppb	18:25:36
1	V 292.402†	-1477.5	85.7	0.6062 ug/L	0.6062 ppb	18:25:41
1	Zn 213.857†	807.9	170.4	1.7163 ug/L	1.7163 ppb	18:26:01
1	SiO2†	570.9	-5.7	-0.3975 ug/L	-0.3975 ppb	18:27:07
2	Sc Radial	3849.9	3849.9	98.2 %		18:25:04
2	Y RADIAL	4397.0	4397.0	99.69 %		18:24:44
2	Al 396.153Radial†	-115.7	-5.3	-4.9982 ug/L	-4.9982 ppb	18:24:44
2	Ca 317.933Radial†	18.8	-0.5	-1.0274 ug/L	-1.0274 ppb	18:25:04
2	Fe 238.204 Radial†	13.8	2.8	38.959 ug/L	38.959 ppb	18:25:04
2	K 766.490 Radial†	2723.9	133.1	25.535 ug/L	25.535 ppb	18:24:44
2	Mg 279.077 IEC†	2.3	-1.8	-86.396 ug/L	-86.396 ppb	18:25:04
2	Na 589.592 Radial†	-799.8	5.7	1.7573 ug/L	1.7573 ppb	18:24:44
2	Sr 421.552†	28.9	-6.3	-0.0437 ug/L	-0.0437 ppb	18:24:44
2	Sc 361.383	908778.7	908778.7	103.60 %		18:26:06
2	Y 371.029	764914.1	764914.1	101.20 %		18:26:06
2	Ag 328.068†	373.1	119.8	0.5667 ug/L	0.5667 ppb	18:26:11
2	As 188.979†	-21.9	-2.9	-1.2848 ug/L	-1.2848 ppb	18:26:31
2	B 249.677†	-473.4	-58.7	-1.4304 ug/L	-1.4304 ppb	18:26:31
2	Ba 233.527†	-5.9	-4.3	-0.0320 ug/L	-0.0320 ppb	18:26:31
2	Be 313.107†	-3831.2	64.0	0.0237 ug/L	0.0237 ppb	18:26:11
2	Cd 226.502†	-183.1	19.5	0.2218 ug/L	0.2218 ppb	18:26:31
2	Co 228.616†	-64.1	4.7	0.0974 ug/L	0.0974 ppb	18:26:31
2	Cr 267.716†	55.3	-24.3	-0.2698 ug/L	-0.2698 ppb	18:26:31
2	Cu 324.752†	5966.5	-231.4	-0.7029 ug/L	-0.7029 ppb	18:26:11
2	Mn 257.610†	487.0	11.4	0.0203 ug/L	0.0203 ppb	18:26:31
2	Mo 202.031†	11.3	0.8	0.0601 ug/L	0.0601 ppb	18:26:31
2	Ni 231.604†	58.6	-5.9	-0.1502 ug/L	-0.1502 ppb	18:26:31

2	P 214.914†	216.0	-2.0	-1.0630 ug/L	-1.0630 ppb	18:26:31
2	Pb 220.353†	-64.2	-3.9	-0.4845 ug/L	-0.4845 ppb	18:26:31
2	S 181.975 Axial†	43.5	1.2	1.6986 ug/L	1.6986 ppb	18:26:31
2	Sb 206.836†	44.3	6.1	2.1669 ug/L	2.1669 ppb	18:26:31
2	Se 196.026†	-23.9	4.7	3.2101 ug/L	3.2101 ppb	18:26:31
2	Si 251.611†	551.1	-26.3	-0.8519 ug/L	-0.8519 ppb	18:26:31
2	Sn 189.927†	28.0	16.5	2.9653 ug/L	2.9653 ppb	18:26:31
2	Ti 334.940†	-1516.2	-89.5	-0.1343 ug/L	-0.1343 ppb	18:26:11
2	Tl 190.801†	-34.2	-0.5	-0.1567 ug/L	-0.1567 ppb	18:26:31
2	U 409.014†	-2936.3	52.3	1.4398 ug/L	1.4398 ppb	18:26:06
2	V 292.402†	-1524.4	34.2	0.2346 ug/L	0.2346 ppb	18:26:11
2	Zn 213.857†	830.3	195.5	1.9639 ug/L	1.9639 ppb	18:26:31
2	SiO2†	591.7	16.8	1.1651 ug/L	1.1651 ppb	18:27:12
3	Sc Radial	3831.7	3831.7	97.8 %		18:25:29
3	Y RADIAL	4372.3	4372.3	99.13 %		18:25:09
3	Al 396.153Radial†	-141.4	-32.2	-30.227 ug/L	-30.227 ppb	18:25:09
3	Ca 317.933Radial†	17.5	-1.8	-3.6608 ug/L	-3.6608 ppb	18:25:29
3	Fe 238.204 Radial†	11.1	-0.0	-0.1367 ug/L	-0.1367 ppb	18:25:29
3	K 766.490 Radial†	2801.4	225.5	43.271 ug/L	43.271 ppb	18:25:09
3	Mg 279.077 IEC†	1.3	-2.7	-132.68 ug/L	-132.68 ppb	18:25:29
3	Na 589.592 Radial†	-762.7	39.7	12.251 ug/L	12.251 ppb	18:25:09
3	Sr 421.552†	56.8	22.3	0.1546 ug/L	0.1546 ppb	18:25:09
3	Sc 361.383	905741.5	905741.5	103.25 %		18:26:36
3	Y 371.029	763648.4	763648.4	101.03 %		18:26:36
3	Ag 328.068†	313.9	63.6	0.2958 ug/L	0.2958 ppb	18:26:42
3	As 188.979†	-25.0	-6.0	-2.6860 ug/L	-2.6860 ppb	18:27:02
3	B 249.677†	-475.0	-61.9	-1.4997 ug/L	-1.4997 ppb	18:27:02
3	Ba 233.527†	-0.8	0.6	0.0058 ug/L	0.0058 ppb	18:27:02
3	Be 313.107†	-3892.6	-7.9	-0.0032 ug/L	-0.0032 ppb	18:26:42
3	Cd 226.502†	-205.0	-2.3	-0.0271 ug/L	-0.0271 ppb	18:27:02
3	Co 228.616†	-66.7	1.9	0.0418 ug/L	0.0418 ppb	18:27:02
3	Cr 267.716†	69.5	-10.4	-0.1160 ug/L	-0.1160 ppb	18:27:02
3	Cu 324.752†	6023.7	-156.7	-0.4770 ug/L	-0.4770 ppb	18:26:42
3	Mn 257.610†	481.4	7.5	0.0140 ug/L	0.0140 ppb	18:27:02
3	Mo 202.031†	16.3	5.6	0.4113 ug/L	0.4113 ppb	18:27:02
3	Ni 231.604†	44.0	-19.8	-0.5034 ug/L	-0.5034 ppb	18:27:02
3	P 214.914†	217.1	-0.3	-0.0499 ug/L	-0.0499 ppb	18:27:02
3	Pb 220.353†	-56.9	3.0	0.3693 ug/L	0.3693 ppb	18:27:02
3	S 181.975 Axial†	51.3	8.8	12.722 ug/L	12.722 ppb	18:27:02
3	Sb 206.836†	43.9	5.8	2.0753 ug/L	2.0753 ppb	18:27:02
3	Se 196.026†	-33.1	-4.4	-2.8544 ug/L	-2.8544 ppb	18:27:02
3	Si 251.611†	571.6	-4.8	-0.1588 ug/L	-0.1588 ppb	18:27:02
3	Sn 189.927†	22.2	11.0	1.9694 ug/L	1.9694 ppb	18:27:02
3	Ti 334.940†	-1476.5	-56.0	-0.0778 ug/L	-0.0778 ppb	18:26:42
3	Tl 190.801†	-24.4	8.9	2.8458 ug/L	2.8458 ppb	18:27:02
3	U 409.014†	-2961.9	17.9	0.4958 ug/L	0.4958 ppb	18:26:36
3	V 292.402†	-1501.5	51.4	0.3628 ug/L	0.3628 ppb	18:26:42
3	Zn 213.857†	832.3	200.0	2.0176 ug/L	2.0176 ppb	18:27:02
3	SiO2†	603.2	29.8	2.0593 ug/L	2.0593 ppb	18:27:17

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909086.8	103.63 %		0.400			0.39%
Sc Radial	3849.4	98.2 %		0.45			0.45%
Y 371.029	765363.7	101.26 %		0.262			0.26%
Y RADIAL	4358.4	98.81 %		1.068			1.08%
Ag 328.068†	88.6	0.4137 ug/L		0.13885	0.4137 ppb	0.13885	33.56%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-9.9	-9.2730 ug/L		19.17786	-9.2730 ppb	19.17786	206.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.6	-2.0417 ug/L		0.70734	-2.0417 ppb	0.70734	34.65%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-58.6	-1.4234 ug/L		0.08000	-1.4234 ppb	0.08000	5.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	3.8	0.0311 ug/L		0.07889	0.0311 ppb	0.07889	253.40%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	57.9	0.0215 ug/L		0.02369	0.0215 ppb	0.02369	109.93%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.4	-0.7726 ug/L		3.02359	-0.7726 ppb	3.02359	391.34%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	10.1	0.1160 ug/L	0.12856	0.1160 ppb	0.12856 110.79%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	3.1	0.0657 ug/L	0.02863	0.0657 ppb	0.02863 43.56%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-8.6	-0.0963 ug/L	0.18422	-0.0963 ppb	0.18422 191.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-228.5	-0.6960 ug/L	0.21563	-0.6960 ppb	0.21563 30.98%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	0.7	10.470 ug/L	24.9388	10.470 ppb	24.9388 238.19%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	177.5	34.057 ug/L	8.8879	34.057 ppb	8.8879 26.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	-1.2	-57.593 ug/L	92.9040	-57.593 ppb	92.9040 161.31%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	-3.2	-0.0002 ug/L	0.03019	-0.0002 ppb	0.03019 >999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	1.9	0.1382 ug/L	0.24371	0.1382 ppb	0.24371 176.40%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	26.5	8.1769 ug/L	5.62635	8.1769 ppb	5.62635 68.81%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-5.9	-0.1497 ug/L	0.35396	-0.1497 ppb	0.35396 236.47%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-2.3	-1.2665 ug/L	1.33007	-1.2665 ppb	1.33007 105.02%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	0.7	0.0808 ug/L	0.48960	0.0808 ppb	0.48960 605.75%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	4.1	5.9226 ug/L	5.94605	5.9226 ppb	5.94605 100.40%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	5.0	1.8013 ug/L	0.55582	1.8013 ppb	0.55582 30.86%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	2.4	1.6046 ug/L	3.91166	1.6046 ppb	3.91166 243.78%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	-10.4	-0.3397 ug/L	0.44983	-0.3397 ppb	0.44983 132.40%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	12.1	2.1700 ug/L	0.71630	2.1700 ppb	0.71630 33.01%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	7.2	0.0501 ug/L	0.09956	0.0501 ppb	0.09956 198.56%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	-64.5	-0.0975 ug/L	0.03188	-0.0975 ppb	0.03188 32.68%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-0.7	-0.2296 ug/L	3.11254	-0.2296 ppb	3.11254 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	70.3	1.9408 ug/L	1.75006	1.9408 ppb	1.75006 90.17%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	57.1	0.4012 ug/L	0.18874	0.4012 ppb	0.18874 47.05%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	188.6	1.8993 ug/L	0.16069	1.8993 ppb	0.16069 8.46%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		13.6	0.9423 ug/L	1.24345	0.9423 ppb	1.24345 131.96%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 19:39:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4022.1	4022.1	103 %		19:41:01
1	Y RADIAL	4407.0	4407.0	99.91 %		19:41:01
1	Al 396.153Radial†	5328.8	5304.4	4951.0 ug/L	4951.0 ppb	19:41:01
1	Ca 317.933Radial†	2477.1	2393.8	5004.3 ug/L	5004.3 ppb	19:41:21
1	Fe 238.204 Radial†	365.4	344.7	4880.4 ug/L	4880.4 ppb	19:41:21
1	K 766.490 Radial†	29126.9	25739.4	4933.1 ug/L	4933.1 ppb	19:41:01
1	Mg 279.077 IEC†	109.6	102.7	4980.0 ug/L	4980.0 ppb	19:41:21
1	Na 589.592 Radial†	32398.5	32386.4	9985.6 ug/L	9985.6 ppb	19:41:01
1	Sr 421.552†	72276.7	70385.2	487.00 ug/L	487.00 ppb	19:41:01
1	Sc 361.383	901596.9	901596.9	102.78 %		19:42:18
1	Y 371.029	748196.3	748196.3	98.988 %		19:42:18
1	Ag 328.068†	108458.1	105286.6	490.80 ug/L	490.80 ppb	19:42:24
1	As 188.979†	1117.3	1105.3	497.78 ug/L	497.78 ppb	19:42:44
1	B 249.677†	19931.8	19791.3	477.62 ug/L	477.62 ppb	19:42:24
1	Ba 233.527†	64643.9	62898.3	494.81 ug/L	494.81 ppb	19:42:24
1	Be 313.107†	1346231.1	1313611.4	494.76 ug/L	494.76 ppb	19:42:18
1	Cd 226.502†	44054.0	43059.7	498.53 ug/L	498.53 ppb	19:42:24
1	Co 228.616†	24420.4	23827.0	499.21 ug/L	499.21 ppb	19:42:24
1	Cr 267.716†	45041.5	43746.6	492.06 ug/L	492.06 ppb	19:42:24
1	Cu 324.752†	169860.7	159279.5	484.69 ug/L	484.69 ppb	19:42:24
1	Mn 257.610†	450768.3	438127.5	498.84 ug/L	498.84 ppb	19:42:18
1	Mo 202.031†	6885.2	6689.0	491.52 ug/L	491.52 ppb	19:42:44
1	Ni 231.604†	20223.6	19614.6	498.56 ug/L	498.56 ppb	19:42:24
1	P 214.914†	4491.3	4159.4	2409.6 ug/L	2409.6 ppb	19:42:44
1	Pb 220.353†	4102.2	4049.4	499.55 ug/L	499.55 ppb	19:42:44
1	S 181.975 Axial†	756.7	695.4	999.79 ug/L	999.79 ppb	19:42:44
1	Sb 206.836†	1476.5	1399.9	507.06 ug/L	507.06 ppb	19:42:44
1	Se 196.026†	759.7	766.9	519.04 ug/L	519.04 ppb	19:42:44
1	Si 251.611†	78554.5	75873.3	2449.1 ug/L	2449.1 ppb	19:42:24
1	Sn 189.927†	2837.2	2750.1	494.04 ug/L	494.04 ppb	19:42:44
1	Ti 334.940†	317840.6	310625.0	487.99 ug/L	487.99 ppb	19:42:24
1	Tl 190.801†	1561.3	1551.7	499.45 ug/L	499.45 ppb	19:42:44
1	U 409.014†	14712.4	17201.4	473.34 ug/L	473.34 ppb	19:42:24
1	V 292.402†	70268.0	69874.7	493.77 ug/L	493.77 ppb	19:42:24
1	Zn 213.857†	51139.7	49151.6	490.22 ug/L	490.22 ppb	19:42:24
1	SiO2†	79027.1	76337.0	5291.7 ug/L	5291.7 ppb	19:43:51
2	Sc Radial	4019.7	4019.7	103 %		19:41:26
2	Y RADIAL	4423.9	4423.9	100.3 %		19:41:26
2	Al 396.153Radial†	5264.8	5245.1	4895.6 ug/L	4895.6 ppb	19:41:26
2	Ca 317.933Radial†	2470.9	2389.3	4994.8 ug/L	4994.8 ppb	19:41:46
2	Fe 238.204 Radial†	361.0	340.7	4823.2 ug/L	4823.2 ppb	19:41:46
2	K 766.490 Radial†	28982.2	25615.5	4909.4 ug/L	4909.4 ppb	19:41:26
2	Mg 279.077 IEC†	108.8	102.0	4944.4 ug/L	4944.4 ppb	19:41:46
2	Na 589.592 Radial†	31761.6	31784.5	9800.0 ug/L	9800.0 ppb	19:41:26
2	Sr 421.552†	70977.5	69160.9	478.53 ug/L	478.53 ppb	19:41:26
2	Sc 361.383	912302.5	912302.5	104.00 %		19:42:49
2	Y 371.029	757281.3	757281.3	100.19 %		19:42:49
2	Ag 328.068†	107959.2	103568.5	482.81 ug/L	482.81 ppb	19:42:55
2	As 188.979†	1114.0	1089.5	490.61 ug/L	490.61 ppb	19:43:15
2	B 249.677†	19809.4	19446.1	469.29 ug/L	469.29 ppb	19:42:55
2	Ba 233.527†	64444.9	61968.9	487.50 ug/L	487.50 ppb	19:42:55
2	Be 313.107†	1344485.9	1296562.4	488.33 ug/L	488.33 ppb	19:42:49
2	Cd 226.502†	43930.4	42437.8	491.33 ug/L	491.33 ppb	19:42:55
2	Co 228.616†	24252.6	23386.8	490.00 ug/L	490.00 ppb	19:42:55
2	Cr 267.716†	44948.8	43143.2	485.27 ug/L	485.27 ppb	19:42:55
2	Cu 324.752†	169034.2	156545.3	476.38 ug/L	476.38 ppb	19:42:55
2	Mn 257.610†	449773.9	432024.6	491.89 ug/L	491.89 ppb	19:42:49
2	Mo 202.031†	6903.2	6627.7	487.02 ug/L	487.02 ppb	19:43:15
2	Ni 231.604†	20115.1	19279.3	490.04 ug/L	490.04 ppb	19:42:55

2	P 214.914†	4506.7	4123.0	2389.4 ug/L	2389.4 ppb	19:43:15
2	Pb 220.353†	4108.2	4008.4	494.49 ug/L	494.49 ppb	19:43:15
2	S 181.975 Axial†	755.3	685.5	985.53 ug/L	985.53 ppb	19:43:15
2	Sb 206.836†	1485.4	1391.6	504.04 ug/L	504.04 ppb	19:43:15
2	Se 196.026†	766.0	764.3	517.17 ug/L	517.17 ppb	19:43:15
2	Si 251.611†	78286.8	74718.9	2411.8 ug/L	2411.8 ppb	19:42:55
2	Sn 189.927†	2862.2	2741.7	492.54 ug/L	492.54 ppb	19:43:15
2	Ti 334.940†	316161.6	305381.5	479.76 ug/L	479.76 ppb	19:42:55
2	Tl 190.801†	1559.9	1532.5	493.26 ug/L	493.26 ppb	19:43:15
2	U 409.014†	14517.3	16845.8	463.55 ug/L	463.55 ppb	19:42:55
2	V 292.402†	70052.2	68864.9	486.66 ug/L	486.66 ppb	19:42:55
2	Zn 213.857†	51008.2	48441.2	483.14 ug/L	483.14 ppb	19:42:55
2	SiO2†	79371.5	75765.9	5252.1 ug/L	5252.1 ppb	19:43:56
3	Sc Radial	3895.9	3895.9	99.4 %		19:41:51
3	Y RADIAL	4289.0	4289.0	97.24 %		19:41:51
3	Al 396.153Radial†	5216.5	5359.6	5003.0 ug/L	5003.0 ppb	19:41:51
3	Ca 317.933Radial†	2474.7	2469.6	5162.7 ug/L	5162.7 ppb	19:42:11
3	Fe 238.204 Radial†	359.6	350.4	4960.8 ug/L	4960.8 ppb	19:42:11
3	K 766.490 Radial†	28817.2	26347.1	5049.6 ug/L	5049.6 ppb	19:41:51
3	Mg 279.077 IEC†	106.5	103.0	4995.5 ug/L	4995.5 ppb	19:42:11
3	Na 589.592 Radial†	32020.1	33028.3	10184 ug/L	10184 ppb	19:41:51
3	Sr 421.552†	71150.6	71533.5	494.94 ug/L	494.94 ppb	19:41:51
3	Sc 361.383	903666.2	903666.2	103.01 %		19:43:20
3	Y 371.029	749820.8	749820.8	99.203 %		19:43:20
3	Ag 328.068†	109605.0	106158.3	494.88 ug/L	494.88 ppb	19:43:26
3	As 188.979†	1116.5	1102.1	496.38 ug/L	496.38 ppb	19:43:46
3	B 249.677†	20272.1	20077.3	484.54 ug/L	484.54 ppb	19:43:26
3	Ba 233.527†	65320.9	63411.5	498.85 ug/L	498.85 ppb	19:43:26
3	Be 313.107†	1347492.1	1311835.9	494.10 ug/L	494.10 ppb	19:43:20
3	Cd 226.502†	44676.7	43566.0	504.39 ug/L	504.39 ppb	19:43:26
3	Co 228.616†	24633.8	23979.7	502.39 ug/L	502.39 ppb	19:43:26
3	Cr 267.716†	45624.4	44212.1	497.29 ug/L	497.29 ppb	19:43:26
3	Cu 324.752†	171509.2	160501.3	488.41 ug/L	488.41 ppb	19:43:26
3	Mn 257.610†	450845.0	437197.6	497.79 ug/L	497.79 ppb	19:43:20
3	Mo 202.031†	6836.4	6626.3	486.93 ug/L	486.93 ppb	19:43:46
3	Ni 231.604†	20434.7	19774.5	502.62 ug/L	502.62 ppb	19:43:26
3	P 214.914†	4440.0	4099.6	2372.8 ug/L	2372.8 ppb	19:43:46
3	Pb 220.353†	4067.2	4006.4	494.25 ug/L	494.25 ppb	19:43:46
3	S 181.975 Axial†	746.5	683.9	983.21 ug/L	983.21 ppb	19:43:46
3	Sb 206.836†	1468.0	1388.4	502.92 ug/L	502.92 ppb	19:43:46
3	Se 196.026†	735.6	741.8	502.87 ug/L	502.87 ppb	19:43:46
3	Si 251.611†	79512.4	76628.1	2473.6 ug/L	2473.6 ppb	19:43:26
3	Sn 189.927†	2839.6	2746.0	493.34 ug/L	493.34 ppb	19:43:46
3	Ti 334.940†	320934.7	312920.5	491.62 ug/L	491.62 ppb	19:43:26
3	Tl 190.801†	1560.9	1547.8	498.19 ug/L	498.19 ppb	19:43:46
3	U 409.014†	14949.1	17398.4	478.76 ug/L	478.76 ppb	19:43:26
3	V 292.402†	71043.9	70471.3	497.86 ug/L	497.86 ppb	19:43:26
3	Zn 213.857†	51746.7	49626.9	494.96 ug/L	494.96 ppb	19:43:26
3	SiO2†	78594.9	75741.3	5250.4 ug/L	5250.4 ppb	19:44:01

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905855.2	103.26 %	0.647			0.63%
Sc Radial	3979.2	102 %	1.8			1.81%
Y 371.029	751766.1	99.460 %	0.6410			0.64%
Y RADIAL	4373.3	99.15 %	1.666			1.68%
Ag 328.068†	105004.5	489.50 ug/L	6.141	489.50 ppb	6.141	1.25%
QC value within limits for Ag 328.068 Recovery = 97.90%						
Al 396.153Radial†	5303.0	4949.9 ug/L	53.70	4949.9 ppb	53.70	1.08%
QC value within limits for Al 396.153Radial Recovery = 99.00%						
As 188.979†	1099.0	494.93 ug/L	3.798	494.93 ppb	3.798	0.77%
QC value within limits for As 188.979 Recovery = 98.99%						
B 249.677†	19771.6	477.15 ug/L	7.634	477.15 ppb	7.634	1.60%
QC value within limits for B 249.677 Recovery = 95.43%						
Ba 233.527†	62759.6	493.72 ug/L	5.753	493.72 ppb	5.753	1.17%
QC value within limits for Ba 233.527 Recovery = 98.74%						
Be 313.107†	1307336.6	492.40 ug/L	3.535	492.40 ppb	3.535	0.72%
QC value within limits for Be 313.107 Recovery = 98.48%						
Ca 317.933Radial†	2417.6	5053.9 ug/L	94.33	5053.9 ppb	94.33	1.87%

QC value within limits for Ca 317.933 Radial Recovery = 101.08%							
Cd	226.502†	43021.2	498.09 ug/L	6.542	498.09 ppb	6.542	1.31%
QC value within limits for Cd 226.502 Recovery = 99.62%							
Co	228.616†	23731.2	497.20 ug/L	6.437	497.20 ppb	6.437	1.29%
QC value within limits for Co 228.616 Recovery = 99.44%							
Cr	267.716†	43700.6	491.54 ug/L	6.028	491.54 ppb	6.028	1.23%
QC value within limits for Cr 267.716 Recovery = 98.31%							
Cu	324.752†	158775.3	483.16 ug/L	6.163	483.16 ppb	6.163	1.28%
QC value within limits for Cu 324.752 Recovery = 96.63%							
Fe	238.204 Radial†	345.2	4888.1 ug/L	69.14	4888.1 ppb	69.14	1.41%
QC value within limits for Fe 238.204 Radial Recovery = 97.76%							
K	766.490 Radial†	25900.7	4964.0 ug/L	75.04	4964.0 ppb	75.04	1.51%
QC value within limits for K 766.490 Radial Recovery = 99.28%							
Mg	279.077 IEC†	102.6	4973.3 ug/L	26.21	4973.3 ppb	26.21	0.53%
QC value within limits for Mg 279.077 IEC Recovery = 99.47%							
Mn	257.610†	435783.3	496.17 ug/L	3.746	496.17 ppb	3.746	0.75%
QC value within limits for Mn 257.610 Recovery = 99.23%							
Mo	202.031†	6647.7	488.49 ug/L	2.629	488.49 ppb	2.629	0.54%
QC value within limits for Mo 202.031 Recovery = 97.70%							
Na	589.592 Radial†	32399.7	9989.7 ug/L	191.78	9989.7 ppb	191.78	1.92%
QC value within limits for Na 589.592 Radial Recovery = 99.90%							
Ni	231.604†	19556.1	497.07 ug/L	6.423	497.07 ppb	6.423	1.29%
QC value within limits for Ni 231.604 Recovery = 99.41%							
P	214.914†	4127.3	2390.6 ug/L	18.45	2390.6 ppb	18.45	0.77%
QC value within limits for P 214.914 Recovery = 95.62%							
Pb	220.353†	4021.4	496.10 ug/L	2.995	496.10 ppb	2.995	0.60%
QC value within limits for Pb 220.353 Recovery = 99.22%							
S	181.975 Axial†	688.3	989.51 ug/L	8.982	989.51 ppb	8.982	0.91%
QC value within limits for S 181.975 Axial Recovery = 98.95%							
Sb	206.836†	1393.3	504.67 ug/L	2.141	504.67 ppb	2.141	0.42%
QC value within limits for Sb 206.836 Recovery = 100.93%							
Se	196.026†	757.7	513.03 ug/L	8.844	513.03 ppb	8.844	1.72%
QC value within limits for Se 196.026 Recovery = 102.61%							
Si	251.611†	75740.1	2444.8 ug/L	31.11	2444.8 ppb	31.11	1.27%
QC value within limits for Si 251.611 Recovery = 97.79%							
Sn	189.927†	2745.9	493.31 ug/L	0.751	493.31 ppb	0.751	0.15%
QC value within limits for Sn 189.927 Recovery = 98.66%							
Sr	421.552†	70359.9	486.82 ug/L	8.209	486.82 ppb	8.209	1.69%
QC value within limits for Sr 421.552 Recovery = 97.36%							
Ti	334.940†	309642.3	486.46 ug/L	6.074	486.46 ppb	6.074	1.25%
QC value within limits for Ti 334.940 Recovery = 97.29%							
Tl	190.801†	1544.0	496.97 ug/L	3.270	496.97 ppb	3.270	0.66%
QC value within limits for Tl 190.801 Recovery = 99.39%							
U	409.014†	17148.5	471.89 ug/L	7.712	471.89 ppb	7.712	1.63%
QC value within limits for U 409.014 Recovery = 94.38%							
V	292.402†	69737.0	492.76 ug/L	5.664	492.76 ppb	5.664	1.15%
QC value within limits for V 292.402 Recovery = 98.55%							
Zn	213.857†	49073.2	489.44 ug/L	5.948	489.44 ppb	5.948	1.22%
QC value within limits for Zn 213.857 Recovery = 97.89%							
SiO2†		75948.0	5264.8 ug/L	23.35	5264.8 ppb	23.35	0.44%
QC value within limits for SiO2 Recovery = 98.45%							
All analyte(s) passed QC.							



Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 19:46:11

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	4019.3	4019.3	103 %		19:48:03
1	Y RADIAL	4457.9	4457.9	101.1 %		19:48:03
1	Al 396.153Radial†	-113.6	1.6	1.5545 ug/L	1.5545 ppb	19:48:03
1	Ca 317.933Radial†	23.0	2.8	5.8395 ug/L	5.8395 ppb	19:48:23
1	Fe 238.204 Radial†	12.7	1.1	15.023 ug/L	15.023 ppb	19:48:23
1	K 766.490 Radial†	2671.1	-35.3	-6.7737 ug/L	-6.7737 ppb	19:48:03
1	Mg 279.077 IEC†	3.0	-1.1	-54.278 ug/L	-54.278 ppb	19:48:23
1	Na 589.592 Radial†	-819.9	20.4	6.2805 ug/L	6.2805 ppb	19:48:03
1	Sr 421.552†	33.8	-2.7	-0.0189 ug/L	-0.0189 ppb	19:48:03
1	Sc 361.383	903727.8	903727.8	103.02 %		19:49:20
1	Y 371.029	761295.1	761295.1	100.72 %		19:49:20
1	Ag 328.068†	282.7	34.0	0.1624 ug/L	0.1624 ppb	19:49:25
1	As 188.979†	-28.2	-9.2	-4.0843 ug/L	-4.0843 ppb	19:49:45
1	B 249.677†	-476.8	-64.6	-1.5689 ug/L	-1.5689 ppb	19:49:45
1	Ba 233.527†	6.6	7.8	0.0616 ug/L	0.0616 ppb	19:49:45
1	Be 313.107†	-3844.3	30.6	0.0112 ug/L	0.0112 ppb	19:49:25
1	Cd 226.502†	-174.3	27.0	0.3114 ug/L	0.3114 ppb	19:49:45
1	Co 228.616†	-76.7	-8.0	-0.1670 ug/L	-0.1670 ppb	19:49:45
1	Cr 267.716†	66.1	-13.5	-0.1504 ug/L	-0.1504 ppb	19:49:45
1	Cu 324.752†	5894.2	-269.4	-0.8182 ug/L	-0.8182 ppb	19:49:25
1	Mn 257.610†	463.3	-9.1	-0.0066 ug/L	-0.0066 ppb	19:49:45
1	Mo 202.031†	7.1	-3.2	-0.2368 ug/L	-0.2368 ppb	19:49:45
1	Ni 231.604†	64.2	-0.1	-0.0032 ug/L	-0.0032 ppb	19:49:45
1	P 214.914†	206.9	-9.7	-5.6603 ug/L	-5.6603 ppb	19:49:45
1	Pb 220.353†	-75.3	-15.0	-1.8471 ug/L	-1.8471 ppb	19:49:45
1	S 181.975 Axial†	41.1	-0.9	-1.2792 ug/L	-1.2792 ppb	19:49:45
1	Sb 206.836†	28.7	-8.8	-3.0810 ug/L	-3.0810 ppb	19:49:45
1	Se 196.026†	-29.0	-0.4	-0.2003 ug/L	-0.2003 ppb	19:49:45
1	Si 251.611†	555.0	-19.6	-0.6301 ug/L	-0.6301 ppb	19:49:45
1	Sn 189.927†	16.6	5.7	1.0153 ug/L	1.0153 ppb	19:49:45
1	Ti 334.940†	-1505.1	-86.9	-0.1307 ug/L	-0.1307 ppb	19:49:25
1	Tl 190.801†	-33.0	0.5	0.1676 ug/L	0.1676 ppb	19:49:45
1	U 409.014†	-3020.8	-45.6	-1.2606 ug/L	-1.2606 ppb	19:49:20
1	V 292.402†	-1579.6	-27.6	-0.2016 ug/L	-0.2016 ppb	19:49:25
1	Zn 213.857†	830.4	200.0	2.0121 ug/L	2.0121 ppb	19:49:45
1	SiO2†	564.6	-6.4	-0.4380 ug/L	-0.4380 ppb	19:50:51
2	Sc Radial	3955.1	3955.1	101 %		19:48:28
2	Y RADIAL	4385.2	4385.2	99.42 %		19:48:28
2	Al 396.153Radial†	-124.9	-11.3	-10.640 ug/L	-10.640 ppb	19:48:28
2	Ca 317.933Radial†	17.8	-2.0	-4.2251 ug/L	-4.2251 ppb	19:48:48
2	Fe 238.204 Radial†	10.5	-0.9	-12.950 ug/L	-12.950 ppb	19:48:48
2	K 766.490 Radial†	2714.5	50.0	9.5871 ug/L	9.5871 ppb	19:48:28
2	Mg 279.077 IEC†	2.4	-1.7	-84.438 ug/L	-84.438 ppb	19:48:48
2	Na 589.592 Radial†	-786.5	40.4	12.468 ug/L	12.468 ppb	19:48:28
2	Sr 421.552†	47.9	11.7	0.0810 ug/L	0.0810 ppb	19:48:28
2	Sc 361.383	921254.5	921254.5	105.02 %		19:49:50
2	Y 371.029	775340.2	775340.2	102.58 %		19:49:50
2	Ag 328.068†	227.7	-23.6	-0.1156 ug/L	-0.1156 ppb	19:49:55
2	As 188.979†	-19.7	-0.5	-0.2467 ug/L	-0.2467 ppb	19:50:15
2	B 249.677†	-486.9	-65.4	-1.5835 ug/L	-1.5835 ppb	19:50:15
2	Ba 233.527†	-1.5	-0.0	0.0004 ug/L	0.0004 ppb	19:50:15
2	Be 313.107†	-3875.8	71.6	0.0269 ug/L	0.0269 ppb	19:49:55
2	Cd 226.502†	-183.5	21.6	0.2517 ug/L	0.2517 ppb	19:50:15
2	Co 228.616†	-70.2	-0.4	-0.0064 ug/L	-0.0064 ppb	19:50:15
2	Cr 267.716†	65.5	-15.3	-0.1746 ug/L	-0.1746 ppb	19:50:15
2	Cu 324.752†	5988.8	-288.1	-0.8802 ug/L	-0.8802 ppb	19:49:55
2	Mn 257.610†	472.5	-8.8	-0.0078 ug/L	-0.0078 ppb	19:50:15
2	Mo 202.031†	15.8	4.9	0.3593 ug/L	0.3593 ppb	19:50:15
2	Ni 231.604†	56.9	-8.3	-0.2109 ug/L	-0.2109 ppb	19:50:15

2	P 214.914†	211.8	-8.8	-5.1297 ug/L	-5.1297 ppb	19:50:15
2	Pb 220.353†	-67.3	-6.0	-0.7323 ug/L	-0.7323 ppb	19:50:15
2	S 181.975 Axial†	41.2	-1.5	-2.2136 ug/L	-2.2136 ppb	19:50:15
2	Sb 206.836†	48.9	9.8	3.4557 ug/L	3.4557 ppb	19:50:15
2	Se 196.026†	-35.1	-5.6	-3.7342 ug/L	-3.7342 ppb	19:50:15
2	Si 251.611†	587.8	1.4	0.0421 ug/L	0.0421 ppb	19:50:15
2	Sn 189.927†	13.7	2.5	0.4572 ug/L	0.4572 ppb	19:50:15
2	Ti 334.940†	-1455.2	-11.6	-0.0139 ug/L	-0.0139 ppb	19:49:55
2	Tl 190.801†	-36.2	-1.9	-0.6217 ug/L	-0.6217 ppb	19:50:15
2	U 409.014†	-2848.4	174.4	4.8170 ug/L	4.8170 ppb	19:49:50
2	V 292.402†	-1514.1	63.9	0.4604 ug/L	0.4604 ppb	19:49:55
2	Zn 213.857†	822.0	176.7	1.7828 ug/L	1.7828 ppb	19:50:15
2	SiO2†	606.0	22.7	1.5652 ug/L	1.5652 ppb	19:50:56
3	Sc Radial	3920.9	3920.9	100 %		19:48:53
3	Y RADIAL	4339.7	4339.7	98.39 %		19:48:53
3	Al 396.153Radial†	-106.8	5.7	5.3103 ug/L	5.3103 ppb	19:48:53
3	Ca 317.933Radial†	23.4	3.7	7.6982 ug/L	7.6982 ppb	19:49:14
3	Fe 238.204 Radial†	10.2	-1.1	-15.373 ug/L	-15.373 ppb	19:49:14
3	K 766.490 Radial†	2811.1	170.0	32.620 ug/L	32.620 ppb	19:48:53
3	Mg 279.077 IBC†	1.7	-2.4	-117.26 ug/L	-117.26 ppb	19:49:14
3	Na 589.592 Radial†	-802.1	18.1	5.5653 ug/L	5.5653 ppb	19:48:53
3	Sr 421.552†	57.1	21.3	0.1475 ug/L	0.1475 ppb	19:48:53
3	Sc 361.383	908750.7	908750.7	103.59 %		19:50:21
3	Y 371.029	765115.4	765115.4	101.23 %		19:50:21
3	Ag 328.068†	252.8	3.7	0.0125 ug/L	0.0125 ppb	19:50:26
3	As 188.979†	-31.5	-12.1	-5.4158 ug/L	-5.4158 ppb	19:50:46
3	B 249.677†	-509.8	-93.9	-2.2723 ug/L	-2.2723 ppb	19:50:46
3	Ba 233.527†	4.8	6.1	0.0475 ug/L	0.0475 ppb	19:50:46
3	Be 313.107†	-3847.0	48.6	0.0179 ug/L	0.0179 ppb	19:50:26
3	Cd 226.502†	-170.7	31.5	0.3664 ug/L	0.3664 ppb	19:50:46
3	Co 228.616†	-88.1	-18.5	-0.3847 ug/L	-0.3847 ppb	19:50:46
3	Cr 267.716†	76.8	-3.6	-0.0417 ug/L	-0.0417 ppb	19:50:46
3	Cu 324.752†	6021.7	-177.9	-0.5426 ug/L	-0.5426 ppb	19:50:26
3	Mn 257.610†	474.6	-0.6	0.0026 ug/L	0.0026 ppb	19:50:46
3	Mo 202.031†	19.7	8.9	0.6535 ug/L	0.6535 ppb	19:50:46
3	Ni 231.604†	76.1	11.0	0.2811 ug/L	0.2811 ppb	19:50:46
3	P 214.914†	197.4	-20.0	-11.882 ug/L	-11.882 ppb	19:50:46
3	Pb 220.353†	-49.3	10.6	1.3036 ug/L	1.3036 ppb	19:50:46
3	S 181.975 Axial†	41.4	-0.9	-1.2586 ug/L	-1.2586 ppb	19:50:46
3	Sb 206.836†	43.1	4.9	1.7445 ug/L	1.7445 ppb	19:50:46
3	Se 196.026†	-31.3	-2.4	-1.6425 ug/L	-1.6425 ppb	19:50:46
3	Si 251.611†	584.8	6.2	0.1918 ug/L	0.1918 ppb	19:50:46
3	Sn 189.927†	16.4	5.4	0.9633 ug/L	0.9633 ppb	19:50:46
3	Ti 334.940†	-1545.1	-117.4	-0.1741 ug/L	-0.1741 ppb	19:50:26
3	Tl 190.801†	-31.9	1.7	0.5585 ug/L	0.5585 ppb	19:50:46
3	U 409.014†	-2967.3	22.2	0.6148 ug/L	0.6148 ppb	19:50:21
3	V 292.402†	-1528.1	30.6	0.2239 ug/L	0.2239 ppb	19:50:26
3	Zn 213.857†	811.2	177.0	1.7831 ug/L	1.7831 ppb	19:50:46
3	SiO2†	600.1	24.9	1.7135 ug/L	1.7135 ppb	19:51:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911244.4	103.88 %	1.029			0.99%
Sc Radial	3965.1	101 %	1.3			1.26%
Y 371.029	767250.3	101.51 %	0.961			0.95%
Y RADIAL	4394.3	99.62 %	1.352			1.36%
Ag 328.068†	4.7	0.0198 ug/L	0.13912	0.0198 ppb	0.13912	703.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.3	-1.2584 ug/L	8.33889	-1.2584 ppb	8.33889	662.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-7.3	-3.2489 ug/L	2.68390	-3.2489 ppb	2.68390	82.61%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-74.6	-1.8083 ug/L	0.40197	-1.8083 ppb	0.40197	22.23%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.6	0.0365 ug/L	0.03203	0.0365 ppb	0.03203	87.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	50.3	0.0186 ug/L	0.00787	0.0186 ppb	0.00787	42.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.5	3.1042 ug/L	6.41502	3.1042 ppb	6.41502	206.66%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	26.7	0.3098 ug/L	0.05734	0.3098 ppb	0.05734	18.51%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-8.9	-0.1861 ug/L	0.18984	-0.1861 ppb	0.18984	102.03%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-10.8	-0.1222 ug/L	0.07081	-0.1222 ppb	0.07081	57.92%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-245.1	-0.7470 ug/L	0.17970	-0.7470 ppb	0.17970	24.06%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.3	-4.4333 ug/L	16.89277	-4.4333 ppb	16.89277	381.04%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	61.6	11.811 ug/L	19.7909	11.811 ppb	19.7909	167.56%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.8	-85.326 ug/L	31.5006	-85.326 ppb	31.5006	36.92%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-6.1	-0.0039 ug/L	0.00571	-0.0039 ppb	0.00571	144.74%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.5	0.2587 ug/L	0.45357	0.2587 ppb	0.45357	175.35%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	26.3	8.1046 ug/L	3.79559	8.1046 ppb	3.79559	46.83%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.9	0.0223 ug/L	0.24701	0.0223 ppb	0.24701	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-12.8	-7.5573 ug/L	3.75467	-7.5573 ppb	3.75467	49.68%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-3.5	-0.4252 ug/L	1.59764	-0.4252 ppb	1.59764	375.70%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.1	-1.5838 ug/L	0.54551	-1.5838 ppb	0.54551	34.44%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.0	0.7064 ug/L	3.38975	0.7064 ppb	3.38975	479.86%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-2.8	-1.8590 ug/L	1.77687	-1.8590 ppb	1.77687	95.58%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-4.0	-0.1321 ug/L	0.43776	-0.1321 ppb	0.43776	331.46%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.5	0.8119 ug/L	0.30833	0.8119 ppb	0.30833	37.98%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	10.1	0.0699 ug/L	0.08374	0.0699 ppb	0.08374	119.86%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-72.0	-0.1063 ug/L	0.08288	-0.1063 ppb	0.08288	78.00%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.1	0.0348 ug/L	0.60123	0.0348 ppb	0.60123	>999.9%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	50.3	1.3904 ug/L	3.11214	1.3904 ppb	3.11214	223.84%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	22.3	0.1609 ug/L	0.33545	0.1609 ppb	0.33545	208.44%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	184.6	1.8593 ug/L	0.13232	1.8593 ppb	0.13232	7.12%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	13.7	0.9469 ug/L	1.20162	0.9469 ppb	1.20162	126.90%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 37

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 21:01:26

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	3858.0	3858.0	98.4 %		21:03:18
1	Y RADIAL	4233.7	4233.7	95.98 %		21:03:18
1	Al 396.153Radial†	5186.6	5380.8	5022.6 ug/L	5022.6 ppb	21:03:18
1	Ca 317.933Radial†	2413.8	2432.2	5084.5 ug/L	5084.5 ppb	21:03:38
1	Fe 238.204 Radial†	342.7	336.7	4767.9 ug/L	4767.9 ppb	21:03:38
1	K 766.490 Radial†	28347.6	26155.1	5013.0 ug/L	5013.0 ppb	21:03:18
1	Mg 279.077 IEC†	106.8	104.4	5061.6 ug/L	5061.6 ppb	21:03:38
1	Na 589.592 Radial†	29637.4	30924.7	9534.9 ug/L	9534.9 ppb	21:03:18
1	Sr 421.552†	68707.9	69756.0	482.64 ug/L	482.64 ppb	21:03:18
1	Sc 361.383	896787.2	896787.2	102.23 %		21:04:36
1	Y 371.029	744443.2	744443.2	98.492 %		21:04:36
1	Ag 328.068†	106580.8	104016.2	484.87 ug/L	484.87 ppb	21:04:41
1	As 188.979†	1138.0	1131.4	509.31 ug/L	509.31 ppb	21:05:01
1	B 249.677†	19369.9	19345.7	466.86 ug/L	466.86 ppb	21:04:41
1	Ba 233.527†	63470.6	62088.0	488.43 ug/L	488.43 ppb	21:04:41
1	Be 313.107†	1340598.8	1315126.9	495.31 ug/L	495.31 ppb	21:04:36
1	Cd 226.502†	43391.9	42641.9	493.70 ug/L	493.70 ppb	21:04:41
1	Co 228.616†	23916.2	23461.2	491.57 ug/L	491.57 ppb	21:04:41
1	Cr 267.716†	44335.1	43290.6	486.92 ug/L	486.92 ppb	21:04:41
1	Cu 324.752†	166346.0	156727.8	476.93 ug/L	476.93 ppb	21:04:41
1	Mn 257.610†	447548.3	437330.0	497.92 ug/L	497.92 ppb	21:04:36
1	Mo 202.031†	6875.4	6715.3	493.44 ug/L	493.44 ppb	21:05:01
1	Ni 231.604†	19794.7	19300.6	490.58 ug/L	490.58 ppb	21:04:41
1	P 214.914†	4474.5	4166.4	2415.5 ug/L	2415.5 ppb	21:05:01
1	Pb 220.353†	4098.3	4067.0	501.76 ug/L	501.76 ppb	21:05:01
1	S 181.975 Axial†	758.7	701.3	1008.3 ug/L	1008.3 ppb	21:05:01
1	Sb 206.836†	1473.5	1404.7	508.79 ug/L	508.79 ppb	21:05:01
1	Se 196.026†	756.3	767.6	519.15 ug/L	519.15 ppb	21:05:01
1	Si 251.611†	77038.5	74800.2	2414.4 ug/L	2414.4 ppb	21:04:41
1	Sn 189.927†	2829.5	2757.3	495.36 ug/L	495.36 ppb	21:05:01
1	Ti 334.940†	311388.1	305971.8	480.69 ug/L	480.69 ppb	21:04:41
1	Tl 190.801†	1554.3	1553.0	499.83 ug/L	499.83 ppb	21:05:01
1	U 409.014†	14381.9	16954.9	466.56 ug/L	466.56 ppb	21:04:41
1	V 292.402†	69168.2	69165.5	488.87 ug/L	488.87 ppb	21:04:41
1	Zn 213.857†	50298.5	48595.6	484.70 ug/L	484.70 ppb	21:04:41
1	SiO2†	77483.3	75239.2	5215.4 ug/L	5215.4 ppb	21:06:08
2	Sc Radial	3806.9	3806.9	97.1 %		21:03:43
2	Y RADIAL	4214.9	4214.9	95.56 %		21:03:43
2	Al 396.153Radial†	5182.2	5446.9	5084.8 ug/L	5084.8 ppb	21:03:43
2	Ca 317.933Radial†	2408.8	2459.9	5142.4 ug/L	5142.4 ppb	21:04:03
2	Fe 238.204 Radial†	343.5	342.3	4846.2 ug/L	4846.2 ppb	21:04:03
2	K 766.490 Radial†	28222.4	26412.4	5062.3 ug/L	5062.3 ppb	21:03:43
2	Mg 279.077 IEC†	108.5	107.6	5215.9 ug/L	5215.9 ppb	21:04:03
2	Na 589.592 Radial†	29409.2	31093.4	9586.9 ug/L	9586.9 ppb	21:03:43
2	Sr 421.552†	68252.7	70223.2	485.87 ug/L	485.87 ppb	21:03:43
2	Sc 361.383	899900.0	899900.0	102.58 %		21:05:07
2	Y 371.029	747247.5	747247.5	98.863 %		21:05:07
2	Ag 328.068†	108993.2	106007.2	494.14 ug/L	494.14 ppb	21:05:12
2	As 188.979†	1112.5	1102.7	496.63 ug/L	496.63 ppb	21:05:32
2	B 249.677†	20072.8	19965.4	481.84 ug/L	481.84 ppb	21:05:12
2	Ba 233.527†	64998.3	63362.4	498.45 ug/L	498.45 ppb	21:05:12
2	Be 313.107†	1346836.2	1316671.1	495.91 ug/L	495.91 ppb	21:05:07
2	Cd 226.502†	44217.7	43300.1	501.32 ug/L	501.32 ppb	21:05:12
2	Co 228.616†	24498.1	23947.5	501.73 ug/L	501.73 ppb	21:05:12
2	Cr 267.716†	45203.1	43986.7	494.75 ug/L	494.75 ppb	21:05:12
2	Cu 324.752†	170725.7	160434.3	488.20 ug/L	488.20 ppb	21:05:12
2	Mn 257.610†	450137.9	438340.1	499.07 ug/L	499.07 ppb	21:05:07
2	Mo 202.031†	6837.9	6655.5	489.06 ug/L	489.06 ppb	21:05:32
2	Ni 231.604†	20246.1	19673.7	500.06 ug/L	500.06 ppb	21:05:12

2	P 214.914†	4450.2	4127.6	2389.8 ug/L	2389.8 ppb	21:05:32
2	Pb 220.353†	4059.1	4015.0	495.34 ug/L	495.34 ppb	21:05:32
2	S 181.975 Axial†	752.1	692.4	995.39 ug/L	995.39 ppb	21:05:32
2	Sb 206.836†	1473.6	1399.8	506.95 ug/L	506.95 ppb	21:05:32
2	Se 196.026†	747.5	756.5	512.10 ug/L	512.10 ppb	21:05:32
2	Si 251.611†	79016.0	76467.3	2468.4 ug/L	2468.4 ppb	21:05:12
2	Sn 189.927†	2829.6	2747.8	493.66 ug/L	493.66 ppb	21:05:32
2	Ti 334.940†	318823.6	312166.4	490.41 ug/L	490.41 ppb	21:05:12
2	Tl 190.801†	1544.2	1537.9	495.03 ug/L	495.03 ppb	21:05:32
2	U 409.014†	14837.4	17350.2	477.45 ug/L	477.45 ppb	21:05:12
2	V 292.402†	70439.7	70171.0	495.81 ug/L	495.81 ppb	21:05:12
2	Zn 213.857†	51420.1	49518.7	493.91 ug/L	493.91 ppb	21:05:12
2	SiO2†	78157.9	75634.7	5243.0 ug/L	5243.0 ppb	21:06:13
3	Sc Radial	3883.5	3883.5	99.1 %		21:04:08
3	Y RADIAL	4270.0	4270.0	96.81 %		21:04:08
3	Al 396.153Radial†	5252.3	5412.5	5052.4 ug/L	5052.4 ppb	21:04:08
3	Ca 317.933Radial†	2439.8	2442.4	5105.8 ug/L	5105.8 ppb	21:04:28
3	Fe 238.204 Radial†	347.7	339.5	4807.2 ug/L	4807.2 ppb	21:04:28
3	K 766.490 Radial†	28536.0	26156.1	5013.2 ug/L	5013.2 ppb	21:04:08
3	Mg 279.077 IEC†	111.1	108.1	5240.8 ug/L	5240.8 ppb	21:04:28
3	Na 589.592 Radial†	29516.4	30604.8	9436.3 ug/L	9436.3 ppb	21:04:08
3	Sr 421.552†	68898.4	69489.7	480.80 ug/L	480.80 ppb	21:04:08
3	Sc 361.383	897279.5	897279.5	102.29 %		21:05:38
3	Y 371.029	744168.1	744168.1	98.455 %		21:05:38
3	Ag 328.068†	107879.4	105228.6	490.51 ug/L	490.51 ppb	21:05:43
3	As 188.979†	1119.0	1112.3	500.85 ug/L	500.85 ppb	21:06:03
3	B 249.677†	19811.0	19766.5	477.05 ug/L	477.05 ppb	21:05:43
3	Ba 233.527†	64059.2	62629.4	492.69 ug/L	492.69 ppb	21:05:43
3	Be 313.107†	1340467.4	1314278.9	495.01 ug/L	495.01 ppb	21:05:38
3	Cd 226.502†	43570.8	42793.5	495.46 ug/L	495.46 ppb	21:05:43
3	Co 228.616†	24110.3	23638.2	495.26 ug/L	495.26 ppb	21:05:43
3	Cr 267.716†	44674.2	43598.3	490.38 ug/L	490.38 ppb	21:05:43
3	Cu 324.752†	168898.9	159134.4	484.25 ug/L	484.25 ppb	21:05:43
3	Mn 257.610†	448556.4	438075.3	498.76 ug/L	498.76 ppb	21:05:38
3	Mo 202.031†	6855.6	6692.3	491.76 ug/L	491.76 ppb	21:06:03
3	Ni 231.604†	19978.7	19469.8	494.88 ug/L	494.88 ppb	21:05:43
3	P 214.914†	4466.2	4155.9	2407.7 ug/L	2407.7 ppb	21:06:03
3	Pb 220.353†	4066.1	4033.3	497.60 ug/L	497.60 ppb	21:06:03
3	S 181.975 Axial†	754.1	696.4	1001.2 ug/L	1001.2 ppb	21:06:03
3	Sb 206.836†	1468.1	1398.6	506.62 ug/L	506.62 ppb	21:06:03
3	Se 196.026†	745.6	756.7	512.14 ug/L	512.14 ppb	21:06:03
3	Si 251.611†	77901.8	75602.9	2440.4 ug/L	2440.4 ppb	21:05:43
3	Sn 189.927†	2835.0	2761.2	496.06 ug/L	496.06 ppb	21:06:03
3	Ti 334.940†	315218.2	309549.2	486.30 ug/L	486.30 ppb	21:05:43
3	Tl 190.801†	1550.4	1548.3	498.36 ug/L	498.36 ppb	21:06:03
3	U 409.014†	14672.4	17231.1	474.18 ug/L	474.18 ppb	21:05:43
3	V 292.402†	69817.2	69762.9	493.01 ug/L	493.01 ppb	21:05:43
3	Zn 213.857†	50735.0	48995.4	488.68 ug/L	488.68 ppb	21:05:43
3	SiO2†	79150.3	76827.4	5325.8 ug/L	5325.8 ppb	21:06:19

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897988.9	102.37 %	0.191			0.19%
Sc Radial	3849.5	98.2 %	0.99			1.01%
Y 371.029	745286.2	98.603 %	0.2254			0.23%
Y RADIAL	4239.5	96.12 %	0.636			0.66%
Ag 328.068†	105084.0	489.84 ug/L	4.670	489.84 ppb	4.670	0.95%
QC value within limits for Ag 328.068 Recovery = 97.97%						
Al 396.153Radial†	5413.4	5053.3 ug/L	31.11	5053.3 ppb	31.11	0.62%
QC value within limits for Al 396.153Radial Recovery = 101.07%						
As 188.979†	1115.5	502.26 ug/L	6.460	502.26 ppb	6.460	1.29%
QC value within limits for As 188.979 Recovery = 100.45%						
B 249.677†	19692.5	475.25 ug/L	7.652	475.25 ppb	7.652	1.61%
QC value within limits for B 249.677 Recovery = 95.05%						
Ba 233.527†	62693.2	493.19 ug/L	5.028	493.19 ppb	5.028	1.02%
QC value within limits for Ba 233.527 Recovery = 98.64%						
Be 313.107†	1315359.0	495.41 ug/L	0.462	495.41 ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 99.08%						
Ca 317.933Radial†	2444.8	5110.9 ug/L	29.31	5110.9 ppb	29.31	0.57%

QC value within limits for Ca 317.933 Radial Recovery = 102.22%

Cd	226.502†	42911.8	496.83 ug/L	3.991	496.83 ppb	3.991	0.80%
QC value within limits for Cd 226.502 Recovery = 99.37%							
Co	228.616†	23682.3	496.18 ug/L	5.142	496.18 ppb	5.142	1.04%
QC value within limits for Co 228.616 Recovery = 99.24%							
Cr	267.716†	43625.2	490.68 ug/L	3.923	490.68 ppb	3.923	0.80%
QC value within limits for Cr 267.716 Recovery = 98.14%							
Cu	324.752†	158765.5	483.13 ug/L	5.722	483.13 ppb	5.722	1.18%
QC value within limits for Cu 324.752 Recovery = 96.63%							
Fe	238.204 Radial†	339.5	4807.1 ug/L	39.13	4807.1 ppb	39.13	0.81%
QC value within limits for Fe 238.204 Radial Recovery = 96.14%							
K	766.490 Radial†	26241.2	5029.5 ug/L	28.42	5029.5 ppb	28.42	0.57%
QC value within limits for K 766.490 Radial Recovery = 100.59%							
Mg	279.077 IEC†	106.7	5172.7 ug/L	97.06	5172.7 ppb	97.06	1.88%
QC value within limits for Mg 279.077 IEC Recovery = 103.45%							
Mn	257.610†	437915.1	498.58 ug/L	0.596	498.58 ppb	0.596	0.12%
QC value within limits for Mn 257.610 Recovery = 99.72%							
Mo	202.031†	6687.7	491.42 ug/L	2.211	491.42 ppb	2.211	0.45%
QC value within limits for Mo 202.031 Recovery = 98.28%							
Na	589.592 Radial†	30874.3	9519.4 ug/L	76.51	9519.4 ppb	76.51	0.80%
QC value within limits for Na 589.592 Radial Recovery = 95.19%							
Ni	231.604†	19481.4	495.17 ug/L	4.748	495.17 ppb	4.748	0.96%
QC value within limits for Ni 231.604 Recovery = 99.03%							
P	214.914†	4150.0	2404.3 ug/L	13.17	2404.3 ppb	13.17	0.55%
QC value within limits for P 214.914 Recovery = 96.17%							
Pb	220.353†	4038.5	498.23 ug/L	3.253	498.23 ppb	3.253	0.65%
QC value within limits for Pb 220.353 Recovery = 99.65%							
S	181.975 Axial†	696.7	1001.6 ug/L	6.45	1001.6 ppb	6.45	0.64%
QC value within limits for S 181.975 Axial Recovery = 100.16%							
Sb	206.836†	1401.0	507.45 ug/L	1.168	507.45 ppb	1.168	0.23%
QC value within limits for Sb 206.836 Recovery = 101.49%							
Se	196.026†	760.2	514.46 ug/L	4.061	514.46 ppb	4.061	0.79%
QC value within limits for Se 196.026 Recovery = 102.89%							
Si	251.611†	75623.5	2441.0 ug/L	27.01	2441.0 ppb	27.01	1.11%
QC value within limits for Si 251.611 Recovery = 97.64%							
Sn	189.927†	2755.4	495.03 ug/L	1.234	495.03 ppb	1.234	0.25%
QC value within limits for Sn 189.927 Recovery = 99.01%							
Sr	421.552†	69823.0	483.11 ug/L	2.569	483.11 ppb	2.569	0.53%
QC value within limits for Sr 421.552 Recovery = 96.62%							
Ti	334.940†	309229.1	485.80 ug/L	4.880	485.80 ppb	4.880	1.00%
QC value within limits for Ti 334.940 Recovery = 97.16%							
Tl	190.801†	1546.4	497.74 ug/L	2.458	497.74 ppb	2.458	0.49%
QC value within limits for Tl 190.801 Recovery = 99.55%							
U	409.014†	17178.8	472.73 ug/L	5.587	472.73 ppb	5.587	1.18%
QC value within limits for U 409.014 Recovery = 94.55%							
V	292.402†	69699.8	492.56 ug/L	3.496	492.56 ppb	3.496	0.71%
QC value within limits for V 292.402 Recovery = 98.51%							
Zn	213.857†	49036.6	489.10 ug/L	4.617	489.10 ppb	4.617	0.94%
QC value within limits for Zn 213.857 Recovery = 97.82%							
SiO2†		75900.4	5261.4 ug/L	57.47	5261.4 ppb	57.47	1.09%
QC value within limits for SiO2 Recovery = 98.39%							

All analyte(s) passed QC.

Sequence No.: 38

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 21:08:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3831.7	3831.7	97.8 %		21:10:40
1	Y RADIAL	4302.3	4302.3	97.54 %		21:10:20
1	Al 396.153Radial†	-116.2	-6.4	-5.9973 ug/L	-5.9973 ppb	21:10:20
1	Ca 317.933Radial†	10.9	-8.5	-17.804 ug/L	-17.804 ppb	21:10:40
1	Fe 238.204 Radial†	11.6	0.5	6.9759 ug/L	6.9759 ppb	21:10:40
1	K 766.490 Radial†	2755.0	178.0	34.163 ug/L	34.163 ppb	21:10:20
1	Mg 279.077 IEC†	1.6	-2.5	-120.62 ug/L	-120.62 ppb	21:10:40
1	Na 589.592 Radial†	-818.6	-17.4	-5.3608 ug/L	-5.3608 ppb	21:10:20
1	Sr 421.552†	34.5	-0.4	-0.0029 ug/L	-0.0029 ppb	21:10:20
1	Sc 361.383	917543.4	917543.4	104.60 %		21:11:37
1	Y 371.029	774367.1	774367.1	102.45 %		21:11:37
1	Ag 328.068†	226.1	-24.2	-0.1128 ug/L	-0.1128 ppb	21:11:42
1	As 188.979†	-25.4	-6.0	-2.6739 ug/L	-2.6739 ppb	21:12:02
1	B 249.677†	-441.6	-24.0	-0.5821 ug/L	-0.5821 ppb	21:12:02
1	Ba 233.527†	16.6	17.2	0.1363 ug/L	0.1363 ppb	21:12:02
1	Be 313.107†	-3792.7	136.2	0.0508 ug/L	0.0508 ppb	21:11:42
1	Cd 226.502†	-183.1	21.2	0.2457 ug/L	0.2457 ppb	21:12:02
1	Co 228.616†	-66.0	3.5	0.0725 ug/L	0.0725 ppb	21:12:02
1	Cr 267.716†	85.0	3.6	0.0397 ug/L	0.0397 ppb	21:12:02
1	Cu 324.752†	6027.1	-228.4	-0.6977 ug/L	-0.6977 ppb	21:11:42
1	Mn 257.610†	477.5	-2.2	0.0031 ug/L	0.0031 ppb	21:12:02
1	Mo 202.031†	9.2	-1.4	-0.1015 ug/L	-0.1015 ppb	21:12:02
1	Ni 231.604†	74.0	8.3	0.2119 ug/L	0.2119 ppb	21:12:02
1	P 214.914†	211.4	-8.4	-4.9457 ug/L	-4.9457 ppb	21:12:02
1	Pb 220.353†	-67.3	-6.3	-0.7730 ug/L	-0.7730 ppb	21:12:02
1	S 181.975 Axial†	41.5	-1.2	-1.6659 ug/L	-1.6659 ppb	21:12:02
1	Sb 206.836†	43.1	4.5	1.5437 ug/L	1.5437 ppb	21:12:02
1	Se 196.026†	-23.0	5.8	3.8248 ug/L	3.8248 ppb	21:12:02
1	Si 251.611†	575.1	-8.5	-0.2722 ug/L	-0.2722 ppb	21:12:02
1	Sn 189.927†	2.2	-8.3	-1.5008 ug/L	-1.5008 ppb	21:12:02
1	Ti 334.940†	-1551.6	-109.3	-0.1667 ug/L	-0.1667 ppb	21:11:42
1	Tl 190.801†	-27.9	5.9	1.8704 ug/L	1.8704 ppb	21:12:02
1	U 409.014†	-2818.0	192.4	5.3119 ug/L	5.3119 ppb	21:11:37
1	V 292.402†	-1523.5	49.1	0.3477 ug/L	0.3477 ppb	21:11:42
1	Zn 213.857†	818.3	176.3	1.7730 ug/L	1.7730 ppb	21:12:02
1	SiO2†	584.5	4.4	0.3098 ug/L	0.3098 ppb	21:13:08
2	Sc Radial	3844.7	3844.7	98.1 %		21:11:05
2	Y RADIAL	4390.6	4390.6	99.54 %		21:10:45
2	Al 396.153Radial†	-113.3	-3.0	-2.8759 ug/L	-2.8759 ppb	21:10:45
2	Ca 317.933Radial†	20.6	1.3	2.7728 ug/L	2.7728 ppb	21:11:05
2	Fe 238.204 Radial†	10.0	-1.1	-16.198 ug/L	-16.198 ppb	21:11:05
2	K 766.490 Radial†	2764.6	178.2	34.197 ug/L	34.197 ppb	21:10:45
2	Mg 279.077 IEC†	1.8	-2.3	-109.25 ug/L	-109.25 ppb	21:11:05
2	Na 589.592 Radial†	-793.7	10.8	3.3209 ug/L	3.3209 ppb	21:10:45
2	Sr 421.552†	17.6	-17.8	-0.1231 ug/L	-0.1231 ppb	21:10:45
2	Sc 361.383	907310.6	907310.6	103.43 %		21:12:07
2	Y 371.029	764712.4	764712.4	101.17 %		21:12:07
2	Ag 328.068†	278.1	28.5	0.1286 ug/L	0.1286 ppb	21:12:12
2	As 188.979†	-16.7	2.1	0.9348 ug/L	0.9348 ppb	21:12:32
2	B 249.677†	-471.3	-57.4	-1.3902 ug/L	-1.3902 ppb	21:12:32
2	Ba 233.527†	11.6	12.6	0.0991 ug/L	0.0991 ppb	21:12:32
2	Be 313.107†	-3804.5	83.8	0.0316 ug/L	0.0316 ppb	21:12:12
2	Cd 226.502†	-182.3	20.0	0.2336 ug/L	0.2336 ppb	21:12:32
2	Co 228.616†	-68.7	0.1	0.0040 ug/L	0.0040 ppb	21:12:32
2	Cr 267.716†	74.4	-5.7	-0.0651 ug/L	-0.0651 ppb	21:12:32
2	Cu 324.752†	6011.4	-178.7	-0.5440 ug/L	-0.5440 ppb	21:12:12
2	Mn 257.610†	467.9	-6.4	-0.0044 ug/L	-0.0044 ppb	21:12:32
2	Mo 202.031†	17.5	6.7	0.4929 ug/L	0.4929 ppb	21:12:32
2	Ni 231.604†	63.1	-1.5	-0.0373 ug/L	-0.0373 ppb	21:12:32

2	P 214.914†	208.6	-8.8	-5.1796 ug/L	-5.1796 ppb	21:12:32
2	Pb 220.353†	-54.4	5.5	0.6791 ug/L	0.6791 ppb	21:12:32
2	S 181.975 Axial†	44.3	2.1	2.9851 ug/L	2.9851 ppb	21:12:32
2	Sb 206.836†	38.3	0.4	0.1480 ug/L	0.1480 ppb	21:12:32
2	Se 196.026†	-26.0	2.6	1.6778 ug/L	1.6778 ppb	21:12:32
2	Si 251.611†	564.7	-12.3	-0.4050 ug/L	-0.4050 ppb	21:12:32
2	Sn 189.927†	14.3	3.4	0.6089 ug/L	0.6089 ppb	21:12:32
2	Ti 334.940†	-1407.9	12.8	0.0300 ug/L	0.0300 ppb	21:12:12
2	Tl 190.801†	-35.7	-1.9	-0.6133 ug/L	-0.6133 ppb	21:12:32
2	U 409.014†	-3026.8	-39.9	-1.0992 ug/L	-1.0992 ppb	21:12:07
2	V 292.402†	-1532.4	24.1	0.1730 ug/L	0.1730 ppb	21:12:12
2	Zn 213.857†	817.9	184.7	1.8631 ug/L	1.8631 ppb	21:12:32
2	SiO2†	599.3	25.0	1.7254 ug/L	1.7254 ppb	21:13:13
3	Sc Radial	3825.4	3825.4	97.6 %		21:11:30
3	Y RADIAL	4320.6	4320.6	97.95 %		21:11:10
3	Al 396.153Radial†	-95.9	14.2	13.291 ug/L	13.291 ppb	21:11:10
3	Ca 317.933Radial†	14.3	-5.0	-10.424 ug/L	-10.424 ppb	21:11:30
3	Fe 238.204 Radial†	7.9	-3.2	-44.934 ug/L	-44.934 ppb	21:11:30
3	K 766.490 Radial†	2769.4	197.4	37.895 ug/L	37.895 ppb	21:11:10
3	Mg 279.077 IEC†	0.5	-3.6	-172.68 ug/L	-172.68 ppb	21:11:30
3	Na 589.592 Radial†	-888.4	-90.4	-27.865 ug/L	-27.865 ppb	21:11:10
3	Sr 421.552†	26.8	-8.2	-0.0568 ug/L	-0.0568 ppb	21:11:10
3	Sc 361.383	895442.5	895442.5	102.08 %		21:12:37
3	Y 371.029	755161.9	755161.9	99.910 %		21:12:37
3	Ag 328.068†	265.8	20.0	0.0753 ug/L	0.0753 ppb	21:12:42
3	As 188.979†	-18.0	0.6	0.2589 ug/L	0.2589 ppb	21:13:02
3	B 249.677†	-459.0	-51.4	-1.2389 ug/L	-1.2389 ppb	21:13:02
3	Ba 233.527†	-5.4	-3.9	-0.0322 ug/L	-0.0322 ppb	21:13:02
3	Be 313.107†	-3732.3	105.8	0.0397 ug/L	0.0397 ppb	21:12:42
3	Cd 226.502†	-186.2	13.8	0.1656 ug/L	0.1656 ppb	21:13:02
3	Co 228.616†	-69.0	-1.1	-0.0221 ug/L	-0.0221 ppb	21:13:02
3	Cr 267.716†	82.9	3.5	0.0334 ug/L	0.0334 ppb	21:13:02
3	Cu 324.752†	6037.3	-76.3	-0.2370 ug/L	-0.2370 ppb	21:12:42
3	Mn 257.610†	471.3	2.9	0.0060 ug/L	0.0060 ppb	21:13:02
3	Mo 202.031†	8.4	-1.9	-0.1434 ug/L	-0.1434 ppb	21:13:02
3	Ni 231.604†	65.7	1.9	0.0478 ug/L	0.0478 ppb	21:13:02
3	P 214.914†	203.5	-11.1	-6.6160 ug/L	-6.6160 ppb	21:13:02
3	Pb 220.353†	-68.9	-9.4	-1.1472 ug/L	-1.1472 ppb	21:13:02
3	S 181.975 Axial†	37.2	-4.3	-6.2514 ug/L	-6.2514 ppb	21:13:02
3	Sb 206.836†	41.9	4.3	1.5156 ug/L	1.5156 ppb	21:13:02
3	Se 196.026†	-24.9	3.3	2.0248 ug/L	2.0248 ppb	21:13:02
3	Si 251.611†	568.9	-1.0	-0.0313 ug/L	-0.0313 ppb	21:13:02
3	Sn 189.927†	14.9	4.1	0.7372 ug/L	0.7372 ppb	21:13:02
3	Ti 334.940†	-1418.1	-15.2	-0.0131 ug/L	-0.0131 ppb	21:12:42
3	Tl 190.801†	-34.4	-1.1	-0.3611 ug/L	-0.3611 ppb	21:13:02
3	U 409.014†	-2783.1	160.1	4.4273 ug/L	4.4273 ppb	21:12:37
3	V 292.402†	-1538.9	-1.9	-0.0036 ug/L	-0.0036 ppb	21:12:42
3	Zn 213.857†	808.4	186.0	1.8787 ug/L	1.8787 ppb	21:13:02
3	SiO2†	558.7	-7.1	-0.4888 ug/L	-0.4888 ppb	21:13:18

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906765.5	103.37 %		1.261			1.22%
Sc Radial	3833.9	97.8 %		0.25			0.26%
Y 371.029	764747.1	101.18 %		1.270			1.26%
Y RADIAL	4337.8	98.34 %		1.056			1.07%
Ag 328.068†	8.1	0.0304 ug/L		0.12684	0.0304 ppb	0.12684	417.89%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	1.6	1.4725 ug/L		10.35311	1.4725 ppb	10.35311	703.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.1	-0.4934 ug/L		1.91838	-0.4934 ppb	1.91838	388.80%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-44.3	-1.0704 ug/L		0.42958	-1.0704 ppb	0.42958	40.13%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.7	0.0677 ug/L		0.08849	0.0677 ppb	0.08849	130.62%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	108.6	0.0407 ug/L		0.00965	0.0407 ppb	0.00965	23.73%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-4.1	-8.4851 ug/L		10.42446	-8.4851 ppb	10.42446	122.86%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	18.3	0.2149 ug/L	0.04319	0.2149 ppb	0.04319	20.09%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	0.8	0.0181 ug/L	0.04885	0.0181 ppb	0.04885	269.18%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	0.5	0.0027 ug/L	0.05877	0.0027 ppb	0.05877	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-161.1	-0.4929 ug/L	0.23456	-0.4929 ppb	0.23456	47.58%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-1.3	-18.052 ug/L	26.0046	-18.052 ppb	26.0046	144.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	184.5	35.418 ug/L	2.1451	35.418 ppb	2.1451	6.06%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.8	-134.18 ug/L	33.819	-134.18 ppb	33.819	25.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-1.9	0.0016 ug/L	0.00536	0.0016 ppb	0.00536	342.52%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	1.1	0.0827 ug/L	0.35590	0.0827 ppb	0.35590	430.54%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-32.3	-9.9682 ug/L	16.09529	-9.9682 ppb	16.09529	161.47%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	2.9	0.0742 ug/L	0.12666	0.0742 ppb	0.12666	170.80%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-9.5	-5.5805 ug/L	0.90441	-5.5805 ppb	0.90441	16.21%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-3.4	-0.4137 ug/L	0.96472	-0.4137 ppb	0.96472	233.19%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.1	-1.6440 ug/L	4.61830	-1.6440 ppb	4.61830	280.91%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	3.1	1.0691 ug/L	0.79783	1.0691 ppb	0.79783	74.63%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.9	2.5091 ug/L	1.15258	2.5091 ppb	1.15258	45.94%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-7.3	-0.2362 ug/L	0.18946	-0.2362 ppb	0.18946	80.22%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-0.3	-0.0516 ug/L	1.25674	-0.0516 ppb	1.25674	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-8.8	-0.0609 ug/L	0.06024	-0.0609 ppb	0.06024	98.86%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-37.2	-0.0499 ug/L	0.10336	-0.0499 ppb	0.10336	206.95%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	0.9	0.2987 ug/L	1.36699	0.2987 ppb	1.36699	457.64%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	104.2	2.8800 ug/L	3.47433	2.8800 ppb	3.47433	120.64%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	23.7	0.1724 ug/L	0.17566	0.1724 ppb	0.17566	101.89%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	182.3	1.8383 ug/L	0.05704	1.8383 ppb	0.05704	3.10%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		7.5	0.5155 ug/L	1.12137	0.5155 ppb	1.12137	217.54%
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 48

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 22:16:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Conc. Units	Sample	Analysis Time
1	Sc Radial	3810.4	3810.4	97.2	%			22:19:02
1	Y RADIAL	4133.5	4133.5	93.71	%			22:18:42
1	Al 396.153Radial†	5311.6	5575.2	5204.9	ug/L	5204.9	ppb	22:18:42
1	Ca 317.933Radial†	2469.3	2519.9	5267.8	ug/L	5267.8	ppb	22:19:02
1	Fe 238.204 Radial†	357.4	356.3	5043.5	ug/L	5043.5	ppb	22:19:02
1	K 766.490 Radial†	29031.9	27218.3	5216.5	ug/L	5216.5	ppb	22:18:42
1	Mg 279.077 IEC†	108.0	107.0	5188.7	ug/L	5188.7	ppb	22:19:02
1	Na 589.592 Radial†	32927.6	34684.1	10694	ug/L	10694	ppb	22:18:42
1	Sr 421.552†	72851.9	74888.9	518.16	ug/L	518.16	ppb	22:18:42
1	Sc 361.383	891177.9	891177.9	101.59	%			22:20:00
1	Y 371.029	741068.6	741068.6	98.045	%			22:20:00
1	Ag 328.068†	107477.3	105554.9	492.10	ug/L	492.10	ppb	22:20:05
1	As 188.979†	1111.7	1112.6	501.04	ug/L	501.04	ppb	22:20:25
1	B 249.677†	19769.8	19858.6	479.24	ug/L	479.24	ppb	22:20:05
1	Ba 233.527†	63878.8	62880.6	494.67	ug/L	494.67	ppb	22:20:05
1	Be 313.107†	1318940.3	1302061.3	490.42	ug/L	490.42	ppb	22:20:00
1	Cd 226.502†	43583.8	43098.0	498.96	ug/L	498.96	ppb	22:20:05
1	Co 228.616†	23981.7	23673.0	495.98	ug/L	495.98	ppb	22:20:05
1	Cr 267.716†	44503.7	43729.5	491.88	ug/L	491.88	ppb	22:20:05
1	Cu 324.752†	167613.3	158999.4	483.85	ug/L	483.85	ppb	22:20:05
1	Mn 257.610†	441011.5	433651.0	493.75	ug/L	493.75	ppb	22:20:00
1	Mo 202.031†	6822.6	6705.7	492.76	ug/L	492.76	ppb	22:20:25
1	Ni 231.604†	19906.8	19532.8	496.48	ug/L	496.48	ppb	22:20:05
1	P 214.914†	4414.3	4134.7	2394.9	ug/L	2394.9	ppb	22:20:25
1	Pb 220.353†	4046.9	4041.7	498.64	ug/L	498.64	ppb	22:20:25
1	S 181.975 Axial†	737.2	684.9	984.56	ug/L	984.56	ppb	22:20:25
1	Sb 206.836†	1458.2	1398.7	506.66	ug/L	506.66	ppb	22:20:25
1	Se 196.026†	758.2	774.1	524.29	ug/L	524.29	ppb	22:20:25
1	Si 251.611†	77952.9	76174.6	2458.9	ug/L	2458.9	ppb	22:20:05
1	Sn 189.927†	2812.2	2757.7	495.45	ug/L	495.45	ppb	22:20:25
1	Ti 334.940†	313787.8	310251.1	487.42	ug/L	487.42	ppb	22:20:05
1	Tl 190.801†	1556.4	1564.6	503.56	ug/L	503.56	ppb	22:20:25
1	U 409.014†	14614.1	17272.0	475.28	ug/L	475.28	ppb	22:20:05
1	V 292.402†	69577.6	69994.4	494.61	ug/L	494.61	ppb	22:20:05
1	Zn 213.857†	50452.8	49057.2	489.26	ug/L	489.26	ppb	22:20:05
1	SiO2†	78410.5	76629.0	5312.0	ug/L	5312.0	ppb	22:21:32
2	Sc Radial	3840.5	3840.5	98.0	%			22:19:27
2	Y RADIAL	4329.4	4329.4	98.15	%			22:19:07
2	Al 396.153Radial†	5213.6	5432.4	5072.2	ug/L	5072.2	ppb	22:19:07
2	Ca 317.933Radial†	2453.9	2484.2	5193.3	ug/L	5193.3	ppb	22:19:27
2	Fe 238.204 Radial†	361.7	357.7	5063.4	ug/L	5063.4	ppb	22:19:27
2	K 766.490 Radial†	28672.0	26617.2	5101.3	ug/L	5101.3	ppb	22:19:07
2	Mg 279.077 IEC†	108.5	106.7	5171.4	ug/L	5171.4	ppb	22:19:27
2	Na 589.592 Radial†	32391.6	33872.1	10444	ug/L	10444	ppb	22:19:07
2	Sr 421.552†	71524.7	72947.9	504.73	ug/L	504.73	ppb	22:19:07
2	Sc 361.383	940275.3	940275.3	107.19	%			22:20:31
2	Y 371.029	782720.1	782720.1	103.56	%			22:20:31
2	Ag 328.068†	108052.7	100567.5	468.92	ug/L	468.92	ppb	22:20:36
2	As 188.979†	1116.0	1059.4	477.17	ug/L	477.17	ppb	22:20:56
2	B 249.677†	20019.5	19075.4	460.31	ug/L	460.31	ppb	22:20:36
2	Ba 233.527†	64174.4	59873.0	471.02	ug/L	471.02	ppb	22:20:36
2	Be 313.107†	1327038.3	1241824.4	467.73	ug/L	467.73	ppb	22:20:31
2	Cd 226.502†	43674.4	40942.3	473.98	ug/L	473.98	ppb	22:20:36
2	Co 228.616†	24088.6	22540.0	472.25	ug/L	472.25	ppb	22:20:36
2	Cr 267.716†	44683.9	41610.2	468.07	ug/L	468.07	ppb	22:20:36
2	Cu 324.752†	169016.0	151692.9	461.63	ug/L	461.63	ppb	22:20:36
2	Mn 257.610†	442501.0	412373.2	469.54	ug/L	469.54	ppb	22:20:31
2	Mo 202.031†	6864.9	6394.5	469.91	ug/L	469.91	ppb	22:20:56
2	Ni 231.604†	19941.9	18542.3	471.30	ug/L	471.30	ppb	22:20:36

2	P 214.914†	4458.3	3948.9	2287.2 ug/L	2287.2 ppb	22:20:56
2	Pb 220.353†	4060.4	3846.2	474.53 ug/L	474.53 ppb	22:20:56
2	S 181.975 Axial†	752.1	660.8	949.99 ug/L	949.99 ppb	22:20:56
2	Sb 206.836†	1466.1	1331.1	482.18 ug/L	482.18 ppb	22:20:56
2	Se 196.026†	755.1	732.2	496.84 ug/L	496.84 ppb	22:20:56
2	Si 251.611†	78523.3	72700.1	2346.7 ug/L	2346.7 ppb	22:20:36
2	Sn 189.927†	2822.2	2622.4	471.17 ug/L	471.17 ppb	22:20:56
2	Ti 334.940†	315407.5	295634.0	464.46 ug/L	464.46 ppb	22:20:36
2	Tl 190.801†	1546.6	1475.5	474.90 ug/L	474.90 ppb	22:20:56
2	U 409.014†	14645.5	16550.2	455.39 ug/L	455.39 ppb	22:20:36
2	V 292.402†	69775.3	66602.6	470.62 ug/L	470.62 ppb	22:20:36
2	Zn 213.857†	50757.9	46748.6	466.21 ug/L	466.21 ppb	22:20:36
2	SiO2†	78336.2	72529.4	5027.7 ug/L	5027.7 ppb	22:21:37
3	Sc Radial	3852.8	3852.8	98.3 %		22:19:52
3	Y RADIAL	4362.4	4362.4	98.90 %		22:19:32
3	Al 396.153Radial†	5285.0	5488.0	5123.5 ug/L	5123.5 ppb	22:19:32
3	Ca 317.933Radial†	2460.0	2482.4	5189.6 ug/L	5189.6 ppb	22:19:52
3	Fe 238.204 Radial†	360.9	355.7	5036.3 ug/L	5036.3 ppb	22:19:52
3	K 766.490 Radial†	28971.3	26828.1	5141.7 ug/L	5141.7 ppb	22:19:32
3	Mg 279.077 IEC†	105.8	103.5	5018.4 ug/L	5018.4 ppb	22:19:52
3	Na 589.592 Radial†	32943.2	34327.4	10584 ug/L	10584 ppb	22:19:32
3	Sr 421.552†	72590.8	73798.8	510.62 ug/L	510.62 ppb	22:19:32
3	Sc 361.383	898053.4	898053.4	102.37 %		22:21:02
3	Y 371.029	744982.0	744982.0	98.563 %		22:21:02
3	Ag 328.068†	109058.7	106289.7	495.51 ug/L	495.51 ppb	22:21:07
3	As 188.979†	1098.2	1091.0	491.46 ug/L	491.46 ppb	22:21:27
3	B 249.677†	20265.7	20194.0	487.35 ug/L	487.35 ppb	22:21:07
3	Ba 233.527†	64899.7	63396.4	498.73 ug/L	498.73 ppb	22:21:07
3	Be 313.107†	1339381.5	1312088.9	494.20 ug/L	494.20 ppb	22:21:02
3	Cd 226.502†	44166.0	43338.3	501.75 ug/L	501.75 ppb	22:21:07
3	Co 228.616†	24466.7	23966.0	502.10 ug/L	502.10 ppb	22:21:07
3	Cr 267.716†	45233.2	44106.8	496.12 ug/L	496.12 ppb	22:21:07
3	Cu 324.752†	170696.8	160748.3	489.17 ug/L	489.17 ppb	22:21:07
3	Mn 257.610†	447756.8	436916.4	497.48 ug/L	497.48 ppb	22:21:02
3	Mo 202.031†	6785.0	6617.5	486.29 ug/L	486.29 ppb	22:21:27
3	Ni 231.604†	20309.6	19776.3	502.67 ug/L	502.67 ppb	22:21:07
3	P 214.914†	4405.1	4092.5	2368.3 ug/L	2368.3 ppb	22:21:27
3	Pb 220.353†	4049.9	4014.1	495.21 ug/L	495.21 ppb	22:21:27
3	S 181.975 Axial†	739.4	681.4	979.62 ug/L	979.62 ppb	22:21:27
3	Sb 206.836†	1471.2	1400.4	507.05 ug/L	507.05 ppb	22:21:27
3	Se 196.026†	741.0	751.6	509.51 ug/L	509.51 ppb	22:21:27
3	Si 251.611†	79313.1	76915.9	2482.9 ug/L	2482.9 ppb	22:21:07
3	Sn 189.927†	2800.4	2725.0	489.56 ug/L	489.56 ppb	22:21:27
3	Ti 334.940†	319127.9	313102.7	491.90 ug/L	491.90 ppb	22:21:07
3	Tl 190.801†	1538.1	1535.0	494.12 ug/L	494.12 ppb	22:21:27
3	U 409.014†	14929.2	17469.6	480.73 ug/L	480.73 ppb	22:21:07
3	V 292.402†	70510.9	70381.7	497.22 ug/L	497.22 ppb	22:21:07
3	Zn 213.857†	51302.3	49506.8	493.74 ug/L	493.74 ppb	22:21:07
3	SiO2†	77938.1	75576.6	5239.0 ug/L	5239.0 ppb	22:21:43

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909835.5	103.72 %	3.031			2.92%
Sc Radial	3834.6	97.9 %	0.56			0.57%
Y 371.029	756256.9	100.05 %	3.043			3.04%
Y RADIAL	4275.1	96.92 %	2.806			2.89%
Ag 328.068†	104137.4	485.51 ug/L	14.467	485.51 ppb	14.467	2.98%
QC value within limits for Ag 328.068 Recovery = 97.10%						
Al 396.153Radial†	5498.5	5133.5 ug/L	66.96	5133.5 ppb	66.96	1.30%
QC value within limits for Al 396.153Radial Recovery = 102.67%						
As 188.979†	1087.7	489.89 ug/L	12.012	489.89 ppb	12.012	2.45%
QC value within limits for As 188.979 Recovery = 97.98%						
B 249.677†	19709.4	475.64 ug/L	13.875	475.64 ppb	13.875	2.92%
QC value within limits for B 249.677 Recovery = 95.13%						
Ba 233.527†	62050.0	488.14 ug/L	14.964	488.14 ppb	14.964	3.07%
QC value within limits for Ba 233.527 Recovery = 97.63%						
Be 313.107†	1285324.9	484.11 ug/L	14.315	484.11 ppb	14.315	2.96%
QC value within limits for Be 313.107 Recovery = 96.82%						
Ca 317.933Radial†	2495.5	5216.9 ug/L	44.11	5216.9 ppb	44.11	0.85%

QC value within limits for Ca 317.933 Radial Recovery = 104.34%							
Cd	226.502†	42459.5	491.56 ug/L	15.293	491.56 ppb	15.293	3.11%
QC value within limits for Cd 226.502 Recovery = 98.31%							
Co	228.616†	23393.0	490.11 ug/L	15.770	490.11 ppb	15.770	3.22%
QC value within limits for Co 228.616 Recovery = 98.02%							
Cr	267.716†	43148.8	485.35 ug/L	15.121	485.35 ppb	15.121	3.12%
QC value within limits for Cr 267.716 Recovery = 97.07%							
Cu	324.752†	157146.9	478.22 ug/L	14.609	478.22 ppb	14.609	3.05%
QC value within limits for Cu 324.752 Recovery = 95.64%							
Fe	238.204 Radial†	356.6	5047.8 ug/L	14.05	5047.8 ppb	14.05	0.28%
QC value within limits for Fe 238.204 Radial Recovery = 100.96%							
K	766.490 Radial†	26887.9	5153.2 ug/L	58.45	5153.2 ppb	58.45	1.13%
QC value within limits for K 766.490 Radial Recovery = 103.06%							
Mg	279.077 IEC†	105.7	5126.2 ug/L	93.72	5126.2 ppb	93.72	1.83%
QC value within limits for Mg 279.077 IEC Recovery = 102.52%							
Mn	257.610†	427646.9	486.92 ug/L	15.167	486.92 ppb	15.167	3.11%
QC value within limits for Mn 257.610 Recovery = 97.38%							
Mo	202.031†	6572.6	482.99 ug/L	11.777	482.99 ppb	11.777	2.44%
QC value within limits for Mo 202.031 Recovery = 96.60%							
Na	589.592 Radial†	34294.6	10574 ug/L	125.5	10574 ppb	125.5	1.19%
QC value within limits for Na 589.592 Radial Recovery = 105.74%							
Ni	231.604†	19283.8	490.15 ug/L	16.613	490.15 ppb	16.613	3.39%
QC value within limits for Ni 231.604 Recovery = 98.03%							
P	214.914†	4058.7	2350.1 ug/L	56.11	2350.1 ppb	56.11	2.39%
QC value within limits for P 214.914 Recovery = 94.00%							
Pb	220.353†	3967.3	489.46 ug/L	13.045	489.46 ppb	13.045	2.67%
QC value within limits for Pb 220.353 Recovery = 97.89%							
S	181.975 Axial†	675.7	971.39 ug/L	18.694	971.39 ppb	18.694	1.92%
QC value within limits for S 181.975 Axial Recovery = 97.14%							
Sb	206.836†	1376.7	498.63 ug/L	14.249	498.63 ppb	14.249	2.86%
QC value within limits for Sb 206.836 Recovery = 99.73%							
Se	196.026†	752.6	510.21 ug/L	13.738	510.21 ppb	13.738	2.69%
QC value within limits for Se 196.026 Recovery = 102.04%							
Si	251.611†	75263.5	2429.5 ug/L	72.70	2429.5 ppb	72.70	2.99%
QC value within limits for Si 251.611 Recovery = 97.18%							
Sn	189.927†	2701.7	485.39 ug/L	12.666	485.39 ppb	12.666	2.61%
QC value within limits for Sn 189.927 Recovery = 97.08%							
Sr	421.552†	73878.5	511.17 ug/L	6.732	511.17 ppb	6.732	1.32%
QC value within limits for Sr 421.552 Recovery = 102.23%							
Ti	334.940†	306329.3	481.26 ug/L	14.721	481.26 ppb	14.721	3.06%
QC value within limits for Ti 334.940 Recovery = 96.25%							
Tl	190.801†	1525.0	490.86 ug/L	14.606	490.86 ppb	14.606	2.98%
QC value within limits for Tl 190.801 Recovery = 98.17%							
U	409.014†	17097.3	470.47 ug/L	13.333	470.47 ppb	13.333	2.83%
QC value within limits for U 409.014 Recovery = 94.09%							
V	292.402†	68992.9	487.48 ug/L	14.658	487.48 ppb	14.658	3.01%
QC value within limits for V 292.402 Recovery = 97.50%							
Zn	213.857†	48437.5	483.07 ug/L	14.773	483.07 ppb	14.773	3.06%
QC value within limits for Zn 213.857 Recovery = 96.61%							
SiO2†		74911.7	5192.9 ug/L	147.65	5192.9 ppb	147.65	2.84%
QC value within limits for SiO2 Recovery = 97.11%							
All analyte(s) passed QC.							

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 22:23:53

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	3810.6	3810.6	97.2 %		22:26:05
1	Y RADIAL	4397.6	4397.6	99.70 %		22:25:45
1	Al 396.153Radial†	-104.7	4.7	4.4551 ug/L	4.4551 ppb	22:25:45
1	Ca 317.933Radial†	23.8	4.8	10.068 ug/L	10.068 ppb	22:26:05
1	Fe 238.204 Radial†	11.6	0.6	8.0666 ug/L	8.0666 ppb	22:26:05
1	K 766.490 Radial†	2762.9	201.7	38.709 ug/L	38.709 ppb	22:25:45
1	Mg 279.077 IEC†	2.3	-1.7	-83.085 ug/L	-83.085 ppb	22:26:05
1	Na 589.592 Radial†	-815.9	-19.3	-5.9415 ug/L	-5.9415 ppb	22:25:45
1	Sr 421.552†	58.1	24.0	0.1663 ug/L	0.1663 ppb	22:25:45
1	Sc 361.383	890284.6	890284.6	101.49 %		22:27:01
1	Y 371.029	751075.4	751075.4	99.369 %		22:27:01
1	Ag 328.068†	168.6	-74.3	-0.3393 ug/L	-0.3393 ppb	22:27:06
1	As 188.979†	-11.6	6.9	3.0670 ug/L	3.0670 ppb	22:27:26
1	B 249.677†	-358.5	45.0	1.0900 ug/L	1.0900 ppb	22:27:26
1	Ba 233.527†	-11.1	-9.5	-0.0724 ug/L	-0.0724 ppb	22:27:26
1	Be 313.107†	-3815.2	2.9	0.0009 ug/L	0.0009 ppb	22:27:06
1	Cd 226.502†	-168.6	30.1	0.3481 ug/L	0.3481 ppb	22:27:26
1	Co 228.616†	-77.4	-9.7	-0.2058 ug/L	-0.2058 ppb	22:27:26
1	Cr 267.716†	64.6	-14.0	-0.1559 ug/L	-0.1559 ppb	22:27:26
1	Cu 324.752†	6067.4	-12.3	-0.0377 ug/L	-0.0377 ppb	22:27:06
1	Mn 257.610†	527.6	61.1	0.0737 ug/L	0.0737 ppb	22:27:26
1	Mo 202.031†	0.3	-9.8	-0.7223 ug/L	-0.7223 ppb	22:27:26
1	Ni 231.604†	57.4	-5.9	-0.1496 ug/L	-0.1496 ppb	22:27:26
1	P 214.914†	211.8	-1.8	-1.0715 ug/L	-1.0715 ppb	22:27:26
1	Pb 220.353†	-63.4	-4.3	-0.5363 ug/L	-0.5363 ppb	22:27:26
1	S 181.975 Axial†	37.7	-3.7	-5.2704 ug/L	-5.2704 ppb	22:27:26
1	Sb 206.836†	40.4	3.1	1.1055 ug/L	1.1055 ppb	22:27:26
1	Se 196.026†	-21.8	6.3	4.1466 ug/L	4.1466 ppb	22:27:26
1	Si 251.611†	760.5	191.1	6.1916 ug/L	6.1916 ppb	22:27:26
1	Sn 189.927†	21.6	10.8	1.9452 ug/L	1.9452 ppb	22:27:26
1	Ti 334.940†	-1461.6	-66.1	-0.0963 ug/L	-0.0963 ppb	22:27:06
1	Tl 190.801†	-28.4	4.6	1.4728 ug/L	1.4728 ppb	22:27:26
1	U 409.014†	-2884.4	44.5	1.2292 ug/L	1.2292 ppb	22:27:01
1	V 292.402†	-1401.3	124.9	0.8605 ug/L	0.8605 ppb	22:27:06
1	Zn 213.857†	831.6	213.3	2.1473 ug/L	2.1473 ppb	22:27:26
1	SiO2†	791.9	225.9	15.717 ug/L	15.717 ppb	22:28:32
2	Sc Radial	3807.4	3807.4	97.2 %		22:26:30
2	Y RADIAL	4284.6	4284.6	97.14 %		22:26:10
2	Al 396.153Radial†	-129.0	-20.3	-19.055 ug/L	-19.055 ppb	22:26:10
2	Ca 317.933Radial†	19.2	0.1	0.1254 ug/L	0.1254 ppb	22:26:30
2	Fe 238.204 Radial†	11.2	0.2	3.0851 ug/L	3.0851 ppb	22:26:30
2	K 766.490 Radial†	2826.0	269.1	51.636 ug/L	51.636 ppb	22:26:10
2	Mg 279.077 IEC†	4.4	0.4	21.619 ug/L	21.619 ppb	22:26:30
2	Na 589.592 Radial†	-826.7	-31.2	-9.6056 ug/L	-9.6056 ppb	22:26:10
2	Sr 421.552†	49.0	14.7	0.1018 ug/L	0.1018 ppb	22:26:10
2	Sc 361.383	907108.3	907108.3	103.41 %		22:27:32
2	Y 371.029	764442.6	764442.6	101.14 %		22:27:32
2	Ag 328.068†	240.7	-7.6	-0.0335 ug/L	-0.0335 ppb	22:27:37
2	As 188.979†	-19.0	-0.2	-0.0712 ug/L	-0.0712 ppb	22:27:57
2	B 249.677†	-362.6	47.6	1.1533 ug/L	1.1533 ppb	22:27:57
2	Ba 233.527†	-18.4	-16.4	-0.1284 ug/L	-0.1284 ppb	22:27:57
2	Be 313.107†	-3759.3	126.7	0.0475 ug/L	0.0475 ppb	22:27:37
2	Cd 226.502†	-189.0	13.4	0.1550 ug/L	0.1550 ppb	22:27:57
2	Co 228.616†	-67.3	1.5	0.0301 ug/L	0.0301 ppb	22:27:57
2	Cr 267.716†	93.2	12.4	0.1402 ug/L	0.1402 ppb	22:27:57
2	Cu 324.752†	6026.5	-162.7	-0.4946 ug/L	-0.4946 ppb	22:27:37
2	Mn 257.610†	513.2	37.6	0.0422 ug/L	0.0422 ppb	22:27:57
2	Mo 202.031†	8.0	-2.4	-0.1791 ug/L	-0.1791 ppb	22:27:57
2	Ni 231.604†	48.8	-15.2	-0.3874 ug/L	-0.3874 ppb	22:27:57

2	P 214.914†	194.5	-22.4	-13.376 ug/L	-13.376 ppb	22:27:57
2	Pb 220.353†	-68.2	-7.9	-0.9746 ug/L	-0.9746 ppb	22:27:57
2	S 181.975 Axial†	47.0	4.6	6.6842 ug/L	6.6842 ppb	22:27:57
2	Sb 206.836†	34.0	-3.8	-1.3246 ug/L	-1.3246 ppb	22:27:57
2	Se 196.026†	-21.5	7.0	4.5760 ug/L	4.5760 ppb	22:27:57
2	Si 251.611†	767.1	183.6	5.9419 ug/L	5.9419 ppb	22:27:57
2	Sn 189.927†	15.7	4.7	0.8500 ug/L	0.8500 ppb	22:27:57
2	Ti 334.940†	-1456.5	-34.4	-0.0556 ug/L	-0.0556 ppb	22:27:37
2	Tl 190.801†	-28.7	4.8	1.5347 ug/L	1.5347 ppb	22:27:57
2	U 409.014†	-3010.7	-25.0	-0.6897 ug/L	-0.6897 ppb	22:27:32
2	V 292.402†	-1543.1	13.4	0.0894 ug/L	0.0894 ppb	22:27:37
2	Zn 213.857†	843.0	209.2	2.1090 ug/L	2.1090 ppb	22:27:57
2	SiO2†	765.6	186.0	12.929 ug/L	12.929 ppb	22:28:37
3	Sc Radial	3811.0	3811.0	97.2 %		22:26:55
3	Y RADIAL	4274.0	4274.0	96.90 %		22:26:35
3	Al 396.153Radial†	-125.7	-16.8	-15.798 ug/L	-15.798 ppb	22:26:35
3	Ca 317.933Radial†	18.3	-0.8	-1.7318 ug/L	-1.7318 ppb	22:26:55
3	Fe 238.204 Radial†	11.5	0.5	7.0417 ug/L	7.0417 ppb	22:26:55
3	K 766.490 Radial†	2626.1	60.7	11.657 ug/L	11.657 ppb	22:26:35
3	Mg 279.077 IEC†	3.9	-0.1	-3.4089 ug/L	-3.4089 ppb	22:26:55
3	Na 589.592 Radial†	-799.0	-1.8	-0.5630 ug/L	-0.5630 ppb	22:26:35
3	Sr 421.552†	45.3	10.8	0.0750 ug/L	0.0750 ppb	22:26:35
3	Sc 361.383	908326.4	908326.4	103.54 %		22:28:02
3	Y 371.029	765068.3	765068.3	101.22 %		22:28:02
3	Ag 328.068†	233.0	-15.4	-0.0730 ug/L	-0.0730 ppb	22:28:07
3	As 188.979†	-25.8	-6.7	-2.9978 ug/L	-2.9978 ppb	22:28:27
3	B 249.677†	-331.2	78.3	1.8989 ug/L	1.8989 ppb	22:28:27
3	Ba 233.527†	16.0	16.9	0.1332 ug/L	0.1332 ppb	22:28:27
3	Be 313.107†	-3785.9	105.9	0.0398 ug/L	0.0398 ppb	22:28:07
3	Cd 226.502†	-186.5	16.2	0.1876 ug/L	0.1876 ppb	22:28:27
3	Co 228.616†	-79.4	-10.1	-0.2114 ug/L	-0.2114 ppb	22:28:27
3	Cr 267.716†	75.8	-4.4	-0.0513 ug/L	-0.0513 ppb	22:28:27
3	Cu 324.752†	6032.0	-165.3	-0.5060 ug/L	-0.5060 ppb	22:28:07
3	Mn 257.610†	496.0	20.3	0.0240 ug/L	0.0240 ppb	22:28:27
3	Mo 202.031†	16.2	5.5	0.4055 ug/L	0.4055 ppb	22:28:27
3	Ni 231.604†	67.7	2.9	0.0745 ug/L	0.0745 ppb	22:28:27
3	P 214.914†	205.0	-12.6	-7.4574 ug/L	-7.4574 ppb	22:28:27
3	Pb 220.353†	-56.9	3.1	0.3836 ug/L	0.3836 ppb	22:28:27
3	S 181.975 Axial†	49.2	6.7	9.6140 ug/L	9.6140 ppb	22:28:27
3	Sb 206.836†	40.0	1.9	0.6909 ug/L	0.6909 ppb	22:28:27
3	Se 196.026†	-19.2	9.2	6.0305 ug/L	6.0305 ppb	22:28:27
3	Si 251.611†	759.8	175.5	5.6726 ug/L	5.6726 ppb	22:28:27
3	Sn 189.927†	19.6	8.4	1.5129 ug/L	1.5129 ppb	22:28:27
3	Ti 334.940†	-1431.2	-8.1	-0.0154 ug/L	-0.0154 ppb	22:28:07
3	Tl 190.801†	-32.2	1.5	0.4801 ug/L	0.4801 ppb	22:28:27
3	U 409.014†	-2756.9	224.1	6.1875 ug/L	6.1875 ppb	22:28:02
3	V 292.402†	-1512.1	45.4	0.3327 ug/L	0.3327 ppb	22:28:07
3	Zn 213.857†	843.2	208.3	2.0957 ug/L	2.0957 ppb	22:28:27
3	SiO2†	766.0	185.4	12.874 ug/L	12.874 ppb	22:28:42

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901906.4	102.81 %		1.149			1.12%
Sc Radial	3809.7	97.2 %		0.05			0.05%
Y 371.029	760195.4	100.58 %		1.046			1.04%
Y RADIAL	4318.8	97.91 %		1.553			1.59%
Ag 328.068†	-32.4	-0.1486 ug/L		0.16628	-0.1486 ppb	0.16628	111.89%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-10.8	-10.133 ug/L		12.7378	-10.133 ppb	12.7378	125.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.0	-0.0007 ug/L		3.03305	-0.0007 ppb	3.03305	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	57.0	1.3807 ug/L		0.44987	1.3807 ppb	0.44987	32.58%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-3.0	-0.0225 ug/L		0.13777	-0.0225 ppb	0.13777	611.77%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	78.5	0.0294 ug/L		0.02499	0.0294 ppb	0.02499	85.06%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.3	2.8205 ug/L		6.34473	2.8205 ppb	6.34473	224.95%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	19.9	0.2302 ug/L	0.10336	0.2302 ppb	0.10336	44.89%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-6.1	-0.1290 ug/L	0.13786	-0.1290 ppb	0.13786	106.86%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-2.0	-0.0223 ug/L	0.15017	-0.0223 ppb	0.15017	673.15%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-113.4	-0.3461 ug/L	0.26715	-0.3461 ppb	0.26715	77.19%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.4	6.0645 ug/L	2.63059	6.0645 ppb	2.63059	43.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	177.2	34.000 ug/L	20.4013	34.000 ppb	20.4013	60.00%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.4	-21.625 ug/L	54.6772	-21.625 ppb	54.6772	252.84%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	39.7	0.0466 ug/L	0.02517	0.0466 ppb	0.02517	54.00%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-2.3	-0.1653 ug/L	0.56403	-0.1653 ppb	0.56403	341.19%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-17.4	-5.3700 ug/L	4.54834	-5.3700 ppb	4.54834	84.70%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-6.1	-0.1542 ug/L	0.23096	-0.1542 ppb	0.23096	149.81%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-12.3	-7.3017 ug/L	6.15378	-7.3017 ppb	6.15378	84.28%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-3.0	-0.3758 ug/L	0.69319	-0.3758 ppb	0.69319	184.46%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.6	3.6759 ug/L	7.88500	3.6759 ppb	7.88500	214.50%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	0.4	0.1573 ug/L	1.29998	0.1573 ppb	1.29998	826.60%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	7.5	4.9177 ug/L	0.98736	4.9177 ppb	0.98736	20.08%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	183.4	5.9354 ug/L	0.25953	5.9354 ppb	0.25953	4.37%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	8.0	1.4360 ug/L	0.55164	1.4360 ppb	0.55164	38.41%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	16.5	0.1144 ug/L	0.04690	0.1144 ppb	0.04690	41.01%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-36.2	-0.0557 ug/L	0.04044	-0.0557 ppb	0.04044	72.55%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	3.6	1.1625 ug/L	0.59180	1.1625 ppb	0.59180	50.91%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	81.2	2.2424 ug/L	3.54878	2.2424 ppb	3.54878	158.26%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	61.2	0.4276 ug/L	0.39419	0.4276 ppb	0.39419	92.19%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	210.3	2.1173 ug/L	0.02678	2.1173 ppb	0.02678	1.26%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	199.1	13.840	ug/L	1.6257	13.840 ppb	1.6257	11.75%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 23:34:47

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	3861.9	3861.9	98.5 %		23:36:39
1	Y RADIAL	4265.2	4265.2	96.70 %		23:36:39
1	Al 396.153Radial†	5231.1	5420.6	5060.1 ug/L	5060.1 ppb	23:36:39
1	Ca 317.933Radial†	2459.6	2476.2	5176.5 ug/L	5176.5 ppb	23:36:59
1	Fe 238.204 Radial†	354.7	348.6	4936.0 ug/L	4936.0 ppb	23:36:59
1	K 766.490 Radial†	28383.3	26162.4	5014.2 ug/L	5014.2 ppb	23:36:39
1	Mg 279.077 IEC†	106.5	104.0	5042.7 ug/L	5042.7 ppb	23:36:59
1	Na 589.592 Radial†	31056.7	32334.6	9969.6 ug/L	9969.6 ppb	23:36:39
1	Sr 421.552†	70201.6	71201.4	492.64 ug/L	492.64 ppb	23:36:39
1	Sc 361.383	901214.8	901214.8	102.73 %		23:37:56
1	Y 371.029	749764.9	749764.9	99.196 %		23:37:56
1	Ag 328.068†	107960.0	104846.5	488.77 ug/L	488.77 ppb	23:38:02
1	As 188.979†	1121.5	1109.9	499.80 ug/L	499.80 ppb	23:38:22
1	B 249.677†	19598.8	19475.5	469.98 ug/L	469.98 ppb	23:38:02
1	Ba 233.527†	63969.9	62268.9	489.86 ug/L	489.86 ppb	23:38:02
1	Be 313.107†	1343428.8	1311438.9	493.93 ug/L	493.93 ppb	23:37:56
1	Cd 226.502†	43643.1	42677.9	494.11 ug/L	494.11 ppb	23:38:02
1	Co 228.616†	24038.2	23465.1	491.63 ug/L	491.63 ppb	23:38:02
1	Cr 267.716†	44781.1	43511.7	489.42 ug/L	489.42 ppb	23:38:02
1	Cu 324.752†	168385.4	157913.5	480.54 ug/L	480.54 ppb	23:38:02
1	Mn 257.610†	447827.0	435450.4	495.80 ug/L	495.80 ppb	23:37:56
1	Mo 202.031†	6883.7	6690.4	491.63 ug/L	491.63 ppb	23:38:22
1	Ni 231.604†	20019.4	19424.2	493.72 ug/L	493.72 ppb	23:38:02
1	P 214.914†	4459.9	4130.7	2393.1 ug/L	2393.1 ppb	23:38:22
1	Pb 220.353†	4105.6	4054.5	500.19 ug/L	500.19 ppb	23:38:22
1	S 181.975 Axial†	747.0	686.3	986.70 ug/L	986.70 ppb	23:38:22
1	Sb 206.836†	1489.3	1413.0	511.60 ug/L	511.60 ppb	23:38:22
1	Se 196.026†	753.7	761.4	515.62 ug/L	515.62 ppb	23:38:22
1	Si 251.611†	77972.2	75338.8	2431.8 ug/L	2431.8 ppb	23:38:02
1	Sn 189.927†	2825.6	2739.9	492.25 ug/L	492.25 ppb	23:38:22
1	Ti 334.940†	315308.0	308290.9	484.34 ug/L	484.34 ppb	23:38:02
1	Tl 190.801†	1545.3	1536.7	494.66 ug/L	494.66 ppb	23:38:22
1	U 409.014†	14971.7	17459.9	480.48 ug/L	480.48 ppb	23:38:02
1	V 292.402†	69981.8	69625.1	492.04 ug/L	492.04 ppb	23:38:02
1	Zn 213.857†	50731.5	48775.4	486.46 ug/L	486.46 ppb	23:38:02
1	SiO2†	79023.2	76365.8	5293.7 ug/L	5293.7 ppb	23:39:29
2	Sc Radial	3941.0	3941.0	101 %		23:37:04
2	Y RADIAL	4324.0	4324.0	98.03 %		23:37:04
2	Al 396.153Radial†	5306.6	5389.1	5030.9 ug/L	5030.9 ppb	23:37:04
2	Ca 317.933Radial†	2460.1	2426.6	5072.8 ug/L	5072.8 ppb	23:37:24
2	Fe 238.204 Radial†	356.8	343.5	4863.0 ug/L	4863.0 ppb	23:37:24
2	K 766.490 Radial†	28903.2	26100.9	5002.5 ug/L	5002.5 ppb	23:37:04
2	Mg 279.077 IEC†	113.2	108.5	5258.5 ug/L	5258.5 ppb	23:37:24
2	Na 589.592 Radial†	31430.7	32073.5	9889.1 ug/L	9889.1 ppb	23:37:04
2	Sr 421.552†	71135.6	70699.4	489.17 ug/L	489.17 ppb	23:37:04
2	Sc 361.383	919929.9	919929.9	104.87 %		23:38:27
2	Y 371.029	763583.0	763583.0	101.02 %		23:38:27
2	Ag 328.068†	109292.8	103979.5	484.73 ug/L	484.73 ppb	23:38:33
2	As 188.979†	1130.6	1096.3	493.71 ug/L	493.71 ppb	23:38:53
2	B 249.677†	20108.6	19573.4	472.37 ug/L	472.37 ppb	23:38:33
2	Ba 233.527†	65121.1	62099.9	488.53 ug/L	488.53 ppb	23:38:33
2	Be 313.107†	1371644.8	1311741.8	494.04 ug/L	494.04 ppb	23:38:27
2	Cd 226.502†	44416.4	42551.1	492.64 ug/L	492.64 ppb	23:38:33
2	Co 228.616†	24531.9	23459.8	491.51 ug/L	491.51 ppb	23:38:33
2	Cr 267.716†	45497.5	43308.0	487.13 ug/L	487.13 ppb	23:38:33
2	Cu 324.752†	171084.5	157152.8	478.22 ug/L	478.22 ppb	23:38:33
2	Mn 257.610†	458267.0	436537.7	497.02 ug/L	497.02 ppb	23:38:27
2	Mo 202.031†	6915.4	6584.3	483.83 ug/L	483.83 ppb	23:38:53
2	Ni 231.604†	20297.9	19293.3	490.39 ug/L	490.39 ppb	23:38:33



2	P 214.914†	4463.1	4045.4	2342.2 ug/L	2342.2 ppb	23:38:53
2	Pb 220.353†	4093.5	3961.6	488.76 ug/L	488.76 ppb	23:38:53
2	S 181.975 Axial†	748.0	672.5	966.83 ug/L	966.83 ppb	23:38:53
2	Sb 206.836†	1469.3	1364.4	494.30 ug/L	494.30 ppb	23:38:53
2	Se 196.026†	752.7	745.5	504.95 ug/L	504.95 ppb	23:38:53
2	Si 251.611†	79259.9	75022.7	2421.7 ug/L	2421.7 ppb	23:38:33
2	Sn 189.927†	2829.2	2687.4	482.81 ug/L	482.81 ppb	23:38:53
2	Ti 334.940†	320011.7	306532.4	481.55 ug/L	481.55 ppb	23:38:33
2	Tl 190.801†	1557.7	1518.0	488.66 ug/L	488.66 ppb	23:38:53
2	U 409.014†	14850.8	17048.1	469.12 ug/L	469.12 ppb	23:38:33
2	V 292.402†	71009.2	69219.0	489.10 ug/L	489.10 ppb	23:38:33
2	Zn 213.857†	51578.4	48578.3	484.51 ug/L	484.51 ppb	23:38:33
2	SiO2†	79362.0	75124.0	5207.6 ug/L	5207.6 ppb	23:39:34
3	Sc Radial	3907.0	3907.0	99.7 %		23:37:29
3	Y RADIAL	4286.3	4286.3	97.18 %		23:37:29
3	Al 396.153Radial†	5264.4	5392.7	5033.8 ug/L	5033.8 ppb	23:37:29
3	Ca 317.933Radial†	2433.2	2420.9	5060.9 ug/L	5060.9 ppb	23:37:49
3	Fe 238.204 Radial†	349.2	338.9	4798.5 ug/L	4798.5 ppb	23:37:49
3	K 766.490 Radial†	28498.9	25945.3	4972.6 ug/L	4972.6 ppb	23:37:29
3	Mg 279.077 IEC†	102.4	98.6	4781.7 ug/L	4781.7 ppb	23:37:49
3	Na 589.592 Radial†	30923.6	31836.7	9816.1 ug/L	9816.1 ppb	23:37:29
3	Sr 421.552†	70551.2	70728.4	489.37 ug/L	489.37 ppb	23:37:29
3	Sc 361.383	898849.8	898849.8	102.46 %		23:38:58
3	Y 371.029	746977.6	746977.6	98.827 %		23:38:58
3	Ag 328.068†	108084.7	105244.7	490.58 ug/L	490.58 ppb	23:39:04
3	As 188.979†	1108.7	1100.3	495.49 ug/L	495.49 ppb	23:39:24
3	B 249.677†	19715.1	19639.2	473.96 ug/L	473.96 ppb	23:39:04
3	Ba 233.527†	64176.9	62634.8	492.74 ug/L	492.74 ppb	23:39:04
3	Be 313.107†	1336376.7	1307997.2	492.65 ug/L	492.65 ppb	23:38:58
3	Cd 226.502†	43719.4	42864.1	496.28 ug/L	496.28 ppb	23:39:04
3	Co 228.616†	24121.7	23608.1	494.63 ug/L	494.63 ppb	23:39:04
3	Cr 267.716†	44943.0	43784.4	492.47 ug/L	492.47 ppb	23:39:04
3	Cu 324.752†	168733.1	158684.1	482.88 ug/L	482.88 ppb	23:39:04
3	Mn 257.610†	446146.1	434956.9	495.23 ug/L	495.23 ppb	23:38:58
3	Mo 202.031†	6863.2	6688.0	491.44 ug/L	491.44 ppb	23:39:24
3	Ni 231.604†	20088.9	19543.2	496.75 ug/L	496.75 ppb	23:39:04
3	P 214.914†	4437.3	4120.0	2386.3 ug/L	2386.3 ppb	23:39:24
3	Pb 220.353†	4058.1	4018.6	495.79 ug/L	495.79 ppb	23:39:24
3	S 181.975 Axial†	748.4	689.6	991.35 ug/L	991.35 ppb	23:39:24
3	Sb 206.836†	1462.7	1390.8	503.80 ug/L	503.80 ppb	23:39:24
3	Se 196.026†	743.9	753.8	510.20 ug/L	510.20 ppb	23:39:24
3	Si 251.611†	78236.0	75796.0	2446.6 ug/L	2446.6 ppb	23:39:04
3	Sn 189.927†	2798.5	2720.7	488.79 ug/L	488.79 ppb	23:39:24
3	Ti 334.940†	315790.0	309568.9	486.36 ug/L	486.36 ppb	23:39:04
3	Tl 190.801†	1540.9	1536.4	494.56 ug/L	494.56 ppb	23:39:24
3	U 409.014†	14687.8	17221.1	473.90 ug/L	473.90 ppb	23:39:04
3	V 292.402†	69991.1	69813.4	493.35 ug/L	493.35 ppb	23:39:04
3	Zn 213.857†	50780.5	48953.1	488.25 ug/L	488.25 ppb	23:39:04
3	SiO2†	79845.2	77370.4	5363.5 ug/L	5363.5 ppb	23:39:39

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906664.8	103.36 %	1.316			1.27%
Sc Radial	3903.3	99.6 %	1.01			1.02%
Y 371.029	753441.8	99.682 %	1.1765			1.18%
Y RADIAL	4291.8	97.30 %	0.676			0.69%
Ag 328.068†	104690.2	488.03 ug/L	2.997	488.03 ppb	2.997	0.61%
QC value within limits for Ag 328.068 Recovery = 97.61%						
Al 396.153Radial†	5400.8	5041.6 ug/L	16.06	5041.6 ppb	16.06	0.32%
QC value within limits for Al 396.153Radial Recovery = 100.83%						
As 188.979†	1102.2	496.33 ug/L	3.131	496.33 ppb	3.131	0.63%
QC value within limits for As 188.979 Recovery = 99.27%						
B 249.677†	19562.7	472.10 ug/L	2.005	472.10 ppb	2.005	0.42%
QC value within limits for B 249.677 Recovery = 94.42%						
Ba 233.527†	62334.5	490.38 ug/L	2.149	490.38 ppb	2.149	0.44%
QC value within limits for Ba 233.527 Recovery = 98.08%						
Be 313.107†	1310392.6	493.54 ug/L	0.777	493.54 ppb	0.777	0.16%
QC value within limits for Be 313.107 Recovery = 98.71%						
Ca 317.933Radial†	2441.2	5103.4 ug/L	63.56	5103.4 ppb	63.56	1.25%

QC value within limits for Ca 317.933Radial Recovery = 102.07%							
Cd	226.502†	42697.7	494.34 ug/L	1.830	494.34 ppb	1.830	0.37%
QC value within limits for Cd 226.502 Recovery = 98.87%							
Co	228.616†	23511.0	492.59 ug/L	1.764	492.59 ppb	1.764	0.36%
QC value within limits for Co 228.616 Recovery = 98.52%							
Cr	267.716†	43534.7	489.67 ug/L	2.682	489.67 ppb	2.682	0.55%
QC value within limits for Cr 267.716 Recovery = 97.93%							
Cu	324.752†	157916.8	480.55 ug/L	2.327	480.55 ppb	2.327	0.48%
QC value within limits for Cu 324.752 Recovery = 96.11%							
Fe	238.204 Radial†	343.7	4865.8 ug/L	68.78	4865.8 ppb	68.78	1.41%
QC value within limits for Fe 238.204 Radial Recovery = 97.32%							
K	766.490 Radial†	26069.5	4996.4 ug/L	21.42	4996.4 ppb	21.42	0.43%
QC value within limits for K 766.490 Radial Recovery = 99.93%							
Mg	279.077 IEC†	103.7	5027.6 ug/L	238.77	5027.6 ppb	238.77	4.75%
QC value within limits for Mg 279.077 IEC Recovery = 100.55%							
Mn	257.610†	435648.3	496.02 ug/L	0.913	496.02 ppb	0.913	0.18%
QC value within limits for Mn 257.610 Recovery = 99.20%							
Mo	202.031†	6654.2	488.97 ug/L	4.449	488.97 ppb	4.449	0.91%
QC value within limits for Mo 202.031 Recovery = 97.79%							
Na	589.592 Radial†	32081.6	9891.6 ug/L	76.79	9891.6 ppb	76.79	0.78%
QC value within limits for Na 589.592 Radial Recovery = 98.92%							
Ni	231.604†	19420.3	493.62 ug/L	3.178	493.62 ppb	3.178	0.64%
QC value within limits for Ni 231.604 Recovery = 98.72%							
P	214.914†	4098.7	2373.9 ug/L	27.63	2373.9 ppb	27.63	1.16%
QC value within limits for P 214.914 Recovery = 94.96%							
Pb	220.353†	4011.6	494.92 ug/L	5.767	494.92 ppb	5.767	1.17%
QC value within limits for Pb 220.353 Recovery = 98.98%							
S	181.975 Axial†	682.8	981.63 ug/L	13.021	981.63 ppb	13.021	1.33%
QC value within limits for S 181.975 Axial Recovery = 98.16%							
Sb	206.836†	1389.4	503.23 ug/L	8.666	503.23 ppb	8.666	1.72%
QC value within limits for Sb 206.836 Recovery = 100.65%							
Se	196.026†	753.5	510.26 ug/L	5.336	510.26 ppb	5.336	1.05%
QC value within limits for Se 196.026 Recovery = 102.05%							
Si	251.611†	75385.8	2433.4 ug/L	12.54	2433.4 ppb	12.54	0.52%
QC value within limits for Si 251.611 Recovery = 97.34%							
Sn	189.927†	2716.0	487.95 ug/L	4.774	487.95 ppb	4.774	0.98%
QC value within limits for Sn 189.927 Recovery = 97.59%							
Sr	421.552†	70876.4	490.39 ug/L	1.950	490.39 ppb	1.950	0.40%
QC value within limits for Sr 421.552 Recovery = 98.08%							
Ti	334.940†	308130.7	484.08 ug/L	2.413	484.08 ppb	2.413	0.50%
QC value within limits for Ti 334.940 Recovery = 96.82%							
Tl	190.801†	1530.4	492.62 ug/L	3.435	492.62 ppb	3.435	0.70%
QC value within limits for Tl 190.801 Recovery = 98.52%							
U	409.014†	17243.0	474.50 ug/L	5.704	474.50 ppb	5.704	1.20%
QC value within limits for U 409.014 Recovery = 94.90%							
V	292.402†	69552.5	491.50 ug/L	2.179	491.50 ppb	2.179	0.44%
QC value within limits for V 292.402 Recovery = 98.30%							
Zn	213.857†	48768.9	486.41 ug/L	1.869	486.41 ppb	1.869	0.38%
QC value within limits for Zn 213.857 Recovery = 97.28%							
SiO2†		76286.7	5288.3 ug/L	78.10	5288.3 ppb	78.10	1.48%
QC value within limits for SiO2 Recovery = 98.89%							
All analyte(s) passed QC.							

Sequence No.: 60

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 23:41:50

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	3861.2	3861.2	98.5 %		23:44:01
1	Y RADIAL	4266.9	4266.9	96.74 %		23:43:41
1	Al 396.153Radial†	-102.0	8.9	8.2760 ug/L	8.2760 ppb	23:43:41
1	Ca 317.933Radial†	17.4	-2.0	-4.2512 ug/L	-4.2512 ppb	23:44:01
1	Fe 238.204 Radial†	9.2	-1.9	-27.494 ug/L	-27.494 ppb	23:44:01
1	K 766.490 Radial†	2739.7	141.0	27.060 ug/L	27.060 ppb	23:43:41
1	Mg 279.077 IEC†	5.1	1.1	51.068 ug/L	51.068 ppb	23:44:01
1	Na 589.592 Radial†	-822.4	-14.9	-4.6061 ug/L	-4.6061 ppb	23:43:41
1	Sr 421.552†	44.2	9.1	0.0629 ug/L	0.0629 ppb	23:43:41
1	Sc 361.383	892687.0	892687.0	101.76 %		23:44:58
1	Y 371.029	754727.0	754727.0	99.852 %		23:44:58
1	Ag 328.068†	155.4	-87.7	-0.4105 ug/L	-0.4105 ppb	23:44:58
1	As 188.979†	-28.6	-9.9	-4.4270 ug/L	-4.4270 ppb	23:45:18
1	B 249.677†	-496.8	-90.0	-2.1781 ug/L	-2.1781 ppb	23:45:18
1	Ba 233.527†	6.1	7.4	0.0579 ug/L	0.0579 ppb	23:45:18
1	Be 313.107†	-3683.5	142.5	0.0533 ug/L	0.0533 ppb	23:44:58
1	Cd 226.502†	-183.9	15.5	0.1819 ug/L	0.1819 ppb	23:45:18
1	Co 228.616†	-67.4	0.3	0.0090 ug/L	0.0090 ppb	23:45:18
1	Cr 267.716†	61.9	-16.8	-0.1894 ug/L	-0.1894 ppb	23:45:18
1	Cu 324.752†	5950.3	-143.5	-0.4357 ug/L	-0.4357 ppb	23:44:58
1	Mn 257.610†	496.4	29.0	0.0282 ug/L	0.0282 ppb	23:45:18
1	Mo 202.031†	17.7	7.3	0.5302 ug/L	0.5302 ppb	23:45:18
1	Ni 231.604†	52.5	-10.8	-0.2752 ug/L	-0.2752 ppb	23:45:18
1	P 214.914†	215.6	1.4	0.9500 ug/L	0.9500 ppb	23:45:18
1	Pb 220.353†	-72.2	-12.9	-1.5753 ug/L	-1.5753 ppb	23:45:18
1	S 181.975 Axial†	36.6	-4.8	-6.9570 ug/L	-6.9570 ppb	23:45:18
1	Sb 206.836†	34.5	-2.8	-0.9509 ug/L	-0.9509 ppb	23:45:18
1	Se 196.026†	-24.2	3.9	2.4986 ug/L	2.4986 ppb	23:45:18
1	Si 251.611†	641.6	72.2	2.3295 ug/L	2.3295 ppb	23:45:18
1	Sn 189.927†	13.6	2.9	0.5185 ug/L	0.5185 ppb	23:45:18
1	Ti 334.940†	-1466.0	-66.6	-0.1075 ug/L	-0.1075 ppb	23:44:58
1	Tl 190.801†	-39.5	-6.2	-1.9828 ug/L	-1.9828 ppb	23:45:18
1	U 409.014†	-3091.6	-151.4	-4.1784 ug/L	-4.1784 ppb	23:44:58
1	V 292.402†	-1499.2	32.4	0.2309 ug/L	0.2309 ppb	23:44:58
1	Zn 213.857†	839.1	218.5	2.2062 ug/L	2.2062 ppb	23:45:18
1	SiO2†	680.6	114.4	7.9354 ug/L	7.9354 ppb	23:46:14
2	Sc Radial	3889.2	3889.2	99.2 %		23:44:26
2	Y RADIAL	4521.5	4521.5	102.5 %		23:44:06
2	Al 396.153Radial†	-121.4	-9.9	-9.2769 ug/L	-9.2769 ppb	23:44:06
2	Ca 317.933Radial†	17.6	-1.9	-4.0132 ug/L	-4.0132 ppb	23:44:26
2	Fe 238.204 Radial†	10.3	-1.0	-14.065 ug/L	-14.065 ppb	23:44:26
2	K 766.490 Radial†	2761.7	143.1	27.466 ug/L	27.466 ppb	23:44:06
2	Mg 279.077 IEC†	3.2	-0.8	-40.636 ug/L	-40.636 ppb	23:44:26
2	Na 589.592 Radial†	-867.5	-54.3	-16.755 ug/L	-16.755 ppb	23:44:06
2	Sr 421.552†	31.9	-3.6	-0.0250 ug/L	-0.0250 ppb	23:44:06
2	Sc 361.383	898607.6	898607.6	102.44 %		23:45:23
2	Y 371.029	759669.5	759669.5	100.51 %		23:45:23
2	Ag 328.068†	278.6	31.6	0.1492 ug/L	0.1492 ppb	23:45:23
2	As 188.979†	-24.2	-5.4	-2.4145 ug/L	-2.4145 ppb	23:45:43
2	B 249.677†	-471.7	-62.2	-1.5062 ug/L	-1.5062 ppb	23:45:43
2	Ba 233.527†	-9.5	-7.9	-0.0608 ug/L	-0.0608 ppb	23:45:43
2	Be 313.107†	-3778.1	74.0	0.0279 ug/L	0.0279 ppb	23:45:23
2	Cd 226.502†	-193.5	7.3	0.0851 ug/L	0.0851 ppb	23:45:43
2	Co 228.616†	-64.1	3.9	0.0816 ug/L	0.0816 ppb	23:45:43
2	Cr 267.716†	63.9	-15.3	-0.1697 ug/L	-0.1697 ppb	23:45:43
2	Cu 324.752†	6024.9	-109.2	-0.3299 ug/L	-0.3299 ppb	23:45:23
2	Mn 257.610†	527.0	55.8	0.0637 ug/L	0.0637 ppb	23:45:43
2	Mo 202.031†	7.4	-3.0	-0.2184 ug/L	-0.2184 ppb	23:45:43
2	Ni 231.604†	54.5	-9.3	-0.2357 ug/L	-0.2357 ppb	23:45:43

2	P 214.914†	215.9	0.3	0.2565 ug/L	0.2565 ppb	23:45:43
2	Pb 220.353†	-59.6	-0.1	-0.0085 ug/L	-0.0085 ppb	23:45:43
2	S 181.975 Axial†	39.5	-2.2	-3.1953 ug/L	-3.1953 ppb	23:45:43
2	Sb 206.836†	41.4	3.7	1.2870 ug/L	1.2870 ppb	23:45:43
2	Se 196.026†	-24.7	3.7	2.3641 ug/L	2.3641 ppb	23:45:43
2	Si 251.611†	646.3	72.6	2.3519 ug/L	2.3519 ppb	23:45:43
2	Sn 189.927†	12.9	2.1	0.3768 ug/L	0.3768 ppb	23:45:43
2	Ti 334.940†	-1385.4	21.6	0.0393 ug/L	0.0393 ppb	23:45:23
2	Tl 190.801†	-39.5	-6.0	-1.9077 ug/L	-1.9077 ppb	23:45:43
2	U 409.014†	-3172.7	-210.6	-5.8139 ug/L	-5.8139 ppb	23:45:23
2	V 292.402†	-1450.4	89.8	0.6134 ug/L	0.6134 ppb	23:45:23
2	Zn 213.857†	839.2	213.2	2.1501 ug/L	2.1501 ppb	23:45:43
2	SiO2†	649.7	79.8	5.5539 ug/L	5.5539 ppb	23:46:19
3	Sc Radial	3895.0	3895.0	99.4 %		23:44:51
3	Y RADIAL	4413.6	4413.6	100.1 %		23:44:31
3	Al 396.153Radial†	-147.5	-36.0	-33.797 ug/L	-33.797 ppb	23:44:31
3	Ca 317.933Radial†	18.0	-1.5	-3.1918 ug/L	-3.1918 ppb	23:44:51
3	Fe 238.204 Radial†	8.5	-2.8	-39.059 ug/L	-39.059 ppb	23:44:51
3	K 766.490 Radial†	2739.8	117.0	22.458 ug/L	22.458 ppb	23:44:31
3	Mg 279.077 IEC†	2.1	-2.0	-95.317 ug/L	-95.317 ppb	23:44:51
3	Na 589.592 Radial†	-873.1	-58.7	-18.105 ug/L	-18.105 ppb	23:44:31
3	Sr 421.552†	55.5	20.1	0.1392 ug/L	0.1392 ppb	23:44:31
3	Sc 361.383	893412.1	893412.1	101.84 %		23:45:49
3	Y 371.029	754487.6	754487.6	99.821 %		23:45:49
3	Ag 328.068†	242.9	-1.9	-0.0215 ug/L	-0.0215 ppb	23:45:49
3	As 188.979†	-21.3	-2.7	-1.2155 ug/L	-1.2155 ppb	23:46:09
3	B 249.677†	-481.8	-74.9	-1.8088 ug/L	-1.8088 ppb	23:46:09
3	Ba 233.527†	0.3	1.7	0.0121 ug/L	0.0121 ppb	23:46:09
3	Be 313.107†	-3788.1	42.7	0.0161 ug/L	0.0161 ppb	23:45:49
3	Cd 226.502†	-198.1	1.7	0.0240 ug/L	0.0240 ppb	23:46:09
3	Co 228.616†	-66.9	0.8	0.0185 ug/L	0.0185 ppb	23:46:09
3	Cr 267.716†	55.4	-23.3	-0.2656 ug/L	-0.2656 ppb	23:46:09
3	Cu 324.752†	6069.2	-31.5	-0.0982 ug/L	-0.0982 ppb	23:45:49
3	Mn 257.610†	514.4	46.3	0.0528 ug/L	0.0528 ppb	23:46:09
3	Mo 202.031†	12.9	2.6	0.1855 ug/L	0.1855 ppb	23:46:09
3	Ni 231.604†	68.3	4.6	0.1172 ug/L	0.1172 ppb	23:46:09
3	P 214.914†	207.8	-6.4	-3.8186 ug/L	-3.8186 ppb	23:46:09
3	Pb 220.353†	-55.0	4.1	0.5074 ug/L	0.5074 ppb	23:46:09
3	S 181.975 Axial†	43.0	1.4	2.0914 ug/L	2.0914 ppb	23:46:09
3	Sb 206.836†	38.9	1.5	0.5412 ug/L	0.5412 ppb	23:46:09
3	Se 196.026†	-29.1	-0.8	-0.6668 ug/L	-0.6668 ppb	23:46:09
3	Si 251.611†	625.4	55.8	1.8032 ug/L	1.8032 ppb	23:46:09
3	Sn 189.927†	16.7	6.0	1.0698 ug/L	1.0698 ppb	23:46:09
3	Ti 334.940†	-1391.9	7.4	0.0189 ug/L	0.0189 ppb	23:45:49
3	Tl 190.801†	-32.4	0.7	0.2337 ug/L	0.2337 ppb	23:46:09
3	U 409.014†	-2924.3	15.3	0.4279 ug/L	0.4279 ppb	23:45:49
3	V 292.402†	-1552.8	-19.0	-0.1249 ug/L	-0.1249 ppb	23:45:49
3	Zn 213.857†	819.2	198.3	2.0012 ug/L	2.0012 ppb	23:46:09
3	SiO2†	697.8	130.8	9.0854 ug/L	9.0854 ppb	23:46:24

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	894902.2	102.01 %		0.368			0.36%
Sc Radial	3881.8	99.1 %		0.46			0.47%
Y 371.029	756294.7	100.06 %		0.387			0.39%
Y RADIAL	4400.7	99.77 %		2.897			2.90%
Ag 328.068†	-19.3	-0.0943 ug/L		0.28684	-0.0943 ppb	0.28684	304.29%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-12.4	-11.599 ug/L		21.1322	-11.599 ppb	21.1322	182.19%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-6.0	-2.6857 ug/L		1.62282	-2.6857 ppb	1.62282	60.43%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-75.7	-1.8310 ug/L		0.33649	-1.8310 ppb	0.33649	18.38%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.4	0.0031 ug/L		0.05991	0.0031 ppb	0.05991	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	86.4	0.0324 ug/L		0.01904	0.0324 ppb	0.01904	58.72%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.8	-3.8187 ug/L		0.55583	-3.8187 ppb	0.55583	14.56%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	8.2	0.0970 ug/L	0.07960	0.0970 ppb	0.07960	82.04%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.7	0.0364 ug/L	0.03948	0.0364 ppb	0.03948	108.59%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-18.5	-0.2082 ug/L	0.05068	-0.2082 ppb	0.05068	24.33%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-94.7	-0.2879 ug/L	0.17265	-0.2879 ppb	0.17265	59.96%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.9	-26.873 ug/L	12.5090	-26.873 ppb	12.5090	46.55%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	133.7	25.661 ug/L	2.7815	25.661 ppb	2.7815	10.84%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.6	-28.295 ug/L	73.9688	-28.295 ppb	73.9688	261.42%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	43.7	0.0482 ug/L	0.01818	0.0482 ppb	0.01818	37.68%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.3	0.1658 ug/L	0.37468	0.1658 ppb	0.37468	226.05%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-42.7	-13.156 ug/L	7.4348	-13.156 ppb	7.4348	56.51%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-5.2	-0.1312 ug/L	0.21604	-0.1312 ppb	0.21604	164.60%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.6	-0.8707 ug/L	2.57641	-0.8707 ppb	2.57641	295.90%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-2.9	-0.3588 ug/L	1.08464	-0.3588 ppb	1.08464	302.27%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-1.9	-2.6870 ug/L	4.54554	-2.6870 ppb	4.54554	169.17%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	0.8	0.2924 ug/L	1.13948	0.2924 ppb	1.13948	389.64%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.3	1.3986 ug/L	1.78999	1.3986 ppb	1.78999	127.98%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	66.9	2.1615 ug/L	0.31056	2.1615 ppb	0.31056	14.37%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.6	0.6550 ug/L	0.36614	0.6550 ppb	0.36614	55.90%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	8.5	0.0590 ug/L	0.08217	0.0590 ppb	0.08217	139.20%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-12.5	-0.0164 ug/L	0.07951	-0.0164 ppb	0.07951	484.24%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.8	-1.2189 ug/L	1.25858	-1.2189 ppb	1.25858	103.25%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-115.6	-3.1881 ug/L	3.23658	-3.1881 ppb	3.23658	101.52%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	34.4	0.2398 ug/L	0.36922	0.2398 ppb	0.36922	153.97%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	210.0	2.1192 ug/L	0.10593	2.1192 ppb	0.10593	5.00%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	108.3	7.5249 ug/L	1.80117	7.5249 ppb	1.80117	23.94%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 61

Sample ID: 1202033898|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 86

Date Collected: 2/24/2010 23:48:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033898|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3942.2	3942.2	101 %			23:50:28
1	Y RADIAL	4415.5	4415.5	100.1 %			23:50:28
1	Al 396.153Radial†	-112.8	0.3	0.2246 ug/L		0.2246 ppb	23:50:28
1	Ca 317.933Radial†	25.5	5.6	11.768 ug/L		11.768 ppb	23:50:48
1	Fe 238.204 Radial†	16.4	5.0	70.447 ug/L		70.447 ppb	23:50:48
1	K 766.490 Radial†	2824.6	168.3	32.284 ug/L		32.284 ppb	23:50:28
1	Mg 279.077 IEC†	1.8	-2.3	-109.63 ug/L		-109.63 ppb	23:50:48
1	Na 589.592 Radial†	-784.3	40.2	12.383 ug/L		12.383 ppb	23:50:28
1	Sr 421.552†	67.1	31.0	0.2145 ug/L		0.2145 ppb	23:50:28
1	Sc 361.383	901853.3	901853.3	102.81 %			23:51:44
1	Y 371.029	760869.4	760869.4	100.66 %			23:51:44
1	Ag 328.068†	246.9	-0.2	0.0185 ug/L		0.0185 ppb	23:51:49
1	As 188.979†	-29.8	-10.8	-4.7967 ug/L		-4.7967 ppb	23:52:09
1	B 249.677†	-507.9	-95.8	-2.3349 ug/L		-2.3349 ppb	23:52:09
1	Ba 233.527†	44.5	44.7	0.3542 ug/L		0.3542 ppb	23:52:09
1	Be 313.107†	-3598.5	262.0	0.0994 ug/L		0.0994 ppb	23:51:49
1	Cd 226.502†	-182.5	18.7	0.2106 ug/L		0.2106 ppb	23:52:09
1	Co 228.616†	-59.4	8.7	0.1818 ug/L		0.1818 ppb	23:52:09
1	Cr 267.716†	162.4	80.3	0.9068 ug/L		0.9068 ppb	23:52:09
1	Cu 324.752†	6084.0	-72.9	-0.2207 ug/L		-0.2207 ppb	23:51:49
1	Mn 257.610†	1332.4	837.3	0.9642 ug/L		0.9642 ppb	23:52:09
1	Mo 202.031†	15.6	5.0	0.3729 ug/L		0.3729 ppb	23:52:09
1	Ni 231.604†	81.0	16.4	0.4162 ug/L		0.4162 ppb	23:52:09
1	P 214.914†	197.2	-18.7	-11.241 ug/L		-11.241 ppb	23:52:09
1	Pb 220.353†	-54.9	4.7	0.5711 ug/L		0.5711 ppb	23:52:09
1	S 181.975 Axial†	46.8	4.7	6.7348 ug/L		6.7348 ppb	23:52:09
1	Sb 206.836†	39.8	2.1	0.7751 ug/L		0.7751 ppb	23:52:09
1	Se 196.026†	-32.3	-3.7	-2.1800 ug/L		-2.1800 ppb	23:52:09
1	Si 251.611†	1194.9	604.0	19.540 ug/L		19.540 ppb	23:52:09
1	Sn 189.927†	29.5	18.2	3.2700 ug/L		3.2700 ppb	23:52:09
1	Ti 334.940†	-1135.4	269.7	0.4318 ug/L		0.4318 ppb	23:51:49
1	Tl 190.801†	-45.1	-11.3	-3.5958 ug/L		-3.5958 ppb	23:52:09
1	U 409.014†	-2787.6	175.1	4.8259 ug/L		4.8259 ppb	23:51:44
1	V 292.402†	-1475.8	70.2	0.4905 ug/L		0.4905 ppb	23:51:49
1	Zn 213.857†	950.0	318.0	3.1887 ug/L		3.1887 ppb	23:52:09
1	SiO2†	1289.2	699.6	48.606 ug/L		48.606 ppb	23:53:15
2	Sc Radial	4020.1	4020.1	103 %			23:50:53
2	Y RADIAL	4455.4	4455.4	101.0 %			23:50:53
2	Al 396.153Radial†	-100.9	14.1	13.216 ug/L		13.216 ppb	23:50:53
2	Ca 317.933Radial†	22.8	2.5	5.3205 ug/L		5.3205 ppb	23:51:13
2	Fe 238.204 Radial†	18.0	6.2	88.028 ug/L		88.028 ppb	23:51:13
2	K 766.490 Radial†	2717.6	9.6	1.8305 ug/L		1.8305 ppb	23:50:53
2	Mg 279.077 IEC†	3.0	-1.1	-53.738 ug/L		-53.738 ppb	23:51:13
2	Na 589.592 Radial†	-766.5	72.5	22.364 ug/L		22.364 ppb	23:50:53
2	Sr 421.552†	43.1	6.3	0.0432 ug/L		0.0432 ppb	23:50:53
2	Sc 361.383	909883.0	909883.0	103.72 %			23:52:15
2	Y 371.029	766313.6	766313.6	101.39 %			23:52:15
2	Ag 328.068†	267.4	17.4	0.1041 ug/L		0.1041 ppb	23:52:20
2	As 188.979†	-23.8	-4.7	-2.0880 ug/L		-2.0880 ppb	23:52:40
2	B 249.677†	-511.3	-94.8	-2.3131 ug/L		-2.3131 ppb	23:52:40
2	Ba 233.527†	49.8	49.4	0.3916 ug/L		0.3916 ppb	23:52:40
2	Be 313.107†	-3716.1	179.5	0.0689 ug/L		0.0689 ppb	23:52:20
2	Cd 226.502†	-184.3	18.5	0.2073 ug/L		0.2073 ppb	23:52:40
2	Co 228.616†	-50.1	18.2	0.3772 ug/L		0.3772 ppb	23:52:40
2	Cr 267.716†	152.0	68.9	0.7799 ug/L		0.7799 ppb	23:52:40
2	Cu 324.752†	6116.4	-93.9	-0.2848 ug/L		-0.2848 ppb	23:52:20
2	Mn 257.610†	1288.8	783.8	0.9028 ug/L		0.9028 ppb	23:52:40
2	Mo 202.031†	2.6	-7.6	-0.5546 ug/L		-0.5546 ppb	23:52:40
2	Ni 231.604†	82.7	17.3	0.4395 ug/L		0.4395 ppb	23:52:40

2	P 214.914†	206.6	-11.3	-6.8324 ug/L	-6.8324 ppb	23:52:40
2	Pb 220.353†	-76.2	-15.3	-1.8951 ug/L	-1.8951 ppb	23:52:40
2	S 181.975 Axial†	43.1	0.8	1.0895 ug/L	1.0895 ppb	23:52:40
2	Sb 206.836†	40.4	2.3	0.7962 ug/L	0.7962 ppb	23:52:40
2	Se 196.026†	-29.0	-0.2	0.1155 ug/L	0.1155 ppb	23:52:40
2	Si 251.611†	1213.8	612.0	19.809 ug/L	19.809 ppb	23:52:40
2	Sn 189.927†	15.3	4.2	0.7584 ug/L	0.7584 ppb	23:52:40
2	Ti 334.940†	-1008.1	402.2	0.6338 ug/L	0.6338 ppb	23:52:20
2	Tl 190.801†	-36.7	-2.8	-0.8895 ug/L	-0.8895 ppb	23:52:40
2	U 409.014†	-2738.8	246.1	6.7845 ug/L	6.7845 ppb	23:52:15
2	V 292.402†	-1482.7	76.2	0.5216 ug/L	0.5216 ppb	23:52:20
2	Zn 213.857†	959.8	319.3	3.1988 ug/L	3.1988 ppb	23:52:40
2	SiO2†	1262.3	662.6	46.064 ug/L	46.064 ppb	23:53:21
3	Sc Radial	4000.9	4000.9	102 %		23:51:18
3	Y RADIAL	4406.5	4406.5	99.90 %		23:51:18
3	Al 396.153Radial†	-102.8	11.8	11.010 ug/L	11.010 ppb	23:51:18
3	Ca 317.933Radial†	24.0	3.8	8.0350 ug/L	8.0350 ppb	23:51:38
3	Fe 238.204 Radial†	15.6	4.0	55.887 ug/L	55.887 ppb	23:51:38
3	K 766.490 Radial†	2857.2	158.9	30.494 ug/L	30.494 ppb	23:51:18
3	Mg 279.077 IEC†	4.1	-0.0	-0.8996 ug/L	-0.8996 ppb	23:51:38
3	Na 589.592 Radial†	-791.7	44.3	13.663 ug/L	13.663 ppb	23:51:18
3	Sr 421.552†	45.8	9.1	0.0629 ug/L	0.0629 ppb	23:51:18
3	Sc 361.383	903175.1	903175.1	102.96 %		23:52:45
3	Y 371.029	760538.6	760538.6	100.62 %		23:52:45
3	Ag 328.068†	275.0	26.7	0.1445 ug/L	0.1445 ppb	23:52:50
3	As 188.979†	-24.9	-6.0	-2.6400 ug/L	-2.6400 ppb	23:53:10
3	B 249.677†	-550.3	-136.3	-3.3144 ug/L	-3.3144 ppb	23:53:10
3	Ba 233.527†	42.6	42.8	0.3396 ug/L	0.3396 ppb	23:53:10
3	Be 313.107†	-3761.9	108.3	0.0423 ug/L	0.0423 ppb	23:52:50
3	Cd 226.502†	-171.2	30.0	0.3421 ug/L	0.3421 ppb	23:53:10
3	Co 228.616†	-62.8	5.6	0.1147 ug/L	0.1147 ppb	23:53:10
3	Cr 267.716†	145.4	63.6	0.7202 ug/L	0.7202 ppb	23:53:10
3	Cu 324.752†	6111.3	-55.0	-0.1644 ug/L	-0.1644 ppb	23:52:50
3	Mn 257.610†	1330.8	833.8	0.9544 ug/L	0.9544 ppb	23:53:10
3	Mo 202.031†	14.2	3.6	0.2716 ug/L	0.2716 ppb	23:53:10
3	Ni 231.604†	80.0	15.2	0.3869 ug/L	0.3869 ppb	23:53:10
3	P 214.914†	213.4	-3.3	-1.9610 ug/L	-1.9610 ppb	23:53:10
3	Pb 220.353†	-68.0	-7.9	-0.9761 ug/L	-0.9761 ppb	23:53:10
3	S 181.975 Axial†	45.8	3.7	5.3555 ug/L	5.3555 ppb	23:53:10
3	Sb 206.836†	39.0	1.2	0.4347 ug/L	0.4347 ppb	23:53:10
3	Se 196.026†	-25.9	2.6	1.9023 ug/L	1.9023 ppb	23:53:10
3	Si 251.611†	1192.1	599.5	19.396 ug/L	19.396 ppb	23:53:10
3	Sn 189.927†	17.9	6.9	1.2356 ug/L	1.2356 ppb	23:53:10
3	Ti 334.940†	-951.7	449.7	0.7077 ug/L	0.7077 ppb	23:52:50
3	Tl 190.801†	-21.3	11.9	3.8107 ug/L	3.8107 ppb	23:53:10
3	U 409.014†	-2981.6	-9.3	-0.2654 ug/L	-0.2654 ppb	23:52:45
3	V 292.402†	-1426.2	120.4	0.8339 ug/L	0.8339 ppb	23:52:50
3	Zn 213.857†	974.6	340.6	3.4175 ug/L	3.4175 ppb	23:53:10
3	SiO2†	1230.5	640.8	44.525 ug/L	44.525 ppb	23:53:26

Mean Data: 1202033898|949334|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	904970.5	103.16 %	0.491			0.48%
Sc Radial	3987.7	102 %	1.0			1.02%
Y 371.029	762573.9	100.89 %	0.429			0.43%
Y RADIAL	4425.8	100.3 %	0.59			0.59%
Ag 328.068†	14.6	0.0890 ug/L	0.06438	0.0890 ppb	0.06438	72.30%
Al 396.153Radial†	8.7	8.1502 ug/L	6.95183	8.1502 ppb	6.95183	85.30%
As 188.979†	-7.2	-3.1749 ug/L	1.43142	-3.1749 ppb	1.43142	45.09%
B 249.677†	-109.0	-2.6541 ug/L	0.57192	-2.6541 ppb	0.57192	21.55%
Ba 233.527†	45.7	0.3618 ug/L	0.02680	0.3618 ppb	0.02680	7.41%
Be 313.107†	183.3	0.0702 ug/L	0.02857	0.0702 ppb	0.02857	40.69%
Ca 317.933Radial†	4.0	8.3745 ug/L	3.23716	8.3745 ppb	3.23716	38.66%
Cd 226.502†	22.4	0.2533 ug/L	0.07689	0.2533 ppb	0.07689	30.35%
Co 228.616†	10.8	0.2246 ug/L	0.13639	0.2246 ppb	0.13639	60.74%
Cr 267.716†	70.9	0.8023 ug/L	0.09529	0.8023 ppb	0.09529	11.88%
Cu 324.752†	-73.9	-0.2233 ug/L	0.06026	-0.2233 ppb	0.06026	26.99%
Fe 238.204 Radial†	5.1	71.454 ug/L	16.0945	71.454 ppb	16.0945	22.52%
K 766.490 Radial†	112.3	21.536 ug/L	17.0889	21.536 ppb	17.0889	79.35%

Mg 279.077 IEC†	-1.1	-54.757 ug/L	54.3736	-54.757 ppb	54.3736	99.30%
Mn 257.610†	818.3	0.9405 ug/L	0.03296	0.9405 ppb	0.03296	3.50%
Mo 202.031†	0.3	0.0300 ug/L	0.50880	0.0300 ppb	0.50880	>999.9%
Na 589.592 Radial†	52.3	16.137 ug/L	5.4312	16.137 ppb	5.4312	33.66%
Ni 231.604†	16.3	0.4142 ug/L	0.02639	0.4142 ppb	0.02639	6.37%
P 214.914†	-11.1	-6.6781 ug/L	4.64184	-6.6781 ppb	4.64184	69.51%
Pb 220.353†	-6.2	-0.7667 ug/L	1.24637	-0.7667 ppb	1.24637	162.57%
S 181.975 Axial†	3.1	4.3933 ug/L	2.94312	4.3933 ppb	2.94312	66.99%
Sb 206.836†	1.8	0.6687 ug/L	0.20290	0.6687 ppb	0.20290	30.34%
Se 196.026†	-0.4	-0.0541 ug/L	2.04641	-0.0541 ppb	2.04641	>999.9%
Si 251.611†	605.2	19.582 ug/L	0.2097	19.582 ppb	0.2097	1.07%
Sn 189.927†	9.8	1.7547 ug/L	1.33386	1.7547 ppb	1.33386	76.02%
Sr 421.552†	15.5	0.1069 ug/L	0.09370	0.1069 ppb	0.09370	87.68%
Ti 334.940†	373.9	0.5911 ug/L	0.14282	0.5911 ppb	0.14282	24.16%
Tl 190.801†	-0.7	-0.2249 ug/L	3.74770	-0.2249 ppb	3.74770	>999.9%
U 409.014†	137.3	3.7817 ug/L	3.63912	3.7817 ppb	3.63912	96.23%
V 292.402†	88.9	0.6153 ug/L	0.18990	0.6153 ppb	0.18990	30.86%
Zn 213.857†	326.0	3.2683 ug/L	0.12931	3.2683 ppb	0.12931	3.96%
SiO2†	667.7	46.398 ug/L	2.0610	46.398 ppb	2.0610	4.44%



Sequence No.: 62

Sample ID: 1202033903|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 87

Date Collected: 2/24/2010 23:55:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033903|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4038.4	4038.4	103 %		23:57:50
1	Y RADIAL	4859.7	4859.7	110.2 %		23:57:50
1	Al 396.153Radial†	100376.7	97517.2	91435 ug/L	91435 ppb	23:57:30
1	Ca 317.933Radial†	49844.5	48349.1	101070 ug/L	101070 ppb	23:57:30
1	Fe 238.204 Radial†	12961.3	12566.3	177400 ug/L	177400 ppb	23:57:50
1	K 766.490 Radial†	235548.4	225934.8	43316 ug/L	43316 ppb	23:57:30
1	Mg 279.077 IEC†	837.6	808.7	39033 ug/L	39033 ppb	23:57:50
1	Na 589.592 Radial†	34749.1	34540.0	10650 ug/L	10650 ppb	23:57:30
1	Sr 421.552†	346569.4	336272.6	2326.1 ug/L	2326.1 ppb	23:57:30
1	Sc 361.383	910092.7	910092.7	103.75 %		23:58:51
1	Y 371.029	825476.3	825476.3	109.21 %		23:58:51
1	Ag 328.068†	56705.7	54417.8	310.49 ug/L	310.49 ppb	23:58:51
1	As 188.979†	2362.3	2295.2	1115.4 ug/L	1115.4 ppb	23:58:56
1	B 249.677†	65742.5	63766.9	1514.5 ug/L	1514.5 ppb	23:58:51
1	Ba 233.527†	251226.5	242156.6	1908.5 ug/L	1908.5 ppb	23:58:51
1	Be 313.107†	2243260.1	2166022.9	827.11 ug/L	827.11 ppb	23:58:51
1	Cd 226.502†	55589.4	53778.5	605.26 ug/L	605.26 ppb	23:58:56
1	Co 228.616†	46498.5	44886.1	926.61 ug/L	926.61 ppb	23:58:56
1	Cr 267.716†	225494.9	217275.1	2457.8 ug/L	2457.8 ppb	23:58:51
1	Cu 324.752†	655295.2	625643.1	1913.3 ug/L	1913.3 ppb	23:58:51
1	Mn 257.610†	4945550.4	4766518.2	5439.9 ug/L	5439.9 ppb	23:58:51
1	Mo 202.031†	7043.6	6779.1	512.67 ug/L	512.67 ppb	23:58:56
1	Ni 231.604†	55150.9	53097.1	1349.9 ug/L	1349.9 ppb	23:58:56
1	P 214.914†	14322.6	13594.9	7695.6 ug/L	7695.6 ppb	23:58:56
1	Pb 220.353†	6882.6	6692.2	824.48 ug/L	824.48 ppb	23:58:56
1	S 181.975 Axial†	2887.2	2742.2	3928.9 ug/L	3928.9 ppb	23:58:56
1	Sb 206.836†	4966.9	4750.9	1668.1 ug/L	1668.1 ppb	23:58:56
1	Se 196.026†	4031.5	3913.7	3117.9 ug/L	3117.9 ppb	23:58:56
1	Si 251.611†	674930.1	650001.5	21027 ug/L	21027 ppb	23:58:51
1	Sn 189.927†	6006.3	5779.0	1044.7 ug/L	1044.7 ppb	23:58:56
1	Ti 334.940†	3814367.2	3678012.5	5789.2 ug/L	5789.2 ppb	23:58:51
1	Tl 190.801†	3766.2	3662.8	1238.5 ug/L	1238.5 ppb	23:58:56
1	U 409.014†	-8175.6	-4993.8	-163.58 ug/L	-163.58 ppb	23:58:51
1	V 292.402†	186608.8	181376.5	1239.4 ug/L	1239.4 ppb	23:58:51
1	Zn 213.857†	617678.1	594769.0	5949.5 ug/L	5949.5 ppb	23:58:51
1	SiO2†	674839.2	649917.8	45153 ug/L	45153 ppb	23:59:31
2	Sc Radial	4019.0	4019.0	103 %		23:58:15
2	Y RADIAL	4843.7	4843.7	109.8 %		23:58:15
2	Al 396.153Radial†	102384.8	99943.9	93710 ug/L	93710 ppb	23:57:55
2	Ca 317.933Radial†	50469.7	49191.4	102840 ug/L	102840 ppb	23:57:55
2	Fe 238.204 Radial†	12888.9	12556.1	177260 ug/L	177260 ppb	23:58:15
2	K 766.490 Radial†	239905.1	231282.6	44342 ug/L	44342 ppb	23:57:55
2	Mg 279.077 IEC†	831.7	806.9	38943 ug/L	38943 ppb	23:58:15
2	Na 589.592 Radial†	35400.2	35337.2	10895 ug/L	10895 ppb	23:57:55
2	Sr 421.552†	354054.3	345189.0	2387.8 ug/L	2387.8 ppb	23:57:55
2	Sc 361.383	909341.2	909341.2	103.66 %		23:59:05
2	Y 371.029	824717.6	824717.6	109.11 %		23:59:05
2	Ag 328.068†	56653.0	54412.1	310.41 ug/L	310.41 ppb	23:59:05
2	As 188.979†	2393.3	2327.1	1129.6 ug/L	1129.6 ppb	23:59:10
2	B 249.677†	65814.4	63888.6	1517.5 ug/L	1517.5 ppb	23:59:05
2	Ba 233.527†	251742.7	242854.7	1913.9 ug/L	1913.9 ppb	23:59:05
2	Be 313.107†	2244745.7	2169243.0	828.33 ug/L	828.33 ppb	23:59:05
2	Cd 226.502†	55711.3	53940.3	607.15 ug/L	607.15 ppb	23:59:10
2	Co 228.616†	46654.0	45073.1	930.54 ug/L	930.54 ppb	23:59:10
2	Cr 267.716†	225627.9	217583.0	2461.3 ug/L	2461.3 ppb	23:59:05
2	Cu 324.752†	654101.9	625013.9	1911.4 ug/L	1911.4 ppb	23:59:05
2	Mn 257.610†	4950108.3	4774854.7	5449.4 ug/L	5449.4 ppb	23:59:05
2	Mo 202.031†	7103.9	6842.9	517.37 ug/L	517.37 ppb	23:59:10
2	Ni 231.604†	55275.9	53261.6	1354.0 ug/L	1354.0 ppb	23:59:10

2	P 214.914†	14349.4	13632.2	7719.1 ug/L	7719.1 ppb	23:59:10
2	Pb 220.353†	6850.7	6666.9	821.91 ug/L	821.91 ppb	23:59:10
2	S 181.975 Axial†	2876.2	2733.8	3916.4 ug/L	3916.4 ppb	23:59:10
2	Sb 206.836†	5007.8	4794.2	1683.3 ug/L	1683.3 ppb	23:59:10
2	Se 196.026†	4012.7	3898.7	3107.7 ug/L	3107.7 ppb	23:59:10
2	Si 251.611†	675743.5	651323.8	21070 ug/L	21070 ppb	23:59:05
2	Sn 189.927†	6016.3	5793.3	1047.6 ug/L	1047.6 ppb	23:59:10
2	Ti 334.940†	3814504.9	3681183.8	5794.4 ug/L	5794.4 ppb	23:59:05
2	Tl 190.801†	3804.0	3702.3	1251.2 ug/L	1251.2 ppb	23:59:10
2	U 409.014†	-8506.0	-5319.0	-172.55 ug/L	-172.55 ppb	23:59:05
2	V 292.402†	186569.3	181487.0	1240.2 ug/L	1240.2 ppb	23:59:05
2	Zn 213.857†	618570.9	596122.3	5963.1 ug/L	5963.1 ppb	23:59:05
2	SiO2†	664275.5	640264.7	44482 ug/L	44482 ppb	23:59:37
3	Sc Radial	4025.6	4025.6	103 %		23:58:40
3	Y RADIAL	4847.1	4847.1	109.9 %		23:58:40
3	Al 396.153Radial†	101014.1	98447.0	92307 ug/L	92307 ppb	23:58:20
3	Ca 317.933Radial†	49847.2	48505.3	101400 ug/L	101400 ppb	23:58:20
3	Fe 238.204 Radial†	12894.7	12541.3	177050 ug/L	177050 ppb	23:58:40
3	K 766.490 Radial†	236549.2	227634.8	43643 ug/L	43643 ppb	23:58:20
3	Mg 279.077 IEC†	835.9	809.6	39076 ug/L	39076 ppb	23:58:40
3	Na 589.592 Radial†	34389.1	34296.7	10575 ug/L	10575 ppb	23:58:20
3	Sr 421.552†	347458.8	338206.2	2339.5 ug/L	2339.5 ppb	23:58:20
3	Sc 361.383	900161.6	900161.6	102.61 %		23:59:20
3	Y 371.029	816182.3	816182.3	107.98 %		23:59:20
3	Ag 328.068†	56001.6	54334.6	309.99 ug/L	309.99 ppb	23:59:20
3	As 188.979†	2346.0	2304.5	1119.4 ug/L	1119.4 ppb	23:59:25
3	B 249.677†	65024.9	63766.7	1514.6 ug/L	1514.6 ppb	23:59:20
3	Ba 233.527†	248691.3	242357.7	1910.0 ug/L	1910.0 ppb	23:59:20
3	Be 313.107†	2213719.8	2161090.5	825.24 ug/L	825.24 ppb	23:59:20
3	Cd 226.502†	55257.7	54046.3	608.40 ug/L	608.40 ppb	23:59:25
3	Co 228.616†	46330.6	45217.0	933.57 ug/L	933.57 ppb	23:59:25
3	Cr 267.716†	223012.3	217253.6	2457.5 ug/L	2457.5 ppb	23:59:20
3	Cu 324.752†	646063.5	623615.1	1907.2 ug/L	1907.2 ppb	23:59:20
3	Mn 257.610†	4889940.5	4764917.1	5438.1 ug/L	5438.1 ppb	23:59:20
3	Mo 202.031†	6996.9	6808.6	514.81 ug/L	514.81 ppb	23:59:25
3	Ni 231.604†	54802.9	53344.5	1356.1 ug/L	1356.1 ppb	23:59:25
3	P 214.914†	14216.7	13644.0	7726.9 ug/L	7726.9 ppb	23:59:25
3	Pb 220.353†	6838.1	6722.0	828.39 ug/L	828.39 ppb	23:59:25
3	S 181.975 Axial†	2842.9	2729.6	3910.7 ug/L	3910.7 ppb	23:59:25
3	Sb 206.836†	4952.2	4789.3	1681.7 ug/L	1681.7 ppb	23:59:25
3	Se 196.026†	4007.1	3932.8	3129.3 ug/L	3129.3 ppb	23:59:25
3	Si 251.611†	666783.6	649239.9	21002 ug/L	21002 ppb	23:59:20
3	Sn 189.927†	5961.5	5799.1	1048.4 ug/L	1048.4 ppb	23:59:25
3	Ti 334.940†	3768922.3	3674288.2	5783.4 ug/L	5783.4 ppb	23:59:20
3	Tl 190.801†	3739.1	3676.4	1242.7 ug/L	1242.7 ppb	23:59:25
3	U 409.014†	-8277.7	-5180.2	-168.69 ug/L	-168.69 ppb	23:59:20
3	V 292.402†	184225.4	181038.2	1237.1 ug/L	1237.1 ppb	23:59:20
3	Zn 213.857†	610902.4	594734.4	5949.2 ug/L	5949.2 ppb	23:59:20
3	SiO2†	675754.9	657986.5	45713 ug/L	45713 ppb	23:59:43

Mean Data: 1202033903|949334|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units	Units		Conc. Units		
Sc 361.383	906531.8	103.34	%	0.630			0.61%
Sc Radial	4027.7	103	%	0.3			0.24%
Y 371.029	822125.4	108.77	%	0.683			0.63%
Y RADIAL	4850.2	110.0	%	0.19			0.17%
Ag 328.068†	54388.2	310.30	ug/L	0.270	310.30 ppb	0.270	0.09%
Al 396.153Radial†	98636.0	92484	ug/L	1148.2	92484 ppb	1148.2	1.24%
As 188.979†	2308.9	1121.4	ug/L	7.33	1121.4 ppb	7.33	0.65%
B 249.677†	63807.4	1515.5	ug/L	1.70	1515.5 ppb	1.70	0.11%
Ba 233.527†	242456.3	1910.8	ug/L	2.82	1910.8 ppb	2.82	0.15%
Be 313.107†	2165452.1	826.89	ug/L	1.555	826.89 ppb	1.555	0.19%
Ca 317.933Radial†	48681.9	101770	ug/L	936.7	101770 ppb	936.7	0.92%
Cd 226.502†	53921.7	606.94	ug/L	1.581	606.94 ppb	1.581	0.26%
Co 228.616†	45058.7	930.24	ug/L	3.487	930.24 ppb	3.487	0.37%
Cr 267.716†	217370.6	2458.9	ug/L	2.07	2458.9 ppb	2.07	0.08%
Cu 324.752†	624757.4	1910.6	ug/L	3.17	1910.6 ppb	3.17	0.17%
Fe 238.204 Radial†	12554.6	177240	ug/L	177.1	177240 ppb	177.1	0.10%
K 766.490 Radial†	228284.0	43767	ug/L	524.0	43767 ppb	524.0	1.20%

Mg 279.077 IEC†	808.4	39018 ug/L	67.8	39018 ppb	67.8	0.17%
Mn 257.610†	4768763.3	5442.5 ug/L	6.08	5442.5 ppb	6.08	0.11%
Mo 202.031†	6810.2	514.95 ug/L	2.350	514.95 ppb	2.350	0.46%
Na 589.592 Radial†	34724.6	10707 ug/L	167.8	10707 ppb	167.8	1.57%
Ni 231.604†	53234.4	1353.3 ug/L	3.20	1353.3 ppb	3.20	0.24%
P 214.914†	13623.7	7713.9 ug/L	16.30	7713.9 ppb	16.30	0.21%
Pb 220.353†	6693.7	824.93 ug/L	3.262	824.93 ppb	3.262	0.40%
S 181.975 Axial†	2735.2	3918.7 ug/L	9.29	3918.7 ppb	9.29	0.24%
Sb 206.836†	4778.1	1677.7 ug/L	8.34	1677.7 ppb	8.34	0.50%
Se 196.026†	3915.1	3118.3 ug/L	10.84	3118.3 ppb	10.84	0.35%
Si 251.611†	650188.4	21033 ug/L	34.1	21033 ppb	34.1	0.16%
Sn 189.927†	5790.5	1046.9 ug/L	1.95	1046.9 ppb	1.95	0.19%
Sr 421.552†	339889.2	2351.1 ug/L	32.45	2351.1 ppb	32.45	1.38%
Ti 334.940†	3677828.2	5789.0 ug/L	5.52	5789.0 ppb	5.52	0.10%
Tl 190.801†	3680.5	1244.1 ug/L	6.46	1244.1 ppb	6.46	0.52%
U 409.014†	-5164.3	-168.27 ug/L	4.500	-168.27 ppb	4.500	2.67%
V 292.402†	181300.5	1238.9 ug/L	1.61	1238.9 ppb	1.61	0.13%
Zn 213.857†	595208.6	5953.9 ug/L	7.96	5953.9 ppb	7.96	0.13%
SiO2†	649389.7	45116 ug/L	616.7	45116 ppb	616.7	1.37%

Sequence No.: 63

Sample ID: 246055001|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 88

Date Collected: 2/25/2010 00:01:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055001|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3875.6	3875.6	98.9 %			00:04:08
1	Y RADIAL	4769.5	4769.5	108.1 %			00:03:48
1	Al 396.153Radial†	28720.6	29153.5	27342 ug/L		27342 ppb	00:03:48
1	Ca 317.933Radial†	6304.1	6354.8	13285 ug/L		13285 ppb	00:03:48
1	Fe 238.204 Radial†	6296.6	6355.6	89711 ug/L		89711 ppb	00:03:48
1	K 766.490 Radial†	34642.5	32389.5	6210.2 ug/L		6210.2 ppb	00:03:48
1	Mg 279.077 IEC†	133.3	130.7	6242.4 ug/L		6242.4 ppb	00:04:08
1	Na 589.592 Radial†	2332.4	3178.2	979.91 ug/L		979.91 ppb	00:03:48
1	Sr 421.552†	18767.3	18941.0	130.96 ug/L		130.96 ppb	00:03:48
1	Sc 361.383	909391.0	909391.0	103.67 %			00:05:07
1	Y 371.029	809916.4	809916.4	107.15 %			00:05:07
1	Ag 328.068†	-4480.5	-4562.4	6.7280 ug/L		6.7280 ppb	00:05:27
1	As 188.979†	1420.8	1388.8	659.06 ug/L		659.06 ppb	00:05:27
1	B 249.677†	1110.0	1469.0	20.979 ug/L		20.979 ppb	00:05:07
1	Ba 233.527†	54650.1	52718.8	416.65 ug/L		416.65 ppb	00:05:07
1	Be 313.107†	-8865.8	-4790.0	2.8806 ug/L		2.8806 ppb	00:05:07
1	Cd 226.502†	847.6	1013.9	2.4815 ug/L		2.4815 ppb	00:05:27
1	Co 228.616†	1116.9	1144.0	18.524 ug/L		18.524 ppb	00:05:27
1	Cr 267.716†	4181.3	3955.8	53.114 ug/L		53.114 ppb	00:05:27
1	Cu 324.752†	30869.9	23787.5	77.187 ug/L		77.187 ppb	00:05:07
1	Mn 257.610†	1346431.6	1298357.4	1486.1 ug/L		1486.1 ppb	00:05:07
1	Mo 202.031†	-15.3	-24.9	5.2942 ug/L		5.2942 ppb	00:05:27
1	Ni 231.604†	1688.1	1566.0	39.813 ug/L		39.813 ppb	00:05:27
1	P 214.914†	2382.4	2087.6	1176.8 ug/L		1176.8 ppb	00:05:27
1	Pb 220.353†	3437160.5	3315666.4	407780 ug/L		407780 ppb	00:05:07
1	S 181.975 Axial†	563.7	503.0	718.69 ug/L		718.69 ppb	00:05:27
1	Sb 206.836†	6080.5	5828.7	2029.0 ug/L		2029.0 ppb	00:05:27
1	Se 196.026†	-422.6	-380.0	30.625 ug/L		30.625 ppb	00:05:27
1	Si 251.611†	488779.8	470936.2	15239 ug/L		15239 ppb	00:05:07
1	Sn 189.927†	-46.8	-55.7	-12.778 ug/L		-12.778 ppb	00:05:27
1	Ti 334.940†	1358717.9	1312042.0	2063.0 ug/L		2063.0 ppb	00:05:07
1	Tl 190.801†	-128.4	-91.3	-5.3147 ug/L		-5.3147 ppb	00:05:27
1	U 409.014†	-6461.3	-3346.2	-102.73 ug/L		-102.73 ppb	00:05:07
1	V 292.402†	13008.7	14054.3	82.653 ug/L		82.653 ppb	00:05:27
1	Zn 213.857†	180654.5	173659.8	1734.4 ug/L		1734.4 ppb	00:05:07
1	SiO2†	487030.2	469252.4	32611 ug/L		32611 ppb	00:06:27
2	Sc Radial	3926.0	3926.0	100 %			00:04:33
2	Y RADIAL	4692.4	4692.4	106.4 %			00:04:13
2	Al 396.153Radial†	28099.2	28160.4	26411 ug/L		26411 ppb	00:04:13
2	Ca 317.933Radial†	6153.3	6122.4	12799 ug/L		12799 ppb	00:04:13
2	Fe 238.204 Radial†	6164.2	6141.6	86691 ug/L		86691 ppb	00:04:13
2	K 766.490 Radial†	34051.3	31349.7	6010.8 ug/L		6010.8 ppb	00:04:13
2	Mg 279.077 IEC†	135.5	131.2	6270.2 ug/L		6270.2 ppb	00:04:33
2	Na 589.592 Radial†	2325.6	3141.1	968.48 ug/L		968.48 ppb	00:04:13
2	Sr 421.552†	18358.5	18289.3	126.46 ug/L		126.46 ppb	00:04:13
2	Sc 361.383	905833.5	905833.5	103.26 %			00:05:34
2	Y 371.029	807201.8	807201.8	106.79 %			00:05:34
2	Ag 328.068†	-4498.8	-4597.1	5.6528 ug/L		5.6528 ppb	00:05:54
2	As 188.979†	1431.8	1404.8	665.49 ug/L		665.49 ppb	00:05:54
2	B 249.677†	1037.9	1403.3	19.877 ug/L		19.877 ppb	00:05:34
2	Ba 233.527†	54359.7	52644.6	415.98 ug/L		415.98 ppb	00:05:34
2	Be 313.107†	-8941.9	-4897.4	2.8365 ug/L		2.8365 ppb	00:05:34
2	Cd 226.502†	835.8	1005.7	2.6989 ug/L		2.6989 ppb	00:05:54
2	Co 228.616†	1114.4	1145.8	18.609 ug/L		18.609 ppb	00:05:54
2	Cr 267.716†	4228.6	4017.4	53.521 ug/L		53.521 ppb	00:05:54
2	Cu 324.752†	30533.1	23578.2	76.391 ug/L		76.391 ppb	00:05:34
2	Mn 257.610†	1340114.1	1297340.3	1484.6 ug/L		1484.6 ppb	00:05:34
2	Mo 202.031†	-10.6	-20.4	5.3822 ug/L		5.3822 ppb	00:05:54
2	Ni 231.604†	1716.0	1599.3	40.661 ug/L		40.661 ppb	00:05:54

2	P 214.914†	2405.0	2118.5	1197.8 ug/L	1197.8 ppb	00:05:54
2	Pb 220.353†	3426351.2	3318219.8	408100 ug/L	408100 ppb	00:05:34
2	S 181.975 Axial†	567.0	508.3	726.54 ug/L	726.54 ppb	00:05:54
2	Sb 206.836†	6114.0	5884.3	2048.5 ug/L	2048.5 ppb	00:05:54
2	Se 196.026†	-408.4	-367.8	29.207 ug/L	29.207 ppb	00:05:54
2	Si 251.611†	486200.3	470289.9	15218 ug/L	15218 ppb	00:05:34
2	Sn 189.927†	-46.5	-55.6	-12.672 ug/L	-12.672 ppb	00:05:54
2	Ti 334.940†	1352311.6	1310985.4	2061.3 ug/L	2061.3 ppb	00:05:34
2	Tl 190.801†	-121.4	-85.0	-3.3201 ug/L	-3.3201 ppb	00:05:54
2	U 409.014†	-6513.7	-3421.4	-104.46 ug/L	-104.46 ppb	00:05:34
2	V 292.402†	13163.7	14253.7	84.486 ug/L	84.486 ppb	00:05:54
2	Zn 213.857†	180096.6	173803.9	1736.3 ug/L	1736.3 ppb	00:05:34
2	SiO2†	486897.1	470968.6	32730 ug/L	32730 ppb	00:06:32
3	Sc Radial	3938.1	3938.1	100 %		00:04:58
3	Y RADIAL	4822.1	4822.1	109.3 %		00:04:38
3	Al 396.153Radial†	28811.7	28782.9	26995 ug/L	26995 ppb	00:04:38
3	Ca 317.933Radial†	6305.9	6255.3	13077 ug/L	13077 ppb	00:04:38
3	Fe 238.204 Radial†	6320.5	6278.2	88619 ug/L	88619 ppb	00:04:38
3	K 766.490 Radial†	34625.1	31815.7	6100.1 ug/L	6100.1 ppb	00:04:38
3	Mg 279.077 IEC†	138.3	133.6	6384.0 ug/L	6384.0 ppb	00:04:58
3	Na 589.592 Radial†	2371.6	3179.8	980.41 ug/L	980.41 ppb	00:04:38
3	Sr 421.552†	18789.7	18661.8	129.03 ug/L	129.03 ppb	00:04:38
3	Sc 361.383	902798.4	902798.4	102.91 %		00:06:01
3	Y 371.029	804199.9	804199.9	106.40 %		00:06:01
3	Ag 328.068†	-4459.0	-4573.1	6.3556 ug/L	6.3556 ppb	00:06:21
3	As 188.979†	1433.7	1411.3	668.84 ug/L	668.84 ppb	00:06:21
3	B 249.677†	939.1	1310.7	17.319 ug/L	17.319 ppb	00:06:01
3	Ba 233.527†	54289.4	52753.3	416.89 ug/L	416.89 ppb	00:06:01
3	Be 313.107†	-8798.5	-4787.1	2.8745 ug/L	2.8745 ppb	00:06:01
3	Cd 226.502†	852.1	1024.2	2.7141 ug/L	2.7141 ppb	00:06:21
3	Co 228.616†	1114.8	1149.8	18.669 ug/L	18.669 ppb	00:06:21
3	Cr 267.716†	4183.7	3987.5	53.370 ug/L	53.370 ppb	00:06:21
3	Cu 324.752†	30338.0	23488.0	76.219 ug/L	76.219 ppb	00:06:01
3	Mn 257.610†	1336601.9	1298290.6	1485.9 ug/L	1485.9 ppb	00:06:01
3	Mo 202.031†	-11.0	-20.8	5.5068 ug/L	5.5068 ppb	00:06:21
3	Ni 231.604†	1727.5	1616.2	41.090 ug/L	41.090 ppb	00:06:21
3	P 214.914†	2385.0	2107.0	1189.4 ug/L	1189.4 ppb	00:06:21
3	Pb 220.353†	3421243.1	3324411.7	408860 ug/L	408860 ppb	00:06:01
3	S 181.975 Axial†	564.6	507.8	725.69 ug/L	725.69 ppb	00:06:21
3	Sb 206.836†	6117.0	5907.0	2056.5 ug/L	2056.5 ppb	00:06:21
3	Se 196.026†	-407.8	-368.5	34.699 ug/L	34.699 ppb	00:06:21
3	Si 251.611†	484116.8	469848.3	15204 ug/L	15204 ppb	00:06:01
3	Sn 189.927†	-47.6	-56.8	-12.950 ug/L	-12.950 ppb	00:06:21
3	Ti 334.940†	1346784.8	1310017.9	2059.8 ug/L	2059.8 ppb	00:06:01
3	Tl 190.801†	-122.9	-86.8	-3.9179 ug/L	-3.9179 ppb	00:06:21
3	U 409.014†	-6498.7	-3428.0	-104.86 ug/L	-104.86 ppb	00:06:01
3	V 292.402†	13211.5	14343.0	84.831 ug/L	84.831 ppb	00:06:21
3	Zn 213.857†	179390.0	173703.7	1735.0 ug/L	1735.0 ppb	00:06:01
3	SiO2†	484461.1	470186.7	32676 ug/L	32676 ppb	00:06:37

Mean Data: 246055001|949334|1

	Mean Corrected	Calib.		Sample		
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	906007.6	103.28 %	0.376			0.36%
Sc Radial	3913.2	99.9 %	0.85			0.85%
Y 371.029	807106.0	106.78 %	0.378			0.35%
Y RADIAL	4761.3	107.9 %	1.48			1.37%
Ag 328.068†	-4577.6	6.2455 ug/L	0.54598	6.2455 ppb	0.54598	8.74%
Al 396.153Radial†	28699.0	26916 ug/L	470.7	26916 ppb	470.7	1.75%
As 188.979†	1401.7	664.47 ug/L	4.973	664.47 ppb	4.973	0.75%
B 249.677†	1394.4	19.392 ug/L	1.8779	19.392 ppb	1.8779	9.68%
Ba 233.527†	52705.6	416.51 ug/L	0.473	416.51 ppb	0.473	0.11%
Be 313.107†	-4824.8	2.8639 ug/L	0.02389	2.8639 ppb	0.02389	0.83%
Ca 317.933Radial†	6244.2	13053 ug/L	243.7	13053 ppb	243.7	1.87%
Cd 226.502†	1014.6	2.6315 ug/L	0.13011	2.6315 ppb	0.13011	4.94%
Co 228.616†	1146.5	18.601 ug/L	0.0728	18.601 ppb	0.0728	0.39%
Cr 267.716†	3986.9	53.335 ug/L	0.2059	53.335 ppb	0.2059	0.39%
Cu 324.752†	23617.9	76.599 ug/L	0.5162	76.599 ppb	0.5162	0.67%
Fe 238.204 Radial†	6258.5	88341 ug/L	1529.2	88341 ppb	1529.2	1.73%
K 766.490 Radial†	31851.6	6107.0 ug/L	99.87	6107.0 ppb	99.87	1.64%

Mg 279.077 IEC†	131.8	6298.9 ug/L	75.01	6298.9 ppb	75.01	1.19%
Mn 257.610†	1297996.1	1485.5 ug/L	0.79	1485.5 ppb	0.79	0.05%
Mo 202.031†	-22.0	5.3944 ug/L	0.10684	5.3944 ppb	0.10684	1.98%
Na 589.592 Radial†	3166.3	976.27 ug/L	6.747	976.27 ppb	6.747	0.69%
Ni 231.604†	1593.8	40.521 ug/L	0.6496	40.521 ppb	0.6496	1.60%
P 214.914†	2104.4	1188.0 ug/L	10.54	1188.0 ppb	10.54	0.89%
Pb 220.353†	3319432.6	408250 ug/L	553.1	408250 ppb	553.1	0.14%
S 181.975 Axial†	506.4	723.64 ug/L	4.310	723.64 ppb	4.310	0.60%
Sb 206.836†	5873.3	2044.7 ug/L	14.11	2044.7 ppb	14.11	0.69%
Se 196.026†	-372.1	31.511 ug/L	2.8511	31.511 ppb	2.8511	9.05%
Si 251.611†	470358.1	15220 ug/L	17.7	15220 ppb	17.7	0.12%
Sn 189.927†	-56.0	-12.800 ug/L	0.1404	-12.800 ppb	0.1404	1.10%
Sr 421.552†	18630.7	128.82 ug/L	2.261	128.82 ppb	2.261	1.75%
Ti 334.940†	1311015.1	2061.4 ug/L	1.61	2061.4 ppb	1.61	0.08%
Tl 190.801†	-87.7	-4.1842 ug/L	1.02364	-4.1842 ppb	1.02364	24.46%
U 409.014†	-3398.6	-104.02 ug/L	1.134	-104.02 ppb	1.134	1.09%
V 292.402†	14217.0	83.990 ug/L	1.1707	83.990 ppb	1.1707	1.39%
Zn 213.857†	173722.4	1735.2 ug/L	0.97	1735.2 ppb	0.97	0.06%
SiO2†	470135.9	32672 ug/L	59.7	32672 ppb	59.7	0.18%

Sequence No.: 64

Sample ID: 1202033899|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 89

Date Collected: 2/25/2010 00:08:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033899|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3867.6	3867.6	98.7	%		00:11:03
1	Y RADIAL	4797.0	4797.0	108.8	%		00:10:43
1	Al 396.153Radial†	39018.6	39647.9	37185	ug/L	37185 ppb	00:10:43
1	Ca 317.933Radial†	8162.4	8250.9	17249	ug/L	17249 ppb	00:10:43
1	Fe 238.204 Radial†	5741.8	5806.6	81962	ug/L	81962 ppb	00:10:43
1	K 766.490 Radial†	45326.7	43287.6	8299.9	ug/L	8299.9 ppb	00:10:43
1	Mg 279.077 IEC†	184.6	182.9	8783.6	ug/L	8783.6 ppb	00:11:03
1	Na 589.592 Radial†	2915.7	3774.1	1163.7	ug/L	1163.7 ppb	00:10:43
1	Sr 421.552†	22055.5	22311.9	154.26	ug/L	154.26 ppb	00:10:43
1	Sc 361.383	915698.5	915698.5	104.39	%		00:12:00
1	Y 371.029	827041.6	827041.6	109.42	%		00:12:00
1	Ag 328.068†	-5542.2	-5549.8	-0.1047	ug/L	-0.1047 ppb	00:12:06
1	As 188.979†	-10.7	8.0	45.914	ug/L	45.914 ppb	00:12:26
1	B 249.677†	1147.9	1497.9	22.922	ug/L	22.922 ppb	00:12:06
1	Ba 233.527†	72177.3	69146.7	545.42	ug/L	545.42 ppb	00:12:06
1	Be 313.107†	-11383.3	-7142.9	3.3823	ug/L	3.3823 ppb	00:12:06
1	Cd 226.502†	814.3	976.3	2.8509	ug/L	2.8509 ppb	00:12:26
1	Co 228.616†	1388.9	1397.0	22.709	ug/L	22.709 ppb	00:12:26
1	Cr 267.716†	6332.5	5988.8	75.262	ug/L	75.262 ppb	00:12:06
1	Cu 324.752†	34620.0	27174.9	87.085	ug/L	87.085 ppb	00:12:06
1	Mn 257.610†	1814648.4	1737958.5	1985.4	ug/L	1985.4 ppb	00:12:00
1	Mo 202.031†	-25.1	-34.2	4.0581	ug/L	4.0581 ppb	00:12:26
1	Ni 231.604†	1968.5	1823.3	46.355	ug/L	46.355 ppb	00:12:26
1	P 214.914†	2556.3	2238.4	1274.2	ug/L	1274.2 ppb	00:12:26
1	Pb 220.353†	271431.6	260087.2	31987	ug/L	31987 ppb	00:12:06
1	S 181.975 Axial†	812.3	737.4	1054.1	ug/L	1054.1 ppb	00:12:26
1	Sb 206.836†	185.0	140.6	38.603	ug/L	38.603 ppb	00:12:26
1	Se 196.026†	-398.7	-354.2	23.235	ug/L	23.235 ppb	00:12:26
1	Si 251.611†	803740.4	769418.0	24897	ug/L	24897 ppb	00:12:00
1	Sn 189.927†	-53.5	-61.7	-12.716	ug/L	-12.716 ppb	00:12:26
1	Ti 334.940†	1773657.5	1700522.4	2673.8	ug/L	2673.8 ppb	00:12:00
1	Tl 190.801†	-139.3	-100.8	-1.0103	ug/L	-1.0103 ppb	00:12:26
1	U 409.014†	-6529.5	-3368.6	-102.51	ug/L	-102.51 ppb	00:12:06
1	V 292.402†	19643.5	20324.0	126.88	ug/L	126.88 ppb	00:12:06
1	Zn 213.857†	218893.1	209091.6	2092.1	ug/L	2092.1 ppb	00:12:06
1	SiO2†	805199.0	770819.1	53569	ug/L	53569 ppb	00:13:34
2	Sc Radial	3841.6	3841.6	98.0	%		00:11:28
2	Y RADIAL	4705.1	4705.1	106.7	%		00:11:08
2	Al 396.153Radial†	38395.2	39279.4	36839	ug/L	36839 ppb	00:11:08
2	Ca 317.933Radial†	8015.8	8157.2	17053	ug/L	17053 ppb	00:11:08
2	Fe 238.204 Radial†	5660.0	5762.4	81339	ug/L	81339 ppb	00:11:08
2	K 766.490 Radial†	44462.0	42716.2	8190.3	ug/L	8190.3 ppb	00:11:08
2	Mg 279.077 IEC†	180.5	180.0	8644.3	ug/L	8644.3 ppb	00:11:28
2	Na 589.592 Radial†	2911.3	3789.6	1168.4	ug/L	1168.4 ppb	00:11:08
2	Sr 421.552†	21697.6	22098.0	152.78	ug/L	152.78 ppb	00:11:08
2	Sc 361.383	915201.3	915201.3	104.33	%		00:12:32
2	Y 371.029	826869.2	826869.2	109.40	%		00:12:32
2	Ag 328.068†	-5530.0	-5540.9	-0.2485	ug/L	-0.2485 ppb	00:12:37
2	As 188.979†	-26.7	-7.3	38.829	ug/L	38.829 ppb	00:12:57
2	B 249.677†	1162.9	1512.8	23.386	ug/L	23.386 ppb	00:12:37
2	Ba 233.527†	72678.5	69664.6	549.47	ug/L	549.47 ppb	00:12:37
2	Be 313.107†	-11385.9	-7151.3	3.3492	ug/L	3.3492 ppb	00:12:37
2	Cd 226.502†	796.4	959.7	2.7220	ug/L	2.7220 ppb	00:12:57
2	Co 228.616†	1385.6	1394.6	22.698	ug/L	22.698 ppb	00:12:57
2	Cr 267.716†	6318.9	5979.0	75.094	ug/L	75.094 ppb	00:12:37
2	Cu 324.752†	34509.6	27087.1	86.785	ug/L	86.785 ppb	00:12:37
2	Mn 257.610†	1807712.3	1732254.8	1978.9	ug/L	1978.9 ppb	00:12:32
2	Mo 202.031†	-23.2	-32.3	4.1426	ug/L	4.1426 ppb	00:12:57
2	Ni 231.604†	1951.3	1807.9	45.962	ug/L	45.962 ppb	00:12:57

2	P 214.914†	2569.6	2252.5	1283.2 ug/L	1283.2 ppb	00:12:57
2	Pb 220.353†	273179.2	261903.6	32210 ug/L	32210 ppb	00:12:37
2	S 181.975 Axial†	812.7	738.2	1055.4 ug/L	1055.4 ppb	00:12:57
2	Sb 206.836†	194.6	149.8	41.906 ug/L	41.906 ppb	00:12:57
2	Se 196.026†	-405.3	-360.7	17.018 ug/L	17.018 ppb	00:12:57
2	Si 251.611†	800147.4	766392.3	24800 ug/L	24800 ppb	00:12:32
2	Sn 189.927†	-55.6	-63.8	-13.085 ug/L	-13.085 ppb	00:12:57
2	Ti 334.940†	1763941.5	1692132.7	2660.6 ug/L	2660.6 ppb	00:12:32
2	Tl 190.801†	-149.6	-110.9	-4.3554 ug/L	-4.3554 ppb	00:12:57
2	U 409.014†	-6551.9	-3393.5	-103.13 ug/L	-103.13 ppb	00:12:37
2	V 292.402†	19774.1	20459.4	127.93 ug/L	127.93 ppb	00:12:37
2	Zn 213.857†	220151.8	210412.1	2105.5 ug/L	2105.5 ppb	00:12:37
2	SiO2†	791176.5	757797.5	52664 ug/L	52664 ppb	00:13:40
3	Sc Radial	3868.5	3868.5	98.7 %		00:11:53
3	Y RADIAL	4691.8	4691.8	106.4 %		00:11:33
3	Al 396.153Radial†	38346.6	38957.8	36538 ug/L	36538 ppb	00:11:33
3	Ca 317.933Radial†	8028.8	8113.6	16962 ug/L	16962 ppb	00:11:33
3	Fe 238.204 Radial†	5646.7	5708.8	80582 ug/L	80582 ppb	00:11:33
3	K 766.490 Radial†	44424.9	42363.2	8122.6 ug/L	8122.6 ppb	00:11:33
3	Mg 279.077 IEC†	180.6	178.9	8589.9 ug/L	8589.9 ppb	00:11:53
3	Na 589.592 Radial†	2810.5	3666.8	1130.6 ug/L	1130.6 ppb	00:11:33
3	Sr 421.552†	21570.0	21814.9	150.82 ug/L	150.82 ppb	00:11:33
3	Sc 361.383	926063.8	926063.8	105.57 %		00:13:03
3	Y 371.029	833869.3	833869.3	110.32 %		00:13:03
3	Ag 328.068†	-5563.7	-5510.8	-0.3547 ug/L	-0.3547 ppb	00:13:08
3	As 188.979†	-11.0	7.8	45.080 ug/L	45.080 ppb	00:13:28
3	B 249.677†	1218.5	1552.5	24.470 ug/L	24.470 ppb	00:13:08
3	Ba 233.527†	72193.7	68388.2	539.43 ug/L	539.43 ppb	00:13:08
3	Be 313.107†	-11199.7	-6847.0	3.3780 ug/L	3.3780 ppb	00:13:08
3	Cd 226.502†	791.0	945.5	2.6366 ug/L	2.6366 ppb	00:13:28
3	Co 228.616†	1390.3	1383.5	22.551 ug/L	22.551 ppb	00:13:28
3	Cr 267.716†	6270.6	5862.2	73.705 ug/L	73.705 ppb	00:13:08
3	Cu 324.752†	34211.6	26416.8	84.704 ug/L	84.704 ppb	00:13:08
3	Mn 257.610†	1804320.6	1708717.5	1952.0 ug/L	1952.0 ppb	00:13:03
3	Mo 202.031†	-27.6	-36.3	3.7907 ug/L	3.7907 ppb	00:13:28
3	Ni 231.604†	1937.5	1772.9	45.073 ug/L	45.073 ppb	00:13:28
3	P 214.914†	2569.9	2223.9	1266.9 ug/L	1266.9 ppb	00:13:28
3	Pb 220.353†	270981.5	256750.4	31576 ug/L	31576 ppb	00:13:08
3	S 181.975 Axial†	822.5	738.3	1055.7 ug/L	1055.7 ppb	00:13:28
3	Sb 206.836†	187.8	141.1	38.975 ug/L	38.975 ppb	00:13:28
3	Se 196.026†	-386.7	-338.5	29.196 ug/L	29.196 ppb	00:13:28
3	Si 251.611†	799187.5	756486.9	24479 ug/L	24479 ppb	00:13:03
3	Sn 189.927†	-63.3	-70.5	-14.261 ug/L	-14.261 ppb	00:13:28
3	Ti 334.940†	1759532.3	1668123.8	2622.9 ug/L	2622.9 ppb	00:13:03
3	Tl 190.801†	-144.3	-104.1	-2.6362 ug/L	-2.6362 ppb	00:13:28
3	U 409.014†	-6526.6	-3295.8	-100.34 ug/L	-100.34 ppb	00:13:08
3	V 292.402†	19543.2	20018.3	125.00 ug/L	125.00 ppb	00:13:08
3	Zn 213.857†	218531.7	206402.2	2065.3 ug/L	2065.3 ppb	00:13:08
3	SiO2†	804756.3	761766.0	52939 ug/L	52939 ppb	00:13:46

Mean Data: 1202033899|949334|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	918987.9	104.76 %	0.699			0.67%
Sc Radial	3859.2	98.5 %	0.39			0.40%
Y 371.029	829260.0	109.71 %	0.528			0.48%
Y RADIAL	4731.3	107.3 %	1.30			1.21%
Ag 328.068†	-5533.8	-0.2360 ug/L	0.12547	-0.2360 ppb	0.12547	53.16%
Al 396.153Radial†	39295.1	36854 ug/L	323.9	36854 ppb	323.9	0.88%
As 188.979†	2.8	43.274 ug/L	3.8722	43.274 ppb	3.8722	8.95%
B 249.677†	1521.1	23.593 ug/L	0.7945	23.593 ppb	0.7945	3.37%
Ba 233.527†	69066.5	544.77 ug/L	5.055	544.77 ppb	5.055	0.93%
Be 313.107†	-7047.1	3.3698 ug/L	0.01798	3.3698 ppb	0.01798	0.53%
Ca 317.933Radial†	8173.9	17088 ug/L	146.6	17088 ppb	146.6	0.86%
Cd 226.502†	960.5	2.7365 ug/L	0.10790	2.7365 ppb	0.10790	3.94%
Co 228.616†	1391.7	22.653 ug/L	0.0885	22.653 ppb	0.0885	0.39%
Cr 267.716†	5943.4	74.687 ug/L	0.8544	74.687 ppb	0.8544	1.14%
Cu 324.752†	26892.9	86.192 ug/L	1.2969	86.192 ppb	1.2969	1.50%
Fe 238.204 Radial†	5759.3	81294 ug/L	691.3	81294 ppb	691.3	0.85%
K 766.490 Radial†	42789.0	8204.3 ug/L	89.46	8204.3 ppb	89.46	1.09%



Mg 279.077 IEC†	180.6	8672.6 ug/L	99.91	8672.6 ppb	99.91	1.15%
Mn 257.610†	1726310.3	1972.1 ug/L	17.70	1972.1 ppb	17.70	0.90%
Mo 202.031†	-34.3	3.9971 ug/L	0.18370	3.9971 ppb	0.18370	4.60%
Na 589.592 Radial†	3743.5	1154.2 ug/L	20.62	1154.2 ppb	20.62	1.79%
Ni 231.604†	1801.4	45.797 ug/L	0.6571	45.797 ppb	0.6571	1.43%
P 214.914†	2238.3	1274.8 ug/L	8.16	1274.8 ppb	8.16	0.64%
Pb 220.353†	259580.4	31924 ug/L	321.4	31924 ppb	321.4	1.01%
S 181.975 Axial†	738.0	1055.1 ug/L	0.82	1055.1 ppb	0.82	0.08%
Sb 206.836†	143.8	39.828 ug/L	1.8092	39.828 ppb	1.8092	4.54%
Se 196.026†	-351.1	23.149 ug/L	6.0896	23.149 ppb	6.0896	26.31%
Si 251.611†	764099.1	24725 ug/L	218.9	24725 ppb	218.9	0.89%
Sn 189.927†	-65.3	-13.354 ug/L	0.8070	-13.354 ppb	0.8070	6.04%
Sr 421.552†	22075.0	152.62 ug/L	1.724	152.62 ppb	1.724	1.13%
Ti 334.940†	1686926.3	2652.4 ug/L	26.43	2652.4 ppb	26.43	1.00%
Tl 190.801†	-105.3	-2.6673 ug/L	1.67276	-2.6673 ppb	1.67276	62.71%
U 409.014†	-3352.6	-102.00 ug/L	1.464	-102.00 ppb	1.464	1.44%
V 292.402†	20267.2	126.61 ug/L	1.482	126.61 ppb	1.482	1.17%
Zn 213.857†	208635.3	2087.6 ug/L	20.49	2087.6 ppb	20.49	0.98%
SiO2†	763460.9	53057 ug/L	463.8	53057 ppb	463.8	0.87%

Sequence No.: 65

Sample ID: 1202033901|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 90

Date Collected: 2/25/2010 00:15:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033901|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3904.0	3904.0	99.6 %		00:18:11
1	Y RADIAL	4780.0	4780.0	108.4 %		00:17:51
1	Al 396.153Radial†	70770.4	71150.7	66708 ug/L	66708 ppb	00:17:51
1	Ca 317.933Radial†	9625.2	9641.9	20156 ug/L	20156 ppb	00:17:51
1	Fe 238.204 Radial†	6573.7	6587.2	92995 ug/L	92995 ppb	00:17:51
1	K 766.490 Radial†	74828.1	72471.6	13897 ug/L	13897 ppb	00:17:51
1	Mg 279.077 IEC†	296.2	293.2	14125 ug/L	14125 ppb	00:18:11
1	Na 589.592 Radial†	19518.3	20412.0	6293.6 ug/L	6293.6 ppb	00:17:51
1	Sr 421.552†	95272.4	95597.2	661.34 ug/L	661.34 ppb	00:17:51
1	Sc 361.383	885412.7	885412.7	100.93 %		00:19:15
1	Y 371.029	791349.3	791349.3	104.70 %		00:19:15
1	Ag 328.068†	103398.5	102202.7	504.06 ug/L	504.06 ppb	00:19:15
1	As 188.979†	3771.6	3755.0	1728.3 ug/L	1728.3 ppb	00:19:35
1	B 249.677†	21989.1	22184.2	521.32 ug/L	521.32 ppb	00:19:15
1	Ba 233.527†	138740.1	137459.5	1082.9 ug/L	1082.9 ppb	00:19:15
1	Be 313.107†	1358126.3	1349339.0	515.14 ug/L	515.14 ppb	00:19:10
1	Cd 226.502†	43790.1	43581.7	495.48 ug/L	495.48 ppb	00:19:15
1	Co 228.616†	24178.6	24021.7	495.80 ug/L	495.80 ppb	00:19:35
1	Cr 267.716†	50424.7	49881.0	569.54 ug/L	569.54 ppb	00:19:15
1	Cu 324.752†	220752.6	212722.0	652.02 ug/L	652.02 ppb	00:19:15
1	Mn 257.610†	2020665.2	2001534.8	2286.2 ug/L	2286.2 ppb	00:19:10
1	Mo 202.031†	6486.5	6416.4	478.53 ug/L	478.53 ppb	00:19:35
1	Ni 231.604†	20815.0	20560.2	522.60 ug/L	522.60 ppb	00:19:35
1	P 214.914†	5545.1	5283.4	2998.3 ug/L	2998.3 ppb	00:19:35
1	Pb 220.353†	4693336.1	4650026.1	571900 ug/L	571900 ppb	00:19:10
1	S 181.975 Axial†	4395.2	4313.8	6195.1 ug/L	6195.1 ppb	00:19:35
1	Sb 206.836†	12758.1	12603.5	4410.5 ug/L	4410.5 ppb	00:19:35
1	Se 196.026†	252.7	278.1	473.02 ug/L	473.02 ppb	00:19:35
1	Si 251.611†	771232.9	763548.1	24702 ug/L	24702 ppb	00:19:10
1	Sn 189.927†	2744.5	2708.6	484.24 ug/L	484.24 ppb	00:19:35
1	Ti 334.940†	2280891.5	2261189.3	3554.4 ug/L	3554.4 ppb	00:19:10
1	Tl 190.801†	1386.4	1406.2	486.55 ug/L	486.55 ppb	00:19:35
1	U 409.014†	12187.8	14961.8	401.30 ug/L	401.30 ppb	00:19:15
1	V 292.402†	90829.6	91495.9	628.20 ug/L	628.20 ppb	00:19:15
1	Zn 213.857†	400774.8	396465.4	3972.9 ug/L	3972.9 ppb	00:19:15
1	SiO2†	769549.6	761884.3	52935 ug/L	52935 ppb	00:20:46
2	Sc Radial	3903.1	3903.1	99.6 %		00:18:36
2	Y RADIAL	4727.8	4727.8	107.2 %		00:18:16
2	Al 396.153Radial†	70758.7	71155.5	66712 ug/L	66712 ppb	00:18:16
2	Ca 317.933Radial†	9637.1	9656.2	20186 ug/L	20186 ppb	00:18:16
2	Fe 238.204 Radial†	6551.4	6566.4	92702 ug/L	92702 ppb	00:18:16
2	K 766.490 Radial†	74664.0	72324.5	13868 ug/L	13868 ppb	00:18:16
2	Mg 279.077 IEC†	304.4	301.6	14530 ug/L	14530 ppb	00:18:36
2	Na 589.592 Radial†	19558.5	20456.9	6307.4 ug/L	6307.4 ppb	00:18:16
2	Sr 421.552†	95301.9	95649.2	661.70 ug/L	661.70 ppb	00:18:16
2	Sc 361.383	862988.3	862988.3	98.376 %		00:19:48
2	Y 371.029	774607.8	774607.8	102.48 %		00:19:48
2	Ag 328.068†	100740.7	102162.9	503.79 ug/L	503.79 ppb	00:19:48
2	As 188.979†	3775.9	3856.5	1773.9 ug/L	1773.9 ppb	00:20:08
2	B 249.677†	21358.7	22109.4	519.51 ug/L	519.51 ppb	00:19:48
2	Ba 233.527†	135752.9	137994.8	1087.1 ug/L	1087.1 ppb	00:19:48
2	Be 313.107†	1339707.4	1365580.3	521.36 ug/L	521.36 ppb	00:19:42
2	Cd 226.502†	42851.7	43755.2	497.53 ug/L	497.53 ppb	00:19:48
2	Co 228.616†	24304.3	24772.0	511.44 ug/L	511.44 ppb	00:20:08
2	Cr 267.716†	49207.0	49941.4	570.19 ug/L	570.19 ppb	00:19:48
2	Cu 324.752†	214710.3	212263.1	650.61 ug/L	650.61 ppb	00:19:48
2	Mn 257.610†	1998857.2	2031387.9	2320.2 ug/L	2320.2 ppb	00:19:42
2	Mo 202.031†	6473.2	6569.8	489.77 ug/L	489.77 ppb	00:20:08
2	Ni 231.604†	20896.2	21178.6	538.32 ug/L	538.32 ppb	00:20:08

2	P 214.914†	5558.3	5439.5	3093.0 ug/L	3093.0 ppb	00:20:08
2	Pb 220.353†	4645944.7	4722680.3	580840 ug/L	580840 ppb	00:19:42
2	S 181.975 Axial†	4394.5	4426.2	6357.0 ug/L	6357.0 ppb	00:20:08
2	Sb 206.836†	12777.7	12951.9	4532.6 ug/L	4532.6 ppb	00:20:08
2	Se 196.026†	239.5	271.2	467.59 ug/L	467.59 ppb	00:20:08
2	Si 251.611†	763810.2	775857.9	25100 ug/L	25100 ppb	00:19:42
2	Sn 189.927†	2748.8	2783.6	497.72 ug/L	497.72 ppb	00:20:08
2	Ti 334.940†	2254980.3	2293570.9	3605.3 ug/L	3605.3 ppb	00:19:42
2	Tl 190.801†	1372.3	1427.6	493.90 ug/L	493.90 ppb	00:20:08
2	U 409.014†	11661.6	14740.7	395.23 ug/L	395.23 ppb	00:19:48
2	V 292.402†	88598.4	91566.3	628.84 ug/L	628.84 ppb	00:19:48
2	Zn 213.857†	391925.0	397787.4	3986.1 ug/L	3986.1 ppb	00:19:48
2	SiO2†	766395.9	778490.2	54088 ug/L	54088 ppb	00:20:51
3	Sc Radial	3852.6	3852.6	98.3 %		00:19:02
3	Y RADIAL	4700.7	4700.7	106.6 %		00:18:41
3	Al 396.153Radial†	70655.3	71982.5	67488 ug/L	67488 ppb	00:18:41
3	Ca 317.933Radial†	9604.7	9750.1	20383 ug/L	20383 ppb	00:18:41
3	Fe 238.204 Radial†	6512.3	6613.0	93359 ug/L	93359 ppb	00:18:41
3	K 766.490 Radial†	74414.9	73054.7	14009 ug/L	14009 ppb	00:18:41
3	Mg 279.077 IEC†	300.9	302.0	14552 ug/L	14552 ppb	00:19:02
3	Na 589.592 Radial†	19314.1	20466.0	6310.2 ug/L	6310.2 ppb	00:18:41
3	Sr 421.552†	94671.7	96263.7	665.95 ug/L	665.95 ppb	00:18:41
3	Sc 361.383	880738.1	880738.1	100.40 %		00:20:20
3	Y 371.029	787370.4	787370.4	104.17 %		00:20:20
3	Ag 328.068†	103434.2	102781.9	506.86 ug/L	506.86 ppb	00:20:20
3	As 188.979†	3809.4	3812.5	1754.5 ug/L	1754.5 ppb	00:20:40
3	B 249.677†	22031.9	22342.4	525.08 ug/L	525.08 ppb	00:20:20
3	Ba 233.527†	138816.5	138265.2	1089.3 ug/L	1089.3 ppb	00:20:20
3	Be 313.107†	1366698.8	1365019.1	521.16 ug/L	521.16 ppb	00:20:15
3	Cd 226.502†	43840.4	43862.1	498.69 ug/L	498.69 ppb	00:20:20
3	Co 228.616†	24252.7	24222.6	499.89 ug/L	499.89 ppb	00:20:40
3	Cr 267.716†	50256.8	49979.0	570.67 ug/L	570.67 ppb	00:20:20
3	Cu 324.752†	220650.0	213780.7	655.26 ug/L	655.26 ppb	00:20:20
3	Mn 257.610†	2040288.9	2031706.2	2320.6 ug/L	2320.6 ppb	00:20:15
3	Mo 202.031†	6468.7	6432.8	479.76 ug/L	479.76 ppb	00:20:40
3	Ni 231.604†	20854.2	20708.7	526.38 ug/L	526.38 ppb	00:20:40
3	P 214.914†	5570.5	5337.8	3030.4 ug/L	3030.4 ppb	00:20:40
3	Pb 220.353†	4726970.5	4708206.8	579060 ug/L	579060 ppb	00:20:15
3	S 181.975 Axial†	4379.5	4321.2	6205.7 ug/L	6205.7 ppb	00:20:40
3	Sb 206.836†	12722.9	12635.6	4421.6 ug/L	4421.6 ppb	00:20:40
3	Se 196.026†	230.3	257.1	460.39 ug/L	460.39 ppb	00:20:40
3	Si 251.611†	780930.0	777262.2	25145 ug/L	25145 ppb	00:20:15
3	Sn 189.927†	2776.4	2754.9	492.56 ug/L	492.56 ppb	00:20:40
3	Ti 334.940†	2303536.8	2295738.6	3608.7 ug/L	3608.7 ppb	00:20:15
3	Tl 190.801†	1392.0	1419.0	491.25 ug/L	491.25 ppb	00:20:40
3	U 409.014†	12085.6	14924.1	400.22 ug/L	400.22 ppb	00:20:20
3	V 292.402†	90636.0	91780.8	630.10 ug/L	630.10 ppb	00:20:20
3	Zn 213.857†	400834.1	398632.0	3994.6 ug/L	3994.6 ppb	00:20:20
3	SiO2†	768951.6	765335.3	53174 ug/L	53174 ppb	00:20:57

Mean Data: 1202033901|949334|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	876379.7	99.903 %		1.3486				1.35%
Sc Radial	3886.6	99.2 %		0.75				0.76%
Y 371.029	784442.5	103.78 %		1.157				1.11%
Y RADIAL	4736.2	107.4 %		0.91				0.85%
Ag 328.068†	102382.5	504.90 ug/L		1.700	504.90 ppb		1.700	0.34%
Al 396.153Radial†	71429.6	66969 ug/L		449.3	66969 ppb		449.3	0.67%
As 188.979†	3808.0	1752.2 ug/L		22.91	1752.2 ppb		22.91	1.31%
B 249.677†	22212.0	521.97 ug/L		2.844	521.97 ppb		2.844	0.54%
Ba 233.527†	137906.5	1086.4 ug/L		3.22	1086.4 ppb		3.22	0.30%
Be 313.107†	1359979.4	519.22 ug/L		3.533	519.22 ppb		3.533	0.68%
Ca 317.933Radial†	9682.7	20242 ug/L		122.9	20242 ppb		122.9	0.61%
Cd 226.502†	43733.0	497.23 ug/L		1.626	497.23 ppb		1.626	0.33%
Co 228.616†	24338.8	502.38 ug/L		8.112	502.38 ppb		8.112	1.61%
Cr 267.716†	49933.8	570.13 ug/L		0.571	570.13 ppb		0.571	0.10%
Cu 324.752†	212921.9	652.63 ug/L		2.385	652.63 ppb		2.385	0.37%
Fe 238.204 Radial†	6588.9	93019 ug/L		329.1	93019 ppb		329.1	0.35%
K 766.490 Radial†	72617.0	13925 ug/L		74.1	13925 ppb		74.1	0.53%

Mg 279.077 IEC†	298.9	14402 ug/L	240.1	14402 ppb	240.1	1.67%
Mn 257.610†	2021543.0	2309.0 ug/L	19.71	2309.0 ppb	19.71	0.85%
Mo 202.031†	6473.0	482.69 ug/L	6.165	482.69 ppb	6.165	1.28%
Na 589.592 Radial†	20444.9	6303.7 ug/L	8.91	6303.7 ppb	8.91	0.14%
Ni 231.604†	20815.8	529.10 ug/L	8.206	529.10 ppb	8.206	1.55%
P 214.914†	5353.6	3040.6 ug/L	48.13	3040.6 ppb	48.13	1.58%
Pb 220.353†	4693637.7	577270 ug/L	4729.6	577270 ppb	4729.6	0.82%
S 181.975 Axial†	4353.7	6252.6 ug/L	90.53	6252.6 ppb	90.53	1.45%
Sb 206.836†	12730.3	4454.9 ug/L	67.49	4454.9 ppb	67.49	1.51%
Se 196.026†	268.8	467.00 ug/L	6.335	467.00 ppb	6.335	1.36%
Si 251.611†	772222.8	24982 ug/L	244.1	24982 ppb	244.1	0.98%
Sn 189.927†	2749.0	491.51 ug/L	6.804	491.51 ppb	6.804	1.38%
Sr 421.552†	95836.7	663.00 ug/L	2.564	663.00 ppb	2.564	0.39%
Ti 334.940†	2283499.6	3589.4 ug/L	30.40	3589.4 ppb	30.40	0.85%
Tl 190.801†	1417.6	490.57 ug/L	3.721	490.57 ppb	3.721	0.76%
U 409.014†	14875.5	398.92 ug/L	3.239	398.92 ppb	3.239	0.81%
V 292.402†	91614.3	629.05 ug/L	0.967	629.05 ppb	0.967	0.15%
Zn 213.857†	397628.3	3984.5 ug/L	10.95	3984.5 ppb	10.95	0.27%
SiO2†	768570.0	53399 ug/L	608.8	53399 ppb	608.8	1.14%

Sequence No.: 66

Sample ID: 1202033902|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 91

Date Collected: 2/25/2010 00:23:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033902|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3947.6	3947.6	101 %		00:25:01
1	Y RADIAL	4673.2	4673.2	105.9 %		00:25:01
1	Al 396.153Radial†	57797.3	57488.0	53893 ug/L	53893 ppb	00:25:01
1	Ca 317.933Radial†	8298.1	8217.8	17179 ug/L	17179 ppb	00:25:01
1	Fe 238.204 Radial†	4632.3	4587.2	64765 ug/L	64765 ppb	00:25:01
1	K 766.490 Radial†	66307.5	63184.1	12116 ug/L	12116 ppb	00:25:01
1	Mg 279.077 IEC†	259.1	253.2	12212 ug/L	12212 ppb	00:25:21
1	Na 589.592 Radial†	17952.9	18641.7	5747.7 ug/L	5747.7 ppb	00:25:01
1	Sr 421.552†	87082.7	86411.6	597.80 ug/L	597.80 ppb	00:25:01
1	Sc 361.383	917204.0	917204.0	104.56 %		00:26:20
1	Y 371.029	798476.4	798476.4	105.64 %		00:26:25
1	Ag 328.068†	109343.8	104338.1	505.16 ug/L	505.16 ppb	00:26:25
1	As 188.979†	17072.4	16346.6	7337.9 ug/L	7337.9 ppb	00:26:45
1	B 249.677†	22238.9	21668.0	513.37 ug/L	513.37 ppb	00:26:25
1	Ba 233.527†	120706.4	115447.3	909.25 ug/L	909.25 ppb	00:26:25
1	Be 313.107†	1381312.5	1324875.5	504.22 ug/L	504.22 ppb	00:26:20
1	Cd 226.502†	45632.3	43839.8	501.39 ug/L	501.39 ppb	00:26:25
1	Co 228.616†	25385.7	24345.9	504.53 ug/L	504.53 ppb	00:26:45
1	Cr 267.716†	51497.6	49175.6	558.88 ug/L	558.88 ppb	00:26:25
1	Cu 324.752†	215003.1	199642.2	610.73 ug/L	610.73 ppb	00:26:25
1	Mn 257.610†	1703467.4	1628769.6	1859.3 ug/L	1859.3 ppb	00:26:20
1	Mo 202.031†	6845.1	6536.6	485.13 ug/L	485.13 ppb	00:26:45
1	Ni 231.604†	21693.3	20685.4	525.78 ug/L	525.78 ppb	00:26:45
1	P 214.914†	3701.9	3330.0	1873.7 ug/L	1873.7 ppb	00:26:45
1	Pb 220.353†	5657361.2	5410865.0	665480 ug/L	665480 ppb	00:26:20
1	S 181.975 Axial†	4523.3	4285.4	6156.6 ug/L	6156.6 ppb	00:26:45
1	Sb 206.836†	52074.4	49768.2	17444 ug/L	17444 ppb	00:26:25
1	Se 196.026†	358.7	370.8	445.86 ug/L	445.86 ppb	00:26:45
1	Si 251.611†	849997.2	812395.1	26282 ug/L	26282 ppb	00:26:20
1	Sn 189.927†	17669.4	16888.9	3029.6 ug/L	3029.6 ppb	00:26:45
1	Ti 334.940†	1855773.5	1776270.9	2792.2 ug/L	2792.2 ppb	00:26:20
1	Tl 190.801†	1491.6	1459.2	495.19 ug/L	495.19 ppb	00:26:45
1	U 409.014†	12666.4	15001.0	405.62 ug/L	405.62 ppb	00:26:25
1	V 292.402†	88363.2	86017.9	595.02 ug/L	595.02 ppb	00:26:25
1	Zn 213.857†	529780.4	506085.9	5080.6 ug/L	5080.6 ppb	00:26:25
1	SiO2†	878773.7	839921.4	58358 ug/L	58358 ppb	00:27:56
2	Sc Radial	3875.6	3875.6	98.9 %		00:25:26
2	Y RADIAL	4512.7	4512.7	102.3 %		00:25:26
2	Al 396.153Radial†	55998.2	56734.5	53187 ug/L	53187 ppb	00:25:26
2	Ca 317.933Radial†	8037.6	8107.5	16949 ug/L	16949 ppb	00:25:26
2	Fe 238.204 Radial†	4493.0	4531.7	63982 ug/L	63982 ppb	00:25:26
2	K 766.490 Radial†	64418.7	62496.8	11984 ug/L	11984 ppb	00:25:26
2	Mg 279.077 IEC†	254.8	253.6	12235 ug/L	12235 ppb	00:25:46
2	Na 589.592 Radial†	17297.3	18309.7	5645.4 ug/L	5645.4 ppb	00:25:26
2	Sr 421.552†	84113.4	85014.8	588.14 ug/L	588.14 ppb	00:25:26
2	Sc 361.383	934237.8	934237.8	106.50 %		00:26:52
2	Y 371.029	808621.4	808621.4	106.98 %		00:26:58
2	Ag 328.068†	111005.3	103991.4	503.30 ug/L	503.30 ppb	00:26:58
2	As 188.979†	17114.2	16088.2	7222.3 ug/L	7222.3 ppb	00:27:18
2	B 249.677†	22626.1	21643.7	512.93 ug/L	512.93 ppb	00:26:58
2	Ba 233.527†	122831.7	115338.0	908.36 ug/L	908.36 ppb	00:26:58
2	Be 313.107†	1401716.0	1319946.3	502.37 ug/L	502.37 ppb	00:26:52
2	Cd 226.502†	46199.9	43577.1	498.42 ug/L	498.42 ppb	00:26:58
2	Co 228.616†	25390.2	23907.5	495.35 ug/L	495.35 ppb	00:27:18
2	Cr 267.716†	52152.8	48892.8	555.62 ug/L	555.62 ppb	00:26:58
2	Cu 324.752†	218634.1	199302.4	609.64 ug/L	609.64 ppb	00:26:58
2	Mn 257.610†	1732626.5	1626443.9	1856.6 ug/L	1856.6 ppb	00:26:52
2	Mo 202.031†	6852.1	6423.8	476.78 ug/L	476.78 ppb	00:27:18
2	Ni 231.604†	21740.3	20351.3	517.29 ug/L	517.29 ppb	00:27:18

2	P 214.914†	3694.1	3258.2	1830.7 ug/L	1830.7 ppb	00:27:18
2	Pb 220.353†	5726806.7	5377418.3	661360 ug/L	661360 ppb	00:26:52
2	S 181.975 Axial†	4543.0	4225.0	6069.9 ug/L	6069.9 ppb	00:27:18
2	Sb 206.836†	52888.5	49624.6	17393 ug/L	17393 ppb	00:26:58
2	Se 196.026†	372.4	377.5	447.74 ug/L	447.74 ppb	00:27:18
2	Si 251.611†	863940.1	810664.6	26226 ug/L	26226 ppb	00:26:52
2	Sn 189.927†	17735.2	16642.5	2985.4 ug/L	2985.4 ppb	00:27:18
2	Ti 334.940†	1890021.3	1776067.4	2791.8 ug/L	2791.8 ppb	00:26:52
2	Tl 190.801†	1508.7	1449.2	492.02 ug/L	492.02 ppb	00:27:18
2	U 409.014†	13295.0	15370.3	415.92 ug/L	415.92 ppb	00:26:58
2	V 292.402†	89682.0	85715.3	592.93 ug/L	592.93 ppb	00:26:58
2	Zn 213.857†	537781.6	504360.4	5063.4 ug/L	5063.4 ppb	00:26:58
2	SiO2†	872006.2	818242.4	56851 ug/L	56851 ppb	00:28:02
3	Sc Radial	3978.0	3978.0	102 %		00:25:51
3	Y RADIAL	4671.0	4671.0	105.9 %		00:25:51
3	Al 396.153Radial†	57710.0	56963.5	53402 ug/L	53402 ppb	00:25:51
3	Ca 317.933Radial†	8333.1	8189.4	17120 ug/L	17120 ppb	00:25:51
3	Fe 238.204 Radial†	4628.0	4547.8	64209 ug/L	64209 ppb	00:25:51
3	K 766.490 Radial†	66567.6	62937.1	12068 ug/L	12068 ppb	00:25:51
3	Mg 279.077 IEC†	261.3	253.3	12219 ug/L	12219 ppb	00:26:11
3	Na 589.592 Radial†	17942.8	18495.5	5702.7 ug/L	5702.7 ppb	00:25:51
3	Sr 421.552†	86591.0	85266.4	589.88 ug/L	589.88 ppb	00:25:51
3	Sc 361.383	925684.9	925684.9	105.52 %		00:27:25
3	Y 371.029	800830.3	800830.3	105.95 %		00:27:30
3	Ag 328.068†	109768.0	103781.9	502.39 ug/L	502.39 ppb	00:27:30
3	As 188.979†	17055.3	16180.8	7263.7 ug/L	7263.7 ppb	00:27:50
3	B 249.677†	22213.6	21449.1	508.17 ug/L	508.17 ppb	00:27:30
3	Ba 233.527†	121473.2	115116.2	906.62 ug/L	906.62 ppb	00:27:30
3	Be 313.107†	1393619.3	1324434.3	504.05 ug/L	504.05 ppb	00:27:25
3	Cd 226.502†	45888.4	43682.7	499.62 ug/L	499.62 ppb	00:27:30
3	Co 228.616†	25316.2	24057.5	498.49 ug/L	498.49 ppb	00:27:50
3	Cr 267.716†	51896.1	49102.0	557.99 ug/L	557.99 ppb	00:27:30
3	Cu 324.752†	214834.7	197598.7	604.48 ug/L	604.48 ppb	00:27:30
3	Mn 257.610†	1720424.8	1629912.7	1860.6 ug/L	1860.6 ppb	00:27:25
3	Mo 202.031†	6818.0	6451.0	478.80 ug/L	478.80 ppb	00:27:50
3	Ni 231.604†	21632.8	20438.0	519.50 ug/L	519.50 ppb	00:27:50
3	P 214.914†	3661.3	3259.2	1832.4 ug/L	1832.4 ppb	00:27:50
3	Pb 220.353†	5735019.5	5434885.4	668430 ug/L	668430 ppb	00:27:25
3	S 181.975 Axial†	4529.8	4251.9	6108.6 ug/L	6108.6 ppb	00:27:50
3	Sb 206.836†	52275.4	49502.4	17351 ug/L	17351 ppb	00:27:30
3	Se 196.026†	367.6	376.1	447.59 ug/L	447.59 ppb	00:27:50
3	Si 251.611†	857299.4	811866.8	26265 ug/L	26265 ppb	00:27:25
3	Sn 189.927†	17708.9	16771.4	3008.6 ug/L	3008.6 ppb	00:27:50
3	Ti 334.940†	1870658.0	1774114.9	2788.8 ug/L	2788.8 ppb	00:27:25
3	Tl 190.801†	1473.0	1428.4	485.38 ug/L	485.38 ppb	00:27:50
3	U 409.014†	12828.1	15043.2	406.85 ug/L	406.85 ppb	00:27:30
3	V 292.402†	88648.9	85514.3	591.50 ug/L	591.50 ppb	00:27:30
3	Zn 213.857†	532695.9	504206.6	5061.8 ug/L	5061.8 ppb	00:27:30
3	SiO2†	876115.7	829702.2	57648 ug/L	57648 ppb	00:28:08

Mean Data: 1202033902|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925708.9	105.53 %		0.971			0.92%
Sc Radial	3933.8	100 %		1.3			1.34%
Y 371.029	802642.7	106.19 %		0.702			0.66%
Y RADIAL	4619.0	104.7 %		2.09			1.99%
Ag 328.068†	104037.1	503.62 ug/L		1.409	503.62 ppb	1.409	0.28%
Al 396.153Radial†	57062.0	53494 ug/L		362.1	53494 ppb	362.1	0.68%
As 188.979†	16205.2	7274.6 ug/L		58.56	7274.6 ppb	58.56	0.80%
B 249.677†	21586.9	511.49 ug/L		2.884	511.49 ppb	2.884	0.56%
Ba 233.527†	115300.5	908.08 ug/L		1.334	908.08 ppb	1.334	0.15%
Be 313.107†	1323085.4	503.55 ug/L		1.023	503.55 ppb	1.023	0.20%
Ca 317.933Radial†	8171.6	17083 ug/L		119.7	17083 ppb	119.7	0.70%
Cd 226.502†	43699.9	499.81 ug/L		1.491	499.81 ppb	1.491	0.30%
Co 228.616†	24103.6	499.46 ug/L		4.670	499.46 ppb	4.670	0.94%
Cr 267.716†	49056.8	557.50 ug/L		1.684	557.50 ppb	1.684	0.30%
Cu 324.752†	198847.8	608.28 ug/L		3.340	608.28 ppb	3.340	0.55%
Fe 238.204 Radial†	4555.6	64318 ug/L		402.9	64318 ppb	402.9	0.63%
K 766.490 Radial†	62872.7	12056 ug/L		66.7	12056 ppb	66.7	0.55%

Mg 279.077 IEC†	253.4	12222 ug/L	11.6	12222 ppb	11.6	0.10%
Mn 257.610†	1628375.4	1858.8 ug/L	2.03	1858.8 ppb	2.03	0.11%
Mo 202.031†	6470.5	480.23 ug/L	4.354	480.23 ppb	4.354	0.91%
Na 589.592 Radial†	18482.3	5698.6 ug/L	51.30	5698.6 ppb	51.30	0.90%
Ni 231.604†	20491.6	520.86 ug/L	4.407	520.86 ppb	4.407	0.85%
P 214.914†	3282.5	1845.6 ug/L	24.35	1845.6 ppb	24.35	1.32%
Pb 220.353†	5407722.9	665090 ug/L	3549.7	665090 ppb	3549.7	0.53%
S 181.975 Axial†	4254.1	6111.7 ug/L	43.46	6111.7 ppb	43.46	0.71%
Sb 206.836†	49631.8	17396 ug/L	46.7	17396 ppb	46.7	0.27%
Se 196.026†	374.8	447.06 ug/L	1.047	447.06 ppb	1.047	0.23%
Si 251.611†	811642.2	26258 ug/L	28.6	26258 ppb	28.6	0.11%
Sn 189.927†	16767.6	3007.9 ug/L	22.11	3007.9 ppb	22.11	0.73%
Sr 421.552†	85564.3	591.94 ug/L	5.151	591.94 ppb	5.151	0.87%
Ti 334.940†	1775484.4	2790.9 ug/L	1.87	2790.9 ppb	1.87	0.07%
Tl 190.801†	1445.6	490.86 ug/L	5.009	490.86 ppb	5.009	1.02%
U 409.014†	15138.2	409.46 ug/L	5.622	409.46 ppb	5.622	1.37%
V 292.402†	85749.2	593.15 ug/L	1.767	593.15 ppb	1.767	0.30%
Zn 213.857†	504884.3	5068.6 ug/L	10.42	5068.6 ppb	10.42	0.21%
SiO2†	829288.7	57619 ug/L	753.6	57619 ppb	753.6	1.31%

Sequence No.: 67

Sample ID: 1202033900|949334|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 92

Date Collected: 2/25/2010 00:30:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033900|949334|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3773.1	3773.1	96.3 %			00:32:33
1	Y RADIAL	4356.6	4356.6	98.77 %			00:32:13
1	Al 396.153Radial†	5362.5	5682.0	5329.0 ug/L	5329.0 ppb		00:32:13
1	Ca 317.933Radial†	1201.3	1228.0	2567.1 ug/L	2567.1 ppb		00:32:33
1	Fe 238.204 Radial†	1199.5	1234.5	17425 ug/L	17425 ppb		00:32:33
1	K 766.490 Radial†	8780.5	6480.0	1242.5 ug/L	1242.5 ppb		00:32:13
1	Mg 279.077 IEC†	28.1	25.1	1200.4 ug/L	1200.4 ppb		00:32:33
1	Na 589.592 Radial†	-198.0	614.1	189.34 ug/L	189.34 ppb		00:32:13
1	Sr 421.552†	3631.0	3735.5	25.829 ug/L	25.829 ppb		00:32:13
1	Sc 361.383	895893.1	895893.1	102.13 %			00:33:30
1	Y 371.029	760196.6	760196.6	100.58 %			00:33:30
1	Ag 328.068†	-731.0	-956.2	0.9838 ug/L	0.9838 ppb		00:33:35
1	As 188.979†	255.5	268.4	127.46 ug/L	127.46 ppb		00:33:55
1	B 249.677†	4.1	402.2	6.9088 ug/L	6.9088 ppb		00:33:35
1	Ba 233.527†	10698.8	10477.3	82.793 ug/L	82.793 ppb		00:33:35
1	Be 313.107†	-4693.2	-833.2	0.6100 ug/L	0.6100 ppb		00:33:35
1	Cd 226.502†	43.5	238.9	0.9680 ug/L	0.9680 ppb		00:33:55
1	Co 228.616†	168.2	231.2	3.7753 ug/L	3.7753 ppb		00:33:55
1	Cr 267.716†	938.1	840.8	11.130 ug/L	11.130 ppb		00:33:35
1	Cu 324.752†	10692.8	4479.3	14.562 ug/L	14.562 ppb		00:33:35
1	Mn 257.610†	267976.7	261935.8	299.74 ug/L	299.74 ppb		00:33:30
1	Mo 202.031†	9.3	-1.0	1.3080 ug/L	1.3080 ppb		00:33:55
1	Ni 231.604†	373.5	303.3	7.7107 ug/L	7.7107 ppb		00:33:55
1	P 214.914†	636.3	412.6	232.94 ug/L	232.94 ppb		00:33:55
1	Pb 220.353†	738174.0	722855.6	88902 ug/L	88902 ppb		00:33:30
1	S 181.975 Axial†	137.1	93.5	133.53 ug/L	133.53 ppb		00:33:55
1	Sb 206.836†	1239.2	1176.7	409.69 ug/L	409.69 ppb		00:33:55
1	Se 196.026†	-96.0	-66.2	10.921 ug/L	10.921 ppb		00:33:55
1	Si 251.611†	94315.1	91792.2	2970.3 ug/L	2970.3 ppb		00:33:35
1	Sn 189.927†	2.5	-8.0	-1.9809 ug/L	-1.9809 ppb		00:33:55
1	Ti 334.940†	262862.8	258761.3	406.87 ug/L	406.87 ppb		00:33:30
1	Tl 190.801†	-55.9	-22.2	-2.3606 ug/L	-2.3606 ppb		00:33:55
1	U 409.014†	-3511.0	-551.3	-17.231 ug/L	-17.231 ppb		00:33:30
1	V 292.402†	1366.7	2844.0	16.852 ug/L	16.852 ppb		00:33:35
1	Zn 213.857†	36288.0	34926.1	348.91 ug/L	348.91 ppb		00:33:35
1	SiO2†	93727.0	91220.2	6339.4 ug/L	6339.4 ppb		00:35:02
2	Sc Radial	3751.6	3751.6	95.7 %			00:32:58
2	Y RADIAL	4406.2	4406.2	99.89 %			00:32:38
2	Al 396.153Radial†	5337.4	5687.8	5334.4 ug/L	5334.4 ppb		00:32:38
2	Ca 317.933Radial†	1190.2	1223.6	2558.0 ug/L	2558.0 ppb		00:32:58
2	Fe 238.204 Radial†	1191.4	1233.2	17407 ug/L	17407 ppb		00:32:58
2	K 766.490 Radial†	8666.7	6413.4	1229.7 ug/L	1229.7 ppb		00:32:38
2	Mg 279.077 IEC†	30.4	27.7	1322.5 ug/L	1322.5 ppb		00:32:58
2	Na 589.592 Radial†	-223.2	586.7	180.88 ug/L	180.88 ppb		00:32:38
2	Sr 421.552†	3536.8	3658.7	25.297 ug/L	25.297 ppb		00:32:38
2	Sc 361.383	897556.9	897556.9	102.32 %			00:34:00
2	Y 371.029	761512.7	761512.7	100.75 %			00:34:00
2	Ag 328.068†	-775.5	-998.4	0.7816 ug/L	0.7816 ppb		00:34:05
2	As 188.979†	247.6	260.3	123.84 ug/L	123.84 ppb		00:34:26
2	B 249.677†	-136.1	265.2	3.5891 ug/L	3.5891 ppb		00:34:05
2	Ba 233.527†	10696.3	10455.5	82.620 ug/L	82.620 ppb		00:34:05
2	Be 313.107†	-4779.4	-908.9	0.5830 ug/L	0.5830 ppb		00:34:05
2	Cd 226.502†	19.9	215.7	0.7017 ug/L	0.7017 ppb		00:34:26
2	Co 228.616†	156.3	219.3	3.5241 ug/L	3.5241 ppb		00:34:26
2	Cr 267.716†	890.2	792.3	10.584 ug/L	10.584 ppb		00:34:05
2	Cu 324.752†	10526.0	4296.8	14.006 ug/L	14.006 ppb		00:34:05
2	Mn 257.610†	268923.3	262374.6	300.23 ug/L	300.23 ppb		00:34:00
2	Mo 202.031†	3.3	-7.0	0.8706 ug/L	0.8706 ppb		00:34:26
2	Ni 231.604†	385.4	314.2	7.9887 ug/L	7.9887 ppb		00:34:26



2	P 214.914†	634.2	409.3	231.09 ug/L	231.09 ppb	00:34:26
2	Pb 220.353†	740597.3	723884.1	89028 ug/L	89028 ppb	00:34:00
2	S 181.975 Axial†	152.9	108.6	155.33 ug/L	155.33 ppb	00:34:26
2	Sb 206.836†	1207.1	1143.0	397.90 ug/L	397.90 ppb	00:34:26
2	Se 196.026†	-107.3	-77.1	3.7075 ug/L	3.7075 ppb	00:34:26
2	Si 251.611†	93688.1	91008.2	2944.9 ug/L	2944.9 ppb	00:34:05
2	Sn 189.927†	-0.6	-11.1	-2.5340 ug/L	-2.5340 ppb	00:34:26
2	Ti 334.940†	263766.6	259167.5	407.49 ug/L	407.49 ppb	00:34:00
2	Tl 190.801†	-38.6	-5.1	3.1062 ug/L	3.1062 ppb	00:34:26
2	U 409.014†	-3546.0	-579.1	-17.996 ug/L	-17.996 ppb	00:34:00
2	V 292.402†	1308.9	2784.9	16.437 ug/L	16.437 ppb	00:34:05
2	Zn 213.857†	36076.3	34653.3	346.16 ug/L	346.16 ppb	00:34:05
2	SiO2†	94875.4	92172.5	6405.6 ug/L	6405.6 ppb	00:35:07
3	Sc Radial	3781.2	3781.2	96.5 %		00:33:23
3	Y RADIAL	4308.1	4308.1	97.67 %		00:33:03
3	Al 396.153Radial†	5214.2	5516.4	5173.7 ug/L	5173.7 ppb	00:33:03
3	Ca 317.933Radial†	1190.1	1213.7	2537.2 ug/L	2537.2 ppb	00:33:23
3	Fe 238.204 Radial†	1195.8	1228.0	17334 ug/L	17334 ppb	00:33:23
3	K 766.490 Radial†	8644.5	6319.5	1211.7 ug/L	1211.7 ppb	00:33:03
3	Mg 279.077 IEC†	28.7	25.7	1226.6 ug/L	1226.6 ppb	00:33:23
3	Na 589.592 Radial†	-237.0	574.2	177.04 ug/L	177.04 ppb	00:33:03
3	Sr 421.552†	3456.9	3547.0	24.525 ug/L	24.525 ppb	00:33:03
3	Sc 361.383	885429.9	885429.9	100.93 %		00:34:31
3	Y 371.029	751341.4	751341.4	99.404 %		00:34:31
3	Ag 328.068†	-733.6	-967.2	0.9050 ug/L	0.9050 ppb	00:34:36
3	As 188.979†	254.5	270.4	128.31 ug/L	128.31 ppb	00:34:56
3	B 249.677†	-31.3	367.2	6.0744 ug/L	6.0744 ppb	00:34:36
3	Ba 233.527†	10759.8	10661.6	84.238 ug/L	84.238 ppb	00:34:36
3	Be 313.107†	-4804.6	-997.9	0.5462 ug/L	0.5462 ppb	00:34:36
3	Cd 226.502†	39.2	235.1	0.9343 ug/L	0.9343 ppb	00:34:56
3	Co 228.616†	177.6	242.5	4.0148 ug/L	4.0148 ppb	00:34:56
3	Cr 267.716†	925.6	839.4	11.105 ug/L	11.105 ppb	00:34:36
3	Cu 324.752†	10676.4	4586.7	14.882 ug/L	14.882 ppb	00:34:36
3	Mn 257.610†	264089.9	261185.8	298.88 ug/L	298.88 ppb	00:34:31
3	Mo 202.031†	7.2	-3.0	1.1533 ug/L	1.1533 ppb	00:34:56
3	Ni 231.604†	380.0	314.0	7.9830 ug/L	7.9830 ppb	00:34:56
3	P 214.914†	624.3	408.0	230.15 ug/L	230.15 ppb	00:34:56
3	Pb 220.353†	725961.4	719297.4	88464 ug/L	88464 ppb	00:34:31
3	S 181.975 Axial†	138.0	95.9	137.04 ug/L	137.04 ppb	00:34:56
3	Sb 206.836†	1219.0	1171.0	407.66 ug/L	407.66 ppb	00:34:56
3	Se 196.026†	-102.2	-73.5	5.8621 ug/L	5.8621 ppb	00:34:56
3	Si 251.611†	94652.9	93218.1	3016.4 ug/L	3016.4 ppb	00:34:36
3	Sn 189.927†	-12.0	-22.4	-4.5562 ug/L	-4.5562 ppb	00:34:56
3	Ti 334.940†	259242.3	258215.9	406.00 ug/L	406.00 ppb	00:34:31
3	Tl 190.801†	-46.9	-13.9	0.2760 ug/L	0.2760 ppb	00:34:56
3	U 409.014†	-3354.3	-436.6	-14.054 ug/L	-14.054 ppb	00:34:31
3	V 292.402†	1441.0	2933.4	17.494 ug/L	17.494 ppb	00:34:36
3	Zn 213.857†	36360.3	35417.6	353.87 ug/L	353.87 ppb	00:34:36
3	SiO2†	94903.8	93470.6	6495.8 ug/L	6495.8 ppb	00:35:12

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Mean Data: 1202033900|949334|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892960.0	101.79 %	0.749			0.74%
Sc Radial	3768.6	96.2 %	0.39			0.41%
Y 371.029	757683.6	100.24 %	0.732			0.73%
Y RADIAL	4357.0	98.78 %	1.112			1.13%
Ag 328.068†	-973.9	0.8902 ug/L	0.10193	0.8902 ppb	0.10193	11.45%
Al 396.153Radial†	5628.7	5279.0 ug/L	91.27	5279.0 ppb	91.27	1.73%
As 188.979†	266.4	126.54 ug/L	2.373	126.54 ppb	2.373	1.88%
B 249.677†	344.9	5.5241 ug/L	1.72692	5.5241 ppb	1.72692	31.26%
Ba 233.527†	10531.5	83.217 ug/L	0.8881	83.217 ppb	0.8881	1.07%
Be 313.107†	-913.4	0.5797 ug/L	0.03204	0.5797 ppb	0.03204	5.53%
Ca 317.933Radial†	1221.8	2554.1 ug/L	15.30	2554.1 ppb	15.30	0.60%
Cd 226.502†	229.9	0.8680 ug/L	0.14499	0.8680 ppb	0.14499	16.70%
Co 228.616†	231.0	3.7714 ug/L	0.24538	3.7714 ppb	0.24538	6.51%
Cr 267.716†	824.2	10.940 ug/L	0.3084	10.940 ppb	0.3084	2.82%
Cu 324.752†	4454.3	14.483 ug/L	0.4433	14.483 ppb	0.4433	3.06%
Fe 238.204 Radial†	1231.9	17389 ug/L	48.2	17389 ppb	48.2	0.28%
K 766.490 Radial†	6404.3	1227.9 ug/L	15.47	1227.9 ppb	15.47	1.26%

Mg 279.077 IEC†	26.2	1249.8 ug/L	64.30	1249.8 ppb	64.30	5.14%
Mn 257.610†	261832.1	299.62 ug/L	0.686	299.62 ppb	0.686	0.23%
Mo 202.031†	-3.7	1.1106 ug/L	0.22181	1.1106 ppb	0.22181	19.97%
Na 589.592 Radial†	591.6	182.42 ug/L	6.292	182.42 ppb	6.292	3.45%
Ni 231.604†	310.5	7.8942 ug/L	0.15889	7.8942 ppb	0.15889	2.01%
P 214.914†	410.0	231.39 ug/L	1.424	231.39 ppb	1.424	0.62%
Pb 220.353†	722012.4	88798 ug/L	296.0	88798 ppb	296.0	0.33%
S 181.975 Axial†	99.3	141.97 ug/L	11.706	141.97 ppb	11.706	8.25%
Sb 206.836†	1163.6	405.08 ug/L	6.305	405.08 ppb	6.305	1.56%
Se 196.026†	-72.3	6.8304 ug/L	3.70315	6.8304 ppb	3.70315	54.22%
Si 251.611†	92006.2	2977.2 ug/L	36.25	2977.2 ppb	36.25	1.22%
Sn 189.927†	-13.8	-3.0237 ug/L	1.35569	-3.0237 ppb	1.35569	44.84%
Sr 421.552†	3647.1	25.217 ug/L	0.6557	25.217 ppb	0.6557	2.60%
Ti 334.940†	258714.9	406.79 ug/L	0.749	406.79 ppb	0.749	0.18%
Tl 190.801†	-13.8	0.3405 ug/L	2.73398	0.3405 ppb	2.73398	802.94%
U 409.014†	-522.3	-16.427 ug/L	2.0904	-16.427 ppb	2.0904	12.73%
V 292.402†	2854.1	16.928 ug/L	0.5325	16.928 ppb	0.5325	3.15%
Zn 213.857†	34999.0	349.64 ug/L	3.905	349.64 ppb	3.905	1.12%
SiO2†	92287.8	6413.6 ug/L	78.51	6413.6 ppb	78.51	1.22%

Sequence No.: 68

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 00:37:22

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	3810.9	3810.9	97.2 %		00:39:15
1	Y RADIAL	4201.0	4201.0	95.24 %		00:39:15
1	Al 396.153Radial†	5137.1	5394.9	5035.7 ug/L	5035.7 ppb	00:39:15
1	Ca 317.933Radial†	2378.2	2425.8	5071.2 ug/L	5071.2 ppb	00:39:35
1	Fe 238.204 Radial†	338.1	336.3	4762.3 ug/L	4762.3 ppb	00:39:35
1	K 766.490 Radial†	28167.4	26325.1	5045.4 ug/L	5045.4 ppb	00:39:15
1	Mg 279.077 IEC†	104.2	103.1	4999.7 ug/L	4999.7 ppb	00:39:35
1	Na 589.592 Radial†	31376.0	33083.9	10201 ug/L	10201 ppb	00:39:15
1	Sr 421.552†	69868.8	71810.8	496.86 ug/L	496.86 ppb	00:39:15
1	Sc 361.383	878818.4	878818.4	100.18 %		00:40:32
1	Y 371.029	731972.8	731972.8	96.842 %		00:40:32
1	Ag 328.068†	106234.8	105802.6	493.16 ug/L	493.16 ppb	00:40:37
1	As 188.979†	1092.4	1108.7	499.22 ug/L	499.22 ppb	00:40:57
1	B 249.677†	19447.4	19810.5	478.12 ug/L	478.12 ppb	00:40:37
1	Ba 233.527†	62969.0	62856.7	494.48 ug/L	494.48 ppb	00:40:37
1	Be 313.107†	1313043.2	1314433.9	495.07 ug/L	495.07 ppb	00:40:32
1	Cd 226.502†	42958.6	43077.3	498.75 ug/L	498.75 ppb	00:40:37
1	Co 228.616†	23633.3	23657.1	495.66 ug/L	495.66 ppb	00:40:37
1	Cr 267.716†	44043.2	43885.9	493.61 ug/L	493.61 ppb	00:40:37
1	Cu 324.752†	165545.4	159255.6	484.62 ug/L	484.62 ppb	00:40:37
1	Mn 257.610†	438085.5	436835.5	497.36 ug/L	497.36 ppb	00:40:32
1	Mo 202.031†	6760.4	6738.0	495.11 ug/L	495.11 ppb	00:40:57
1	Ni 231.604†	19647.0	19549.1	496.89 ug/L	496.89 ppb	00:40:37
1	P 214.914†	4385.7	4167.3	2414.5 ug/L	2414.5 ppb	00:40:57
1	Pb 220.353†	5541.8	5589.9	689.06 ug/L	689.06 ppb	00:40:57
1	S 181.975 Axial†	730.2	688.1	989.18 ug/L	989.18 ppb	00:40:57
1	Sb 206.836†	1447.1	1407.8	509.93 ug/L	509.93 ppb	00:40:57
1	Se 196.026†	752.8	779.2	526.77 ug/L	526.77 ppb	00:40:57
1	Si 251.611†	76837.2	76140.1	2457.7 ug/L	2457.7 ppb	00:40:37
1	Sn 189.927†	2782.3	2766.8	497.06 ug/L	497.06 ppb	00:40:57
1	Ti 334.940†	309374.8	310190.1	487.32 ug/L	487.32 ppb	00:40:37
1	Tl 190.801†	1528.4	1558.2	501.52 ug/L	501.52 ppb	00:40:57
1	U 409.014†	14294.6	17155.4	472.08 ug/L	472.08 ppb	00:40:37
1	V 292.402†	68593.0	69974.8	494.53 ug/L	494.53 ppb	00:40:37
1	Zn 213.857†	49998.1	49301.8	491.76 ug/L	491.76 ppb	00:40:37
1	SiO2†	78789.3	78092.6	5413.6 ug/L	5413.6 ppb	00:42:05
2	Sc Radial	3860.5	3860.5	98.5 %		00:39:40
2	Y RADIAL	4286.6	4286.6	97.18 %		00:39:40
2	Al 396.153Radial†	5192.2	5383.1	5024.6 ug/L	5024.6 ppb	00:39:40
2	Ca 317.933Radial†	2382.2	2398.5	5014.0 ug/L	5014.0 ppb	00:40:00
2	Fe 238.204 Radial†	335.5	329.2	4661.9 ug/L	4661.9 ppb	00:40:00
2	K 766.490 Radial†	28455.5	26245.8	5030.2 ug/L	5030.2 ppb	00:39:40
2	Mg 279.077 IEC†	103.0	100.5	4871.2 ug/L	4871.2 ppb	00:40:00
2	Na 589.592 Radial†	31503.2	32798.9	10113 ug/L	10113 ppb	00:39:40
2	Sr 421.552†	70492.0	71521.2	494.86 ug/L	494.86 ppb	00:39:40
2	Sc 361.383	869965.8	869965.8	99.172 %		00:41:03
2	Y 371.029	723572.4	723572.4	95.730 %		00:41:03
2	Ag 328.068†	107870.8	108531.3	505.82 ug/L	505.82 ppb	00:41:08
2	As 188.979†	1087.7	1115.0	502.15 ug/L	502.15 ppb	00:41:28
2	B 249.677†	19943.6	20508.4	495.02 ug/L	495.02 ppb	00:41:08
2	Ba 233.527†	63851.8	64386.5	506.51 ug/L	506.51 ppb	00:41:08
2	Be 313.107†	1316445.0	1331201.2	501.40 ug/L	501.40 ppb	00:41:03
2	Cd 226.502†	43442.4	44001.5	509.47 ug/L	509.47 ppb	00:41:08
2	Co 228.616†	24020.2	24287.3	508.84 ug/L	508.84 ppb	00:41:08
2	Cr 267.716†	44733.8	45029.7	506.45 ug/L	506.45 ppb	00:41:08
2	Cu 324.752†	168744.9	164163.4	499.54 ug/L	499.54 ppb	00:41:08
2	Mn 257.610†	440309.1	443527.6	504.97 ug/L	504.97 ppb	00:41:03
2	Mo 202.031†	6713.4	6759.4	496.67 ug/L	496.67 ppb	00:41:28
2	Ni 231.604†	19895.1	19998.8	508.32 ug/L	508.32 ppb	00:41:08

2	P 214.914†	4299.4	4124.8	2386.0 ug/L	2386.0 ppb	00:41:28
2	Pb 220.353†	5490.5	5594.5	689.62 ug/L	689.62 ppb	00:41:28
2	S 181.975 Axial†	731.1	696.4	1001.3 ug/L	1001.3 ppb	00:41:28
2	Sb 206.836†	1419.0	1394.1	505.15 ug/L	505.15 ppb	00:41:28
2	Se 196.026†	722.3	756.1	511.31 ug/L	511.31 ppb	00:41:28
2	Si 251.611†	77969.0	78061.8	2519.9 ug/L	2519.9 ppb	00:41:08
2	Sn 189.927†	2742.7	2755.1	494.97 ug/L	494.97 ppb	00:41:28
2	Ti 334.940†	314368.5	318368.0	500.16 ug/L	500.16 ppb	00:41:08
2	Tl 190.801†	1524.7	1570.1	505.38 ug/L	505.38 ppb	00:41:28
2	U 409.014†	14557.9	17566.0	483.41 ug/L	483.41 ppb	00:41:08
2	V 292.402†	69764.4	71852.7	507.67 ug/L	507.67 ppb	00:41:08
2	Zn 213.857†	50733.4	50551.0	504.26 ug/L	504.26 ppb	00:41:08
2	SiO2†	78454.8	78555.6	5445.7 ug/L	5445.7 ppb	00:42:10
3	Sc Radial	3786.5	3786.5	96.6 %		00:40:05
3	Y RADIAL	4152.9	4152.9	94.15 %		00:40:05
3	Al 396.153Radial†	5131.9	5423.7	5062.3 ug/L	5062.3 ppb	00:40:05
3	Ca 317.933Radial†	2358.6	2421.4	5061.9 ug/L	5061.9 ppb	00:40:25
3	Fe 238.204 Radial†	333.6	333.9	4728.7 ug/L	4728.7 ppb	00:40:25
3	K 766.490 Radial†	28070.6	26412.0	5062.1 ug/L	5062.1 ppb	00:40:05
3	Mg 279.077 IEC†	101.9	101.4	4917.1 ug/L	4917.1 ppb	00:40:25
3	Na 589.592 Radial†	30904.9	32804.8	10115 ug/L	10115 ppb	00:40:05
3	Sr 421.552†	69192.9	71575.5	495.23 ug/L	495.23 ppb	00:40:05
3	Sc 361.383	875247.0	875247.0	99.774 %		00:41:34
3	Y 371.029	729645.0	729645.0	96.534 %		00:41:34
3	Ag 328.068†	107549.5	107552.9	501.29 ug/L	501.29 ppb	00:41:39
3	As 188.979†	1118.7	1139.5	513.04 ug/L	513.04 ppb	00:41:59
3	B 249.677†	19849.1	20292.3	489.78 ug/L	489.78 ppb	00:41:39
3	Ba 233.527†	63681.9	63827.7	502.12 ug/L	502.12 ppb	00:41:39
3	Be 313.107†	1308613.1	1315341.9	495.43 ug/L	495.43 ppb	00:41:34
3	Cd 226.502†	43392.0	43686.6	505.82 ug/L	505.82 ppb	00:41:39
3	Co 228.616†	23900.6	24021.3	503.30 ug/L	503.30 ppb	00:41:39
3	Cr 267.716†	44652.7	44676.2	502.49 ug/L	502.49 ppb	00:41:39
3	Cu 324.752†	167962.8	162352.8	494.03 ug/L	494.03 ppb	00:41:39
3	Mn 257.610†	435898.9	436428.4	496.89 ug/L	496.89 ppb	00:41:34
3	Mo 202.031†	6876.2	6881.6	505.65 ug/L	505.65 ppb	00:41:59
3	Ni 231.604†	19948.3	19931.1	506.60 ug/L	506.60 ppb	00:41:39
3	P 214.914†	4450.1	4249.7	2462.4 ug/L	2462.4 ppb	00:41:59
3	Pb 220.353†	5513.0	5583.6	688.31 ug/L	688.31 ppb	00:41:59
3	S 181.975 Axial†	743.7	704.6	1013.0 ug/L	1013.0 ppb	00:41:59
3	Sb 206.836†	1476.7	1443.3	522.72 ug/L	522.72 ppb	00:41:59
3	Se 196.026†	751.4	780.8	527.77 ug/L	527.77 ppb	00:41:59
3	Si 251.611†	77762.9	77380.8	2497.7 ug/L	2497.7 ppb	00:41:39
3	Sn 189.927†	2829.8	2825.8	507.65 ug/L	507.65 ppb	00:41:59
3	Ti 334.940†	313931.7	316017.5	496.47 ug/L	496.47 ppb	00:41:39
3	Tl 190.801†	1553.8	1589.9	511.69 ug/L	511.69 ppb	00:41:59
3	U 409.014†	14717.3	17637.3	485.37 ug/L	485.37 ppb	00:41:39
3	V 292.402†	69660.1	71323.7	504.10 ug/L	504.10 ppb	00:41:39
3	Zn 213.857†	50650.4	50159.2	500.32 ug/L	500.32 ppb	00:41:39
3	SiO2†	76820.5	76440.3	5298.5 ug/L	5298.5 ppb	00:42:15

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	874677.1	99.709 %	0.5077			0.51%
Sc Radial	3819.3	97.5 %	0.96			0.99%
Y 371.029	728396.8	96.369 %	0.5738			0.60%
Y RADIAL	4213.5	95.53 %	1.535			1.61%
Ag 328.068†	107295.6	500.09 ug/L	6.412	500.09 ppb	6.412	1.28%
QC value within limits for Ag 328.068 Recovery = 100.02%						
Al 396.153Radial†	5400.6	5040.9 ug/L	19.35	5040.9 ppb	19.35	0.38%
QC value within limits for Al 396.153Radial Recovery = 100.82%						
As 188.979†	1121.1	504.80 ug/L	7.282	504.80 ppb	7.282	1.44%
QC value within limits for As 188.979 Recovery = 100.96%						
B 249.677†	20203.7	487.64 ug/L	8.651	487.64 ppb	8.651	1.77%
QC value within limits for B 249.677 Recovery = 97.53%						
Ba 233.527†	63690.3	501.03 ug/L	6.088	501.03 ppb	6.088	1.22%
QC value within limits for Ba 233.527 Recovery = 100.21%						
Be 313.107†	1320325.7	497.30 ug/L	3.555	497.30 ppb	3.555	0.71%
QC value within limits for Be 313.107 Recovery = 99.46%						
Ca 317.933Radial†	2415.2	5049.0 ug/L	30.66	5049.0 ppb	30.66	0.61%

QC value within limits for Ca 317.933Radial Recovery = 100.98%							
Cd 226.502†	43588.5	504.68 ug/L	5.451	504.68 ppb	5.451	1.08%	
QC value within limits for Cd 226.502 Recovery = 100.94%							
Co 228.616†	23988.6	502.60 ug/L	6.617	502.60 ppb	6.617	1.32%	
QC value within limits for Co 228.616 Recovery = 100.52%							
Cr 267.716†	44530.6	500.85 ug/L	6.577	500.85 ppb	6.577	1.31%	
QC value within limits for Cr 267.716 Recovery = 100.17%							
Cu 324.752†	161923.9	492.73 ug/L	7.546	492.73 ppb	7.546	1.53%	
QC value within limits for Cu 324.752 Recovery = 98.55%							
Fe 238.204 Radial†	333.2	4717.6 ug/L	51.09	4717.6 ppb	51.09	1.08%	
QC value within limits for Fe 238.204 Radial Recovery = 94.35%							
K 766.490 Radial†	26327.6	5045.9 ug/L	15.94	5045.9 ppb	15.94	0.32%	
QC value within limits for K 766.490 Radial Recovery = 100.92%							
Mg 279.077 IEC†	101.7	4929.3 ug/L	65.08	4929.3 ppb	65.08	1.32%	
QC value within limits for Mg 279.077 IEC Recovery = 98.59%							
Mn 257.610†	438930.5	499.74 ug/L	4.534	499.74 ppb	4.534	0.91%	
QC value within limits for Mn 257.610 Recovery = 99.95%							
Mo 202.031†	6793.0	499.15 ug/L	5.688	499.15 ppb	5.688	1.14%	
QC value within limits for Mo 202.031 Recovery = 99.83%							
Na 589.592 Radial†	32895.9	10143 ug/L	50.2	10143 ppb	50.2	0.50%	
QC value within limits for Na 589.592 Radial Recovery = 101.43%							
Ni 231.604†	19826.3	503.94 ug/L	6.163	503.94 ppb	6.163	1.22%	
QC value within limits for Ni 231.604 Recovery = 100.79%							
P 214.914†	4180.6	2421.0 ug/L	38.59	2421.0 ppb	38.59	1.59%	
QC value within limits for P 214.914 Recovery = 96.84%							
Pb 220.353†	5589.4	689.00 ug/L	0.655	689.00 ppb	0.655	0.10%	
QC value greater than the upper limit for Pb 220.353 Recovery = 137.80%							
S 181.975 Axial†	696.4	1001.2 ug/L	11.92	1001.2 ppb	11.92	1.19%	
QC value within limits for S 181.975 Axial Recovery = 100.12%							
Sb 206.836†	1415.1	512.60 ug/L	9.088	512.60 ppb	9.088	1.77%	
QC value within limits for Sb 206.836 Recovery = 102.52%							
Se 196.026†	772.0	521.95 ug/L	9.227	521.95 ppb	9.227	1.77%	
QC value within limits for Se 196.026 Recovery = 104.39%							
Si 251.611†	77194.2	2491.8 ug/L	31.51	2491.8 ppb	31.51	1.26%	
QC value within limits for Si 251.611 Recovery = 99.67%							
Sn 189.927†	2782.6	499.89 ug/L	6.798	499.89 ppb	6.798	1.36%	
QC value within limits for Sn 189.927 Recovery = 99.98%							
Sr 421.552†	71635.8	495.65 ug/L	1.065	495.65 ppb	1.065	0.21%	
QC value within limits for Sr 421.552 Recovery = 99.13%							
Ti 334.940†	314858.5	494.65 ug/L	6.613	494.65 ppb	6.613	1.34%	
QC value within limits for Ti 334.940 Recovery = 98.93%							
Tl 190.801†	1572.7	506.19 ug/L	5.135	506.19 ppb	5.135	1.01%	
QC value within limits for Tl 190.801 Recovery = 101.24%							
U 409.014†	17452.9	480.29 ug/L	7.173	480.29 ppb	7.173	1.49%	
QC value within limits for U 409.014 Recovery = 96.06%							
V 292.402†	71050.4	502.10 ug/L	6.791	502.10 ppb	6.791	1.35%	
QC value within limits for V 292.402 Recovery = 100.42%							
Zn 213.857†	50004.0	498.78 ug/L	6.390	498.78 ppb	6.390	1.28%	
QC value within limits for Zn 213.857 Recovery = 99.76%							
SiO2†	77696.1	5385.9 ug/L	77.42	5385.9 ppb	77.42	1.44%	
QC value within limits for SiO2 Recovery = 100.72%							
QC Failed. Continue with analysis.							

Sequence No.: 69

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 00:44:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3793.2	3793.2	96.8 %		00:46:37
1	Y RADIAL	4340.6	4340.6	98.41 %		00:46:17
1	Al 396.153Radial†	-100.2	8.9	8.3036 ug/L	8.3036 ppb	00:46:17
1	Ca 317.933Radial†	15.5	-3.6	-7.6126 ug/L	-7.6126 ppb	00:46:37
1	Fe 238.204 Radial†	11.8	0.9	12.332 ug/L	12.332 ppb	00:46:37
1	K 766.490 Radial†	2772.0	224.1	43.020 ug/L	43.020 ppb	00:46:17
1	Mg 279.077 IEC†	3.9	-0.0	-0.6866 ug/L	-0.6866 ppb	00:46:37
1	Na 589.592 Radial†	-837.2	-45.1	-13.916 ug/L	-13.916 ppb	00:46:17
1	Sr 421.552†	40.5	6.1	0.0426 ug/L	0.0426 ppb	00:46:17
1	Sc 361.383	894458.3	894458.3	101.96 %		00:47:34
1	Y 371.029	753878.7	753878.7	99.740 %		00:47:34
1	Ag 328.068†	272.6	26.9	0.1276 ug/L	0.1276 ppb	00:47:39
1	As 188.979†	-16.4	2.2	0.9872 ug/L	0.9872 ppb	00:47:59
1	B 249.677†	-277.9	125.6	3.0445 ug/L	3.0445 ppb	00:47:59
1	Ba 233.527†	16.7	17.8	0.1396 ug/L	0.1396 ppb	00:47:59
1	Be 313.107†	-3727.1	106.9	0.0400 ug/L	0.0400 ppb	00:47:39
1	Cd 226.502†	-174.3	25.3	0.2921 ug/L	0.2921 ppb	00:47:59
1	Co 228.616†	-76.6	-8.5	-0.1775 ug/L	-0.1775 ppb	00:47:59
1	Cr 267.716†	81.6	2.3	0.0270 ug/L	0.0270 ppb	00:47:59
1	Cu 324.752†	6033.1	-73.9	-0.2244 ug/L	-0.2244 ppb	00:47:39
1	Mn 257.610†	525.4	56.6	0.0656 ug/L	0.0656 ppb	00:47:59
1	Mo 202.031†	19.2	8.7	0.6412 ug/L	0.6412 ppb	00:47:59
1	Ni 231.604†	60.6	-3.1	-0.0775 ug/L	-0.0775 ppb	00:47:59
1	P 214.914†	208.5	-6.1	-3.5959 ug/L	-3.5959 ppb	00:47:59
1	Pb 220.353†	1410.1	1441.1	177.24 ug/L	177.24 ppb	00:47:59
1	S 181.975 Axial†	38.9	-2.7	-3.8791 ug/L	-3.8791 ppb	00:47:59
1	Sb 206.836†	43.0	5.4	1.9458 ug/L	1.9458 ppb	00:47:59
1	Se 196.026†	-20.1	8.1	5.3176 ug/L	5.3176 ppb	00:47:59
1	Si 251.611†	680.4	109.0	3.5183 ug/L	3.5183 ppb	00:47:59
1	Sn 189.927†	22.7	11.8	2.1179 ug/L	2.1179 ppb	00:47:59
1	Ti 334.940†	-1449.2	-47.2	-0.0753 ug/L	-0.0753 ppb	00:47:39
1	Tl 190.801†	-32.2	1.0	0.3167 ug/L	0.3167 ppb	00:47:59
1	U 409.014†	-2927.8	15.2	0.4183 ug/L	0.4183 ppb	00:47:34
1	V 292.402†	-1560.3	-24.6	-0.1631 ug/L	-0.1631 ppb	00:47:39
1	Zn 213.857†	965.3	340.6	3.4280 ug/L	3.4280 ppb	00:47:59
1	SiO2†	673.3	106.0	7.3468 ug/L	7.3468 ppb	00:49:05
2	Sc Radial	3823.9	3823.9	97.6 %		00:47:02
2	Y RADIAL	4348.7	4348.7	98.59 %		00:46:42
2	Al 396.153Radial†	-119.4	-10.0	-9.3726 ug/L	-9.3726 ppb	00:46:42
2	Ca 317.933Radial†	19.6	0.4	0.8983 ug/L	0.8983 ppb	00:47:02
2	Fe 238.204 Radial†	13.5	2.5	35.843 ug/L	35.843 ppb	00:47:02
2	K 766.490 Radial†	2867.2	298.7	57.331 ug/L	57.331 ppb	00:46:42
2	Mg 279.077 IEC†	3.2	-0.8	-36.743 ug/L	-36.743 ppb	00:47:02
2	Na 589.592 Radial†	-889.2	-91.4	-28.196 ug/L	-28.196 ppb	00:46:42
2	Sr 421.552†	46.4	11.9	0.0821 ug/L	0.0821 ppb	00:46:42
2	Sc 361.383	898915.6	898915.6	102.47 %		00:48:04
2	Y 371.029	758223.6	758223.6	100.31 %		00:48:04
2	Ag 328.068†	244.6	-1.8	0.0008 ug/L	0.0008 ppb	00:48:09
2	As 188.979†	-20.7	-2.0	-0.8727 ug/L	-0.8727 ppb	00:48:29
2	B 249.677†	-295.1	110.3	2.6681 ug/L	2.6681 ppb	00:48:29
2	Ba 233.527†	11.0	12.1	0.0960 ug/L	0.0960 ppb	00:48:29
2	Be 313.107†	-3622.4	227.2	0.0853 ug/L	0.0853 ppb	00:48:09
2	Cd 226.502†	-174.9	25.6	0.2931 ug/L	0.2931 ppb	00:48:29
2	Co 228.616†	-80.9	-12.5	-0.2612 ug/L	-0.2612 ppb	00:48:29
2	Cr 267.716†	80.4	0.7	0.0107 ug/L	0.0107 ppb	00:48:29
2	Cu 324.752†	5882.1	-250.5	-0.7618 ug/L	-0.7618 ppb	00:48:09
2	Mn 257.610†	513.0	41.9	0.0527 ug/L	0.0527 ppb	00:48:29
2	Mo 202.031†	11.7	1.2	0.0928 ug/L	0.0928 ppb	00:48:29
2	Ni 231.604†	65.6	1.6	0.0399 ug/L	0.0399 ppb	00:48:29

2	P 214.914†	208.1	-7.4	-4.3339 ug/L	-4.3339 ppb	00:48:29
2	Pb 220.353†	1382.3	1407.1	173.05 ug/L	173.05 ppb	00:48:29
2	S 181.975 Axial†	45.7	3.8	5.4226 ug/L	5.4226 ppb	00:48:29
2	Sb 206.836†	42.1	4.3	1.5614 ug/L	1.5614 ppb	00:48:29
2	Se 196.026†	-25.8	2.5	1.7679 ug/L	1.7679 ppb	00:48:29
2	Si 251.611†	673.6	99.0	3.2024 ug/L	3.2024 ppb	00:48:29
2	Sn 189.927†	25.4	14.3	2.5624 ug/L	2.5624 ppb	00:48:29
2	Ti 334.940†	-1416.0	-7.8	-0.0102 ug/L	-0.0102 ppb	00:48:09
2	Tl 190.801†	-35.4	-2.0	-0.6427 ug/L	-0.6427 ppb	00:48:29
2	U 409.014†	-2867.0	88.7	2.4461 ug/L	2.4461 ppb	00:48:04
2	V 292.402†	-1547.8	-4.8	-0.0332 ug/L	-0.0332 ppb	00:48:09
2	Zn 213.857†	954.9	325.8	3.2752 ug/L	3.2752 ppb	00:48:29
2	SiO2†	689.6	118.5	8.2357 ug/L	8.2357 ppb	00:49:10
3	Sc Radial	3791.0	3791.0	96.7 %		00:47:27
3	Y RADIAL	4415.1	4415.1	100.1 %		00:47:07
3	Al 396.153Radial†	-114.0	-5.4	-5.0747 ug/L	-5.0747 ppb	00:47:07
3	Ca 317.933Radial†	22.0	3.1	6.4381 ug/L	6.4381 ppb	00:47:27
3	Fe 238.204 Radial†	10.9	-0.1	-1.1097 ug/L	-1.1097 ppb	00:47:27
3	K 766.490 Radial†	2799.8	254.6	48.862 ug/L	48.862 ppb	00:47:07
3	Mg 279.077 IEC†	6.6	2.8	134.90 ug/L	134.90 ppb	00:47:27
3	Na 589.592 Radial†	-883.9	-93.9	-28.954 ug/L	-28.954 ppb	00:47:07
3	Sr 421.552†	50.1	16.1	0.1112 ug/L	0.1112 ppb	00:47:07
3	Sc 361.383	907115.8	907115.8	103.41 %		00:48:34
3	Y 371.029	766249.5	766249.5	101.38 %		00:48:34
3	Ag 328.068†	239.6	-8.7	-0.0378 ug/L	-0.0378 ppb	00:48:39
3	As 188.979†	-14.2	4.5	2.0231 ug/L	2.0231 ppb	00:48:59
3	B 249.677†	-305.7	102.6	2.4883 ug/L	2.4883 ppb	00:48:59
3	Ba 233.527†	-0.8	0.6	0.0056 ug/L	0.0056 ppb	00:48:59
3	Be 313.107†	-3661.4	221.5	0.0831 ug/L	0.0831 ppb	00:48:39
3	Cd 226.502†	-181.4	20.8	0.2410 ug/L	0.2410 ppb	00:48:59
3	Co 228.616†	-65.7	3.0	0.0638 ug/L	0.0638 ppb	00:48:59
3	Cr 267.716†	65.1	-14.7	-0.1644 ug/L	-0.1644 ppb	00:48:59
3	Cu 324.752†	5998.8	-189.6	-0.5759 ug/L	-0.5759 ppb	00:48:39
3	Mn 257.610†	513.5	37.9	0.0375 ug/L	0.0375 ppb	00:48:59
3	Mo 202.031†	10.7	0.2	0.0164 ug/L	0.0164 ppb	00:48:59
3	Ni 231.604†	65.6	1.0	0.0250 ug/L	0.0250 ppb	00:48:59
3	P 214.914†	213.6	-4.0	-2.2665 ug/L	-2.2665 ppb	00:48:59
3	Pb 220.353†	1359.0	1372.3	168.78 ug/L	168.78 ppb	00:48:59
3	S 181.975 Axial†	33.7	-8.3	-11.885 ug/L	-11.885 ppb	00:48:59
3	Sb 206.836†	38.3	0.4	0.1667 ug/L	0.1667 ppb	00:48:59
3	Se 196.026†	-18.8	9.6	6.2780 ug/L	6.2780 ppb	00:48:59
3	Si 251.611†	653.1	73.3	2.3707 ug/L	2.3707 ppb	00:48:59
3	Sn 189.927†	23.1	11.9	2.1345 ug/L	2.1345 ppb	00:48:59
3	Ti 334.940†	-1457.5	-35.4	-0.0648 ug/L	-0.0648 ppb	00:48:39
3	Tl 190.801†	-33.5	0.1	0.0436 ug/L	0.0436 ppb	00:48:59
3	U 409.014†	-3063.1	-75.6	-2.0874 ug/L	-2.0874 ppb	00:48:34
3	V 292.402†	-1511.1	44.3	0.3082 ug/L	0.3082 ppb	00:48:39
3	Zn 213.857†	944.1	307.0	3.0911 ug/L	3.0911 ppb	00:48:59
3	SiO2†	664.0	87.8	6.0985 ug/L	6.0985 ppb	00:49:15

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900163.2	102.61 %		0.732			0.71%
Sc Radial	3802.7	97.0 %		0.47			0.48%
Y 371.029	759450.6	100.48 %		0.830			0.83%
Y RADIAL	4368.1	99.03 %		0.928			0.94%
Ag 328.068†	5.5	0.0302 ug/L		0.08651	0.0302 ppb	0.08651	286.48%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-2.2	-2.0479 ug/L		9.21862	-2.0479 ppb	9.21862	450.14%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.6	0.7125 ug/L		1.46735	0.7125 ppb	1.46735	205.93%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	112.8	2.7336 ug/L		0.28385	2.7336 ppb	0.28385	10.38%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.2	0.0804 ug/L		0.06834	0.0804 ppb	0.06834	84.96%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	185.2	0.0695 ug/L		0.02556	0.0695 ppb	0.02556	36.79%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.0	-0.0921 ug/L		7.07752	-0.0921 ppb	7.07752	>999.9%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	23.9 0.2754 ug/L	0.02979 0.2754 ppb	0.02979 10.81%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-6.0 -0.1250 ug/L	0.16874 -0.1250 ppb	0.16874 135.03%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-3.9 -0.0422 ug/L	0.10613 -0.0422 ppb	0.10613 251.28%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-171.3 -0.5207 ug/L	0.27290 -0.5207 ppb	0.27290 52.41%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.1 15.688 ug/L	18.7035 15.688 ppb	18.7035 119.22%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	259.1 49.738 ug/L	7.1958 49.738 ppb	7.1958 14.47%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.7 32.490 ug/L	90.5024 32.490 ppb	90.5024 278.56%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	45.5 0.0519 ug/L	0.01409 0.0519 ppb	0.01409 27.12%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.4 0.2501 ug/L	0.34083 0.2501 ppb	0.34083 136.25%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-76.8 -23.689 ug/L	8.4718 -23.689 ppb	8.4718 35.76%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-0.2 -0.0042 ug/L	0.06393 -0.0042 ppb	0.06393 >999.9%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-5.8 -3.3988 ug/L	1.04768 -3.3988 ppb	1.04768 30.83%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	1406.8 173.02 ug/L	4.231 173.02 ppb	4.231 2.45%
QC value greater than the upper limit for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.4 -3.4472 ug/L	8.66187 -3.4472 ppb	8.66187 251.28%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	3.4 1.2246 ug/L	0.93613 1.2246 ppb	0.93613 76.44%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	6.7 4.4545 ug/L	2.37574 4.4545 ppb	2.37574 53.33%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	93.7 3.0305 ug/L	0.59284 3.0305 ppb	0.59284 19.56%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	12.7 2.2716 ug/L	0.25197 2.2716 ppb	0.25197 11.09%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	11.4 0.0786 ug/L	0.03442 0.0786 ppb	0.03442 43.78%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-30.1 -0.0501 ug/L	0.03496 -0.0501 ppb	0.03496 69.76%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.3 -0.0942 ug/L	0.49432 -0.0942 ppb	0.49432 524.94%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	9.4 0.2590 ug/L	2.27096 0.2590 ppb	2.27096 876.85%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	5.0 0.0373 ug/L	0.24342 0.0373 ppb	0.24342 652.78%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	324.5 3.2648 ug/L	0.16870 3.2648 ppb	0.16870 5.17%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	104.1 7.2270 ug/L	1.07362 7.2270 ppb	1.07362 14.86%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			



Sequence No.: 70

Sample ID: 246055002|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 93

Date Collected: 2/25/2010 00:51:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055002|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4005.3	4005.3	102 %		00:53:39
1	Y RADIAL	4912.6	4912.6	111.4 %		00:53:39
1	Al 396.153Radial†	149270.3	146158.2	137080 ug/L	137080 ppb	00:53:19
1	Ca 317.933Radial†	11979.6	11701.2	24461 ug/L	24461 ppb	00:53:19
1	Fe 238.204 Radial†	8937.3	8732.9	123270 ug/L	123270 ppb	00:53:19
1	K 766.490 Radial†	91656.5	87036.9	16693 ug/L	16693 ppb	00:53:19
1	Mg 279.077 IEC†	398.5	385.8	18578 ug/L	18578 ppb	00:53:39
1	Na 589.592 Radial†	1587.0	2372.5	731.50 ug/L	731.50 ppb	00:53:19
1	Sr 421.552†	37799.6	36947.3	255.48 ug/L	255.48 ppb	00:53:19
1	Sc 361.383	876397.7	876397.7	99.905 %		00:54:42
1	Y 371.029	802880.1	802880.1	106.22 %		00:54:42
1	Ag 328.068†	-8280.2	-8528.5	-0.6811 ug/L	-0.6811 ppb	00:54:42
1	As 188.979†	-66.5	-48.3	56.899 ug/L	56.899 ppb	00:55:02
1	B 249.677†	1428.3	1827.9	24.118 ug/L	24.118 ppb	00:54:42
1	Ba 233.527†	216324.9	216532.0	1703.6 ug/L	1703.6 ppb	00:54:42
1	Be 313.107†	-8307.4	-4553.1	11.282 ug/L	11.282 ppb	00:54:42
1	Cd 226.502†	1087.3	1284.6	2.1832 ug/L	2.1832 ppb	00:55:02
1	Co 228.616†	2965.2	3034.5	50.528 ug/L	50.528 ppb	00:55:02
1	Cr 267.716†	14279.7	14215.6	171.77 ug/L	171.77 ppb	00:55:02
1	Cu 324.752†	30020.0	24057.8	79.816 ug/L	79.816 ppb	00:54:42
1	Mn 257.610†	2447005.0	2448873.5	2798.1 ug/L	2798.1 ppb	00:54:37
1	Mo 202.031†	-86.2	-96.4	2.7824 ug/L	2.7824 ppb	00:55:02
1	Ni 231.604†	4314.7	4256.4	108.21 ug/L	108.21 ppb	00:55:02
1	P 214.914†	1483.8	1274.7	687.54 ug/L	687.54 ppb	00:55:02
1	Pb 220.353†	16342.8	16416.5	2034.5 ug/L	2034.5 ppb	00:55:02
1	S 181.975 Axial†	570.3	530.0	736.99 ug/L	736.99 ppb	00:55:02
1	Sb 206.836†	145.7	109.1	14.635 ug/L	14.635 ppb	00:55:02
1	Se 196.026†	-585.9	-558.7	17.121 ug/L	17.121 ppb	00:55:02
1	Si 251.611†	980632.2	981006.5	31744 ug/L	31744 ppb	00:54:37
1	Sn 189.927†	-85.1	-95.7	-19.904 ug/L	-19.904 ppb	00:55:02
1	Ti 334.940†	3637318.8	3642152.0	5725.0 ug/L	5725.0 ppb	00:54:37
1	Tl 190.801†	-223.2	-190.8	-1.0070 ug/L	-1.0070 ppb	00:55:02
1	U 409.014†	-8206.2	-5327.4	-161.52 ug/L	-161.52 ppb	00:54:42
1	V 292.402†	39409.1	40952.2	261.46 ug/L	261.46 ppb	00:54:42
1	Zn 213.857†	26503.3	25922.5	241.71 ug/L	241.71 ppb	00:55:02
1	SiO2†	987584.5	987969.3	68660 ug/L	68660 ppb	00:56:12
2	Sc Radial	4005.3	4005.3	102 %		00:54:04
2	Y RADIAL	4938.0	4938.0	112.0 %		00:54:04
2	Al 396.153Radial†	148690.8	145591.5	136550 ug/L	136550 ppb	00:53:44
2	Ca 317.933Radial†	11898.8	11622.1	24296 ug/L	24296 ppb	00:53:44
2	Fe 238.204 Radial†	8855.2	8652.6	122130 ug/L	122130 ppb	00:53:44
2	K 766.490 Radial†	90923.0	86319.4	16555 ug/L	16555 ppb	00:53:44
2	Mg 279.077 IEC†	400.5	387.7	18672 ug/L	18672 ppb	00:54:04
2	Na 589.592 Radial†	1437.8	2226.5	686.50 ug/L	686.50 ppb	00:53:44
2	Sr 421.552†	37401.4	36557.8	252.78 ug/L	252.78 ppb	00:53:44
2	Sc 361.383	873866.1	873866.1	99.616 %		00:55:14
2	Y 371.029	800647.9	800647.9	105.93 %		00:55:14
2	Ag 328.068†	-8234.3	-8506.4	-0.9195 ug/L	-0.9195 ppb	00:55:14
2	As 188.979†	-58.9	-40.8	59.938 ug/L	59.938 ppb	00:55:34
2	B 249.677†	1292.0	1695.2	21.084 ug/L	21.084 ppb	00:55:14
2	Ba 233.527†	215290.3	216120.7	1700.3 ug/L	1700.3 ppb	00:55:14
2	Be 313.107†	-8612.9	-4883.9	11.149 ug/L	11.149 ppb	00:55:14
2	Cd 226.502†	1099.7	1300.2	2.4809 ug/L	2.4809 ppb	00:55:34
2	Co 228.616†	2970.7	3048.7	50.847 ug/L	50.847 ppb	00:55:34
2	Cr 267.716†	14354.8	14332.4	172.97 ug/L	172.97 ppb	00:55:34
2	Cu 324.752†	29770.0	23893.9	79.260 ug/L	79.260 ppb	00:55:14
2	Mn 257.610†	2433394.9	2442306.8	2790.5 ug/L	2790.5 ppb	00:55:09
2	Mo 202.031†	-87.0	-97.5	2.6125 ug/L	2.6125 ppb	00:55:34
2	Ni 231.604†	4338.3	4292.6	109.13 ug/L	109.13 ppb	00:55:34

2	P 214.914†	1463.6	1258.7	678.82 ug/L	678.82 ppb	00:55:34
2	Pb 220.353†	16336.9	16457.9	2039.7 ug/L	2039.7 ppb	00:55:34
2	S 181.975 Axial†	559.8	521.1	724.30 ug/L	724.30 ppb	00:55:34
2	Sb 206.836†	153.7	117.6	17.666 ug/L	17.666 ppb	00:55:34
2	Se 196.026†	-592.4	-566.9	8.1874 ug/L	8.1874 ppb	00:55:34
2	Si 251.611†	976361.2	979562.7	31697 ug/L	31697 ppb	00:55:09
2	Sn 189.927†	-81.4	-92.2	-19.238 ug/L	-19.238 ppb	00:55:34
2	Ti 334.940†	3624190.6	3639520.8	5720.9 ug/L	5720.9 ppb	00:55:09
2	Tl 190.801†	-216.7	-185.0	0.7754 ug/L	0.7754 ppb	00:55:34
2	U 409.014†	-8353.4	-5498.9	-166.13 ug/L	-166.13 ppb	00:55:14
2	V 292.402†	39363.8	41021.0	262.10 ug/L	262.10 ppb	00:55:14
2	Zn 213.857†	26595.7	26092.1	243.58 ug/L	243.58 ppb	00:55:34
2	SiO2†	972415.0	975605.2	67800 ug/L	67800 ppb	00:56:18
3	Sc Radial	4004.3	4004.3	102 %		00:54:29
3	Y RADIAL	4922.6	4922.6	111.6 %		00:54:29
3	Al 396.153Radial†	150142.3	147048.5	137910 ug/L	137910 ppb	00:54:09
3	Ca 317.933Radial†	12031.6	11755.0	24574 ug/L	24574 ppb	00:54:09
3	Fe 238.204 Radial†	8927.5	8725.5	123160 ug/L	123160 ppb	00:54:09
3	K 766.490 Radial†	91979.4	87375.7	16758 ug/L	16758 ppb	00:54:09
3	Mg 279.077 IEC†	396.0	383.5	18466 ug/L	18466 ppb	00:54:29
3	Na 589.592 Radial†	1491.6	2279.6	702.85 ug/L	702.85 ppb	00:54:09
3	Sr 421.552†	37735.5	36893.9	255.11 ug/L	255.11 ppb	00:54:09
3	Sc 361.383	886569.2	886569.2	101.06 %		00:55:46
3	Y 371.029	808786.2	808786.2	107.00 %		00:55:46
3	Ag 328.068†	-8332.8	-8485.4	-0.5168 ug/L	-0.5168 ppb	00:55:46
3	As 188.979†	-69.4	-50.4	54.900 ug/L	54.900 ppb	00:56:06
3	B 249.677†	1336.7	1720.8	21.538 ug/L	21.538 ppb	00:55:46
3	Ba 233.527†	218492.3	216192.4	1700.9 ug/L	1700.9 ppb	00:55:46
3	Be 313.107†	-8559.5	-4707.1	10.950 ug/L	10.950 ppb	00:55:46
3	Cd 226.502†	1082.7	1267.6	1.9969 ug/L	1.9969 ppb	00:56:06
3	Co 228.616†	3012.1	3046.9	51.040 ug/L	51.040 ppb	00:56:06
3	Cr 267.716†	14287.3	14059.2	170.00 ug/L	170.00 ppb	00:56:06
3	Cu 324.752†	30443.6	24132.2	80.035 ug/L	80.035 ppb	00:55:46
3	Mn 257.610†	2419903.0	2393956.0	2735.6 ug/L	2735.6 ppb	00:55:40
3	Mo 202.031†	-95.0	-104.1	2.2078 ug/L	2.2078 ppb	00:56:06
3	Ni 231.604†	4322.2	4214.2	107.14 ug/L	107.14 ppb	00:56:06
3	P 214.914†	1481.8	1255.6	676.34 ug/L	676.34 ppb	00:56:06
3	Pb 220.353†	16304.5	16190.9	2007.0 ug/L	2007.0 ppb	00:56:06
3	S 181.975 Axial†	564.9	518.1	719.72 ug/L	719.72 ppb	00:56:06
3	Sb 206.836†	160.4	122.0	19.508 ug/L	19.508 ppb	00:56:06
3	Se 196.026†	-575.4	-541.6	28.001 ug/L	28.001 ppb	00:56:06
3	Si 251.611†	969971.3	959196.5	31038 ug/L	31038 ppb	00:55:40
3	Sn 189.927†	-86.7	-96.3	-19.981 ug/L	-19.981 ppb	00:56:06
3	Ti 334.940†	3601800.6	3565237.7	5604.2 ug/L	5604.2 ppb	00:55:40
3	Tl 190.801†	-209.1	-174.3	2.9467 ug/L	2.9467 ppb	00:56:06
3	U 409.014†	-8155.4	-5182.9	-157.51 ug/L	-157.51 ppb	00:55:46
3	V 292.402†	39924.4	41009.6	262.00 ug/L	262.00 ppb	00:55:46
3	Zn 213.857†	26496.0	25610.9	238.60 ug/L	238.60 ppb	00:56:06
3	SiO2†	980853.6	969968.1	67409 ug/L	67409 ppb	00:56:24

Mean Data: 246055002|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	878944.3	100.20 %		0.766			0.76%
Sc Radial	4005.0	102 %		0.0			0.01%
Y 371.029	804104.7	106.39 %		0.556			0.52%
Y RADIAL	4924.4	111.6 %		0.29			0.26%
Ag 328.068†	-8506.8	-0.7058 ug/L		0.20249	-0.7058 ppb	0.20249	28.69%
Al 396.153Radial†	146266.1	137180 ug/L		688.9	137180 ppb	688.9	0.50%
As 188.979†	-46.5	57.246 ug/L		2.5369	57.246 ppb	2.5369	4.43%
B 249.677†	1748.0	22.247 ug/L		1.6366	22.247 ppb	1.6366	7.36%
Ba 233.527†	216281.7	1701.6 ug/L		1.74	1701.6 ppb	1.74	0.10%
Be 313.107†	-4714.7	11.127 ug/L		0.1672	11.127 ppb	0.1672	1.50%
Ca 317.933Radial†	11692.8	24444 ug/L		139.7	24444 ppb	139.7	0.57%
Cd 226.502†	1284.1	2.2203 ug/L		0.24413	2.2203 ppb	0.24413	11.00%
Co 228.616†	3043.3	50.805 ug/L		0.2584	50.805 ppb	0.2584	0.51%
Cr 267.716†	14202.4	171.58 ug/L		1.495	171.58 ppb	1.495	0.87%
Cu 324.752†	24028.0	79.703 ug/L		0.3995	79.703 ppb	0.3995	0.50%
Fe 238.204 Radial†	8703.7	122860 ug/L		627.0	122860 ppb	627.0	0.51%
K 766.490 Radial†	86910.7	16669 ug/L		103.5	16669 ppb	103.5	0.62%

Mg 279.077 IEC†	385.7	18572 ug/L	103.1	18572 ppb	103.1	0.56%
Mn 257.610†	2428378.7	2774.7 ug/L	34.10	2774.7 ppb	34.10	1.23%
Mo 202.031†	-99.3	2.5342 ug/L	0.29518	2.5342 ppb	0.29518	11.65%
Na 589.592 Radial†	2292.9	706.95 ug/L	22.777	706.95 ppb	22.777	3.22%
Ni 231.604†	4254.4	108.16 ug/L	0.998	108.16 ppb	0.998	0.92%
P 214.914†	1263.0	680.90 ug/L	5.884	680.90 ppb	5.884	0.86%
Pb 220.353†	16355.1	2027.1 ug/L	17.57	2027.1 ppb	17.57	0.87%
S 181.975 Axial†	523.1	727.00 ug/L	8.949	727.00 ppb	8.949	1.23%
Sb 206.836†	116.2	17.270 ug/L	2.4608	17.270 ppb	2.4608	14.25%
Se 196.026†	-555.7	17.770 ug/L	9.9226	17.770 ppb	9.9226	55.84%
Si 251.611†	973255.2	31493 ug/L	394.7	31493 ppb	394.7	1.25%
Sn 189.927†	-94.7	-19.708 ug/L	0.4089	-19.708 ppb	0.4089	2.07%
Sr 421.552†	36799.7	254.45 ug/L	1.460	254.45 ppb	1.460	0.57%
Ti 334.940†	3615636.9	5683.4 ug/L	68.60	5683.4 ppb	68.60	1.21%
Tl 190.801†	-183.4	0.9050 ug/L	1.98004	0.9050 ppb	1.98004	218.78%
U 409.014†	-5336.4	-161.72 ug/L	4.311	-161.72 ppb	4.311	2.67%
V 292.402†	40994.3	261.86 ug/L	0.345	261.86 ppb	0.345	0.13%
Zn 213.857†	25875.2	241.30 ug/L	2.519	241.30 ppb	2.519	1.04%
SiO2†	977847.5	67956 ug/L	639.9	67956 ppb	639.9	0.94%

Sequence No.: 71

Sample ID: 246055003|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 94

Date Collected: 2/25/2010 00:58:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055003|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4012.2	4012.2	102 %		01:00:49
1	Y RADIAL	4996.7	4996.7	113.3 %		01:00:49
1	Al 396.153Radial†	160744.3	157115.2	147350 ug/L	147350 ppb	01:00:29
1	Ca 317.933Radial†	10762.1	10492.0	21934 ug/L	21934 ppb	01:00:29
1	Fe 238.204 Radial†	10480.2	10225.0	144330 ug/L	144330 ppb	01:00:29
1	K 766.490 Radial†	110227.8	105022.5	20141 ug/L	20141 ppb	01:00:29
1	Mg 279.077 IEC†	504.7	488.9	23553 ug/L	23553 ppb	01:00:49
1	Na 589.592 Radial†	32835.1	32890.6	10141 ug/L	10141 ppb	01:00:29
1	Sr 421.552†	42584.2	41557.3	287.39 ug/L	287.39 ppb	01:00:29
1	Sc 361.383	892619.4	892619.4	101.75 %		01:01:52
1	Y 371.029	821105.2	821105.2	108.63 %		01:01:52
1	Ag 328.068†	-10123.3	-10189.2	-1.6646 ug/L	-1.6646 ppb	01:01:52
1	As 188.979†	-78.0	-58.4	56.417 ug/L	56.417 ppb	01:02:12
1	B 249.677†	1701.5	2070.3	26.532 ug/L	26.532 ppb	01:01:52
1	Ba 233.527†	225732.4	221842.4	1746.0 ug/L	1746.0 ppb	01:01:52
1	Be 313.107†	-5054.0	-1204.7	12.306 ug/L	12.306 ppb	01:01:52
1	Cd 226.502†	1252.8	1427.4	1.6522 ug/L	1.6522 ppb	01:02:12
1	Co 228.616†	3755.0	3756.8	65.597 ug/L	65.597 ppb	01:02:12
1	Cr 267.716†	12426.9	12135.0	150.49 ug/L	150.49 ppb	01:02:12
1	Cu 324.752†	32764.8	26209.2	87.501 ug/L	87.501 ppb	01:01:52
1	Mn 257.610†	3162949.8	3107963.8	3550.0 ug/L	3550.0 ppb	01:01:47
1	Mo 202.031†	-114.5	-122.7	2.4590 ug/L	2.4590 ppb	01:02:12
1	Ni 231.604†	4304.8	4168.1	105.96 ug/L	105.96 ppb	01:02:12
1	P 214.914†	1637.3	1398.5	746.42 ug/L	746.42 ppb	01:02:12
1	Pb 220.353†	8411.0	8324.1	1039.1 ug/L	1039.1 ppb	01:02:12
1	S 181.975 Axial†	650.9	598.9	834.18 ug/L	834.18 ppb	01:02:12
1	Sb 206.836†	120.6	81.8	5.0140 ug/L	5.0140 ppb	01:02:12
1	Se 196.026†	-704.4	-664.5	13.402 ug/L	13.402 ppb	01:02:12
1	Si 251.611†	969196.3	951929.6	30803 ug/L	30803 ppb	01:01:47
1	Sn 189.927†	-82.2	-91.2	-20.758 ug/L	-20.758 ppb	01:02:12
1	Ti 334.940†	3637785.6	3576446.4	5621.1 ug/L	5621.1 ppb	01:01:47
1	Tl 190.801†	-234.0	-197.4	-0.5387 ug/L	-0.5387 ppb	01:02:12
1	U 409.014†	-9897.9	-6840.6	-205.66 ug/L	-205.66 ppb	01:01:52
1	V 292.402†	46224.0	46932.8	300.20 ug/L	300.20 ppb	01:01:52
1	Zn 213.857†	39387.2	38102.2	361.17 ug/L	361.17 ppb	01:01:52
1	SiO2†	968316.0	951068.4	66095 ug/L	66095 ppb	01:03:22
2	Sc Radial	4020.1	4020.1	103 %		01:01:14
2	Y RADIAL	5012.8	5012.8	113.6 %		01:01:14
2	Al 396.153Radial†	158516.1	154636.3	145030 ug/L	145030 ppb	01:00:54
2	Ca 317.933Radial†	10592.4	10305.9	21545 ug/L	21545 ppb	01:00:54
2	Fe 238.204 Radial†	10287.5	10017.1	141400 ug/L	141400 ppb	01:00:54
2	K 766.490 Radial†	108868.0	103486.6	19847 ug/L	19847 ppb	01:00:54
2	Mg 279.077 IEC†	499.4	482.7	23259 ug/L	23259 ppb	01:01:14
2	Na 589.592 Radial†	32213.0	32221.5	9934.7 ug/L	9934.7 ppb	01:00:54
2	Sr 421.552†	41783.9	40695.8	281.44 ug/L	281.44 ppb	01:00:54
2	Sc 361.383	889985.3	889985.3	101.45 %		01:02:24
2	Y 371.029	819057.6	819057.6	108.36 %		01:02:24
2	Ag 328.068†	-10017.8	-10114.7	-2.2172 ug/L	-2.2172 ppb	01:02:24
2	As 188.979†	-73.7	-54.4	57.320 ug/L	57.320 ppb	01:02:44
2	B 249.677†	1742.8	2116.0	28.116 ug/L	28.116 ppb	01:02:24
2	Ba 233.527†	224876.0	221654.8	1744.4 ug/L	1744.4 ppb	01:02:24
2	Be 313.107†	-5297.6	-1459.4	12.156 ug/L	12.156 ppb	01:02:24
2	Cd 226.502†	1217.7	1396.5	1.5965 ug/L	1.5965 ppb	01:02:44
2	Co 228.616†	3755.7	3768.4	65.934 ug/L	65.934 ppb	01:02:44
2	Cr 267.716†	12381.6	12126.5	150.11 ug/L	150.11 ppb	01:02:44
2	Cu 324.752†	32634.3	26175.8	87.245 ug/L	87.245 ppb	01:02:24
2	Mn 257.610†	3139191.4	3093745.6	3533.5 ug/L	3533.5 ppb	01:02:19
2	Mo 202.031†	-102.3	-111.0	3.0832 ug/L	3.0832 ppb	01:02:44
2	Ni 231.604†	4313.5	4189.3	106.50 ug/L	106.50 ppb	01:02:44

2	P 214.914†	1643.4	1409.3	754.71 ug/L	754.71 ppb	01:02:44
2	Pb 220.353†	8372.9	8311.0	1037.3 ug/L	1037.3 ppb	01:02:44
2	S 181.975 Axial†	654.2	604.0	841.98 ug/L	841.98 ppb	01:02:44
2	Sb 206.836†	109.3	71.1	1.4670 ug/L	1.4670 ppb	01:02:44
2	Se 196.026†	-702.5	-664.7	4.1077 ug/L	4.1077 ppb	01:02:44
2	Si 251.611†	961897.4	947554.4	30662 ug/L	30662 ppb	01:02:19
2	Sn 189.927†	-75.2	-84.6	-19.470 ug/L	-19.470 ppb	01:02:44
2	Ti 334.940†	3611409.9	3561029.7	5596.8 ug/L	5596.8 ppb	01:02:19
2	Tl 190.801†	-226.5	-190.7	1.3350 ug/L	1.3350 ppb	01:02:44
2	U 409.014†	-9976.7	-6947.1	-208.26 ug/L	-208.26 ppb	01:02:24
2	V 292.402†	45961.0	46808.0	299.79 ug/L	299.79 ppb	01:02:24
2	Zn 213.857†	39266.0	38097.2	361.56 ug/L	361.56 ppb	01:02:24
2	SiO2†	969366.2	954920.0	66363 ug/L	66363 ppb	01:03:28
3	Sc Radial	4036.9	4036.9	103 %		01:01:39
3	Y RADIAL	5020.7	5020.7	113.8 %		01:01:39
3	Al 396.153Radial†	161208.6	156607.5	146880 ug/L	146880 ppb	01:01:19
3	Ca 317.933Radial†	10820.4	10484.4	21918 ug/L	21918 ppb	01:01:19
3	Fe 238.204 Radial†	10473.6	10156.0	143360 ug/L	143360 ppb	01:01:19
3	K 766.490 Radial†	110670.0	104794.6	20098 ug/L	20098 ppb	01:01:19
3	Mg 279.077 IEC†	502.0	483.3	23283 ug/L	23283 ppb	01:01:39
3	Na 589.592 Radial†	32841.9	32701.5	10083 ug/L	10083 ppb	01:01:19
3	Sr 421.552†	42570.6	41290.2	285.55 ug/L	285.55 ppb	01:01:19
3	Sc 361.383	885594.2	885594.2	100.95 %		01:02:56
3	Y 371.029	817059.9	817059.9	108.10 %		01:02:56
3	Ag 328.068†	-10091.7	-10236.8	-2.1825 ug/L	-2.1825 ppb	01:02:56
3	As 188.979†	-76.0	-57.0	56.637 ug/L	56.637 ppb	01:03:16
3	B 249.677†	1696.2	2078.4	26.886 ug/L	26.886 ppb	01:02:56
3	Ba 233.527†	223965.7	221852.1	1746.0 ug/L	1746.0 ppb	01:02:56
3	Be 313.107†	-4843.4	-1035.5	12.323 ug/L	12.323 ppb	01:02:56
3	Cd 226.502†	1211.4	1396.3	1.3905 ug/L	1.3905 ppb	01:03:16
3	Co 228.616†	3711.3	3742.8	65.363 ug/L	65.363 ppb	01:03:16
3	Cr 267.716†	12285.2	12091.5	149.91 ug/L	149.91 ppb	01:03:16
3	Cu 324.752†	32455.5	26158.3	87.294 ug/L	87.294 ppb	01:02:56
3	Mn 257.610†	3127165.6	3097175.6	3537.6 ug/L	3537.6 ppb	01:02:50
3	Mo 202.031†	-102.6	-111.8	3.1849 ug/L	3.1849 ppb	01:03:16
3	Ni 231.604†	4201.1	4099.0	104.20 ug/L	104.20 ppb	01:03:16
3	P 214.914†	1628.9	1403.0	749.80 ug/L	749.80 ppb	01:03:16
3	Pb 220.353†	8292.1	8271.9	1032.7 ug/L	1032.7 ppb	01:03:16
3	S 181.975 Axial†	648.3	601.4	837.88 ug/L	837.88 ppb	01:03:16
3	Sb 206.836†	121.0	83.1	5.5928 ug/L	5.5928 ppb	01:03:16
3	Se 196.026†	-698.3	-664.0	10.704 ug/L	10.704 ppb	01:03:16
3	Si 251.611†	957432.1	947832.3	30671 ug/L	30671 ppb	01:02:50
3	Sn 189.927†	-80.7	-90.5	-20.565 ug/L	-20.565 ppb	01:03:16
3	Ti 334.940†	3595843.3	3563260.1	5600.4 ug/L	5600.4 ppb	01:02:50
3	Tl 190.801†	-226.5	-191.8	1.0135 ug/L	1.0135 ppb	01:03:16
3	U 409.014†	-9817.2	-6837.9	-205.47 ug/L	-205.47 ppb	01:02:56
3	V 292.402†	45912.1	46984.2	300.73 ug/L	300.73 ppb	01:02:56
3	Zn 213.857†	39174.6	38198.6	362.30 ug/L	362.30 ppb	01:02:56
3	SiO2†	949005.5	939489.2	65290 ug/L	65290 ppb	01:03:34

Mean Data: 246055003|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	889399.7	101.39 %	0.405			0.40%
Sc Radial	4023.0	103 %	0.3			0.31%
Y 371.029	819074.2	108.37 %	0.268			0.25%
Y RADIAL	5010.1	113.6 %	0.28			0.24%
Ag 328.068†	-10180.2	-2.0214 ug/L	0.30952	-2.0214 ppb	0.30952	15.31%
Al 396.153Radial†	156119.7	146420 ug/L	1228.1	146420 ppb	1228.1	0.84%
As 188.979†	-56.6	56.791 ug/L	0.4706	56.791 ppb	0.4706	0.83%
B 249.677†	2088.3	27.178 ug/L	0.8314	27.178 ppb	0.8314	3.06%
Ba 233.527†	221783.1	1745.5 ug/L	0.92	1745.5 ppb	0.92	0.05%
Be 313.107†	-1233.2	12.262 ug/L	0.0922	12.262 ppb	0.0922	0.75%
Ca 317.933Radial†	10427.4	21799 ug/L	220.1	21799 ppb	220.1	1.01%
Cd 226.502†	1406.7	1.5464 ug/L	0.13786	1.5464 ppb	0.13786	8.91%
Co 228.616†	3756.0	65.632 ug/L	0.2870	65.632 ppb	0.2870	0.44%
Cr 267.716†	12117.7	150.17 ug/L	0.294	150.17 ppb	0.294	0.20%
Cu 324.752†	26181.1	87.347 ug/L	0.1355	87.347 ppb	0.1355	0.16%
Fe 238.204 Radial†	10132.7	143030 ug/L	1494.6	143030 ppb	1494.6	1.04%
K 766.490 Radial†	104434.6	20028 ug/L	158.9	20028 ppb	158.9	0.79%

Mg 279.077 IEC†	485.0	23365 ug/L	163.3	23365 ppb	163.3	0.70%
Mn 257.610†	3099628.3	3540.4 ug/L	8.57	3540.4 ppb	8.57	0.24%
Mo 202.031†	-115.1	2.9090 ug/L	0.39305	2.9090 ppb	0.39305	13.51%
Na 589.592 Radial†	32604.5	10053 ug/L	106.4	10053 ppb	106.4	1.06%
Ni 231.604†	4152.1	105.55 ug/L	1.201	105.55 ppb	1.201	1.14%
P 214.914†	1403.6	750.31 ug/L	4.169	750.31 ppb	4.169	0.56%
Pb 220.353†	8302.3	1036.4 ug/L	3.31	1036.4 ppb	3.31	0.32%
S 181.975 Axial†	601.4	838.01 ug/L	3.900	838.01 ppb	3.900	0.47%
Sb 206.836†	78.7	4.0246 ug/L	2.23379	4.0246 ppb	2.23379	55.50%
Se 196.026†	-664.4	9.4048 ug/L	4.78166	9.4048 ppb	4.78166	50.84%
Si 251.611†	949105.4	30712 ug/L	79.3	30712 ppb	79.3	0.26%
Sn 189.927†	-88.8	-20.264 ug/L	0.6946	-20.264 ppb	0.6946	3.43%
Sr 421.552†	41181.1	284.79 ug/L	3.050	284.79 ppb	3.050	1.07%
Ti 334.940†	3566912.1	5606.1 ug/L	13.10	5606.1 ppb	13.10	0.23%
Tl 190.801†	-193.3	0.6032 ug/L	1.00195	0.6032 ppb	1.00195	166.10%
U 409.014†	-6875.2	-206.46 ug/L	1.562	-206.46 ppb	1.562	0.76%
V 292.402†	46908.3	300.24 ug/L	0.473	300.24 ppb	0.473	0.16%
Zn 213.857†	38132.7	361.68 ug/L	0.573	361.68 ppb	0.573	0.16%
SiO2†	948492.6	65916 ug/L	558.2	65916 ppb	558.2	0.85%

Sequence No.: 72

Sample ID: 246055004|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 95

Date Collected: 2/25/2010 01:05:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055004|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3883.2	3883.2	99.1 %		01:07:58
1	Y RADIAL	4656.2	4656.2	105.6 %		01:07:38
1	Al 396.153Radial†	41841.3	42337.8	39708 ug/L	39708 ppb	01:07:38
1	Ca 317.933Radial†	12635.0	12731.3	26615 ug/L	26615 ppb	01:07:38
1	Fe 238.204 Radial†	5263.6	5300.6	74820 ug/L	74820 ppb	01:07:38
1	K 766.490 Radial†	50723.2	48549.2	9306.6 ug/L	9306.6 ppb	01:07:38
1	Mg 279.077 IEC†	221.5	219.4	10561 ug/L	10561 ppb	01:07:58
1	Na 589.592 Radial†	1490.5	2324.0	716.55 ug/L	716.55 ppb	01:07:38
1	Sr 421.552†	21134.7	21293.1	147.14 ug/L	147.14 ppb	01:07:38
1	Sc 361.383	893626.1	893626.1	101.87 %		01:08:55
1	Y 371.029	797779.6	797779.6	105.55 %		01:08:55
1	Ag 328.068†	-4937.5	-5087.3	-0.1400 ug/L	-0.1400 ppb	01:09:01
1	As 188.979†	-59.3	-39.9	28.843 ug/L	28.843 ppb	01:09:21
1	B 249.677†	718.3	1103.3	14.500 ug/L	14.500 ppb	01:09:01
1	Ba 233.527†	93554.4	91839.4	723.36 ug/L	723.36 ppb	01:09:01
1	Be 313.107†	-15304.8	-11261.8	3.4047 ug/L	3.4047 ppb	01:09:01
1	Cd 226.502†	572.6	758.4	1.0758 ug/L	1.0758 ppb	01:09:21
1	Co 228.616†	1638.2	1674.7	27.248 ug/L	27.248 ppb	01:09:21
1	Cr 267.716†	9414.0	9163.6	110.27 ug/L	110.27 ppb	01:09:01
1	Cu 324.752†	23741.6	17315.3	56.704 ug/L	56.704 ppb	01:09:01
1	Mn 257.610†	1864942.9	1830268.9	2089.7 ug/L	2089.7 ppb	01:08:55
1	Mo 202.031†	-39.7	-49.1	2.5199 ug/L	2.5199 ppb	01:09:21
1	Ni 231.604†	2581.3	2471.5	62.836 ug/L	62.836 ppb	01:09:21
1	P 214.914†	2723.0	2462.6	1421.4 ug/L	1421.4 ppb	01:09:21
1	Pb 220.353†	4184.5	4165.9	512.87 ug/L	512.87 ppb	01:09:21
1	S 181.975 Axial†	599.9	548.1	781.34 ug/L	781.34 ppb	01:09:21
1	Sb 206.836†	88.7	50.4	4.6616 ug/L	4.6616 ppb	01:09:21
1	Se 196.026†	-359.0	-324.7	20.260 ug/L	20.260 ppb	01:09:21
1	Si 251.611†	701761.6	688328.3	22273 ug/L	22273 ppb	01:08:55
1	Sn 189.927†	-135.8	-143.8	-25.371 ug/L	-25.371 ppb	01:09:21
1	Ti 334.940†	2179276.7	2140668.5	3366.6 ug/L	3366.6 ppb	01:08:55
1	Tl 190.801†	-160.8	-125.3	-2.6802 ug/L	-2.6802 ppb	01:09:21
1	U 409.014†	-6394.3	-3390.4	-102.38 ug/L	-102.38 ppb	01:09:01
1	V 292.402†	24399.2	25457.3	162.99 ug/L	162.99 ppb	01:09:01
1	Zn 213.857†	22351.1	21335.0	203.10 ug/L	203.10 ppb	01:09:01
1	SiO2†	701555.7	688130.2	47822 ug/L	47822 ppb	01:10:29
2	Sc Radial	3853.9	3853.9	98.3 %		01:08:23
2	Y RADIAL	4725.5	4725.5	107.1 %		01:08:03
2	Al 396.153Radial†	42089.6	42910.5	40245 ug/L	40245 ppb	01:08:03
2	Ca 317.933Radial†	12737.3	12932.1	27035 ug/L	27035 ppb	01:08:03
2	Fe 238.204 Radial†	5296.1	5373.9	75856 ug/L	75856 ppb	01:08:03
2	K 766.490 Radial†	51243.8	49466.7	9482.6 ug/L	9482.6 ppb	01:08:03
2	Mg 279.077 IEC†	226.2	226.0	10877 ug/L	10877 ppb	01:08:23
2	Na 589.592 Radial†	1477.0	2321.6	715.81 ug/L	715.81 ppb	01:08:03
2	Sr 421.552†	21249.0	21570.9	149.06 ug/L	149.06 ppb	01:08:03
2	Sc 361.383	889303.1	889303.1	101.38 %		01:09:26
2	Y 371.029	795612.8	795612.8	105.26 %		01:09:26
2	Ag 328.068†	-4882.6	-5056.7	0.3089 ug/L	0.3089 ppb	01:09:32
2	As 188.979†	-63.3	-44.2	27.179 ug/L	27.179 ppb	01:09:52
2	B 249.677†	604.9	994.9	11.703 ug/L	11.703 ppb	01:09:32
2	Ba 233.527†	92435.0	91181.7	718.23 ug/L	718.23 ppb	01:09:32
2	Be 313.107†	-14918.7	-10954.0	3.5227 ug/L	3.5227 ppb	01:09:32
2	Cd 226.502†	589.7	777.9	1.1957 ug/L	1.1957 ppb	01:09:52
2	Co 228.616†	1635.3	1679.7	27.331 ug/L	27.331 ppb	01:09:52
2	Cr 267.716†	9441.6	9235.7	111.18 ug/L	111.18 ppb	01:09:32
2	Cu 324.752†	23645.2	17333.4	56.813 ug/L	56.813 ppb	01:09:32
2	Mn 257.610†	1857354.3	1831682.6	2091.4 ug/L	2091.4 ppb	01:09:26
2	Mo 202.031†	-43.2	-52.8	2.3341 ug/L	2.3341 ppb	01:09:52
2	Ni 231.604†	2590.1	2492.5	63.370 ug/L	63.370 ppb	01:09:52

2	P 214.914†	2729.9	2482.3	1432.6 ug/L	1432.6 ppb	01:09:52
2	Pb 220.353†	4201.9	4202.9	517.43 ug/L	517.43 ppb	01:09:52
2	S 181.975 Axial†	600.8	551.8	786.52 ug/L	786.52 ppb	01:09:52
2	Sb 206.836†	74.6	36.9	-0.1047 ug/L	-0.1047 ppb	01:09:52
2	Se 196.026†	-363.5	-330.9	19.441 ug/L	19.441 ppb	01:09:52
2	Si 251.611†	697845.2	687813.9	22257 ug/L	22257 ppb	01:09:26
2	Sn 189.927†	-147.7	-156.2	-27.575 ug/L	-27.575 ppb	01:09:52
2	Ti 334.940†	2169398.1	2141323.3	3367.6 ug/L	3367.6 ppb	01:09:26
2	Tl 190.801†	-159.6	-124.8	-2.5150 ug/L	-2.5150 ppb	01:09:52
2	U 409.014†	-6291.3	-3319.3	-100.54 ug/L	-100.54 ppb	01:09:32
2	V 292.402†	24127.0	25305.1	161.78 ug/L	161.78 ppb	01:09:32
2	Zn 213.857†	22226.6	21318.8	202.78 ug/L	202.78 ppb	01:09:32
2	SiO2†	692397.8	682444.4	47427 ug/L	47427 ppb	01:10:34
3	Sc Radial	3842.0	3842.0	98.0 %		01:08:48
3	Y RADIAL	4721.7	4721.7	107.0 %		01:08:28
3	Al 396.153Radial†	42144.8	43099.8	40422 ug/L	40422 ppb	01:08:28
3	Ca 317.933Radial†	12749.3	12984.6	27144 ug/L	27144 ppb	01:08:28
3	Fe 238.204 Radial†	5313.6	5408.5	76343 ug/L	76343 ppb	01:08:28
3	K 766.490 Radial†	51013.2	49393.5	9468.5 ug/L	9468.5 ppb	01:08:28
3	Mg 279.077 IEC†	221.4	221.8	10673 ug/L	10673 ppb	01:08:48
3	Na 589.592 Radial†	1497.6	2347.3	723.74 ug/L	723.74 ppb	01:08:28
3	Sr 421.552†	21304.3	21694.5	149.91 ug/L	149.91 ppb	01:08:28
3	Sc 361.383	900133.5	900133.5	102.61 %		01:09:58
3	Y 371.029	803484.7	803484.7	106.30 %		01:09:58
3	Ag 328.068†	-4892.2	-5008.1	0.6849 ug/L	0.6849 ppb	01:10:03
3	As 188.979†	-63.3	-43.4	27.707 ug/L	27.707 ppb	01:10:23
3	B 249.677†	645.8	1027.5	12.416 ug/L	12.416 ppb	01:10:03
3	Ba 233.527†	94077.5	91685.3	722.20 ug/L	722.20 ppb	01:10:03
3	Be 313.107†	-14966.9	-10823.9	3.5853 ug/L	3.5853 ppb	01:10:03
3	Cd 226.502†	574.4	756.0	0.8908 ug/L	0.8908 ppb	01:10:23
3	Co 228.616†	1637.5	1662.4	26.951 ug/L	26.951 ppb	01:10:23
3	Cr 267.716†	9497.8	9178.4	110.58 ug/L	110.58 ppb	01:10:03
3	Cu 324.752†	24063.0	17460.0	57.224 ug/L	57.224 ppb	01:10:03
3	Mn 257.610†	1884596.6	1836187.4	2096.6 ug/L	2096.6 ppb	01:09:58
3	Mo 202.031†	-43.5	-52.5	2.3927 ug/L	2.3927 ppb	01:10:23
3	Ni 231.604†	2573.6	2445.7	62.180 ug/L	62.180 ppb	01:10:23
3	P 214.914†	2731.9	2451.8	1413.8 ug/L	1413.8 ppb	01:10:23
3	Pb 220.353†	4184.0	4135.7	509.15 ug/L	509.15 ppb	01:10:23
3	S 181.975 Axial†	608.1	551.8	786.46 ug/L	786.46 ppb	01:10:23
3	Sb 206.836†	85.0	46.1	3.0915 ug/L	3.0915 ppb	01:10:23
3	Se 196.026†	-355.5	-318.7	28.908 ug/L	28.908 ppb	01:10:23
3	Si 251.611†	708925.6	690329.9	22338 ug/L	22338 ppb	01:09:58
3	Sn 189.927†	-143.2	-150.0	-26.476 ug/L	-26.476 ppb	01:10:23
3	Ti 334.940†	2199757.9	2145162.8	3373.7 ug/L	3373.7 ppb	01:09:58
3	Tl 190.801†	-150.7	-114.3	0.9222 ug/L	0.9222 ppb	01:10:23
3	U 409.014†	-6380.7	-3331.7	-100.94 ug/L	-100.94 ppb	01:10:03
3	V 292.402†	24509.9	25392.0	162.31 ug/L	162.31 ppb	01:10:03
3	Zn 213.857†	22568.7	21388.4	203.41 ug/L	203.41 ppb	01:10:03
3	SiO2†	697396.8	679098.3	47194 ug/L	47194 ppb	01:10:39

Mean Data: 246055004|949334|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	894354.3	101.95 %	0.621			0.61%
Sc Radial	3859.7	98.5 %	0.54			0.55%
Y 371.029	798959.0	105.70 %	0.538			0.51%
Y RADIAL	4701.1	106.6 %	0.88			0.83%
Ag 328.068†	-5050.7	0.2846 ug/L	0.41294	0.2846 ppb	0.41294	145.10%
Al 396.153Radial†	42782.7	40125 ug/L	372.1	40125 ppb	372.1	0.93%
As 188.979†	-42.5	27.910 ug/L	0.8504	27.910 ppb	0.8504	3.05%
B 249.677†	1041.9	12.873 ug/L	1.4535	12.873 ppb	1.4535	11.29%
Ba 233.527†	91568.8	721.26 ug/L	2.691	721.26 ppb	2.691	0.37%
Be 313.107†	-11013.2	3.5042 ug/L	0.09172	3.5042 ppb	0.09172	2.62%
Ca 317.933Radial†	12882.7	26931 ug/L	279.4	26931 ppb	279.4	1.04%
Cd 226.502†	764.1	1.0541 ug/L	0.15356	1.0541 ppb	0.15356	14.57%
Co 228.616†	1672.3	27.177 ug/L	0.1995	27.177 ppb	0.1995	0.73%
Cr 267.716†	9192.6	110.68 ug/L	0.460	110.68 ppb	0.460	0.42%
Cu 324.752†	17369.6	56.914 ug/L	0.2744	56.914 ppb	0.2744	0.48%
Fe 238.204 Radial†	5361.0	75673 ug/L	778.0	75673 ppb	778.0	1.03%
K 766.490 Radial†	49136.5	9419.2 ug/L	97.76	9419.2 ppb	97.76	1.04%



Mg 279.077 IEC†	222.4	10704 ug/L	160.3	10704 ppb	160.3	1.50%
Mn 257.610†	1832713.0	2092.6 ug/L	3.58	2092.6 ppb	3.58	0.17%
Mo 202.031†	-51.5	2.4156 ug/L	0.09499	2.4156 ppb	0.09499	3.93%
Na 589.592 Radial†	2331.0	718.70 ug/L	4.381	718.70 ppb	4.381	0.61%
Ni 231.604†	2469.9	62.795 ug/L	0.5964	62.795 ppb	0.5964	0.95%
P 214.914†	2465.6	1422.6 ug/L	9.44	1422.6 ppb	9.44	0.66%
Pb 220.353†	4168.2	513.15 ug/L	4.149	513.15 ppb	4.149	0.81%
S 181.975 Axial†	550.6	784.77 ug/L	2.974	784.77 ppb	2.974	0.38%
Sb 206.836†	44.5	2.5495 ug/L	2.42891	2.5495 ppb	2.42891	95.27%
Se 196.026†	-324.8	22.870 ug/L	5.2453	22.870 ppb	5.2453	22.94%
Si 251.611†	688824.0	22290 ug/L	43.0	22290 ppb	43.0	0.19%
Sn 189.927†	-150.0	-26.474 ug/L	1.1019	-26.474 ppb	1.1019	4.16%
Sr 421.552†	21519.5	148.70 ug/L	1.421	148.70 ppb	1.421	0.96%
Ti 334.940†	2142384.9	3369.3 ug/L	3.84	3369.3 ppb	3.84	0.11%
Tl 190.801†	-121.5	-1.4243 ug/L	2.03386	-1.4243 ppb	2.03386	142.79%
U 409.014†	-3347.1	-101.29 ug/L	0.970	-101.29 ppb	0.970	0.96%
V 292.402†	25384.8	162.36 ug/L	0.605	162.36 ppb	0.605	0.37%
Zn 213.857†	21347.4	203.10 ug/L	0.317	203.10 ppb	0.317	0.16%
SiO2†	683224.3	47481 ug/L	317.3	47481 ppb	317.3	0.67%

Sequence No.: 73

Sample ID: 246055005|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 96

Date Collected: 2/25/2010 01:12:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055005|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3940.5	3940.5	101 %			01:15:04
1	Y RADIAL	4722.3	4722.3	107.1 %			01:15:04
1	Al 396.153Radial†	107502.8	107023.6	100380 ug/L		100380 ppb	01:14:44
1	Ca 317.933Radial†	8847.7	8779.3	18353 ug/L		18353 ppb	01:14:44
1	Fe 238.204 Radial†	7613.5	7560.3	106720 ug/L		106720 ppb	01:14:44
1	K 766.490 Radial†	87919.9	84796.4	16265 ug/L		16265 ppb	01:14:44
1	Mg 279.077 IEC†	362.1	356.0	17152 ug/L		17152 ppb	01:15:04
1	Na 589.592 Radial†	1838.4	2648.1	816.47 ug/L		816.47 ppb	01:14:44
1	Sr 421.552†	32118.6	31906.1	220.64 ug/L		220.64 ppb	01:14:44
1	Sc 361.383	898677.7	898677.7	102.44 %			01:16:02
1	Y 371.029	814529.3	814529.3	107.76 %			01:16:02
1	Ag 328.068†	-6984.0	-7057.7	0.9379 ug/L		0.9379 ppb	01:16:07
1	As 188.979†	-74.5	-54.4	40.444 ug/L		40.444 ppb	01:16:27
1	B 249.677†	889.6	1266.6	13.218 ug/L		13.218 ppb	01:16:07
1	Ba 233.527†	167678.0	163677.9	1288.2 ug/L		1288.2 ppb	01:16:07
1	Be 313.107†	-10496.1	-6483.5	7.9776 ug/L		7.9776 ppb	01:16:07
1	Cd 226.502†	858.5	1034.2	0.9705 ug/L		0.9705 ppb	01:16:27
1	Co 228.616†	2666.0	2668.9	45.323 ug/L		45.323 ppb	01:16:27
1	Cr 267.716†	7449.7	7194.3	91.304 ug/L		91.304 ppb	01:16:07
1	Cu 324.752†	27235.6	20594.9	68.390 ug/L		68.390 ppb	01:16:07
1	Mn 257.610†	2312412.4	2256769.0	2577.9 ug/L		2577.9 ppb	01:16:02
1	Mo 202.031†	-94.2	-102.1	1.0039 ug/L		1.0039 ppb	01:16:27
1	Ni 231.604†	2704.9	2577.9	65.531 ug/L		65.531 ppb	01:16:27
1	P 214.914†	1404.9	1160.9	625.29 ug/L		625.29 ppb	01:16:27
1	Pb 220.353†	5332.7	5263.5	656.93 ug/L		656.93 ppb	01:16:27
1	S 181.975 Axial†	495.8	443.2	618.94 ug/L		618.94 ppb	01:16:27
1	Sb 206.836†	94.0	55.0	0.4886 ug/L		0.4886 ppb	01:16:27
1	Se 196.026†	-515.0	-474.9	20.726 ug/L		20.726 ppb	01:16:27
1	Si 251.611†	824687.2	804448.1	26031 ug/L		26031 ppb	01:16:02
1	Sn 189.927†	-92.1	-100.4	-20.883 ug/L		-20.883 ppb	01:16:27
1	Ti 334.940†	2989106.1	2919146.4	4588.2 ug/L		4588.2 ppb	01:16:02
1	Tl 190.801†	-209.0	-171.4	-5.1735 ug/L		-5.1735 ppb	01:16:27
1	U 409.014†	-7632.7	-4564.0	-138.38 ug/L		-138.38 ppb	01:16:07
1	V 292.402†	34116.8	34808.3	222.27 ug/L		222.27 ppb	01:16:07
1	Zn 213.857†	26331.8	25097.4	236.17 ug/L		236.17 ppb	01:16:07
1	SiO2†	831227.6	810836.3	56350 ug/L		56350 ppb	01:17:35
2	Sc Radial	3953.3	3953.3	101 %			01:15:29
2	Y RADIAL	4738.7	4738.7	107.4 %			01:15:29
2	Al 396.153Radial†	109602.3	108758.6	102000 ug/L		102000 ppb	01:15:09
2	Ca 317.933Radial†	9005.9	8907.7	18622 ug/L		18622 ppb	01:15:09
2	Fe 238.204 Radial†	7767.7	7688.6	108530 ug/L		108530 ppb	01:15:09
2	K 766.490 Radial†	89551.0	86130.1	16521 ug/L		16521 ppb	01:15:09
2	Mg 279.077 IEC†	363.1	355.9	17141 ug/L		17141 ppb	01:15:29
2	Na 589.592 Radial†	1973.1	2775.7	855.81 ug/L		855.81 ppb	01:15:09
2	Sr 421.552†	32869.7	32547.2	225.07 ug/L		225.07 ppb	01:15:09
2	Sc 361.383	891105.4	891105.4	101.58 %			01:16:33
2	Y 371.029	808461.8	808461.8	106.96 %			01:16:33
2	Ag 328.068†	-7047.4	-7178.1	0.9677 ug/L		0.9677 ppb	01:16:38
2	As 188.979†	-69.6	-50.3	43.060 ug/L		43.060 ppb	01:16:58
2	B 249.677†	983.8	1366.7	15.350 ug/L		15.350 ppb	01:16:38
2	Ba 233.527†	171017.7	168356.4	1325.0 ug/L		1325.0 ppb	01:16:38
2	Be 313.107†	-10639.9	-6712.0	7.9807 ug/L		7.9807 ppb	01:16:38
2	Cd 226.502†	886.1	1068.6	1.1811 ug/L		1.1811 ppb	01:16:58
2	Co 228.616†	2681.2	2706.0	46.009 ug/L		46.009 ppb	01:16:58
2	Cr 267.716†	7624.5	7428.1	94.113 ug/L		94.113 ppb	01:16:38
2	Cu 324.752†	27852.8	21428.3	71.024 ug/L		71.024 ppb	01:16:38
2	Mn 257.610†	2313744.4	2277261.4	2601.4 ug/L		2601.4 ppb	01:16:33
2	Mo 202.031†	-83.8	-92.7	1.8444 ug/L		1.8444 ppb	01:16:58
2	Ni 231.604†	2720.4	2615.6	66.488 ug/L		66.488 ppb	01:16:58

2	P 214.914†	1434.4	1201.6	648.25 ug/L	648.25 ppb	01:16:58
2	Pb 220.353†	5315.0	5290.4	660.38 ug/L	660.38 ppb	01:16:58
2	S 181.975 Axial†	497.2	448.6	626.49 ug/L	626.49 ppb	01:16:58
2	Sb 206.836†	88.1	50.0	-1.4236 ug/L	-1.4236 ppb	01:16:58
2	Se 196.026†	-530.5	-494.5	13.553 ug/L	13.553 ppb	01:16:58
2	Si 251.611†	825344.0	811935.3	26273 ug/L	26273 ppb	01:16:33
2	Sn 189.927†	-94.1	-103.1	-21.428 ug/L	-21.428 ppb	01:16:58
2	Ti 334.940†	2989278.6	2944110.5	4627.5 ug/L	4627.5 ppb	01:16:33
2	Tl 190.801†	-196.2	-160.6	-1.2993 ug/L	-1.2993 ppb	01:16:58
2	U 409.014†	-7702.7	-4696.2	-142.24 ug/L	-142.24 ppb	01:16:38
2	V 292.402†	34959.5	35920.9	229.72 ug/L	229.72 ppb	01:16:38
2	Zn 213.857†	26889.1	25864.4	243.61 ug/L	243.61 ppb	01:16:38
2	SiO2†	825174.5	811772.4	56415 ug/L	56415 ppb	01:17:41
3	Sc Radial	3973.8	3973.8	101 %		01:15:54
3	Y RADIAL	4751.1	4751.1	107.7 %		01:15:54
3	Al 396.153Radial†	107895.0	106515.6	99899 ug/L	99899 ppb	01:15:34
3	Ca 317.933Radial†	8858.5	8716.4	18222 ug/L	18222 ppb	01:15:34
3	Fe 238.204 Radial†	7633.1	7516.2	106090 ug/L	106090 ppb	01:15:34
3	K 766.490 Radial†	88006.1	84149.8	16141 ug/L	16141 ppb	01:15:34
3	Mg 279.077 IEC†	362.6	353.6	17032 ug/L	17032 ppb	01:15:54
3	Na 589.592 Radial†	1886.9	2680.6	826.49 ug/L	826.49 ppb	01:15:34
3	Sr 421.552†	32293.7	31811.5	219.99 ug/L	219.99 ppb	01:15:34
3	Sc 361.383	889260.6	889260.6	101.37 %		01:17:04
3	Y 371.029	806204.3	806204.3	106.66 %		01:17:04
3	Ag 328.068†	-7101.3	-7245.6	-0.0840 ug/L	-0.0840 ppb	01:17:09
3	As 188.979†	-81.9	-62.6	37.254 ug/L	37.254 ppb	01:17:29
3	B 249.677†	943.0	1328.4	14.819 ug/L	14.819 ppb	01:17:09
3	Ba 233.527†	171745.3	169423.5	1333.3 ug/L	1333.3 ppb	01:17:09
3	Be 313.107†	-10434.2	-6530.9	8.1157 ug/L	8.1157 ppb	01:17:09
3	Cd 226.502†	859.3	1043.9	1.1465 ug/L	1.1465 ppb	01:17:29
3	Co 228.616†	2641.4	2672.2	45.279 ug/L	45.279 ppb	01:17:29
3	Cr 267.716†	7660.3	7479.0	94.455 ug/L	94.455 ppb	01:17:09
3	Cu 324.752†	27865.9	21498.2	71.109 ug/L	71.109 ppb	01:17:09
3	Mn 257.610†	2324238.5	2292338.7	2618.3 ug/L	2618.3 ppb	01:17:04
3	Mo 202.031†	-79.9	-89.0	1.9179 ug/L	1.9179 ppb	01:17:29
3	Ni 231.604†	2732.8	2633.4	66.941 ug/L	66.941 ppb	01:17:29
3	P 214.914†	1412.5	1182.9	638.38 ug/L	638.38 ppb	01:17:29
3	Pb 220.353†	5282.7	5269.4	657.62 ug/L	657.62 ppb	01:17:29
3	S 181.975 Axial†	501.8	454.2	634.89 ug/L	634.89 ppb	01:17:29
3	Sb 206.836†	99.6	61.6	2.5741 ug/L	2.5741 ppb	01:17:29
3	Se 196.026†	-521.7	-486.9	10.973 ug/L	10.973 ppb	01:17:29
3	Si 251.611†	828640.8	816873.1	26433 ug/L	26433 ppb	01:17:04
3	Sn 189.927†	-105.8	-114.9	-23.470 ug/L	-23.470 ppb	01:17:29
3	Ti 334.940†	3002084.0	2962847.6	4656.9 ug/L	4656.9 ppb	01:17:04
3	Tl 190.801†	-197.4	-162.2	-1.4743 ug/L	-1.4743 ppb	01:17:29
3	U 409.014†	-7776.1	-4784.3	-144.40 ug/L	-144.40 ppb	01:17:09
3	V 292.402†	34950.4	35983.3	230.48 ug/L	230.48 ppb	01:17:09
3	Zn 213.857†	26971.6	26000.7	245.34 ug/L	245.34 ppb	01:17:09
3	SiO2†	823641.9	811945.7	56427 ug/L	56427 ppb	01:17:47

Mean Data: 246055005|949334|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity		Units		Units			
Sc 361.383	893014.6	101.80	%	0.569				0.56%
Sc Radial	3955.9	101	%	0.4				0.42%
Y 371.029	809731.8	107.13	%	0.570				0.53%
Y RADIAL	4737.4	107.4	%	0.33				0.31%
Ag 328.068†	-7160.5	0.6072	ug/L	0.59881	0.6072	ppb	0.59881	98.62%
Al 396.153Radial†	107432.6	100760	ug/L	1103.0	100760	ppb	1103.0	1.09%
As 188.979†	-55.8	40.253	ug/L	2.9080	40.253	ppb	2.9080	7.22%
B 249.677†	1320.6	14.462	ug/L	1.1099	14.462	ppb	1.1099	7.67%
Ba 233.527†	167152.6	1315.5	ug/L	24.00	1315.5	ppb	24.00	1.82%
Be 313.107†	-6575.5	8.0247	ug/L	0.07883	8.0247	ppb	0.07883	0.98%
Ca 317.933Radial†	8801.1	18399	ug/L	203.8	18399	ppb	203.8	1.11%
Cd 226.502†	1048.9	1.0994	ug/L	0.11292	1.0994	ppb	0.11292	10.27%
Co 228.616†	2682.3	45.537	ug/L	0.4095	45.537	ppb	0.4095	0.90%
Cr 267.716†	7367.1	93.291	ug/L	1.7293	93.291	ppb	1.7293	1.85%
Cu 324.752†	21173.8	70.175	ug/L	1.5459	70.175	ppb	1.5459	2.20%
Fe 238.204 Radial†	7588.4	107110	ug/L	1264.4	107110	ppb	1264.4	1.18%
K 766.490 Radial†	85025.4	16309	ug/L	193.7	16309	ppb	193.7	1.19%

Mg 279.077 IEC†	355.2	17108 ug/L	66.2	17108 ppb	66.2	0.39%
Mn 257.610†	2275456.4	2599.2 ug/L	20.30	2599.2 ppb	20.30	0.78%
Mo 202.031†	-94.6	1.5887 ug/L	0.50779	1.5887 ppb	0.50779	31.96%
Na 589.592 Radial†	2701.4	832.92 ug/L	20.446	832.92 ppb	20.446	2.45%
Ni 231.604†	2609.0	66.320 ug/L	0.7202	66.320 ppb	0.7202	1.09%
P 214.914†	1181.8	637.31 ug/L	11.517	637.31 ppb	11.517	1.81%
Pb 220.353†	5274.4	658.31 ug/L	1.825	658.31 ppb	1.825	0.28%
S 181.975 Axial†	448.7	626.78 ug/L	7.981	626.78 ppb	7.981	1.27%
Sb 206.836†	55.5	0.5464 ug/L	1.99948	0.5464 ppb	1.99948	365.97%
Se 196.026†	-485.4	15.084 ug/L	5.0535	15.084 ppb	5.0535	33.50%
Si 251.611†	811085.5	26246 ug/L	202.4	26246 ppb	202.4	0.77%
Sn 189.927†	-106.2	-21.927 ug/L	1.3639	-21.927 ppb	1.3639	6.22%
Sr 421.552†	32088.3	221.90 ug/L	2.768	221.90 ppb	2.768	1.25%
Ti 334.940†	2942034.9	4624.2 ug/L	34.45	4624.2 ppb	34.45	0.75%
Tl 190.801†	-164.7	-2.6490 ug/L	2.18801	-2.6490 ppb	2.18801	82.60%
U 409.014†	-4681.5	-141.67 ug/L	3.050	-141.67 ppb	3.050	2.15%
V 292.402†	35570.8	227.49 ug/L	4.538	227.49 ppb	4.538	1.99%
Zn 213.857†	25654.2	241.71 ug/L	4.874	241.71 ppb	4.874	2.02%
SiO2†	811518.1	56397 ug/L	41.5	56397 ppb	41.5	0.07%

Sequence No.: 74

Sample ID: 246055006|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 97

Date Collected: 2/25/2010 01:19:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055006|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4265.0	4265.0	109 %		01:22:12
1	Y RADIAL	5291.8	5291.8	120.0 %		01:22:12
1	Al 396.153Radial†	172973.8	159044.9	149160 ug/L	149160 ppb	01:21:52
1	Ca 317.933Radial†	12218.5	11207.0	23428 ug/L	23428 ppb	01:21:52
1	Fe 238.204 Radial†	9305.1	8538.4	120520 ug/L	120520 ppb	01:21:52
1	K 766.490 Radial†	113619.4	101756.6	19518 ug/L	19518 ppb	01:21:52
1	Mg 279.077 IEC†	471.5	429.2	20683 ug/L	20683 ppb	01:22:12
1	Na 589.592 Radial†	2187.0	2829.3	872.34 ug/L	872.34 ppb	01:21:52
1	Sr 421.552†	42314.9	38844.2	268.61 ug/L	268.61 ppb	01:21:52
1	Sc 361.383	866058.1	866058.1	98.726 %		01:23:16
1	Y 371.029	834456.4	834456.4	110.40 %		01:23:16
1	Ag 328.068†	-9110.7	-9468.7	-5.7427 ug/L	-5.7427 ppb	01:23:16
1	As 188.979†	-94.2	-77.2	42.222 ug/L	42.222 ppb	01:23:36
1	B 249.677†	1274.7	1689.4	21.199 ug/L	21.199 ppb	01:23:16
1	Ba 233.527†	224625.9	227525.2	1789.8 ug/L	1789.8 ppb	01:23:16
1	Be 313.107†	-2906.7	818.0	13.000 ug/L	13.000 ppb	01:23:16
1	Cd 226.502†	1112.8	1323.4	2.9025 ug/L	2.9025 ppb	01:23:36
1	Co 228.616†	3044.5	3150.3	53.322 ug/L	53.322 ppb	01:23:36
1	Cr 267.716†	11241.0	11308.4	138.92 ug/L	138.92 ppb	01:23:36
1	Cu 324.752†	28432.4	22808.5	75.890 ug/L	75.890 ppb	01:23:16
1	Mn 257.610†	2350021.1	2379880.1	2719.2 ug/L	2719.2 ppb	01:23:10
1	Mo 202.031†	-118.4	-130.1	0.0855 ug/L	0.0855 ppb	01:23:36
1	Ni 231.604†	3907.1	3895.0	99.022 ug/L	99.022 ppb	01:23:36
1	P 214.914†	1504.8	1313.7	716.95 ug/L	716.95 ppb	01:23:36
1	Pb 220.353†	3912.5	4021.1	512.86 ug/L	512.86 ppb	01:23:36
1	S 181.975 Axial†	500.3	465.9	642.49 ug/L	642.49 ppb	01:23:36
1	Sb 206.836†	101.4	66.0	-0.3861 ug/L	-0.3861 ppb	01:23:36
1	Se 196.026†	-642.8	-623.4	-33.938 ug/L	-33.938 ppb	01:23:36
1	Si 251.611†	1110357.3	1124123.8	36375 ug/L	36375 ppb	01:23:10
1	Sn 189.927†	-120.9	-133.0	-26.619 ug/L	-26.619 ppb	01:23:36
1	Ti 334.940†	3511259.2	3557932.2	5592.4 ug/L	5592.4 ppb	01:23:10
1	Tl 190.801†	-215.6	-185.8	-0.9525 ug/L	-0.9525 ppb	01:23:36
1	U 409.014†	-9500.1	-6736.1	-200.03 ug/L	-200.03 ppb	01:23:16
1	V 292.402†	42175.9	44225.7	284.77 ug/L	284.77 ppb	01:23:16
1	Zn 213.857†	27895.8	27649.6	259.57 ug/L	259.57 ppb	01:23:36
1	SiO2†	1116612.1	1130463.2	78562 ug/L	78562 ppb	01:24:46
2	Sc Radial	3877.1	3877.1	98.9 %		01:22:38
2	Y RADIAL	4940.4	4940.4	112.0 %		01:22:38
2	Al 396.153Radial†	169651.5	171590.4	160930 ug/L	160930 ppb	01:22:18
2	Ca 317.933Radial†	12000.2	12109.8	25316 ug/L	25316 ppb	01:22:18
2	Fe 238.204 Radial†	9131.9	9218.9	130130 ug/L	130130 ppb	01:22:18
2	K 766.490 Radial†	111273.7	109832.1	21067 ug/L	21067 ppb	01:22:18
2	Mg 279.077 IEC†	488.2	489.3	23590 ug/L	23590 ppb	01:22:38
2	Na 589.592 Radial†	2114.6	2957.1	911.77 ug/L	911.77 ppb	01:22:18
2	Sr 421.552†	41405.8	41815.9	289.16 ug/L	289.16 ppb	01:22:18
2	Sc 361.383	871288.9	871288.9	99.323 %		01:23:47
2	Y 371.029	839657.8	839657.8	111.09 %		01:23:47
2	Ag 328.068†	-9314.6	-9618.6	-3.5077 ug/L	-3.5077 ppb	01:23:47
2	As 188.979†	-83.3	-65.7	49.819 ug/L	49.819 ppb	01:24:08
2	B 249.677†	1380.9	1788.5	22.041 ug/L	22.041 ppb	01:23:47
2	Ba 233.527†	226658.0	228205.2	1795.4 ug/L	1795.4 ppb	01:23:47
2	Be 313.107†	-2764.9	978.4	13.112 ug/L	13.112 ppb	01:23:47
2	Cd 226.502†	1093.7	1297.4	1.6091 ug/L	1.6091 ppb	01:24:08
2	Co 228.616†	3077.0	3164.6	53.436 ug/L	53.436 ppb	01:24:08
2	Cr 267.716†	11305.3	11304.7	139.79 ug/L	139.79 ppb	01:24:08
2	Cu 324.752†	28706.5	22911.5	76.713 ug/L	76.713 ppb	01:23:47
2	Mn 257.610†	2372773.0	2388496.7	2729.9 ug/L	2729.9 ppb	01:23:42
2	Mo 202.031†	-119.5	-130.5	0.8223 ug/L	0.8223 ppb	01:24:08
2	Ni 231.604†	3921.3	3885.6	98.784 ug/L	98.784 ppb	01:24:08

2	P 214.914†	1500.7	1300.5	704.14 ug/L	704.14 ppb	01:24:08
2	Pb 220.353†	3920.5	4005.4	512.37 ug/L	512.37 ppb	01:24:08
2	S 181.975 Axial†	498.6	461.2	633.47 ug/L	633.47 ppb	01:24:08
2	Sb 206.836†	110.6	74.7	2.1954 ug/L	2.1954 ppb	01:24:08
2	Se 196.026†	-646.7	-623.4	-4.0801 ug/L	-4.0801 ppb	01:24:08
2	Si 251.611†	1122129.2	1129223.9	36540 ug/L	36540 ppb	01:23:42
2	Sn 189.927†	-104.0	-115.2	-23.639 ug/L	-23.639 ppb	01:24:08
2	Ti 334.940†	3546772.1	3572335.3	5615.1 ug/L	5615.1 ppb	01:23:42
2	Tl 190.801†	-217.3	-186.2	-0.8266 ug/L	-0.8266 ppb	01:24:08
2	U 409.014†	-9583.3	-6762.0	-201.85 ug/L	-201.85 ppb	01:23:47
2	V 292.402†	42506.4	44302.0	283.93 ug/L	283.93 ppb	01:23:47
2	Zn 213.857†	27998.0	27582.9	257.46 ug/L	257.46 ppb	01:24:08
2	SiO2†	1098485.6	1105422.9	76822 ug/L	76822 ppb	01:24:52
3	Sc Radial	3972.9	3972.9	101 %		01:23:03
3	Y RADIAL	5032.8	5032.8	114.1 %		01:23:03
3	Al 396.153Radial†	180472.0	178126.3	167060 ug/L	167060 ppb	01:22:43
3	Ca 317.933Radial†	12741.4	12548.2	26232 ug/L	26232 ppb	01:22:43
3	Fe 238.204 Radial†	9669.6	9526.6	134470 ug/L	134470 ppb	01:22:43
3	K 766.490 Radial†	118428.5	114175.8	21900 ug/L	21900 ppb	01:22:43
3	Mg 279.077 IEC†	481.2	470.6	22677 ug/L	22677 ppb	01:23:03
3	Na 589.592 Radial†	2335.7	3123.6	963.10 ug/L	963.10 ppb	01:22:43
3	Sr 421.552†	44278.1	43639.3	301.77 ug/L	301.77 ppb	01:22:43
3	Sc 361.383	864938.6	864938.6	98.599 %		01:24:19
3	Y 371.029	832358.1	832358.1	110.12 %		01:24:19
3	Ag 328.068†	-9096.0	-9465.7	-1.4858 ug/L	-1.4858 ppb	01:24:19
3	As 188.979†	-73.1	-55.9	55.627 ug/L	55.627 ppb	01:24:39
3	B 249.677†	1336.0	1753.2	20.478 ug/L	20.478 ppb	01:24:19
3	Ba 233.527†	223537.9	226716.3	1783.9 ug/L	1783.9 ppb	01:24:19
3	Be 313.107†	-2692.4	1031.5	13.244 ug/L	13.244 ppb	01:24:19
3	Cd 226.502†	1117.5	1329.7	1.5348 ug/L	1.5348 ppb	01:24:39
3	Co 228.616†	3062.7	3172.8	53.439 ug/L	53.439 ppb	01:24:39
3	Cr 267.716†	11236.1	11318.1	140.35 ug/L	140.35 ppb	01:24:39
3	Cu 324.752†	28376.2	22788.7	76.568 ug/L	76.568 ppb	01:24:19
3	Mn 257.610†	2375791.7	2409097.8	2753.8 ug/L	2753.8 ppb	01:24:14
3	Mo 202.031†	-107.2	-118.9	2.0206 ug/L	2.0206 ppb	01:24:39
3	Ni 231.604†	3904.7	3897.7	99.091 ug/L	99.091 ppb	01:24:39
3	P 214.914†	1490.4	1301.1	702.62 ug/L	702.62 ppb	01:24:39
3	Pb 220.353†	3897.9	4011.4	513.93 ug/L	513.93 ppb	01:24:39
3	S 181.975 Axial†	488.4	454.6	622.83 ug/L	622.83 ppb	01:24:39
3	Sb 206.836†	114.8	79.7	3.5489 ug/L	3.5489 ppb	01:24:39
3	Se 196.026†	-650.8	-632.4	3.5132 ug/L	3.5132 ppb	01:24:39
3	Si 251.611†	1124470.3	1139893.0	36886 ug/L	36886 ppb	01:24:14
3	Sn 189.927†	-122.4	-134.6	-27.214 ug/L	-27.214 ppb	01:24:39
3	Ti 334.940†	3551817.7	3603670.3	5664.5 ug/L	5664.5 ppb	01:24:14
3	Tl 190.801†	-207.7	-178.1	2.2825 ug/L	2.2825 ppb	01:24:39
3	U 409.014†	-9457.7	-6705.5	-200.78 ug/L	-200.78 ppb	01:24:19
3	V 292.402†	41939.6	44041.3	281.43 ug/L	281.43 ppb	01:24:19
3	Zn 213.857†	27885.0	27675.3	257.74 ug/L	257.74 ppb	01:24:39
3	SiO2†	1106789.9	1121965.2	77972 ug/L	77972 ppb	01:24:58

Mean Data: 246055006|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	867428.6	98.883 %		0.3864				0.39%
Sc Radial	4038.3	103 %		5.2				5.00%
Y 371.029	835490.8	110.54 %		0.497				0.45%
Y RADIAL	5088.3	115.4 %		4.13				3.58%
Ag 328.068†	-9517.7	-3.5788 ug/L		2.12933	-3.5788 ppb		2.12933	59.50%
Al 396.153Radial†	169587.2	159050 ug/L		9094.7	159050 ppb		9094.7	5.72%
As 188.979†	-66.2	49.223 ug/L		6.7224	49.223 ppb		6.7224	13.66%
B 249.677†	1743.7	21.240 ug/L		0.7823	21.240 ppb		0.7823	3.68%
Ba 233.527†	227482.3	1789.7 ug/L		5.78	1789.7 ppb		5.78	0.32%
Be 313.107†	942.6	13.119 ug/L		0.1218	13.119 ppb		0.1218	0.93%
Ca 317.933Radial†	11955.0	24992 ug/L		1429.7	24992 ppb		1429.7	5.72%
Cd 226.502†	1316.8	2.0155 ug/L		0.76905	2.0155 ppb		0.76905	38.16%
Co 228.616†	3162.6	53.399 ug/L		0.0667	53.399 ppb		0.0667	0.12%
Cr 267.716†	11310.4	139.69 ug/L		0.722	139.69 ppb		0.722	0.52%
Cu 324.752†	22836.2	76.390 ug/L		0.4391	76.390 ppb		0.4391	0.57%
Fe 238.204 Radial†	9094.7	128380 ug/L		7137.6	128380 ppb		7137.6	5.56%
K 766.490 Radial†	108588.1	20828 ug/L		1208.9	20828 ppb		1208.9	5.80%

Mg 279.077 IEC†	463.0	22317 ug/L	1486.6	22317 ppb	1486.6	6.66%
Mn 257.610†	2392491.5	2734.3 ug/L	17.69	2734.3 ppb	17.69	0.65%
Mo 202.031†	-126.5	0.9761 ug/L	0.97667	0.9761 ppb	0.97667	100.06%
Na 589.592 Radial†	2970.0	915.74 ug/L	45.510	915.74 ppb	45.510	4.97%
Ni 231.604†	3892.8	98.965 ug/L	0.1611	98.965 ppb	0.1611	0.16%
P 214.914†	1305.1	707.90 ug/L	7.870	707.90 ppb	7.870	1.11%
Pb 220.353†	4012.6	513.05 ug/L	0.802	513.05 ppb	0.802	0.16%
S 181.975 Axial†	460.5	632.93 ug/L	9.844	632.93 ppb	9.844	1.56%
Sb 206.836†	73.5	1.7861 ug/L	1.99916	1.7861 ppb	1.99916	111.93%
Se 196.026†	-626.4	-11.502 ug/L	19.7978	-11.502 ppb	19.7978	172.13%
Si 251.611†	1131080.2	36600 ug/L	260.4	36600 ppb	260.4	0.71%
Sn 189.927†	-127.6	-25.824 ug/L	1.9160	-25.824 ppb	1.9160	7.42%
Sr 421.552†	41433.1	286.51 ug/L	16.737	286.51 ppb	16.737	5.84%
Ti 334.940†	3577979.3	5624.0 ug/L	36.86	5624.0 ppb	36.86	0.66%
Tl 190.801†	-183.4	0.1678 ug/L	1.83244	0.1678 ppb	1.83244	>999.9%
U 409.014†	-6734.5	-200.89 ug/L	0.911	-200.89 ppb	0.911	0.45%
V 292.402†	44189.7	283.38 ug/L	1.739	283.38 ppb	1.739	0.61%
Zn 213.857†	27635.9	258.26 ug/L	1.145	258.26 ppb	1.145	0.44%
SiO2†	1119283.8	77785 ug/L	884.9	77785 ppb	884.9	1.14%

Sequence No.: 75

Sample ID: 246055007|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 98

Date Collected: 2/25/2010 01:27:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055007|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3970.1	3970.1	101	%		01:29:22
1	Y RADIAL	5095.7	5095.7	115.5	%		01:29:22
1	Al 396.153Radial†	107644.7	106367.4	99759	ug/L	99759 ppb	01:29:02
1	Ca 317.933Radial†	7558.2	7441.0	15555	ug/L	15555 ppb	01:29:22
1	Fe 238.204 Radial†	8174.1	8057.3	113730	ug/L	113730 ppb	01:29:02
1	K 766.490 Radial†	65104.8	61624.6	11819	ug/L	11819 ppb	01:29:02
1	Mg 279.077 IEC†	332.4	324.1	15594	ug/L	15594 ppb	01:29:22
1	Na 589.592 Radial†	2463.5	3251.5	1002.5	ug/L	1002.5 ppb	01:29:02
1	Sr 421.552†	28743.8	28337.0	195.96	ug/L	195.96 ppb	01:29:02
1	Sc 361.383	893985.1	893985.1	101.91	%		01:30:21
1	Y 371.029	876308.5	876308.5	115.94	%		01:30:21
1	Ag 328.068†	-8019.0	-8109.1	-1.7656	ug/L	-1.7656 ppb	01:30:26
1	As 188.979†	-74.1	-54.5	44.729	ug/L	44.729 ppb	01:30:46
1	B 249.677†	719.1	1103.8	8.1573	ug/L	8.1573 ppb	01:30:26
1	Ba 233.527†	156987.3	154046.7	1212.8	ug/L	1212.8 ppb	01:30:26
1	Be 313.107†	-10374.1	-6417.5	8.7010	ug/L	8.7010 ppb	01:30:26
1	Cd 226.502†	919.5	1098.6	0.9822	ug/L	0.9822 ppb	01:30:46
1	Co 228.616†	2242.8	2267.2	36.113	ug/L	36.113 ppb	01:30:46
1	Cr 267.716†	11997.2	11694.7	142.49	ug/L	142.49 ppb	01:30:26
1	Cu 324.752†	23402.0	16972.7	57.793	ug/L	57.793 ppb	01:30:26
1	Mn 257.610†	2543547.7	2495421.0	2850.2	ug/L	2850.2 ppb	01:30:21
1	Mo 202.031†	-43.1	-52.5	5.1627	ug/L	5.1627 ppb	01:30:46
1	Ni 231.604†	3348.8	3223.6	81.956	ug/L	81.956 ppb	01:30:46
1	P 214.914†	1358.2	1122.2	598.47	ug/L	598.47 ppb	01:30:46
1	Pb 220.353†	3678.6	3667.7	459.76	ug/L	459.76 ppb	01:30:46
1	S 181.975 Axial†	274.4	228.4	310.04	ug/L	310.04 ppb	01:30:46
1	Sb 206.836†	96.0	57.5	0.3821	ug/L	0.3821 ppb	01:30:46
1	Se 196.026†	-543.9	-506.0	22.267	ug/L	22.267 ppb	01:30:46
1	Si 251.611†	1046582.7	1026410.7	33213	ug/L	33213 ppb	01:30:21
1	Sn 189.927†	-54.9	-64.4	-15.317	ug/L	-15.317 ppb	01:30:46
1	Ti 334.940†	3173074.6	3114983.0	4895.7	ug/L	4895.7 ppb	01:30:21
1	Tl 190.801†	-199.2	-162.8	1.5066	ug/L	1.5066 ppb	01:30:46
1	U 409.014†	-11180.4	-8084.3	-236.50	ug/L	-236.50 ppb	01:30:21
1	V 292.402†	30111.2	31052.5	194.55	ug/L	194.55 ppb	01:30:26
1	Zn 213.857†	37210.8	35907.4	343.85	ug/L	343.85 ppb	01:30:26
1	SiO2†	1040671.7	1020614.3	70928	ug/L	70928 ppb	01:31:56
2	Sc Radial	4048.7	4048.7	103	%		01:29:48
2	Y RADIAL	5186.3	5186.3	117.6	%		01:29:48
2	Al 396.153Radial†	106054.4	102765.8	96382	ug/L	96382 ppb	01:29:27
2	Ca 317.933Radial†	7539.4	7277.9	15215	ug/L	15215 ppb	01:29:48
2	Fe 238.204 Radial†	8042.3	7773.0	109720	ug/L	109720 ppb	01:29:27
2	K 766.490 Radial†	63885.0	59196.7	11353	ug/L	11353 ppb	01:29:27
2	Mg 279.077 IEC†	333.1	318.3	15320	ug/L	15320 ppb	01:29:48
2	Na 589.592 Radial†	2391.9	3135.0	966.61	ug/L	966.61 ppb	01:29:27
2	Sr 421.552†	28244.8	27303.3	188.81	ug/L	188.81 ppb	01:29:27
2	Sc 361.383	909626.0	909626.0	103.69	%		01:30:53
2	Y 371.029	890505.1	890505.1	117.82	%		01:30:53
2	Ag 328.068†	-7789.6	-7752.6	-1.3861	ug/L	-1.3861 ppb	01:30:58
2	As 188.979†	-76.0	-55.1	43.249	ug/L	43.249 ppb	01:31:18
2	B 249.677†	762.5	1133.6	9.5332	ug/L	9.5332 ppb	01:30:58
2	Ba 233.527†	153076.4	147626.2	1162.3	ug/L	1162.3 ppb	01:30:58
2	Be 313.107†	-10240.9	-6114.0	8.7450	ug/L	8.7450 ppb	01:30:58
2	Cd 226.502†	930.9	1094.0	1.3446	ug/L	1.3446 ppb	01:31:18
2	Co 228.616†	2241.5	2228.2	35.394	ug/L	35.394 ppb	01:31:18
2	Cr 267.716†	11762.6	11266.0	137.28	ug/L	137.28 ppb	01:30:58
2	Cu 324.752†	22668.2	15870.1	54.221	ug/L	54.221 ppb	01:30:58
2	Mn 257.610†	2568260.1	2476336.9	2828.1	ug/L	2828.1 ppb	01:30:53
2	Mo 202.031†	-49.4	-57.8	4.4557	ug/L	4.4557 ppb	01:31:18
2	Ni 231.604†	3379.4	3196.6	81.272	ug/L	81.272 ppb	01:31:18



2	P 214.914†	1338.5	1080.3	576.32 ug/L	576.32 ppb	01:31:18
2	Pb 220.353†	3688.4	3615.2	453.02 ug/L	453.02 ppb	01:31:18
2	S 181.975 Axial†	276.9	226.2	307.51 ug/L	307.51 ppb	01:31:18
2	Sb 206.836†	102.2	61.9	2.1162 ug/L	2.1162 ppb	01:31:18
2	Se 196.026†	-560.1	-512.4	5.6151 ug/L	5.6151 ppb	01:31:18
2	Si 251.611†	1057029.8	1018827.1	32968 ug/L	32968 ppb	01:30:53
2	Sn 189.927†	-55.5	-64.0	-15.085 ug/L	-15.085 ppb	01:31:18
2	Ti 334.940†	3208217.1	3095335.7	4864.8 ug/L	4864.8 ppb	01:30:53
2	Tl 190.801†	-211.0	-170.9	-1.4112 ug/L	-1.4112 ppb	01:31:18
2	U 409.014†	-11105.5	-7823.4	-228.83 ug/L	-228.83 ppb	01:30:53
2	V 292.402†	29248.3	29712.4	185.83 ug/L	185.83 ppb	01:30:58
2	Zn 213.857†	36139.0	34246.0	327.73 ug/L	327.73 ppb	01:30:58
2	SiO2†	1049625.7	1011690.6	70308 ug/L	70308 ppb	01:32:02
3	Sc Radial	3947.2	3947.2	101 %		01:30:13
3	Y RADIAL	5102.5	5102.5	115.7 %		01:30:13
3	Al 396.153Radial†	109123.9	108450.4	101710 ug/L	101710 ppb	01:29:53
3	Ca 317.933Radial†	7657.2	7582.4	15851 ug/L	15851 ppb	01:30:13
3	Fe 238.204 Radial†	8224.1	8153.5	115090 ug/L	115090 ppb	01:29:53
3	K 766.490 Radial†	65962.9	62848.3	12054 ug/L	12054 ppb	01:29:53
3	Mg 279.077 IEC†	337.7	331.2	15939 ug/L	15939 ppb	01:30:13
3	Na 589.592 Radial†	2478.4	3280.3	1011.4 ug/L	1011.4 ppb	01:29:53
3	Sr 421.552†	29113.5	28868.2	199.64 ug/L	199.64 ppb	01:29:53
3	Sc 361.383	889071.2	889071.2	101.35 %		01:31:25
3	Y 371.029	871463.4	871463.4	115.30 %		01:31:25
3	Ag 328.068†	-8026.8	-8160.4	-1.5819 ug/L	-1.5819 ppb	01:31:30
3	As 188.979†	-73.9	-54.7	44.668 ug/L	44.668 ppb	01:31:50
3	B 249.677†	733.3	1121.7	8.3700 ug/L	8.3700 ppb	01:31:30
3	Ba 233.527†	156626.8	154542.3	1216.7 ug/L	1216.7 ppb	01:31:30
3	Be 313.107†	-10478.2	-6576.5	8.5632 ug/L	8.5632 ppb	01:31:30
3	Cd 226.502†	936.8	1120.6	1.0982 ug/L	1.0982 ppb	01:31:50
3	Co 228.616†	2250.3	2286.9	36.578 ug/L	36.578 ppb	01:31:50
3	Cr 267.716†	12067.0	11828.6	144.13 ug/L	144.13 ppb	01:31:30
3	Cu 324.752†	23155.2	16856.1	57.510 ug/L	57.510 ppb	01:31:30
3	Mn 257.610†	2509210.4	2475335.7	2827.5 ug/L	2827.5 ppb	01:31:25
3	Mo 202.031†	-40.3	-49.9	5.4615 ug/L	5.4615 ppb	01:31:50
3	Ni 231.604†	3367.3	3260.0	82.882 ug/L	82.882 ppb	01:31:50
3	P 214.914†	1374.1	1145.3	611.84 ug/L	611.84 ppb	01:31:50
3	Pb 220.353†	3681.3	3690.4	462.81 ug/L	462.81 ppb	01:31:50
3	S 181.975 Axial†	282.1	237.5	322.75 ug/L	322.75 ppb	01:31:50
3	Sb 206.836†	94.6	56.7	0.1827 ug/L	0.1827 ppb	01:31:50
3	Se 196.026†	-568.2	-532.9	8.8712 ug/L	8.8712 ppb	01:31:50
3	Si 251.611†	1032896.7	1018583.0	32960 ug/L	32960 ppb	01:31:25
3	Sn 189.927†	-44.5	-54.4	-13.551 ug/L	-13.551 ppb	01:31:50
3	Ti 334.940†	3133460.5	3093105.3	4861.4 ug/L	4861.4 ppb	01:31:25
3	Tl 190.801†	-203.3	-168.0	-0.5454 ug/L	-0.5454 ppb	01:31:50
3	U 409.014†	-11111.7	-8077.1	-236.46 ug/L	-236.46 ppb	01:31:25
3	V 292.402†	30220.5	31323.7	196.29 ug/L	196.29 ppb	01:31:30
3	Zn 213.857†	36993.8	35895.2	343.52 ug/L	343.52 ppb	01:31:30
3	SiO2†	1063690.0	1048970.1	72899 ug/L	72899 ppb	01:32:08

Mean Data: 246055007|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	897560.8	102.32 %		1.224			1.20%
Sc Radial	3988.7	102 %		1.4			1.33%
Y 371.029	879425.7	116.35 %		1.309			1.13%
Y RADIAL	5128.2	116.3 %		1.14			0.98%
Ag 328.068†	-8007.4	-1.5779 ug/L		0.18976	-1.5779 ppb	0.18976	12.03%
Al 396.153Radial†	105861.2	99285 ug/L		2697.2	99285 ppb	2697.2	2.72%
As 188.979†	-54.7	44.215 ug/L		0.8372	44.215 ppb	0.8372	1.89%
B 249.677†	1119.7	8.6868 ug/L		0.74067	8.6868 ppb	0.74067	8.53%
Ba 233.527†	152071.7	1197.3 ug/L		30.37	1197.3 ppb	30.37	2.54%
Be 313.107†	-6369.3	8.6697 ug/L		0.09483	8.6697 ppb	0.09483	1.09%
Ca 317.933Radial†	7433.8	15540 ug/L		318.5	15540 ppb	318.5	2.05%
Cd 226.502†	1104.4	1.1417 ug/L		0.18508	1.1417 ppb	0.18508	16.21%
Co 228.616†	2260.8	36.028 ug/L		0.5965	36.028 ppb	0.5965	1.66%
Cr 267.716†	11596.5	141.30 ug/L		3.575	141.30 ppb	3.575	2.53%
Cu 324.752†	16566.3	56.508 ug/L		1.9854	56.508 ppb	1.9854	3.51%
Fe 238.204 Radial†	7994.6	112850 ug/L		2792.4	112850 ppb	2792.4	2.47%
K 766.490 Radial†	61223.2	11742 ug/L		356.6	11742 ppb	356.6	3.04%

Mg 279.077 IEC†	324.5	15618 ug/L	310.1	15618 ppb	310.1	1.99%
Mn 257.610†	2482364.6	2835.3 ug/L	12.95	2835.3 ppb	12.95	0.46%
Mo 202.031†	-53.4	5.0266 ug/L	0.51654	5.0266 ppb	0.51654	10.28%
Na 589.592 Radial†	3222.3	993.52 ug/L	23.724	993.52 ppb	23.724	2.39%
Ni 231.604†	3226.7	82.037 ug/L	0.8082	82.037 ppb	0.8082	0.99%
P 214.914†	1115.9	595.54 ug/L	17.942	595.54 ppb	17.942	3.01%
Pb 220.353†	3657.8	458.53 ug/L	5.011	458.53 ppb	5.011	1.09%
S 181.975 Axial†	230.7	313.43 ug/L	8.168	313.43 ppb	8.168	2.61%
Sb 206.836†	58.7	0.8936 ug/L	1.06346	0.8936 ppb	1.06346	119.00%
Se 196.026†	-517.1	12.251 ug/L	8.8257	12.251 ppb	8.8257	72.04%
Si 251.611†	1021273.6	33047 ug/L	144.0	33047 ppb	144.0	0.44%
Sn 189.927†	-60.9	-14.651 ug/L	0.9594	-14.651 ppb	0.9594	6.55%
Sr 421.552†	28169.5	194.80 ug/L	5.504	194.80 ppb	5.504	2.83%
Ti 334.940†	3101141.3	4874.0 ug/L	18.92	4874.0 ppb	18.92	0.39%
Tl 190.801†	-167.3	-0.1500 ug/L	1.49856	-0.1500 ppb	1.49856	999.15%
U 409.014†	-7994.9	-233.93 ug/L	4.418	-233.93 ppb	4.418	1.89%
V 292.402†	30696.2	192.22 ug/L	5.606	192.22 ppb	5.606	2.92%
Zn 213.857†	35349.5	338.37 ug/L	9.210	338.37 ppb	9.210	2.72%
SiO2†	1027091.7	71378 ug/L	1352.8	71378 ppb	1352.8	1.90%

Sequence No.: 76

Sample ID: 246055008|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 99

Date Collected: 2/25/2010 01:34:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055008|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3903.7	3903.7	99.6 %		01:36:34
1	Y RADIAL	4785.8	4785.8	108.5 %		01:36:14
1	Al 396.153Radial†	67510.8	67884.0	63667 ug/L	63667 ppb	01:36:14
1	Ca 317.933Radial†	11134.8	11158.1	23326 ug/L	23326 ppb	01:36:14
1	Fe 238.204 Radial†	6283.0	6296.0	88870 ug/L	88870 ppb	01:36:14
1	K 766.490 Radial†	76450.8	74106.4	14212 ug/L	14212 ppb	01:36:14
1	Mg 279.077 IEC†	275.6	272.6	13126 ug/L	13126 ppb	01:36:34
1	Na 589.592 Radial†	687.2	1509.6	465.46 ug/L	465.46 ppb	01:36:14
1	Sr 421.552†	30113.0	30193.5	208.75 ug/L	208.75 ppb	01:36:14
1	Sc 361.383	904563.1	904563.1	103.12 %		01:37:32
1	Y 371.029	827958.4	827958.4	109.54 %		01:37:32
1	Ag 328.068†	-5696.6	-5764.9	1.1558 ug/L	1.1558 ppb	01:37:52
1	As 188.979†	-55.5	-35.5	39.018 ug/L	39.018 ppb	01:37:52
1	B 249.677†	966.6	1335.6	17.825 ug/L	17.825 ppb	01:37:32
1	Ba 233.527†	140591.9	136345.2	1073.1 ug/L	1073.1 ppb	01:37:32
1	Be 313.107†	-12464.3	-8325.5	5.7961 ug/L	5.7961 ppb	01:37:32
1	Cd 226.502†	756.0	929.5	1.5988 ug/L	1.5988 ppb	01:37:52
1	Co 228.616†	2071.5	2075.4	34.430 ug/L	34.430 ppb	01:37:52
1	Cr 267.716†	6880.0	6594.4	82.791 ug/L	82.791 ppb	01:37:52
1	Cu 324.752†	28358.3	21510.7	70.210 ug/L	70.210 ppb	01:37:32
1	Mn 257.610†	2215680.0	2148273.1	2452.8 ug/L	2452.8 ppb	01:37:32
1	Mo 202.031†	-49.1	-57.8	2.9336 ug/L	2.9336 ppb	01:37:52
1	Ni 231.604†	2099.0	1973.2	50.157 ug/L	50.157 ppb	01:37:52
1	P 214.914†	2834.2	2538.0	1459.0 ug/L	1459.0 ppb	01:37:52
1	Pb 220.353†	3816.6	3759.3	466.29 ug/L	466.29 ppb	01:37:52
1	S 181.975 Axial†	900.4	832.4	1185.9 ug/L	1185.9 ppb	01:37:52
1	Sb 206.836†	87.2	47.9	1.2150 ug/L	1.2150 ppb	01:37:52
1	Se 196.026†	-436.3	-395.4	17.516 ug/L	17.516 ppb	01:37:52
1	Si 251.611†	996688.2	966014.3	31259 ug/L	31259 ppb	01:37:32
1	Sn 189.927†	-113.5	-120.6	-22.592 ug/L	-22.592 ppb	01:37:52
1	Ti 334.940†	2578228.8	2501700.0	3933.2 ug/L	3933.2 ppb	01:37:32
1	Tl 190.801†	-168.0	-130.3	2.0759 ug/L	2.0759 ppb	01:37:52
1	U 409.014†	-6159.9	-3087.2	-95.546 ug/L	-95.546 ppb	01:37:32
1	V 292.402†	27568.3	28240.9	179.82 ug/L	179.82 ppb	01:37:32
1	Zn 213.857†	28132.6	26676.5	254.83 ug/L	254.83 ppb	01:37:52
1	SiO2†	990931.8	960435.8	66746 ug/L	66746 ppb	01:38:52
2	Sc Radial	3881.8	3881.8	99.1 %		01:36:59
2	Y RADIAL	4903.6	4903.6	111.2 %		01:36:39
2	Al 396.153Radial†	68977.0	69746.5	65414 ug/L	65414 ppb	01:36:39
2	Ca 317.933Radial†	11353.3	11441.7	23919 ug/L	23919 ppb	01:36:39
2	Fe 238.204 Radial†	6395.8	6445.4	90980 ug/L	90980 ppb	01:36:39
2	K 766.490 Radial†	77944.1	76046.9	14584 ug/L	14584 ppb	01:36:39
2	Mg 279.077 IEC†	274.4	273.0	13140 ug/L	13140 ppb	01:36:59
2	Na 589.592 Radial†	711.7	1538.2	474.28 ug/L	474.28 ppb	01:36:39
2	Sr 421.552†	30859.5	31117.7	215.14 ug/L	215.14 ppb	01:36:39
2	Sc 361.383	906030.2	906030.2	103.28 %		01:37:59
2	Y 371.029	829870.6	829870.6	109.79 %		01:37:59
2	Ag 328.068†	-5716.7	-5775.4	1.7433 ug/L	1.7433 ppb	01:38:19
2	As 188.979†	-58.2	-38.1	38.396 ug/L	38.396 ppb	01:38:19
2	B 249.677†	859.2	1230.1	14.925 ug/L	14.925 ppb	01:37:59
2	Ba 233.527†	140621.8	136153.5	1071.6 ug/L	1071.6 ppb	01:37:59
2	Be 313.107†	-12801.6	-8632.5	5.6907 ug/L	5.6907 ppb	01:37:59
2	Cd 226.502†	773.7	945.3	1.5656 ug/L	1.5656 ppb	01:38:19
2	Co 228.616†	2081.0	2081.4	34.517 ug/L	34.517 ppb	01:38:19
2	Cr 267.716†	6859.6	6563.8	82.647 ug/L	82.647 ppb	01:38:19
2	Cu 324.752†	28318.4	21427.5	70.066 ug/L	70.066 ppb	01:37:59
2	Mn 257.610†	2218727.5	2147744.3	2452.5 ug/L	2452.5 ppb	01:37:59
2	Mo 202.031†	-34.4	-43.4	4.1604 ug/L	4.1604 ppb	01:38:19
2	Ni 231.604†	2105.7	1976.3	50.236 ug/L	50.236 ppb	01:38:19

2	P 214.914†	2820.6	2520.4	1447.1 ug/L	1447.1 ppb	01:38:19
2	Pb 220.353†	3799.6	3737.0	463.68 ug/L	463.68 ppb	01:38:19
2	S 181.975 Axial†	907.5	837.8	1193.4 ug/L	1193.4 ppb	01:38:19
2	Sb 206.836†	71.5	32.5	-4.2416 ug/L	-4.2416 ppb	01:38:19
2	Se 196.026†	-430.2	-388.8	28.445 ug/L	28.445 ppb	01:38:19
2	Si 251.611†	998288.2	965998.3	31259 ug/L	31259 ppb	01:37:59
2	Sn 189.927†	-125.7	-132.2	-24.685 ug/L	-24.685 ppb	01:38:19
2	Ti 334.940†	2585284.3	2504482.6	3937.7 ug/L	3937.7 ppb	01:37:59
2	Tl 190.801†	-172.6	-134.6	0.7562 ug/L	0.7562 ppb	01:38:19
2	U 409.014†	-6033.2	-2954.8	-92.132 ug/L	-92.132 ppb	01:37:59
2	V 292.402†	27562.7	28192.2	179.19 ug/L	179.19 ppb	01:37:59
2	Zn 213.857†	28037.0	26539.8	253.14 ug/L	253.14 ppb	01:38:19
2	SiO2†	999825.7	967490.8	67236 ug/L	67236 ppb	01:38:58
3	Sc Radial	3908.3	3908.3	99.7 %		01:37:24
3	Y RADIAL	4803.5	4803.5	108.9 %		01:37:04
3	Al 396.153Radial†	67577.9	67872.6	63656 ug/L	63656 ppb	01:37:04
3	Ca 317.933Radial†	11123.9	11134.2	23276 ug/L	23276 ppb	01:37:04
3	Fe 238.204 Radial†	6260.2	6265.8	88444 ug/L	88444 ppb	01:37:04
3	K 766.490 Radial†	76551.6	74118.4	14214 ug/L	14214 ppb	01:37:04
3	Mg 279.077 IEC†	276.2	272.9	13140 ug/L	13140 ppb	01:37:24
3	Na 589.592 Radial†	618.7	1440.1	444.03 ug/L	444.03 ppb	01:37:04
3	Sr 421.552†	30127.1	30172.6	208.61 ug/L	208.61 ppb	01:37:04
3	Sc 361.383	897738.1	897738.1	102.34 %		01:38:26
3	Y 371.029	823966.9	823966.9	109.01 %		01:38:26
3	Ag 328.068†	-5606.9	-5719.2	1.2276 ug/L	1.2276 ppb	01:38:46
3	As 188.979†	-52.3	-32.9	40.061 ug/L	40.061 ppb	01:38:46
3	B 249.677†	890.6	1268.5	16.268 ug/L	16.268 ppb	01:38:26
3	Ba 233.527†	139048.9	135874.0	1069.4 ug/L	1069.4 ppb	01:38:26
3	Be 313.107†	-12808.6	-8753.9	5.6247 ug/L	5.6247 ppb	01:38:26
3	Cd 226.502†	750.2	929.3	1.6421 ug/L	1.6421 ppb	01:38:46
3	Co 228.616†	2047.2	2067.0	34.270 ug/L	34.270 ppb	01:38:46
3	Cr 267.716†	6771.0	6538.7	82.121 ug/L	82.121 ppb	01:38:46
3	Cu 324.752†	28163.6	21529.5	70.241 ug/L	70.241 ppb	01:38:26
3	Mn 257.610†	2192058.6	2141526.8	2445.1 ug/L	2445.1 ppb	01:38:26
3	Mo 202.031†	-35.6	-45.0	3.8415 ug/L	3.8415 ppb	01:38:46
3	Ni 231.604†	2081.8	1971.8	50.122 ug/L	50.122 ppb	01:38:46
3	P 214.914†	2792.8	2518.5	1447.6 ug/L	1447.6 ppb	01:38:46
3	Pb 220.353†	3765.2	3737.3	463.63 ug/L	463.63 ppb	01:38:46
3	S 181.975 Axial†	889.2	828.1	1179.8 ug/L	1179.8 ppb	01:38:46
3	Sb 206.836†	74.9	36.5	-2.7173 ug/L	-2.7173 ppb	01:38:46
3	Se 196.026†	-442.1	-404.3	10.394 ug/L	10.394 ppb	01:38:46
3	Si 251.611†	988204.8	965073.0	31229 ug/L	31229 ppb	01:38:26
3	Sn 189.927†	-107.9	-115.9	-21.743 ug/L	-21.743 ppb	01:38:46
3	Ti 334.940†	2555783.5	2498776.0	3928.6 ug/L	3928.6 ppb	01:38:26
3	Tl 190.801†	-159.9	-123.6	4.1425 ug/L	4.1425 ppb	01:38:46
3	U 409.014†	-5856.8	-2836.4	-88.572 ug/L	-88.572 ppb	01:38:26
3	V 292.402†	27220.0	28103.9	178.96 ug/L	178.96 ppb	01:38:26
3	Zn 213.857†	27799.0	26557.9	253.70 ug/L	253.70 ppb	01:38:46
3	SiO2†	994615.7	971341.4	67504 ug/L	67504 ppb	01:39:04

Mean Data: 246055008|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	902777.1	102.91 %		0.504			0.49%
Sc Radial	3898.0	99.5 %		0.36			0.36%
Y 371.029	827265.3	109.45 %		0.399			0.36%
Y RADIAL	4831.0	109.5 %		1.44			1.32%
Ag 328.068†	-5753.2	1.3756 ug/L		0.32048	1.3756 ppb	0.32048	23.30%
Al 396.153Radial†	68501.0	64246 ug/L		1011.6	64246 ppb	1011.6	1.57%
As 188.979†	-35.5	39.158 ug/L		0.8412	39.158 ppb	0.8412	2.15%
B 249.677†	1278.1	16.339 ug/L		1.4512	16.339 ppb	1.4512	8.88%
Ba 233.527†	136124.2	1071.4 ug/L		1.87	1071.4 ppb	1.87	0.17%
Be 313.107†	-8570.6	5.7038 ug/L		0.08647	5.7038 ppb	0.08647	1.52%
Ca 317.933Radial†	11244.7	23507 ug/L		357.6	23507 ppb	357.6	1.52%
Cd 226.502†	934.7	1.6022 ug/L		0.03839	1.6022 ppb	0.03839	2.40%
Co 228.616†	2074.6	34.406 ug/L		0.1255	34.406 ppb	0.1255	0.36%
Cr 267.716†	6565.6	82.520 ug/L		0.3528	82.520 ppb	0.3528	0.43%
Cu 324.752†	21489.2	70.172 ug/L		0.0931	70.172 ppb	0.0931	0.13%
Fe 238.204 Radial†	6335.7	89431 ug/L		1357.8	89431 ppb	1357.8	1.52%
K 766.490 Radial†	74757.2	14337 ug/L		214.2	14337 ppb	214.2	1.49%

Mg 279.077 IEC†	272.8	13135 ug/L	8.4	13135 ppb	8.4	0.06%
Mn 257.610†	2145848.1	2450.1 ug/L	4.35	2450.1 ppb	4.35	0.18%
Mo 202.031†	-48.7	3.6452 ug/L	0.63650	3.6452 ppb	0.63650	17.46%
Na 589.592 Radial†	1496.0	461.25 ug/L	15.555	461.25 ppb	15.555	3.37%
Ni 231.604†	1973.7	50.172 ug/L	0.0586	50.172 ppb	0.0586	0.12%
P 214.914†	2525.7	1451.2 ug/L	6.71	1451.2 ppb	6.71	0.46%
Pb 220.353†	3744.5	464.53 ug/L	1.521	464.53 ppb	1.521	0.33%
S 181.975 Axial†	832.8	1186.3 ug/L	6.82	1186.3 ppb	6.82	0.57%
Sb 206.836†	39.0	-1.9146 ug/L	2.81550	-1.9146 ppb	2.81550	147.05%
Se 196.026†	-396.1	18.785 ug/L	9.0918	18.785 ppb	9.0918	48.40%
Si 251.611†	965695.2	31249 ug/L	17.4	31249 ppb	17.4	0.06%
Sn 189.927†	-122.9	-23.007 ug/L	1.5140	-23.007 ppb	1.5140	6.58%
Sr 421.552†	30494.6	210.83 ug/L	3.732	210.83 ppb	3.732	1.77%
Ti 334.940†	2501652.9	3933.2 ug/L	4.53	3933.2 ppb	4.53	0.12%
Tl 190.801†	-129.5	2.3248 ug/L	1.70681	2.3248 ppb	1.70681	73.42%
U 409.014†	-2959.5	-92.083 ug/L	3.4868	-92.083 ppb	3.4868	3.79%
V 292.402†	28179.0	179.32 ug/L	0.446	179.32 ppb	0.446	0.25%
Zn 213.857†	26591.4	253.89 ug/L	0.862	253.89 ppb	0.862	0.34%
SiO2†	966422.7	67162 ug/L	384.3	67162 ppb	384.3	0.57%

Sequence No.: 77

Sample ID: 246055009|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 100

Date Collected: 2/25/2010 01:41:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055009|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4019.7	4019.7	103 %		01:43:10
1	Y RADIAL	4825.5	4825.5	109.4 %		01:43:10
1	Al 396.153Radial†	28569.8	27965.1	26228 ug/L	26228 ppb	01:43:10
1	Ca 317.933Radial†	6038.2	5867.0	12265 ug/L	12265 ppb	01:43:10
1	Fe 238.204 Radial†	4939.4	4804.1	67811 ug/L	67811 ppb	01:43:10
1	K 766.490 Radial†	35734.3	32197.8	6173.6 ug/L	6173.6 ppb	01:43:10
1	Mg 279.077 IEC†	125.5	118.3	5663.8 ug/L	5663.8 ppb	01:43:30
1	Na 589.592 Radial†	3049.5	3792.8	1169.4 ug/L	1169.4 ppb	01:43:10
1	Sr 421.552†	16627.7	16174.6	111.83 ug/L	111.83 ppb	01:43:10
1	Sc 361.383	900750.0	900750.0	102.68 %		01:44:28
1	Y 371.029	816821.2	816821.2	108.07 %		01:44:28
1	Ag 328.068†	-3655.2	-3800.2	3.5066 ug/L	3.5066 ppb	01:44:48
1	As 188.979†	1073.9	1064.1	512.26 ug/L	512.26 ppb	01:44:48
1	B 249.677†	378.1	766.4	7.5062 ug/L	7.5062 ppb	01:44:28
1	Ba 233.527†	59208.1	57663.5	454.79 ug/L	454.79 ppb	01:44:28
1	Be 313.107†	-8687.1	-4698.1	3.7933 ug/L	3.7933 ppb	01:44:28
1	Cd 226.502†	618.5	798.6	2.2562 ug/L	2.2562 ppb	01:44:48
1	Co 228.616†	1031.3	1070.9	16.521 ug/L	16.521 ppb	01:44:48
1	Cr 267.716†	4116.3	3931.1	50.736 ug/L	50.736 ppb	01:44:48
1	Cu 324.752†	26465.9	19784.1	63.819 ug/L	63.819 ppb	01:44:28
1	Mn 257.610†	1541613.9	1500903.2	1714.4 ug/L	1714.4 ppb	01:44:28
1	Mo 202.031†	-7.0	-16.9	4.1672 ug/L	4.1672 ppb	01:44:48
1	Ni 231.604†	1446.8	1346.6	34.234 ug/L	34.234 ppb	01:44:48
1	P 214.914†	2807.4	2523.6	1459.1 ug/L	1459.1 ppb	01:44:48
1	Pb 220.353†	3622802.8	3528268.4	433930 ug/L	433930 ppb	01:44:28
1	S 181.975 Axial†	580.3	524.4	749.69 ug/L	749.69 ppb	01:44:48
1	Sb 206.836†	4471.1	4317.7	1499.8 ug/L	1499.8 ppb	01:44:48
1	Se 196.026†	-346.7	-309.9	8.1954 ug/L	8.1954 ppb	01:44:48
1	Si 251.611†	578256.4	562599.6	18205 ug/L	18205 ppb	01:44:28
1	Sn 189.927†	-61.6	-70.4	-14.351 ug/L	-14.351 ppb	01:44:48
1	Ti 334.940†	1598535.8	1558171.7	2449.7 ug/L	2449.7 ppb	01:44:28
1	Tl 190.801†	-133.1	-97.1	-2.8480 ug/L	-2.8480 ppb	01:44:48
1	U 409.014†	-4685.9	-1676.9	-54.136 ug/L	-54.136 ppb	01:44:28
1	V 292.402†	12969.9	14137.0	86.094 ug/L	86.094 ppb	01:44:48
1	Zn 213.857†	171772.4	166681.3	1667.4 ug/L	1667.4 ppb	01:44:28
1	SiO2†	565455.0	550136.4	38232 ug/L	38232 ppb	01:45:48
2	Sc Radial	4005.5	4005.5	102 %		01:43:35
2	Y RADIAL	4783.8	4783.8	108.5 %		01:43:35
2	Al 396.153Radial†	28326.4	27826.0	26097 ug/L	26097 ppb	01:43:35
2	Ca 317.933Radial†	5957.7	5809.1	12144 ug/L	12144 ppb	01:43:35
2	Fe 238.204 Radial†	4902.0	4784.6	67537 ug/L	67537 ppb	01:43:35
2	K 766.490 Radial†	35231.4	31829.5	6102.9 ug/L	6102.9 ppb	01:43:35
2	Mg 279.077 IEC†	124.8	118.0	5652.2 ug/L	5652.2 ppb	01:43:55
2	Na 589.592 Radial†	2995.3	3750.3	1156.3 ug/L	1156.3 ppb	01:43:35
2	Sr 421.552†	16346.3	15956.9	110.32 ug/L	110.32 ppb	01:43:35
2	Sc 361.383	894763.2	894763.2	102.00 %		01:44:55
2	Y 371.029	812174.9	812174.9	107.45 %		01:44:55
2	Ag 328.068†	-3632.1	-3801.3	3.4292 ug/L	3.4292 ppb	01:45:15
2	As 188.979†	1084.6	1081.6	520.04 ug/L	520.04 ppb	01:45:15
2	B 249.677†	312.7	704.8	6.0554 ug/L	6.0554 ppb	01:44:55
2	Ba 233.527†	58826.5	57675.2	454.87 ug/L	454.87 ppb	01:44:55
2	Be 313.107†	-8714.8	-4781.8	3.7616 ug/L	3.7616 ppb	01:44:55
2	Cd 226.502†	648.2	831.7	2.6680 ug/L	2.6680 ppb	01:45:15
2	Co 228.616†	1025.8	1072.2	16.550 ug/L	16.550 ppb	01:45:15
2	Cr 267.716†	4165.5	4006.2	51.558 ug/L	51.558 ppb	01:45:15
2	Cu 324.752†	26322.6	19816.0	63.905 ug/L	63.905 ppb	01:44:55
2	Mn 257.610†	1530488.2	1500041.0	1713.4 ug/L	1713.4 ppb	01:44:55
2	Mo 202.031†	-17.3	-27.2	3.3937 ug/L	3.3937 ppb	01:45:15
2	Ni 231.604†	1480.3	1388.8	35.309 ug/L	35.309 ppb	01:45:15

2	P 214.914†	2841.9	2575.7	1490.6 ug/L	1490.6 ppb	01:45:15
2	Pb 220.353†	3599478.1	3529007.9	434020 ug/L	434020 ppb	01:44:55
2	S 181.975 Axial†	584.2	532.0	760.65 ug/L	760.65 ppb	01:45:15
2	Sb 206.836†	4512.1	4387.0	1524.0 ug/L	1524.0 ppb	01:45:15
2	Se 196.026†	-346.2	-311.6	6.2300 ug/L	6.2300 ppb	01:45:15
2	Si 251.611†	573335.5	561543.2	18171 ug/L	18171 ppb	01:44:55
2	Sn 189.927†	-58.0	-67.3	-13.802 ug/L	-13.802 ppb	01:45:15
2	Ti 334.940†	1587871.5	1558132.8	2449.6 ug/L	2449.6 ppb	01:44:55
2	Tl 190.801†	-149.5	-114.0	-8.2712 ug/L	-8.2712 ppb	01:45:15
2	U 409.014†	-4842.4	-1860.9	-59.187 ug/L	-59.187 ppb	01:44:55
2	V 292.402†	13117.9	14366.5	87.714 ug/L	87.714 ppb	01:45:15
2	Zn 213.857†	170540.9	166593.3	1666.6 ug/L	1666.6 ppb	01:44:55
2	SiO2†	574624.3	562810.7	39113 ug/L	39113 ppb	01:45:54
3	Sc Radial	3942.3	3942.3	101 %		01:44:00
3	Y RADIAL	4745.0	4745.0	107.6 %		01:44:00
3	Al 396.153Radial†	28102.0	28046.8	26305 ug/L	26305 ppb	01:44:00
3	Ca 317.933Radial†	5913.7	5858.8	12248 ug/L	12248 ppb	01:44:00
3	Fe 238.204 Radial†	4871.3	4830.9	68190 ug/L	68190 ppb	01:44:00
3	K 766.490 Radial†	34966.8	32118.6	6158.4 ug/L	6158.4 ppb	01:44:00
3	Mg 279.077 IEC†	122.9	118.1	5655.6 ug/L	5655.6 ppb	01:44:20
3	Na 589.592 Radial†	2902.2	3704.7	1142.2 ug/L	1142.2 ppb	01:44:00
3	Sr 421.552†	16184.7	16052.4	110.98 ug/L	110.98 ppb	01:44:00
3	Sc 361.383	902668.8	902668.8	102.90 %		01:45:22
3	Y 371.029	819727.6	819727.6	108.45 %		01:45:22
3	Ag 328.068†	-3662.2	-3799.4	3.6273 ug/L	3.6273 ppb	01:45:42
3	As 188.979†	1067.7	1055.8	508.62 ug/L	508.62 ppb	01:45:42
3	B 249.677†	319.8	709.0	6.0541 ug/L	6.0541 ppb	01:45:22
3	Ba 233.527†	59008.9	57347.4	452.32 ug/L	452.32 ppb	01:45:22
3	Be 313.107†	-8947.1	-4932.7	3.6898 ug/L	3.6898 ppb	01:45:22
3	Cd 226.502†	609.5	788.6	2.1016 ug/L	2.1016 ppb	01:45:42
3	Co 228.616†	1016.6	1054.5	16.182 ug/L	16.182 ppb	01:45:42
3	Cr 267.716†	4117.9	3924.2	50.695 ug/L	50.695 ppb	01:45:42
3	Cu 324.752†	26438.8	19703.0	63.594 ug/L	63.594 ppb	01:45:22
3	Mn 257.610†	1536437.4	1492681.2	1705.1 ug/L	1705.1 ppb	01:45:22
3	Mo 202.031†	-17.3	-26.9	3.4638 ug/L	3.4638 ppb	01:45:42
3	Ni 231.604†	1473.3	1369.3	34.813 ug/L	34.813 ppb	01:45:42
3	P 214.914†	2801.9	2512.5	1452.1 ug/L	1452.1 ppb	01:45:42
3	Pb 220.353†	3605375.4	3503832.3	430930 ug/L	430930 ppb	01:45:22
3	S 181.975 Axial†	572.9	515.9	737.47 ug/L	737.47 ppb	01:45:42
3	Sb 206.836†	4467.3	4304.7	1495.3 ug/L	1495.3 ppb	01:45:42
3	Se 196.026†	-346.9	-309.4	9.7424 ug/L	9.7424 ppb	01:45:42
3	Si 251.611†	576843.6	560029.6	18122 ug/L	18122 ppb	01:45:22
3	Sn 189.927†	-60.5	-69.3	-14.169 ug/L	-14.169 ppb	01:45:42
3	Ti 334.940†	1597526.6	1553881.6	2443.0 ug/L	2443.0 ppb	01:45:22
3	Tl 190.801†	-127.8	-91.7	-1.2098 ug/L	-1.2098 ppb	01:45:42
3	U 409.014†	-4770.4	-1749.4	-56.179 ug/L	-56.179 ppb	01:45:22
3	V 292.402†	12955.5	14096.1	85.747 ug/L	85.747 ppb	01:45:42
3	Zn 213.857†	171171.8	165742.1	1657.9 ug/L	1657.9 ppb	01:45:22
3	SiO2†	577910.3	561070.1	38992 ug/L	38992 ppb	01:45:59

Mean Data: 246055009|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899394.0	102.53	%	0.470			0.46%
Sc Radial	3989.2	102	%	1.1			1.03%
Y 371.029	816241.2	107.99	%	0.504			0.47%
Y RADIAL	4784.7	108.5	%	0.91			0.84%
Ag 328.068†	-3800.3	3.5210	ug/L	0.09985	3.5210 ppb	0.09985	2.84%
Al 396.153Radial†	27946.0	26210	ug/L	104.7	26210 ppb	104.7	0.40%
As 188.979†	1067.2	513.64	ug/L	5.833	513.64 ppb	5.833	1.14%
B 249.677†	726.8	6.5386	ug/L	0.83804	6.5386 ppb	0.83804	12.82%
Ba 233.527†	57562.1	453.99	ug/L	1.452	453.99 ppb	1.452	0.32%
Be 313.107†	-4804.2	3.7482	ug/L	0.05303	3.7482 ppb	0.05303	1.41%
Ca 317.933Radial†	5844.9	12219	ug/L	65.5	12219 ppb	65.5	0.54%
Cd 226.502†	806.3	2.3419	ug/L	0.29276	2.3419 ppb	0.29276	12.50%
Co 228.616†	1065.9	16.418	ug/L	0.2048	16.418 ppb	0.2048	1.25%
Cr 267.716†	3953.8	50.996	ug/L	0.4866	50.996 ppb	0.4866	0.95%
Cu 324.752†	19767.7	63.773	ug/L	0.1608	63.773 ppb	0.1608	0.25%
Fe 238.204 Radial†	4806.5	67846	ug/L	328.1	67846 ppb	328.1	0.48%
K 766.490 Radial†	32048.7	6145.0	ug/L	37.18	6145.0 ppb	37.18	0.61%

Mg 279.077 IEC†	118.1	5657.2 ug/L	5.95	5657.2 ppb	5.95	0.11%
Mn 257.610†	1497875.1	1711.0 ug/L	5.11	1711.0 ppb	5.11	0.30%
Mo 202.031†	-23.7	3.6749 ug/L	0.42780	3.6749 ppb	0.42780	11.64%
Na 589.592 Radial†	3749.2	1156.0 ug/L	13.59	1156.0 ppb	13.59	1.18%
Ni 231.604†	1368.3	34.785 ug/L	0.5378	34.785 ppb	0.5378	1.55%
P 214.914†	2537.3	1467.2 ug/L	20.52	1467.2 ppb	20.52	1.40%
Pb 220.353†	3520369.5	432960 ug/L	1762.0	432960 ppb	1762.0	0.41%
S 181.975 Axial†	524.1	749.27 ug/L	11.596	749.27 ppb	11.596	1.55%
Sb 206.836†	4336.4	1506.4 ug/L	15.46	1506.4 ppb	15.46	1.03%
Se 196.026†	-310.3	8.0559 ug/L	1.76033	8.0559 ppb	1.76033	21.85%
Si 251.611†	561390.8	18166 ug/L	41.8	18166 ppb	41.8	0.23%
Sn 189.927†	-69.0	-14.108 ug/L	0.2797	-14.108 ppb	0.2797	1.98%
Sr 421.552†	16061.3	111.05 ug/L	0.755	111.05 ppb	0.755	0.68%
Ti 334.940†	1556728.7	2447.4 ug/L	3.87	2447.4 ppb	3.87	0.16%
Tl 190.801†	-100.9	-4.1097 ug/L	3.69593	-4.1097 ppb	3.69593	89.93%
U 409.014†	-1762.4	-56.501 ug/L	2.5405	-56.501 ppb	2.5405	4.50%
V 292.402†	14199.9	86.518 ug/L	1.0499	86.518 ppb	1.0499	1.21%
Zn 213.857†	166338.9	1664.0 ug/L	5.26	1664.0 ppb	5.26	0.32%
SiO2†	558005.7	38779 ug/L	477.5	38779 ppb	477.5	1.23%



Sequence No.: 78

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 01:48:11

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	3751.5	3751.5	95.7 %		01:50:23
1	Y RADIAL	4178.2	4178.2	94.72 %		01:50:03
1	Al 396.153Radial†	5311.3	5660.6	5284.6 ug/L	5284.6 ppb	01:50:03
1	Ca 317.933Radial†	2454.1	2543.9	5318.0 ug/L	5318.0 ppb	01:50:23
1	Fe 238.204 Radial†	343.3	347.3	4916.7 ug/L	4916.7 ppb	01:50:23
1	K 766.490 Radial†	29141.5	27801.7	5328.6 ug/L	5328.6 ppb	01:50:03
1	Mg 279.077 IEC†	106.6	107.3	5201.9 ug/L	5201.9 ppb	01:50:23
1	Na 589.592 Radial†	31291.4	33506.9	10331 ug/L	10331 ppb	01:50:03
1	Sr 421.552†	71387.4	74535.9	515.72 ug/L	515.72 ppb	01:50:03
1	Sc 361.383	893450.3	893450.3	101.85 %		01:51:20
1	Y 371.029	742912.7	742912.7	98.289 %		01:51:20
1	Ag 328.068†	109836.4	107602.1	501.57 ug/L	501.57 ppb	01:51:26
1	As 188.979†	1141.3	1138.8	512.77 ug/L	512.77 ppb	01:51:46
1	B 249.677†	19904.4	19941.3	481.24 ug/L	481.24 ppb	01:51:26
1	Ba 233.527†	65002.3	63823.7	502.09 ug/L	502.09 ppb	01:51:26
1	Be 313.107†	1372437.5	1351285.4	508.94 ug/L	508.94 ppb	01:51:20
1	Cd 226.502†	44130.0	43525.2	503.93 ug/L	503.93 ppb	01:51:26
1	Co 228.616†	24419.2	24042.4	503.73 ug/L	503.73 ppb	01:51:26
1	Cr 267.716†	45420.6	44518.4	500.73 ug/L	500.73 ppb	01:51:26
1	Cu 324.752†	171346.6	162245.3	493.71 ug/L	493.71 ppb	01:51:26
1	Mn 257.610†	457591.3	448825.8	511.01 ug/L	511.01 ppb	01:51:20
1	Mo 202.031†	6969.2	6832.5	502.06 ug/L	502.06 ppb	01:51:46
1	Ni 231.604†	20230.3	19800.6	503.29 ug/L	503.29 ppb	01:51:26
1	P 214.914†	4464.1	4172.5	2415.8 ug/L	2415.8 ppb	01:51:46
1	Pb 220.353†	5442.5	5401.8	665.97 ug/L	665.97 ppb	01:51:46
1	S 181.975 Axial†	750.5	696.1	1000.7 ug/L	1000.7 ppb	01:51:46
1	Sb 206.836†	1497.3	1433.4	519.04 ug/L	519.04 ppb	01:51:46
1	Se 196.026†	760.1	774.0	523.87 ug/L	523.87 ppb	01:51:46
1	Si 251.611†	79292.3	77294.6	2495.0 ug/L	2495.0 ppb	01:51:26
1	Sn 189.927†	2842.4	2780.3	499.53 ug/L	499.53 ppb	01:51:46
1	Ti 334.940†	320493.1	316049.1	496.53 ug/L	496.53 ppb	01:51:26
1	Tl 190.801†	1572.3	1576.3	507.40 ug/L	507.40 ppb	01:51:46
1	U 409.014†	15147.8	17759.5	488.73 ug/L	488.73 ppb	01:51:26
1	V 292.402†	71059.4	71275.1	503.70 ug/L	503.70 ppb	01:51:26
1	Zn 213.857†	51472.1	49931.7	498.02 ug/L	498.02 ppb	01:51:26
1	SiO2†	80686.3	78667.1	5453.3 ug/L	5453.3 ppb	01:52:53
2	Sc Radial	3789.7	3789.7	96.7 %		01:50:48
2	Y RADIAL	4263.3	4263.3	96.65 %		01:50:28
2	Al 396.153Radial†	5431.5	5729.0	5348.6 ug/L	5348.6 ppb	01:50:28
2	Ca 317.933Radial†	2472.4	2536.9	5303.5 ug/L	5303.5 ppb	01:50:48
2	Fe 238.204 Radial†	345.5	346.0	4898.7 ug/L	4898.7 ppb	01:50:48
2	K 766.490 Radial†	29501.6	27867.3	5341.2 ug/L	5341.2 ppb	01:50:28
2	Mg 279.077 IEC†	110.0	109.6	5315.9 ug/L	5315.9 ppb	01:50:48
2	Na 589.592 Radial†	31572.3	33468.0	10319 ug/L	10319 ppb	01:50:28
2	Sr 421.552†	72571.3	75008.6	518.99 ug/L	518.99 ppb	01:50:28
2	Sc 361.383	894788.0	894788.0	102.00 %		01:51:51
2	Y 371.029	744407.6	744407.6	98.487 %		01:51:51
2	Ag 328.068†	110561.7	108151.9	504.12 ug/L	504.12 ppb	01:51:57
2	As 188.979†	1140.0	1135.9	511.49 ug/L	511.49 ppb	01:52:17
2	B 249.677†	20105.9	20109.7	485.32 ug/L	485.32 ppb	01:51:57
2	Ba 233.527†	65433.0	64150.6	504.66 ug/L	504.66 ppb	01:51:57
2	Be 313.107†	1378804.9	1355513.2	510.53 ug/L	510.53 ppb	01:51:51
2	Cd 226.502†	44339.2	43665.5	505.55 ug/L	505.55 ppb	01:51:57
2	Co 228.616†	24574.4	24158.7	506.16 ug/L	506.16 ppb	01:51:57
2	Cr 267.716†	45759.3	44783.8	503.71 ug/L	503.71 ppb	01:51:57
2	Cu 324.752†	172514.9	163139.2	496.43 ug/L	496.43 ppb	01:51:57
2	Mn 257.610†	459182.8	449714.3	512.01 ug/L	512.01 ppb	01:51:51
2	Mo 202.031†	7008.7	6861.0	504.15 ug/L	504.15 ppb	01:52:17
2	Ni 231.604†	20350.7	19888.9	505.53 ug/L	505.53 ppb	01:51:57

2	P 214.914†	4498.2	4199.4	2431.5 ug/L	2431.5 ppb	01:52:17
2	Pb 220.353†	5402.1	5354.2	660.13 ug/L	660.13 ppb	01:52:17
2	S 181.975 Axial†	763.0	707.2	1016.7 ug/L	1016.7 ppb	01:52:17
2	Sb 206.836†	1496.2	1430.2	517.99 ug/L	517.99 ppb	01:52:17
2	Se 196.026†	767.3	780.0	527.72 ug/L	527.72 ppb	01:52:17
2	Si 251.611†	79742.2	77619.2	2505.5 ug/L	2505.5 ppb	01:51:57
2	Sn 189.927†	2853.1	2786.7	500.66 ug/L	500.66 ppb	01:52:17
2	Ti 334.940†	323054.1	318089.4	499.73 ug/L	499.73 ppb	01:51:57
2	Tl 190.801†	1591.1	1592.4	512.57 ug/L	512.57 ppb	01:52:17
2	U 409.014†	15122.9	17712.7	487.44 ug/L	487.44 ppb	01:51:57
2	V 292.402†	71660.4	71760.0	507.11 ug/L	507.11 ppb	01:51:57
2	Zn 213.857†	51610.1	49991.4	498.61 ug/L	498.61 ppb	01:51:57
2	SiO2†	80393.2	78261.4	5425.1 ug/L	5425.1 ppb	01:52:58
3	Sc Radial	3711.3	3711.3	94.7 %		01:51:13
3	Y RADIAL	4245.6	4245.6	96.25 %		01:50:53
3	Al 396.153Radial†	5434.8	5851.0	5462.6 ug/L	5462.6 ppb	01:50:53
3	Ca 317.933Radial†	2430.1	2546.3	5323.0 ug/L	5323.0 ppb	01:51:13
3	Fe 238.204 Radial†	339.7	347.4	4919.0 ug/L	4919.0 ppb	01:51:13
3	K 766.490 Radial†	29530.0	28541.2	5470.4 ug/L	5470.4 ppb	01:50:53
3	Mg 279.077 IEC†	104.7	106.5	5163.1 ug/L	5163.1 ppb	01:51:13
3	Na 589.592 Radial†	31563.7	34148.0	10529 ug/L	10529 ppb	01:50:53
3	Sr 421.552†	72483.8	76500.1	529.31 ug/L	529.31 ppb	01:50:53
3	Sc 361.383	880564.6	880564.6	100.38 %		01:52:22
3	Y 371.029	733791.9	733791.9	97.082 %		01:52:22
3	Ag 328.068†	112054.0	111389.4	519.18 ug/L	519.18 ppb	01:52:28
3	As 188.979†	1154.7	1168.6	526.19 ug/L	526.19 ppb	01:52:48
3	B 249.677†	20514.2	20834.8	502.86 ug/L	502.86 ppb	01:52:28
3	Ba 233.527†	66402.8	66152.9	520.41 ug/L	520.41 ppb	01:52:28
3	Be 313.107†	1354270.1	1352905.6	509.59 ug/L	509.59 ppb	01:52:22
3	Cd 226.502†	45006.9	45032.8	521.40 ug/L	521.40 ppb	01:52:28
3	Co 228.616†	24846.4	24818.8	519.99 ug/L	519.99 ppb	01:52:28
3	Cr 267.716†	46538.8	46285.0	520.58 ug/L	520.58 ppb	01:52:28
3	Cu 324.752†	175449.2	168794.2	513.63 ug/L	513.63 ppb	01:52:28
3	Mn 257.610†	450004.9	447842.7	509.89 ug/L	509.89 ppb	01:52:22
3	Mo 202.031†	7054.5	7017.7	515.66 ug/L	515.66 ppb	01:52:48
3	Ni 231.604†	20658.2	20517.5	521.51 ug/L	521.51 ppb	01:52:28
3	P 214.914†	4517.1	4289.5	2482.5 ug/L	2482.5 ppb	01:52:48
3	Pb 220.353†	5373.8	5411.6	667.23 ug/L	667.23 ppb	01:52:48
3	S 181.975 Axial†	764.1	720.4	1035.7 ug/L	1035.7 ppb	01:52:48
3	Sb 206.836†	1509.4	1467.0	531.29 ug/L	531.29 ppb	01:52:48
3	Se 196.026†	780.4	805.2	544.35 ug/L	544.35 ppb	01:52:48
3	Si 251.611†	80834.2	79969.9	2581.4 ug/L	2581.4 ppb	01:52:28
3	Sn 189.927†	2882.4	2861.0	514.01 ug/L	514.01 ppb	01:52:48
3	Ti 334.940†	327691.7	327825.3	515.03 ug/L	515.03 ppb	01:52:28
3	Tl 190.801†	1591.0	1617.6	520.64 ug/L	520.64 ppb	01:52:48
3	U 409.014†	15537.5	18365.3	505.42 ug/L	505.42 ppb	01:52:28
3	V 292.402†	72801.4	74031.5	523.12 ug/L	523.12 ppb	01:52:28
3	Zn 213.857†	52424.5	51620.0	514.88 ug/L	514.88 ppb	01:52:28
3	SiO2†	79202.4	78348.1	5430.8 ug/L	5430.8 ppb	01:53:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	889601.0	101.41 %		0.895			0.88%
Sc Radial	3750.8	95.7 %		1.00			1.04%
Y 371.029	740370.8	97.953 %		0.7602			0.78%
Y RADIAL	4229.0	95.88 %		1.018			1.06%
Ag 328.068†	109047.8	508.29 ug/L		9.516	508.29 ppb	9.516	1.87%
QC value within limits for Ag 328.068 Recovery = 101.66%							
Al 396.153Radial†	5746.9	5365.3 ug/L		90.13	5365.3 ppb	90.13	1.68%
QC value within limits for Al 396.153Radial Recovery = 107.31%							
As 188.979†	1147.7	516.82 ug/L		8.141	516.82 ppb	8.141	1.58%
QC value within limits for As 188.979 Recovery = 103.36%							
B 249.677†	20295.3	489.81 ug/L		11.486	489.81 ppb	11.486	2.34%
QC value within limits for B 249.677 Recovery = 97.96%							
Ba 233.527†	64709.0	509.05 ug/L		9.919	509.05 ppb	9.919	1.95%
QC value within limits for Ba 233.527 Recovery = 101.81%							
Be 313.107†	1353234.8	509.69 ug/L		0.803	509.69 ppb	0.803	0.16%
QC value within limits for Be 313.107 Recovery = 101.94%							
Ca 317.933Radial†	2542.4	5314.8 ug/L		10.14	5314.8 ppb	10.14	0.19%

QC value within limits for Ca 317.933 Radial Recovery = 106.30%							
Cd	226.502†	44074.5	510.29 ug/L	9.653	510.29 ppb	9.653	1.89%
QC value within limits for Cd 226.502 Recovery = 102.06%							
Co	228.616†	24340.0	509.96 ug/L	8.768	509.96 ppb	8.768	1.72%
QC value within limits for Co 228.616 Recovery = 101.99%							
Cr	267.716†	45195.7	508.34 ug/L	10.705	508.34 ppb	10.705	2.11%
QC value within limits for Cr 267.716 Recovery = 101.67%							
Cu	324.752†	164726.2	501.26 ug/L	10.801	501.26 ppb	10.801	2.15%
QC value within limits for Cu 324.752 Recovery = 100.25%							
Fe	238.204 Radial†	346.9	4911.5 ug/L	11.13	4911.5 ppb	11.13	0.23%
QC value within limits for Fe 238.204 Radial Recovery = 98.23%							
K	766.490 Radial†	28070.1	5380.0 ug/L	78.49	5380.0 ppb	78.49	1.46%
QC value within limits for K 766.490 Radial Recovery = 107.60%							
Mg	279.077 IEC†	107.8	5227.0 ug/L	79.44	5227.0 ppb	79.44	1.52%
QC value within limits for Mg 279.077 IEC Recovery = 104.54%							
Mn	257.610†	448794.2	510.97 ug/L	1.061	510.97 ppb	1.061	0.21%
QC value within limits for Mn 257.610 Recovery = 102.19%							
Mo	202.031†	6903.7	507.29 ug/L	7.320	507.29 ppb	7.320	1.44%
QC value within limits for Mo 202.031 Recovery = 101.46%							
Na	589.592 Radial†	33707.6	10393 ug/L	117.7	10393 ppb	117.7	1.13%
QC value within limits for Na 589.592 Radial Recovery = 103.93%							
Ni	231.604†	20069.0	510.11 ug/L	9.937	510.11 ppb	9.937	1.95%
QC value within limits for Ni 231.604 Recovery = 102.02%							
P	214.914†	4220.5	2443.3 ug/L	34.82	2443.3 ppb	34.82	1.43%
QC value within limits for P 214.914 Recovery = 97.73%							
Pb	220.353†	5389.2	664.44 ug/L	3.787	664.44 ppb	3.787	0.57%
QC value greater than the upper limit for Pb 220.353 Recovery = 132.89%							
S	181.975 Axial†	707.9	1017.7 ug/L	17.51	1017.7 ppb	17.51	1.72%
QC value within limits for S 181.975 Axial Recovery = 101.77%							
Sb	206.836†	1443.5	522.77 ug/L	7.395	522.77 ppb	7.395	1.41%
QC value within limits for Sb 206.836 Recovery = 104.55%							
Se	196.026†	786.4	531.98 ug/L	10.884	531.98 ppb	10.884	2.05%
QC value within limits for Se 196.026 Recovery = 106.40%							
Si	251.611†	78294.6	2527.3 ug/L	47.15	2527.3 ppb	47.15	1.87%
QC value within limits for Si 251.611 Recovery = 101.09%							
Sn	189.927†	2809.3	504.73 ug/L	8.052	504.73 ppb	8.052	1.60%
QC value within limits for Sn 189.927 Recovery = 100.95%							
Sr	421.552†	75348.2	521.34 ug/L	7.094	521.34 ppb	7.094	1.36%
QC value within limits for Sr 421.552 Recovery = 104.27%							
Ti	334.940†	320654.6	503.76 ug/L	9.886	503.76 ppb	9.886	1.96%
QC value within limits for Ti 334.940 Recovery = 100.75%							
Tl	190.801†	1595.4	513.54 ug/L	6.676	513.54 ppb	6.676	1.30%
QC value within limits for Tl 190.801 Recovery = 102.71%							
U	409.014†	17945.8	493.86 ug/L	10.027	493.86 ppb	10.027	2.03%
QC value within limits for U 409.014 Recovery = 98.77%							
V	292.402†	72355.5	511.31 ug/L	10.367	511.31 ppb	10.367	2.03%
QC value within limits for V 292.402 Recovery = 102.26%							
Zn	213.857†	50514.4	503.84 ug/L	9.565	503.84 ppb	9.565	1.90%
QC value within limits for Zn 213.857 Recovery = 100.77%							
SiO2†		78425.5	5436.4 ug/L	14.94	5436.4 ppb	14.94	0.27%
QC value within limits for SiO2 Recovery = 101.66%							
QC Failed. Continue with analysis.							

Sequence No.: 79

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 01:55:13

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	3904.2	3904.2	99.6 %		01:57:26
1	Y RADIAL	4278.1	4278.1	96.99 %		01:57:06
1	Al 396.153Radial†	-92.0	20.1	18.802 ug/L	18.802 ppb	01:57:06
1	Ca 317.933Radial†	19.9	0.3	0.5597 ug/L	0.5597 ppb	01:57:26
1	Fe 238.204 Radial†	11.8	0.5	7.5867 ug/L	7.5867 ppb	01:57:26
1	K 766.490 Radial†	2841.1	212.1	40.688 ug/L	40.688 ppb	01:57:06
1	Mg 279.077 IEC†	3.7	-0.3	-15.760 ug/L	-15.760 ppb	01:57:26
1	Na 589.592 Radial†	-757.7	59.2	18.252 ug/L	18.252 ppb	01:57:06
1	Sr 421.552†	26.9	-8.7	-0.0601 ug/L	-0.0601 ppb	01:57:06
1	Sc 361.383	878431.0	878431.0	100.14 %		01:58:23
1	Y 371.029	741529.1	741529.1	98.106 %		01:58:23
1	Ag 328.068†	260.7	20.0	0.0981 ug/L	0.0981 ppb	01:58:23
1	As 188.979†	-23.1	-4.8	-2.1303 ug/L	-2.1303 ppb	01:58:43
1	B 249.677†	-456.4	-57.6	-1.3977 ug/L	-1.3977 ppb	01:58:43
1	Ba 233.527†	19.4	20.8	0.1634 ug/L	0.1634 ppb	01:58:43
1	Be 313.107†	-3735.2	32.1	0.0118 ug/L	0.0118 ppb	01:58:23
1	Cd 226.502†	-181.3	15.2	0.1751 ug/L	0.1751 ppb	01:58:43
1	Co 228.616†	-59.4	7.2	0.1522 ug/L	0.1522 ppb	01:58:43
1	Cr 267.716†	82.7	4.9	0.0570 ug/L	0.0570 ppb	01:58:43
1	Cu 324.752†	5947.6	-51.3	-0.1540 ug/L	-0.1540 ppb	01:58:23
1	Mn 257.610†	525.9	66.4	0.0770 ug/L	0.0770 ppb	01:58:43
1	Mo 202.031†	14.0	3.8	0.2804 ug/L	0.2804 ppb	01:58:43
1	Ni 231.604†	63.8	1.2	0.0315 ug/L	0.0315 ppb	01:58:43
1	P 214.914†	203.1	-7.7	-4.6008 ug/L	-4.6008 ppb	01:58:43
1	Pb 220.353†	849.2	906.1	111.45 ug/L	111.45 ppb	01:58:43
1	S 181.975 Axial†	41.5	0.7	0.9818 ug/L	0.9818 ppb	01:58:43
1	Sb 206.836†	52.1	15.3	5.3843 ug/L	5.3843 ppb	01:58:43
1	Se 196.026†	-25.9	1.9	1.2899 ug/L	1.2899 ppb	01:58:43
1	Si 251.611†	611.0	51.8	1.6739 ug/L	1.6739 ppb	01:58:43
1	Sn 189.927†	16.1	5.6	1.0023 ug/L	1.0023 ppb	01:58:43
1	Ti 334.940†	-1439.6	-63.6	-0.0971 ug/L	-0.0971 ppb	01:58:23
1	Tl 190.801†	-27.7	4.9	1.5635 ug/L	1.5635 ppb	01:58:43
1	U 409.014†	-3005.7	-115.0	-3.1775 ug/L	-3.1775 ppb	01:58:23
1	V 292.402†	-1486.9	20.8	0.1416 ug/L	0.1416 ppb	01:58:23
1	Zn 213.857†	780.0	172.9	1.7390 ug/L	1.7390 ppb	01:58:43
1	SiO2†	615.9	60.6	4.2068 ug/L	4.2068 ppb	01:59:39
2	Sc Radial	3807.5	3807.5	97.2 %		01:57:51
2	Y RADIAL	4388.9	4388.9	99.50 %		01:57:31
2	Al 396.153Radial†	-109.2	0.0	0.0381 ug/L	0.0381 ppb	01:57:31
2	Ca 317.933Radial†	19.1	0.0	0.0552 ug/L	0.0552 ppb	01:57:51
2	Fe 238.204 Radial†	10.2	-0.8	-11.336 ug/L	-11.336 ppb	01:57:51
2	K 766.490 Radial†	2689.5	128.6	24.682 ug/L	24.682 ppb	01:57:31
2	Mg 279.077 IEC†	1.6	-2.5	-118.97 ug/L	-118.97 ppb	01:57:51
2	Na 589.592 Radial†	-858.8	-64.1	-19.777 ug/L	-19.777 ppb	01:57:31
2	Sr 421.552†	4.4	-31.2	-0.2156 ug/L	-0.2156 ppb	01:57:31
2	Sc 361.383	891701.1	891701.1	101.65 %		01:58:48
2	Y 371.029	753557.3	753557.3	99.697 %		01:58:48
2	Ag 328.068†	251.7	7.2	0.0327 ug/L	0.0327 ppb	01:58:48
2	As 188.979†	-24.2	-5.5	-2.4633 ug/L	-2.4633 ppb	01:59:08
2	B 249.677†	-450.7	-45.2	-1.0939 ug/L	-1.0939 ppb	01:59:08
2	Ba 233.527†	0.3	1.7	0.0121 ug/L	0.0121 ppb	01:59:08
2	Be 313.107†	-3785.2	38.4	0.0146 ug/L	0.0146 ppb	01:58:48
2	Cd 226.502†	-178.4	20.8	0.2406 ug/L	0.2406 ppb	01:59:08
2	Co 228.616†	-62.7	4.8	0.1009 ug/L	0.1009 ppb	01:59:08
2	Cr 267.716†	96.0	16.8	0.1888 ug/L	0.1888 ppb	01:59:08
2	Cu 324.752†	6037.9	-50.8	-0.1526 ug/L	-0.1526 ppb	01:58:48
2	Mn 257.610†	523.9	56.7	0.0682 ug/L	0.0682 ppb	01:59:08
2	Mo 202.031†	8.4	-1.8	-0.1366 ug/L	-0.1366 ppb	01:59:08
2	Ni 231.604†	59.7	-3.7	-0.0943 ug/L	-0.0943 ppb	01:59:08

2	P 214.914†	211.8	-2.2	-1.2692 ug/L	-1.2692 ppb	01:59:08
2	Pb 220.353†	831.1	875.8	107.71 ug/L	107.71 ppb	01:59:08
2	S 181.975 Axial†	41.2	-0.2	-0.3414 ug/L	-0.3414 ppb	01:59:08
2	Sb 206.836†	38.2	0.9	0.3113 ug/L	0.3113 ppb	01:59:08
2	Se 196.026†	-26.9	1.3	0.7834 ug/L	0.7834 ppb	01:59:08
2	Si 251.611†	607.6	39.4	1.2774 ug/L	1.2774 ppb	01:59:08
2	Sn 189.927†	11.6	0.9	0.1665 ug/L	0.1665 ppb	01:59:08
2	Ti 334.940†	-1337.0	58.8	0.1042 ug/L	0.1042 ppb	01:58:48
2	Tl 190.801†	-31.6	1.5	0.4837 ug/L	0.4837 ppb	01:59:08
2	U 409.014†	-3111.5	-174.4	-4.8146 ug/L	-4.8146 ppb	01:58:48
2	V 292.402†	-1576.8	-45.6	-0.3297 ug/L	-0.3297 ppb	01:58:48
2	Zn 213.857†	797.4	178.4	1.7982 ug/L	1.7982 ppb	01:59:08
2	SiO2†	629.4	64.8	4.5044 ug/L	4.5044 ppb	01:59:44
3	Sc Radial	3794.1	3794.1	96.8 %		01:58:16
3	Y RADIAL	4276.4	4276.4	96.95 %		01:57:56
3	Al 396.153Radial†	-102.8	6.3	5.8953 ug/L	5.8953 ppb	01:57:56
3	Ca 317.933Radial†	23.1	4.2	8.7458 ug/L	8.7458 ppb	01:58:16
3	Fe 238.204 Radial†	10.3	-0.7	-10.062 ug/L	-10.062 ppb	01:58:16
3	K 766.490 Radial†	2770.7	222.2	42.646 ug/L	42.646 ppb	01:57:56
3	Mg 279.077 IEC†	1.6	-2.4	-116.03 ug/L	-116.03 ppb	01:58:16
3	Na 589.592 Radial†	-833.1	-40.7	-12.548 ug/L	-12.548 ppb	01:57:56
3	Sr 421.552†	75.3	42.0	0.2907 ug/L	0.2907 ppb	01:57:56
3	Sc 361.383	900277.4	900277.4	102.63 %		01:59:13
3	Y 371.029	761244.3	761244.3	100.71 %		01:59:13
3	Ag 328.068†	219.0	-27.0	-0.1230 ug/L	-0.1230 ppb	01:59:13
3	As 188.979†	-19.2	-0.4	-0.1866 ug/L	-0.1866 ppb	01:59:33
3	B 249.677†	-459.8	-49.8	-1.2058 ug/L	-1.2058 ppb	01:59:33
3	Ba 233.527†	-1.7	-0.3	-0.0013 ug/L	-0.0013 ppb	01:59:33
3	Be 313.107†	-3731.5	126.2	0.0474 ug/L	0.0474 ppb	01:59:13
3	Cd 226.502†	-164.8	35.6	0.4132 ug/L	0.4132 ppb	01:59:33
3	Co 228.616†	-54.8	13.2	0.2751 ug/L	0.2751 ppb	01:59:33
3	Cr 267.716†	69.9	-9.6	-0.1066 ug/L	-0.1066 ppb	01:59:33
3	Cu 324.752†	6073.0	-73.2	-0.2213 ug/L	-0.2213 ppb	01:59:13
3	Mn 257.610†	524.9	52.8	0.0638 ug/L	0.0638 ppb	01:59:33
3	Mo 202.031†	6.1	-4.2	-0.3073 ug/L	-0.3073 ppb	01:59:33
3	Ni 231.604†	72.2	7.9	0.2020 ug/L	0.2020 ppb	01:59:33
3	P 214.914†	206.1	-9.7	-5.7786 ug/L	-5.7786 ppb	01:59:33
3	Pb 220.353†	799.8	837.4	102.99 ug/L	102.99 ppb	01:59:33
3	S 181.975 Axial†	41.5	-0.4	-0.5192 ug/L	-0.5192 ppb	01:59:33
3	Sb 206.836†	50.4	12.4	4.3208 ug/L	4.3208 ppb	01:59:33
3	Se 196.026†	-26.4	2.0	1.2824 ug/L	1.2824 ppb	01:59:33
3	Si 251.611†	613.2	39.2	1.2724 ug/L	1.2724 ppb	01:59:33
3	Sn 189.927†	5.0	-5.6	-0.9990 ug/L	-0.9990 ppb	01:59:33
3	Ti 334.940†	-1416.7	-6.3	0.0024 ug/L	0.0024 ppb	01:59:13
3	Tl 190.801†	-28.0	5.3	1.7054 ug/L	1.7054 ppb	01:59:33
3	U 409.014†	-3103.6	-137.5	-3.7954 ug/L	-3.7954 ppb	01:59:13
3	V 292.402†	-1463.3	79.8	0.5442 ug/L	0.5442 ppb	01:59:13
3	Zn 213.857†	789.1	162.9	1.6404 ug/L	1.6404 ppb	01:59:33
3	SiO2†	606.5	36.6	2.5493 ug/L	2.5493 ppb	01:59:49

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890136.5	101.47 %	1.255			1.24%
Sc Radial	3835.3	97.9 %	1.53			1.57%
Y 371.029	752110.2	99.506 %	1.3147			1.32%
Y RADIAL	4314.5	97.81 %	1.462			1.49%
Ag 328.068†	0.1	0.0026 ug/L	0.11359	0.0026 ppb	0.11359	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.8	8.2452 ug/L	9.60018	8.2452 ppb	9.60018	116.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.6	-1.5934 ug/L	1.22964	-1.5934 ppb	1.22964	77.17%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-50.8	-1.2325 ug/L	0.15366	-1.2325 ppb	0.15366	12.47%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.4	0.0581 ug/L	0.09149	0.0581 ppb	0.09149	157.56%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	65.6	0.0246 ug/L	0.01978	0.0246 ppb	0.01978	80.33%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.5	3.1202 ug/L	4.87843	3.1202 ppb	4.87843	156.35%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	23.9	0.2763 ug/L	0.12298	0.2763 ppb	0.12298	44.51%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.4	0.1761 ug/L	0.08956	0.1761 ppb	0.08956	50.86%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	4.0	0.0464 ug/L	0.14801	0.0464 ppb	0.14801	319.10%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-58.5	-0.1760 ug/L	0.03928	-0.1760 ppb	0.03928	22.32%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.3	-4.6036 ug/L	10.57633	-4.6036 ppb	10.57633	229.74%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	187.6	36.005 ug/L	9.8552	36.005 ppb	9.8552	27.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.7	-83.589 ug/L	58.7599	-83.589 ppb	58.7599	70.30%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	58.6	0.0697 ug/L	0.00670	0.0697 ppb	0.00670	9.62%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-0.7	-0.0545 ug/L	0.30231	-0.0545 ppb	0.30231	554.52%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-15.2	-4.6910 ug/L	20.19557	-4.6910 ppb	20.19557	430.52%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	1.8	0.0464 ug/L	0.14870	0.0464 ppb	0.14870	320.29%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-6.5	-3.8829 ug/L	2.33884	-3.8829 ppb	2.33884	60.23%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	873.1	107.38 ug/L	4.238	107.38 ppb	4.238	3.95%	
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.0	0.0404 ug/L	0.82010	0.0404 ppb	0.82010	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	9.6	3.3388 ug/L	2.67528	3.3388 ppb	2.67528	80.13%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.7	1.1185 ug/L	0.29028	1.1185 ppb	0.29028	25.95%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	43.5	1.4079 ug/L	0.23037	1.4079 ppb	0.23037	16.36%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.3	0.0566 ug/L	1.00515	0.0566 ppb	1.00515	>999.9%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	0.7	0.0050 ug/L	0.25935	0.0050 ppb	0.25935	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-3.7	0.0032 ug/L	0.10067	0.0032 ppb	0.10067	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.9	1.2509 ug/L	0.66819	1.2509 ppb	0.66819	53.42%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-142.3	-3.9292 ug/L	0.82674	-3.9292 ppb	0.82674	21.04%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	18.3	0.1187 ug/L	0.43742	0.1187 ppb	0.43742	368.56%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	171.4	1.7259 ug/L	0.07971	1.7259 ppb	0.07971	4.62%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	54.0	3.7535 ug/L	1.05345	3.7535 ppb	1.05345	28.07%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

## =====

Reprocessing Begun

Logged In Analyst: Optima3

Technique: ICP Continuous

Results Data Set (original): 030110

Results Library (original): C:\pe\Optima3\Results\Results.mdb

Results Data Set (reprocessed): 030110A

Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

## =====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/1/2010 13:26:24

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

Sample ID: S0

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/1/2010 11:32:10

Data Type: Reprocessed on 3/1/2010 13:29:20

Initial Sample Vol:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	771077.3	771077.3	100.41 %	11:35:20
1	Sc Radial	4720.0	4720.0	100 %	11:34:03
1	Y 371.029	691300.5	691300.5	100.33 %	11:35:20
1	Y RADIAL	5001.3	5001.3	100.3 %	11:34:03
1	Ag 328.068†	250.1	249.0	[0.00] ug/L	11:35:20

1	Al 396.153Radial†	-83.3	-83.0	[0.00]	ug/L	11:34:23
1	As 188.979†	-21.8	-21.8	[0.00]	ug/L	11:35:40
1	B 249.677†	-446.4	-444.5	[0.00]	ug/L	11:35:40
1	Ba 233.527†	3.2	3.2	[0.00]	ug/L	11:35:40
1	Be 313.107†	-8975.1	-8938.6	[0.00]	ug/L	11:35:20
1	Ca 317.933Radial†	22.4	22.3	[0.00]	ug/L	11:34:23
1	Cd 226.502†	-194.3	-193.5	[0.00]	ug/L	11:35:40
1	Co 228.616†	-48.1	-47.9	[0.00]	ug/L	11:35:40
1	Cr 267.716†	76.3	76.0	[0.00]	ug/L	11:35:40
1	Cu 324.752†	7463.3	7433.0	[0.00]	ug/L	11:35:20
1	Fe 238.204 Radial†	5.7	5.6	[0.00]	ug/L	11:34:23
1	K 766.490 Radial†	2178.5	2172.4	[0.00]	ug/L	11:34:03
1	Mg 279.077 IEC†	2.6	2.6	[0.00]	ug/L	11:34:23
1	Mn 257.610†	457.0	455.2	[0.00]	ug/L	11:35:40
1	Mo 202.031†	15.5	15.4	[0.00]	ug/L	11:35:40
1	Na 589.592 Radial†	-839.3	-836.9	[0.00]	ug/L	11:34:03
1	Ni 231.604†	92.4	92.0	[0.00]	ug/L	11:35:40
1	P 214.914†	189.2	188.5	[0.00]	ug/L	11:35:40
1	Pb 220.353†	-69.6	-69.3	[0.00]	ug/L	11:35:40
1	S 181.975 Axial†	44.5	44.3	[0.00]	ug/L	11:35:40
1	Sb 206.836†	42.1	41.9	[0.00]	ug/L	11:35:40
1	Se 196.026†	-20.4	-20.3	[0.00]	ug/L	11:35:40
1	Si 251.611†	573.0	570.6	[0.00]	ug/L	11:35:40
1	Sn 189.927†	7.1	7.0	[0.00]	ug/L	11:35:40
1	Sr 421.552†	7.2	7.1	[0.00]	ug/L	11:34:03
1	Ti 334.940†	-1385.7	-1380.1	[0.00]	ug/L	11:35:20
1	Tl 190.801†	-30.6	-30.5	[0.00]	ug/L	11:35:40
1	U 409.014†	-2567.7	-2557.2	[0.00]	ug/L	11:35:20
1	V 292.402†	-1650.4	-1643.7	[0.00]	ug/L	11:35:20
1	Zn 213.857†	709.8	706.9	[0.00]	ug/L	11:35:40
1	SiO2†	599.2	596.8	[0.00]	ug/L	11:36:36
2	Sc 361.383	771656.5	771656.5	100.48	%	11:35:45
2	Sc Radial	4764.1	4764.1	101	%	11:34:28
2	Y 371.029	692601.0	692601.0	100.52	%	11:35:45
2	Y RADIAL	5064.2	5064.2	101.6	%	11:34:28
2	Ag 328.068†	275.0	273.7	[0.00]	ug/L	11:35:45
2	Al 396.153Radial†	-85.9	-84.8	[0.00]	ug/L	11:34:48
2	As 188.979†	-26.2	-26.1	[0.00]	ug/L	11:36:05
2	B 249.677†	-458.7	-456.5	[0.00]	ug/L	11:36:05
2	Ba 233.527†	14.1	14.1	[0.00]	ug/L	11:36:05
2	Be 313.107†	-9023.6	-8980.1	[0.00]	ug/L	11:35:45
2	Ca 317.933Radial†	18.8	18.5	[0.00]	ug/L	11:34:48
2	Cd 226.502†	-180.2	-179.4	[0.00]	ug/L	11:36:05
2	Co 228.616†	-71.9	-71.5	[0.00]	ug/L	11:36:05
2	Cr 267.716†	75.3	74.9	[0.00]	ug/L	11:36:05
2	Cu 324.752†	7571.0	7534.5	[0.00]	ug/L	11:35:45
2	Fe 238.204 Radial†	8.4	8.3	[0.00]	ug/L	11:34:48
2	K 766.490 Radial†	2281.5	2254.0	[0.00]	ug/L	11:34:28
2	Mg 279.077 IEC†	3.6	3.6	[0.00]	ug/L	11:34:48
2	Mn 257.610†	459.1	456.9	[0.00]	ug/L	11:36:05
2	Mo 202.031†	15.8	15.7	[0.00]	ug/L	11:36:05
2	Na 589.592 Radial†	-873.6	-863.0	[0.00]	ug/L	11:34:28
2	Ni 231.604†	106.1	105.6	[0.00]	ug/L	11:36:05
2	P 214.914†	206.2	205.2	[0.00]	ug/L	11:36:05
2	Pb 220.353†	-80.9	-80.5	[0.00]	ug/L	11:36:05
2	S 181.975 Axial†	37.6	37.4	[0.00]	ug/L	11:36:05
2	Sb 206.836†	19.0	18.9	[0.00]	ug/L	11:36:05
2	Se 196.026†	-12.0	-12.0	[0.00]	ug/L	11:36:05
2	Si 251.611†	602.2	599.3	[0.00]	ug/L	11:36:05
2	Sn 189.927†	8.1	8.1	[0.00]	ug/L	11:36:05
2	Sr 421.552†	-8.0	-7.9	[0.00]	ug/L	11:34:28
2	Ti 334.940†	-1287.1	-1280.9	[0.00]	ug/L	11:35:45
2	Tl 190.801†	-22.7	-22.6	[0.00]	ug/L	11:36:05
2	U 409.014†	-2503.9	-2491.8	[0.00]	ug/L	11:35:45
2	V 292.402†	-1592.0	-1584.3	[0.00]	ug/L	11:35:45
2	Zn 213.857†	715.3	711.8	[0.00]	ug/L	11:36:05
2	SiO2†	612.8	609.9	[0.00]	ug/L	11:36:41
3	Sc 361.383	761083.0	761083.0	99.107	%	11:36:11
3	Sc Radial	4635.9	4635.9	98.5	%	11:34:53
3	Y 371.029	683202.5	683202.5	99.154	%	11:36:11
3	Y RADIAL	4890.8	4890.8	98.10	%	11:34:53



3	Ag 328.068†	242.1	244.3	[0.00]	ug/L	11:36:11
3	Al 396.153Radial†	-92.1	-93.5	[0.00]	ug/L	11:35:13
3	As 188.979†	-27.0	-27.2	[0.00]	ug/L	11:36:31
3	B 249.677†	-455.2	-459.3	[0.00]	ug/L	11:36:31
3	Ba 233.527†	-10.0	-10.1	[0.00]	ug/L	11:36:31
3	Be 313.107†	-8948.7	-9029.3	[0.00]	ug/L	11:36:11
3	Ca 317.933Radial†	25.2	25.6	[0.00]	ug/L	11:35:13
3	Cd 226.502†	-185.4	-187.1	[0.00]	ug/L	11:36:31
3	Co 228.616†	-52.5	-53.0	[0.00]	ug/L	11:36:31
3	Cr 267.716†	75.2	75.9	[0.00]	ug/L	11:36:31
3	Cu 324.752†	7572.7	7641.0	[0.00]	ug/L	11:36:11
3	Fe 238.204 Radial†	7.9	8.0	[0.00]	ug/L	11:35:13
3	K 766.490 Radial†	2323.1	2358.5	[0.00]	ug/L	11:34:53
3	Mg 279.077 IEC†	2.5	2.5	[0.00]	ug/L	11:35:13
3	Mn 257.610†	467.2	471.4	[0.00]	ug/L	11:36:31
3	Mo 202.031†	11.9	12.1	[0.00]	ug/L	11:36:31
3	Na 589.592 Radial†	-830.7	-843.4	[0.00]	ug/L	11:34:53
3	Ni 231.604†	105.5	106.4	[0.00]	ug/L	11:36:31
3	P 214.914†	190.7	192.4	[0.00]	ug/L	11:36:31
3	Pb 220.353†	-61.8	-62.3	[0.00]	ug/L	11:36:31
3	S 181.975 Axial†	45.4	45.8	[0.00]	ug/L	11:36:31
3	Sb 206.836†	29.0	29.2	[0.00]	ug/L	11:36:31
3	Se 196.026†	-26.9	-27.1	[0.00]	ug/L	11:36:31
3	Si 251.611†	592.3	597.7	[0.00]	ug/L	11:36:31
3	Sn 189.927†	9.0	9.1	[0.00]	ug/L	11:36:31
3	Sr 421.552†	-0.6	-0.7	[0.00]	ug/L	11:34:53
3	Ti 334.940†	-1231.1	-1242.1	[0.00]	ug/L	11:36:11
3	Tl 190.801†	-40.2	-40.5	[0.00]	ug/L	11:36:31
3	U 409.014†	-2538.6	-2561.4	[0.00]	ug/L	11:36:11
3	V 292.402†	-1641.2	-1655.9	[0.00]	ug/L	11:36:11
3	Zn 213.857†	705.7	712.1	[0.00]	ug/L	11:36:31
3	SiO2†	577.5	582.7	[0.00]	ug/L	11:36:46

## Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	767938.9	5944.49	0.77%	100.00 %
Sc Radial	4706.6	65.13	1.38%	100 %
Y 371.029	689034.7	5092.47	0.74%	100.000 %
Y RADIAL	4985.4	87.80	1.76%	100.0 %
Ag 328.068†	255.7	15.78	6.17%	[0.00] ug/L
Al 396.153Radial†	-87.1	5.59	6.42%	[0.00] ug/L
As 188.979†	-25.0	2.87	11.48%	[0.00] ug/L
B 249.677†	-453.4	7.84	1.73%	[0.00] ug/L
Ba 233.527†	2.4	12.08	503.84%	[0.00] ug/L
Be 313.107†	-8982.7	45.41	0.51%	[0.00] ug/L
Ca 317.933Radial†	22.2	3.54	15.98%	[0.00] ug/L
Cd 226.502†	-186.6	7.06	3.78%	[0.00] ug/L
Co 228.616†	-57.5	12.42	21.61%	[0.00] ug/L
Cr 267.716†	75.6	0.58	0.77%	[0.00] ug/L
Cu 324.752†	7536.1	104.01	1.38%	[0.00] ug/L
Fe 238.204 Radial†	7.3	1.46	19.98%	[0.00] ug/L
K 766.490 Radial†	2261.6	93.32	4.13%	[0.00] ug/L
Mg 279.077 IEC†	2.9	0.58	19.93%	[0.00] ug/L
Mn 257.610†	461.1	8.91	1.93%	[0.00] ug/L
Mo 202.031†	14.4	2.02	14.03%	[0.00] ug/L
Na 589.592 Radial†	-847.8	13.58	1.60%	[0.00] ug/L
Ni 231.604†	101.3	8.11	8.00%	[0.00] ug/L
P 214.914†	195.4	8.75	4.48%	[0.00] ug/L
Pb 220.353†	-70.7	9.15	12.94%	[0.00] ug/L
S 181.975 Axial†	42.5	4.49	10.57%	[0.00] ug/L
Sb 206.836†	30.0	11.49	38.28%	[0.00] ug/L
Se 196.026†	-19.8	7.60	38.38%	[0.00] ug/L
Si 251.611†	589.2	16.10	2.73%	[0.00] ug/L
Sn 189.927†	8.1	1.02	12.57%	[0.00] ug/L
Sr 421.552†	-0.5	7.54	>999.9%	[0.00] ug/L
Ti 334.940†	-1301.0	71.15	5.47%	[0.00] ug/L
Tl 190.801†	-31.2	9.00	28.84%	[0.00] ug/L
U 409.014†	-2536.8	39.04	1.54%	[0.00] ug/L
V 292.402†	-1628.0	38.29	2.35%	[0.00] ug/L

Zn 213.857†	710.3	2.91	0.41%	[0.00] ug/L
SiO2†	596.4	13.60	2.28%	[0.00] ug/L

Sequence No.: 2  
 Sample ID: S0.1  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 3/1/2010 11:38:57  
 Data Type: Reprocessed on 3/1/2010 13:29:22

Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Analysis Time
1	Sc 361.383	778142.1	778142.1	101.33 %	11:41:22
1	Sc Radial	4713.9	4713.9	100 %	11:40:55
1	Y 371.029	696918.7	696918.7	101.14 %	11:41:22
1	Y RADIAL	4985.6	4985.6	100.0 %	11:40:55
1	Ag 328.068†	19692.1	19178.2	[100] ug/L	11:41:22
1	As 188.979†	198.5	220.9	[100] ug/L	11:41:42
1	B 249.677†	3443.4	3851.7	[100] ug/L	11:41:22
1	Ba 233.527†	8531.0	8416.8	[100] ug/L	11:41:22
1	Be 313.107†	242750.5	248550.2	[100] ug/L	11:41:22
1	Cd 226.502†	6779.8	6877.6	[100] ug/L	11:41:42
1	Co 228.616†	3281.4	3295.8	[100] ug/L	11:41:42
1	Cr 267.716†	7523.2	7348.9	[100] ug/L	11:41:22
1	Cu 324.752†	33895.6	25915.0	[100] ug/L	11:41:22
1	K 766.490 Radial†	7290.4	5017.6	[1000] ug/L	11:40:50
1	Mn 257.610†	64656.4	63347.5	[100] ug/L	11:41:22
1	Mo 202.031†	1119.9	1090.8	[100] ug/L	11:41:42
1	Ni 231.604†	3233.3	3089.5	[100] ug/L	11:41:42
1	P 214.914†	1086.5	876.8	[500] ug/L	11:41:42
1	Pb 220.353†	545.6	609.2	[100] ug/L	11:41:42
1	S 181.975 Axial†	195.3	150.2	[200] ug/L	11:41:42
1	Sb 206.836†	267.7	234.2	[100] ug/L	11:41:42
1	Se 196.026†	141.5	159.5	[100] ug/L	11:41:42
1	Si 251.611†	14319.0	13542.1	[500] ug/L	11:41:22
1	Sn 189.927†	428.2	414.5	[100] ug/L	11:41:42
1	Sr 421.552†	13640.7	13620.3	[100] ug/L	11:40:55
1	Ti 334.940†	49216.9	49872.6	[100] ug/L	11:41:22
1	Tl 190.801†	183.0	211.9	[100] ug/L	11:41:42
1	U 409.014†	482.0	3012.5	[100] ug/L	11:41:22
1	V 292.402†	10893.8	12378.9	[100] ug/L	11:41:22
1	Zn 213.857†	9808.8	8969.9	[100] ug/L	11:41:22
1	SiO2†	14406.9	13621.6	[1069.5] ug/L	11:42:38
2	Sc 361.383	773296.3	773296.3	100.70 %	11:41:47
2	Sc Radial	4723.0	4723.0	100 %	11:41:05
2	Y 371.029	692513.1	692513.1	100.50 %	11:41:47
2	Y RADIAL	4999.7	4999.7	100.3 %	11:41:05
2	Ag 328.068†	19573.1	19181.8	[100] ug/L	11:41:47
2	As 188.979†	199.3	223.0	[100] ug/L	11:42:07
2	B 249.677†	3373.9	3804.0	[100] ug/L	11:41:47
2	Ba 233.527†	8516.8	8455.4	[100] ug/L	11:41:47
2	Be 313.107†	241861.3	249168.4	[100] ug/L	11:41:47
2	Cd 226.502†	6779.2	6918.9	[100] ug/L	11:42:07
2	Co 228.616†	3298.5	3333.1	[100] ug/L	11:42:07
2	Cr 267.716†	7432.1	7305.0	[100] ug/L	11:41:47
2	Cu 324.752†	33649.0	25879.8	[100] ug/L	11:41:47
2	K 766.490 Radial†	7257.0	4970.2	[1000] ug/L	11:41:00
2	Mn 257.610†	64411.1	63503.7	[100] ug/L	11:41:47
2	Mo 202.031†	1106.3	1084.2	[100] ug/L	11:42:07
2	Ni 231.604†	3232.0	3108.3	[100] ug/L	11:42:07
2	P 214.914†	1089.5	886.6	[500] ug/L	11:42:07
2	Pb 220.353†	553.9	620.8	[100] ug/L	11:42:07
2	S 181.975 Axial†	199.4	155.5	[200] ug/L	11:42:07
2	Sb 206.836†	273.7	241.8	[100] ug/L	11:42:07
2	Se 196.026†	140.9	159.7	[100] ug/L	11:42:07
2	Si 251.611†	14283.1	13594.9	[500] ug/L	11:41:47
2	Sn 189.927†	424.2	413.2	[100] ug/L	11:42:07
2	Sr 421.552†	13667.2	13620.3	[100] ug/L	11:41:05
2	Ti 334.940†	48811.0	49773.9	[100] ug/L	11:41:47
2	Tl 190.801†	184.2	214.1	[100] ug/L	11:42:07

2	U 409.014†	517.4	3050.7	[100]	ug/L	11:41:47
2	V 292.402†	10815.8	12368.9	[100]	ug/L	11:41:47
2	Zn 213.857†	9815.8	9037.5	[100]	ug/L	11:41:47
2	SiO2†	14287.5	13592.1	[1069.5]	ug/L	11:42:43
3	Sc 361.383	771392.6	771392.6	100.45	%	11:42:13
3	Sc Radial	4684.6	4684.6	99.5	%	11:41:15
3	Y 371.029	689472.4	689472.4	100.06	%	11:42:13
3	Y RADIAL	4931.4	4931.4	98.92	%	11:41:15
3	Ag 328.068†	19554.4	19211.2	[100]	ug/L	11:42:13
3	As 188.979†	195.4	219.5	[100]	ug/L	11:42:33
3	B 249.677†	3421.3	3859.4	[100]	ug/L	11:42:13
3	Ba 233.527†	8545.6	8504.9	[100]	ug/L	11:42:13
3	Be 313.107†	240812.5	248717.0	[100]	ug/L	11:42:13
3	Cd 226.502†	6764.8	6921.1	[100]	ug/L	11:42:33
3	Co 228.616†	3279.8	3322.6	[100]	ug/L	11:42:33
3	Cr 267.716†	7461.9	7352.9	[100]	ug/L	11:42:13
3	Cu 324.752†	33538.9	25852.6	[100]	ug/L	11:42:13
3	K 766.490 Radial†	7330.3	5103.1	[1000]	ug/L	11:41:10
3	Mn 257.610†	64366.7	63617.4	[100]	ug/L	11:42:13
3	Mo 202.031†	1090.9	1071.7	[100]	ug/L	11:42:33
3	Ni 231.604†	3225.7	3110.0	[100]	ug/L	11:42:33
3	P 214.914†	1080.6	880.3	[500]	ug/L	11:42:33
3	Pb 220.353†	551.5	619.7	[100]	ug/L	11:42:33
3	S 181.975 Axial†	199.5	156.1	[200]	ug/L	11:42:33
3	Sb 206.836†	271.9	240.7	[100]	ug/L	11:42:33
3	Se 196.026†	144.0	163.2	[100]	ug/L	11:42:33
3	Si 251.611†	14287.1	13633.9	[500]	ug/L	11:42:13
3	Sn 189.927†	429.0	419.0	[100]	ug/L	11:42:33
3	Sr 421.552†	13646.5	13711.1	[100]	ug/L	11:41:15
3	Ti 334.940†	48626.0	49709.3	[100]	ug/L	11:42:13
3	Tl 190.801†	186.0	216.4	[100]	ug/L	11:42:33
3	U 409.014†	412.8	2947.7	[100]	ug/L	11:42:13
3	V 292.402†	10813.4	12393.0	[100]	ug/L	11:42:13
3	Zn 213.857†	9811.2	9057.0	[100]	ug/L	11:42:13
3	SiO2†	14311.4	13650.9	[1069.5]	ug/L	11:42:48

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Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	774277.0	3480.00	0.45%	100.83	%
Sc Radial	4707.2	20.05	0.43%	100	%
Y 371.029	692968.1	3743.96	0.54%	100.57	%
Y RADIAL	4972.2	36.05	0.73%	99.73	%
Ag 328.068†	19190.4	18.08	0.09%	[100]	ug/L
As 188.979†	221.1	1.73	0.78%	[100]	ug/L
B 249.677†	3838.4	30.02	0.78%	[100]	ug/L
Ba 233.527†	8459.0	44.17	0.52%	[100]	ug/L
Be 313.107†	248811.8	319.84	0.13%	[100]	ug/L
Cd 226.502†	6905.9	24.53	0.36%	[100]	ug/L
Co 228.616†	3317.2	19.19	0.58%	[100]	ug/L
Cr 267.716†	7335.6	26.60	0.36%	[100]	ug/L
Cu 324.752†	25882.5	31.29	0.12%	[100]	ug/L
K 766.490 Radial†	5030.3	67.36	1.34%	[1000]	ug/L
Mn 257.610†	63489.5	135.52	0.21%	[100]	ug/L
Mo 202.031†	1082.2	9.73	0.90%	[100]	ug/L
Ni 231.604†	3102.6	11.33	0.37%	[100]	ug/L
P 214.914†	881.3	4.93	0.56%	[500]	ug/L
Pb 220.353†	616.5	6.42	1.04%	[100]	ug/L
S 181.975 Axial†	153.9	3.27	2.12%	[200]	ug/L
Sb 206.836†	238.9	4.10	1.72%	[100]	ug/L
Se 196.026†	160.8	2.06	1.28%	[100]	ug/L
Si 251.611†	13590.3	46.10	0.34%	[500]	ug/L
Sn 189.927†	415.6	3.08	0.74%	[100]	ug/L
Sr 421.552†	13650.5	52.40	0.38%	[100]	ug/L
Ti 334.940†	49785.3	82.23	0.17%	[100]	ug/L
Tl 190.801†	214.1	2.28	1.07%	[100]	ug/L
U 409.014†	3003.6	52.03	1.73%	[100]	ug/L
V 292.402†	12380.3	12.11	0.10%	[100]	ug/L
Zn 213.857†	9021.5	45.70	0.51%	[100]	ug/L
SiO2†	13621.5	29.42	0.22%	[1069.5]	ug/L

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 3/1/2010 11:44:59  
 Data Type: Reprocessed on 3/1/2010 13:29:30  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	790109.5	790109.5	102.89 %	11:48:08
1	Sc Radial	4632.9	4632.9	98.4 %	11:46:51
1	Y 371.029	699903.0	699903.0	101.58 %	11:48:08
1	Y RADIAL	4914.6	4914.6	98.58 %	11:46:51
1	Ag 328.068†	97511.0	94519.2	[500] ug/L	11:48:14
1	Al 396.153Radial†	5188.1	5357.8	[5000] ug/L	11:46:51
1	As 188.979†	1107.8	1101.7	[500] ug/L	11:48:34
1	B 249.677†	19417.9	19326.4	[500] ug/L	11:48:14
1	Ba 233.527†	42572.9	41375.9	[500] ug/L	11:48:14
1	Be 313.107†	1263820.9	1237340.6	[500] ug/L	11:48:08
1	Ca 317.933Radial†	2804.8	2827.2	[5000] ug/L	11:47:11
1	Cd 226.502†	35370.6	34564.8	[500] ug/L	11:48:14
1	Co 228.616†	16446.3	16042.3	[500] ug/L	11:48:34
1	Cr 267.716†	36946.9	35834.6	[500] ug/L	11:48:14
1	Cu 324.752†	140635.4	129153.0	[500] ug/L	11:48:14
1	K 766.490 Radial†	27232.8	25404.3	[5000] ug/L	11:46:51
1	Mg 279.077 IEC†	133.4	132.6	[5000] ug/L	11:47:11
1	Mn 257.610†	314138.7	304862.8	[500] ug/L	11:48:14
1	Mo 202.031†	5445.4	5278.2	[500] ug/L	11:48:34
1	Ni 231.604†	16123.9	15570.2	[500] ug/L	11:48:14
1	P 214.914†	4676.0	4349.4	[2500] ug/L	11:48:34
1	Pb 220.353†	3034.6	3020.1	[500] ug/L	11:48:34
1	S 181.975 Axial†	813.3	748.0	[1000] ug/L	11:48:34
1	Sb 206.836†	1254.5	1189.3	[500] ug/L	11:48:34
1	Se 196.026†	800.3	797.7	[500] ug/L	11:48:34
1	Si 251.611†	68794.6	66275.0	[2500] ug/L	11:48:14
1	Sn 189.927†	2106.7	2039.5	[500] ug/L	11:48:34
1	Sr 421.552†	68297.0	69383.9	[500] ug/L	11:46:51
1	Ti 334.940†	246507.0	240891.1	[500] ug/L	11:48:14
1	Tl 190.801†	1050.3	1052.0	[500] ug/L	11:48:34
1	U 409.014†	12315.1	14506.4	[500] ug/L	11:48:14
1	V 292.402†	61427.8	61332.1	[500] ug/L	11:48:14
1	Zn 213.857†	46350.5	44339.6	[500] ug/L	11:48:14
1	SiO2†	68687.1	66163.3	[5347.5] ug/L	11:49:41
2	Sc 361.383	790740.8	790740.8	102.97 %	11:48:39
2	Sc Radial	4662.2	4662.2	99.1 %	11:47:16
2	Y 371.029	699967.4	699967.4	101.59 %	11:48:39
2	Y RADIAL	4898.5	4898.5	98.26 %	11:47:16
2	Ag 328.068†	98433.1	95339.0	[500] ug/L	11:48:44
2	Al 396.153Radial†	5177.9	5314.4	[5000] ug/L	11:47:16
2	As 188.979†	1104.4	1097.5	[500] ug/L	11:49:04
2	B 249.677†	19693.8	19579.4	[500] ug/L	11:48:44
2	Ba 233.527†	43001.0	41758.6	[500] ug/L	11:48:44
2	Be 313.107†	1263373.0	1235924.9	[500] ug/L	11:48:39
2	Ca 317.933Radial†	2802.7	2807.2	[5000] ug/L	11:47:36
2	Cd 226.502†	35805.4	34959.5	[500] ug/L	11:48:44
2	Co 228.616†	16656.2	16233.3	[500] ug/L	11:49:04
2	Cr 267.716†	37284.3	36133.5	[500] ug/L	11:48:44
2	Cu 324.752†	142165.2	130529.6	[500] ug/L	11:48:44
2	K 766.490 Radial†	27213.5	25211.5	[5000] ug/L	11:47:16
2	Mg 279.077 IEC†	131.8	130.2	[5000] ug/L	11:47:36
2	Mn 257.610†	317713.4	308090.7	[500] ug/L	11:48:44
2	Mo 202.031†	5517.3	5343.8	[500] ug/L	11:49:04
2	Ni 231.604†	16230.5	15661.1	[500] ug/L	11:48:44
2	P 214.914†	4727.1	4395.4	[2500] ug/L	11:49:04
2	Pb 220.353†	3079.3	3061.2	[500] ug/L	11:49:04
2	S 181.975 Axial†	823.9	757.7	[1000] ug/L	11:49:04
2	Sb 206.836†	1291.3	1224.0	[500] ug/L	11:49:04

2	Se 196.026†	808.8	805.2	[500]	ug/L	11:49:04
2	Si 251.611†	69551.7	66956.9	[2500]	ug/L	11:48:44
2	Sn 189.927†	2136.7	2067.0	[500]	ug/L	11:49:04
2	Sr 421.552†	68378.5	69031.3	[500]	ug/L	11:47:16
2	Ti 334.940†	248868.0	242992.6	[500]	ug/L	11:48:44
2	Tl 190.801†	1071.9	1072.2	[500]	ug/L	11:49:04
2	U 409.014†	12438.0	14616.1	[500]	ug/L	11:48:44
2	V 292.402†	62019.9	61859.5	[500]	ug/L	11:48:44
2	Zn 213.857†	46860.7	44799.2	[500]	ug/L	11:48:44
2	SiO2†	68889.7	66306.7	[5347.5]	ug/L	11:49:46
3	Sc 361.383	782342.0	782342.0	101.88	%	11:49:10
3	Sc Radial	4768.5	4768.5	101	%	11:47:41
3	Y 371.029	693075.9	693075.9	100.59	%	11:49:10
3	Y RADIAL	5014.8	5014.8	100.6	%	11:47:41
3	Ag 328.068†	98042.5	95981.8	[500]	ug/L	11:49:15
3	Al 396.153Radial†	5274.4	5293.1	[5000]	ug/L	11:47:41
3	As 188.979†	1097.5	1102.3	[500]	ug/L	11:49:35
3	B 249.677†	19586.2	19679.1	[500]	ug/L	11:49:15
3	Ba 233.527†	42805.1	42014.7	[500]	ug/L	11:49:15
3	Be 313.107†	1250417.1	1236379.4	[500]	ug/L	11:49:10
3	Ca 317.933Radial†	2810.5	2751.9	[5000]	ug/L	11:48:01
3	Cd 226.502†	35501.0	35034.0	[500]	ug/L	11:49:15
3	Co 228.616†	16417.7	16172.9	[500]	ug/L	11:49:35
3	Cr 267.716†	37022.2	36265.0	[500]	ug/L	11:49:15
3	Cu 324.752†	141604.8	131461.7	[500]	ug/L	11:49:15
3	K 766.490 Radial†	27791.7	25169.7	[5000]	ug/L	11:47:41
3	Mg 279.077 IEC†	137.0	132.3	[5000]	ug/L	11:48:01
3	Mn 257.610†	315616.6	309344.9	[500]	ug/L	11:49:15
3	Mo 202.031†	5467.8	5352.7	[500]	ug/L	11:49:35
3	Ni 231.604†	16114.0	15716.0	[500]	ug/L	11:49:15
3	P 214.914†	4674.3	4392.9	[2500]	ug/L	11:49:35
3	Pb 220.353†	3023.0	3038.0	[500]	ug/L	11:49:35
3	S 181.975 Axial†	817.5	759.9	[1000]	ug/L	11:49:35
3	Sb 206.836†	1247.7	1194.7	[500]	ug/L	11:49:35
3	Se 196.026†	797.5	802.6	[500]	ug/L	11:49:35
3	Si 251.611†	69130.1	67268.1	[2500]	ug/L	11:49:15
3	Sn 189.927†	2096.6	2049.9	[500]	ug/L	11:49:35
3	Sr 421.552†	70108.2	69199.4	[500]	ug/L	11:47:41
3	Ti 334.940†	247878.1	244615.7	[500]	ug/L	11:49:15
3	Tl 190.801†	1067.6	1079.2	[500]	ug/L	11:49:35
3	U 409.014†	12484.0	14791.0	[500]	ug/L	11:49:15
3	V 292.402†	61750.0	62241.1	[500]	ug/L	11:49:15
3	Zn 213.857†	46561.7	44994.2	[500]	ug/L	11:49:15
3	SiO2†	68604.0	66744.6	[5347.5]	ug/L	11:49:51

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	787730.8	4677.50	0.59%	102.58 %
Sc Radial	4687.9	71.33	1.52%	99.6 %
Y 371.029	697648.8	3960.38	0.57%	101.25 %
Y RADIAL	4942.6	63.03	1.28%	99.14 %
Ag 328.068†	95280.0	733.09	0.77%	[500] ug/L
Al 396.153Radial†	5321.7	32.96	0.62%	[5000] ug/L
As 188.979†	1100.5	2.60	0.24%	[500] ug/L
B 249.677†	19528.3	181.79	0.93%	[500] ug/L
Ba 233.527†	41716.4	321.48	0.77%	[500] ug/L
Be 313.107†	1236548.3	722.81	0.06%	[500] ug/L
Ca 317.933Radial†	2795.5	39.05	1.40%	[5000] ug/L
Cd 226.502†	34852.8	252.19	0.72%	[500] ug/L
Co 228.616†	16149.5	97.65	0.60%	[500] ug/L
Cr 267.716†	36077.7	220.58	0.61%	[500] ug/L
Cu 324.752†	130381.4	1161.43	0.89%	[500] ug/L
K 766.490 Radial†	25261.8	125.16	0.50%	[5000] ug/L
Mg 279.077 IEC†	131.7	1.32	1.00%	[5000] ug/L
Mn 257.610†	307432.8	2312.33	0.75%	[500] ug/L
Mo 202.031†	5324.9	40.70	0.76%	[500] ug/L
Ni 231.604†	15649.1	73.67	0.47%	[500] ug/L
P 214.914†	4379.2	25.87	0.59%	[2500] ug/L
Pb 220.353†	3039.8	20.61	0.68%	[500] ug/L

S 181.975 Axial†	755.2	6.34	0.84%	[1000]	ug/L
Sb 206.836†	1202.7	18.67	1.55%	[500]	ug/L
Se 196.026†	801.8	3.85	0.48%	[500]	ug/L
Si 251.611†	66833.4	507.96	0.76%	[2500]	ug/L
Sn 189.927†	2052.1	13.87	0.68%	[500]	ug/L
Sr 421.552†	69204.9	176.36	0.25%	[500]	ug/L
Ti 334.940†	242833.1	1867.41	0.77%	[500]	ug/L
Tl 190.801†	1067.8	14.10	1.32%	[500]	ug/L
U 409.014†	14637.8	143.55	0.98%	[500]	ug/L
V 292.402†	61810.9	456.44	0.74%	[500]	ug/L
Zn 213.857†	44711.0	336.06	0.75%	[500]	ug/L
SiO2†	66404.9	302.81	0.46%	[5347.5]	ug/L

Sequence No.: 4  
 Sample ID: SCAL  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 3/1/2010 11:52:01  
 Data Type: Reprocessed on 3/1/2010 13:29:31  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	764373.9	764373.9	99.536 %	11:55:17
1	Sc Radial	4594.5	4594.5	97.6 %	11:53:54
1	Y 371.029	678498.0	678498.0	98.471 %	11:55:17
1	Y RADIAL	4835.7	4835.7	97.00 %	11:53:54
1	Ag 328.068†	194905.6	195558.9	[1000] ug/L	11:55:17
1	Al 396.153Radial†	10324.1	10663.1	[10000] ug/L	11:53:54
1	As 188.979†	2217.4	2252.8	[1000] ug/L	11:55:37
1	B 249.677†	39539.4	40177.2	[1000] ug/L	11:55:17
1	Ba 233.527†	84709.4	85102.0	[1000] ug/L	11:55:17
1	Be 313.107†	2496774.2	2517401.8	[1000] ug/L	11:55:11
1	Ca 317.933Radial†	5522.2	5634.7	[10000] ug/L	11:53:54
1	Cd 226.502†	70329.3	70844.0	[1000] ug/L	11:55:17
1	Co 228.616†	33153.7	33365.8	[1000] ug/L	11:55:37
1	Cr 267.716†	73226.0	73491.9	[1000] ug/L	11:55:17
1	Cu 324.752†	275147.3	268894.4	[1000] ug/L	11:55:17
1	Fe 238.204 Radial†	977.3	993.9	[10000] ug/L	11:54:14
1	K 766.490 Radial†	51251.7	50240.4	[10000] ug/L	11:53:54
1	Mg 279.077 IEC†	255.7	259.1	[10000] ug/L	11:54:14
1	Mn 257.610†	625097.1	627551.4	[1000] ug/L	11:55:17
1	Mo 202.031†	10936.9	10973.5	[1000] ug/L	11:55:37
1	Na 589.592 Radial†	27964.2	29494.3	[10000] ug/L	11:53:54
1	Ni 231.604†	31284.4	31329.0	[1000] ug/L	11:55:37
1	P 214.914†	9171.0	9018.4	[5000] ug/L	11:55:37
1	Pb 220.353†	6157.2	6256.6	[1000] ug/L	11:55:37
1	S 181.975 Axial†	1587.3	1552.2	[2000] ug/L	11:55:37
1	Sb 206.836†	2501.1	2482.7	[1000] ug/L	11:55:37
1	Se 196.026†	1617.2	1644.6	[1000] ug/L	11:55:37
1	Si 251.611†	137914.9	137968.9	[5000] ug/L	11:55:17
1	Sn 189.927†	4281.5	4293.4	[1000] ug/L	11:55:37
1	Sr 421.552†	134424.0	137703.9	[1000] ug/L	11:53:54
1	Ti 334.940†	495663.3	499276.1	[1000] ug/L	11:55:17
1	Tl 190.801†	2150.4	2191.7	[1000] ug/L	11:55:37
1	U 409.014†	27272.9	29936.9	[1000] ug/L	11:55:17
1	V 292.402†	124028.5	126234.9	[1000] ug/L	11:55:17
1	Zn 213.857†	91300.7	91016.3	[1000] ug/L	11:55:17
1	SiO2†	137615.6	137661.0	[10695] ug/L	11:56:45
2	Sc 361.383	760055.8	760055.8	98.973 %	11:55:48
2	Sc Radial	4648.4	4648.4	98.8 %	11:54:19
2	Y 371.029	673845.2	673845.2	97.796 %	11:55:48
2	Y RADIAL	4896.3	4896.3	98.21 %	11:54:19
2	Ag 328.068†	193600.0	195352.3	[1000] ug/L	11:55:48
2	Al 396.153Radial†	10430.5	10648.3	[10000] ug/L	11:54:19
2	As 188.979†	2224.8	2272.9	[1000] ug/L	11:56:08
2	B 249.677†	39308.2	40169.3	[1000] ug/L	11:55:48
2	Ba 233.527†	84410.6	85283.7	[1000] ug/L	11:55:48
2	Be 313.107†	2500143.8	2535057.6	[1000] ug/L	11:55:42
2	Ca 317.933Radial†	5612.1	5660.2	[10000] ug/L	11:54:19
2	Cd 226.502†	70124.0	71037.9	[1000] ug/L	11:55:48
2	Co 228.616†	33014.1	33414.0	[1000] ug/L	11:56:08
2	Cr 267.716†	72996.6	73678.1	[1000] ug/L	11:55:48
2	Cu 324.752†	272480.3	267770.3	[1000] ug/L	11:55:48
2	Fe 238.204 Radial†	978.2	983.2	[10000] ug/L	11:54:39
2	K 766.490 Radial†	51829.1	50216.5	[10000] ug/L	11:54:19
2	Mg 279.077 IEC†	258.4	258.8	[10000] ug/L	11:54:39
2	Mn 257.610†	622130.2	628121.7	[1000] ug/L	11:55:48
2	Mo 202.031†	10909.8	11008.6	[1000] ug/L	11:56:08
2	Na 589.592 Radial†	28443.5	29647.4	[10000] ug/L	11:54:19
2	Ni 231.604†	31196.1	31418.4	[1000] ug/L	11:56:08



2	P 214.914†	9144.6	9044.1	[5000]	ug/L	11:56:08
2	Pb 220.353†	6123.9	6258.1	[1000]	ug/L	11:56:08
2	S 181.975 Axial†	1578.8	1552.6	[2000]	ug/L	11:56:08
2	Sb 206.836†	2495.6	2491.5	[1000]	ug/L	11:56:08
2	Se 196.026†	1605.7	1642.1	[1000]	ug/L	11:56:08
2	Si 251.611†	137090.1	137922.7	[5000]	ug/L	11:55:48
2	Sn 189.927†	4258.4	4294.5	[1000]	ug/L	11:56:08
2	Sr 421.552†	135779.9	137480.6	[1000]	ug/L	11:54:19
2	Ti 334.940†	492315.4	498722.7	[1000]	ug/L	11:55:48
2	Tl 190.801†	2144.1	2197.5	[1000]	ug/L	11:56:08
2	U 409.014†	27067.1	29884.6	[1000]	ug/L	11:55:48
2	V 292.402†	123262.1	126168.5	[1000]	ug/L	11:55:48
2	Zn 213.857†	90887.3	91119.7	[1000]	ug/L	11:55:48
2	SiO2†	138658.0	139499.7	[10695]	ug/L	11:56:50
3	Sc 361.383	763813.6	763813.6	99.463	%	11:56:19
3	Sc Radial	4595.7	4595.7	97.6	%	11:54:44
3	Y 371.029	677242.1	677242.1	98.289	%	11:56:19
3	Y RADIAL	4859.4	4859.4	97.47	%	11:54:44
3	Ag 328.068†	194810.4	195606.9	[1000]	ug/L	11:56:19
3	Al 396.153Radial†	10282.6	10617.8	[10000]	ug/L	11:54:44
3	As 188.979†	2201.3	2238.2	[1000]	ug/L	11:56:39
3	B 249.677†	39491.5	40158.3	[1000]	ug/L	11:56:19
3	Ba 233.527†	84390.4	84843.8	[1000]	ug/L	11:56:19
3	Be 313.107†	2505418.6	2527933.1	[1000]	ug/L	11:56:14
3	Ca 317.933Radial†	5509.7	5620.5	[10000]	ug/L	11:54:44
3	Cd 226.502†	69846.3	70410.2	[1000]	ug/L	11:56:19
3	Co 228.616†	32838.2	33073.1	[1000]	ug/L	11:56:39
3	Cr 267.716†	72876.8	73194.8	[1000]	ug/L	11:56:19
3	Cu 324.752†	275543.0	269495.1	[1000]	ug/L	11:56:19
3	Fe 238.204 Radial†	962.4	978.3	[10000]	ug/L	11:55:04
3	K 766.490 Radial†	51059.4	50029.8	[10000]	ug/L	11:54:44
3	Mg 279.077 IEC†	260.6	264.0	[10000]	ug/L	11:55:04
3	Mn 257.610†	622791.6	625694.1	[1000]	ug/L	11:56:19
3	Mo 202.031†	10850.7	10894.9	[1000]	ug/L	11:56:39
3	Na 589.592 Radial†	27728.1	29245.0	[10000]	ug/L	11:54:44
3	Ni 231.604†	31028.9	31095.2	[1000]	ug/L	11:56:39
3	P 214.914†	9096.7	8950.5	[5000]	ug/L	11:56:39
3	Pb 220.353†	6078.9	6182.4	[1000]	ug/L	11:56:39
3	S 181.975 Axial†	1581.0	1547.1	[2000]	ug/L	11:56:39
3	Sb 206.836†	2484.0	2467.4	[1000]	ug/L	11:56:39
3	Se 196.026†	1605.8	1634.3	[1000]	ug/L	11:56:39
3	Si 251.611†	137568.5	137722.3	[5000]	ug/L	11:56:19
3	Sn 189.927†	4245.6	4260.5	[1000]	ug/L	11:56:39
3	Sr 421.552†	133510.6	136732.7	[1000]	ug/L	11:54:44
3	Ti 334.940†	494757.9	498731.2	[1000]	ug/L	11:56:19
3	Tl 190.801†	2133.6	2176.3	[1000]	ug/L	11:56:39
3	U 409.014†	27519.3	30204.8	[1000]	ug/L	11:56:19
3	V 292.402†	123543.8	125839.0	[1000]	ug/L	11:56:19
3	Zn 213.857†	91057.2	90838.7	[1000]	ug/L	11:56:19
3	SiO2†	137947.6	138096.2	[10695]	ug/L	11:56:55

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	762747.7	2348.09	0.31%	99.324 %
Sc Radial	4612.9	30.77	0.67%	98.0 %
Y 371.029	676528.4	2407.10	0.36%	98.185 %
Y RADIAL	4863.8	30.56	0.63%	97.56 %
Ag 328.068†	195506.1	135.29	0.07%	[1000] ug/L
Al 396.153Radial†	10643.0	23.08	0.22%	[10000] ug/L
As 188.979†	2254.6	17.46	0.77%	[1000] ug/L
B 249.677†	40168.3	9.53	0.02%	[1000] ug/L
Ba 233.527†	85076.5	221.08	0.26%	[1000] ug/L
Be 313.107†	2526797.5	8882.47	0.35%	[1000] ug/L
Ca 317.933Radial†	5638.5	20.11	0.36%	[10000] ug/L
Cd 226.502†	70764.0	321.42	0.45%	[1000] ug/L
Co 228.616†	33284.3	184.52	0.55%	[1000] ug/L
Cr 267.716†	73455.0	243.79	0.33%	[1000] ug/L
Cu 324.752†	268719.9	875.55	0.33%	[1000] ug/L
Fe 238.204 Radial†	985.1	7.96	0.81%	[10000] ug/L

K 766.490 Radial†	50162.2	115.29	0.23%	[10000]	ug/L
Mg 279.077 IEC†	260.6	2.93	1.12%	[10000]	ug/L
Mn 257.610†	627122.4	1269.35	0.20%	[1000]	ug/L
Mo 202.031†	10959.0	58.21	0.53%	[1000]	ug/L
Na 589.592 Radial†	29462.2	203.12	0.69%	[10000]	ug/L
Ni 231.604†	31280.8	166.87	0.53%	[1000]	ug/L
P 214.914†	9004.3	48.36	0.54%	[5000]	ug/L
Pb 220.353†	6232.4	43.27	0.69%	[1000]	ug/L
S 181.975 Axial†	1550.6	3.08	0.20%	[2000]	ug/L
Sb 206.836†	2480.5	12.19	0.49%	[1000]	ug/L
Se 196.026†	1640.3	5.41	0.33%	[1000]	ug/L
Si 251.611†	137871.3	131.08	0.10%	[5000]	ug/L
Sn 189.927†	4282.8	19.32	0.45%	[1000]	ug/L
Sr 421.552†	137305.7	508.66	0.37%	[1000]	ug/L
Ti 334.940†	498910.0	317.08	0.06%	[1000]	ug/L
Tl 190.801†	2188.5	10.94	0.50%	[1000]	ug/L
U 409.014†	30008.8	171.74	0.57%	[1000]	ug/L
V 292.402†	126080.8	212.01	0.17%	[1000]	ug/L
Zn 213.857†	90991.6	142.12	0.16%	[1000]	ug/L
SiO2†	138419.0	960.93	0.69%	[10695]	ug/L

Sequence No.: 5  
 Sample ID: S10  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 3/1/2010 11:59:07  
 Data Type: Reprocessed on 3/1/2010 13:29:32  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	770445.5	770445.5	100.33 %	12:02:17
1	Sc Radial	4543.4	4543.4	96.5 %	12:01:20
1	Y 371.029	678491.0	678491.0	98.470 %	12:02:17
1	Y RADIAL	4785.7	4785.7	95.99 %	12:01:20
1	Al 396.153Radial†	51636.6	53578.6	[50000] ug/L	12:01:00
1	Ca 317.933Radial†	26617.7	27551.7	[50000] ug/L	12:01:00
1	Fe 238.204 Radial†	1858.9	1918.3	[20000] ug/L	12:01:20
1	Mg 279.077 IEC†	1216.6	1257.4	[50000] ug/L	12:01:20
1	Na 589.592 Radial†	56343.4	59215.1	[20000] ug/L	12:01:00
2	Sc 361.383	765160.6	765160.6	99.638 %	12:02:23
2	Sc Radial	4573.4	4573.4	97.2 %	12:01:45
2	Y 371.029	673725.2	673725.2	97.778 %	12:02:23
2	Y RADIAL	4797.4	4797.4	96.23 %	12:01:45
2	Al 396.153Radial†	51907.2	53506.7	[50000] ug/L	12:01:25
2	Ca 317.933Radial†	26783.4	27541.7	[50000] ug/L	12:01:25
2	Fe 238.204 Radial†	1867.4	1914.5	[20000] ug/L	12:01:45
2	Mg 279.077 IEC†	1226.8	1259.6	[50000] ug/L	12:01:45
2	Na 589.592 Radial†	56031.4	58511.8	[20000] ug/L	12:01:25
3	Sc 361.383	768716.6	768716.6	100.10 %	12:02:28
3	Sc Radial	4539.8	4539.8	96.5 %	12:02:10
3	Y 371.029	676808.4	676808.4	98.226 %	12:02:28
3	Y RADIAL	4768.2	4768.2	95.64 %	12:02:10
3	Al 396.153Radial†	51332.8	53306.6	[50000] ug/L	12:01:50
3	Ca 317.933Radial†	26420.1	27369.0	[50000] ug/L	12:01:50
3	Fe 238.204 Radial†	1857.5	1918.5	[20000] ug/L	12:02:10
3	Mg 279.077 IEC†	1212.2	1253.9	[50000] ug/L	12:02:10
3	Na 589.592 Radial†	55271.5	58150.7	[20000] ug/L	12:01:50

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	768107.6	2694.59	0.35%	100.02 %
Sc Radial	4552.2	18.44	0.41%	96.7 %
Y 371.029	676341.5	2416.96	0.36%	98.158 %
Y RADIAL	4783.8	14.71	0.31%	95.96 %
Al 396.153Radial†	53464.0	140.93	0.26%	[50000] ug/L
Ca 317.933Radial†	27487.5	102.68	0.37%	[50000] ug/L
Fe 238.204 Radial†	1917.1	2.27	0.12%	[20000] ug/L
Mg 279.077 IEC†	1257.0	2.91	0.23%	[50000] ug/L
Na 589.592 Radial†	58625.9	541.29	0.92%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	194.5	0.00000	0.999948	
Al 396.153Radial	3	Lin Thru 0	0.0	1.069	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.244	0.00000	0.999954	
B 249.677	3	Lin Thru 0	0.0	39.93	0.00000	0.999932	
Ba 233.527	3	Lin Thru 0	0.0	84.75	0.00000	0.999970	
Be 313.107	3	Lin Thru 0	0.0	2516	0.00000	0.999963	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5504	0.00000	0.999987	
Cd 226.502	3	Lin Thru 0	0.0	70.54	0.00000	0.999980	
Co 228.616	3	Lin Thru 0	0.0	33.09	0.00000	0.999930	
Cr 267.716	3	Lin Thru 0	0.0	73.20	0.00000	0.999975	
Cu 324.752	3	Lin Thru 0	0.0	267.1	0.00000	0.999926	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0964	0.00000	0.999939	

K 766.490 Radial	3	Lin Thru 0	0.0	5.024	0.00000	0.999996
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0252	0.00000	0.999965
Mn 257.610	3	Lin Thru 0	0.0	624.8	0.00000	0.999968
Mo 202.031	3	Lin Thru 0	0.0	10.90	0.00000	0.999936
Na 589.592 Radia	2	Lin Thru 0	0.0	2.934	0.00000	0.999998
Ni 231.604	3	Lin Thru 0	0.0	31.28	0.00000	1.000000
P 214.914	3	Lin Thru 0	0.0	1.791	0.00000	0.999939
Pb 220.353	3	Lin Thru 0	0.0	6.202	0.00000	0.999952
S 181.975 Axial	3	Lin Thru 0	0.0	0.7713	0.00000	0.999946
Sb 206.836	3	Lin Thru 0	0.0	2.465	0.00000	0.999922
Se 196.026	3	Lin Thru 0	0.0	1.633	0.00000	0.999959
Si 251.611	3	Lin Thru 0	0.0	27.40	0.00000	0.999925
Sn 189.927	3	Lin Thru 0	0.0	4.246	0.00000	0.999858
Sr 421.552	3	Lin Thru 0	0.0	137.5	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	496.3	0.00000	0.999943
Tl 190.801	3	Lin Thru 0	0.0	2.178	0.00000	0.999952
U 409.014	3	Lin Thru 0	0.0	29.86	0.00000	0.999952
V 292.402	3	Lin Thru 0	0.0	125.6	0.00000	0.999969
Zn 213.857	3	Lin Thru 0	0.0	90.67	0.00000	0.999976
SiO2	3	Lin Thru 0	0.0	12.84	0.00000	0.999867

Sequence No.: 6  
 Sample ID: ICV  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 9  
 Date Collected: 3/1/2010 12:04:40  
 Data Type: Reprocessed on 3/1/2010 13:29:33  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	784981.8	784981.8	102.22 %		12:07:50
1	Sc Radial	4649.6	4649.6	98.8 %		12:06:32
1	Y 371.029	695335.6	695335.6	100.91 %		12:07:50
1	Y RADIAL	4903.6	4903.6	98.36 %		12:06:32
1	Ag 328.068†	51531.9	50157.4	261.07 ug/L	261.07 ppb	12:07:50
1	Al 396.153Radial†	5284.2	5436.1	5059.3 ug/L	5059.3 ppb	12:06:32
1	As 188.979†	1048.7	1050.9	472.71 ug/L	472.71 ppb	12:08:10
1	B 249.677†	20755.0	20757.8	517.52 ug/L	517.52 ppb	12:07:50
1	Ba 233.527†	43949.7	42993.1	508.60 ug/L	508.60 ppb	12:07:50
1	Be 313.107†	657976.6	652673.8	260.57 ug/L	260.57 ppb	12:07:50
1	Ca 317.933Radial†	2793.0	2805.0	5096.6 ug/L	5096.6 ppb	12:06:53
1	Cd 226.502†	34855.5	34285.3	485.92 ug/L	485.92 ppb	12:08:10
1	Co 228.616†	17128.9	16814.4	508.31 ug/L	508.31 ppb	12:08:10
1	Cr 267.716†	36537.1	35668.2	487.92 ug/L	487.92 ppb	12:07:50
1	Cu 324.752†	145500.6	134805.5	504.77 ug/L	504.77 ppb	12:07:50
1	Fe 238.204 Radial†	499.2	498.0	5182.3 ug/L	5182.3 ppb	12:06:53
1	K 766.490 Radial†	14710.2	12628.9	2510.5 ug/L	2510.5 ppb	12:06:32
1	Mg 279.077 IEC†	136.4	135.2	5368.3 ug/L	5368.3 ppb	12:06:53
1	Mn 257.610†	334228.8	326511.2	522.92 ug/L	522.92 ppb	12:07:50
1	Mo 202.031†	5924.1	5781.1	531.01 ug/L	531.01 ppb	12:08:10
1	Na 589.592 Radial†	6277.5	7202.2	2454.5 ug/L	2454.5 ppb	12:06:32
1	Ni 231.604†	16276.4	15821.7	505.47 ug/L	505.47 ppb	12:08:10
1	P 214.914†	4739.1	4440.9	2381.7 ug/L	2381.7 ppb	12:08:10
1	Pb 220.353†	3062.8	3067.0	496.47 ug/L	496.47 ppb	12:08:10
1	S 181.975 Axial†	1984.6	1899.0	2461.2 ug/L	2461.2 ppb	12:08:10
1	Sb 206.836†	1283.6	1225.7	516.38 ug/L	516.38 ppb	12:08:10
1	Se 196.026†	4171.1	4100.4	2524.9 ug/L	2524.9 ppb	12:08:10
1	Si 251.611†	136009.9	132467.8	4827.3 ug/L	4827.3 ppb	12:07:50
1	Sn 189.927†	2314.6	2256.3	531.96 ug/L	531.96 ppb	12:08:10
1	Sr 421.552†	71138.6	72011.1	523.61 ug/L	523.61 ppb	12:06:32
1	Ti 334.940†	254476.2	250252.3	504.12 ug/L	504.12 ppb	12:07:50
1	Tl 190.801†	1131.0	1137.7	525.94 ug/L	525.94 ppb	12:08:10
1	U 409.014†	12389.3	14657.1	489.12 ug/L	489.12 ppb	12:07:50
1	V 292.402†	64046.6	64284.1	518.99 ug/L	518.99 ppb	12:07:50
1	Zn 213.857†	48398.4	46637.4	509.66 ug/L	509.66 ppb	12:07:50
1	SiO2†	137020.9	133449.6	10381 ug/L	10381 ppb	12:09:08
2	Sc 361.383	788850.1	788850.1	102.72 %		12:08:16
2	Sc Radial	4754.2	4754.2	101 %		12:06:58
2	Y 371.029	700164.8	700164.8	101.62 %		12:08:16
2	Y RADIAL	5055.9	5055.9	101.4 %		12:06:58
2	Ag 328.068†	51408.5	49790.1	259.14 ug/L	259.14 ppb	12:08:16
2	Al 396.153Radial†	5402.3	5435.4	5058.7 ug/L	5058.7 ppb	12:06:58
2	As 188.979†	1048.2	1045.4	470.18 ug/L	470.18 ppb	12:08:36
2	B 249.677†	20691.6	20596.5	513.50 ug/L	513.50 ppb	12:08:16
2	Ba 233.527†	43858.5	42693.5	505.05 ug/L	505.05 ppb	12:08:16
2	Be 313.107†	658498.4	650025.4	259.51 ug/L	259.51 ppb	12:08:16
2	Ca 317.933Radial†	2784.9	2734.9	4969.1 ug/L	4969.1 ppb	12:07:18
2	Cd 226.502†	34942.2	34202.6	484.76 ug/L	484.76 ppb	12:08:36
2	Co 228.616†	17162.6	16765.1	506.82 ug/L	506.82 ppb	12:08:36
2	Cr 267.716†	36417.9	35376.9	483.94 ug/L	483.94 ppb	12:08:16
2	Cu 324.752†	145750.1	134350.3	503.06 ug/L	503.06 ppb	12:08:16
2	Fe 238.204 Radial†	498.7	486.4	5061.0 ug/L	5061.0 ppb	12:07:18
2	K 766.490 Radial†	15123.7	12710.8	2526.8 ug/L	2526.8 ppb	12:06:58
2	Mg 279.077 IEC†	136.6	132.4	5255.8 ug/L	5255.8 ppb	12:07:18
2	Mn 257.610†	333515.9	324213.8	519.23 ug/L	519.23 ppb	12:08:16
2	Mo 202.031†	5951.1	5779.0	530.80 ug/L	530.80 ppb	12:08:36
2	Na 589.592 Radial†	6399.9	7183.7	2448.2 ug/L	2448.2 ppb	12:06:58
2	Ni 231.604†	16270.8	15738.2	502.80 ug/L	502.80 ppb	12:08:36

2	P 214.914†	4771.8	4450.0	2387.1 ug/L	2387.1 ppb	12:08:36
2	Pb 220.353†	3039.0	3029.2	490.39 ug/L	490.39 ppb	12:08:36
2	S 181.975 Axial†	1992.8	1897.5	2459.2 ug/L	2459.2 ppb	12:08:36
2	Sb 206.836†	1293.2	1228.9	517.63 ug/L	517.63 ppb	12:08:36
2	Se 196.026†	4189.2	4097.9	2523.2 ug/L	2523.2 ppb	12:08:36
2	Si 251.611†	135544.0	131361.7	4786.9 ug/L	4786.9 ppb	12:08:16
2	Sn 189.927†	2311.8	2242.5	528.68 ug/L	528.68 ppb	12:08:36
2	Sr 421.552†	72988.6	72259.2	525.41 ug/L	525.41 ppb	12:06:58
2	Ti 334.940†	254195.8	248758.5	501.10 ug/L	501.10 ppb	12:08:16
2	Tl 190.801†	1134.2	1135.4	524.83 ug/L	524.83 ppb	12:08:36
2	U 409.014†	12481.0	14687.0	490.15 ug/L	490.15 ppb	12:08:16
2	V 292.402†	64051.9	63982.0	516.60 ug/L	516.60 ppb	12:08:16
2	Zn 213.857†	48251.5	46262.1	505.56 ug/L	505.56 ppb	12:08:16
2	SiO2†	136513.5	132298.3	10292 ug/L	10292 ppb	12:09:13
3	Sc 361.383	792006.3	792006.3	103.13 %		12:08:42
3	Sc Radial	4646.4	4646.4	98.7 %		12:07:23
3	Y 371.029	703352.1	703352.1	102.08 %		12:08:42
3	Y RADIAL	4906.2	4906.2	98.41 %		12:07:23
3	Ag 328.068†	51696.9	49870.2	259.60 ug/L	259.60 ppb	12:08:42
3	Al 396.153Radial†	5301.8	5457.6	5079.4 ug/L	5079.4 ppb	12:07:23
3	As 188.979†	1054.9	1047.9	471.32 ug/L	471.32 ppb	12:09:02
3	B 249.677†	20800.1	20621.5	514.10 ug/L	514.10 ppb	12:08:42
3	Ba 233.527†	44036.7	42696.1	505.09 ug/L	505.09 ppb	12:08:42
3	Be 313.107†	662340.7	651196.3	259.98 ug/L	259.98 ppb	12:08:42
3	Ca 317.933Radial†	2791.5	2805.5	5097.5 ug/L	5097.5 ppb	12:07:43
3	Cd 226.502†	35234.9	34350.8	486.85 ug/L	486.85 ppb	12:09:02
3	Co 228.616†	17314.9	16846.2	509.27 ug/L	509.27 ppb	12:09:02
3	Cr 267.716†	36654.9	35465.4	485.15 ug/L	485.15 ppb	12:08:42
3	Cu 324.752†	146661.2	134668.4	504.26 ug/L	504.26 ppb	12:08:42
3	Fe 238.204 Radial†	501.3	500.4	5207.3 ug/L	5207.3 ppb	12:07:43
3	K 766.490 Radial†	14756.8	12686.5	2521.9 ug/L	2521.9 ppb	12:07:23
3	Mg 279.077 IEC†	135.6	134.5	5339.2 ug/L	5339.2 ppb	12:07:43
3	Mn 257.610†	335113.8	324469.2	519.65 ug/L	519.65 ppb	12:08:42
3	Mo 202.031†	5985.5	5789.3	531.76 ug/L	531.76 ppb	12:09:02
3	Na 589.592 Radial†	6221.9	7150.4	2436.8 ug/L	2436.8 ppb	12:07:23
3	Ni 231.604†	16398.4	15798.8	504.73 ug/L	504.73 ppb	12:09:02
3	P 214.914†	4793.8	4452.8	2388.4 ug/L	2388.4 ppb	12:09:02
3	Pb 220.353†	3094.4	3071.1	497.14 ug/L	497.14 ppb	12:09:02
3	S 181.975 Axial†	2018.2	1914.4	2481.1 ug/L	2481.1 ppb	12:09:02
3	Sb 206.836†	1307.4	1237.7	521.28 ug/L	521.28 ppb	12:09:02
3	Se 196.026†	4219.9	4111.5	2531.8 ug/L	2531.8 ppb	12:09:02
3	Si 251.611†	136519.5	131781.7	4802.3 ug/L	4802.3 ppb	12:08:42
3	Sn 189.927†	2341.9	2262.6	533.44 ug/L	533.44 ppb	12:09:02
3	Sr 421.552†	71578.4	72506.9	527.21 ug/L	527.21 ppb	12:07:23
3	Ti 334.940†	255503.9	249040.7	501.68 ug/L	501.68 ppb	12:08:42
3	Tl 190.801†	1134.3	1131.0	522.84 ug/L	522.84 ppb	12:09:02
3	U 409.014†	12405.1	14565.0	486.04 ug/L	486.04 ppb	12:08:42
3	V 292.402†	64392.4	64063.7	517.24 ug/L	517.24 ppb	12:08:42
3	Zn 213.857†	48556.1	46370.3	506.72 ug/L	506.72 ppb	12:08:42
3	SiO2†	135032.5	130332.7	10139 ug/L	10139 ppb	12:09:18

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	788612.7	102.69 %	0.458			0.45%
Sc Radial	4683.4	99.5 %	1.30			1.31%
Y 371.029	699617.5	101.54 %	0.586			0.58%
Y RADIAL	4955.2	99.39 %	1.749			1.76%
Ag 328.068†	49939.2	259.94 ug/L	1.010	259.94 ppb	1.010	0.39%
QC value within limits for Ag 328.068 Recovery = 103.97%						
Al 396.153Radial†	5443.0	5065.8 ug/L	11.79	5065.8 ppb	11.79	0.23%
QC value within limits for Al 396.153Radial Recovery = 101.32%						
As 188.979†	1048.1	471.40 ug/L	1.265	471.40 ppb	1.265	0.27%
QC value within limits for As 188.979 Recovery = 94.28%						
B 249.677†	20658.6	515.04 ug/L	2.168	515.04 ppb	2.168	0.42%
QC value within limits for B 249.677 Recovery = 103.01%						
Ba 233.527†	42794.2	506.25 ug/L	2.036	506.25 ppb	2.036	0.40%
QC value within limits for Ba 233.527 Recovery = 101.25%						
Be 313.107†	651298.5	260.02 ug/L	0.531	260.02 ppb	0.531	0.20%
QC value within limits for Be 313.107 Recovery = 104.01%						

Ca 317.933Radial†	2781.8	5054.4 ug/L	73.87	5054.4 ppb	73.87	1.46%
QC value within limits for Ca 317.933Radial Recovery = 101.09%						
Cd 226.502†	34279.6	485.84 ug/L	1.046	485.84 ppb	1.046	0.22%
QC value within limits for Cd 226.502 Recovery = 97.17%						
Co 228.616†	16808.6	508.13 ug/L	1.233	508.13 ppb	1.233	0.24%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	35503.5	485.67 ug/L	2.043	485.67 ppb	2.043	0.42%
QC value within limits for Cr 267.716 Recovery = 97.13%						
Cu 324.752†	134608.1	504.03 ug/L	0.879	504.03 ppb	0.879	0.17%
QC value within limits for Cu 324.752 Recovery = 100.81%						
Fe 238.204 Radial†	494.9	5150.2 ug/L	78.23	5150.2 ppb	78.23	1.52%
QC value within limits for Fe 238.204 Radial Recovery = 103.00%						
K 766.490 Radial†	12675.4	2519.7 ug/L	8.39	2519.7 ppb	8.39	0.33%
QC value within limits for K 766.490 Radial Recovery = 100.79%						
Mg 279.077 IEC†	134.0	5321.1 ug/L	58.40	5321.1 ppb	58.40	1.10%
QC value within limits for Mg 279.077 IEC Recovery = 106.42%						
Mn 257.610†	325064.7	520.60 ug/L	2.017	520.60 ppb	2.017	0.39%
QC value within limits for Mn 257.610 Recovery = 104.12%						
Mo 202.031†	5783.1	531.19 ug/L	0.503	531.19 ppb	0.503	0.09%
QC value within limits for Mo 202.031 Recovery = 106.24%						
Na 589.592 Radial†	7178.8	2446.5 ug/L	8.95	2446.5 ppb	8.95	0.37%
QC value within limits for Na 589.592 Radial Recovery = 97.86%						
Ni 231.604†	15786.2	504.33 ug/L	1.379	504.33 ppb	1.379	0.27%
QC value within limits for Ni 231.604 Recovery = 100.87%						
P 214.914†	4447.9	2385.7 ug/L	3.58	2385.7 ppb	3.58	0.15%
QC value within limits for P 214.914 Recovery = 95.43%						
Pb 220.353†	3055.7	494.67 ug/L	3.722	494.67 ppb	3.722	0.75%
QC value within limits for Pb 220.353 Recovery = 98.93%						
S 181.975 Axial†	1903.6	2467.2 ug/L	12.10	2467.2 ppb	12.10	0.49%
QC value within limits for S 181.975 Axial Recovery = 98.69%						
Sb 206.836†	1230.8	518.43 ug/L	2.547	518.43 ppb	2.547	0.49%
QC value within limits for Sb 206.836 Recovery = 103.69%						
Se 196.026†	4103.2	2526.6 ug/L	4.55	2526.6 ppb	4.55	0.18%
QC value within limits for Se 196.026 Recovery = 101.06%						
Si 251.611†	131870.4	4805.5 ug/L	20.37	4805.5 ppb	20.37	0.42%
QC value within limits for Si 251.611 Recovery = 96.11%						
Sn 189.927†	2253.8	531.36 ug/L	2.435	531.36 ppb	2.435	0.46%
QC value within limits for Sn 189.927 Recovery = 106.27%						
Sr 421.552†	72259.0	525.41 ug/L	1.803	525.41 ppb	1.803	0.34%
QC value within limits for Sr 421.552 Recovery = 105.08%						
Ti 334.940†	249350.5	502.30 ug/L	1.601	502.30 ppb	1.601	0.32%
QC value within limits for Ti 334.940 Recovery = 100.46%						
Tl 190.801†	1134.7	524.54 ug/L	1.569	524.54 ppb	1.569	0.30%
QC value within limits for Tl 190.801 Recovery = 104.91%						
U 409.014†	14636.4	488.44 ug/L	2.137	488.44 ppb	2.137	0.44%
QC value within limits for U 409.014 Recovery = 97.69%						
V 292.402†	64109.9	517.61 ug/L	1.236	517.61 ppb	1.236	0.24%
QC value within limits for V 292.402 Recovery = 103.52%						
Zn 213.857†	46423.3	507.31 ug/L	2.114	507.31 ppb	2.114	0.42%
QC value within limits for Zn 213.857 Recovery = 101.46%						
SiO2†	132026.9	10271 ug/L	122.8	10271 ppb	122.8	1.20%
QC value within limits for SiO2 Recovery = 96.03%						
All analyte(s) passed QC.						

Sequence No.: 7  
 Sample ID: ICB  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 3/1/2010 12:11:29  
 Data Type: Reprocessed on 3/1/2010 13:29:35  
 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 361.383	758808.1	758808.1	98.811 %		12:14:39
1	Sc Radial	4656.0	4656.0	98.9 %		12:13:22
1	Y 371.029	678679.2	678679.2	98.497 %		12:14:39
1	Y RADIAL	4939.4	4939.4	99.08 %		12:13:22
1	Ag 328.068†	241.0	-11.7	-0.0650 ug/L	-0.0650 ppb	12:14:39
1	Al 396.153Radial†	-83.2	3.0	2.8298 ug/L	2.8298 ppb	12:13:42
1	As 188.979†	-34.5	-9.9	-4.4161 ug/L	-4.4161 ppb	12:14:59
1	B 249.677†	-140.5	311.3	7.7971 ug/L	7.7971 ppb	12:14:59
1	Ba 233.527†	11.9	9.7	0.1142 ug/L	0.1142 ppb	12:14:59
1	Be 313.107†	-8966.4	-91.6	-0.0368 ug/L	-0.0368 ppb	12:14:39
1	Ca 317.933Radial†	18.4	-3.6	-6.5093 ug/L	-6.5093 ppb	12:13:42
1	Cd 226.502†	-186.6	-2.2	-0.0295 ug/L	-0.0295 ppb	12:14:59
1	Co 228.616†	-66.6	-9.9	-0.2994 ug/L	-0.2994 ppb	12:14:59
1	Cr 267.716†	70.4	-4.4	-0.0616 ug/L	-0.0616 ppb	12:14:59
1	Cu 324.752†	7353.6	-94.0	-0.3546 ug/L	-0.3546 ppb	12:14:39
1	Fe 238.204 Radial†	6.7	-0.5	-5.3824 ug/L	-5.3824 ppb	12:13:42
1	K 766.490 Radial†	2274.4	37.4	7.4499 ug/L	7.4499 ppb	12:13:22
1	Mg 279.077 IEC†	3.1	0.2	8.3929 ug/L	8.3929 ppb	12:13:42
1	Mn 257.610†	444.4	-11.4	-0.0191 ug/L	-0.0191 ppb	12:14:59
1	Mo 202.031†	17.3	3.2	0.2894 ug/L	0.2894 ppb	12:14:59
1	Na 589.592 Radial†	-787.4	51.8	17.655 ug/L	17.655 ppb	12:13:22
1	Ni 231.604†	96.7	-3.5	-0.1109 ug/L	-0.1109 ppb	12:14:59
1	P 214.914†	196.4	3.4	1.9905 ug/L	1.9905 ppb	12:14:59
1	Pb 220.353†	-68.2	1.7	0.2737 ug/L	0.2737 ppb	12:14:59
1	S 181.975 Axial†	46.3	4.3	5.5891 ug/L	5.5891 ppb	12:14:59
1	Sb 206.836†	43.0	13.5	5.4900 ug/L	5.4900 ppb	12:14:59
1	Se 196.026†	-26.0	-6.5	-3.9688 ug/L	-3.9688 ppb	12:14:59
1	Si 251.611†	582.5	0.3	0.0073 ug/L	0.0073 ppb	12:14:59
1	Sn 189.927†	11.4	3.5	0.8176 ug/L	0.8176 ppb	12:14:59
1	Sr 421.552†	19.4	20.1	0.1460 ug/L	0.1460 ppb	12:13:22
1	Ti 334.940†	-1376.3	-91.8	-0.1883 ug/L	-0.1883 ppb	12:14:39
1	Tl 190.801†	-34.8	-4.0	-1.8601 ug/L	-1.8601 ppb	12:14:59
1	U 409.014†	-2387.3	120.8	4.0454 ug/L	4.0454 ppb	12:14:39
1	V 292.402†	-1601.3	7.4	0.0720 ug/L	0.0720 ppb	12:14:39
1	Zn 213.857†	616.6	-86.2	-0.9491 ug/L	-0.9491 ppb	12:14:59
1	SiO2†	632.6	43.8	3.4057 ug/L	3.4057 ppb	12:15:55
2	Sc 361.383	775920.5	775920.5	101.04 %		12:15:04
2	Sc Radial	4685.8	4685.8	99.6 %		12:13:47
2	Y 371.029	694648.1	694648.1	100.81 %		12:15:04
2	Y RADIAL	5001.0	5001.0	100.3 %		12:13:47
2	Ag 328.068†	254.2	-4.1	-0.0242 ug/L	-0.0242 ppb	12:15:04
2	Al 396.153Radial†	-82.5	4.3	3.9611 ug/L	3.9611 ppb	12:14:07
2	As 188.979†	-18.3	6.9	3.0791 ug/L	3.0791 ppb	12:15:24
2	B 249.677†	-175.2	280.0	7.0126 ug/L	7.0126 ppb	12:15:24
2	Ba 233.527†	0.6	-1.8	-0.0209 ug/L	-0.0209 ppb	12:15:24
2	Be 313.107†	-9071.7	4.3	0.0024 ug/L	0.0024 ppb	12:15:04
2	Ca 317.933Radial†	22.7	0.7	1.2181 ug/L	1.2181 ppb	12:14:07
2	Cd 226.502†	-200.3	-11.6	-0.1629 ug/L	-0.1629 ppb	12:15:24
2	Co 228.616†	-51.9	6.1	0.1869 ug/L	0.1869 ppb	12:15:24
2	Cr 267.716†	60.8	-15.4	-0.2113 ug/L	-0.2113 ppb	12:15:24
2	Cu 324.752†	7519.2	-94.3	-0.3542 ug/L	-0.3542 ppb	12:15:04
2	Fe 238.204 Radial†	6.6	-0.7	-6.8362 ug/L	-6.8362 ppb	12:14:07
2	K 766.490 Radial†	2207.8	-44.0	-8.7572 ug/L	-8.7572 ppb	12:13:47
2	Mg 279.077 IEC†	3.0	0.1	4.5344 ug/L	4.5344 ppb	12:14:07
2	Mn 257.610†	452.3	-13.4	-0.0224 ug/L	-0.0224 ppb	12:15:24
2	Mo 202.031†	24.6	10.0	0.9186 ug/L	0.9186 ppb	12:15:24
2	Na 589.592 Radial†	-862.6	-18.6	-6.3517 ug/L	-6.3517 ppb	12:13:47
2	Ni 231.604†	103.5	1.1	0.0341 ug/L	0.0341 ppb	12:15:24



2	P 214.914†	198.4	1.0	0.6627 ug/L	0.6627 ppb	12:15:24
2	Pb 220.353†	-63.5	7.8	1.2656 ug/L	1.2656 ppb	12:15:24
2	S 181.975 Axial†	36.2	-6.7	-8.6998 ug/L	-8.6998 ppb	12:15:24
2	Sb 206.836†	41.5	11.0	4.5298 ug/L	4.5298 ppb	12:15:24
2	Se 196.026†	-27.2	-7.1	-4.3642 ug/L	-4.3642 ppb	12:15:24
2	Si 251.611†	586.5	-8.8	-0.3317 ug/L	-0.3317 ppb	12:15:24
2	Sn 189.927†	19.8	11.5	2.7088 ug/L	2.7088 ppb	12:15:24
2	Sr 421.552†	10.3	10.9	0.0790 ug/L	0.0790 ppb	12:13:47
2	Ti 334.940†	-1172.8	140.3	0.2819 ug/L	0.2819 ppb	12:15:04
2	Tl 190.801†	-42.2	-10.6	-4.8462 ug/L	-4.8462 ppb	12:15:24
2	U 409.014†	-2516.9	45.8	1.5350 ug/L	1.5350 ppb	12:15:04
2	V 292.402†	-1631.4	13.3	0.1229 ug/L	0.1229 ppb	12:15:04
2	Zn 213.857†	618.0	-98.6	-1.0866 ug/L	-1.0866 ppb	12:15:24
2	SiO2†	593.3	-9.3	-0.7477 ug/L	-0.7477 ppb	12:16:00
3	Sc 361.383	768099.9	768099.9	100.02 %		12:15:30
3	Sc Radial	4626.1	4626.1	98.3 %		12:14:12
3	Y 371.029	688037.7	688037.7	99.855 %		12:15:30
3	Y RADIAL	4875.4	4875.4	97.79 %		12:14:12
3	Ag 328.068†	290.8	35.0	0.1764 ug/L	0.1764 ppb	12:15:30
3	Al 396.153Radial†	-80.1	5.7	5.3322 ug/L	5.3322 ppb	12:14:32
3	As 188.979†	-19.7	5.3	2.3529 ug/L	2.3529 ppb	12:15:50
3	B 249.677†	-176.9	276.5	6.9230 ug/L	6.9230 ppb	12:15:50
3	Ba 233.527†	2.7	0.3	0.0032 ug/L	0.0032 ppb	12:15:50
3	Be 313.107†	-8947.7	36.8	0.0146 ug/L	0.0146 ppb	12:15:30
3	Ca 317.933Radial†	19.4	-2.4	-4.4249 ug/L	-4.4249 ppb	12:14:32
3	Cd 226.502†	-182.9	3.7	0.0531 ug/L	0.0531 ppb	12:15:50
3	Co 228.616†	-54.3	3.2	0.0948 ug/L	0.0948 ppb	12:15:50
3	Cr 267.716†	69.5	-6.1	-0.0864 ug/L	-0.0864 ppb	12:15:50
3	Cu 324.752†	7437.2	-100.5	-0.3798 ug/L	-0.3798 ppb	12:15:30
3	Fe 238.204 Radial†	8.2	1.0	10.690 ug/L	10.690 ppb	12:14:32
3	K 766.490 Radial†	2304.9	83.4	16.595 ug/L	16.595 ppb	12:14:12
3	Mg 279.077 IEC†	4.0	1.2	45.673 ug/L	45.673 ppb	12:14:32
3	Mn 257.610†	432.8	-28.4	-0.0463 ug/L	-0.0463 ppb	12:15:50
3	Mo 202.031†	7.2	-7.2	-0.6569 ug/L	-0.6569 ppb	12:15:50
3	Na 589.592 Radial†	-834.4	-1.1	-0.3818 ug/L	-0.3818 ppb	12:14:12
3	Ni 231.604†	83.8	-17.6	-0.5619 ug/L	-0.5619 ppb	12:15:50
3	P 214.914†	196.5	1.1	0.6780 ug/L	0.6780 ppb	12:15:50
3	Pb 220.353†	-71.8	-1.1	-0.1835 ug/L	-0.1835 ppb	12:15:50
3	S 181.975 Axial†	45.5	3.0	3.9028 ug/L	3.9028 ppb	12:15:50
3	Sb 206.836†	37.5	7.4	3.0112 ug/L	3.0112 ppb	12:15:50
3	Se 196.026†	-13.9	5.9	3.6451 ug/L	3.6451 ppb	12:15:50
3	Si 251.611†	602.4	13.1	0.4853 ug/L	0.4853 ppb	12:15:50
3	Sn 189.927†	12.9	4.8	1.1347 ug/L	1.1347 ppb	12:15:50
3	Sr 421.552†	3.6	4.2	0.0304 ug/L	0.0304 ppb	12:14:12
3	Ti 334.940†	-1312.3	-11.0	-0.0297 ug/L	-0.0297 ppb	12:15:30
3	Tl 190.801†	-33.9	-2.6	-1.2156 ug/L	-1.2156 ppb	12:15:50
3	U 409.014†	-2311.6	225.7	7.5562 ug/L	7.5562 ppb	12:15:30
3	V 292.402†	-1657.2	-28.9	-0.2252 ug/L	-0.2252 ppb	12:15:30
3	Zn 213.857†	616.0	-94.4	-1.0390 ug/L	-1.0390 ppb	12:15:50
3	SiO2†	588.8	-7.8	-0.5890 ug/L	-0.5890 ppb	12:16:05

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	767609.5	99.957 %	1.1155			1.12%
Sc Radial	4656.0	98.9 %	0.63			0.64%
Y 371.029	687121.7	99.722 %	1.1645			1.17%
Y RADIAL	4938.6	99.06 %	1.259			1.27%
Ag 328.068†	6.4	0.0291 ug/L	0.12921	0.0291 ppb	0.12921	444.61%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.3	4.0410 ug/L	1.25313	4.0410 ppb	1.25313	31.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.8	0.3386 ug/L	4.13372	0.3386 ppb	4.13372	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	289.3	7.2442 ug/L	0.48092	7.2442 ppb	0.48092	6.64%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.7	0.0322 ug/L	0.07204	0.0322 ppb	0.07204	223.94%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-16.8	-0.0066 ug/L	0.02687	-0.0066 ppb	0.02687	404.73%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca 317.933Radial†	-1.8	-3.2387 ug/L	3.99792	-3.2387 ppb	3.99792	123.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-3.3	-0.0464 ug/L	0.10898	-0.0464 ppb	0.10898	234.74%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.2	-0.0059 ug/L	0.25833	-0.0059 ppb	0.25833	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-8.6	-0.1198 ug/L	0.08025	-0.1198 ppb	0.08025	67.01%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-96.3	-0.3629 ug/L	0.01469	-0.3629 ppb	0.01469	4.05%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.0	-0.5095 ug/L	9.72638	-0.5095 ppb	9.72638	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	25.6	5.0957 ug/L	12.83879	5.0957 ppb	12.83879	251.95%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	19.533 ug/L	22.7196	19.533 ppb	22.7196	116.31%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-17.7	-0.0293 ug/L	0.01487	-0.0293 ppb	0.01487	50.84%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.0	0.1837 ug/L	0.79307	0.1837 ppb	0.79307	431.71%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	10.7	3.6404 ug/L	12.49850	3.6404 ppb	12.49850	343.32%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-6.7	-0.2129 ug/L	0.31082	-0.2129 ppb	0.31082	146.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	1.8	1.1104 ug/L	0.76223	1.1104 ppb	0.76223	68.64%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	2.8	0.4519 ug/L	0.74082	0.4519 ppb	0.74082	163.92%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.2	0.2640 ug/L	7.80858	0.2640 ppb	7.80858	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.6	4.3437 ug/L	1.24985	4.3437 ppb	1.24985	28.77%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.6	-1.5626 ug/L	4.51434	-1.5626 ppb	4.51434	288.90%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	1.5	0.0536 ug/L	0.41047	0.0536 ppb	0.41047	765.10%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.6	1.5537 ug/L	1.01284	1.5537 ppb	1.01284	65.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	11.7	0.0851 ug/L	0.05805	0.0851 ppb	0.05805	68.19%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	12.5	0.0213 ug/L	0.23924	0.0213 ppb	0.23924	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-5.8	-2.6406 ug/L	1.93707	-2.6406 ppb	1.93707	73.36%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	130.8	4.3789 ug/L	3.02443	4.3789 ppb	3.02443	69.07%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-2.7	-0.0101 ug/L	0.18805	-0.0101 ppb	0.18805	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-93.1	-1.0249 ug/L	0.06982	-1.0249 ppb	0.06982	6.81%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	8.9	0.6896 ug/L	2.35349	0.6896 ppb	2.35349	341.26%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 8

Sample ID: PQL

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/1/2010 12:18:17

Data Type: Reprocessed on 3/1/2010 13:29:36

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 361.383	781108.3	781108.3	101.71 %		12:21:27
1	Sc Radial	4645.8	4645.8	98.7 %		12:20:10
1	Y 371.029	698977.5	698977.5	101.44 %		12:21:27
1	Y RADIAL	4932.5	4932.5	98.94 %		12:20:10
1	Ag 328.068†	1071.2	797.5	4.1043 ug/L	4.1043 ppb	12:21:27
1	Al 396.153Radial†	127.3	216.1	201.66 ug/L	201.66 ppb	12:20:30
1	As 188.979†	30.9	55.4	24.736 ug/L	24.736 ppb	12:21:47
1	B 249.677†	1608.3	2034.7	50.921 ug/L	50.921 ppb	12:21:27
1	Ba 233.527†	420.4	410.9	4.8632 ug/L	4.8632 ppb	12:21:47
1	Be 313.107†	3192.6	12121.5	4.8295 ug/L	4.8295 ppb	12:21:27
1	Ca 317.933Radial†	125.4	104.9	190.61 ug/L	190.61 ppb	12:20:30
1	Cd 226.502†	166.3	350.1	4.9664 ug/L	4.9664 ppb	12:21:47
1	Co 228.616†	99.6	155.4	4.7063 ug/L	4.7063 ppb	12:21:47
1	Cr 267.716†	425.7	342.9	4.6715 ug/L	4.6715 ppb	12:21:47
1	Cu 324.752†	10229.2	2520.5	9.4125 ug/L	9.4125 ppb	12:21:27
1	Fe 238.204 Radial†	17.0	9.9	102.61 ug/L	102.61 ppb	12:20:30
1	K 766.490 Radial†	3046.7	825.0	164.02 ug/L	164.02 ppb	12:20:10
1	Mg 279.077 IEC†	5.6	2.8	111.94 ug/L	111.94 ppb	12:20:30
1	Mn 257.610†	6914.8	6337.1	10.149 ug/L	10.149 ppb	12:21:27
1	Mo 202.031†	115.7	99.3	9.1255 ug/L	9.1255 ppb	12:21:47
1	Na 589.592 Radial†	68.9	917.6	312.71 ug/L	312.71 ppb	12:20:10
1	Ni 231.604†	246.7	141.2	4.5097 ug/L	4.5097 ppb	12:21:47
1	P 214.914†	471.9	268.6	148.17 ug/L	148.17 ppb	12:21:47
1	Pb 220.353†	-4.7	66.0	10.708 ug/L	10.708 ppb	12:21:47
1	S 181.975 Axial†	115.8	71.3	92.468 ug/L	92.468 ppb	12:21:47
1	Sb 206.836†	53.9	23.0	9.6362 ug/L	9.6362 ppb	12:21:47
1	Se 196.026†	25.8	45.1	27.917 ug/L	27.917 ppb	12:21:47
1	Si 251.611†	3178.0	2535.2	92.399 ug/L	92.399 ppb	12:21:47
1	Sn 189.927†	45.7	36.8	8.7009 ug/L	8.7009 ppb	12:21:47
1	Sr 421.552†	667.8	677.0	4.9214 ug/L	4.9214 ppb	12:20:10
1	Ti 334.940†	1215.3	2495.8	5.0193 ug/L	5.0193 ppb	12:21:27
1	Tl 190.801†	7.3	38.4	17.696 ug/L	17.696 ppb	12:21:47
1	U 409.014†	-881.1	1670.6	55.919 ug/L	55.919 ppb	12:21:27
1	V 292.402†	-994.3	650.5	5.3959 ug/L	5.3959 ppb	12:21:27
1	Zn 213.857†	1537.8	801.6	8.7837 ug/L	8.7837 ppb	12:21:47
1	SiO2†	3293.5	2641.5	205.53 ug/L	205.53 ppb	12:22:43
2	Sc 361.383	764797.2	764797.2	99.591 %		12:21:52
2	Sc Radial	4643.6	4643.6	98.7 %		12:20:35
2	Y 371.029	683958.2	683958.2	99.263 %		12:21:52
2	Y RADIAL	4937.3	4937.3	99.03 %		12:20:35
2	Ag 328.068†	1132.9	881.9	4.5372 ug/L	4.5372 ppb	12:21:52
2	Al 396.153Radial†	121.4	210.1	196.11 ug/L	196.11 ppb	12:20:55
2	As 188.979†	29.7	54.8	24.476 ug/L	24.476 ppb	12:22:12
2	B 249.677†	1589.8	2049.8	51.299 ug/L	51.299 ppb	12:21:52
2	Ba 233.527†	411.2	410.5	4.8581 ug/L	4.8581 ppb	12:22:12
2	Be 313.107†	3087.7	12083.0	4.8140 ug/L	4.8140 ppb	12:21:52
2	Ca 317.933Radial†	125.0	104.6	190.03 ug/L	190.03 ppb	12:20:55
2	Cd 226.502†	157.0	344.3	4.8847 ug/L	4.8847 ppb	12:22:12
2	Co 228.616†	106.6	164.5	4.9828 ug/L	4.9828 ppb	12:22:12
2	Cr 267.716†	444.7	370.9	5.0547 ug/L	5.0547 ppb	12:22:12
2	Cu 324.752†	9987.7	2492.6	9.3082 ug/L	9.3082 ppb	12:21:52
2	Fe 238.204 Radial†	16.6	9.5	99.114 ug/L	99.114 ppb	12:20:55
2	K 766.490 Radial†	3010.2	789.4	156.95 ug/L	156.95 ppb	12:20:35
2	Mg 279.077 IEC†	10.5	7.8	308.17 ug/L	308.17 ppb	12:20:55
2	Mn 257.610†	6721.0	6287.5	10.061 ug/L	10.061 ppb	12:21:52
2	Mo 202.031†	118.8	104.9	9.6350 ug/L	9.6350 ppb	12:22:12
2	Na 589.592 Radial†	29.4	877.6	299.07 ug/L	299.07 ppb	12:20:35
2	Ni 231.604†	257.5	157.2	5.0231 ug/L	5.0231 ppb	12:22:12

2	P 214.914†	467.5	274.1	151.25 ug/L	151.25 ppb	12:22:12
2	Pb 220.353†	-12.7	57.9	9.4032 ug/L	9.4032 ppb	12:22:12
2	S 181.975 Axial†	111.8	69.8	90.410 ug/L	90.410 ppb	12:22:12
2	Sb 206.836†	63.6	33.8	14.073 ug/L	14.073 ppb	12:22:12
2	Se 196.026†	36.0	55.9	34.528 ug/L	34.528 ppb	12:22:12
2	Si 251.611†	3157.6	2581.4	94.078 ug/L	94.078 ppb	12:22:12
2	Sn 189.927†	50.0	42.2	9.9563 ug/L	9.9563 ppb	12:22:12
2	Sr 421.552†	678.1	687.8	5.0000 ug/L	5.0000 ppb	12:20:35
2	Ti 334.940†	1149.4	2455.2	4.9215 ug/L	4.9215 ppb	12:21:52
2	Tl 190.801†	9.1	40.4	18.597 ug/L	18.597 ppb	12:22:12
2	U 409.014†	-891.1	1642.0	54.962 ug/L	54.962 ppb	12:21:52
2	V 292.402†	-1003.4	620.5	5.1665 ug/L	5.1665 ppb	12:21:52
2	Zn 213.857†	1526.9	822.8	9.0153 ug/L	9.0153 ppb	12:22:12
2	SiO2†	3255.5	2672.5	207.93 ug/L	207.93 ppb	12:22:48
3	Sc 361.383	769305.9	769305.9	100.18 %		12:22:17
3	Sc Radial	4649.0	4649.0	98.8 %		12:21:00
3	Y 371.029	689181.3	689181.3	100.02 %		12:22:17
3	Y RADIAL	4939.7	4939.7	99.08 %		12:21:00
3	Ag 328.068†	1152.2	894.5	4.6045 ug/L	4.6045 ppb	12:22:17
3	Al 396.153Radial†	132.6	221.4	206.59 ug/L	206.59 ppb	12:21:20
3	As 188.979†	26.1	51.1	22.805 ug/L	22.805 ppb	12:22:37
3	B 249.677†	1559.9	2010.5	50.316 ug/L	50.316 ppb	12:22:17
3	Ba 233.527†	452.4	449.2	5.3150 ug/L	5.3150 ppb	12:22:37
3	Be 313.107†	3138.9	12116.0	4.8274 ug/L	4.8274 ppb	12:22:17
3	Ca 317.933Radial†	128.2	107.6	195.48 ug/L	195.48 ppb	12:21:20
3	Cd 226.502†	163.1	349.5	4.9567 ug/L	4.9567 ppb	12:22:37
3	Co 228.616†	96.4	153.6	4.6546 ug/L	4.6546 ppb	12:22:37
3	Cr 267.716†	438.7	362.3	4.9364 ug/L	4.9364 ppb	12:22:37
3	Cu 324.752†	9981.6	2427.8	9.0656 ug/L	9.0656 ppb	12:22:17
3	Fe 238.204 Radial†	17.6	10.5	109.01 ug/L	109.01 ppb	12:21:20
3	K 766.490 Radial†	3044.2	820.3	163.09 ug/L	163.09 ppb	12:21:00
3	Mg 279.077 IEC†	7.0	4.2	167.98 ug/L	167.98 ppb	12:21:20
3	Mn 257.610†	6813.4	6340.1	10.152 ug/L	10.152 ppb	12:22:17
3	Mo 202.031†	120.8	106.2	9.7546 ug/L	9.7546 ppb	12:22:37
3	Na 589.592 Radial†	40.2	888.5	302.79 ug/L	302.79 ppb	12:21:00
3	Ni 231.604†	245.4	143.7	4.5895 ug/L	4.5895 ppb	12:22:37
3	P 214.914†	465.0	268.8	148.35 ug/L	148.35 ppb	12:22:37
3	Pb 220.353†	4.5	75.2	12.195 ug/L	12.195 ppb	12:22:37
3	S 181.975 Axial†	121.0	78.3	101.44 ug/L	101.44 ppb	12:22:37
3	Sb 206.836†	55.7	25.6	10.712 ug/L	10.712 ppb	12:22:37
3	Se 196.026†	30.5	50.2	31.056 ug/L	31.056 ppb	12:22:37
3	Si 251.611†	3207.2	2612.3	95.203 ug/L	95.203 ppb	12:22:37
3	Sn 189.927†	46.7	38.5	9.1059 ug/L	9.1059 ppb	12:22:37
3	Sr 421.552†	671.2	680.0	4.9431 ug/L	4.9431 ppb	12:21:00
3	Ti 334.940†	1206.0	2504.9	5.0337 ug/L	5.0337 ppb	12:22:17
3	Tl 190.801†	16.5	47.7	21.979 ug/L	21.979 ppb	12:22:37
3	U 409.014†	-882.4	1656.0	55.428 ug/L	55.428 ppb	12:22:17
3	V 292.402†	-1016.2	613.6	5.1105 ug/L	5.1105 ppb	12:22:17
3	Zn 213.857†	1533.5	820.5	8.9910 ug/L	8.9910 ppb	12:22:37
3	SiO2†	3271.5	2669.3	207.67 ug/L	207.67 ppb	12:22:53

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	771737.1	100.49 %	1.097			1.09%
Sc Radial	4646.1	98.7 %	0.06			0.06%
Y 371.029	690705.6	100.24 %	1.107			1.10%
Y RADIAL	4936.5	99.02 %	0.074			0.07%
Ag 328.068†	858.0	4.4153 ug/L	0.27144	4.4153 ppb	0.27144	6.15%
QC value within limits for Ag 328.068 Recovery = 88.31%						
Al 396.153Radial†	215.9	201.45 ug/L	5.244	201.45 ppb	5.244	2.60%
QC value within limits for Al 396.153Radial Recovery = 100.73%						
As 188.979†	53.8	24.005 ug/L	1.0479	24.005 ppb	1.0479	4.37%
QC value within limits for As 188.979 Recovery = 80.02%						
B 249.677†	2031.7	50.846 ug/L	0.4959	50.846 ppb	0.4959	0.98%
QC value within limits for B 249.677 Recovery = 101.69%						
Ba 233.527†	423.6	5.0121 ug/L	0.26238	5.0121 ppb	0.26238	5.23%
QC value within limits for Ba 233.527 Recovery = 100.24%						
Be 313.107†	12106.8	4.8236 ug/L	0.00839	4.8236 ppb	0.00839	0.17%
QC value within limits for Be 313.107 Recovery = 96.47%						

Ca 317.933Radial†	105.7	192.04 ug/L	2.992	192.04 ppb	2.992	1.56%
QC value within limits for Ca 317.933Radial Recovery = 96.02%						
Cd 226.502†	348.0	4.9360 ug/L	0.04465	4.9360 ppb	0.04465	0.90%
QC value within limits for Cd 226.502 Recovery = 98.72%						
Co 228.616†	157.9	4.7812 ug/L	0.17647	4.7812 ppb	0.17647	3.69%
QC value within limits for Co 228.616 Recovery = 95.62%						
Cr 267.716†	358.7	4.8875 ug/L	0.19625	4.8875 ppb	0.19625	4.02%
QC value within limits for Cr 267.716 Recovery = 97.75%						
Cu 324.752†	2480.3	9.2621 ug/L	0.17795	9.2621 ppb	0.17795	1.92%
QC value within limits for Cu 324.752 Recovery = 92.62%						
Fe 238.204 Radial†	10.0	103.58 ug/L	5.018	103.58 ppb	5.018	4.85%
QC value within limits for Fe 238.204 Radial Recovery = 103.58%						
K 766.490 Radial†	811.6	161.35 ug/L	3.839	161.35 ppb	3.839	2.38%
QC value within limits for K 766.490 Radial Recovery = 107.57%						
Mg 279.077 IEC†	4.9	196.03 ug/L	101.077	196.03 ppb	101.077	51.56%
QC value less than the lower limit for Mg 279.077 IEC Recovery = 65.34%						
Mn 257.610†	6321.6	10.121 ug/L	0.0516	10.121 ppb	0.0516	0.51%
QC value within limits for Mn 257.610 Recovery = 101.21%						
Mo 202.031†	103.5	9.5050 ug/L	0.33404	9.5050 ppb	0.33404	3.51%
QC value within limits for Mo 202.031 Recovery = 95.05%						
Na 589.592 Radial†	894.5	304.86 ug/L	7.050	304.86 ppb	7.050	2.31%
QC value within limits for Na 589.592 Radial Recovery = 101.62%						
Ni 231.604†	147.3	4.7074 ug/L	0.27627	4.7074 ppb	0.27627	5.87%
QC value within limits for Ni 231.604 Recovery = 94.15%						
P 214.914†	270.5	149.26 ug/L	1.726	149.26 ppb	1.726	1.16%
QC value within limits for P 214.914 Recovery = 99.50%						
Pb 220.353†	66.4	10.769 ug/L	1.3968	10.769 ppb	1.3968	12.97%
QC value within limits for Pb 220.353 Recovery = 107.69%						
S 181.975 Axial†	73.1	94.774 ug/L	5.8678	94.774 ppb	5.8678	6.19%
QC value within limits for S 181.975 Axial Recovery = 94.77%						
Sb 206.836†	27.5	11.474 ug/L	2.3145	11.474 ppb	2.3145	20.17%
QC value within limits for Sb 206.836 Recovery = 114.74%						
Se 196.026†	50.4	31.167 ug/L	3.3067	31.167 ppb	3.3067	10.61%
QC value within limits for Se 196.026 Recovery = 103.89%						
Si 251.611†	2576.3	93.893 ug/L	1.4115	93.893 ppb	1.4115	1.50%
QC value within limits for Si 251.611 Recovery = 93.89%						
Sn 189.927†	39.2	9.2544 ug/L	0.64074	9.2544 ppb	0.64074	6.92%
QC value within limits for Sn 189.927 Recovery = 92.54%						
Sr 421.552†	681.6	4.9548 ug/L	0.04062	4.9548 ppb	0.04062	0.82%
QC value within limits for Sr 421.552 Recovery = 99.10%						
Ti 334.940†	2485.3	4.9915 ug/L	0.06104	4.9915 ppb	0.06104	1.22%
QC value within limits for Ti 334.940 Recovery = 99.83%						
Tl 190.801†	42.2	19.424 ug/L	2.2580	19.424 ppb	2.2580	11.62%
QC value within limits for Tl 190.801 Recovery = 97.12%						
U 409.014†	1656.2	55.436 ug/L	0.4786	55.436 ppb	0.4786	0.86%
QC value within limits for U 409.014 Recovery = 110.87%						
V 292.402†	628.2	5.2243 ug/L	0.15122	5.2243 ppb	0.15122	2.89%
QC value within limits for V 292.402 Recovery = 104.49%						
Zn 213.857†	815.0	8.9300 ug/L	0.12725	8.9300 ppb	0.12725	1.42%
QC value within limits for Zn 213.857 Recovery = 89.30%						
SiO2†	2661.1	207.04 ug/L	1.318	207.04 ppb	1.318	0.64%
QC value within limits for SiO2 Recovery = 97.20%						
QC Failed. Continue with analysis.						

Sequence No.: 9  
 Sample ID: IC5A  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 13  
 Date Collected: 3/1/2010 12:25:05  
 Data Type: Reprocessed on 3/1/2010 13:29:37  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: IC5A

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	692739.2	692739.2	90.208 %		12:27:30
1	Sc Radial	4213.4	4213.4	89.5 %		12:27:03
1	Y 371.029	606235.6	606235.6	87.983 %		12:27:30
1	Y RADIAL	4424.5	4424.5	88.75 %		12:27:03
1	Ag 328.068†	-9846.6	-11171.1	-7.2296 ug/L	-7.2296 ppb	12:27:30
1	Al 396.153Radial†	498573.5	557024.9	521050 ug/L	521050 ppb	12:26:58
1	As 188.979†	-77.3	-60.6	16.042 ug/L	16.042 ppb	12:27:51
1	B 249.677†	331.1	820.5	-9.4216 ug/L	-9.4216 ppb	12:27:30
1	Ba 233.527†	-502.3	-559.2	-0.9524 ug/L	-0.9524 ppb	12:27:51
1	Be 313.107†	-9213.7	-1231.3	-0.5420 ug/L	-0.5420 ppb	12:27:30
1	Ca 317.933Radial†	236617.8	264294.7	480210 ug/L	480210 ppb	12:26:58
1	Cd 226.502†	1103.5	1409.9	0.9377 ug/L	0.9377 ppb	12:27:51
1	Co 228.616†	-33.9	19.9	-2.0592 ug/L	-2.0592 ppb	12:27:51
1	Cr 267.716†	-4.7	-80.8	2.4331 ug/L	2.4331 ppb	12:27:51
1	Cu 324.752†	4937.9	-2062.2	2.0156 ug/L	2.0156 ppb	12:27:30
1	Fe 238.204 Radial†	15929.1	17786.5	184530 ug/L	184530 ppb	12:27:03
1	K 766.490 Radial†	2201.2	197.2	-121.37 ug/L	-121.37 ppb	12:27:03
1	Mg 279.077 IEC†	10950.5	12229.5	485380 ug/L	485380 ppb	12:27:03
1	Mn 257.610†	-668.0	-1201.6	-3.5511 ug/L	-3.5511 ppb	12:27:30
1	Mo 202.031†	-156.9	-188.3	2.7540 ug/L	2.7540 ppb	12:27:51
1	Na 589.592 Radial†	-650.8	120.8	41.167 ug/L	41.167 ppb	12:27:03
1	Ni 231.604†	157.3	73.0	2.3338 ug/L	2.3338 ppb	12:27:51
1	P 214.914†	181.1	5.4	-14.933 ug/L	-14.933 ppb	12:27:51
1	Pb 220.353†	-673.5	-675.9	9.7170 ug/L	9.7170 ppb	12:27:51
1	S 181.975 Axial†	57.3	21.0	-70.396 ug/L	-70.396 ppb	12:27:51
1	Sb 206.836†	58.4	34.8	-3.4957 ug/L	-3.4957 ppb	12:27:51
1	Se 196.026†	-734.2	-794.1	-23.568 ug/L	-23.568 ppb	12:27:51
1	Si 251.611†	535.4	4.3	0.3708 ug/L	0.3708 ppb	12:27:51
1	Sn 189.927†	-302.1	-343.0	-6.0541 ug/L	-6.0541 ppb	12:27:51
1	Sr 421.552†	454.9	508.6	0.1125 ug/L	0.1125 ppb	12:27:03
1	Ti 334.940†	-11551.5	-11504.4	1.5431 ug/L	1.5431 ppb	12:27:30
1	Tl 190.801†	-55.8	-30.6	-14.280 ug/L	-14.280 ppb	12:27:51
1	U 409.014†	-832.4	1614.1	33.014 ug/L	33.014 ppb	12:27:30
1	V 292.402†	169.3	1815.7	-3.1552 ug/L	-3.1552 ppb	12:27:51
1	Zn 213.857†	2801.3	2395.2	-1.2049 ug/L	-1.2049 ppb	12:27:51
1	SiO2†	533.5	-5.1	0.0768 ug/L	0.0768 ppb	12:28:47
2	Sc 361.383	694839.9	694839.9	90.481 %		12:27:56
2	Sc Radial	4240.1	4240.1	90.1 %		12:27:13
2	Y 371.029	608131.1	608131.1	88.258 %		12:27:56
2	Y RADIAL	4457.5	4457.5	89.41 %		12:27:13
2	Ag 328.068†	-9940.6	-11242.0	-7.4057 ug/L	-7.4057 ppb	12:27:56
2	Al 396.153Radial†	491658.2	545840.9	510590 ug/L	510590 ppb	12:27:08
2	As 188.979†	-94.3	-79.2	7.8009 ug/L	7.8009 ppb	12:28:16
2	B 249.677†	235.1	713.3	-12.137 ug/L	-12.137 ppb	12:27:56
2	Ba 233.527†	-492.9	-547.2	-0.8042 ug/L	-0.8042 ppb	12:28:16
2	Be 313.107†	-9312.3	-1309.4	-0.5736 ug/L	-0.5736 ppb	12:27:56
2	Ca 317.933Radial†	233334.1	258984.9	470560 ug/L	470560 ppb	12:27:08
2	Cd 226.502†	1124.9	1429.9	1.2033 ug/L	1.2033 ppb	12:28:16
2	Co 228.616†	-13.5	42.6	-1.3759 ug/L	-1.3759 ppb	12:28:16
2	Cr 267.716†	-93.3	-178.7	1.1009 ug/L	1.1009 ppb	12:28:16
2	Cu 324.752†	4943.6	-2072.5	1.9880 ug/L	1.9880 ppb	12:27:56
2	Fe 238.204 Radial†	16045.2	17803.3	184710 ug/L	184710 ppb	12:27:13
2	K 766.490 Radial†	2285.4	275.2	-102.62 ug/L	-102.62 ppb	12:27:13
2	Mg 279.077 IEC†	11078.4	12294.5	487950 ug/L	487950 ppb	12:27:13
2	Mn 257.610†	-776.9	-1319.8	-3.8285 ug/L	-3.8285 ppb	12:27:56
2	Mo 202.031†	-163.6	-195.2	2.0250 ug/L	2.0250 ppb	12:28:16
2	Na 589.592 Radial†	-617.5	162.4	55.338 ug/L	55.338 ppb	12:27:13
2	Ni 231.604†	180.5	98.1	3.1356 ug/L	3.1356 ppb	12:28:16

2	P 214.914†	183.8	7.7	-16.351 ug/L	-16.351 ppb	12:28:16
2	Pb 220.353†	-660.8	-659.6	9.6532 ug/L	9.6532 ppb	12:28:16
2	S 181.975 Axial†	58.5	22.2	-66.935 ug/L	-66.935 ppb	12:28:16
2	Sb 206.836†	53.6	29.2	-5.4814 ug/L	-5.4814 ppb	12:28:16
2	Se 196.026†	-750.4	-809.5	-33.622 ug/L	-33.622 ppb	12:28:16
2	Si 251.611†	542.8	10.7	0.6098 ug/L	0.6098 ppb	12:28:16
2	Sn 189.927†	-301.7	-341.6	-7.4405 ug/L	-7.4405 ppb	12:28:16
2	Sr 421.552†	458.3	509.3	0.1895 ug/L	0.1895 ppb	12:27:13
2	Ti 334.940†	-11693.2	-11622.3	-0.1974 ug/L	-0.1974 ppb	12:27:56
2	Tl 190.801†	-61.5	-36.8	-17.137 ug/L	-17.137 ppb	12:28:16
2	U 409.014†	-903.2	1538.5	30.467 ug/L	30.467 ppb	12:27:56
2	V 292.402†	221.7	1873.0	-2.6869 ug/L	-2.6869 ppb	12:28:16
2	Zn 213.857†	2766.3	2347.1	-1.7663 ug/L	-1.7663 ppb	12:28:16
2	SiO2†	512.5	-30.1	-1.8545 ug/L	-1.8545 ppb	12:28:52
3	Sc 361.383	698608.7	698608.7	90.972 %		12:28:21
3	Sc Radial	4199.1	4199.1	89.2 %		12:27:24
3	Y 371.029	610888.9	610888.9	88.659 %		12:28:21
3	Y RADIAL	4439.7	4439.7	89.05 %		12:27:24
3	Ag 328.068†	-9991.8	-11239.1	-7.2188 ug/L	-7.2188 ppb	12:28:21
3	Al 396.153Radial†	485919.6	544744.6	509560 ug/L	509560 ppb	12:27:19
3	As 188.979†	-79.2	-62.1	15.580 ug/L	15.580 ppb	12:28:41
3	B 249.677†	297.5	780.5	-10.550 ug/L	-10.550 ppb	12:28:21
3	Ba 233.527†	-511.7	-564.8	-0.9955 ug/L	-0.9955 ppb	12:28:41
3	Be 313.107†	-9408.4	-1359.4	-0.5935 ug/L	-0.5935 ppb	12:28:21
3	Ca 317.933Radial†	231332.5	259273.8	471090 ug/L	471090 ppb	12:27:19
3	Cd 226.502†	1108.3	1404.9	0.7890 ug/L	0.7890 ppb	12:28:41
3	Co 228.616†	-15.4	40.5	-1.4499 ug/L	-1.4499 ppb	12:28:41
3	Cr 267.716†	-30.0	-108.6	2.0689 ug/L	2.0689 ppb	12:28:41
3	Cu 324.752†	5085.6	-1945.8	2.4932 ug/L	2.4932 ppb	12:28:21
3	Fe 238.204 Radial†	15940.3	17859.8	185290 ug/L	185290 ppb	12:27:24
3	K 766.490 Radial†	2168.8	169.3	-123.86 ug/L	-123.86 ppb	12:27:24
3	Mg 279.077 IEC†	10977.9	12302.0	488250 ug/L	488250 ppb	12:27:24
3	Mn 257.610†	-750.9	-1286.6	-3.7297 ug/L	-3.7297 ppb	12:28:21
3	Mo 202.031†	-174.5	-206.2	1.0638 ug/L	1.0638 ppb	12:28:41
3	Na 589.592 Radial†	-660.2	107.8	36.735 ug/L	36.735 ppb	12:27:24
3	Ni 231.604†	202.2	121.0	3.8664 ug/L	3.8664 ppb	12:28:41
3	P 214.914†	168.3	-10.3	-27.273 ug/L	-27.273 ppb	12:28:41
3	Pb 220.353†	-667.4	-663.0	8.8179 ug/L	8.8179 ppb	12:28:41
3	S 181.975 Axial†	63.5	27.3	-60.061 ug/L	-60.061 ppb	12:28:41
3	Sb 206.836†	55.5	30.9	-4.7868 ug/L	-4.7868 ppb	12:28:41
3	Se 196.026†	-744.5	-798.5	-25.701 ug/L	-25.701 ppb	12:28:41
3	Si 251.611†	540.2	4.6	0.4000 ug/L	0.4000 ppb	12:28:41
3	Sn 189.927†	-306.9	-345.4	-8.2867 ug/L	-8.2867 ppb	12:28:41
3	Sr 421.552†	460.2	516.3	0.2370 ug/L	0.2370 ppb	12:27:24
3	Ti 334.940†	-11744.9	-11609.4	-0.1259 ug/L	-0.1259 ppb	12:28:21
3	Tl 190.801†	-57.7	-32.2	-15.024 ug/L	-15.024 ppb	12:28:41
3	U 409.014†	-908.7	1537.9	30.376 ug/L	30.376 ppb	12:28:21
3	V 292.402†	179.1	1824.8	-3.1653 ug/L	-3.1653 ppb	12:28:41
3	Zn 213.857†	2821.7	2391.4	-1.3707 ug/L	-1.3707 ppb	12:28:41
3	SiO2†	546.0	3.8	0.8110 ug/L	0.8110 ppb	12:28:57

## Mean Data: ICSSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	695395.9	90.554 %	0.3873			0.43%
Sc Radial	4217.5	89.6 %	0.44			0.49%
Y 371.029	608418.5	88.300 %	0.3396			0.38%
Y RADIAL	4440.6	89.07 %	0.331			0.37%
Ag 328.068†	-11217.4	-7.2847 ug/L	0.10491	-7.2847 ppb	0.10491	1.44%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	549203.4	513730 ug/L	6356.8	513730 ppb	6356.8	1.24%
QC value within limits for Al 396.153Radial Recovery = 102.75%						
As 188.979†	-67.3	13.141 ug/L	4.6305	13.141 ppb	4.6305	35.24%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	771.4	-10.703 ug/L	1.3639	-10.703 ppb	1.3639	12.74%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-557.1	-0.9174 ug/L	0.10036	-0.9174 ppb	0.10036	10.94%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1300.0	-0.5697 ug/L	0.02593	-0.5697 ppb	0.02593	4.55%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca	317.933Radial†	260851.1	473950 ug/L	5424.8	473950 ppb	5424.8	1.14%
	QC value within limits for Ca 317.933Radial Recovery = 94.79%						
Cd	226.502†	1414.9	0.9767 ug/L	0.20984	0.9767 ppb	0.20984	21.49%
	QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	34.3	-1.6283 ug/L	0.37495	-1.6283 ppb	0.37495	23.03%
	QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-122.7	1.8676 ug/L	0.68852	1.8676 ppb	0.68852	36.87%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-2026.8	2.1656 ug/L	0.28403	2.1656 ppb	0.28403	13.12%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	17816.5	184850 ug/L	398.7	184850 ppb	398.7	0.22%
	QC value within limits for Fe 238.204 Radial Recovery = 92.42%						
K	766.490 Radial†	213.9	-115.95 ug/L	11.610	-115.95 ppb	11.610	10.01%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	12275.3	487200 ug/L	1582.3	487200 ppb	1582.3	0.32%
	QC value within limits for Mg 279.077 IEC Recovery = 97.44%						
Mn	257.610†	-1269.3	-3.7031 ug/L	0.14056	-3.7031 ppb	0.14056	3.80%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	-196.6	1.9476 ug/L	0.84777	1.9476 ppb	0.84777	43.53%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	130.3	44.413 ug/L	9.7171	44.413 ppb	9.7171	21.88%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	97.4	3.1119 ug/L	0.76662	3.1119 ppb	0.76662	24.63%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	0.9	-19.519 ug/L	6.7523	-19.519 ppb	6.7523	34.59%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	-666.2	9.3960 ug/L	0.50171	9.3960 ppb	0.50171	5.34%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	23.5	-65.798 ug/L	5.2607	-65.798 ppb	5.2607	8.00%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	31.6	-4.5880 ug/L	1.00768	-4.5880 ppb	1.00768	21.96%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-800.7	-27.630 ug/L	5.2975	-27.630 ppb	5.2975	19.17%
	QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	6.5	0.4602 ug/L	0.13038	0.4602 ppb	0.13038	28.33%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-343.3	-7.2604 ug/L	1.12715	-7.2604 ppb	1.12715	15.52%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	511.4	0.1797 ug/L	0.06279	0.1797 ppb	0.06279	34.95%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	-11578.7	0.4066 ug/L	0.98488	0.4066 ppb	0.98488	242.20%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-33.2	-15.480 ug/L	1.4822	-15.480 ppb	1.4822	9.57%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	1563.5	31.286 ug/L	1.4971	31.286 ppb	1.4971	4.79%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	1837.8	-3.0025 ug/L	0.27335	-3.0025 ppb	0.27335	9.10%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	2377.9	-1.4473 ug/L	0.28840	-1.4473 ppb	0.28840	19.93%
	QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		-10.4	-0.3222 ug/L	1.37684	-0.3222 ppb	1.37684	427.27%
	QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.							



Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 3/1/2010 12:31:09

Data Type: Reprocessed on 3/1/2010 13:29:38

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 361.383	704340.1	704340.1	91.718 %		12:34:20
1	Sc Radial	4225.3	4225.3	89.8 %		12:33:21
1	Y 371.029	616031.0	616031.0	89.405 %		12:34:20
1	Y RADIAL	4471.3	4471.3	89.69 %		12:33:21
1	Ag 328.068†	38036.6	41215.5	263.83 ug/L	263.83 ppb	12:34:20
1	Al 396.153Radial†	493154.2	549415.5	513910 ug/L	513910 ppb	12:33:01
1	As 188.979†	946.3	1056.8	517.37 ug/L	517.37 ppb	12:34:40
1	B 249.677†	18925.1	21087.4	496.75 ug/L	496.75 ppb	12:34:20
1	Ba 233.527†	38107.9	41546.5	496.98 ug/L	496.98 ppb	12:34:20
1	Be 313.107†	535444.0	592774.9	236.72 ug/L	236.72 ppb	12:34:20
1	Ca 317.933Radial†	234604.4	261305.6	474780 ug/L	474780 ppb	12:33:01
1	Cd 226.502†	30187.9	33100.4	450.56 ug/L	450.56 ppb	12:34:40
1	Co 228.616†	14038.6	15363.7	461.74 ug/L	461.74 ppb	12:34:40
1	Cr 267.716†	31729.1	34518.4	475.63 ug/L	475.63 ppb	12:34:20
1	Cu 324.752†	145564.9	151172.7	575.53 ug/L	575.53 ppb	12:34:20
1	Fe 238.204 Radial†	15986.5	17800.2	184690 ug/L	184690 ppb	12:33:21
1	K 766.490 Radial†	26360.5	27101.5	5233.4 ug/L	5233.4 ppb	12:33:01
1	Mg 279.077 IEC†	11111.9	12374.8	491150 ug/L	491150 ppb	12:33:21
1	Mn 257.610†	283824.2	308991.1	492.73 ug/L	492.73 ppb	12:34:20
1	Mo 202.031†	4589.3	4989.3	477.86 ug/L	477.86 ppb	12:34:40
1	Na 589.592 Radial†	12952.5	15275.7	5205.9 ug/L	5205.9 ppb	12:33:01
1	Ni 231.604†	13064.0	14142.3	451.81 ug/L	451.81 ppb	12:34:40
1	P 214.914†	4284.3	4475.8	2370.1 ug/L	2370.1 ppb	12:34:40
1	Pb 220.353†	2037.4	2292.0	487.34 ug/L	487.34 ppb	12:34:40
1	S 181.975 Axial†	1853.4	1978.2	2468.5 ug/L	2468.5 ppb	12:34:40
1	Sb 206.836†	1276.2	1361.4	552.34 ug/L	552.34 ppb	12:34:40
1	Se 196.026†	3049.4	3344.5	2512.2 ug/L	2512.2 ppb	12:34:40
1	Si 251.611†	133993.5	145503.3	5303.9 ug/L	5303.9 ppb	12:34:20
1	Sn 189.927†	1602.0	1738.6	483.17 ug/L	483.17 ppb	12:34:40
1	Sr 421.552†	61221.6	68195.7	492.36 ug/L	492.36 ppb	12:33:01
1	Ti 334.940†	219311.1	240414.9	507.58 ug/L	507.58 ppb	12:34:20
1	Tl 190.801†	935.6	1051.3	486.15 ug/L	486.15 ppb	12:34:40
1	U 409.014†	12541.6	16210.8	520.72 ug/L	520.72 ppb	12:34:20
1	V 292.402†	56887.3	63651.9	496.30 ug/L	496.30 ppb	12:34:20
1	Zn 213.857†	43887.7	47140.3	488.61 ug/L	488.61 ppb	12:34:20
1	SiO2†	131981.8	143302.7	11151 ug/L	11151 ppb	12:35:37
2	Sc 361.383	696859.8	696859.8	90.744 %		12:34:46
2	Sc Radial	4208.5	4208.5	89.4 %		12:33:47
2	Y 371.029	609654.8	609654.8	88.480 %		12:34:46
2	Y RADIAL	4449.6	4449.6	89.25 %		12:33:47
2	Ag 328.068†	37638.7	41222.2	263.88 ug/L	263.88 ppb	12:34:46
2	Al 396.153Radial†	492018.9	550339.1	514770 ug/L	514770 ppb	12:33:27
2	As 188.979†	954.2	1076.6	526.18 ug/L	526.18 ppb	12:35:06
2	B 249.677†	18678.6	21037.3	495.45 ug/L	495.45 ppb	12:34:46
2	Ba 233.527†	37631.3	41467.2	496.04 ug/L	496.04 ppb	12:34:46
2	Be 313.107†	528866.4	591793.0	236.33 ug/L	236.33 ppb	12:34:46
2	Ca 317.933Radial†	233297.6	260887.5	474020 ug/L	474020 ppb	12:33:27
2	Cd 226.502†	30372.6	33657.3	458.45 ug/L	458.45 ppb	12:35:06
2	Co 228.616†	14147.0	15647.5	470.33 ug/L	470.33 ppb	12:35:06
2	Cr 267.716†	31537.7	34678.9	477.82 ug/L	477.82 ppb	12:34:46
2	Cu 324.752†	143499.5	150600.2	573.39 ug/L	573.39 ppb	12:34:46
2	Fe 238.204 Radial†	15930.7	17808.9	184780 ug/L	184780 ppb	12:33:47
2	K 766.490 Radial†	26323.0	27176.8	5248.6 ug/L	5248.6 ppb	12:33:27
2	Mg 279.077 IEC†	11061.7	12368.0	490880 ug/L	490880 ppb	12:33:47
2	Mn 257.610†	280620.7	308782.6	492.42 ug/L	492.42 ppb	12:34:46
2	Mo 202.031†	4608.4	5064.1	484.73 ug/L	484.73 ppb	12:35:06
2	Na 589.592 Radial†	12874.8	15246.4	5196.0 ug/L	5196.0 ppb	12:33:27
2	Ni 231.604†	13173.5	14415.8	460.55 ug/L	460.55 ppb	12:35:06

2	P 214.914†	4313.6	4558.2	2416.8 ug/L	2416.8 ppb	12:35:06
2	Pb 220.353†	2040.3	2319.1	491.91 ug/L	491.91 ppb	12:35:06
2	S 181.975 Axial†	1870.3	2018.6	2520.7 ug/L	2520.7 ppb	12:35:06
2	Sb 206.836†	1294.0	1395.9	566.58 ug/L	566.58 ppb	12:35:06
2	Se 196.026†	3067.2	3399.9	2546.4 ug/L	2546.4 ppb	12:35:06
2	Si 251.611†	132325.6	145233.5	5293.9 ug/L	5293.9 ppb	12:34:46
2	Sn 189.927†	1615.0	1771.7	490.82 ug/L	490.82 ppb	12:35:06
2	Sr 421.552†	61000.5	68220.7	492.54 ug/L	492.54 ppb	12:33:27
2	Ti 334.940†	217190.8	240645.1	507.96 ug/L	507.96 ppb	12:34:46
2	Tl 190.801†	928.9	1054.9	487.78 ug/L	487.78 ppb	12:35:06
2	U 409.014†	12713.3	16546.9	531.96 ug/L	531.96 ppb	12:34:46
2	V 292.402†	56175.0	63532.8	495.45 ug/L	495.45 ppb	12:34:46
2	Zn 213.857†	43390.4	47105.9	488.16 ug/L	488.16 ppb	12:34:46
2	SiO2†	132995.2	145964.2	11358 ug/L	11358 ppb	12:35:42
3	Sc 361.383	711334.7	711334.7	92.629 %		12:35:12
3	Sc Radial	4245.6	4245.6	90.2 %		12:34:12
3	Y 371.029	620828.2	620828.2	90.101 %		12:35:12
3	Y RADIAL	4479.2	4479.2	89.85 %		12:34:12
3	Ag 328.068†	38184.6	40967.4	262.55 ug/L	262.55 ppb	12:35:12
3	Al 396.153Radial†	490418.7	543766.7	508630 ug/L	508630 ppb	12:33:52
3	As 188.979†	942.0	1042.0	510.73 ug/L	510.73 ppb	12:35:32
3	B 249.677†	19191.0	21171.6	498.90 ug/L	498.90 ppb	12:35:12
3	Ba 233.527†	38418.5	41473.3	496.10 ug/L	496.10 ppb	12:35:12
3	Be 313.107†	537296.8	589034.7	235.23 ug/L	235.23 ppb	12:35:12
3	Ca 317.933Radial†	233252.0	258561.7	469790 ug/L	469790 ppb	12:33:52
3	Cd 226.502†	30167.6	32754.8	445.67 ug/L	445.67 ppb	12:35:32
3	Co 228.616†	13958.9	15127.2	454.59 ug/L	454.59 ppb	12:35:32
3	Cr 267.716†	32066.5	34542.6	475.95 ug/L	475.95 ppb	12:35:12
3	Cu 324.752†	146988.8	151149.2	575.43 ug/L	575.43 ppb	12:35:12
3	Fe 238.204 Radial†	16048.8	17784.4	184530 ug/L	184530 ppb	12:34:12
3	K 766.490 Radial†	26138.4	26715.5	5158.2 ug/L	5158.2 ppb	12:33:52
3	Mg 279.077 IEC†	11161.3	12370.6	490980 ug/L	490980 ppb	12:34:12
3	Mn 257.610†	285976.0	308271.4	491.57 ug/L	491.57 ppb	12:35:12
3	Mo 202.031†	4590.3	4941.1	473.37 ug/L	473.37 ppb	12:35:32
3	Na 589.592 Radial†	12800.0	15037.9	5124.9 ug/L	5124.9 ppb	12:33:52
3	Ni 231.604†	13042.8	13979.4	446.60 ug/L	446.60 ppb	12:35:32
3	P 214.914†	4266.0	4410.1	2332.2 ug/L	2332.2 ppb	12:35:32
3	Pb 220.353†	2003.0	2233.1	476.47 ug/L	476.47 ppb	12:35:32
3	S 181.975 Axial†	1846.6	1951.0	2434.3 ug/L	2434.3 ppb	12:35:32
3	Sb 206.836†	1279.2	1351.0	548.09 ug/L	548.09 ppb	12:35:32
3	Se 196.026†	3008.7	3267.9	2464.4 ug/L	2464.4 ppb	12:35:32
3	Si 251.611†	134990.8	145143.5	5290.8 ug/L	5290.8 ppb	12:35:12
3	Sn 189.927†	1598.8	1718.0	477.44 ug/L	477.44 ppb	12:35:32
3	Sr 421.552†	60729.3	67325.2	486.06 ug/L	486.06 ppb	12:33:52
3	Ti 334.940†	221304.6	240215.9	506.52 ug/L	506.52 ppb	12:35:12
3	Tl 190.801†	918.7	1023.0	473.22 ug/L	473.22 ppb	12:35:32
3	U 409.014†	12848.6	16407.9	527.34 ug/L	527.34 ppb	12:35:12
3	V 292.402†	57099.5	63271.1	493.24 ug/L	493.24 ppb	12:35:12
3	Zn 213.857†	44289.2	47103.3	488.25 ug/L	488.25 ppb	12:35:12
3	SiO2†	131154.4	140994.6	10971 ug/L	10971 ppb	12:35:47

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Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	704178.2	91.697 %	0.9426			1.03%
Sc Radial	4226.5	89.8 %	0.39			0.44%
Y 371.029	615504.7	89.329 %	0.8135			0.91%
Y RADIAL	4466.7	89.60 %	0.307			0.34%
Ag 328.068†	41135.0	263.42 ug/L	0.754	263.42 ppb	0.754	0.29%
QC value within limits for Ag 328.068 Recovery = 105.37%						
Al 396.153Radial†	547840.5	512440 ug/L	3328.0	512440 ppb	3328.0	0.65%
QC value within limits for Al 396.153Radial Recovery = 102.49%						
As 188.979†	1058.4	518.09 ug/L	7.754	518.09 ppb	7.754	1.50%
QC value within limits for As 188.979 Recovery = 103.62%						
B 249.677†	21098.7	497.03 ug/L	1.742	497.03 ppb	1.742	0.35%
QC value within limits for B 249.677 Recovery = 99.41%						
Ba 233.527†	41495.7	496.38 ug/L	0.524	496.38 ppb	0.524	0.11%
QC value within limits for Ba 233.527 Recovery = 99.28%						
Be 313.107†	591200.9	236.09 ug/L	0.771	236.09 ppb	0.771	0.33%
QC value within limits for Be 313.107 Recovery = 94.44%						

Ca 317.933Radial†	260251.6	472860 ug/L	2686.1	472860 ppb	2686.1	0.57%
QC value within limits for Ca 317.933Radial Recovery = 94.57%						
Cd 226.502†	33170.8	451.56 ug/L	6.447	451.56 ppb	6.447	1.43%
QC value within limits for Cd 226.502 Recovery = 90.31%						
Co 228.616†	15379.4	462.22 ug/L	7.883	462.22 ppb	7.883	1.71%
QC value within limits for Co 228.616 Recovery = 92.44%						
Cr 267.716†	34580.0	476.46 ug/L	1.182	476.46 ppb	1.182	0.25%
QC value within limits for Cr 267.716 Recovery = 95.29%						
Cu 324.752†	150974.0	574.78 ug/L	1.211	574.78 ppb	1.211	0.21%
QC value within limits for Cu 324.752 Recovery = 114.96%						
Fe 238.204 Radial†	17797.8	184670 ug/L	129.1	184670 ppb	129.1	0.07%
QC value within limits for Fe 238.204 Radial Recovery = 92.33%						
K 766.490 Radial†	26997.9	5213.4 ug/L	48.39	5213.4 ppb	48.39	0.93%
QC value within limits for K 766.490 Radial Recovery = 104.27%						
Mg 279.077 IEC†	12371.1	491000 ug/L	134.9	491000 ppb	134.9	0.03%
QC value within limits for Mg 279.077 IEC Recovery = 98.20%						
Mn 257.610†	308681.7	492.24 ug/L	0.601	492.24 ppb	0.601	0.12%
QC value within limits for Mn 257.610 Recovery = 98.45%						
Mo 202.031†	4998.2	478.65 ug/L	5.719	478.65 ppb	5.719	1.19%
QC value within limits for Mo 202.031 Recovery = 95.73%						
Na 589.592 Radial†	15186.7	5175.6 ug/L	44.19	5175.6 ppb	44.19	0.85%
QC value within limits for Na 589.592 Radial Recovery = 103.51%						
Ni 231.604†	14179.2	452.98 ug/L	7.046	452.98 ppb	7.046	1.56%
QC value within limits for Ni 231.604 Recovery = 90.60%						
P 214.914†	4481.4	2373.1 ug/L	42.35	2373.1 ppb	42.35	1.78%
QC value within limits for P 214.914 Recovery = 94.92%						
Pb 220.353†	2281.4	485.24 ug/L	7.932	485.24 ppb	7.932	1.63%
QC value within limits for Pb 220.353 Recovery = 97.05%						
S 181.975 Axial†	1982.6	2474.5 ug/L	43.52	2474.5 ppb	43.52	1.76%
QC value within limits for S 181.975 Axial Recovery = 98.98%						
Sb 206.836†	1369.4	555.67 ug/L	9.684	555.67 ppb	9.684	1.74%
QC value within limits for Sb 206.836 Recovery = 111.13%						
Se 196.026†	3337.4	2507.6 ug/L	41.19	2507.6 ppb	41.19	1.64%
QC value within limits for Se 196.026 Recovery = 100.31%						
Si 251.611†	145293.4	5296.2 ug/L	6.83	5296.2 ppb	6.83	0.13%
QC value within limits for Si 251.611 Recovery = 105.92%						
Sn 189.927†	1742.7	483.81 ug/L	6.713	483.81 ppb	6.713	1.39%
QC value within limits for Sn 189.927 Recovery = 96.76%						
Sr 421.552†	67913.9	490.32 ug/L	3.689	490.32 ppb	3.689	0.75%
QC value within limits for Sr 421.552 Recovery = 98.06%						
Ti 334.940†	240425.3	507.35 ug/L	0.745	507.35 ppb	0.745	0.15%
QC value within limits for Ti 334.940 Recovery = 101.47%						
Tl 190.801†	1043.1	482.38 ug/L	7.980	482.38 ppb	7.980	1.65%
QC value within limits for Tl 190.801 Recovery = 96.48%						
U 409.014†	16388.5	526.67 ug/L	5.648	526.67 ppb	5.648	1.07%
QC value within limits for U 409.014 Recovery = 105.33%						
V 292.402†	63485.3	494.99 ug/L	1.580	494.99 ppb	1.580	0.32%
QC value within limits for V 292.402 Recovery = 99.00%						
Zn 213.857†	47116.5	488.34 ug/L	0.234	488.34 ppb	0.234	0.05%
QC value within limits for Zn 213.857 Recovery = 97.67%						
SiO2†	143420.5	11160 ug/L	193.6	11160 ppb	193.6	1.73%
QC value within limits for SiO2 Recovery = 104.35%						
All analyte(s) passed QC.						

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 3/1/2010 12:37:57  
 Data Type: Reprocessed on 3/1/2010 13:29:39  
 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 361.383	686767.6	686767.6	89.430 %		12:41:08
1	Sc Radial	4122.0	4122.0	87.6 %		12:40:10
1	Y 371.029	601213.8	601213.8	87.255 %		12:41:08
1	Y RADIAL	4361.2	4361.2	87.48 %		12:40:10
1	Ag 328.068†	-20956.2	-23688.7	-10.393 ug/L	-10.393 ppb	12:41:08
1	Al 396.153Radial†	480771.6	549041.9	513580 ug/L	513580 ppb	12:39:50
1	As 188.979†	-141.7	-133.4	39.576 ug/L	39.576 ppb	12:41:29
1	B 249.677†	909.2	1470.1	-31.931 ug/L	-31.931 ppb	12:41:08
1	Ba 233.527†	-1256.2	-1407.1	-3.6801 ug/L	-3.6801 ppb	12:41:29
1	Be 313.107†	-14739.2	-7498.6	-3.0284 ug/L	-3.0284 ppb	12:41:08
1	Ca 317.933Radial†	229140.4	261615.0	475340 ug/L	475340 ppb	12:39:50
1	Cd 226.502†	3021.3	3565.1	9.7623 ug/L	9.7623 ppb	12:41:29
1	Co 228.616†	125.5	197.8	-0.1878 ug/L	-0.1878 ppb	12:41:29
1	Cr 267.716†	13.3	-60.7	1.3378 ug/L	1.3378 ppb	12:41:29
1	Cu 324.752†	2512.7	-4726.5	-3.6433 ug/L	-3.6433 ppb	12:41:08
1	Fe 238.204 Radial†	35732.5	40792.8	423220 ug/L	423220 ppb	12:40:10
1	K 766.490 Radial†	3769.7	2042.7	57.081 ug/L	57.081 ppb	12:39:50
1	Mg 279.077 IEC†	10832.4	12365.8	490540 ug/L	490540 ppb	12:40:10
1	Mn 257.610†	-19567.0	-22340.8	-14.034 ug/L	-14.034 ppb	12:41:08
1	Mo 202.031†	-368.1	-426.0	-0.5878 ug/L	-0.5878 ppb	12:41:29
1	Na 589.592 Radial†	1254868.7	1433682.2	488600 ug/L	488600 ppb	12:39:50
1	Ni 231.604†	227.3	152.9	4.8834 ug/L	4.8834 ppb	12:41:29
1	P 214.914†	491.6	354.4	-12.244 ug/L	-12.244 ppb	12:41:29
1	Pb 220.353†	-508.5	-497.9	17.358 ug/L	17.358 ppb	12:41:29
1	S 181.975 Axial†	75.3	41.7	-42.221 ug/L	-42.221 ppb	12:41:29
1	Sb 206.836†	55.2	31.7	-7.7022 ug/L	-7.7022 ppb	12:41:29
1	Se 196.026†	-1821.2	-2016.7	-238.73 ug/L	-238.73 ppb	12:41:29
1	Si 251.611†	-295.1	-919.2	-33.061 ug/L	-33.061 ppb	12:41:29
1	Sn 189.927†	-319.9	-365.8	-25.996 ug/L	-25.996 ppb	12:41:29
1	Sr 421.552†	1457.0	1664.2	8.5520 ug/L	8.5520 ppb	12:40:10
1	Ti 334.940†	-10515.5	-10457.4	-4.0393 ug/L	-4.0393 ppb	12:41:08
1	Tl 190.801†	-87.8	-66.9	-31.150 ug/L	-31.150 ppb	12:41:29
1	U 409.014†	400386.5	450246.4	15029 ug/L	15029 ppb	12:41:08
1	V 292.402†	928.2	2665.9	-2.6029 ug/L	-2.6029 ppb	12:41:29
1	Zn 213.857†	5023.9	4907.4	-9.2212 ug/L	-9.2212 ppb	12:41:29
1	SiO2†	-297.9	-929.5	-71.347 ug/L	-71.347 ppb	12:42:25
2	Sc 361.383	698587.1	698587.1	90.969 %		12:41:34
2	Sc Radial	4111.8	4111.8	87.4 %		12:40:36
2	Y 371.029	611197.6	611197.6	88.703 %		12:41:34
2	Y RADIAL	4353.6	4353.6	87.33 %		12:40:36
2	Ag 328.068†	-21331.8	-23705.1	-10.229 ug/L	-10.229 ppb	12:41:34
2	Al 396.153Radial†	481893.3	551691.8	516060 ug/L	516060 ppb	12:40:16
2	As 188.979†	-162.4	-153.5	30.815 ug/L	30.815 ppb	12:41:54
2	B 249.677†	1044.8	1602.0	-28.754 ug/L	-28.754 ppb	12:41:34
2	Ba 233.527†	-1298.2	-1429.5	-3.9206 ug/L	-3.9206 ppb	12:41:54
2	Be 313.107†	-15028.9	-7538.2	-3.0428 ug/L	-3.0428 ppb	12:41:34
2	Ca 317.933Radial†	229225.9	262363.8	476700 ug/L	476700 ppb	12:40:16
2	Cd 226.502†	2974.3	3456.2	8.1325 ug/L	8.1325 ppb	12:41:54
2	Co 228.616†	134.8	205.6	0.0344 ug/L	0.0344 ppb	12:41:54
2	Cr 267.716†	95.5	29.4	2.5996 ug/L	2.5996 ppb	12:41:54
2	Cu 324.752†	2468.3	-4822.8	-3.9426 ug/L	-3.9426 ppb	12:41:34
2	Fe 238.204 Radial†	35707.9	40866.1	423980 ug/L	423980 ppb	12:40:36
2	K 766.490 Radial†	3807.8	2097.0	67.154 ug/L	67.154 ppb	12:40:16
2	Mg 279.077 IEC†	10811.2	12372.3	490790 ug/L	490790 ppb	12:40:36
2	Mn 257.610†	-19964.4	-22407.5	-14.076 ug/L	-14.076 ppb	12:41:34
2	Mo 202.031†	-376.0	-427.7	-0.6620 ug/L	-0.6620 ppb	12:41:54
2	Na 589.592 Radial†	1253696.5	1435905.8	489360 ug/L	489360 ppb	12:40:16
2	Ni 231.604†	221.7	142.4	4.5481 ug/L	4.5481 ppb	12:41:54

2	P 214.914†	500.0	354.3	-12.162 ug/L	-12.162 ppb	12:41:54
2	Pb 220.353†	-509.8	-489.8	19.237 ug/L	19.237 ppb	12:41:54
2	S 181.975 Axial†	81.0	46.5	-36.378 ug/L	-36.378 ppb	12:41:54
2	Sb 206.836†	19.3	-8.8	-24.136 ug/L	-24.136 ppb	12:41:54
2	Se 196.026†	-1799.7	-1958.6	-201.24 ug/L	-201.24 ppb	12:41:54
2	Si 251.611†	-276.4	-893.0	-32.104 ug/L	-32.104 ppb	12:41:54
2	Sn 189.927†	-306.6	-345.1	-20.930 ug/L	-20.930 ppb	12:41:54
2	Sr 421.552†	1473.2	1686.8	8.7066 ug/L	8.7066 ppb	12:40:36
2	Ti 334.940†	-10433.7	-10168.5	-3.2793 ug/L	-3.2793 ppb	12:41:34
2	Tl 190.801†	-93.1	-71.1	-33.081 ug/L	-33.081 ppb	12:41:54
2	U 409.014†	406236.9	449102.7	14990 ug/L	14990 ppb	12:41:34
2	V 292.402†	983.3	2708.9	-2.4425 ug/L	-2.4425 ppb	12:41:54
2	Zn 213.857†	5022.5	4810.8	-10.398 ug/L	-10.398 ppb	12:41:54
2	SiO2†	-358.4	-990.4	-76.088 ug/L	-76.088 ppb	12:42:30
3	Sc 361.383	689597.3	689597.3	89.798 %		12:42:00
3	Sc Radial	4087.4	4087.4	86.8 %		12:41:01
3	Y 371.029	602594.6	602594.6	87.455 %		12:42:00
3	Y RADIAL	4345.6	4345.6	87.17 %		12:41:01
3	Ag 328.068†	-21229.9	-23897.4	-11.215 ug/L	-11.215 ppb	12:42:00
3	Al 396.153Radial†	478076.8	550594.4	515040 ug/L	515040 ppb	12:40:41
3	As 188.979†	-167.3	-161.3	27.351 ug/L	27.351 ppb	12:42:20
3	B 249.677†	880.0	1433.4	-32.969 ug/L	-32.969 ppb	12:42:00
3	Ba 233.527†	-1265.4	-1411.5	-3.7087 ug/L	-3.7087 ppb	12:42:20
3	Be 313.107†	-15003.2	-7725.0	-3.1166 ug/L	-3.1166 ppb	12:42:00
3	Ca 317.933Radial†	227420.5	261853.4	475770 ug/L	475770 ppb	12:40:41
3	Cd 226.502†	2972.8	3497.1	8.7172 ug/L	8.7172 ppb	12:42:20
3	Co 228.616†	119.8	190.9	-0.4170 ug/L	-0.4170 ppb	12:42:20
3	Cr 267.716†	75.5	8.5	2.3123 ug/L	2.3123 ppb	12:42:20
3	Cu 324.752†	2406.4	-4856.4	-4.0718 ug/L	-4.0718 ppb	12:42:00
3	Fe 238.204 Radial†	35493.6	40863.6	423960 ug/L	423960 ppb	12:41:01
3	K 766.490 Radial†	3660.3	1953.3	39.706 ug/L	39.706 ppb	12:40:41
3	Mg 279.077 IEC†	10734.3	12357.7	490220 ug/L	490220 ppb	12:41:01
3	Mn 257.610†	-19381.1	-22044.0	-13.473 ug/L	-13.473 ppb	12:42:00
3	Mo 202.031†	-393.4	-452.5	-2.9511 ug/L	-2.9511 ppb	12:42:20
3	Na 589.592 Radial†	1240645.9	1429456.2	487160 ug/L	487160 ppb	12:40:41
3	Ni 231.604†	240.6	166.6	5.3210 ug/L	5.3210 ppb	12:42:20
3	P 214.914†	499.7	361.1	-8.6219 ug/L	-8.6219 ppb	12:42:20
3	Pb 220.353†	-491.5	-476.6	21.087 ug/L	21.087 ppb	12:42:20
3	S 181.975 Axial†	67.9	33.1	-53.672 ug/L	-53.672 ppb	12:42:20
3	Sb 206.836†	60.3	37.1	-5.6258 ug/L	-5.6258 ppb	12:42:20
3	Se 196.026†	-1787.0	-1970.2	-208.53 ug/L	-208.53 ppb	12:42:20
3	Si 251.611†	-312.3	-937.0	-33.680 ug/L	-33.680 ppb	12:42:20
3	Sn 189.927†	-325.1	-370.1	-26.966 ug/L	-26.966 ppb	12:42:20
3	Sr 421.552†	1458.4	1679.8	8.6627 ug/L	8.6627 ppb	12:41:01
3	Ti 334.940†	-10216.9	-10076.6	-3.1731 ug/L	-3.1731 ppb	12:42:00
3	Tl 190.801†	-87.3	-66.0	-30.702 ug/L	-30.702 ppb	12:42:20
3	U 409.014†	401117.0	449222.7	14994 ug/L	14994 ppb	12:42:00
3	V 292.402†	999.5	2741.1	-2.2187 ug/L	-2.2187 ppb	12:42:20
3	Zn 213.857†	5001.3	4859.2	-9.8651 ug/L	-9.8651 ppb	12:42:20
3	SiO2†	-347.8	-983.8	-75.505 ug/L	-75.505 ppb	12:42:36

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Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	691650.7	90.066 %	0.8036			0.89%
Sc Radial	4107.1	87.3 %	0.38			0.43%
Y 371.029	605002.0	87.804 %	0.7851			0.89%
Y RADIAL	4353.5	87.32 %	0.156			0.18%
Ag 328.068†	-23763.7	-10.612 ug/L	0.5283	-10.612 ppb	0.5283	4.98%
Al 396.153Radial†	550442.7	514890 ug/L	1245.5	514890 ppb	1245.5	0.24%
QC value within limits for Al 396.153Radial Recovery = 102.98%						
As 188.979†	-149.4	32.581 ug/L	6.3010	32.581 ppb	6.3010	19.34%
B 249.677†	1501.9	-31.218 ug/L	2.1962	-31.218 ppb	2.1962	7.03%
Ba 233.527†	-1416.0	-3.7698 ug/L	0.13141	-3.7698 ppb	0.13141	3.49%
Be 313.107†	-7587.3	-3.0626 ug/L	0.04734	-3.0626 ppb	0.04734	1.55%
Ca 317.933Radial†	261944.1	475940 ug/L	695.1	475940 ppb	695.1	0.15%
QC value within limits for Ca 317.933Radial Recovery = 95.19%						
Cd 226.502†	3506.1	8.8707 ug/L	0.82563	8.8707 ppb	0.82563	9.31%
Co 228.616†	198.1	-0.1901 ug/L	0.22570	-0.1901 ppb	0.22570	118.70%
Cr 267.716†	-7.6	2.0832 ug/L	0.66134	2.0832 ppb	0.66134	31.75%

Cu 324.752†	-4801.9	-3.8859 ug/L	0.21982	-3.8859 ppb	0.21982	5.66%
Fe 238.204 Radial†	40840.8	423720 ug/L	432.1	423720 ppb	432.1	0.10%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 84.74%						
K 766.490 Radial†	2031.0	54.647 ug/L	13.8847	54.647 ppb	13.8847	25.41%
Mg 279.077 IEC†	12365.3	490520 ug/L	288.9	490520 ppb	288.9	0.06%
QC value within limits for Mg 279.077 IEC Recovery = 98.10%						
Mn 257.610†	-22264.1	-13.861 ug/L	0.3366	-13.861 ppb	0.3366	2.43%
Mo 202.031†	-435.4	-1.4003 ug/L	1.34357	-1.4003 ppb	1.34357	95.95%
Na 589.592 Radial†	1433014.8	488370 ug/L	1116.5	488370 ppb	1116.5	0.23%
QC value within limits for Na 589.592 Radial Recovery = 97.67%						
Ni 231.604†	153.9	4.9175 ug/L	0.38760	4.9175 ppb	0.38760	7.88%
P 214.914†	356.6	-11.009 ug/L	2.0680	-11.009 ppb	2.0680	18.78%
Pb 220.353†	-488.1	19.228 ug/L	1.8645	19.228 ppb	1.8645	9.70%
S 181.975 Axial†	40.4	-44.090 ug/L	8.7975	-44.090 ppb	8.7975	19.95%
Sb 206.836†	20.0	-12.488 ug/L	10.1408	-12.488 ppb	10.1408	81.20%
Se 196.026†	-1981.8	-216.17 ug/L	19.881	-216.17 ppb	19.881	9.20%
Si 251.611†	-916.4	-32.948 ug/L	0.7939	-32.948 ppb	0.7939	2.41%
Sn 189.927†	-360.3	-24.630 ug/L	3.2411	-24.630 ppb	3.2411	13.16%
Sr 421.552†	1676.9	8.6405 ug/L	0.07972	8.6405 ppb	0.07972	0.92%
Ti 334.940†	-10234.1	-3.4973 ug/L	0.47244	-3.4973 ppb	0.47244	13.51%
Tl 190.801†	-68.0	-31.644 ug/L	1.2645	-31.644 ppb	1.2645	4.00%
U 409.014†	449523.9	15004 ug/L	21.1	15004 ppb	21.1	0.14%
QC value within limits for U 409.014 Recovery = 100.03%						
V 292.402†	2705.3	-2.4214 ug/L	0.19300	-2.4214 ppb	0.19300	7.97%
Zn 213.857†	4859.1	-9.8281 ug/L	0.58917	-9.8281 ppb	0.58917	5.99%
SiO2†	-967.9	-74.313 ug/L	2.5855	-74.313 ppb	2.5855	3.48%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/1/2010 12:44:45

Data Type: Reprocessed on 3/1/2010 13:29:40

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 361.383	782532.9	782532.9	101.90 %		12:48:21
1	Sc Radial	4642.2	4642.2	98.6 %		12:46:43
1	Y 371.029	684711.6	684711.6	99.373 %		12:48:21
1	Y RADIAL	4828.2	4828.2	96.85 %		12:46:43
1	Ag 328.068†	-6161.1	-6301.9	7.2805 ug/L	7.2805 ppb	12:48:26
1	Al 396.153Radial†	409.5	502.3	5.5185 ug/L	5.5185 ppb	12:46:43
1	As 188.979†	21598.3	21220.5	9517.6 ug/L	9517.6 ppb	12:48:26
1	B 249.677†	200037.2	196760.0	4899.5 ug/L	4899.5 ppb	12:48:21
1	Ba 233.527†	1207446.3	1184925.5	14004 ug/L	14004 ppb	12:48:21
1	Be 313.107†	6921766.5	6801660.8	2725.2 ug/L	2725.2 ppb	12:48:14
1	Ca 317.933Radial†	33.0	11.3	20.516 ug/L	20.516 ppb	12:47:03
1	Cd 226.502†	692804.5	680070.6	9647.1 ug/L	9647.1 ppb	12:48:21
1	Co 228.616†	327054.1	321012.1	9700.2 ug/L	9700.2 ppb	12:48:26
1	Cr 267.716†	1776350.6	1743146.8	23829 ug/L	23829 ppb	12:48:21
1	Cu 324.752†	5513657.3	5403293.6	20232 ug/L	20232 ppb	12:48:14
1	Fe 238.204 Radial†	-17.1	-24.7	34.458 ug/L	34.458 ppb	12:47:03
1	K 766.490 Radial†	1449010.1	1466853.5	291980 ug/L	291980 ppb	12:46:38
1	Mg 279.077 IEC†	-2.9	-5.9	-133.00 ug/L	-133.00 ppb	12:47:03
1	Mn 257.610†	5985441.4	5873354.0	9401.1 ug/L	9401.1 ppb	12:48:14
1	Mo 202.031†	106340.9	104343.3	9575.8 ug/L	9575.8 ppb	12:48:26
1	Na 589.592 Radial†	-65.4	781.5	266.32 ug/L	266.32 ppb	12:46:43
1	Ni 231.604†	312178.7	306255.3	9784.2 ug/L	9784.2 ppb	12:48:26
1	P 214.914†	30822.0	30051.8	12858 ug/L	12858 ppb	12:48:26
1	Pb 220.353†	154527.6	151716.5	24477 ug/L	24477 ppb	12:48:26
1	S 181.975 Axial†	39401.6	38624.2	50078 ug/L	50078 ppb	12:48:26
1	Sb 206.836†	26528.1	26003.3	10908 ug/L	10908 ppb	12:48:26
1	Se 196.026†	16594.0	16304.3	10014 ug/L	10014 ppb	12:48:26
1	Si 251.611†	1299129.9	1274312.4	46383 ug/L	46383 ppb	12:48:21
1	Sn 189.927†	43970.3	43142.2	10160 ug/L	10160 ppb	12:48:26
1	Sr 421.552†	1306985.7	1325120.6	9635.9 ug/L	9635.9 ppb	12:46:38
1	Ti 334.940†	4832677.1	4743850.6	9550.3 ug/L	9550.3 ppb	12:48:14
1	Tl 190.801†	22457.7	22070.1	10198 ug/L	10198 ppb	12:48:26
1	U 409.014†	-1171.6	1387.1	-6.8173 ug/L	-6.8173 ppb	12:48:26
1	V 292.402†	1257655.0	1235828.2	9957.9 ug/L	9957.9 ppb	12:48:21
1	Zn 213.857†	1274909.2	1250422.3	13701 ug/L	13701 ppb	12:48:21
1	SiO2†	1276728.6	1252321.6	97297 ug/L	97297 ppb	12:49:12
2	Sc 361.383	777689.9	777689.9	101.27 %		12:48:40
2	Sc Radial	4601.6	4601.6	97.8 %		12:47:14
2	Y 371.029	680527.1	680527.1	98.765 %		12:48:40
2	Y RADIAL	4806.9	4806.9	96.42 %		12:47:14
2	Ag 328.068†	-6103.3	-6282.4	7.1415 ug/L	7.1415 ppb	12:48:46
2	Al 396.153Radial†	410.5	507.0	12.459 ug/L	12.459 ppb	12:47:14
2	As 188.979†	21355.1	21112.4	9471.9 ug/L	9471.9 ppb	12:48:46
2	B 249.677†	197412.6	195390.8	4865.4 ug/L	4865.4 ppb	12:48:40
2	Ba 233.527†	1193882.5	1178910.8	13933 ug/L	13933 ppb	12:48:40
2	Be 313.107†	7068217.4	6988576.2	2800.1 ug/L	2800.1 ppb	12:48:34
2	Ca 317.933Radial†	33.7	12.3	22.341 ug/L	22.341 ppb	12:47:34
2	Cd 226.502†	685092.6	676689.3	9599.2 ug/L	9599.2 ppb	12:48:40
2	Co 228.616†	323493.1	319494.5	9653.7 ug/L	9653.7 ppb	12:48:46
2	Cr 267.716†	1756735.6	1734633.4	23712 ug/L	23712 ppb	12:48:40
2	Cu 324.752†	5628722.1	5550611.1	20784 ug/L	20784 ppb	12:48:34
2	Fe 238.204 Radial†	-16.4	-24.1	39.221 ug/L	39.221 ppb	12:47:34
2	K 766.490 Radial†	1448208.3	1479004.1	294400 ug/L	294400 ppb	12:47:09
2	Mg 279.077 IEC†	-4.3	-7.3	-188.67 ug/L	-188.67 ppb	12:47:34
2	Mn 257.610†	6123112.2	6045877.2	9677.2 ug/L	9677.2 ppb	12:48:34
2	Mo 202.031†	105089.6	103757.6	9522.0 ug/L	9522.0 ppb	12:48:46
2	Na 589.592 Radial†	-125.0	720.0	245.36 ug/L	245.36 ppb	12:47:14
2	Ni 231.604†	308881.1	304906.9	9741.1 ug/L	9741.1 ppb	12:48:46

2	P 214.914†	30500.6	29922.8	12676 ug/L	12676 ppb	12:48:46
2	Pb 220.353†	152893.2	151046.8	24368 ug/L	24368 ppb	12:48:46
2	S 181.975 Axial†	38908.3	38378.0	49759 ug/L	49759 ppb	12:48:46
2	Sb 206.836†	26191.2	25832.8	10835 ug/L	10835 ppb	12:48:46
2	Se 196.026†	16333.3	16148.3	9918.7 ug/L	9918.7 ppb	12:48:46
2	Si 251.611†	1284144.0	1267453.8	46133 ug/L	46133 ppb	12:48:40
2	Sn 189.927†	43436.1	42883.4	10099 ug/L	10099 ppb	12:48:46
2	Sr 421.552†	1303990.6	1333756.6	9698.7 ug/L	9698.7 ppb	12:47:09
2	Ti 334.940†	4935183.4	4874605.3	9813.8 ug/L	9813.8 ppb	12:48:34
2	Tl 190.801†	22100.6	21854.7	10103 ug/L	10103 ppb	12:48:46
2	U 409.014†	-1159.3	1392.1	-6.3906 ug/L	-6.3906 ppb	12:48:46
2	V 292.402†	1242294.0	1228345.7	9897.3 ug/L	9897.3 ppb	12:48:40
2	Zn 213.857†	1262211.2	1245674.8	13648 ug/L	13648 ppb	12:48:40
2	SiO2†	1273958.1	1257388.3	97693 ug/L	97693 ppb	12:49:18
3	Sc 361.383	780596.0	780596.0	101.65 %		12:49:00
3	Sc Radial	4673.4	4673.4	99.3 %		12:47:44
3	Y 371.029	683014.5	683014.5	99.126 %		12:49:00
3	Y RADIAL	4901.1	4901.1	98.31 %		12:47:44
3	Ag 328.068†	-6012.2	-6170.4	7.7025 ug/L	7.7025 ppb	12:49:05
3	Al 396.153Radial†	389.4	479.3	-5.2635 ug/L	-5.2635 ppb	12:47:44
3	As 188.979†	20985.6	20670.4	9274.5 ug/L	9274.5 ppb	12:49:05
3	B 249.677†	198627.6	195860.4	4877.6 ug/L	4877.6 ppb	12:49:00
3	Ba 233.527†	1196921.8	1177511.8	13916 ug/L	13916 ppb	12:49:00
3	Be 313.107†	7026646.0	6921694.7	2773.3 ug/L	2773.3 ppb	12:48:54
3	Ca 317.933Radial†	37.0	15.1	27.403 ug/L	27.403 ppb	12:48:04
3	Cd 226.502†	685216.7	674292.9	9565.1 ug/L	9565.1 ppb	12:49:00
3	Co 228.616†	318810.6	313698.7	9478.4 ug/L	9478.4 ppb	12:49:05
3	Cr 267.716†	1759386.5	1730783.2	23660 ug/L	23660 ppb	12:49:00
3	Cu 324.752†	5591149.3	5492955.1	20568 ug/L	20568 ppb	12:48:54
3	Fe 238.204 Radial†	-19.7	-27.2	1.9320 ug/L	1.9320 ppb	12:48:04
3	K 766.490 Radial†	1473685.9	1481895.8	294980 ug/L	294980 ppb	12:47:39
3	Mg 279.077 IEC†	-11.1	-14.0	-458.65 ug/L	-458.65 ppb	12:48:04
3	Mn 257.610†	6091386.4	5992156.1	9591.2 ug/L	9591.2 ppb	12:48:54
3	Mo 202.031†	103625.2	101930.6	9354.3 ug/L	9354.3 ppb	12:49:05
3	Na 589.592 Radial†	-195.6	650.8	221.78 ug/L	221.78 ppb	12:47:44
3	Ni 231.604†	304752.8	299710.0	9575.1 ug/L	9575.1 ppb	12:49:05
3	P 214.914†	29959.8	29278.7	12358 ug/L	12358 ppb	12:49:05
3	Pb 220.353†	150873.8	148498.1	23957 ug/L	23957 ppb	12:49:05
3	S 181.975 Axial†	38400.4	37735.3	48926 ug/L	48926 ppb	12:49:05
3	Sb 206.836†	25783.6	25335.5	10628 ug/L	10628 ppb	12:49:05
3	Se 196.026†	15988.1	15748.6	9673.3 ug/L	9673.3 ppb	12:49:05
3	Si 251.611†	1291751.4	1270217.0	46236 ug/L	46236 ppb	12:49:00
3	Sn 189.927†	42953.4	42248.8	9949.4 ug/L	9949.4 ppb	12:49:05
3	Sr 421.552†	1323486.9	1332891.7	9692.5 ug/L	9692.5 ppb	12:47:39
3	Ti 334.940†	4907763.8	4829487.5	9723.0 ug/L	9723.0 ppb	12:48:54
3	Tl 190.801†	21724.9	21403.8	9895.5 ug/L	9895.5 ppb	12:49:05
3	U 409.014†	-1401.8	1157.7	-14.117 ug/L	-14.117 ppb	12:49:05
3	V 292.402†	1246575.0	1227990.3	9892.2 ug/L	9892.2 ppb	12:49:00
3	Zn 213.857†	1263738.1	1242536.8	13615 ug/L	13615 ppb	12:49:00
3	SiO2†	1298149.9	1276504.6	99187 ug/L	99187 ppb	12:49:24

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Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	780272.9	101.61 %	0.317			0.31%
Sc Radial	4639.1	98.6 %	0.77			0.78%
Y 371.029	682751.1	99.088 %	0.3055			0.31%
Y RADIAL	4845.4	97.19 %	0.991			1.02%
Ag 328.068†	-6251.6	7.3749 ug/L	0.29217	7.3749 ppb	0.29217	3.96%
Al 396.153Radial†	496.2	4.2380 ug/L	8.93035	4.2380 ppb	8.93035	210.72%
As 188.979†	21001.1	9421.3 ug/L	129.22	9421.3 ppb	129.22	1.37%
QC value within limits for As 188.979 Recovery = 94.21%						
B 249.677†	196003.8	4880.8 ug/L	17.30	4880.8 ppb	17.30	0.35%
QC value within limits for B 249.677 Recovery = 97.62%						
Ba 233.527†	1180449.4	13951 ug/L	46.6	13951 ppb	46.6	0.33%
QC value within limits for Ba 233.527 Recovery = 93.01%						
Be 313.107†	6903977.2	2766.2 ug/L	37.95	2766.2 ppb	37.95	1.37%
QC value within limits for Be 313.107 Recovery = 92.21%						
Ca 317.933Radial†	12.9	23.420 ug/L	3.5683	23.420 ppb	3.5683	15.24%
Cd 226.502†	677017.6	9603.8 ug/L	41.21	9603.8 ppb	41.21	0.43%



QC value within limits for Cd 226.502 Recovery = 96.04%									
Co	228.616†	318068.4	9610.8 ug/L	117.00	9610.8 ppb	117.00	1.22%		
QC value within limits for Co 228.616 Recovery = 96.11%									
Cr	267.716†	1736187.8	23733 ug/L	86.5	23733 ppb	86.5	0.36%		
QC value within limits for Cr 267.716 Recovery = 94.93%									
Cu	324.752†	5482286.6	20528 ug/L	278.0	20528 ppb	278.0	1.35%		
QC value within limits for Cu 324.752 Recovery = 102.64%									
Fe	238.204 Radial†	-25.3	25.204 ug/L	20.2941	25.204 ppb	20.2941	80.52%		
K	766.490 Radial†	1475917.8	293790 ug/L	1589.0	293790 ppb	1589.0	0.54%		
QC value within limits for K 766.490 Radial Recovery = 97.93%									
Mg	279.077 IEC†	-9.1	-260.10 ug/L	174.182	-260.10 ppb	174.182	66.97%		
Mn	257.610†	5970462.5	9556.5 ug/L	141.31	9556.5 ppb	141.31	1.48%		
QC value within limits for Mn 257.610 Recovery = 95.57%									
Mo	202.031†	103343.8	9484.0 ug/L	115.49	9484.0 ppb	115.49	1.22%		
QC value within limits for Mo 202.031 Recovery = 94.84%									
Na	589.592 Radial†	717.4	244.49 ug/L	22.281	244.49 ppb	22.281	9.11%		
Ni	231.604†	303624.1	9700.1 ug/L	110.41	9700.1 ppb	110.41	1.14%		
QC value within limits for Ni 231.604 Recovery = 97.00%									
P	214.914†	29751.1	12631 ug/L	253.2	12631 ppb	253.2	2.00%		
QC value less than the lower limit for P 214.914 Recovery = 84.20%									
Pb	220.353†	150420.5	24267 ug/L	274.2	24267 ppb	274.2	1.13%		
QC value within limits for Pb 220.353 Recovery = 97.07%									
S	181.975 Axial†	38245.8	49588 ug/L	595.1	49588 ppb	595.1	1.20%		
QC value within limits for S 181.975 Axial Recovery = 99.18%									
Sb	206.836†	25723.9	10790 ug/L	145.1	10790 ppb	145.1	1.35%		
QC value within limits for Sb 206.836 Recovery = 107.90%									
Se	196.026†	16067.1	9868.8 ug/L	175.92	9868.8 ppb	175.92	1.78%		
QC value within limits for Se 196.026 Recovery = 98.69%									
Si	251.611†	1270661.1	46251 ug/L	125.4	46251 ppb	125.4	0.27%		
QC value within limits for Si 251.611 Recovery = 92.50%									
Sn	189.927†	42758.1	10069 ug/L	108.2	10069 ppb	108.2	1.08%		
QC value within limits for Sn 189.927 Recovery = 100.69%									
Sr	421.552†	1330589.6	9675.7 ug/L	34.58	9675.7 ppb	34.58	0.36%		
QC value within limits for Sr 421.552 Recovery = 96.76%									
Ti	334.940†	4815981.1	9695.7 ug/L	133.86	9695.7 ppb	133.86	1.38%		
QC value within limits for Ti 334.940 Recovery = 96.96%									
Tl	190.801†	21776.2	10066 ug/L	154.7	10066 ppb	154.7	1.54%		
QC value within limits for Tl 190.801 Recovery = 100.66%									
U	409.014†	1312.3	-9.1083 ug/L	4.34296	-9.1083 ppb	4.34296	47.68%		
V	292.402†	1230721.4	9915.8 ug/L	36.54	9915.8 ppb	36.54	0.37%		
QC value within limits for V 292.402 Recovery = 99.16%									
Zn	213.857†	1246211.3	13654 ug/L	43.4	13654 ppb	43.4	0.32%		
QC value within limits for Zn 213.857 Recovery = 91.03%									
SiO2†		1262071.5	98059 ug/L	996.7	98059 ppb	996.7	1.02%		
QC value within limits for SiO2 Recovery = 91.64%									
QC Failed. Continue with analysis.									

Sequence No.: 13

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/1/2010 12:51:34

Data Type: Reprocessed on 3/1/2010 13:29:41

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 361.383	822882.6	822882.6	107.15 %		12:54:43
1	Sc Radial	4809.3	4809.3	102 %		12:53:26
1	Y 371.029	728740.1	728740.1	105.76 %		12:54:43
1	Y RADIAL	5065.3	5065.3	101.6 %		12:53:26
1	Ag 328.068†	102975.6	95844.3	495.91 ug/L	495.91 ppb	12:54:48
1	Al 396.153Radial†	5501.9	5471.6	5094.4 ug/L	5094.4 ppb	12:53:26
1	As 188.979†	1234.4	1177.0	528.91 ug/L	528.91 ppb	12:55:08
1	B 249.677†	22207.5	21178.2	528.05 ug/L	528.05 ppb	12:54:48
1	Ba 233.527†	45158.0	42140.4	498.50 ug/L	498.50 ppb	12:54:48
1	Be 313.107†	1327236.4	1247599.9	497.02 ug/L	497.02 ppb	12:54:43
1	Ca 317.933Radial†	2946.9	2861.9	5199.9 ug/L	5199.9 ppb	12:53:46
1	Cd 226.502†	37567.8	35246.0	499.54 ug/L	499.54 ppb	12:54:48
1	Co 228.616†	17860.7	16725.6	505.54 ug/L	505.54 ppb	12:54:48
1	Cr 267.716†	39093.8	36407.9	498.00 ug/L	498.00 ppb	12:54:48
1	Cu 324.752†	149252.5	131750.8	493.33 ug/L	493.33 ppb	12:54:48
1	Fe 238.204 Radial†	519.5	501.1	5214.2 ug/L	5214.2 ppb	12:53:46
1	K 766.490 Radial†	29938.5	27037.9	5376.0 ug/L	5376.0 ppb	12:53:26
1	Mg 279.077 IEC†	141.8	135.9	5393.9 ug/L	5393.9 ppb	12:53:46
1	Mn 257.610†	332636.2	309965.0	496.43 ug/L	496.43 ppb	12:54:48
1	Mo 202.031†	5749.3	5351.1	491.54 ug/L	491.54 ppb	12:55:08
1	Na 589.592 Radial†	28044.9	28294.2	9642.6 ug/L	9642.6 ppb	12:53:26
1	Ni 231.604†	17043.8	15804.4	504.92 ug/L	504.92 ppb	12:54:48
1	P 214.914†	4924.0	4399.8	2360.7 ug/L	2360.7 ppb	12:55:08
1	Pb 220.353†	3273.5	3125.7	505.86 ug/L	505.86 ppb	12:55:08
1	S 181.975 Axial†	861.9	761.9	986.84 ug/L	986.84 ppb	12:55:08
1	Sb 206.836†	1385.7	1263.2	530.23 ug/L	530.23 ppb	12:55:08
1	Se 196.026†	857.3	819.8	515.74 ug/L	515.74 ppb	12:55:08
1	Si 251.611†	73316.3	67831.8	2469.2 ug/L	2469.2 ppb	12:54:48
1	Sn 189.927†	2267.6	2108.2	497.09 ug/L	497.09 ppb	12:55:08
1	Sr 421.552†	69652.3	68166.3	495.65 ug/L	495.65 ppb	12:53:26
1	Ti 334.940†	261113.4	244980.0	493.49 ug/L	493.49 ppb	12:54:48
1	Tl 190.801†	1118.1	1074.7	496.83 ug/L	496.83 ppb	12:55:08
1	U 409.014†	13419.9	15060.6	502.61 ug/L	502.61 ppb	12:54:48
1	V 292.402†	65036.2	62321.7	502.84 ug/L	502.84 ppb	12:54:48
1	Zn 213.857†	49138.2	45147.0	493.24 ug/L	493.24 ppb	12:54:48
1	SiO2†	72354.7	66927.1	5200.4 ug/L	5200.4 ppb	12:56:15
2	Sc 361.383	817634.9	817634.9	106.47 %		12:55:14
2	Sc Radial	4813.6	4813.6	102 %		12:53:51
2	Y 371.029	723758.5	723758.5	105.04 %		12:55:14
2	Y RADIAL	5082.9	5082.9	102.0 %		12:53:51
2	Ag 328.068†	102723.2	96224.0	497.86 ug/L	497.86 ppb	12:55:19
2	Al 396.153Radial†	5489.1	5454.3	5078.1 ug/L	5078.1 ppb	12:53:51
2	As 188.979†	1225.4	1175.9	528.43 ug/L	528.43 ppb	12:55:39
2	B 249.677†	22096.5	21206.9	528.75 ug/L	528.75 ppb	12:55:19
2	Ba 233.527†	45029.9	42290.6	500.28 ug/L	500.28 ppb	12:55:19
2	Be 313.107†	1316819.1	1245765.3	496.29 ug/L	496.29 ppb	12:55:14
2	Ca 317.933Radial†	2930.4	2843.1	5165.8 ug/L	5165.8 ppb	12:54:11
2	Cd 226.502†	37458.6	35368.5	501.28 ug/L	501.28 ppb	12:55:19
2	Co 228.616†	17920.1	16888.4	510.47 ug/L	510.47 ppb	12:55:19
2	Cr 267.716†	38967.4	36523.3	499.58 ug/L	499.58 ppb	12:55:19
2	Cu 324.752†	148589.3	132021.8	494.34 ug/L	494.34 ppb	12:55:19
2	Fe 238.204 Radial†	519.6	500.7	5210.4 ug/L	5210.4 ppb	12:54:11
2	K 766.490 Radial†	29656.3	26735.8	5315.8 ug/L	5315.8 ppb	12:53:51
2	Mg 279.077 IEC†	141.8	135.7	5389.4 ug/L	5389.4 ppb	12:54:11
2	Mn 257.610†	331860.9	311229.2	498.46 ug/L	498.46 ppb	12:55:19
2	Mo 202.031†	5743.4	5379.9	494.19 ug/L	494.19 ppb	12:55:39
2	Na 589.592 Radial†	28298.1	28517.1	9718.6 ug/L	9718.6 ppb	12:53:51
2	Ni 231.604†	16958.9	15826.8	505.63 ug/L	505.63 ppb	12:55:19

2	P 214.914†	4909.8	4416.0	2369.5 ug/L	2369.5 ppb	12:55:39
2	Pb 220.353†	3253.2	3126.2	505.94 ug/L	505.94 ppb	12:55:39
2	S 181.975 Axial†	867.7	772.4	1000.6 ug/L	1000.6 ppb	12:55:39
2	Sb 206.836†	1376.8	1263.1	530.27 ug/L	530.27 ppb	12:55:39
2	Se 196.026†	851.8	819.8	515.71 ug/L	515.71 ppb	12:55:39
2	Si 251.611†	72997.4	67971.4	2474.2 ug/L	2474.2 ppb	12:55:19
2	Sn 189.927†	2258.0	2112.7	498.15 ug/L	498.15 ppb	12:55:39
2	Sr 421.552†	70069.5	68513.1	498.17 ug/L	498.17 ppb	12:53:51
2	Ti 334.940†	260009.9	245507.5	494.55 ug/L	494.55 ppb	12:55:19
2	Tl 190.801†	1117.5	1080.8	499.64 ug/L	499.64 ppb	12:55:39
2	U 409.014†	13322.1	15049.2	502.22 ug/L	502.22 ppb	12:55:19
2	V 292.402†	64734.1	62427.6	503.71 ug/L	503.71 ppb	12:55:19
2	Zn 213.857†	49045.6	45354.3	495.52 ug/L	495.52 ppb	12:55:19
2	SiO2†	73690.7	68615.4	5331.8 ug/L	5331.8 ppb	12:56:21
3	Sc 361.383	813886.2	813886.2	105.98 %		12:55:45
3	Sc Radial	4829.5	4829.5	103 %		12:54:16
3	Y 371.029	719850.0	719850.0	104.47 %		12:55:45
3	Y RADIAL	5079.5	5079.5	101.9 %		12:54:16
3	Ag 328.068†	102643.6	96593.3	499.75 ug/L	499.75 ppb	12:55:50
3	Al 396.153Radial†	5521.5	5468.2	5091.0 ug/L	5091.0 ppb	12:54:16
3	As 188.979†	1222.4	1178.4	529.51 ug/L	529.51 ppb	12:56:10
3	B 249.677†	22055.0	21263.3	530.18 ug/L	530.18 ppb	12:55:50
3	Ba 233.527†	44920.6	42382.3	501.36 ug/L	501.36 ppb	12:55:50
3	Be 313.107†	1310616.1	1245609.1	496.24 ug/L	496.24 ppb	12:55:45
3	Ca 317.933Radial†	2924.3	2827.7	5137.9 ug/L	5137.9 ppb	12:54:36
3	Cd 226.502†	37476.3	35547.2	503.82 ug/L	503.82 ppb	12:55:50
3	Co 228.616†	17812.9	16864.8	509.76 ug/L	509.76 ppb	12:55:50
3	Cr 267.716†	38851.6	36582.7	500.39 ug/L	500.39 ppb	12:55:50
3	Cu 324.752†	148529.8	132608.5	496.54 ug/L	496.54 ppb	12:55:50
3	Fe 238.204 Radial†	513.6	493.2	5132.3 ug/L	5132.3 ppb	12:54:36
3	K 766.490 Radial†	29760.8	26742.3	5317.2 ug/L	5317.2 ppb	12:54:16
3	Mg 279.077 IEC†	140.0	133.6	5302.4 ug/L	5302.4 ppb	12:54:36
3	Mn 257.610†	331356.1	312188.6	499.99 ug/L	499.99 ppb	12:55:50
3	Mo 202.031†	5746.6	5407.8	496.75 ug/L	496.75 ppb	12:56:10
3	Na 589.592 Radial†	28279.4	28408.0	9681.4 ug/L	9681.4 ppb	12:54:16
3	Ni 231.604†	16997.8	15936.9	509.15 ug/L	509.15 ppb	12:55:50
3	P 214.914†	4934.1	4460.2	2393.8 ug/L	2393.8 ppb	12:56:10
3	Pb 220.353†	3246.2	3133.6	507.15 ug/L	507.15 ppb	12:56:10
3	S 181.975 Axial†	873.3	781.5	1012.3 ug/L	1012.3 ppb	12:56:10
3	Sb 206.836†	1377.0	1269.2	532.84 ug/L	532.84 ppb	12:56:10
3	Se 196.026†	845.5	817.6	514.21 ug/L	514.21 ppb	12:56:10
3	Si 251.611†	72871.7	68168.6	2481.4 ug/L	2481.4 ppb	12:55:50
3	Sn 189.927†	2261.8	2126.1	501.30 ug/L	501.30 ppb	12:56:10
3	Sr 421.552†	70036.8	68256.1	496.30 ug/L	496.30 ppb	12:54:16
3	Ti 334.940†	259985.2	246609.1	496.78 ug/L	496.78 ppb	12:55:50
3	Tl 190.801†	1107.0	1075.7	497.34 ug/L	497.34 ppb	12:56:10
3	U 409.014†	13085.7	14883.7	496.69 ug/L	496.69 ppb	12:55:50
3	V 292.402†	64604.1	62584.9	505.00 ug/L	505.00 ppb	12:55:50
3	Zn 213.857†	48922.5	45450.3	496.57 ug/L	496.57 ppb	12:55:50
3	SiO2†	73204.9	68475.7	5320.9 ug/L	5320.9 ppb	12:56:26

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818134.5	106.54 %	0.588			0.55%
Sc Radial	4817.4	102 %	0.2			0.22%
Y 371.029	724116.2	105.09 %	0.647			0.62%
Y RADIAL	5075.9	101.8 %	0.19			0.18%
Ag 328.068†	96220.5	497.84 ug/L	1.920	497.84 ppb	1.920	0.39%
QC value within limits for Ag 328.068 Recovery = 99.57%						
Al 396.153Radial†	5464.7	5087.8 ug/L	8.59	5087.8 ppb	8.59	0.17%
QC value within limits for Al 396.153Radial Recovery = 101.76%						
As 188.979†	1177.1	528.95 ug/L	0.539	528.95 ppb	0.539	0.10%
QC value within limits for As 188.979 Recovery = 105.79%						
B 249.677†	21216.1	528.99 ug/L	1.087	528.99 ppb	1.087	0.21%
QC value within limits for B 249.677 Recovery = 105.80%						
Ba 233.527†	42271.1	500.05 ug/L	1.442	500.05 ppb	1.442	0.29%
QC value within limits for Ba 233.527 Recovery = 100.01%						
Be 313.107†	1246324.8	496.52 ug/L	0.437	496.52 ppb	0.437	0.09%
QC value within limits for Be 313.107 Recovery = 99.30%						

Ca 317.933Radial†	2844.3	5167.9 ug/L	31.06	5167.9 ppb	31.06	0.60%
QC value within limits for Ca 317.933Radial Recovery = 103.36%						
Cd 226.502†	35387.3	501.54 ug/L	2.152	501.54 ppb	2.152	0.43%
QC value within limits for Cd 226.502 Recovery = 100.31%						
Co 228.616†	16826.3	508.59 ug/L	2.661	508.59 ppb	2.661	0.52%
QC value within limits for Co 228.616 Recovery = 101.72%						
Cr 267.716†	36504.6	499.32 ug/L	1.216	499.32 ppb	1.216	0.24%
QC value within limits for Cr 267.716 Recovery = 99.86%						
Cu 324.752†	132127.0	494.74 ug/L	1.641	494.74 ppb	1.641	0.33%
QC value within limits for Cu 324.752 Recovery = 98.95%						
Fe 238.204 Radial†	498.4	5185.6 ug/L	46.21	5185.6 ppb	46.21	0.89%
QC value within limits for Fe 238.204 Radial Recovery = 103.71%						
K 766.490 Radial†	26838.7	5336.3 ug/L	34.37	5336.3 ppb	34.37	0.64%
QC value within limits for K 766.490 Radial Recovery = 106.73%						
Mg 279.077 IEC†	135.1	5361.9 ug/L	51.55	5361.9 ppb	51.55	0.96%
QC value within limits for Mg 279.077 IEC Recovery = 107.24%						
Mn 257.610†	311127.6	498.29 ug/L	1.783	498.29 ppb	1.783	0.36%
QC value within limits for Mn 257.610 Recovery = 99.66%						
Mo 202.031†	5379.6	494.16 ug/L	2.601	494.16 ppb	2.601	0.53%
QC value within limits for Mo 202.031 Recovery = 98.83%						
Na 589.592 Radial†	28406.5	9680.9 ug/L	37.99	9680.9 ppb	37.99	0.39%
QC value within limits for Na 589.592 Radial Recovery = 96.81%						
Ni 231.604†	15856.1	506.56 ug/L	2.266	506.56 ppb	2.266	0.45%
QC value within limits for Ni 231.604 Recovery = 101.31%						
P 214.914†	4425.3	2374.7 ug/L	17.17	2374.7 ppb	17.17	0.72%
QC value within limits for P 214.914 Recovery = 94.99%						
Pb 220.353†	3128.5	506.32 ug/L	0.725	506.32 ppb	0.725	0.14%
QC value within limits for Pb 220.353 Recovery = 101.26%						
S 181.975 Axial†	771.9	999.89 ug/L	12.726	999.89 ppb	12.726	1.27%
QC value within limits for S 181.975 Axial Recovery = 99.99%						
Sb 206.836†	1265.2	531.12 ug/L	1.496	531.12 ppb	1.496	0.28%
QC value within limits for Sb 206.836 Recovery = 106.22%						
Se 196.026†	819.1	515.22 ug/L	0.875	515.22 ppb	0.875	0.17%
QC value within limits for Se 196.026 Recovery = 103.04%						
Si 251.611†	67990.6	2474.9 ug/L	6.14	2474.9 ppb	6.14	0.25%
QC value within limits for Si 251.611 Recovery = 99.00%						
Sn 189.927†	2115.6	498.84 ug/L	2.193	498.84 ppb	2.193	0.44%
QC value within limits for Sn 189.927 Recovery = 99.77%						
Sr 421.552†	68311.9	496.71 ug/L	1.309	496.71 ppb	1.309	0.26%
QC value within limits for Sr 421.552 Recovery = 99.34%						
Ti 334.940†	245698.8	494.94 ug/L	1.676	494.94 ppb	1.676	0.34%
QC value within limits for Ti 334.940 Recovery = 98.99%						
Tl 190.801†	1077.1	497.94 ug/L	1.499	497.94 ppb	1.499	0.30%
QC value within limits for Tl 190.801 Recovery = 99.59%						
U 409.014†	14997.8	500.51 ug/L	3.311	500.51 ppb	3.311	0.66%
QC value within limits for U 409.014 Recovery = 100.10%						
V 292.402†	62444.7	503.85 ug/L	1.088	503.85 ppb	1.088	0.22%
QC value within limits for V 292.402 Recovery = 100.77%						
Zn 213.857†	45317.2	495.11 ug/L	1.701	495.11 ppb	1.701	0.34%
QC value within limits for Zn 213.857 Recovery = 99.02%						
SiO2†	68006.1	5284.3 ug/L	72.93	5284.3 ppb	72.93	1.38%
QC value within limits for SiO2 Recovery = 98.82%						
All analyte(s) passed QC.						

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/1/2010 12:58:36  
 Data Type: Reprocessed on 3/1/2010 13:29:43  
 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 361.383	801042.3	801042.3	104.31 %		13:01:45
1	Sc Radial	4860.2	4860.2	103 %		13:00:29
1	Y 371.029	720663.8	720663.8	104.59 %		13:01:45
1	Y RADIAL	5132.1	5132.1	102.9 %		13:00:29
1	Ag 328.068†	218.3	-46.4	-0.2407 ug/L	-0.2407 ppb	13:01:45
1	Al 396.153Radial†	-79.4	10.2	9.5181 ug/L	9.5181 ppb	13:00:49
1	As 188.979†	-1.0	24.1	10.725 ug/L	10.725 ppb	13:02:05
1	B 249.677†	580.1	1009.5	25.279 ug/L	25.279 ppb	13:02:05
1	Ba 233.527†	25.8	22.4	0.2631 ug/L	0.2631 ppb	13:02:05
1	Be 313.107†	-9173.5	188.2	0.0754 ug/L	0.0754 ppb	13:01:45
1	Ca 317.933Radial†	28.1	5.1	9.2452 ug/L	9.2452 ppb	13:00:49
1	Cd 226.502†	-193.7	1.0	0.0138 ug/L	0.0138 ppb	13:02:05
1	Co 228.616†	-53.6	6.1	0.1849 ug/L	0.1849 ppb	13:02:05
1	Cr 267.716†	99.4	19.7	0.2678 ug/L	0.2678 ppb	13:02:05
1	Cu 324.752†	7791.8	-66.3	-0.2498 ug/L	-0.2498 ppb	13:01:45
1	Fe 238.204 Radial†	8.4	0.8	8.2681 ug/L	8.2681 ppb	13:00:49
1	K 766.490 Radial†	2775.3	425.9	84.760 ug/L	84.760 ppb	13:00:29
1	Mg 279.077 IEC†	3.2	0.2	7.4569 ug/L	7.4569 ppb	13:00:49
1	Mn 257.610†	481.9	0.8	0.0019 ug/L	0.0019 ppb	13:02:05
1	Mo 202.031†	17.3	2.2	0.2014 ug/L	0.2014 ppb	13:02:05
1	Na 589.592 Radial†	-681.4	188.0	64.060 ug/L	64.060 ppb	13:00:29
1	Ni 231.604†	109.4	3.6	0.1147 ug/L	0.1147 ppb	13:02:05
1	P 214.914†	196.8	-6.7	-3.6663 ug/L	-3.6663 ppb	13:02:05
1	Pb 220.353†	-32.6	39.4	6.3560 ug/L	6.3560 ppb	13:02:05
1	S 181.975 Axial†	43.7	-0.6	-0.8071 ug/L	-0.8071 ppb	13:02:05
1	Sb 206.836†	45.8	13.9	5.6621 ug/L	5.6621 ppb	13:02:05
1	Se 196.026†	-15.6	4.9	3.0021 ug/L	3.0021 ppb	13:02:05
1	Si 251.611†	692.9	75.0	2.7361 ug/L	2.7361 ppb	13:02:05
1	Sn 189.927†	12.7	4.1	0.9588 ug/L	0.9588 ppb	13:02:05
1	Sr 421.552†	47.3	46.2	0.3362 ug/L	0.3362 ppb	13:00:29
1	Ti 334.940†	-1216.3	135.0	0.2711 ug/L	0.2711 ppb	13:01:45
1	Tl 190.801†	-34.9	-2.3	-1.0317 ug/L	-1.0317 ppb	13:02:05
1	U 409.014†	-2546.6	95.5	3.1959 ug/L	3.1959 ppb	13:01:45
1	V 292.402†	-1758.8	-58.2	-0.4556 ug/L	-0.4556 ppb	13:01:45
1	Zn 213.857†	763.7	21.8	0.2389 ug/L	0.2389 ppb	13:02:05
1	SiO2†	688.1	63.2	4.9216 ug/L	4.9216 ppb	13:03:01
2	Sc 361.383	801808.8	801808.8	104.41 %		13:02:11
2	Sc Radial	4879.3	4879.3	104 %		13:00:54
2	Y 371.029	721183.9	721183.9	104.67 %		13:02:11
2	Y RADIAL	5127.6	5127.6	102.9 %		13:00:54
2	Ag 328.068†	194.9	-69.0	-0.3594 ug/L	-0.3594 ppb	13:02:11
2	Al 396.153Radial†	-81.0	9.0	8.4529 ug/L	8.4529 ppb	13:01:14
2	As 188.979†	-12.0	13.5	6.0097 ug/L	6.0097 ppb	13:02:31
2	B 249.677†	515.7	947.4	23.725 ug/L	23.725 ppb	13:02:31
2	Ba 233.527†	24.5	21.1	0.2489 ug/L	0.2489 ppb	13:02:31
2	Be 313.107†	-9270.9	103.4	0.0414 ug/L	0.0414 ppb	13:02:11
2	Ca 317.933Radial†	31.2	8.0	14.486 ug/L	14.486 ppb	13:01:14
2	Cd 226.502†	-175.5	18.6	0.2638 ug/L	0.2638 ppb	13:02:31
2	Co 228.616†	-63.2	-3.1	-0.0940 ug/L	-0.0940 ppb	13:02:31
2	Cr 267.716†	73.4	-5.4	-0.0753 ug/L	-0.0753 ppb	13:02:31
2	Cu 324.752†	7821.8	-44.7	-0.1705 ug/L	-0.1705 ppb	13:02:11
2	Fe 238.204 Radial†	7.5	-0.0	-0.4398 ug/L	-0.4398 ppb	13:01:14
2	K 766.490 Radial†	2782.1	422.0	83.980 ug/L	83.980 ppb	13:00:54
2	Mg 279.077 IEC†	0.7	-2.2	-87.558 ug/L	-87.558 ppb	13:01:14
2	Mn 257.610†	454.2	-26.1	-0.0383 ug/L	-0.0383 ppb	13:02:31
2	Mo 202.031†	13.3	-1.7	-0.1537 ug/L	-0.1537 ppb	13:02:31
2	Na 589.592 Radial†	-727.7	145.8	49.704 ug/L	49.704 ppb	13:00:54
2	Ni 231.604†	91.1	-14.1	-0.4511 ug/L	-0.4511 ppb	13:02:31

2	P 214.914†	204.9	0.9	0.5662 ug/L	0.5662 ppb	13:02:31
2	Pb 220.353†	-40.4	32.0	5.1682 ug/L	5.1682 ppb	13:02:31
2	S 181.975 Axial†	51.3	6.6	8.5889 ug/L	8.5889 ppb	13:02:31
2	Sb 206.836†	53.9	21.6	8.7842 ug/L	8.7842 ppb	13:02:31
2	Se 196.026†	-15.4	5.1	3.1128 ug/L	3.1128 ppb	13:02:31
2	Si 251.611†	729.1	109.1	3.9823 ug/L	3.9823 ppb	13:02:31
2	Sn 189.927†	20.1	11.2	2.6364 ug/L	2.6364 ppb	13:02:31
2	Sr 421.552†	50.2	48.9	0.3556 ug/L	0.3556 ppb	13:00:54
2	Ti 334.940†	-1292.3	63.4	0.1344 ug/L	0.1344 ppb	13:02:11
2	Tl 190.801†	-29.8	2.7	1.2231 ug/L	1.2231 ppb	13:02:31
2	U 409.014†	-2480.3	161.3	5.4021 ug/L	5.4021 ppb	13:02:11
2	V 292.402†	-1698.8	0.9	0.0139 ug/L	0.0139 ppb	13:02:11
2	Zn 213.857†	766.9	24.2	0.2698 ug/L	0.2698 ppb	13:02:31
2	SiO2†	702.2	76.1	5.9342 ug/L	5.9342 ppb	13:03:07
3	Sc 361.383	802421.1	802421.1	104.49 %		13:02:36
3	Sc Radial	4984.7	4984.7	106 %		13:01:19
3	Y 371.029	720635.8	720635.8	104.59 %		13:02:36
3	Y RADIAL	5262.4	5262.4	105.6 %		13:01:19
3	Ag 328.068†	218.6	-46.4	-0.2424 ug/L	-0.2424 ppb	13:02:36
3	Al 396.153Radial†	-75.3	16.0	14.904 ug/L	14.904 ppb	13:01:39
3	As 188.979†	-5.2	20.0	8.9136 ug/L	8.9136 ppb	13:02:56
3	B 249.677†	455.9	889.8	22.278 ug/L	22.278 ppb	13:02:56
3	Ba 233.527†	16.4	13.3	0.1587 ug/L	0.1587 ppb	13:02:56
3	Be 313.107†	-9310.5	72.3	0.0291 ug/L	0.0291 ppb	13:02:36
3	Cd 317.933Radial†	31.6	7.7	14.027 ug/L	14.027 ppb	13:01:39
3	Cd 226.502†	-178.9	15.5	0.2204 ug/L	0.2204 ppb	13:02:56
3	Co 228.616†	-45.3	14.1	0.4286 ug/L	0.4286 ppb	13:02:56
3	Cr 267.716†	85.1	5.8	0.0766 ug/L	0.0766 ppb	13:02:56
3	Cu 324.752†	7786.8	-84.0	-0.3203 ug/L	-0.3203 ppb	13:02:36
3	Fe 238.204 Radial†	8.7	0.9	9.5950 ug/L	9.5950 ppb	13:01:39
3	K 766.490 Radial†	2681.9	270.6	53.842 ug/L	53.842 ppb	13:01:19
3	Mg 279.077 IEC†	0.0	-2.9	-113.77 ug/L	-113.77 ppb	13:01:39
3	Mn 257.610†	480.8	-1.0	0.0039 ug/L	0.0039 ppb	13:02:56
3	Mo 202.031†	29.8	14.1	1.2981 ug/L	1.2981 ppb	13:02:56
3	Na 589.592 Radial†	-699.5	187.3	63.846 ug/L	63.846 ppb	13:01:19
3	Ni 231.604†	107.4	1.4	0.0453 ug/L	0.0453 ppb	13:02:56
3	P 214.914†	208.2	3.9	2.2321 ug/L	2.2321 ppb	13:02:56
3	Pb 220.353†	-30.4	41.6	6.7188 ug/L	6.7188 ppb	13:02:56
3	S 181.975 Axial†	51.5	6.8	8.8228 ug/L	8.8228 ppb	13:02:56
3	Sb 206.836†	48.5	16.3	6.6726 ug/L	6.6726 ppb	13:02:56
3	Se 196.026†	-14.5	5.9	3.6674 ug/L	3.6674 ppb	13:02:56
3	Si 251.611†	643.8	27.0	0.9678 ug/L	0.9678 ppb	13:02:56
3	Sn 189.927†	12.4	3.8	0.8994 ug/L	0.8994 ppb	13:02:56
3	Sr 421.552†	30.9	29.7	0.2158 ug/L	0.2158 ppb	13:01:19
3	Ti 334.940†	-1266.2	89.3	0.1860 ug/L	0.1860 ppb	13:02:36
3	Tl 190.801†	-23.8	8.4	3.8648 ug/L	3.8648 ppb	13:02:56
3	U 409.014†	-2295.2	340.2	11.392 ug/L	11.392 ppb	13:02:36
3	V 292.402†	-1605.2	91.7	0.7669 ug/L	0.7669 ppb	13:02:36
3	Zn 213.857†	762.4	19.4	0.2123 ug/L	0.2123 ppb	13:02:56
3	SiO2†	670.4	45.2	3.4842 ug/L	3.4842 ppb	13:03:12

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	801757.4	104.40 %	0.090			0.09%
Sc Radial	4908.1	104 %	1.4			1.37%
Y 371.029	720827.8	104.61 %	0.045			0.04%
Y RADIAL	5174.0	103.8 %	1.54			1.48%
Ag 328.068†	-53.9	-0.2808 ug/L	0.06804	-0.2808 ppb	0.06804	24.23%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	11.7	10.958 ug/L	3.4582	10.958 ppb	3.4582	31.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	19.2	8.5495 ug/L	2.37877	8.5495 ppb	2.37877	27.82%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	948.9	23.761 ug/L	1.5006	23.761 ppb	1.5006	6.32%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	18.9	0.2236 ug/L	0.05663	0.2236 ppb	0.05663	25.33%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	121.3	0.0486 ug/L	0.02400	0.0486 ppb	0.02400	49.33%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca 317.933Radial†	6.9	12.586 ug/L	2.9022	12.586 ppb	2.9022	23.06%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.7	0.1660 ug/L	0.13359	0.1660 ppb	0.13359	80.47%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.7	0.1732 ug/L	0.26151	0.1732 ppb	0.26151	150.99%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.7	0.0897 ug/L	0.17192	0.0897 ppb	0.17192	191.73%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-65.0	-0.2468 ug/L	0.07496	-0.2468 ppb	0.07496	30.37%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.6	5.8078 ug/L	5.45111	5.8078 ppb	5.45111	93.86%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	372.9	74.194 ug/L	17.6298	74.194 ppb	17.6298	23.76%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.6	-64.623 ug/L	63.7835	-64.623 ppb	63.7835	98.70%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-8.8	-0.0108 ug/L	0.02379	-0.0108 ppb	0.02379	219.91%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.9	0.4486 ug/L	0.75680	0.4486 ppb	0.75680	168.71%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	173.7	59.203 ug/L	8.2277	59.203 ppb	8.2277	13.90%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.0	-0.0970 ug/L	0.30861	-0.0970 ppb	0.30861	318.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.6	-0.2893 ug/L	3.04083	-0.2893 ppb	3.04083	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	37.7	6.0810 ug/L	0.81105	6.0810 ppb	0.81105	13.34%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.3	5.5349 ug/L	5.49352	5.5349 ppb	5.49352	99.25%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	17.3	7.0396 ug/L	1.59305	7.0396 ppb	1.59305	22.63%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.3	3.2608 ug/L	0.35649	3.2608 ppb	0.35649	10.93%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	70.4	2.5621 ug/L	1.51474	2.5621 ppb	1.51474	59.12%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.4	1.4982 ug/L	0.98615	1.4982 ppb	0.98615	65.82%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	41.6	0.3025 ug/L	0.07575	0.3025 ppb	0.07575	25.04%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	95.9	0.1972 ug/L	0.06901	0.1972 ppb	0.06901	35.00%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.9	1.3520 ug/L	2.45081	1.3520 ppb	2.45081	181.27%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	199.0	6.6632 ug/L	4.24084	6.6632 ppb	4.24084	63.65%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	11.5	0.1084 ug/L	0.61669	0.1084 ppb	0.61669	568.97%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	21.8	0.2403 ug/L	0.02876	0.2403 ppb	0.02876	11.97%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	61.5	4.7800 ug/L	1.23111	4.7800 ppb	1.23111	25.76%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 15

Sample ID: LR1

Analyst: HSC

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 3/1/2010 13:05:17

Data Type: Reprocessed on 3/1/2010 13:29:44

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 361.383	812300.2	812300.2	105.78 %		13:08:28
1	Sc Radial	4755.7	4755.7	101 %		13:07:10
1	Y 371.029	723774.4	723774.4	105.04 %		13:08:28
1	Y RADIAL	5069.1	5069.1	101.7 %		13:07:10
1	Ag 328.068†	-22401.9	-21434.2	4.1408 ug/L	4.1408 ppb	13:08:28
1	Al 396.153Radial†	-117.7	-29.3	-26.040 ug/L	-26.040 ppb	13:07:30
1	As 188.979†	-163.5	-129.5	29.374 ug/L	29.374 ppb	13:08:48
1	B 249.677†	1509.6	1880.6	-13.289 ug/L	-13.289 ppb	13:08:28
1	Ba 233.527†	-1484.1	-1405.5	-5.1702 ug/L	-5.1702 ppb	13:08:28
1	Be 313.107†	-9274.1	215.0	0.0858 ug/L	0.0858 ppb	13:08:28
1	Ca 317.933Radial†	19.1	-3.2	-5.9044 ug/L	-5.9044 ppb	13:07:30
1	Cd 226.502†	2669.8	2710.6	0.0647 ug/L	0.0647 ppb	13:08:28
1	Co 228.616†	506.4	536.2	10.767 ug/L	10.767 ppb	13:08:48
1	Cr 267.716†	-425.4	-477.8	0.6391 ug/L	0.6391 ppb	13:08:48
1	Cu 324.752†	1326.9	-6281.7	-3.8952 ug/L	-3.8952 ppb	13:08:28
1	Fe 238.204 Radial†	36191.5	35810.8	371530 ug/L	371530 ppb	13:07:10
1	K 766.490 Radial†	2181.4	-102.7	-20.418 ug/L	-20.418 ppb	13:07:10
1	Mg 279.077 IEC†	11.4	8.4	-57.254 ug/L	-57.254 ppb	13:07:30
1	Mn 257.610†	-28426.4	-27335.2	-7.0721 ug/L	-7.0721 ppb	13:08:28
1	Mo 202.031†	-313.7	-310.9	0.3065 ug/L	0.3065 ppb	13:08:28
1	Na 589.592 Radial†	-665.5	189.2	64.484 ug/L	64.484 ppb	13:07:10
1	Ni 231.604†	155.8	46.0	1.4604 ug/L	1.4604 ppb	13:08:48
1	P 214.914†	603.9	375.6	-84.913 ug/L	-84.913 ppb	13:08:48
1	Pb 220.353†	161.1	223.0	6.1224 ug/L	6.1224 ppb	13:08:48
1	S 181.975 Axial†	60.1	14.3	18.519 ug/L	18.519 ppb	13:08:48
1	Sb 206.836†	38.8	6.6	-1.9799 ug/L	-1.9799 ppb	13:08:48
1	Se 196.026†	-1479.5	-1378.9	-12.765 ug/L	-12.765 ppb	13:08:48
1	Si 251.611†	-190.6	-769.4	-27.725 ug/L	-27.725 ppb	13:08:28
1	Sn 189.927†	-18.8	-25.8	-27.414 ug/L	-27.414 ppb	13:08:48
1	Sr 421.552†	69.6	69.4	0.5044 ug/L	0.5044 ppb	13:07:10
1	Ti 334.940†	-1295.8	76.0	0.0966 ug/L	0.0966 ppb	13:08:28
1	Tl 190.801†	-36.8	-3.6	-2.0113 ug/L	-2.0113 ppb	13:08:48
1	U 409.014†	-447.2	2114.1	28.450 ug/L	28.450 ppb	13:08:28
1	V 292.402†	4922.8	6281.9	-4.3450 ug/L	-4.3450 ppb	13:08:28
1	Zn 213.857†	3652.0	2742.3	-25.334 ug/L	-25.334 ppb	13:08:48
1	SiO2†	-213.0	-797.8	-61.371 ug/L	-61.371 ppb	13:09:45
2	Sc 361.383	796825.3	796825.3	103.76 %		13:08:54
2	Sc Radial	4763.9	4763.9	101 %		13:07:35
2	Y 371.029	709451.5	709451.5	102.96 %		13:08:54
2	Y RADIAL	5057.6	5057.6	101.4 %		13:07:35
2	Ag 328.068†	-22071.9	-21527.4	3.6128 ug/L	3.6128 ppb	13:08:54
2	Al 396.153Radial†	-120.5	-32.0	-28.690 ug/L	-28.690 ppb	13:07:55
2	As 188.979†	-156.2	-125.5	31.118 ug/L	31.118 ppb	13:09:14
2	B 249.677†	1545.9	1943.3	-11.695 ug/L	-11.695 ppb	13:08:54
2	Ba 233.527†	-1438.7	-1389.0	-4.9795 ug/L	-4.9795 ppb	13:08:54
2	Be 313.107†	-9114.4	198.7	0.0792 ug/L	0.0792 ppb	13:08:54
2	Ca 317.933Radial†	18.7	-3.7	-6.6481 ug/L	-6.6481 ppb	13:07:55
2	Cd 226.502†	2684.2	2773.5	0.9721 ug/L	0.9721 ppb	13:08:54
2	Co 228.616†	510.3	549.2	11.172 ug/L	11.172 ppb	13:09:14
2	Cr 267.716†	-445.0	-504.4	0.2703 ug/L	0.2703 ppb	13:09:14
2	Cu 324.752†	1205.1	-6374.7	-4.2540 ug/L	-4.2540 ppb	13:08:54
2	Fe 238.204 Radial†	36239.1	35796.5	371390 ug/L	371390 ppb	13:07:35
2	K 766.490 Radial†	2339.3	49.5	9.8927 ug/L	9.8927 ppb	13:07:35
2	Mg 279.077 IEC†	9.2	6.2	-144.14 ug/L	-144.14 ppb	13:07:55
2	Mn 257.610†	-27751.5	-27206.6	-6.8774 ug/L	-6.8774 ppb	13:08:54
2	Mo 202.031†	-268.3	-273.0	3.7794 ug/L	3.7794 ppb	13:08:54
2	Na 589.592 Radial†	-739.4	117.3	39.971 ug/L	39.971 ppb	13:07:35
2	Ni 231.604†	141.7	35.2	1.1157 ug/L	1.1157 ppb	13:09:14



2	P 214.914†	609.4	392.0	-75.560 ug/L	-75.560 ppb	13:09:14
2	Pb 220.353†	162.0	226.8	6.7588 ug/L	6.7588 ppb	13:09:14
2	S 181.975 Axial†	53.0	8.6	11.113 ug/L	11.113 ppb	13:09:14
2	Sb 206.836†	21.5	-9.3	-8.3688 ug/L	-8.3688 ppb	13:09:14
2	Se 196.026†	-1481.4	-1407.8	-30.833 ug/L	-30.833 ppb	13:09:14
2	Si 251.611†	-139.9	-724.1	-26.113 ug/L	-26.113 ppb	13:08:54
2	Sn 189.927†	-14.0	-21.6	-26.402 ug/L	-26.402 ppb	13:09:14
2	Sr 421.552†	96.5	95.8	0.6967 ug/L	0.6967 ppb	13:07:35
2	Ti 334.940†	-1295.4	52.6	0.0544 ug/L	0.0544 ppb	13:08:54
2	Tl 190.801†	-33.9	-1.4	-1.0302 ug/L	-1.0302 ppb	13:09:14
2	U 409.014†	-285.3	2261.8	33.416 ug/L	33.416 ppb	13:08:54
2	V 292.402†	4855.5	6307.4	-4.0630 ug/L	-4.0630 ppb	13:08:54
2	Zn 213.857†	3703.4	2858.9	-24.024 ug/L	-24.024 ppb	13:09:14
2	SiO2†	-297.0	-882.7	-68.078 ug/L	-68.078 ppb	13:09:50
3	Sc 361.383	797370.0	797370.0	103.83 %		13:09:20
3	Sc Radial	4772.0	4772.0	101 %		13:08:00
3	Y 371.029	709955.2	709955.2	103.04 %		13:09:20
3	Y RADIAL	5050.4	5050.4	101.3 %		13:08:00
3	Ag 328.068†	-22095.9	-21536.0	2.8813 ug/L	2.8813 ppb	13:09:20
3	Al 396.153Radial†	-115.8	-27.1	-24.221 ug/L	-24.221 ppb	13:08:20
3	As 188.979†	-144.6	-114.2	35.607 ug/L	35.607 ppb	13:09:40
3	B 249.677†	1380.0	1782.5	-15.362 ug/L	-15.362 ppb	13:09:20
3	Ba 233.527†	-1528.7	-1474.6	-6.0580 ug/L	-6.0580 ppb	13:09:20
3	Be 313.107†	-9262.9	61.6	0.0243 ug/L	0.0243 ppb	13:09:20
3	Ca 317.933Radial†	17.1	-5.3	-9.6166 ug/L	-9.6166 ppb	13:08:20
3	Cd 226.502†	2696.8	2783.9	1.3503 ug/L	1.3503 ppb	13:09:20
3	Co 228.616†	537.1	574.8	11.980 ug/L	11.980 ppb	13:09:40
3	Cr 267.716†	-410.6	-471.0	0.6830 ug/L	0.6830 ppb	13:09:40
3	Cu 324.752†	1301.5	-6282.7	-4.0297 ug/L	-4.0297 ppb	13:09:20
3	Fe 238.204 Radial†	36083.0	35581.7	369160 ug/L	369160 ppb	13:08:00
3	K 766.490 Radial†	2313.2	19.9	3.9864 ug/L	3.9864 ppb	13:08:00
3	Mg 279.077 IEC†	9.2	6.1	-142.68 ug/L	-142.68 ppb	13:08:20
3	Mn 257.610†	-27718.6	-27156.6	-7.0174 ug/L	-7.0174 ppb	13:09:20
3	Mo 202.031†	-245.2	-250.5	5.6684 ug/L	5.6684 ppb	13:09:20
3	Na 589.592 Radial†	-751.9	106.1	36.175 ug/L	36.175 ppb	13:08:00
3	Ni 231.604†	118.9	13.2	0.4100 ug/L	0.4100 ppb	13:09:40
3	P 214.914†	587.4	370.3	-85.919 ug/L	-85.919 ppb	13:09:40
3	Pb 220.353†	159.1	223.9	6.4788 ug/L	6.4788 ppb	13:09:40
3	S 181.975 Axial†	50.8	6.4	8.3546 ug/L	8.3546 ppb	13:09:40
3	Sb 206.836†	31.6	0.4	-4.3721 ug/L	-4.3721 ppb	13:09:40
3	Se 196.026†	-1466.2	-1392.3	-26.291 ug/L	-26.291 ppb	13:09:40
3	Si 251.611†	-195.3	-777.3	-28.081 ug/L	-28.081 ppb	13:09:20
3	Sn 189.927†	-20.1	-27.4	-27.653 ug/L	-27.653 ppb	13:09:40
3	Sr 421.552†	74.7	74.1	0.5392 ug/L	0.5392 ppb	13:08:00
3	Ti 334.940†	-1388.2	-36.0	-0.1263 ug/L	-0.1263 ppb	13:09:20
3	Tl 190.801†	-29.1	3.2	1.0833 ug/L	1.0833 ppb	13:09:40
3	U 409.014†	-164.7	2378.1	37.563 ug/L	37.563 ppb	13:09:20
3	V 292.402†	4878.9	6326.8	-3.5477 ug/L	-3.5477 ppb	13:09:20
3	Zn 213.857†	3671.2	2825.4	-24.055 ug/L	-24.055 ppb	13:09:40
3	SiO2†	-288.3	-874.1	-67.468 ug/L	-67.468 ppb	13:09:55

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	802165.1	104.46 %		1.144			1.09%
Sc Radial	4763.8	101 %		0.2			0.17%
Y 371.029	714393.7	103.68 %		1.180			1.14%
Y RADIAL	5059.0	101.5 %		0.19			0.19%
Ag 328.068†	-21499.2	3.5450 ug/L		0.63250	3.5450 ppb	0.63250	17.84%
Al 396.153Radial†	-29.5	-26.317 ug/L		2.2473	-26.317 ppb	2.2473	8.54%
As 188.979†	-123.1	32.033 ug/L		3.2155	32.033 ppb	3.2155	10.04%
B 249.677†	1868.8	-13.449 ug/L		1.8391	-13.449 ppb	1.8391	13.67%
Ba 233.527†	-1423.0	-5.4026 ug/L		0.57556	-5.4026 ppb	0.57556	10.65%
Be 313.107†	158.4	0.0631 ug/L		0.03375	0.0631 ppb	0.03375	53.47%
Ca 317.933Radial†	-4.1	-7.3897 ug/L		1.96406	-7.3897 ppb	1.96406	26.58%
Cd 226.502†	2756.0	0.7957 ug/L		0.66070	0.7957 ppb	0.66070	83.04%
Co 228.616†	553.4	11.306 ug/L		0.6175	11.306 ppb	0.6175	5.46%
Cr 267.716†	-484.4	0.5308 ug/L		0.22664	0.5308 ppb	0.22664	42.70%
Cu 324.752†	-6313.0	-4.0597 ug/L		0.18125	-4.0597 ppb	0.18125	4.46%
Fe 238.204 Radial†	35729.7	370690 ug/L		1331.1	370690 ppb	1331.1	0.36%

K 766.490 Radial†	-11.1	-2.1797 ug/L	16.06862	-2.1797 ppb	16.06862	737.20%
Mg 279.077 IEC†	6.9	-114.69 ug/L	49.747	-114.69 ppb	49.747	43.37%
Mn 257.610†	-27232.8	-6.9890 ug/L	0.10041	-6.9890 ppb	0.10041	1.44%
Mo 202.031†	-278.1	3.2514 ug/L	2.71969	3.2514 ppb	2.71969	83.65%
Na 589.592 Radial†	137.5	46.876 ug/L	15.3661	46.876 ppb	15.3661	32.78%
Ni 231.604†	31.5	0.9953 ug/L	0.53546	0.9953 ppb	0.53546	53.80%
P 214.914†	379.3	-82.131 ug/L	5.7127	-82.131 ppb	5.7127	6.96%
Pb 220.353†	224.6	6.4533 ug/L	0.31893	6.4533 ppb	0.31893	4.94%
S 181.975 Axial†	9.8	12.662 ug/L	5.2564	12.662 ppb	5.2564	41.51%
Sb 206.836†	-0.8	-4.9069 ug/L	3.22782	-4.9069 ppb	3.22782	65.78%
Se 196.026†	-1393.0	-23.296 ug/L	9.3990	-23.296 ppb	9.3990	40.35%
Si 251.611†	-756.9	-27.306 ug/L	1.0485	-27.306 ppb	1.0485	3.84%
Sn 189.927†	-24.9	-27.156 ug/L	0.6640	-27.156 ppb	0.6640	2.45%
Sr 421.552†	79.8	0.5801 ug/L	0.10244	0.5801 ppb	0.10244	17.66%
Ti 334.940†	30.9	0.0082 ug/L	0.11840	0.0082 ppb	0.11840	>999.9%
Tl 190.801†	-0.6	-0.6527 ug/L	1.58142	-0.6527 ppb	1.58142	242.28%
U 409.014†	2251.3	33.143 ug/L	4.5629	33.143 ppb	4.5629	13.77%
V 292.402†	6305.4	-3.9853 ug/L	0.40429	-3.9853 ppb	0.40429	10.14%
Zn 213.857†	2808.9	-24.471 ug/L	0.7475	-24.471 ppb	0.7475	3.05%
SiO2†	-851.5	-65.639 ug/L	3.7086	-65.639 ppb	3.7086	5.65%

Sequence No.: 16  
 Sample ID: CCV  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/1/2010 13:12:07  
 Data Type: Reprocessed on 3/1/2010 13:29:45  
 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 361.383	812020.3	812020.3	105.74 %		13:15:17
1	Sc Radial	4863.6	4863.6	103 %		13:13:59
1	Y 371.029	719915.3	719915.3	104.48 %		13:15:17
1	Y RADIAL	5099.8	5099.8	102.3 %		13:13:59
1	Ag 328.068†	102563.9	96740.4	500.54 ug/L	500.54 ppb	13:15:22
1	Al 396.153Radial†	5533.1	5441.6	5066.2 ug/L	5066.2 ppb	13:13:59
1	As 188.979†	1168.9	1130.5	508.20 ug/L	508.20 ppb	13:15:42
1	B 249.677†	20941.1	20257.8	504.98 ug/L	504.98 ppb	13:15:22
1	Ba 233.527†	44881.5	42442.6	502.08 ug/L	502.08 ppb	13:15:22
1	Be 313.107†	1307756.2	1245745.9	496.29 ug/L	496.29 ppb	13:15:17
1	Ca 317.933Radial†	2944.6	2827.4	5137.2 ug/L	5137.2 ppb	13:14:19
1	Cd 226.502†	37379.9	35537.3	503.67 ug/L	503.67 ppb	13:15:22
1	Co 228.616†	17841.0	16930.0	511.72 ug/L	511.72 ppb	13:15:22
1	Cr 267.716†	38994.1	36801.7	503.39 ug/L	503.39 ppb	13:15:22
1	Cu 324.752†	148770.2	133157.9	498.60 ug/L	498.60 ppb	13:15:22
1	Fe 238.204 Radial†	526.2	501.9	5222.5 ug/L	5222.5 ppb	13:14:19
1	K 766.490 Radial†	28898.2	25703.7	5110.3 ug/L	5110.3 ppb	13:13:59
1	Mg 279.077 IEC†	137.4	130.0	5163.1 ug/L	5163.1 ppb	13:14:19
1	Mn 257.610†	331243.1	312800.1	500.98 ug/L	500.98 ppb	13:15:22
1	Mo 202.031†	5719.9	5395.0	495.57 ug/L	495.57 ppb	13:15:42
1	Na 589.592 Radial†	29528.5	29423.1	10027 ug/L	10027 ppb	13:13:59
1	Ni 231.604†	16931.6	15911.1	508.32 ug/L	508.32 ppb	13:15:22
1	P 214.914†	4912.9	4450.8	2388.0 ug/L	2388.0 ppb	13:15:42
1	Pb 220.353†	3189.5	3087.0	499.62 ug/L	499.62 ppb	13:15:42
1	S 181.975 Axial†	860.8	771.6	999.46 ug/L	999.46 ppb	13:15:42
1	Sb 206.836†	1334.2	1231.7	517.47 ug/L	517.47 ppb	13:15:42
1	Se 196.026†	846.2	820.0	515.88 ug/L	515.88 ppb	13:15:42
1	Si 251.611†	72800.9	68259.6	2484.7 ug/L	2484.7 ppb	13:15:22
1	Sn 189.927†	2219.7	2091.2	493.07 ug/L	493.07 ppb	13:15:42
1	Sr 421.552†	71418.0	69113.0	502.53 ug/L	502.53 ppb	13:13:59
1	Ti 334.940†	260272.1	247444.0	498.47 ug/L	498.47 ppb	13:15:22
1	Tl 190.801†	1102.3	1073.7	496.38 ug/L	496.38 ppb	13:15:42
1	U 409.014†	13062.6	14890.3	496.89 ug/L	496.89 ppb	13:15:22
1	V 292.402†	64813.9	62923.4	507.66 ug/L	507.66 ppb	13:15:22
1	Zn 213.857†	48794.6	45435.4	496.39 ug/L	496.39 ppb	13:15:22
1	SiO2†	72942.2	68386.1	5313.9 ug/L	5313.9 ppb	13:16:49
2	Sc 361.383	813811.3	813811.3	105.97 %		13:15:47
2	Sc Radial	4865.8	4865.8	103 %		13:14:24
2	Y 371.029	720903.6	720903.6	104.63 %		13:15:47
2	Y RADIAL	5108.9	5108.9	102.5 %		13:14:24
2	Ag 328.068†	101911.1	95911.0	496.26 ug/L	496.26 ppb	13:15:53
2	Al 396.153Radial†	5473.4	5381.4	5009.9 ug/L	5009.9 ppb	13:14:24
2	As 188.979†	1160.9	1120.5	503.70 ug/L	503.70 ppb	13:16:13
2	B 249.677†	20791.7	20073.1	500.36 ug/L	500.36 ppb	13:15:53
2	Ba 233.527†	44701.5	42179.4	498.97 ug/L	498.97 ppb	13:15:53
2	Be 313.107†	1314042.1	1248955.8	497.56 ug/L	497.56 ppb	13:15:47
2	Ca 317.933Radial†	2945.2	2826.7	5135.9 ug/L	5135.9 ppb	13:14:44
2	Cd 226.502†	37205.6	35295.0	500.23 ug/L	500.23 ppb	13:15:53
2	Co 228.616†	17802.6	16856.6	509.51 ug/L	509.51 ppb	13:15:53
2	Cr 267.716†	38619.8	36367.3	497.45 ug/L	497.45 ppb	13:15:53
2	Cu 324.752†	147549.5	131696.4	493.13 ug/L	493.13 ppb	13:15:53
2	Fe 238.204 Radial†	527.6	503.0	5233.9 ug/L	5233.9 ppb	13:14:44
2	K 766.490 Radial†	28858.3	25652.7	5100.1 ug/L	5100.1 ppb	13:14:24
2	Mg 279.077 IEC†	139.3	131.9	5236.0 ug/L	5236.0 ppb	13:14:44
2	Mn 257.610†	329381.0	310353.6	497.06 ug/L	497.06 ppb	13:15:53
2	Mo 202.031†	5731.3	5393.8	495.47 ug/L	495.47 ppb	13:16:13
2	Na 589.592 Radial†	29341.6	29229.6	9961.4 ug/L	9961.4 ppb	13:14:24
2	Ni 231.604†	16871.9	15819.5	505.39 ug/L	505.39 ppb	13:15:53

2	P 214.914†	4927.2	4454.1	2390.9 ug/L	2390.9 ppb	13:16:13
2	Pb 220.353†	3211.0	3100.7	501.81 ug/L	501.81 ppb	13:16:13
2	S 181.975 Axial†	861.5	770.4	997.93 ug/L	997.93 ppb	13:16:13
2	Sb 206.836†	1348.4	1242.3	521.80 ug/L	521.80 ppb	13:16:13
2	Se 196.026†	857.7	829.2	521.51 ug/L	521.51 ppb	13:16:13
2	Si 251.611†	72316.4	67650.9	2462.5 ug/L	2462.5 ppb	13:15:53
2	Sn 189.927†	2226.1	2092.5	493.39 ug/L	493.39 ppb	13:16:13
2	Sr 421.552†	71143.7	68817.0	500.38 ug/L	500.38 ppb	13:14:24
2	Ti 334.940†	258466.2	245198.2	493.94 ug/L	493.94 ppb	13:15:53
2	Tl 190.801†	1114.1	1082.5	500.41 ug/L	500.41 ppb	13:16:13
2	U 409.014†	13006.7	14810.4	494.23 ug/L	494.23 ppb	13:15:53
2	V 292.402†	64402.0	62399.8	503.49 ug/L	503.49 ppb	13:15:53
2	Zn 213.857†	48693.6	45238.6	494.25 ug/L	494.25 ppb	13:15:53
2	SiO2†	72357.4	67682.4	5259.1 ug/L	5259.1 ppb	13:16:54
3	Sc 361.383	826056.0	826056.0	107.57 %		13:16:18
3	Sc Radial	4827.1	4827.1	103 %		13:14:50
3	Y 371.029	729803.6	729803.6	105.92 %		13:16:18
3	Y RADIAL	5073.6	5073.6	101.8 %		13:14:50
3	Ag 328.068†	102086.2	94648.2	489.74 ug/L	489.74 ppb	13:16:23
3	Al 396.153Radial†	5507.4	5457.0	5081.0 ug/L	5081.0 ppb	13:14:50
3	As 188.979†	1149.1	1093.2	491.53 ug/L	491.53 ppb	13:16:43
3	B 249.677†	20848.5	19835.2	494.43 ug/L	494.43 ppb	13:16:23
3	Ba 233.527†	44848.9	41691.2	493.19 ug/L	493.19 ppb	13:16:23
3	Be 313.107†	1328033.0	1243582.0	495.41 ug/L	495.41 ppb	13:16:18
3	Ca 317.933Radial†	2936.0	2840.5	5161.1 ug/L	5161.1 ppb	13:15:10
3	Cd 226.502†	37177.5	34748.5	492.48 ug/L	492.48 ppb	13:16:23
3	Co 228.616†	17794.4	16599.9	501.75 ug/L	501.75 ppb	13:16:23
3	Cr 267.716†	38712.8	35913.6	491.24 ug/L	491.24 ppb	13:16:23
3	Cu 324.752†	147458.5	129547.9	485.09 ug/L	485.09 ppb	13:16:23
3	Fe 238.204 Radial†	521.3	501.0	5213.0 ug/L	5213.0 ppb	13:15:10
3	K 766.490 Radial†	28625.2	25649.0	5099.4 ug/L	5099.4 ppb	13:14:50
3	Mg 279.077 IEC†	139.1	132.8	5270.6 ug/L	5270.6 ppb	13:15:10
3	Mn 257.610†	329726.2	306067.2	490.20 ug/L	490.20 ppb	13:16:23
3	Mo 202.031†	5713.1	5296.8	486.56 ug/L	486.56 ppb	13:16:43
3	Na 589.592 Radial†	29108.6	29229.8	9961.5 ug/L	9961.5 ppb	13:14:50
3	Ni 231.604†	16821.7	15536.9	496.36 ug/L	496.36 ppb	13:16:23
3	P 214.914†	4912.6	4371.6	2346.5 ug/L	2346.5 ppb	13:16:43
3	Pb 220.353†	3191.7	3037.8	491.68 ug/L	491.68 ppb	13:16:43
3	S 181.975 Axial†	857.3	754.5	977.26 ug/L	977.26 ppb	13:16:43
3	Sb 206.836†	1333.5	1209.6	508.24 ug/L	508.24 ppb	13:16:43
3	Se 196.026†	829.0	790.4	497.72 ug/L	497.72 ppb	13:16:43
3	Si 251.611†	72262.7	66589.4	2423.9 ug/L	2423.9 ppb	13:16:23
3	Sn 189.927†	2230.2	2065.2	486.97 ug/L	486.97 ppb	13:16:43
3	Sr 421.552†	70763.1	68997.1	501.69 ug/L	501.69 ppb	13:14:50
3	Ti 334.940†	258767.4	241862.9	487.23 ug/L	487.23 ppb	13:16:23
3	Tl 190.801†	1102.1	1055.8	488.10 ug/L	488.10 ppb	13:16:43
3	U 409.014†	13109.0	14723.5	491.34 ug/L	491.34 ppb	13:16:23
3	V 292.402†	64389.0	61486.9	496.10 ug/L	496.10 ppb	13:16:23
3	Zn 213.857†	48575.3	44447.5	485.59 ug/L	485.59 ppb	13:16:23
3	SiO2†	73293.1	67540.1	5248.2 ug/L	5248.2 ppb	13:16:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817295.9	106.43 %	0.995			0.93%
Sc Radial	4852.2	103 %	0.5			0.45%
Y 371.029	723540.8	105.01 %	0.790			0.75%
Y RADIAL	5094.1	102.2 %	0.37			0.36%
Ag 328.068†	95766.5	495.51 ug/L	5.440	495.51 ppb	5.440	1.10%
QC value within limits for Ag 328.068 Recovery = 99.10%						
Al 396.153Radial†	5426.7	5052.3 ug/L	37.52	5052.3 ppb	37.52	0.74%
QC value within limits for Al 396.153Radial Recovery = 101.05%						
As 188.979†	1114.7	501.14 ug/L	8.624	501.14 ppb	8.624	1.72%
QC value within limits for As 188.979 Recovery = 100.23%						
B 249.677†	20055.4	499.92 ug/L	5.290	499.92 ppb	5.290	1.06%
QC value within limits for B 249.677 Recovery = 99.98%						
Ba 233.527†	42104.4	498.08 ug/L	4.512	498.08 ppb	4.512	0.91%
QC value within limits for Ba 233.527 Recovery = 99.62%						
Be 313.107†	1246094.6	496.42 ug/L	1.081	496.42 ppb	1.081	0.22%
QC value within limits for Be 313.107 Recovery = 99.28%						

Ca 317.933Radial†	2831.5	5144.7 ug/L	14.18	5144.7 ppb	14.18	0.28%
QC value within limits for Ca 317.933Radial Recovery = 102.89%						
Cd 226.502†	35193.6	498.79 ug/L	5.732	498.79 ppb	5.732	1.15%
QC value within limits for Cd 226.502 Recovery = 99.76%						
Co 228.616†	16795.5	507.66 ug/L	5.238	507.66 ppb	5.238	1.03%
QC value within limits for Co 228.616 Recovery = 101.53%						
Cr 267.716†	36360.8	497.36 ug/L	6.074	497.36 ppb	6.074	1.22%
QC value within limits for Cr 267.716 Recovery = 99.47%						
Cu 324.752†	131467.4	492.27 ug/L	6.798	492.27 ppb	6.798	1.38%
QC value within limits for Cu 324.752 Recovery = 98.45%						
Fe 238.204 Radial†	502.0	5223.1 ug/L	10.45	5223.1 ppb	10.45	0.20%
QC value within limits for Fe 238.204 Radial Recovery = 104.46%						
K 766.490 Radial†	25668.4	5103.3 ug/L	6.07	5103.3 ppb	6.07	0.12%
QC value within limits for K 766.490 Radial Recovery = 102.07%						
Mg 279.077 IEC†	131.6	5223.2 ug/L	54.89	5223.2 ppb	54.89	1.05%
QC value within limits for Mg 279.077 IEC Recovery = 104.46%						
Mn 257.610†	309740.3	496.08 ug/L	5.458	496.08 ppb	5.458	1.10%
QC value within limits for Mn 257.610 Recovery = 99.22%						
Mo 202.031†	5361.9	492.54 ug/L	5.172	492.54 ppb	5.172	1.05%
QC value within limits for Mo 202.031 Recovery = 98.51%						
Na 589.592 Radial†	29294.2	9983.4 ug/L	38.04	9983.4 ppb	38.04	0.38%
QC value within limits for Na 589.592 Radial Recovery = 99.83%						
Ni 231.604†	15755.8	503.36 ug/L	6.233	503.36 ppb	6.233	1.24%
QC value within limits for Ni 231.604 Recovery = 100.67%						
P 214.914†	4425.5	2375.1 ug/L	24.87	2375.1 ppb	24.87	1.05%
QC value within limits for P 214.914 Recovery = 95.01%						
Pb 220.353†	3075.2	497.71 ug/L	5.332	497.71 ppb	5.332	1.07%
QC value within limits for Pb 220.353 Recovery = 99.54%						
S 181.975 Axial†	765.5	991.55 ug/L	12.401	991.55 ppb	12.401	1.25%
QC value within limits for S 181.975 Axial Recovery = 99.15%						
Sb 206.836†	1227.9	515.84 ug/L	6.927	515.84 ppb	6.927	1.34%
QC value within limits for Sb 206.836 Recovery = 103.17%						
Se 196.026†	813.2	511.70 ug/L	12.435	511.70 ppb	12.435	2.43%
QC value within limits for Se 196.026 Recovery = 102.34%						
Si 251.611†	67500.0	2457.1 ug/L	30.78	2457.1 ppb	30.78	1.25%
QC value within limits for Si 251.611 Recovery = 98.28%						
Sn 189.927†	2083.0	491.14 ug/L	3.622	491.14 ppb	3.622	0.74%
QC value within limits for Sn 189.927 Recovery = 98.23%						
Sr 421.552†	68975.7	501.54 ug/L	1.085	501.54 ppb	1.085	0.22%
QC value within limits for Sr 421.552 Recovery = 100.31%						
Ti 334.940†	244835.0	493.21 ug/L	5.658	493.21 ppb	5.658	1.15%
QC value within limits for Ti 334.940 Recovery = 98.64%						
Tl 190.801†	1070.7	494.96 ug/L	6.277	494.96 ppb	6.277	1.27%
QC value within limits for Tl 190.801 Recovery = 98.99%						
U 409.014†	14808.0	494.15 ug/L	2.779	494.15 ppb	2.779	0.56%
QC value within limits for U 409.014 Recovery = 98.83%						
V 292.402†	62270.0	502.42 ug/L	5.853	502.42 ppb	5.853	1.16%
QC value within limits for V 292.402 Recovery = 100.48%						
Zn 213.857†	45040.5	492.08 ug/L	5.717	492.08 ppb	5.717	1.16%
QC value within limits for Zn 213.857 Recovery = 98.42%						
SiO2†	67869.5	5273.7 ug/L	35.20	5273.7 ppb	35.20	0.67%
QC value within limits for SiO2 Recovery = 98.62%						
All analyte(s) passed QC.						

Sequence No.: 17  
 Sample ID: CCB  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/1/2010 13:19:10  
 Data Type: Reprocessed on 3/1/2010 13:29:46  
 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 361.383	810277.2	810277.2	105.51 %		13:22:19
1	Sc Radial	4862.4	4862.4	103 %		13:21:02
1	Y 371.029	730937.1	730937.1	106.08 %		13:22:19
1	Y RADIAL	5156.5	5156.5	103.4 %		13:21:02
1	Ag 328.068†	194.7	-71.2	-0.3643 ug/L	-0.3643 ppb	13:22:19
1	Al 396.153Radial†	-78.9	10.7	10.042 ug/L	10.042 ppb	13:21:22
1	As 188.979†	-31.1	-4.4	-1.9674 ug/L	-1.9674 ppb	13:22:39
1	B 249.677†	-33.5	421.7	10.556 ug/L	10.556 ppb	13:22:39
1	Ba 233.527†	19.4	16.0	0.1900 ug/L	0.1900 ppb	13:22:39
1	Be 313.107†	-9262.9	203.7	0.0817 ug/L	0.0817 ppb	13:22:19
1	Ca 317.933Radial†	30.9	7.7	14.063 ug/L	14.063 ppb	13:21:22
1	Cd 226.502†	-192.9	3.8	0.0532 ug/L	0.0532 ppb	13:22:39
1	Co 228.616†	-58.1	2.4	0.0721 ug/L	0.0721 ppb	13:22:39
1	Cr 267.716†	90.6	10.2	0.1388 ug/L	0.1388 ppb	13:22:39
1	Cu 324.752†	7847.5	-98.7	-0.3715 ug/L	-0.3715 ppb	13:22:19
1	Fe 238.204 Radial†	9.1	1.5	15.345 ug/L	15.345 ppb	13:21:22
1	K 766.490 Radial†	2382.5	44.6	8.8454 ug/L	8.8454 ppb	13:21:02
1	Mg 279.077 IEC†	1.1	-1.8	-71.376 ug/L	-71.376 ppb	13:21:22
1	Mn 257.610†	447.3	-37.2	-0.0552 ug/L	-0.0552 ppb	13:22:39
1	Mo 202.031†	14.0	-1.1	-0.1034 ug/L	-0.1034 ppb	13:22:39
1	Na 589.592 Radial†	-714.9	155.8	53.086 ug/L	53.086 ppb	13:21:02
1	Ni 231.604†	110.2	3.1	0.0990 ug/L	0.0990 ppb	13:22:39
1	P 214.914†	213.8	7.3	4.1503 ug/L	4.1503 ppb	13:22:39
1	Pb 220.353†	-61.1	12.8	2.0625 ug/L	2.0625 ppb	13:22:39
1	S 181.975 Axial†	46.4	1.5	1.9452 ug/L	1.9452 ppb	13:22:39
1	Sb 206.836†	43.0	10.8	4.3950 ug/L	4.3950 ppb	13:22:39
1	Se 196.026†	-8.9	11.4	7.0057 ug/L	7.0057 ppb	13:22:39
1	Si 251.611†	629.3	7.2	0.2636 ug/L	0.2636 ppb	13:22:39
1	Sn 189.927†	17.3	8.3	1.9670 ug/L	1.9670 ppb	13:22:39
1	Sr 421.552†	13.0	13.1	0.0952 ug/L	0.0952 ppb	13:21:02
1	Ti 334.940†	-1209.9	154.3	0.3165 ug/L	0.3165 ppb	13:22:19
1	Tl 190.801†	-30.7	2.1	0.9794 ug/L	0.9794 ppb	13:22:39
1	U 409.014†	-2521.8	146.8	4.9130 ug/L	4.9130 ppb	13:22:19
1	V 292.402†	-1680.2	35.6	0.2874 ug/L	0.2874 ppb	13:22:19
1	Zn 213.857†	772.4	21.7	0.2371 ug/L	0.2371 ppb	13:22:39
1	SiO2†	612.1	-16.4	-1.2714 ug/L	-1.2714 ppb	13:23:35
2	Sc 361.383	814797.3	814797.3	106.10 %		13:22:44
2	Sc Radial	4967.9	4967.9	106 %		13:21:27
2	Y 371.029	734106.6	734106.6	106.54 %		13:22:44
2	Y RADIAL	5264.3	5264.3	105.6 %		13:21:27
2	Ag 328.068†	194.8	-72.1	-0.3747 ug/L	-0.3747 ppb	13:22:44
2	Al 396.153Radial†	-71.0	19.8	18.547 ug/L	18.547 ppb	13:21:47
2	As 188.979†	-24.6	1.8	0.8228 ug/L	0.8228 ppb	13:23:04
2	B 249.677†	-28.9	426.2	10.672 ug/L	10.672 ppb	13:23:04
2	Ba 233.527†	11.2	8.2	0.0978 ug/L	0.0978 ppb	13:23:04
2	Be 313.107†	-9362.0	159.0	0.0638 ug/L	0.0638 ppb	13:22:44
2	Ca 317.933Radial†	31.1	7.3	13.318 ug/L	13.318 ppb	13:21:47
2	Cd 226.502†	-197.0	1.0	0.0144 ug/L	0.0144 ppb	13:23:04
2	Co 228.616†	-63.8	-2.6	-0.0812 ug/L	-0.0812 ppb	13:23:04
2	Cr 267.716†	77.9	-2.2	-0.0331 ug/L	-0.0331 ppb	13:23:04
2	Cu 324.752†	7860.4	-127.7	-0.4832 ug/L	-0.4832 ppb	13:22:44
2	Fe 238.204 Radial†	8.4	0.7	6.9292 ug/L	6.9292 ppb	13:21:47
2	K 766.490 Radial†	2417.9	29.1	5.7731 ug/L	5.7731 ppb	13:21:27
2	Mg 279.077 IEC†	-0.8	-3.6	-143.72 ug/L	-143.72 ppb	13:21:47
2	Mn 257.610†	433.3	-52.7	-0.0779 ug/L	-0.0779 ppb	13:23:04
2	Mo 202.031†	11.6	-3.5	-0.3167 ug/L	-0.3167 ppb	13:23:04
2	Na 589.592 Radial†	-699.1	185.5	63.207 ug/L	63.207 ppb	13:21:27
2	Ni 231.604†	93.7	-13.0	-0.4163 ug/L	-0.4163 ppb	13:23:04

2	P 214.914†	196.5	-10.1	-5.5656 ug/L	-5.5656 ppb	13:23:04
2	Pb 220.353†	-51.9	21.7	3.5099 ug/L	3.5099 ppb	13:23:04
2	S 181.975 Axial†	42.6	-2.4	-3.1100 ug/L	-3.1100 ppb	13:23:04
2	Sb 206.836†	39.3	7.0	2.8282 ug/L	2.8282 ppb	13:23:04
2	Se 196.026†	-24.6	-3.3	-2.0299 ug/L	-2.0299 ppb	13:23:04
2	Si 251.611†	618.5	-6.2	-0.2238 ug/L	-0.2238 ppb	13:23:04
2	Sn 189.927†	10.0	1.4	0.3266 ug/L	0.3266 ppb	13:23:04
2	Sr 421.552†	51.0	48.8	0.3546 ug/L	0.3546 ppb	13:21:27
2	Ti 334.940†	-1237.5	134.7	0.2809 ug/L	0.2809 ppb	13:22:44
2	Tl 190.801†	-38.4	-5.0	-2.3044 ug/L	-2.3044 ppb	13:23:04
2	U 409.014†	-2390.9	283.4	9.4882 ug/L	9.4882 ppb	13:22:44
2	V 292.402†	-1673.9	50.4	0.4107 ug/L	0.4107 ppb	13:22:44
2	Zn 213.857†	760.3	6.3	0.0721 ug/L	0.0721 ppb	13:23:04
2	SiO2†	610.5	-21.1	-1.6327 ug/L	-1.6327 ppb	13:23:40
3	Sc 361.383	804933.5	804933.5	104.82 %		13:23:09
3	Sc Radial	4961.0	4961.0	105 %		13:21:52
3	Y 371.029	724081.2	724081.2	105.09 %		13:23:09
3	Y RADIAL	5272.6	5272.6	105.8 %		13:21:52
3	Ag 328.068†	244.9	-22.0	-0.1231 ug/L	-0.1231 ppb	13:23:09
3	Al 396.153Radial†	-83.4	8.0	7.4930 ug/L	7.4930 ppb	13:22:12
3	As 188.979†	-29.4	-3.0	-1.3442 ug/L	-1.3442 ppb	13:23:30
3	B 249.677†	-52.9	402.9	10.093 ug/L	10.093 ppb	13:23:30
3	Ba 233.527†	12.4	9.5	0.1119 ug/L	0.1119 ppb	13:23:30
3	Be 313.107†	-9348.5	63.8	0.0257 ug/L	0.0257 ppb	13:23:09
3	Ca 317.933Radial†	31.8	8.0	14.549 ug/L	14.549 ppb	13:22:12
3	Cd 226.502†	-197.9	-2.2	-0.0285 ug/L	-0.0285 ppb	13:23:30
3	Co 228.616†	-68.1	-7.5	-0.2254 ug/L	-0.2254 ppb	13:23:30
3	Cr 267.716†	77.6	-1.5	-0.0245 ug/L	-0.0245 ppb	13:23:30
3	Cu 324.752†	7766.6	-126.5	-0.4791 ug/L	-0.4791 ppb	13:23:09
3	Fe 238.204 Radial†	6.5	-1.1	-11.602 ug/L	-11.602 ppb	13:22:12
3	K 766.490 Radial†	2405.0	20.1	3.9680 ug/L	3.9680 ppb	13:21:52
3	Mg 279.077 IEC†	2.7	-0.3	-12.789 ug/L	-12.789 ppb	13:22:12
3	Mn 257.610†	432.0	-49.0	-0.0790 ug/L	-0.0790 ppb	13:23:30
3	Mo 202.031†	15.7	0.6	0.0514 ug/L	0.0514 ppb	13:23:30
3	Na 589.592 Radial†	-721.3	163.5	55.725 ug/L	55.725 ppb	13:21:52
3	Ni 231.604†	95.3	-10.4	-0.3321 ug/L	-0.3321 ppb	13:23:30
3	P 214.914†	208.0	3.0	1.7986 ug/L	1.7986 ppb	13:23:30
3	Pb 220.353†	-60.9	12.6	2.0348 ug/L	2.0348 ppb	13:23:30
3	S 181.975 Axial†	41.6	-2.8	-3.6233 ug/L	-3.6233 ppb	13:23:30
3	Sb 206.836†	44.5	12.4	5.0231 ug/L	5.0231 ppb	13:23:30
3	Se 196.026†	-11.6	8.7	5.3236 ug/L	5.3236 ppb	13:23:30
3	Si 251.611†	598.2	-18.6	-0.6777 ug/L	-0.6777 ppb	13:23:30
3	Sn 189.927†	8.3	-0.2	-0.0374 ug/L	-0.0374 ppb	13:23:30
3	Sr 421.552†	20.2	19.7	0.1430 ug/L	0.1430 ppb	13:21:52
3	Ti 334.940†	-1280.3	79.6	0.1595 ug/L	0.1595 ppb	13:23:09
3	Tl 190.801†	-29.6	3.0	1.3776 ug/L	1.3776 ppb	13:23:30
3	U 409.014†	-2382.8	263.5	8.8255 ug/L	8.8255 ppb	13:23:09
3	V 292.402†	-1669.3	35.4	0.3009 ug/L	0.3009 ppb	13:23:09
3	Zn 213.857†	752.1	7.3	0.0847 ug/L	0.0847 ppb	13:23:30
3	SiO2†	638.4	12.6	0.9782 ug/L	0.9782 ppb	13:23:45

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	810002.7	105.48 %	0.643			0.61%
Sc Radial	4930.4	105 %	1.3			1.20%
Y 371.029	729708.3	105.90 %	0.744			0.70%
Y RADIAL	5231.1	104.9 %	1.30			1.24%
Ag 328.068†	-55.1	-0.2874 ug/L	0.14233	-0.2874 ppb	0.14233	49.53%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.9	12.027 ug/L	5.7882	12.027 ppb	5.7882	48.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.9	-0.8296 ug/L	1.46457	-0.8296 ppb	1.46457	176.54%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	416.9	10.440 ug/L	0.3065	10.440 ppb	0.3065	2.94%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.2	0.1333 ug/L	0.04967	0.1333 ppb	0.04967	37.27%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	142.2	0.0571 ug/L	0.02859	0.0571 ppb	0.02859	50.09%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca 317.933Radial†	7.7	13.977 ug/L	0.6201	13.977 ppb	0.6201	4.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.8	0.0131 ug/L	0.04087	0.0131 ppb	0.04087	313.16%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.6	-0.0782 ug/L	0.14876	-0.0782 ppb	0.14876	190.29%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	2.2	0.0270 ug/L	0.09684	0.0270 ppb	0.09684	357.99%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-117.6	-0.4446 ug/L	0.06337	-0.4446 ppb	0.06337	14.25%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	3.5571 ug/L	13.78636	3.5571 ppb	13.78636	387.57%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	31.3	6.1955 ug/L	2.46600	6.1955 ppb	2.46600	39.80%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.9	-75.961 ug/L	65.5845	-75.961 ppb	65.5845	86.34%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-46.3	-0.0707 ug/L	0.01345	-0.0707 ppb	0.01345	19.02%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-1.3	-0.1229 ug/L	0.18481	-0.1229 ppb	0.18481	150.36%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	168.3	57.340 ug/L	5.2500	57.340 ppb	5.2500	9.16%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-6.8	-0.2165 ug/L	0.27642	-0.2165 ppb	0.27642	127.68%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	0.1	0.1278 ug/L	5.06885	0.1278 ppb	5.06885	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	15.7	2.5357 ug/L	0.84374	2.5357 ppb	0.84374	33.27%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.2	-1.5960 ug/L	3.07750	-1.5960 ppb	3.07750	192.82%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.0	4.0821 ug/L	1.13043	4.0821 ppb	1.13043	27.69%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.6	3.4331 ug/L	4.80533	3.4331 ppb	4.80533	139.97%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-5.9	-0.2126 ug/L	0.47075	-0.2126 ppb	0.47075	221.40%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.2	0.7521 ug/L	1.06777	0.7521 ppb	1.06777	141.98%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	27.2	0.1976 ug/L	0.13806	0.1976 ppb	0.13806	69.86%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	122.9	0.2523 ug/L	0.08231	0.2523 ppb	0.08231	32.62%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.0	0.0175 ug/L	2.02068	0.0175 ppb	2.02068	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	231.2	7.7422 ug/L	2.47252	7.7422 ppb	2.47252	31.94%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	40.5	0.3330 ug/L	0.06763	0.3330 ppb	0.06763	20.31%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	11.8	0.1313 ug/L	0.09183	0.1313 ppb	0.09183	69.94%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-8.3	-0.6420 ug/L	1.41470	-0.6420 ppb	1.41470	220.37%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						



Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/1/2010 14:20:07

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	5106.5	5106.5	108 %		14:21:59
1	Y RADIAL	5370.5	5370.5	107.7 %		14:21:59
1	Al 396.153Radial†	5786.0	5420.0	5045.8 ug/L	5045.8 ppb	14:21:59
1	Ca 317.933Radial†	3030.2	2770.8	5034.4 ug/L	5034.4 ppb	14:22:19
1	Fe 238.204 Radial†	542.1	492.3	5122.9 ug/L	5122.9 ppb	14:22:19
1	K 766.490 Radial†	29833.1	25235.4	5017.1 ug/L	5017.1 ppb	14:21:59
1	Mg 279.077 IEC†	145.0	130.8	5191.4 ug/L	5191.4 ppb	14:22:19
1	Na 589.592 Radial†	30899.7	29327.9	9994.9 ug/L	9994.9 ppb	14:21:59
1	Sr 421.552†	74979.2	69108.5	502.50 ug/L	502.50 ppb	14:21:59
1	Sc 361.383	826727.5	826727.5	107.66 %		14:23:17
1	Y 371.029	729362.4	729362.4	105.85 %		14:23:17
1	Ag 328.068†	104560.7	96869.8	501.16 ug/L	501.16 ppb	14:23:22
1	As 188.979†	1187.5	1128.0	507.10 ug/L	507.10 ppb	14:23:42
1	B 249.677†	20897.5	19864.9	495.15 ug/L	495.15 ppb	14:23:22
1	Ba 233.527†	45864.8	42601.0	503.95 ug/L	503.95 ppb	14:23:22
1	Be 313.107†	1348946.3	1262005.5	502.76 ug/L	502.76 ppb	14:23:17
1	Cd 226.502†	38090.1	35568.2	504.12 ug/L	504.12 ppb	14:23:22
1	Co 228.616†	18229.1	16990.3	513.55 ug/L	513.55 ppb	14:23:22
1	Cr 267.716†	39521.4	36635.4	501.11 ug/L	501.11 ppb	14:23:22
1	Cu 324.752†	152344.6	133975.3	501.65 ug/L	501.65 ppb	14:23:22
1	Mn 257.610†	338312.0	313793.5	502.56 ug/L	502.56 ppb	14:23:22
1	Mo 202.031†	5874.9	5442.8	499.95 ug/L	499.95 ppb	14:23:42
1	Ni 231.604†	17162.4	15840.6	506.07 ug/L	506.07 ppb	14:23:22
1	P 214.914†	5041.7	4487.8	2408.2 ug/L	2408.2 ppb	14:23:42
1	Pb 220.353†	3262.9	3101.6	501.98 ug/L	501.98 ppb	14:23:42
1	S 181.975 Axial†	887.9	782.2	1013.3 ug/L	1013.3 ppb	14:23:42
1	Sb 206.836†	1366.6	1239.4	520.76 ug/L	520.76 ppb	14:23:42
1	Se 196.026†	866.9	825.0	518.74 ug/L	518.74 ppb	14:23:42
1	Si 251.611†	74504.2	68617.0	2497.7 ug/L	2497.7 ppb	14:23:22
1	Sn 189.927†	2281.9	2111.6	497.87 ug/L	497.87 ppb	14:23:42
1	Ti 334.940†	266197.5	248569.3	500.72 ug/L	500.72 ppb	14:23:22
1	Tl 190.801†	1134.6	1085.1	501.65 ug/L	501.65 ppb	14:23:42
1	U 409.014†	13786.7	15343.1	512.07 ug/L	512.07 ppb	14:23:22
1	V 292.402†	65975.8	62912.3	507.68 ug/L	507.68 ppb	14:23:22
1	Zn 213.857†	49751.0	45502.9	497.16 ug/L	497.16 ppb	14:23:22
1	SiO2†	74476.3	68583.9	5329.2 ug/L	5329.2 ppb	14:24:49
2	Sc Radial	4922.9	4922.9	105 %		14:22:25
2	Y RADIAL	5179.3	5179.3	103.9 %		14:22:25
2	Al 396.153Radial†	5689.1	5526.3	5145.4 ug/L	5145.4 ppb	14:22:25
2	Ca 317.933Radial†	3022.8	2867.8	5210.7 ug/L	5210.7 ppb	14:22:45
2	Fe 238.204 Radial†	546.5	515.2	5360.3 ug/L	5360.3 ppb	14:22:45
2	K 766.490 Radial†	29347.0	25796.2	5128.6 ug/L	5128.6 ppb	14:22:25
2	Mg 279.077 IEC†	144.3	135.1	5362.4 ug/L	5362.4 ppb	14:22:45
2	Na 589.592 Radial†	30283.4	29800.9	10156 ug/L	10156 ppb	14:22:25
2	Sr 421.552†	73566.0	70334.9	511.42 ug/L	511.42 ppb	14:22:25
2	Sc 361.383	827747.3	827747.3	107.79 %		14:23:47
2	Y 371.029	732457.2	732457.2	106.30 %		14:23:47
2	Ag 328.068†	104699.6	96878.9	501.28 ug/L	501.28 ppb	14:23:53
2	As 188.979†	1183.3	1122.8	504.82 ug/L	504.82 ppb	14:24:13
2	B 249.677†	20929.2	19870.4	495.26 ug/L	495.26 ppb	14:23:53
2	Ba 233.527†	46007.2	42680.6	504.89 ug/L	504.89 ppb	14:23:53
2	Be 313.107†	1345459.0	1257226.4	500.86 ug/L	500.86 ppb	14:23:47
2	Cd 226.502†	38045.1	35482.8	502.88 ug/L	502.88 ppb	14:23:53
2	Co 228.616†	18208.5	16950.3	512.33 ug/L	512.33 ppb	14:23:53
2	Cr 267.716†	39574.4	36639.3	501.17 ug/L	501.17 ppb	14:23:53
2	Cu 324.752†	152379.4	133833.1	501.13 ug/L	501.13 ppb	14:23:53
2	Mn 257.610†	338226.6	313327.2	501.83 ug/L	501.83 ppb	14:23:53
2	Mo 202.031†	5846.1	5409.3	496.90 ug/L	496.90 ppb	14:24:13
2	Ni 231.604†	17221.9	15876.2	507.20 ug/L	507.20 ppb	14:23:53

2	P 214.914†	5035.5	4476.3	2401.7 ug/L	2401.7 ppb	14:24:13
2	Pb 220.353†	3257.7	3093.0	500.59 ug/L	500.59 ppb	14:24:13
2	S 181.975 Axial†	876.8	770.9	998.55 ug/L	998.55 ppb	14:24:13
2	Sb 206.836†	1362.0	1233.5	518.27 ug/L	518.27 ppb	14:24:13
2	Se 196.026†	875.3	831.8	523.44 ug/L	523.44 ppb	14:24:13
2	Si 251.611†	74525.3	68551.3	2495.4 ug/L	2495.4 ppb	14:23:53
2	Sn 189.927†	2274.1	2101.7	495.57 ug/L	495.57 ppb	14:24:13
2	Ti 334.940†	266227.9	248292.9	500.17 ug/L	500.17 ppb	14:23:53
2	Tl 190.801†	1146.7	1095.0	506.21 ug/L	506.21 ppb	14:24:13
2	U 409.014†	13694.6	15242.0	508.66 ug/L	508.66 ppb	14:23:53
2	V 292.402†	66061.4	62916.1	507.63 ug/L	507.63 ppb	14:23:53
2	Zn 213.857†	49748.1	45443.3	496.46 ug/L	496.46 ppb	14:23:53
2	SiO2†	74098.9	68148.4	5295.4 ug/L	5295.4 ppb	14:24:54
3	Sc Radial	4997.1	4997.1	106 %		14:22:50
3	Y RADIAL	5257.7	5257.7	105.5 %		14:22:50
3	Al 396.153Radial†	5759.9	5512.2	5132.0 ug/L	5132.0 ppb	14:22:50
3	Ca 317.933Radial†	3025.9	2827.8	5138.0 ug/L	5138.0 ppb	14:23:10
3	Fe 238.204 Radial†	542.6	503.7	5241.7 ug/L	5241.7 ppb	14:23:10
3	K 766.490 Radial†	29692.0	25704.5	5110.4 ug/L	5110.4 ppb	14:22:50
3	Mg 279.077 IEC†	144.4	133.2	5286.6 ug/L	5286.6 ppb	14:23:10
3	Na 589.592 Radial†	30661.5	29727.0	10131 ug/L	10131 ppb	14:22:50
3	Sr 421.552†	74595.9	70260.3	510.88 ug/L	510.88 ppb	14:22:50
3	Sc 361.383	828096.0	828096.0	107.83 %		14:24:18
3	Y 371.029	732734.7	732734.7	106.34 %		14:24:18
3	Ag 328.068†	105136.8	97243.5	503.13 ug/L	503.13 ppb	14:24:24
3	As 188.979†	1195.9	1134.1	509.81 ug/L	509.81 ppb	14:24:44
3	B 249.677†	21085.8	20007.5	498.70 ug/L	498.70 ppb	14:24:24
3	Ba 233.527†	45960.5	42619.3	504.17 ug/L	504.17 ppb	14:24:24
3	Be 313.107†	1346591.1	1257750.6	501.07 ug/L	501.07 ppb	14:24:18
3	Cd 226.502†	38249.0	35657.0	505.37 ug/L	505.37 ppb	14:24:24
3	Co 228.616†	18343.5	17068.4	515.91 ug/L	515.91 ppb	14:24:24
3	Cr 267.716†	39643.9	36688.3	501.84 ug/L	501.84 ppb	14:24:24
3	Cu 324.752†	152708.4	134078.7	502.04 ug/L	502.04 ppb	14:24:24
3	Mn 257.610†	339250.8	314144.7	503.13 ug/L	503.13 ppb	14:24:24
3	Mo 202.031†	5877.3	5436.0	499.34 ug/L	499.34 ppb	14:24:44
3	Ni 231.604†	17346.3	15984.8	510.67 ug/L	510.67 ppb	14:24:24
3	P 214.914†	5050.0	4487.8	2408.0 ug/L	2408.0 ppb	14:24:44
3	Pb 220.353†	3269.9	3103.0	502.22 ug/L	502.22 ppb	14:24:44
3	S 181.975 Axial†	891.0	783.8	1015.3 ug/L	1015.3 ppb	14:24:44
3	Sb 206.836†	1381.4	1251.0	525.41 ug/L	525.41 ppb	14:24:44
3	Se 196.026†	870.5	827.0	520.24 ug/L	520.24 ppb	14:24:44
3	Si 251.611†	74682.0	68667.5	2499.6 ug/L	2499.6 ppb	14:24:24
3	Sn 189.927†	2274.4	2101.1	495.42 ug/L	495.42 ppb	14:24:44
3	Ti 334.940†	266619.9	248552.3	500.69 ug/L	500.69 ppb	14:24:24
3	Tl 190.801†	1154.8	1102.2	509.48 ug/L	509.48 ppb	14:24:44
3	U 409.014†	13704.4	15245.7	508.79 ug/L	508.79 ppb	14:24:24
3	V 292.402†	66211.2	63029.3	508.58 ug/L	508.58 ppb	14:24:24
3	Zn 213.857†	49976.7	45635.8	498.58 ug/L	498.58 ppb	14:24:24
3	SiO2†	74184.0	68198.4	5299.2 ug/L	5299.2 ppb	14:24:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827523.6	107.76 %	0.093			0.09%
Sc Radial	5008.8	106 %	2.0			1.84%
Y 371.029	731518.1	106.17 %	0.272			0.26%
Y RADIAL	5269.1	105.7 %	1.93			1.82%
Ag 328.068†	96997.4	501.86 ug/L	1.100	501.86 ppb	1.100	0.22%
QC value within limits for Ag 328.068 Recovery = 100.37%						
Al 396.153Radial†	5486.2	5107.7 ug/L	54.07	5107.7 ppb	54.07	1.06%
QC value within limits for Al 396.153Radial Recovery = 102.15%						
As 188.979†	1128.3	507.24 ug/L	2.499	507.24 ppb	2.499	0.49%
QC value within limits for As 188.979 Recovery = 101.45%						
B 249.677†	19914.3	496.37 ug/L	2.017	496.37 ppb	2.017	0.41%
QC value within limits for B 249.677 Recovery = 99.27%						
Ba 233.527†	42633.6	504.34 ug/L	0.495	504.34 ppb	0.495	0.10%
QC value within limits for Ba 233.527 Recovery = 100.87%						
Be 313.107†	1258994.2	501.56 ug/L	1.042	501.56 ppb	1.042	0.21%
QC value within limits for Be 313.107 Recovery = 100.31%						
Ca 317.933Radial†	2822.2	5127.7 ug/L	88.62	5127.7 ppb	88.62	1.73%

QC value within limits for Ca 317.933 Radial Recovery = 102.55%							
Cd 226.502†	35569.3	504.12 ug/L	1.242	504.12 ppb	1.242	0.25%	
QC value within limits for Cd 226.502 Recovery = 100.82%							
Co 228.616†	17003.0	513.93 ug/L	1.818	513.93 ppb	1.818	0.35%	
QC value within limits for Co 228.616 Recovery = 102.79%							
Cr 267.716†	36654.4	501.37 ug/L	0.404	501.37 ppb	0.404	0.08%	
QC value within limits for Cr 267.716 Recovery = 100.27%							
Cu 324.752†	133962.4	501.61 ug/L	0.458	501.61 ppb	0.458	0.09%	
QC value within limits for Cu 324.752 Recovery = 100.32%							
Fe 238.204 Radial†	503.7	5241.6 ug/L	118.67	5241.6 ppb	118.67	2.26%	
QC value within limits for Fe 238.204 Radial Recovery = 104.83%							
K 766.490 Radial†	25578.7	5085.4 ug/L	59.82	5085.4 ppb	59.82	1.18%	
QC value within limits for K 766.490 Radial Recovery = 101.71%							
Mg 279.077 IEC†	133.0	5280.1 ug/L	85.70	5280.1 ppb	85.70	1.62%	
QC value within limits for Mg 279.077 IEC Recovery = 105.60%							
Mn 257.610†	313755.1	502.51 ug/L	0.652	502.51 ppb	0.652	0.13%	
QC value within limits for Mn 257.610 Recovery = 100.50%							
Mo 202.031†	5429.4	498.73 ug/L	1.613	498.73 ppb	1.613	0.32%	
QC value within limits for Mo 202.031 Recovery = 99.75%							
Na 589.592 Radial†	29618.6	10094 ug/L	86.7	10094 ppb	86.7	0.86%	
QC value within limits for Na 589.592 Radial Recovery = 100.94%							
Ni 231.604†	15900.5	507.98 ug/L	2.400	507.98 ppb	2.400	0.47%	
QC value within limits for Ni 231.604 Recovery = 101.60%							
P 214.914†	4484.0	2406.0 ug/L	3.72	2406.0 ppb	3.72	0.15%	
QC value within limits for P 214.914 Recovery = 96.24%							
Pb 220.353†	3099.2	501.60 ug/L	0.878	501.60 ppb	0.878	0.18%	
QC value within limits for Pb 220.353 Recovery = 100.32%							
S 181.975 Axial†	779.0	1009.0 ug/L	9.13	1009.0 ppb	9.13	0.90%	
QC value within limits for S 181.975 Axial Recovery = 100.90%							
Sb 206.836†	1241.3	521.48 ug/L	3.622	521.48 ppb	3.622	0.69%	
QC value within limits for Sb 206.836 Recovery = 104.30%							
Se 196.026†	828.0	520.80 ug/L	2.400	520.80 ppb	2.400	0.46%	
QC value within limits for Se 196.026 Recovery = 104.16%							
Si 251.611†	68612.0	2497.6 ug/L	2.11	2497.6 ppb	2.11	0.08%	
QC value within limits for Si 251.611 Recovery = 99.90%							
Sn 189.927†	2104.8	496.29 ug/L	1.375	496.29 ppb	1.375	0.28%	
QC value within limits for Sn 189.927 Recovery = 99.26%							
Sr 421.552†	69901.2	508.27 ug/L	4.999	508.27 ppb	4.999	0.98%	
QC value within limits for Sr 421.552 Recovery = 101.65%							
Ti 334.940†	248471.5	500.52 ug/L	0.308	500.52 ppb	0.308	0.06%	
QC value within limits for Ti 334.940 Recovery = 100.10%							
Tl 190.801†	1094.1	505.78 ug/L	3.930	505.78 ppb	3.930	0.78%	
QC value within limits for Tl 190.801 Recovery = 101.16%							
U 409.014†	15276.9	509.84 ug/L	1.934	509.84 ppb	1.934	0.38%	
QC value within limits for U 409.014 Recovery = 101.97%							
V 292.402†	62952.6	507.96 ug/L	0.535	507.96 ppb	0.535	0.11%	
QC value within limits for V 292.402 Recovery = 101.59%							
Zn 213.857†	45527.3	497.40 ug/L	1.079	497.40 ppb	1.079	0.22%	
QC value within limits for Zn 213.857 Recovery = 99.48%							
SiO2†	68310.3	5307.9 ug/L	18.53	5307.9 ppb	18.53	0.35%	
QC value within limits for SiO2 Recovery = 99.26%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/1/2010 14:27:10

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	5218.0	5218.0	111 %		14:29:02
1	Y RADIAL	5544.9	5544.9	111.2 %		14:29:02
1	Al 396.153Radial†	-77.7	17.1	15.981 ug/L	15.981 ppb	14:29:22
1	Ca 317.933Radial†	26.4	1.6	2.9394 ug/L	2.9394 ppb	14:29:22
1	Fe 238.204 Radial†	6.9	-1.1	-11.400 ug/L	-11.400 ppb	14:29:22
1	K 766.490 Radial†	2305.6	-182.0	-36.259 ug/L	-36.259 ppb	14:29:02
1	Mg 279.077 IEC†	0.6	-2.4	-94.447 ug/L	-94.447 ppb	14:29:22
1	Na 589.592 Radial†	-704.6	212.2	72.333 ug/L	72.333 ppb	14:29:02
1	Sr 421.552†	28.1	25.8	0.1875 ug/L	0.1875 ppb	14:29:02
1	Sc 361.383	818015.8	818015.8	106.52 %		14:30:19
1	Y 371.029	730161.0	730161.0	105.97 %		14:30:19
1	Ag 328.068†	171.6	-94.6	-0.4967 ug/L	-0.4967 ppb	14:30:19
1	As 188.979†	-32.1	-5.1	-2.2835 ug/L	-2.2835 ppb	14:30:39
1	B 249.677†	-275.0	195.3	4.8931 ug/L	4.8931 ppb	14:30:39
1	Ba 233.527†	33.1	28.6	0.3385 ug/L	0.3385 ppb	14:30:39
1	Be 313.107†	-9561.3	6.7	0.0033 ug/L	0.0033 ppb	14:30:19
1	Cd 226.502†	-194.1	4.4	0.0659 ug/L	0.0659 ppb	14:30:39
1	Co 228.616†	-60.4	0.8	0.0227 ug/L	0.0227 ppb	14:30:39
1	Cr 267.716†	76.3	-4.0	-0.0578 ug/L	-0.0578 ppb	14:30:39
1	Cu 324.752†	7961.1	-62.4	-0.2399 ug/L	-0.2399 ppb	14:30:19
1	Mn 257.610†	462.2	-27.3	-0.0409 ug/L	-0.0409 ppb	14:30:39
1	Mo 202.031†	10.4	-4.6	-0.4211 ug/L	-0.4211 ppb	14:30:39
1	Ni 231.604†	92.0	-15.0	-0.4788 ug/L	-0.4788 ppb	14:30:39
1	P 214.914†	203.0	-4.8	-2.6490 ug/L	-2.6490 ppb	14:30:39
1	Pb 220.353†	-70.8	4.2	0.6871 ug/L	0.6871 ppb	14:30:39
1	S 181.975 Axial†	48.0	2.5	3.3025 ug/L	3.3025 ppb	14:30:39
1	Sb 206.836†	34.9	2.7	1.0817 ug/L	1.0817 ppb	14:30:39
1	Se 196.026†	-20.6	0.5	0.2706 ug/L	0.2706 ppb	14:30:39
1	Si 251.611†	641.9	13.4	0.4936 ug/L	0.4936 ppb	14:30:39
1	Sn 189.927†	1.4	-6.7	-1.5826 ug/L	-1.5826 ppb	14:30:39
1	Ti 334.940†	-1226.9	149.3	0.3043 ug/L	0.3043 ppb	14:30:19
1	Tl 190.801†	-32.6	0.6	0.2786 ug/L	0.2786 ppb	14:30:39
1	U 409.014†	-2367.3	314.4	10.530 ug/L	10.530 ppb	14:30:19
1	V 292.402†	-1671.2	59.0	0.4840 ug/L	0.4840 ppb	14:30:19
1	Zn 213.857†	768.6	11.3	0.1294 ug/L	0.1294 ppb	14:30:39
1	SiO2†	941.4	287.3	22.396 ug/L	22.396 ppb	14:31:35
2	Sc Radial	4894.3	4894.3	104 %		14:29:27
2	Y RADIAL	5151.7	5151.7	103.3 %		14:29:27
2	Al 396.153Radial†	-72.5	17.4	16.310 ug/L	16.310 ppb	14:29:47
2	Ca 317.933Radial†	30.3	7.0	12.674 ug/L	12.674 ppb	14:29:47
2	Fe 238.204 Radial†	7.3	-0.3	-2.8340 ug/L	-2.8340 ppb	14:29:47
2	K 766.490 Radial†	2376.3	23.5	4.6600 ug/L	4.6600 ppb	14:29:27
2	Mg 279.077 IEC†	-1.5	-4.3	-171.82 ug/L	-171.82 ppb	14:29:47
2	Na 589.592 Radial†	-730.3	145.5	49.591 ug/L	49.591 ppb	14:29:27
2	Sr 421.552†	47.6	46.2	0.3361 ug/L	0.3361 ppb	14:29:27
2	Sc 361.383	826087.4	826087.4	107.57 %		14:30:44
2	Y 371.029	736765.2	736765.2	106.93 %		14:30:44
2	Ag 328.068†	286.3	10.5	0.0460 ug/L	0.0460 ppb	14:30:44
2	As 188.979†	-26.6	0.3	0.1195 ug/L	0.1195 ppb	14:31:04
2	B 249.677†	-282.8	190.5	4.7711 ug/L	4.7711 ppb	14:31:04
2	Ba 233.527†	24.2	20.1	0.2383 ug/L	0.2383 ppb	14:31:04
2	Be 313.107†	-9617.7	41.9	0.0173 ug/L	0.0173 ppb	14:30:44
2	Cd 226.502†	-184.9	14.8	0.2112 ug/L	0.2112 ppb	14:31:04
2	Co 228.616†	-57.8	3.8	0.1138 ug/L	0.1138 ppb	14:31:04
2	Cr 267.716†	68.8	-11.6	-0.1624 ug/L	-0.1624 ppb	14:31:04
2	Cu 324.752†	8077.0	-27.6	-0.1094 ug/L	-0.1094 ppb	14:30:44
2	Mn 257.610†	457.6	-35.7	-0.0505 ug/L	-0.0505 ppb	14:31:04
2	Mo 202.031†	15.1	-0.4	-0.0350 ug/L	-0.0350 ppb	14:31:04
2	Ni 231.604†	82.9	-24.2	-0.7749 ug/L	-0.7749 ppb	14:31:04

2	P 214.914†	209.6	-0.5	-0.2668 ug/L	-0.2668 ppb	14:31:04
2	Pb 220.353†	-65.5	9.8	1.5802 ug/L	1.5802 ppb	14:31:04
2	S 181.975 Axial†	47.6	1.7	2.2181 ug/L	2.2181 ppb	14:31:04
2	Sb 206.836†	40.9	8.0	3.2413 ug/L	3.2413 ppb	14:31:04
2	Se 196.026†	-18.5	2.6	1.5708 ug/L	1.5708 ppb	14:31:04
2	Si 251.611†	616.6	-16.0	-0.5841 ug/L	-0.5841 ppb	14:31:04
2	Sn 189.927†	8.8	0.1	0.0315 ug/L	0.0315 ppb	14:31:04
2	Ti 334.940†	-1256.3	133.1	0.2795 ug/L	0.2795 ppb	14:30:44
2	Tl 190.801†	-31.6	1.8	0.8279 ug/L	0.8279 ppb	14:31:04
2	U 409.014†	-2397.0	308.5	10.332 ug/L	10.332 ppb	14:30:44
2	V 292.402†	-1694.5	52.7	0.4359 ug/L	0.4359 ppb	14:30:44
2	Zn 213.857†	775.3	10.4	0.1202 ug/L	0.1202 ppb	14:31:04
2	SiO2†	920.1	258.9	20.171 ug/L	20.171 ppb	14:31:40
3	Sc Radial	5105.8	5105.8	108 %		14:29:52
3	Y RADIAL	5352.2	5352.2	107.4 %		14:29:52
3	Al 396.153Radial†	-71.6	21.1	19.753 ug/L	19.753 ppb	14:30:12
3	Ca 317.933Radial†	28.4	4.0	7.3248 ug/L	7.3248 ppb	14:30:12
3	Fe 238.204 Radial†	7.6	-0.3	-3.2048 ug/L	-3.2048 ppb	14:30:12
3	K 766.490 Radial†	2357.6	-88.3	-17.604 ug/L	-17.604 ppb	14:29:52
3	Mg 279.077 IEC†	2.6	-0.5	-21.163 ug/L	-21.163 ppb	14:30:12
3	Na 589.592 Radial†	-717.6	186.3	63.493 ug/L	63.493 ppb	14:29:52
3	Sr 421.552†	26.4	24.8	0.1805 ug/L	0.1805 ppb	14:29:52
3	Sc 361.383	828191.4	828191.4	107.85 %		14:31:10
3	Y 371.029	738495.9	738495.9	107.18 %		14:31:10
3	Ag 328.068†	235.0	-37.7	-0.2027 ug/L	-0.2027 ppb	14:31:10
3	As 188.979†	-27.5	-0.4	-0.1939 ug/L	-0.1939 ppb	14:31:30
3	B 249.677†	-243.9	227.3	5.6914 ug/L	5.6914 ppb	14:31:30
3	Ba 233.527†	31.0	26.3	0.3114 ug/L	0.3114 ppb	14:31:30
3	Be 313.107†	-9667.4	18.6	0.0084 ug/L	0.0084 ppb	14:31:10
3	Cd 226.502†	-185.7	14.5	0.2072 ug/L	0.2072 ppb	14:31:30
3	Co 228.616†	-56.4	5.1	0.1535 ug/L	0.1535 ppb	14:31:30
3	Cr 267.716†	55.6	-24.0	-0.3321 ug/L	-0.3321 ppb	14:31:30
3	Cu 324.752†	8025.1	-94.9	-0.3621 ug/L	-0.3621 ppb	14:31:10
3	Mn 257.610†	526.6	27.2	0.0440 ug/L	0.0440 ppb	14:31:30
3	Mo 202.031†	10.0	-5.1	-0.4724 ug/L	-0.4724 ppb	14:31:30
3	Ni 231.604†	94.5	-13.7	-0.4386 ug/L	-0.4386 ppb	14:31:30
3	P 214.914†	202.3	-7.8	-4.2895 ug/L	-4.2895 ppb	14:31:30
3	Pb 220.353†	-68.3	7.4	1.1910 ug/L	1.1910 ppb	14:31:30
3	S 181.975 Axial†	41.9	-3.6	-4.6868 ug/L	-4.6868 ppb	14:31:30
3	Sb 206.836†	36.9	4.2	1.6841 ug/L	1.6841 ppb	14:31:30
3	Se 196.026†	-12.9	7.8	4.7720 ug/L	4.7720 ppb	14:31:30
3	Si 251.611†	677.7	39.2	1.4351 ug/L	1.4351 ppb	14:31:30
3	Sn 189.927†	6.8	-1.8	-0.4216 ug/L	-0.4216 ppb	14:31:30
3	Ti 334.940†	-1153.1	231.9	0.4648 ug/L	0.4648 ppb	14:31:10
3	Tl 190.801†	-37.2	-3.3	-1.5222 ug/L	-1.5222 ppb	14:31:30
3	U 409.014†	-2354.5	353.6	11.843 ug/L	11.843 ppb	14:31:10
3	V 292.402†	-1686.9	63.8	0.5238 ug/L	0.5238 ppb	14:31:10
3	Zn 213.857†	767.6	1.5	0.0198 ug/L	0.0198 ppb	14:31:30
3	SiO2†	850.9	192.6	15.014 ug/L	15.014 ppb	14:31:45

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824098.2	107.31 %		0.699			0.65%
Sc Radial	5072.7	108 %		3.5			3.24%
Y 371.029	735140.7	106.69 %		0.638			0.60%
Y RADIAL	5349.6	107.3 %		3.94			3.67%
Ag 328.068†	-40.6	-0.2178 ug/L		0.27163	-0.2178 ppb	0.27163	124.71%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	18.5	17.348 ug/L		2.0891	17.348 ppb	2.0891	12.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.8	-0.7860 ug/L		1.30634	-0.7860 ppb	1.30634	166.21%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	204.4	5.1185 ug/L		0.49985	5.1185 ppb	0.49985	9.77%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	25.0	0.2961 ug/L		0.05185	0.2961 ppb	0.05185	17.52%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	22.4	0.0097 ug/L		0.00705	0.0097 ppb	0.00705	72.75%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.2	7.6459 ug/L		4.87507	7.6459 ppb	4.87507	63.76%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	11.2	0.1614 ug/L	0.08279	0.1614 ppb	0.08279	51.28%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	3.2	0.0967 ug/L	0.06705	0.0967 ppb	0.06705	69.37%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-13.2	-0.1841 ug/L	0.13844	-0.1841 ppb	0.13844	75.20%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-61.6	-0.2371 ug/L	0.12639	-0.2371 ppb	0.12639	53.30%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.6	-5.8130 ug/L	4.84221	-5.8130 ppb	4.84221	83.30%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-82.3	-16.401 ug/L	20.4862	-16.401 ppb	20.4862	124.91%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.4	-95.811 ug/L	75.3398	-95.811 ppb	75.3398	78.63%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-12.0	-0.0158 ug/L	0.05201	-0.0158 ppb	0.05201	329.38%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-3.4	-0.3095 ug/L	0.23909	-0.3095 ppb	0.23909	77.24%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	181.4	61.806 ug/L	11.4646	61.806 ppb	11.4646	18.55%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-17.6	-0.5641 ug/L	0.18364	-0.5641 ppb	0.18364	32.55%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-4.4	-2.4018 ug/L	2.02272	-2.4018 ppb	2.02272	84.22%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	7.1	1.1528 ug/L	0.44776	1.1528 ppb	0.44776	38.84%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.2	0.2779 ug/L	4.33364	0.2779 ppb	4.33364	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	5.0	2.0024 ug/L	1.11439	2.0024 ppb	1.11439	55.65%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.6	2.2045 ug/L	2.31661	2.2045 ppb	2.31661	105.09%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	12.2	0.4482 ug/L	1.01036	0.4482 ppb	1.01036	225.44%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-2.8	-0.6576 ug/L	0.83250	-0.6576 ppb	0.83250	126.60%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	32.3	0.2347 ug/L	0.08787	0.2347 ppb	0.08787	37.43%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	171.4	0.3496 ug/L	0.10060	0.3496 ppb	0.10060	28.78%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.3	-0.1386 ug/L	1.22934	-0.1386 ppb	1.22934	887.24%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	325.5	10.902 ug/L	0.8213	10.902 ppb	0.8213	7.53%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	58.5	0.4812 ug/L	0.04400	0.4812 ppb	0.04400	9.14%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	7.7	0.0898 ug/L	0.06078	0.0898 ppb	0.06078	67.67%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	246.3	19.193 ug/L	3.7872	19.193 ppb	3.7872	19.73%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/1/2010 15:27:07

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	4801.6	4801.6	102 %		15:29:00
1	Y RADIAL	5070.2	5070.2	101.7 %		15:29:00
1	Al 396.153Radial†	5642.5	5618.0	5230.8 ug/L	5230.8 ppb	15:29:00
1	Ca 317.933Radial†	2986.5	2905.3	5278.7 ug/L	5278.7 ppb	15:29:20
1	Fe 238.204 Radial†	509.6	492.2	5121.6 ug/L	5121.6 ppb	15:29:20
1	K 766.490 Radial†	28651.7	25823.2	5134.5 ug/L	5134.5 ppb	15:29:00
1	Mg 279.077 IEC†	136.6	131.0	5201.6 ug/L	5201.6 ppb	15:29:20
1	Na 589.592 Radial†	25533.2	25875.8	8818.5 ug/L	8818.5 ppb	15:29:00
1	Sr 421.552†	67617.1	66279.8	481.93 ug/L	481.93 ppb	15:29:00
1	Sc 361.383	822556.0	822556.0	107.11 %		15:30:17
1	Y 371.029	727631.3	727631.3	105.60 %		15:30:17
1	Ag 328.068†	105703.6	98429.3	509.20 ug/L	509.20 ppb	15:30:22
1	As 188.979†	1190.4	1136.4	510.88 ug/L	510.88 ppb	15:30:42
1	B 249.677†	21110.4	20162.2	502.63 ug/L	502.63 ppb	15:30:22
1	Ba 233.527†	46249.5	43176.2	510.75 ug/L	510.75 ppb	15:30:22
1	Be 313.107†	1341298.8	1261220.3	502.47 ug/L	502.47 ppb	15:30:17
1	Cd 226.502†	38393.7	36031.1	510.69 ug/L	510.69 ppb	15:30:22
1	Co 228.616†	17776.8	16653.9	503.38 ug/L	503.38 ppb	15:30:42
1	Cr 267.716†	39826.5	37106.4	507.55 ug/L	507.55 ppb	15:30:22
1	Cu 324.752†	153452.9	135727.6	508.21 ug/L	508.21 ppb	15:30:22
1	Mn 257.610†	340811.0	317720.3	508.85 ug/L	508.85 ppb	15:30:22
1	Mo 202.031†	5891.9	5486.3	503.95 ug/L	503.95 ppb	15:30:42
1	Ni 231.604†	17366.5	16112.1	514.75 ug/L	514.75 ppb	15:30:22
1	P 214.914†	5058.7	4527.4	2429.1 ug/L	2429.1 ppb	15:30:42
1	Pb 220.353†	3268.4	3122.1	505.35 ug/L	505.35 ppb	15:30:42
1	S 181.975 Axial†	887.1	785.7	1017.8 ug/L	1017.8 ppb	15:30:42
1	Sb 206.836†	1382.5	1260.7	529.54 ug/L	529.54 ppb	15:30:42
1	Se 196.026†	869.8	831.9	522.97 ug/L	522.97 ppb	15:30:42
1	Si 251.611†	75208.7	69625.7	2534.5 ug/L	2534.5 ppb	15:30:22
1	Sn 189.927†	2292.3	2132.0	502.72 ug/L	502.72 ppb	15:30:42
1	Ti 334.940†	268455.2	251931.0	507.52 ug/L	507.52 ppb	15:30:22
1	Tl 190.801†	1144.1	1099.4	508.33 ug/L	508.33 ppb	15:30:42
1	U 409.014†	13959.4	15569.3	519.63 ug/L	519.63 ppb	15:30:22
1	V 292.402†	66706.9	63905.6	515.65 ug/L	515.65 ppb	15:30:22
1	Zn 213.857†	50195.6	46152.4	504.26 ug/L	504.26 ppb	15:30:22
1	SiO2†	74630.6	69078.8	5367.6 ug/L	5367.6 ppb	15:31:49
2	Sc Radial	4837.8	4837.8	103 %		15:29:25
2	Y RADIAL	5090.4	5090.4	102.1 %		15:29:25
2	Al 396.153Radial†	5668.8	5602.2	5216.4 ug/L	5216.4 ppb	15:29:25
2	Ca 317.933Radial†	2961.1	2858.6	5194.0 ug/L	5194.0 ppb	15:29:45
2	Fe 238.204 Radial†	509.8	488.6	5084.2 ug/L	5084.2 ppb	15:29:45
2	K 766.490 Radial†	28904.9	25859.6	5141.8 ug/L	5141.8 ppb	15:29:25
2	Mg 279.077 IEC†	139.3	132.6	5266.1 ug/L	5266.1 ppb	15:29:45
2	Na 589.592 Radial†	25698.2	25849.3	8809.4 ug/L	8809.4 ppb	15:29:25
2	Sr 421.552†	68146.4	66299.5	482.07 ug/L	482.07 ppb	15:29:25
2	Sc 361.383	838776.6	838776.6	109.22 %		15:30:48
2	Y 371.029	741833.5	741833.5	107.66 %		15:30:48
2	Ag 328.068†	104827.8	95719.0	495.22 ug/L	495.22 ppb	15:30:53
2	As 188.979†	1188.7	1113.3	500.47 ug/L	500.47 ppb	15:31:13
2	B 249.677†	20992.5	19673.0	490.41 ug/L	490.41 ppb	15:30:53
2	Ba 233.527†	45983.5	42097.6	497.99 ug/L	497.99 ppb	15:30:53
2	Be 313.107†	1359130.3	1253329.6	499.30 ug/L	499.30 ppb	15:30:48
2	Cd 226.502†	38214.7	35173.9	498.53 ug/L	498.53 ppb	15:30:53
2	Co 228.616†	17755.0	16313.0	493.09 ug/L	493.09 ppb	15:31:13
2	Cr 267.716†	39700.5	36272.1	496.14 ug/L	496.14 ppb	15:30:53
2	Cu 324.752†	152286.2	131888.9	493.84 ug/L	493.84 ppb	15:30:53
2	Mn 257.610†	338804.1	309729.8	496.05 ug/L	496.05 ppb	15:30:53
2	Mo 202.031†	5910.4	5396.8	495.73 ug/L	495.73 ppb	15:31:13
2	Ni 231.604†	17323.1	15758.8	503.46 ug/L	503.46 ppb	15:30:53

2	P 214.914†	5073.0	4449.2	2388.2 ug/L	2388.2 ppb	15:31:13
2	Pb 220.353†	3277.7	3071.6	497.18 ug/L	497.18 ppb	15:31:13
2	S 181.975 Axial†	883.2	766.1	992.31 ug/L	992.31 ppb	15:31:13
2	Sb 206.836†	1383.6	1236.7	519.46 ug/L	519.46 ppb	15:31:13
2	Se 196.026†	876.5	822.3	516.95 ug/L	516.95 ppb	15:31:13
2	Si 251.611†	74662.4	67767.7	2466.8 ug/L	2466.8 ppb	15:30:53
2	Sn 189.927†	2278.9	2078.4	490.08 ug/L	490.08 ppb	15:31:13
2	Ti 334.940†	266477.0	245273.1	494.10 ug/L	494.10 ppb	15:30:53
2	Tl 190.801†	1146.3	1080.7	499.64 ug/L	499.64 ppb	15:31:13
2	U 409.014†	13588.9	14978.1	499.86 ug/L	499.86 ppb	15:30:53
2	V 292.402†	66251.0	62283.9	502.61 ug/L	502.61 ppb	15:30:53
2	Zn 213.857†	49879.3	44956.5	491.17 ug/L	491.17 ppb	15:30:53
2	SiO2†	74730.2	67822.5	5270.0 ug/L	5270.0 ppb	15:31:54
3	Sc Radial	4902.5	4902.5	104 %		15:29:50
3	Y RADIAL	5171.3	5171.3	103.7 %		15:29:50
3	Al 396.153Radial†	5673.2	5533.7	5151.8 ug/L	5151.8 ppb	15:29:50
3	Ca 317.933Radial†	2992.0	2850.3	5178.8 ug/L	5178.8 ppb	15:30:10
3	Fe 238.204 Radial†	510.6	482.8	5024.6 ug/L	5024.6 ppb	15:30:10
3	K 766.490 Radial†	29135.8	25710.3	5112.0 ug/L	5112.0 ppb	15:29:50
3	Mg 279.077 IEC†	143.0	134.4	5336.1 ug/L	5336.1 ppb	15:30:10
3	Na 589.592 Radial†	25947.8	25759.2	8778.7 ug/L	8778.7 ppb	15:29:50
3	Sr 421.552†	68568.7	65830.3	478.66 ug/L	478.66 ppb	15:29:50
3	Sc 361.383	822814.3	822814.3	107.15 %		15:31:18
3	Y 371.029	728686.5	728686.5	105.75 %		15:31:18
3	Ag 328.068†	106159.5	98823.8	511.21 ug/L	511.21 ppb	15:31:24
3	As 188.979†	1197.3	1142.5	513.57 ug/L	513.57 ppb	15:31:44
3	B 249.677†	21320.3	20351.9	507.38 ug/L	507.38 ppb	15:31:24
3	Ba 233.527†	46537.4	43431.3	513.76 ug/L	513.76 ppb	15:31:24
3	Be 313.107†	1341588.7	1261097.7	502.42 ug/L	502.42 ppb	15:31:18
3	Cd 226.502†	38639.4	36249.1	513.79 ug/L	513.79 ppb	15:31:24
3	Co 228.616†	17881.3	16746.2	506.17 ug/L	506.17 ppb	15:31:44
3	Cr 267.716†	40120.6	37369.2	511.14 ug/L	511.14 ppb	15:31:24
3	Cu 324.752†	154209.7	136389.0	510.68 ug/L	510.68 ppb	15:31:24
3	Mn 257.610†	342521.9	319217.2	511.23 ug/L	511.23 ppb	15:31:24
3	Mo 202.031†	5930.7	5520.8	507.10 ug/L	507.10 ppb	15:31:44
3	Ni 231.604†	17489.5	16221.7	518.25 ug/L	518.25 ppb	15:31:24
3	P 214.914†	5124.5	4587.4	2462.2 ug/L	2462.2 ppb	15:31:44
3	Pb 220.353†	3286.8	3138.3	507.95 ug/L	507.95 ppb	15:31:44
3	S 181.975 Axial†	895.4	793.2	1027.4 ug/L	1027.4 ppb	15:31:44
3	Sb 206.836†	1383.8	1261.5	529.97 ug/L	529.97 ppb	15:31:44
3	Se 196.026†	874.9	836.4	525.48 ug/L	525.48 ppb	15:31:44
3	Si 251.611†	75446.0	69825.1	2541.7 ug/L	2541.7 ppb	15:31:24
3	Sn 189.927†	2306.0	2144.1	505.57 ug/L	505.57 ppb	15:31:44
3	Ti 334.940†	269531.0	252856.4	509.36 ug/L	509.36 ppb	15:31:24
3	Tl 190.801†	1147.4	1102.1	509.57 ug/L	509.57 ppb	15:31:44
3	U 409.014†	13914.5	15523.3	518.10 ug/L	518.10 ppb	15:31:24
3	V 292.402†	66891.2	64058.1	516.92 ug/L	516.92 ppb	15:31:24
3	Zn 213.857†	50453.9	46378.8	506.75 ug/L	506.75 ppb	15:31:24
3	SiO2†	74915.8	69323.1	5386.6 ug/L	5386.6 ppb	15:31:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828049.0	107.83 %	1.210			1.12%
Sc Radial	4847.3	103 %	1.1			1.05%
Y 371.029	732717.1	106.34 %	1.148			1.08%
Y RADIAL	5110.6	102.5 %	1.07			1.05%
Ag 328.068†	97657.4	505.21 ug/L	8.709	505.21 ppb	8.709	1.72%
QC value within limits for Ag 328.068 Recovery = 101.04%						
Al 396.153Radial†	5584.6	5199.6 ug/L	42.07	5199.6 ppb	42.07	0.81%
QC value within limits for Al 396.153Radial Recovery = 103.99%						
As 188.979†	1130.7	508.31 ug/L	6.915	508.31 ppb	6.915	1.36%
QC value within limits for As 188.979 Recovery = 101.66%						
B 249.677†	20062.4	500.14 ug/L	8.754	500.14 ppb	8.754	1.75%
QC value within limits for B 249.677 Recovery = 100.03%						
Ba 233.527†	42901.7	507.50 ug/L	8.370	507.50 ppb	8.370	1.65%
QC value within limits for Ba 233.527 Recovery = 101.50%						
Be 313.107†	1258549.2	501.39 ug/L	1.816	501.39 ppb	1.816	0.36%
QC value within limits for Be 313.107 Recovery = 100.28%						
Ca 317.933Radial†	2871.4	5217.2 ug/L	53.84	5217.2 ppb	53.84	1.03%



QC value within limits for Ca 317.933 Radial Recovery = 104.34%							
Cd 226.502†	35818.0	507.67 ug/L	8.066	507.67 ppb	8.066	1.59%	
QC value within limits for Cd 226.502 Recovery = 101.53%							
Co 228.616†	16571.0	500.88 ug/L	6.892	500.88 ppb	6.892	1.38%	
QC value within limits for Co 228.616 Recovery = 100.18%							
Cr 267.716†	36915.9	504.95 ug/L	7.833	504.95 ppb	7.833	1.55%	
QC value within limits for Cr 267.716 Recovery = 100.99%							
Cu 324.752†	134668.5	504.24 ug/L	9.092	504.24 ppb	9.092	1.80%	
QC value within limits for Cu 324.752 Recovery = 100.85%							
Fe 238.204 Radial†	487.9	5076.8 ug/L	48.93	5076.8 ppb	48.93	0.96%	
QC value within limits for Fe 238.204 Radial Recovery = 101.54%							
K 766.490 Radial†	25797.7	5129.4 ug/L	15.49	5129.4 ppb	15.49	0.30%	
QC value within limits for K 766.490 Radial Recovery = 102.59%							
Mg 279.077 IEC†	132.7	5267.9 ug/L	67.27	5267.9 ppb	67.27	1.28%	
QC value within limits for Mg 279.077 IEC Recovery = 105.36%							
Mn 257.610†	315555.8	505.37 ug/L	8.162	505.37 ppb	8.162	1.62%	
QC value within limits for Mn 257.610 Recovery = 101.07%							
Mo 202.031†	5468.0	502.26 ug/L	5.870	502.26 ppb	5.870	1.17%	
QC value within limits for Mo 202.031 Recovery = 100.45%							
Na 589.592 Radial†	25828.1	8802.2 ug/L	20.84	8802.2 ppb	20.84	0.24%	
QC value less than the lower limit for Na 589.592 Radial Recovery = 88.02%							
Ni 231.604†	16030.9	512.16 ug/L	7.730	512.16 ppb	7.730	1.51%	
QC value within limits for Ni 231.604 Recovery = 102.43%							
P 214.914†	4521.3	2426.5 ug/L	37.07	2426.5 ppb	37.07	1.53%	
QC value within limits for P 214.914 Recovery = 97.06%							
Pb 220.353†	3110.7	503.49 ug/L	5.618	503.49 ppb	5.618	1.12%	
QC value within limits for Pb 220.353 Recovery = 100.70%							
S 181.975 Axial†	781.7	1012.5 ug/L	18.13	1012.5 ppb	18.13	1.79%	
QC value within limits for S 181.975 Axial Recovery = 101.25%							
Sb 206.836†	1252.9	526.32 ug/L	5.948	526.32 ppb	5.948	1.13%	
QC value within limits for Sb 206.836 Recovery = 105.26%							
Se 196.026†	830.2	521.80 ug/L	4.383	521.80 ppb	4.383	0.84%	
QC value within limits for Se 196.026 Recovery = 104.36%							
Si 251.611†	69072.8	2514.3 ug/L	41.33	2514.3 ppb	41.33	1.64%	
QC value within limits for Si 251.611 Recovery = 100.57%							
Sn 189.927†	2118.2	499.46 ug/L	8.241	499.46 ppb	8.241	1.65%	
QC value within limits for Sn 189.927 Recovery = 99.89%							
Sr 421.552†	66136.5	480.89 ug/L	1.930	480.89 ppb	1.930	0.40%	
QC value within limits for Sr 421.552 Recovery = 96.18%							
Ti 334.940†	250020.2	503.66 ug/L	8.330	503.66 ppb	8.330	1.65%	
QC value within limits for Ti 334.940 Recovery = 100.73%							
Tl 190.801†	1094.0	505.85 ug/L	5.415	505.85 ppb	5.415	1.07%	
QC value within limits for Tl 190.801 Recovery = 101.17%							
U 409.014†	15356.9	512.53 ug/L	10.997	512.53 ppb	10.997	2.15%	
QC value within limits for U 409.014 Recovery = 102.51%							
V 292.402†	63415.8	511.72 ug/L	7.922	511.72 ppb	7.922	1.55%	
QC value within limits for V 292.402 Recovery = 102.34%							
Zn 213.857†	45829.2	500.72 ug/L	8.369	500.72 ppb	8.369	1.67%	
QC value within limits for Zn 213.857 Recovery = 100.14%							
SiO2†	68741.5	5341.4 ug/L	62.56	5341.4 ppb	62.56	1.17%	
QC value within limits for SiO2 Recovery = 99.89%							
QC Failed. Continue with analysis.							

Sequence No.: 10  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/1/2010 15:34:10  
 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	4944.1	4944.1	105 %		15:36:02
1	Y RADIAL	5213.5	5213.5	104.6 %		15:36:02
1	Al 396.153Radial†	-67.3	23.0	21.558 ug/L	21.558 ppb	15:36:22
1	Ca 317.933Radial†	31.1	7.5	13.594 ug/L	13.594 ppb	15:36:22
1	Fe 238.204 Radial†	7.9	0.2	1.7148 ug/L	1.7148 ppb	15:36:22
1	K 766.490 Radial†	2200.8	-166.6	-33.181 ug/L	-33.181 ppb	15:36:02
1	Mg 279.077 IEC†	4.6	1.5	57.937 ug/L	57.937 ppb	15:36:22
1	Na 589.592 Radial†	-727.5	155.3	52.913 ug/L	52.913 ppb	15:36:02
1	Sr 421.552†	29.0	28.1	0.2040 ug/L	0.2040 ppb	15:36:02
1	Sc 361.383	805254.2	805254.2	104.86 %		15:37:19
1	Y 371.029	724298.2	724298.2	105.12 %		15:37:19
1	Ag 328.068†	222.3	-43.7	-0.2332 ug/L	-0.2332 ppb	15:37:19
1	As 188.979†	-27.1	-0.8	-0.3630 ug/L	-0.3630 ppb	15:37:39
1	B 249.677†	-243.3	221.4	5.5438 ug/L	5.5438 ppb	15:37:39
1	Ba 233.527†	17.3	14.1	0.1668 ug/L	0.1668 ppb	15:37:39
1	Be 313.107†	-9377.4	39.8	0.0166 ug/L	0.0166 ppb	15:37:19
1	Cd 226.502†	-192.2	3.4	0.0499 ug/L	0.0499 ppb	15:37:39
1	Co 228.616†	-53.8	6.2	0.1850 ug/L	0.1850 ppb	15:37:39
1	Cr 267.716†	78.6	-0.7	-0.0135 ug/L	-0.0135 ppb	15:37:39
1	Cu 324.752†	7769.0	-127.2	-0.4829 ug/L	-0.4829 ppb	15:37:19
1	Mn 257.610†	465.1	-17.6	-0.0304 ug/L	-0.0304 ppb	15:37:39
1	Mo 202.031†	7.2	-7.5	-0.6882 ug/L	-0.6882 ppb	15:37:39
1	Ni 231.604†	92.6	-13.1	-0.4177 ug/L	-0.4177 ppb	15:37:39
1	P 214.914†	208.2	3.2	1.8848 ug/L	1.8848 ppb	15:37:39
1	Pb 220.353†	-61.5	12.0	1.9461 ug/L	1.9461 ppb	15:37:39
1	S 181.975 Axial†	44.9	0.3	0.3998 ug/L	0.3998 ppb	15:37:39
1	Sb 206.836†	34.9	3.2	1.2801 ug/L	1.2801 ppb	15:37:39
1	Se 196.026†	-14.9	5.6	3.4245 ug/L	3.4245 ppb	15:37:39
1	Si 251.611†	614.9	-2.8	-0.0948 ug/L	-0.0948 ppb	15:37:39
1	Sn 189.927†	6.4	-1.9	-0.4515 ug/L	-0.4515 ppb	15:37:39
1	Ti 334.940†	-1194.9	161.5	0.3172 ug/L	0.3172 ppb	15:37:19
1	Tl 190.801†	-23.7	8.6	3.9587 ug/L	3.9587 ppb	15:37:39
1	U 409.014†	-2282.4	360.2	12.061 ug/L	12.061 ppb	15:37:19
1	V 292.402†	-1678.5	27.3	0.2311 ug/L	0.2311 ppb	15:37:19
1	Zn 213.857†	766.5	20.7	0.2312 ug/L	0.2312 ppb	15:37:39
1	SiO2†	632.6	6.8	0.5505 ug/L	0.5505 ppb	15:38:35
2	Sc Radial	4836.5	4836.5	103 %		15:36:27
2	Y RADIAL	5126.6	5126.6	102.8 %		15:36:27
2	Al 396.153Radial†	-72.1	16.9	15.834 ug/L	15.834 ppb	15:36:48
2	Ca 317.933Radial†	27.3	4.4	8.0472 ug/L	8.0472 ppb	15:36:48
2	Fe 238.204 Radial†	8.0	0.5	5.1872 ug/L	5.1872 ppb	15:36:48
2	K 766.490 Radial†	2370.7	45.4	9.0223 ug/L	9.0223 ppb	15:36:27
2	Mg 279.077 IEC†	3.7	0.7	28.603 ug/L	28.603 ppb	15:36:48
2	Na 589.592 Radial†	-704.7	162.1	55.231 ug/L	55.231 ppb	15:36:27
2	Sr 421.552†	3.5	3.9	0.0281 ug/L	0.0281 ppb	15:36:27
2	Sc 361.383	810766.0	810766.0	105.58 %		15:37:45
2	Y 371.029	731028.7	731028.7	106.09 %		15:37:45
2	Ag 328.068†	255.7	-13.5	-0.0782 ug/L	-0.0782 ppb	15:37:45
2	As 188.979†	-32.5	-5.8	-2.5812 ug/L	-2.5812 ppb	15:38:05
2	B 249.677†	-277.8	190.3	4.7638 ug/L	4.7638 ppb	15:38:05
2	Ba 233.527†	-8.1	-10.1	-0.1184 ug/L	-0.1184 ppb	15:38:05
2	Be 313.107†	-9420.6	59.7	0.0246 ug/L	0.0246 ppb	15:37:45
2	Cd 226.502†	-183.3	13.0	0.1860 ug/L	0.1860 ppb	15:38:05
2	Co 228.616†	-56.1	4.3	0.1295 ug/L	0.1295 ppb	15:38:05
2	Cr 267.716†	67.1	-12.1	-0.1702 ug/L	-0.1702 ppb	15:38:05
2	Cu 324.752†	7830.9	-118.9	-0.4521 ug/L	-0.4521 ppb	15:37:45
2	Mn 257.610†	459.2	-26.2	-0.0426 ug/L	-0.0426 ppb	15:38:05
2	Mo 202.031†	11.4	-3.6	-0.3290 ug/L	-0.3290 ppb	15:38:05
2	Ni 231.604†	75.8	-29.6	-0.9448 ug/L	-0.9448 ppb	15:38:05

2	P 214.914†	211.1	4.6	2.6403 ug/L	2.6403 ppb	15:38:05
2	Pb 220.353†	-70.1	4.3	0.6935 ug/L	0.6935 ppb	15:38:05
2	S 181.975 Axial†	40.6	-4.0	-5.2264 ug/L	-5.2264 ppb	15:38:05
2	Sb 206.836†	39.8	7.7	3.0765 ug/L	3.0765 ppb	15:38:05
2	Se 196.026†	-16.8	3.9	2.4270 ug/L	2.4270 ppb	15:38:05
2	Si 251.611†	608.3	-13.0	-0.4713 ug/L	-0.4713 ppb	15:38:05
2	Sn 189.927†	2.0	-6.2	-1.4509 ug/L	-1.4509 ppb	15:38:05
2	Ti 334.940†	-1183.1	180.4	0.3566 ug/L	0.3566 ppb	15:37:45
2	Tl 190.801†	-28.6	4.1	1.8840 ug/L	1.8840 ppb	15:38:05
2	U 409.014†	-2259.9	396.3	13.271 ug/L	13.271 ppb	15:37:45
2	V 292.402†	-1700.8	17.1	0.1560 ug/L	0.1560 ppb	15:37:45
2	Zn 213.857†	779.1	27.6	0.3105 ug/L	0.3105 ppb	15:38:05
2	SiO2†	621.9	-7.4	-0.5681 ug/L	-0.5681 ppb	15:38:40
3	Sc Radial	4983.4	4983.4	106 %		15:36:53
3	Y RADIAL	5296.6	5296.6	106.2 %		15:36:53
3	Al 396.153Radial†	-71.1	20.0	18.691 ug/L	18.691 ppb	15:37:13
3	Ca 317.933Radial†	27.5	3.8	6.9040 ug/L	6.9040 ppb	15:37:13
3	Fe 238.204 Radial†	8.4	0.6	6.5314 ug/L	6.5314 ppb	15:37:13
3	K 766.490 Radial†	2155.9	-225.5	-44.908 ug/L	-44.908 ppb	15:36:53
3	Mg 279.077 IEC†	1.1	-1.8	-72.404 ug/L	-72.404 ppb	15:37:13
3	Na 589.592 Radial†	-695.0	191.4	65.213 ug/L	65.213 ppb	15:36:53
3	Sr 421.552†	24.7	23.8	0.1731 ug/L	0.1731 ppb	15:36:53
3	Sc 361.383	806979.5	806979.5	105.08 %		15:38:10
3	Y 371.029	725892.3	725892.3	105.35 %		15:38:10
3	Ag 328.068†	189.7	-75.2	-0.3892 ug/L	-0.3892 ppb	15:38:10
3	As 188.979†	-28.2	-1.8	-0.7959 ug/L	-0.7959 ppb	15:38:30
3	B 249.677†	-261.3	204.8	5.1269 ug/L	5.1269 ppb	15:38:30
3	Ba 233.527†	13.9	10.8	0.1287 ug/L	0.1287 ppb	15:38:30
3	Be 313.107†	-9310.1	122.9	0.0492 ug/L	0.0492 ppb	15:38:10
3	Cd 226.502†	-190.3	5.5	0.0794 ug/L	0.0794 ppb	15:38:30
3	Co 228.616†	-51.3	8.6	0.2615 ug/L	0.2615 ppb	15:38:30
3	Cr 267.716†	78.5	-0.9	-0.0141 ug/L	-0.0141 ppb	15:38:30
3	Cu 324.752†	7761.5	-150.1	-0.5659 ug/L	-0.5659 ppb	15:38:10
3	Mn 257.610†	498.7	13.5	0.0252 ug/L	0.0252 ppb	15:38:30
3	Mo 202.031†	19.2	3.9	0.3558 ug/L	0.3558 ppb	15:38:30
3	Ni 231.604†	106.3	-0.2	-0.0063 ug/L	-0.0063 ppb	15:38:30
3	P 214.914†	199.6	-5.4	-2.9000 ug/L	-2.9000 ppb	15:38:30
3	Pb 220.353†	-60.0	13.6	2.1959 ug/L	2.1959 ppb	15:38:30
3	S 181.975 Axial†	44.0	-0.7	-0.8773 ug/L	-0.8773 ppb	15:38:30
3	Sb 206.836†	30.9	-0.6	-0.2455 ug/L	-0.2455 ppb	15:38:30
3	Se 196.026†	-19.3	1.4	0.8864 ug/L	0.8864 ppb	15:38:30
3	Si 251.611†	602.2	-16.2	-0.5937 ug/L	-0.5937 ppb	15:38:30
3	Sn 189.927†	7.7	-0.8	-0.1771 ug/L	-0.1771 ppb	15:38:30
3	Ti 334.940†	-1293.6	70.0	0.1446 ug/L	0.1446 ppb	15:38:10
3	Tl 190.801†	-30.0	2.7	1.2377 ug/L	1.2377 ppb	15:38:30
3	U 409.014†	-2431.4	223.0	7.4673 ug/L	7.4673 ppb	15:38:10
3	V 292.402†	-1658.6	49.7	0.4122 ug/L	0.4122 ppb	15:38:10
3	Zn 213.857†	777.0	29.2	0.3214 ug/L	0.3214 ppb	15:38:30
3	SiO2†	627.2	0.4	0.0238 ug/L	0.0238 ppb	15:38:45

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	807666.5	105.17 %		0.367				0.35%
Sc Radial	4921.3	105 %		1.6				1.55%
Y 371.029	727073.1	105.52 %		0.510				0.48%
Y RADIAL	5212.2	104.5 %		1.71				1.63%
Ag 328.068†	-44.1	-0.2335 ug/L		0.15546	-0.2335 ppb		0.15546	66.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	20.0	18.694 ug/L		2.8623	18.694 ppb		2.8623	15.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.8	-1.2467 ug/L		1.17579	-1.2467 ppb		1.17579	94.31%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	205.5	5.1448 ug/L		0.39033	5.1448 ppb		0.39033	7.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.9	0.0591 ug/L		0.15484	0.0591 ppb		0.15484	262.17%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	74.1	0.0301 ug/L		0.01701	0.0301 ppb		0.01701	56.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.2	9.5150 ug/L		3.57827	9.5150 ppb		3.57827	37.61%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	7.3	0.1051 ug/L	0.07159	0.1051 ppb	0.07159	68.12%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	6.4	0.1920 ug/L	0.06630	0.1920 ppb	0.06630	34.53%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-4.5	-0.0659 ug/L	0.09030	-0.0659 ppb	0.09030	136.98%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-132.1	-0.5003 ug/L	0.05884	-0.5003 ppb	0.05884	11.76%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.4	4.4778 ug/L	2.48545	4.4778 ppb	2.48545	55.51%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-115.5	-23.022 ug/L	28.3639	-23.022 ppb	28.3639	123.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.1	4.7118 ug/L	68.37614	4.7118 ppb	68.37614	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-10.1	-0.0160 ug/L	0.03614	-0.0160 ppb	0.03614	226.56%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-2.4	-0.2204 ug/L	0.53041	-0.2204 ppb	0.53041	240.60%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	169.6	57.786 ug/L	6.5356	57.786 ppb	6.5356	11.31%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-14.3	-0.4563 ug/L	0.47043	-0.4563 ppb	0.47043	103.10%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	0.8	0.5417 ug/L	3.00443	0.5417 ppb	3.00443	554.65%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	10.0	1.6119 ug/L	0.80503	1.6119 ppb	0.80503	49.94%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.5	-1.9013 ug/L	2.94957	-1.9013 ppb	2.94957	155.13%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	3.4	1.3704 ug/L	1.66281	1.3704 ppb	1.66281	121.34%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	3.6	2.2460 ug/L	1.27874	2.2460 ppb	1.27874	56.93%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-10.7	-0.3866 ug/L	0.26004	-0.3866 ppb	0.26004	67.27%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-2.9	-0.6931 ug/L	0.67043	-0.6931 ppb	0.67043	96.72%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	18.6	0.1350 ug/L	0.09392	0.1350 ppb	0.09392	69.55%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	137.3	0.2728 ug/L	0.11274	0.2728 ppb	0.11274	41.33%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	5.1	2.3601 ug/L	1.42158	2.3601 ppb	1.42158	60.23%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	326.5	10.933 ug/L	3.0618	10.933 ppb	3.0618	28.00%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	31.3	0.2664 ug/L	0.13170	0.2664 ppb	0.13170	49.43%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	25.8	0.2877 ug/L	0.04920	0.2877 ppb	0.04920	17.10%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-0.1	0.0020 ug/L	0.55963	0.0020 ppb	0.55963	>999.9%
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/1/2010 16:37:43

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	4963.4	4963.4	105 %		16:39:36
1	Y RADIAL	5241.2	5241.2	105.1 %		16:39:36
1	Al 396.153Radial†	5697.0	5489.4	5110.2 ug/L	5110.2 ppb	16:39:36
1	Ca 317.933Radial†	3020.5	2842.1	5164.0 ug/L	5164.0 ppb	16:39:56
1	Fe 238.204 Radial†	534.8	499.8	5201.7 ug/L	5201.7 ppb	16:39:56
1	K 766.490 Radial†	29336.9	25557.9	5081.3 ug/L	5081.3 ppb	16:39:36
1	Mg 279.077 IEC†	146.6	136.1	5405.1 ug/L	5405.1 ppb	16:39:56
1	Na 589.592 Radial†	29502.5	28824.4	9823.3 ug/L	9823.3 ppb	16:39:36
1	Sr 421.552†	72525.2	68774.6	500.07 ug/L	500.07 ppb	16:39:36
1	Sc 361.383	820799.0	820799.0	106.88 %		16:40:53
1	Y 371.029	727017.8	727017.8	105.51 %		16:40:53
1	Ag 328.068†	107664.2	100474.9	519.79 ug/L	519.79 ppb	16:40:58
1	As 188.979†	1193.5	1141.6	513.29 ug/L	513.29 ppb	16:41:18
1	B 249.677†	21347.4	20426.0	509.14 ug/L	509.14 ppb	16:40:58
1	Ba 233.527†	47150.2	44111.3	521.81 ug/L	521.81 ppb	16:40:58
1	Be 313.107†	1358559.4	1280049.8	509.97 ug/L	509.97 ppb	16:40:53
1	Cd 226.502†	39110.1	36778.0	521.28 ug/L	521.28 ppb	16:40:58
1	Co 228.616†	18693.6	17547.2	530.37 ug/L	530.37 ppb	16:40:58
1	Cr 267.716†	40719.8	38021.8	520.08 ug/L	520.08 ppb	16:40:58
1	Cu 324.752†	156357.9	138752.2	519.53 ug/L	519.53 ppb	16:40:58
1	Mn 257.610†	347203.3	324382.0	519.51 ug/L	519.51 ppb	16:40:58
1	Mo 202.031†	5958.9	5560.8	510.79 ug/L	510.79 ppb	16:41:18
1	Ni 231.604†	17683.6	16443.4	525.33 ug/L	525.33 ppb	16:40:58
1	P 214.914†	5110.4	4585.9	2459.4 ug/L	2459.4 ppb	16:41:18
1	Pb 220.353†	3316.2	3173.4	513.58 ug/L	513.58 ppb	16:41:18
1	S 181.975 Axial†	886.7	787.1	1019.5 ug/L	1019.5 ppb	16:41:18
1	Sb 206.836†	1390.6	1271.0	533.91 ug/L	533.91 ppb	16:41:18
1	Se 196.026†	875.6	839.0	527.50 ug/L	527.50 ppb	16:41:18
1	Si 251.611†	76459.3	70946.0	2582.6 ug/L	2582.6 ppb	16:40:58
1	Sn 189.927†	2290.5	2134.9	503.38 ug/L	503.38 ppb	16:41:18
1	Ti 334.940†	273384.7	257079.5	517.85 ug/L	517.85 ppb	16:40:58
1	Tl 190.801†	1140.8	1098.5	507.93 ug/L	507.93 ppb	16:41:18
1	U 409.014†	14120.7	15748.1	525.58 ug/L	525.58 ppb	16:40:58
1	V 292.402†	68114.7	65356.0	527.28 ug/L	527.28 ppb	16:40:58
1	Zn 213.857†	51091.3	47090.7	514.51 ug/L	514.51 ppb	16:40:58
1	SiO2†	74325.3	68942.3	5356.8 ug/L	5356.8 ppb	16:42:25
2	Sc Radial	4977.3	4977.3	106 %		16:40:01
2	Y RADIAL	5243.9	5243.9	105.2 %		16:40:01
2	Al 396.153Radial†	5735.1	5510.4	5129.4 ug/L	5129.4 ppb	16:40:01
2	Ca 317.933Radial†	3035.9	2848.7	5175.9 ug/L	5175.9 ppb	16:40:21
2	Fe 238.204 Radial†	539.4	502.8	5232.4 ug/L	5232.4 ppb	16:40:21
2	K 766.490 Radial†	29460.6	25597.1	5089.1 ug/L	5089.1 ppb	16:40:01
2	Mg 279.077 IEC†	142.7	132.0	5241.9 ug/L	5241.9 ppb	16:40:21
2	Na 589.592 Radial†	29624.4	28861.5	9836.0 ug/L	9836.0 ppb	16:40:01
2	Sr 421.552†	72779.9	68823.2	500.43 ug/L	500.43 ppb	16:40:01
2	Sc 361.383	808760.3	808760.3	105.32 %		16:41:24
2	Y 371.029	716988.4	716988.4	104.06 %		16:41:24
2	Ag 328.068†	106072.4	100462.8	519.74 ug/L	519.74 ppb	16:41:29
2	As 188.979†	1192.5	1157.4	520.31 ug/L	520.31 ppb	16:41:49
2	B 249.677†	21085.7	20474.9	510.35 ug/L	510.35 ppb	16:41:29
2	Ba 233.527†	46610.5	44255.5	523.52 ug/L	523.52 ppb	16:41:29
2	Be 313.107†	1344452.2	1285575.0	512.17 ug/L	512.17 ppb	16:41:24
2	Cd 226.502†	38764.7	36994.7	524.35 ug/L	524.35 ppb	16:41:29
2	Co 228.616†	18536.5	17658.3	533.74 ug/L	533.74 ppb	16:41:29
2	Cr 267.716†	40330.4	38219.1	522.78 ug/L	522.78 ppb	16:41:29
2	Cu 324.752†	154006.7	138697.2	519.33 ug/L	519.33 ppb	16:41:29
2	Mn 257.610†	343391.2	325597.8	521.46 ug/L	521.46 ppb	16:41:29
2	Mo 202.031†	5949.6	5634.9	517.60 ug/L	517.60 ppb	16:41:49
2	Ni 231.604†	17519.2	16533.6	528.21 ug/L	528.21 ppb	16:41:29

2	P 214.914†	5126.3	4672.2	2507.7 ug/L	2507.7 ppb	16:41:49
2	Pb 220.353†	3294.6	3199.0	517.74 ug/L	517.74 ppb	16:41:49
2	S 181.975 Axial†	891.2	803.7	1041.1 ug/L	1041.1 ppb	16:41:49
2	Sb 206.836†	1381.3	1281.5	538.49 ug/L	538.49 ppb	16:41:49
2	Se 196.026†	874.6	850.2	534.47 ug/L	534.47 ppb	16:41:49
2	Si 251.611†	75494.7	71095.0	2587.9 ug/L	2587.9 ppb	16:41:29
2	Sn 189.927†	2312.3	2187.5	515.76 ug/L	515.76 ppb	16:41:49
2	Ti 334.940†	269828.7	257510.4	518.74 ug/L	518.74 ppb	16:41:29
2	Tl 190.801†	1159.1	1131.8	523.20 ug/L	523.20 ppb	16:41:49
2	U 409.014†	13746.5	15589.5	520.26 ug/L	520.26 ppb	16:41:29
2	V 292.402†	67241.7	65475.7	528.31 ug/L	528.31 ppb	16:41:29
2	Zn 213.857†	50654.6	47387.6	517.77 ug/L	517.77 ppb	16:41:29
2	SiO2†	75893.0	71466.0	5553.2 ug/L	5553.2 ppb	16:42:30
3	Sc Radial	4959.5	4959.5	105 %		16:40:26
3	Y RADIAL	5212.3	5212.3	104.6 %		16:40:26
3	Al 396.153Radial†	5710.2	5506.2	5125.8 ug/L	5125.8 ppb	16:40:26
3	Ca 317.933Radial†	3036.1	2859.2	5195.0 ug/L	5195.0 ppb	16:40:46
3	Fe 238.204 Radial†	542.7	507.7	5283.0 ug/L	5283.0 ppb	16:40:46
3	K 766.490 Radial†	29375.5	25616.3	5092.9 ug/L	5092.9 ppb	16:40:26
3	Mg 279.077 IEC†	143.8	133.6	5305.2 ug/L	5305.2 ppb	16:40:46
3	Na 589.592 Radial†	29753.4	29084.3	9911.9 ug/L	9911.9 ppb	16:40:26
3	Sr 421.552†	72982.9	69262.7	503.62 ug/L	503.62 ppb	16:40:26
3	Sc 361.383	816327.2	816327.2	106.30 %		16:41:55
3	Y 371.029	721896.3	721896.3	104.77 %		16:41:55
3	Ag 328.068†	104916.9	98442.2	509.33 ug/L	509.33 ppb	16:42:00
3	As 188.979†	1203.5	1157.2	520.16 ug/L	520.16 ppb	16:42:20
3	B 249.677†	20841.6	20059.6	499.98 ug/L	499.98 ppb	16:42:00
3	Ba 233.527†	46125.0	43388.5	513.26 ug/L	513.26 ppb	16:42:00
3	Be 313.107†	1349906.8	1278872.9	509.48 ug/L	509.48 ppb	16:41:55
3	Cd 226.502†	38399.1	36309.6	514.62 ug/L	514.62 ppb	16:42:00
3	Co 228.616†	18320.2	17291.8	522.67 ug/L	522.67 ppb	16:42:00
3	Cr 267.716†	39761.9	37329.4	510.61 ug/L	510.61 ppb	16:42:00
3	Cu 324.752†	151204.8	134705.9	504.39 ug/L	504.39 ppb	16:42:00
3	Mn 257.610†	338997.0	318441.6	510.01 ug/L	510.01 ppb	16:42:00
3	Mo 202.031†	5932.5	5566.5	511.32 ug/L	511.32 ppb	16:42:20
3	Ni 231.604†	17290.7	16164.5	516.41 ug/L	516.41 ppb	16:42:00
3	P 214.914†	5095.0	4597.6	2469.0 ug/L	2469.0 ppb	16:42:20
3	Pb 220.353†	3301.6	3176.6	514.12 ug/L	514.12 ppb	16:42:20
3	S 181.975 Axial†	890.8	795.5	1030.4 ug/L	1030.4 ppb	16:42:20
3	Sb 206.836†	1376.3	1264.7	531.44 ug/L	531.44 ppb	16:42:20
3	Se 196.026†	887.6	854.8	537.35 ug/L	537.35 ppb	16:42:20
3	Si 251.611†	74307.9	69314.0	2523.0 ug/L	2523.0 ppb	16:42:00
3	Sn 189.927†	2299.6	2155.3	508.17 ug/L	508.17 ppb	16:42:20
3	Ti 334.940†	266240.5	251760.0	507.15 ug/L	507.15 ppb	16:42:00
3	Tl 190.801†	1144.6	1107.9	512.17 ug/L	512.17 ppb	16:42:20
3	U 409.014†	13565.0	15297.7	510.51 ug/L	510.51 ppb	16:42:00
3	V 292.402†	66352.0	64046.9	516.84 ug/L	516.84 ppb	16:42:00
3	Zn 213.857†	50029.6	46353.8	506.45 ug/L	506.45 ppb	16:42:00
3	SiO2†	74574.5	69557.6	5404.7 ug/L	5404.7 ppb	16:42:36

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815295.5	106.17 %	0.792			0.75%
Sc Radial	4966.7	106 %	0.2			0.19%
Y 371.029	721967.5	104.78 %	0.728			0.69%
Y RADIAL	5232.5	105.0 %	0.35			0.33%
Ag 328.068†	99793.3	516.29 ug/L	6.024	516.29 ppb	6.024	1.17%
QC value within limits for Ag 328.068 Recovery = 103.26%						
Al 396.153Radial†	5502.0	5121.8 ug/L	10.24	5121.8 ppb	10.24	0.20%
QC value within limits for Al 396.153Radial Recovery = 102.44%						
As 188.979†	1152.1	517.92 ug/L	4.009	517.92 ppb	4.009	0.77%
QC value within limits for As 188.979 Recovery = 103.58%						
B 249.677†	20320.2	506.49 ug/L	5.673	506.49 ppb	5.673	1.12%
QC value within limits for B 249.677 Recovery = 101.30%						
Ba 233.527†	43918.4	519.53 ug/L	5.494	519.53 ppb	5.494	1.06%
QC value within limits for Ba 233.527 Recovery = 103.91%						
Be 313.107†	1281499.2	510.54 ug/L	1.432	510.54 ppb	1.432	0.28%
QC value within limits for Be 313.107 Recovery = 102.11%						
Ca 317.933Radial†	2850.0	5178.3 ug/L	15.63	5178.3 ppb	15.63	0.30%

QC value within limits for Ca 317.933 Radial Recovery = 103.57%							
Cd 226.502†	36694.1	520.08 ug/L	4.973	520.08 ppb	4.973	0.96%	
QC value within limits for Cd 226.502 Recovery = 104.02%							
Co 228.616†	17499.1	528.93 ug/L	5.674	528.93 ppb	5.674	1.07%	
QC value within limits for Co 228.616 Recovery = 105.79%							
Cr 267.716†	37856.8	517.82 ug/L	6.390	517.82 ppb	6.390	1.23%	
QC value within limits for Cr 267.716 Recovery = 103.56%							
Cu 324.752†	137385.1	514.42 ug/L	8.683	514.42 ppb	8.683	1.69%	
QC value within limits for Cu 324.752 Recovery = 102.88%							
Fe 238.204 Radial†	503.4	5239.0 ug/L	41.02	5239.0 ppb	41.02	0.78%	
QC value within limits for Fe 238.204 Radial Recovery = 104.78%							
K 766.490 Radial†	25590.4	5087.7 ug/L	5.91	5087.7 ppb	5.91	0.12%	
QC value within limits for K 766.490 Radial Recovery = 101.75%							
Mg 279.077 IEC†	133.9	5317.4 ug/L	82.28	5317.4 ppb	82.28	1.55%	
QC value within limits for Mg 279.077 IEC Recovery = 106.35%							
Mn 257.610†	322807.1	516.99 ug/L	6.126	516.99 ppb	6.126	1.18%	
QC value within limits for Mn 257.610 Recovery = 103.40%							
Mo 202.031†	5587.4	513.23 ug/L	3.786	513.23 ppb	3.786	0.74%	
QC value within limits for Mo 202.031 Recovery = 102.65%							
Na 589.592 Radial†	28923.4	9857.1 ug/L	47.91	9857.1 ppb	47.91	0.49%	
QC value within limits for Na 589.592 Radial Recovery = 98.57%							
Ni 231.604†	16380.5	523.32 ug/L	6.148	523.32 ppb	6.148	1.17%	
QC value within limits for Ni 231.604 Recovery = 104.66%							
P 214.914†	4618.6	2478.7 ug/L	25.59	2478.7 ppb	25.59	1.03%	
QC value within limits for P 214.914 Recovery = 99.15%							
Pb 220.353†	3183.0	515.15 ug/L	2.261	515.15 ppb	2.261	0.44%	
QC value within limits for Pb 220.353 Recovery = 103.03%							
S 181.975 Axial†	795.4	1030.3 ug/L	10.81	1030.3 ppb	10.81	1.05%	
QC value within limits for S 181.975 Axial Recovery = 103.03%							
Sb 206.836†	1272.4	534.61 ug/L	3.581	534.61 ppb	3.581	0.67%	
QC value within limits for Sb 206.836 Recovery = 106.92%							
Se 196.026†	848.0	533.11 ug/L	5.064	533.11 ppb	5.064	0.95%	
QC value within limits for Se 196.026 Recovery = 106.62%							
Si 251.611†	70451.7	2564.5 ug/L	36.03	2564.5 ppb	36.03	1.40%	
QC value within limits for Si 251.611 Recovery = 102.58%							
Sn 189.927†	2159.2	509.10 ug/L	6.243	509.10 ppb	6.243	1.23%	
QC value within limits for Sn 189.927 Recovery = 101.82%							
Sr 421.552†	68953.5	501.37 ug/L	1.955	501.37 ppb	1.955	0.39%	
QC value within limits for Sr 421.552 Recovery = 100.27%							
Ti 334.940†	255450.0	514.58 ug/L	6.446	514.58 ppb	6.446	1.25%	
QC value within limits for Ti 334.940 Recovery = 102.92%							
Tl 190.801†	1112.7	514.43 ug/L	7.882	514.43 ppb	7.882	1.53%	
QC value within limits for Tl 190.801 Recovery = 102.89%							
U 409.014†	15545.1	518.79 ug/L	7.642	518.79 ppb	7.642	1.47%	
QC value within limits for U 409.014 Recovery = 103.76%							
V 292.402†	64959.5	524.14 ug/L	6.349	524.14 ppb	6.349	1.21%	
QC value within limits for V 292.402 Recovery = 104.83%							
Zn 213.857†	46944.0	512.91 ug/L	5.825	512.91 ppb	5.825	1.14%	
QC value within limits for Zn 213.857 Recovery = 102.58%							
SiO2†	69988.6	5438.3 ug/L	102.41	5438.3 ppb	102.41	1.88%	
QC value within limits for SiO2 Recovery = 101.70%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/1/2010 16:44:46

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	4926.9	4926.9	105 %		16:46:38
1	Y RADIAL	5199.1	5199.1	104.3 %		16:46:38
1	Al 396.153Radial†	-73.8	16.6	15.558 ug/L	15.558 ppb	16:46:58
1	Ca 317.933Radial†	29.0	5.6	10.115 ug/L	10.115 ppb	16:46:58
1	Fe 238.204 Radial†	9.2	1.5	15.058 ug/L	15.058 ppb	16:46:58
1	K 766.490 Radial†	2335.1	-30.9	-6.1852 ug/L	-6.1852 ppb	16:46:38
1	Mg 279.077 IEC†	0.1	-2.8	-109.51 ug/L	-109.51 ppb	16:46:58
1	Na 589.592 Radial†	-708.1	171.4	58.399 ug/L	58.399 ppb	16:46:38
1	Sr 421.552†	26.2	25.5	0.1852 ug/L	0.1852 ppb	16:46:38
1	Sc 361.383	814753.1	814753.1	106.10 %		16:47:55
1	Y 371.029	734452.6	734452.6	106.59 %		16:47:55
1	Ag 328.068†	248.7	-21.2	-0.1096 ug/L	-0.1096 ppb	16:47:55
1	As 188.979†	-29.3	-2.6	-1.1579 ug/L	-1.1579 ppb	16:48:15
1	B 249.677†	-361.3	112.9	2.8243 ug/L	2.8243 ppb	16:48:15
1	Ba 233.527†	21.8	18.2	0.2169 ug/L	0.2169 ppb	16:48:15
1	Be 313.107†	-9551.2	-19.7	-0.0068 ug/L	-0.0068 ppb	16:47:55
1	Cd 226.502†	-197.4	0.6	0.0083 ug/L	0.0083 ppb	16:48:15
1	Co 228.616†	-57.8	3.0	0.0882 ug/L	0.0882 ppb	16:48:15
1	Cr 267.716†	77.4	-2.7	-0.0395 ug/L	-0.0395 ppb	16:48:15
1	Cu 324.752†	7890.3	-99.2	-0.3764 ug/L	-0.3764 ppb	16:47:55
1	Mn 257.610†	501.2	11.3	0.0240 ug/L	0.0240 ppb	16:48:15
1	Mo 202.031†	9.6	-5.3	-0.4886 ug/L	-0.4886 ppb	16:48:15
1	Ni 231.604†	90.0	-16.5	-0.5288 ug/L	-0.5288 ppb	16:48:15
1	P 214.914†	203.5	-3.6	-1.9057 ug/L	-1.9057 ppb	16:48:15
1	Pb 220.353†	-48.0	25.4	4.1022 ug/L	4.1022 ppb	16:48:15
1	S 181.975 Axial†	45.9	0.8	1.0187 ug/L	1.0187 ppb	16:48:15
1	Sb 206.836†	27.3	-4.3	-1.7190 ug/L	-1.7190 ppb	16:48:15
1	Se 196.026†	-14.8	5.9	3.6430 ug/L	3.6430 ppb	16:48:15
1	Si 251.611†	624.5	-0.6	-0.0157 ug/L	-0.0157 ppb	16:48:15
1	Sn 189.927†	15.1	6.1	1.4478 ug/L	1.4478 ppb	16:48:15
1	Ti 334.940†	-1146.3	220.6	0.4504 ug/L	0.4504 ppb	16:47:55
1	Tl 190.801†	-39.1	-5.6	-2.5762 ug/L	-2.5762 ppb	16:48:15
1	U 409.014†	-2364.7	308.0	10.312 ug/L	10.312 ppb	16:47:55
1	V 292.402†	-1613.0	107.7	0.8656 ug/L	0.8656 ppb	16:47:55
1	Zn 213.857†	772.9	18.2	0.2025 ug/L	0.2025 ppb	16:48:15
1	SiO2†	620.5	-11.5	-0.8860 ug/L	-0.8860 ppb	16:49:11
2	Sc Radial	4911.1	4911.1	104 %		16:47:03
2	Y RADIAL	5199.3	5199.3	104.3 %		16:47:03
2	Al 396.153Radial†	-76.0	14.3	13.378 ug/L	13.378 ppb	16:47:23
2	Ca 317.933Radial†	28.3	4.9	8.9689 ug/L	8.9689 ppb	16:47:23
2	Fe 238.204 Radial†	6.9	-0.7	-7.5516 ug/L	-7.5516 ppb	16:47:23
2	K 766.490 Radial†	2263.0	-92.8	-18.508 ug/L	-18.508 ppb	16:47:03
2	Mg 279.077 IEC†	0.6	-2.4	-93.554 ug/L	-93.554 ppb	16:47:23
2	Na 589.592 Radial†	-707.3	170.0	57.920 ug/L	57.920 ppb	16:47:03
2	Sr 421.552†	-5.5	-4.8	-0.0350 ug/L	-0.0350 ppb	16:47:03
2	Sc 361.383	798560.3	798560.3	103.99 %		16:48:20
2	Y 371.029	717916.1	717916.1	104.19 %		16:48:20
2	Ag 328.068†	235.8	-28.9	-0.1556 ug/L	-0.1556 ppb	16:48:20
2	As 188.979†	-32.7	-6.4	-2.8586 ug/L	-2.8586 ppb	16:48:41
2	B 249.677†	-364.3	103.1	2.5816 ug/L	2.5816 ppb	16:48:41
2	Ba 233.527†	-10.9	-12.9	-0.1506 ug/L	-0.1506 ppb	16:48:41
2	Be 313.107†	-9274.6	63.7	0.0261 ug/L	0.0261 ppb	16:48:20
2	Cd 226.502†	-178.0	15.5	0.2219 ug/L	0.2219 ppb	16:48:41
2	Co 228.616†	-47.2	12.1	0.3657 ug/L	0.3657 ppb	16:48:41
2	Cr 267.716†	76.1	-2.4	-0.0354 ug/L	-0.0354 ppb	16:48:41
2	Cu 324.752†	7771.7	-62.4	-0.2391 ug/L	-0.2391 ppb	16:48:20
2	Mn 257.610†	511.8	31.1	0.0528 ug/L	0.0528 ppb	16:48:41
2	Mo 202.031†	14.8	-0.1	-0.0125 ug/L	-0.0125 ppb	16:48:41
2	Ni 231.604†	96.6	-8.4	-0.2700 ug/L	-0.2700 ppb	16:48:41



2	P 214.914†	194.7	-8.2	-4.4960 ug/L	-4.4960 ppb	16:48:41
2	Pb 220.353†	-55.9	16.9	2.7351 ug/L	2.7351 ppb	16:48:41
2	S 181.975 Axial†	41.9	-2.2	-2.8833 ug/L	-2.8833 ppb	16:48:41
2	Sb 206.836†	44.3	12.6	5.1064 ug/L	5.1064 ppb	16:48:41
2	Se 196.026†	-26.1	-5.3	-3.2693 ug/L	-3.2693 ppb	16:48:41
2	Si 251.611†	619.5	6.6	0.2397 ug/L	0.2397 ppb	16:48:41
2	Sn 189.927†	9.6	1.1	0.2701 ug/L	0.2701 ppb	16:48:41
2	Ti 334.940†	-1177.9	168.3	0.3441 ug/L	0.3441 ppb	16:48:20
2	Tl 190.801†	-34.6	-2.1	-0.9622 ug/L	-0.9622 ppb	16:48:41
2	U 409.014†	-2363.1	264.3	8.8523 ug/L	8.8523 ppb	16:48:20
2	V 292.402†	-1611.4	78.4	0.6400 ug/L	0.6400 ppb	16:48:20
2	Zn 213.857†	772.4	32.5	0.3619 ug/L	0.3619 ppb	16:48:41
2	SiO2†	605.7	-13.9	-1.0852 ug/L	-1.0852 ppb	16:49:16
3	Sc Radial	4955.6	4955.6	105 %		16:47:28
3	Y RADIAL	5248.9	5248.9	105.3 %		16:47:28
3	Al 396.153Radial†	-74.6	16.3	15.195 ug/L	15.195 ppb	16:47:48
3	Ca 317.933Radial†	30.9	7.2	13.079 ug/L	13.079 ppb	16:47:48
3	Fe 238.204 Radial†	8.0	0.3	2.6756 ug/L	2.6756 ppb	16:47:48
3	K 766.490 Radial†	2317.1	-61.0	-12.171 ug/L	-12.171 ppb	16:47:28
3	Mg 279.077 IEC†	1.5	-1.4	-57.035 ug/L	-57.035 ppb	16:47:48
3	Na 589.592 Radial†	-671.7	209.9	71.520 ug/L	71.520 ppb	16:47:28
3	Sr 421.552†	7.8	7.9	0.0573 ug/L	0.0573 ppb	16:47:28
3	Sc 361.383	812872.8	812872.8	105.85 %		16:48:46
3	Y 371.029	730747.6	730747.6	106.05 %		16:48:46
3	Ag 328.068†	152.4	-111.7	-0.5777 ug/L	-0.5777 ppb	16:48:46
3	As 188.979†	-22.6	3.6	1.6156 ug/L	1.6156 ppb	16:49:06
3	B 249.677†	-374.2	100.0	2.5033 ug/L	2.5033 ppb	16:49:06
3	Ba 233.527†	-10.5	-12.3	-0.1455 ug/L	-0.1455 ppb	16:49:06
3	Be 313.107†	-9523.7	-14.6	-0.0053 ug/L	-0.0053 ppb	16:48:46
3	Cd 226.502†	-181.4	15.3	0.2173 ug/L	0.2173 ppb	16:49:06
3	Co 228.616†	-68.1	-6.9	-0.2078 ug/L	-0.2078 ppb	16:49:06
3	Cr 267.716†	62.9	-16.2	-0.2233 ug/L	-0.2233 ppb	16:49:06
3	Cu 324.752†	7787.6	-179.0	-0.6728 ug/L	-0.6728 ppb	16:48:46
3	Mn 257.610†	508.2	19.0	0.0330 ug/L	0.0330 ppb	16:49:06
3	Mo 202.031†	16.7	1.4	0.1285 ug/L	0.1285 ppb	16:49:06
3	Ni 231.604†	94.7	-11.8	-0.3780 ug/L	-0.3780 ppb	16:49:06
3	P 214.914†	198.9	-7.5	-4.0525 ug/L	-4.0525 ppb	16:49:06
3	Pb 220.353†	-78.3	-3.2	-0.5157 ug/L	-0.5157 ppb	16:49:06
3	S 181.975 Axial†	42.9	-2.0	-2.5539 ug/L	-2.5539 ppb	16:49:06
3	Sb 206.836†	32.7	0.9	0.3329 ug/L	0.3329 ppb	16:49:06
3	Se 196.026†	-13.5	7.0	4.3143 ug/L	4.3143 ppb	16:49:06
3	Si 251.611†	605.3	-17.4	-0.6356 ug/L	-0.6356 ppb	16:49:06
3	Sn 189.927†	-1.1	-9.1	-2.1511 ug/L	-2.1511 ppb	16:49:06
3	Ti 334.940†	-1259.9	110.8	0.2277 ug/L	0.2277 ppb	16:48:46
3	Tl 190.801†	-41.6	-8.1	-3.6937 ug/L	-3.6937 ppb	16:49:06
3	U 409.014†	-2533.3	143.6	4.8081 ug/L	4.8081 ppb	16:48:46
3	V 292.402†	-1731.8	-8.1	-0.0551 ug/L	-0.0551 ppb	16:48:46
3	Zn 213.857†	764.3	11.7	0.1323 ug/L	0.1323 ppb	16:49:06
3	SiO2†	646.2	14.0	1.0896 ug/L	1.0896 ppb	16:49:21

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	808728.7	105.31 %		1.153			1.10%
Sc Radial	4931.2	105 %		0.5			0.46%
Y 371.029	727705.5	105.61 %		1.259			1.19%
Y RADIAL	5215.8	104.6 %		0.57			0.55%
Ag 328.068†	-53.9	-0.2810 ug/L		0.25802	-0.2810 ppb	0.25802	91.84%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	15.7	14.710 ug/L		1.1681	14.710 ppb	1.1681	7.94%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.8	-0.8003 ug/L		2.25841	-0.8003 ppb	2.25841	282.19%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	105.3	2.6364 ug/L		0.16736	2.6364 ppb	0.16736	6.35%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.3	-0.0264 ug/L		0.21069	-0.0264 ppb	0.21069	798.10%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	9.8	0.0047 ug/L		0.01858	0.0047 ppb	0.01858	399.37%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	5.9	10.721 ug/L		2.1211	10.721 ppb	2.1211	19.78%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	10.5	0.1492 ug/L	0.12199	0.1492 ppb	0.12199	81.78%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	2.7	0.0820 ug/L	0.28681	0.0820 ppb	0.28681	349.64%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-7.1	-0.0994 ug/L	0.10731	-0.0994 ppb	0.10731	107.96%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-113.6	-0.4295 ug/L	0.22166	-0.4295 ppb	0.22166	51.61%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.3	3.3940 ug/L	11.32194	3.3940 ppb	11.32194	333.59%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-61.6	-12.288 ug/L	6.1621	-12.288 ppb	6.1621	50.15%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.2	-86.701 ug/L	26.9014	-86.701 ppb	26.9014	31.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	20.4	0.0366 ug/L	0.01471	0.0366 ppb	0.01471	40.21%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-1.4	-0.1242 ug/L	0.32336	-0.1242 ppb	0.32336	260.27%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	183.7	62.613 ug/L	7.7170	62.613 ppb	7.7170	12.32%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-12.3	-0.3923 ug/L	0.12995	-0.3923 ppb	0.12995	33.13%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-6.4	-3.4847 ug/L	1.38533	-3.4847 ppb	1.38533	39.75%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	13.0	2.1072 ug/L	2.37211	2.1072 ppb	2.37211	112.57%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.1	-1.4728 ug/L	2.16401	-1.4728 ppb	2.16401	146.93%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	3.1	1.2401 ug/L	3.50193	1.2401 ppb	3.50193	282.39%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	2.5	1.5627 ug/L	4.19807	1.5627 ppb	4.19807	268.65%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-3.8	-0.1372 ug/L	0.45014	-0.1372 ppb	0.45014	328.09%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-0.6	-0.1444 ug/L	1.83488	-0.1444 ppb	1.83488	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	9.5	0.0692 ug/L	0.11057	0.0692 ppb	0.11057	159.82%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	166.6	0.3407 ug/L	0.11139	0.3407 ppb	0.11139	32.70%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-5.3	-2.4107 ug/L	1.37326	-2.4107 ppb	1.37326	56.97%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	238.6	7.9907 ug/L	2.85118	7.9907 ppb	2.85118	35.68%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	59.3	0.4835 ug/L	0.47988	0.4835 ppb	0.47988	99.25%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	20.8	0.2322 ug/L	0.11762	0.2322 ppb	0.11762	50.65%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-3.8	-0.2939 ug/L	1.20224	-0.2939 ppb	1.20224	409.08%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/1/2010 17:48:01

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	4939.2	4939.2	105 %		17:49:53
1	Y RADIAL	5178.9	5178.9	103.9 %		17:49:53
1	Al 396.153Radial†	5629.3	5451.3	5074.9 ug/L	5074.9 ppb	17:49:53
1	Ca 317.933Radial†	2995.5	2832.3	5146.2 ug/L	5146.2 ppb	17:50:13
1	Fe 238.204 Radial†	528.5	496.3	5164.8 ug/L	5164.8 ppb	17:50:13
1	K 766.490 Radial†	29381.8	25736.7	5116.9 ug/L	5116.9 ppb	17:49:53
1	Mg 279.077 IEC†	144.0	134.3	5332.2 ug/L	5332.2 ppb	17:50:13
1	Na 589.592 Radial†	29196.0	28669.2	9770.4 ug/L	9770.4 ppb	17:49:53
1	Sr 421.552†	72310.8	68906.6	501.03 ug/L	501.03 ppb	17:49:53
1	Sc 361.383	817806.6	817806.6	106.49 %		17:51:11
1	Y 371.029	725093.1	725093.1	105.23 %		17:51:11
1	Ag 328.068†	105025.5	98365.7	508.90 ug/L	508.90 ppb	17:51:16
1	As 188.979†	1183.5	1136.4	510.88 ug/L	510.88 ppb	17:51:36
1	B 249.677†	20928.6	20105.8	501.16 ug/L	501.16 ppb	17:51:16
1	Ba 233.527†	46118.6	43304.0	512.26 ug/L	512.26 ppb	17:51:16
1	Be 313.107†	1331354.5	1259154.8	501.64 ug/L	501.64 ppb	17:51:11
1	Cd 226.502†	38356.1	36203.9	513.13 ug/L	513.13 ppb	17:51:16
1	Co 228.616†	18260.9	17204.9	520.03 ug/L	520.03 ppb	17:51:16
1	Cr 267.716†	39805.8	37302.9	510.24 ug/L	510.24 ppb	17:51:16
1	Cu 324.752†	152572.7	135733.0	508.23 ug/L	508.23 ppb	17:51:16
1	Mn 257.610†	339742.2	318564.5	510.20 ug/L	510.20 ppb	17:51:16
1	Mo 202.031†	5840.8	5470.2	502.48 ug/L	502.48 ppb	17:51:36
1	Ni 231.604†	17378.3	16217.3	518.10 ug/L	518.10 ppb	17:51:16
1	P 214.914†	4996.6	4496.5	2411.7 ug/L	2411.7 ppb	17:51:36
1	Pb 220.353†	3260.3	3132.2	506.92 ug/L	506.92 ppb	17:51:36
1	S 181.975 Axial†	868.8	773.3	1001.7 ug/L	1001.7 ppb	17:51:36
1	Sb 206.836†	1360.1	1247.2	523.92 ug/L	523.92 ppb	17:51:36
1	Se 196.026†	861.1	828.4	520.92 ug/L	520.92 ppb	17:51:36
1	Si 251.611†	75035.6	69870.9	2543.5 ug/L	2543.5 ppb	17:51:16
1	Sn 189.927†	2242.1	2097.3	494.53 ug/L	494.53 ppb	17:51:36
1	Ti 334.940†	266907.9	251933.7	507.49 ug/L	507.49 ppb	17:51:16
1	Tl 190.801†	1135.9	1097.8	507.55 ug/L	507.55 ppb	17:51:36
1	U 409.014†	13772.1	15469.2	516.27 ug/L	516.27 ppb	17:51:16
1	V 292.402†	66522.2	64093.9	517.12 ug/L	517.12 ppb	17:51:16
1	Zn 213.857†	50106.1	46340.5	506.31 ug/L	506.31 ppb	17:51:16
1	SiO2†	73235.0	68172.9	5297.1 ug/L	5297.1 ppb	17:52:43
2	Sc Radial	4932.1	4932.1	105 %		17:50:18
2	Y RADIAL	5179.9	5179.9	103.9 %		17:50:18
2	Al 396.153Radial†	5665.7	5493.8	5114.8 ug/L	5114.8 ppb	17:50:18
2	Ca 317.933Radial†	2987.8	2829.0	5140.2 ug/L	5140.2 ppb	17:50:39
2	Fe 238.204 Radial†	530.1	498.6	5188.0 ug/L	5188.0 ppb	17:50:39
2	K 766.490 Radial†	29536.7	25924.9	5154.4 ug/L	5154.4 ppb	17:50:18
2	Mg 279.077 IEC†	140.9	131.6	5224.8 ug/L	5224.8 ppb	17:50:39
2	Na 589.592 Radial†	29469.9	28970.6	9873.2 ug/L	9873.2 ppb	17:50:18
2	Sr 421.552†	72616.2	69297.3	503.87 ug/L	503.87 ppb	17:50:18
2	Sc 361.383	822013.5	822013.5	107.04 %		17:51:41
2	Y 371.029	727307.2	727307.2	105.55 %		17:51:41
2	Ag 328.068†	103326.9	96274.0	498.12 ug/L	498.12 ppb	17:51:47
2	As 188.979†	1176.0	1123.6	505.10 ug/L	505.10 ppb	17:52:07
2	B 249.677†	20567.4	19667.9	490.22 ug/L	490.22 ppb	17:51:47
2	Ba 233.527†	45328.3	42344.1	500.91 ug/L	500.91 ppb	17:51:47
2	Be 313.107†	1329224.3	1250766.5	498.28 ug/L	498.28 ppb	17:51:41
2	Cd 226.502†	37797.2	35497.5	503.11 ug/L	503.11 ppb	17:51:47
2	Co 228.616†	18028.8	16900.3	510.83 ug/L	510.83 ppb	17:51:47
2	Cr 267.716†	39222.9	36567.1	500.18 ug/L	500.18 ppb	17:51:47
2	Cu 324.752†	149396.3	132032.4	494.38 ug/L	494.38 ppb	17:51:47
2	Mn 257.610†	334268.5	311818.1	499.40 ug/L	499.40 ppb	17:51:47
2	Mo 202.031†	5832.9	5434.8	499.23 ug/L	499.23 ppb	17:52:07
2	Ni 231.604†	17037.1	15815.0	505.25 ug/L	505.25 ppb	17:51:47

2	P 214.914†	5002.0	4477.6	2403.9 ug/L	2403.9 ppb	17:52:07
2	Pb 220.353†	3242.5	3099.9	501.72 ug/L	501.72 ppb	17:52:07
2	S 181.975 Axial†	870.7	770.9	998.60 ug/L	998.60 ppb	17:52:07
2	Sb 206.836†	1344.2	1225.7	515.20 ug/L	515.20 ppb	17:52:07
2	Se 196.026†	868.0	830.7	522.37 ug/L	522.37 ppb	17:52:07
2	Si 251.611†	73602.2	68171.2	2481.5 ug/L	2481.5 ppb	17:51:47
2	Sn 189.927†	2266.7	2109.5	497.40 ug/L	497.40 ppb	17:52:07
2	Ti 334.940†	262336.1	246379.9	496.32 ug/L	496.32 ppb	17:51:47
2	Tl 190.801†	1130.7	1087.5	502.72 ug/L	502.72 ppb	17:52:07
2	U 409.014†	13391.6	15047.4	502.17 ug/L	502.17 ppb	17:51:47
2	V 292.402†	65361.3	62689.6	505.87 ug/L	505.87 ppb	17:51:47
2	Zn 213.857†	49236.1	45286.9	494.78 ug/L	494.78 ppb	17:51:47
2	SiO2†	74637.5	69131.2	5371.8 ug/L	5371.8 ppb	17:52:48
3	Sc Radial	4914.7	4914.7	104 %		17:50:44
3	Y RADIAL	5157.0	5157.0	103.4 %		17:50:44
3	Al 396.153Radial†	5612.4	5461.9	5085.1 ug/L	5085.1 ppb	17:50:44
3	Ca 317.933Radial†	3010.2	2860.6	5197.6 ug/L	5197.6 ppb	17:51:04
3	Fe 238.204 Radial†	533.5	503.6	5240.5 ug/L	5240.5 ppb	17:51:04
3	K 766.490 Radial†	29091.7	25598.6	5089.4 ug/L	5089.4 ppb	17:50:44
3	Mg 279.077 IEC†	145.4	136.4	5414.2 ug/L	5414.2 ppb	17:51:04
3	Na 589.592 Radial†	29216.1	28827.1	9824.3 ug/L	9824.3 ppb	17:50:44
3	Sr 421.552†	72104.6	69052.8	502.10 ug/L	502.10 ppb	17:50:44
3	Sc 361.383	823539.4	823539.4	107.24 %		17:52:12
3	Y 371.029	728257.9	728257.9	105.69 %		17:52:12
3	Ag 328.068†	105130.5	97777.1	505.88 ug/L	505.88 ppb	17:52:17
3	As 188.979†	1184.7	1129.7	507.91 ug/L	507.91 ppb	17:52:37
3	B 249.677†	20927.7	19968.2	497.71 ug/L	497.71 ppb	17:52:17
3	Ba 233.527†	46059.8	42947.7	508.05 ug/L	508.05 ppb	17:52:17
3	Be 313.107†	1335261.6	1254095.5	499.63 ug/L	499.63 ppb	17:52:12
3	Cd 226.502†	38311.9	35912.0	508.98 ug/L	508.98 ppb	17:52:17
3	Co 228.616†	18341.9	17161.0	518.70 ug/L	518.70 ppb	17:52:17
3	Cr 267.716†	39750.9	36991.6	505.98 ug/L	505.98 ppb	17:52:17
3	Cu 324.752†	152481.0	134650.2	504.18 ug/L	504.18 ppb	17:52:17
3	Mn 257.610†	339766.9	316366.8	506.68 ug/L	506.68 ppb	17:52:17
3	Mo 202.031†	5824.9	5417.3	497.62 ug/L	497.62 ppb	17:52:37
3	Ni 231.604†	17304.4	16034.8	512.27 ug/L	512.27 ppb	17:52:17
3	P 214.914†	4992.9	4460.4	2392.3 ug/L	2392.3 ppb	17:52:37
3	Pb 220.353†	3253.6	3104.7	502.47 ug/L	502.47 ppb	17:52:37
3	S 181.975 Axial†	877.4	775.6	1004.7 ug/L	1004.7 ppb	17:52:37
3	Sb 206.836†	1358.8	1237.0	519.67 ug/L	519.67 ppb	17:52:37
3	Se 196.026†	860.6	822.3	517.32 ug/L	517.32 ppb	17:52:37
3	Si 251.611†	75072.3	69414.7	2526.9 ug/L	2526.9 ppb	17:52:17
3	Sn 189.927†	2255.0	2094.7	493.92 ug/L	493.92 ppb	17:52:37
3	Ti 334.940†	266901.6	250183.0	503.97 ug/L	503.97 ppb	17:52:17
3	Tl 190.801†	1136.9	1091.4	504.55 ug/L	504.55 ppb	17:52:37
3	U 409.014†	13808.9	15413.4	514.40 ug/L	514.40 ppb	17:52:17
3	V 292.402†	66340.2	63489.3	512.22 ug/L	512.22 ppb	17:52:17
3	Zn 213.857†	50031.3	45943.2	501.96 ug/L	501.96 ppb	17:52:17
3	SiO2†	73209.3	67670.2	5258.1 ug/L	5258.1 ppb	17:52:53

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	821119.8	106.93 %	0.387			0.36%
Sc Radial	4928.7	105 %	0.3			0.26%
Y 371.029	726886.1	105.49 %	0.236			0.22%
Y RADIAL	5171.9	103.7 %	0.26			0.25%
Ag 328.068†	97472.3	504.30 ug/L	5.561	504.30 ppb	5.561	1.10%
QC value within limits for Ag 328.068 Recovery = 100.86%						
Al 396.153Radial†	5469.0	5091.6 ug/L	20.74	5091.6 ppb	20.74	0.41%
QC value within limits for Al 396.153Radial Recovery = 101.83%						
As 188.979†	1129.9	507.96 ug/L	2.889	507.96 ppb	2.889	0.57%
QC value within limits for As 188.979 Recovery = 101.59%						
B 249.677†	19914.0	496.36 ug/L	5.595	496.36 ppb	5.595	1.13%
QC value within limits for B 249.677 Recovery = 99.27%						
Ba 233.527†	42865.3	507.08 ug/L	5.738	507.08 ppb	5.738	1.13%
QC value within limits for Ba 233.527 Recovery = 101.42%						
Be 313.107†	1254672.3	499.85 ug/L	1.691	499.85 ppb	1.691	0.34%
QC value within limits for Be 313.107 Recovery = 99.97%						
Ca 317.933Radial†	2840.7	5161.3 ug/L	31.56	5161.3 ppb	31.56	0.61%

QC value within limits for Ca 317.933 Radial Recovery = 103.23%							
Cd 226.502†	35871.1	508.41 ug/L	5.039	508.41 ppb	5.039	0.99%	
QC value within limits for Cd 226.502 Recovery = 101.68%							
Co 228.616†	17088.7	516.52 ug/L	4.968	516.52 ppb	4.968	0.96%	
QC value within limits for Co 228.616 Recovery = 103.30%							
Cr 267.716†	36953.8	505.47 ug/L	5.051	505.47 ppb	5.051	1.00%	
QC value within limits for Cr 267.716 Recovery = 101.09%							
Cu 324.752†	134138.6	502.26 ug/L	7.120	502.26 ppb	7.120	1.42%	
QC value within limits for Cu 324.752 Recovery = 100.45%							
Fe 238.204 Radial†	499.5	5197.8 ug/L	38.82	5197.8 ppb	38.82	0.75%	
QC value within limits for Fe 238.204 Radial Recovery = 103.96%							
K 766.490 Radial†	25753.4	5120.2 ug/L	32.61	5120.2 ppb	32.61	0.64%	
QC value within limits for K 766.490 Radial Recovery = 102.40%							
Mg 279.077 IEC†	134.1	5323.7 ug/L	95.00	5323.7 ppb	95.00	1.78%	
QC value within limits for Mg 279.077 IEC Recovery = 106.47%							
Mn 257.610†	315583.1	505.43 ug/L	5.504	505.43 ppb	5.504	1.09%	
QC value within limits for Mn 257.610 Recovery = 101.09%							
Mo 202.031†	5440.8	499.77 ug/L	2.474	499.77 ppb	2.474	0.49%	
QC value within limits for Mo 202.031 Recovery = 99.95%							
Na 589.592 Radial†	28822.3	9822.6 ug/L	51.39	9822.6 ppb	51.39	0.52%	
QC value within limits for Na 589.592 Radial Recovery = 98.23%							
Ni 231.604†	16022.4	511.88 ug/L	6.436	511.88 ppb	6.436	1.26%	
QC value within limits for Ni 231.604 Recovery = 102.38%							
P 214.914†	4478.2	2402.6 ug/L	9.77	2402.6 ppb	9.77	0.41%	
QC value within limits for P 214.914 Recovery = 96.10%							
Pb 220.353†	3112.2	503.71 ug/L	2.812	503.71 ppb	2.812	0.56%	
QC value within limits for Pb 220.353 Recovery = 100.74%							
S 181.975 Axial†	773.3	1001.7 ug/L	3.05	1001.7 ppb	3.05	0.30%	
QC value within limits for S 181.975 Axial Recovery = 100.17%							
Sb 206.836†	1236.6	519.60 ug/L	4.363	519.60 ppb	4.363	0.84%	
QC value within limits for Sb 206.836 Recovery = 103.92%							
Se 196.026†	827.1	520.21 ug/L	2.600	520.21 ppb	2.600	0.50%	
QC value within limits for Se 196.026 Recovery = 104.04%							
Si 251.611†	69152.3	2517.3 ug/L	32.09	2517.3 ppb	32.09	1.27%	
QC value within limits for Si 251.611 Recovery = 100.69%							
Sn 189.927†	2100.5	495.28 ug/L	1.860	495.28 ppb	1.860	0.38%	
QC value within limits for Sn 189.927 Recovery = 99.06%							
Sr 421.552†	69085.5	502.33 ug/L	1.435	502.33 ppb	1.435	0.29%	
QC value within limits for Sr 421.552 Recovery = 100.47%							
Ti 334.940†	249498.8	502.59 ug/L	5.712	502.59 ppb	5.712	1.14%	
QC value within limits for Ti 334.940 Recovery = 100.52%							
Tl 190.801†	1092.2	504.94 ug/L	2.439	504.94 ppb	2.439	0.48%	
QC value within limits for Tl 190.801 Recovery = 100.99%							
U 409.014†	15310.0	510.94 ug/L	7.660	510.94 ppb	7.660	1.50%	
QC value within limits for U 409.014 Recovery = 102.19%							
V 292.402†	63424.2	511.74 ug/L	5.639	511.74 ppb	5.639	1.10%	
QC value within limits for V 292.402 Recovery = 102.35%							
Zn 213.857†	45856.9	501.02 ug/L	5.818	501.02 ppb	5.818	1.16%	
QC value within limits for Zn 213.857 Recovery = 100.20%							
SiO2†	68324.8	5309.0 ug/L	57.81	5309.0 ppb	57.81	1.09%	
QC value within limits for SiO2 Recovery = 99.28%							
All analyte(s) passed QC.							

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/1/2010 17:55:04

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	5004.8	5004.8	106 %		17:56:56
1	Y RADIAL	5280.9	5280.9	105.9 %		17:56:56
1	Al 396.153Radial†	-61.3	29.5	27.624 ug/L	27.624 ppb	17:57:16
1	Ca 317.933Radial†	32.9	8.8	15.955 ug/L	15.955 ppb	17:57:16
1	Fe 238.204 Radial†	8.5	0.6	6.6145 ug/L	6.6145 ppb	17:57:16
1	K 766.490 Radial†	2344.9	-56.4	-11.258 ug/L	-11.258 ppb	17:56:56
1	Mg 279.077 IEC†	2.9	-0.1	-5.8188 ug/L	-5.8188 ppb	17:57:16
1	Na 589.592 Radial†	-732.7	158.7	54.089 ug/L	54.089 ppb	17:56:56
1	Sr 421.552†	34.1	32.6	0.2367 ug/L	0.2367 ppb	17:56:56
1	Sc 361.383	807716.8	807716.8	105.18 %		17:58:13
1	Y 371.029	722275.5	722275.5	104.82 %		17:58:13
1	Ag 328.068†	200.3	-65.3	-0.3361 ug/L	-0.3361 ppb	17:58:13
1	As 188.979†	-36.4	-9.6	-4.2834 ug/L	-4.2834 ppb	17:58:33
1	B 249.677†	-365.0	106.4	2.6637 ug/L	2.6637 ppb	17:58:33
1	Ba 233.527†	-3.3	-5.5	-0.0639 ug/L	-0.0639 ppb	17:58:33
1	Be 313.107†	-9404.8	41.1	0.0166 ug/L	0.0166 ppb	17:58:13
1	Cd 226.502†	-177.9	17.5	0.2479 ug/L	0.2479 ppb	17:58:33
1	Co 228.616†	-62.6	-2.1	-0.0650 ug/L	-0.0650 ppb	17:58:33
1	Cr 267.716†	76.5	-2.9	-0.0410 ug/L	-0.0410 ppb	17:58:33
1	Cu 324.752†	7666.4	-247.3	-0.9284 ug/L	-0.9284 ppb	17:58:13
1	Mn 257.610†	483.1	-1.8	-0.0020 ug/L	-0.0020 ppb	17:58:33
1	Mo 202.031†	5.3	-9.3	-0.8564 ug/L	-0.8564 ppb	17:58:33
1	Ni 231.604†	91.1	-14.8	-0.4715 ug/L	-0.4715 ppb	17:58:33
1	P 214.914†	199.0	-6.2	-3.2627 ug/L	-3.2627 ppb	17:58:33
1	Pb 220.353†	-66.2	7.8	1.2550 ug/L	1.2550 ppb	17:58:33
1	S 181.975 Axial†	40.7	-3.8	-4.9723 ug/L	-4.9723 ppb	17:58:33
1	Sb 206.836†	42.1	10.0	4.0202 ug/L	4.0202 ppb	17:58:33
1	Se 196.026†	-28.3	-7.1	-4.3127 ug/L	-4.3127 ppb	17:58:33
1	Si 251.611†	598.2	-20.4	-0.7352 ug/L	-0.7352 ppb	17:58:33
1	Sn 189.927†	2.2	-6.0	-1.4095 ug/L	-1.4095 ppb	17:58:33
1	Ti 334.940†	-1305.1	60.2	0.1217 ug/L	0.1217 ppb	17:58:13
1	Tl 190.801†	-33.0	-0.1	-0.0678 ug/L	-0.0678 ppb	17:58:33
1	U 409.014†	-2505.5	154.7	5.1793 ug/L	5.1793 ppb	17:58:13
1	V 292.402†	-1649.5	59.7	0.4718 ug/L	0.4718 ppb	17:58:13
1	Zn 213.857†	790.5	41.3	0.4587 ug/L	0.4587 ppb	17:58:33
1	SiO2†	613.3	-13.4	-1.0189 ug/L	-1.0189 ppb	17:59:29
2	Sc Radial	5007.4	5007.4	106 %		17:57:21
2	Y RADIAL	5287.9	5287.9	106.1 %		17:57:21
2	Al 396.153Radial†	-80.7	11.3	10.562 ug/L	10.562 ppb	17:57:41
2	Ca 317.933Radial†	28.2	4.4	7.9139 ug/L	7.9139 ppb	17:57:41
2	Fe 238.204 Radial†	7.9	0.1	1.4009 ug/L	1.4009 ppb	17:57:41
2	K 766.490 Radial†	2197.8	-195.9	-39.011 ug/L	-39.011 ppb	17:57:21
2	Mg 279.077 IEC†	1.1	-1.9	-73.518 ug/L	-73.518 ppb	17:57:41
2	Na 589.592 Radial†	-738.2	154.0	52.469 ug/L	52.469 ppb	17:57:21
2	Sr 421.552†	30.0	28.7	0.2088 ug/L	0.2088 ppb	17:57:21
2	Sc 361.383	806824.0	806824.0	105.06 %		17:58:38
2	Y 371.029	721011.8	721011.8	104.64 %		17:58:38
2	Ag 328.068†	272.1	3.4	0.0073 ug/L	0.0073 ppb	17:58:38
2	As 188.979†	-25.6	0.6	0.2817 ug/L	0.2817 ppb	17:58:59
2	B 249.677†	-370.4	100.9	2.5255 ug/L	2.5255 ppb	17:58:59
2	Ba 233.527†	13.5	10.5	0.1240 ug/L	0.1240 ppb	17:58:59
2	Be 313.107†	-9361.5	72.3	0.0292 ug/L	0.0292 ppb	17:58:38
2	Cd 226.502†	-200.4	-4.1	-0.0558 ug/L	-0.0558 ppb	17:58:59
2	Co 228.616†	-59.4	1.0	0.0298 ug/L	0.0298 ppb	17:58:59
2	Cr 267.716†	65.1	-13.6	-0.1910 ug/L	-0.1910 ppb	17:58:59
2	Cu 324.752†	7692.3	-214.6	-0.8108 ug/L	-0.8108 ppb	17:58:38
2	Mn 257.610†	482.7	-1.7	0.0004 ug/L	0.0004 ppb	17:58:59
2	Mo 202.031†	18.1	2.9	0.2643 ug/L	0.2643 ppb	17:58:59
2	Ni 231.604†	84.2	-21.2	-0.6768 ug/L	-0.6768 ppb	17:58:59

2	P 214.914†	207.9	2.5	1.5342 ug/L	1.5342 ppb	17:58:59
2	Pb 220.353†	-65.8	8.1	1.3110 ug/L	1.3110 ppb	17:58:59
2	S 181.975 Axial†	44.7	0.1	0.0648 ug/L	0.0648 ppb	17:58:59
2	Sb 206.836†	37.9	6.0	2.4261 ug/L	2.4261 ppb	17:58:59
2	Se 196.026†	-18.5	2.2	1.3439 ug/L	1.3439 ppb	17:58:59
2	Si 251.611†	599.5	-18.6	-0.6834 ug/L	-0.6834 ppb	17:58:59
2	Sn 189.927†	-0.9	-8.9	-2.0928 ug/L	-2.0928 ppb	17:58:59
2	Ti 334.940†	-1265.4	96.6	0.1961 ug/L	0.1961 ppb	17:58:38
2	Tl 190.801†	-36.8	-3.8	-1.7415 ug/L	-1.7415 ppb	17:58:59
2	U 409.014†	-2255.2	390.3	13.069 ug/L	13.069 ppb	17:58:38
2	V 292.402†	-1699.6	10.3	0.1087 ug/L	0.1087 ppb	17:58:38
2	Zn 213.857†	784.4	36.3	0.4056 ug/L	0.4056 ppb	17:58:59
2	SiO2†	648.7	21.0	1.6272 ug/L	1.6272 ppb	17:59:34
3	Sc Radial	4987.8	4987.8	106 %		17:57:46
3	Y RADIAL	5274.6	5274.6	105.8 %		17:57:46
3	Al 396.153Radial†	-75.2	16.1	15.144 ug/L	15.144 ppb	17:58:06
3	Ca 317.933Radial†	33.6	9.5	17.272 ug/L	17.272 ppb	17:58:06
3	Fe 238.204 Radial†	10.6	2.7	27.956 ug/L	27.956 ppb	17:58:06
3	K 766.490 Radial†	2348.1	-45.9	-9.1600 ug/L	-9.1600 ppb	17:57:46
3	Mg 279.077 IEC†	1.5	-1.5	-57.883 ug/L	-57.883 ppb	17:58:06
3	Na 589.592 Radial†	-702.0	185.4	63.181 ug/L	63.181 ppb	17:57:46
3	Sr 421.552†	9.6	9.5	0.0689 ug/L	0.0689 ppb	17:57:46
3	Sc 361.383	811978.0	811978.0	105.73 %		17:59:04
3	Y 371.029	725369.6	725369.6	105.27 %		17:59:04
3	Ag 328.068†	154.8	-109.3	-0.5614 ug/L	-0.5614 ppb	17:59:04
3	As 188.979†	-27.1	-0.6	-0.2765 ug/L	-0.2765 ppb	17:59:24
3	B 249.677†	-382.7	91.5	2.2876 ug/L	2.2876 ppb	17:59:24
3	Ba 233.527†	10.6	7.7	0.0910 ug/L	0.0910 ppb	17:59:24
3	Be 313.107†	-9460.8	35.0	0.0147 ug/L	0.0147 ppb	17:59:04
3	Cd 226.502†	-193.8	3.3	0.0460 ug/L	0.0460 ppb	17:59:24
3	Co 228.616†	-64.7	-3.7	-0.1140 ug/L	-0.1140 ppb	17:59:24
3	Cr 267.716†	45.7	-32.3	-0.4452 ug/L	-0.4452 ppb	17:59:24
3	Cu 324.752†	7714.3	-240.2	-0.9031 ug/L	-0.9031 ppb	17:59:04
3	Mn 257.610†	498.7	10.5	0.0219 ug/L	0.0219 ppb	17:59:24
3	Mo 202.031†	5.8	-8.9	-0.8170 ug/L	-0.8170 ppb	17:59:24
3	Ni 231.604†	98.4	-8.2	-0.2634 ug/L	-0.2634 ppb	17:59:24
3	P 214.914†	208.1	1.5	0.9801 ug/L	0.9801 ppb	17:59:24
3	Pb 220.353†	-52.0	21.5	3.4685 ug/L	3.4685 ppb	17:59:24
3	S 181.975 Axial†	41.4	-3.4	-4.3757 ug/L	-4.3757 ppb	17:59:24
3	Sb 206.836†	28.5	-3.0	-1.2475 ug/L	-1.2475 ppb	17:59:24
3	Se 196.026†	-27.4	-6.1	-3.6800 ug/L	-3.6800 ppb	17:59:24
3	Si 251.611†	603.5	-18.5	-0.6645 ug/L	-0.6645 ppb	17:59:24
3	Sn 189.927†	8.5	-0.1	-0.0111 ug/L	-0.0111 ppb	17:59:24
3	Ti 334.940†	-1192.7	173.0	0.3517 ug/L	0.3517 ppb	17:59:04
3	Tl 190.801†	-26.1	6.6	3.0193 ug/L	3.0193 ppb	17:59:24
3	U 409.014†	-2389.5	276.9	9.2703 ug/L	9.2703 ppb	17:59:04
3	V 292.402†	-1731.6	-9.7	-0.0761 ug/L	-0.0761 ppb	17:59:04
3	Zn 213.857†	786.8	33.9	0.3723 ug/L	0.3723 ppb	17:59:24
3	SiO2†	590.1	-38.4	-2.9675 ug/L	-2.9675 ppb	17:59:39

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	808839.6	105.33 %	0.359			0.34%
Sc Radial	5000.0	106 %	0.2			0.21%
Y 371.029	722885.6	104.91 %	0.325			0.31%
Y RADIAL	5281.1	105.9 %	0.13			0.13%
Ag 328.068†	-57.1	-0.2968 ug/L	0.28638	-0.2968 ppb	0.28638	96.50%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	19.0	17.777 ug/L	8.8304	17.777 ppb	8.8304	49.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.2	-1.4261 ug/L	2.49023	-1.4261 ppb	2.49023	174.62%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	99.6	2.4923 ug/L	0.19020	2.4923 ppb	0.19020	7.63%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.2	0.0504 ug/L	0.10031	0.0504 ppb	0.10031	199.05%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	49.5	0.0202 ug/L	0.00788	0.0202 ppb	0.00788	39.10%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.5	13.714 ug/L	5.0656	13.714 ppb	5.0656	36.94%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	5.6	0.0793 ug/L	0.15459	0.0793 ppb	0.15459 194.83%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	-1.6	-0.0497 ug/L	0.07308	-0.0497 ppb	0.07308 146.94%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-16.3	-0.2257 ug/L	0.20430	-0.2257 ppb	0.20430 90.50%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-234.0	-0.8807 ug/L	0.06190	-0.8807 ppb	0.06190 7.03%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	1.2	11.990 ug/L	14.0702	11.990 ppb	14.0702 117.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	-99.4	-19.810 ug/L	16.6619	-19.810 ppb	16.6619 84.11%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	-1.2	-45.740 ug/L	35.4454	-45.740 ppb	35.4454 77.49%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	2.3	0.0068 ug/L	0.01319	0.0068 ppb	0.01319 194.93%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	-5.1	-0.4697 ug/L	0.63595	-0.4697 ppb	0.63595 135.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	166.0	56.580 ug/L	5.7741	56.580 ppb	5.7741 10.21%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-14.7	-0.4706 ug/L	0.20671	-0.4706 ppb	0.20671 43.93%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-0.7	-0.2494 ug/L	2.62421	-0.2494 ppb	2.62421 >999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	12.5	2.0115 ug/L	1.26211	2.0115 ppb	1.26211 62.74%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-2.4	-3.0944 ug/L	2.75214	-3.0944 ppb	2.75214 88.94%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	4.3	1.7329 ug/L	2.70138	1.7329 ppb	2.70138 155.89%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-3.7	-2.2163 ug/L	3.09934	-2.2163 ppb	3.09934 139.85%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	-19.2	-0.6944 ug/L	0.03662	-0.6944 ppb	0.03662 5.27%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-5.0	-1.1711 ug/L	1.06112	-1.1711 ppb	1.06112 90.61%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	23.6	0.1715 ug/L	0.08989	0.1715 ppb	0.08989 52.42%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	109.9	0.2232 ug/L	0.11736	0.2232 ppb	0.11736 52.59%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	0.9	0.4034 ug/L	2.41512	0.4034 ppb	2.41512 598.76%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	274.0	9.1727 ug/L	3.94559	9.1727 ppb	3.94559 43.01%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	20.1	0.1681 ug/L	0.27875	0.1681 ppb	0.27875 165.80%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	37.2	0.4122 ug/L	0.04360	0.4122 ppb	0.04360 10.58%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		-10.3	-0.7864 ug/L	2.30616	-0.7864 ppb	2.30616 293.25%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.



## =====

Analysis Begun

Start Time: 3/1/2010 18:22:02

Plasma On Time: 3/1/2010 06:57:40

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\030110.sif

Batch ID:

Results Data Set: 030110A

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

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 3/1/2010 18:22:03

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	4848.9	4848.9	103 %		18:23:55
1	Y RADIAL	5099.4	5099.4	102.3 %		18:23:55
1	Al 396.153Radial†	5538.9	5463.5	5086.9 ug/L	5086.9 ppb	18:23:55
1	Ca 317.933Radial†	2972.2	2862.8	5201.6 ug/L	5201.6 ppb	18:24:15
1	Fe 238.204 Radial†	531.3	508.4	5289.6 ug/L	5289.6 ppb	18:24:15
1	K 766.490 Radial†	28912.7	25803.0	5130.0 ug/L	5130.0 ppb	18:23:55
1	Mg 279.077 IEC†	141.9	134.9	5355.2 ug/L	5355.2 ppb	18:24:15
1	Na 589.592 Radial†	29722.0	29697.9	10121 ug/L	10121 ppb	18:23:55
1	Sr 421.552†	72381.2	70258.4	510.86 ug/L	510.86 ppb	18:23:55
1	Sc 361.383	823743.9	823743.9	107.27 %		18:25:12
1	Y 371.029	729086.6	729086.6	105.81 %		18:25:12
1	Ag 328.068†	103603.7	96329.3	498.42 ug/L	498.42 ppb	18:25:17
1	As 188.979†	1162.0	1108.3	498.32 ug/L	498.32 ppb	18:25:38
1	B 249.677†	20665.4	19718.9	491.48 ug/L	491.48 ppb	18:25:17
1	Ba 233.527†	45511.5	42425.9	501.88 ug/L	501.88 ppb	18:25:17
1	Be 313.107†	1304868.4	1225452.0	488.22 ug/L	488.22 ppb	18:25:12
1	Cd 226.502†	37637.7	35274.6	499.94 ug/L	499.94 ppb	18:25:17
1	Co 228.616†	17962.7	16803.3	507.88 ug/L	507.88 ppb	18:25:17
1	Cr 267.716†	39112.8	36387.5	497.72 ug/L	497.72 ppb	18:25:17
1	Cu 324.752†	151112.4	133339.0	499.27 ug/L	499.27 ppb	18:25:17
1	Mn 257.610†	334728.4	311590.9	499.05 ug/L	499.05 ppb	18:25:17
1	Mo 202.031†	5754.1	5349.9	491.45 ug/L	491.45 ppb	18:25:38
1	Ni 231.604†	17034.6	15779.3	504.11 ug/L	504.11 ppb	18:25:17
1	P 214.914†	4951.0	4420.2	2370.7 ug/L	2370.7 ppb	18:25:38
1	Pb 202.353†	3205.5	3059.0	495.10 ug/L	495.10 ppb	18:25:38
1	S 181.975 Axial†	855.5	755.1	978.04 ug/L	978.04 ppb	18:25:38
1	Sb 206.836†	1333.8	1213.4	509.88 ug/L	509.88 ppb	18:25:38
1	Se 196.026†	854.0	815.9	513.51 ug/L	513.51 ppb	18:25:38
1	Si 251.611†	74370.7	68743.2	2502.4 ug/L	2502.4 ppb	18:25:17
1	Sn 189.927†	2229.0	2069.9	488.08 ug/L	488.08 ppb	18:25:38
1	Ti 334.940†	263123.2	246598.8	496.76 ug/L	496.76 ppb	18:25:17
1	Tl 190.801†	1125.3	1080.3	499.43 ug/L	499.43 ppb	18:25:38
1	U 409.014†	13745.2	15350.8	512.32 ug/L	512.32 ppb	18:25:17
1	V 292.402†	65375.2	62574.3	504.85 ug/L	504.85 ppb	18:25:17
1	Zn 213.857†	49329.6	45277.5	494.67 ug/L	494.67 ppb	18:25:17
1	SiO2†	73360.0	67793.8	5267.9 ug/L	5267.9 ppb	18:26:45
2	Sc Radial	4788.2	4788.2	102 %		18:24:20
2	Y RADIAL	5011.5	5011.5	100.5 %		18:24:20
2	Al 396.153Radial†	5659.7	5650.4	5261.4 ug/L	5261.4 ppb	18:24:20
2	Ca 317.933Radial†	2945.0	2872.7	5219.4 ug/L	5219.4 ppb	18:24:40
2	Fe 238.204 Radial†	527.7	511.4	5321.4 ug/L	5321.4 ppb	18:24:40
2	K 766.490 Radial†	29436.1	26673.0	5303.0 ug/L	5303.0 ppb	18:24:20
2	Mg 279.077 IEC†	137.3	132.1	5242.8 ug/L	5242.8 ppb	18:24:40
2	Na 589.592 Radial†	30423.8	30753.3	10481 ug/L	10481 ppb	18:24:20
2	Sr 421.552†	73908.4	72649.9	528.25 ug/L	528.25 ppb	18:24:20
2	Sc 361.383	814108.0	814108.0	106.01 %		18:25:43
2	Y 371.029	720459.4	720459.4	104.56 %		18:25:43

2	Ag 328.068†	102915.8	96823.7	501.00 ug/L	501.00 ppb	18:25:48
2	As 188.979†	1172.5	1131.0	508.48 ug/L	508.48 ppb	18:26:08
2	B 249.677†	20537.5	19826.2	494.15 ug/L	494.15 ppb	18:25:48
2	Ba 233.527†	45359.5	42784.7	506.12 ug/L	506.12 ppb	18:25:48
2	Be 313.107†	1301861.6	1237014.0	492.83 ug/L	492.83 ppb	18:25:43
2	Cd 226.502†	37747.5	35793.5	507.29 ug/L	507.29 ppb	18:25:48
2	Co 228.616†	18022.3	17057.7	515.58 ug/L	515.58 ppb	18:25:48
2	Cr 267.716†	39124.2	36829.8	503.78 ug/L	503.78 ppb	18:25:48
2	Cu 324.752†	149591.7	133572.0	500.15 ug/L	500.15 ppb	18:25:48
2	Mn 257.610†	333785.3	314394.8	503.54 ug/L	503.54 ppb	18:25:48
2	Mo 202.031†	5766.3	5424.9	498.33 ug/L	498.33 ppb	18:26:08
2	Ni 231.604†	17028.0	15961.0	509.91 ug/L	509.91 ppb	18:25:48
2	P 214.914†	4977.6	4500.0	2415.2 ug/L	2415.2 ppb	18:26:08
2	Pb 220.353†	3205.4	3094.3	500.85 ug/L	500.85 ppb	18:26:08
2	S 181.975 Axial†	869.9	778.0	1007.8 ug/L	1007.8 ppb	18:26:08
2	Sb 206.836†	1344.6	1238.0	520.24 ug/L	520.24 ppb	18:26:08
2	Se 196.026†	865.9	836.6	526.28 ug/L	526.28 ppb	18:26:08
2	Si 251.611†	74008.1	69221.8	2519.8 ug/L	2519.8 ppb	18:25:48
2	Sn 189.927†	2238.4	2103.4	495.95 ug/L	495.95 ppb	18:26:08
2	Ti 334.940†	261782.4	248237.4	500.07 ug/L	500.07 ppb	18:25:48
2	Tl 190.801†	1125.4	1092.8	505.17 ug/L	505.17 ppb	18:26:08
2	U 409.014†	13364.2	15143.1	505.35 ug/L	505.35 ppb	18:25:48
2	V 292.402†	65143.5	63077.1	508.92 ug/L	508.92 ppb	18:25:48
2	Zn 213.857†	49083.5	45589.6	498.07 ug/L	498.07 ppb	18:25:48
2	SiO2†	72273.2	67578.1	5250.9 ug/L	5250.9 ppb	18:26:50
3	Sc Radial	4714.0	4714.0	100 %		18:24:45
3	Y RADIAL	4940.6	4940.6	99.10 %		18:24:45
3	Al 396.153Radial†	5539.3	5617.8	5231.0 ug/L	5231.0 ppb	18:24:45
3	Ca 317.933Radial†	2967.4	2940.6	5342.9 ug/L	5342.9 ppb	18:25:05
3	Fe 238.204 Radial†	533.0	524.8	5460.5 ug/L	5460.5 ppb	18:25:05
3	K 766.490 Radial†	28919.1	26612.2	5290.9 ug/L	5290.9 ppb	18:24:45
3	Mg 279.077 IEC†	142.9	139.8	5550.2 ug/L	5550.2 ppb	18:25:05
3	Na 589.592 Radial†	29742.9	30544.1	10409 ug/L	10409 ppb	18:24:45
3	Sr 421.552†	72603.5	72490.3	527.09 ug/L	527.09 ppb	18:24:45
3	Sc 361.383	821751.5	821751.5	107.01 %		18:26:14
3	Y 371.029	726701.4	726701.4	105.47 %		18:26:14
3	Ag 328.068†	102757.0	95772.3	495.61 ug/L	495.61 ppb	18:26:19
3	As 188.979†	1158.6	1107.7	498.09 ug/L	498.09 ppb	18:26:39
3	B 249.677†	20592.3	19697.3	490.91 ug/L	490.91 ppb	18:26:19
3	Ba 233.527†	45223.0	42259.1	499.91 ug/L	499.91 ppb	18:26:19
3	Be 313.107†	1312086.8	1235147.2	492.07 ug/L	492.07 ppb	18:26:14
3	Cd 226.502†	37586.9	35312.1	500.45 ug/L	500.45 ppb	18:26:19
3	Co 228.616†	17994.5	16873.6	510.02 ug/L	510.02 ppb	18:26:19
3	Cr 267.716†	38941.5	36315.8	496.75 ug/L	496.75 ppb	18:26:19
3	Cu 324.752†	149380.4	132062.1	494.51 ug/L	494.51 ppb	18:26:19
3	Mn 257.610†	333088.8	310815.2	497.81 ug/L	497.81 ppb	18:26:19
3	Mo 202.031†	5768.9	5376.7	493.92 ug/L	493.92 ppb	18:26:39
3	Ni 231.604†	17035.5	15818.6	505.36 ug/L	505.36 ppb	18:26:19
3	P 214.914†	4972.0	4451.1	2388.8 ug/L	2388.8 ppb	18:26:39
3	Pb 220.353†	3198.9	3060.1	495.30 ug/L	495.30 ppb	18:26:39
3	S 181.975 Axial†	865.7	766.5	992.83 ug/L	992.83 ppb	18:26:39
3	Sb 206.836†	1350.2	1231.7	517.42 ug/L	517.42 ppb	18:26:39
3	Se 196.026†	849.8	814.0	512.74 ug/L	512.74 ppb	18:26:39
3	Si 251.611†	73922.9	68492.8	2493.3 ug/L	2493.3 ppb	18:26:19
3	Sn 189.927†	2237.7	2083.1	491.19 ug/L	491.19 ppb	18:26:39
3	Ti 334.940†	261236.0	245430.0	494.41 ug/L	494.41 ppb	18:26:19
3	Tl 190.801†	1121.7	1079.5	499.02 ug/L	499.02 ppb	18:26:39
3	U 409.014†	13283.0	14949.9	498.88 ug/L	498.88 ppb	18:26:19
3	V 292.402†	64932.8	62308.6	502.72 ug/L	502.72 ppb	18:26:19
3	Zn 213.857†	48961.8	45045.3	492.08 ug/L	492.08 ppb	18:26:19
3	SiO2†	72599.3	67248.7	5225.3 ug/L	5225.3 ppb	18:26:55

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819867.8	106.76 %	0.662			0.62%
Sc Radial	4783.7	102 %	1.4			1.41%
Y 371.029	725415.8	105.28 %	0.647			0.61%
Y RADIAL	5017.2	100.6 %	1.60			1.59%
Ag 328.068†	96308.4	498.34 ug/L	2.693	498.34 ppb	2.693	0.54%

QC value within limits for Ag 328.068 Recovery = 99.67%							
Al 396.153Radial†	5577.3	5193.1 ug/L	93.25	5193.1 ppb	93.25	1.80%	
QC value within limits for Al 396.153Radial Recovery = 103.86%							
As 188.979†	1115.7	501.63 ug/L	5.931	501.63 ppb	5.931	1.18%	
QC value within limits for As 188.979 Recovery = 100.33%							
B 249.677†	19747.5	492.18 ug/L	1.727	492.18 ppb	1.727	0.35%	
QC value within limits for B 249.677 Recovery = 98.44%							
Ba 233.527†	42489.9	502.64 ug/L	3.174	502.64 ppb	3.174	0.63%	
QC value within limits for Ba 233.527 Recovery = 100.53%							
Be 313.107†	1232537.8	491.04 ug/L	2.469	491.04 ppb	2.469	0.50%	
QC value within limits for Be 313.107 Recovery = 98.21%							
Ca 317.933Radial†	2892.0	5254.6 ug/L	76.96	5254.6 ppb	76.96	1.46%	
QC value within limits for Ca 317.933Radial Recovery = 105.09%							
Cd 226.502†	35460.0	502.56 ug/L	4.106	502.56 ppb	4.106	0.82%	
QC value within limits for Cd 226.502 Recovery = 100.51%							
Co 228.616†	16911.5	511.16 ug/L	3.975	511.16 ppb	3.975	0.78%	
QC value within limits for Co 228.616 Recovery = 102.23%							
Cr 267.716†	36511.0	499.42 ug/L	3.807	499.42 ppb	3.807	0.76%	
QC value within limits for Cr 267.716 Recovery = 99.88%							
Cu 324.752†	132991.0	497.98 ug/L	3.036	497.98 ppb	3.036	0.61%	
QC value within limits for Cu 324.752 Recovery = 99.60%							
Fe 238.204 Radial†	514.9	5357.1 ug/L	90.89	5357.1 ppb	90.89	1.70%	
QC value within limits for Fe 238.204 Radial Recovery = 107.14%							
K 766.490 Radial†	26362.7	5241.3 ug/L	96.59	5241.3 ppb	96.59	1.84%	
QC value within limits for K 766.490 Radial Recovery = 104.83%							
Mg 279.077 IEC†	135.6	5382.7 ug/L	155.56	5382.7 ppb	155.56	2.89%	
QC value within limits for Mg 279.077 IEC Recovery = 107.65%							
Mn 257.610†	312267.0	500.13 ug/L	3.015	500.13 ppb	3.015	0.60%	
QC value within limits for Mn 257.610 Recovery = 100.03%							
Mo 202.031†	5383.9	494.57 ug/L	3.487	494.57 ppb	3.487	0.71%	
QC value within limits for Mo 202.031 Recovery = 98.91%							
Na 589.592 Radial†	30331.8	10337 ug/L	190.4	10337 ppb	190.4	1.84%	
QC value within limits for Na 589.592 Radial Recovery = 103.37%							
Ni 231.604†	15852.9	506.46 ug/L	3.055	506.46 ppb	3.055	0.60%	
QC value within limits for Ni 231.604 Recovery = 101.29%							
P 214.914†	4457.1	2391.6 ug/L	22.36	2391.6 ppb	22.36	0.93%	
QC value within limits for P 214.914 Recovery = 95.66%							
Pb 220.353†	3071.1	497.08 ug/L	3.264	497.08 ppb	3.264	0.66%	
QC value within limits for Pb 220.353 Recovery = 99.42%							
S 181.975 Axial†	766.5	992.88 ug/L	14.866	992.88 ppb	14.866	1.50%	
QC value within limits for S 181.975 Axial Recovery = 99.29%							
Sb 206.836†	1227.8	515.85 ug/L	5.353	515.85 ppb	5.353	1.04%	
QC value within limits for Sb 206.836 Recovery = 103.17%							
Se 196.026†	822.2	517.51 ug/L	7.605	517.51 ppb	7.605	1.47%	
QC value within limits for Se 196.026 Recovery = 103.50%							
Si 251.611†	68819.3	2505.2 ug/L	13.48	2505.2 ppb	13.48	0.54%	
QC value within limits for Si 251.611 Recovery = 100.21%							
Sn 189.927†	2085.4	491.74 ug/L	3.966	491.74 ppb	3.966	0.81%	
QC value within limits for Sn 189.927 Recovery = 98.35%							
Sr 421.552†	71799.5	522.07 ug/L	9.722	522.07 ppb	9.722	1.86%	
QC value within limits for Sr 421.552 Recovery = 104.41%							
Ti 334.940†	246755.4	497.08 ug/L	2.844	497.08 ppb	2.844	0.57%	
QC value within limits for Ti 334.940 Recovery = 99.42%							
Tl 190.801†	1084.2	501.21 ug/L	3.441	501.21 ppb	3.441	0.69%	
QC value within limits for Tl 190.801 Recovery = 100.24%							
U 409.014†	15148.0	505.51 ug/L	6.722	505.51 ppb	6.722	1.33%	
QC value within limits for U 409.014 Recovery = 101.10%							
V 292.402†	62653.3	505.50 ug/L	3.151	505.50 ppb	3.151	0.62%	
QC value within limits for V 292.402 Recovery = 101.10%							
Zn 213.857†	45304.1	494.94 ug/L	3.003	494.94 ppb	3.003	0.61%	
QC value within limits for Zn 213.857 Recovery = 98.99%							
SiO2†	67540.2	5248.0 ug/L	21.41	5248.0 ppb	21.41	0.41%	
QC value within limits for SiO2 Recovery = 98.14%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/1/2010 18:29:04

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	4989.1	4989.1	106 %		18:30:56
1	Y RADIAL	5274.7	5274.7	105.8 %		18:30:56
1	Al 396.153Radial†	-95.3	-2.8	-2.5721 ug/L	-2.5721 ppb	18:31:16
1	Ca 317.933Radial†	19.6	-3.7	-6.6941 ug/L	-6.6941 ppb	18:31:16
1	Fe 238.204 Radial†	5.5	-2.2	-22.353 ug/L	-22.353 ppb	18:31:16
1	K 766.490 Radial†	2224.7	-162.9	-32.455 ug/L	-32.455 ppb	18:30:56
1	Mg 279.077 IEC†	2.5	-0.5	-20.708 ug/L	-20.708 ppb	18:31:16
1	Na 589.592 Radial†	-719.8	168.7	57.502 ug/L	57.502 ppb	18:30:56
1	Sr 421.552†	50.9	48.5	0.3529 ug/L	0.3529 ppb	18:30:56
1	Sc 361.383	803091.4	803091.4	104.58 %		18:32:13
1	Y 371.029	720271.0	720271.0	104.53 %		18:32:13
1	Ag 328.068†	183.4	-80.3	-0.4303 ug/L	-0.4303 ppb	18:32:13
1	As 188.979†	-32.3	-5.9	-2.6279 ug/L	-2.6279 ppb	18:32:33
1	B 249.677†	-346.5	122.1	3.0616 ug/L	3.0616 ppb	18:32:33
1	Ba 233.527†	0.9	-1.6	-0.0194 ug/L	-0.0194 ppb	18:32:33
1	Be 313.107†	-9584.6	-182.5	-0.0721 ug/L	-0.0721 ppb	18:32:13
1	Cd 226.502†	-182.5	12.1	0.1757 ug/L	0.1757 ppb	18:32:33
1	Co 228.616†	-71.1	-10.5	-0.3185 ug/L	-0.3185 ppb	18:32:33
1	Cr 267.716†	60.1	-18.2	-0.2535 ug/L	-0.2535 ppb	18:32:33
1	Cu 324.752†	7756.0	-119.6	-0.4560 ug/L	-0.4560 ppb	18:32:13
1	Mn 257.610†	446.3	-34.4	-0.0564 ug/L	-0.0564 ppb	18:32:33
1	Mo 202.031†	11.2	-3.7	-0.3416 ug/L	-0.3416 ppb	18:32:33
1	Ni 231.604†	87.8	-17.4	-0.5558 ug/L	-0.5558 ppb	18:32:33
1	P 214.914†	217.3	12.4	7.0548 ug/L	7.0548 ppb	18:32:33
1	Pb 220.353†	-50.2	22.7	3.6638 ug/L	3.6638 ppb	18:32:33
1	S 181.975 Axial†	38.3	-5.9	-7.6824 ug/L	-7.6824 ppb	18:32:33
1	Sb 206.836†	30.7	-0.7	-0.2932 ug/L	-0.2932 ppb	18:32:33
1	Se 196.026†	-20.5	0.2	0.0472 ug/L	0.0472 ppb	18:32:33
1	Si 251.611†	560.5	-53.3	-1.9395 ug/L	-1.9395 ppb	18:32:33
1	Sn 189.927†	10.0	1.5	0.3600 ug/L	0.3600 ppb	18:32:33
1	Ti 334.940†	-1271.1	85.6	0.1678 ug/L	0.1678 ppb	18:32:13
1	Tl 190.801†	-33.5	-0.9	-0.3927 ug/L	-0.3927 ppb	18:32:33
1	U 409.014†	-2261.1	374.6	12.548 ug/L	12.548 ppb	18:32:13
1	V 292.402†	-1712.1	-9.2	-0.0512 ug/L	-0.0512 ppb	18:32:13
1	Zn 213.857†	738.8	-3.9	-0.0351 ug/L	-0.0351 ppb	18:32:33
1	SiO2†	545.1	-75.2	-5.8485 ug/L	-5.8485 ppb	18:33:29
2	Sc Radial	5012.1	5012.1	106 %		18:31:21
2	Y RADIAL	5271.4	5271.4	105.7 %		18:31:21
2	Al 396.153Radial†	-84.3	8.0	7.4737 ug/L	7.4737 ppb	18:31:41
2	Ca 317.933Radial†	16.4	-6.7	-12.219 ug/L	-12.219 ppb	18:31:41
2	Fe 238.204 Radial†	6.2	-1.5	-15.893 ug/L	-15.893 ppb	18:31:41
2	K 766.490 Radial†	2360.5	-45.0	-8.9714 ug/L	-8.9714 ppb	18:31:21
2	Mg 279.077 IEC†	2.6	-0.4	-17.768 ug/L	-17.768 ppb	18:31:41
2	Na 589.592 Radial†	-710.7	180.4	61.495 ug/L	61.495 ppb	18:31:21
2	Sr 421.552†	46.2	43.9	0.3191 ug/L	0.3191 ppb	18:31:21
2	Sc 361.383	795327.1	795327.1	103.57 %		18:32:38
2	Y 371.029	713569.6	713569.6	103.56 %		18:32:38
2	Ag 328.068†	279.5	14.2	0.0567 ug/L	0.0567 ppb	18:32:38
2	As 188.979†	-32.2	-6.1	-2.7120 ug/L	-2.7120 ppb	18:32:58
2	B 249.677†	-367.2	98.9	2.4781 ug/L	2.4781 ppb	18:32:58
2	Ba 233.527†	-15.2	-17.1	-0.2022 ug/L	-0.2022 ppb	18:32:58
2	Be 313.107†	-9662.9	-347.5	-0.1379 ug/L	-0.1379 ppb	18:32:38
2	Cd 226.502†	-204.3	-10.6	-0.1461 ug/L	-0.1461 ppb	18:32:58
2	Co 228.616†	-50.7	8.5	0.2568 ug/L	0.2568 ppb	18:32:58
2	Cr 267.716†	56.7	-20.8	-0.2903 ug/L	-0.2903 ppb	18:32:58
2	Cu 324.752†	7818.8	13.4	0.0412 ug/L	0.0412 ppb	18:32:38
2	Mn 257.610†	478.8	1.2	0.0011 ug/L	0.0011 ppb	18:32:58
2	Mo 202.031†	15.8	0.8	0.0763 ug/L	0.0763 ppb	18:32:58
2	Ni 231.604†	85.9	-18.3	-0.5867 ug/L	-0.5867 ppb	18:32:58

2	P 214.914†	218.1	15.3	8.5297 ug/L	8.5297 ppb	18:32:58
2	Pb 220.353†	-68.7	4.3	0.7031 ug/L	0.7031 ppb	18:32:58
2	S 181.975 Axial†	42.1	-1.9	-2.4610 ug/L	-2.4610 ppb	18:32:58
2	Sb 206.836†	45.5	13.9	5.6604 ug/L	5.6604 ppb	18:32:58
2	Se 196.026†	-14.8	5.5	3.3627 ug/L	3.3627 ppb	18:32:58
2	Si 251.611†	587.9	-21.6	-0.7886 ug/L	-0.7886 ppb	18:32:58
2	Sn 189.927†	9.6	1.2	0.2849 ug/L	0.2849 ppb	18:32:58
2	Ti 334.940†	-1283.0	62.3	0.1189 ug/L	0.1189 ppb	18:32:38
2	Tl 190.801†	-31.3	1.0	0.4576 ug/L	0.4576 ppb	18:32:58
2	U 409.014†	-2176.2	435.6	14.588 ug/L	14.588 ppb	18:32:38
2	V 292.402†	-1669.8	15.7	0.1562 ug/L	0.1562 ppb	18:32:38
2	Zn 213.857†	742.4	6.5	0.0779 ug/L	0.0779 ppb	18:32:58
2	SiO2†	616.5	-1.2	-0.0935 ug/L	-0.0935 ppb	18:33:34
3	Sc Radial	5011.8	5011.8	106 %		18:31:46
3	Y RADIAL	5336.2	5336.2	107.0 %		18:31:46
3	Al 396.153Radial†	-82.3	9.8	9.1879 ug/L	9.1879 ppb	18:32:06
3	Ca 317.933Radial†	20.9	-2.6	-4.6623 ug/L	-4.6623 ppb	18:32:06
3	Fe 238.204 Radial†	7.9	0.1	0.9742 ug/L	0.9742 ppb	18:32:06
3	K 766.490 Radial†	2342.9	-61.4	-12.245 ug/L	-12.245 ppb	18:31:46
3	Mg 279.077 IEC†	1.7	-1.3	-49.688 ug/L	-49.688 ppb	18:32:06
3	Na 589.592 Radial†	-703.1	187.5	63.913 ug/L	63.913 ppb	18:31:46
3	Sr 421.552†	-13.7	-12.3	-0.0897 ug/L	-0.0897 ppb	18:31:46
3	Sc 361.383	789366.6	789366.6	102.79 %		18:33:04
3	Y 371.029	706943.5	706943.5	102.60 %		18:33:04
3	Ag 328.068†	230.9	-31.1	-0.1614 ug/L	-0.1614 ppb	18:33:04
3	As 188.979†	-33.3	-7.4	-3.2919 ug/L	-3.2919 ppb	18:33:24
3	B 249.677†	-389.2	74.8	1.8740 ug/L	1.8740 ppb	18:33:24
3	Ba 233.527†	-0.7	-3.1	-0.0350 ug/L	-0.0350 ppb	18:33:24
3	Be 313.107†	-9606.4	-363.0	-0.1435 ug/L	-0.1435 ppb	18:33:04
3	Cd 226.502†	-195.7	-3.8	-0.0534 ug/L	-0.0534 ppb	18:33:24
3	Co 228.616†	-69.2	-9.8	-0.2984 ug/L	-0.2984 ppb	18:33:24
3	Cr 267.716†	50.5	-26.5	-0.3629 ug/L	-0.3629 ppb	18:33:24
3	Cu 324.752†	7632.8	-110.6	-0.4167 ug/L	-0.4167 ppb	18:33:04
3	Mn 257.610†	473.6	-0.4	0.0015 ug/L	0.0015 ppb	18:33:24
3	Mo 202.031†	8.8	-5.9	-0.5372 ug/L	-0.5372 ppb	18:33:24
3	Ni 231.604†	72.6	-30.7	-0.9812 ug/L	-0.9812 ppb	18:33:24
3	P 214.914†	219.1	17.8	10.011 ug/L	10.011 ppb	18:33:24
3	Pb 220.353†	-70.9	1.7	0.2812 ug/L	0.2812 ppb	18:33:24
3	S 181.975 Axial†	38.6	-4.9	-6.3870 ug/L	-6.3870 ppb	18:33:24
3	Sb 206.836†	44.3	13.0	5.2909 ug/L	5.2909 ppb	18:33:24
3	Se 196.026†	-24.5	-4.1	-2.4900 ug/L	-2.4900 ppb	18:33:24
3	Si 251.611†	568.5	-36.2	-1.3137 ug/L	-1.3137 ppb	18:33:24
3	Sn 189.927†	11.5	3.1	0.7308 ug/L	0.7308 ppb	18:33:24
3	Ti 334.940†	-1153.0	179.4	0.3629 ug/L	0.3629 ppb	18:33:04
3	Tl 190.801†	-30.5	1.6	0.7264 ug/L	0.7264 ppb	18:33:24
3	U 409.014†	-2460.6	143.0	4.7888 ug/L	4.7888 ppb	18:33:04
3	V 292.402†	-1612.8	59.0	0.4698 ug/L	0.4698 ppb	18:33:04
3	Zn 213.857†	750.5	19.8	0.2251 ug/L	0.2251 ppb	18:33:24
3	SiO2†	611.8	-1.3	-0.0849 ug/L	-0.0849 ppb	18:33:39

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	795928.4	103.64 %		0.896			0.86%
Sc Radial	5004.4	106 %		0.3			0.26%
Y 371.029	713594.7	103.56 %		0.967			0.93%
Y RADIAL	5294.1	106.2 %		0.73			0.69%
Ag 328.068†	-32.4	-0.1784 ug/L		0.24396	-0.1784 ppb	0.24396	136.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	5.0	4.6965 ug/L		6.35290	4.6965 ppb	6.35290	135.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-6.5	-2.8773 ug/L		0.36156	-2.8773 ppb	0.36156	12.57%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	98.6	2.4713 ug/L		0.59386	2.4713 ppb	0.59386	24.03%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-7.2	-0.0855 ug/L		0.10134	-0.0855 ppb	0.10134	118.48%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-297.7	-0.1178 ug/L		0.03966	-0.1178 ppb	0.03966	33.67%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-4.3	-7.8585 ug/L		3.91062	-7.8585 ppb	3.91062	49.76%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-0.8	-0.0079 ug/L	0.16563	-0.0079 ppb	0.16563	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.9	-0.1200 ug/L	0.32647	-0.1200 ppb	0.32647	271.98%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-21.8	-0.3022 ug/L	0.05565	-0.3022 ppb	0.05565	18.41%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-72.3	-0.2772 ug/L	0.27641	-0.2772 ppb	0.27641	99.73%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.2	-12.424 ug/L	12.0445	-12.424 ppb	12.0445	96.95%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-89.8	-17.891 ug/L	12.7193	-17.891 ppb	12.7193	71.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.7	-29.388 ug/L	17.6418	-29.388 ppb	17.6418	60.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-11.2	-0.0179 ug/L	0.03333	-0.0179 ppb	0.03333	185.80%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-2.9	-0.2675 ug/L	0.31342	-0.2675 ppb	0.31342	117.17%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	178.9	60.970 ug/L	3.2377	60.970 ppb	3.2377	5.31%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-22.1	-0.7079 ug/L	0.23720	-0.7079 ppb	0.23720	33.51%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	15.2	8.5318 ug/L	1.47805	8.5318 ppb	1.47805	17.32%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	9.6	1.5494 ug/L	1.84324	1.5494 ppb	1.84324	118.97%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-4.2	-5.5102 ug/L	2.71890	-5.5102 ppb	2.71890	49.34%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.8	3.5527 ug/L	3.33575	3.5527 ppb	3.33575	93.89%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.3066 ug/L	2.93493	0.3066 ppb	2.93493	957.15%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-37.0	-1.3473 ug/L	0.57615	-1.3473 ppb	0.57615	42.76%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.0	0.4585 ug/L	0.23876	0.4585 ppb	0.23876	52.07%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	26.7	0.1941 ug/L	0.24635	0.1941 ppb	0.24635	126.94%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	109.1	0.2165 ug/L	0.12906	0.2165 ppb	0.12906	59.60%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.6	0.2638 ug/L	0.58418	0.2638 ppb	0.58418	221.48%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	317.7	10.642 ug/L	5.1702	10.642 ppb	5.1702	48.58%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	21.8	0.1916 ug/L	0.26230	0.1916 ppb	0.26230	136.89%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	7.5	0.0893 ug/L	0.13049	0.0893 ppb	0.13049	146.14%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-25.9	-2.0090 ug/L	3.32516	-2.0090 ppb	3.32516	165.52%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/1/2010 19:43:44

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	5258.2	5258.2	112 %		19:45:36
1	Y RADIAL	5514.4	5514.4	110.6 %		19:45:36
1	Al 396.153Radial†	5435.5	4952.4	4608.5 ug/L	4608.5 ppb	19:45:36
1	Ca 317.933Radial†	2936.2	2606.1	4735.1 ug/L	4735.1 ppb	19:45:56
1	Fe 238.204 Radial†	521.8	459.7	4785.1 ug/L	4785.1 ppb	19:45:56
1	K 766.490 Radial†	28379.1	23140.4	4600.6 ug/L	4600.6 ppb	19:45:36
1	Mg 279.077 IEC†	140.5	122.8	4877.6 ug/L	4877.6 ppb	19:45:56
1	Na 589.592 Radial†	28372.3	26243.7	8943.8 ug/L	8943.8 ppb	19:45:36
1	Sr 421.552†	70270.1	62899.0	457.35 ug/L	457.35 ppb	19:45:36
1	Sc 361.383	817652.6	817652.6	106.47 %		19:46:53
1	Y 371.029	721883.8	721883.8	104.77 %		19:46:53
1	Ag 328.068†	103478.5	96931.2	501.38 ug/L	501.38 ppb	19:46:58
1	As 188.979†	1172.1	1125.8	506.06 ug/L	506.06 ppb	19:47:19
1	B 249.677†	20544.9	19749.2	492.30 ug/L	492.30 ppb	19:46:58
1	Ba 233.527†	45582.3	42808.5	506.38 ug/L	506.38 ppb	19:46:58
1	Be 313.107†	1314161.5	1243242.5	495.31 ug/L	495.31 ppb	19:46:53
1	Cd 226.502†	37664.0	35560.6	504.05 ug/L	504.05 ppb	19:46:58
1	Co 228.616†	18103.7	17060.5	515.67 ug/L	515.67 ppb	19:46:58
1	Cr 267.716†	39068.3	36617.3	500.86 ug/L	500.86 ppb	19:46:58
1	Cu 324.752†	150882.8	134172.9	502.37 ug/L	502.37 ppb	19:46:58
1	Mn 257.610†	335325.6	314476.5	503.63 ug/L	503.63 ppb	19:46:58
1	Mo 202.031†	5770.2	5405.0	496.45 ug/L	496.45 ppb	19:47:19
1	Ni 231.604†	17103.1	15961.9	509.94 ug/L	509.94 ppb	19:46:58
1	P 214.914†	4959.7	4462.8	2394.2 ug/L	2394.2 ppb	19:47:19
1	Pb 220.353†	3216.1	3091.3	500.23 ug/L	500.23 ppb	19:47:19
1	S 181.975 Axial†	857.4	762.8	988.10 ug/L	988.10 ppb	19:47:19
1	Sb 206.836†	1358.4	1245.8	523.27 ug/L	523.27 ppb	19:47:19
1	Se 196.026†	862.0	829.4	520.60 ug/L	520.60 ppb	19:47:19
1	Si 251.611†	74456.8	69340.6	2524.2 ug/L	2524.2 ppb	19:46:58
1	Sn 189.927†	2248.9	2104.1	496.08 ug/L	496.08 ppb	19:47:19
1	Ti 334.940†	263621.9	248894.6	501.36 ug/L	501.36 ppb	19:46:58
1	Tl 190.801†	1107.5	1071.4	495.35 ug/L	495.35 ppb	19:47:19
1	U 409.014†	13605.2	15314.8	511.16 ug/L	511.16 ppb	19:46:58
1	V 292.402†	65218.1	62880.8	507.42 ug/L	507.42 ppb	19:46:58
1	Zn 213.857†	49333.3	45623.5	498.52 ug/L	498.52 ppb	19:46:58
1	SiO2†	73401.9	68342.6	5310.5 ug/L	5310.5 ppb	19:48:26
2	Sc Radial	4926.1	4926.1	105 %		19:46:01
2	Y RADIAL	5155.6	5155.6	103.4 %		19:46:01
2	Al 396.153Radial†	5543.0	5383.1	5011.5 ug/L	5011.5 ppb	19:46:01
2	Ca 317.933Radial†	2964.8	2810.6	5106.7 ug/L	5106.7 ppb	19:46:21
2	Fe 238.204 Radial†	523.5	492.9	5128.7 ug/L	5128.7 ppb	19:46:21
2	K 766.490 Radial†	28687.4	25147.4	4999.7 ug/L	4999.7 ppb	19:46:01
2	Mg 279.077 IEC†	136.5	127.5	5062.4 ug/L	5062.4 ppb	19:46:21
2	Na 589.592 Radial†	28800.7	28365.1	9666.8 ug/L	9666.8 ppb	19:46:01
2	Sr 421.552†	71499.3	68313.8	496.72 ug/L	496.72 ppb	19:46:01
2	Sc 361.383	816523.1	816523.1	106.33 %		19:47:24
2	Y 371.029	722213.5	722213.5	104.82 %		19:47:24
2	Ag 328.068†	102668.6	96304.0	498.25 ug/L	498.25 ppb	19:47:29
2	As 188.979†	1164.7	1120.4	503.66 ug/L	503.66 ppb	19:47:49
2	B 249.677†	20444.4	19681.3	490.57 ug/L	490.57 ppb	19:47:29
2	Ba 233.527†	44900.5	42226.4	499.52 ug/L	499.52 ppb	19:47:29
2	Be 313.107†	1315474.0	1246184.3	496.46 ug/L	496.46 ppb	19:47:24
2	Cd 226.502†	37176.3	35150.9	498.20 ug/L	498.20 ppb	19:47:29
2	Co 228.616†	17843.0	16838.8	508.97 ug/L	508.97 ppb	19:47:29
2	Cr 267.716†	38682.8	36305.5	496.60 ug/L	496.60 ppb	19:47:29
2	Cu 324.752†	149352.6	132929.8	497.74 ug/L	497.74 ppb	19:47:29
2	Mn 257.610†	331022.1	310864.7	497.88 ug/L	497.88 ppb	19:47:29
2	Mo 202.031†	5747.8	5391.4	495.24 ug/L	495.24 ppb	19:47:49
2	Ni 231.604†	16908.3	15800.9	504.80 ug/L	504.80 ppb	19:47:29

2	P 214.914†	4942.3	4452.9	2389.4 ug/L	2389.4 ppb	19:47:49
2	Pb 220.353†	3176.1	3057.8	494.90 ug/L	494.90 ppb	19:47:49
2	S 181.975 Axial†	862.2	768.4	995.34 ug/L	995.34 ppb	19:47:49
2	Sb 206.836†	1352.9	1242.4	521.80 ug/L	521.80 ppb	19:47:49
2	Se 196.026†	848.6	817.9	514.38 ug/L	514.38 ppb	19:47:49
2	Si 251.611†	73523.1	68559.2	2495.7 ug/L	2495.7 ppb	19:47:29
2	Sn 189.927†	2234.7	2093.6	493.65 ug/L	493.65 ppb	19:47:49
2	Ti 334.940†	260600.8	246395.8	496.36 ug/L	496.36 ppb	19:47:29
2	Tl 190.801†	1102.4	1068.0	493.78 ug/L	493.78 ppb	19:47:49
2	U 409.014†	13333.6	15077.0	503.17 ug/L	503.17 ppb	19:47:29
2	V 292.402†	64677.2	62456.8	503.97 ug/L	503.97 ppb	19:47:29
2	Zn 213.857†	48777.2	45164.6	493.44 ug/L	493.44 ppb	19:47:29
2	SiO2†	74238.1	69224.4	5379.2 ug/L	5379.2 ppb	19:48:31
3	Sc Radial	4932.9	4932.9	105 %		19:46:26
3	Y RADIAL	5206.7	5206.7	104.4 %		19:46:26
3	Al 396.153Radial†	5571.6	5403.2	5030.3 ug/L	5030.3 ppb	19:46:26
3	Ca 317.933Radial†	2983.5	2824.5	5132.0 ug/L	5132.0 ppb	19:46:46
3	Fe 238.204 Radial†	526.7	495.2	5152.9 ug/L	5152.9 ppb	19:46:46
3	K 766.490 Radial†	28953.3	25363.6	5042.7 ug/L	5042.7 ppb	19:46:26
3	Mg 279.077 IEC†	138.5	129.3	5131.9 ug/L	5131.9 ppb	19:46:46
3	Na 589.592 Radial†	29149.8	28660.6	9767.5 ug/L	9767.5 ppb	19:46:26
3	Sr 421.552†	71956.2	68656.1	499.21 ug/L	499.21 ppb	19:46:26
3	Sc 361.383	822719.6	822719.6	107.13 %		19:47:55
3	Y 371.029	727811.7	727811.7	105.63 %		19:47:55
3	Ag 328.068†	104367.2	97162.3	502.68 ug/L	502.68 ppb	19:48:00
3	As 188.979†	1159.1	1106.9	497.73 ug/L	497.73 ppb	19:48:20
3	B 249.677†	20967.5	20024.8	499.15 ug/L	499.15 ppb	19:48:00
3	Ba 233.527†	45808.6	42756.0	505.78 ug/L	505.78 ppb	19:48:00
3	Be 313.107†	1322789.4	1243694.3	495.49 ug/L	495.49 ppb	19:47:55
3	Cd 226.502†	37922.9	35584.5	504.35 ug/L	504.35 ppb	19:48:00
3	Co 228.616†	18192.8	17038.9	515.00 ug/L	515.00 ppb	19:48:00
3	Cr 267.716†	39421.2	36720.7	502.28 ug/L	502.28 ppb	19:48:00
3	Cu 324.752†	152244.7	134571.4	503.88 ug/L	503.88 ppb	19:48:00
3	Mn 257.610†	337419.7	314491.5	503.68 ug/L	503.68 ppb	19:48:00
3	Mo 202.031†	5785.6	5386.0	494.74 ug/L	494.74 ppb	19:48:20
3	Ni 231.604†	17189.0	15943.1	509.34 ug/L	509.34 ppb	19:48:00
3	P 214.914†	4971.5	4445.1	2383.8 ug/L	2383.8 ppb	19:48:20
3	Pb 220.353†	3223.6	3079.7	498.43 ug/L	498.43 ppb	19:48:20
3	S 181.975 Axial†	855.6	756.1	979.43 ug/L	979.43 ppb	19:48:20
3	Sb 206.836†	1358.2	1237.8	519.88 ug/L	519.88 ppb	19:48:20
3	Se 196.026†	869.2	831.2	522.54 ug/L	522.54 ppb	19:48:20
3	Si 251.611†	74951.6	69371.7	2525.3 ug/L	2525.3 ppb	19:48:00
3	Sn 189.927†	2237.7	2080.6	490.59 ug/L	490.59 ppb	19:48:20
3	Ti 334.940†	265417.9	249046.1	501.70 ug/L	501.70 ppb	19:48:00
3	Tl 190.801†	1127.0	1083.2	500.78 ug/L	500.78 ppb	19:48:20
3	U 409.014†	13613.7	15244.1	508.75 ug/L	508.75 ppb	19:48:00
3	V 292.402†	65707.5	62960.4	507.97 ug/L	507.97 ppb	19:48:00
3	Zn 213.857†	49570.0	45559.1	497.75 ug/L	497.75 ppb	19:48:00
3	SiO2†	73615.7	68117.5	5293.0 ug/L	5293.0 ppb	19:48:36

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818965.1	106.64 %	0.430			0.40%
Sc Radial	5039.1	107 %	4.0			3.77%
Y 371.029	723969.7	105.07 %	0.483			0.46%
Y RADIAL	5292.2	106.2 %	3.89			3.67%
Ag 328.068†	96799.2	500.77 ug/L	2.278	500.77 ppb	2.278	0.45%
QC value within limits for Ag 328.068 Recovery = 100.15%						
Al 396.153Radial†	5246.2	4883.4 ug/L	238.27	4883.4 ppb	238.27	4.88%
QC value within limits for Al 396.153Radial Recovery = 97.67%						
As 188.979†	1117.7	502.48 ug/L	4.289	502.48 ppb	4.289	0.85%
QC value within limits for As 188.979 Recovery = 100.50%						
B 249.677†	19818.5	494.01 ug/L	4.537	494.01 ppb	4.537	0.92%
QC value within limits for B 249.677 Recovery = 98.80%						
Ba 233.527†	42597.0	503.89 ug/L	3.801	503.89 ppb	3.801	0.75%
QC value within limits for Ba 233.527 Recovery = 100.78%						
Be 313.107†	1244373.7	495.75 ug/L	0.623	495.75 ppb	0.623	0.13%
QC value within limits for Be 313.107 Recovery = 99.15%						
Ca 317.933Radial†	2747.0	4991.2 ug/L	222.21	4991.2 ppb	222.21	4.45%



QC value within limits for Ca 317.933 Radial Recovery = 99.82%							
Cd 226.502†	35432.0	502.20 ug/L	3.467	502.20 ppb	3.467	0.69%	
QC value within limits for Cd 226.502 Recovery = 100.44%							
Co 228.616†	16979.4	513.21 ug/L	3.691	513.21 ppb	3.691	0.72%	
QC value within limits for Co 228.616 Recovery = 102.64%							
Cr 267.716†	36547.8	499.91 ug/L	2.954	499.91 ppb	2.954	0.59%	
QC value within limits for Cr 267.716 Recovery = 99.98%							
Cu 324.752†	133891.3	501.33 ug/L	3.202	501.33 ppb	3.202	0.64%	
QC value within limits for Cu 324.752 Recovery = 100.27%							
Fe 238.204 Radial†	482.6	5022.2 ug/L	205.73	5022.2 ppb	205.73	4.10%	
QC value within limits for Fe 238.204 Radial Recovery = 100.44%							
K 766.490 Radial†	24550.5	4881.0 ug/L	243.79	4881.0 ppb	243.79	4.99%	
QC value within limits for K 766.490 Radial Recovery = 97.62%							
Mg 279.077 IEC†	126.5	5024.0 ug/L	131.45	5024.0 ppb	131.45	2.62%	
QC value within limits for Mg 279.077 IEC Recovery = 100.48%							
Mn 257.610†	313277.6	501.73 ug/L	3.337	501.73 ppb	3.337	0.67%	
QC value within limits for Mn 257.610 Recovery = 100.35%							
Mo 202.031†	5394.1	495.48 ug/L	0.880	495.48 ppb	0.880	0.18%	
QC value within limits for Mo 202.031 Recovery = 99.10%							
Na 589.592 Radial†	27756.5	9459.4 ug/L	449.31	9459.4 ppb	449.31	4.75%	
QC value within limits for Na 589.592 Radial Recovery = 94.59%							
Ni 231.604†	15902.0	508.03 ug/L	2.811	508.03 ppb	2.811	0.55%	
QC value within limits for Ni 231.604 Recovery = 101.61%							
P 214.914†	4453.6	2389.1 ug/L	5.22	2389.1 ppb	5.22	0.22%	
QC value within limits for P 214.914 Recovery = 95.57%							
Pb 220.353†	3076.3	497.85 ug/L	2.711	497.85 ppb	2.711	0.54%	
QC value within limits for Pb 220.353 Recovery = 99.57%							
S 181.975 Axial†	762.4	987.62 ug/L	7.965	987.62 ppb	7.965	0.81%	
QC value within limits for S 181.975 Axial Recovery = 98.76%							
Sb 206.836†	1242.0	521.65 ug/L	1.702	521.65 ppb	1.702	0.33%	
QC value within limits for Sb 206.836 Recovery = 104.33%							
Se 196.026†	826.2	519.17 ug/L	4.260	519.17 ppb	4.260	0.82%	
QC value within limits for Se 196.026 Recovery = 103.83%							
Si 251.611†	69090.5	2515.1 ug/L	16.80	2515.1 ppb	16.80	0.67%	
QC value within limits for Si 251.611 Recovery = 100.60%							
Sn 189.927†	2092.8	493.44 ug/L	2.750	493.44 ppb	2.750	0.56%	
QC value within limits for Sn 189.927 Recovery = 98.69%							
Sr 421.552†	66623.0	484.43 ug/L	23.483	484.43 ppb	23.483	4.85%	
QC value within limits for Sr 421.552 Recovery = 96.89%							
Ti 334.940†	248112.2	499.80 ug/L	2.987	499.80 ppb	2.987	0.60%	
QC value within limits for Ti 334.940 Recovery = 99.96%							
Tl 190.801†	1074.2	496.64 ug/L	3.672	496.64 ppb	3.672	0.74%	
QC value within limits for Tl 190.801 Recovery = 99.33%							
U 409.014†	15211.9	507.69 ug/L	4.099	507.69 ppb	4.099	0.81%	
QC value within limits for U 409.014 Recovery = 101.54%							
V 292.402†	62766.0	506.45 ug/L	2.169	506.45 ppb	2.169	0.43%	
QC value within limits for V 292.402 Recovery = 101.29%							
Zn 213.857†	45449.1	496.57 ug/L	2.735	496.57 ppb	2.735	0.55%	
QC value within limits for Zn 213.857 Recovery = 99.31%							
SiO2†	68561.5	5327.6 ug/L	45.57	5327.6 ppb	45.57	0.86%	
QC value within limits for SiO2 Recovery = 99.63%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/1/2010 19:50:45

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	5098.3	5098.3	108 %		19:52:37
1	Y RADIAL	5360.2	5360.2	107.5 %		19:52:37
1	Al 396.153Radial†	-95.5	-1.1	-1.0300 ug/L	-1.0300 ppb	19:52:57
1	Ca 317.933Radial†	27.7	3.4	6.2222 ug/L	6.2222 ppb	19:52:57
1	Fe 238.204 Radial†	8.8	0.8	8.6908 ug/L	8.6908 ppb	19:52:57
1	K 766.490 Radial†	2225.7	-206.9	-41.212 ug/L	-41.212 ppb	19:52:37
1	Mg 279.077 IEC†	-0.9	-3.7	-146.90 ug/L	-146.90 ppb	19:52:57
1	Na 589.592 Radial†	-724.1	179.3	61.116 ug/L	61.116 ppb	19:52:37
1	Sr 421.552†	10.3	10.0	0.0727 ug/L	0.0727 ppb	19:52:37
1	Sc 361.383	809198.9	809198.9	105.37 %		19:53:54
1	Y 371.029	726387.2	726387.2	105.42 %		19:53:54
1	Ag 328.068†	232.7	-34.8	-0.1837 ug/L	-0.1837 ppb	19:53:54
1	As 188.979†	-33.6	-6.9	-3.0745 ug/L	-3.0745 ppb	19:54:14
1	B 249.677†	-275.8	191.7	4.8001 ug/L	4.8001 ppb	19:54:14
1	Ba 233.527†	4.3	1.7	0.0216 ug/L	0.0216 ppb	19:54:14
1	Be 313.107†	-9677.4	-201.3	-0.0793 ug/L	-0.0793 ppb	19:53:54
1	Cd 226.502†	-190.7	5.7	0.0814 ug/L	0.0814 ppb	19:54:14
1	Co 228.616†	-72.8	-11.7	-0.3519 ug/L	-0.3519 ppb	19:54:14
1	Cr 267.716†	52.9	-25.4	-0.3513 ug/L	-0.3513 ppb	19:54:14
1	Cu 324.752†	7861.9	-75.1	-0.2876 ug/L	-0.2876 ppb	19:53:54
1	Mn 257.610†	430.3	-52.8	-0.0776 ug/L	-0.0776 ppb	19:54:14
1	Mo 202.031†	21.6	6.1	0.5640 ug/L	0.5640 ppb	19:54:14
1	Ni 231.604†	92.2	-13.9	-0.4433 ug/L	-0.4433 ppb	19:54:14
1	P 214.914†	209.9	3.8	2.1760 ug/L	2.1760 ppb	19:54:14
1	Pb 220.353†	-72.1	2.2	0.3603 ug/L	0.3603 ppb	19:54:14
1	S 181.975 Axial†	43.6	-1.1	-1.4395 ug/L	-1.4395 ppb	19:54:14
1	Sb 206.836†	32.2	0.5	0.2111 ug/L	0.2111 ppb	19:54:14
1	Se 196.026†	-21.6	-0.7	-0.3977 ug/L	-0.3977 ppb	19:54:14
1	Si 251.611†	566.3	-51.8	-1.8977 ug/L	-1.8977 ppb	19:54:14
1	Sn 189.927†	5.6	-2.7	-0.6469 ug/L	-0.6469 ppb	19:54:14
1	Ti 334.940†	-1204.4	158.0	0.3260 ug/L	0.3260 ppb	19:53:54
1	Tl 190.801†	-37.1	-4.0	-1.8469 ug/L	-1.8469 ppb	19:54:14
1	U 409.014†	-2287.4	366.0	12.256 ug/L	12.256 ppb	19:53:54
1	V 292.402†	-1625.4	85.5	0.7079 ug/L	0.7079 ppb	19:53:54
1	Zn 213.857†	774.2	24.5	0.2716 ug/L	0.2716 ppb	19:54:14
1	SiO2†	565.2	-60.1	-4.6949 ug/L	-4.6949 ppb	19:55:10
2	Sc Radial	5013.8	5013.8	107 %		19:53:02
2	Y RADIAL	5282.8	5282.8	106.0 %		19:53:02
2	Al 396.153Radial†	-84.6	7.7	7.2409 ug/L	7.2409 ppb	19:53:22
2	Ca 317.933Radial†	17.7	-5.5	-10.026 ug/L	-10.026 ppb	19:53:22
2	Fe 238.204 Radial†	5.9	-1.7	-18.125 ug/L	-18.125 ppb	19:53:22
2	K 766.490 Radial†	2367.3	-39.4	-7.8501 ug/L	-7.8501 ppb	19:53:02
2	Mg 279.077 IEC†	-1.8	-4.6	-181.52 ug/L	-181.52 ppb	19:53:22
2	Na 589.592 Radial†	-745.7	147.8	50.373 ug/L	50.373 ppb	19:53:02
2	Sr 421.552†	5.2	5.4	0.0391 ug/L	0.0391 ppb	19:53:02
2	Sc 361.383	811656.1	811656.1	105.69 %		19:54:19
2	Y 371.029	728765.3	728765.3	105.77 %		19:54:19
2	Ag 328.068†	225.8	-42.0	-0.2247 ug/L	-0.2247 ppb	19:54:19
2	As 188.979†	-19.3	6.7	2.9993 ug/L	2.9993 ppb	19:54:39
2	B 249.677†	-320.1	150.6	3.7740 ug/L	3.7740 ppb	19:54:39
2	Ba 233.527†	4.3	1.7	0.0208 ug/L	0.0208 ppb	19:54:39
2	Be 313.107†	-9604.9	-104.9	-0.0413 ug/L	-0.0413 ppb	19:54:19
2	Cd 226.502†	-193.1	3.9	0.0587 ug/L	0.0587 ppb	19:54:39
2	Co 228.616†	-60.1	0.6	0.0196 ug/L	0.0196 ppb	19:54:39
2	Cr 267.716†	72.3	-7.2	-0.1004 ug/L	-0.1004 ppb	19:54:39
2	Cu 324.752†	7858.3	-101.1	-0.3833 ug/L	-0.3833 ppb	19:54:19
2	Mn 257.610†	434.4	-50.1	-0.0746 ug/L	-0.0746 ppb	19:54:39
2	Mo 202.031†	15.5	0.3	0.0282 ug/L	0.0282 ppb	19:54:39
2	Ni 231.604†	80.4	-25.2	-0.8067 ug/L	-0.8067 ppb	19:54:39

2	P 214.914†	200.8	-5.4	-2.9387 ug/L	-2.9387 ppb	19:54:39
2	Pb 220.353†	-71.0	3.5	0.5747 ug/L	0.5747 ppb	19:54:39
2	S 181.975 Axial†	47.9	2.8	3.5836 ug/L	3.5836 ppb	19:54:39
2	Sb 206.836†	33.4	1.5	0.6259 ug/L	0.6259 ppb	19:54:39
2	Se 196.026†	-15.9	4.7	2.8543 ug/L	2.8543 ppb	19:54:39
2	Si 251.611†	549.9	-68.9	-2.5159 ug/L	-2.5159 ppb	19:54:39
2	Sn 189.927†	9.6	1.0	0.2389 ug/L	0.2389 ppb	19:54:39
2	Ti 334.940†	-1286.2	84.1	0.1799 ug/L	0.1799 ppb	19:54:19
2	Tl 190.801†	-29.3	3.5	1.5886 ug/L	1.5886 ppb	19:54:39
2	U 409.014†	-2462.8	206.7	6.9222 ug/L	6.9222 ppb	19:54:19
2	V 292.402†	-1644.9	71.7	0.5835 ug/L	0.5835 ppb	19:54:19
2	Zn 213.857†	750.7	0.0	0.0086 ug/L	0.0086 ppb	19:54:39
2	SiO2†	585.8	-42.2	-3.2855 ug/L	-3.2855 ppb	19:55:15
3	Sc Radial	4969.6	4969.6	106 %		19:53:27
3	Y RADIAL	5232.0	5232.0	104.9 %		19:53:27
3	Al 396.153Radial†	-79.7	11.7	10.912 ug/L	10.912 ppb	19:53:47
3	Ca 317.933Radial†	19.5	-3.7	-6.6605 ug/L	-6.6605 ppb	19:53:47
3	Fe 238.204 Radial†	8.7	0.9	9.7216 ug/L	9.7216 ppb	19:53:47
3	K 766.490 Radial†	2313.3	-70.8	-14.101 ug/L	-14.101 ppb	19:53:27
3	Mg 279.077 IEC†	1.6	-1.4	-54.255 ug/L	-54.255 ppb	19:53:47
3	Na 589.592 Radial†	-763.6	124.6	42.468 ug/L	42.468 ppb	19:53:27
3	Sr 421.552†	-5.1	-4.4	-0.0318 ug/L	-0.0318 ppb	19:53:27
3	Sc 361.383	817019.0	817019.0	106.39 %		19:54:44
3	Y 371.029	735068.1	735068.1	106.68 %		19:54:44
3	Ag 328.068†	215.7	-53.0	-0.2734 ug/L	-0.2734 ppb	19:54:44
3	As 188.979†	-35.3	-8.2	-3.6355 ug/L	-3.6355 ppb	19:55:05
3	B 249.677†	-317.1	155.4	3.8897 ug/L	3.8897 ppb	19:55:05
3	Ba 233.527†	-2.5	-4.8	-0.0543 ug/L	-0.0543 ppb	19:55:05
3	Be 313.107†	-9648.7	-86.4	-0.0336 ug/L	-0.0336 ppb	19:54:44
3	Cd 226.502†	-199.1	-0.5	-0.0059 ug/L	-0.0059 ppb	19:55:05
3	Co 228.616†	-59.4	1.6	0.0484 ug/L	0.0484 ppb	19:55:05
3	Cr 267.716†	68.1	-11.6	-0.1613 ug/L	-0.1613 ppb	19:55:05
3	Cu 324.752†	7896.2	-114.3	-0.4326 ug/L	-0.4326 ppb	19:54:44
3	Mn 257.610†	472.2	-17.3	-0.0244 ug/L	-0.0244 ppb	19:55:05
3	Mo 202.031†	17.9	2.4	0.2234 ug/L	0.2234 ppb	19:55:05
3	Ni 231.604†	98.4	-8.8	-0.2818 ug/L	-0.2818 ppb	19:55:05
3	P 214.914†	204.2	-3.4	-1.8227 ug/L	-1.8227 ppb	19:55:05
3	Pb 220.353†	-62.0	12.4	2.0036 ug/L	2.0036 ppb	19:55:05
3	S 181.975 Axial†	51.2	5.7	7.3357 ug/L	7.3357 ppb	19:55:05
3	Sb 206.836†	45.6	12.8	5.2063 ug/L	5.2063 ppb	19:55:05
3	Se 196.026†	-23.5	-2.3	-1.3558 ug/L	-1.3558 ppb	19:55:05
3	Si 251.611†	557.1	-65.6	-2.3953 ug/L	-2.3953 ppb	19:55:05
3	Sn 189.927†	9.8	1.2	0.2744 ug/L	0.2744 ppb	19:55:05
3	Ti 334.940†	-1219.7	154.6	0.3111 ug/L	0.3111 ppb	19:54:44
3	Tl 190.801†	-31.5	1.6	0.7328 ug/L	0.7328 ppb	19:55:05
3	U 409.014†	-2400.1	280.9	9.4041 ug/L	9.4041 ppb	19:54:44
3	V 292.402†	-1616.3	108.8	0.8846 ug/L	0.8846 ppb	19:54:44
3	Zn 213.857†	741.5	-13.4	-0.1464 ug/L	-0.1464 ppb	19:55:05
3	SiO2†	575.6	-55.5	-4.3265 ug/L	-4.3265 ppb	19:55:20

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	812624.7	105.82 %	0.521			0.49%
Sc Radial	5027.2	107 %	1.4			1.30%
Y 371.029	730073.6	105.96 %	0.651			0.61%
Y RADIAL	5291.7	106.1 %	1.30			1.22%
Ag 328.068†	-43.3	-0.2273 ug/L	0.04494	-0.2273 ppb	0.04494	19.77%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	6.1	5.7077 ug/L	6.11690	5.7077 ppb	6.11690	107.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.8	-1.2369 ug/L	3.67937	-1.2369 ppb	3.67937	297.47%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	165.9	4.1546 ug/L	0.56199	4.1546 ppb	0.56199	13.53%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-0.5	-0.0039 ug/L	0.04359	-0.0039 ppb	0.04359	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-130.9	-0.0514 ug/L	0.02444	-0.0514 ppb	0.02444	47.53%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-3.4880 ug/L	8.57595	-3.4880 ppb	8.57595	245.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd	226.502†	3.0	0.0447 ug/L	0.04530	0.0447 ppb	0.04530 101.27%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co	228.616†	-3.1	-0.0946 ug/L	0.22324	-0.0946 ppb	0.22324 235.97%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr	267.716†	-14.8	-0.2043 ug/L	0.13088	-0.2043 ppb	0.13088 64.05%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	-96.8	-0.3678 ug/L	0.07371	-0.3678 ppb	0.07371 20.04%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	0.0	0.0959 ug/L	15.78781	0.0959 ppb	15.78781 >999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	-105.7	-21.054 ug/L	17.7344	-21.054 ppb	17.7344 84.23%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	-3.2	-127.56 ug/L	65.798	-127.56 ppb	65.798 51.58%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	-40.0	-0.0589 ug/L	0.02986	-0.0589 ppb	0.02986 50.71%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	3.0	0.2719 ug/L	0.27119	0.2719 ppb	0.27119 99.75%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	150.6	51.319 ug/L	9.3597	51.319 ppb	9.3597 18.24%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	-16.0	-0.5106 ug/L	0.26886	-0.5106 ppb	0.26886 52.65%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	-1.7	-0.8618 ug/L	2.68930	-0.8618 ppb	2.68930 312.06%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	6.1	0.9796 ug/L	0.89334	0.9796 ppb	0.89334 91.20%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	2.4	3.1600 ug/L	4.40291	3.1600 ppb	4.40291 139.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	5.0	2.0144 ug/L	2.77201	2.0144 ppb	2.77201 137.61%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	0.6	0.3669 ug/L	2.20672	0.3669 ppb	2.20672 601.38%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	-62.1	-2.2696 ug/L	0.32771	-2.2696 ppb	0.32771 14.44%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-0.2	-0.0445 ug/L	0.52199	-0.0445 ppb	0.52199 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	3.7	0.0267 ug/L	0.05336	0.0267 ppb	0.05336 199.94%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	132.3	0.2723 ug/L	0.08038	0.2723 ppb	0.08038 29.51%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	0.3	0.1582 ug/L	1.78842	0.1582 ppb	1.78842 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	284.5	9.5273 ug/L	2.66884	9.5273 ppb	2.66884 28.01%
QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	88.6	0.7253 ug/L	0.15129	0.7253 ppb	0.15129 20.86%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	3.7	0.0446 ug/L	0.21132	0.0446 ppb	0.21132 473.82%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†		-52.6	-4.1023 ug/L	0.73095	-4.1023 ppb	0.73095 17.82%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 15

Sample ID: 1202033898|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 3/1/2010 19:57:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033898|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5129.4	5129.4	109 %		19:59:23
1	Y RADIAL	5456.1	5456.1	109.4 %		19:59:23
1	Al 396.153Radial†	-71.7	21.3	19.958 ug/L	19.958 ppb	19:59:43
1	Ca 317.933Radial†	28.3	3.8	6.9885 ug/L	6.9885 ppb	19:59:43
1	Fe 238.204 Radial†	14.6	6.1	63.221 ug/L	63.221 ppb	19:59:43
1	K 766.490 Radial†	2302.3	-149.1	-29.703 ug/L	-29.703 ppb	19:59:23
1	Mg 279.077 IEC†	0.0	-2.9	-113.49 ug/L	-113.49 ppb	19:59:43
1	Na 589.592 Radial†	-684.9	219.4	74.769 ug/L	74.769 ppb	19:59:23
1	Sr 421.552†	44.7	41.5	0.3019 ug/L	0.3019 ppb	19:59:23
1	Sc 361.383	795983.9	795983.9	103.65 %		20:00:40
1	Y 371.029	712101.2	712101.2	103.35 %		20:00:40
1	Ag 328.068†	241.6	-22.6	-0.1049 ug/L	-0.1049 ppb	20:00:40
1	As 188.979†	-30.4	-4.3	-1.9138 ug/L	-1.9138 ppb	20:01:00
1	B 249.677†	-369.9	96.6	2.4092 ug/L	2.4092 ppb	20:01:00
1	Ba 233.527†	18.6	15.6	0.1873 ug/L	0.1873 ppb	20:01:00
1	Be 313.107†	-9561.7	-242.2	-0.0944 ug/L	-0.0944 ppb	20:00:40
1	Cd 226.502†	-178.3	14.6	0.2036 ug/L	0.2036 ppb	20:01:00
1	Co 228.616†	-74.6	-14.5	-0.4403 ug/L	-0.4403 ppb	20:01:00
1	Cr 267.716†	145.9	65.2	0.8873 ug/L	0.8873 ppb	20:01:00
1	Cu 324.752†	7735.4	-73.3	-0.2789 ug/L	-0.2789 ppb	20:00:40
1	Mn 257.610†	958.5	463.6	0.7529 ug/L	0.7529 ppb	20:01:00
1	Mo 202.031†	14.4	-0.5	-0.0423 ug/L	-0.0423 ppb	20:01:00
1	Ni 231.604†	98.8	-6.0	-0.1924 ug/L	-0.1924 ppb	20:01:00
1	P 214.914†	218.0	15.0	8.4036 ug/L	8.4036 ppb	20:01:00
1	Pb 220.353†	-56.4	16.3	2.6298 ug/L	2.6298 ppb	20:01:00
1	S 181.975 Axial†	41.7	-2.3	-2.9377 ug/L	-2.9377 ppb	20:01:00
1	Sb 206.836†	37.7	6.3	2.5985 ug/L	2.5985 ppb	20:01:00
1	Se 196.026†	-27.2	-6.4	-3.7863 ug/L	-3.7863 ppb	20:01:00
1	Si 251.611†	1176.1	545.5	19.905 ug/L	19.905 ppb	20:01:00
1	Sn 189.927†	20.2	11.4	2.6907 ug/L	2.6907 ppb	20:01:00
1	Ti 334.940†	-920.3	413.1	0.8363 ug/L	0.8363 ppb	20:00:40
1	Tl 190.801†	-28.9	3.4	1.5605 ug/L	1.5605 ppb	20:01:00
1	U 409.014†	-2202.7	411.7	13.776 ug/L	13.776 ppb	20:00:40
1	V 292.402†	-1580.1	103.5	0.8374 ug/L	0.8374 ppb	20:00:40
1	Zn 213.857†	785.1	47.1	0.5118 ug/L	0.5118 ppb	20:01:00
1	SiO2†	1238.3	598.2	46.604 ug/L	46.604 ppb	20:01:56
2	Sc Radial	5004.8	5004.8	106 %		19:59:48
2	Y RADIAL	5297.3	5297.3	106.3 %		19:59:48
2	Al 396.153Radial†	-79.6	12.3	11.465 ug/L	11.465 ppb	20:00:09
2	Ca 317.933Radial†	27.7	3.9	7.0699 ug/L	7.0699 ppb	20:00:09
2	Fe 238.204 Radial†	16.0	7.8	80.574 ug/L	80.574 ppb	20:00:09
2	K 766.490 Radial†	2303.6	-95.3	-18.995 ug/L	-18.995 ppb	19:59:48
2	Mg 279.077 IEC†	1.6	-1.4	-56.719 ug/L	-56.719 ppb	20:00:09
2	Na 589.592 Radial†	-661.4	225.8	76.965 ug/L	76.965 ppb	19:59:48
2	Sr 421.552†	38.0	36.2	0.2631 ug/L	0.2631 ppb	19:59:48
2	Sc 361.383	810643.8	810643.8	105.56 %		20:01:06
2	Y 371.029	727416.6	727416.6	105.57 %		20:01:06
2	Ag 328.068†	337.0	63.5	0.3436 ug/L	0.3436 ppb	20:01:06
2	As 188.979†	-33.9	-7.1	-3.1524 ug/L	-3.1524 ppb	20:01:26
2	B 249.677†	-338.5	132.8	3.3120 ug/L	3.3120 ppb	20:01:26
2	Ba 233.527†	17.1	13.8	0.1662 ug/L	0.1662 ppb	20:01:26
2	Be 313.107†	-9419.6	59.3	0.0255 ug/L	0.0255 ppb	20:01:06
2	Cd 226.502†	-189.0	7.6	0.1023 ug/L	0.1023 ppb	20:01:26
2	Co 228.616†	-57.4	3.1	0.0911 ug/L	0.0911 ppb	20:01:26
2	Cr 267.716†	114.6	32.9	0.4471 ug/L	0.4471 ppb	20:01:26
2	Cu 324.752†	7813.4	-134.3	-0.5054 ug/L	-0.5054 ppb	20:01:06
2	Mn 257.610†	958.1	446.5	0.7249 ug/L	0.7249 ppb	20:01:26
2	Mo 202.031†	18.7	3.3	0.3094 ug/L	0.3094 ppb	20:01:26
2	Ni 231.604†	109.7	2.6	0.0835 ug/L	0.0835 ppb	20:01:26

2	P 214.914†	212.5	6.0	3.3750 ug/L	3.3750 ppb	20:01:26
2	Pb 220.353†	-72.2	2.3	0.3644 ug/L	0.3644 ppb	20:01:26
2	S 181.975 Axial†	46.8	1.8	2.3242 ug/L	2.3242 ppb	20:01:26
2	Sb 206.836†	42.8	10.5	4.2801 ug/L	4.2801 ppb	20:01:26
2	Se 196.026†	-23.9	-2.8	-1.5448 ug/L	-1.5448 ppb	20:01:26
2	Si 251.611†	1201.1	548.6	20.014 ug/L	20.014 ppb	20:01:26
2	Sn 189.927†	9.9	1.3	0.3089 ug/L	0.3089 ppb	20:01:26
2	Ti 334.940†	-938.0	412.5	0.8312 ug/L	0.8312 ppb	20:01:06
2	Tl 190.801†	-28.5	4.2	1.9590 ug/L	1.9590 ppb	20:01:26
2	U 409.014†	-2299.1	358.8	12.006 ug/L	12.006 ppb	20:01:06
2	V 292.402†	-1649.5	65.4	0.5343 ug/L	0.5343 ppb	20:01:06
2	Zn 213.857†	791.7	39.7	0.4257 ug/L	0.4257 ppb	20:01:26
2	SiO2†	1264.7	601.6	46.860 ug/L	46.860 ppb	20:02:01
3	Sc Radial	4949.4	4949.4	105 %		20:00:14
3	Y RADIAL	5236.1	5236.1	105.0 %		20:00:14
3	Al 396.153Radial†	-67.6	22.9	21.345 ug/L	21.345 ppb	20:00:34
3	Ca 317.933Radial†	29.5	5.9	10.669 ug/L	10.669 ppb	20:00:34
3	Fe 238.204 Radial†	14.3	6.2	64.816 ug/L	64.816 ppb	20:00:34
3	K 766.490 Radial†	2337.3	-39.0	-7.7890 ug/L	-7.7890 ppb	20:00:14
3	Mg 279.077 IEC†	1.1	-1.8	-71.674 ug/L	-71.674 ppb	20:00:34
3	Na 589.592 Radial†	-681.9	199.3	67.937 ug/L	67.937 ppb	20:00:14
3	Sr 421.552†	30.7	29.7	0.2157 ug/L	0.2157 ppb	20:00:14
3	Sc 361.383	798883.6	798883.6	104.03 %		20:01:31
3	Y 371.029	716561.9	716561.9	104.00 %		20:01:31
3	Ag 328.068†	252.6	-12.8	-0.0525 ug/L	-0.0525 ppb	20:01:31
3	As 188.979†	-31.4	-5.1	-2.2665 ug/L	-2.2665 ppb	20:01:51
3	B 249.677†	-402.7	66.3	1.6513 ug/L	1.6513 ppb	20:01:51
3	Ba 233.527†	32.9	29.2	0.3487 ug/L	0.3487 ppb	20:01:51
3	Be 313.107†	-9329.3	14.7	0.0075 ug/L	0.0075 ppb	20:01:31
3	Cd 226.502†	-185.7	8.1	0.1105 ug/L	0.1105 ppb	20:01:51
3	Co 228.616†	-73.8	-13.4	-0.4067 ug/L	-0.4067 ppb	20:01:51
3	Cr 267.716†	123.5	43.1	0.5867 ug/L	0.5867 ppb	20:01:51
3	Cu 324.752†	7604.8	-226.0	-0.8491 ug/L	-0.8491 ppb	20:01:31
3	Mn 257.610†	957.9	459.7	0.7451 ug/L	0.7451 ppb	20:01:51
3	Mo 202.031†	24.4	9.1	0.8397 ug/L	0.8397 ppb	20:01:51
3	Ni 231.604†	90.1	-14.7	-0.4693 ug/L	-0.4693 ppb	20:01:51
3	P 214.914†	201.5	-1.7	-0.8212 ug/L	-0.8212 ppb	20:01:51
3	Pb 220.353†	-66.3	6.9	1.1232 ug/L	1.1232 ppb	20:01:51
3	S 181.975 Axial†	51.9	7.4	9.5763 ug/L	9.5763 ppb	20:01:51
3	Sb 206.836†	38.6	7.1	2.9311 ug/L	2.9311 ppb	20:01:51
3	Se 196.026†	-26.3	-5.5	-3.2314 ug/L	-3.2314 ppb	20:01:51
3	Si 251.611†	1197.7	562.1	20.502 ug/L	20.502 ppb	20:01:51
3	Sn 189.927†	16.3	7.6	1.7862 ug/L	1.7862 ppb	20:01:51
3	Ti 334.940†	-967.7	370.8	0.7491 ug/L	0.7491 ppb	20:01:31
3	Tl 190.801†	-27.7	4.6	2.1365 ug/L	2.1365 ppb	20:01:51
3	U 409.014†	-2279.2	345.9	11.572 ug/L	11.572 ppb	20:01:31
3	V 292.402†	-1596.2	93.7	0.7679 ug/L	0.7679 ppb	20:01:31
3	Zn 213.857†	812.3	70.6	0.7728 ug/L	0.7728 ppb	20:01:51
3	SiO2†	1209.7	566.4	44.100 ug/L	44.100 ppb	20:02:06

Mean Data: 1202033898|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	801837.1	104.41 %		1.011			0.97%
Sc Radial	5027.9	107 %		2.0			1.83%
Y 371.029	718693.2	104.30 %		1.143			1.10%
Y RADIAL	5329.8	106.9 %		2.28			2.13%
Ag 328.068†	9.4	0.0621 ug/L		0.24522	0.0621 ppb	0.24522	394.94%
Al 396.153Radial†	18.8	17.589 ug/L		5.3486	17.589 ppb	5.3486	30.41%
As 188.979†	-5.5	-2.4442 ug/L		0.63814	-2.4442 ppb	0.63814	26.11%
B 249.677†	98.6	2.4575 ug/L		0.83139	2.4575 ppb	0.83139	33.83%
Ba 233.527†	19.5	0.2341 ug/L		0.09986	0.2341 ppb	0.09986	42.66%
Be 313.107†	-56.1	-0.0205 ug/L		0.06463	-0.0205 ppb	0.06463	315.92%
Ca 317.933Radial†	4.5	8.2423 ug/L		2.10164	8.2423 ppb	2.10164	25.50%
Cd 226.502†	10.1	0.1388 ug/L		0.05627	0.1388 ppb	0.05627	40.54%
Co 228.616†	-8.3	-0.2520 ug/L		0.29755	-0.2520 ppb	0.29755	118.09%
Cr 267.716†	47.1	0.6404 ug/L		0.22494	0.6404 ppb	0.22494	35.13%
Cu 324.752†	-144.5	-0.5444 ug/L		0.28710	-0.5444 ppb	0.28710	52.73%
Fe 238.204 Radial†	6.7	69.537 ug/L		9.5917	69.537 ppb	9.5917	13.79%
K 766.490 Radial†	-94.4	-18.829 ug/L		10.9580	-18.829 ppb	10.9580	58.20%

Mg 279.077 IEC†	-2.0	-80.628 ug/L	29.4259	-80.628 ppb	29.4259	36.50%
Mn 257.610†	456.6	0.7410 ug/L	0.01446	0.7410 ppb	0.01446	1.95%
Mo 202.031†	4.0	0.3690 ug/L	0.44403	0.3690 ppb	0.44403	120.35%
Na 589.592 Radial†	214.9	73.224 ug/L	4.7078	73.224 ppb	4.7078	6.43%
Ni 231.604†	-6.0	-0.1928 ug/L	0.27638	-0.1928 ppb	0.27638	143.39%
P 214.914†	6.4	3.6525 ug/L	4.61865	3.6525 ppb	4.61865	126.45%
Pb 220.353†	8.5	1.3724 ug/L	1.15308	1.3724 ppb	1.15308	84.02%
S 181.975 Axial†	2.3	2.9876 ug/L	6.28335	2.9876 ppb	6.28335	210.31%
Sb 206.836†	8.0	3.2699 ug/L	0.89052	3.2699 ppb	0.89052	27.23%
Se 196.026†	-4.9	-2.8542 ug/L	1.16743	-2.8542 ppb	1.16743	40.90%
Si 251.611†	552.1	20.140 ug/L	0.3181	20.140 ppb	0.3181	1.58%
Sn 189.927†	6.8	1.5952 ug/L	1.20233	1.5952 ppb	1.20233	75.37%
Sr 421.552†	35.8	0.2603 ug/L	0.04321	0.2603 ppb	0.04321	16.60%
Ti 334.940†	398.8	0.8055 ug/L	0.04893	0.8055 ppb	0.04893	6.07%
Tl 190.801†	4.1	1.8854 ug/L	0.29498	1.8854 ppb	0.29498	15.65%
U 409.014†	372.1	12.451 ug/L	1.1674	12.451 ppb	1.1674	9.38%
V 292.402†	87.5	0.7132 ug/L	0.15883	0.7132 ppb	0.15883	22.27%
Zn 213.857†	52.5	0.5701 ug/L	0.18078	0.5701 ppb	0.18078	31.71%
SiO2†	588.8	45.855 ug/L	1.5252	45.855 ppb	1.5252	3.33%

Sequence No.: 16  
 Sample ID: 1202033903|949334|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 49  
 Date Collected: 3/1/2010 20:04:18  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202033903|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5092.8	5092.8	108 %		20:06:31
1	Y RADIAL	5841.6	5841.6	117.2 %		20:06:31
1	Al 396.153Radial†	112447.0	104008.7	97267 ug/L	97267 ppb	20:06:11
1	Ca 317.933Radial†	60507.2	55897.5	101560 ug/L	101560 ppb	20:06:11
1	Fe 238.204 Radial†	19668.1	18169.6	188540 ug/L	188540 ppb	20:06:11
1	K 766.490 Radial†	239452.7	219036.3	43561 ug/L	43561 ppb	20:06:11
1	Mg 279.077 IEC†	1089.3	1003.8	39665 ug/L	39665 ppb	20:06:31
1	Na 589.592 Radial†	32049.2	30467.1	10383 ug/L	10383 ppb	20:06:11
1	Sr 421.552†	349130.1	322660.4	2345.5 ug/L	2345.5 ppb	20:06:11
1	Sc 361.383	834778.3	834778.3	108.70 %		20:07:33
1	Y 371.029	803930.6	803930.6	116.67 %		20:07:33
1	Ag 328.068†	53950.8	49375.3	315.64 ug/L	315.64 ppb	20:07:33
1	As 188.979†	2518.7	2342.0	1137.7 ug/L	1137.7 ppb	20:07:38
1	B 249.677†	66563.5	61687.3	1511.3 ug/L	1511.3 ppb	20:07:33
1	Ba 233.527†	179232.9	164879.6	1954.1 ug/L	1954.1 ppb	20:07:33
1	Be 313.107†	2140241.3	1977858.3	799.49 ug/L	799.49 ppb	20:07:33
1	Cd 226.502†	47799.6	44159.0	607.40 ug/L	607.40 ppb	20:07:38
1	Co 228.616†	35800.6	32991.6	983.08 ug/L	983.08 ppb	20:07:38
1	Cr 267.716†	192826.3	177311.4	2427.9 ug/L	2427.9 ppb	20:07:33
1	Cu 324.752†	582424.4	528254.4	1988.1 ug/L	1988.1 ppb	20:07:33
1	Mn 257.610†	3801067.3	3496260.8	5613.2 ug/L	5613.2 ppb	20:07:33
1	Mo 202.031†	5856.0	5372.7	508.91 ug/L	508.91 ppb	20:07:38
1	Ni 231.604†	47630.2	43715.2	1396.8 ug/L	1396.8 ppb	20:07:38
1	P 214.914†	16049.6	14569.2	7624.7 ug/L	7624.7 ppb	20:07:38
1	Pb 220.353†	5529.8	5157.7	841.76 ug/L	841.76 ppb	20:07:38
1	S 181.975 Axial†	3293.6	2987.4	3855.0 ug/L	3855.0 ppb	20:07:38
1	Sb 206.836†	3717.1	3389.4	1381.7 ug/L	1381.7 ppb	20:07:38
1	Se 196.026†	4769.2	4407.1	3131.9 ug/L	3131.9 ppb	20:07:38
1	Si 251.611†	1074150.8	987556.0	36030 ug/L	36030 ppb	20:07:33
1	Sn 189.927†	4740.5	4352.9	1032.3 ug/L	1032.3 ppb	20:07:38
1	Ti 334.940†	3165047.1	2912927.9	5879.2 ug/L	5879.2 ppb	20:07:33
1	Tl 190.801†	2894.0	2693.5	1305.6 ug/L	1305.6 ppb	20:07:38
1	U 409.014†	-7368.6	-4241.8	-168.95 ug/L	-168.95 ppb	20:07:33
1	V 292.402†	170273.2	158267.7	1233.2 ug/L	1233.2 ppb	20:07:33
1	Zn 213.857†	581797.6	534503.7	5855.0 ug/L	5855.0 ppb	20:07:33
1	SiO2†	1095955.7	1007607.8	78481 ug/L	78481 ppb	20:08:13
2	Sc Radial	5123.0	5123.0	109 %		20:06:57
2	Y RADIAL	5899.7	5899.7	118.3 %		20:06:57
2	Al 396.153Radial†	111780.6	102784.0	96122 ug/L	96122 ppb	20:06:37
2	Ca 317.933Radial†	60279.2	55358.5	100580 ug/L	100580 ppb	20:06:37
2	Fe 238.204 Radial†	19544.2	17948.6	186250 ug/L	186250 ppb	20:06:37
2	K 766.490 Radial†	238102.8	216492.0	43055 ug/L	43055 ppb	20:06:37
2	Mg 279.077 IEC†	1092.0	1000.3	39528 ug/L	39528 ppb	20:06:57
2	Na 589.592 Radial†	31748.3	30016.1	10229 ug/L	10229 ppb	20:06:37
2	Sr 421.552†	346484.3	318328.1	2314.1 ug/L	2314.1 ppb	20:06:37
2	Sc 361.383	839716.3	839716.3	109.35 %		20:07:47
2	Y 371.029	808945.3	808945.3	117.40 %		20:07:47
2	Ag 328.068†	54270.1	49375.6	314.94 ug/L	314.94 ppb	20:07:47
2	As 188.979†	2537.7	2345.8	1138.8 ug/L	1138.8 ppb	20:07:52
2	B 249.677†	66977.9	61706.2	1512.2 ug/L	1512.2 ppb	20:07:47
2	Ba 233.527†	179946.8	164562.9	1950.3 ug/L	1950.3 ppb	20:07:47
2	Be 313.107†	2151681.4	1976742.3	799.04 ug/L	799.04 ppb	20:07:47
2	Cd 226.502†	47506.3	43632.2	600.16 ug/L	600.16 ppb	20:07:52
2	Co 228.616†	35491.8	32515.5	968.71 ug/L	968.71 ppb	20:07:52
2	Cr 267.716†	193842.7	177197.7	2426.3 ug/L	2426.3 ppb	20:07:47
2	Cu 324.752†	586766.3	529074.5	1991.0 ug/L	1991.0 ppb	20:07:47
2	Mn 257.610†	3816387.3	3489708.5	5602.5 ug/L	5602.5 ppb	20:07:47
2	Mo 202.031†	5827.0	5314.5	503.38 ug/L	503.38 ppb	20:07:52
2	Ni 231.604†	47248.4	43108.4	1377.5 ug/L	1377.5 ppb	20:07:52



2	P 214.914†	15998.1	14435.3	7550.9 ug/L	7550.9 ppb	20:07:52
2	Pb 220.353†	5538.1	5135.4	838.05 ug/L	838.05 ppb	20:07:52
2	S 181.975 Axial†	3271.5	2949.4	3806.0 ug/L	3806.0 ppb	20:07:52
2	Sb 206.836†	3698.7	3352.5	1366.6 ug/L	1366.6 ppb	20:07:52
2	Se 196.026†	4746.4	4360.5	3098.1 ug/L	3098.1 ppb	20:07:52
2	Si 251.611†	1080849.2	987871.0	36042 ug/L	36042 ppb	20:07:47
2	Sn 189.927†	4771.8	4355.9	1033.0 ug/L	1033.0 ppb	20:07:52
2	Ti 334.940†	3183419.8	2912608.0	5878.4 ug/L	5878.4 ppb	20:07:47
2	Tl 190.801†	2818.1	2608.4	1266.5 ug/L	1266.5 ppb	20:07:52
2	U 409.014†	-7216.8	-4063.1	-162.70 ug/L	-162.70 ppb	20:07:47
2	V 292.402†	171048.7	158055.7	1231.8 ug/L	1231.8 ppb	20:07:47
2	Zn 213.857†	583772.3	533162.2	5840.7 ug/L	5840.7 ppb	20:07:47
2	SiO2†	1086640.4	993160.0	77355 ug/L	77355 ppb	20:08:19
3	Sc Radial	5145.4	5145.4	109 %		20:07:22
3	Y RADIAL	5910.6	5910.6	118.6 %		20:07:22
3	Al 396.153Radial†	111365.5	101957.0	95349 ug/L	95349 ppb	20:07:02
3	Ca 317.933Radial†	60029.1	54888.6	99729 ug/L	99729 ppb	20:07:02
3	Fe 238.204 Radial†	19464.4	17797.5	184680 ug/L	184680 ppb	20:07:02
3	K 766.490 Radial†	236335.9	213923.0	42544 ug/L	42544 ppb	20:07:02
3	Mg 279.077 IEC†	1100.5	1003.7	39665 ug/L	39665 ppb	20:07:22
3	Na 589.592 Radial†	31553.4	29710.8	10125 ug/L	10125 ppb	20:07:02
3	Sr 421.552†	344183.7	314837.3	2288.7 ug/L	2288.7 ppb	20:07:02
3	Sc 361.383	839284.4	839284.4	109.29 %		20:08:01
3	Y 371.029	809311.3	809311.3	117.46 %		20:08:01
3	Ag 328.068†	54287.2	49416.7	314.68 ug/L	314.68 ppb	20:08:01
3	As 188.979†	2513.5	2324.8	1129.1 ug/L	1129.1 ppb	20:08:06
3	B 249.677†	66950.7	61712.9	1512.6 ug/L	1512.6 ppb	20:08:01
3	Ba 233.527†	180065.8	164756.5	1952.5 ug/L	1952.5 ppb	20:08:01
3	Be 313.107†	2152533.5	1978534.7	799.76 ug/L	799.76 ppb	20:08:01
3	Cd 226.502†	47724.5	43854.2	603.47 ug/L	603.47 ppb	20:08:06
3	Co 228.616†	35673.6	32698.6	974.26 ug/L	974.26 ppb	20:08:06
3	Cr 267.716†	193907.7	177348.5	2428.3 ug/L	2428.3 ppb	20:08:01
3	Cu 324.752†	586604.6	529202.7	1991.4 ug/L	1991.4 ppb	20:08:01
3	Mn 257.610†	3814359.0	3489648.7	5602.3 ug/L	5602.3 ppb	20:08:01
3	Mo 202.031†	5797.7	5290.5	501.04 ug/L	501.04 ppb	20:08:06
3	Ni 231.604†	47421.3	43288.8	1383.2 ug/L	1383.2 ppb	20:08:06
3	P 214.914†	16072.7	14511.1	7594.1 ug/L	7594.1 ppb	20:08:06
3	Pb 220.353†	5518.8	5120.4	835.54 ug/L	835.54 ppb	20:08:06
3	S 181.975 Axial†	3283.5	2961.9	3822.3 ug/L	3822.3 ppb	20:08:06
3	Sb 206.836†	3698.7	3354.3	1367.3 ug/L	1367.3 ppb	20:08:06
3	Se 196.026†	4721.9	4340.3	3082.2 ug/L	3082.2 ppb	20:08:06
3	Si 251.611†	1080310.3	987886.6	36043 ug/L	36043 ppb	20:08:01
3	Sn 189.927†	4746.7	4335.1	1028.0 ug/L	1028.0 ppb	20:08:06
3	Ti 334.940†	3181814.3	2912637.2	5878.3 ug/L	5878.3 ppb	20:08:01
3	Tl 190.801†	2868.7	2656.0	1288.4 ug/L	1288.4 ppb	20:08:06
3	U 409.014†	-7357.3	-4195.1	-166.95 ug/L	-166.95 ppb	20:08:01
3	V 292.402†	170796.9	157905.9	1230.8 ug/L	1230.8 ppb	20:08:01
3	Zn 213.857†	583474.6	533164.6	5840.9 ug/L	5840.9 ppb	20:08:01
3	SiO2†	1067256.4	975935.1	76014 ug/L	76014 ppb	20:08:24

Mean Data: 1202033903|949334|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	837926.3	109.11	%	0.356				0.33%
Sc Radial	5120.4	109	%	0.6				0.52%
Y 371.029	807395.7	117.18	%	0.436				0.37%
Y RADIAL	5884.0	118.0	%	0.74				0.63%
Ag 328.068†	49389.2	315.08	ug/L	0.498	315.08	ppb	0.498	0.16%
Al 396.153Radial†	102916.6	96246	ug/L	965.4	96246	ppb	965.4	1.00%
As 188.979†	2337.5	1135.2	ug/L	5.30	1135.2	ppb	5.30	0.47%
B 249.677†	61702.1	1512.0	ug/L	0.66	1512.0	ppb	0.66	0.04%
Ba 233.527†	164733.0	1952.3	ug/L	1.91	1952.3	ppb	1.91	0.10%
Be 313.107†	1977711.8	799.43	ug/L	0.360	799.43	ppb	0.360	0.05%
Ca 317.933Radial†	55381.5	100630	ug/L	917.3	100630	ppb	917.3	0.91%
Cd 226.502†	43881.8	603.67	ug/L	3.626	603.67	ppb	3.626	0.60%
Co 228.616†	32735.2	975.35	ug/L	7.245	975.35	ppb	7.245	0.74%
Cr 267.716†	177285.9	2427.5	ug/L	1.07	2427.5	ppb	1.07	0.04%
Cu 324.752†	528843.9	1990.2	ug/L	1.83	1990.2	ppb	1.83	0.09%
Fe 238.204 Radial†	17971.9	186490	ug/L	1942.0	186490	ppb	1942.0	1.04%
K 766.490 Radial†	216483.8	43054	ug/L	508.6	43054	ppb	508.6	1.18%

Mg 279.077 IEC†	1002.6	39620 ug/L	79.2	39620 ppb	79.2	0.20%
Mn 257.610†	3491872.7	5606.0 ug/L	6.26	5606.0 ppb	6.26	0.11%
Mo 202.031†	5325.9	504.44 ug/L	4.041	504.44 ppb	4.041	0.80%
Na 589.592 Radial†	30064.7	10246 ug/L	129.7	10246 ppb	129.7	1.27%
Ni 231.604†	43370.8	1385.8 ug/L	9.96	1385.8 ppb	9.96	0.72%
P 214.914†	14505.2	7589.9 ug/L	37.09	7589.9 ppb	37.09	0.49%
Pb 220.353†	5137.8	838.45 ug/L	3.128	838.45 ppb	3.128	0.37%
S 181.975 Axial†	2966.2	3827.8 ug/L	24.96	3827.8 ppb	24.96	0.65%
Sb 206.836†	3365.4	1371.9 ug/L	8.50	1371.9 ppb	8.50	0.62%
Se 196.026†	4369.3	3104.1 ug/L	25.41	3104.1 ppb	25.41	0.82%
Si 251.611†	987771.2	36038 ug/L	6.9	36038 ppb	6.9	0.02%
Sn 189.927†	4348.0	1031.1 ug/L	2.69	1031.1 ppb	2.69	0.26%
Sr 421.552†	318608.6	2316.1 ug/L	28.49	2316.1 ppb	28.49	1.23%
Ti 334.940†	2912724.4	5878.6 ug/L	0.46	5878.6 ppb	0.46	0.01%
Tl 190.801†	2652.7	1286.8 ug/L	19.57	1286.8 ppb	19.57	1.52%
U 409.014†	-4166.7	-166.20 ug/L	3.191	-166.20 ppb	3.191	1.92%
V 292.402†	158076.4	1232.0 ug/L	1.22	1232.0 ppb	1.22	0.10%
Zn 213.857†	533610.2	5845.5 ug/L	8.21	5845.5 ppb	8.21	0.14%
SiO2†	992234.3	77283 ug/L	1235.2	77283 ppb	1235.2	1.60%

Sequence No.: 17  
 Sample ID: 246055001|949334|50  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 50  
 Date Collected: 3/1/2010 20:10:36  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246055001|949334|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5185.9	5185.9	110 %		20:12:29
1	Y RADIAL	5436.8	5436.8	109.1 %		20:12:29
1	Al 396.153Radial†	571.4	605.7	566.64 ug/L	566.64 ppb	20:12:29
1	Ca 317.933Radial†	172.4	134.3	243.97 ug/L	243.97 ppb	20:12:49
1	Fe 238.204 Radial†	200.0	174.2	1807.2 ug/L	1807.2 ppb	20:12:49
1	K 766.490 Radial†	2937.3	404.2	80.326 ug/L	80.326 ppb	20:12:29
1	Mg 279.077 IEC†	6.5	3.0	117.76 ug/L	117.76 ppb	20:12:49
1	Na 589.592 Radial†	-611.8	292.5	99.685 ug/L	99.685 ppb	20:12:29
1	Sr 421.552†	376.0	341.7	2.4833 ug/L	2.4833 ppb	20:12:29
1	Sc 361.383	817335.3	817335.3	106.43 %		20:13:46
1	Y 371.029	734617.3	734617.3	106.62 %		20:13:46
1	Ag 328.068†	120.6	-142.4	-0.1779 ug/L	-0.1779 ppb	20:13:46
1	As 188.979†	23.0	46.6	21.544 ug/L	21.544 ppb	20:14:06
1	B 249.677†	23.9	475.9	11.624 ug/L	11.624 ppb	20:14:06
1	Ba 233.527†	765.9	717.2	8.5234 ug/L	8.5234 ppb	20:14:06
1	Be 313.107†	-9748.9	-177.0	0.0209 ug/L	0.0209 ppb	20:13:46
1	Cd 226.502†	-162.3	34.1	0.2990 ug/L	0.2990 ppb	20:14:06
1	Co 228.616†	-45.3	14.9	0.3415 ug/L	0.3415 ppb	20:14:06
1	Cr 267.716†	162.7	77.3	1.0895 ug/L	1.0895 ppb	20:14:06
1	Cu 324.752†	8407.6	363.4	1.4502 ug/L	1.4502 ppb	20:13:46
1	Mn 257.610†	21047.3	19314.1	31.088 ug/L	31.088 ppb	20:13:46
1	Mo 202.031†	9.8	-5.2	-0.3311 ug/L	-0.3311 ppb	20:14:06
1	Ni 231.604†	114.6	6.4	0.2032 ug/L	0.2032 ppb	20:14:06
1	P 214.914†	256.2	45.3	23.730 ug/L	23.730 ppb	20:14:06
1	Pb 220.353†	70607.5	66411.0	10709 ug/L	10709 ppb	20:13:46
1	S 181.975 Axial†	54.6	8.8	11.280 ug/L	11.280 ppb	20:14:06
1	Sb 206.836†	160.7	121.0	48.918 ug/L	48.918 ppb	20:14:06
1	Se 196.026†	-28.0	-6.5	0.1128 ug/L	0.1128 ppb	20:14:06
1	Si 251.611†	15954.7	14401.2	525.52 ug/L	525.52 ppb	20:13:46
1	Sn 189.927†	8.8	0.2	-0.0155 ug/L	-0.0155 ppb	20:14:06
1	Ti 334.940†	19851.2	19952.5	40.223 ug/L	40.223 ppb	20:13:46
1	Tl 190.801†	-34.3	-1.0	0.0259 ug/L	0.0259 ppb	20:14:06
1	U 409.014†	-2355.5	323.7	10.630 ug/L	10.630 ppb	20:13:46
1	V 292.402†	-1378.7	332.6	2.3590 ug/L	2.3590 ppb	20:13:46
1	Zn 213.857†	4056.5	3101.0	33.926 ug/L	33.926 ppb	20:14:06
1	SiO2†	15696.2	14151.1	1102.4 ug/L	1102.4 ppb	20:15:02
2	Sc Radial	5069.5	5069.5	108 %		20:12:54
2	Y RADIAL	5289.6	5289.6	106.1 %		20:12:54
2	Al 396.153Radial†	563.8	610.6	571.14 ug/L	571.14 ppb	20:12:54
2	Ca 317.933Radial†	176.6	141.8	257.68 ug/L	257.68 ppb	20:13:14
2	Fe 238.204 Radial†	201.6	179.9	1866.4 ug/L	1866.4 ppb	20:13:14
2	K 766.490 Radial†	2943.3	470.9	93.615 ug/L	93.615 ppb	20:12:54
2	Mg 279.077 IEC†	2.0	-1.0	-41.972 ug/L	-41.972 ppb	20:13:14
2	Na 589.592 Radial†	-630.8	262.2	89.343 ug/L	89.343 ppb	20:12:54
2	Sr 421.552†	403.4	375.0	2.7247 ug/L	2.7247 ppb	20:12:54
2	Sc 361.383	808528.2	808528.2	105.29 %		20:14:11
2	Y 371.029	725135.1	725135.1	105.24 %		20:14:11
2	Ag 328.068†	177.6	-87.0	0.1265 ug/L	0.1265 ppb	20:14:11
2	As 188.979†	11.6	36.0	16.841 ug/L	16.841 ppb	20:14:31
2	B 249.677†	11.1	464.0	11.315 ug/L	11.315 ppb	20:14:31
2	Ba 233.527†	767.7	726.8	8.6393 ug/L	8.6393 ppb	20:14:31
2	Be 313.107†	-9740.8	-269.1	-0.0159 ug/L	-0.0159 ppb	20:14:11
2	Cd 226.502†	-163.7	31.1	0.2505 ug/L	0.2505 ppb	20:14:31
2	Co 228.616†	-54.8	5.4	0.0545 ug/L	0.0545 ppb	20:14:31
2	Cr 267.716†	133.4	51.1	0.7337 ug/L	0.7337 ppb	20:14:31
2	Cu 324.752†	8415.5	456.9	1.8039 ug/L	1.8039 ppb	20:14:11
2	Mn 257.610†	20879.2	19369.9	31.190 ug/L	31.190 ppb	20:14:11
2	Mo 202.031†	9.5	-5.3	-0.3399 ug/L	-0.3399 ppb	20:14:31
2	Ni 231.604†	109.0	2.2	0.0709 ug/L	0.0709 ppb	20:14:31

2	P 214.914†	266.2	57.5	30.393 ug/L	30.393 ppb	20:14:31
2	Pb 220.353†	70535.5	67065.2	10814 ug/L	10814 ppb	20:14:11
2	S 181.975 Axial†	59.0	13.5	17.376 ug/L	17.376 ppb	20:14:31
2	Sb 206.836†	155.6	117.7	47.597 ug/L	47.597 ppb	20:14:31
2	Se 196.026†	-30.2	-8.9	-1.1977 ug/L	-1.1977 ppb	20:14:31
2	Si 251.611†	15836.1	14451.9	527.36 ug/L	527.36 ppb	20:14:11
2	Sn 189.927†	7.8	-0.7	-0.2185 ug/L	-0.2185 ppb	20:14:31
2	Ti 334.940†	19579.6	19897.7	40.127 ug/L	40.127 ppb	20:14:11
2	Tl 190.801†	-26.9	5.6	3.0577 ug/L	3.0577 ppb	20:14:31
2	U 409.014†	-2347.5	307.2	10.072 ug/L	10.072 ppb	20:14:11
2	V 292.402†	-1314.8	379.2	2.7171 ug/L	2.7171 ppb	20:14:11
2	Zn 213.857†	4046.0	3132.6	34.266 ug/L	34.266 ppb	20:14:31
2	SiO2†	15897.4	14502.9	1129.8 ug/L	1129.8 ppb	20:15:07
3	Sc Radial	4980.0	4980.0	106 %		20:13:19
3	Y RADIAL	5254.5	5254.5	105.4 %		20:13:19
3	Al 396.153Radial†	541.2	598.6	560.00 ug/L	560.00 ppb	20:13:19
3	Ca 317.933Radial†	175.7	143.9	261.42 ug/L	261.42 ppb	20:13:39
3	Fe 238.204 Radial†	204.7	186.1	1931.1 ug/L	1931.1 ppb	20:13:39
3	K 766.490 Radial†	2981.6	556.3	110.62 ug/L	110.62 ppb	20:13:19
3	Mg 279.077 IEC†	4.9	1.7	65.577 ug/L	65.577 ppb	20:13:39
3	Na 589.592 Radial†	-701.7	184.6	62.923 ug/L	62.923 ppb	20:13:19
3	Sr 421.552†	368.7	349.0	2.5356 ug/L	2.5356 ppb	20:13:19
3	Sc 361.383	814452.6	814452.6	106.06 %		20:14:37
3	Y 371.029	730763.3	730763.3	106.06 %		20:14:37
3	Ag 328.068†	104.3	-157.3	-0.2194 ug/L	-0.2194 ppb	20:14:37
3	As 188.979†	12.4	36.7	17.164 ug/L	17.164 ppb	20:14:57
3	B 249.677†	-11.5	442.6	10.768 ug/L	10.768 ppb	20:14:57
3	Ba 233.527†	763.5	717.5	8.5315 ug/L	8.5315 ppb	20:14:57
3	Be 313.107†	-9847.5	-302.5	-0.0300 ug/L	-0.0300 ppb	20:14:37
3	Cd 226.502†	-190.5	7.0	-0.0973 ug/L	-0.0973 ppb	20:14:57
3	Co 228.616†	-36.4	23.1	0.5909 ug/L	0.5909 ppb	20:14:57
3	Cr 267.716†	134.6	51.3	0.7357 ug/L	0.7357 ppb	20:14:57
3	Cu 324.752†	8350.0	337.0	1.3562 ug/L	1.3562 ppb	20:14:37
3	Mn 257.610†	20674.7	19032.8	30.653 ug/L	30.653 ppb	20:14:37
3	Mo 202.031†	11.5	-3.5	-0.1696 ug/L	-0.1696 ppb	20:14:57
3	Ni 231.604†	112.8	5.0	0.1608 ug/L	0.1608 ppb	20:14:57
3	P 214.914†	238.7	29.7	14.897 ug/L	14.897 ppb	20:14:57
3	Pb 220.353†	69855.9	65937.1	10632 ug/L	10632 ppb	20:14:37
3	S 181.975 Axial†	63.3	17.2	22.213 ug/L	22.213 ppb	20:14:57
3	Sb 206.836†	157.6	118.6	47.914 ug/L	47.914 ppb	20:14:57
3	Se 196.026†	-27.7	-6.3	0.5258 ug/L	0.5258 ppb	20:14:57
3	Si 251.611†	15754.2	14265.3	520.55 ug/L	520.55 ppb	20:14:37
3	Sn 189.927†	2.3	-5.9	-1.4589 ug/L	-1.4589 ppb	20:14:57
3	Ti 334.940†	19530.3	19716.0	39.751 ug/L	39.751 ppb	20:14:37
3	Tl 190.801†	-31.8	1.2	1.0177 ug/L	1.0177 ppb	20:14:57
3	U 409.014†	-2238.2	426.4	14.057 ug/L	14.057 ppb	20:14:37
3	V 292.402†	-1361.9	343.9	2.4391 ug/L	2.4391 ppb	20:14:37
3	Zn 213.857†	4026.7	3086.4	33.747 ug/L	33.747 ppb	20:14:57
3	SiO2†	15885.7	14382.1	1120.4 ug/L	1120.4 ppb	20:15:12

Mean Data: 246055001|949334|50

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	813438.7	105.92 %	0.585			0.55%
Sc Radial	5078.5	108 %	2.2			2.03%
Y 371.029	730171.9	105.97 %	0.692			0.65%
Y RADIAL	5326.9	106.9 %	1.94			1.82%
Ag 328.068†	-128.9	-0.0903 ug/L	0.18888	-0.0903 ppb	0.18888	209.27%
Al 396.153Radial†	605.0	565.93 ug/L	5.608	565.93 ppb	5.608	0.99%
As 188.979†	39.8	18.516 ug/L	2.6268	18.516 ppb	2.6268	14.19%
B 249.677†	460.8	11.235 ug/L	0.4335	11.235 ppb	0.4335	3.86%
Ba 233.527†	720.5	8.5647 ug/L	0.06468	8.5647 ppb	0.06468	0.76%
Be 313.107†	-249.5	-0.0084 ug/L	0.02631	-0.0084 ppb	0.02631	314.87%
Ca 317.933Radial†	140.0	254.36 ug/L	9.184	254.36 ppb	9.184	3.61%
Cd 226.502†	24.1	0.1507 ug/L	0.21616	0.1507 ppb	0.21616	143.40%
Co 228.616†	14.5	0.3290 ug/L	0.26840	0.3290 ppb	0.26840	81.59%
Cr 267.716†	59.9	0.8529 ug/L	0.20486	0.8529 ppb	0.20486	24.02%
Cu 324.752†	385.7	1.5368 ug/L	0.23602	1.5368 ppb	0.23602	15.36%
Fe 238.204 Radial†	180.1	1868.2 ug/L	62.01	1868.2 ppb	62.01	3.32%
K 766.490 Radial†	477.2	94.854 ug/L	15.1859	94.854 ppb	15.1859	16.01%

Mg 279.077 IEC†	1.2	47.122 ug/L	81.4502	47.122 ppb	81.4502	172.85%
Mn 257.610†	19238.9	30.977 ug/L	0.2856	30.977 ppb	0.2856	0.92%
Mo 202.031†	-4.7	-0.2802 ug/L	0.09587	-0.2802 ppb	0.09587	34.21%
Na 589.592 Radial†	246.4	83.984 ug/L	18.9577	83.984 ppb	18.9577	22.57%
Ni 231.604†	4.5	0.1450 ug/L	0.06753	0.1450 ppb	0.06753	46.59%
P 214.914†	44.2	23.007 ug/L	7.7733	23.007 ppb	7.7733	33.79%
Pb 220.353†	66471.1	10718 ug/L	91.3	10718 ppb	91.3	0.85%
S 181.975 Axial†	13.2	16.956 ug/L	5.4785	16.956 ppb	5.4785	32.31%
Sb 206.836†	119.1	48.143 ug/L	0.6895	48.143 ppb	0.6895	1.43%
Se 196.026†	-7.2	-0.1863 ug/L	0.89986	-0.1863 ppb	0.89986	482.91%
Si 251.611†	14372.8	524.48 ug/L	3.522	524.48 ppb	3.522	0.67%
Sn 189.927†	-2.1	-0.5643 ug/L	0.78138	-0.5643 ppb	0.78138	138.47%
Sr 421.552†	355.2	2.5812 ug/L	0.12702	2.5812 ppb	0.12702	4.92%
Ti 334.940†	19855.4	40.034 ug/L	0.2493	40.034 ppb	0.2493	0.62%
Tl 190.801†	1.9	1.3671 ug/L	1.54582	1.3671 ppb	1.54582	113.08%
U 409.014†	352.4	11.586 ug/L	2.1576	11.586 ppb	2.1576	18.62%
V 292.402†	351.9	2.5050 ug/L	0.18794	2.5050 ppb	0.18794	7.50%
Zn 213.857†	3106.7	33.980 ug/L	0.2638	33.980 ppb	0.2638	0.78%
SiO2†	14345.4	1117.5 ug/L	13.92	1117.5 ppb	13.92	1.25%

Sequence No.: 18

Sample ID: 1202033899|949334|50

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 51

Date Collected: 3/1/2010 20:17:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033899|949334|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5194.2	5194.2	110 %		20:19:16
1	Y RADIAL	5458.7	5458.7	109.5 %		20:19:16
1	Al 396.153Radial†	801.7	813.6	761.03 ug/L	761.03 ppb	20:19:16
1	Ca 317.933Radial†	227.7	184.1	334.56 ug/L	334.56 ppb	20:19:36
1	Fe 238.204 Radial†	196.0	170.3	1766.9 ug/L	1766.9 ppb	20:19:36
1	K 766.490 Radial†	3217.4	653.8	129.98 ug/L	129.98 ppb	20:19:16
1	Mg 279.077 IEC†	8.1	4.5	176.15 ug/L	176.15 ppb	20:19:36
1	Na 589.592 Radial†	-692.4	220.4	75.119 ug/L	75.119 ppb	20:19:16
1	Sr 421.552†	522.6	474.0	3.4442 ug/L	3.4442 ppb	20:19:16
1	Sc 361.383	817786.2	817786.2	106.49 %		20:20:33
1	Y 371.029	734909.0	734909.0	106.66 %		20:20:33
1	Ag 328.068†	33.1	-224.6	-0.6134 ug/L	-0.6134 ppb	20:20:33
1	As 188.979†	-28.6	-1.8	0.0730 ug/L	0.0730 ppb	20:20:53
1	B 249.677†	-215.9	250.7	5.9897 ug/L	5.9897 ppb	20:20:53
1	Ba 233.527†	1019.3	954.8	11.327 ug/L	11.327 ppb	20:20:53
1	Be 313.107†	-9752.5	-175.4	0.0542 ug/L	0.0542 ppb	20:20:33
1	Cd 226.502†	-172.5	24.7	0.1696 ug/L	0.1696 ppb	20:20:53
1	Co 228.616†	-50.1	10.4	0.1796 ug/L	0.1796 ppb	20:20:53
1	Cr 267.716†	175.2	88.9	1.2478 ug/L	1.2478 ppb	20:20:53
1	Cu 324.752†	8241.4	202.9	0.8469 ug/L	0.8469 ppb	20:20:33
1	Mn 257.610†	27965.1	25799.4	41.463 ug/L	41.463 ppb	20:20:33
1	Mo 202.031†	13.4	-1.8	-0.0251 ug/L	-0.0251 ppb	20:20:53
1	Ni 231.604†	117.5	9.0	0.2881 ug/L	0.2881 ppb	20:20:53
1	P 214.914†	274.0	61.9	33.195 ug/L	33.195 ppb	20:20:53
1	Pb 220.353†	4213.7	4027.6	649.49 ug/L	649.49 ppb	20:20:53
1	S 181.975 Axial†	62.7	16.4	21.084 ug/L	21.084 ppb	20:20:53
1	Sb 206.836†	46.2	13.3	5.2240 ug/L	5.2240 ppb	20:20:53
1	Se 196.026†	-20.4	0.7	4.4514 ug/L	4.4514 ppb	20:20:53
1	Si 251.611†	20755.7	18901.3	689.72 ug/L	689.72 ppb	20:20:33
1	Sn 189.927†	15.5	6.5	1.4860 ug/L	1.4860 ppb	20:20:53
1	Ti 334.940†	27454.5	27082.1	54.596 ug/L	54.596 ppb	20:20:33
1	Tl 190.801†	-35.5	-2.1	-0.3366 ug/L	-0.3366 ppb	20:20:53
1	U 409.014†	-2337.0	342.3	11.257 ug/L	11.257 ppb	20:20:33
1	V 292.402†	-1324.6	384.1	2.7664 ug/L	2.7664 ppb	20:20:33
1	Zn 213.857†	4764.2	3763.5	41.238 ug/L	41.238 ppb	20:20:53
1	SiO2†	20538.3	18690.0	1456.0 ug/L	1456.0 ppb	20:21:49
2	Sc Radial	5057.9	5057.9	107 %		20:19:41
2	Y RADIAL	5338.0	5338.0	107.1 %		20:19:41
2	Al 396.153Radial†	759.5	793.8	742.62 ug/L	742.62 ppb	20:19:41
2	Ca 317.933Radial†	224.9	187.1	340.03 ug/L	340.03 ppb	20:20:01
2	Fe 238.204 Radial†	196.2	175.3	1818.7 ug/L	1818.7 ppb	20:20:01
2	K 766.490 Radial†	3179.2	696.8	138.55 ug/L	138.55 ppb	20:19:41
2	Mg 279.077 IEC†	5.0	1.7	66.488 ug/L	66.488 ppb	20:20:01
2	Na 589.592 Radial†	-682.7	212.5	72.413 ug/L	72.413 ppb	20:19:41
2	Sr 421.552†	475.4	442.9	3.2179 ug/L	3.2179 ppb	20:19:41
2	Sc 361.383	819278.8	819278.8	106.69 %		20:20:58
2	Y 371.029	735682.9	735682.9	106.77 %		20:20:58
2	Ag 328.068†	44.9	-213.6	-0.5444 ug/L	-0.5444 ppb	20:20:58
2	As 188.979†	-29.6	-2.7	-0.3113 ug/L	-0.3113 ppb	20:21:18
2	B 249.677†	-253.1	216.2	5.1170 ug/L	5.1170 ppb	20:21:18
2	Ba 233.527†	1004.7	939.4	11.146 ug/L	11.146 ppb	20:21:18
2	Be 313.107†	-9908.0	-304.5	0.0031 ug/L	0.0031 ppb	20:20:58
2	Cd 226.502†	-181.0	16.9	0.0554 ug/L	0.0554 ppb	20:21:18
2	Co 228.616†	-46.1	14.2	0.2911 ug/L	0.2911 ppb	20:21:18
2	Cr 267.716†	163.0	77.2	1.0878 ug/L	1.0878 ppb	20:21:18
2	Cu 324.752†	8293.2	237.3	0.9765 ug/L	0.9765 ppb	20:20:58
2	Mn 257.610†	27964.7	25751.1	41.395 ug/L	41.395 ppb	20:20:58
2	Mo 202.031†	3.6	-11.0	-0.8631 ug/L	-0.8631 ppb	20:21:18
2	Ni 231.604†	116.5	7.8	0.2503 ug/L	0.2503 ppb	20:21:18

2	P 214.914†	249.3	38.3	19.893 ug/L	19.893 ppb	20:21:18
2	Pb 220.353†	4204.1	4011.4	646.87 ug/L	646.87 ppb	20:21:18
2	S 181.975 Axial†	63.0	16.6	21.368 ug/L	21.368 ppb	20:21:18
2	Sb 206.836†	27.4	-4.4	-2.0315 ug/L	-2.0315 ppb	20:21:18
2	Se 196.026†	-28.0	-6.4	0.2198 ug/L	0.2198 ppb	20:21:18
2	Si 251.611†	20868.3	18971.4	692.29 ug/L	692.29 ppb	20:20:58
2	Sn 189.927†	0.1	-8.0	-1.9185 ug/L	-1.9185 ppb	20:21:18
2	Ti 334.940†	27566.5	27140.1	54.721 ug/L	54.721 ppb	20:20:58
2	Tl 190.801†	-31.8	1.4	1.3071 ug/L	1.3071 ppb	20:21:18
2	U 409.014†	-2220.7	455.3	15.035 ug/L	15.035 ppb	20:20:58
2	V 292.402†	-1348.2	364.2	2.5936 ug/L	2.5936 ppb	20:20:58
2	Zn 213.857†	4739.2	3731.9	40.883 ug/L	40.883 ppb	20:21:18
2	SiO2†	20620.3	18731.7	1459.3 ug/L	1459.3 ppb	20:21:54
3	Sc Radial	5057.4	5057.4	107 %		20:20:06
3	Y RADIAL	5349.0	5349.0	107.3 %		20:20:06
3	Al 396.153Radial†	749.3	784.4	733.83 ug/L	733.83 ppb	20:20:06
3	Ca 317.933Radial†	223.8	186.1	338.21 ug/L	338.21 ppb	20:20:26
3	Fe 238.204 Radial†	202.1	180.7	1875.1 ug/L	1875.1 ppb	20:20:26
3	K 766.490 Radial†	3077.2	602.2	119.72 ug/L	119.72 ppb	20:20:06
3	Mg 279.077 IEC†	6.5	3.2	124.06 ug/L	124.06 ppb	20:20:26
3	Na 589.592 Radial†	-660.6	233.0	79.406 ug/L	79.406 ppb	20:20:06
3	Sr 421.552†	509.4	474.5	3.4482 ug/L	3.4482 ppb	20:20:06
3	Sc 361.383	809778.3	809778.3	105.45 %		20:21:24
3	Y 371.029	726725.8	726725.8	105.47 %		20:21:24
3	Ag 328.068†	52.6	-205.8	-0.4815 ug/L	-0.4815 ppb	20:21:24
3	As 188.979†	-28.1	-1.7	0.1692 ug/L	0.1692 ppb	20:21:44
3	B 249.677†	-244.5	221.6	5.2432 ug/L	5.2432 ppb	20:21:44
3	Ba 233.527†	1018.5	963.5	11.433 ug/L	11.433 ppb	20:21:44
3	Be 313.107†	-9750.1	-263.7	0.0194 ug/L	0.0194 ppb	20:21:24
3	Cd 226.502†	-174.2	21.4	0.1123 ug/L	0.1123 ppb	20:21:44
3	Co 228.616†	-34.6	24.6	0.6058 ug/L	0.6058 ppb	20:21:44
3	Cr 267.716†	156.2	72.5	1.0270 ug/L	1.0270 ppb	20:21:44
3	Cu 324.752†	8178.4	219.7	0.9163 ug/L	0.9163 ppb	20:21:24
3	Mn 257.610†	27618.4	25730.3	41.365 ug/L	41.365 ppb	20:21:24
3	Mo 202.031†	3.8	-10.8	-0.8427 ug/L	-0.8427 ppb	20:21:44
3	Ni 231.604†	108.2	1.3	0.0412 ug/L	0.0412 ppb	20:21:44
3	P 214.914†	270.2	60.9	32.508 ug/L	32.508 ppb	20:21:44
3	Pb 220.353†	4172.1	4027.3	649.43 ug/L	649.43 ppb	20:21:44
3	S 181.975 Axial†	59.8	14.2	18.261 ug/L	18.261 ppb	20:21:44
3	Sb 206.836†	28.6	-2.9	-1.4223 ug/L	-1.4223 ppb	20:21:44
3	Se 196.026†	-22.1	-1.1	3.5719 ug/L	3.5719 ppb	20:21:44
3	Si 251.611†	20492.4	18844.4	687.66 ug/L	687.66 ppb	20:21:24
3	Sn 189.927†	0.4	-7.7	-1.8566 ug/L	-1.8566 ppb	20:21:44
3	Ti 334.940†	27260.4	27152.9	54.744 ug/L	54.744 ppb	20:21:24
3	Tl 190.801†	-43.3	-9.9	-3.8980 ug/L	-3.8980 ppb	20:21:44
3	U 409.014†	-2360.1	298.7	9.7854 ug/L	9.7854 ppb	20:21:24
3	V 292.402†	-1289.2	405.4	2.9042 ug/L	2.9042 ppb	20:21:24
3	Zn 213.857†	4743.4	3788.0	41.494 ug/L	41.494 ppb	20:21:44
3	SiO2†	20777.4	19107.5	1488.5 ug/L	1488.5 ppb	20:21:59

Mean Data: 1202033899|949334|50

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	815614.4	106.21	%	0.665				0.63%
Sc Radial	5103.1	108	%	1.7				1.54%
Y 371.029	732439.2	106.30	%	0.720				0.68%
Y RADIAL	5381.9	108.0	%	1.34				1.24%
Ag 328.068†	-214.7	-0.5464	ug/L	0.06598	-0.5464	ppb	0.06598	12.07%
Al 396.153Radial†	797.3	745.83	ug/L	13.881	745.83	ppb	13.881	1.86%
As 188.979†	-2.1	-0.0230	ug/L	0.25426	-0.0230	ppb	0.25426	>999.9%
B 249.677†	229.5	5.4499	ug/L	0.47168	5.4499	ppb	0.47168	8.65%
Ba 233.527†	952.5	11.302	ug/L	0.1451	11.302	ppb	0.1451	1.28%
Be 313.107†	-247.8	0.0256	ug/L	0.02608	0.0256	ppb	0.02608	101.97%
Ca 317.933Radial†	185.8	337.60	ug/L	2.784	337.60	ppb	2.784	0.82%
Cd 226.502†	21.0	0.1124	ug/L	0.05708	0.1124	ppb	0.05708	50.77%
Co 228.616†	16.4	0.3588	ug/L	0.22101	0.3588	ppb	0.22101	61.59%
Cr 267.716†	79.5	1.1209	ug/L	0.11406	1.1209	ppb	0.11406	10.18%
Cu 324.752†	220.0	0.9132	ug/L	0.06486	0.9132	ppb	0.06486	7.10%
Fe 238.204 Radial†	175.4	1820.2	ug/L	54.16	1820.2	ppb	54.16	2.98%
K 766.490 Radial†	650.9	129.42	ug/L	9.431	129.42	ppb	9.431	7.29%

Mg 279.077 IEC†	3.1	122.24 ug/L	54.856	122.24 ppb	54.856	44.88%
Mn 257.610†	25760.3	41.407 ug/L	0.0501	41.407 ppb	0.0501	0.12%
Mo 202.031†	-7.9	-0.5770 ug/L	0.47805	-0.5770 ppb	0.47805	82.86%
Na 589.592 Radial†	222.0	75.646 ug/L	3.5262	75.646 ppb	3.5262	4.66%
Ni 231.604†	6.1	0.1932 ug/L	0.13300	0.1932 ppb	0.13300	68.85%
P 214.914†	53.7	28.532 ug/L	7.4895	28.532 ppb	7.4895	26.25%
Pb 220.353†	4022.1	648.60 ug/L	1.495	648.60 ppb	1.495	0.23%
S 181.975 Axial†	15.7	20.238 ug/L	1.7176	20.238 ppb	1.7176	8.49%
Sb 206.836†	2.0	0.5901 ug/L	4.02466	0.5901 ppb	4.02466	682.08%
Se 196.026†	-2.3	2.7477 ug/L	2.23294	2.7477 ppb	2.23294	81.27%
Si 251.611†	18905.7	689.89 ug/L	2.321	689.89 ppb	2.321	0.34%
Sn 189.927†	-3.1	-0.7631 ug/L	1.94795	-0.7631 ppb	1.94795	255.28%
Sr 421.552†	463.8	3.3701 ug/L	0.13187	3.3701 ppb	0.13187	3.91%
Ti 334.940†	27125.0	54.687 ug/L	0.0797	54.687 ppb	0.0797	0.15%
Tl 190.801†	-3.5	-0.9759 ug/L	2.66078	-0.9759 ppb	2.66078	272.66%
U 409.014†	365.4	12.026 ug/L	2.7078	12.026 ppb	2.7078	22.52%
V 292.402†	384.6	2.7547 ug/L	0.15563	2.7547 ppb	0.15563	5.65%
Zn 213.857†	3761.1	41.205 ug/L	0.3070	41.205 ppb	0.3070	0.74%
SiO2†	18843.0	1467.9 ug/L	17.92	1467.9 ppb	17.92	1.22%



Sequence No.: 19

Sample ID: 1202033901|949334|50

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 3/1/2010 20:24:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033901|949334|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4989.4	4989.4	106 %		20:26:03
1	Y RADIAL	5221.3	5221.3	104.7 %		20:26:03
1	Al 396.153Radial†	1448.5	1453.5	1359.2 ug/L	1359.2 ppb	20:26:03
1	Ca 317.933Radial†	274.4	236.7	430.12 ug/L	430.12 ppb	20:26:23
1	Fe 238.204 Radial†	230.9	210.5	2184.3 ug/L	2184.3 ppb	20:26:23
1	K 766.490 Radial†	3709.2	1237.4	246.08 ug/L	246.08 ppb	20:26:03
1	Mg 279.077 IEC†	12.8	9.2	363.13 ug/L	363.13 ppb	20:26:23
1	Na 589.592 Radial†	-336.8	530.1	180.66 ug/L	180.66 ppb	20:26:03
1	Sr 421.552†	1989.0	1876.8	13.644 ug/L	13.644 ppb	20:26:03
1	Sc 361.383	799354.5	799354.5	104.09 %		20:27:20
1	Y 371.029	716057.4	716057.4	103.92 %		20:27:20
1	Ag 328.068†	2080.1	1742.7	9.6659 ug/L	9.6659 ppb	20:27:20
1	As 188.979†	53.5	76.4	35.205 ug/L	35.205 ppb	20:27:40
1	B 249.677†	50.7	502.1	12.190 ug/L	12.190 ppb	20:27:40
1	Ba 233.527†	1999.3	1918.3	22.732 ug/L	22.732 ppb	20:27:40
1	Be 313.107†	17052.7	25365.1	10.251 ug/L	10.251 ppb	20:27:20
1	Cd 226.502†	592.3	755.7	10.497 ug/L	10.497 ppb	20:27:40
1	Co 228.616†	305.7	351.2	10.454 ug/L	10.454 ppb	20:27:40
1	Cr 267.716†	928.1	816.0	11.202 ug/L	11.202 ppb	20:27:40
1	Cu 324.752†	11273.8	3294.6	12.443 ug/L	12.443 ppb	20:27:20
1	Mn 257.610†	32789.6	31039.8	49.884 ug/L	49.884 ppb	20:27:20
1	Mo 202.031†	122.1	103.0	9.6237 ug/L	9.6237 ppb	20:27:40
1	Ni 231.604†	459.0	339.6	10.850 ug/L	10.850 ppb	20:27:40
1	P 214.914†	320.9	112.9	59.253 ug/L	59.253 ppb	20:27:40
1	Pb 220.353†	91062.7	87554.5	14118 ug/L	14118 ppb	20:27:20
1	S 181.975 Axial†	138.8	90.9	117.58 ug/L	117.58 ppb	20:27:40
1	Sb 206.836†	287.5	246.2	99.968 ug/L	99.968 ppb	20:27:40
1	Se 196.026†	-7.1	13.0	12.980 ug/L	12.980 ppb	20:27:40
1	Si 251.611†	19840.3	18471.3	673.91 ug/L	673.91 ppb	20:27:20
1	Sn 189.927†	51.2	41.1	9.6238 ug/L	9.6238 ppb	20:27:40
1	Ti 334.940†	37165.1	37005.5	74.583 ug/L	74.583 ppb	20:27:20
1	Tl 190.801†	-15.6	16.3	8.2591 ug/L	8.2591 ppb	20:27:40
1	U 409.014†	-2109.0	510.7	16.826 ug/L	16.826 ppb	20:27:20
1	V 292.402†	57.7	1683.4	13.178 ug/L	13.178 ppb	20:27:20
1	Zn 213.857†	8770.9	7715.9	84.682 ug/L	84.682 ppb	20:27:20
1	SiO2†	19520.7	18157.1	1414.2 ug/L	1414.2 ppb	20:28:36
2	Sc Radial	5010.6	5010.6	106 %		20:26:28
2	Y RADIAL	5295.7	5295.7	106.2 %		20:26:28
2	Al 396.153Radial†	1456.8	1455.6	1361.1 ug/L	1361.1 ppb	20:26:28
2	Ca 317.933Radial†	267.3	228.9	415.91 ug/L	415.91 ppb	20:26:48
2	Fe 238.204 Radial†	226.2	205.1	2128.5 ug/L	2128.5 ppb	20:26:48
2	K 766.490 Radial†	3927.9	1428.0	284.03 ug/L	284.03 ppb	20:26:28
2	Mg 279.077 IEC†	11.2	7.6	301.59 ug/L	301.59 ppb	20:26:48
2	Na 589.592 Radial†	-321.9	545.4	185.87 ug/L	185.87 ppb	20:26:28
2	Sr 421.552†	1964.2	1845.5	13.417 ug/L	13.417 ppb	20:26:28
2	Sc 361.383	805688.0	805688.0	104.92 %		20:27:45
2	Y 371.029	721180.8	721180.8	104.67 %		20:27:45
2	Ag 328.068†	2226.7	1866.7	10.285 ug/L	10.285 ppb	20:27:45
2	As 188.979†	39.7	62.8	29.120 ug/L	29.120 ppb	20:28:05
2	B 249.677†	71.7	521.8	12.689 ug/L	12.689 ppb	20:28:05
2	Ba 233.527†	1993.6	1897.8	22.488 ug/L	22.488 ppb	20:28:05
2	Be 313.107†	16732.3	24931.0	10.077 ug/L	10.077 ppb	20:27:45
2	Cd 226.502†	597.3	756.0	10.507 ug/L	10.507 ppb	20:28:05
2	Co 228.616†	324.2	366.4	10.916 ug/L	10.916 ppb	20:28:05
2	Cr 267.716†	940.4	820.7	11.265 ug/L	11.265 ppb	20:28:05
2	Cu 324.752†	11227.3	3165.1	11.954 ug/L	11.954 ppb	20:27:45
2	Mn 257.610†	32634.7	30644.6	49.249 ug/L	49.249 ppb	20:27:45
2	Mo 202.031†	118.7	98.7	9.2321 ug/L	9.2321 ppb	20:28:05
2	Ni 231.604†	446.7	324.4	10.365 ug/L	10.365 ppb	20:28:05

2	P 214.914†	333.8	122.8	64.946 ug/L	64.946 ppb	20:28:05
2	Pb 220.353†	90547.5	86375.7	13928 ug/L	13928 ppb	20:27:45
2	S 181.975 Axial†	145.2	95.9	124.02 ug/L	124.02 ppb	20:28:05
2	Sb 206.836†	288.3	244.8	99.367 ug/L	99.367 ppb	20:28:05
2	Se 196.026†	-12.7	7.7	9.6145 ug/L	9.6145 ppb	20:28:05
2	Si 251.611†	19764.4	18249.2	665.81 ug/L	665.81 ppb	20:27:45
2	Sn 189.927†	47.2	36.9	8.6372 ug/L	8.6372 ppb	20:28:05
2	Ti 334.940†	37080.3	36644.0	73.857 ug/L	73.857 ppb	20:27:45
2	Tl 190.801†	-6.6	25.0	12.238 ug/L	12.238 ppb	20:28:05
2	U 409.014†	-2097.6	537.5	17.729 ug/L	17.729 ppb	20:27:45
2	V 292.402†	41.0	1667.1	13.051 ug/L	13.051 ppb	20:27:45
2	Zn 213.857†	8726.9	7607.7	83.501 ug/L	83.501 ppb	20:27:45
2	SiO2†	19714.8	18194.6	1417.1 ug/L	1417.1 ppb	20:28:41
3	Sc Radial	5212.5	5212.5	111 %		20:26:53
3	Y RADIAL	5528.9	5528.9	110.9 %		20:26:53
3	Al 396.153Radial†	1427.8	1376.4	1287.0 ug/L	1287.0 ppb	20:26:53
3	Ca 317.933Radial†	274.2	225.5	409.66 ug/L	409.66 ppb	20:27:13
3	Fe 238.204 Radial†	229.6	200.0	2075.2 ug/L	2075.2 ppb	20:27:13
3	K 766.490 Radial†	3816.1	1184.1	235.48 ug/L	235.48 ppb	20:26:53
3	Mg 279.077 IEC†	11.6	7.6	297.90 ug/L	297.90 ppb	20:27:13
3	Na 589.592 Radial†	-362.2	520.8	177.47 ug/L	177.47 ppb	20:26:53
3	Sr 421.552†	1970.5	1779.8	12.939 ug/L	12.939 ppb	20:26:53
3	Sc 361.383	771960.2	771960.2	100.52 %		20:28:11
3	Y 371.029	690367.6	690367.6	100.19 %		20:28:11
3	Ag 328.068†	2118.7	1852.0	10.196 ug/L	10.196 ppb	20:28:11
3	As 188.979†	54.3	79.1	36.353 ug/L	36.353 ppb	20:28:31
3	B 249.677†	73.5	526.5	12.816 ug/L	12.816 ppb	20:28:31
3	Ba 233.527†	1984.2	1971.5	23.356 ug/L	23.356 ppb	20:28:31
3	Be 313.107†	16761.6	25656.9	10.371 ug/L	10.371 ppb	20:28:11
3	Cd 226.502†	590.1	773.7	10.763 ug/L	10.763 ppb	20:28:31
3	Co 228.616†	317.7	373.5	11.130 ug/L	11.130 ppb	20:28:31
3	Cr 267.716†	925.5	845.1	11.598 ug/L	11.598 ppb	20:28:31
3	Cu 324.752†	10997.8	3404.4	12.848 ug/L	12.848 ppb	20:28:11
3	Mn 257.610†	32278.0	31648.8	50.851 ug/L	50.851 ppb	20:28:11
3	Mo 202.031†	126.3	111.3	10.376 ug/L	10.376 ppb	20:28:31
3	Ni 231.604†	453.4	349.7	11.172 ug/L	11.172 ppb	20:28:31
3	P 214.914†	320.4	123.3	65.080 ug/L	65.080 ppb	20:28:31
3	Pb 220.353†	89737.5	89340.7	14406 ug/L	14406 ppb	20:28:11
3	S 181.975 Axial†	150.9	107.6	139.27 ug/L	139.27 ppb	20:28:31
3	Sb 206.836†	280.1	248.6	100.95 ug/L	100.95 ppb	20:28:31
3	Se 196.026†	-8.8	11.0	11.549 ug/L	11.549 ppb	20:28:31
3	Si 251.611†	19488.4	18797.6	685.81 ug/L	685.81 ppb	20:28:11
3	Sn 189.927†	51.4	43.1	10.096 ug/L	10.096 ppb	20:28:31
3	Ti 334.940†	36586.9	37697.4	75.980 ug/L	75.980 ppb	20:28:11
3	Tl 190.801†	-6.2	25.0	12.301 ug/L	12.301 ppb	20:28:31
3	U 409.014†	-2072.5	475.1	15.646 ug/L	15.646 ppb	20:28:11
3	V 292.402†	70.1	1697.7	13.313 ug/L	13.313 ppb	20:28:11
3	Zn 213.857†	8598.2	7843.2	86.099 ug/L	86.099 ppb	20:28:11
3	SiO2†	19549.6	18851.3	1468.3 ug/L	1468.3 ppb	20:28:46

Mean Data: 1202033901|949334|50

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	792334.2	103.18 %		2.334				2.26%
Sc Radial	5070.8	108 %		2.6				2.43%
Y 371.029	709201.9	102.93 %		2.396				2.33%
Y RADIAL	5348.6	107.3 %		3.22				3.00%
Ag 328.068†	1820.5	10.049 ug/L		0.3347	10.049 ppb		0.3347	3.33%
Al 396.153Radial†	1428.5	1335.8 ug/L		42.27	1335.8 ppb		42.27	3.16%
As 188.979†	72.8	33.559 ug/L		3.8872	33.559 ppb		3.8872	11.58%
B 249.677†	516.8	12.565 ug/L		0.3311	12.565 ppb		0.3311	2.64%
Ba 233.527†	1929.2	22.858 ug/L		0.4478	22.858 ppb		0.4478	1.96%
Be 313.107†	25317.7	10.233 ug/L		0.1476	10.233 ppb		0.1476	1.44%
Ca 317.933Radial†	230.4	418.57 ug/L		10.484	418.57 ppb		10.484	2.50%
Cd 226.502†	761.8	10.589 ug/L		0.1510	10.589 ppb		0.1510	1.43%
Co 228.616†	363.7	10.833 ug/L		0.3455	10.833 ppb		0.3455	3.19%
Cr 267.716†	827.2	11.355 ug/L		0.2127	11.355 ppb		0.2127	1.87%
Cu 324.752†	3288.0	12.415 ug/L		0.4477	12.415 ppb		0.4477	3.61%
Fe 238.204 Radial†	205.2	2129.3 ug/L		54.55	2129.3 ppb		54.55	2.56%
K 766.490 Radial†	1283.2	255.19 ug/L		25.526	255.19 ppb		25.526	10.00%

Mg 279.077 IEC†	8.1	320.87 ug/L	36.644	320.87 ppb	36.644	11.42%
Mn 257.610†	31111.0	49.994 ug/L	0.8068	49.994 ppb	0.8068	1.61%
Mo 202.031†	104.3	9.7438 ug/L	0.58117	9.7438 ppb	0.58117	5.96%
Na 589.592 Radial†	532.1	181.33 ug/L	4.239	181.33 ppb	4.239	2.34%
Ni 231.604†	337.9	10.795 ug/L	0.4063	10.795 ppb	0.4063	3.76%
P 214.914†	119.7	63.093 ug/L	3.3260	63.093 ppb	3.3260	5.27%
Pb 220.353†	87757.0	14151 ug/L	240.7	14151 ppb	240.7	1.70%
S 181.975 Axial†	98.1	126.96 ug/L	11.141	126.96 ppb	11.141	8.78%
Sb 206.836†	246.5	100.09 ug/L	0.799	100.09 ppb	0.799	0.80%
Se 196.026†	10.5	11.381 ug/L	1.6892	11.381 ppb	1.6892	14.84%
Si 251.611†	18506.0	675.18 ug/L	10.059	675.18 ppb	10.059	1.49%
Sn 189.927†	40.3	9.4525 ug/L	0.74456	9.4525 ppb	0.74456	7.88%
Sr 421.552†	1834.0	13.333 ug/L	0.3599	13.333 ppb	0.3599	2.70%
Ti 334.940†	37115.6	74.807 ug/L	1.0790	74.807 ppb	1.0790	1.44%
Tl 190.801†	22.1	10.933 ug/L	2.3156	10.933 ppb	2.3156	21.18%
U 409.014†	507.7	16.734 ug/L	1.0450	16.734 ppb	1.0450	6.25%
V 292.402†	1682.7	13.181 ug/L	0.1309	13.181 ppb	0.1309	0.99%
Zn 213.857†	7722.3	84.761 ug/L	1.3008	84.761 ppb	1.3008	1.53%
SiO2†	18401.0	1433.2 ug/L	30.40	1433.2 ppb	30.40	2.12%

Sequence No.: 20  
 Sample ID: 1202033902|949334|50  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 53  
 Date Collected: 3/1/2010 20:30:57  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 1202033902|949334|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5275.8	5275.8	112 %		20:32:50
1	Y RADIAL	5571.3	5571.3	111.8 %		20:32:50
1	Al 396.153Radial†	1158.6	1120.7	1047.8 ug/L	1047.8 ppb	20:32:50
1	Ca 317.933Radial†	232.4	185.2	336.42 ug/L	336.42 ppb	20:33:10
1	Fe 238.204 Radial†	155.3	131.2	1361.9 ug/L	1361.9 ppb	20:33:10
1	K 766.490 Radial†	3535.0	892.1	177.37 ug/L	177.37 ppb	20:32:50
1	Mg 279.077 IEC†	9.7	5.7	226.17 ug/L	226.17 ppb	20:33:10
1	Na 589.592 Radial†	-388.6	501.1	170.78 ug/L	170.78 ppb	20:32:50
1	Sr 421.552†	1849.2	1650.2	11.997 ug/L	11.997 ppb	20:32:50
1	Sc 361.383	808537.3	808537.3	105.29 %		20:34:07
1	Y 371.029	725465.5	725465.5	105.29 %		20:34:07
1	Ag 328.068†	2146.5	1783.0	9.6160 ug/L	9.6160 ppb	20:34:07
1	As 188.979†	317.7	326.7	146.42 ug/L	146.42 ppb	20:34:27
1	B 249.677†	9.3	462.3	11.325 ug/L	11.325 ppb	20:34:27
1	Ba 233.527†	1668.6	1582.5	18.741 ug/L	18.741 ppb	20:34:27
1	Be 313.107†	16849.7	24986.3	10.064 ug/L	10.064 ppb	20:34:07
1	Cd 226.502†	566.1	724.3	10.138 ug/L	10.138 ppb	20:34:27
1	Co 228.616†	301.3	343.6	10.272 ug/L	10.272 ppb	20:34:27
1	Cr 267.716†	934.7	812.2	11.132 ug/L	11.132 ppb	20:34:27
1	Cu 324.752†	11187.7	3089.8	11.632 ug/L	11.632 ppb	20:34:07
1	Mn 257.610†	26609.4	24812.1	39.840 ug/L	39.840 ppb	20:34:07
1	Mo 202.031†	137.0	115.8	10.735 ug/L	10.735 ppb	20:34:27
1	Ni 231.604†	457.9	333.6	10.658 ug/L	10.658 ppb	20:34:27
1	P 214.914†	273.9	64.8	33.630 ug/L	33.630 ppb	20:34:27
1	Pb 220.353†	103822.3	98679.9	15912 ug/L	15912 ppb	20:34:07
1	S 181.975 Axial†	135.9	86.5	112.01 ug/L	112.01 ppb	20:34:27
1	Sb 206.836†	987.7	908.1	369.41 ug/L	369.41 ppb	20:34:27
1	Se 196.026†	-12.6	7.9	8.0070 ug/L	8.0070 ppb	20:34:27
1	Si 251.611†	19602.4	18028.9	657.75 ug/L	657.75 ppb	20:34:07
1	Sn 189.927†	291.4	268.7	63.257 ug/L	63.257 ppb	20:34:27
1	Ti 334.940†	29185.0	29020.6	58.492 ug/L	58.492 ppb	20:34:07
1	Tl 190.801†	-6.1	25.4	12.269 ug/L	12.269 ppb	20:34:27
1	U 409.014†	-2103.4	539.0	17.870 ug/L	17.870 ppb	20:34:07
1	V 292.402†	-100.0	1533.0	12.132 ug/L	12.132 ppb	20:34:07
1	Zn 213.857†	10926.7	9667.8	106.33 ug/L	106.33 ppb	20:34:07
1	SiO2†	19535.7	17958.3	1398.7 ug/L	1398.7 ppb	20:35:23
2	Sc Radial	5045.6	5045.6	107 %		20:33:15
2	Y RADIAL	5316.4	5316.4	106.6 %		20:33:15
2	Al 396.153Radial†	1159.7	1168.9	1093.0 ug/L	1093.0 ppb	20:33:15
2	Ca 317.933Radial†	230.9	193.2	351.03 ug/L	351.03 ppb	20:33:35
2	Fe 238.204 Radial†	157.4	139.5	1447.4 ug/L	1447.4 ppb	20:33:35
2	K 766.490 Radial†	3513.4	1015.8	201.99 ug/L	201.99 ppb	20:33:15
2	Mg 279.077 IEC†	10.6	7.0	278.23 ug/L	278.23 ppb	20:33:35
2	Na 589.592 Radial†	-333.7	536.5	182.83 ug/L	182.83 ppb	20:33:15
2	Sr 421.552†	1844.1	1720.7	12.510 ug/L	12.510 ppb	20:33:15
2	Sc 361.383	812900.4	812900.4	105.85 %		20:34:32
2	Y 371.029	728919.5	728919.5	105.79 %		20:34:32
2	Ag 328.068†	2233.7	1854.5	10.009 ug/L	10.009 ppb	20:34:32
2	As 188.979†	314.3	321.9	144.30 ug/L	144.30 ppb	20:34:52
2	B 249.677†	-3.6	450.0	11.004 ug/L	11.004 ppb	20:34:52
2	Ba 233.527†	1656.2	1562.2	18.506 ug/L	18.506 ppb	20:34:52
2	Be 313.107†	16805.1	24858.3	10.014 ug/L	10.014 ppb	20:34:32
2	Cd 226.502†	570.6	725.7	10.149 ug/L	10.149 ppb	20:34:52
2	Co 228.616†	310.3	350.6	10.477 ug/L	10.477 ppb	20:34:52
2	Cr 267.716†	925.7	798.9	10.951 ug/L	10.951 ppb	20:34:52
2	Cu 324.752†	11085.2	2935.9	11.058 ug/L	11.058 ppb	20:34:32
2	Mn 257.610†	26857.2	24910.6	40.004 ug/L	40.004 ppb	20:34:32
2	Mo 202.031†	117.5	96.6	8.9838 ug/L	8.9838 ppb	20:34:52
2	Ni 231.604†	455.6	329.1	10.513 ug/L	10.513 ppb	20:34:52

2	P 214.914†	273.7	63.2	32.812 ug/L	32.812 ppb	20:34:52
2	Pb 220.353†	104697.7	98977.6	15960 ug/L	15960 ppb	20:34:32
2	S 181.975 Axial†	144.2	93.7	121.30 ug/L	121.30 ppb	20:34:52
2	Sb 206.836†	980.4	896.1	364.51 ug/L	364.51 ppb	20:34:52
2	Se 196.026†	-5.0	15.1	12.607 ug/L	12.607 ppb	20:34:52
2	Si 251.611†	19794.4	18110.3	660.75 ug/L	660.75 ppb	20:34:32
2	Sn 189.927†	289.3	265.2	62.438 ug/L	62.438 ppb	20:34:52
2	Ti 334.940†	29398.2	29073.2	58.594 ug/L	58.594 ppb	20:34:32
2	Tl 190.801†	-3.2	28.2	13.566 ug/L	13.566 ppb	20:34:52
2	U 409.014†	-2013.0	635.1	21.078 ug/L	21.078 ppb	20:34:32
2	V 292.402†	-34.5	1595.4	12.599 ug/L	12.599 ppb	20:34:32
2	Zn 213.857†	11008.3	9689.1	106.56 ug/L	106.56 ppb	20:34:32
2	SiO2†	19274.0	17611.5	1371.7 ug/L	1371.7 ppb	20:35:28
3	Sc Radial	5178.0	5178.0	110 %		20:33:40
3	Y RADIAL	5468.7	5468.7	109.7 %		20:33:40
3	Al 396.153Radial†	1198.9	1176.9	1100.4 ug/L	1100.4 ppb	20:33:40
3	Ca 317.933Radial†	233.6	190.1	345.47 ug/L	345.47 ppb	20:34:00
3	Fe 238.204 Radial†	160.9	138.9	1441.8 ug/L	1441.8 ppb	20:34:00
3	K 766.490 Radial†	3504.2	923.6	183.64 ug/L	183.64 ppb	20:33:40
3	Mg 279.077 IEC†	12.6	8.6	339.24 ug/L	339.24 ppb	20:34:00
3	Na 589.592 Radial†	-371.6	510.1	173.83 ug/L	173.83 ppb	20:33:40
3	Sr 421.552†	1857.0	1688.5	12.276 ug/L	12.276 ppb	20:33:40
3	Sc 361.383	805174.4	805174.4	104.85 %		20:34:58
3	Y 371.029	721017.5	721017.5	104.64 %		20:34:58
3	Ag 328.068†	2148.7	1793.6	9.6939 ug/L	9.6939 ppb	20:34:58
3	As 188.979†	310.8	321.5	144.09 ug/L	144.09 ppb	20:35:18
3	B 249.677†	-7.3	446.5	10.917 ug/L	10.917 ppb	20:35:18
3	Ba 233.527†	1633.8	1555.9	18.431 ug/L	18.431 ppb	20:35:18
3	Be 313.107†	16480.5	24701.0	9.9504 ug/L	9.9504 ppb	20:34:58
3	Cd 226.502†	734.0	734.0	10.268 ug/L	10.268 ppb	20:35:18
3	Co 228.616†	307.8	351.0	10.494 ug/L	10.494 ppb	20:35:18
3	Cr 267.716†	903.1	785.8	10.772 ug/L	10.772 ppb	20:35:18
3	Cu 324.752†	10960.4	2917.4	10.988 ug/L	10.988 ppb	20:34:58
3	Mn 257.610†	26403.6	24721.4	39.698 ug/L	39.698 ppb	20:34:58
3	Mo 202.031†	129.6	109.3	10.143 ug/L	10.143 ppb	20:35:18
3	Ni 231.604†	444.2	322.3	10.297 ug/L	10.297 ppb	20:35:18
3	P 214.914†	279.7	71.4	37.354 ug/L	37.354 ppb	20:35:18
3	Pb 220.353†	103076.9	98380.8	15864 ug/L	15864 ppb	20:34:58
3	S 181.975 Axial†	140.2	91.2	118.05 ug/L	118.05 ppb	20:35:18
3	Sb 206.836†	968.2	893.4	363.40 ug/L	363.40 ppb	20:35:18
3	Se 196.026†	-16.2	4.3	6.0128 ug/L	6.0128 ppb	20:35:18
3	Si 251.611†	19463.4	17974.1	655.76 ug/L	655.76 ppb	20:34:58
3	Sn 189.927†	276.5	255.6	60.170 ug/L	60.170 ppb	20:35:18
3	Ti 334.940†	28932.3	28895.4	58.229 ug/L	58.229 ppb	20:34:58
3	Tl 190.801†	-3.3	28.1	13.511 ug/L	13.511 ppb	20:35:18
3	U 409.014†	-1956.9	670.4	22.260 ug/L	22.260 ppb	20:34:58
3	V 292.402†	-13.8	1614.9	12.775 ug/L	12.775 ppb	20:34:58
3	Zn 213.857†	10803.5	9593.6	105.51 ug/L	105.51 ppb	20:34:58
3	SiO2†	19728.2	18219.4	1419.0 ug/L	1419.0 ppb	20:35:33

Mean Data: 1202033902|949334|50

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	808870.7	105.33 %	0.504			0.48%
Sc Radial	5166.4	110 %	2.5			2.24%
Y 371.029	725134.2	105.24 %	0.575			0.55%
Y RADIAL	5452.2	109.4 %	2.57			2.35%
Ag 328.068†	1810.4	9.7729 ug/L	0.20797	9.7729 ppb	0.20797	2.13%
Al 396.153Radial†	1155.5	1080.4 ug/L	28.44	1080.4 ppb	28.44	2.63%
As 188.979†	323.4	144.94 ug/L	1.290	144.94 ppb	1.290	0.89%
B 249.677†	452.9	11.082 ug/L	0.2146	11.082 ppb	0.2146	1.94%
Ba 233.527†	1566.9	18.560 ug/L	0.1616	18.560 ppb	0.1616	0.87%
Be 313.107†	24848.5	10.009 ug/L	0.0571	10.009 ppb	0.0571	0.57%
Ca 317.933Radial†	189.5	344.31 ug/L	7.376	344.31 ppb	7.376	2.14%
Cd 226.502†	728.0	10.185 ug/L	0.0721	10.185 ppb	0.0721	0.71%
Co 228.616†	348.4	10.414 ug/L	0.1232	10.414 ppb	0.1232	1.18%
Cr 267.716†	798.9	10.952 ug/L	0.1802	10.952 ppb	0.1802	1.65%
Cu 324.752†	2981.0	11.226 ug/L	0.3531	11.226 ppb	0.3531	3.15%
Fe 238.204 Radial†	136.6	1417.0 ug/L	47.82	1417.0 ppb	47.82	3.37%
K 766.490 Radial†	943.8	187.67 ug/L	12.794	187.67 ppb	12.794	6.82%

Mg 279.077 IEC†	7.1	281.21 ug/L	56.596	281.21 ppb	56.596	20.13%
Mn 257.610†	24814.7	39.848 ug/L	0.1531	39.848 ppb	0.1531	0.38%
Mo 202.031†	107.2	9.9538 ug/L	0.89065	9.9538 ppb	0.89065	8.95%
Na 589.592 Radial†	515.9	175.81 ug/L	6.264	175.81 ppb	6.264	3.56%
Ni 231.604†	328.3	10.489 ug/L	0.1815	10.489 ppb	0.1815	1.73%
P 214.914†	66.5	34.599 ug/L	2.4210	34.599 ppb	2.4210	7.00%
Pb 220.353†	98679.4	15912 ug/L	48.1	15912 ppb	48.1	0.30%
S 181.975 Axial†	90.5	117.12 ug/L	4.711	117.12 ppb	4.711	4.02%
Sb 206.836†	899.2	365.77 ug/L	3.196	365.77 ppb	3.196	0.87%
Se 196.026†	9.1	8.8755 ug/L	3.38162	8.8755 ppb	3.38162	38.10%
Si 251.611†	18037.8	658.09 ug/L	2.509	658.09 ppb	2.509	0.38%
Sn 189.927†	263.2	61.955 ug/L	1.5992	61.955 ppb	1.5992	2.58%
Sr 421.552†	1686.4	12.261 ug/L	0.2564	12.261 ppb	0.2564	2.09%
Ti 334.940†	28996.4	58.438 ug/L	0.1880	58.438 ppb	0.1880	0.32%
Tl 190.801†	27.2	13.115 ug/L	0.7333	13.115 ppb	0.7333	5.59%
U 409.014†	614.8	20.402 ug/L	2.2716	20.402 ppb	2.2716	11.13%
V 292.402†	1581.1	12.502 ug/L	0.3323	12.502 ppb	0.3323	2.66%
Zn 213.857†	9650.2	106.13 ug/L	0.553	106.13 ppb	0.553	0.52%
SiO2†	17929.7	1396.5 ug/L	23.74	1396.5 ppb	23.74	1.70%

Sequence No.: 21  
 Sample ID: 1202033900|949334|250  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 54  
 Date Collected: 3/1/2010 20:37:44  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202033900|949334|250

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4951.0	4951.0	105 %			20:39:37
1	Y RADIAL	5269.3	5269.3	105.7 %			20:39:37
1	Al 396.153Radial†	48.1	132.9	124.33 ug/L		124.33 ppb	20:39:57
1	Ca 317.933Radial†	53.3	28.5	51.789 ug/L		51.789 ppb	20:39:57
1	Fe 238.204 Radial†	44.9	35.3	366.72 ug/L		366.72 ppb	20:39:57
1	K 766.490 Radial†	2472.5	88.9	17.649 ug/L		17.649 ppb	20:39:37
1	Mg 279.077 IEC†	1.4	-1.5	-60.462 ug/L		-60.462 ppb	20:39:57
1	Na 589.592 Radial†	-735.9	148.2	50.502 ug/L		50.502 ppb	20:39:37
1	Sr 421.552†	117.4	112.1	0.8147 ug/L		0.8147 ppb	20:39:37
1	Sc 361.383	813199.8	813199.8	105.89 %			20:40:54
1	Y 371.029	727116.2	727116.2	105.53 %			20:40:54
1	Ag 328.068†	197.3	-69.3	-0.2540 ug/L		-0.2540 ppb	20:40:54
1	As 188.979†	-25.2	1.3	0.7200 ug/L		0.7200 ppb	20:41:14
1	B 249.677†	-456.3	22.5	0.5044 ug/L		0.5044 ppb	20:41:14
1	Ba 233.527†	153.7	142.7	1.6966 ug/L		1.6966 ppb	20:41:14
1	Be 313.107†	-9512.1	-0.0	0.0188 ug/L		0.0188 ppb	20:40:54
1	Cd 226.502†	-193.3	4.1	0.0223 ug/L		0.0223 ppb	20:41:14
1	Co 228.616†	-54.9	5.6	0.1466 ug/L		0.1466 ppb	20:41:14
1	Cr 267.716†	70.4	-9.1	-0.1230 ug/L		-0.1230 ppb	20:41:14
1	Cu 324.752†	7858.5	-115.0	-0.4199 ug/L		-0.4199 ppb	20:40:54
1	Mn 257.610†	4457.0	3747.8	6.0375 ug/L		6.0375 ppb	20:40:54
1	Mo 202.031†	10.0	-4.9	-0.4196 ug/L		-0.4196 ppb	20:41:14
1	Ni 231.604†	96.2	-10.5	-0.3348 ug/L		-0.3348 ppb	20:41:14
1	P 214.914†	220.7	13.0	7.0709 ug/L		7.0709 ppb	20:41:14
1	Pb 220.353†	14070.8	13358.4	2154.0 ug/L		2154.0 ppb	20:40:54
1	S 181.975 Axial†	43.0	-1.9	-2.5334 ug/L		-2.5334 ppb	20:41:14
1	Sb 206.836†	52.5	19.6	7.8781 ug/L		7.8781 ppb	20:41:14
1	Se 196.026†	-19.2	1.7	1.8534 ug/L		1.8534 ppb	20:41:14
1	Si 251.611†	3441.4	2660.7	97.095 ug/L		97.095 ppb	20:41:14
1	Sn 189.927†	3.5	-4.8	-1.1451 ug/L		-1.1451 ppb	20:41:14
1	Ti 334.940†	2964.6	4100.6	8.2680 ug/L		8.2680 ppb	20:40:54
1	Tl 190.801†	-30.4	2.5	1.2271 ug/L		1.2271 ppb	20:41:14
1	U 409.014†	-2200.8	458.5	15.310 ug/L		15.310 ppb	20:40:54
1	V 292.402†	-1628.2	90.4	0.6795 ug/L		0.6795 ppb	20:40:54
1	Zn 213.857†	1322.9	538.9	5.8915 ug/L		5.8915 ppb	20:41:14
1	SiO2†	3619.2	2821.4	219.80 ug/L		219.80 ppb	20:42:10
2	Sc Radial	4993.9	4993.9	106 %			20:40:02
2	Y RADIAL	5270.3	5270.3	105.7 %			20:40:02
2	Al 396.153Radial†	52.3	136.5	127.65 ug/L		127.65 ppb	20:40:22
2	Ca 317.933Radial†	56.6	31.2	56.683 ug/L		56.683 ppb	20:40:22
2	Fe 238.204 Radial†	45.2	35.3	366.47 ug/L		366.47 ppb	20:40:22
2	K 766.490 Radial†	2450.6	48.0	9.5002 ug/L		9.5002 ppb	20:40:02
2	Mg 279.077 IEC†	1.8	-1.2	-48.597 ug/L		-48.597 ppb	20:40:22
2	Na 589.592 Radial†	-693.8	193.9	66.076 ug/L		66.076 ppb	20:40:02
2	Sr 421.552†	101.6	96.2	0.6995 ug/L		0.6995 ppb	20:40:02
2	Sc 361.383	813704.4	813704.4	105.96 %			20:41:19
2	Y 371.029	726495.2	726495.2	105.44 %			20:41:19
2	Ag 328.068†	217.8	-50.1	-0.1483 ug/L		-0.1483 ppb	20:41:19
2	As 188.979†	-19.8	6.3	2.9785 ug/L		2.9785 ppb	20:41:39
2	B 249.677†	-436.6	41.4	0.9768 ug/L		0.9768 ppb	20:41:39
2	Ba 233.527†	159.1	147.8	1.7557 ug/L		1.7557 ppb	20:41:39
2	Be 313.107†	-9492.0	24.6	0.0281 ug/L		0.0281 ppb	20:41:19
2	Cd 226.502†	-195.3	2.4	-0.0037 ug/L		-0.0037 ppb	20:41:39
2	Co 228.616†	-61.2	-0.2	-0.0290 ug/L		-0.0290 ppb	20:41:39
2	Cr 267.716†	73.9	-5.9	-0.0747 ug/L		-0.0747 ppb	20:41:39
2	Cu 324.752†	7782.7	-191.2	-0.6995 ug/L		-0.6995 ppb	20:41:19
2	Mn 257.610†	4479.3	3766.3	6.0666 ug/L		6.0666 ppb	20:41:19
2	Mo 202.031†	13.9	-1.3	-0.0884 ug/L		-0.0884 ppb	20:41:39
2	Ni 231.604†	86.3	-19.8	-0.6342 ug/L		-0.6342 ppb	20:41:39

2	P 214.914†	203.4	-3.4	-2.0254 ug/L	-2.0254 ppb	20:41:39
2	Pb 220.353†	14170.4	13444.1	2167.9 ug/L	2167.9 ppb	20:41:19
2	S 181.975 Axial†	47.9	2.7	3.5276 ug/L	3.5276 ppb	20:41:39
2	Sb 206.836†	57.6	24.3	9.8230 ug/L	9.8230 ppb	20:41:39
2	Se 196.026†	-19.6	1.3	1.6164 ug/L	1.6164 ppb	20:41:39
2	Si 251.611†	3477.5	2692.7	98.261 ug/L	98.261 ppb	20:41:39
2	Sn 189.927†	6.3	-2.1	-0.5137 ug/L	-0.5137 ppb	20:41:39
2	Ti 334.940†	2858.0	3998.3	8.0659 ug/L	8.0659 ppb	20:41:19
2	Tl 190.801†	-21.8	10.6	4.9809 ug/L	4.9809 ppb	20:41:39
2	U 409.014†	-2520.9	157.7	5.2393 ug/L	5.2393 ppb	20:41:19
2	V 292.402†	-1663.7	57.9	0.4064 ug/L	0.4064 ppb	20:41:19
2	Zn 213.857†	1326.7	541.8	5.9251 ug/L	5.9251 ppb	20:41:39
2	SiO2†	3552.8	2756.5	214.74 ug/L	214.74 ppb	20:42:15
3	Sc Radial	4962.4	4962.4	105 %		20:40:27
3	Y RADIAL	5275.6	5275.6	105.8 %		20:40:27
3	Al 396.153Radial†	41.9	126.8	118.63 ug/L	118.63 ppb	20:40:47
3	Ca 317.933Radial†	52.3	27.4	49.818 ug/L	49.818 ppb	20:40:47
3	Fe 238.204 Radial†	44.1	34.5	358.12 ug/L	358.12 ppb	20:40:47
3	K 766.490 Radial†	2351.5	-31.4	-6.2860 ug/L	-6.2860 ppb	20:40:27
3	Mg 279.077 IEC†	3.2	0.1	5.2146 ug/L	5.2146 ppb	20:40:47
3	Na 589.592 Radial†	-713.8	170.8	58.198 ug/L	58.198 ppb	20:40:27
3	Sr 421.552†	98.6	94.0	0.6833 ug/L	0.6833 ppb	20:40:27
3	Sc 361.383	821808.5	821808.5	107.01 %		20:41:45
3	Y 371.029	732710.1	732710.1	106.34 %		20:41:45
3	Ag 328.068†	200.9	-67.9	-0.2489 ug/L	-0.2489 ppb	20:41:45
3	As 188.979†	-22.5	3.9	1.9119 ug/L	1.9119 ppb	20:42:05
3	B 249.677†	-495.0	-9.1	-0.2869 ug/L	-0.2869 ppb	20:42:05
3	Ba 233.527†	154.0	141.5	1.6826 ug/L	1.6826 ppb	20:42:05
3	Be 313.107†	-9718.5	-98.8	-0.0205 ug/L	-0.0205 ppb	20:41:45
3	Cd 226.502†	-184.4	14.4	0.1690 ug/L	0.1690 ppb	20:42:05
3	Co 228.616†	-48.9	11.8	0.3345 ug/L	0.3345 ppb	20:42:05
3	Cr 267.716†	95.5	13.7	0.1886 ug/L	0.1886 ppb	20:42:05
3	Cu 324.752†	8002.0	-58.7	-0.2087 ug/L	-0.2087 ppb	20:41:45
3	Mn 257.610†	4504.4	3748.0	6.0344 ug/L	6.0344 ppb	20:41:45
3	Mo 202.031†	15.9	0.5	0.0732 ug/L	0.0732 ppb	20:42:05
3	Ni 231.604†	81.1	-25.6	-0.8174 ug/L	-0.8174 ppb	20:42:05
3	P 214.914†	216.3	6.8	3.5539 ug/L	3.5539 ppb	20:42:05
3	Pb 220.353†	14247.6	13384.4	2158.2 ug/L	2158.2 ppb	20:41:45
3	S 181.975 Axial†	36.7	-8.2	-10.677 ug/L	-10.677 ppb	20:42:05
3	Sb 206.836†	64.4	30.2	12.179 ug/L	12.179 ppb	20:42:05
3	Se 196.026†	-25.6	-4.1	-1.7025 ug/L	-1.7025 ppb	20:42:05
3	Si 251.611†	3476.9	2659.7	97.055 ug/L	97.055 ppb	20:42:05
3	Sn 189.927†	2.1	-6.1	-1.4453 ug/L	-1.4453 ppb	20:42:05
3	Ti 334.940†	3005.5	4109.5	8.2806 ug/L	8.2806 ppb	20:41:45
3	Tl 190.801†	-34.9	-1.4	-0.5392 ug/L	-0.5392 ppb	20:42:05
3	U 409.014†	-2255.3	429.4	14.336 ug/L	14.336 ppb	20:41:45
3	V 292.402†	-1652.0	84.3	0.6386 ug/L	0.6386 ppb	20:41:45
3	Zn 213.857†	1326.3	529.1	5.7869 ug/L	5.7869 ppb	20:42:05
3	SiO2†	3594.0	2761.9	215.16 ug/L	215.16 ppb	20:42:20

## Mean Data: 1202033900|949334|250

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	816237.6	106.29 %		0.629			0.59%
Sc Radial	4969.1	106 %		0.5			0.45%
Y 371.029	728773.8	105.77 %		0.497			0.47%
Y RADIAL	5271.7	105.7 %		0.07			0.06%
Ag 328.068†	-62.5	-0.2170 ug/L		0.05958	-0.2170 ppb	0.05958	27.45%
Al 396.153Radial†	132.1	123.53 ug/L		4.561	123.53 ppb	4.561	3.69%
As 188.979†	3.8	1.8702 ug/L		1.12982	1.8702 ppb	1.12982	60.41%
B 249.677†	18.3	0.3981 ug/L		0.63853	0.3981 ppb	0.63853	160.40%
Ba 233.527†	144.0	1.7116 ug/L		0.03881	1.7116 ppb	0.03881	2.27%
Be 313.107†	-24.8	0.0088 ug/L		0.02576	0.0088 ppb	0.02576	293.60%
Ca 317.933Radial†	29.0	52.763 ug/L		3.5346	52.763 ppb	3.5346	6.70%
Cd 226.502†	6.9	0.0625 ug/L		0.09309	0.0625 ppb	0.09309	148.85%
Co 228.616†	5.7	0.1507 ug/L		0.18176	0.1507 ppb	0.18176	120.61%
Cr 267.716†	-0.5	-0.0030 ug/L		0.16770	-0.0030 ppb	0.16770	>999.9%
Cu 324.752†	-121.6	-0.4427 ug/L		0.24616	-0.4427 ppb	0.24616	55.61%
Fe 238.204 Radial†	35.1	363.77 ug/L		4.894	363.77 ppb	4.894	1.35%
K 766.490 Radial†	35.1	6.9544 ug/L		12.16879	6.9544 ppb	12.16879	174.98%



Mg 279.077 IEC†	-0.9	-34.615 ug/L	34.9998	-34.615 ppb	34.9998	101.11%
Mn 257.610†	3754.0	6.0461 ug/L	0.01775	6.0461 ppb	0.01775	0.29%
Mo 202.031†	-1.9	-0.1449 ug/L	0.25122	-0.1449 ppb	0.25122	173.35%
Na 589.592 Radial†	170.9	58.259 ug/L	7.7876	58.259 ppb	7.7876	13.37%
Ni 231.604†	-18.6	-0.5955 ug/L	0.24364	-0.5955 ppb	0.24364	40.92%
P 214.914†	5.5	2.8665 ug/L	4.58695	2.8665 ppb	4.58695	160.02%
Pb 220.353†	13395.6	2160.1 ug/L	7.09	2160.1 ppb	7.09	0.33%
S 181.975 Axial†	-2.5	-3.2276 ug/L	7.12779	-3.2276 ppb	7.12779	220.84%
Sb 206.836†	24.7	9.9602 ug/L	2.15392	9.9602 ppb	2.15392	21.63%
Se 196.026†	-0.4	0.5891 ug/L	1.98811	0.5891 ppb	1.98811	337.47%
Si 251.611†	2671.0	97.470 ug/L	0.6849	97.470 ppb	0.6849	0.70%
Sn 189.927†	-4.3	-1.0347 ug/L	0.47552	-1.0347 ppb	0.47552	45.96%
Sr 421.552†	100.8	0.7325 ug/L	0.07162	0.7325 ppb	0.07162	9.78%
Ti 334.940†	4069.5	8.2048 ug/L	0.12051	8.2048 ppb	0.12051	1.47%
Tl 190.801†	3.9	1.8896 ug/L	2.81904	1.8896 ppb	2.81904	149.19%
U 409.014†	348.5	11.629 ug/L	5.5546	11.629 ppb	5.5546	47.77%
V 292.402†	77.5	0.5748 ug/L	0.14729	0.5748 ppb	0.14729	25.62%
Zn 213.857†	536.6	5.8678 ug/L	0.07211	5.8678 ppb	0.07211	1.23%
SiO2†	2779.9	216.57 ug/L	2.809	216.57 ppb	2.809	1.30%

Sequence No.: 22

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/1/2010 20:44:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4955.3	4955.3	105 %		20:46:23
1	Y RADIAL	5216.5	5216.5	104.6 %		20:46:23
1	Al 396.153Radial†	5530.9	5340.5	4971.5 ug/L	4971.5 ppb	20:46:23
1	Ca 317.933Radial†	2981.9	2810.1	5105.8 ug/L	5105.8 ppb	20:46:43
1	Fe 238.204 Radial†	530.0	496.1	5162.5 ug/L	5162.5 ppb	20:46:43
1	K 766.490 Radial†	28735.5	25031.7	4976.5 ug/L	4976.5 ppb	20:46:23
1	Mg 279.077 IEC†	142.5	132.4	5257.9 ug/L	5257.9 ppb	20:46:43
1	Na 589.592 Radial†	30146.9	29481.7	10047 ug/L	10047 ppb	20:46:23
1	Sr 421.552†	72753.2	69102.4	502.46 ug/L	502.46 ppb	20:46:23
1	Sc 361.383	818841.5	818841.5	106.63 %		20:47:40
1	Y 371.029	725332.2	725332.2	105.27 %		20:47:40
1	Ag 328.068†	102995.3	96337.0	498.42 ug/L	498.42 ppb	20:47:46
1	As 188.979†	1169.6	1121.9	504.32 ug/L	504.32 ppb	20:48:06
1	B 249.677†	20483.8	19663.9	490.13 ug/L	490.13 ppb	20:47:46
1	Ba 233.527†	45020.1	42219.0	499.43 ug/L	499.43 ppb	20:47:46
1	Be 313.107†	1315047.5	1242281.3	494.91 ug/L	494.91 ppb	20:47:40
1	Cd 226.502†	37426.5	35286.5	500.12 ug/L	500.12 ppb	20:47:46
1	Co 228.616†	17883.3	16829.1	508.68 ug/L	508.68 ppb	20:47:46
1	Cr 267.716†	38856.1	36365.0	497.41 ug/L	497.41 ppb	20:47:46
1	Cu 324.752†	149317.2	132498.8	496.13 ug/L	496.13 ppb	20:47:46
1	Mn 257.610†	331754.3	310670.0	497.56 ug/L	497.56 ppb	20:47:46
1	Mo 202.031†	5776.1	5402.6	496.27 ug/L	496.27 ppb	20:48:06
1	Ni 231.604†	16954.0	15798.7	504.73 ug/L	504.73 ppb	20:47:46
1	P 214.914†	4982.1	4477.1	2403.2 ug/L	2403.2 ppb	20:48:06
1	Pb 220.353†	3268.4	3135.9	507.49 ug/L	507.49 ppb	20:48:06
1	S 181.975 Axial†	868.6	772.1	1000.2 ug/L	1000.2 ppb	20:48:06
1	Sb 206.836†	1333.6	1220.7	513.02 ug/L	513.02 ppb	20:48:06
1	Se 196.026†	862.9	829.0	521.26 ug/L	521.26 ppb	20:48:06
1	Si 251.611†	73537.2	68376.6	2489.0 ug/L	2489.0 ppb	20:47:46
1	Sn 189.927†	2239.5	2092.2	493.31 ug/L	493.31 ppb	20:48:06
1	Ti 334.940†	260825.7	245912.7	495.37 ug/L	495.37 ppb	20:47:46
1	Tl 190.801†	1118.2	1079.9	499.23 ug/L	499.23 ppb	20:48:06
1	U 409.014†	13342.1	15049.5	502.24 ug/L	502.24 ppb	20:47:46
1	V 292.402†	64737.1	62340.8	503.06 ug/L	503.06 ppb	20:47:46
1	Zn 213.857†	48862.8	45115.0	492.89 ug/L	492.89 ppb	20:47:46
1	SiO2†	73818.2	68632.9	5333.1 ug/L	5333.1 ppb	20:49:13
2	Sc Radial	5017.5	5017.5	107 %		20:46:48
2	Y RADIAL	5219.2	5219.2	104.7 %		20:46:48
2	Al 396.153Radial†	5559.1	5301.8	4935.6 ug/L	4935.6 ppb	20:46:48
2	Ca 317.933Radial†	3010.9	2802.2	5091.5 ug/L	5091.5 ppb	20:47:08
2	Fe 238.204 Radial†	538.0	497.4	5175.3 ug/L	5175.3 ppb	20:47:08
2	K 766.490 Radial†	28842.7	24793.9	4929.2 ug/L	4929.2 ppb	20:46:48
2	Mg 279.077 IEC†	142.5	130.8	5192.3 ug/L	5192.3 ppb	20:47:08
2	Na 589.592 Radial†	30254.1	29227.3	9960.7 ug/L	9960.7 ppb	20:46:48
2	Sr 421.552†	72983.2	68461.6	497.80 ug/L	497.80 ppb	20:46:48
2	Sc 361.383	821062.7	821062.7	106.92 %		20:48:11
2	Y 371.029	726323.4	726323.4	105.41 %		20:48:11
2	Ag 328.068†	102390.9	95510.4	494.17 ug/L	494.17 ppb	20:48:16
2	As 188.979†	1152.4	1102.8	495.81 ug/L	495.81 ppb	20:48:37
2	B 249.677†	20439.9	19570.9	487.80 ug/L	487.80 ppb	20:48:16
2	Ba 233.527†	44946.5	42036.0	497.27 ug/L	497.27 ppb	20:48:16
2	Be 313.107†	1314649.6	1238572.8	493.43 ug/L	493.43 ppb	20:48:11
2	Cd 226.502†	37367.3	35136.2	497.99 ug/L	497.99 ppb	20:48:16
2	Co 228.616†	17843.2	16746.2	506.17 ug/L	506.17 ppb	20:48:16
2	Cr 267.716†	38716.6	36136.0	494.28 ug/L	494.28 ppb	20:48:16
2	Cu 324.752†	148595.4	131444.9	492.18 ug/L	492.18 ppb	20:48:16
2	Mn 257.610†	331036.1	309156.5	495.14 ug/L	495.14 ppb	20:48:16
2	Mo 202.031†	5719.9	5335.5	490.11 ug/L	490.11 ppb	20:48:37
2	Ni 231.604†	16931.5	15734.6	502.68 ug/L	502.68 ppb	20:48:16

2	P 214.914†	4918.2	4404.7	2363.5 ug/L	2363.5 ppb	20:48:37
2	Pb 220.353†	3250.0	3110.4	503.36 ug/L	503.36 ppb	20:48:37
2	S 181.975 Axial†	870.5	771.7	999.56 ug/L	999.56 ppb	20:48:37
2	Sb 206.836†	1329.4	1213.4	509.87 ug/L	509.87 ppb	20:48:37
2	Se 196.026†	847.0	812.0	510.86 ug/L	510.86 ppb	20:48:37
2	Si 251.611†	73320.7	67987.6	2474.9 ug/L	2474.9 ppb	20:48:16
2	Sn 189.927†	2229.0	2076.7	489.65 ug/L	489.65 ppb	20:48:37
2	Ti 334.940†	259779.9	244272.9	492.07 ug/L	492.07 ppb	20:48:16
2	Tl 190.801†	1108.4	1067.9	493.70 ug/L	493.70 ppb	20:48:37
2	U 409.014†	13394.0	15064.2	502.74 ug/L	502.74 ppb	20:48:16
2	V 292.402†	64573.2	62023.2	500.44 ug/L	500.44 ppb	20:48:16
2	Zn 213.857†	48729.1	44866.0	490.16 ug/L	490.16 ppb	20:48:16
2	SiO2†	74174.8	68779.2	5344.7 ug/L	5344.7 ppb	20:49:18
3	Sc Radial	4975.9	4975.9	106 %		20:47:13
3	Y RADIAL	5234.1	5234.1	105.0 %		20:47:13
3	Al 396.153Radial†	5545.5	5332.5	4964.2 ug/L	4964.2 ppb	20:47:13
3	Ca 317.933Radial†	3002.1	2817.5	5119.2 ug/L	5119.2 ppb	20:47:33
3	Fe 238.204 Radial†	533.6	497.4	5175.7 ug/L	5175.7 ppb	20:47:33
3	K 766.490 Radial†	28618.8	24808.6	4932.1 ug/L	4932.1 ppb	20:47:13
3	Mg 279.077 IEC†	141.3	130.8	5192.8 ug/L	5192.8 ppb	20:47:33
3	Na 589.592 Radial†	29982.9	29208.3	9954.2 ug/L	9954.2 ppb	20:47:13
3	Sr 421.552†	72795.7	68857.3	500.67 ug/L	500.67 ppb	20:47:13
3	Sc 361.383	822590.8	822590.8	107.12 %		20:48:42
3	Y 371.029	727105.4	727105.4	105.53 %		20:48:42
3	Ag 328.068†	103098.9	95993.5	496.66 ug/L	496.66 ppb	20:48:47
3	As 188.979†	1166.9	1114.4	500.99 ug/L	500.99 ppb	20:49:07
3	B 249.677†	20666.7	19747.1	492.21 ug/L	492.21 ppb	20:48:47
3	Ba 233.527†	45128.4	42127.7	498.35 ug/L	498.35 ppb	20:48:47
3	Be 313.107†	1314512.6	1236160.7	492.48 ug/L	492.48 ppb	20:48:42
3	Cd 226.502†	37523.2	35216.8	499.13 ug/L	499.13 ppb	20:48:47
3	Co 228.616†	17897.7	16766.1	506.77 ug/L	506.77 ppb	20:48:47
3	Cr 267.716†	39024.4	36356.1	497.29 ug/L	497.29 ppb	20:48:47
3	Cu 324.752†	149979.0	132478.5	496.05 ug/L	496.05 ppb	20:48:47
3	Mn 257.610†	333180.4	310583.2	497.43 ug/L	497.43 ppb	20:48:47
3	Mo 202.031†	5762.0	5364.8	492.80 ug/L	492.80 ppb	20:49:07
3	Ni 231.604†	17000.7	15769.8	503.81 ug/L	503.81 ppb	20:48:47
3	P 214.914†	4952.8	4428.4	2376.0 ug/L	2376.0 ppb	20:49:07
3	Pb 220.353†	3249.5	3104.3	502.38 ug/L	502.38 ppb	20:49:07
3	S 181.975 Axial†	860.6	760.9	985.61 ug/L	985.61 ppb	20:49:07
3	Sb 206.836†	1345.2	1225.8	514.97 ug/L	514.97 ppb	20:49:07
3	Se 196.026†	859.7	822.4	517.23 ug/L	517.23 ppb	20:49:07
3	Si 251.611†	73953.3	68450.7	2491.8 ug/L	2491.8 ppb	20:48:47
3	Sn 189.927†	2232.5	2076.1	489.52 ug/L	489.52 ppb	20:49:07
3	Ti 334.940†	262019.5	245912.3	495.38 ug/L	495.38 ppb	20:48:47
3	Tl 190.801†	1116.9	1073.9	496.50 ug/L	496.50 ppb	20:49:07
3	U 409.014†	13367.1	15015.8	501.12 ug/L	501.12 ppb	20:48:47
3	V 292.402†	64956.2	62268.6	502.43 ug/L	502.43 ppb	20:48:47
3	Zn 213.857†	49082.1	45110.8	492.85 ug/L	492.85 ppb	20:48:47
3	SiO2†	74158.0	68634.6	5333.3 ug/L	5333.3 ppb	20:49:23

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820831.7	106.89 %	0.246			0.23%
Sc Radial	4982.9	106 %	0.7			0.64%
Y 371.029	726253.7	105.40 %	0.129			0.12%
Y RADIAL	5223.3	104.8 %	0.19			0.18%
Ag 328.068†	95947.0	496.42 ug/L	2.139	496.42 ppb	2.139	0.43%
QC value within limits for Ag 328.068 Recovery = 99.28%						
Al 396.153Radial†	5324.9	4957.1 ug/L	18.96	4957.1 ppb	18.96	0.38%
QC value within limits for Al 396.153Radial Recovery = 99.14%						
As 188.979†	1113.0	500.37 ug/L	4.286	500.37 ppb	4.286	0.86%
QC value within limits for As 188.979 Recovery = 100.07%						
B 249.677†	19660.6	490.05 ug/L	2.206	490.05 ppb	2.206	0.45%
QC value within limits for B 249.677 Recovery = 98.01%						
Ba 233.527†	42127.6	498.35 ug/L	1.082	498.35 ppb	1.082	0.22%
QC value within limits for Ba 233.527 Recovery = 99.67%						
Be 313.107†	1239004.9	493.60 ug/L	1.226	493.60 ppb	1.226	0.25%
QC value within limits for Be 313.107 Recovery = 98.72%						
Ca 317.933Radial†	2809.9	5105.5 ug/L	13.85	5105.5 ppb	13.85	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 102.11%							
Cd 226.502†	35213.2	499.08 ug/L	1.068	499.08 ppb	1.068	0.21%	
QC value within limits for Cd 226.502 Recovery = 99.82%							
Co 228.616†	16780.4	507.20 ug/L	1.312	507.20 ppb	1.312	0.26%	
QC value within limits for Co 228.616 Recovery = 101.44%							
Cr 267.716†	36285.7	496.33 ug/L	1.775	496.33 ppb	1.775	0.36%	
QC value within limits for Cr 267.716 Recovery = 99.27%							
Cu 324.752†	132140.7	494.79 ug/L	2.257	494.79 ppb	2.257	0.46%	
QC value within limits for Cu 324.752 Recovery = 98.96%							
Fe 238.204 Radial†	497.0	5171.2 ug/L	7.54	5171.2 ppb	7.54	0.15%	
QC value within limits for Fe 238.204 Radial Recovery = 103.42%							
K 766.490 Radial†	24878.1	4945.9 ug/L	26.50	4945.9 ppb	26.50	0.54%	
QC value within limits for K 766.490 Radial Recovery = 98.92%							
Mg 279.077 IEC†	131.3	5214.4 ug/L	37.72	5214.4 ppb	37.72	0.72%	
QC value within limits for Mg 279.077 IEC Recovery = 104.29%							
Mn 257.610†	310136.5	496.71 ug/L	1.359	496.71 ppb	1.359	0.27%	
QC value within limits for Mn 257.610 Recovery = 99.34%							
Mo 202.031†	5367.6	493.06 ug/L	3.090	493.06 ppb	3.090	0.63%	
QC value within limits for Mo 202.031 Recovery = 98.61%							
Na 589.592 Radial†	29305.8	9987.4 ug/L	52.02	9987.4 ppb	52.02	0.52%	
QC value within limits for Na 589.592 Radial Recovery = 99.87%							
Ni 231.604†	15767.7	503.74 ug/L	1.025	503.74 ppb	1.025	0.20%	
QC value within limits for Ni 231.604 Recovery = 100.75%							
P 214.914†	4436.7	2380.9 ug/L	20.30	2380.9 ppb	20.30	0.85%	
QC value within limits for P 214.914 Recovery = 95.24%							
Pb 220.353†	3116.9	504.41 ug/L	2.713	504.41 ppb	2.713	0.54%	
QC value within limits for Pb 220.353 Recovery = 100.88%							
S 181.975 Axial†	768.2	995.12 ug/L	8.237	995.12 ppb	8.237	0.83%	
QC value within limits for S 181.975 Axial Recovery = 99.51%							
Sb 206.836†	1220.0	512.62 ug/L	2.573	512.62 ppb	2.573	0.50%	
QC value within limits for Sb 206.836 Recovery = 102.52%							
Se 196.026†	821.2	516.45 ug/L	5.245	516.45 ppb	5.245	1.02%	
QC value within limits for Se 196.026 Recovery = 103.29%							
Si 251.611†	68271.6	2485.2 ug/L	9.05	2485.2 ppb	9.05	0.36%	
QC value within limits for Si 251.611 Recovery = 99.41%							
Sn 189.927†	2081.6	490.83 ug/L	2.152	490.83 ppb	2.152	0.44%	
QC value within limits for Sn 189.927 Recovery = 98.17%							
Sr 421.552†	68807.1	500.31 ug/L	2.351	500.31 ppb	2.351	0.47%	
QC value within limits for Sr 421.552 Recovery = 100.06%							
Ti 334.940†	245366.0	494.27 ug/L	1.907	494.27 ppb	1.907	0.39%	
QC value within limits for Ti 334.940 Recovery = 98.85%							
Tl 190.801†	1073.9	496.48 ug/L	2.764	496.48 ppb	2.764	0.56%	
QC value within limits for Tl 190.801 Recovery = 99.30%							
U 409.014†	15043.2	502.03 ug/L	0.833	502.03 ppb	0.833	0.17%	
QC value within limits for U 409.014 Recovery = 100.41%							
V 292.402†	62210.9	501.98 ug/L	1.364	501.98 ppb	1.364	0.27%	
QC value within limits for V 292.402 Recovery = 100.40%							
Zn 213.857†	45030.6	491.97 ug/L	1.564	491.97 ppb	1.564	0.32%	
QC value within limits for Zn 213.857 Recovery = 98.39%							
SiO2†	68682.2	5337.0 ug/L	6.61	5337.0 ppb	6.61	0.12%	
QC value within limits for SiO2 Recovery = 99.80%							
All analyte(s) passed QC.							

Sequence No.: 23

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/1/2010 20:51:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5140.4	5140.4	109 %		20:53:25
1	Y RADIAL	5445.0	5445.0	109.2 %		20:53:25
1	Al 396.153Radial†	-92.6	2.3	2.2059 ug/L	2.2059 ppb	20:53:45
1	Ca 317.933Radial†	21.7	-2.2	-4.0799 ug/L	-4.0799 ppb	20:53:45
1	Fe 238.204 Radial†	7.5	-0.5	-4.7746 ug/L	-4.7746 ppb	20:53:45
1	K 766.490 Radial†	2105.5	-333.8	-66.474 ug/L	-66.474 ppb	20:53:25
1	Mg 279.077 IEC†	0.6	-2.3	-92.264 ug/L	-92.264 ppb	20:53:45
1	Na 589.592 Radial†	-738.6	171.6	58.466 ug/L	58.466 ppb	20:53:25
1	Sr 421.552†	21.5	20.2	0.1469 ug/L	0.1469 ppb	20:53:25
1	Sc 361.383	820422.2	820422.2	106.83 %		20:54:42
1	Y 371.029	739637.5	739637.5	107.34 %		20:54:42
1	Ag 328.068†	225.1	-45.0	-0.2376 ug/L	-0.2376 ppb	20:54:42
1	As 188.979†	-20.6	5.8	2.5671 ug/L	2.5671 ppb	20:55:02
1	B 249.677†	-303.2	169.7	4.2499 ug/L	4.2499 ppb	20:55:02
1	Ba 233.527†	-1.3	-3.6	-0.0416 ug/L	-0.0416 ppb	20:55:02
1	Be 313.107†	-9639.5	-40.2	-0.0155 ug/L	-0.0155 ppb	20:54:42
1	Cd 226.502†	-183.9	14.5	0.2072 ug/L	0.2072 ppb	20:55:02
1	Co 228.616†	-59.9	1.4	0.0395 ug/L	0.0395 ppb	20:55:02
1	Cr 267.716†	53.3	-25.7	-0.3540 ug/L	-0.3540 ppb	20:55:02
1	Cu 324.752†	7987.9	-59.2	-0.2266 ug/L	-0.2266 ppb	20:54:42
1	Mn 257.610†	431.7	-57.0	-0.0880 ug/L	-0.0880 ppb	20:55:02
1	Mo 202.031†	7.6	-7.3	-0.6667 ug/L	-0.6667 ppb	20:55:02
1	Ni 231.604†	98.1	-9.5	-0.3042 ug/L	-0.3042 ppb	20:55:02
1	P 214.914†	207.9	-0.8	-0.3938 ug/L	-0.3938 ppb	20:55:02
1	Pb 220.353†	-31.4	41.3	6.6597 ug/L	6.6597 ppb	20:55:02
1	S 181.975 Axial†	47.5	2.0	2.5349 ug/L	2.5349 ppb	20:55:02
1	Sb 206.836†	30.8	-1.2	-0.4889 ug/L	-0.4889 ppb	20:55:02
1	Se 196.026†	-20.9	0.2	0.1304 ug/L	0.1304 ppb	20:55:02
1	Si 251.611†	556.7	-68.1	-2.4772 ug/L	-2.4772 ppb	20:55:02
1	Sn 189.927†	6.4	-2.1	-0.4842 ug/L	-0.4842 ppb	20:55:02
1	Ti 334.940†	-1273.9	108.6	0.2223 ug/L	0.2223 ppb	20:54:42
1	Tl 190.801†	-30.6	2.5	1.1709 ug/L	1.1709 ppb	20:55:02
1	U 409.014†	-2442.8	250.3	8.3830 ug/L	8.3830 ppb	20:54:42
1	V 292.402†	-1673.5	61.5	0.4954 ug/L	0.4954 ppb	20:54:42
1	Zn 213.857†	759.5	0.6	0.0098 ug/L	0.0098 ppb	20:55:02
1	SiO2†	560.1	-72.2	-5.6068 ug/L	-5.6068 ppb	20:55:58
2	Sc Radial	5007.8	5007.8	106 %		20:53:50
2	Y RADIAL	5267.2	5267.2	105.7 %		20:53:50
2	Al 396.153Radial†	-90.3	2.3	2.1517 ug/L	2.1517 ppb	20:54:10
2	Ca 317.933Radial†	21.7	-1.8	-3.2381 ug/L	-3.2381 ppb	20:54:10
2	Fe 238.204 Radial†	6.7	-1.0	-10.709 ug/L	-10.709 ppb	20:54:10
2	K 766.490 Radial†	2297.3	-102.4	-20.408 ug/L	-20.408 ppb	20:53:50
2	Mg 279.077 IEC†	0.5	-2.4	-94.770 ug/L	-94.770 ppb	20:54:10
2	Na 589.592 Radial†	-739.9	152.4	51.948 ug/L	51.948 ppb	20:53:50
2	Sr 421.552†	42.0	40.0	0.2906 ug/L	0.2906 ppb	20:53:50
2	Sc 361.383	813000.7	813000.7	105.87 %		20:55:07
2	Y 371.029	731605.8	731605.8	106.18 %		20:55:07
2	Ag 328.068†	205.6	-61.5	-0.3269 ug/L	-0.3269 ppb	20:55:07
2	As 188.979†	-24.6	1.7	0.7798 ug/L	0.7798 ppb	20:55:27
2	B 249.677†	-301.1	169.0	4.2355 ug/L	4.2355 ppb	20:55:27
2	Ba 233.527†	-1.8	-4.1	-0.0466 ug/L	-0.0466 ppb	20:55:27
2	Be 313.107†	-9573.6	-60.3	-0.0234 ug/L	-0.0234 ppb	20:55:07
2	Cd 226.502†	-195.0	2.5	0.0378 ug/L	0.0378 ppb	20:55:27
2	Co 228.616†	-69.2	-7.9	-0.2386 ug/L	-0.2386 ppb	20:55:27
2	Cr 267.716†	67.1	-12.2	-0.1712 ug/L	-0.1712 ppb	20:55:27
2	Cu 324.752†	7909.0	-65.5	-0.2531 ug/L	-0.2531 ppb	20:55:07
2	Mn 257.610†	454.3	-32.0	-0.0484 ug/L	-0.0484 ppb	20:55:27
2	Mo 202.031†	13.8	-1.4	-0.1268 ug/L	-0.1268 ppb	20:55:27
2	Ni 231.604†	71.5	-33.8	-1.0796 ug/L	-1.0796 ppb	20:55:27

2	P 214.914†	215.1	7.8	4.4102 ug/L	4.4102 ppb	20:55:27
2	Pb 220.353†	-37.1	35.7	5.7555 ug/L	5.7555 ppb	20:55:27
2	S 181.975 Axial†	40.9	-3.9	-5.0770 ug/L	-5.0770 ppb	20:55:27
2	Sb 206.836†	39.6	7.3	2.9549 ug/L	2.9549 ppb	20:55:27
2	Se 196.026†	-19.2	1.7	1.0251 ug/L	1.0251 ppb	20:55:27
2	Si 251.611†	583.7	-37.9	-1.3811 ug/L	-1.3811 ppb	20:55:27
2	Sn 189.927†	3.4	-4.9	-1.1479 ug/L	-1.1479 ppb	20:55:27
2	Ti 334.940†	-1239.5	130.3	0.2642 ug/L	0.2642 ppb	20:55:07
2	Tl 190.801†	-46.8	-13.0	-5.9678 ug/L	-5.9678 ppb	20:55:27
2	U 409.014†	-2280.3	382.9	12.824 ug/L	12.824 ppb	20:55:07
2	V 292.402†	-1630.2	88.1	0.7242 ug/L	0.7242 ppb	20:55:07
2	Zn 213.857†	752.7	0.6	0.0160 ug/L	0.0160 ppb	20:55:27
2	SiO2†	606.2	-23.9	-1.8558 ug/L	-1.8558 ppb	20:56:03
3	Sc Radial	5000.7	5000.7	106 %		20:54:15
3	Y RADIAL	5303.6	5303.6	106.4 %		20:54:15
3	Al 396.153Radial†	-93.6	-0.9	-0.8691 ug/L	-0.8691 ppb	20:54:35
3	Ca 317.933Radial†	19.1	-4.2	-7.6059 ug/L	-7.6059 ppb	20:54:35
3	Fe 238.204 Radial†	4.8	-2.8	-28.726 ug/L	-28.726 ppb	20:54:35
3	K 766.490 Radial†	2343.6	-55.9	-11.133 ug/L	-11.133 ppb	20:54:15
3	Mg 279.077 IEC†	3.5	0.4	17.486 ug/L	17.486 ppb	20:54:35
3	Na 589.592 Radial†	-794.3	100.2	34.151 ug/L	34.151 ppb	20:54:15
3	Sr 421.552†	7.0	7.1	0.0518 ug/L	0.0518 ppb	20:54:15
3	Sc 361.383	813556.3	813556.3	105.94 %		20:55:33
3	Y 371.029	731926.4	731926.4	106.22 %		20:55:33
3	Ag 328.068†	204.7	-62.4	-0.3418 ug/L	-0.3418 ppb	20:55:33
3	As 188.979†	-30.8	-4.1	-1.8159 ug/L	-1.8159 ppb	20:55:53
3	B 249.677†	-325.5	146.2	3.6648 ug/L	3.6648 ppb	20:55:53
3	Ba 233.527†	-0.1	-2.5	-0.0303 ug/L	-0.0303 ppb	20:55:53
3	Be 313.107†	-9502.0	13.5	0.0059 ug/L	0.0059 ppb	20:55:33
3	Cd 226.502†	-194.0	3.5	0.0557 ug/L	0.0557 ppb	20:55:53
3	Co 228.616†	-41.2	18.6	0.5610 ug/L	0.5610 ppb	20:55:53
3	Cr 267.716†	61.8	-17.2	-0.2420 ug/L	-0.2420 ppb	20:55:53
3	Cu 324.752†	7928.3	-52.4	-0.2063 ug/L	-0.2063 ppb	20:55:33
3	Mn 257.610†	443.8	-42.2	-0.0711 ug/L	-0.0711 ppb	20:55:53
3	Mo 202.031†	13.9	-1.3	-0.1193 ug/L	-0.1193 ppb	20:55:53
3	Ni 231.604†	96.7	-10.1	-0.3220 ug/L	-0.3220 ppb	20:55:53
3	P 214.914†	212.7	5.4	3.0981 ug/L	3.0981 ppb	20:55:53
3	Pb 220.353†	-35.8	36.9	5.9573 ug/L	5.9573 ppb	20:55:53
3	S 181.975 Axial†	48.1	2.9	3.7984 ug/L	3.7984 ppb	20:55:53
3	Sb 206.836†	40.1	7.8	3.1815 ug/L	3.1815 ppb	20:55:53
3	Se 196.026†	-19.4	1.5	0.8751 ug/L	0.8751 ppb	20:55:53
3	Si 251.611†	570.7	-50.5	-1.8414 ug/L	-1.8414 ppb	20:55:53
3	Sn 189.927†	15.3	6.4	1.5067 ug/L	1.5067 ppb	20:55:53
3	Ti 334.940†	-1245.6	125.3	0.2431 ug/L	0.2431 ppb	20:55:33
3	Tl 190.801†	-35.3	-2.1	-0.9590 ug/L	-0.9590 ppb	20:55:53
3	U 409.014†	-2189.9	469.7	15.732 ug/L	15.732 ppb	20:55:33
3	V 292.402†	-1700.6	22.7	0.2137 ug/L	0.2137 ppb	20:55:33
3	Zn 213.857†	747.8	-4.5	-0.0426 ug/L	-0.0426 ppb	20:55:53
3	SiO2†	603.4	-26.9	-2.0909 ug/L	-2.0909 ppb	20:56:08

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	815659.8	106.21 %		0.538			0.51%
Sc Radial	5049.6	107 %		1.7			1.56%
Y 371.029	734389.9	106.58 %		0.660			0.62%
Y RADIAL	5338.6	107.1 %		1.88			1.76%
Ag 328.068†	-56.3	-0.3021 ug/L		0.05632	-0.3021 ppb	0.05632	18.64%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	1.2	1.1628 ug/L		1.75994	1.1628 ppb	1.75994	151.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.1	0.5103 ug/L		2.20388	0.5103 ppb	2.20388	431.84%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	161.7	4.0501 ug/L		0.33376	4.0501 ppb	0.33376	8.24%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-3.4	-0.0395 ug/L		0.00833	-0.0395 ppb	0.00833	21.09%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-29.0	-0.0110 ug/L		0.01516	-0.0110 ppb	0.01516	138.11%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.7	-4.9746 ug/L		2.31729	-4.9746 ppb	2.31729	46.58%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	6.8	0.1003 ug/L	0.09306	0.1003 ppb	0.09306	92.83%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	4.0	0.1207 ug/L	0.40591	0.1207 ppb	0.40591	336.43%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-18.4	-0.2557 ug/L	0.09215	-0.2557 ppb	0.09215	36.03%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-59.0	-0.2287 ug/L	0.02345	-0.2287 ppb	0.02345	10.26%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-1.4	-14.736 ug/L	12.4732	-14.736 ppb	12.4732	84.64%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-164.0	-32.672 ug/L	29.6384	-32.672 ppb	29.6384	90.72%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-1.4	-56.516 ug/L	64.1002	-56.516 ppb	64.1002	113.42%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-43.7	-0.0692 ug/L	0.01985	-0.0692 ppb	0.01985	28.69%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	-3.3	-0.3043 ug/L	0.31392	-0.3043 ppb	0.31392	103.18%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	141.4	48.188 ug/L	12.5863	48.188 ppb	12.5863	26.12%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-17.8	-0.5686 ug/L	0.44261	-0.5686 ppb	0.44261	77.84%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	4.1	2.3715 ug/L	2.48302	2.3715 ppb	2.48302	104.70%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	38.0	6.1242 ug/L	0.47463	6.1242 ppb	0.47463	7.75%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	0.3	0.4188 ug/L	4.80124	0.4188 ppb	4.80124	>999.9%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	4.7	1.8825 ug/L	2.05683	1.8825 ppb	2.05683	109.26%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	1.2	0.6769 ug/L	0.47914	0.6769 ppb	0.47914	70.79%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-52.2	-1.8999 ug/L	0.55039	-1.8999 ppb	0.55039	28.97%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	-0.2	-0.0418 ug/L	1.38151	-0.0418 ppb	1.38151	>999.9%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	22.4	0.1631 ug/L	0.12023	0.1631 ppb	0.12023	73.72%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	121.4	0.2432 ug/L	0.02094	0.2432 ppb	0.02094	8.61%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-4.2	-1.9186 ug/L	3.66480	-1.9186 ppb	3.66480	191.01%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	367.6	12.313 ug/L	3.7011	12.313 ppb	3.7011	30.06%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	57.5	0.4778 ug/L	0.25572	0.4778 ppb	0.25572	53.52%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-1.1	-0.0056 ug/L	0.03214	-0.0056 ppb	0.03214	573.14%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-41.0	-3.1845 ug/L	2.10106	-3.1845 ppb	2.10106	65.98%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 24

Sample ID: 246055002|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 3/1/2010 20:58:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055002|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5124.0	5124.0	109 %		21:00:31
1	Y RADIAL	5977.6	5977.6	119.9 %		21:00:31
1	Al 396.153Radial†	167302.5	153763.5	143830 ug/L	143830 ppb	21:00:11
1	Ca 317.933Radial†	14720.3	13499.2	24527 ug/L	24527 ppb	21:00:11
1	Fe 238.204 Radial†	13812.0	12679.8	131550 ug/L	131550 ppb	21:00:11
1	K 766.490 Radial†	94910.6	84918.8	16895 ug/L	16895 ppb	21:00:11
1	Mg 279.077 IEC†	539.2	492.4	19412 ug/L	19412 ppb	21:00:31
1	Na 589.592 Radial†	1565.4	2285.7	778.98 ug/L	778.98 ppb	21:00:11
1	Sr 421.552†	37820.0	34740.2	252.44 ug/L	252.44 ppb	21:00:11
1	Sc 361.383	860515.6	860515.6	112.06 %		21:01:29
1	Y 371.029	844030.6	844030.6	122.49 %		21:01:29
1	Ag 328.068†	-7329.2	-6796.4	6.3807 ug/L	6.3807 ppb	21:01:49
1	As 188.979†	-16.7	10.1	82.064 ug/L	82.064 ppb	21:01:49
1	B 249.677†	1145.8	1476.0	15.419 ug/L	15.419 ppb	21:01:29
1	Ba 233.527†	156637.9	139783.9	1654.0 ug/L	1654.0 ppb	21:01:29
1	Be 313.107†	-16643.8	-5870.6	9.9157 ug/L	9.9157 ppb	21:01:29
1	Cd 226.502†	1049.2	1122.9	2.3697 ug/L	2.3697 ppb	21:01:49
1	Co 228.616†	2260.6	2074.8	50.212 ug/L	50.212 ppb	21:01:49
1	Cr 267.716†	12767.9	11318.7	157.60 ug/L	157.60 ppb	21:01:49
1	Cu 324.752†	29220.4	18540.7	76.466 ug/L	76.466 ppb	21:01:29
1	Mn 257.610†	1875132.1	1672939.1	2690.0 ug/L	2690.0 ppb	21:01:29
1	Mo 202.031†	-69.7	-76.6	3.4735 ug/L	3.4735 ppb	21:01:49
1	Ni 231.604†	3785.3	3276.8	104.71 ug/L	104.71 ppb	21:01:49
1	P 214.914†	1653.0	1279.8	630.63 ug/L	630.63 ppb	21:01:49
1	Pb 220.353†	11993.4	10773.9	1762.1 ug/L	1762.1 ppb	21:01:49
1	S 181.975 Axial†	653.2	540.5	673.77 ug/L	673.77 ppb	21:01:49
1	Sb 206.836†	114.8	72.4	6.7249 ug/L	6.7249 ppb	21:01:49
1	Se 196.026†	-539.6	-461.8	25.411 ug/L	25.411 ppb	21:01:49
1	Si 251.611†	1272183.1	1134729.0	41407 ug/L	41407 ppb	21:01:29
1	Sn 189.927†	-53.2	-55.5	-16.270 ug/L	-16.270 ppb	21:01:49
1	Ti 334.940†	2998973.5	2677636.7	5397.2 ug/L	5397.2 ppb	21:01:29
1	Tl 190.801†	-183.4	-132.4	-4.0280 ug/L	-4.0280 ppb	21:01:49
1	U 409.014†	-7595.4	-4241.5	-157.37 ug/L	-157.37 ppb	21:01:29
1	V 292.402†	36659.0	34343.1	248.56 ug/L	248.56 ppb	21:01:29
1	Zn 213.857†	26299.2	22759.6	230.56 ug/L	230.56 ppb	21:01:49
1	SiO2†	1248628.7	1113701.3	86759 ug/L	86759 ppb	21:02:49
2	Sc Radial	5079.7	5079.7	108 %		21:00:56
2	Y RADIAL	5945.4	5945.4	119.3 %		21:00:56
2	Al 396.153Radial†	167545.1	155327.5	145300 ug/L	145300 ppb	21:00:36
2	Ca 317.933Radial†	14784.7	13676.7	24850 ug/L	24850 ppb	21:00:36
2	Fe 238.204 Radial†	13781.8	12762.4	132410 ug/L	132410 ppb	21:00:36
2	K 766.490 Radial†	94833.2	85606.9	17032 ug/L	17032 ppb	21:00:36
2	Mg 279.077 IEC†	540.7	498.1	19637 ug/L	19637 ppb	21:00:56
2	Na 589.592 Radial†	1557.1	2290.5	780.60 ug/L	780.60 ppb	21:00:36
2	Sr 421.552†	37745.3	34973.8	254.13 ug/L	254.13 ppb	21:00:36
2	Sc 361.383	869173.6	869173.6	113.18 %		21:01:56
2	Y 371.029	851747.6	851747.6	123.61 %		21:01:56
2	Ag 328.068†	-7420.9	-6812.2	6.5475 ug/L	6.5475 ppb	21:02:16
2	As 188.979†	-37.1	-7.8	74.053 ug/L	74.053 ppb	21:02:16
2	B 249.677†	1207.1	1519.9	16.378 ug/L	16.378 ppb	21:01:56
2	Ba 233.527†	157308.9	138984.3	1644.6 ug/L	1644.6 ppb	21:01:56
2	Be 313.107†	-16562.5	-5650.8	9.9379 ug/L	9.9379 ppb	21:01:56
2	Cd 226.502†	1054.4	1118.2	2.2147 ug/L	2.2147 ppb	21:02:16
2	Co 228.616†	2308.1	2096.7	50.916 ug/L	50.916 ppb	21:02:16
2	Cr 267.716†	12917.6	11337.4	157.87 ug/L	157.87 ppb	21:02:16
2	Cu 324.752†	29276.8	18330.7	75.722 ug/L	75.722 ppb	21:01:56
2	Mn 257.610†	1882854.1	1663092.6	2674.3 ug/L	2674.3 ppb	21:01:56
2	Mo 202.031†	-77.5	-82.8	2.9750 ug/L	2.9750 ppb	21:02:16
2	Ni 231.604†	3815.2	3269.5	104.48 ug/L	104.48 ppb	21:02:16



2	P 214.914†	1674.7	1284.3	632.96 ug/L	632.96 ppb	21:02:16
2	Pb 220.353†	12087.3	10750.2	1758.5 ug/L	1758.5 ppb	21:02:16
2	S 181.975 Axial†	653.0	534.5	665.74 ug/L	665.74 ppb	21:02:16
2	Sb 206.836†	118.8	74.9	7.7561 ug/L	7.7561 ppb	21:02:16
2	Se 196.026†	-555.6	-471.1	21.745 ug/L	21.745 ppb	21:02:16
2	Si 251.611†	1278621.7	1129108.5	41202 ug/L	41202 ppb	21:01:56
2	Sn 189.927†	-58.8	-60.1	-17.330 ug/L	-17.330 ppb	21:02:16
2	Ti 334.940†	3013032.0	2663398.3	5368.5 ug/L	5368.5 ppb	21:01:56
2	Tl 190.801†	-178.7	-126.7	-1.7057 ug/L	-1.7057 ppb	21:02:16
2	U 409.014†	-7488.7	-4079.7	-152.05 ug/L	-152.05 ppb	21:01:56
2	V 292.402†	36810.6	34151.1	246.94 ug/L	246.94 ppb	21:01:56
2	Zn 213.857†	26565.1	22760.7	230.44 ug/L	230.44 ppb	21:02:16
2	SiO2†	1276989.2	1127658.9	87847 ug/L	87847 ppb	21:02:55
3	Sc Radial	5352.7	5352.7	114 %		21:01:21
3	Y RADIAL	6210.6	6210.6	124.6 %		21:01:21
3	Al 396.153Radial†	166292.8	146309.4	136860 ug/L	136860 ppb	21:01:01
3	Ca 317.933Radial†	14704.0	12907.2	23452 ug/L	23452 ppb	21:01:01
3	Fe 238.204 Radial†	13688.1	12028.7	124800 ug/L	124800 ppb	21:01:01
3	K 766.490 Radial†	94501.4	80834.0	16082 ug/L	16082 ppb	21:01:01
3	Mg 279.077 IEC†	531.4	464.4	18309 ug/L	18309 ppb	21:01:21
3	Na 589.592 Radial†	1458.6	2130.3	726.02 ug/L	726.02 ppb	21:01:01
3	Sr 421.552†	37436.0	32918.2	239.20 ug/L	239.20 ppb	21:01:01
3	Sc 361.383	836014.2	836014.2	108.86 %		21:02:23
3	Y 371.029	823327.5	823327.5	119.49 %		21:02:23
3	Ag 328.068†	-7279.5	-6942.4	3.5993 ug/L	3.5993 ppb	21:02:43
3	As 188.979†	-13.3	12.8	83.056 ug/L	83.056 ppb	21:02:43
3	B 249.677†	1136.4	1497.3	17.045 ug/L	17.045 ppb	21:02:23
3	Ba 233.527†	156292.1	143563.1	1698.4 ug/L	1698.4 ppb	21:02:23
3	Be 313.107†	-16674.8	-6334.3	10.089 ug/L	10.089 ppb	21:02:23
3	Cd 226.502†	1039.4	1141.4	3.3304 ug/L	3.3304 ppb	21:02:43
3	Co 228.616†	2265.0	2138.0	51.912 ug/L	51.912 ppb	21:02:43
3	Cr 267.716†	12811.0	11692.2	162.58 ug/L	162.58 ppb	21:02:43
3	Cu 324.752†	29118.9	19211.7	78.623 ug/L	78.623 ppb	21:02:23
3	Mn 257.610†	1869702.7	1716994.8	2759.9 ug/L	2759.9 ppb	21:02:23
3	Mo 202.031†	-55.6	-65.4	3.9609 ug/L	3.9609 ppb	21:02:43
3	Ni 231.604†	3777.3	3368.4	107.64 ug/L	107.64 ppb	21:02:43
3	P 214.914†	1657.5	1327.1	660.27 ug/L	660.27 ppb	21:02:43
3	Pb 220.353†	11920.3	11020.3	1800.6 ug/L	1800.6 ppb	21:02:43
3	S 181.975 Axial†	648.6	553.2	691.66 ug/L	691.66 ppb	21:02:43
3	Sb 206.836†	118.0	78.3	8.8725 ug/L	8.8725 ppb	21:02:43
3	Se 196.026†	-539.3	-475.6	1.1656 ug/L	1.1656 ppb	21:02:43
3	Si 251.611†	1270643.0	1166587.5	42570 ug/L	42570 ppb	21:02:23
3	Sn 189.927†	-61.8	-64.9	-18.276 ug/L	-18.276 ppb	21:02:43
3	Ti 334.940†	2998607.9	2755737.4	5554.5 ug/L	5554.5 ppb	21:02:23
3	Tl 190.801†	-181.2	-135.3	-3.7171 ug/L	-3.7171 ppb	21:02:43
3	U 409.014†	-7486.8	-4340.4	-159.93 ug/L	-159.93 ppb	21:02:23
3	V 292.402†	36580.5	35229.8	256.42 ug/L	256.42 ppb	21:02:23
3	Zn 213.857†	26241.4	23394.4	238.55 ug/L	238.55 ppb	21:02:43
3	SiO2†	1276717.3	1172159.9	91313 ug/L	91313 ppb	21:03:01

Mean Data: 246055002|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	855234.4	111.37 %		2.240				2.01%
Sc Radial	5185.4	110 %		3.1				2.83%
Y 371.029	839701.9	121.87 %		2.133				1.75%
Y RADIAL	6044.5	121.2 %		2.90				2.39%
Ag 328.068†	-6850.3	5.5092 ug/L		1.65612	5.5092 ppb		1.65612	30.06%
Al 396.153Radial†	151800.1	142000 ug/L		4507.8	142000 ppb		4507.8	3.17%
As 188.979†	5.0	79.724 ug/L		4.9368	79.724 ppb		4.9368	6.19%
B 249.677†	1497.8	16.280 ug/L		0.8172	16.280 ppb		0.8172	5.02%
Ba 233.527†	140777.1	1665.7 ug/L		28.74	1665.7 ppb		28.74	1.73%
Be 313.107†	-5951.9	9.9808 ug/L		0.09409	9.9808 ppb		0.09409	0.94%
Ca 317.933Radial†	13361.1	24276 ug/L		732.1	24276 ppb		732.1	3.02%
Cd 226.502†	1127.5	2.6383 ug/L		0.60439	2.6383 ppb		0.60439	22.91%
Co 228.616†	2103.2	51.013 ug/L		0.8543	51.013 ppb		0.8543	1.67%
Cr 267.716†	11449.4	159.35 ug/L		2.804	159.35 ppb		2.804	1.76%
Cu 324.752†	18694.3	76.937 ug/L		1.5067	76.937 ppb		1.5067	1.96%
Fe 238.204 Radial†	12490.3	129590 ug/L		4169.1	129590 ppb		4169.1	3.22%
K 766.490 Radial†	83786.6	16669 ug/L		513.4	16669 ppb		513.4	3.08%

Mg 279.077 IEC†	485.0	19119 ug/L	710.9	19119 ppb	710.9	3.72%
Mn 257.610†	1684342.2	2708.0 ug/L	45.56	2708.0 ppb	45.56	1.68%
Mo 202.031†	-75.0	3.4698 ug/L	0.49296	3.4698 ppb	0.49296	14.21%
Na 589.592 Radial†	2235.5	761.87 ug/L	31.055	761.87 ppb	31.055	4.08%
Ni 231.604†	3304.9	105.61 ug/L	1.761	105.61 ppb	1.761	1.67%
P 214.914†	1297.1	641.29 ug/L	16.479	641.29 ppb	16.479	2.57%
Pb 220.353†	10848.1	1773.7 ug/L	23.35	1773.7 ppb	23.35	1.32%
S 181.975 Axial†	542.7	677.05 ug/L	13.268	677.05 ppb	13.268	1.96%
Sb 206.836†	75.2	7.7845 ug/L	1.07409	7.7845 ppb	1.07409	13.80%
Se 196.026†	-469.5	16.107 ug/L	13.0690	16.107 ppb	13.0690	81.14%
Si 251.611†	1143475.0	41726 ug/L	737.6	41726 ppb	737.6	1.77%
Sn 189.927†	-60.2	-17.292 ug/L	1.0037	-17.292 ppb	1.0037	5.80%
Sr 421.552†	34210.7	248.59 ug/L	8.179	248.59 ppb	8.179	3.29%
Ti 334.940†	2698924.1	5440.1 ug/L	100.14	5440.1 ppb	100.14	1.84%
Tl 190.801†	-131.5	-3.1503 ug/L	1.26065	-3.1503 ppb	1.26065	40.02%
U 409.014†	-4220.5	-156.45 ug/L	4.017	-156.45 ppb	4.017	2.57%
V 292.402†	34574.7	250.64 ug/L	5.071	250.64 ppb	5.071	2.02%
Zn 213.857†	22971.5	233.18 ug/L	4.646	233.18 ppb	4.646	1.99%
SiO2†	1137840.0	88640 ug/L	2378.3	88640 ppb	2378.3	2.68%

Sequence No.: 25

Sample ID: 246055003|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 3/1/2010 21:05:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055003|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5157.9	5157.9	110 %		21:07:25
1	Y RADIAL	6102.0	6102.0	122.4 %		21:07:25
1	Al 396.153Radial†	178707.3	163159.0	152620 ug/L	152620 ppb	21:07:05
1	Ca 317.933Radial†	13413.3	12217.6	22199 ug/L	22199 ppb	21:07:05
1	Fe 238.204 Radial†	16612.0	15151.3	157200 ug/L	157200 ppb	21:07:05
1	K 766.490 Radial†	114684.0	102388.4	20369 ug/L	20369 ppb	21:07:05
1	Mg 279.077 IEC†	695.7	632.0	24928 ug/L	24928 ppb	21:07:25
1	Na 589.592 Radial†	31436.8	29534.1	10065 ug/L	10065 ppb	21:07:05
1	Sr 421.552†	44328.0	40450.2	293.98 ug/L	293.98 ppb	21:07:05
1	Sc 361.383	856373.3	856373.3	111.52 %		21:08:24
1	Y 371.029	855911.6	855911.6	124.22 %		21:08:24
1	Ag 328.068†	-9459.0	-8737.9	4.5545 ug/L	4.5545 ppb	21:08:24
1	As 188.979†	-37.9	-9.0	80.225 ug/L	80.225 ppb	21:08:44
1	B 249.677†	1578.6	1869.1	21.049 ug/L	21.049 ppb	21:08:24
1	Ba 233.527†	164868.2	147840.5	1750.0 ug/L	1750.0 ppb	21:08:24
1	Be 313.107†	-13359.4	-2997.1	11.224 ug/L	11.224 ppb	21:08:24
1	Cd 226.502†	1188.4	1252.3	1.5423 ug/L	1.5423 ppb	21:08:44
1	Co 228.616†	2882.7	2642.5	66.896 ug/L	66.896 ppb	21:08:44
1	Cr 267.716†	11238.5	10002.3	140.20 ug/L	140.20 ppb	21:08:44
1	Cu 324.752†	31942.5	21107.8	87.468 ug/L	87.468 ppb	21:08:24
1	Mn 257.610†	2449744.5	2196307.9	3530.0 ug/L	3530.0 ppb	21:08:24
1	Mo 202.031†	-82.7	-88.5	4.3411 ug/L	4.3411 ppb	21:08:44
1	Ni 231.604†	3710.5	3226.0	103.08 ug/L	103.08 ppb	21:08:44
1	P 214.914†	1845.9	1459.9	710.85 ug/L	710.85 ppb	21:08:44
1	Pb 220.353†	5865.5	5330.5	884.35 ug/L	884.35 ppb	21:08:44
1	S 181.975 Axial†	762.2	641.0	802.50 ug/L	802.50 ppb	21:08:44
1	Sb 206.836†	76.1	38.2	-7.8453 ug/L	-7.8453 ppb	21:08:44
1	Se 196.026†	-663.4	-575.0	14.268 ug/L	14.268 ppb	21:08:44
1	Si 251.611†	1271237.1	1139372.2	41577 ug/L	41577 ppb	21:08:24
1	Sn 189.927†	-63.8	-65.3	-20.460 ug/L	-20.460 ppb	21:08:44
1	Ti 334.940†	3024986.6	2713909.2	5469.5 ug/L	5469.5 ppb	21:08:24
1	Tl 190.801†	-190.0	-139.2	-2.6944 ug/L	-2.6944 ppb	21:08:44
1	U 409.014†	-9519.5	-5999.6	-219.13 ug/L	-219.13 ppb	21:08:24
1	V 292.402†	43235.2	40398.5	292.96 ug/L	292.96 ppb	21:08:24
1	Zn 213.857†	39274.4	34508.4	356.29 ug/L	356.29 ppb	21:08:24
1	SiO2†	1247963.7	1118494.9	87133 ug/L	87133 ppb	21:09:45
2	Sc Radial	5206.2	5206.2	111 %		21:07:51
2	Y RADIAL	6180.5	6180.5	124.0 %		21:07:51
2	Al 396.153Radial†	176955.7	160063.0	149730 ug/L	149730 ppb	21:07:30
2	Ca 317.933Radial†	13414.6	12105.2	21994 ug/L	21994 ppb	21:07:30
2	Fe 238.204 Radial†	16435.6	14851.2	154080 ug/L	154080 ppb	21:07:30
2	K 766.490 Radial†	113525.1	100370.2	19968 ug/L	19968 ppb	21:07:30
2	Mg 279.077 IEC†	694.8	625.2	24664 ug/L	24664 ppb	21:07:51
2	Na 589.592 Radial†	30799.9	28692.3	9778.3 ug/L	9778.3 ppb	21:07:30
2	Sr 421.552†	43444.8	39276.6	285.45 ug/L	285.45 ppb	21:07:30
2	Sc 361.383	852250.8	852250.8	110.98 %		21:08:51
2	Y 371.029	851251.1	851251.1	123.54 %		21:08:51
2	Ag 328.068†	-9392.2	-8718.7	3.6907 ug/L	3.6907 ppb	21:08:51
2	As 188.979†	-36.9	-8.2	79.731 ug/L	79.731 ppb	21:09:11
2	B 249.677†	1703.2	1988.1	24.536 ug/L	24.536 ppb	21:08:51
2	Ba 233.527†	163816.1	147607.7	1747.1 ug/L	1747.1 ppb	21:08:51
2	Be 313.107†	-13119.7	-2839.2	11.264 ug/L	11.264 ppb	21:08:51
2	Cd 226.502†	1196.6	1264.9	2.0430 ug/L	2.0430 ppb	21:09:11
2	Co 228.616†	2877.5	2650.3	67.198 ug/L	67.198 ppb	21:09:11
2	Cr 267.716†	11157.9	9978.4	139.81 ug/L	139.81 ppb	21:09:11
2	Cu 324.752†	31612.4	20948.9	86.706 ug/L	86.706 ppb	21:08:51
2	Mn 257.610†	2433243.5	2192065.4	3522.9 ug/L	3522.9 ppb	21:08:51
2	Mo 202.031†	-72.0	-79.3	4.9465 ug/L	4.9465 ppb	21:09:11
2	Ni 231.604†	3660.5	3197.1	102.15 ug/L	102.15 ppb	21:09:11

2	P 214.914†	1834.5	1457.6	711.46 ug/L	711.46 ppb	21:09:11
2	Pb 220.353†	5860.4	5351.4	887.26 ug/L	887.26 ppb	21:09:11
2	S 181.975 Axial†	753.6	636.6	797.30 ug/L	797.30 ppb	21:09:11
2	Sb 206.836†	91.8	52.7	-1.7904 ug/L	-1.7904 ppb	21:09:11
2	Se 196.026†	-658.0	-573.1	8.2232 ug/L	8.2232 ppb	21:09:11
2	Si 251.611†	1262808.2	1137291.3	41501 ug/L	41501 ppb	21:08:51
2	Sn 189.927†	-59.0	-61.2	-19.358 ug/L	-19.358 ppb	21:09:11
2	Ti 334.940†	3004988.0	2709010.3	5459.7 ug/L	5459.7 ppb	21:08:51
2	Tl 190.801†	-192.4	-142.2	-4.1721 ug/L	-4.1721 ppb	21:09:11
2	U 409.014†	-9296.7	-5840.2	-213.43 ug/L	-213.43 ppb	21:08:51
2	V 292.402†	42896.0	40280.4	292.50 ug/L	292.50 ppb	21:08:51
2	Zn 213.857†	39050.6	34477.1	356.42 ug/L	356.42 ppb	21:08:51
2	SiO2†	1265424.9	1139642.0	88780 ug/L	88780 ppb	21:09:51
3	Sc Radial	5137.3	5137.3	109 %		21:08:16
3	Y RADIAL	6105.6	6105.6	122.5 %		21:08:16
3	Al 396.153Radial†	179627.8	164657.1	154020 ug/L	154020 ppb	21:07:56
3	Ca 317.933Radial†	13595.4	12433.6	22591 ug/L	22591 ppb	21:07:56
3	Fe 238.204 Radial†	16630.4	15229.0	158000 ug/L	158000 ppb	21:07:56
3	K 766.490 Radial†	114944.6	103047.4	20500 ug/L	20500 ppb	21:07:56
3	Mg 279.077 IEC†	691.5	630.7	24875 ug/L	24875 ppb	21:08:16
3	Na 589.592 Radial†	31154.3	29390.5	10016 ug/L	10016 ppb	21:07:56
3	Sr 421.552†	43973.0	40287.4	292.79 ug/L	292.79 ppb	21:07:56
3	Sc 361.383	862213.3	862213.3	112.28 %		21:09:18
3	Y 371.029	860783.6	860783.6	124.93 %		21:09:18
3	Ag 328.068†	-9400.2	-8628.1	5.3258 ug/L	5.3258 ppb	21:09:18
3	As 188.979†	-37.7	-8.5	79.915 ug/L	79.915 ppb	21:09:38
3	B 249.677†	1601.5	1879.9	21.192 ug/L	21.192 ppb	21:09:18
3	Ba 233.527†	162964.0	145143.1	1718.2 ug/L	1718.2 ppb	21:09:18
3	Be 313.107†	-13313.3	-2875.0	11.094 ug/L	11.094 ppb	21:09:18
3	Cd 226.502†	1171.1	1229.7	1.1401 ug/L	1.1401 ppb	21:09:38
3	Co 228.616†	2858.2	2603.1	65.844 ug/L	65.844 ppb	21:09:38
3	Cr 267.716†	11117.7	9826.5	137.80 ug/L	137.80 ppb	21:09:38
3	Cu 324.752†	31754.6	20746.4	86.149 ug/L	86.149 ppb	21:09:18
3	Mn 257.610†	2423751.4	2158277.3	3469.2 ug/L	3469.2 ppb	21:09:18
3	Mo 202.031†	-90.2	-94.7	3.8456 ug/L	3.8456 ppb	21:09:38
3	Ni 231.604†	3621.5	3124.2	99.823 ug/L	99.823 ppb	21:09:38
3	P 214.914†	1811.2	1417.8	687.24 ug/L	687.24 ppb	21:09:38
3	Pb 220.353†	5791.1	5228.6	868.21 ug/L	868.21 ppb	21:09:38
3	S 181.975 Axial†	736.5	613.5	766.57 ug/L	766.57 ppb	21:09:38
3	Sb 206.836†	92.0	51.9	-2.1159 ug/L	-2.1159 ppb	21:09:38
3	Se 196.026†	-658.9	-567.1	21.097 ug/L	21.097 ppb	21:09:38
3	Si 251.611†	1260633.4	1122206.6	40950 ug/L	40950 ppb	21:09:18
3	Sn 189.927†	-71.0	-71.3	-21.859 ug/L	-21.859 ppb	21:09:38
3	Ti 334.940†	3001740.4	2674831.3	5390.8 ug/L	5390.8 ppb	21:09:18
3	Tl 190.801†	-187.8	-136.1	-2.1964 ug/L	-2.1964 ppb	21:09:38
3	U 409.014†	-9024.2	-5500.7	-202.51 ug/L	-202.51 ppb	21:09:18
3	V 292.402†	42751.6	39705.1	287.42 ug/L	287.42 ppb	21:09:18
3	Zn 213.857†	38891.7	33929.0	349.80 ug/L	349.80 ppb	21:09:18
3	SiO2†	1257813.0	1119687.3	87226 ug/L	87226 ppb	21:09:56

Mean Data: 246055003|949334|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	856945.8	111.59 %		0.652				0.58%
Sc Radial	5167.1	110 %		0.8				0.68%
Y 371.029	855982.1	124.23 %		0.692				0.56%
Y RADIAL	6129.4	122.9 %		0.89				0.72%
Ag 328.068†	-8694.9	4.5237 ug/L		0.81796	4.5237 ppb		0.81796	18.08%
Al 396.153Radial†	162626.4	152120 ug/L		2191.6	152120 ppb		2191.6	1.44%
As 188.979†	-8.6	79.957 ug/L		0.2498	79.957 ppb		0.2498	0.31%
B 249.677†	1912.4	22.259 ug/L		1.9732	22.259 ppb		1.9732	8.86%
Ba 233.527†	146863.8	1738.4 ug/L		17.61	1738.4 ppb		17.61	1.01%
Be 313.107†	-2903.8	11.194 ug/L		0.0891	11.194 ppb		0.0891	0.80%
Ca 317.933Radial†	12252.1	22261 ug/L		303.2	22261 ppb		303.2	1.36%
Cd 226.502†	1249.0	1.5751 ug/L		0.45230	1.5751 ppb		0.45230	28.71%
Co 228.616†	2632.0	66.646 ug/L		0.7104	66.646 ppb		0.7104	1.07%
Cr 267.716†	9935.7	139.27 ug/L		1.289	139.27 ppb		1.289	0.93%
Cu 324.752†	20934.4	86.774 ug/L		0.6626	86.774 ppb		0.6626	0.76%
Fe 238.204 Radial†	15077.2	156430 ug/L		2069.8	156430 ppb		2069.8	1.32%
K 766.490 Radial†	101935.4	20279 ug/L		277.5	20279 ppb		277.5	1.37%

Mg 279.077 IEC†	629.3	24822 ug/L	139.9	24822 ppb	139.9	0.56%
Mn 257.610†	2182216.9	3507.4 ug/L	33.24	3507.4 ppb	33.24	0.95%
Mo 202.031†	-87.5	4.3777 ug/L	0.55136	4.3777 ppb	0.55136	12.59%
Na 589.592 Radial†	29205.6	9953.3 ug/L	153.46	9953.3 ppb	153.46	1.54%
Ni 231.604†	3182.4	101.68 ug/L	1.677	101.68 ppb	1.677	1.65%
P 214.914†	1445.1	703.19 ug/L	13.809	703.19 ppb	13.809	1.96%
Pb 220.353†	5303.5	879.94 ug/L	10.264	879.94 ppb	10.264	1.17%
S 181.975 Axial†	630.4	788.79 ug/L	19.420	788.79 ppb	19.420	2.46%
Sb 206.836†	47.6	-3.9172 ug/L	3.40574	-3.9172 ppb	3.40574	86.94%
Se 196.026†	-571.7	14.529 ug/L	6.4411	14.529 ppb	6.4411	44.33%
Si 251.611†	1132956.7	41342 ug/L	341.8	41342 ppb	341.8	0.83%
Sn 189.927†	-66.0	-20.559 ug/L	1.2536	-20.559 ppb	1.2536	6.10%
Sr 421.552†	40004.7	290.74 ug/L	4.622	290.74 ppb	4.622	1.59%
Ti 334.940†	2699250.3	5440.0 ug/L	42.87	5440.0 ppb	42.87	0.79%
Tl 190.801†	-139.1	-3.0210 ug/L	1.02754	-3.0210 ppb	1.02754	34.01%
U 409.014†	-5780.2	-211.69 ug/L	8.447	-211.69 ppb	8.447	3.99%
V 292.402†	40128.0	290.96 ug/L	3.070	290.96 ppb	3.070	1.06%
Zn 213.857†	34304.8	354.17 ug/L	3.783	354.17 ppb	3.783	1.07%
SiO2†	1125941.4	87713 ug/L	925.5	87713 ppb	925.5	1.06%

Sequence No.: 26  
 Sample ID: 246055004|949334|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 57  
 Date Collected: 3/1/2010 21:12:07  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246055004|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5066.2	5066.2	108 %		21:14:20
1	Y RADIAL	5668.1	5668.1	113.7 %		21:14:20
1	Al 396.153Radial†	48377.9	45031.8	42124 ug/L	42124 ppb	21:14:00
1	Ca 317.933Radial†	15650.5	14517.6	26378 ug/L	26378 ppb	21:14:00
1	Fe 238.204 Radial†	8074.8	7494.4	77755 ug/L	77755 ppb	21:14:00
1	K 766.490 Radial†	52504.6	46516.9	9249.8 ug/L	9249.8 ppb	21:14:00
1	Mg 279.077 IEC†	306.7	282.0	11116 ug/L	11116 ppb	21:14:20
1	Na 589.592 Radial†	2243.4	2932.0	999.21 ug/L	999.21 ppb	21:14:00
1	Sr 421.552†	22252.0	20673.3	150.13 ug/L	150.13 ppb	21:14:00
1	Sc 361.383	845520.4	845520.4	110.10 %		21:15:18
1	Y 371.029	800673.4	800673.4	116.20 %		21:15:18
1	Ag 328.068†	-4576.0	-4411.8	1.6321 ug/L	1.6321 ppb	21:15:23
1	As 188.979†	-32.9	-4.9	45.792 ug/L	45.792 ppb	21:15:43
1	B 249.677†	678.2	1069.4	14.051 ug/L	14.051 ppb	21:15:23
1	Ba 233.527†	67819.5	61594.3	729.56 ug/L	729.56 ppb	21:15:23
1	Be 313.107†	-22682.9	-11619.0	3.1800 ug/L	3.1800 ppb	21:15:23
1	Cd 226.502†	542.6	679.5	1.6242 ug/L	1.6242 ppb	21:15:43
1	Co 228.616†	1253.2	1195.6	28.113 ug/L	28.113 ppb	21:15:43
1	Cr 267.716†	8417.3	7569.3	105.18 ug/L	105.18 ppb	21:15:23
1	Cu 324.752†	23735.2	14021.2	56.663 ug/L	56.663 ppb	21:15:23
1	Mn 257.610†	1473098.2	1337471.7	2148.0 ug/L	2148.0 ppb	21:15:18
1	Mo 202.031†	-21.7	-34.1	3.2187 ug/L	3.2187 ppb	21:15:43
1	Ni 231.604†	2256.0	1947.7	62.239 ug/L	62.239 ppb	21:15:43
1	P 214.914†	3164.5	2678.8	1433.1 ug/L	1433.1 ppb	21:15:43
1	Pb 220.353†	2582.1	2415.8	393.91 ug/L	393.91 ppb	21:15:43
1	S 181.975 Axial†	717.9	609.6	782.42 ug/L	782.42 ppb	21:15:43
1	Sb 206.836†	68.3	32.0	-0.3181 ug/L	-0.3181 ppb	21:15:43
1	Se 196.026†	-323.2	-273.7	10.455 ug/L	10.455 ppb	21:15:43
1	Si 251.611†	990494.4	899021.5	32806 ug/L	32806 ppb	21:15:18
1	Sn 189.927†	-117.6	-114.9	-26.836 ug/L	-26.836 ppb	21:15:43
1	Ti 334.940†	1875476.5	1704691.5	3437.6 ug/L	3437.6 ppb	21:15:18
1	Tl 190.801†	-136.7	-93.0	-4.4484 ug/L	-4.4484 ppb	21:15:43
1	U 409.014†	-5499.8	-2458.3	-91.414 ug/L	-91.414 ppb	21:15:23
1	V 292.402†	22380.7	21955.1	159.85 ug/L	159.85 ppb	21:15:23
1	Zn 213.857†	21997.5	19268.8	200.40 ug/L	200.40 ppb	21:15:23
1	SiO2†	968695.3	879215.4	68492 ug/L	68492 ppb	21:16:51
2	Sc Radial	5088.1	5088.1	108 %		21:14:45
2	Y RADIAL	5706.9	5706.9	114.5 %		21:14:45
2	Al 396.153Radial†	50206.6	46530.0	43525 ug/L	43525 ppb	21:14:25
2	Ca 317.933Radial†	16221.8	14983.5	27224 ug/L	27224 ppb	21:14:25
2	Fe 238.204 Radial†	8337.9	7705.5	79945 ug/L	79945 ppb	21:14:25
2	K 766.490 Radial†	54242.6	47914.6	9527.8 ug/L	9527.8 ppb	21:14:25
2	Mg 279.077 IEC†	311.6	285.3	11246 ug/L	11246 ppb	21:14:45
2	Na 589.592 Radial†	2271.8	2949.3	1005.1 ug/L	1005.1 ppb	21:14:25
2	Sr 421.552†	23057.7	21329.7	154.90 ug/L	154.90 ppb	21:14:25
2	Sc 361.383	831014.9	831014.9	108.21 %		21:15:49
2	Y 371.029	787609.8	787609.8	114.31 %		21:15:49
2	Ag 328.068†	-4566.8	-4475.9	1.9741 ug/L	1.9741 ppb	21:15:54
2	As 188.979†	-29.6	-2.4	47.384 ug/L	47.384 ppb	21:16:14
2	B 249.677†	668.6	1071.3	13.743 ug/L	13.743 ppb	21:15:54
2	Ba 233.527†	67252.2	62145.2	736.13 ug/L	736.13 ppb	21:15:54
2	Be 313.107†	-22478.5	-11789.7	3.0960 ug/L	3.0960 ppb	21:15:54
2	Cd 226.502†	566.4	710.1	1.8325 ug/L	1.8325 ppb	21:16:14
2	Co 228.616†	1221.2	1186.0	27.804 ug/L	27.804 ppb	21:16:14
2	Cr 267.716†	8395.1	7682.3	106.77 ug/L	106.77 ppb	21:15:54
2	Cu 324.752†	23537.6	14214.9	57.504 ug/L	57.504 ppb	21:15:54
2	Mn 257.610†	1443882.5	1333827.4	2142.4 ug/L	2142.4 ppb	21:15:49
2	Mo 202.031†	-34.6	-46.4	2.2746 ug/L	2.2746 ppb	21:16:14
2	Ni 231.604†	2258.3	1985.6	63.451 ug/L	63.451 ppb	21:16:14

2	P 214.914†	3105.1	2674.0	1428.8 ug/L	1428.8 ppb	21:16:14
2	Pb 220.353†	2555.0	2431.8	396.66 ug/L	396.66 ppb	21:16:14
2	S 181.975 Axial†	704.4	608.4	780.71 ug/L	780.71 ppb	21:16:14
2	Sb 206.836†	66.8	31.7	-0.4772 ug/L	-0.4772 ppb	21:16:14
2	Se 196.026†	-314.7	-271.0	17.125 ug/L	17.125 ppb	21:16:14
2	Si 251.611†	970077.2	895856.9	32690 ug/L	32690 ppb	21:15:49
2	Sn 189.927†	-113.2	-112.7	-26.292 ug/L	-26.292 ppb	21:16:14
2	Ti 334.940†	1839483.4	1701163.5	3430.6 ug/L	3430.6 ppb	21:15:49
2	Tl 190.801†	-127.9	-87.0	-1.8000 ug/L	-1.8000 ppb	21:16:14
2	U 409.014†	-5448.4	-2498.0	-92.997 ug/L	-92.997 ppb	21:15:54
2	V 292.402†	22293.6	22229.4	161.71 ug/L	161.71 ppb	21:15:54
2	Zn 213.857†	21833.5	19466.0	202.24 ug/L	202.24 ppb	21:15:54
2	SiO2†	974293.8	899746.2	70092 ug/L	70092 ppb	21:16:57
3	Sc Radial	5049.2	5049.2	107 %		21:15:10
3	Y RADIAL	5671.2	5671.2	113.8 %		21:15:10
3	Al 396.153Radial†	50171.5	46854.5	43829 ug/L	43829 ppb	21:14:50
3	Ca 317.933Radial†	16196.0	15074.9	27390 ug/L	27390 ppb	21:14:50
3	Fe 238.204 Radial†	8317.2	7745.5	80361 ug/L	80361 ppb	21:14:50
3	K 766.490 Radial†	54109.4	48176.5	9579.8 ug/L	9579.8 ppb	21:14:50
3	Mg 279.077 IEC†	313.7	289.6	11413 ug/L	11413 ppb	21:15:10
3	Na 589.592 Radial†	2261.5	2955.8	1007.4 ug/L	1007.4 ppb	21:14:50
3	Sr 421.552†	22922.6	21367.8	155.18 ug/L	155.18 ppb	21:14:50
3	Sc 361.383	833545.5	833545.5	108.54 %		21:16:20
3	Y 371.029	791092.9	791092.9	114.81 %		21:16:20
3	Ag 328.068†	-4456.9	-4361.8	2.6735 ug/L	2.6735 ppb	21:16:25
3	As 188.979†	-35.0	-7.3	45.237 ug/L	45.237 ppb	21:16:45
3	B 249.677†	617.1	1022.0	12.440 ug/L	12.440 ppb	21:16:25
3	Ba 233.527†	66504.2	61267.4	725.78 ug/L	725.78 ppb	21:16:25
3	Be 313.107†	-22434.2	-11685.8	3.1250 ug/L	3.1250 ppb	21:16:25
3	Cd 226.502†	541.7	685.7	1.4451 ug/L	1.4451 ppb	21:16:45
3	Co 228.616†	1233.1	1193.5	28.034 ug/L	28.034 ppb	21:16:45
3	Cr 267.716†	8251.3	7526.2	104.64 ug/L	104.64 ppb	21:16:25
3	Cu 324.752†	23385.1	14008.4	56.751 ug/L	56.751 ppb	21:16:25
3	Mn 257.610†	1444013.3	1329897.0	2136.1 ug/L	2136.1 ppb	21:16:20
3	Mo 202.031†	-22.9	-35.4	3.3115 ug/L	3.3115 ppb	21:16:45
3	Ni 231.604†	2293.1	2011.2	64.272 ug/L	64.272 ppb	21:16:45
3	P 214.914†	3160.6	2716.5	1452.4 ug/L	1452.4 ppb	21:16:45
3	Pb 220.353†	2591.0	2457.8	400.90 ug/L	400.90 ppb	21:16:45
3	S 181.975 Axial†	701.4	603.7	774.55 ug/L	774.55 ppb	21:16:45
3	Sb 206.836†	75.8	39.8	2.7871 ug/L	2.7871 ppb	21:16:45
3	Se 196.026†	-328.2	-282.6	11.023 ug/L	11.023 ppb	21:16:45
3	Si 251.611†	970622.7	893637.8	32609 ug/L	32609 ppb	21:16:20
3	Sn 189.927†	-127.4	-125.4	-29.288 ug/L	-29.288 ppb	21:16:45
3	Ti 334.940†	1842175.4	1698482.7	3425.2 ug/L	3425.2 ppb	21:16:20
3	Tl 190.801†	-117.7	-77.2	2.6291 ug/L	2.6291 ppb	21:16:45
3	U 409.014†	-5347.2	-2389.6	-89.407 ug/L	-89.407 ppb	21:16:25
3	V 292.402†	22040.2	21933.5	159.32 ug/L	159.32 ppb	21:16:25
3	Zn 213.857†	21629.2	19216.5	199.42 ug/L	199.42 ppb	21:16:25
3	SiO2†	977181.7	899673.4	70086 ug/L	70086 ppb	21:17:03

Mean Data: 246055004|949334|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	836693.6	108.95 %		1.009			0.93%
Sc Radial	5067.8	108 %		0.4			0.38%
Y 371.029	793125.4	115.11 %		0.982			0.85%
Y RADIAL	5682.1	114.0 %		0.43			0.38%
Ag 328.068†	-4416.5	2.0932 ug/L		0.53086	2.0932 ppb	0.53086	25.36%
Al 396.153Radial†	46138.8	43159 ug/L		909.5	43159 ppb	909.5	2.11%
As 188.979†	-4.8	46.137 ug/L		1.1143	46.137 ppb	1.1143	2.42%
B 249.677†	1054.3	13.411 ug/L		0.8551	13.411 ppb	0.8551	6.38%
Ba 233.527†	61669.0	730.49 ug/L		5.238	730.49 ppb	5.238	0.72%
Be 313.107†	-11698.1	3.1337 ug/L		0.04265	3.1337 ppb	0.04265	1.36%
Ca 317.933Radial†	14858.7	26997 ug/L		543.0	26997 ppb	543.0	2.01%
Cd 226.502†	691.7	1.6339 ug/L		0.19386	1.6339 ppb	0.19386	11.86%
Co 228.616†	1191.7	27.983 ug/L		0.1607	27.983 ppb	0.1607	0.57%
Cr 267.716†	7592.6	105.53 ug/L		1.106	105.53 ppb	1.106	1.05%
Cu 324.752†	14081.5	56.973 ug/L		0.4625	56.973 ppb	0.4625	0.81%
Fe 238.204 Radial†	7648.5	79354 ug/L		1399.7	79354 ppb	1399.7	1.76%
K 766.490 Radial†	47536.0	9452.5 ug/L		177.44	9452.5 ppb	177.44	1.88%

Mg 279.077 IEC†	285.6	11258 ug/L	148.7	11258 ppb	148.7	1.32%
Mn 257.610†	1333732.0	2142.2 ug/L	5.94	2142.2 ppb	5.94	0.28%
Mo 202.031†	-38.6	2.9349 ug/L	0.57374	2.9349 ppb	0.57374	19.55%
Na 589.592 Radial†	2945.7	1003.9 ug/L	4.21	1003.9 ppb	4.21	0.42%
Ni 231.604†	1981.5	63.320 ug/L	1.0225	63.320 ppb	1.0225	1.61%
P 214.914†	2689.8	1438.1 ug/L	12.57	1438.1 ppb	12.57	0.87%
Pb 220.353†	2435.1	397.15 ug/L	3.519	397.15 ppb	3.519	0.89%
S 181.975 Axial†	607.2	779.23 ug/L	4.138	779.23 ppb	4.138	0.53%
Sb 206.836†	34.5	0.6639 ug/L	1.84042	0.6639 ppb	1.84042	277.21%
Se 196.026†	-275.8	12.867 ug/L	3.6977	12.867 ppb	3.6977	28.74%
Si 251.611†	896172.1	32702 ug/L	98.7	32702 ppb	98.7	0.30%
Sn 189.927†	-117.7	-27.472 ug/L	1.5962	-27.472 ppb	1.5962	5.81%
Sr 421.552†	21123.6	153.40 ug/L	2.835	153.40 ppb	2.835	1.85%
Ti 334.940†	1701445.9	3431.1 ug/L	6.22	3431.1 ppb	6.22	0.18%
Tl 190.801†	-85.7	-1.2064 ug/L	3.57591	-1.2064 ppb	3.57591	296.41%
U 409.014†	-2448.6	-91.273 ug/L	1.7989	-91.273 ppb	1.7989	1.97%
V 292.402†	22039.3	160.29 ug/L	1.253	160.29 ppb	1.253	0.78%
Zn 213.857†	19317.1	200.69 ug/L	1.430	200.69 ppb	1.430	0.71%
SiO2†	892878.3	69557 ug/L	921.8	69557 ppb	921.8	1.33%



Sequence No.: 27

Sample ID: 246055005|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 3/1/2010 21:19:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055005|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5089.1	5089.1	108 %		21:21:27
1	Y RADIAL	5810.8	5810.8	116.6 %		21:21:27
1	Al 396.153Radial†	118050.8	109265.9	102210 ug/L	102210 ppb	21:21:07
1	Ca 317.933Radial†	10800.6	9966.7	18109 ug/L	18109 ppb	21:21:07
1	Fe 238.204 Radial†	11728.5	10839.7	112460 ug/L	112460 ppb	21:21:07
1	K 766.490 Radial†	89444.1	80460.3	16009 ug/L	16009 ppb	21:21:07
1	Mg 279.077 IEC†	493.6	453.6	17892 ug/L	17892 ppb	21:21:27
1	Na 589.592 Radial†	1968.5	2668.3	909.36 ug/L	909.36 ppb	21:21:07
1	Sr 421.552†	32185.8	29767.3	216.33 ug/L	216.33 ppb	21:21:07
1	Sc 361.383	838372.9	838372.9	109.17 %		21:22:25
1	Y 371.029	804617.9	804617.9	116.77 %		21:22:25
1	Ag 328.068†	-6485.3	-6196.1	3.5481 ug/L	3.5481 ppb	21:22:30
1	As 188.979†	-42.4	-13.8	60.396 ug/L	60.396 ppb	21:22:50
1	B 249.677†	875.6	1255.4	13.011 ug/L	13.011 ppb	21:22:30
1	Ba 233.527†	122159.8	111894.4	1324.3 ug/L	1324.3 ppb	21:22:30
1	Be 313.107†	-18150.3	-7642.7	7.4976 ug/L	7.4976 ppb	21:22:30
1	Cd 226.502†	809.7	928.3	1.5636 ug/L	1.5636 ppb	21:22:50
1	Co 228.616†	2009.4	1898.0	46.602 ug/L	46.602 ppb	21:22:50
1	Cr 267.716†	6771.4	6126.9	86.252 ug/L	86.252 ppb	21:22:30
1	Cu 324.752†	26827.5	17037.5	69.811 ug/L	69.811 ppb	21:22:30
1	Mn 257.610†	1789802.0	1638974.7	2633.8 ug/L	2633.8 ppb	21:22:25
1	Mo 202.031†	-54.4	-64.2	3.0517 ug/L	3.0517 ppb	21:22:50
1	Ni 231.604†	2376.6	2075.6	66.317 ug/L	66.317 ppb	21:22:50
1	P 214.914†	1587.4	1258.7	624.95 ug/L	624.95 ppb	21:22:50
1	Pb 220.353†	3681.1	3442.5	571.18 ug/L	571.18 ppb	21:22:50
1	S 181.975 Axial†	573.8	483.1	607.15 ug/L	607.15 ppb	21:22:50
1	Sb 206.836†	80.7	43.9	-1.1811 ug/L	-1.1811 ppb	21:22:50
1	Se 196.026†	-455.4	-397.4	18.150 ug/L	18.150 ppb	21:22:50
1	Si 251.611†	1176616.8	1077176.8	39307 ug/L	39307 ppb	21:22:25
1	Sn 189.927†	-69.4	-71.6	-20.102 ug/L	-20.102 ppb	21:22:50
1	Ti 334.940†	2512824.4	2303016.2	4641.6 ug/L	4641.6 ppb	21:22:25
1	Tl 190.801†	-167.3	-122.0	-5.6851 ug/L	-5.6851 ppb	21:22:50
1	U 409.014†	-6438.0	-3360.3	-125.53 ug/L	-125.53 ppb	21:22:30
1	V 292.402†	31851.2	30803.3	224.02 ug/L	224.02 ppb	21:22:30
1	Zn 213.857†	26277.2	23359.3	240.28 ug/L	240.28 ppb	21:22:30
1	SiO2†	1185305.6	1085128.4	84533 ug/L	84533 ppb	21:23:59
2	Sc Radial	5101.4	5101.4	108 %		21:21:53
2	Y RADIAL	5806.4	5806.4	116.5 %		21:21:53
2	Al 396.153Radial†	119475.7	110317.2	103190 ug/L	103190 ppb	21:21:33
2	Ca 317.933Radial†	10929.4	10061.5	18281 ug/L	18281 ppb	21:21:33
2	Fe 238.204 Radial†	11813.2	10891.8	113000 ug/L	113000 ppb	21:21:33
2	K 766.490 Radial†	90524.9	81258.0	16168 ug/L	16168 ppb	21:21:33
2	Mg 279.077 IEC†	495.9	454.6	17932 ug/L	17932 ppb	21:21:53
2	Na 589.592 Radial†	2010.4	2702.7	921.07 ug/L	921.07 ppb	21:21:33
2	Sr 421.552†	32505.8	29990.8	217.95 ug/L	217.95 ppb	21:21:33
2	Sc 361.383	842281.4	842281.4	109.68 %		21:22:56
2	Y 371.029	810258.1	810258.1	117.59 %		21:22:56
2	Ag 328.068†	-6497.9	-6180.0	3.7929 ug/L	3.7929 ppb	21:23:01
2	As 188.979†	-37.7	-9.4	62.654 ug/L	62.654 ppb	21:23:21
2	B 249.677†	768.1	1153.8	10.377 ug/L	10.377 ppb	21:23:01
2	Ba 233.527†	122332.4	111532.5	1320.0 ug/L	1320.0 ppb	21:23:01
2	Be 313.107†	-18238.7	-7646.3	7.5332 ug/L	7.5332 ppb	21:23:01
2	Cd 226.502†	845.8	957.8	1.9253 ug/L	1.9253 ppb	21:23:21
2	Co 228.616†	2023.6	1902.5	46.694 ug/L	46.694 ppb	21:23:21
2	Cr 267.716†	6786.5	6111.9	86.058 ug/L	86.058 ppb	21:23:01
2	Cu 324.752†	26972.1	17055.3	69.908 ug/L	69.908 ppb	21:23:01
2	Mn 257.610†	1800226.2	1640871.3	2636.9 ug/L	2636.9 ppb	21:22:56
2	Mo 202.031†	-48.2	-58.3	3.6366 ug/L	3.6366 ppb	21:23:21
2	Ni 231.604†	2368.8	2058.4	65.766 ug/L	65.766 ppb	21:23:21

2	P 214.914†	1581.6	1246.7	618.01 ug/L	618.01 ppb	21:23:21
2	Pb 220.353†	3703.8	3447.6	572.20 ug/L	572.20 ppb	21:23:21
2	S 181.975 Axial†	582.1	488.2	613.61 ug/L	613.61 ppb	21:23:21
2	Sb 206.836†	85.4	47.8	0.3295 ug/L	0.3295 ppb	21:23:21
2	Se 196.026†	-469.3	-408.0	12.911 ug/L	12.911 ppb	21:23:21
2	Si 251.611†	1185577.4	1080345.4	39423 ug/L	39423 ppb	21:22:56
2	Sn 189.927†	-74.8	-76.3	-21.196 ug/L	-21.196 ppb	21:23:21
2	Ti 334.940†	2533422.5	2311115.6	4657.9 ug/L	4657.9 ppb	21:22:56
2	Tl 190.801†	-172.0	-125.6	-7.2013 ug/L	-7.2013 ppb	21:23:21
2	U 409.014†	-6556.0	-3440.5	-128.28 ug/L	-128.28 ppb	21:23:01
2	V 292.402†	31878.0	30692.3	223.04 ug/L	223.04 ppb	21:23:01
2	Zn 213.857†	26284.9	23254.6	239.05 ug/L	239.05 ppb	21:23:01
2	SiO2†	1180710.3	1075900.6	83815 ug/L	83815 ppb	21:24:05
3	Sc Radial	5072.6	5072.6	108 %		21:22:18
3	Y RADIAL	5759.4	5759.4	115.5 %		21:22:18
3	Al 396.153Radial†	117211.4	108842.1	101810 ug/L	101810 ppb	21:21:58
3	Ca 317.933Radial†	10746.5	9949.0	18077 ug/L	18077 ppb	21:21:58
3	Fe 238.204 Radial†	11694.8	10843.8	112510 ug/L	112510 ppb	21:21:58
3	K 766.490 Radial†	88828.9	80158.6	15949 ug/L	15949 ppb	21:21:58
3	Mg 279.077 IEC†	491.1	452.7	17858 ug/L	17858 ppb	21:22:18
3	Na 589.592 Radial†	1935.8	2643.9	901.05 ug/L	901.05 ppb	21:21:58
3	Sr 421.552†	31792.0	29498.8	214.37 ug/L	214.37 ppb	21:21:58
3	Sc 361.383	840968.4	840968.4	109.51 %		21:23:27
3	Y 371.029	808181.0	808181.0	117.29 %		21:23:27
3	Ag 328.068†	-6457.1	-6152.0	3.7939 ug/L	3.7939 ppb	21:23:33
3	As 188.979†	-52.3	-22.8	56.264 ug/L	56.264 ppb	21:23:53
3	B 249.677†	947.1	1318.3	14.579 ug/L	14.579 ppb	21:23:33
3	Ba 233.527†	122824.0	112155.6	1327.4 ug/L	1327.4 ppb	21:23:33
3	Be 313.107†	-18395.9	-7815.8	7.3881 ug/L	7.3881 ppb	21:23:33
3	Cd 226.502†	821.6	936.9	1.6812 ug/L	1.6812 ppb	21:23:53
3	Co 228.616†	2022.7	1904.5	46.834 ug/L	46.834 ppb	21:23:53
3	Cr 267.716†	6847.8	6177.5	86.947 ug/L	86.947 ppb	21:23:33
3	Cu 324.752†	27109.5	17219.2	70.494 ug/L	70.494 ppb	21:23:33
3	Mn 257.610†	1787805.2	1632091.5	2622.8 ug/L	2622.8 ppb	21:23:27
3	Mo 202.031†	-62.3	-71.3	2.4092 ug/L	2.4092 ppb	21:23:53
3	Ni 231.604†	2374.8	2067.2	66.049 ug/L	66.049 ppb	21:23:53
3	P 214.914†	1562.4	1231.3	609.39 ug/L	609.39 ppb	21:23:53
3	Pb 220.353†	3693.4	3443.3	571.21 ug/L	571.21 ppb	21:23:53
3	S 181.975 Axial†	572.1	479.9	603.12 ug/L	603.12 ppb	21:23:53
3	Sb 206.836†	86.5	49.0	0.9374 ug/L	0.9374 ppb	21:23:53
3	Se 196.026†	-464.4	-404.3	13.967 ug/L	13.967 ppb	21:23:53
3	Si 251.611†	1175726.5	1073037.5	39156 ug/L	39156 ppb	21:23:27
3	Sn 189.927†	-76.1	-77.6	-21.515 ug/L	-21.515 ppb	21:23:53
3	Ti 334.940†	2510859.2	2294117.9	4623.7 ug/L	4623.7 ppb	21:23:27
3	Tl 190.801†	-159.8	-114.7	-2.5455 ug/L	-2.5455 ppb	21:23:53
3	U 409.014†	-6499.0	-3397.8	-126.79 ug/L	-126.79 ppb	21:23:33
3	V 292.402†	32113.9	30953.2	225.21 ug/L	225.21 ppb	21:23:33
3	Zn 213.857†	26336.3	23339.0	240.05 ug/L	240.05 ppb	21:23:33
3	SiO2†	1188170.1	1084393.3	84476 ug/L	84476 ppb	21:24:11

Mean Data: 246055005|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Sample Units	Std.Dev.	RSD
Sc 361.383	840540.9	109.45 %		0.259			0.24%
Sc Radial	5087.7	108 %		0.3			0.28%
Y 371.029	807685.7	117.22 %		0.414			0.35%
Y RADIAL	5792.2	116.2 %		0.57			0.49%
Ag 328.068†	-6176.1	3.7116 ug/L		0.14163	3.7116 ppb	0.14163	3.82%
Al 396.153Radial†	109475.0	102400 ug/L		710.4	102400 ppb	710.4	0.69%
As 188.979†	-15.3	59.771 ug/L		3.2405	59.771 ppb	3.2405	5.42%
B 249.677†	1242.5	12.656 ug/L		2.1234	12.656 ppb	2.1234	16.78%
Ba 233.527†	111860.8	1323.9 ug/L		3.69	1323.9 ppb	3.69	0.28%
Be 313.107†	-7701.6	7.4730 ug/L		0.07563	7.4730 ppb	0.07563	1.01%
Ca 317.933Radial†	9992.4	18156 ug/L		109.9	18156 ppb	109.9	0.61%
Cd 226.502†	941.0	1.7234 ug/L		0.18451	1.7234 ppb	0.18451	10.71%
Co 228.616†	1901.7	46.710 ug/L		0.1168	46.710 ppb	0.1168	0.25%
Cr 267.716†	6138.8	86.419 ug/L		0.4672	86.419 ppb	0.4672	0.54%
Cu 324.752†	17104.0	70.071 ug/L		0.3697	70.071 ppb	0.3697	0.53%
Fe 238.204 Radial†	10858.4	112660 ug/L		300.3	112660 ppb	300.3	0.27%
K 766.490 Radial†	80625.6	16042 ug/L		113.0	16042 ppb	113.0	0.70%

Mg 279.077 IEC†	453.6	17894 ug/L	37.3	17894 ppb	37.3	0.21%
Mn 257.610†	1637312.5	2631.1 ug/L	7.41	2631.1 ppb	7.41	0.28%
Mo 202.031†	-64.6	3.0325 ug/L	0.61393	3.0325 ppb	0.61393	20.24%
Na 589.592 Radial†	2671.6	910.49 ug/L	10.054	910.49 ppb	10.054	1.10%
Ni 231.604†	2067.1	66.044 ug/L	0.2755	66.044 ppb	0.2755	0.42%
P 214.914†	1245.6	617.45 ug/L	7.797	617.45 ppb	7.797	1.26%
Pb 220.353†	3444.5	571.53 ug/L	0.580	571.53 ppb	0.580	0.10%
S 181.975 Axial†	483.7	607.96 ug/L	5.292	607.96 ppb	5.292	0.87%
Sb 206.836†	46.9	0.0286 ug/L	1.09083	0.0286 ppb	1.09083	>999.9%
Se 196.026†	-403.2	15.009 ug/L	2.7707	15.009 ppb	2.7707	18.46%
Si 251.611†	1076853.2	39295 ug/L	133.7	39295 ppb	133.7	0.34%
Sn 189.927†	-75.1	-20.938 ug/L	0.7410	-20.938 ppb	0.7410	3.54%
Sr 421.552†	29752.3	216.22 ug/L	1.791	216.22 ppb	1.791	0.83%
Ti 334.940†	2302749.9	4641.1 ug/L	17.14	4641.1 ppb	17.14	0.37%
Tl 190.801†	-120.8	-5.1440 ug/L	2.37459	-5.1440 ppb	2.37459	46.16%
U 409.014†	-3399.6	-126.87 ug/L	1.374	-126.87 ppb	1.374	1.08%
V 292.402†	30816.3	224.09 ug/L	1.087	224.09 ppb	1.087	0.49%
Zn 213.857†	23317.6	239.79 ug/L	0.655	239.79 ppb	0.655	0.27%
SiO2†	1081807.4	84275 ug/L	399.5	84275 ppb	399.5	0.47%

Sequence No.: 28  
 Sample ID: 246055006|949334|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 59  
 Date Collected: 3/1/2010 21:26:21  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246055006|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5128.6	5128.6	109 %		21:28:34
1	Y RADIAL	6161.5	6161.5	123.6 %		21:28:34
1	Al 396.153Radial†	201077.9	184621.1	172700 ug/L	172700 ppb	21:28:14
1	Ca 317.933Radial†	15620.3	14313.0	26006 ug/L	26006 ppb	21:28:14
1	Fe 238.204 Radial†	14978.0	13738.4	142540 ug/L	142540 ppb	21:28:14
1	K 766.490 Radial†	121869.2	109580.6	21803 ug/L	21803 ppb	21:28:14
1	Mg 279.077 IEC†	657.2	600.3	23684 ug/L	23684 ppb	21:28:34
1	Na 589.592 Radial†	2363.6	3016.9	1028.2 ug/L	1028.2 ppb	21:28:14
1	Sr 421.552†	44275.5	40633.2	295.28 ug/L	295.28 ppb	21:28:14
1	Sc 361.383	848022.7	848022.7	110.43 %		21:29:33
1	Y 371.029	856959.4	856959.4	124.37 %		21:29:33
1	Ag 328.068†	-8059.0	-7553.6	5.9600 ug/L	5.9600 ppb	21:29:53
1	As 188.979†	-44.1	-15.0	73.479 ug/L	73.479 ppb	21:29:53
1	B 249.677†	1287.3	1619.2	17.212 ug/L	17.212 ppb	21:29:33
1	Ba 233.527†	162049.8	146744.1	1736.5 ug/L	1736.5 ppb	21:29:33
1	Be 313.107†	-10982.2	-962.4	11.864 ug/L	11.864 ppb	21:29:33
1	Cd 226.502†	1065.7	1151.7	1.6283 ug/L	1.6283 ppb	21:29:53
1	Co 228.616†	2351.4	2186.8	53.490 ug/L	53.490 ppb	21:29:53
1	Cr 267.716†	10059.3	9033.7	126.64 ug/L	126.64 ppb	21:29:53
1	Cu 324.752†	27622.9	17478.2	73.093 ug/L	73.093 ppb	21:29:33
1	Mn 257.610†	1824249.4	1651513.6	2656.6 ug/L	2656.6 ppb	21:29:33
1	Mo 202.031†	-89.7	-95.6	2.5999 ug/L	2.5999 ppb	21:29:53
1	Ni 231.604†	3394.0	2972.2	94.971 ug/L	94.971 ppb	21:29:53
1	P 214.914†	1656.8	1305.0	643.78 ug/L	643.78 ppb	21:29:53
1	Pb 220.353†	2673.8	2492.0	432.76 ug/L	432.76 ppb	21:29:53
1	S 181.975 Axial†	564.4	468.6	575.17 ug/L	575.17 ppb	21:29:53
1	Sb 206.836†	74.9	37.8	-8.2930 ug/L	-8.2930 ppb	21:29:53
1	Se 196.026†	-589.0	-513.6	20.995 ug/L	20.995 ppb	21:29:53
1	Si 251.611†	1470717.7	1331240.0	48578 ug/L	48578 ppb	21:29:33
1	Sn 189.927†	-78.2	-78.9	-22.138 ug/L	-22.138 ppb	21:29:53
1	Ti 334.940†	2954906.4	2677158.2	5396.1 ug/L	5396.1 ppb	21:29:33
1	Tl 190.801†	-184.1	-135.5	-5.6729 ug/L	-5.6729 ppb	21:29:53
1	U 409.014†	-8889.6	-5513.3	-201.14 ug/L	-201.14 ppb	21:29:33
1	V 292.402†	38946.8	36896.8	267.29 ug/L	267.29 ppb	21:29:33
1	Zn 213.857†	27613.6	24295.6	245.92 ug/L	245.92 ppb	21:29:53
1	SiO2†	1457211.4	1319001.9	102750 ug/L	102750 ppb	21:30:53
2	Sc Radial	5139.4	5139.4	109 %		21:29:00
2	Y RADIAL	6170.3	6170.3	123.8 %		21:29:00
2	Al 396.153Radial†	195237.4	178883.7	167330 ug/L	167330 ppb	21:28:40
2	Ca 317.933Radial†	15298.0	13987.6	25415 ug/L	25415 ppb	21:28:40
2	Fe 238.204 Radial†	14608.8	13371.3	138730 ug/L	138730 ppb	21:28:40
2	K 766.490 Radial†	118373.9	106144.0	21120 ug/L	21120 ppb	21:28:40
2	Mg 279.077 IEC†	657.0	598.8	23631 ug/L	23631 ppb	21:29:00
2	Na 589.592 Radial†	2240.2	2899.3	988.09 ug/L	988.09 ppb	21:28:40
2	Sr 421.552†	42712.7	39116.4	284.25 ug/L	284.25 ppb	21:28:40
2	Sc 361.383	846399.9	846399.9	110.22 %		21:30:00
2	Y 371.029	856928.8	856928.8	124.37 %		21:30:00
2	Ag 328.068†	-8159.3	-7658.6	4.2579 ug/L	4.2579 ppb	21:30:20
2	As 188.979†	-54.8	-24.7	68.201 ug/L	68.201 ppb	21:30:20
2	B 249.677†	1192.2	1535.1	15.724 ug/L	15.724 ppb	21:30:00
2	Ba 233.527†	161452.8	146483.7	1733.4 ug/L	1733.4 ppb	21:30:00
2	Be 313.107†	-11108.9	-1096.4	11.798 ug/L	11.798 ppb	21:30:00
2	Cd 226.502†	1078.0	1164.7	2.2074 ug/L	2.2074 ppb	21:30:20
2	Co 228.616†	2360.8	2199.4	53.940 ug/L	53.940 ppb	21:30:20
2	Cr 267.716†	10119.5	9105.8	127.55 ug/L	127.55 ppb	21:30:20
2	Cu 324.752†	27593.8	17499.7	72.972 ug/L	72.972 ppb	21:30:00
2	Mn 257.610†	1816371.5	1647533.4	2649.8 ug/L	2649.8 ppb	21:30:00
2	Mo 202.031†	-66.4	-74.6	4.2257 ug/L	4.2257 ppb	21:30:20
2	Ni 231.604†	3455.4	3033.8	96.941 ug/L	96.941 ppb	21:30:20

2	P 214.914†	1666.9	1317.0	652.22 ug/L	652.22 ppb	21:30:20
2	Pb 220.353†	2666.3	2489.9	431.42 ug/L	431.42 ppb	21:30:20
2	S 181.975 Axial†	576.5	480.5	591.66 ug/L	591.66 ppb	21:30:20
2	Sb 206.836†	76.4	39.3	-7.4729 ug/L	-7.4729 ppb	21:30:20
2	Se 196.026†	-602.7	-527.0	3.7333 ug/L	3.7333 ppb	21:30:20
2	Si 251.611†	1464947.0	1328557.7	48480 ug/L	48480 ppb	21:30:00
2	Sn 189.927†	-91.8	-91.3	-24.954 ug/L	-24.954 ppb	21:30:20
2	Ti 334.940†	2946115.9	2674313.0	5390.3 ug/L	5390.3 ppb	21:30:00
2	Tl 190.801†	-192.6	-143.5	-9.4422 ug/L	-9.4422 ppb	21:30:20
2	U 409.014†	-8910.0	-5547.2	-201.85 ug/L	-201.85 ppb	21:30:00
2	V 292.402†	38843.3	36870.6	267.66 ug/L	267.66 ppb	21:30:00
2	Zn 213.857†	27793.4	24506.7	248.81 ug/L	248.81 ppb	21:30:20
2	SiO2†	1464680.4	1328308.6	103480 ug/L	103480 ppb	21:30:59
3	Sc Radial	5120.4	5120.4	109 %		21:29:25
3	Y RADIAL	6152.3	6152.3	123.4 %		21:29:25
3	Al 396.153Radial†	197703.8	181814.7	170070 ug/L	170070 ppb	21:29:05
3	Ca 317.933Radial†	15401.9	14135.2	25683 ug/L	25683 ppb	21:29:05
3	Fe 238.204 Radial†	14770.5	13569.6	140790 ug/L	140790 ppb	21:29:05
3	K 766.490 Radial†	119681.2	107748.3	21439 ug/L	21439 ppb	21:29:05
3	Mg 279.077 IEC†	659.5	603.3	23805 ug/L	23805 ppb	21:29:25
3	Na 589.592 Radial†	2313.7	2974.5	1013.7 ug/L	1013.7 ppb	21:29:05
3	Sr 421.552†	43425.6	39916.9	290.07 ug/L	290.07 ppb	21:29:05
3	Sc 361.383	845083.9	845083.9	110.05 %		21:30:27
3	Y 371.029	855345.0	855345.0	124.14 %		21:30:27
3	Ag 328.068†	-8148.0	-7659.9	4.8748 ug/L	4.8748 ppb	21:30:47
3	As 188.979†	-44.8	-15.7	72.720 ug/L	72.720 ppb	21:30:47
3	B 249.677†	1336.7	1668.1	18.722 ug/L	18.722 ppb	21:30:27
3	Ba 233.527†	161526.8	146779.2	1736.9 ug/L	1736.9 ppb	21:30:27
3	Be 313.107†	-11122.7	-1124.7	11.796 ug/L	11.796 ppb	21:30:27
3	Cd 226.502†	1071.9	1160.7	1.9385 ug/L	1.9385 ppb	21:30:47
3	Co 228.616†	2336.8	2181.0	53.345 ug/L	53.345 ppb	21:30:47
3	Cr 267.716†	10105.2	9107.1	127.61 ug/L	127.61 ppb	21:30:47
3	Cu 324.752†	27576.5	17523.0	73.166 ug/L	73.166 ppb	21:30:27
3	Mn 257.610†	1817812.5	1651409.2	2656.2 ug/L	2656.2 ppb	21:30:27
3	Mo 202.031†	-69.2	-77.2	4.1459 ug/L	4.1459 ppb	21:30:47
3	Ni 231.604†	3422.6	3008.8	96.144 ug/L	96.144 ppb	21:30:47
3	P 214.914†	1679.5	1330.8	658.92 ug/L	658.92 ppb	21:30:47
3	Pb 220.353†	2635.2	2465.3	427.96 ug/L	427.96 ppb	21:30:47
3	S 181.975 Axial†	553.8	460.8	565.54 ug/L	565.54 ppb	21:30:47
3	Sb 206.836†	78.0	40.8	-6.9631 ug/L	-6.9631 ppb	21:30:47
3	Se 196.026†	-588.2	-514.7	16.149 ug/L	16.149 ppb	21:30:47
3	Si 251.611†	1465003.1	1330678.6	48557 ug/L	48557 ppb	21:30:27
3	Sn 189.927†	-85.4	-85.7	-23.695 ug/L	-23.695 ppb	21:30:47
3	Ti 334.940†	2943750.9	2676326.5	5394.4 ug/L	5394.4 ppb	21:30:27
3	Tl 190.801†	-194.0	-145.1	-10.078 ug/L	-10.078 ppb	21:30:47
3	U 409.014†	-8728.7	-5395.0	-196.98 ug/L	-196.98 ppb	21:30:27
3	V 292.402†	38748.9	36839.6	267.12 ug/L	267.12 ppb	21:30:27
3	Zn 213.857†	27704.5	24465.2	248.05 ug/L	248.05 ppb	21:30:47
3	SiO2†	1468227.0	1333601.0	103890 ug/L	103890 ppb	21:31:05

Mean Data: 246055006|949334|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	846502.2	110.23 %	0.192			0.17%
Sc Radial	5129.5	109 %	0.2			0.19%
Y 371.029	856411.1	124.29 %	0.134			0.11%
Y RADIAL	6161.4	123.6 %	0.18			0.15%
Ag 328.068†	-7624.0	5.0309 ug/L	0.86174	5.0309 ppb	0.86174	17.13%
Al 396.153Radial†	181773.2	170030 ug/L	2683.7	170030 ppb	2683.7	1.58%
As 188.979†	-18.4	71.467 ug/L	2.8537	71.467 ppb	2.8537	3.99%
B 249.677†	1607.5	17.219 ug/L	1.4990	17.219 ppb	1.4990	8.71%
Ba 233.527†	146669.0	1735.6 ug/L	1.95	1735.6 ppb	1.95	0.11%
Be 313.107†	-1061.2	11.820 ug/L	0.0389	11.820 ppb	0.0389	0.33%
Ca 317.933Radial†	14145.2	25701 ug/L	296.1	25701 ppb	296.1	1.15%
Cd 226.502†	1159.0	1.9247 ug/L	0.28981	1.9247 ppb	0.28981	15.06%
Co 228.616†	2189.1	53.592 ug/L	0.3104	53.592 ppb	0.3104	0.58%
Cr 267.716†	9082.2	127.27 ug/L	0.543	127.27 ppb	0.543	0.43%
Cu 324.752†	17500.3	73.077 ug/L	0.0976	73.077 ppb	0.0976	0.13%
Fe 238.204 Radial†	13559.8	140680 ug/L	1906.1	140680 ppb	1906.1	1.35%
K 766.490 Radial†	107824.3	21454 ug/L	342.2	21454 ppb	342.2	1.60%

Mg 279.077 IEC†	600.8	23707 ug/L	89.5	23707 ppb	89.5	0.38%
Mn 257.610†	1650152.1	2654.2 ug/L	3.80	2654.2 ppb	3.80	0.14%
Mo 202.031†	-82.5	3.6572 ug/L	0.91650	3.6572 ppb	0.91650	25.06%
Na 589.592 Radial†	2963.6	1010.0 ug/L	20.29	1010.0 ppb	20.29	2.01%
Ni 231.604†	3004.9	96.019 ug/L	0.9908	96.019 ppb	0.9908	1.03%
P 214.914†	1317.6	651.64 ug/L	7.583	651.64 ppb	7.583	1.16%
Pb 220.353†	2482.4	430.71 ug/L	2.478	430.71 ppb	2.478	0.58%
S 181.975 Axial†	470.0	577.46 ug/L	13.213	577.46 ppb	13.213	2.29%
Sb 206.836†	39.3	-7.5763 ug/L	0.67099	-7.5763 ppb	0.67099	8.86%
Se 196.026†	-518.4	13.626 ug/L	8.9031	13.626 ppb	8.9031	65.34%
Si 251.611†	1330158.7	48538 ug/L	51.6	48538 ppb	51.6	0.11%
Sn 189.927†	-85.3	-23.596 ug/L	1.4106	-23.596 ppb	1.4106	5.98%
Sr 421.552†	39888.8	289.87 ug/L	5.516	289.87 ppb	5.516	1.90%
Ti 334.940†	2675932.6	5393.6 ug/L	2.98	5393.6 ppb	2.98	0.06%
Tl 190.801†	-141.4	-8.3977 ug/L	2.38102	-8.3977 ppb	2.38102	28.35%
U 409.014†	-5485.2	-199.99 ug/L	2.627	-199.99 ppb	2.627	1.31%
V 292.402†	36869.0	267.36 ug/L	0.277	267.36 ppb	0.277	0.10%
Zn 213.857†	24422.5	247.59 ug/L	1.495	247.59 ppb	1.495	0.60%
SiO2†	1326970.5	103370 ug/L	575.7	103370 ppb	575.7	0.56%

Sequence No.: 29

Sample ID: 246055007|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 3/1/2010 21:33:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055007|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5029.5	5029.5	107 %		21:35:29
1	Y RADIAL	6182.8	6182.8	124.0 %		21:35:29
1	Al 396.153Radial†	118621.5	111093.5	103920 ug/L	103920 ppb	21:35:09
1	Ca 317.933Radial†	9626.9	8986.7	16328 ug/L	16328 ppb	21:35:09
1	Fe 238.204 Radial†	12883.3	12048.9	125010 ug/L	125010 ppb	21:35:09
1	K 766.490 Radial†	66956.8	60396.7	12016 ug/L	12016 ppb	21:35:09
1	Mg 279.077 IEC†	468.7	435.7	17170 ug/L	17170 ppb	21:35:29
1	Na 589.592 Radial†	2690.8	3365.8	1147.1 ug/L	1147.1 ppb	21:35:09
1	Sr 421.552†	29450.2	27560.1	200.29 ug/L	200.29 ppb	21:35:09
1	Sc 361.383	837398.8	837398.8	109.04 %		21:36:27
1	Y 371.029	868593.7	868593.7	126.06 %		21:36:27
1	Ag 328.068†	-7405.0	-7046.4	3.0001 ug/L	3.0001 ppb	21:36:32
1	As 188.979†	-46.8	-17.9	63.711 ug/L	63.711 ppb	21:36:52
1	B 249.677†	629.7	1030.9	5.3764 ug/L	5.3764 ppb	21:36:32
1	Ba 233.527†	110764.5	101574.5	1202.8 ug/L	1202.8 ppb	21:36:32
1	Be 313.107†	-18142.2	-7654.7	8.0703 ug/L	8.0703 ppb	21:36:32
1	Cd 226.502†	889.8	1002.7	1.3123 ug/L	1.3123 ppb	21:36:52
1	Co 228.616†	1697.1	1613.8	37.223 ug/L	37.223 ppb	21:36:52
1	Cr 267.716†	10542.1	9592.1	133.83 ug/L	133.83 ppb	21:36:32
1	Cu 324.752†	22468.8	13068.9	55.671 ug/L	55.671 ppb	21:36:32
1	Mn 257.610†	1959189.1	1796218.9	2886.7 ug/L	2886.7 ppb	21:36:27
1	Mo 202.031†	-30.2	-42.1	6.0342 ug/L	6.0342 ppb	21:36:52
1	Ni 231.604†	2917.8	2574.4	82.268 ug/L	82.268 ppb	21:36:52
1	P 214.914†	1503.4	1183.4	576.20 ug/L	576.20 ppb	21:36:52
1	Pb 220.353†	2521.8	2383.4	399.79 ug/L	399.79 ppb	21:36:52
1	S 181.975 Axial†	310.4	242.2	294.51 ug/L	294.51 ppb	21:36:52
1	Sb 206.836†	76.5	40.2	-3.6531 ug/L	-3.6531 ppb	21:36:52
1	Se 196.026†	-510.7	-448.6	15.046 ug/L	15.046 ppb	21:36:52
1	Si 251.611†	1339638.9	1227930.5	44808 ug/L	44808 ppb	21:36:27
1	Sn 189.927†	-40.3	-45.0	-14.874 ug/L	-14.874 ppb	21:36:52
1	Ti 334.940†	2647562.0	2429255.4	4895.8 ug/L	4895.8 ppb	21:36:27
1	Tl 190.801†	-175.4	-129.6	-5.7705 ug/L	-5.7705 ppb	21:36:52
1	U 409.014†	-9740.4	-6395.7	-228.71 ug/L	-228.71 ppb	21:36:32
1	V 292.402†	27098.0	26478.3	187.29 ug/L	187.29 ppb	21:36:32
1	Zn 213.857†	35775.5	32097.7	334.69 ug/L	334.69 ppb	21:36:32
1	SiO2†	1357854.0	1244627.5	96959 ug/L	96959 ppb	21:38:01
2	Sc Radial	5089.5	5089.5	108 %		21:35:54
2	Y RADIAL	6256.0	6256.0	125.5 %		21:35:54
2	Al 396.153Radial†	121403.6	112359.0	105100 ug/L	105100 ppb	21:35:34
2	Ca 317.933Radial†	9787.3	9029.0	16405 ug/L	16405 ppb	21:35:34
2	Fe 238.204 Radial†	13166.2	12168.6	126250 ug/L	126250 ppb	21:35:34
2	K 766.490 Radial†	68153.5	60765.4	12089 ug/L	12089 ppb	21:35:34
2	Mg 279.077 IEC†	469.1	431.0	16979 ug/L	16979 ppb	21:35:54
2	Na 589.592 Radial†	2804.1	3441.0	1172.7 ug/L	1172.7 ppb	21:35:34
2	Sr 421.552†	30117.0	27852.1	202.41 ug/L	202.41 ppb	21:35:34
2	Sc 361.383	849210.8	849210.8	110.58 %		21:36:58
2	Y 371.029	881345.5	881345.5	127.91 %		21:36:58
2	Ag 328.068†	-7291.3	-6849.2	4.3876 ug/L	4.3876 ppb	21:37:03
2	As 188.979†	-51.1	-21.2	62.550 ug/L	62.550 ppb	21:37:23
2	B 249.677†	689.5	1077.0	6.3288 ug/L	6.3288 ppb	21:37:03
2	Ba 233.527†	111146.6	100507.2	1190.3 ug/L	1190.3 ppb	21:37:03
2	Be 313.107†	-18352.8	-7613.7	8.0856 ug/L	8.0856 ppb	21:37:03
2	Cd 226.502†	888.3	989.9	1.0035 ug/L	1.0035 ppb	21:37:23
2	Co 228.616†	1713.0	1606.6	36.984 ug/L	36.984 ppb	21:37:23
2	Cr 267.716†	10565.6	9478.8	132.30 ug/L	132.30 ppb	21:37:03
2	Cu 324.752†	22664.3	12959.1	55.324 ug/L	55.324 ppb	21:37:03
2	Mn 257.610†	1986028.4	1795498.7	2885.7 ug/L	2885.7 ppb	21:36:58
2	Mo 202.031†	-18.8	-31.4	7.1171 ug/L	7.1171 ppb	21:37:23
2	Ni 231.604†	2939.4	2556.8	81.703 ug/L	81.703 ppb	21:37:23

2	P 214.914†	1505.3	1165.9	565.82 ug/L	565.82 ppb	21:37:23
2	Pb 220.353†	2541.4	2368.9	397.65 ug/L	397.65 ppb	21:37:23
2	S 181.975 Axial†	313.5	241.0	292.78 ug/L	292.78 ppb	21:37:23
2	Sb 206.836†	78.0	40.5	-3.5432 ug/L	-3.5432 ppb	21:37:23
2	Se 196.026†	-515.7	-446.5	19.179 ug/L	19.179 ppb	21:37:23
2	Si 251.611†	1359656.6	1228944.4	44845 ug/L	44845 ppb	21:36:58
2	Sn 189.927†	-36.8	-41.3	-14.066 ug/L	-14.066 ppb	21:37:23
2	Ti 334.940†	2684653.8	2429025.8	4895.4 ug/L	4895.4 ppb	21:36:58
2	Tl 190.801†	-175.0	-127.0	-4.5823 ug/L	-4.5823 ppb	21:37:23
2	U 409.014†	-9778.1	-6305.5	-225.83 ug/L	-225.83 ppb	21:37:03
2	V 292.402†	27319.4	26332.9	185.96 ug/L	185.96 ppb	21:37:03
2	Zn 213.857†	35886.3	31741.6	330.58 ug/L	330.58 ppb	21:37:03
2	SiO2†	1351041.5	1221146.6	95129 ug/L	95129 ppb	21:38:07
3	Sc Radial	5143.4	5143.4	109 %		21:36:19
3	Y RADIAL	6300.3	6300.3	126.4 %		21:36:19
3	Al 396.153Radial†	119453.1	109397.4	102330 ug/L	102330 ppb	21:35:59
3	Ca 317.933Radial†	9711.1	8864.4	16106 ug/L	16106 ppb	21:35:59
3	Fe 238.204 Radial†	13038.8	11924.4	123720 ug/L	123720 ppb	21:35:59
3	K 766.490 Radial†	67329.1	59350.5	11808 ug/L	11808 ppb	21:35:59
3	Mg 279.077 IEC†	462.5	420.4	16561 ug/L	16561 ppb	21:36:19
3	Na 589.592 Radial†	2716.9	3334.0	1136.2 ug/L	1136.2 ppb	21:35:59
3	Sr 421.552†	29550.3	27041.7	196.52 ug/L	196.52 ppb	21:35:59
3	Sc 361.383	842001.9	842001.9	109.64 %		21:37:29
3	Y 371.029	873201.9	873201.9	126.73 %		21:37:29
3	Ag 328.068†	-7456.6	-7056.4	2.5681 ug/L	2.5681 ppb	21:37:34
3	As 188.979†	-53.6	-23.9	60.289 ug/L	60.289 ppb	21:37:54
3	B 249.677†	695.9	1088.1	7.0178 ug/L	7.0178 ppb	21:37:34
3	Ba 233.527†	112544.2	102642.3	1215.4 ug/L	1215.4 ppb	21:37:34
3	Be 313.107†	-18052.4	-7481.9	8.0171 ug/L	8.0171 ppb	21:37:34
3	Cd 226.502†	877.5	986.9	1.2224 ug/L	1.2224 ppb	21:37:54
3	Co 228.616†	1707.9	1615.2	37.399 ug/L	37.399 ppb	21:37:54
3	Cr 267.716†	10688.5	9672.7	134.91 ug/L	134.91 ppb	21:37:34
3	Cu 324.752†	22842.0	13296.7	56.457 ug/L	56.457 ppb	21:37:34
3	Mn 257.610†	1951295.3	1779197.1	2859.4 ug/L	2859.4 ppb	21:37:29
3	Mo 202.031†	-35.9	-47.1	5.4746 ug/L	5.4746 ppb	21:37:54
3	Ni 231.604†	2947.9	2587.3	82.678 ug/L	82.678 ppb	21:37:54
3	P 214.914†	1519.4	1190.4	580.62 ug/L	580.62 ppb	21:37:54
3	Pb 220.353†	2560.9	2406.3	403.20 ug/L	403.20 ppb	21:37:54
3	S 181.975 Axial†	312.1	242.2	294.79 ug/L	294.79 ppb	21:37:54
3	Sb 206.836†	77.2	40.4	-3.2917 ug/L	-3.2917 ppb	21:37:54
3	Se 196.026†	-504.8	-440.6	16.860 ug/L	16.860 ppb	21:37:54
3	Si 251.611†	1332639.6	1214830.7	44330 ug/L	44330 ppb	21:37:29
3	Sn 189.927†	-25.8	-31.6	-11.687 ug/L	-11.687 ppb	21:37:54
3	Ti 334.940†	2632896.2	2402606.2	4842.1 ug/L	4842.1 ppb	21:37:29
3	Tl 190.801†	-164.6	-118.9	-1.4160 ug/L	-1.4160 ppb	21:37:54
3	U 409.014†	-9877.2	-6471.6	-231.11 ug/L	-231.11 ppb	21:37:34
3	V 292.402†	27636.6	26833.6	190.34 ug/L	190.34 ppb	21:37:34
3	Zn 213.857†	36253.7	32354.5	337.71 ug/L	337.71 ppb	21:37:34
3	SiO2†	1344128.4	1225301.7	95453 ug/L	95453 ppb	21:38:12

Mean Data: 246055007|949334|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842870.5	109.76 %	0.775			0.71%
Sc Radial	5087.4	108 %	1.2			1.12%
Y 371.029	874380.4	126.90 %	0.937			0.74%
Y RADIAL	6246.4	125.3 %	1.19			0.95%
Ag 328.068†	-6984.0	3.3186 ug/L	0.95066	3.3186 ppb	0.95066	28.65%
Al 396.153Radial†	110950.0	103780 ug/L	1390.0	103780 ppb	1390.0	1.34%
As 188.979†	-21.0	62.183 ug/L	1.7404	62.183 ppb	1.7404	2.80%
B 249.677†	1065.3	6.2410 ug/L	0.82418	6.2410 ppb	0.82418	13.21%
Ba 233.527†	101574.7	1202.8 ug/L	12.56	1202.8 ppb	12.56	1.04%
Be 313.107†	-7583.4	8.0577 ug/L	0.03594	8.0577 ppb	0.03594	0.45%
Ca 317.933Radial†	8960.0	16280 ug/L	155.3	16280 ppb	155.3	0.95%
Cd 226.502†	993.2	1.1794 ug/L	0.15885	1.1794 ppb	0.15885	13.47%
Co 228.616†	1611.8	37.202 ug/L	0.2085	37.202 ppb	0.2085	0.56%
Cr 267.716†	9581.2	133.68 ug/L	1.311	133.68 ppb	1.311	0.98%
Cu 324.752†	13108.2	55.817 ug/L	0.5804	55.817 ppb	0.5804	1.04%
Fe 238.204 Radial†	12047.3	124990 ug/L	1266.9	124990 ppb	1266.9	1.01%
K 766.490 Radial†	60170.9	11971 ug/L	146.1	11971 ppb	146.1	1.22%



Mg 279.077 IEC†	429.0	16903 ug/L	311.8	16903 ppb	311.8	1.84%
Mn 257.610†	1790304.9	2877.3 ug/L	15.50	2877.3 ppb	15.50	0.54%
Mo 202.031†	-40.2	6.2086 ug/L	0.83502	6.2086 ppb	0.83502	13.45%
Na 589.592 Radial†	3380.3	1152.0 ug/L	18.72	1152.0 ppb	18.72	1.62%
Ni 231.604†	2572.8	82.216 ug/L	0.4897	82.216 ppb	0.4897	0.60%
P 214.914†	1179.9	574.21 ug/L	7.601	574.21 ppb	7.601	1.32%
Pb 220.353†	2386.2	400.22 ug/L	2.798	400.22 ppb	2.798	0.70%
S 181.975 Axial†	241.8	294.03 ug/L	1.092	294.03 ppb	1.092	0.37%
Sb 206.836†	40.3	-3.4960 ug/L	0.18527	-3.4960 ppb	0.18527	5.30%
Se 196.026†	-445.2	17.028 ug/L	2.0718	17.028 ppb	2.0718	12.17%
Si 251.611†	1223901.9	44661 ug/L	287.3	44661 ppb	287.3	0.64%
Sn 189.927†	-39.3	-13.542 ug/L	1.6572	-13.542 ppb	1.6572	12.24%
Sr 421.552†	27484.6	199.74 ug/L	2.984	199.74 ppb	2.984	1.49%
Ti 334.940†	2420295.8	4877.8 ug/L	30.87	4877.8 ppb	30.87	0.63%
Tl 190.801†	-125.2	-3.9229 ug/L	2.25092	-3.9229 ppb	2.25092	57.38%
U 409.014†	-6390.9	-228.55 ug/L	2.644	-228.55 ppb	2.644	1.16%
V 292.402†	26548.2	187.86 ug/L	2.243	187.86 ppb	2.243	1.19%
Zn 213.857†	32064.6	334.33 ug/L	3.579	334.33 ppb	3.579	1.07%
SiO2†	1230358.6	95847 ug/L	976.2	95847 ppb	976.2	1.02%

Sequence No.: 30

Sample ID: 246055008|949334|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 3/1/2010 21:40:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246055008|949334|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5125.5	5125.5	109 %		21:42:38
1	Y RADIAL	5887.5	5887.5	118.1 %		21:42:38
1	Al 396.153Radial†	78033.6	71743.1	67110 ug/L	67110 ppb	21:42:18
1	Ca 317.933Radial†	14045.1	12875.0	23393 ug/L	23393 ppb	21:42:18
1	Fe 238.204 Radial†	9946.5	9126.3	94686 ug/L	94686 ppb	21:42:18
1	K 766.490 Radial†	79758.7	70978.4	14120 ug/L	14120 ppb	21:42:18
1	Mg 279.077 IEC†	383.1	348.9	13756 ug/L	13756 ppb	21:42:38
1	Na 589.592 Radial†	1217.2	1965.6	669.86 ug/L	669.86 ppb	21:42:18
1	Sr 421.552†	31474.6	28902.7	210.00 ug/L	210.00 ppb	21:42:18
1	Sc 361.383	841207.7	841207.7	109.54 %		21:43:36
1	Y 371.029	818250.0	818250.0	118.75 %		21:43:36
1	Ag 328.068†	-5578.5	-5348.3	2.1485 ug/L	2.1485 ppb	21:43:41
1	As 188.979†	-26.2	1.1	57.514 ug/L	57.514 ppb	21:44:01
1	B 249.677†	996.6	1363.3	18.634 ug/L	18.634 ppb	21:43:41
1	Ba 233.527†	101012.4	92211.9	1091.4 ug/L	1091.4 ppb	21:43:41
1	Be 313.107†	-20757.4	-9966.8	5.1691 ug/L	5.1691 ppb	21:43:41
1	Cd 226.502†	705.1	830.3	2.0084 ug/L	2.0084 ppb	21:44:01
1	Co 228.616†	1556.8	1478.7	35.382 ug/L	35.382 ppb	21:44:01
1	Cr 267.716†	5964.4	5369.3	75.479 ug/L	75.479 ppb	21:44:01
1	Cu 324.752†	27970.4	17998.0	72.443 ug/L	72.443 ppb	21:43:41
1	Mn 257.610†	1722192.9	1571729.7	2524.6 ug/L	2524.6 ppb	21:43:36
1	Mo 202.031†	-18.5	-31.2	4.7622 ug/L	4.7622 ppb	21:44:01
1	Ni 231.604†	1796.5	1538.7	49.160 ug/L	49.160 ppb	21:44:01
1	P 214.914†	3224.2	2748.0	1461.4 ug/L	1461.4 ppb	21:44:01
1	Pb 220.353†	2594.3	2439.0	402.32 ug/L	402.32 ppb	21:44:01
1	S 181.975 Axial†	1069.6	933.9	1198.3 ug/L	1198.3 ppb	21:44:01
1	Sb 206.836†	63.9	28.3	-4.4645 ug/L	-4.4645 ppb	21:44:01
1	Se 196.026†	-382.7	-329.6	16.510 ug/L	16.510 ppb	21:44:01
1	Si 251.611†	1308537.2	1193975.1	43569 ug/L	43569 ppb	21:43:36
1	Sn 189.927†	-86.7	-87.3	-21.827 ug/L	-21.827 ppb	21:44:01
1	Ti 334.940†	2184961.1	1995953.2	4023.9 ug/L	4023.9 ppb	21:43:36
1	Tl 190.801†	-156.1	-111.3	-6.2732 ug/L	-6.2732 ppb	21:44:01
1	U 409.014†	-5060.6	-2083.0	-80.709 ug/L	-80.709 ppb	21:43:41
1	V 292.402†	25573.9	24974.4	180.90 ug/L	180.90 ppb	21:43:41
1	Zn 213.857†	28301.8	25126.4	262.53 ug/L	262.53 ppb	21:43:41
1	SiO2†	1307178.3	1192727.3	92915 ug/L	92915 ppb	21:45:10
2	Sc Radial	5078.9	5078.9	108 %		21:43:03
2	Y RADIAL	5856.2	5856.2	117.5 %		21:43:03
2	Al 396.153Radial†	77918.9	72294.5	67626 ug/L	67626 ppb	21:42:43
2	Ca 317.933Radial†	14046.7	12994.9	23611 ug/L	23611 ppb	21:42:43
2	Fe 238.204 Radial†	9976.1	9237.5	95840 ug/L	95840 ppb	21:42:43
2	K 766.490 Radial†	79863.6	71747.8	14273 ug/L	14273 ppb	21:42:43
2	Mg 279.077 IEC†	377.0	346.5	13656 ug/L	13656 ppb	21:43:03
2	Na 589.592 Radial†	1228.9	1986.6	677.04 ug/L	677.04 ppb	21:42:43
2	Sr 421.552†	31484.2	29176.9	211.99 ug/L	211.99 ppb	21:42:43
2	Sc 361.383	847184.5	847184.5	110.32 %		21:44:07
2	Y 371.029	823892.7	823892.7	119.57 %		21:44:07
2	Ag 328.068†	-5456.7	-5202.0	3.2354 ug/L	3.2354 ppb	21:44:12
2	As 188.979†	-40.1	-11.4	52.216 ug/L	52.216 ppb	21:44:32
2	B 249.677†	1032.8	1389.6	19.108 ug/L	19.108 ppb	21:44:12
2	Ba 233.527†	100493.8	91091.3	1078.2 ug/L	1078.2 ppb	21:44:12
2	Be 313.107†	-20576.0	-9668.7	5.2835 ug/L	5.2835 ppb	21:44:12
2	Cd 226.502†	719.3	838.7	2.0084 ug/L	2.0084 ppb	21:44:32
2	Co 228.616†	1561.4	1472.8	35.185 ug/L	35.185 ppb	21:44:32
2	Cr 267.716†	5963.5	5330.0	74.958 ug/L	74.958 ppb	21:44:32
2	Cu 324.752†	27607.3	17488.7	70.593 ug/L	70.593 ppb	21:44:12
2	Mn 257.610†	1735179.5	1572409.8	2525.8 ug/L	2525.8 ppb	21:44:07
2	Mo 202.031†	-13.0	-26.2	5.3185 ug/L	5.3185 ppb	21:44:32
2	Ni 231.604†	1801.9	1532.0	48.948 ug/L	48.948 ppb	21:44:32

2	P 214.914†	3235.2	2737.2	1454.9 ug/L	1454.9 ppb	21:44:32
2	Pb 220.353†	2624.1	2449.3	404.03 ug/L	404.03 ppb	21:44:32
2	S 181.975 Axial†	1064.5	922.4	1183.3 ug/L	1183.3 ppb	21:44:32
2	Sb 206.836†	73.9	37.0	-0.9821 ug/L	-0.9821 ppb	21:44:32
2	Se 196.026†	-391.3	-334.9	15.906 ug/L	15.906 ppb	21:44:32
2	Si 251.611†	1315670.1	1192013.2	43497 ug/L	43497 ppb	21:44:07
2	Sn 189.927†	-96.4	-95.4	-23.780 ug/L	-23.780 ppb	21:44:32
2	Ti 334.940†	2199503.8	1995063.4	4022.1 ug/L	4022.1 ppb	21:44:07
2	Tl 190.801†	-162.3	-115.9	-8.4035 ug/L	-8.4035 ppb	21:44:32
2	U 409.014†	-4893.0	-1898.5	-74.661 ug/L	-74.661 ppb	21:44:12
2	V 292.402†	25337.6	24595.5	177.73 ug/L	177.73 ppb	21:44:12
2	Zn 213.857†	28073.6	24737.3	258.07 ug/L	258.07 ppb	21:44:12
2	SiO2†	1294764.5	1173055.9	91383 ug/L	91383 ppb	21:45:15
3	Sc Radial	5081.4	5081.4	108 %		21:43:28
3	Y RADIAL	5850.3	5850.3	117.3 %		21:43:28
3	Al 396.153Radial†	77183.1	71577.2	66955 ug/L	66955 ppb	21:43:08
3	Ca 317.933Radial†	13803.6	12763.3	23190 ug/L	23190 ppb	21:43:08
3	Fe 238.204 Radial†	9871.8	9136.3	94790 ug/L	94790 ppb	21:43:08
3	K 766.490 Radial†	79340.3	71226.6	14170 ug/L	14170 ppb	21:43:08
3	Mg 279.077 IEC†	379.1	348.3	13728 ug/L	13728 ppb	21:43:28
3	Na 589.592 Radial†	1157.8	1920.2	654.41 ug/L	654.41 ppb	21:43:08
3	Sr 421.552†	31143.8	28847.1	209.60 ug/L	209.60 ppb	21:43:08
3	Sc 361.383	837453.9	837453.9	109.05 %		21:44:38
3	Y 371.029	814353.9	814353.9	118.19 %		21:44:38
3	Ag 328.068†	-5497.3	-5296.7	2.4413 ug/L	2.4413 ppb	21:44:43
3	As 188.979†	-47.1	-18.2	48.942 ug/L	48.942 ppb	21:45:03
3	B 249.677†	1051.3	1417.5	19.974 ug/L	19.974 ppb	21:44:43
3	Ba 233.527†	100444.3	92104.3	1090.1 ug/L	1090.1 ppb	21:44:43
3	Be 313.107†	-20617.5	-9923.4	5.1815 ug/L	5.1815 ppb	21:44:43
3	Cd 226.502†	718.1	845.1	2.2080 ug/L	2.2080 ppb	21:45:03
3	Co 228.616†	1571.0	1498.1	35.969 ug/L	35.969 ppb	21:45:03
3	Cr 267.716†	5970.0	5398.8	75.881 ug/L	75.881 ppb	21:45:03
3	Cu 324.752†	27699.4	17864.0	71.945 ug/L	71.945 ppb	21:44:43
3	Mn 257.610†	1712800.8	1570164.3	2522.1 ug/L	2522.1 ppb	21:44:38
3	Mo 202.031†	-16.0	-29.0	4.9703 ug/L	4.9703 ppb	21:45:03
3	Ni 231.604†	1802.8	1551.8	49.580 ug/L	49.580 ppb	21:45:03
3	P 214.914†	3240.3	2775.9	1477.0 ug/L	1477.0 ppb	21:45:03
3	Pb 220.353†	2603.5	2458.1	405.36 ug/L	405.36 ppb	21:45:03
3	S 181.975 Axial†	1059.4	929.0	1191.9 ug/L	1191.9 ppb	21:45:03
3	Sb 206.836†	77.1	40.6	0.5769 ug/L	0.5769 ppb	21:45:03
3	Se 196.026†	-385.9	-334.0	14.017 ug/L	14.017 ppb	21:45:03
3	Si 251.611†	1298856.5	1190452.4	43440 ug/L	43440 ppb	21:44:38
3	Sn 189.927†	-84.9	-85.9	-21.557 ug/L	-21.557 ppb	21:45:03
3	Ti 334.940†	2174047.8	1994886.4	4021.7 ug/L	4021.7 ppb	21:44:38
3	Tl 190.801†	-155.8	-111.6	-6.4677 ug/L	-6.4677 ppb	21:45:03
3	U 409.014†	-4940.0	-1993.2	-77.714 ug/L	-77.714 ppb	21:44:43
3	V 292.402†	25292.9	24821.4	179.67 ug/L	179.67 ppb	21:44:43
3	Zn 213.857†	28159.6	25111.9	262.36 ug/L	262.36 ppb	21:44:43
3	SiO2†	1296205.1	1188013.9	92548 ug/L	92548 ppb	21:45:21

Mean Data: 246055008|949334|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	841948.7	109.64 %		0.639				0.58%
Sc Radial	5095.3	108 %		0.6				0.51%
Y 371.029	818832.2	118.84 %		0.696				0.59%
Y RADIAL	5864.7	117.6 %		0.40				0.34%
Ag 328.068†	-5282.3	2.6084 ug/L		0.56237	2.6084 ppb		0.56237	21.56%
Al 396.153Radial†	71871.6	67230 ug/L		351.2	67230 ppb		351.2	0.52%
As 188.979†	-9.5	52.891 ug/L		4.3254	52.891 ppb		4.3254	8.18%
B 249.677†	1390.1	19.239 ug/L		0.6794	19.239 ppb		0.6794	3.53%
Ba 233.527†	91802.5	1086.6 ug/L		7.28	1086.6 ppb		7.28	0.67%
Be 313.107†	-9853.0	5.2114 ug/L		0.06279	5.2114 ppb		0.06279	1.20%
Ca 317.933Radial†	12877.7	23398 ug/L		210.4	23398 ppb		210.4	0.90%
Cd 226.502†	838.0	2.0749 ug/L		0.11526	2.0749 ppb		0.11526	5.56%
Co 228.616†	1483.2	35.512 ug/L		0.4080	35.512 ppb		0.4080	1.15%
Cr 267.716†	5366.1	75.439 ug/L		0.4629	75.439 ppb		0.4629	0.61%
Cu 324.752†	17783.6	71.660 ug/L		0.9569	71.660 ppb		0.9569	1.34%
Fe 238.204 Radial†	9166.7	95105 ug/L		638.4	95105 ppb		638.4	0.67%
K 766.490 Radial†	71317.6	14188 ug/L		78.1	14188 ppb		78.1	0.55%

Mg 279.077 IEC†	347.9	13713 ug/L	51.5	13713 ppb	51.5	0.38%
Mn 257.610†	1571434.6	2524.1 ug/L	1.89	2524.1 ppb	1.89	0.07%
Mo 202.031†	-28.8	5.0170 ug/L	0.28107	5.0170 ppb	0.28107	5.60%
Na 589.592 Radial†	1957.5	667.10 ug/L	11.560	667.10 ppb	11.560	1.73%
Ni 231.604†	1540.9	49.230 ug/L	0.3219	49.230 ppb	0.3219	0.65%
P 214.914†	2753.7	1464.4 ug/L	11.33	1464.4 ppb	11.33	0.77%
Pb 220.353†	2448.8	403.90 ug/L	1.521	403.90 ppb	1.521	0.38%
S 181.975 Axial†	928.4	1191.1 ug/L	7.52	1191.1 ppb	7.52	0.63%
Sb 206.836†	35.3	-1.6232 ug/L	2.58109	-1.6232 ppb	2.58109	159.01%
Se 196.026†	-332.8	15.477 ug/L	1.3007	15.477 ppb	1.3007	8.40%
Si 251.611†	1192146.9	43502 ug/L	64.4	43502 ppb	64.4	0.15%
Sn 189.927†	-89.5	-22.388 ug/L	1.2130	-22.388 ppb	1.2130	5.42%
Sr 421.552†	28975.6	210.53 ug/L	1.282	210.53 ppb	1.282	0.61%
Ti 334.940†	1995301.0	4022.6 ug/L	1.15	4022.6 ppb	1.15	0.03%
Tl 190.801†	-112.9	-7.0481 ug/L	1.17779	-7.0481 ppb	1.17779	16.71%
U 409.014†	-1991.6	-77.695 ug/L	3.0244	-77.695 ppb	3.0244	3.89%
V 292.402†	24797.1	179.43 ug/L	1.597	179.43 ppb	1.597	0.89%
Zn 213.857†	24991.9	260.99 ug/L	2.525	260.99 ppb	2.525	0.97%
SiO2†	1184599.0	92282 ug/L	800.1	92282 ppb	800.1	0.87%

Sequence No.: 31  
 Sample ID: 246055009|949334|100  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 62  
 Date Collected: 3/1/2010 21:47:33  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246055009|949334|100

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4991.6	4991.6	106 %		21:49:26
1	Y RADIAL	5268.1	5268.1	105.7 %		21:49:26
1	Al 396.153Radial†	259.4	331.7	310.31 ug/L	310.31 ppb	21:49:46
1	Ca 317.933Radial†	98.3	70.5	128.14 ug/L	128.14 ppb	21:49:46
1	Fe 238.204 Radial†	91.6	79.1	820.21 ug/L	820.21 ppb	21:49:46
1	K 766.490 Radial†	2610.6	199.9	39.709 ug/L	39.709 ppb	21:49:26
1	Mg 279.077 IEC†	3.4	0.4	13.311 ug/L	13.311 ppb	21:49:46
1	Na 589.592 Radial†	-655.1	230.1	78.424 ug/L	78.424 ppb	21:49:26
1	Sr 421.552†	201.5	190.5	1.3842 ug/L	1.3842 ppb	21:49:26
1	Sc 361.383	812902.2	812902.2	105.86 %		21:50:43
1	Y 371.029	732145.9	732145.9	106.26 %		21:50:43
1	Ag 328.068†	171.1	-94.0	-0.2329 ug/L	-0.2329 ppb	21:50:43
1	As 188.979†	-20.4	5.8	2.9941 ug/L	2.9941 ppb	21:51:03
1	B 249.677†	-554.0	-69.9	-1.8845 ug/L	-1.8845 ppb	21:51:03
1	Ba 233.527†	436.3	409.8	4.8645 ug/L	4.8645 ppb	21:51:03
1	Be 313.107†	-9522.0	-12.6	0.0538 ug/L	0.0538 ppb	21:50:43
1	Cd 226.502†	-190.6	6.5	0.0099 ug/L	0.0099 ppb	21:51:03
1	Co 228.616†	-55.7	4.9	0.0843 ug/L	0.0843 ppb	21:51:03
1	Cr 267.716†	92.4	11.7	0.1747 ug/L	0.1747 ppb	21:51:03
1	Cu 324.752†	8015.7	36.2	0.1743 ug/L	0.1743 ppb	21:50:43
1	Mn 257.610†	12626.6	11467.1	18.435 ug/L	18.435 ppb	21:50:43
1	Mo 202.031†	18.5	3.1	0.3539 ug/L	0.3539 ppb	21:51:03
1	Ni 231.604†	115.4	7.7	0.2466 ug/L	0.2466 ppb	21:51:03
1	P 214.914†	233.4	25.1	13.404 ug/L	13.404 ppb	21:51:03
1	Pb 220.353†	37363.3	35367.4	5703.0 ug/L	5703.0 ppb	21:50:43
1	S 181.975 Axial†	51.5	6.2	7.9252 ug/L	7.9252 ppb	21:51:03
1	Sb 206.836†	75.5	41.3	16.657 ug/L	16.657 ppb	21:51:03
1	Se 196.026†	-27.6	-6.3	-1.9900 ug/L	-1.9900 ppb	21:51:03
1	Si 251.611†	9128.1	8034.0	293.16 ug/L	293.16 ppb	21:50:43
1	Sn 189.927†	7.7	-0.8	-0.2151 ug/L	-0.2151 ppb	21:51:03
1	Ti 334.940†	12227.5	12852.2	25.910 ug/L	25.910 ppb	21:50:43
1	Tl 190.801†	-47.7	-13.8	-6.0472 ug/L	-6.0472 ppb	21:51:03
1	U 409.014†	-2416.8	253.7	8.4016 ug/L	8.4016 ppb	21:50:43
1	V 292.402†	-1496.9	213.9	1.5769 ug/L	1.5769 ppb	21:50:43
1	Zn 213.857†	2311.2	1473.0	16.121 ug/L	16.121 ppb	21:51:03
1	SiO2†	9112.7	8012.2	624.15 ug/L	624.15 ppb	21:51:59
2	Sc Radial	5127.1	5127.1	109 %		21:49:51
2	Y RADIAL	5411.0	5411.0	108.5 %		21:49:51
2	Al 396.153Radial†	253.4	319.8	299.16 ug/L	299.16 ppb	21:50:11
2	Ca 317.933Radial†	97.4	67.3	122.27 ug/L	122.27 ppb	21:50:11
2	Fe 238.204 Radial†	89.4	74.7	775.46 ug/L	775.46 ppb	21:50:11
2	K 766.490 Radial†	2643.6	165.2	32.810 ug/L	32.810 ppb	21:49:51
2	Mg 279.077 IEC†	5.7	2.4	92.708 ug/L	92.708 ppb	21:50:11
2	Na 589.592 Radial†	-687.6	216.6	73.802 ug/L	73.802 ppb	21:49:51
2	Sr 421.552†	186.4	171.6	1.2470 ug/L	1.2470 ppb	21:49:51
2	Sc 361.383	810838.2	810838.2	105.59 %		21:51:08
2	Y 371.029	728397.5	728397.5	105.71 %		21:51:08
2	Ag 328.068†	165.3	-99.1	-0.2788 ug/L	-0.2788 ppb	21:51:08
2	As 188.979†	-22.9	3.3	1.8968 ug/L	1.8968 ppb	21:51:28
2	B 249.677†	-549.6	-67.1	-1.8042 ug/L	-1.8042 ppb	21:51:28
2	Ba 233.527†	453.6	427.2	5.0668 ug/L	5.0668 ppb	21:51:28
2	Be 313.107†	-9675.9	-181.3	-0.0130 ug/L	-0.0130 ppb	21:51:08
2	Cd 226.502†	-179.6	16.6	0.1572 ug/L	0.1572 ppb	21:51:28
2	Co 228.616†	-70.0	-8.9	-0.3340 ug/L	-0.3340 ppb	21:51:28
2	Cr 267.716†	100.0	19.1	0.2727 ug/L	0.2727 ppb	21:51:28
2	Cu 324.752†	7978.4	20.1	0.1090 ug/L	0.1090 ppb	21:51:08
2	Mn 257.610†	12657.2	11526.4	18.522 ug/L	18.522 ppb	21:51:08
2	Mo 202.031†	3.3	-11.2	-0.9678 ug/L	-0.9678 ppb	21:51:28
2	Ni 231.604†	101.9	-4.8	-0.1530 ug/L	-0.1530 ppb	21:51:28

2	P 214.914†	239.6	31.6	17.058 ug/L	17.058 ppb	21:51:28
2	Pb 220.353†	37331.4	35427.0	5712.6 ug/L	5712.6 ppb	21:51:08
2	S 181.975 Axial†	52.3	7.0	9.0375 ug/L	9.0375 ppb	21:51:28
2	Sb 206.836†	81.1	46.8	18.853 ug/L	18.853 ppb	21:51:28
2	Se 196.026†	-11.5	9.0	7.2452 ug/L	7.2452 ppb	21:51:28
2	Si 251.611†	9111.2	8039.9	293.39 ug/L	293.39 ppb	21:51:08
2	Sn 189.927†	10.5	1.9	0.4154 ug/L	0.4154 ppb	21:51:28
2	Ti 334.940†	12262.1	12914.4	26.025 ug/L	26.025 ppb	21:51:08
2	Tl 190.801†	-35.8	-2.7	-0.9233 ug/L	-0.9233 ppb	21:51:28
2	U 409.014†	-2252.7	403.3	13.417 ug/L	13.417 ppb	21:51:08
2	V 292.402†	-1547.8	162.1	1.1634 ug/L	1.1634 ppb	21:51:08
2	Zn 213.857†	2323.0	1489.8	16.315 ug/L	16.315 ppb	21:51:28
2	SiO2†	9218.0	8133.9	633.67 ug/L	633.67 ppb	21:52:04
3	Sc Radial	5125.3	5125.3	109 %		21:50:16
3	Y RADIAL	5436.5	5436.5	109.0 %		21:50:16
3	Al 396.153Radial†	262.5	328.2	306.97 ug/L	306.97 ppb	21:50:36
3	Ca 317.933Radial†	104.7	74.0	134.49 ug/L	134.49 ppb	21:50:36
3	Fe 238.204 Radial†	89.7	75.0	778.64 ug/L	778.64 ppb	21:50:36
3	K 766.490 Radial†	2460.9	-1.7	-0.4221 ug/L	-0.4221 ppb	21:50:16
3	Mg 279.077 IEC†	2.7	-0.4	-16.307 ug/L	-16.307 ppb	21:50:36
3	Na 589.592 Radial†	-716.0	190.2	64.834 ug/L	64.834 ppb	21:50:16
3	Sr 421.552†	217.1	199.9	1.4524 ug/L	1.4524 ppb	21:50:16
3	Sc 361.383	820584.0	820584.0	106.86 %		21:51:34
3	Y 371.029	737814.5	737814.5	107.08 %		21:51:34
3	Ag 328.068†	134.8	-129.5	-0.4349 ug/L	-0.4349 ppb	21:51:34
3	As 188.979†	-15.4	10.6	5.1264 ug/L	5.1264 ppb	21:51:54
3	B 249.677†	-541.6	-53.4	-1.4636 ug/L	-1.4636 ppb	21:51:54
3	Ba 233.527†	433.5	403.3	4.7856 ug/L	4.7856 ppb	21:51:54
3	Be 313.107†	-9744.4	-136.6	0.0051 ug/L	0.0051 ppb	21:51:34
3	Cd 226.502†	-180.9	17.4	0.1687 ug/L	0.1687 ppb	21:51:54
3	Co 228.616†	-53.2	7.7	0.1672 ug/L	0.1672 ppb	21:51:54
3	Cr 267.716†	110.2	27.5	0.3870 ug/L	0.3870 ppb	21:51:54
3	Cu 324.752†	8033.6	-17.9	-0.0341 ug/L	-0.0341 ppb	21:51:34
3	Mn 257.610†	12803.4	11520.9	18.518 ug/L	18.518 ppb	21:51:34
3	Mo 202.031†	14.0	-1.3	-0.0535 ug/L	-0.0535 ppb	21:51:54
3	Ni 231.604†	110.7	2.3	0.0731 ug/L	0.0731 ppb	21:51:54
3	P 214.914†	241.2	30.4	16.425 ug/L	16.425 ppb	21:51:54
3	Pb 220.353†	37704.2	35356.0	5701.2 ug/L	5701.2 ppb	21:51:34
3	S 181.975 Axial†	53.3	7.3	9.4536 ug/L	9.4536 ppb	21:51:54
3	Sb 206.836†	69.8	35.3	14.204 ug/L	14.204 ppb	21:51:54
3	Se 196.026†	-23.2	-1.9	0.5981 ug/L	0.5981 ppb	21:51:54
3	Si 251.611†	9282.6	8097.8	295.50 ug/L	295.50 ppb	21:51:34
3	Sn 189.927†	10.1	1.3	0.2939 ug/L	0.2939 ppb	21:51:54
3	Ti 334.940†	12491.9	12991.5	26.191 ug/L	26.191 ppb	21:51:34
3	Tl 190.801†	-19.3	13.1	6.3391 ug/L	6.3391 ppb	21:51:54
3	U 409.014†	-2231.2	448.7	14.936 ug/L	14.936 ppb	21:51:34
3	V 292.402†	-1547.5	179.7	1.3169 ug/L	1.3169 ppb	21:51:34
3	Zn 213.857†	2302.8	1444.8	15.817 ug/L	15.817 ppb	21:51:54
3	SiO2†	9179.5	7994.2	622.76 ug/L	622.76 ppb	21:52:09

Mean Data: 246055009|949334|100

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	814774.8	106.10 %		0.669				0.63%
Sc Radial	5081.3	108 %		1.7				1.53%
Y 371.029	732786.0	106.35 %		0.688				0.65%
Y RADIAL	5371.9	107.8 %		1.82				1.69%
Ag 328.068†	-107.5	-0.3155 ug/L		0.10587	-0.3155 ppb		0.10587	33.55%
Al 396.153Radial†	326.6	305.48 ug/L		5.723	305.48 ppb		5.723	1.87%
As 188.979†	6.6	3.3391 ug/L		1.64222	3.3391 ppb		1.64222	49.18%
B 249.677†	-63.4	-1.7175 ug/L		0.22350	-1.7175 ppb		0.22350	13.01%
Ba 233.527†	413.4	4.9056 ug/L		0.14507	4.9056 ppb		0.14507	2.96%
Be 313.107†	-110.2	0.0153 ug/L		0.03452	0.0153 ppb		0.03452	225.60%
Ca 317.933Radial†	70.6	128.30 ug/L		6.113	128.30 ppb		6.113	4.76%
Cd 226.502†	13.5	0.1119 ug/L		0.08858	0.1119 ppb		0.08858	79.14%
Co 228.616†	1.2	-0.0275 ug/L		0.26865	-0.0275 ppb		0.26865	978.02%
Cr 267.716†	19.5	0.2781 ug/L		0.10626	0.2781 ppb		0.10626	38.21%
Cu 324.752†	12.8	0.0830 ug/L		0.10661	0.0830 ppb		0.10661	128.38%
Fe 238.204 Radial†	76.3	791.44 ug/L		24.968	791.44 ppb		24.968	3.15%
K 766.490 Radial†	121.1	24.032 ug/L		21.4573	24.032 ppb		21.4573	89.28%

Mg 279.077 IEC†	0.8	29.904 ug/L	56.3698	29.904 ppb	56.3698	188.50%
Mn 257.610†	11504.8	18.492 ug/L	0.0493	18.492 ppb	0.0493	0.27%
Mo 202.031†	-3.1	-0.2225 ug/L	0.67689	-0.2225 ppb	0.67689	304.28%
Na 589.592 Radial†	212.3	72.353 ug/L	6.9100	72.353 ppb	6.9100	9.55%
Ni 231.604†	1.7	0.0556 ug/L	0.20035	0.0556 ppb	0.20035	360.42%
P 214.914†	29.0	15.629 ug/L	1.9529	15.629 ppb	1.9529	12.50%
Pb 220.353†	35383.5	5705.6 ug/L	6.15	5705.6 ppb	6.15	0.11%
S 181.975 Axial†	6.8	8.8054 ug/L	0.79021	8.8054 ppb	0.79021	8.97%
Sb 206.836†	41.1	16.571 ug/L	2.3257	16.571 ppb	2.3257	14.03%
Se 196.026†	0.2	1.9511 ug/L	4.76394	1.9511 ppb	4.76394	244.17%
Si 251.611†	8057.2	294.02 ug/L	1.286	294.02 ppb	1.286	0.44%
Sn 189.927†	0.8	0.1647 ug/L	0.33448	0.1647 ppb	0.33448	203.05%
Sr 421.552†	187.3	1.3612 ug/L	0.10460	1.3612 ppb	0.10460	7.68%
Ti 334.940†	12919.4	26.042 ug/L	0.1412	26.042 ppb	0.1412	0.54%
Tl 190.801†	-1.1	-0.2105 ug/L	6.22384	-0.2105 ppb	6.22384	>999.9%
U 409.014†	368.6	12.251 ug/L	3.4194	12.251 ppb	3.4194	27.91%
V 292.402†	185.2	1.3524 ug/L	0.20900	1.3524 ppb	0.20900	15.45%
Zn 213.857†	1469.2	16.085 ug/L	0.2511	16.085 ppb	0.2511	1.56%
SiO2†	8046.7	626.86 ug/L	5.936	626.86 ppb	5.936	0.95%

Sequence No.: 32

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/1/2010 21:54:21

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	4914.6	4914.6	104 %		21:56:12
1	Y RADIAL	5163.5	5163.5	103.6 %		21:56:12
1	Al 396.153Radial†	5715.4	5560.6	5177.9 ug/L	5177.9 ppb	21:56:12
1	Ca 317.933Radial†	2995.1	2846.2	5171.4 ug/L	5171.4 ppb	21:56:32
1	Fe 238.204 Radial†	536.4	506.4	5268.9 ug/L	5268.9 ppb	21:56:32
1	K 766.490 Radial†	29258.3	25758.7	5121.0 ug/L	5121.0 ppb	21:56:12
1	Mg 279.077 IEC†	144.7	135.7	5386.6 ug/L	5386.6 ppb	21:56:32
1	Na 589.592 Radial†	31396.1	30915.5	10536 ug/L	10536 ppb	21:56:12
1	Sr 421.552†	75434.9	72243.5	525.30 ug/L	525.30 ppb	21:56:12
1	Sc 361.383	834131.3	834131.3	108.62 %		21:57:30
1	Y 371.029	738744.7	738744.7	107.21 %		21:57:30
1	Ag 328.068†	104279.9	95749.1	495.43 ug/L	495.43 ppb	21:57:35
1	As 188.979†	1168.5	1100.8	494.95 ug/L	494.95 ppb	21:57:55
1	B 249.677†	20870.4	19667.6	490.21 ug/L	490.21 ppb	21:57:35
1	Ba 233.527†	45596.1	41975.4	496.56 ug/L	496.56 ppb	21:57:35
1	Be 313.107†	1329784.9	1233242.6	491.31 ug/L	491.31 ppb	21:57:30
1	Cd 226.502†	37863.2	35045.2	496.68 ug/L	496.68 ppb	21:57:35
1	Co 228.616†	18091.4	16713.2	505.16 ug/L	505.16 ppb	21:57:35
1	Cr 267.716†	39343.5	36145.8	494.42 ug/L	494.42 ppb	21:57:35
1	Cu 324.752†	151576.5	132012.0	494.31 ug/L	494.31 ppb	21:57:35
1	Mn 257.610†	336247.6	309103.6	495.06 ug/L	495.06 ppb	21:57:35
1	Mo 202.031†	5787.1	5313.5	488.10 ug/L	488.10 ppb	21:57:55
1	Ni 231.604†	17160.3	15697.2	501.49 ug/L	501.49 ppb	21:57:35
1	P 214.914†	5001.2	4409.0	2365.4 ug/L	2365.4 ppb	21:57:55
1	Pb 220.353†	3245.8	3058.9	495.10 ug/L	495.10 ppb	21:57:55
1	S 181.975 Axial†	870.7	759.1	983.22 ug/L	983.22 ppb	21:57:55
1	Sb 206.836†	1344.8	1208.1	507.61 ug/L	507.61 ppb	21:57:55
1	Se 196.026†	863.4	814.7	512.72 ug/L	512.72 ppb	21:57:55
1	Si 251.611†	74691.6	68175.2	2481.8 ug/L	2481.8 ppb	21:57:35
1	Sn 189.927†	2243.5	2057.4	485.13 ug/L	485.13 ppb	21:57:55
1	Ti 334.940†	264613.6	244916.3	493.37 ug/L	493.37 ppb	21:57:35
1	Tl 190.801†	1112.2	1055.2	487.87 ug/L	487.87 ppb	21:57:55
1	U 409.014†	13529.5	14992.7	500.34 ug/L	500.34 ppb	21:57:35
1	V 292.402†	65858.3	62260.1	502.29 ug/L	502.29 ppb	21:57:35
1	Zn 213.857†	49463.8	44828.4	489.74 ug/L	489.74 ppb	21:57:35
1	SiO2†	73671.8	67229.2	5224.0 ug/L	5224.0 ppb	21:59:02
2	Sc Radial	4994.1	4994.1	106 %		21:56:37
2	Y RADIAL	5200.4	5200.4	104.3 %		21:56:37
2	Al 396.153Radial†	5532.2	5300.9	4934.2 ug/L	4934.2 ppb	21:56:37
2	Ca 317.933Radial†	3036.0	2839.1	5158.5 ug/L	5158.5 ppb	21:56:58
2	Fe 238.204 Radial†	544.7	506.0	5264.9 ug/L	5264.9 ppb	21:56:58
2	K 766.490 Radial†	28785.6	24867.1	4943.7 ug/L	4943.7 ppb	21:56:37
2	Mg 279.077 IEC†	141.6	130.6	5184.0 ug/L	5184.0 ppb	21:56:58
2	Na 589.592 Radial†	30352.5	29453.2	10038 ug/L	10038 ppb	21:56:37
2	Sr 421.552†	72885.1	68690.4	499.46 ug/L	499.46 ppb	21:56:37
2	Sc 361.383	813210.4	813210.4	105.90 %		21:58:00
2	Y 371.029	720315.7	720315.7	104.54 %		21:58:00
2	Ag 328.068†	102582.1	96615.7	499.90 ug/L	499.90 ppb	21:58:06
2	As 188.979†	1181.8	1141.0	512.87 ug/L	512.87 ppb	21:58:26
2	B 249.677†	20328.6	19650.3	489.77 ug/L	489.77 ppb	21:58:06
2	Ba 233.527†	44845.9	42346.9	500.95 ug/L	500.95 ppb	21:58:06
2	Be 313.107†	1321101.4	1256538.3	500.58 ug/L	500.58 ppb	21:58:00
2	Cd 226.502†	37304.9	35414.7	501.93 ug/L	501.93 ppb	21:58:06
2	Co 228.616†	17820.3	16885.7	510.40 ug/L	510.40 ppb	21:58:06
2	Cr 267.716†	38787.5	36552.6	499.98 ug/L	499.98 ppb	21:58:06
2	Cu 324.752†	148380.2	132583.7	496.45 ug/L	496.45 ppb	21:58:06
2	Mn 257.610†	330390.4	311536.5	498.96 ug/L	498.96 ppb	21:58:06
2	Mo 202.031†	5813.3	5475.3	502.95 ug/L	502.95 ppb	21:58:26
2	Ni 231.604†	16909.6	15866.9	506.91 ug/L	506.91 ppb	21:58:06



2	P 214.914†	5000.1	4526.4	2430.7 ug/L	2430.7 ppb	21:58:26
2	Pb 220.353†	3252.8	3142.4	508.53 ug/L	508.53 ppb	21:58:26
2	S 181.975 Axial†	870.0	779.0	1009.1 ug/L	1009.1 ppb	21:58:26
2	Sb 206.836†	1353.3	1248.0	524.36 ug/L	524.36 ppb	21:58:26
2	Se 196.026†	850.4	822.9	517.75 ug/L	517.75 ppb	21:58:26
2	Si 251.611†	73340.6	68668.5	2499.6 ug/L	2499.6 ppb	21:58:06
2	Sn 189.927†	2261.2	2127.2	501.56 ug/L	501.56 ppb	21:58:26
2	Ti 334.940†	259609.1	246457.7	496.48 ug/L	496.48 ppb	21:58:06
2	Tl 190.801†	1119.2	1088.1	503.00 ug/L	503.00 ppb	21:58:26
2	U 409.014†	13335.4	15129.8	504.92 ug/L	504.92 ppb	21:58:06
2	V 292.402†	64626.2	62656.5	505.65 ug/L	505.65 ppb	21:58:06
2	Zn 213.857†	48758.2	45333.5	495.27 ug/L	495.27 ppb	21:58:06
2	SiO2†	74438.5	69698.0	5415.9 ug/L	5415.9 ppb	21:59:07
3	Sc Radial	4968.2	4968.2	106 %		21:57:03
3	Y RADIAL	5214.4	5214.4	104.6 %		21:57:03
3	Al 396.153Radial†	5498.2	5295.8	4930.0 ug/L	4930.0 ppb	21:57:03
3	Ca 317.933Radial†	3004.1	2823.8	5130.7 ug/L	5130.7 ppb	21:57:23
3	Fe 238.204 Radial†	539.0	503.3	5237.2 ug/L	5237.2 ppb	21:57:23
3	K 766.490 Radial†	28550.3	24785.4	4927.5 ug/L	4927.5 ppb	21:57:03
3	Mg 279.077 IEC†	144.6	134.1	5325.2 ug/L	5325.2 ppb	21:57:23
3	Na 589.592 Radial†	30091.8	29355.3	10004 ug/L	10004 ppb	21:57:03
3	Sr 421.552†	72593.4	68771.8	500.05 ug/L	500.05 ppb	21:57:03
3	Sc 361.383	819206.7	819206.7	106.68 %		21:58:31
3	Y 371.029	724158.1	724158.1	105.10 %		21:58:31
3	Ag 328.068†	102914.3	96218.0	497.83 ug/L	497.83 ppb	21:58:36
3	As 188.979†	1163.5	1115.7	501.59 ug/L	501.59 ppb	21:58:56
3	B 249.677†	20524.1	19693.1	490.84 ug/L	490.84 ppb	21:58:36
3	Ba 233.527†	45139.8	42312.4	500.53 ug/L	500.53 ppb	21:58:36
3	Be 313.107†	1305600.4	1232875.8	491.17 ug/L	491.17 ppb	21:58:31
3	Cd 226.502†	37499.8	35339.6	500.86 ug/L	500.86 ppb	21:58:36
3	Co 228.616†	17900.5	16837.7	508.93 ug/L	508.93 ppb	21:58:36
3	Cr 267.716†	38791.7	36288.4	496.37 ug/L	496.37 ppb	21:58:36
3	Cu 324.752†	149063.3	132198.5	495.01 ug/L	495.01 ppb	21:58:36
3	Mn 257.610†	332243.9	310990.3	498.08 ug/L	498.08 ppb	21:58:36
3	Mo 202.031†	5727.1	5354.3	491.84 ug/L	491.84 ppb	21:58:56
3	Ni 231.604†	17009.4	15843.5	506.16 ug/L	506.16 ppb	21:58:36
3	P 214.914†	4904.5	4402.2	2361.5 ug/L	2361.5 ppb	21:58:56
3	Pb 220.353†	3229.6	3098.2	501.38 ug/L	501.38 ppb	21:58:56
3	S 181.975 Axial†	847.9	752.3	974.53 ug/L	974.53 ppb	21:58:56
3	Sb 206.836†	1338.1	1224.4	514.37 ug/L	514.37 ppb	21:58:56
3	Se 196.026†	861.9	827.8	520.65 ug/L	520.65 ppb	21:58:56
3	Si 251.611†	73711.0	68508.8	2493.9 ug/L	2493.9 ppb	21:58:36
3	Sn 189.927†	2225.4	2078.1	489.99 ug/L	489.99 ppb	21:58:56
3	Ti 334.940†	260972.8	245941.6	495.43 ug/L	495.43 ppb	21:58:36
3	Tl 190.801†	1125.8	1086.6	502.30 ug/L	502.30 ppb	21:58:56
3	U 409.014†	13418.7	15115.7	504.45 ug/L	504.45 ppb	21:58:36
3	V 292.402†	64794.2	62367.2	503.20 ug/L	503.20 ppb	21:58:36
3	Zn 213.857†	48864.4	45096.1	492.67 ug/L	492.67 ppb	21:58:36
3	SiO2†	73854.2	68635.8	5333.5 ug/L	5333.5 ppb	21:59:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	822182.8	107.06 %	1.403			1.31%
Sc Radial	4959.0	105 %	0.9			0.82%
Y 371.029	727739.5	105.62 %	1.411			1.34%
Y RADIAL	5192.8	104.2 %	0.53			0.51%
Ag 328.068†	96194.3	497.72 ug/L	2.234	497.72 ppb	2.234	0.45%
QC value within limits for Ag 328.068 Recovery = 99.54%						
Al 396.153Radial†	5385.8	5014.0 ug/L	141.92	5014.0 ppb	141.92	2.83%
QC value within limits for Al 396.153Radial Recovery = 100.28%						
As 188.979†	1119.2	503.14 ug/L	9.056	503.14 ppb	9.056	1.80%
QC value within limits for As 188.979 Recovery = 100.63%						
B 249.677†	19670.3	490.27 ug/L	0.542	490.27 ppb	0.542	0.11%
QC value within limits for B 249.677 Recovery = 98.05%						
Ba 233.527†	42211.6	499.35 ug/L	2.424	499.35 ppb	2.424	0.49%
QC value within limits for Ba 233.527 Recovery = 99.87%						
Be 313.107†	1240885.6	494.35 ug/L	5.391	494.35 ppb	5.391	1.09%
QC value within limits for Be 313.107 Recovery = 98.87%						
Ca 317.933Radial†	2836.4	5153.5 ug/L	20.83	5153.5 ppb	20.83	0.40%

QC value within limits for Ca 317.933 Radial Recovery = 103.07%

Cd 226.502†	35266.5	499.83 ug/L	2.772	499.83 ppb	2.772	0.55%
QC value within limits for Cd 226.502 Recovery = 99.97%						
Co 228.616†	16812.2	508.16 ug/L	2.703	508.16 ppb	2.703	0.53%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	36328.9	496.92 ug/L	2.821	496.92 ppb	2.821	0.57%
QC value within limits for Cr 267.716 Recovery = 99.38%						
Cu 324.752†	132264.7	495.26 ug/L	1.091	495.26 ppb	1.091	0.22%
QC value within limits for Cu 324.752 Recovery = 99.05%						
Fe 238.204 Radial†	505.2	5257.0 ug/L	17.27	5257.0 ppb	17.27	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 105.14%						
K 766.490 Radial†	25137.1	4997.4 ug/L	107.36	4997.4 ppb	107.36	2.15%
QC value within limits for K 766.490 Radial Recovery = 99.95%						
Mg 279.077 IEC†	133.5	5298.6 ug/L	103.89	5298.6 ppb	103.89	1.96%
QC value within limits for Mg 279.077 IEC Recovery = 105.97%						
Mn 257.610†	310543.4	497.37 ug/L	2.046	497.37 ppb	2.046	0.41%
QC value within limits for Mn 257.610 Recovery = 99.47%						
Mo 202.031†	5381.0	494.29 ug/L	7.725	494.29 ppb	7.725	1.56%
QC value within limits for Mo 202.031 Recovery = 98.86%						
Na 589.592 Radial†	29908.0	10193 ug/L	297.8	10193 ppb	297.8	2.92%
QC value within limits for Na 589.592 Radial Recovery = 101.93%						
Ni 231.604†	15802.6	504.85 ug/L	2.940	504.85 ppb	2.940	0.58%
QC value within limits for Ni 231.604 Recovery = 100.97%						
P 214.914†	4445.9	2385.9 ug/L	38.86	2385.9 ppb	38.86	1.63%
QC value within limits for P 214.914 Recovery = 95.43%						
Pb 220.353†	3099.8	501.67 ug/L	6.721	501.67 ppb	6.721	1.34%
QC value within limits for Pb 220.353 Recovery = 100.33%						
S 181.975 Axial†	763.5	988.96 ug/L	17.993	988.96 ppb	17.993	1.82%
QC value within limits for S 181.975 Axial Recovery = 98.90%						
Sb 206.836†	1226.8	515.45 ug/L	8.427	515.45 ppb	8.427	1.63%
QC value within limits for Sb 206.836 Recovery = 103.09%						
Se 196.026†	821.8	517.04 ug/L	4.010	517.04 ppb	4.010	0.78%
QC value within limits for Se 196.026 Recovery = 103.41%						
Si 251.611†	68450.8	2491.7 ug/L	9.10	2491.7 ppb	9.10	0.37%
QC value within limits for Si 251.611 Recovery = 99.67%						
Sn 189.927†	2087.6	492.23 ug/L	8.442	492.23 ppb	8.442	1.72%
QC value within limits for Sn 189.927 Recovery = 98.45%						
Sr 421.552†	69901.9	508.27 ug/L	14.749	508.27 ppb	14.749	2.90%
QC value within limits for Sr 421.552 Recovery = 101.65%						
Ti 334.940†	245771.8	495.09 ug/L	1.585	495.09 ppb	1.585	0.32%
QC value within limits for Ti 334.940 Recovery = 99.02%						
Tl 190.801†	1076.6	497.72 ug/L	8.542	497.72 ppb	8.542	1.72%
QC value within limits for Tl 190.801 Recovery = 99.54%						
U 409.014†	15079.4	503.24 ug/L	2.522	503.24 ppb	2.522	0.50%
QC value within limits for U 409.014 Recovery = 100.65%						
V 292.402†	62427.9	503.71 ug/L	1.741	503.71 ppb	1.741	0.35%
QC value within limits for V 292.402 Recovery = 100.74%						
Zn 213.857†	45086.0	492.56 ug/L	2.769	492.56 ppb	2.769	0.56%
QC value within limits for Zn 213.857 Recovery = 98.51%						
SiO2†	68521.0	5324.4 ug/L	96.28	5324.4 ppb	96.28	1.81%
QC value within limits for SiO2 Recovery = 99.57%						

All analyte(s) passed QC.

Sequence No.: 33  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 3/1/2010 22:01:22  
 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	5014.4	5014.4	107 %		22:03:14
1	Y RADIAL	5308.8	5308.8	106.5 %		22:03:14
1	Al 396.153Radial†	-84.1	8.1	7.6177 ug/L	7.6177 ppb	22:03:34
1	Ca 317.933Radial†	18.9	-4.4	-8.0663 ug/L	-8.0663 ppb	22:03:34
1	Fe 238.204 Radial†	8.8	0.9	9.7285 ug/L	9.7285 ppb	22:03:34
1	K 766.490 Radial†	2343.4	-62.0	-12.370 ug/L	-12.370 ppb	22:03:14
1	Mg 279.077 IEC†	1.6	-1.4	-54.043 ug/L	-54.043 ppb	22:03:34
1	Na 589.592 Radial†	-735.2	157.7	53.751 ug/L	53.751 ppb	22:03:14
1	Sr 421.552†	23.4	22.4	0.1632 ug/L	0.1632 ppb	22:03:14
1	Sc 361.383	814487.0	814487.0	106.06 %		22:04:31
1	Y 371.029	733697.1	733697.1	106.48 %		22:04:31
1	Ag 328.068†	176.1	-89.6	-0.4655 ug/L	-0.4655 ppb	22:04:31
1	As 188.979†	-32.8	-5.9	-2.6231 ug/L	-2.6231 ppb	22:04:51
1	B 249.677†	-353.9	119.8	2.9988 ug/L	2.9988 ppb	22:04:51
1	Ba 233.527†	10.2	7.2	0.0865 ug/L	0.0865 ppb	22:04:51
1	Be 313.107†	-9582.5	-52.2	-0.0200 ug/L	-0.0200 ppb	22:04:31
1	Cd 226.502†	-203.1	-4.9	-0.0681 ug/L	-0.0681 ppb	22:04:51
1	Co 228.616†	-67.9	-6.6	-0.1986 ug/L	-0.1986 ppb	22:04:51
1	Cr 267.716†	65.7	-13.7	-0.1907 ug/L	-0.1907 ppb	22:04:51
1	Cu 324.752†	7794.4	-187.2	-0.7076 ug/L	-0.7076 ppb	22:04:31
1	Mn 257.610†	465.2	-22.5	-0.0329 ug/L	-0.0329 ppb	22:04:51
1	Mo 202.031†	16.6	1.3	0.1164 ug/L	0.1164 ppb	22:04:51
1	Ni 231.604†	86.3	-20.0	-0.6389 ug/L	-0.6389 ppb	22:04:51
1	P 214.914†	209.1	1.8	1.1192 ug/L	1.1192 ppb	22:04:51
1	Pb 220.353†	-36.7	36.1	5.8281 ug/L	5.8281 ppb	22:04:51
1	S 181.975 Axial†	44.3	-0.7	-0.9579 ug/L	-0.9579 ppb	22:04:51
1	Sb 206.836†	33.5	1.5	0.6118 ug/L	0.6118 ppb	22:04:51
1	Se 196.026†	-24.2	-3.0	-1.8058 ug/L	-1.8058 ppb	22:04:51
1	Si 251.611†	584.8	-37.8	-1.3819 ug/L	-1.3819 ppb	22:04:51
1	Sn 189.927†	4.9	-3.5	-0.8153 ug/L	-0.8153 ppb	22:04:51
1	Ti 334.940†	-1219.7	151.0	0.3020 ug/L	0.3020 ppb	22:04:31
1	Tl 190.801†	-24.4	8.2	3.7831 ug/L	3.7831 ppb	22:04:51
1	U 409.014†	-2277.6	389.4	13.038 ug/L	13.038 ppb	22:04:31
1	V 292.402†	-1635.4	86.1	0.7094 ug/L	0.7094 ppb	22:04:31
1	Zn 213.857†	754.3	0.9	0.0130 ug/L	0.0130 ppb	22:04:51
1	SiO2†	583.2	-46.5	-3.6292 ug/L	-3.6292 ppb	22:05:47
2	Sc Radial	5129.8	5129.8	109 %		22:03:39
2	Y RADIAL	5431.0	5431.0	108.9 %		22:03:39
2	Al 396.153Radial†	-90.6	4.0	3.7117 ug/L	3.7117 ppb	22:03:59
2	Ca 317.933Radial†	23.3	-0.8	-1.4574 ug/L	-1.4574 ppb	22:03:59
2	Fe 238.204 Radial†	7.3	-0.7	-6.7488 ug/L	-6.7488 ppb	22:03:59
2	K 766.490 Radial†	2254.9	-192.7	-38.377 ug/L	-38.377 ppb	22:03:39
2	Mg 279.077 IEC†	-0.8	-3.6	-143.46 ug/L	-143.46 ppb	22:03:59
2	Na 589.592 Radial†	-771.2	140.2	47.771 ug/L	47.771 ppb	22:03:39
2	Sr 421.552†	17.3	16.4	0.1189 ug/L	0.1189 ppb	22:03:39
2	Sc 361.383	736947.0	736947.0	95.964 %		22:04:56
2	Y 371.029	659437.4	659437.4	95.705 %		22:04:56
2	Ag 328.068†	277.0	33.0	0.1617 ug/L	0.1617 ppb	22:04:56
2	As 188.979†	-26.7	-2.9	-1.2737 ug/L	-1.2737 ppb	22:05:16
2	B 249.677†	-355.6	82.9	2.0777 ug/L	2.0777 ppb	22:05:16
2	Ba 233.527†	8.6	6.6	0.0755 ug/L	0.0755 ppb	22:05:16
2	Be 313.107†	-9673.6	-1097.7	-0.4363 ug/L	-0.4363 ppb	22:04:56
2	Cd 226.502†	-181.8	-2.8	-0.0384 ug/L	-0.0384 ppb	22:05:16
2	Co 228.616†	-51.2	4.2	0.1253 ug/L	0.1253 ppb	22:05:16
2	Cr 267.716†	72.4	-0.1	-0.0045 ug/L	-0.0045 ppb	22:05:16
2	Cu 324.752†	7848.5	642.4	2.4033 ug/L	2.4033 ppb	22:04:56
2	Mn 257.610†	453.4	11.3	0.0233 ug/L	0.0233 ppb	22:05:16
2	Mo 202.031†	12.1	-1.8	-0.1625 ug/L	-0.1625 ppb	22:05:16
2	Ni 231.604†	89.9	-7.6	-0.2431 ug/L	-0.2431 ppb	22:05:16

2	P 214.914†	205.8	19.1	10.196 ug/L	10.196 ppb	22:05:16
2	Pb 220.353†	-39.0	30.0	4.8414 ug/L	4.8414 ppb	22:05:16
2	S 181.975 Axial†	47.7	7.2	9.3865 ug/L	9.3865 ppb	22:05:16
2	Sb 206.836†	33.4	4.8	1.9422 ug/L	1.9422 ppb	22:05:16
2	Se 196.026†	-17.0	2.1	1.2623 ug/L	1.2623 ppb	22:05:16
2	Si 251.611†	576.4	11.4	0.4187 ug/L	0.4187 ppb	22:05:16
2	Sn 189.927†	9.1	1.4	0.3257 ug/L	0.3257 ppb	22:05:16
2	Ti 334.940†	-1238.0	11.0	0.0322 ug/L	0.0322 ppb	22:04:56
2	Tl 190.801†	-34.0	-4.2	-1.9463 ug/L	-1.9463 ppb	22:05:16
2	U 409.014†	-2336.6	102.0	3.4159 ug/L	3.4159 ppb	22:04:56
2	V 292.402†	-1653.4	-94.9	-0.7534 ug/L	-0.7534 ppb	22:04:56
2	Zn 213.857†	755.8	77.3	0.8522 ug/L	0.8522 ppb	22:05:16
2	SiO2†	564.0	-8.7	-0.6737 ug/L	-0.6737 ppb	22:05:52
3	Sc Radial	4919.6	4919.6	105 %		22:04:04
3	Y RADIAL	5169.6	5169.6	103.7 %		22:04:04
3	Al 396.153Radial†	-93.4	-2.2	-2.0692 ug/L	-2.0692 ppb	22:04:24
3	Ca 317.933Radial†	18.4	-4.6	-8.2681 ug/L	-8.2681 ppb	22:04:24
3	Fe 238.204 Radial†	6.1	-1.5	-15.527 ug/L	-15.527 ppb	22:04:24
3	K 766.490 Radial†	2352.6	-10.9	-2.1814 ug/L	-2.1814 ppb	22:04:04
3	Mg 279.077 IEC†	1.0	-1.9	-75.673 ug/L	-75.673 ppb	22:04:24
3	Na 589.592 Radial†	-782.7	99.0	33.739 ug/L	33.739 ppb	22:04:04
3	Sr 421.552†	-4.5	-3.8	-0.0277 ug/L	-0.0277 ppb	22:04:04
3	Sc 361.383	817138.7	817138.7	106.41 %		22:05:22
3	Y 371.029	735183.8	735183.8	106.70 %		22:05:22
3	Ag 328.068†	202.5	-65.4	-0.3506 ug/L	-0.3506 ppb	22:05:22
3	As 188.979†	-25.4	1.1	0.4961 ug/L	0.4961 ppb	22:05:42
3	B 249.677†	-365.2	110.2	2.7621 ug/L	2.7621 ppb	22:05:42
3	Ba 233.527†	-3.6	-5.8	-0.0676 ug/L	-0.0676 ppb	22:05:42
3	Be 313.107†	-9532.8	23.8	0.0106 ug/L	0.0106 ppb	22:05:22
3	Cd 226.502†	-199.7	-1.0	-0.0103 ug/L	-0.0103 ppb	22:05:42
3	Co 228.616†	-60.7	0.4	0.0123 ug/L	0.0123 ppb	22:05:42
3	Cr 267.716†	57.6	-21.5	-0.2985 ug/L	-0.2985 ppb	22:05:42
3	Cu 324.752†	7876.3	-134.1	-0.5109 ug/L	-0.5109 ppb	22:05:22
3	Mn 257.610†	486.5	-4.0	-0.0048 ug/L	-0.0048 ppb	22:05:42
3	Mo 202.031†	16.1	0.8	0.0686 ug/L	0.0686 ppb	22:05:42
3	Ni 231.604†	90.8	-16.0	-0.5116 ug/L	-0.5116 ppb	22:05:42
3	P 214.914†	205.6	-2.2	-1.1081 ug/L	-1.1081 ppb	22:05:42
3	Pb 220.353†	-52.3	21.6	3.4801 ug/L	3.4801 ppb	22:05:42
3	S 181.975 Axial†	41.8	-3.2	-4.1784 ug/L	-4.1784 ppb	22:05:42
3	Sb 206.836†	39.9	7.5	3.0113 ug/L	3.0113 ppb	22:05:42
3	Se 196.026†	-20.4	0.6	0.3452 ug/L	0.3452 ppb	22:05:42
3	Si 251.611†	586.6	-37.9	-1.3842 ug/L	-1.3842 ppb	22:05:42
3	Sn 189.927†	0.6	-7.5	-1.7759 ug/L	-1.7759 ppb	22:05:42
3	Ti 334.940†	-1109.4	258.5	0.5197 ug/L	0.5197 ppb	22:05:22
3	Tl 190.801†	-33.7	-0.4	-0.1894 ug/L	-0.1894 ppb	22:05:42
3	U 409.014†	-2244.6	427.4	14.314 ug/L	14.314 ppb	22:05:22
3	V 292.402†	-1675.0	53.9	0.4577 ug/L	0.4577 ppb	22:05:22
3	Zn 213.857†	758.4	2.5	0.0336 ug/L	0.0336 ppb	22:05:42
3	SiO2†	603.9	-28.9	-2.2546 ug/L	-2.2546 ppb	22:05:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	789524.2	102.81 %		5.932			5.77%
Sc Radial	5021.3	107 %		2.2			2.10%
Y 371.029	709439.4	102.96 %		6.286			6.10%
Y RADIAL	5303.1	106.4 %		2.62			2.47%
Ag 328.068†	-40.7	-0.2181 ug/L		0.33395	-0.2181 ppb	0.33395	153.09%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.3	3.0868 ug/L		4.87361	3.0868 ppb	4.87361	157.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.5	-1.1335 ug/L		1.56434	-1.1335 ppb	1.56434	138.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	104.3	2.6129 ug/L		0.47833	2.6129 ppb	0.47833	18.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	2.7	0.0315 ug/L		0.08598	0.0315 ppb	0.08598	273.15%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-375.4	-0.1486 ug/L		0.24964	-0.1486 ppb	0.24964	168.04%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-3.3	-5.9306 ug/L		3.87519	-5.9306 ppb	3.87519	65.34%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-2.9	-0.0389 ug/L	0.02889	-0.0389 ppb	0.02889	74.18%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.7	-0.0203 ug/L	0.16442	-0.0203 ppb	0.16442	808.85%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-11.8	-0.1646 ug/L	0.14873	-0.1646 ppb	0.14873	90.37%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	107.0	0.3949 ug/L	1.74209	0.3949 ppb	1.74209	441.12%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-4.1823 ug/L	12.82167	-4.1823 ppb	12.82167	306.57%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-88.6	-17.643 ug/L	18.6653	-17.643 ppb	18.6653	105.80%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.3	-91.059 ug/L	46.6515	-91.059 ppb	46.6515	51.23%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-5.1	-0.0048 ug/L	0.02808	-0.0048 ppb	0.02808	585.58%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.1	0.0075 ug/L	0.14918	0.0075 ppb	0.14918	>999.9%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	132.3	45.087 ug/L	10.2726	45.087 ppb	10.2726	22.78%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-14.5	-0.4645 ug/L	0.20207	-0.4645 ppb	0.20207	43.50%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	6.2	3.4025 ug/L	5.98819	3.4025 ppb	5.98819	175.99%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	29.2	4.7165 ug/L	1.17894	4.7165 ppb	1.17894	25.00%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.1	1.4167 ug/L	7.08737	1.4167 ppb	7.08737	500.26%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.6	1.8551 ug/L	1.20212	1.8551 ppb	1.20212	64.80%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.1	-0.0661 ug/L	1.57485	-0.0661 ppb	1.57485	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-21.4	-0.7825 ug/L	1.04026	-0.7825 ppb	1.04026	132.95%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.2	-0.7552 ug/L	1.05210	-0.7552 ppb	1.05210	139.32%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	11.7	0.0848 ug/L	0.09990	0.0848 ppb	0.09990	117.77%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	140.2	0.2846 ug/L	0.24422	0.2846 ppb	0.24422	85.81%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.2	0.5491 ug/L	2.93524	0.5491 ppb	2.93524	534.54%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	306.3	10.256 ug/L	5.9579	10.256 ppb	5.9579	58.09%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	15.0	0.1379 ug/L	0.78206	0.1379 ppb	0.78206	567.23%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	26.9	0.2996 ug/L	0.47869	0.2996 ppb	0.47869	159.77%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-28.1	-2.1858 ug/L	1.47897	-2.1858 ppb	1.47897	67.66%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

## ICPMS #6 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Thursday, February 25, 2010 21:10:56

### Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1673

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	4426.7	4426.686	125.624	2.8
Mg	24.0	33968.1	33968.140	360.627	1.1
Co	58.9	55712.4	55712.441	767.844	1.4
Rh	102.9	102017.2	102017.216	1333.173	1.3
In	114.9	112334.6	112334.589	1361.480	1.2
Pb	208.0	82895.7	82895.659	1277.395	1.5
[> Ba	137.9	106971.7	106971.669	1685.235	1.6
[ Ba++	69.0	2397.2	0.022	0.001	3.1
[> Ce	139.9	138161.7	138161.712	925.788	0.7
[ CeO	155.9	2844.6	0.021	0.000	1.6
Bkgd	220.0	6.4	6.400	1.817	28.4

### Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
4.75	Lens Voltage
1450.00	ICP RF Power
-1800.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
25.00	Discriminator Threshold
-6.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	5.3	4785.5
Co	59	11	6.0	51167.5
In	115	11	6.8	111813.5

## ICPMS #6 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	582	2080	0.638
Be	9.0	9.0	2035	2080	0.652
Mg	24.0	24.0	5692	2124	0.597
Mg	25.0	25.1	5932	2080	0.693
Mg	26.0	26.1	6174	2120	0.666
Co	58.9	59.0	14165	2170	0.619
Rh	102.9	102.9	24868	2230	0.691
In	114.9	114.9	27795	2260	0.675
Ce	139.9	139.9	33858	2280	0.745
Pb	206.0	206.0	49960	2428	0.744
Pb	207.0	207.0	50135	2385	0.687
Pb	208.0	208.0	50463	2430	0.733
U	238.1	238.0	57717	2470	0.741

## ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 26, 2010 00:27:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniaset1.mth

Dataset File: C:\elandata\Dataset\100225\Blank.042

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	ug/L			11
[>	Sc	45	ug/L		1229591	
[	Ni	60	ug/L		79	
[>	Ge	74	ug/L		277580	
[	As	75	ug/L		245	
[	Se	77	ug/L		5032	
[	Se	82	ug/L		-3	
[	Kr	83	ug/L		91	
[>	Lu	175	ug/L		197016	
[	Tl	205	ug/L		131	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9				
[>	Sc	45				
[	Ni	60				
[>	Ge	74				
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175				
[	Tl	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Sample Date/Time: Friday, February 26, 2010 00:28:00



## ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 26, 2010 00:31:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\Standard 1.043

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	10.000	ug/L	0.826	4577	0.004
>	Sc 45		ug/L		1238858	1238857.584
[	Ni 60	10.000	ug/L	0.976	10496	0.008
[>	Ge 74		ug/L		277318	277317.714
	As 75	10.000	ug/L	4.053	8837	0.031
	Se 77		ug/L		5695	0.002
	Se 82	10.000	ug/L	5.319	804	0.003
[	Kr 83		ug/L		92	0.000
[>	Lu 175		ug/L		197650	197650.392
[	Tl 205	10.000	ug/L	0.726	69956	0.353

### 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 % 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 MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Friday, February 26, 2010 00:32:00

## ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 26, 2010 00:35:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100225\Standard 2.044

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	100.014	ug/L	0.572	42759	0.037
>	Sc 45		ug/L		1143032	1143031.876
[	Ni 60	100.016	ug/L	1.180	97807	0.086
>	Ge 74		ug/L		262663	262663.042
	As 75	100.066	ug/L	0.970	87417	0.332
	Se 77		ug/L		10756	0.023
	Se 82	100.009	ug/L	1.287	7717	0.029
[	Kr 83		ug/L		91	0.000
>	Lu 175		ug/L		190908	190907.728
[	Tl 205	99.993	ug/L	1.244	669989	3.509

### 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 % 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 MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 26, 2010 00:39:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 1.045

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	52.152	ug/L	0.868	22848	0.020
>	Sc 45		ug/L		1171148	1171148.490
[	Ni 60	50.659	ug/L	0.168	50796	0.043
>	Ge 74		ug/L		264440	264440.086
	As 75	47.652	ug/L	0.781	42032	0.158
	Se 77		ug/L		8150	0.013
	Se 82	50.733	ug/L	2.599	3940	0.015
[	Kr 83		ug/L		78	-0.000
>	Lu 175		ug/L		192194	192194.306
[	Tl 205	50.057	ug/L	0.236	337742	1.757

### 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 % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be 9	104.303					
>	Sc 45		95.2				
[	Ni 60	101.319					
>	Ge 74		95.3				
	As 75	95.303					
	Se 77						
	Se 82	101.467					
[	Kr 83						
>	Lu 175		97.6				
[	Tl 205	100.115					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Sample Date/Time: Friday, February 26, 2010 00:40:01

## ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 26, 2010 00:43:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 2.046

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.000	ug/L	3356.713	10	-0.000
[>	Sc 45		ug/L		1207694	1207693.582
[	Ni 60	0.021	ug/L	45.116	99	0.000
[>	Ge 74		ug/L		271084	271084.302
[	As 75	0.080	ug/L	487.046	312	0.000
[	Se 77		ug/L		5185	0.001
[	Se 82	0.150	ug/L	120.546	9	0.000
[	Kr 83		ug/L		80	-0.000
[>	Lu 175		ug/L		196791	196791.154
[	Tl 205	0.015	ug/L	35.592	232	0.001

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[ Be 9					
[> Sc 45		98.2			
[ Ni 60					
[> Ge 74		97.7			
[ As 75					
[ Se 77					
[ Se 82					
[ Kr 83					
[> Lu 175		99.9			
[ Tl 205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

## ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 26, 2010 00:47:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 3.047

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.615	ug/L	4.533	290	0.000
>	Sc 45		ug/L		1214448	1214448.252
[	Ni 60	2.309	ug/L	1.961	2475	0.002
[>	Ge 74		ug/L		271968	271968.466
	As 75	5.724	ug/L	7.295	5405	0.019
	Se 77		ug/L		5595	0.002
	Se 82	6.040	ug/L	3.648	479	0.002
[	Kr 83		ug/L		71	-0.000
[>	Lu 175		ug/L		196309	196309.392
[	Tl 205	1.113	ug/L	2.696	7792	0.039

### Calibration

Analyte	Mass Curve 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 % Dil	Duplicate Rel. % Difference
[	Be 9	122.900				
>	Sc 45		98.8			
[	Ni 60	115.459				
[>	Ge 74		98.0			
	As 75	114.482				
	Se 77					
	Se 82	120.800				
[	Kr 83					
[>	Lu 175		99.6			
[	Tl 205	111.251				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, February 26, 2010 00:51:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 4.048

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.125	ug/L	3.067	53	0.000
> Sc	45		ug/L		949073	949073.192
Ni	60	4.653	ug/L	1.106	3836	0.004
> Ge	74		ug/L		216916	216916.354
As	75	0.330	ug/L	114.912	431	0.001
Se	77		ug/L		6755	0.013
Se	82	-2.401	ug/L	11.871	-156	-0.001
Kr	83		ug/L		279	0.001
> Lu	175		ug/L		172378	172377.527
Tl	205	0.014	ug/L	7.033	197	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45				77.2						
Ni	60		172.347								
> Ge	74				78.1						
As	75										
Se	77										
Se	82										
Kr	83										
> Lu	175				87.5						
Tl	205										

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
	Ge	74	

### QC Action

QC Action Line: Continue

Sample ID: QC Std 4

Report Date/Time: Friday, February 26, 2010 00:52:09

## ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 26, 2010 00:55:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 5.049

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	22.169 ug/L	1.442	7996	0.008
>	Sc	45	ug/L		963487	963487.375
[	Ni	60	25.171 ug/L	1.856	20794	0.022
>	Ge	74	ug/L		220499	220498.512
	As	75	23.976 ug/L	1.440	17732	0.080
	Se	77	ug/L		7612	0.016
	Se	82	21.594 ug/L	2.849	1397	0.006
[	Kr	83	ug/L		279	0.001
>	Lu	175	ug/L		176108	176108.044
[	Tl	205	20.508 ug/L	1.436	126844	0.720

### 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 % Dil	Duplicate Rel. % Difference
[	Be	9	110.847		
>	Sc	45		78.4	
[	Ni	60	110.884		
>	Ge	74		79.4	
	As	75	119.880		
	Se	77			
	Se	82	107.971		
[	Kr	83			
>	Lu	175		89.4	
[	Tl	205	102.540		

### QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
Sc 45 Int Std for QC Sc		45
	Ge	74

### QC Action

QC Action Line: Continue

Sample ID: QC Std 5

Report Date/Time: Friday, February 26, 2010 00:56:11

## ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 00:59:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.050

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.452 ug/L	0.116	22274	0.019
>	Sc	45	ug/L		1157143	1157143.273
[	Ni	60	50.820 ug/L	1.268	50345	0.043
>	Ge	74	ug/L		262786	262785.979
	As	75	46.923 ug/L	1.862	41132	0.156
	Se	77	ug/L		8147	0.013
	Se	82	49.447 ug/L	3.963	3815	0.015
[	Kr	83	ug/L		88	0.000
>	Lu	175	ug/L		195941	195940.596
[	Tl	205	48.277 ug/L	1.720	332102	1.694

### 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 % Dil	Duplicate Rel.	% Difference
[	Be	9	102.904				
>	Sc	45		94.1			
[	Ni	60	101.639				
>	Ge	74		94.7			
	As	75	93.847				
	Se	77					
	Se	82	98.894				
[	Kr	83					
>	Lu	175		99.5			
[	Tl	205	96.554				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 01:03:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.051

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.000	ug/L	699.181	11	0.000
>	Sc 45		ug/L		1204842	1204841.646
[	Ni 60	0.004	ug/L	77.514	82	0.000
>	Ge 74		ug/L		272544	272544.025
	As 75	0.155	ug/L	141.648	380	0.001
	Se 77		ug/L		5469	0.002
	Se 82	-0.004	ug/L	3370.835	-4	-0.000
[	Kr 83		ug/L		89	-0.000
>	Lu 175		ug/L		198554	198553.731
[	Tl 205	0.010	ug/L	25.553	200	0.000

### 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 % Dil	Duplicate Rel.	% Difference
[	Be 9					
>	Sc 45		98.0			
[	Ni 60					
>	Ge 74		98.2			
	As 75					
	Se 77					
	Se 82					
[	Kr 83					
>	Lu 175		100.8			
[	Tl 205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 01:04:17

## ICPMS#6 - Summary Report

Sample ID: 1202033908

Sample Date/Time: Friday, February 26, 2010 01:07:41

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 949336[2]rmj

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033908.052

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.005	ug/L	61.774	8	-0.000
>	Sc 45		ug/L		1223352	1223351.761
[	Ni 60	0.057	ug/L	15.240	138	0.000
>	Ge 74		ug/L		271961	271960.904
	As 75	-0.109	ug/L	234.465	142	-0.000
	Se 77		ug/L		3923	-0.004
	Se 82	0.000	ug/L	11851.641	-3	0.000
[	Kr 83		ug/L		75	-0.000
>	Lu 175		ug/L		211155	211154.628
[	Tl 205	0.018	ug/L	15.941	274	0.001

### 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 % Dil	Duplicate Rel.	% Difference
[ Be 9						
> Sc 45		99.5				
[ Ni 60						
> Ge 74		98.0				
As 75						
Se 77						
Se 82						
[ Kr 83						
> Lu 175		107.2				
[ 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#6 - Summary Report

Sample ID: 1202033913

Sample Date/Time: Friday, February 26, 2010 01:11:46

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 949336|40|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033913.053

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	21.363 ug/L	0.558	9767	0.008
>	Sc	45	ug/L		1221369	1221368.511
[	Ni	60	37.128 ug/L	1.835	38840	0.032
>	Ge	74	ug/L		274652	274652.147
	As	75	27.270 ug/L	2.970	25085	0.090
	Se	77	ug/L		9647	0.017
	Se	82	73.223 ug/L	1.686	5908	0.022
[	Kr	83	ug/L		94	0.000
>	Lu	175	ug/L		199666	199666.187
[	Tl	205	32.738 ug/L	3.155	229448	1.149

### Calibration

Analyte	Mass Curve 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	99.3		
[	Ni	60			
>	Ge	74	98.9		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	101.3		
[	Tl	205			

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 01:15:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.054

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.777 ug/L	0.691	23246	0.019
>	Sc	45	ug/L		1200134	1200133.991
[	Ni	60	50.205 ug/L	2.110	51580	0.043
>	Ge	74	ug/L		268929	268928.725
	As	75	46.224 ug/L	2.390	41470	0.153
	Se	77	ug/L		8031	0.012
	Se	82	48.862 ug/L	1.843	3859	0.014
[	Kr	83	ug/L		76	-0.000
>	Lu	175	ug/L		194718	194718.320
[	Tl	205	48.537 ug/L	1.118	331791	1.703

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	103.554			
>	Sc	45		97.6		
[	Ni	60	100.410			
>	Ge	74		96.9		
	As	75	92.447			
	Se	77				
	Se	82	97.723			
[	Kr	83				
>	Lu	175		98.8		
[	Tl	205	97.074			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 01:16:27

## ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 01:19:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.055

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.004	ug/L	154.908	9	-0.000
>	Sc 45		ug/L		1234375	1234375.068
[	Ni 60	0.006	ug/L	156.827	86	0.000
>	Ge 74		ug/L		274280	274279.664
	As 75	-0.330	ug/L	54.550	-56	-0.001
	Se 77		ug/L		5374	0.001
	Se 82	-0.095	ug/L	88.438	-11	-0.000
[	Kr 83		ug/L		85	-0.000
>	Lu 175		ug/L		201858	201857.548
[	Tl 205	0.012	ug/L	18.612	218	0.000

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
>	Sc 45		100.4		
[	Ni 60				
>	Ge 74		98.8		
	As 75				
	Se 77				
	Se 82				
[	Kr 83				
>	Lu 175		102.5		
[	Tl 205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, February 26, 2010 01:20:32

## ICPMS#6 - Summary Report

Sample ID: 246055001

Sample Date/Time: Friday, February 26, 2010 01:23:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\246055001.056

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.007 ug/L	2.801	872	0.001
>	Sc	45	ug/L		1148050	1148050.398
[	Ni	60	22.336 ug/L	1.106	21995	0.019
>	Ge	74	ug/L		247430	247430.166
	As	75	15.512 ug/L	2.909	12951	0.051
	Se	77	ug/L		3485	-0.004
	Se	82	0.078 ug/L	277.488	3	0.000
[	Kr	83	ug/L		163	0.000
>	Lu	175	ug/L		192935	192934.712
[	Tl	205	0.456 ug/L	1.884	3213	0.016

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	93.4		
[	Ni	60			
>	Ge	74	89.1		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	97.9		
[	Tl	205			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246055001

## ICPMS#6 - Summary Report

Sample ID: 1202033911

Sample Date/Time: Friday, February 26, 2010 01:32:05

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 949336[2]rm]

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033911.058

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	26.944 ug/L	1.387	10354	0.010
>	Sc	45	ug/L		1026779	1026778.758
[	Ni	60	52.143 ug/L	1.765	45831	0.045
>	Ge	74	ug/L		224197	224196.538
	As	75	55.385 ug/L	0.918	41386	0.184
	Se	77	ug/L		3366	-0.003
	Se	82	8.754 ug/L	5.529	574	0.003
[	Kr	83	ug/L		171	0.000
>	Lu	175	ug/L		185201	185200.651
[	Tl	205	47.246 ug/L	0.563	307176	1.658

### 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	83.5		
[	Ni	60			
>	Ge	74	80.8		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	94.0		
[	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#6 - Summary Report

Sample ID: 1202033912

Sample Date/Time: Friday, February 26, 2010 01:36:10

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033912.059

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	27.027 ug/L	2.017	10057	0.010
>	Sc	45	ug/L		994346	994345.991
[	Ni	60	49.457 ug/L	0.377	42105	0.042
>	Ge	74	ug/L		218801	218801.371
	As	75	57.177 ug/L	0.608	41692	0.190
	Se	77	ug/L		3101	-0.004
	Se	82	7.781 ug/L	7.290	498	0.002
[	Kr	83	ug/L		161	0.000
>	Lu	175	ug/L		184140	184139.887
[	Tl	205	46.647 ug/L	1.759	301493	1.637

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	80.9		
[	Ni	60			
>	Ge	74	78.8		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	93.5		
[	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

Sample ID: 1202033912



## ICPMS#6 - Summary Report

Sample ID: 1202033910

Sample Date/Time: Friday, February 26, 2010 01:40:15

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 949336|10|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033910.060

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.434	ug/L	14.018	188	0.000
>	Sc 45		ug/L		1102564	1102564.250
[	Ni 60	4.618	ug/L	1.392	4423	0.004
>	Ge 74		ug/L		249483	249482.568
	As 75	3.127	ug/L	6.458	2807	0.010
	Se 77		ug/L		3970	-0.002
	Se 82	0.242	ug/L	52.053	15	0.000
[	Kr 83		ug/L		83	0.000
>	Lu 175		ug/L		194243	194243.019
[	Tl 205	0.192	ug/L	4.881	1438	0.007

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9				
>	Sc 45	89.7			
[	Ni 60				
>	Ge 74	89.9			
	As 75				
	Se 77				
	Se 82				
[	Kr 83				
>	Lu 175	98.6			
[	Tl 205				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: 246055002

Sample Date/Time: Friday, February 26, 2010 01:44:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\246055002.061

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	7.427 ug/L	2.300	2938	0.003
>	Sc	45	ug/L		1054602	1054602.308
[	Ni	60	54.469 ug/L	0.540	49176	0.047
>	Ge	74	ug/L		224650	224650.350
	As	75	15.590 ug/L	2.028	11818	0.052
	Se	77	ug/L		3407	-0.003
	Se	82	-5.808 ug/L	14.204	-386	-0.002
[	Kr	83	ug/L		594	0.002
>	Lu	175	ug/L		184412	184411.898
[	Tl	205	1.319 ug/L	1.637	8658	0.046

### 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 % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		85.8				
[	Ni	60						
>	Ge	74		80.9				
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
>	Lu	175		93.6				
[	Tl	205						

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Se	82Sample is out of limits (<-PQL)

### QC Action

QC Action Line: Continue

Sample ID: 246055002

Report Date/Time: Friday, February 26, 2010 01:45:00

## ICPMS#6 - Summary Report

Sample ID: 246055003

Sample Date/Time: Friday, February 26, 2010 01:48:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\1100225\246055003.062

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.377 ug/L	1.187	2023	0.002
[>	Sc	45	ug/L		1001664	1001663.691
[	Ni	60	43.401 ug/L	1.162	37229	0.037
[>	Ge	74	ug/L		214177	214176.568
	As	75	12.898 ug/L	2.082	9352	0.043
	Se	77	ug/L		3211	-0.003
	Se	82	-3.508 ug/L	10.321	-223	-0.001
[	Kr	83	ug/L		415	0.002
[>	Lu	175	ug/L		186991	186990.760
[	Tl	205	1.059 ug/L	2.384	7076	0.037

### 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 % Dil	Duplicate Rel. % Difference
[	Be	9			
[>	Sc	45	81.5		
[	Ni	60			
[>	Ge	74	77.2		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
[>	Lu	175	94.9		
[	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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 01:52:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.063

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.220 ug/L	1.280	18854	0.018
>	Sc	45	ug/L		1023913	1023912.566
[	Ni	60	51.465 ug/L	0.558	45116	0.044
>	Ge	74	ug/L		234047	234046.707
	As	75	47.000 ug/L	0.673	36698	0.156
	Se	77	ug/L		8037	0.016
	Se	82	47.593 ug/L	1.154	3271	0.014
[	Kr	83	ug/L		74	-0.000
>	Lu	175	ug/L		188513	188512.522
[	Tl	205	48.423 ug/L	1.476	320466	1.699

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	98.439			
>	Sc	45		83.3		
[	Ni	60	102.929			
>	Ge	74		84.3		
	As	75	94.000			
	Se	77				
	Se	82	95.185			
[	Kr	83				
>	Lu	175		95.7		
[	Tl	205	96.845			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

## ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 01:56:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasseti.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.064

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.001	ug/L	951.596	9	-0.000
> Sc	45		ug/L		1124276	1124275.603
Ni	60	0.008	ug/L	239.747	80	0.000
> Ge	74		ug/L		255760	255760.180
As	75	-0.004	ug/L	3198.691	221	-0.000
Se	77		ug/L		5930	0.005
Se	82	0.065	ug/L	266.834	2	0.000
Kr	83		ug/L		82	-0.000
> Lu	175		ug/L		194926	194926.247
Tl	205	0.018	ug/L	13.329	254	0.001

### 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 % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		91.4			
Ni	60					
> Ge	74		92.1			
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#6 - Summary Report

Sample ID: 246055004

Sample Date/Time: Friday, February 26, 2010 02:00:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\246055004.065

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.724	ug/L	3.106	715	0.001
> Sc	45		ug/L		1093637	1093637.113
Li	60	20.126	ug/L	1.353	18887	0.017
> Ge	74		ug/L		240496	240495.503
As	75	5.192	ug/L	7.442	4354	0.017
Se	77		ug/L		3493	-0.004
Se	82	-0.579	ug/L	42.392	-44	-0.000
Kr	83		ug/L		182	0.000
> Lu	175		ug/L		201692	201692.237
Tl	205	0.343	ug/L	0.998	2562	0.012

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		88.9				
Li	60						
> Ge	74		86.6				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		102.4				
Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: 246055005

Sample Date/Time: Friday, February 26, 2010 02:04:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336[2]rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\246055005.066

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.780 ug/L	2.610	1504	0.001
>	Sc	45	ug/L		1057389	1057388.798
[	Ni	60	34.162 ug/L	1.235	30948	0.029
>	Ge	74	ug/L		231319	231319.400
	As	75	20.281 ug/L	0.981	15766	0.067
	Se	77	ug/L		3218	-0.004
	Se	82	-2.274 ug/L	16.378	-157	-0.001
[	Kr	83	ug/L		323	0.001
>	Lu	175	ug/L		200597	200597.369
[	Tl	205	0.759 ug/L	3.265	5473	0.027

### 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 % Recovery	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	86.0		
[	Ni	60			
>	Ge	74	83.3		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	101.8		
[	Tl	205			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246055005

Sample Date/Time: Friday, February 26, 2010 02:05:21

## ICPMS#6 - Summary Report

Sample ID: 246055006

Sample Date/Time: Friday, February 26, 2010 02:08:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100225\246055006.067

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	7.194	ug/L	2.359	2712	0.003
[>	Sc 45		ug/L		1004613	1004612.604
[	Ni 60	52.089	ug/L	0.481	44801	0.045
[>	Ge 74		ug/L		209977	209976.745
	As 75	12.766	ug/L	1.914	9076	0.042
	Se 77		ug/L		2899	-0.004
	Se 82	-5.717	ug/L	3.658	-356	-0.002
[	Kr 83		ug/L		556	0.002
[>	Lu 175		ug/L		196476	196475.533
[	Tl 205	1.232	ug/L	1.292	8625	0.043

### 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 % Dil	Duplicate Rel. % Difference
[ Be 9					
[> Sc 45		81.7			
[ Ni 60					
[> Ge 74		75.6			
As 75					
Se 77					
Se 82					
[ Kr 83					
[> Lu 175		99.7			
[ Tl 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Se	82Sample is out of limits (<-PQL)

### QC Action

QC Action Line: Continue

Sample ID: 246055006



## ICPMS#6 - Summary Report

Sample ID: 246055007

Sample Date/Time: Friday, February 26, 2010 02:12:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: C:\elandata\Dataset\100225\246055007.068

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.416 ug/L	2.053	1599	0.002
>	Sc	45	ug/L		963528	963527.880
[	Ni	60	38.762 ug/L	1.172	31991	0.033
>	Ge	74	ug/L		207890	207890.451
	As	75	10.433 ug/L	3.991	7378	0.035
	Se	77	ug/L		2944	-0.004
	Se	82	-2.803 ug/L	10.429	-174	-0.001
[	Kr	83	ug/L		367	0.001
>	Lu	175	ug/L		195214	195213.713
[	Tl	205	0.826 ug/L	2.943	5789	0.029

### 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 % Dil	Duplicate Rel.	% Difference
[	Be	9				
>	Sc	45	78.4			
[	Ni	60				
>	Ge	74	74.9			
	As	75				
	Se	77				
	Se	82				
[	Kr	83				
>	Lu	175	99.1			
[	Tl	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246055007

## ICPMS#6 - Summary Report

Sample ID: 246055008

Sample Date/Time: Friday, February 26, 2010 02:16:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\246055008.069

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.109 ug/L	6.984	1123	0.001
>	Sc	45	ug/L		958710	958709.637
[	Ni	60	29.116 ug/L	0.470	23925	0.025
>	Ge	74	ug/L		210665	210664.502
	As	75	7.822 ug/L	6.436	5650	0.026
	Se	77	ug/L		2897	-0.004
	Se	82	-0.917 ug/L	25.020	-59	-0.000
[	Kr	83	ug/L		226	0.001
>	Lu	175	ug/L		198356	198355.503
[	Tl	205	0.620 ug/L	2.299	4450	0.022

### Calibration

Analyte	Mass Curve 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	78.0		
[	Ni	60			
>	Ge	74	75.9		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	100.7		
[	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

Sample ID: 246055008

## ICPMS#6 - Summary Report

Sample ID: 246055009

Sample Date/Time: Friday, February 26, 2010 02:20:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\246055009.070

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.001 ug/L	3.546	681	0.001
>	Sc	45	ug/L		899112	899112.451
[	Ni	60	19.982 ug/L	0.243	15417	0.017
>	Ge	74	ug/L		199632	199632.185
	As	75	17.401 ug/L	0.792	11699	0.058
	Se	77	ug/L		2602	-0.005
	Se	82	0.099 ug/L	342.398	3	0.000
[	Kr	83	ug/L		144	0.000
>	Lu	175	ug/L		183091	183090.676
[	Tl	205	0.489 ug/L	1.960	3263	0.017

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	73.1		
[	Ni	60			
>	Ge	74	71.9		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	92.9		
[	Tl	205			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246055009

## ICPMS#6 - Summary Report

Sample ID: 246055002

Sample Date/Time: Friday, February 26, 2010 02:28:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336|4|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\246055002.071

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.770 ug/L	2.590	1426	0.001
>	Sc	45	ug/L		1005097	1005097.015
[	Ni	60	28.185 ug/L	1.482	24284	0.024
>	Ge	74	ug/L		221305	221304.513
	As	75	7.708 ug/L	4.710	5854	0.026
	Se	77	ug/L		4179	0.001
	Se	82	-2.474 ug/L	18.654	-164	-0.001
[	Kr	83	ug/L		310	0.001
>	Lu	175	ug/L		185996	185996.272
[	Tl	205	0.637 ug/L	1.825	4280	0.022

### Calibration

Analyte	Mass Curve 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9			
>	Sc	45	81.7		
[	Ni	60			
>	Ge	74	79.7		
	As	75			
	Se	77			
	Se	82			
[	Kr	83			
>	Lu	175	94.4		
[	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

Sample ID: 246055002

## ICPMS#6 - Summary Report

Sample ID: 246055006

Sample Date/Time: Friday, February 26, 2010 02:32:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949336[4]rmj

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: C:\elandata\Dataset\100225\246055006.072

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.206 ug/L	0.375	1517	0.002
>	Sc	45	ug/L		959097	959096.876
[	Ni	60	30.876 ug/L	0.452	25377	0.026
>	Ge	74	ug/L		209554	209554.280
	As	75	7.340 ug/L	6.946	5286	0.024
	Se	77	ug/L		3647	-0.001
	Se	82	-2.940 ug/L	18.159	-184	-0.001
[	Kr	83	ug/L		330	0.001
>	Lu	175	ug/L		185740	185739.911
[	Tl	205	0.683 ug/L	2.802	4579	0.024

### 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 % Dif	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		78.0				
[	Ni	60						
>	Ge	74		75.5				
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
>	Lu	175		94.3				
[	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

Sample ID: 246055006

Report Date/Time: Friday, February 26, 2010 02:33:01

## ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 02:36:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.073

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	49.229	ug/L	1.232	18204	0.018
[>	Sc 45		ug/L		988456	988456.118
[	Ni 60	52.065	ug/L	1.093	44059	0.045
[>	Ge 74		ug/L		227113	227113.343
	As 75	47.708	ug/L	0.663	36142	0.158
	Se 77		ug/L		7638	0.016
	Se 82	48.119	ug/L	2.929	3209	0.014
[	Kr 83		ug/L		79	0.000
[>	Lu 175		ug/L		188025	188024.886
[	Tl 205	49.361	ug/L	0.934	325821	1.732

### 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 % Dil	Duplicate Rel.	% Difference
[ Be 9	98.457					
[> Sc 45		80.4				
[ Ni 60	104.131					
[> Ge 74		81.8				
As 75	95.416					
Se 77						
Se 82	96.237					
[ Kr 83						
[> Lu 175		95.4				
[ Tl 205	98.722					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 02:37:02

## ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 02:40:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniaset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.074

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	-0.001	ug/L	584.104	9	-0.000
[>	Sc 45		ug/L		1086755	1086755.046
[	Ni 60	0.015	ug/L	75.318	83	0.000
[>	Ge 74		ug/L		247963	247962.635
	As 75	-0.077	ug/L	724.053	157	-0.000
	Se 77		ug/L		5783	0.005
	Se 82	-0.035	ug/L	449.557	-6	-0.000
[	Kr 83		ug/L		81	-0.000
[>	Lu 175		ug/L		198388	198388.244
[	Tl 205	0.012	ug/L	13.388	216	0.000

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[ Be 9					
[> Sc 45		88.4			
[ Ni 60					
[> Ge 74		89.3			
As 75					
Se 77					
Se 82					
[ Kr 83					
[> Lu 175		100.7			
[ Tl 205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

## ICPMS#6 - Summary Report

Sample ID: 1202033909

Sample Date/Time: Friday, February 26, 2010 02:44:31

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 949336|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100225\1202033909.075

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.001	ug/L	3.644	742	0.001
>	Sc 45		ug/L		980285	980284.731
[	Ni 60	23.198	ug/L	1.237	19504	0.020
>	Ge 74		ug/L		215701	215701.065
	As 75	15.955	ug/L	0.606	11606	0.053
	Se 77		ug/L		3177	-0.003
	Se 82	-0.185	ug/L	158.098	-14	-0.000
[	Kr 83		ug/L		163	0.000
>	Lu 175		ug/L		185806	185805.768
[	Tl 205	0.472	ug/L	2.420	3199	0.017

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[ Be 9					
> Sc 45		79.7			
[ Ni 60					
> Ge 74		77.7			
As 75					
Se 77					
Se 82					
[ Kr 83					
> Lu 175		94.3			
[ 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 26, 2010 02:48:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.076

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	49.146	ug/L	0.276	18920	0.018
[>	Sc 45		ug/L		1028990	1028989.931
[	Ni 60	51.925	ug/L	2.000	45743	0.044
[>	Ge 74		ug/L		236326	236325.745
[	As 75	46.801	ug/L	2.736	36895	0.155
[	Se 77		ug/L		7652	0.014
[	Se 82	48.479	ug/L	2.585	3364	0.014
[	Kr 83		ug/L		75	-0.000
[>	Lu 175		ug/L		191260	191259.706
[	Tl 205	48.422	ug/L	0.993	325121	1.699

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be 9	98.293				
[>	Sc 45		83.7			
[	Ni 60	103.851				
[>	Ge 74		85.1			
[	As 75	93.602				
[	Se 77					
[	Se 82	96.957				
[	Kr 83					
[>	Lu 175		97.1			
[	Tl 205	96.844				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 26, 2010 02:52:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.077

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.005	ug/L	56.869	12	0.000
>	Sc 45		ug/L		1108241	1108241.100
[	Ni 60	0.005	ug/L	93.344	75	0.000
>	Ge 74		ug/L		250470	250469.512
	As 75	0.284	ug/L	177.667	457	0.001
	Se 77		ug/L		5538	0.004
	Se 82	0.178	ug/L	32.883	10	0.000
[	Kr 83		ug/L		76	-0.000
>	Lu 175		ug/L		195616	195615.803
[	Tl 205	0.012	ug/L	24.467	211	0.000

### 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 % Dif	Duplicate Rel.	% Difference
[ Be 9						
> Sc 45		90.1				
[ Ni 60						
> Ge 74		90.2				
As 75						
Se 77						
Se 82						
[ Kr 83						
> Lu 175		99.3				
[ 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

Sample ID: QC Std 7

=====  
Analysis BegunLogged In Analyst: Administrator  
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS  
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\022210S1.SIF  
Batch ID:  
Results Data Set: 022210S1  
Results Library: C:\data-AA\Administrator\Results\Results.mdb=====  
Method Loaded

Method Name: SOIL

Method Last Saved: 1/4/2010 13:53:20

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/22/2010 09:10:53

Analyst:

Data Type: Original

-----  
Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0039	0.0004	09:11:45	Yes
2		[0.00]	0.0002	0.0015	0.0002	09:12:15	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0002				
%RSD:		0.00	53.64				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/22/2010 09:12:34

Analyst:

Data Type: Original

-----  
Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0025	0.0130	0.0028	09:13:24	Yes
2		[0.2]	0.0024	0.0118	0.0027	09:13:54	Yes
Mean:		[0.2]	0.0025				
SD:		0.0	0.0001				
%RSD:		0.0	2.95				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01227 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/22/2010 09:14:13

Analyst:

Data Type: Original

-----  
Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0064	0.0296	0.0067	09:15:04	Yes
2		[0.5]	0.0064	0.0296	0.0067	09:15:34	Yes
Mean:		[0.5]	0.0064				
SD:		0.0	0.0000				
%RSD:		0.0	0.76				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999833 Slope: 0.01281 Intercept: -0.00004

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/22/2010 09:15:53

Analyst:

Data Type: Original

-----  
Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0266	0.1214	0.0270	09:16:44	Yes
2		[2.0]	0.0268	0.1221	0.0271	09:17:14	Yes
Mean:		[2.0]	0.0267				
SD:		0.0	0.0001				
%RSD:		0.0	0.39				

Standard number 3 applied. [2.0]  
Correlation Coef.: 0.999935 Slope: 0.01342 Intercept: -0.00017

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 2/22/2010 09:17:34

Data Type: Original

-----  
Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0658	0.2999	0.0661	09:18:25	Yes
2		[5.0]	0.0654	0.2990	0.0657	09:18:55	Yes
Mean:		[5.0]	0.0656				
SD:		0.0	0.0003				
%RSD:		0.0	0.39				

Standard number 4 applied. [5.0]  
Correlation Coef.: 0.999956 Slope: 0.01315 Intercept: -0.00003

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

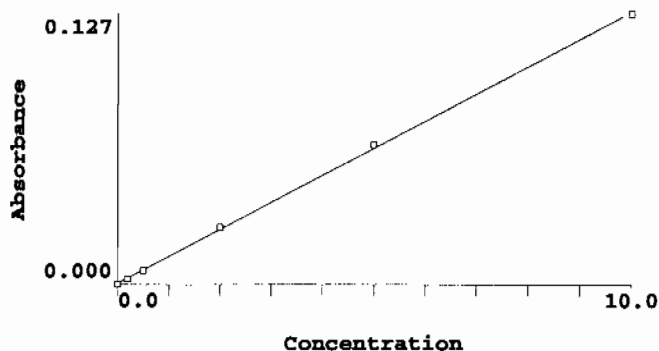
Date Collected: 2/22/2010 09:19:16

Data Type: Original

-----  
Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1267	0.5827	0.1270	09:20:06	Yes
2		[10.0]	0.1264	0.5788	0.1267	09:20:36	Yes
Mean:		[10.0]	0.1266				
SD:		0.0	0.0002				
%RSD:		0.0	0.18				

Standard number 5 applied. [10.0]  
Correlation Coef.: 0.999803 Slope: 0.01270 Intercept: 0.00049

-----  
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	-0.038	0.00	53.6
S0.2	0.0025	0.2	0.155	0.00	2.9
S0.5	0.0064	0.5	0.465	0.00	0.8
S2.0	0.0267	2.0	2.066	0.00	0.4

S5.0	0.0656	5.0	5.126	0.00	0.4
S10.0	0.1266	10.0	9.926	0.00	0.2

Correlation Coef.: 0.999803    Slope: 0.01270    Intercept: 0.00049

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 2/22/2010 09:20:55

Data Type: Original

## Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.163	5.163	0.0661	0.3028	0.0664	09:21:46	Yes
2	5.137	5.137	0.0657	0.3006	0.0660	09:22:15	Yes
Mean:	5.150	5.150	0.0659				
SD:	0.019	0.019	0.0002				
%RSD:	0.366	0.366	0.36				

QC value within limits for Hg 253.7    Recovery = 103.00%  
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 2/22/2010 09:22:35

Data Type: Original

## Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.059	-0.059	-0.0003	-0.0018	0.0001	09:23:26	Yes
2	-0.054	-0.054	-0.0002	-0.0015	0.0001	09:23:56	Yes
Mean:	-0.056	-0.056	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	6.211	6.211	19.49				

QC value within limits for Hg 253.7    Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 2/22/2010 09:24:16

Data Type: Original

## Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.155	0.155	0.0025	0.0117	0.0028	09:25:07	Yes
2	0.147	0.147	0.0024	0.0106	0.0027	09:25:37	Yes
Mean:	0.151	0.151	0.0024				
SD:	0.006	0.006	0.0001				
%RSD:	3.846	3.846	3.07				

QC value within limits for Hg 253.7    Recovery = 75.56%  
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/22/2010 09:25:57

Data Type: Original

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.065	5.065	0.0648	0.2977	0.0651	09:26:47	Yes
2	5.044	5.044	0.0645	0.2946	0.0649	09:27:17	Yes
Mean:	5.055	5.055	0.0647				
SD:	0.015	0.015	0.0002				
%RSD:	0.296	0.296	0.29				

QC value within limits for Hg 253.7    Recovery = 101.09%  
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/22/2010 09:27:36

Data Type: Original

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.057	-0.057	-0.0002	-0.0011	0.0001	09:28:26	Yes
2	-0.063	-0.063	-0.0003	-0.0019	0.0000	09:28:56	Yes
Mean:	-0.060	-0.060	-0.0003				
SD:	0.004	0.004	0.0000				
%RSD:	6.512	6.512	17.97				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202039119|951482|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/22/2010 09:29:16

Data Type: Original

## Replicate Data: 1202039119|951482|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.060	-0.060	-0.0003	-0.0016	0.0000	09:30:08	Yes
2	-0.057	-0.057	-0.0002	-0.0007	0.0001	09:30:37	Yes
Mean:	-0.058	-0.058	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	4.517	4.517	13.10				

Sequence No.: 13

Sample ID: 1202039120|951482|10

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/22/2010 09:30:58

Data Type: Original

## Replicate Data: 1202039120|951482|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.981	3.981	0.0510	0.2348	0.0514	09:31:50	Yes
2	3.964	3.964	0.0508	0.2328	0.0511	09:32:20	Yes
Mean:	3.972	3.972	0.0509				
SD:	0.012	0.012	0.0002				
%RSD:	0.302	0.302	0.30				

Sequence No.: 14

Sample ID: 246354001|951482|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/22/2010 09:32:40

Data Type: Original

## Replicate Data: 246354001|951482|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.212	0.212	0.0032	0.0151	0.0035	09:33:31	Yes
2	0.210	0.210	0.0031	0.0144	0.0035	09:34:01	Yes
Mean:	0.211	0.211	0.0032				
SD:	0.002	0.002	0.0000				
%RSD:	0.960	0.960	0.81				

Sequence No.: 15

Sample ID: 246354002|951482|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/22/2010 09:34:20

Data Type: Original

## Replicate Data: 246354002|951482|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

-----  
Replicate Data: 246354007|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.215	0.215	0.0032	0.0155	0.0035	09:43:28	Yes
2	0.217	0.217	0.0032	0.0156	0.0036	09:43:58	Yes
Mean:	0.216	0.216	0.0032				
SD:	0.002	0.002	0.0000				
%RSD:	0.955	0.955	0.81				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 246354008|951482|1

Date Collected: 2/22/2010 09:44:17

Analyst: JXL

Data Type: Original  
-----

## Replicate Data: 246354008|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.193	0.193	0.0029	0.0149	0.0032	09:45:08	Yes
2	0.196	0.196	0.0030	0.0157	0.0033	09:45:38	Yes
Mean:	0.195	0.195	0.0030				
SD:	0.003	0.003	0.0000				
%RSD:	1.377	1.377	1.15				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 09:45:58

Analyst:

Data Type: Original  
-----

## Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.013	5.013	0.0641	0.2931	0.0645	09:46:48	Yes
2	4.982	4.982	0.0638	0.2911	0.0641	09:47:18	Yes
Mean:	4.997	4.997	0.0639				
SD:	0.022	0.022	0.0003				
%RSD:	0.441	0.441	0.44				

QC value within limits for Hg 253.7 Recovery = 99.94%  
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/22/2010 09:47:37

Analyst:

Data Type: Original  
-----

## Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.050	-0.050	-0.0001	0.0008	0.0002	09:48:28	Yes
2	-0.048	-0.048	-0.0001	0.0011	0.0002	09:48:58	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.111	2.111	9.57				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 246354009|951482|1

Date Collected: 2/22/2010 09:49:17

Analyst: JXL

Data Type: Original  
-----

## Replicate Data: 246354009|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.192	0.192	0.0029	0.0145	0.0032	09:50:09	Yes
2	0.189	0.189	0.0029	0.0142	0.0032	09:50:39	Yes

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.186	2.186	0.0283	0.1317	0.0286	09:58:34	Yes
2	2.176	2.176	0.0281	0.1305	0.0284	09:59:04	Yes
Mean:	2.181	2.181	0.0282				
SD:	0.008	0.008	0.0001				
%RSD:	0.344	0.344	0.34				

Sequence No.: 30

Sample ID: 1202039129|951482|1

Analyst: JXL

Autosampler Location: 28

Date Collected: 2/22/2010 09:59:23

Data Type: Original

Replicate Data: 1202039129|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.225	2.225	0.0287	0.1337	0.0291	10:00:14	Yes
2	2.228	2.228	0.0288	0.1333	0.0291	10:00:44	Yes
Mean:	2.227	2.227	0.0288				
SD:	0.002	0.002	0.0000				
%RSD:	0.072	0.072	0.07				

Sequence No.: 31

Sample ID: 1202039128|951482|5

Analyst: JXL

Autosampler Location: 29

Date Collected: 2/22/2010 10:01:03

Data Type: Original

Replicate Data: 1202039128|951482|5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	0.0003	0.0020	0.0006	10:01:54	Yes
2	-0.008	-0.008	0.0004	0.0029	0.0007	10:02:23	Yes
Mean:	-0.011	-0.011	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	30.67	30.67	12.01				

Sequence No.: 32

Sample ID: 246452002|951482|1

Analyst: JXL

Autosampler Location: 30

Date Collected: 2/22/2010 10:02:43

Data Type: Original

Replicate Data: 246452002|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.266	0.266	0.0039	0.0191	0.0042	10:03:33	Yes
2	0.265	0.265	0.0038	0.0189	0.0042	10:04:03	Yes
Mean:	0.266	0.266	0.0039				
SD:	0.001	0.001	0.0000				
%RSD:	0.492	0.492	0.43				

Sequence No.: 33

Sample ID: 246452003|951482|1

Analyst: JXL

Autosampler Location: 31

Date Collected: 2/22/2010 10:04:22

Data Type: Original

Replicate Data: 246452003|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.614	0.614	0.0083	0.0391	0.0086	10:05:13	Yes
2	0.615	0.615	0.0083	0.0390	0.0086	10:05:43	Yes
Mean:	0.615	0.615	0.0083				
SD:	0.001	0.001	0.0000				
%RSD:	0.120	0.120	0.11				

Sequence No.: 34

Sample ID: CCV

Autosampler Location: 7

Date Collected: 2/22/2010 10:06:02



Analyst:

Data Type: Original

-----  
Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.056	5.056	0.0647	0.2940	0.0650	10:06:53	Yes
2	5.026	5.026	0.0643	0.2919	0.0646	10:07:23	Yes
Mean:	5.041	5.041	0.0645				
SD:	0.021	0.021	0.0003				
%RSD:	0.413	0.413	0.41				

QC value within limits for Hg 253.7 Recovery = 100.82%  
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/22/2010 10:07:42

Analyst:

Data Type: Original

-----  
Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0001	0.0014	0.0002	10:08:32	Yes
2	-0.052	-0.052	-0.0002	0.0004	0.0001	10:09:02	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	10.34	10.34	49.00				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 246452004|951482|1

Date Collected: 2/22/2010 10:09:21

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246452004|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.312	0.312	0.0044	0.0217	0.0048	10:10:13	Yes
2	0.306	0.306	0.0044	0.0208	0.0047	10:10:43	Yes
Mean:	0.309	0.309	0.0044				
SD:	0.004	0.004	0.0000				
%RSD:	1.188	1.188	1.06				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 246452005|951482|1

Date Collected: 2/22/2010 10:11:02

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246452005|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.291	0.291	0.0042	0.0201	0.0045	10:11:53	Yes
2	0.292	0.292	0.0042	0.0201	0.0045	10:12:23	Yes
Mean:	0.291	0.291	0.0042				
SD:	0.001	0.001	0.0000				
%RSD:	0.301	0.301	0.27				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 246452006|951482|1

Date Collected: 2/22/2010 10:12:43

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246452006|951482|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.195	0.195	0.0030	0.0152	0.0033	10:13:34	Yes

2	0.189	0.189	0.0029	0.0146	0.0032	10:14:04	Yes
Mean:	0.192	0.192	0.0029				
SD:	0.005	0.005	0.0001				
%RSD:	2.413	2.413	2.01				

Sequence No.: 39

Autosampler Location: 35

Sample ID: 246452007|951482|1

Date Collected: 2/22/2010 10:14:24

Analyst: JXL

Data Type: Original

Replicate Data: 246452007|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.515	0.515	0.0070	0.0340	0.0073	10:15:15	Yes
2	0.516	0.516	0.0070	0.0339	0.0074	10:15:45	Yes
Mean:	0.515	0.515	0.0070				
SD:	0.001	0.001	0.0000				
%RSD:	0.180	0.180	0.17				

Sequence No.: 40

Autosampler Location: 36

Sample ID: 246452008|951482|1

Date Collected: 2/22/2010 10:16:05

Analyst: JXL

Data Type: Original

Replicate Data: 246452008|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.119	0.119	0.0020	0.0110	0.0023	10:16:56	Yes
2	0.121	0.121	0.0020	0.0108	0.0023	10:17:26	Yes
Mean:	0.120	0.120	0.0020				
SD:	0.001	0.001	0.0000				
%RSD:	0.912	0.912	0.69				

Sequence No.: 41

Autosampler Location: 37

Sample ID: 246452009|951482|1

Date Collected: 2/22/2010 10:17:46

Analyst: JXL

Data Type: Original

Replicate Data: 246452009|951482|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.320	0.320	0.0046	0.0229	0.0049	10:18:38	Yes
2	0.320	0.320	0.0046	0.0236	0.0049	10:19:08	Yes
Mean:	0.320	0.320	0.0046				
SD:	0.000	0.000	0.0000				
%RSD:	0.002	0.002	0.00				

Sequence No.: 42

Autosampler Location: 38

Sample ID: 1202039278|951546|1

Date Collected: 2/22/2010 10:19:28

Analyst: JXL

Data Type: Original

Replicate Data: 1202039278|951546|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	0.0001	0.0040	0.0004	10:20:19	Yes
2	-0.041	-0.041	-0.0000	0.0024	0.0003	10:20:49	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	26.77	26.77	242.68				

Sequence No.: 43

Autosampler Location: 39

Sample ID: 1202039279|951546|10

Date Collected: 2/22/2010 10:21:09

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039279|951546|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.679	3.679	0.0472	0.2153	0.0475	10:21:59	Yes
2	3.681	3.681	0.0472	0.2140	0.0476	10:22:29	Yes
Mean:	3.680	3.680	0.0472				
SD:	0.002	0.002	0.0000				
%RSD:	0.043	0.043	0.04				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 246055001|951546|1

Date Collected: 2/22/2010 10:22:49

Analyst: JXL

Data Type: Original

## Replicate Data: 246055001|951546|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.235	0.235	0.0035	0.0168	0.0038	10:23:39	Yes
2	0.234	0.234	0.0035	0.0169	0.0038	10:24:09	Yes
Mean:	0.235	0.235	0.0035				
SD:	0.000	0.000	0.0000				
%RSD:	0.079	0.079	0.07				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202039280|951546|1

Date Collected: 2/22/2010 10:24:29

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039280|951546|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.078	0.078	0.0015	0.0080	0.0018	10:25:20	Yes
2	0.078	0.078	0.0015	0.0078	0.0018	10:25:50	Yes
Mean:	0.078	0.078	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.484	0.484	0.33				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 10:26:09

Analyst:

Data Type: Original

## Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.123	5.123	0.0656	0.2977	0.0659	10:27:00	Yes
2	5.104	5.104	0.0653	0.2968	0.0656	10:27:30	Yes
Mean:	5.114	5.114	0.0654				
SD:	0.014	0.014	0.0002				
%RSD:	0.275	0.275	0.27				

QC value within limits for Hg 253.7 Recovery = 102.27%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/22/2010 10:27:49

Analyst:

Data Type: Original

## Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0002	0.0007	0.0002	10:28:39	Yes
2	-0.052	-0.052	-0.0002	0.0004	0.0001	10:29:09	Yes
Mean:	-0.051	-0.051	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	1.698	1.698	6.85				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 1202039281|951546|1

Analyst: JXL

Autosampler Location: 42

Date Collected: 2/22/2010 10:29:29

Data Type: Original

Replicate Data: 1202039281|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.190	2.190	0.0283	0.1303	0.0286	10:30:20	Yes
2	2.179	2.179	0.0282	0.1298	0.0285	10:30:50	Yes
Mean:	2.184	2.184	0.0282				
SD:	0.008	0.008	0.0001				
%RSD:	0.355	0.355	0.35				

Sequence No.: 49

Sample ID: 1202039283|951546|1

Analyst: JXL

Autosampler Location: 43

Date Collected: 2/22/2010 10:31:09

Data Type: Original

Replicate Data: 1202039283|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.372	1.372	0.0179	0.0835	0.0182	10:32:00	Yes
2	1.362	1.362	0.0178	0.0821	0.0181	10:32:30	Yes
Mean:	1.367	1.367	0.0178				
SD:	0.007	0.007	0.0001				
%RSD:	0.515	0.515	0.50				

Sequence No.: 50

Sample ID: 1202039282|951546|5

Analyst: JXL

Autosampler Location: 44

Date Collected: 2/22/2010 10:32:50

Data Type: Original

Replicate Data: 1202039282|951546|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.025	0.025	0.0008	0.0078	0.0011	10:33:41	Yes
2	0.028	0.028	0.0008	0.0076	0.0012	10:34:11	Yes
Mean:	0.026	0.026	0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	6.995	6.995	2.86				

Sequence No.: 51

Sample ID: 246055002|951546|1

Analyst: JXL

Autosampler Location: 45

Date Collected: 2/22/2010 10:34:30

Data Type: Original

Replicate Data: 246055002|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.295	0.295	0.0042	0.0211	0.0045	10:35:22	Yes
2	0.288	0.288	0.0041	0.0204	0.0045	10:35:52	Yes
Mean:	0.291	0.291	0.0042				
SD:	0.005	0.005	0.0001				
%RSD:	1.796	1.796	1.59				

Sequence No.: 52

Sample ID: 246055003|951546|1

Analyst: JXL

Autosampler Location: 46

Date Collected: 2/22/2010 10:36:11

Data Type: Original

Replicate Data: 246055003|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

1	0.296	0.296	0.0042	0.0206	0.0046	10:37:02	Yes
2	0.300	0.300	0.0043	0.0210	0.0046	10:37:32	Yes
Mean:	0.298	0.298	0.0043				
SD:	0.003	0.003	0.0000				
%RSD:	0.858	0.858	0.76				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 246055004|951546|1

Date Collected: 2/22/2010 10:37:52

Analyst: JXL

Data Type: Original

Replicate Data: 246055004|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.052	0.052	0.0011	0.0066	0.0015	10:38:44	Yes
2	0.049	0.049	0.0011	0.0064	0.0014	10:39:14	Yes
Mean:	0.051	0.051	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	2.908	2.908	1.65				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 246055005|951546|1

Date Collected: 2/22/2010 10:39:34

Analyst: JXL

Data Type: Original

Replicate Data: 246055005|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.229	0.229	0.0034	0.0167	0.0037	10:40:25	Yes
2	0.230	0.230	0.0034	0.0170	0.0037	10:40:55	Yes
Mean:	0.229	0.229	0.0034				
SD:	0.001	0.001	0.0000				
%RSD:	0.268	0.268	0.23				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 246055006|951546|1

Date Collected: 2/22/2010 10:41:15

Analyst: JXL

Data Type: Original

Replicate Data: 246055006|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.293	0.293	0.0042	0.0203	0.0045	10:42:07	Yes
2	0.289	0.289	0.0042	0.0201	0.0045	10:42:37	Yes
Mean:	0.291	0.291	0.0042				
SD:	0.003	0.003	0.0000				
%RSD:	0.971	0.971	0.86				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 246055007|951546|1

Date Collected: 2/22/2010 10:42:57

Analyst: JXL

Data Type: Original

Replicate Data: 246055007|951546|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.195	0.195	0.0030	0.0150	0.0033	10:43:48	Yes
2	0.199	0.199	0.0030	0.0149	0.0033	10:44:18	Yes
Mean:	0.197	0.197	0.0030				
SD:	0.002	0.002	0.0000				
%RSD:	1.250	1.250	1.05				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 246055008|951546|1

Date Collected: 2/22/2010 10:44:38

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246055008|951546|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.143	0.143	0.0023	0.0118	0.0026	10:45:29	Yes
2	0.146	0.146	0.0023	0.0124	0.0027	10:45:59	Yes
Mean:	0.144	0.144	0.0023				
SD:	0.002	0.002	0.0000				
%RSD:	1.723	1.723	1.36				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/22/2010 10:46:18

Data Type: Original  
-----

## Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.173	5.173	0.0662	0.2986	0.0665	10:47:08	Yes
2	5.219	5.219	0.0668	0.2990	0.0671	10:47:38	Yes
Mean:	5.196	5.196	0.0665				
SD:	0.033	0.033	0.0004				
%RSD:	0.630	0.630	0.63				

QC value within limits for Hg 253.7 Recovery = 103.92%  
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/22/2010 10:47:57

Data Type: Original  
-----

## Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.047	-0.047	-0.0001	0.0014	0.0002	10:48:48	Yes
2	-0.049	-0.049	-0.0001	0.0010	0.0002	10:49:18	Yes
Mean:	-0.048	-0.048	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.335	3.335	16.87				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 246055009|951546|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 2/22/2010 10:49:37

Data Type: Original  
-----

## Replicate Data: 246055009|951546|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.293	0.293	0.0042	0.0202	0.0045	10:50:28	Yes
2	0.291	0.291	0.0042	0.0196	0.0045	10:50:58	Yes
Mean:	0.292	0.292	0.0042				
SD:	0.002	0.002	0.0000				
%RSD:	0.666	0.666	0.59				

Sequence No.: 61

Sample ID: 1202039295|951551|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 2/22/2010 10:51:17

Data Type: Original  
-----

## Replicate Data: 1202039295|951551|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.050	-0.050	-0.0001	0.0009	0.0002	10:52:08	Yes
2	-0.047	-0.047	-0.0001	0.0014	0.0002	10:52:38	Yes
Mean:	-0.049	-0.049	-0.0001				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.421	2.421	0.0312	0.1398	0.0315	11:00:33	Yes
2	2.409	2.409	0.0311	0.1392	0.0314	11:01:03	Yes
Mean:	2.415	2.415	0.0312				
SD:	0.008	0.008	0.0001				
%RSD:	0.333	0.333	0.33				

Sequence No.: 67  
Sample ID: 1202039299|951551|5  
Analyst: JXL

Autosampler Location: 59  
Date Collected: 2/22/2010 11:01:22  
Data Type: Original

## Replicate Data: 1202039299|951551|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	0.0005	0.0034	0.0008	11:02:14	Yes
2	0.003	0.003	0.0005	0.0034	0.0008	11:02:44	Yes
Mean:	0.001	0.001	0.0005				
SD:	0.002	0.002	0.0000				
%RSD:	149.8	149.8	5.53				

Sequence No.: 68  
Sample ID: 246066002|951551|1  
Analyst: JXL

Autosampler Location: 60  
Date Collected: 2/22/2010 11:03:04  
Data Type: Original

## Replicate Data: 246066002|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.208	0.208	0.0031	0.0155	0.0034	11:03:56	Yes
2	0.208	0.208	0.0031	0.0152	0.0034	11:04:26	Yes
Mean:	0.208	0.208	0.0031				
SD:	0.000	0.000	0.0000				
%RSD:	0.196	0.196	0.17				

Sequence No.: 69  
Sample ID: 246066003|951551|1  
Analyst: JXL

Autosampler Location: 61  
Date Collected: 2/22/2010 11:04:46  
Data Type: Original

## Replicate Data: 246066003|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.196	0.196	0.0030	0.0147	0.0033	11:05:38	Yes
2	0.189	0.189	0.0029	0.0144	0.0032	11:06:08	Yes
Mean:	0.193	0.193	0.0029				
SD:	0.005	0.005	0.0001				
%RSD:	2.670	2.670	2.23				

Sequence No.: 70  
Sample ID: CCV  
Analyst:

Autosampler Location: 7  
Date Collected: 2/22/2010 11:06:28  
Data Type: Original

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.198	5.198	0.0665	0.2949	0.0668	11:07:18	Yes
2	5.157	5.157	0.0660	0.2914	0.0663	11:07:48	Yes
Mean:	5.177	5.177	0.0662				
SD:	0.029	0.029	0.0004				
%RSD:	0.555	0.555	0.55				

QC value within limits for Hg 253.7 Recovery = 103.54%  
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB  
Analyst:

Date Collected: 2/22/2010 11:08:07  
Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.051	-0.051	-0.0002	0.0008	0.0002	11:08:58	Yes
2	-0.059	-0.059	-0.0003	-0.0005	0.0001	11:09:28	Yes
Mean:	-0.055	-0.055	-0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	10.73	10.73	35.82				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

## =====

Sequence No.: 72  
Sample ID: 246066004|951551|1  
Analyst: JXL

Autosampler Location: 62  
Date Collected: 2/22/2010 11:09:47  
Data Type: Original

-----  
Replicate Data: 246066004|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.397	0.397	0.0055	0.0260	0.0058	11:10:38	Yes
2	0.396	0.396	0.0055	0.0259	0.0058	11:11:08	Yes
Mean:	0.397	0.397	0.0055				
SD:	0.001	0.001	0.0000				
%RSD:	0.217	0.217	0.20				

## =====

Sequence No.: 73  
Sample ID: 246066005|951551|1  
Analyst: JXL

Autosampler Location: 63  
Date Collected: 2/22/2010 11:11:28  
Data Type: Original

-----  
Replicate Data: 246066005|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.055	0.055	0.0012	0.0065	0.0015	11:12:19	Yes
2	0.058	0.058	0.0012	0.0067	0.0015	11:12:49	Yes
Mean:	0.056	0.056	0.0012				
SD:	0.002	0.002	0.0000				
%RSD:	3.337	3.337	1.99				

## =====

Sequence No.: 74  
Sample ID: 246066006|951551|1  
Analyst: JXL

Autosampler Location: 64  
Date Collected: 2/22/2010 11:13:09  
Data Type: Original

-----  
Replicate Data: 246066006|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.544	0.544	0.0074	0.0341	0.0077	11:14:00	Yes
2	0.536	0.536	0.0073	0.0334	0.0076	11:14:29	Yes
Mean:	0.540	0.540	0.0073				
SD:	0.005	0.005	0.0001				
%RSD:	0.997	0.997	0.93				

## =====

Sequence No.: 75  
Sample ID: 246066007|951551|1  
Analyst: JXL

Autosampler Location: 65  
Date Collected: 2/22/2010 11:14:49  
Data Type: Original

-----  
Replicate Data: 246066007|951551|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	0.0005	0.0037	0.0008	11:15:40	Yes
2	-0.006	-0.006	0.0004	0.0030	0.0007	11:16:10	Yes



# Miscellaneous

# Prep LogBook

Analyst: AXG2  
 Batch: 949333  
 Lab SOP: GL-MA-E-009 REV# 19

Verified by:

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202033903	U1062540-1	.521	g
MS	1202033901	U1100120-01	.25	mL
MS	1202033901	U1100120-06	.25	mL
MSD	1202033902	U1100120-01	.25	mL
MSD	1202033902	U1100120-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202033898		SW846 3050B	16-FEB-2010 07:00	0.623 g	50 mL	80.25682	SOIL
LCS	1202033903		SW846 3050B	16-FEB-2010 07:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	246055001		SW846 3050B	16-FEB-2010 07:00	0.51 g	50 mL	98.03922	SOIL
DUP	1202033899	246055001	SW846 3050B	16-FEB-2010 07:00	0.513 g	50 mL	97.46589	SOIL
SDILT	1202033900	246055001	SW846 3050B	16-FEB-2010 07:00	0.51 g	50 mL	98.03922	SOIL
MS	1202033901	246055001	SW846 3050B	16-FEB-2010 07:00	0.514 g	50 mL	97.27626	SOIL
MSD	1202033902	246055001	SW846 3050B	16-FEB-2010 07:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	246055002		SW846 3050B	16-FEB-2010 07:00	0.578 g	50 mL	86.50519	SOIL
SAMPLE	246055003		SW846 3050B	16-FEB-2010 07:00	0.552 g	50 mL	90.57971	SOIL
SAMPLE	246055004		SW846 3050B	16-FEB-2010 07:00	0.545 g	50 mL	91.74312	SOIL
SAMPLE	246055005		SW846 3050B	16-FEB-2010 07:00	0.528 g	50 mL	94.69697	SOIL
SAMPLE	246055006		SW846 3050B	16-FEB-2010 07:00	0.541 g	50 mL	92.42144	SOIL
SAMPLE	246055007		SW846 3050B	16-FEB-2010 07:00	0.532 g	50 mL	93.98496	SOIL
SAMPLE	246055008		SW846 3050B	16-FEB-2010 07:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	246055009		SW846 3050B	16-FEB-2010 07:00	0.51 g	50 mL	98.03922	SOIL

Reagent/Solvent Lot ID: 1265209, 1268732  
 Amount: 10 mL, 1.25 mL  
 Description: HYDROCHLORIC ACID, Nitric Acid CONC.  
 Comments: Sample 246055001 consist of black, clumpy soil.

# Prep LogBook

Analyst: AXG2  
Batch: 949335  
Lab SOP: GL-MA-E-009 REV# 19

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot Id	Spike Amount	Spike Units
MB	1202033908		SW846 3050B	16-FEB-2010 07:00	LCS	1202033913	U1062540-MS	.518	g
LCS	1202033913		SW846 3050B	16-FEB-2010 07:00	MS	1202033911	U1091015-A	.5	mL
SAMPLE	246055001		SW846 3050B	16-FEB-2010 07:00	MS	1202033911	U1091015-B	.5	mL
DUP	1202033909	246055001	SW846 3050B	16-FEB-2010 07:00	MSD	1202033912	U1091015-A	.5	mL
SDILT	1202033910	246055001	SW846 3050B	16-FEB-2010 07:00	MSD	1202033912	U1091015-B	.5	mL
MS	1202033911	246055001	SW846 3050B	16-FEB-2010 07:00					
MSD	1202033912	246055001	SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055002		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055003		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055004		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055005		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055006		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055007		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055008		SW846 3050B	16-FEB-2010 07:00					
SAMPLE	246055009		SW846 3050B	16-FEB-2010 07:00					

Comments Sample 246055001 consist of black, clumpy soil.

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: 951544  
 Lab SOP: GL-MA-E-010 REV# 23

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202039278		SW846 7471A Prep	19-FEB-2010 12:25	LCS	1202039279	UJ031809A	.202	g
LCS	1202039279		SW846 7471A Prep	19-FEB-2010 12:25	MS	1202039281	WHG100219-14	.3	mL
SAMPLE	246055001		SW846 7471A Prep	19-FEB-2010 12:25	MSD	1202039283	WHG100219-14	.3	mL
DUP	1202039280	246055001	SW846 7471A Prep	19-FEB-2010 12:25					
MS	1202039281	246055001	SW846 7471A Prep	19-FEB-2010 12:25					
MSD	1202039283	246055001	SW846 7471A Prep	19-FEB-2010 12:25					
SDILT	1202039282	246055001	SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055002		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055003		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055004		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055005		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055006		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055007		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055008		SW846 7471A Prep	19-FEB-2010 12:25					
SAMPLE	246055009		SW846 7471A Prep	19-FEB-2010 12:25					

Reagent/Solvent Lot ID	Amount	Description
1264796-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1264984-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent
WHG100219-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100219-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100219-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100219-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100219-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100219-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments Sample 246055001 is a moist clumpy soil.  
 Digestion Start Date: 19-FEB-10 12:25  
 Digestion End Date: 19-FEB-10 12:55

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 22-FEB-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> MERCURY	<b>Test / Method:</b> SW846 7471A	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 951546	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246055(10-1545)</b>			
<b>Application Issues:</b> Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. Failed RPD for MS/MSD, or PS/PSD:  QC 1202039283MSD		1. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Hg due to possible matrix interferences and/or sample non-homogeneity. Sample is a moist, clumpy soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	
2. Failed Recovery for MSD/PSD:  QC 1202039283MSD		2. The matrix spike recovery failed outside of the control limits for Hg due to possible matrix interferences and/or non-homogeneity. Sample is a moist, clumpy soil. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

**Originator's Name:**

Jason Loy

22-FEB-10

**Data Validator/Group Leader:**

Bryan Davis

22-FEB-10

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 02-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> 949334	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246055(10-1545)</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 MSD/PSD			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. Failed Recovery for MS/PS: QC 1202033901MS 2. Failed RPD for DUP: QC 1202033899DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1202033902MSD 4. Failed Recovery for MSD/PSD: QC 1202033902MSD		1. The matrix spike recovery failed outside of the control limits for barium,calcium,magnesium,manganese,potassium and zinc 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,antimony,barium,calcium,chromium,magnesium, manganese,potassium,zinc and lead 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 aluminum,antimony,iron,manganese and zinc 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. The matrix spike duplicate recovery failed outside of the control limits for calcium,manganese and zinc 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

02-MAR-10

**Data Validator/Group Leader:**

Christopher Louviere

02-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:** UI090422-40      **Opened:** 04-MAY-09      **Amount :** 500 mL  
**Name:** TRACE ICP ICSEA 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 ICSEA 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:** UI090610-03      **Opened:** 10-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **Received:** 10-JUN-09      **Lot Number :** 1016338  
**Type:** Source Material      **Expires:** 10-JUN-10      **Solvent :** 2% HNO3  
**Employee:** Paul Boyd  
**Supplier:** O2SI  
**Description:** ICPMS Tungsten standard SPIKE - 10mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

**Serial ID:** UI090701-09      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #1      **Received:** 01-JUL-09      **Catalog Number :** 160044-09-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016477  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** O2SI  
**Description:** ICPMS CRDL Master Soln #1  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UI090701-10      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #2      **Received:** 01-JUL-09      **Catalog Number :** 160044-08-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016476  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Soln #2  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

**Serial ID:** UI090701-40      **Opened:** 01-JUL-09      **Amount :** 500 mL  
**Name:** TRACE ICP Stock PQL St      **Received:** 30-JUN-09      **Catalog Number :** 160543-01-03  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016475  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** 02si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
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

**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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
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
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

# Standard Logbook

**Serial ID:** 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

**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

# Standard Logbook

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Tin	200 mg/L	Titanium	200 mg/L

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRONMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
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		

**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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

**Serial ID:** UI100120-01      **Opened:** 20-JAN-10      **Lot Number :** 1018095  
**Name:** METALSPIKE-1      **Received:** 20-JAN-10  
**Type:** Source Material      **Expires:** 20-JAN-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:** UI100120-06      **Opened:** 20-JAN-10      **Lot Number :** 1018096  
**Name:** METALSPIKE-2      **Received:** 20-JAN-10  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL



# Standard Logbook

**Serial ID:** UI100210-48      **Opened:** 11-FEB-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 11-FEB-11      **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  
**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

# Standard Logbook

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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:** 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:** UMS090303-01      **Opened:** 03-MAR-09      **Amount :** 250 mL  
**Name:** ICPMSCaSPIKEB      **Received:** 03-MAR-09      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expres:** 28-FEB-10      **Lot Number :** 14-81JB  
**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:** UMS090303-02      **Opened:** 03-MAR-09      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCaSPIKEA      **Received:** 03-MAR-09      **Lot Number :** 14-83JB  
**Type:** Source Material      **Expres:** 28-FEB-10  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

# Standard Logbook

**Serial ID:** UMS090303-03      **Opened:** 03-MAR-09      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 03-MAR-09      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 28-FEB-10      **Lot Number :** 15-199JB  
**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 + 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:** 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  
**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:** MHGWORKCAL5.0.2CRA      **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

# Standard Logbook

**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

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

# Standard Logbook

**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:** WI100224-42      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 25-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.
WI100224-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100224-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100224-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100224-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100224-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100224-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100224-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100224-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100224-43      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 25-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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

**Serial ID:** W1100224-44      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 25-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



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

**Serial ID:** WI100224-45      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 25-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:** WI100224-46      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 25-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

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

**Serial ID:** WI100224-47      **Opened:** 24-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 25-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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WI100301-42      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 01-MAR-10      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1276974  
**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.
WI100301-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100301-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100301-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100301-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100301-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100301-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100301-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100301-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100301-43      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1276974  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

**Serial ID:** WI100301-44      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL and 1 %HNO3-1276974  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

**Serial ID:** WI100301-45      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1276974  
**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:** WI100301-46      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** ICP TRACE ICPV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL AND 1%HNO3-1276974  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

**Serial ID:** WI100301-47      **Opened:** 01-MAR-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 3%HCL & 1%HNO3-1276974  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

## Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100225-04AB      **Opened:** 25-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS Cal Standard 10      **Received:** 25-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1272768  
**Employee:** Rose Jenkins  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100225-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100225-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
WMS100225-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100225-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100225-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100225-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100225-04B      **Opened:** 25-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 25-FEB-10      **Balance Id :** 40245216  
**Type:** Working      **Expires:** 26-FEB-10      **Pipet Id :** 1758088  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl- 1272768  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Alliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

**Serial ID:** WMS100225-05B      **Opened:** 25-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 25-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1272768  
**Employee:** Rose Jenkins  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100225-06B      **Opened:** 25-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 25-FEB-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1272768  
**Employee:** Rose Jenkins      **Verified:** 23-FEB-10  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100225-07B      **Opened:** 25-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 25-FEB-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 26-FEB-10      **Pipet Id :** 3541598  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl - 1272768  
**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:** WMS100225-08B      **Opened:** 25-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 25-FEB-10      **Pipet Id :** 3541598/1758088  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1272768  
**Employee:** Rose Jenkins  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

**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

# Standard Logbook

**Serial ID:** 1100721TCLP      **Opened:** 16-APR-09      **Lot Number :** H02026 L  
**Name:** I-HNO3      **Received:** 02-APR-09  
**Type:** Reagent/Solvent      **Expires:** 02-APR-10  
**Employee:** Clifford Postell  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

**Serial ID:** 1156689-A      **Opened:** 20-JUL-09      **Lot Number :** 41226920  
**Name:** B-KMnO4(VWR)-MER      **Received:** 20-JUL-09  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin      **Verified:** 07-AUG-07  
**Supplier:** VWR  
**Description:** Potassium Permanganate  
**Comments:** None

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCl-MER      **Received:** 12-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 12-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** Fisher Scientific  
**Description:** Hydroxylamine Hydrochloride  
**Comments:** None

**Serial ID:** 1250038-02      **Opened:** 04-JAN-10      **Lot Number :** ZU74081198 mL  
**Name:** B-H2O2      **Received:** 04-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 04-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** EM SCIENCE  
**Description:** Hydrogen Peroxide 30%  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

# Standard Logbook

**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

Parent Material	Analyte	Parent Conc.	Allquot	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

# Standard Logbook

**Serial ID:** 1272768      **Opened:** 22-FEB-10      **Solvent :** Type I Water  
**Name:** B-2%HNO3/1%HCl-ICPMS      **Received:** 22-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 01-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

**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:** 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



# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1545-1**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246056001	RE15-10-8233
246056002	RE15-10-8231
246056003	RE15-10-8230
246056004	RE15-10-8232
1202033915	Method Blank (MB) <b>ICP</b>
1202033916	Laboratory Control Sample (LCS)
1202033919	246056001(RE15-10-8233L) Serial Dilution (SD)
1202033917	246056001(RE15-10-8233D) Sample Duplicate (DUP)
1202033918	246056001(RE15-10-8233S) Matrix Spike (MS)
1202034073	Method Blank (MB) <b>ICP-MS</b>
1202034074	Laboratory Control Sample (LCS)
1202034077	246056001(RE15-10-8233L) Serial Dilution (SD)
1202034075	246056001(RE15-10-8233D) Sample Duplicate (DUP)
1202034076	246056001(RE15-10-8233S) Matrix Spike (MS)
1202033203	Method Blank (MB) <b>CVAA</b>
1202033204	Laboratory Control Sample (LCS)
1202033207	246056001(RE15-10-8233L) Serial Dilution (SD)
1202033205	246056001(RE15-10-8233D) Sample Duplicate (DUP)
1202033206	246056001(RE15-10-8233S) Matrix Spike (MS)

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

### **Method/Analysis Information**

<b>Analytical Batch:</b>	949338, 949400 and 949020
<b>Prep Batch :</b>	949337, 949399 and 949018
<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 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 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

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

carrier gas rate of 80 mL/min.

### **Calibration Information**

#### **Instrument Calibration**

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

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

#### **ICSA/ICSAB Statement**

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

#### **Continuing Calibration Blank (CCB) Requirements**

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

#### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

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

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

The MBs analyzed with this SDG met the acceptance criteria.

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

The LCS spike recoveries met the acceptance limits.

#### **Quality Control (QC) Sample Statement**

The following sample was selected as the quality control (QC) sample for this SDG: 246056001 (RE15-10-8233).

#### **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 DER was not generated for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**

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

**Review Validation:**

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

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

Reviewer: Kristen Panson Date: 3/2/10

# Sample Data Summary



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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056001

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8233

LEVEL: Low

DATE RECEIVED 03-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	103	ug/L	J	68	200	200	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-39-3	Barium	1.47	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7440-70-2	Calcium	53.6	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-47-3	Chromium	2.5	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-89-6	Iron	75.1	ug/L	J	30	100	100	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-92-1	Lead	1.21	ug/L	J	0.5	2	2	1	MS	PRB	03/02/10 14:56	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:21	021110B-1	949338
7439-96-5	Manganese	3	ug/L	J	1	5	5	1	MS	BAJ	03/02/10 05:58	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:14	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-09-7	Potassium	174	ug/L		50	150	150	1	P	HSC	02/11/10 20:21	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-23-5	Sodium	171	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:56	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:21	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:21	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056002

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8231

LEVEL: Low

DATE RECEIVED 03-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	02/11/10 20:35	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7440-70-2	Calcium	53.1	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	03/02/10 14:45	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:35	021110B-1	949338
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/02/10 06:22	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:22	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-09-7	Potassium	159	ug/L		50	150	150	1	P	HSC	02/11/10 20:35	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-23-5	Sodium	126	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-28-0	Thallium	0.413	ug/L	J	0.3	1	1	1	MS	PRB	03/02/10 14:45	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:35	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:35	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056003

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8230

LEVEL: Low

DATE RECEIVED 03-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	265	ug/L		68	200	200	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-39-3	Barium	2.15	ug/L	J	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7440-70-2	Calcium	109	ug/L	J	50	200	200	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-89-6	Iron	153	ug/L		30	100	100	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	PRB	03/02/10 14:47	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:39	021110B-1	949338
7439-96-5	Manganese	2.91	ug/L	J	1	5	5	1	MS	BAJ	03/02/10 06:29	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/05/10 10:24	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-09-7	Potassium	203	ug/L		50	150	150	1	P	HSC	02/11/10 20:39	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-23-5	Sodium	186	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:47	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:39	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:39	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

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

SDG No: 10-1545-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246056004

BASIS: As Received

DATE COLLECTED 29-JAN-10

CLIENT ID: RE15-10-8232

LEVEL: Low

DATE RECEIVED 03-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	02/11/10 20:42	021110B-1	949338
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-92-1	Lead	3.14	ug/L		0.5	2	2	1	MS	PRB	03/02/10 14:49	100302-2	949400
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:42	021110B-1	949338
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/02/10 06:35	100301-3	949400
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLJ	02/05/10 10:26	020510W1-4	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-09-7	Potassium	142	ug/L	J	50	150	150	1	P	HSC	02/11/10 20:42	021110B-1	949338
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-23-5	Sodium	117	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/02/10 14:49	100302-2	949400
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:42	021110B-1	949338
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:42	021110B-1	949338

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3
949338	949337	SW846 3005A	50	mL	50	mL	02/10/10	BXA1
949400	949399	SW846 3005A	50	mL	50	mL	02/10/10	BXA1

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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	4.96	ug/L	5	ug/L	99.1	90.0 – 110.0	AV	05-FEB-10 09:17	020510W1-4
	Aluminum	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Arsenic	450	ug/L	500	ug/L	89.9	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Barium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Calcium	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Chromium	473	ug/L	500	ug/L	94.5	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Copper	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Nickel	485	ug/L	500	ug/L	97	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Potassium	2410	ug/L	2500	ug/L	96.3	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Selenium	2440	ug/L	2500	ug/L	97.5	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Silver	253	ug/L	250	ug/L	101.2	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Sodium	2390	ug/L	2500	ug/L	95.6	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Zinc	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11-FEB-10 14:26	021110B-1
	Antimony	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	02-MAR-10 04:45	100301-3
	Beryllium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	02-MAR-10 04:45	100301-3
	Cadmium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	02-MAR-10 04:45	100301-3
	Manganese	53.9	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	02-MAR-10 04:45	100301-3
	Lead	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	02-MAR-10 14:17	100302-2
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	02-MAR-10 14:17	100302-2
CCV01										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	05-FEB-10 09:22	020510W1-4
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Arsenic	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Barium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Calcium	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Copper	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Magnesium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Nickel	485	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Selenium	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Antimony	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	02-MAR-10 05:15	100301-3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	02-MAR-10 05:15	100301-3
	Cadmium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	02-MAR-10 05:15	100301-3
	Manganese	54.7	ug/L	50	ug/L	109.3	90.0 - 110.0	MS	02-MAR-10 05:15	100301-3
	Lead	50.2	ug/L	50	ug/L	100.3	90.0 - 110.0	MS	02-MAR-10 14:27	100302-2
	Thallium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	02-MAR-10 14:27	100302-2
CCV02										
	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 - 120.0	AV	05-FEB-10 09:45	020510W1-4
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Arsenic	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Calcium	5160	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Chromium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Cobalt	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Copper	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Nickel	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Potassium	5230	ug/L	5000	ug/L	104.5	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Selenium	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Silver	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Vanadium	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Zinc	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	11-FEB-10 15:15	021110B-1
	Antimony	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	02-MAR-10 05:34	100301-3
	Beryllium	52.6	ug/L	50	ug/L	105.2	90.0 - 110.0	MS	02-MAR-10 05:34	100301-3
	Cadmium	52.8	ug/L	50	ug/L	105.6	90.0 - 110.0	MS	02-MAR-10 05:34	100301-3
	Manganese	54.5	ug/L	50	ug/L	109	90.0 - 110.0	MS	02-MAR-10 05:34	100301-3
	Lead	50.1	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	02-MAR-10 14:51	100302-2
	Thallium	48.9	ug/L	50	ug/L	97.7	90.0 - 110.0	MS	02-MAR-10 14:51	100302-2
CCV03										
	Mercury	5.05	ug/L	5	ug/L	101	80.0 - 120.0	AV	05-FEB-10 10:08	020510W1-4
	Aluminum	4750	ug/L	5000	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Barium	468	ug/L	500	ug/L	93.6	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Calcium	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Chromium	467	ug/L	500	ug/L	93.4	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Cobalt	470	ug/L	500	ug/L	94	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Copper	466	ug/L	500	ug/L	93.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Iron	4750	ug/L	5000	ug/L	95.1	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Nickel	467	ug/L	500	ug/L	93.5	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Selenium	475	ug/L	500	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Silver	474	ug/L	500	ug/L	94.7	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Sodium	9790	ug/L	10000	ug/L	98	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Vanadium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Zinc	466	ug/L	500	ug/L	93.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Antimony	50	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	02-MAR-10 06:41	100301-3



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Beryllium	51.5	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	02-MAR-10 06:41	100301-3
	Cadmium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	02-MAR-10 06:41	100301-3
	Manganese	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	02-MAR-10 06:41	100301-3
	Lead	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	02-MAR-10 15:04	100302-2
	Thallium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	02-MAR-10 15:04	100302-2
CCV04										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	05-FEB-10 10:32	020510W1-4
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Arsenic	462	ug/L	500	ug/L	92.4	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Barium	460	ug/L	500	ug/L	92.1	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Chromium	459	ug/L	500	ug/L	91.9	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Cobalt	462	ug/L	500	ug/L	92.3	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Copper	455	ug/L	500	ug/L	91.1	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Iron	4820	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Nickel	461	ug/L	500	ug/L	92.1	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Potassium	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Selenium	461	ug/L	500	ug/L	92.2	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Silver	465	ug/L	500	ug/L	93	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Vanadium	462	ug/L	500	ug/L	92.4	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
	Zinc	458	ug/L	500	ug/L	91.6	90.0 – 110.0	P	11-FEB-10 16:37	021110B-1
CCV05										
	Aluminum	4730	ug/L	5000	ug/L	94.5	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Arsenic	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Calcium	4750	ug/L	5000	ug/L	95	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Chromium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 16:58	021110B-1

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Copper	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.5	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Magnesium	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Nickel	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Potassium	4750	ug/L	5000	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Selenium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Silver	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Sodium	9460	ug/L	10000	ug/L	94.6	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Zinc	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
CCV06	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Barium	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Calcium	4770	ug/L	5000	ug/L	95.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Chromium	468	ug/L	500	ug/L	93.7	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Cobalt	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Copper	467	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Magnesium	4870	ug/L	5000	ug/L	97.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Nickel	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Potassium	4740	ug/L	5000	ug/L	94.7	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Selenium	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Silver	466	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Sodium	9440	ug/L	10000	ug/L	94.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Vanadium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Zinc	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
CCV07	Aluminum	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Arsenic	479	ug/L	500	ug/L	95.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Barium	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Calcium	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Iron	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Nickel	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Potassium	4790	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Selenium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Vanadium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	11-FEB-10 18:03	021110B-1
CCV08	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Arsenic	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Nickel	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Potassium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Selenium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Sodium	10000	ug/L	10000	ug/L	100.4	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
CCV09	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Arsenic	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Selenium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
CCV10	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Arsenic	476	ug/L	500	ug/L	95.3	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Calcium	4850	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Cobalt	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Nickel	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 19:41	021110B-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Selenium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
CCV11										
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Arsenic	470	ug/L	500	ug/L	94	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Barium	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Calcium	4770	ug/L	5000	ug/L	95.3	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Chromium	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Copper	472	ug/L	500	ug/L	94.3	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Iron	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Magnesium	4910	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Nickel	472	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Potassium	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Selenium	480	ug/L	500	ug/L	96	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Silver	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Sodium	9710	ug/L	10000	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Vanadium	475	ug/L	500	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Zinc	470	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
CCV12										
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Arsenic	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Barium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Chromium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,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>
	Iron	4930	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Magnesium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Nickel	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Potassium	4950	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Selenium	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Silver	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Vanadium	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1
	Zinc	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 20:46	021110B-1

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS5,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	.191	ug/L	.2	ug/L	95.5	70.0 – 130.0	AV	05-FEB-10 09:20	020510W1-4
	Manganese	6.24	ug/L	5	ug/L	124.8	70.0 – 130.0	MS	02-MAR-10 04:57	100301-3
	Antimony	3.23	ug/L	3	ug/L	107.6	70.0 – 130.0	MS	02-MAR-10 04:57	100301-3
	Cadmium	1.14	ug/L	1	ug/L	113.5	70.0 – 130.0	MS	02-MAR-10 04:57	100301-3
	Beryllium	.597	ug/L	.5	ug/L	119.4	70.0 – 130.0	MS	02-MAR-10 04:57	100301-3
	Lead	2.23	ug/L	2	ug/L	111.3	70.0 – 130.0	MS	02-MAR-10 14:21	100302-2
	Thallium	1.13	ug/L	1	ug/L	112.9	70.0 – 130.0	MS	02-MAR-10 14:21	100302-2
PQL01										
	Aluminum	201	ug/L	200	ug/L	100.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Iron	119	ug/L	100	ug/L	118.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Magnesium	304	ug/L	300	ug/L	101.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Nickel	4.56	ug/L	5	ug/L	91.2	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Barium	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Cobalt	4.65	ug/L	5	ug/L	93.1	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Vanadium	5.04	ug/L	5	ug/L	100.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Calcium	200	ug/L	200	ug/L	100	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Selenium	28.7	ug/L	30	ug/L	95.7	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Zinc	9.38	ug/L	10	ug/L	93.8	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Copper	9.86	ug/L	10	ug/L	98.6	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Chromium	4.99	ug/L	5	ug/L	99.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Arsenic	28.6	ug/L	30	ug/L	95.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Potassium	185	ug/L	150	ug/L	123.1	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Silver	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Sodium	294	ug/L	300	ug/L	98	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1545-1

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	05-FEB-10 09:18	020510W1-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 14:30	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 14:30	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	02-MAR-10 04:51	100301-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	02-MAR-10 04:51	100301-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	02-MAR-10 04:51	100301-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	02-MAR-10 04:51	100301-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	02-MAR-10 14:19	100302-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	02-MAR-10 14:19	100302-2
CCB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:24	020510W1-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Chromium	1.23	+/-5	J	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

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	11-FEB-10 14:53	021110B-1
	Iron	39.3	+/-100	J	30.0	100	LIQ	P	11-FEB-10 14:53	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Potassium	77.71	+/-150	J	50.0	150	LIQ	P	11-FEB-10 14:53	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	02-MAR-10 05:21	100301-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	02-MAR-10 05:21	100301-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	02-MAR-10 05:21	100301-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	02-MAR-10 05:21	100301-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	02-MAR-10 14:29	100302-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	02-MAR-10 14:29	100302-2
<b>CCB02</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:47	020510W1-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 15:19	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Potassium	56.33	+/-150	J	50.0	150	LIQ	P	11-FEB-10 15:19	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

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>
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	02-MAR-10 05:40	100301-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	02-MAR-10 05:40	100301-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	02-MAR-10 05:40	100301-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	02-MAR-10 05:40	100301-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	02-MAR-10 14:54	100302-2
	Thallium	0.401	+/-1	J	0.3	1.0	LIQ	MS	02-MAR-10 14:54	100302-2
<b>CCB03</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:10	020510W1-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:01	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:01	021110B-1
	Selenium	-5.29	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Sodium	186.28	+/-300	J	100	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	02-MAR-10 06:47	100301-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	02-MAR-10 06:47	100301-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	02-MAR-10 06:47	100301-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	02-MAR-10 06:47	100301-3

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

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	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	02-MAR-10 15:07	100302-2
	Thallium	0.622	+/-1	J	0.3	1.0	LIQ	MS	02-MAR-10 15:07	100302-2
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:34	020510W1-4
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:41	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:41	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Sodium	121.62	+/-300	J	100	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
CCB05	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:02	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:02	021110B-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

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>
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:02	021110B-1
	Selenium	-6.0	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
<b>CCB06</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Arsenic	-8.04	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:31	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:31	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
<b>CCB07</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:07	021110B-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

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>
CCB08	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:07	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:07	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:36	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:36	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
CCB09	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:36	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:36	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:16	021110B-1
	Arsenic	-6.17	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:16	021110B-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:16	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:16	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
<b>CCB10</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:45	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:45	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:45	021110B-1
<b>CCB11</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 20:10	021110B-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1545-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Arsenic	-6.48	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 20:10	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 20:10	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 20:10	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 20:10	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 20:10	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 20:10	021110B-1
<b>CCB12</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 20:50	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 20:50	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 20:50	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 20:50	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 20:50	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:50	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 20:50	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:50	021110B-1

## Metals

-3a-

## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1545-1

Contract: LANL01004

Lab Code: GEL

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<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>
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 20:50	021110B-1

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**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

SDG NO. 10-1545-1

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>
1202033203	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202033915	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	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	-8.01	ug/L	+/-30	J	P	5	30
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Iron	30	ug/L	+/-100	U	P	30	100
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
1202034073	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

-4-

## Interference Check Sample

SDG No: 10-1545-1

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	492000	ug/L	500000	ug/L	98.5	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Arsenic	-47.9	ug/L					11-FEB-10 14:37	021110B-1
	Barium	7.7	ug/L					11-FEB-10 14:37	021110B-1
	Calcium	469000	ug/L	500000	ug/L	93.9	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Chromium	-0.331	ug/L					11-FEB-10 14:37	021110B-1
	Cobalt	1.88	ug/L					11-FEB-10 14:37	021110B-1
	Copper	-2.75	ug/L					11-FEB-10 14:37	021110B-1
	Iron	180000	ug/L	200000	ug/L	90.2	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Magnesium	469000	ug/L	500000	ug/L	93.8	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Nickel	-5.64	ug/L					11-FEB-10 14:37	021110B-1
	Potassium	-12.0	ug/L					11-FEB-10 14:37	021110B-1
	Selenium	-29.8	ug/L					11-FEB-10 14:37	021110B-1
	Silver	-8.02	ug/L					11-FEB-10 14:37	021110B-1
	Sodium	25.0	ug/L					11-FEB-10 14:37	021110B-1
	Vanadium	0.707	ug/L					11-FEB-10 14:37	021110B-1
	Zinc	-9.27	ug/L					11-FEB-10 14:37	021110B-1
<b>ICSAB01</b>									
	Aluminum	493000	ug/L	500000	ug/L	98.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Arsenic	460	ug/L	500	ug/L	92	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Barium	479	ug/L	500	ug/L	95.8	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Calcium	467000	ug/L	500000	ug/L	93.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Chromium	467	ug/L	500	ug/L	93.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Cobalt	417	ug/L	500	ug/L	83.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Copper	516	ug/L	500	ug/L	103	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Iron	181000	ug/L	200000	ug/L	90.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Magnesium	472000	ug/L	500000	ug/L	94.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Nickel	412	ug/L	500	ug/L	82.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Potassium	4870	ug/L	5000	ug/L	97.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Selenium	2240	ug/L	2500	ug/L	89.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545-1

Contract: LANL01004

Lab Code: GEL

ICS:

---

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	244	ug/L	250	ug/L	97.7	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Sodium	4900	ug/L	5000	ug/L	98.1	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.1	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Zinc	442	ug/L	500	ug/L	88.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545-1

Contract: LANI.01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Lcad	0.214	ug/L					02-MAR-10 14:23	100302-2
	Thallium	0.036	ug/L					02-MAR-10 14:23	100302-2
ICSAB01	Lead	19.6	ug/L	20.19	ug/L	97.1	80.0 – 120.0	02-MAR-10 14:25	100302-2
	Thallium	19.0	ug/L	20	ug/L	95.1	80.0 – 120.0	02-MAR-10 14:25	100302-2

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1545-1

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>
<b>ICSA01</b>									
	Antimony	0.193	ug/L					02-MAR-10 05:03	100301-3
	Beryllium	0.096	ug/L					02-MAR-10 05:03	100301-3
	Cadmium	0.464	ug/L					02-MAR-10 05:03	100301-3
	Manganese	6.17	ug/L					02-MAR-10 05:03	100301-3
<b>ICSAB01</b>									
	Antimony	22.1	ug/L	20	ug/L	110	80.0 - 120.0	02-MAR-10 05:09	100301-3
	Beryllium	19.3	ug/L	20	ug/L	96.3	80.0 - 120.0	02-MAR-10 05:09	100301-3
	Cadmium	20.6	ug/L	20.44	ug/L	101	80.0 - 120.0	02-MAR-10 05:09	100301-3
	Manganese	27.8	ug/L	25.8	ug/L	108	80.0 - 120.0	02-MAR-10 05:09	100301-3

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1545-1 Client ID RE15-10-8233S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246056001 Spike ID: 1202033206

<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	1.5		0.066	U	2	75		AV

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1545-1 Client ID RE15-10-8233S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246056001 Spike ID: 1202033918

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5130		103	J	5000	101		P
Arsenic	ug/L	75-125	490		5	U	500	98		P
Barium	ug/L	75-125	493		1.47	J	500	98.4		P
Calcium	ug/L	75-125	4910		53.6	J	5000	97.1		P
Chromium	ug/L	75-125	489		2.5	J	500	97.2		P
Cobalt	ug/L	75-125	481		1	U	500	96.1		P
Copper	ug/L	75-125	492		3	U	500	98.3		P
Iron	ug/L	75-125	5050		75.1	J	5000	99.6		P
Magnesium	ug/L	75-125	5050		85	U	5000	101		P
Nickel	ug/L	75-125	488		1.5	U	500	97.6		P
Potassium	ug/L	75-125	5120		174		5000	98.9		P
Selenium	ug/L	75-125	476		5	U	500	95.2		P
Silver	ug/L	75-125	488		1	U	500	97.4		P
Sodium	ug/L	75-125	5170		171	J	5000	100		P
Vanadium	ug/L	75-125	493		1	U	500	98.4		P
Zinc	ug/L	75-125	474		3.3	U	500	94.5		P

## METALS

--5a--

## Matrix Spike Summary

SDG NO. 10-1545-1 Client ID RE15-10-8233S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246056001 Spike ID: 1202034076

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	215		1	U	200	107		MS
Beryllium	ug/L	75-125	56.4		0.1	U	50	113		MS
Cadmium	ug/L	75-125	11.5		0.11	U	10	115		MS
Lead	ug/L	75-125	43.8		1.21	J	40	106		MS
Manganese	ug/L	75-125	63.8		3	J	50	122		MS
Thallium	ug/L	75-125	96		0.3	U	100	95.9		MS



**Metals**  
**-6-**  
**Duplicate Sample Summary**

**SDG No.:** 10-1545-1**Contract:** LANL01004**Lab Code:** GEL**Matrix:** LIQUID**Level:** Low**Client ID:** RE15-10-8233D**Sample ID:** 246056001**Duplicate ID:** 1202033205**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.: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8233D

Sample ID: 246056001

Duplicate ID: 1202033917

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-200	103 J		106 J		2.48		P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L	+/-5	1.47 J		1.49 J		1.23		P
Calcium	ug/L		53.6 J		50 U		200		P
Chromium	ug/L	+/-5	2.5 J		1.74 J		36.1		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L	+/-100	75.1 J		73 J		2.93		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	174		166		4.75		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	171 J		165 J		3.81		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.: 10-1545-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8233D

Sample ID: 246056001

Duplicate ID: 1202034075

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L	+/-2	1.21 J		1.09 J		10.3		MS
Manganese	ug/L	+/-5	3 J		2.68 J		11.4		MS
Thallium	ug/L		0.3 U		0.3 U				MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1545-1

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>
1202033204	Mercury	ug/L	2	2.01		100	80-120	AV

**METALS**  
**-7-**  
**Laboratory Control Sample Summary**

SDG NO. 10-1545-1

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>
1202033916								
	Aluminum	ug/L	5000	5040		101	80-120	P
	Arsenic	ug/L	500	503		101	80-120	P
	Barium	ug/L	500	499		99.8	80-120	P
	Calcium	ug/L	5000	4950		99	80-120	P
	Chromium	ug/L	500	493		98.6	80-120	P
	Cobalt	ug/L	500	489		97.8	80-120	P
	Copper	ug/L	500	496		99.3	80-120	P
	Iron	ug/L	5000	5020		100	80-120	P
	Magnesium	ug/L	5000	5090		102	80-120	P
	Nickel	ug/L	500	495		98.9	80-120	P
	Potassium	ug/L	5000	5010		100	80-120	P
	Selenium	ug/L	500	488		97.6	80-120	P
	Silver	ug/L	500	495		99.1	80-120	P
	Sodium	ug/L	5000	5030		101	80-120	P
	Vanadium	ug/L	500	500		99.9	80-120	P
	Zinc	ug/L	500	483		96.5	80-120	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1545-1

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>
1202034074								
	Antimony	ug/L	50	56.9		114	80-120	MS
	Beryllium	ug/L	50	54.9		110	80-120	MS
	Cadmium	ug/L	50	52.6		105	80-120	MS
	Lead	ug/L	50	52		104	80-120	MS
	Manganese	ug/L	50	56.2		112	80-120	MS
	Thallium	ug/L	50	48.3		96.7	80-120	MS

## METALS

-9-

## Serial Dilution Sample Summary

**SDG NO.** 10-1545-1 **Client ID** RE15-10-8233L**Contract:** LANL01004**Matrix:** LIQUID **Level:** Low**Sample ID:** 246056001 **Serial Dilution ID:** 1202033207

<b>Analyte</b>	<b><u>Initial Value ug/L</u></b>	<b><u>C</u></b>	<b><u>Serial Value ug/L</u></b>	<b><u>C</u></b>	<b><u>% Difference</u></b>	<b><u>Qual</u></b>	<b><u>Acceptance Limit</u></b>	<b><u>M</u></b>
Mercury	.066	U	.33	U				AV

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1545-1 Client ID RE15-10-8233L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246056001 Serial Dilution ID: 1202033919

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	103	J	340	U	100			P
Arsenic	5	U	25	U				P
Barium	1.47	J	5	U	100			P
Calcium	53.6	J	250	U	100			P
Chromium	2.5	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	75.1	J	150	U	100			P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	174		250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	171	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. 10-1545-1 Client ID RE15-10-8233L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246056001 Serial Dilution ID: 1202034077

Analyte	<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>
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	1.21	J	2.5	U	100			MS
Manganese	3	J	5	U	100			MS
Thallium	.3	U	7.65					MS

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1545-1

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	949337						
1202033915	MB for batch 949337	MB	W	10-FEB-10	50mL	50mL	
1202033916	LCS for batch 949337	LCS	W	10-FEB-10	50mL	50mL	
1202033918	RE15-10-8233S	MS	W	10-FEB-10	50mL	50mL	
1202033917	RE15-10-8233D	DUP	W	10-FEB-10	50mL	50mL	
246056001	RE15-10-8233	SAMPLE	W	10-FEB-10	50mL	50mL	
246056002	RE15-10-8231	SAMPLE	W	10-FEB-10	50mL	50mL	
246056003	RE15-10-8230	SAMPLE	W	10-FEB-10	50mL	50mL	
246056004	RE15-10-8232	SAMPLE	W	10-FEB-10	50mL	50mL	

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SW846

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1545-1

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	949399						
1202034073	MB for batch 949399	MB	W	10-FEB-10	50mL	50mL	
1202034074	LCS for batch 949399	LCS	W	10-FEB-10	50mL	50mL	
1202034076	RE15-10-8233S	MS	W	10-FEB-10	50mL	50mL	
1202034075	RE15-10-8233D	DUP	W	10-FEB-10	50mL	50mL	
246056001	RE15-10-8233	SAMPLE	W	10-FEB-10	50mL	50mL	
246056002	RE15-10-8231	SAMPLE	W	10-FEB-10	50mL	50mL	
246056003	RE15-10-8230	SAMPLE	W	10-FEB-10	50mL	50mL	
246056004	RE15-10-8232	SAMPLE	W	10-FEB-10	50mL	50mL	

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SW846

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**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

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SDG No: 10-1545-1

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	949018						
1202033203	MB for batch 949018	MB	W	04-FEB-10	20mL	20mL	
1202033204	LCS for batch 949018	LCS	W	04-FEB-10	20mL	20mL	
1202033206	RE15-10-8233S	MS	W	04-FEB-10	20mL	20mL	
1202033205	RE15-10-8233D	DUP	W	04-FEB-10	20mL	20mL	
246056001	RE15-10-8233	SAMPLE	W	04-FEB-10	20mL	20mL	
246056002	RE15-10-8231	SAMPLE	W	04-FEB-10	20mL	20mL	
246056003	RE15-10-8230	SAMPLE	W	04-FEB-10	20mL	20mL	
246056004	RE15-10-8232	SAMPLE	W	04-FEB-10	20mL	20mL	

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SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 02-MAR-10

End Date: 02-MAR-10

Client Sdg: 10-1545-1

Method: MS

Data File: 100301-3

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	04:26		X			X	X								X									
S10	1	04:33		X			X	X								X									
S100	1	04:39		X			X	X								X									
ICV01	1	04:45		X			X	X								X									
ICB01	1	04:51		X			X	X								X									
CRDL01	1	04:57		X			X	X								X									
ICSA01	1	05:03		X			X	X								X									
ICSAB01	1	05:09		X			X	X								X									
CCV01	1	05:15		X			X	X								X									
CCB01	1	05:21		X			X	X								X									
LR01	1	05:27		X			X	X								X									
CCV02	1	05:34		X			X	X								X									
CCB02	1	05:40		X			X	X								X									
1202034073	1	05:46		X			X	X								X									
1202034074	1	05:52		X			X	X								X									
246056001	1	05:58		X			X	X								X									
1202034075	1	06:04		X			X	X								X									
1202034076	1	06:10		X			X	X								X									
1202034077	5	06:16		X			X	X								X									
246056002	1	06:22		X			X	X								X									
246056003	1	06:29		X			X	X								X									
246056004	1	06:35		X			X	X								X									
CCV03	1	06:41		X			X	X								X									
CCB03	1	06:47		X			X	X								X									

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 05-FEB-10

End Date: 05-FEB-10

Client Sdg: 10-1545-1

Method: AV

Data File: 020510W1-4

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	09:05															X								
S0.2	1	09:07															X								
S0.5	1	09:09															X								
S2.0	1	09:11															X								
S5.0	1	09:13															X								
S10.0	1	09:15															X								
ICV01	1	09:17															X								
ICB01	1	09:18															X								
CRDL01	1	09:20															X								
CCV01	1	09:22															X								
CCB01	1	09:24															X								
ZZZZZZ	1	09:26																							
ZZZZZZ	1	09:28																							
ZZZZZZ	1	09:30																							
ZZZZZZ	1	09:32																							
ZZZZZZ	1	09:34																							
ZZZZZZ	1	09:36																							
ZZZZZZ	1	09:38																							
ZZZZZZ	1	09:40																							
ZZZZZZ	5	09:42																							
1202033203	1	09:43															X								
CCV02	1	09:45															X								
CCB02	1	09:47															X								
1202033204	1	09:49															X								
ZZZZZZ	1	09:51																							
ZZZZZZ	1	09:53																							
ZZZZZZ	1	09:55																							
ZZZZZZ	1	09:57																							
ZZZZZZ	1	09:59																							
ZZZZZZ	1	10:01																							
ZZZZZZ	1	10:03																							
ZZZZZZ	1	10:05																							
ZZZZZZ	1	10:07																							
CCV03	1	10:08															X								
CCB03	1	10:10															X								
ZZZZZZ	1	10:12																							
246056001	1	10:14															X								
1202033205	1	10:16															X								
1202033206	1	10:18															X								
1202033207	5	10:20															X								

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time
246056002	1	10:22
246056003	1	10:24
246056004	1	10:26
ZZZZZ	1	10:28
ZZZZZ	1	10:30
CCV04	1	10:32
CCB04	1	10:34

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 02-MAR-10

End Date: 02-MAR-10

Client Sdg: 10-1545-1

Method: MS

Data File: 100302-2

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	14:11											X									X			
S10	1	14:13											X									X			
S100	1	14:15											X									X			
ICV01	1	14:17											X									X			
ICB01	1	14:19											X									X			
CRDL01	1	14:21											X									X			
ICSA01	1	14:23											X									X			
ICSAB01	1	14:25											X									X			
CCV01	1	14:27											X									X			
CCB01	1	14:29											X									X			
1202034073	1	14:32											X									X			
1202034074	1	14:34											X									X			
ZZZZZZ	1	14:37																							
ZZZZZZ	1	14:39																							
ZZZZZZ	1	14:41																							
ZZZZZZ	5	14:43																							
246056002	1	14:45											X									X			
246056003	1	14:47											X									X			
246056004	1	14:49											X									X			
CCV02	1	14:51											X									X			
CCB02	1	14:54											X									X			
246056001	1	14:56											X									X			
1202034075	1	14:58											X									X			
1202034076	1	15:00											X									X			
1202034077	5	15:02											X									X			
CCV03	1	15:04											X									X			
CCB03	1	15:07											X									X			



**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 11-FEB-10

End Date: 11-FEB-10

Client Sdg: 10-1545-1

Method P

Data File: 021110B-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	14:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S0.1	1	14:14			X	X				X	X	X						X	X	X	X			X	X
S0.5	1	14:17	X		X	X			X	X	X	X			X			X	X	X	X			X	X
SCAL	1	14:20	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S10	1	14:24	X						X				X		X							X			
ICV01	1	14:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICB01	1	14:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
PQL01	1	14:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSA01	1	14:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSA01	1	14:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR01	1	14:43	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR02	1	14:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV01	1	14:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB01	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR03	1	15:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR04	1	15:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV02	1	15:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB02	1	15:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	15:23																							
ZZZZZZ	1	15:26																							
ZZZZZZ	1	15:30																							
ZZZZZZ	1	15:34																							
ZZZZZZ	1	15:38																							
ZZZZZZ	5	15:42																							
ZZZZZZ	1	15:45																							
ZZZZZZ	1	15:49																							
ZZZZZZ	1	15:53																							
CCV03	1	15:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB03	1	16:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	16:04																							
ZZZZZZ	1	16:08																							
ZZZZZZ	1	16:12																							
ZZZZZZ	1	16:16																							
ZZZZZZ	1	16:20																							
ZZZZZZ	1	16:24																							
ZZZZZZ	1	16:28																							
ZZZZZZ	1	16:31																							
ZZZZZZ	1	16:34																							
CCV04	1	16:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB04	1	16:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X

**Metals**  
**-14-**  
**Analysis Run Log**

[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	1	19:23																							
ZZZZZZ	1	19:27																							
ZZZZZZ	1	19:30																							
ZZZZZZ	1	19:34																							
ZZZZZZ	5	19:37																							
CCV10	1	19:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB10	1	19:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	19:48																							
ZZZZZZ	1	19:52																							
ZZZZZZ	1	19:55																							
ZZZZZZ	1	19:59																							
ZZZZZZ	1	20:03																							
CCV11	1	20:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB11	1	20:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202033915	1	20:14	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202033916	1	20:17	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
246056001	1	20:21	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202033917	1	20:24	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202033918	1	20:28	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
1202033919	5	20:32	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
246056002	1	20:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
246056003	1	20:39	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
246056004	1	20:42	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV12	1	20:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB12	1	20:50	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X

# Standards

METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1545-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</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. 10-1545-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-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				
LIQUID	Mercury		0.066	.2

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1545-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1545-1**

Contract: LANL01004

Instrument: OPTIMA1

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	0.00000	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: **10-1545-1**

Contract: LANL01004

Instrument: OPTIMA1

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	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: **10-1545-1**

Contract: LANL01004

Instrument: OPTIMA1

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

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1545-1

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: GELGEL Job No: **10-1545-1**

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: 10-1545-1

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. 10-1545-1

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
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
Copper	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. 10-1545-1

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS3

<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. 10-1545-1

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



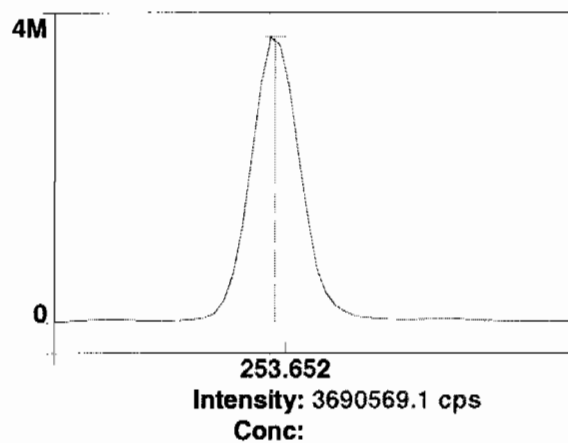
# Raw Data

Method: Hg\_ReAlign  
Result: 030210

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

=====  
Analysis Begun

Start Time: 2/11/2010 14:10:46

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/11/2010 14:10:48

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	54739.4	54739.4	100 %	14:11:23
1	Al 396.153Radial†	-13.9	-13.8	[0.00] µg/L	14:11:23
1	Ca 317.933Radial†	181.9	181.3	[0.00] µg/L	14:11:43
1	Fe 238.204 Radial†	15.3	15.3	[0.00] µg/L	14:11:43
1	K 766.490 Radial†	133.4	133.0	[0.00] µg/L	14:11:23
1	Mg 279.077 IEC†	7.8	7.8	[0.00] µg/L	14:11:43
1	Na 589.592 Radial†	544.1	542.5	[0.00] µg/L	14:11:23
1	Sr 421.552†	47.1	46.9	[0.00] µg/L	14:11:23
1	Sc 361.383	1911885.3	1911885.3	100.11 %	14:12:45
1	Y 371.029	1310700.1	1310700.1	100.06 %	14:12:45
1	Ag 328.068†	-547.3	-546.7	[0.00] µg/L	14:12:50
1	As 188.979†	3.5	3.5	[0.00] µg/L	14:13:11
1	B 249.677†	353.5	353.1	[0.00] µg/L	14:13:11
1	Ba 233.527†	-32.2	-32.2	[0.00] µg/L	14:13:11
1	Be 313.107†	-3446.9	-3443.2	[0.00] µg/L	14:12:50
1	Cd 226.502†	-153.7	-153.5	[0.00] µg/L	14:13:11
1	Co 228.616†	-1.3	-1.3	[0.00] µg/L	14:13:11
1	Cr 267.716†	-55.4	-55.3	[0.00] µg/L	14:12:50
1	Cu 324.752†	2504.0	2501.3	[0.00] µg/L	14:12:50
1	Mn 257.610†	-239.6	-239.4	[0.00] µg/L	14:13:11
1	Mo 202.031†	-2.8	-2.8	[0.00] µg/L	14:13:11
1	Ni 231.604†	307.9	307.6	[0.00] µg/L	14:13:11
1	P 214.914†	26.2	26.2	[0.00] µg/L	14:13:11
1	Pb 220.353†	91.7	91.6	[0.00] µg/L	14:13:11
1	S 181.975 Axial†	15.4	15.3	[0.00] µg/L	14:13:11
1	Sb 206.836†	28.4	28.4	[0.00] µg/L	14:13:11
1	Se 196.026†	16.7	16.7	[0.00] µg/L	14:13:11
1	SiO2†	1235.3	1234.0	[0.00] µg/L	14:12:50
1	Si 251.611†	309.0	308.7	[0.00] µg/L	14:13:11
1	Sn 189.927†	-0.7	-0.7	[0.00] µg/L	14:13:11
1	Ti 334.940†	89.4	89.3	[0.00] µg/L	14:12:50
1	Tl 190.801†	-23.5	-23.5	[0.00] µg/L	14:13:11
1	U 409.014†	-77.0	-76.9	[0.00] µg/L	14:12:50
1	V 292.402†	-41.9	-41.9	[0.00] µg/L	14:12:50
1	Zn 213.857†	474.5	474.0	[0.00] µg/L	14:13:11
2	Sc RADIAL	54665.4	54665.4	100 %	14:11:49
2	Al 396.153Radial†	-1.2	-1.2	[0.00] µg/L	14:11:49
2	Ca 317.933Radial†	175.4	175.1	[0.00] µg/L	14:12:09
2	Fe 238.204 Radial†	14.9	14.8	[0.00] µg/L	14:12:09
2	K 766.490 Radial†	144.1	143.8	[0.00] µg/L	14:11:49
2	Mg 279.077 IEC†	11.1	11.1	[0.00] µg/L	14:12:09
2	Na 589.592 Radial†	552.5	551.5	[0.00] µg/L	14:11:49
2	Sr 421.552†	33.2	33.1	[0.00] µg/L	14:11:49
2	Sc 361.383	1909838.0	1909838.0	100.000 %	14:13:17
2	Y 371.029	1310179.5	1310179.5	100.02 %	14:13:17
2	Ag 328.068†	-580.2	-580.2	[0.00] µg/L	14:13:23
2	As 188.979†	-0.5	-0.5	[0.00] µg/L	14:13:43

2	B 249.677†	311.8	311.8	[0.00]	µg/L	14:13:43
2	Ba 233.527†	-19.4	-19.4	[0.00]	µg/L	14:13:43
2	Be 313.107†	-3440.2	-3440.2	[0.00]	µg/L	14:13:23
2	Cd 226.502†	-136.8	-136.8	[0.00]	µg/L	14:13:43
2	Co 228.616†	-8.2	-8.2	[0.00]	µg/L	14:13:43
2	Cr 267.716†	-44.6	-44.6	[0.00]	µg/L	14:13:23
2	Cu 324.752†	2529.2	2529.2	[0.00]	µg/L	14:13:23
2	Mn 257.610†	-247.4	-247.4	[0.00]	µg/L	14:13:43
2	Mo 202.031†	-8.7	-8.7	[0.00]	µg/L	14:13:43
2	Ni 231.604†	295.5	295.5	[0.00]	µg/L	14:13:43
2	P 214.914†	27.9	27.9	[0.00]	µg/L	14:13:43
2	Pb 220.353†	98.3	98.3	[0.00]	µg/L	14:13:43
2	S 181.975 Axial†	16.8	16.8	[0.00]	µg/L	14:13:43
2	Sb 206.836†	27.6	27.6	[0.00]	µg/L	14:13:43
2	Se 196.026†	12.1	12.1	[0.00]	µg/L	14:13:43
2	SiO2†	1235.5	1235.5	[0.00]	µg/L	14:13:23
2	Si 251.611†	316.0	316.0	[0.00]	µg/L	14:13:43
2	Sn 189.927†	-2.2	-2.2	[0.00]	µg/L	14:13:43
2	Ti 334.940†	132.2	132.2	[0.00]	µg/L	14:13:23
2	Tl 190.801†	-27.5	-27.5	[0.00]	µg/L	14:13:43
2	U 409.014†	-52.6	-52.6	[0.00]	µg/L	14:13:23
2	V 292.402†	-46.9	-46.9	[0.00]	µg/L	14:13:23
2	Zn 213.857†	476.6	476.6	[0.00]	µg/L	14:13:43
3	Sc RADIAL	54318.4	54318.4	99.5	%	14:12:15
3	Al 396.153Radial†	-15.3	-15.3	[0.00]	µg/L	14:12:15
3	Ca 317.933Radial†	180.2	181.0	[0.00]	µg/L	14:12:35
3	Fe 238.204 Radial†	13.3	13.4	[0.00]	µg/L	14:12:35
3	K 766.490 Radial†	107.9	108.4	[0.00]	µg/L	14:12:15
3	Mg 279.077 IEC†	14.9	15.0	[0.00]	µg/L	14:12:35
3	Na 589.592 Radial†	529.1	531.6	[0.00]	µg/L	14:12:15
3	Sr 421.552†	38.4	38.6	[0.00]	µg/L	14:12:15
3	Sc 361.383	1907796.9	1907796.9	99.893	%	14:13:49
3	Y 371.029	1308876.2	1308876.2	99.920	%	14:13:49
3	Ag 328.068†	-566.0	-566.6	[0.00]	µg/L	14:13:55
3	As 188.979†	0.4	0.4	[0.00]	µg/L	14:14:15
3	B 249.677†	329.2	329.5	[0.00]	µg/L	14:14:15
3	Ba 233.527†	-26.4	-26.4	[0.00]	µg/L	14:14:15
3	Be 313.107†	-3434.3	-3437.9	[0.00]	µg/L	14:13:55
3	Cd 226.502†	-135.9	-136.0	[0.00]	µg/L	14:14:15
3	Co 228.616†	-17.0	-17.0	[0.00]	µg/L	14:14:15
3	Cr 267.716†	-57.1	-57.2	[0.00]	µg/L	14:13:55
3	Cu 324.752†	2425.2	2427.8	[0.00]	µg/L	14:13:55
3	Mn 257.610†	-245.3	-245.6	[0.00]	µg/L	14:14:15
3	Mo 202.031†	-11.1	-11.1	[0.00]	µg/L	14:14:15
3	Ni 231.604†	303.1	303.5	[0.00]	µg/L	14:14:15
3	P 214.914†	28.8	28.8	[0.00]	µg/L	14:14:15
3	Pb 220.353†	101.6	101.7	[0.00]	µg/L	14:14:15
3	S 181.975 Axial†	12.3	12.3	[0.00]	µg/L	14:14:15
3	Sb 206.836†	24.9	25.0	[0.00]	µg/L	14:14:15
3	Se 196.026†	18.7	18.7	[0.00]	µg/L	14:14:15
3	SiO2†	1279.2	1280.6	[0.00]	µg/L	14:13:55
3	Si 251.611†	313.6	313.9	[0.00]	µg/L	14:14:15
3	Sn 189.927†	0.3	0.3	[0.00]	µg/L	14:14:15
3	Ti 334.940†	126.8	126.9	[0.00]	µg/L	14:13:55
3	Tl 190.801†	-21.9	-21.9	[0.00]	µg/L	14:14:15
3	U 409.014†	-31.2	-31.3	[0.00]	µg/L	14:13:55
3	V 292.402†	-43.8	-43.9	[0.00]	µg/L	14:13:55
3	Zn 213.857†	475.5	476.0	[0.00]	µg/L	14:14:15

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Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1909840.1	2044.21	0.11%	100.00 %
Sc RADIAL	54574.4	224.80	0.41%	100 %
Y 371.029	1309918.6	939.52	0.07%	100.00 %
Ag 328.068†	-564.5	16.85	2.98%	[0.00] µg/L
Al 396.153Radial†	-10.1	7.73	76.30%	[0.00] µg/L
As 188.979†	1.1	2.09	182.38%	[0.00] µg/L
B 249.677†	331.5	20.73	6.25%	[0.00] µg/L
Ba 233.527†	-26.0	6.39	24.57%	[0.00] µg/L

Be 313.107†	-3440.4	2.66	0.08%	[0.00]	µg/L
Ca 317.933Radial†	179.2	3.51	1.96%	[0.00]	µg/L
Cd 226.502†	-142.1	9.89	6.96%	[0.00]	µg/L
Co 228.616†	-8.8	7.85	88.83%	[0.00]	µg/L
Cr 267.716†	-52.4	6.82	13.02%	[0.00]	µg/L
Cu 324.752†	2486.1	52.42	2.11%	[0.00]	µg/L
Fe 238.204 Radial†	14.5	1.00	6.90%	[0.00]	µg/L
K 766.490 Radial†	128.4	18.15	14.13%	[0.00]	µg/L
Mg 279.077 IEC†	11.3	3.62	32.14%	[0.00]	µg/L
Mn 257.610†	-244.1	4.19	1.72%	[0.00]	µg/L
Mo 202.031†	-7.5	4.31	57.15%	[0.00]	µg/L
Na 589.592 Radial†	541.9	9.97	1.84%	[0.00]	µg/L
Ni 231.604†	302.2	6.13	2.03%	[0.00]	µg/L
P 214.914†	27.6	1.32	4.77%	[0.00]	µg/L
Pb 220.353†	97.2	5.13	5.27%	[0.00]	µg/L
S 181.975 Axial†	14.8	2.33	15.71%	[0.00]	µg/L
Sb 206.836†	27.0	1.78	6.62%	[0.00]	µg/L
Se 196.026†	15.8	3.37	21.27%	[0.00]	µg/L
SiO2†	1250.0	26.45	2.12%	[0.00]	µg/L
Si 251.611†	312.9	3.77	1.21%	[0.00]	µg/L
Sn 189.927†	-0.9	1.29	148.06%	[0.00]	µg/L
Sr 421.552†	39.6	6.94	17.54%	[0.00]	µg/L
Ti 334.940†	116.1	23.40	20.15%	[0.00]	µg/L
Tl 190.801†	-24.3	2.88	11.85%	[0.00]	µg/L
U 409.014†	-53.6	22.84	42.60%	[0.00]	µg/L
V 292.402†	-44.2	2.52	5.69%	[0.00]	µg/L
Zn 213.857†	475.5	1.38	0.29%	[0.00]	µg/L

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

Autosampler Location: 2  
 Date Collected: 2/11/2010 14:14:25  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	55015.9	55015.9	101	%	14:15:00
1	K 766.490 Radial†	1529.6	1388.9	[1000]	µg/L	14:15:00
1	Sr 421.552†	9551.7	9435.5	[100]	µg/L	14:15:00
1	Sc 361.383	1906987.6	1906987.6	99.851	%	14:15:21
1	Y 371.029	1308080.3	1308080.3	99.860	%	14:15:21
1	Ag 328.068†	12337.2	12920.2	[100]	µg/L	14:15:27
1	As 188.979†	60.2	59.1	[100]	µg/L	14:15:48
1	B 249.677†	2597.7	2270.1	[100]	µg/L	14:15:27
1	Ba 233.527†	3962.5	3994.4	[100]	µg/L	14:15:27
1	Be 313.107†	151975.4	155643.2	[100]	µg/L	14:15:21
1	Cd 226.502†	3678.8	3826.5	[100]	µg/L	14:15:27
1	Co 228.616†	2095.6	2107.6	[100]	µg/L	14:15:48
1	Cr 267.716†	4700.6	4760.0	[100]	µg/L	14:15:27
1	Cu 324.752†	17516.6	15056.7	[100]	µg/L	14:15:27
1	Mn 257.610†	30035.0	30324.0	[100]	µg/L	14:15:27
1	Mo 202.031†	993.1	1002.1	[100]	µg/L	14:15:48
1	Ni 231.604†	2238.0	1939.1	[100]	µg/L	14:15:27
1	P 214.914†	275.5	248.3	[500]	µg/L	14:15:48
1	Pb 220.353†	495.9	399.5	[100]	µg/L	14:15:48
1	S 181.975 Axial†	61.0	46.2	[200]	µg/L	14:15:48
1	Sb 206.836†	127.3	100.5	[100]	µg/L	14:15:48
1	Se 196.026†	83.6	67.8	[100]	µg/L	14:15:48
1	SiO2†	6362.3	5121.8	[1069.5]	µg/L	14:15:27
1	Si 251.611†	6526.8	6223.6	[500]	µg/L	14:15:27
1	Sn 189.927†	236.7	237.9	[100]	µg/L	14:15:48
1	Ti 334.940†	41818.8	41765.2	[100]	µg/L	14:15:27
1	Tl 190.801†	52.7	77.0	[100]	µg/L	14:15:48
1	U 409.014†	1125.7	1181.0	[100]	µg/L	14:15:27
1	V 292.402†	9619.3	9677.9	[100]	µg/L	14:15:27
1	Zn 213.857†	4700.1	4231.6	[100]	µg/L	14:15:27
2	Sc RADIAL	55171.2	55171.2	101	%	14:15:05
2	K 766.490 Radial†	1577.1	1431.6	[1000]	µg/L	14:15:05
2	Sr 421.552†	9725.8	9581.1	[100]	µg/L	14:15:05
2	Sc 361.383	1919566.1	1919566.1	100.51	%	14:15:54
2	Y 371.029	1316225.3	1316225.3	100.48	%	14:15:54
2	Ag 328.068†	12296.8	12799.1	[100]	µg/L	14:16:00
2	As 188.979†	55.3	53.9	[100]	µg/L	14:16:20
2	B 249.677†	2620.3	2275.6	[100]	µg/L	14:16:00
2	Ba 233.527†	3925.8	3931.9	[100]	µg/L	14:16:00
2	Be 313.107†	153476.8	156139.6	[100]	µg/L	14:15:54
2	Cd 226.502†	3613.9	3737.7	[100]	µg/L	14:16:00
2	Co 228.616†	2078.6	2076.9	[100]	µg/L	14:16:20
2	Cr 267.716†	4668.3	4697.0	[100]	µg/L	14:16:00
2	Cu 324.752†	17487.1	14912.4	[100]	µg/L	14:16:00
2	Mn 257.610†	29867.9	29960.6	[100]	µg/L	14:16:00
2	Mo 202.031†	997.0	999.5	[100]	µg/L	14:16:20
2	Ni 231.604†	2232.7	1919.2	[100]	µg/L	14:16:00
2	P 214.914†	277.4	248.4	[500]	µg/L	14:16:20
2	Pb 220.353†	494.0	394.3	[100]	µg/L	14:16:20
2	S 181.975 Axial†	66.3	51.1	[200]	µg/L	14:16:20
2	Sb 206.836†	134.2	106.6	[100]	µg/L	14:16:20
2	Se 196.026†	81.0	64.7	[100]	µg/L	14:16:20
2	SiO2†	6316.5	5034.4	[1069.5]	µg/L	14:16:00
2	Si 251.611†	6524.6	6178.6	[500]	µg/L	14:16:00
2	Sn 189.927†	229.9	229.6	[100]	µg/L	14:16:20
2	Ti 334.940†	41713.2	41385.8	[100]	µg/L	14:16:00
2	Tl 190.801†	46.9	70.9	[100]	µg/L	14:16:20
2	U 409.014†	1094.4	1142.5	[100]	µg/L	14:16:00
2	V 292.402†	9634.9	9630.3	[100]	µg/L	14:16:00

2	Zn 213.857†	4683.2	4183.9	[100] µg/L	14:16:00
3	Sc RADIAL	54696.3	54696.3	100 %	14:15:11
3	K 766.490 Radial†	1613.5	1481.5	[1000] µg/L	14:15:11
3	Sr 421.552†	9663.0	9601.9	[100] µg/L	14:15:11
3	Sc 361.383	1914175.0	1914175.0	100.23 %	14:16:26
3	Y 371.029	1314459.8	1314459.8	100.35 %	14:16:26
3	Ag 328.068†	12311.6	12848.2	[100] µg/L	14:16:32
3	As 188.979†	52.2	51.0	[100] µg/L	14:16:53
3	B 249.677†	2607.8	2270.5	[100] µg/L	14:16:32
3	Ba 233.527†	3927.0	3944.1	[100] µg/L	14:16:32
3	Be 313.107†	152121.7	155217.6	[100] µg/L	14:16:26
3	Cd 226.502†	3649.8	3783.7	[100] µg/L	14:16:32
3	Co 228.616†	2092.3	2096.4	[100] µg/L	14:16:53
3	Cr 267.716†	4695.0	4736.7	[100] µg/L	14:16:32
3	Cu 324.752†	17403.9	14878.4	[100] µg/L	14:16:32
3	Mn 257.610†	29812.0	29988.6	[100] µg/L	14:16:32
3	Mo 202.031†	994.2	999.5	[100] µg/L	14:16:53
3	Ni 231.604†	2238.0	1930.8	[100] µg/L	14:16:32
3	P 214.914†	276.9	248.7	[500] µg/L	14:16:53
3	Pb 220.353†	496.4	398.1	[100] µg/L	14:16:53
3	S 181.975 Axial†	63.6	48.7	[200] µg/L	14:16:53
3	Sb 206.836†	131.7	104.5	[100] µg/L	14:16:53
3	Se 196.026†	85.1	69.1	[100] µg/L	14:16:53
3	SiO2†	6274.4	5010.2	[1069.5] µg/L	14:16:32
3	Si 251.611†	6506.8	6179.2	[500] µg/L	14:16:32
3	Sn 189.927†	233.2	233.5	[100] µg/L	14:16:53
3	Ti 334.940†	41628.8	41418.4	[100] µg/L	14:16:32
3	Tl 190.801†	52.0	76.1	[100] µg/L	14:16:53
3	U 409.014†	1167.9	1218.9	[100] µg/L	14:16:32
3	V 292.402†	9645.5	9667.9	[100] µg/L	14:16:32
3	Zn 213.857†	4697.5	4211.3	[100] µg/L	14:16:32

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1913576.2	6310.61	0.33%	100.20 %	
Sc RADIAL	54961.1	242.12	0.44%	101 %	
Y 371.029	1312921.8	4284.80	0.33%	100.23 %	
Ag 328.068†	12855.8	60.90	0.47%	[100] µg/L	
As 188.979†	54.7	4.13	7.55%	[100] µg/L	
B 249.677†	2272.1	3.07	0.13%	[100] µg/L	
Ba 233.527†	3956.8	33.13	0.84%	[100] µg/L	
Be 313.107†	155666.8	461.42	0.30%	[100] µg/L	
Cd 226.502†	3782.6	44.38	1.17%	[100] µg/L	
Co 228.616†	2093.6	15.54	0.74%	[100] µg/L	
Cr 267.716†	4731.2	31.87	0.67%	[100] µg/L	
Cu 324.752†	14949.2	94.66	0.63%	[100] µg/L	
K 766.490 Radial†	1434.0	46.37	3.23%	[1000] µg/L	
Mn 257.610†	30091.1	202.22	0.67%	[100] µg/L	
Mo 202.031†	1000.4	1.54	0.15%	[100] µg/L	
Ni 231.604†	1929.7	10.00	0.52%	[100] µg/L	
P 214.914†	248.5	0.19	0.08%	[500] µg/L	
Pb 220.353†	397.3	2.68	0.67%	[100] µg/L	
S 181.975 Axial†	48.7	2.45	5.03%	[200] µg/L	
Sb 206.836†	103.8	3.08	2.97%	[100] µg/L	
Se 196.026†	67.2	2.24	3.33%	[100] µg/L	
SiO2†	5055.5	58.67	1.16%	[1069.5] µg/L	
Si 251.611†	6193.8	25.84	0.42%	[500] µg/L	
Sn 189.927†	233.7	4.16	1.78%	[100] µg/L	
Sr 421.552†	9539.5	90.63	0.95%	[100] µg/L	
Ti 334.940†	41523.1	210.28	0.51%	[100] µg/L	
Tl 190.801†	74.7	3.29	4.41%	[100] µg/L	
U 409.014†	1180.8	38.20	3.23%	[100] µg/L	
V 292.402†	9658.7	25.07	0.26%	[100] µg/L	
Zn 213.857†	4209.0	23.92	0.57%	[100] µg/L	

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/11/2010 14:17:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	56431.2	56431.2	103 %		14:17:36
1	Al 396.153Radial†	6754.1	6542.0	[5000] µg/L		14:17:36
1	Ca 317.933Radial†	5471.1	5111.9	[5000] µg/L		14:17:56
1	K 766.490 Radial†	7121.7	6759.0	[5000] µg/L		14:17:36
1	Mg 279.077 IEC†	566.8	536.8	[5000] µg/L		14:17:56
1	Sr 421.552†	48100.9	46478.6	[500] µg/L		14:17:36
1	Sc 361.383	1949267.7	1949267.7	102.06 %		14:18:59
1	Y 371.029	1332062.2	1332062.2	101.69 %		14:18:59
1	Ag 328.068†	62715.3	62011.3	[500] µg/L		14:19:05
1	As 188.979†	268.2	261.6	[500] µg/L		14:19:26
1	B 249.677†	11715.5	11147.1	[500] µg/L		14:19:05
1	Ba 233.527†	19296.1	18931.8	[500] µg/L		14:19:05
1	Be 313.107†	765143.4	753107.4	[500] µg/L		14:18:59
1	Cd 226.502†	18181.3	17955.7	[500] µg/L		14:19:05
1	Co 228.616†	10302.5	10103.0	[500] µg/L		14:19:05
1	Cr 267.716†	23080.8	22666.4	[500] µg/L		14:19:05
1	Cu 324.752†	74689.8	70693.0	[500] µg/L		14:19:05
1	Mn 257.610†	147455.4	144716.9	[500] µg/L		14:18:59
1	Mo 202.031†	4948.3	4855.8	[500] µg/L		14:19:26
1	Ni 231.604†	9587.6	9091.5	[500] µg/L		14:19:05
1	P 214.914†	1227.3	1174.8	[2500] µg/L		14:19:26
1	Pb 220.353†	2024.6	1886.4	[500] µg/L		14:19:26
1	S 181.975 Axial†	257.2	237.2	[1000] µg/L		14:19:26
1	Sb 206.836†	565.6	527.2	[500] µg/L		14:19:26
1	Se 196.026†	349.8	326.9	[500] µg/L		14:19:26
1	SiO2†	26268.6	24487.3	[5347.5] µg/L		14:19:05
1	Si 251.611†	30925.0	29986.6	[2500] µg/L		14:19:05
1	Sn 189.927†	1150.8	1128.4	[500] µg/L		14:19:26
1	Ti 334.940†	210237.3	205868.8	[500] µg/L		14:18:59
1	Tl 190.801†	342.7	360.1	[500] µg/L		14:19:26
1	U 409.014†	5574.8	5515.7	[500] µg/L		14:19:05
1	V 292.402†	47320.5	46407.6	[500] µg/L		14:19:05
1	Zn 213.857†	20885.0	19987.0	[500] µg/L		14:19:05
2	Sc RADIAL	56400.3	56400.3	103 %		14:18:02
2	Al 396.153Radial†	6776.8	6567.5	[5000] µg/L		14:18:02
2	Ca 317.933Radial†	5446.0	5090.5	[5000] µg/L		14:18:22
2	K 766.490 Radial†	7209.5	6847.7	[5000] µg/L		14:18:02
2	Mg 279.077 IEC†	558.9	529.5	[5000] µg/L		14:18:22
2	Sr 421.552†	48009.1	46415.3	[500] µg/L		14:18:02
2	Sc 361.383	1969776.8	1969776.8	103.14 %		14:19:33
2	Y 371.029	1347212.9	1347212.9	102.85 %		14:19:33
2	Ag 328.068†	63263.2	61902.7	[500] µg/L		14:19:38
2	As 188.979†	264.1	254.9	[500] µg/L		14:19:59
2	B 249.677†	11833.7	11142.2	[500] µg/L		14:19:38
2	Ba 233.527†	19517.7	18949.8	[500] µg/L		14:19:38
2	Be 313.107†	769998.9	750009.7	[500] µg/L		14:19:33
2	Cd 226.502†	18459.9	18040.3	[500] µg/L		14:19:38
2	Co 228.616†	10435.6	10126.9	[500] µg/L		14:19:38
2	Cr 267.716†	23319.3	22662.1	[500] µg/L		14:19:38
2	Cu 324.752†	75284.2	70507.3	[500] µg/L		14:19:38
2	Mn 257.610†	148076.6	143815.0	[500] µg/L		14:19:33
2	Mo 202.031†	4926.4	4784.1	[500] µg/L		14:19:59
2	Ni 231.604†	9732.8	9134.4	[500] µg/L		14:19:38
2	P 214.914†	1225.6	1160.7	[2500] µg/L		14:19:59
2	Pb 220.353†	2028.4	1869.5	[500] µg/L		14:19:59
2	S 181.975 Axial†	257.8	235.1	[1000] µg/L		14:19:59
2	Sb 206.836†	552.2	508.4	[500] µg/L		14:19:59
2	Se 196.026†	361.1	334.3	[500] µg/L		14:19:59
2	SiO2†	26477.9	24422.2	[5347.5] µg/L		14:19:38



2	Si 251.611†	31253.2	29989.4	[2500]	µg/L	14:19:38
2	Sn 189.927†	1150.3	1116.1	[500]	µg/L	14:19:59
2	Ti 334.940†	211105.1	204565.4	[500]	µg/L	14:19:33
2	Tl 190.801†	338.9	352.9	[500]	µg/L	14:19:59
2	U 409.014†	5592.5	5475.9	[500]	µg/L	14:19:38
2	V 292.402†	47778.9	46369.3	[500]	µg/L	14:19:38
2	Zn 213.857†	21066.0	19949.5	[500]	µg/L	14:19:38
3	Sc RADIAL	56116.0	56116.0	103	%	14:18:27
3	Al 396.153Radial†	6776.6	6600.6	[5000]	µg/L	14:18:27
3	Ca 317.933Radial†	5474.8	5145.3	[5000]	µg/L	14:18:48
3	K 766.490 Radial†	7167.4	6842.1	[5000]	µg/L	14:18:27
3	Mg 279.077 IEC†	570.0	543.0	[5000]	µg/L	14:18:48
3	Sr 421.552†	47985.8	46628.0	[500]	µg/L	14:18:27
3	Sc 361.383	1956384.8	1956384.8	102.44	%	14:20:06
3	Y 371.029	1336938.7	1336938.7	102.06	%	14:20:06
3	Ag 328.068†	58992.1	58153.2	[500]	µg/L	14:20:12
3	As 188.979†	227.0	220.5	[500]	µg/L	14:20:32
3	B 249.677†	10983.9	10391.2	[500]	µg/L	14:20:12
3	Ba 233.527†	17692.5	17297.6	[500]	µg/L	14:20:12
3	Be 313.107†	719301.4	705628.8	[500]	µg/L	14:20:06
3	Cd 226.502†	16595.4	16342.7	[500]	µg/L	14:20:12
3	Co 228.616†	9342.2	9128.8	[500]	µg/L	14:20:12
3	Cr 267.716†	20357.4	19925.5	[500]	µg/L	14:20:12
3	Cu 324.752†	68152.8	64045.2	[500]	µg/L	14:20:12
3	Mn 257.610†	138782.6	135724.9	[500]	µg/L	14:20:06
3	Mo 202.031†	4112.2	4021.9	[500]	µg/L	14:20:32
3	Ni 231.604†	8700.9	8191.7	[500]	µg/L	14:20:12
3	P 214.914†	1052.8	1000.2	[2500]	µg/L	14:20:32
3	Pb 220.353†	1780.7	1641.2	[500]	µg/L	14:20:32
3	S 181.975 Axial†	220.4	200.3	[1000]	µg/L	14:20:32
3	Sb 206.836†	483.7	445.3	[500]	µg/L	14:20:32
3	Se 196.026†	314.2	290.9	[500]	µg/L	14:20:32
3	SiO2†	24349.5	22520.2	[5347.5]	µg/L	14:20:12
3	Si 251.611†	28634.1	27640.0	[2500]	µg/L	14:20:12
3	Sn 189.927†	946.2	924.5	[500]	µg/L	14:20:32
3	Ti 334.940†	196408.6	191619.7	[500]	µg/L	14:20:06
3	Tl 190.801†	311.8	328.7	[500]	µg/L	14:20:32
3	U 409.014†	4970.2	4905.6	[500]	µg/L	14:20:12
3	V 292.402†	42533.9	41566.2	[500]	µg/L	14:20:12
3	Zn 213.857†	18957.2	18030.7	[500]	µg/L	14:20:12

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Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1958476.4	10413.33	0.53%	102.55	%
Sc RADIAL	56315.8	173.75	0.31%	103	%
Y 371.029	1338737.9	7733.97	0.58%	102.20	%
Ag 328.068†	60689.0	2196.81	3.62%	[500]	µg/L
Al 396.153Radial†	6570.0	29.39	0.45%	[5000]	µg/L
As 188.979†	245.7	22.07	8.99%	[500]	µg/L
B 249.677†	10893.5	435.04	3.99%	[500]	µg/L
Ba 233.527†	18393.1	948.76	5.16%	[500]	µg/L
Be 313.107†	736248.6	26562.75	3.61%	[500]	µg/L
Ca 317.933Radial†	5115.9	27.60	0.54%	[5000]	µg/L
Cd 226.502†	17446.2	956.62	5.48%	[500]	µg/L
Co 228.616†	9786.2	569.47	5.82%	[500]	µg/L
Cr 267.716†	21751.3	1581.21	7.27%	[500]	µg/L
Cu 324.752†	68415.2	3785.63	5.53%	[500]	µg/L
K 766.490 Radial†	6816.2	49.68	0.73%	[5000]	µg/L
Mg 279.077 IEC†	536.5	6.79	1.26%	[5000]	µg/L
Mn 257.610†	141419.0	4951.74	3.50%	[500]	µg/L
Mo 202.031†	4553.9	462.10	10.15%	[500]	µg/L
Ni 231.604†	8805.9	532.32	6.04%	[500]	µg/L
P 214.914†	1111.9	97.02	8.73%	[2500]	µg/L
Pb 220.353†	1799.0	136.97	7.61%	[500]	µg/L
S 181.975 Axial†	224.2	20.73	9.24%	[1000]	µg/L
Sb 206.836†	493.6	42.92	8.69%	[500]	µg/L
Se 196.026†	317.4	23.20	7.31%	[500]	µg/L
SiO2†	23809.9	1117.40	4.69%	[5347.5]	µg/L
Si 251.611†	29205.3	1355.64	4.64%	[2500]	µg/L

Sn 189.927†	1056.3	114.33	10.82%	[500] µg/L
Sr 421.552†	46507.3	109.22	0.23%	[500] µg/L
Ti 334.940†	200684.6	7877.46	3.93%	[500] µg/L
Tl 190.801†	347.2	16.45	4.74%	[500] µg/L
U 409.014†	5299.1	341.35	6.44%	[500] µg/L
V 292.402†	44781.0	2784.22	6.22%	[500] µg/L
Zn 213.857†	19322.4	1118.82	5.79%	[500] µg/L

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

Autosampler Location: 4  
 Date Collected: 2/11/2010 14:20:41  
 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	54624.1	54624.1	100 %		14:21:14
1	Al 396.153Radial†	13945.5	13943.0	[10000] µg/L		14:21:14
1	Ca 317.933Radial†	11091.0	10901.8	[10000] µg/L		14:21:34
1	Fe 238.204 Radial†	1237.7	1222.1	[10000] µg/L		14:21:34
1	K 766.490 Radial†	14553.2	14411.5	[10000] µg/L		14:21:14
1	Mg 279.077 IEC†	1145.5	1133.2	[10000] µg/L		14:21:34
1	Na 589.592 Radial†	32001.3	31430.3	[10000] µg/L		14:21:14
1	Sr 421.552†	98763.5	98634.1	[1000] µg/L		14:21:14
1	Sc 361.383	1918837.7	1918837.7	100.47 %		14:22:38
1	Y 371.029	1309873.4	1309873.4	99.997 %		14:22:38
1	Ag 328.068†	129789.4	129745.3	[1000] µg/L		14:22:44
1	As 188.979†	545.1	541.4	[1000] µg/L		14:23:05
1	B 249.677†	24100.3	23655.8	[1000] µg/L		14:22:44
1	Ba 233.527†	40021.0	39859.3	[1000] µg/L		14:22:44
1	Be 313.107†	1583359.7	1579375.6	[1000] µg/L		14:22:38
1	Cd 226.502†	37676.7	37642.1	[1000] µg/L		14:22:44
1	Co 228.616†	21224.5	21133.9	[1000] µg/L		14:22:44
1	Cr 267.716†	47864.2	47692.2	[1000] µg/L		14:22:44
1	Cu 324.752†	152208.7	149008.9	[1000] µg/L		14:22:44
1	Mn 257.610†	300264.6	299100.8	[1000] µg/L		14:22:44
1	Mo 202.031†	10059.0	10019.4	[1000] µg/L		14:23:05
1	Ni 231.604†	19417.1	19023.9	[1000] µg/L		14:22:44
1	P 214.914†	2522.7	2483.2	[5000] µg/L		14:23:05
1	Pb 220.353†	4095.0	3978.6	[1000] µg/L		14:23:05
1	S 181.975 Axial†	497.7	480.5	[2000] µg/L		14:23:05
1	Sb 206.836†	1108.7	1076.5	[1000] µg/L		14:23:05
1	Se 196.026†	705.0	685.9	[1000] µg/L		14:23:05
1	SiO2†	52879.3	51381.3	[10695] µg/L		14:22:44
1	Si 251.611†	63553.1	62942.2	[5000] µg/L		14:22:44
1	Sn 189.927†	2343.4	2333.3	[1000] µg/L		14:23:05
1	Ti 334.940†	431168.6	429030.7	[1000] µg/L		14:22:38
1	Tl 190.801†	726.4	747.3	[1000] µg/L		14:23:05
1	U 409.014†	11460.5	11460.4	[1000] µg/L		14:22:44
1	V 292.402†	98389.1	97972.0	[1000] µg/L		14:22:44
1	Zn 213.857†	42248.3	41574.6	[1000] µg/L		14:22:44
2	Sc RADIAL	55757.6	55757.6	102 %		14:21:40
2	Al 396.153Radial†	13857.6	13573.7	[10000] µg/L		14:21:40
2	Ca 317.933Radial†	11113.5	10698.5	[10000] µg/L		14:22:00
2	Fe 238.204 Radial†	1242.3	1201.4	[10000] µg/L		14:22:00
2	K 766.490 Radial†	14434.4	13999.7	[10000] µg/L		14:21:40
2	Mg 279.077 IEC†	1155.1	1119.3	[10000] µg/L		14:22:00
2	Na 589.592 Radial†	31736.9	30521.6	[10000] µg/L		14:21:40
2	Sr 421.552†	98177.9	96055.0	[1000] µg/L		14:21:40
2	Sc 361.383	1912891.8	1912891.8	100.16 %		14:23:11
2	Y 371.029	1304958.7	1304958.7	99.621 %		14:23:11
2	Ag 328.068†	130617.7	130973.8	[1000] µg/L		14:23:17
2	As 188.979†	550.1	548.1	[1000] µg/L		14:23:38
2	B 249.677†	24305.4	23935.1	[1000] µg/L		14:23:17
2	Ba 233.527†	40326.4	40288.1	[1000] µg/L		14:23:17
2	Be 313.107†	1586929.2	1587837.9	[1000] µg/L		14:23:11
2	Cd 226.502†	37959.2	38040.8	[1000] µg/L		14:23:17
2	Co 228.616†	21379.4	21354.1	[1000] µg/L		14:23:17
2	Cr 267.716†	48340.5	48315.7	[1000] µg/L		14:23:17
2	Cu 324.752†	153521.9	150790.9	[1000] µg/L		14:23:17
2	Mn 257.610†	303225.9	302986.3	[1000] µg/L		14:23:17
2	Mo 202.031†	10012.5	10004.1	[1000] µg/L		14:23:38
2	Ni 231.604†	19568.5	19235.1	[1000] µg/L		14:23:17
2	P 214.914†	2513.0	2481.4	[5000] µg/L		14:23:38
2	Pb 220.353†	4075.3	3971.6	[1000] µg/L		14:23:38

2	S 181.975 Axial†	494.3	478.7	[2000]	µg/L	14:23:38
2	Sb 206.836†	1106.5	1077.8	[1000]	µg/L	14:23:38
2	Se 196.026†	715.1	698.1	[1000]	µg/L	14:23:38
2	SiO2†	53340.3	52005.2	[10695]	µg/L	14:23:17
2	Si 251.611†	64000.9	63585.9	[5000]	µg/L	14:23:17
2	Sn 189.927†	2345.0	2342.2	[1000]	µg/L	14:23:38
2	Ti 334.940†	432325.2	431519.3	[1000]	µg/L	14:23:11
2	Tl 190.801†	726.1	749.2	[1000]	µg/L	14:23:38
2	U 409.014†	11741.1	11776.0	[1000]	µg/L	14:23:17
2	V 292.402†	99181.6	99067.5	[1000]	µg/L	14:23:17
2	Zn 213.857†	42614.4	42070.9	[1000]	µg/L	14:23:17
3	Sc RADIAL	54875.2	54875.2	101	%	14:22:06
3	Al 396.153Radial†	13886.4	13820.4	[10000]	µg/L	14:22:06
3	Ca 317.933Radial†	11079.2	10839.4	[10000]	µg/L	14:22:26
3	Fe 238.204 Radial†	1232.3	1211.0	[10000]	µg/L	14:22:26
3	K 766.490 Radial†	14321.1	14114.2	[10000]	µg/L	14:22:06
3	Mg 279.077 IEC†	1147.7	1130.1	[10000]	µg/L	14:22:26
3	Na 589.592 Radial†	31806.0	31089.8	[10000]	µg/L	14:22:06
3	Sr 421.552†	97911.9	97335.8	[1000]	µg/L	14:22:06
3	Sc 361.383	1943388.7	1943388.7	101.76	%	14:23:44
3	Y 371.029	1326037.1	1326037.1	101.23	%	14:23:44
3	Ag 328.068†	122308.3	120761.4	[1000]	µg/L	14:23:50
3	As 188.979†	468.8	459.6	[1000]	µg/L	14:24:11
3	B 249.677†	22603.8	21882.1	[1000]	µg/L	14:23:50
3	Ba 233.527†	36855.9	36245.6	[1000]	µg/L	14:23:50
3	Be 313.107†	1492194.6	1469875.4	[1000]	µg/L	14:23:44
3	Cd 226.502†	34480.3	34027.2	[1000]	µg/L	14:23:50
3	Co 228.616†	19338.4	19013.4	[1000]	µg/L	14:23:50
3	Cr 267.716†	42475.6	41794.7	[1000]	µg/L	14:23:50
3	Cu 324.752†	139121.1	134233.4	[1000]	µg/L	14:23:50
3	Mn 257.610†	272803.2	268337.9	[1000]	µg/L	14:23:50
3	Mo 202.031†	8402.4	8264.9	[1000]	µg/L	14:24:11
3	Ni 231.604†	17696.7	17089.1	[1000]	µg/L	14:23:50
3	P 214.914†	2160.3	2095.4	[5000]	µg/L	14:24:11
3	Pb 220.353†	3557.4	3398.8	[1000]	µg/L	14:24:11
3	S 181.975 Axial†	437.7	415.3	[2000]	µg/L	14:24:11
3	Sb 206.836†	957.8	914.3	[1000]	µg/L	14:24:11
3	Se 196.026†	625.8	599.2	[1000]	µg/L	14:24:11
3	SiO2†	49204.0	47104.6	[10695]	µg/L	14:23:50
3	Si 251.611†	59050.8	57718.6	[5000]	µg/L	14:23:50
3	Sn 189.927†	1920.9	1888.6	[1000]	µg/L	14:24:11
3	Ti 334.940†	404515.4	397416.1	[1000]	µg/L	14:23:44
3	Tl 190.801†	655.3	668.3	[1000]	µg/L	14:24:11
3	U 409.014†	10336.6	10211.8	[1000]	µg/L	14:23:50
3	V 292.402†	89071.2	87577.8	[1000]	µg/L	14:23:50
3	Zn 213.857†	38626.6	37484.3	[1000]	µg/L	14:23:50

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Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1925039.4	16166.66	0.84%	100.80	%
Sc RADIAL	55085.6	595.31	1.08%	101	%
Y 371.029	1313623.1	11028.13	0.84%	100.28	%
Ag 328.068†	127160.2	5575.45	4.38%	[1000]	µg/L
Al 396.153Radial†	13779.0	188.09	1.37%	[10000]	µg/L
As 188.979†	516.3	49.27	9.54%	[1000]	µg/L
B 249.677†	23157.7	1113.46	4.81%	[1000]	µg/L
Ba 233.527†	38797.7	2220.52	5.72%	[1000]	µg/L
Be 313.107†	1545696.3	65799.01	4.26%	[1000]	µg/L
Ca 317.933Radial†	10813.2	104.13	0.96%	[10000]	µg/L
Cd 226.502†	36570.0	2211.18	6.05%	[1000]	µg/L
Co 228.616†	20500.4	1292.54	6.30%	[1000]	µg/L
Cr 267.716†	45934.2	3598.42	7.83%	[1000]	µg/L
Cu 324.752†	144677.7	9088.85	6.28%	[1000]	µg/L
Fe 238.204 Radial†	1211.5	10.32	0.85%	[10000]	µg/L
K 766.490 Radial†	14175.1	212.58	1.50%	[10000]	µg/L
Mg 279.077 IEC†	1127.5	7.31	0.65%	[10000]	µg/L
Mn 257.610†	290141.7	18982.26	6.54%	[1000]	µg/L
Mo 202.031†	9429.5	1008.55	10.70%	[1000]	µg/L
Na 589.592 Radial†	31013.9	459.06	1.48%	[10000]	µg/L

Ni 231.604†	18449.4	1182.78	6.41%	[1000]	µg/L
P 214.914†	2353.3	223.38	9.49%	[5000]	µg/L
Pb 220.353†	3783.0	332.79	8.80%	[1000]	µg/L
S 181.975 Axial†	458.2	37.14	8.10%	[2000]	µg/L
Sb 206.836†	1022.9	94.00	9.19%	[1000]	µg/L
Se 196.026†	661.1	53.94	8.16%	[1000]	µg/L
SiO2†	50163.7	2667.59	5.32%	[10695]	µg/L
Si 251.611†	61415.6	3217.81	5.24%	[5000]	µg/L
Sn 189.927†	2188.0	259.31	11.85%	[1000]	µg/L
Sr 421.552†	97341.6	1289.53	1.32%	[1000]	µg/L
Ti 334.940†	419322.0	19011.87	4.53%	[1000]	µg/L
Tl 190.801†	721.6	46.19	6.40%	[1000]	µg/L
U 409.014†	11149.4	827.15	7.42%	[1000]	µg/L
V 292.402†	94872.5	6341.05	6.68%	[1000]	µg/L
Zn 213.857†	40376.6	2517.08	6.23%	[1000]	µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/11/2010 14:24:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc RADIAL	55734.1	55734.1	102 %		14:24:53
1	Al 396.153Radial†	68477.1	67062.5	[50000] µg/L		14:24:53
1	Ca 317.933Radial†	54301.8	52992.8	[50000] µg/L		14:24:53
1	Fe 238.204 Radial†	2420.6	2355.7	[20000] µg/L		14:25:13
1	Mg 279.077 IEC†	5505.9	5380.1	[50000] µg/L		14:25:13
1	Na 589.592 Radial†	62235.4	60398.5	[20000] µg/L		14:24:53
1	Sc 361.383	1922257.7	1922257.7	100.65 %		14:26:17
1	Y 371.029	1306511.6	1306511.6	99.740 %		14:26:17
2	Sc RADIAL	55997.4	55997.4	103 %		14:25:19
2	Al 396.153Radial†	68696.2	66960.7	[50000] µg/L		14:25:19
2	Ca 317.933Radial†	54670.5	53102.1	[50000] µg/L		14:25:19
2	Fe 238.204 Radial†	2419.7	2343.7	[20000] µg/L		14:25:39
2	Mg 279.077 IEC†	5512.9	5361.5	[50000] µg/L		14:25:39
2	Na 589.592 Radial†	62504.6	60374.4	[20000] µg/L		14:25:19
2	Sc 361.383	1943938.9	1943938.9	101.79 %		14:26:25
2	Y 371.029	1321297.0	1321297.0	100.87 %		14:26:25
3	Sc RADIAL	56208.4	56208.4	103 %		14:25:45
3	Al 396.153Radial†	69051.1	67053.9	[50000] µg/L		14:25:45
3	Ca 317.933Radial†	54933.8	53157.7	[50000] µg/L		14:25:45
3	Fe 238.204 Radial†	2417.0	2332.2	[20000] µg/L		14:26:05
3	Mg 279.077 IEC†	5516.6	5344.9	[50000] µg/L		14:26:05
3	Na 589.592 Radial†	62899.5	60529.1	[20000] µg/L		14:25:45
3	Sc 361.383	1959647.9	1959647.9	102.61 %		14:26:33
3	Y 371.029	1332766.9	1332766.9	101.74 %		14:26:33

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib. Units
Sc 361.383	1941948.2	18774.43	0.97%	101.68 %	
Sc RADIAL	55979.9	237.64	0.42%	103 %	
Y 371.029	1320191.8	13162.49	1.00%	100.78 %	
Al 396.153Radial†	67025.7	56.44	0.08%	[50000] µg/L	
Ca 317.933Radial†	53084.2	83.91	0.16%	[50000] µg/L	
Fe 238.204 Radial†	2343.9	11.76	0.50%	[20000] µg/L	
Mg 279.077 IEC†	5362.2	17.57	0.33%	[50000] µg/L	
Na 589.592 Radial†	60434.0	83.23	0.14%	[20000] µg/L	

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	126.0	0.00000	0.999831	
Al 396.153Radial	3	Lin Thru 0	0.0	1.342	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	0.5116	0.00000	0.999791	
B 249.677	3	Lin Thru 0	0.0	22.88	0.00000	0.999715	
Ba 233.527	3	Lin Thru 0	0.0	38.40	0.00000	0.999779	
Be 313.107	3	Lin Thru 0	0.0	1531	0.00000	0.999818	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.062	0.00000	0.999987	
Cd 226.502	3	Lin Thru 0	0.0	36.25	0.00000	0.999822	
Co 228.616	3	Lin Thru 0	0.0	20.32	0.00000	0.999831	
Cr 267.716	3	Lin Thru 0	0.0	45.46	0.00000	0.999766	
Cu 324.752	3	Lin Thru 0	0.0	143.2	0.00000	0.999754	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1180	0.00000	0.999910	
K 766.490 Radial	3	Lin Thru 0	0.0	1.407	0.00000	0.999880	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1075	0.00000	0.999952	
Mn 257.610	3	Lin Thru 0	0.0	288.8	0.00000	0.999942	
Mo 202.031	3	Lin Thru 0	0.0	9.370	0.00000	0.999888	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.038	0.00000	0.999945	

Ni 231.604	3	Lin Thru 0	0.0	18.29	0.00000	0.999821
P 214.914	3	Lin Thru 0	0.0	0.4657	0.00000	0.999737
Pb 220.353	3	Lin Thru 0	0.0	3.748	0.00000	0.999792
S 181.975 Axial	3	Lin Thru 0	0.0	0.2282	0.00000	0.999946
Sb 206.836	3	Lin Thru 0	0.0	1.016	0.00000	0.999901
Se 196.026	3	Lin Thru 0	0.0	0.6559	0.00000	0.999870
SiO2	3	Lin Thru 0	0.0	4.643	0.00000	0.999791
Si 251.611	3	Lin Thru 0	0.0	12.16	0.00000	0.999805
Sn 189.927	3	Lin Thru 0	0.0	2.174	0.00000	0.999882
Sr 421.552	3	Lin Thru 0	0.0	96.47	0.00000	0.999840
Ti 334.940	3	Lin Thru 0	0.0	415.7	0.00000	0.999852
Tl 190.801	3	Lin Thru 0	0.0	0.7164	0.00000	0.999879
U 409.014	3	Lin Thru 0	0.0	11.05	0.00000	0.999783
V 292.402	3	Lin Thru 0	0.0	93.83	0.00000	0.999742
Zn 213.857	3	Lin Thru 0	0.0	40.05	0.00000	0.999841

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/11/2010 14:26:41

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	56175.2	56175.2	103 %		14:27:15
1	Al 396.153Radial†	6827.4	6643.0	4939.9 µg/L	4939.9 ppb	14:27:35
1	Ca 317.933Radial†	5504.7	5168.7	4866.7 µg/L	4866.7 ppb	14:27:35
1	Fe 238.204 Radial†	619.4	587.3	4988.2 µg/L	4988.2 ppb	14:27:35
1	K 766.490 Radial†	3573.7	3343.4	2376.5 µg/L	2376.5 ppb	14:27:15
1	Mg 279.077 IEC†	579.7	551.9	5140.1 µg/L	5140.1 ppb	14:27:35
1	Na 589.592 Radial†	7985.2	7215.8	2375.5 µg/L	2375.5 ppb	14:27:15
1	Sr 421.552†	49736.5	48279.6	500.47 µg/L	500.47 ppb	14:27:15
1	Sc 361.383	1963746.6	1963746.6	102.82 %		14:28:38
1	Y 371.029	1343456.9	1343456.9	102.56 %		14:28:38
1	Ag 328.068†	32402.4	32077.4	258.20 µg/L	258.20 ppb	14:28:44
1	As 188.979†	252.0	244.0	475.79 µg/L	475.79 ppb	14:29:05
1	B 249.677†	12299.6	11630.5	506.47 µg/L	506.47 ppb	14:28:44
1	Ba 233.527†	19805.3	19287.7	503.14 µg/L	503.14 ppb	14:28:44
1	Be 313.107†	400944.5	393378.7	256.71 µg/L	256.71 ppb	14:28:38
1	Cd 226.502†	18448.5	18084.2	498.85 µg/L	498.85 ppb	14:28:44
1	Co 228.616†	10564.7	10283.6	505.57 µg/L	505.57 ppb	14:28:44
1	Cr 267.716†	22885.3	22309.5	491.04 µg/L	491.04 ppb	14:28:44
1	Cu 324.752†	76882.1	72285.6	505.62 µg/L	505.62 ppb	14:28:44
1	Mn 257.610†	151694.6	147774.6	512.18 µg/L	512.18 ppb	14:28:38
1	Mo 202.031†	5332.7	5193.9	554.49 µg/L	554.49 ppb	14:29:05
1	Ni 231.604†	9713.9	9145.0	499.47 µg/L	499.47 ppb	14:28:44
1	P 214.914†	1269.4	1206.9	2543.7 µg/L	2543.7 ppb	14:29:05
1	Pb 220.353†	2051.9	1898.4	506.85 µg/L	506.85 ppb	14:29:05
1	S 181.975 Axial†	610.0	578.4	2534.1 µg/L	2534.1 ppb	14:29:05
1	Sb 206.836†	565.9	523.4	518.27 µg/L	518.27 ppb	14:29:05
1	Se 196.026†	1740.7	1677.1	2564.5 µg/L	2564.5 ppb	14:29:05
1	SiO2†	50702.0	48060.2	10350 µg/L	10350 ppb	14:28:44
1	Si 251.611†	60656.9	58679.0	4823.7 µg/L	4823.7 ppb	14:28:44
1	Sn 189.927†	1247.6	1214.2	558.50 µg/L	558.50 ppb	14:29:05
1	Ti 334.940†	209346.8	203483.9	489.14 µg/L	489.14 ppb	14:28:38
1	Tl 190.801†	364.1	378.4	534.06 µg/L	534.06 ppb	14:29:05
1	U 409.014†	5596.2	5496.2	496.62 µg/L	496.62 ppb	14:28:44
1	V 292.402†	48924.8	47626.0	514.07 µg/L	514.07 ppb	14:28:44
1	Zn 213.857†	21567.2	20499.6	508.35 µg/L	508.35 ppb	14:28:44
2	Sc RADIAL	56033.1	56033.1	103 %		14:27:40
2	Al 396.153Radial†	6802.0	6635.1	4934.1 µg/L	4934.1 ppb	14:28:01
2	Ca 317.933Radial†	5475.3	5153.6	4852.4 µg/L	4852.4 ppb	14:28:01
2	Fe 238.204 Radial†	614.3	583.8	4958.8 µg/L	4958.8 ppb	14:28:01
2	K 766.490 Radial†	3641.5	3418.3	2429.7 µg/L	2429.7 ppb	14:27:40
2	Mg 279.077 IEC†	579.8	553.4	5154.4 µg/L	5154.4 ppb	14:28:01
2	Na 589.592 Radial†	8029.7	7278.8	2396.2 µg/L	2396.2 ppb	14:27:40
2	Sr 421.552†	50111.3	48767.2	505.53 µg/L	505.53 ppb	14:27:40
2	Sc 361.383	1959108.8	1959108.8	102.58 %		14:29:12
2	Y 371.029	1337906.1	1337906.1	102.14 %		14:29:12
2	Ag 328.068†	32371.7	32122.1	258.56 µg/L	258.56 ppb	14:29:17
2	As 188.979†	250.3	242.8	473.56 µg/L	473.56 ppb	14:29:38
2	B 249.677†	12349.9	11707.8	509.86 µg/L	509.86 ppb	14:29:17
2	Ba 233.527†	19859.1	19385.7	505.69 µg/L	505.69 ppb	14:29:17
2	Be 313.107†	397767.3	391204.5	255.29 µg/L	255.29 ppb	14:29:12
2	Cd 226.502†	18445.9	18124.1	499.96 µg/L	499.96 ppb	14:29:17
2	Co 228.616†	10616.9	10358.7	509.26 µg/L	509.26 ppb	14:29:17
2	Cr 267.716†	22880.0	22357.0	492.09 µg/L	492.09 ppb	14:29:17
2	Cu 324.752†	76966.8	72545.1	507.43 µg/L	507.43 ppb	14:29:17
2	Mn 257.610†	150503.7	146962.9	509.37 µg/L	509.37 ppb	14:29:12
2	Mo 202.031†	5249.3	5124.9	547.12 µg/L	547.12 ppb	14:29:38
2	Ni 231.604†	9710.9	9164.5	500.53 µg/L	500.53 ppb	14:29:17
2	P 214.914†	1234.6	1175.9	2476.8 µg/L	2476.8 ppb	14:29:38
2	Pb 220.353†	2014.2	1866.4	498.27 µg/L	498.27 ppb	14:29:38



2	S 181.975 Axial†	603.9	573.9	2514.5 µg/L	2514.5 ppb	14:29:38
2	Sb 206.836†	552.1	511.3	506.22 µg/L	506.22 ppb	14:29:38
2	Se 196.026†	1718.6	1659.6	2537.7 µg/L	2537.7 ppb	14:29:38
2	SiO2†	50804.5	48276.9	10397 µg/L	10397 ppb	14:29:17
2	Si 251.611†	60707.2	58867.6	4839.2 µg/L	4839.2 ppb	14:29:17
2	Sn 189.927†	1227.9	1197.9	551.01 µg/L	551.01 ppb	14:29:38
2	Ti 334.940†	208068.6	202719.9	487.30 µg/L	487.30 ppb	14:29:12
2	Tl 190.801†	356.4	371.7	524.72 µg/L	524.72 ppb	14:29:38
2	U 409.014†	5657.2	5568.6	503.18 µg/L	503.18 ppb	14:29:17
2	V 292.402†	48911.7	47725.9	515.09 µg/L	515.09 ppb	14:29:17
2	Zn 213.857†	21491.7	20475.7	507.74 µg/L	507.74 ppb	14:29:17
3	Sc RADIAL	55710.7	55710.7	102 %		14:28:06
3	Al 396.153Radial†	6837.6	6708.3	4990.5 µg/L	4990.5 ppb	14:28:27
3	Ca 317.933Radial†	5503.3	5211.9	4907.4 µg/L	4907.4 ppb	14:28:27
3	Fe 238.204 Radial†	619.1	592.0	5027.4 µg/L	5027.4 ppb	14:28:27
3	K 766.490 Radial†	3604.3	3402.4	2418.4 µg/L	2418.4 ppb	14:28:06
3	Mg 279.077 IEC†	577.0	553.9	5157.4 µg/L	5157.4 ppb	14:28:27
3	Na 589.592 Radial†	7999.1	7294.1	2401.2 µg/L	2401.2 ppb	14:28:06
3	Sr 421.552†	49756.2	48701.8	504.85 µg/L	504.85 ppb	14:28:06
3	Sc 361.383	1966591.1	1966591.1	102.97 %		14:29:45
3	Y 371.029	1344829.1	1344829.1	102.67 %		14:29:45
3	Ag 328.068†	30447.1	30133.0	242.44 µg/L	242.44 ppb	14:29:51
3	As 188.979†	212.1	204.8	399.46 µg/L	399.46 ppb	14:30:11
3	B 249.677†	11543.9	10879.3	473.52 µg/L	473.52 ppb	14:29:51
3	Ba 233.527†	18235.3	17735.1	462.62 µg/L	462.62 ppb	14:29:51
3	Be 313.107†	376544.4	369118.7	240.88 µg/L	240.88 ppb	14:29:45
3	Cd 226.502†	16808.4	16465.5	454.14 µg/L	454.14 ppb	14:29:51
3	Co 228.616†	9616.6	9347.9	459.50 µg/L	459.50 ppb	14:29:51
3	Cr 267.716†	20282.2	19749.2	434.69 µg/L	434.69 ppb	14:29:51
3	Cu 324.752†	70054.3	65546.6	458.56 µg/L	458.56 ppb	14:29:51
3	Mn 257.610†	142833.7	138956.0	481.65 µg/L	481.65 ppb	14:29:45
3	Mo 202.031†	4404.7	4285.1	457.51 µg/L	457.51 ppb	14:30:11
3	Ni 231.604†	8886.0	8327.4	454.82 µg/L	454.82 ppb	14:29:51
3	P 214.914†	1057.7	999.5	2101.9 µg/L	2101.9 ppb	14:30:11
3	Pb 220.353†	1779.9	1631.4	435.46 µg/L	435.46 ppb	14:30:11
3	S 181.975 Axial†	527.5	497.5	2179.7 µg/L	2179.7 ppb	14:30:11
3	Sb 206.836†	492.5	451.4	446.41 µg/L	446.41 ppb	14:30:11
3	Se 196.026†	1501.7	1442.5	2207.0 µg/L	2207.0 ppb	14:30:11
3	SiO2†	47105.5	44496.1	9582.5 µg/L	9582.5 ppb	14:29:51
3	Si 251.611†	56262.5	54326.1	4465.9 µg/L	4465.9 ppb	14:29:51
3	Sn 189.927†	1018.6	990.0	455.40 µg/L	455.40 ppb	14:30:11
3	Ti 334.940†	196112.8	190337.3	457.51 µg/L	457.51 ppb	14:29:45
3	Tl 190.801†	328.3	343.2	484.58 µg/L	484.58 ppb	14:30:11
3	U 409.014†	4922.5	4834.1	436.66 µg/L	436.66 ppb	14:29:51
3	V 292.402†	44109.1	42880.5	462.56 µg/L	462.56 ppb	14:29:51
3	Zn 213.857†	19646.9	18604.4	461.29 µg/L	461.29 ppb	14:29:51

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1963148.8	102.79 %	0.198			0.19%
Sc RADIAL	55973.0	103 %	0.4			0.43%
Y 371.029	1342064.0	102.45 %	0.280			0.27%
Ag 328.068†	31444.2	253.06 µg/L	9.205	253.06 ppb	9.205	3.64%
QC value within limits for Ag 328.068 Recovery = 101.23%						
Al 396.153Radial†	6662.1	4954.8 µg/L	31.04	4954.8 ppb	31.04	0.63%
QC value within limits for Al 396.153Radial Recovery = 99.10%						
As 188.979†	230.5	449.61 µg/L	43.438	449.61 ppb	43.438	9.66%
QC value less than the lower limit for As 188.979 Recovery = 89.92%						
B 249.677†	11405.9	496.62 µg/L	20.071	496.62 ppb	20.071	4.04%
QC value within limits for B 249.677 Recovery = 99.32%						
Ba 233.527†	18802.8	490.48 µg/L	24.164	490.48 ppb	24.164	4.93%
QC value within limits for Ba 233.527 Recovery = 98.10%						
Be 313.107†	384567.3	250.96 µg/L	8.759	250.96 ppb	8.759	3.49%
QC value within limits for Be 313.107 Recovery = 100.38%						
Ca 317.933Radial†	5178.1	4875.5 µg/L	28.51	4875.5 ppb	28.51	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.51%						
Cd 226.502†	17558.0	484.32 µg/L	26.137	484.32 ppb	26.137	5.40%
QC value within limits for Cd 226.502 Recovery = 96.86%						
Co 228.616†	9996.7	491.44 µg/L	27.727	491.44 ppb	27.727	5.64%

QC value within limits for Co 228.616 Recovery = 98.29%							
Cr 267.716†	21471.9	472.61 µg/L	32.838	472.61 ppb	32.838	6.95%	
QC value within limits for Cr 267.716 Recovery = 94.52%							
Cu 324.752†	70125.8	490.54 µg/L	27.712	490.54 ppb	27.712	5.65%	
QC value within limits for Cu 324.752 Recovery = 98.11%							
Fe 238.204 Radial†	587.7	4991.5 µg/L	34.44	4991.5 ppb	34.44	0.69%	
QC value within limits for Fe 238.204 Radial Recovery = 99.83%							
K 766.490 Radial†	3388.1	2408.2 µg/L	28.04	2408.2 ppb	28.04	1.16%	
QC value within limits for K 766.490 Radial Recovery = 96.33%							
Mg 279.077 IEC†	553.1	5150.6 µg/L	9.21	5150.6 ppb	9.21	0.18%	
QC value within limits for Mg 279.077 IEC Recovery = 103.01%							
Mn 257.610†	144564.5	501.06 µg/L	16.874	501.06 ppb	16.874	3.37%	
QC value within limits for Mn 257.610 Recovery = 100.21%							
Mo 202.031†	4868.0	519.70 µg/L	53.991	519.70 ppb	53.991	10.39%	
QC value within limits for Mo 202.031 Recovery = 103.94%							
Na 589.592 Radial†	7262.9	2391.0 µg/L	13.66	2391.0 ppb	13.66	0.57%	
QC value within limits for Na 589.592 Radial Recovery = 95.64%							
Ni 231.604†	8879.0	484.94 µg/L	26.089	484.94 ppb	26.089	5.38%	
QC value within limits for Ni 231.604 Recovery = 96.99%							
P 214.914†	1127.4	2374.2 µg/L	238.13	2374.2 ppb	238.13	10.03%	
QC value within limits for P 214.914 Recovery = 94.97%							
Pb 220.353†	1798.7	480.19 µg/L	38.976	480.19 ppb	38.976	8.12%	
QC value within limits for Pb 220.353 Recovery = 96.04%							
S 181.975 Axial†	549.9	2409.5 µg/L	199.20	2409.5 ppb	199.20	8.27%	
QC value within limits for S 181.975 Axial Recovery = 96.38%							
Sb 206.836†	495.4	490.30 µg/L	38.486	490.30 ppb	38.486	7.85%	
QC value within limits for Sb 206.836 Recovery = 98.06%							
Se 196.026†	1593.1	2436.4 µg/L	199.13	2436.4 ppb	199.13	8.17%	
QC value within limits for Se 196.026 Recovery = 97.46%							
SiO2†	46944.4	10110 µg/L	457.2	10110 ppb	457.2	4.52%	
QC value within limits for SiO2 Recovery = 94.53%							
Si 251.611†	57290.9	4709.6 µg/L	211.21	4709.6 ppb	211.21	4.48%	
QC value within limits for Si 251.611 Recovery = 94.19%							
Sn 189.927†	1134.1	521.64 µg/L	57.487	521.64 ppb	57.487	11.02%	
QC value within limits for Sn 189.927 Recovery = 104.33%							
Sr 421.552†	48582.8	503.62 µg/L	2.743	503.62 ppb	2.743	0.54%	
QC value within limits for Sr 421.552 Recovery = 100.72%							
Ti 334.940†	198847.0	477.98 µg/L	17.751	477.98 ppb	17.751	3.71%	
QC value within limits for Ti 334.940 Recovery = 95.60%							
Tl 190.801†	364.4	514.45 µg/L	26.290	514.45 ppb	26.290	5.11%	
QC value within limits for Tl 190.801 Recovery = 102.89%							
U 409.014†	5299.6	478.82 µg/L	36.655	478.82 ppb	36.655	7.66%	
QC value within limits for U 409.014 Recovery = 95.76%							
V 292.402†	46077.4	497.24 µg/L	30.036	497.24 ppb	30.036	6.04%	
QC value within limits for V 292.402 Recovery = 99.45%							
Zn 213.857†	19859.9	492.46 µg/L	26.995	492.46 ppb	26.995	5.48%	
QC value within limits for Zn 213.857 Recovery = 98.49%							
QC Failed. Continue with analysis.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/11/2010 14:30:21

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	55908.8	55908.8	102 %		14:30:53
1	Al 396.153Radial†	-5.0	5.2	3.8899 µg/L	3.8899 ppb	14:30:53
1	Ca 317.933Radial†	192.7	9.0	8.4299 µg/L	8.4299 ppb	14:31:14
1	Fe 238.204 Radial†	14.3	-0.6	-4.9645 µg/L	-4.9645 ppb	14:31:14
1	K 766.490 Radial†	107.9	-23.1	-16.426 µg/L	-16.426 ppb	14:30:53
1	Mg 279.077 IEC†	15.7	4.0	37.295 µg/L	37.295 ppb	14:31:14
1	Na 589.592 Radial†	574.2	18.7	6.1420 µg/L	6.1420 ppb	14:30:53
1	Sr 421.552†	57.3	16.3	0.1694 µg/L	0.1694 ppb	14:30:53
1	Sc 361.383	1944300.1	1944300.1	101.80 %		14:32:16
1	Y 371.029	1332393.9	1332393.9	101.72 %		14:32:16
1	Ag 328.068†	-508.2	65.3	0.5177 µg/L	0.5177 ppb	14:32:21
1	As 188.979†	2.4	1.2	2.3247 µg/L	2.3247 ppb	14:32:42
1	B 249.677†	341.3	3.8	0.1701 µg/L	0.1701 ppb	14:32:42
1	Ba 233.527†	-14.2	12.0	0.3135 µg/L	0.3135 ppb	14:32:42
1	Be 313.107†	-3420.4	80.6	0.0526 µg/L	0.0526 ppb	14:32:21
1	Cd 226.502†	-141.7	2.9	0.0816 µg/L	0.0816 ppb	14:32:42
1	Co 228.616†	-8.8	0.2	0.0094 µg/L	0.0094 ppb	14:32:42
1	Cr 267.716†	-52.4	0.9	0.0196 µg/L	0.0196 ppb	14:32:21
1	Cu 324.752†	2516.4	-14.3	-0.1006 µg/L	-0.1006 ppb	14:32:21
1	Mn 257.610†	-222.7	25.3	0.0856 µg/L	0.0856 ppb	14:32:42
1	Mo 202.031†	-0.2	7.3	0.7799 µg/L	0.7799 ppb	14:32:42
1	Ni 231.604†	301.0	-6.6	-0.3591 µg/L	-0.3591 ppb	14:32:42
1	P 214.914†	32.4	4.2	8.9740 µg/L	8.9740 ppb	14:32:42
1	Pb 220.353†	88.6	-10.1	-2.7035 µg/L	-2.7035 ppb	14:32:42
1	S 181.975 Axial†	16.5	1.4	6.0966 µg/L	6.0966 ppb	14:32:42
1	Sb 206.836†	22.8	-4.6	-4.5144 µg/L	-4.5144 ppb	14:32:42
1	Se 196.026†	21.7	5.5	8.3158 µg/L	8.3158 ppb	14:32:42
1	SiO2†	1261.7	-10.7	-2.2937 µg/L	-2.2937 ppb	14:32:21
1	Si 251.611†	339.4	20.5	1.6875 µg/L	1.6875 ppb	14:32:42
1	Sn 189.927†	1.1	2.0	0.9031 µg/L	0.9031 ppb	14:32:42
1	Ti 334.940†	148.3	29.6	0.0683 µg/L	0.0683 ppb	14:32:21
1	Tl 190.801†	-21.8	2.8	3.9713 µg/L	3.9713 ppb	14:32:42
1	U 409.014†	-33.0	21.2	1.9223 µg/L	1.9223 ppb	14:32:21
1	V 292.402†	-53.1	-7.9	-0.0767 µg/L	-0.0767 ppb	14:32:21
1	Zn 213.857†	482.8	-1.3	-0.0325 µg/L	-0.0325 ppb	14:32:42
2	Sc RADIAL	55881.3	55881.3	102 %		14:31:19
2	Al 396.153Radial†	-15.6	-5.1	-3.7901 µg/L	-3.7901 ppb	14:31:19
2	Ca 317.933Radial†	181.6	-1.8	-1.6610 µg/L	-1.6610 ppb	14:31:40
2	Fe 238.204 Radial†	14.4	-0.5	-4.0234 µg/L	-4.0234 ppb	14:31:40
2	K 766.490 Radial†	165.7	33.4	23.714 µg/L	23.714 ppb	14:31:19
2	Mg 279.077 IEC†	9.4	-2.1	-19.910 µg/L	-19.910 ppb	14:31:40
2	Na 589.592 Radial†	521.5	-32.6	-10.727 µg/L	-10.727 ppb	14:31:19
2	Sr 421.552†	60.7	19.7	0.2040 µg/L	0.2040 ppb	14:31:19
2	Sc 361.383	1964760.3	1964760.3	102.88 %		14:32:48
2	Y 371.029	1347613.8	1347613.8	102.88 %		14:32:48
2	Ag 328.068†	-518.5	60.5	0.4799 µg/L	0.4799 ppb	14:32:53
2	As 188.979†	-1.3	-2.4	-4.7694 µg/L	-4.7694 ppb	14:33:14
2	B 249.677†	344.7	3.6	0.1600 µg/L	0.1600 ppb	14:33:14
2	Ba 233.527†	-16.3	10.1	0.2637 µg/L	0.2637 ppb	14:33:14
2	Be 313.107†	-3298.7	234.0	0.1527 µg/L	0.1527 ppb	14:32:53
2	Cd 226.502†	-133.3	12.6	0.3477 µg/L	0.3477 ppb	14:33:14
2	Co 228.616†	-4.9	4.1	0.2028 µg/L	0.2028 ppb	14:33:14
2	Cr 267.716†	-12.9	39.8	0.8752 µg/L	0.8752 ppb	14:32:53
2	Cu 324.752†	2529.4	-27.4	-0.1918 µg/L	-0.1918 ppb	14:32:53
2	Mn 257.610†	-202.1	47.7	0.1654 µg/L	0.1654 ppb	14:33:14
2	Mo 202.031†	1.2	8.7	0.9303 µg/L	0.9303 ppb	14:33:14
2	Ni 231.604†	305.7	-5.0	-0.2753 µg/L	-0.2753 ppb	14:33:14
2	P 214.914†	24.2	-4.1	-8.8167 µg/L	-8.8167 ppb	14:33:14
2	Pb 220.353†	97.8	-2.1	-0.5597 µg/L	-0.5597 ppb	14:33:14

2	S 181.975 Axial†	15.1	-0.1	-0.5770 µg/L	-0.5770 ppb	14:33:14
2	Sb 206.836†	27.2	-0.5	-0.4890 µg/L	-0.4890 ppb	14:33:14
2	Se 196.026†	14.7	-1.6	-2.3575 µg/L	-2.3575 ppb	14:33:14
2	SiO2†	1242.8	-41.9	-9.0338 µg/L	-9.0338 ppb	14:32:53
2	Si 251.611†	360.2	37.3	3.0664 µg/L	3.0664 ppb	14:33:14
2	Sn 189.927†	0.7	1.6	0.7280 µg/L	0.7280 ppb	14:33:14
2	Ti 334.940†	261.8	138.4	0.3344 µg/L	0.3344 ppb	14:32:53
2	Tl 190.801†	-26.1	-1.1	-1.5598 µg/L	-1.5598 ppb	14:33:14
2	U 409.014†	-15.1	39.0	3.5273 µg/L	3.5273 ppb	14:32:53
2	V 292.402†	-42.6	2.8	0.0426 µg/L	0.0426 ppb	14:32:53
2	Zn 213.857†	491.7	2.4	0.0627 µg/L	0.0627 ppb	14:33:14
3	Sc RADIAL	56329.8	56329.8	103 %		14:31:45
3	Al 396.153Radial†	2.8	12.8	9.5317 µg/L	9.5317 ppb	14:31:45
3	Ca 317.933Radial†	174.0	-10.6	-9.9765 µg/L	-9.9765 ppb	14:32:05
3	Fe 238.204 Radial†	15.1	0.1	1.1942 µg/L	1.1942 ppb	14:32:05
3	K 766.490 Radial†	116.0	-16.0	-11.375 µg/L	-11.375 ppb	14:31:45
3	Mg 279.077 IEC†	9.4	-2.1	-19.858 µg/L	-19.858 ppb	14:32:05
3	Na 589.592 Radial†	536.5	-22.1	-7.2800 µg/L	-7.2800 ppb	14:31:45
3	Sr 421.552†	17.2	-22.9	-0.2369 µg/L	-0.2369 ppb	14:31:45
3	Sc 361.383	1963041.8	1963041.8	102.79 %		14:33:20
3	Y 371.029	1346546.9	1346546.9	102.80 %		14:33:20
3	Ag 328.068†	-542.7	36.6	0.2929 µg/L	0.2929 ppb	14:33:26
3	As 188.979†	1.8	0.6	1.1689 µg/L	1.1689 ppb	14:33:46
3	B 249.677†	343.0	2.2	0.0978 µg/L	0.0978 ppb	14:33:46
3	Ba 233.527†	-18.5	8.0	0.2082 µg/L	0.2082 ppb	14:33:46
3	Be 313.107†	-3230.6	297.4	0.1942 µg/L	0.1942 ppb	14:33:26
3	Cd 226.502†	-130.1	15.5	0.4281 µg/L	0.4281 ppb	14:33:46
3	Co 228.616†	-21.8	-12.4	-0.6104 µg/L	-0.6104 ppb	14:33:46
3	Cr 267.716†	-41.2	12.3	0.2708 µg/L	0.2708 ppb	14:33:26
3	Cu 324.752†	2546.0	-9.1	-0.0637 µg/L	-0.0637 ppb	14:33:26
3	Mn 257.610†	-170.0	78.8	0.2737 µg/L	0.2737 ppb	14:33:46
3	Mo 202.031†	0.3	7.9	0.8413 µg/L	0.8413 ppb	14:33:46
3	Ni 231.604†	307.9	-2.6	-0.1428 µg/L	-0.1428 ppb	14:33:46
3	P 214.914†	31.7	3.2	7.0023 µg/L	7.0023 ppb	14:33:46
3	Pb 220.353†	97.7	-2.1	-0.5651 µg/L	-0.5651 ppb	14:33:46
3	S 181.975 Axial†	14.0	-1.2	-5.1565 µg/L	-5.1565 ppb	14:33:46
3	Sb 206.836†	18.5	-9.0	-8.8540 µg/L	-8.8540 ppb	14:33:46
3	Se 196.026†	7.7	-8.4	-12.762 µg/L	-12.762 ppb	14:33:46
3	SiO2†	1231.2	-52.2	-11.239 µg/L	-11.239 ppb	14:33:26
3	Si 251.611†	338.7	16.6	1.3655 µg/L	1.3655 ppb	14:33:46
3	Sn 189.927†	2.7	3.5	1.5931 µg/L	1.5931 ppb	14:33:46
3	Ti 334.940†	206.7	84.9	0.2057 µg/L	0.2057 ppb	14:33:26
3	Tl 190.801†	-23.5	1.4	1.9821 µg/L	1.9821 ppb	14:33:46
3	U 409.014†	-82.4	-26.6	-2.4037 µg/L	-2.4037 ppb	14:33:26
3	V 292.402†	-5.0	39.3	0.4238 µg/L	0.4238 ppb	14:33:26
3	Zn 213.857†	490.6	1.7	0.0448 µg/L	0.0448 ppb	14:33:46

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1957367.4	102.49 %	0.594			0.58%
Sc RADIAL	56040.0	103 %	0.5			0.45%
Y 371.029	1342184.9	102.46 %	0.649			0.63%
Ag 328.068†	54.1	0.4302 µg/L	0.12036	0.4302 ppb	0.12036	27.98%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.3	3.2105 µg/L	6.68686	3.2105 ppb	6.68686	208.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.4253 µg/L	3.80624	-0.4253 ppb	3.80624	895.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	3.2	0.1426 µg/L	0.03915	0.1426 ppb	0.03915	27.45%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.0	0.2618 µg/L	0.05266	0.2618 ppb	0.05266	20.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	204.0	0.1331 µg/L	0.07275	0.1331 ppb	0.07275	54.64%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.1	-1.0692 µg/L	9.21745	-1.0692 ppb	9.21745	862.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.4	0.2858 µg/L	0.18136	0.2858 ppb	0.18136	63.46%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.7	-0.1327 µg/L	0.42483	-0.1327 ppb	0.42483	320.06%

QC value within limits	for Co 228.616	Recovery = Not calculated			
Cr 267.716†	17.7	0.3886 µg/L	0.43975	0.3886 ppb	0.43975 113.17%
QC value within limits	for Cr 267.716	Recovery = Not calculated			
Cu 324.752†	-16.9	-0.1187 µg/L	0.06593	-0.1187 ppb	0.06593 55.55%
QC value within limits	for Cu 324.752	Recovery = Not calculated			
Fe 238.204 Radial†	-0.3	-2.5979 µg/L	3.31761	-2.5979 ppb	3.31761 127.70%
QC value within limits	for Fe 238.204 Radial	Recovery = Not calculated			
K 766.490 Radial†	-1.9	-1.3625 µg/L	21.86298	-1.3625 ppb	21.86298 >999.9%
QC value within limits	for K 766.490 Radial	Recovery = Not calculated			
Mg 279.077 IEC†	-0.1	-0.8244 µg/L	33.01203	-0.8244 ppb	33.01203 >999.9%
QC value within limits	for Mg 279.077 IEC	Recovery = Not calculated			
Mn 257.610†	50.6	0.1749 µg/L	0.09441	0.1749 ppb	0.09441 53.98%
QC value within limits	for Mn 257.610	Recovery = Not calculated			
Mo 202.031†	8.0	0.8505 µg/L	0.07561	0.8505 ppb	0.07561 8.89%
QC value within limits	for Mo 202.031	Recovery = Not calculated			
Na 589.592 Radial†	-12.0	-3.9548 µg/L	8.91231	-3.9548 ppb	8.91231 225.35%
QC value within limits	for Na 589.592 Radial	Recovery = Not calculated			
Ni 231.604†	-4.7	-0.2590 µg/L	0.10906	-0.2590 ppb	0.10906 42.10%
QC value within limits	for Ni 231.604	Recovery = Not calculated			
P 214.914†	1.1	2.3865 µg/L	9.75229	2.3865 ppb	9.75229 408.64%
QC value within limits	for P 214.914	Recovery = Not calculated			
Pb 220.353†	-4.8	-1.2761 µg/L	1.23617	-1.2761 ppb	1.23617 96.87%
QC value within limits	for Pb 220.353	Recovery = Not calculated			
S 181.975 Axial†	0.0	0.1210 µg/L	5.65896	0.1210 ppb	5.65896 >999.9%
QC value within limits	for S 181.975 Axial	Recovery = Not calculated			
Sb 206.836†	-4.7	-4.6191 µg/L	4.18349	-4.6191 ppb	4.18349 90.57%
QC value within limits	for Sb 206.836	Recovery = Not calculated			
Se 196.026†	-1.5	-2.2678 µg/L	10.53912	-2.2678 ppb	10.53912 464.73%
QC value within limits	for Se 196.026	Recovery = Not calculated			
SiO2†	-34.9	-7.5220 µg/L	4.66014	-7.5220 ppb	4.66014 61.95%
QC value within limits	for SiO2	Recovery = Not calculated			
Si 251.611†	24.8	2.0398 µg/L	0.90350	2.0398 ppb	0.90350 44.29%
QC value within limits	for Si 251.611	Recovery = Not calculated			
Sn 189.927†	2.3	1.0747 µg/L	0.45737	1.0747 ppb	0.45737 42.56%
QC value within limits	for Sn 189.927	Recovery = Not calculated			
Sr 421.552†	4.4	0.0455 µg/L	0.24518	0.0455 ppb	0.24518 539.15%
QC value within limits	for Sr 421.552	Recovery = Not calculated			
Ti 334.940†	84.3	0.2028 µg/L	0.13307	0.2028 ppb	0.13307 65.62%
QC value within limits	for Ti 334.940	Recovery = Not calculated			
Tl 190.801†	1.0	1.4645 µg/L	2.80164	1.4645 ppb	2.80164 191.30%
QC value within limits	for Tl 190.801	Recovery = Not calculated			
U 409.014†	11.2	1.0153 µg/L	3.06778	1.0153 ppb	3.06778 302.16%
QC value within limits	for U 409.014	Recovery = Not calculated			
V 292.402†	11.4	0.1299 µg/L	0.26143	0.1299 ppb	0.26143 201.23%
QC value within limits	for V 292.402	Recovery = Not calculated			
Zn 213.857†	0.9	0.0250 µg/L	0.05061	0.0250 ppb	0.05061 202.72%
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: 2/11/2010 14:33:56

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	54747.4	54747.4	100 %		14:34:28
1	Al 396.153Radial†	273.1	282.4	210.27 µg/L	210.27 ppb	14:34:28
1	Ca 317.933Radial†	397.1	216.7	204.01 µg/L	204.01 ppb	14:34:49
1	Fe 238.204 Radial†	30.8	16.2	137.25 µg/L	137.25 ppb	14:34:49
1	K 766.490 Radial†	363.7	234.1	166.40 µg/L	166.40 ppb	14:34:28
1	Mg 279.077 IEC†	45.5	34.1	317.43 µg/L	317.43 ppb	14:34:49
1	Na 589.592 Radial†	1424.0	877.6	288.92 µg/L	288.92 ppb	14:34:28
1	Sr 421.552†	486.3	445.2	4.6152 µg/L	4.6152 ppb	14:34:28
1	Sc 361.383	1940350.4	1940350.4	101.60 %		14:35:51
1	Y 371.029	1331501.6	1331501.6	101.65 %		14:35:51
1	Ag 328.068†	65.6	629.1	5.0332 µg/L	5.0332 ppb	14:35:56
1	As 188.979†	15.0	13.6	26.557 µg/L	26.557 ppb	14:36:17
1	B 249.677†	1481.9	1127.1	49.194 µg/L	49.194 ppb	14:35:56
1	Ba 233.527†	167.0	190.4	4.9664 µg/L	4.9664 ppb	14:36:17
1	Be 313.107†	4123.9	7499.6	4.8957 µg/L	4.8957 ppb	14:35:56
1	Cd 226.502†	43.2	184.7	5.0837 µg/L	5.0837 ppb	14:36:17
1	Co 228.616†	90.6	98.0	4.8213 µg/L	4.8213 ppb	14:36:17
1	Cr 267.716†	181.4	230.9	5.0824 µg/L	5.0824 ppb	14:36:17
1	Cu 324.752†	4005.0	1456.0	10.189 µg/L	10.189 ppb	14:35:56
1	Mn 257.610†	2747.7	2948.6	10.216 µg/L	10.216 ppb	14:35:56
1	Mo 202.031†	89.7	95.8	10.232 µg/L	10.232 ppb	14:36:17
1	Ni 231.604†	390.7	82.4	4.5019 µg/L	4.5019 ppb	14:36:17
1	P 214.914†	110.5	81.1	173.12 µg/L	173.12 ppb	14:36:17
1	Pb 220.353†	141.4	42.0	11.169 µg/L	11.169 ppb	14:36:17
1	S 181.975 Axial†	37.1	21.7	95.029 µg/L	95.029 ppb	14:36:17
1	Sb 206.836†	32.7	5.2	5.2344 µg/L	5.2344 ppb	14:36:17
1	Se 196.026†	25.6	9.4	14.367 µg/L	14.367 ppb	14:36:17
1	SiO2†	2267.0	981.4	211.34 µg/L	211.34 ppb	14:35:56
1	Si 251.611†	1501.7	1165.2	95.786 µg/L	95.786 ppb	14:36:17
1	Sn 189.927†	16.7	17.3	7.9752 µg/L	7.9752 ppb	14:36:17
1	Ti 334.940†	2212.8	2061.9	4.9379 µg/L	4.9379 ppb	14:35:56
1	Tl 190.801†	-5.1	19.2	27.011 µg/L	27.011 ppb	14:36:17
1	U 409.014†	558.4	603.3	54.587 µg/L	54.587 ppb	14:35:56
1	V 292.402†	425.6	463.2	5.0996 µg/L	5.0996 ppb	14:35:56
1	Zn 213.857†	892.7	403.1	10.006 µg/L	10.006 ppb	14:36:17
2	Sc RADIAL	54832.7	54832.7	100 %		14:34:54
2	Al 396.153Radial†	256.5	265.4	197.60 µg/L	197.60 ppb	14:34:54
2	Ca 317.933Radial†	389.1	208.2	196.00 µg/L	196.00 ppb	14:35:15
2	Fe 238.204 Radial†	27.3	12.7	107.86 µg/L	107.86 ppb	14:35:15
2	K 766.490 Radial†	367.8	237.7	168.93 µg/L	168.93 ppb	14:34:54
2	Mg 279.077 IEC†	46.2	34.7	322.64 µg/L	322.64 ppb	14:35:15
2	Na 589.592 Radial†	1434.3	885.7	291.57 µg/L	291.57 ppb	14:34:54
2	Sr 421.552†	510.9	468.9	4.8611 µg/L	4.8611 ppb	14:34:54
2	Sc 361.383	1945380.3	1945380.3	101.86 %		14:36:23
2	Y 371.029	1334631.9	1334631.9	101.89 %		14:36:23
2	Ag 328.068†	83.1	646.1	5.1667 µg/L	5.1667 ppb	14:36:29
2	As 188.979†	13.7	12.3	23.962 µg/L	23.962 ppb	14:36:49
2	B 249.677†	1439.6	1081.8	47.230 µg/L	47.230 ppb	14:36:29
2	Ba 233.527†	163.8	186.8	4.8734 µg/L	4.8734 ppb	14:36:49
2	Be 313.107†	4161.3	7525.8	4.9129 µg/L	4.9129 ppb	14:36:29
2	Cd 226.502†	40.3	181.7	5.0056 µg/L	5.0056 ppb	14:36:49
2	Co 228.616†	95.9	103.0	5.0691 µg/L	5.0691 ppb	14:36:49
2	Cr 267.716†	184.6	233.6	5.1411 µg/L	5.1411 ppb	14:36:49
2	Cu 324.752†	3976.5	1417.8	9.9186 µg/L	9.9186 ppb	14:36:29
2	Mn 257.610†	2754.8	2948.6	10.212 µg/L	10.212 ppb	14:36:29
2	Mo 202.031†	93.7	99.6	10.631 µg/L	10.631 ppb	14:36:49
2	Ni 231.604†	392.3	82.9	4.5279 µg/L	4.5279 ppb	14:36:49
2	P 214.914†	107.2	77.6	165.67 µg/L	165.67 ppb	14:36:49
2	Pb 220.353†	143.7	43.9	11.669 µg/L	11.669 ppb	14:36:49

2	S 181.975 Axial†	37.9	22.4	98.282 µg/L	98.282 ppb	14:36:49
2	Sb 206.836†	37.0	9.4	9.3125 µg/L	9.3125 ppb	14:36:49
2	Se 196.026†	40.5	23.9	36.431 µg/L	36.431 ppb	14:36:49
2	SiO2†	2237.3	946.4	203.81 µg/L	203.81 ppb	14:36:29
2	Si 251.611†	1509.6	1169.2	96.111 µg/L	96.111 ppb	14:36:49
2	Sn 189.927†	28.9	29.3	13.482 µg/L	13.482 ppb	14:36:49
2	Ti 334.940†	2191.1	2034.9	4.8725 µg/L	4.8725 ppb	14:36:29
2	Tl 190.801†	-12.7	11.8	16.671 µg/L	16.671 ppb	14:36:49
2	U 409.014†	565.8	609.0	55.113 µg/L	55.113 ppb	14:36:29
2	V 292.402†	429.8	466.2	5.1319 µg/L	5.1319 ppb	14:36:29
2	Zn 213.857†	888.5	396.7	9.8472 µg/L	9.8472 ppb	14:36:49
3	Sc RADIAL	54719.3	54719.3	100 %		14:35:20
3	Al 396.153Radial†	252.3	261.8	194.95 µg/L	194.95 ppb	14:35:20
3	Ca 317.933Radial†	392.4	212.2	199.82 µg/L	199.82 ppb	14:35:41
3	Fe 238.204 Radial†	27.7	13.1	111.51 µg/L	111.51 ppb	14:35:41
3	K 766.490 Radial†	437.0	307.5	218.53 µg/L	218.53 ppb	14:35:20
3	Mg 279.077 IEC†	40.7	29.3	272.95 µg/L	272.95 ppb	14:35:41
3	Na 589.592 Radial†	1460.8	915.0	301.22 µg/L	301.22 ppb	14:35:20
3	Sr 421.552†	523.6	482.7	5.0036 µg/L	5.0036 ppb	14:35:20
3	Sc 361.383	1939953.9	1939953.9	101.58 %		14:36:55
3	Y 371.029	1330294.0	1330294.0	101.56 %		14:36:55
3	Ag 328.068†	50.3	614.0	4.9107 µg/L	4.9107 ppb	14:37:01
3	As 188.979†	19.6	18.1	35.385 µg/L	35.385 ppb	14:37:21
3	B 249.677†	1372.3	1019.5	44.505 µg/L	44.505 ppb	14:37:01
3	Ba 233.527†	145.4	169.2	4.4133 µg/L	4.4133 ppb	14:37:21
3	Be 313.107†	3478.0	6864.4	4.4811 µg/L	4.4811 ppb	14:37:01
3	Cd 226.502†	11.9	153.8	4.2359 µg/L	4.2359 ppb	14:37:21
3	Co 228.616†	75.0	82.7	4.0666 µg/L	4.0666 ppb	14:37:21
3	Cr 267.716†	166.3	216.1	4.7559 µg/L	4.7559 ppb	14:37:21
3	Cu 324.752†	3902.1	1355.5	9.4837 µg/L	9.4837 ppb	14:37:01
3	Mn 257.610†	2548.1	2752.7	9.5360 µg/L	9.5360 ppb	14:37:01
3	Mo 202.031†	79.0	85.3	9.1080 µg/L	9.1080 ppb	14:37:21
3	Ni 231.604†	393.4	85.1	4.6522 µg/L	4.6522 ppb	14:37:21
3	P 214.914†	100.3	71.1	151.77 µg/L	151.77 ppb	14:37:21
3	Pb 220.353†	126.2	27.0	7.1738 µg/L	7.1738 ppb	14:37:21
3	S 181.975 Axial†	34.7	19.3	84.720 µg/L	84.720 ppb	14:37:21
3	Sb 206.836†	29.4	2.0	2.0741 µg/L	2.0741 ppb	14:37:21
3	Se 196.026†	39.6	23.1	35.285 µg/L	35.285 ppb	14:37:21
3	SiO2†	2171.3	887.6	191.15 µg/L	191.15 ppb	14:37:01
3	Si 251.611†	1361.3	1027.3	84.447 µg/L	84.447 ppb	14:37:21
3	Sn 189.927†	21.9	22.4	10.338 µg/L	10.338 ppb	14:37:21
3	Ti 334.940†	2058.9	1910.8	4.5779 µg/L	4.5779 ppb	14:37:01
3	Tl 190.801†	-4.2	20.2	28.271 µg/L	28.271 ppb	14:37:21
3	U 409.014†	515.1	560.7	50.740 µg/L	50.740 ppb	14:37:01
3	V 292.402†	407.9	445.8	4.8980 µg/L	4.8980 ppb	14:37:01
3	Zn 213.857†	822.6	334.3	8.2901 µg/L	8.2901 ppb	14:37:21

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941894.9	101.68 %	0.158			0.16%
Sc RADIAL	54766.5	100 %	0.1			0.11%
Y 371.029	1332142.5	101.70 %	0.171			0.17%
Ag 328.068†	629.8	5.0369 µg/L	0.12806	5.0369 ppb	0.12806	2.54%
QC value within limits for Ag 328.068 Recovery = 100.74%						
Al 396.153Radial†	269.9	200.94 µg/L	8.187	200.94 ppb	8.187	4.07%
QC value within limits for Al 396.153Radial Recovery = 100.47%						
As 188.979†	14.7	28.634 µg/L	5.9881	28.634 ppb	5.9881	20.91%
QC value within limits for As 188.979 Recovery = 95.45%						
B 249.677†	1076.2	46.976 µg/L	2.3545	46.976 ppb	2.3545	5.01%
QC value within limits for B 249.677 Recovery = 93.95%						
Ba 233.527†	182.1	4.7510 µg/L	0.29615	4.7510 ppb	0.29615	6.23%
QC value within limits for Ba 233.527 Recovery = 95.02%						
Be 313.107†	7296.6	4.7633 µg/L	0.24448	4.7633 ppb	0.24448	5.13%
QC value within limits for Be 313.107 Recovery = 95.27%						
Ca 317.933Radial†	212.4	199.94 µg/L	4.009	199.94 ppb	4.009	2.00%
QC value within limits for Ca 317.933Radial Recovery = 99.97%						
Cd 226.502†	173.4	4.7751 µg/L	0.46856	4.7751 ppb	0.46856	9.81%
QC value within limits for Cd 226.502 Recovery = 95.50%						
Co 228.616†	94.6	4.6523 µg/L	0.52218	4.6523 ppb	0.52218	11.22%

QC value within limits for Co 228.616	Recovery = 93.05%			
Cr 267.716†	226.9	4.9931 µg/L	0.20751	4.16%
QC value within limits for Cr 267.716	Recovery = 99.86%			
Cu 324.752†	1409.7	9.8638 µg/L	0.35593	3.61%
QC value within limits for Cu 324.752	Recovery = 98.64%			
Fe 238.204 Radial†	14.0	118.87 µg/L	16.021	13.48%
QC value within limits for Fe 238.204 Radial	Recovery = 118.87%			
K 766.490 Radial†	259.7	184.62 µg/L	29.396	15.92%
QC value within limits for K 766.490 Radial	Recovery = 123.08%			
Mg 279.077 IEC†	32.7	304.34 µg/L	27.307	8.97%
QC value within limits for Mg 279.077 IEC	Recovery = 101.45%			
Mn 257.610†	2883.3	9.9880 µg/L	0.39151	3.92%
QC value within limits for Mn 257.610	Recovery = 99.88%			
Mo 202.031†	93.6	9.9904 µg/L	0.78979	7.91%
QC value within limits for Mo 202.031	Recovery = 99.90%			
Na 589.592 Radial†	892.8	293.90 µg/L	6.477	2.20%
QC value within limits for Na 589.592 Radial	Recovery = 97.97%			
Ni 231.604†	83.5	4.5606 µg/L	0.08032	1.76%
QC value within limits for Ni 231.604	Recovery = 91.21%			
P 214.914†	76.6	163.52 µg/L	10.837	6.63%
QC value within limits for P 214.914	Recovery = 109.01%			
Pb 220.353†	37.6	10.004 µg/L	2.4639	24.63%
QC value within limits for Pb 220.353	Recovery = 100.04%			
S 181.975 Axial†	21.2	92.677 µg/L	7.0801	7.64%
QC value within limits for S 181.975 Axial	Recovery = 92.68%			
Sb 206.836†	5.5	5.5403 µg/L	3.62890	65.50%
QC value less than the lower limit for Sb 206.836	Recovery = 55.40%			
Se 196.026†	18.8	28.694 µg/L	12.4212	43.29%
QC value within limits for Se 196.026	Recovery = 95.65%			
SiO2†	938.5	202.10 µg/L	10.205	5.05%
QC value within limits for SiO2	Recovery = 94.88%			
Si 251.611†	1120.6	92.115 µg/L	6.6423	7.21%
QC value within limits for Si 251.611	Recovery = 92.11%			
Sn 189.927†	23.0	10.598 µg/L	2.7624	26.06%
QC value within limits for Sn 189.927	Recovery = 105.98%			
Sr 421.552†	465.6	4.8266 µg/L	0.19650	4.07%
QC value within limits for Sr 421.552	Recovery = 96.53%			
Ti 334.940†	2002.5	4.7961 µg/L	0.19174	4.00%
QC value within limits for Ti 334.940	Recovery = 95.92%			
Tl 190.801†	17.1	23.984 µg/L	6.3650	26.54%
QC value within limits for Tl 190.801	Recovery = 119.92%			
U 409.014†	591.0	53.480 µg/L	2.3877	4.46%
QC value within limits for U 409.014	Recovery = 106.96%			
V 292.402†	458.4	5.0431 µg/L	0.12672	2.51%
QC value within limits for V 292.402	Recovery = 100.86%			
Zn 213.857†	378.0	9.3810 µg/L	0.94809	10.11%
QC value within limits for Zn 213.857	Recovery = 93.81%			
QC Failed. Continue with analysis.				



Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/11/2010 14:37:31

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	54929.8	54929.8	101 %		14:38:12
1	Al 396.153Radial†	662864.4	658585.8	490860 µg/L	490860 ppb	14:38:07
1	Ca 317.933Radial†	501017.0	497596.3	468520 µg/L	468520 ppb	14:38:07
1	Fe 238.204 Radial†	21302.2	21149.9	179260 µg/L	179260 ppb	14:38:12
1	K 766.490 Radial†	133.6	4.3	3.0615 µg/L	3.0615 ppb	14:38:12
1	Mg 279.077 IEC†	50419.1	50081.6	465880 µg/L	465880 ppb	14:38:12
1	Na 589.592 Radial†	588.4	42.7	14.053 µg/L	14.053 ppb	14:38:12
1	Sr 421.552†	369.2	327.3	3.3927 µg/L	3.3927 ppb	14:38:12
1	Sc 361.383	1857257.4	1857257.4	97.247 %		14:38:45
1	Y 371.029	1267408.3	1267408.3	96.755 %		14:38:45
1	Ag 328.068†	-2882.1	-2399.2	-7.8752 µg/L	-7.8752 ppb	14:38:51
1	As 188.979†	-10.9	-12.4	-38.129 µg/L	-38.129 ppb	14:39:11
1	B 249.677†	826.3	518.2	-70.891 µg/L	-70.891 ppb	14:38:51
1	Ba 233.527†	265.1	298.7	7.7406 µg/L	7.7406 ppb	14:39:11
1	Be 313.107†	-4111.4	-787.4	-0.5240 µg/L	-0.5240 ppb	14:38:51
1	Cd 226.502†	352.3	504.4	-6.3482 µg/L	-6.3482 ppb	14:39:11
1	Co 228.616†	33.3	43.1	2.0584 µg/L	2.0584 ppb	14:39:11
1	Cr 267.716†	-59.0	-8.3	-0.1945 µg/L	-0.1945 ppb	14:39:11
1	Cu 324.752†	-1400.3	-3926.0	-2.5072 µg/L	-2.5072 ppb	14:38:51
1	Mn 257.610†	37.6	282.8	6.1777 µg/L	6.1777 ppb	14:38:51
1	Mo 202.031†	-107.0	-102.5	-4.1257 µg/L	-4.1257 ppb	14:39:11
1	Ni 231.604†	157.1	-140.7	-5.3633 µg/L	-5.3633 ppb	14:39:11
1	P 214.914†	101.4	76.6	162.80 µg/L	162.80 ppb	14:39:11
1	Pb 220.353†	54.2	-41.5	9.1341 µg/L	9.1341 ppb	14:39:11
1	S 181.975 Axial†	32.3	18.4	80.756 µg/L	80.756 ppb	14:39:11
1	Sb 206.836†	58.1	32.8	-8.6501 µg/L	-8.6501 ppb	14:39:11
1	Se 196.026†	34.1	19.3	-25.969 µg/L	-25.969 ppb	14:39:11
1	SiO2†	1033.7	-187.0	-40.276 µg/L	-40.276 ppb	14:39:11
1	Si 251.611†	428.1	127.4	10.470 µg/L	10.470 ppb	14:39:11
1	Sn 189.927†	-61.0	-61.9	5.0665 µg/L	5.0665 ppb	14:39:11
1	Ti 334.940†	10534.2	10716.3	-3.5463 µg/L	-3.5463 ppb	14:38:51
1	Tl 190.801†	-30.9	-7.5	8.6675 µg/L	8.6675 ppb	14:39:11
1	U 409.014†	-29.2	23.6	-51.357 µg/L	-51.357 ppb	14:38:51
1	V 292.402†	-1857.1	-1865.5	1.1351 µg/L	1.1351 ppb	14:38:51
1	Zn 213.857†	1452.2	1017.8	-9.4487 µg/L	-9.4487 ppb	14:39:11
2	Sc RADIAL	55009.9	55009.9	101 %		14:38:23
2	Al 396.153Radial†	661057.1	655833.6	488810 µg/L	488810 ppb	14:38:18
2	Ca 317.933Radial†	498837.3	494708.8	465800 µg/L	465800 ppb	14:38:18
2	Fe 238.204 Radial†	21470.3	21285.8	180410 µg/L	180410 ppb	14:38:23
2	K 766.490 Radial†	106.0	-23.2	-16.506 µg/L	-16.506 ppb	14:38:23
2	Mg 279.077 IEC†	50738.3	50325.3	468150 µg/L	468150 ppb	14:38:23
2	Na 589.592 Radial†	648.0	101.0	33.250 µg/L	33.250 ppb	14:38:23
2	Sr 421.552†	361.1	318.7	3.3032 µg/L	3.3032 ppb	14:38:23
2	Sc 361.383	1846098.6	1846098.6	96.662 %		14:39:17
2	Y 371.029	1260367.6	1260367.6	96.217 %		14:39:17
2	Ag 328.068†	-2932.2	-2468.9	-8.3594 µg/L	-8.3594 ppb	14:39:23
2	As 188.979†	-14.6	-16.3	-45.537 µg/L	-45.537 ppb	14:39:43
2	B 249.677†	858.5	556.6	-69.813 µg/L	-69.813 ppb	14:39:23
2	Ba 233.527†	262.3	297.4	7.7059 µg/L	7.7059 ppb	14:39:43
2	Be 313.107†	-4105.1	-806.4	-0.5367 µg/L	-0.5367 ppb	14:39:23
2	Cd 226.502†	337.6	491.4	-6.8376 µg/L	-6.8376 ppb	14:39:43
2	Co 228.616†	17.7	27.1	1.2707 µg/L	1.2707 ppb	14:39:43
2	Cr 267.716†	-53.0	-2.4	-0.0661 µg/L	-0.0661 ppb	14:39:43
2	Cu 324.752†	-1461.5	-3998.0	-2.8500 µg/L	-2.8500 ppb	14:39:23
2	Mn 257.610†	43.7	289.4	6.2629 µg/L	6.2629 ppb	14:39:23
2	Mo 202.031†	-104.0	-100.0	-3.8203 µg/L	-3.8203 ppb	14:39:43
2	Ni 231.604†	142.4	-154.9	-6.1246 µg/L	-6.1246 ppb	14:39:43
2	P 214.914†	112.7	89.0	187.84 µg/L	187.84 ppb	14:39:43
2	Pb 220.353†	58.0	-37.2	10.116 µg/L	10.116 ppb	14:39:43

2	S 181.975 Axial†	36.2	22.6	98.941 µg/L	98.941 ppb	14:39:43
2	Sb 206.836†	53.9	28.8	-12.353 µg/L	-12.353 ppb	14:39:43
2	Se 196.026†	26.7	11.8	-35.549 µg/L	-35.549 ppb	14:39:43
2	SiO2†	1052.3	-161.4	-34.761 µg/L	-34.761 ppb	14:39:43
2	Si 251.611†	458.0	160.9	13.230 µg/L	13.230 ppb	14:39:43
2	Sn 189.927†	-63.6	-65.0	3.8069 µg/L	3.8069 ppb	14:39:43
2	Ti 334.940†	10748.6	11003.6	-3.0781 µg/L	-3.0781 ppb	14:39:23
2	Tl 190.801†	-35.3	-12.3	2.2973 µg/L	2.2973 ppb	14:39:43
2	U 409.014†	-80.2	-29.4	-56.150 µg/L	-56.150 ppb	14:39:23
2	V 292.402†	-1894.8	-1916.0	0.7299 µg/L	0.7299 ppb	14:39:23
2	Zn 213.857†	1462.8	1037.8	-9.1272 µg/L	-9.1272 ppb	14:39:43
3	Sc RADIAL	54631.5	54631.5	100 %		14:38:35
3	Al 396.153Radial†	667869.4	667182.1	497270 µg/L	497270 ppb	14:38:29
3	Ca 317.933Radial†	503599.4	502894.4	473510 µg/L	473510 ppb	14:38:29
3	Fe 238.204 Radial†	21467.0	21430.1	181630 µg/L	181630 ppb	14:38:35
3	K 766.490 Radial†	96.7	-31.8	-22.617 µg/L	-22.617 ppb	14:38:35
3	Mg 279.077 IEC†	50895.3	50830.8	472850 µg/L	472850 ppb	14:38:35
3	Na 589.592 Radial†	627.0	84.4	27.800 µg/L	27.800 ppb	14:38:35
3	Sr 421.552†	372.9	333.0	3.4514 µg/L	3.4514 ppb	14:38:35
3	Sc 361.383	1825493.4	1825493.4	95.584 %		14:39:49
3	Y 371.029	1244094.0	1244094.0	94.975 %		14:39:49
3	Ag 328.068†	-2843.3	-2410.2	-7.8207 µg/L	-7.8207 ppb	14:39:55
3	As 188.979†	-21.3	-23.4	-59.893 µg/L	-59.893 ppb	14:40:16
3	B 249.677†	774.3	478.6	-73.863 µg/L	-73.863 ppb	14:39:55
3	Ba 233.527†	257.2	295.1	7.6465 µg/L	7.6465 ppb	14:40:16
3	Be 313.107†	-4046.5	-793.0	-0.5281 µg/L	-0.5281 ppb	14:39:55
3	Cd 226.502†	377.7	537.3	-5.7094 µg/L	-5.7094 ppb	14:40:16
3	Co 228.616†	37.6	48.2	2.3043 µg/L	2.3043 ppb	14:40:16
3	Cr 267.716†	-81.4	-32.7	-0.7334 µg/L	-0.7334 ppb	14:40:16
3	Cu 324.752†	-1475.8	-4030.1	-2.9042 µg/L	-2.9042 ppb	14:39:55
3	Mn 257.610†	50.9	297.4	6.2652 µg/L	6.2652 ppb	14:39:55
3	Mo 202.031†	-108.7	-106.2	-4.4310 µg/L	-4.4310 ppb	14:40:16
3	Ni 231.604†	152.6	-142.5	-5.4329 µg/L	-5.4329 ppb	14:40:16
3	P 214.914†	105.4	82.6	175.78 µg/L	175.78 ppb	14:40:16
3	Pb 220.353†	72.0	-21.8	14.642 µg/L	14.642 ppb	14:40:16
3	S 181.975 Axial†	29.0	15.5	67.783 µg/L	67.783 ppb	14:40:16
3	Sb 206.836†	45.6	20.7	-20.949 µg/L	-20.949 ppb	14:40:16
3	Se 196.026†	33.1	18.8	-27.759 µg/L	-27.759 ppb	14:40:16
3	SiO2†	1033.4	-168.9	-36.378 µg/L	-36.378 ppb	14:40:16
3	Si 251.611†	441.5	149.0	12.252 µg/L	12.252 ppb	14:40:16
3	Sn 189.927†	-53.7	-55.3	8.6518 µg/L	8.6518 ppb	14:40:16
3	Ti 334.940†	10848.2	11233.3	-2.7738 µg/L	-2.7738 ppb	14:39:55
3	Tl 190.801†	-26.7	-3.6	14.470 µg/L	14.470 ppb	14:40:16
3	U 409.014†	-83.2	-33.5	-57.162 µg/L	-57.162 ppb	14:39:55
3	V 292.402†	-1928.3	-1973.2	0.2572 µg/L	0.2572 ppb	14:39:55
3	Zn 213.857†	1454.4	1046.1	-9.2482 µg/L	-9.2482 ppb	14:40:16

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1842949.8	96.498 %	0.8438			0.87%
Sc RADIAL	54857.1	101 %	0.4			0.36%
Y 371.029	1257290.0	95.982 %	0.9129			0.95%
Ag 328.068†	-2426.1	-8.0184 µg/L	0.29656	-8.0184 ppb	0.29656	3.70%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	660533.8	492320 µg/L	4412.2	492320 ppb	4412.2	0.90%
QC value within limits for Al 396.153Radial Recovery = 98.46%						
As 188.979†	-17.4	-47.853 µg/L	11.0657	-47.853 ppb	11.0657	23.12%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	517.8	-71.522 µg/L	2.0977	-71.522 ppb	2.0977	2.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	297.0	7.6977 µg/L	0.04758	7.6977 ppb	0.04758	0.62%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-795.6	-0.5296 µg/L	0.00649	-0.5296 ppb	0.00649	1.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	498399.8	469270 µg/L	3908.9	469270 ppb	3908.9	0.83%
QC value within limits for Ca 317.933Radial Recovery = 93.85%						
Cd 226.502†	511.0	-6.2984 µg/L	0.56575	-6.2984 ppb	0.56575	8.98%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	39.5	1.8778 µg/L	0.53996	1.8778 ppb	0.53996	28.75%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-14.5 -0.3313 µg/L	0.35406 -0.3313 ppb	0.35406 106.86%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-3984.7 -2.7538 µg/L	0.21524 -2.7538 ppb	0.21524 7.82%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	21288.6 180430 µg/L	1187.5 180430 ppb	1187.5 0.66%
QC value within limits for Fe 238.204 Radial	Recovery = 90.22%		
K 766.490 Radial†	-16.9 -12.020 µg/L	13.4139 -12.020 ppb	13.4139 111.59%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	50412.6 468960 µg/L	3555.4 468960 ppb	3555.4 0.76%
QC value within limits for Mg 279.077 IEC	Recovery = 93.79%		
Mn 257.610†	289.9 6.2353 µg/L	0.04986 6.2353 ppb	0.04986 0.80%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	-102.9 -4.1257 µg/L	0.30534 -4.1257 ppb	0.30534 7.40%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	76.0 25.034 µg/L	9.8929 25.034 ppb	9.8929 39.52%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-146.0 -5.6403 µg/L	0.42090 -5.6403 ppb	0.42090 7.46%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	82.7 175.47 µg/L	12.518 175.47 ppb	12.518 7.13%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-33.5 11.297 µg/L	2.9376 11.297 ppb	2.9376 26.00%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	18.8 82.493 µg/L	15.6511 82.493 ppb	15.6511 18.97%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	27.4 -13.984 µg/L	6.3094 -13.984 ppb	6.3094 45.12%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	16.6 -29.759 µg/L	5.0935 -29.759 ppb	5.0935 17.12%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-172.5 -37.139 µg/L	2.8350 -37.139 ppb	2.8350 7.63%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	145.8 11.984 µg/L	1.3994 11.984 ppb	1.3994 11.68%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-60.7 5.8417 µg/L	2.51374 5.8417 ppb	2.51374 43.03%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	326.3 3.3825 µg/L	0.07464 3.3825 ppb	0.07464 2.21%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	10984.4 -3.1328 µg/L	0.38914 -3.1328 ppb	0.38914 12.42%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-7.8 8.4783 µg/L	6.08871 8.4783 ppb	6.08871 71.81%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-13.1 -54.890 µg/L	3.1009 -54.890 ppb	3.1009 5.65%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-1918.2 0.7074 µg/L	0.43934 0.7074 ppb	0.43934 62.11%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	1033.9 -9.2747 µg/L	0.16235 -9.2747 ppb	0.16235 1.75%
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: 2/11/2010 14:40:25

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	54743.7	54743.7	100 %		14:41:04
1	Al 396.153Radial†	662601.8	660562.7	492330 µg/L	492330 ppb	14:40:59
1	Ca 317.933Radial†	498259.5	496539.4	467520 µg/L	467520 ppb	14:40:59
1	Fe 238.204 Radial†	21341.6	21261.1	180210 µg/L	180210 ppb	14:41:04
1	K 766.490 Radial†	6958.5	6808.5	4839.5 µg/L	4839.5 ppb	14:41:04
1	Mg 279.077 IEC†	50755.9	50587.7	470600 µg/L	470600 ppb	14:41:04
1	Na 589.592 Radial†	15455.3	14865.6	4893.8 µg/L	4893.8 ppb	14:41:04
1	Sr 421.552†	46875.8	46691.2	484.01 µg/L	484.01 ppb	14:41:04
1	Sc 361.383	1846856.3	1846856.3	96.702 %		14:41:38
1	Y 371.029	1258300.6	1258300.6	96.059 %		14:41:38
1	Ag 328.068†	27332.2	28828.8	243.20 µg/L	243.20 ppb	14:41:44
1	As 188.979†	237.2	244.2	462.48 µg/L	462.48 ppb	14:42:04
1	B 249.677†	11716.6	11784.7	421.73 µg/L	421.73 ppb	14:41:44
1	Ba 233.527†	17712.8	18342.8	478.47 µg/L	478.47 ppb	14:41:44
1	Be 313.107†	339671.1	354695.4	231.45 µg/L	231.45 ppb	14:41:38
1	Cd 226.502†	15868.9	16552.3	436.70 µg/L	436.70 ppb	14:41:44
1	Co 228.616†	8171.6	8459.1	415.69 µg/L	415.69 ppb	14:42:04
1	Cr 267.716†	20395.5	21143.4	465.37 µg/L	465.37 ppb	14:41:44
1	Cu 324.752†	70107.6	70012.4	514.10 µg/L	514.10 ppb	14:41:44
1	Mn 257.610†	126842.6	131412.5	460.20 µg/L	460.20 ppb	14:41:44
1	Mo 202.031†	4309.3	4463.8	483.23 µg/L	483.23 ppb	14:42:04
1	Ni 231.604†	7535.7	7490.5	411.39 µg/L	411.39 ppb	14:42:04
1	P 214.914†	1206.8	1220.3	2570.8 µg/L	2570.8 ppb	14:42:04
1	Pb 220.353†	1703.5	1664.4	464.39 µg/L	464.39 ppb	14:42:04
1	S 181.975 Axial†	587.6	592.8	2597.2 µg/L	2597.2 ppb	14:42:04
1	Sb 206.836†	550.1	541.9	495.21 µg/L	495.21 ppb	14:42:04
1	Se 196.026†	1471.2	1505.6	2238.6 µg/L	2238.6 ppb	14:42:04
1	SiO2†	47866.2	48248.6	10391 µg/L	10391 ppb	14:41:44
1	Si 251.611†	57854.9	59515.0	4892.4 µg/L	4892.4 ppb	14:41:44
1	Sn 189.927†	962.7	996.5	492.28 µg/L	492.28 ppb	14:42:04
1	Ti 334.940†	201101.7	207843.8	470.24 µg/L	470.24 ppb	14:41:44
1	Tl 190.801†	278.9	312.7	461.24 µg/L	461.24 ppb	14:42:04
1	U 409.014†	5055.9	5282.0	424.65 µg/L	424.65 ppb	14:41:44
1	V 292.402†	42477.1	43969.9	495.05 µg/L	495.05 ppb	14:41:44
1	Zn 213.857†	19021.9	19195.0	441.47 µg/L	441.47 ppb	14:41:44
2	Sc RADIAL	55060.7	55060.7	101 %		14:41:16
2	Al 396.153Radial†	664887.8	659025.8	491180 µg/L	491180 ppb	14:41:10
2	Ca 317.933Radial†	499367.7	494778.3	465860 µg/L	465860 ppb	14:41:10
2	Fe 238.204 Radial†	21754.5	21547.8	182640 µg/L	182640 ppb	14:41:16
2	K 766.490 Radial†	7103.8	6912.7	4913.5 µg/L	4913.5 ppb	14:41:16
2	Mg 279.077 IEC†	51410.3	50945.0	473920 µg/L	473920 ppb	14:41:16
2	Na 589.592 Radial†	15635.7	14955.7	4923.5 µg/L	4923.5 ppb	14:41:16
2	Sr 421.552†	47418.4	46960.1	486.80 µg/L	486.80 ppb	14:41:16
2	Sc 361.383	1837075.1	1837075.1	96.190 %		14:42:10
2	Y 371.029	1253427.6	1253427.6	95.687 %		14:42:10
2	Ag 328.068†	27052.1	28688.2	242.21 µg/L	242.21 ppb	14:42:16
2	As 188.979†	226.7	234.5	443.77 µg/L	443.77 ppb	14:42:37
2	B 249.677†	11617.2	11745.8	418.76 µg/L	418.76 ppb	14:42:16
2	Ba 233.527†	17456.8	18174.2	474.07 µg/L	474.07 ppb	14:42:16
2	Be 313.107†	337736.8	354554.8	231.36 µg/L	231.36 ppb	14:42:10
2	Cd 226.502†	15582.5	16341.8	430.62 µg/L	430.62 ppb	14:42:16
2	Co 228.616†	8172.6	8505.1	417.96 µg/L	417.96 ppb	14:42:37
2	Cr 267.716†	20089.6	20937.7	460.84 µg/L	460.84 ppb	14:42:16
2	Cu 324.752†	69141.0	69393.5	510.12 µg/L	510.12 ppb	14:42:16
2	Mn 257.610†	124994.1	130189.1	456.15 µg/L	456.15 ppb	14:42:16
2	Mo 202.031†	4295.8	4473.5	484.36 µg/L	484.36 ppb	14:42:37
2	Ni 231.604†	7541.0	7537.5	413.99 µg/L	413.99 ppb	14:42:37
2	P 214.914†	1237.1	1258.5	2651.1 µg/L	2651.1 ppb	14:42:37
2	Pb 220.353†	1701.2	1671.4	466.10 µg/L	466.10 ppb	14:42:37

2	S 181.975 Axial†	598.3	607.2	2660.4 µg/L	2660.4 ppb	14:42:37
2	Sb 206.836†	550.2	545.1	498.59 µg/L	498.59 ppb	14:42:37
2	Se 196.026†	1466.3	1508.6	2247.3 µg/L	2247.3 ppb	14:42:37
2	SiO2†	47231.2	47852.0	10305 µg/L	10305 ppb	14:42:16
2	Si 251.611†	57079.6	59027.6	4852.4 µg/L	4852.4 ppb	14:42:16
2	Sn 189.927†	972.7	1012.1	499.64 µg/L	499.64 ppb	14:42:37
2	Ti 334.940†	198343.7	206083.8	465.72 µg/L	465.72 ppb	14:42:16
2	Tl 190.801†	259.5	294.1	435.56 µg/L	435.56 ppb	14:42:37
2	U 409.014†	4974.7	5225.3	419.28 µg/L	419.28 ppb	14:42:16
2	V 292.402†	41844.6	43546.2	490.82 µg/L	490.82 ppb	14:42:16
2	Zn 213.857†	18719.4	18985.3	435.92 µg/L	435.92 ppb	14:42:16
3	Sc RADIAL	54836.5	54836.5	100 %		14:41:27
3	Al 396.153Radial†	666707.4	663530.3	494540 µg/L	494540 ppb	14:41:21
3	Ca 317.933Radial†	500342.9	497771.9	468680 µg/L	468680 ppb	14:41:21
3	Fe 238.204 Radial†	21386.7	21269.9	180290 µg/L	180290 ppb	14:41:27
3	K 766.490 Radial†	6994.6	6832.8	4856.7 µg/L	4856.7 ppb	14:41:27
3	Mg 279.077 IEC†	50805.9	50551.7	470260 µg/L	470260 ppb	14:41:27
3	Na 589.592 Radial†	15470.0	14854.1	4890.0 µg/L	4890.0 ppb	14:41:27
3	Sr 421.552†	46844.7	46581.2	482.87 µg/L	482.87 ppb	14:41:27
3	Sc 361.383	1833431.9	1833431.9	95.999 %		14:42:43
3	Y 371.029	1252123.0	1252123.0	95.588 %		14:42:43
3	Ag 328.068†	27588.4	29302.7	247.00 µg/L	247.00 ppb	14:42:49
3	As 188.979†	241.1	250.0	473.71 µg/L	473.71 ppb	14:43:09
3	B 249.677†	11855.2	12017.8	431.89 µg/L	431.89 ppb	14:42:49
3	Ba 233.527†	17813.9	18582.3	484.71 µg/L	484.71 ppb	14:42:49
3	Be 313.107†	338767.0	356325.5	232.51 µg/L	232.51 ppb	14:42:43
3	Cd 226.502†	15965.4	16772.9	442.77 µg/L	442.77 ppb	14:42:49
3	Co 228.616†	8119.3	8466.6	416.04 µg/L	416.04 ppb	14:43:09
3	Cr 267.716†	20600.1	21511.0	473.46 µg/L	473.46 ppb	14:42:49
3	Cu 324.752†	70720.9	71182.1	522.28 µg/L	522.28 ppb	14:42:49
3	Mn 257.610†	127685.2	133250.6	466.59 µg/L	466.59 ppb	14:42:49
3	Mo 202.031†	4277.4	4463.2	483.17 µg/L	483.17 ppb	14:43:09
3	Ni 231.604†	7478.0	7487.4	411.22 µg/L	411.22 ppb	14:43:09
3	P 214.914†	1197.0	1219.3	2568.4 µg/L	2568.4 ppb	14:43:09
3	Pb 220.353†	1703.7	1677.5	467.96 µg/L	467.96 ppb	14:43:09
3	S 181.975 Axial†	585.7	595.2	2608.0 µg/L	2608.0 ppb	14:43:09
3	Sb 206.836†	542.2	537.9	491.06 µg/L	491.06 ppb	14:43:09
3	Se 196.026†	1453.1	1497.9	2227.0 µg/L	2227.0 ppb	14:43:09
3	SiO2†	48266.6	49028.1	10558 µg/L	10558 ppb	14:42:49
3	Si 251.611†	58341.2	60459.7	4970.1 µg/L	4970.1 ppb	14:42:49
3	Sn 189.927†	964.4	1005.4	496.36 µg/L	496.36 ppb	14:43:09
3	Ti 334.940†	202865.6	211203.9	478.37 µg/L	478.37 ppb	14:42:49
3	Tl 190.801†	278.4	314.2	463.55 µg/L	463.55 ppb	14:43:09
3	U 409.014†	5159.4	5428.1	437.79 µg/L	437.79 ppb	14:42:49
3	V 292.402†	42697.4	44521.1	500.97 µg/L	500.97 ppb	14:42:49
3	Zn 213.857†	19157.2	19480.1	448.59 µg/L	448.59 ppb	14:42:49

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1839121.1	96.297 %	0.3635			0.38%
Sc RADIAL	54880.3	101 %	0.3			0.30%
Y 371.029	1254617.1	95.778 %	0.2486			0.26%
Ag 328.068†	28939.9	244.14 µg/L	2.532	244.14 ppb	2.532	1.04%
QC value within limits for Ag 328.068 Recovery = 97.66%						
Al 396.153Radial†	661039.6	492680 µg/L	1706.7	492680 ppb	1706.7	0.35%
QC value within limits for Al 396.153Radial Recovery = 98.54%						
As 188.979†	242.9	459.99 µg/L	15.123	459.99 ppb	15.123	3.29%
QC value within limits for As 188.979 Recovery = 92.00%						
B 249.677†	11849.4	424.12 µg/L	6.887	424.12 ppb	6.887	1.62%
QC value within limits for B 249.677 Recovery = 84.82%						
Ba 233.527†	18366.5	479.08 µg/L	5.348	479.08 ppb	5.348	1.12%
QC value within limits for Ba 233.527 Recovery = 95.82%						
Be 313.107†	355191.9	231.77 µg/L	0.640	231.77 ppb	0.640	0.28%
QC value within limits for Be 313.107 Recovery = 92.71%						
Ca 317.933Radial†	496363.2	467360 µg/L	1416.6	467360 ppb	1416.6	0.30%
QC value within limits for Ca 317.933Radial Recovery = 93.47%						
Cd 226.502†	16555.7	436.70 µg/L	6.077	436.70 ppb	6.077	1.39%
QC value within limits for Cd 226.502 Recovery = 87.34%						
Co 228.616†	8476.9	416.56 µg/L	1.225	416.56 ppb	1.225	0.29%

QC value within limits for Co 228.616 Recovery = 83.31%							
Cr 267.716†	21197.4	466.55 µg/L	6.392	466.55 ppb	6.392	1.37%	
QC value within limits for Cr 267.716 Recovery = 93.31%							
Cu 324.752†	70196.0	515.50 µg/L	6.202	515.50 ppb	6.202	1.20%	
QC value within limits for Cu 324.752 Recovery = 103.10%							
Fe 238.204 Radial†	21359.6	181050 µg/L	1382.0	181050 ppb	1382.0	0.76%	
QC value within limits for Fe 238.204 Radial Recovery = 90.52%							
K 766.490 Radial†	6851.3	4869.9 µg/L	38.72	4869.9 ppb	38.72	0.80%	
QC value within limits for K 766.490 Radial Recovery = 97.40%							
Mg 279.077 IEC†	50694.8	471600 µg/L	2021.9	471600 ppb	2021.9	0.43%	
QC value within limits for Mg 279.077 IEC Recovery = 94.32%							
Mn 257.610†	131617.4	460.98 µg/L	5.261	460.98 ppb	5.261	1.14%	
QC value within limits for Mn 257.610 Recovery = 92.20%							
Mo 202.031†	4466.8	483.58 µg/L	0.671	483.58 ppb	0.671	0.14%	
QC value within limits for Mo 202.031 Recovery = 96.72%							
Na 589.592 Radial†	14891.8	4902.4 µg/L	18.32	4902.4 ppb	18.32	0.37%	
QC value within limits for Na 589.592 Radial Recovery = 98.05%							
Ni 231.604†	7505.2	412.20 µg/L	1.552	412.20 ppb	1.552	0.38%	
QC value within limits for Ni 231.604 Recovery = 82.44%							
P 214.914†	1232.7	2596.7 µg/L	47.05	2596.7 ppb	47.05	1.81%	
QC value within limits for P 214.914 Recovery = 103.87%							
Pb 220.353†	1671.1	466.15 µg/L	1.785	466.15 ppb	1.785	0.38%	
QC value within limits for Pb 220.353 Recovery = 93.23%							
S 181.975 Axial†	598.4	2621.9 µg/L	33.79	2621.9 ppb	33.79	1.29%	
QC value within limits for S 181.975 Axial Recovery = 104.87%							
Sb 206.836†	541.6	494.95 µg/L	3.768	494.95 ppb	3.768	0.76%	
QC value within limits for Sb 206.836 Recovery = 98.99%							
Se 196.026†	1504.0	2237.7 µg/L	10.19	2237.7 ppb	10.19	0.46%	
QC value within limits for Se 196.026 Recovery = 89.51%							
SiO2†	48376.2	10418 µg/L	128.9	10418 ppb	128.9	1.24%	
QC value within limits for SiO2 Recovery = 97.41%							
Si 251.611†	59667.4	4905.0 µg/L	59.86	4905.0 ppb	59.86	1.22%	
QC value within limits for Si 251.611 Recovery = 98.10%							
Sn 189.927†	1004.7	496.10 µg/L	3.686	496.10 ppb	3.686	0.74%	
QC value within limits for Sn 189.927 Recovery = 99.22%							
Sr 421.552†	46744.2	484.56 µg/L	2.020	484.56 ppb	2.020	0.42%	
QC value within limits for Sr 421.552 Recovery = 96.91%							
Ti 334.940†	208377.1	471.44 µg/L	6.410	471.44 ppb	6.410	1.36%	
QC value within limits for Ti 334.940 Recovery = 94.29%							
Tl 190.801†	307.0	453.45 µg/L	15.538	453.45 ppb	15.538	3.43%	
QC value within limits for Tl 190.801 Recovery = 90.69%							
U 409.014†	5311.8	427.24 µg/L	9.525	427.24 ppb	9.525	2.23%	
QC value within limits for U 409.014 Recovery = 85.45%							
V 292.402†	44012.4	495.61 µg/L	5.099	495.61 ppb	5.099	1.03%	
QC value within limits for V 292.402 Recovery = 99.12%							
Zn 213.857†	19220.1	441.99 µg/L	6.349	441.99 ppb	6.349	1.44%	
QC value within limits for Zn 213.857 Recovery = 88.40%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/11/2010 14:43:19

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	54698.7	54698.7	100 %		14:43:59
1	Al 396.153Radial†	649050.7	647585.6	482670 µg/L	482670 ppb	14:43:54
1	Ca 317.933Radial†	489494.3	488202.6	459670 µg/L	459670 ppb	14:43:54
1	Fe 238.204 Radial†	51606.4	51474.6	436280 µg/L	436280 ppb	14:43:59
1	K 766.490 Radial†	59.9	-68.6	-48.776 µg/L	-48.776 ppb	14:43:59
1	Mg 279.077 IEC†	49787.3	49662.9	461710 µg/L	461710 ppb	14:43:59
1	Na 589.592 Radial†	1412387.5	1408635.5	463730 µg/L	463730 ppb	14:43:54
1	Sr 421.552†	535.1	494.4	5.1247 µg/L	5.1247 ppb	14:43:59
1	Sc 361.383	1832827.1	1832827.1	95.968 %		14:44:34
1	Y 371.029	1243371.2	1243371.2	94.920 %		14:44:34
1	Ag 328.068†	-5331.8	-4991.3	-12.516 µg/L	-12.516 ppb	14:44:40
1	As 188.979†	-25.3	-27.5	-52.401 µg/L	-52.401 ppb	14:45:01
1	B 249.677†	1493.7	1225.0	-174.11 µg/L	-174.11 ppb	14:44:40
1	Ba 233.527†	574.9	625.1	16.169 µg/L	16.169 ppb	14:45:01
1	Be 313.107†	-11067.4	-8092.0	-5.2972 µg/L	-5.2972 ppb	14:44:40
1	Cd 226.502†	1038.3	1224.0	-15.542 µg/L	-15.542 ppb	14:44:40
1	Co 228.616†	189.5	206.3	10.066 µg/L	10.066 ppb	14:45:01
1	Cr 267.716†	137.7	195.9	4.2704 µg/L	4.2704 ppb	14:45:01
1	Cu 324.752†	-8795.2	-11650.9	-20.741 µg/L	-20.741 ppb	14:44:40
1	Mn 257.610†	-7006.5	-7056.8	15.101 µg/L	15.101 ppb	14:44:34
1	Mo 202.031†	-203.3	-204.2	-5.2185 µg/L	-5.2185 ppb	14:45:01
1	Ni 231.604†	92.3	-206.0	-5.6060 µg/L	-5.6060 ppb	14:45:01
1	P 214.914†	278.7	262.7	357.28 µg/L	357.28 ppb	14:45:01
1	Pb 220.353†	191.0	101.8	23.594 µg/L	23.594 ppb	14:45:01
1	S 181.975 Axial†	34.6	21.2	93.001 µg/L	93.001 ppb	14:45:01
1	Sb 206.836†	60.3	35.8	-5.1147 µg/L	-5.1147 ppb	14:45:01
1	Se 196.026†	-124.6	-145.7	431.09 µg/L	431.09 ppb	14:45:01
1	SiO2†	971.9	-237.3	-51.105 µg/L	-51.105 ppb	14:45:01
1	Si 251.611†	-251.2	-574.6	-47.235 µg/L	-47.235 ppb	14:45:01
1	Sn 189.927†	-32.5	-33.0	-9.5042 µg/L	-9.5042 ppb	14:45:01
1	Ti 334.940†	13370.7	13816.4	4.0770 µg/L	4.0770 ppb	14:44:40
1	Tl 190.801†	-49.5	-27.3	33.449 µg/L	33.449 ppb	14:45:01
1	U 409.014†	138681.8	144562.6	13000 µg/L	13000 ppb	14:44:40
1	V 292.402†	-5434.6	-5618.7	4.9101 µg/L	4.9101 ppb	14:44:40
1	Zn 213.857†	2732.6	2371.8	12.479 µg/L	12.479 ppb	14:45:01
2	Sc RADIAL	54113.0	54113.0	99.2 %		14:44:11
2	Al 396.153Radial†	645987.5	651505.9	485590 µg/L	485590 ppb	14:44:06
2	Ca 317.933Radial†	485663.6	489625.6	461010 µg/L	461010 ppb	14:44:06
2	Fe 238.204 Radial†	51235.5	51657.9	437830 µg/L	437830 ppb	14:44:11
2	K 766.490 Radial†	83.9	-43.8	-31.167 µg/L	-31.167 ppb	14:44:11
2	Mg 279.077 IEC†	49624.6	50036.5	465180 µg/L	465180 ppb	14:44:11
2	Na 589.592 Radial†	1405673.5	1417117.7	466520 µg/L	466520 ppb	14:44:06
2	Sr 421.552†	505.9	470.7	4.8794 µg/L	4.8794 ppb	14:44:11
2	Sc 361.383	1837825.9	1837825.9	96.229 %		14:45:07
2	Y 371.029	1247268.6	1247268.6	95.217 %		14:45:07
2	Ag 328.068†	-5248.4	-4889.5	-11.624 µg/L	-11.624 ppb	14:45:13
2	As 188.979†	-21.7	-23.6	-44.761 µg/L	-44.761 ppb	14:45:33
2	B 249.677†	1467.3	1193.4	-176.30 µg/L	-176.30 ppb	14:45:13
2	Ba 233.527†	558.0	605.8	15.663 µg/L	15.663 ppb	14:45:33
2	Be 313.107†	-10966.6	-7955.9	-5.2083 µg/L	-5.2083 ppb	14:45:13
2	Cd 226.502†	1019.9	1202.0	-16.327 µg/L	-16.327 ppb	14:45:13
2	Co 228.616†	178.5	194.3	9.4767 µg/L	9.4767 ppb	14:45:33
2	Cr 267.716†	83.6	139.3	3.0246 µg/L	3.0246 ppb	14:45:33
2	Cu 324.752†	-8717.3	-11545.0	-19.786 µg/L	-19.786 ppb	14:45:13
2	Mn 257.610†	-6988.4	-7018.1	15.303 µg/L	15.303 ppb	14:45:07
2	Mo 202.031†	-191.4	-191.4	-3.7840 µg/L	-3.7840 ppb	14:45:33
2	Ni 231.604†	81.9	-217.1	-6.1913 µg/L	-6.1913 ppb	14:45:33
2	P 214.914†	298.0	282.1	398.14 µg/L	398.14 ppb	14:45:33
2	Pb 220.353†	188.3	98.5	22.919 µg/L	22.919 ppb	14:45:33

2	S 181.975 Axial†	34.5	21.1	92.318 µg/L	92.318 ppb	14:45:33
2	Sb 206.836†	49.5	24.4	-16.430 µg/L	-16.430 ppb	14:45:33
2	Se 196.026†	-135.7	-156.8	414.89 µg/L	414.89 ppb	14:45:33
2	SiO2†	995.7	-215.3	-46.357 µg/L	-46.357 ppb	14:45:33
2	Si 251.611†	-242.1	-564.4	-46.400 µg/L	-46.400 ppb	14:45:33
2	Sn 189.927†	-48.8	-49.9	-17.017 µg/L	-17.017 ppb	14:45:33
2	Ti 334.940†	13350.9	13757.9	3.6830 µg/L	3.6830 ppb	14:45:13
2	Tl 190.801†	-50.6	-28.2	32.395 µg/L	32.395 ppb	14:45:33
2	U 409.014†	138028.8	143491.0	12902 µg/L	12902 ppb	14:45:13
2	V 292.402†	-5635.2	-5811.8	2.9425 µg/L	2.9425 ppb	14:45:13
2	Zn 213.857†	2709.5	2340.1	11.417 µg/L	11.417 ppb	14:45:33
3	Sc RADIAL	54398.5	54398.5	99.7 %		14:44:23
3	Al 396.153Radial†	647423.4	649527.5	484110 µg/L	484110 ppb	14:44:18
3	Ca 317.933Radial†	488211.3	489611.2	461000 µg/L	461000 ppb	14:44:18
3	Fe 238.204 Radial†	51015.9	51166.4	433670 µg/L	433670 ppb	14:44:23
3	K 766.490 Radial†	138.6	10.6	7.5591 µg/L	7.5591 ppb	14:44:23
3	Mg 279.077 IEC†	49363.7	49512.1	460310 µg/L	460310 ppb	14:44:23
3	Na 589.592 Radial†	1412371.3	1416397.4	466280 µg/L	466280 ppb	14:44:18
3	Sr 421.552†	507.2	469.3	4.8646 µg/L	4.8646 ppb	14:44:23
3	Sc 361.383	1837461.1	1837461.1	96.210 %		14:45:40
3	Y 371.029	1245635.1	1245635.1	95.093 %		14:45:40
3	Ag 328.068†	-5107.3	-4744.0	-10.729 µg/L	-10.729 ppb	14:45:45
3	As 188.979†	-16.7	-18.5	-34.960 µg/L	-34.960 ppb	14:46:06
3	B 249.677†	1484.3	1211.3	-173.35 µg/L	-173.35 ppb	14:45:45
3	Ba 233.527†	553.8	601.6	15.554 µg/L	15.554 ppb	14:46:06
3	Be 313.107†	-10842.7	-7829.4	-5.1258 µg/L	-5.1258 ppb	14:45:45
3	Cd 226.502†	1000.6	1182.1	-16.404 µg/L	-16.404 ppb	14:45:45
3	Co 228.616†	166.8	182.2	8.8812 µg/L	8.8812 ppb	14:46:06
3	Cr 267.716†	114.6	171.5	3.7340 µg/L	3.7340 ppb	14:46:06
3	Cu 324.752†	-8778.8	-11610.6	-20.823 µg/L	-20.823 ppb	14:45:45
3	Mn 257.610†	-6849.7	-6875.4	15.438 µg/L	15.438 ppb	14:45:40
3	Mo 202.031†	-180.2	-179.7	-2.7014 µg/L	-2.7014 ppb	14:46:06
3	Ni 231.604†	78.6	-220.5	-6.4261 µg/L	-6.4261 ppb	14:46:06
3	P 214.914†	292.5	276.4	389.07 µg/L	389.07 ppb	14:46:06
3	Pb 220.353†	166.9	76.3	17.067 µg/L	17.067 ppb	14:46:06
3	S 181.975 Axial†	27.8	14.1	61.607 µg/L	61.607 ppb	14:46:06
3	Sb 206.836†	44.0	18.8	-21.940 µg/L	-21.940 ppb	14:46:06
3	Se 196.026†	-130.2	-151.2	416.38 µg/L	416.38 ppb	14:46:06
3	SiO2†	1012.2	-197.9	-42.626 µg/L	-42.626 ppb	14:46:06
3	Si 251.611†	-265.6	-588.9	-48.410 µg/L	-48.410 ppb	14:46:06
3	Sn 189.927†	-42.0	-42.7	-13.864 µg/L	-13.864 ppb	14:46:06
3	Ti 334.940†	13514.7	13930.9	4.4846 µg/L	4.4846 ppb	14:45:45
3	Tl 190.801†	-39.7	-17.0	47.407 µg/L	47.407 ppb	14:46:06
3	U 409.014†	138148.6	143644.0	12917 µg/L	12917 ppb	14:45:45
3	V 292.402†	-5603.1	-5779.6	2.8210 µg/L	2.8210 ppb	14:45:45
3	Zn 213.857†	2726.7	2358.5	12.353 µg/L	12.353 ppb	14:46:06

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Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1836038.0	96.136 %	0.1459			0.15%
Sc RADIAL	54403.4	99.7 %	0.54			0.54%
Y 371.029	1245425.0	95.077 %	0.1494			0.16%
Ag 328.068†	-4875.0	-11.623 µg/L	0.8935	-11.623 ppb	0.8935	7.69%
Al 396.153Radial†	649539.7	484120 µg/L	1461.0	484120 ppb	1461.0	0.30%
QC value within limits for Al 396.153Radial Recovery = 96.82%						
As 188.979†	-23.2	-44.041 µg/L	8.7426	-44.041 ppb	8.7426	19.85%
B 249.677†	1209.9	-174.59 µg/L	1.536	-174.59 ppb	1.536	0.88%
Ba 233.527†	610.9	15.795 µg/L	0.3282	15.795 ppb	0.3282	2.08%
Be 313.107†	-7959.1	-5.2104 µg/L	0.08573	-5.2104 ppb	0.08573	1.65%
Ca 317.933Radial†	489146.5	460560 µg/L	769.6	460560 ppb	769.6	0.17%
QC value within limits for Ca 317.933Radial Recovery = 92.11%						
Cd 226.502†	1202.7	-16.091 µg/L	0.4769	-16.091 ppb	0.4769	2.96%
Co 228.616†	194.3	9.4746 µg/L	0.59237	9.4746 ppb	0.59237	6.25%
Cr 267.716†	168.9	3.6764 µg/L	0.62486	3.6764 ppb	0.62486	17.00%
Cu 324.752†	-11602.2	-20.450 µg/L	0.5769	-20.450 ppb	0.5769	2.82%
Fe 238.204 Radial†	51433.0	435930 µg/L	2105.0	435930 ppb	2105.0	0.48%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.19%						
K 766.490 Radial†	-33.9	-24.128 µg/L	28.8197	-24.128 ppb	28.8197	119.44%
Mg 279.077 IEC†	49737.1	462400 µg/L	2510.3	462400 ppb	2510.3	0.54%



QC value within limits for Mg 279.077 IEC Recovery = 92.48%

Mn 257.610†	-6983.5	15.281 µg/L	0.1695	15.281 ppb	0.1695	1.11%
Mo 202.031†	-191.8	-3.9013 µg/L	1.26264	-3.9013 ppb	1.26264	32.36%
Na 589.592 Radial†	1414050.2	465510 µg/L	1548.3	465510 ppb	1548.3	0.33%

QC value within limits for Na 589.592 Radial Recovery = 93.10%

Ni 231.604†	-214.5	-6.0745 µg/L	0.42234	-6.0745 ppb	0.42234	6.95%
P 214.914†	273.7	381.50 µg/L	21.461	381.50 ppb	21.461	5.63%
Pb 220.353†	92.2	21.194 µg/L	3.5893	21.194 ppb	3.5893	16.94%
S 181.975 Axial†	18.8	82.309 µg/L	17.9317	82.309 ppb	17.9317	21.79%
Sb 206.836†	26.4	-14.495 µg/L	8.5779	-14.495 ppb	8.5779	59.18%
Se 196.026†	-151.2	420.79 µg/L	8.956	420.79 ppb	8.956	2.13%
SiO2†	-216.8	-46.696 µg/L	4.2500	-46.696 ppb	4.2500	9.10%
Si 251.611†	-576.0	-47.348 µg/L	1.0098	-47.348 ppb	1.0098	2.13%
Sn 189.927†	-41.9	-13.462 µg/L	3.7726	-13.462 ppb	3.7726	28.02%
Sr 421.552†	478.1	4.9562 µg/L	0.14608	4.9562 ppb	0.14608	2.95%
Ti 334.940†	13835.1	4.0815 µg/L	0.40078	4.0815 ppb	0.40078	9.82%
Tl 190.801†	-24.2	37.750 µg/L	8.3798	37.750 ppb	8.3798	22.20%
U 409.014†	143899.2	12939 µg/L	52.5	12939 ppb	52.5	0.41%

QC value less than the lower limit for U 409.014 Recovery = 86.26%

V 292.402†	-5736.7	3.5579 µg/L	1.17264	3.5579 ppb	1.17264	32.96%
Zn 213.857†	2356.8	12.083 µg/L	0.5800	12.083 ppb	0.5800	4.80%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/11/2010 14:46:15

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	55399.0	55399.0	102 %		14:46:58
1	Al 396.153Radial†	399.7	403.8	92.521 µg/L	92.521 ppb	14:46:58
1	Ca 317.933Radial†	334.1	149.9	141.18 µg/L	141.18 ppb	14:47:18
1	Fe 238.204 Radial†	7.1	-7.5	138.28 µg/L	138.28 ppb	14:47:18
1	K 766.490 Radial†	420398.0	414012.0	294280 µg/L	294280 ppb	14:46:52
1	Mg 279.077 IEC†	6.8	-4.5	128.44 µg/L	128.44 ppb	14:47:18
1	Na 589.592 Radial†	1342.1	780.2	256.86 µg/L	256.86 ppb	14:46:58
1	Sr 421.552†	951196.0	936997.9	9713.1 µg/L	9713.1 ppb	14:46:52
1	Sc 361.383	1973675.2	1973675.2	103.34 %		14:48:49
1	Y 371.029	1341693.6	1341693.6	102.43 %		14:48:49
1	Ag 328.068†	-7295.5	-6495.0	14.834 µg/L	14.834 ppb	14:48:55
1	As 188.979†	5210.7	5041.0	9833.2 µg/L	9833.2 ppb	14:48:55
1	B 249.677†	116645.4	112541.3	4957.2 µg/L	4957.2 ppb	14:48:49
1	Ba 233.527†	564583.2	546348.7	14244 µg/L	14244 ppb	14:48:49
1	Be 313.107†	4590165.2	4445144.6	2899.1 µg/L	2899.1 ppb	14:48:39
1	Cd 226.502†	360765.0	349238.8	9644.6 µg/L	9644.6 ppb	14:48:49
1	Co 228.616†	199452.7	193010.6	9487.0 µg/L	9487.0 ppb	14:48:49
1	Cr 267.716†	1141741.3	1104866.0	24309 µg/L	24309 ppb	14:48:49
1	Cu 324.752†	2993464.1	2894159.5	20216 µg/L	20216 ppb	14:48:49
1	Mn 257.610†	2858381.7	2766176.3	9578.9 µg/L	9578.9 ppb	14:48:49
1	Mo 202.031†	98264.3	95093.6	10148 µg/L	10148 ppb	14:48:49
1	Ni 231.604†	183070.7	176847.4	9657.8 µg/L	9657.8 ppb	14:48:49
1	P 214.914†	7469.6	7200.4	13482 µg/L	13482 ppb	14:48:55
1	Pb 220.353†	97644.4	94389.0	25180 µg/L	25180 ppb	14:48:49
1	S 181.975 Axial†	12516.5	12096.9	53001 µg/L	53001 ppb	14:48:55
1	Sb 206.836†	11239.2	10848.7	10569 µg/L	10569 ppb	14:48:55
1	Se 196.026†	6584.9	6356.1	9690.0 µg/L	9690.0 ppb	14:48:55
1	SiO2†	476520.0	459857.7	99033 µg/L	99033 ppb	14:48:49
1	Si 251.611†	580361.7	561278.0	46140 µg/L	46140 ppb	14:48:49
1	Sn 189.927†	23760.5	22992.8	10575 µg/L	10575 ppb	14:48:55
1	Ti 334.940†	4290484.1	4151599.7	9986.4 µg/L	9986.4 ppb	14:48:39
1	Tl 190.801†	7036.0	6832.7	9632.0 µg/L	9632.0 ppb	14:48:55
1	U 409.014†	835.4	862.0	78.046 µg/L	78.046 ppb	14:48:49
1	V 292.402†	975452.7	943947.6	10194 µg/L	10194 ppb	14:48:49
1	Zn 213.857†	598917.9	579071.4	14385 µg/L	14385 ppb	14:48:49
2	Sc RADIAL	55030.3	55030.3	101 %		14:47:30
2	Al 396.153Radial†	384.6	391.5	90.444 µg/L	90.444 ppb	14:47:30
2	Ca 317.933Radial†	398.0	215.6	202.97 µg/L	202.97 ppb	14:47:50
2	Fe 238.204 Radial†	10.5	-4.0	160.36 µg/L	160.36 ppb	14:47:50
2	K 766.490 Radial†	423060.2	419427.1	298130 µg/L	298130 ppb	14:47:24
2	Mg 279.077 IEC†	11.3	-0.0	164.54 µg/L	164.54 ppb	14:47:50
2	Na 589.592 Radial†	1212.5	660.6	217.48 µg/L	217.48 ppb	14:47:30
2	Sr 421.552†	957912.4	949937.4	9847.2 µg/L	9847.2 ppb	14:47:24
2	Sc 361.383	1973904.3	1973904.3	103.35 %		14:49:14
2	Y 371.029	1342735.7	1342735.7	102.51 %		14:49:14
2	Ag 328.068†	-6836.3	-6049.9	16.075 µg/L	16.075 ppb	14:49:19
2	As 188.979†	5005.3	4841.7	9444.3 µg/L	9444.3 ppb	14:49:19
2	B 249.677†	114403.0	110358.5	4860.1 µg/L	4860.1 ppb	14:49:14
2	Ba 233.527†	548071.4	530309.5	13826 µg/L	13826 ppb	14:49:14
2	Be 313.107†	4469193.3	4327583.5	2822.5 µg/L	2822.5 ppb	14:49:04
2	Cd 226.502†	349367.5	338170.7	9338.9 µg/L	9338.9 ppb	14:49:14
2	Co 228.616†	192536.9	186296.8	9156.8 µg/L	9156.8 ppb	14:49:14
2	Cr 267.716†	1093055.4	1057632.1	23270 µg/L	23270 ppb	14:49:14
2	Cu 324.752†	2898656.7	2802093.0	19573 µg/L	19573 ppb	14:49:14
2	Mn 257.610†	2761508.2	2672125.9	9253.2 µg/L	9253.2 ppb	14:49:14
2	Mo 202.031†	94921.3	91848.1	9802.1 µg/L	9802.1 ppb	14:49:14
2	Ni 231.604†	176871.2	170828.6	9329.1 µg/L	9329.1 ppb	14:49:14
2	P 214.914†	7023.8	6768.2	12612 µg/L	12612 ppb	14:49:19
2	Pb 220.353†	95131.3	91946.6	24529 µg/L	24529 ppb	14:49:14

2	S 181.975 Axial†	12036.4	11630.9	50959 µg/L	50959 ppb	14:49:19
2	Sb 206.836†	10693.6	10319.6	10054 µg/L	10054 ppb	14:49:19
2	Se 196.026†	6359.9	6137.7	9357.1 µg/L	9357.1 ppb	14:49:19
2	SiO2†	465181.8	448834.1	96659 µg/L	96659 ppb	14:49:14
2	Si 251.611†	566752.0	548044.9	45052 µg/L	45052 ppb	14:49:14
2	Sn 189.927†	22166.4	21447.8	9864.4 µg/L	9864.4 ppb	14:49:19
2	Ti 334.940†	4180020.8	4044239.7	9728.1 µg/L	9728.1 ppb	14:49:04
2	Tl 190.801†	6890.0	6690.7	9431.4 µg/L	9431.4 ppb	14:49:19
2	U 409.014†	947.2	970.1	87.818 µg/L	87.818 ppb	14:49:14
2	V 292.402†	941864.4	911339.9	9841.7 µg/L	9841.7 ppb	14:49:14
2	Zn 213.857†	579745.6	560454.1	13922 µg/L	13922 ppb	14:49:14
3	Sc RADIAL	56038.9	56038.9	103 %		14:48:02
3	Al 396.153Radial†	479.5	477.1	179.56 µg/L	179.56 ppb	14:48:02
3	Ca 317.933Radial†	383.6	194.4	183.07 µg/L	183.07 ppb	14:48:22
3	Fe 238.204 Radial†	9.4	-5.4	124.22 µg/L	124.22 ppb	14:48:22
3	K 766.490 Radial†	428756.3	417423.2	296700 µg/L	296700 ppb	14:47:56
3	Mg 279.077 IEC†	6.3	-5.2	95.926 µg/L	95.926 ppb	14:48:22
3	Na 589.592 Radial†	1260.6	685.8	225.77 µg/L	225.77 ppb	14:48:02
3	Sr 421.552†	974533.2	949026.3	9837.8 µg/L	9837.8 ppb	14:47:56
3	Sc 361.383	1967182.2	1967182.2	103.00 %		14:49:39
3	Y 371.029	1337106.2	1337106.2	102.08 %		14:49:39
3	Ag 328.068†	-5873.5	-5137.8	14.957 µg/L	14.957 ppb	14:49:44
3	As 188.979†	4335.2	4207.7	8207.5 µg/L	8207.5 ppb	14:49:44
3	B 249.677†	103256.6	99915.3	4398.2 µg/L	4398.2 ppb	14:49:39
3	Ba 233.527†	483121.0	469064.3	12229 µg/L	12229 ppb	14:49:39
3	Be 313.107†	4064814.3	3949767.9	2576.0 µg/L	2576.0 ppb	14:49:28
3	Cd 226.502†	306350.7	297562.9	8217.4 µg/L	8217.4 ppb	14:49:39
3	Co 228.616†	167417.3	162546.1	7988.6 µg/L	7988.6 ppb	14:49:39
3	Cr 267.716†	928569.1	901554.3	19836 µg/L	19836 ppb	14:49:39
3	Cu 324.752†	2527919.1	2451745.7	17126 µg/L	17126 ppb	14:49:39
3	Mn 257.610†	2402081.4	2332306.4	8076.5 µg/L	8076.5 ppb	14:49:39
3	Mo 202.031†	82713.5	80310.0	8570.8 µg/L	8570.8 ppb	14:49:39
3	Ni 231.604†	153785.8	149000.9	8137.1 µg/L	8137.1 ppb	14:49:39
3	P 214.914†	6020.9	5817.7	10807 µg/L	10807 ppb	14:49:44
3	Pb 220.353†	84806.2	82236.9	21938 µg/L	21938 ppb	14:49:39
3	S 181.975 Axial†	10412.0	10093.6	44224 µg/L	44224 ppb	14:49:44
3	Sb 206.836†	9221.8	8926.1	8701.4 µg/L	8701.4 ppb	14:49:44
3	Se 196.026†	5513.0	5336.4	8135.5 µg/L	8135.5 ppb	14:49:44
3	SiO2†	415353.7	401996.4	86572 µg/L	86572 ppb	14:49:39
3	Si 251.611†	505959.6	490898.3	40354 µg/L	40354 ppb	14:49:39
3	Sn 189.927†	18682.4	18138.7	8342.5 µg/L	8342.5 ppb	14:49:44
3	Ti 334.940†	3801346.2	3690423.2	8877.0 µg/L	8877.0 ppb	14:49:28
3	Tl 190.801†	6155.2	6000.1	8459.0 µg/L	8459.0 ppb	14:49:44
3	U 409.014†	834.8	864.1	78.225 µg/L	78.225 ppb	14:49:39
3	V 292.402†	816284.9	792534.9	8558.2 µg/L	8558.2 ppb	14:49:39
3	Zn 213.857†	507712.5	492437.5	12233 µg/L	12233 ppb	14:49:39

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1971587.2	103.23 %	0.200			0.19%
Sc RADIAL	55489.4	102 %	0.9			0.92%
Y 371.029	1340511.8	102.34 %	0.229			0.22%
Ag 328.068†	-5894.2	15.288 µg/L	0.6836	15.288 ppb	0.6836	4.47%
Al 396.153Radial†	424.2	120.84 µg/L	50.861	120.84 ppb	50.861	42.09%
As 188.979†	4696.8	9161.7 µg/L	848.90	9161.7 ppb	848.90	9.27%
QC value within limits for As 188.979 Recovery = 91.62%						
B 249.677†	107605.0	4738.5 µg/L	298.66	4738.5 ppb	298.66	6.30%
QC value within limits for B 249.677 Recovery = 94.77%						
Ba 233.527†	515240.8	13433 µg/L	1063.5	13433 ppb	1063.5	7.92%
QC value less than the lower limit for Ba 233.527 Recovery = 89.55%						
Be 313.107†	4240832.0	2765.9 µg/L	168.81	2765.9 ppb	168.81	6.10%
QC value within limits for Be 313.107 Recovery = 92.20%						
Ca 317.933Radial†	186.6	175.74 µg/L	31.540	175.74 ppb	31.540	17.95%
Cd 226.502†	328324.1	9067.0 µg/L	751.45	9067.0 ppb	751.45	8.29%
QC value within limits for Cd 226.502 Recovery = 90.67%						
Co 228.616†	180617.8	8877.5 µg/L	787.27	8877.5 ppb	787.27	8.87%
QC value less than the lower limit for Co 228.616 Recovery = 88.77%						
Cr 267.716†	1021350.8	22472 µg/L	2340.9	22472 ppb	2340.9	10.42%
QC value less than the lower limit for Cr 267.716 Recovery = 89.89%						

Cu 324.752†	2715999.4	18972 µg/L	1630.6	18972 ppb	1630.6	8.59%
QC value within limits for Cu 324.752 Recovery = 94.86%						
Fe 238.204 Radial†	-5.6	140.95 µg/L	18.221	140.95 ppb	18.221	12.93%
K 766.490 Radial†	416954.1	296370 µg/L	1946.1	296370 ppb	1946.1	0.66%
QC value within limits for K 766.490 Radial Recovery = 98.79%						
Mg 279.077 IEC†	-3.2	129.64 µg/L	34.323	129.64 ppb	34.323	26.48%
Mn 257.610†	2590202.9	8969.5 µg/L	790.37	8969.5 ppb	790.37	8.81%
QC value less than the lower limit for Mn 257.610 Recovery = 89.70%						
Mo 202.031†	89083.9	9507.1 µg/L	829.20	9507.1 ppb	829.20	8.72%
QC value within limits for Mo 202.031 Recovery = 95.07%						
Na 589.592 Radial†	708.9	233.37 µg/L	20.762	233.37 ppb	20.762	8.90%
Ni 231.604†	165559.0	9041.3 µg/L	800.17	9041.3 ppb	800.17	8.85%
QC value within limits for Ni 231.604 Recovery = 90.41%						
P 214.914†	6595.5	12300 µg/L	1364.7	12300 ppb	1364.7	11.09%
QC value less than the lower limit for P 214.914 Recovery = 82.00%						
Pb 220.353†	89524.2	23882 µg/L	1714.8	23882 ppb	1714.8	7.18%
QC value within limits for Pb 220.353 Recovery = 95.53%						
S 181.975 Axial†	11273.8	49394 µg/L	4592.8	49394 ppb	4592.8	9.30%
QC value within limits for S 181.975 Axial Recovery = 98.79%						
Sb 206.836†	10031.5	9774.9 µg/L	964.64	9774.9 ppb	964.64	9.87%
QC value within limits for Sb 206.836 Recovery = 97.75%						
Se 196.026†	5943.4	9060.9 µg/L	818.48	9060.9 ppb	818.48	9.03%
QC value within limits for Se 196.026 Recovery = 90.61%						
SiO2†	436896.1	94088 µg/L	6616.3	94088 ppb	6616.3	7.03%
QC value less than the lower limit for SiO2 Recovery = 87.93%						
Si 251.611†	533407.1	43849 µg/L	3074.8	43849 ppb	3074.8	7.01%
QC value less than the lower limit for Si 251.611 Recovery = 87.70%						
Sn 189.927†	20859.8	9594.0 µg/L	1140.59	9594.0 ppb	1140.59	11.89%
QC value within limits for Sn 189.927 Recovery = 95.94%						
Sr 421.552†	945320.6	9799.4 µg/L	74.86	9799.4 ppb	74.86	0.76%
QC value within limits for Sr 421.552 Recovery = 97.99%						
Ti 334.940†	3962087.5	9530.5 µg/L	580.46	9530.5 ppb	580.46	6.09%
QC value within limits for Ti 334.940 Recovery = 95.30%						
Tl 190.801†	6507.8	9174.1 µg/L	627.37	9174.1 ppb	627.37	6.84%
QC value within limits for Tl 190.801 Recovery = 91.74%						
U 409.014†	898.7	81.363 µg/L	5.5909	81.363 ppb	5.5909	6.87%
V 292.402†	882607.5	9531.4 µg/L	861.08	9531.4 ppb	861.08	9.03%
QC value within limits for V 292.402 Recovery = 95.31%						
Zn 213.857†	543987.7	13513 µg/L	1132.6	13513 ppb	1132.6	8.38%
QC value within limits for Zn 213.857 Recovery = 90.09%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 14:49:53

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	56804.1	56804.1	104 %		14:50:31
1	Al 396.153Radial†	6842.1	6583.7	4896.3 µg/L	4896.3 ppb	14:50:31
1	Ca 317.933Radial†	5575.3	5177.3	4874.7 µg/L	4874.7 ppb	14:50:52
1	Fe 238.204 Radial†	620.0	581.2	4936.5 µg/L	4936.5 ppb	14:50:52
1	K 766.490 Radial†	7520.1	7096.5	5044.1 µg/L	5044.1 ppb	14:50:31
1	Mg 279.077 IEC†	574.4	540.6	5034.2 µg/L	5034.2 ppb	14:50:52
1	Na 589.592 Radial†	31573.0	29791.8	9807.5 µg/L	9807.5 ppb	14:50:31
1	Sr 421.552†	48614.5	46666.6	483.75 µg/L	483.75 ppb	14:50:31
1	Sc 361.383	1985086.2	1985086.2	103.94 %		14:51:55
1	Y 371.029	1355705.3	1355705.3	103.50 %		14:51:55
1	Ag 328.068†	63419.1	61579.6	492.20 µg/L	492.20 ppb	14:52:00
1	As 188.979†	283.1	271.2	529.04 µg/L	529.04 ppb	14:52:21
1	B 249.677†	12082.8	11293.3	491.77 µg/L	491.77 ppb	14:52:00
1	Ba 233.527†	19621.7	18904.0	493.12 µg/L	493.12 ppb	14:52:00
1	Be 313.107†	773609.6	747725.8	488.12 µg/L	488.12 ppb	14:51:55
1	Cd 226.502†	18494.8	17935.8	494.76 µg/L	494.76 ppb	14:52:00
1	Co 228.616†	10503.4	10114.1	497.19 µg/L	497.19 ppb	14:52:00
1	Cr 267.716†	23548.0	22707.7	499.79 µg/L	499.79 ppb	14:52:00
1	Cu 324.752†	76174.0	70800.5	495.24 µg/L	495.24 ppb	14:52:00
1	Mn 257.610†	149145.1	143735.7	498.19 µg/L	498.19 ppb	14:51:55
1	Mo 202.031†	5080.3	4895.3	522.62 µg/L	522.62 ppb	14:52:21
1	Ni 231.604†	9759.2	9087.1	496.31 µg/L	496.31 ppb	14:52:00
1	P 214.914†	1255.3	1180.1	2486.8 µg/L	2486.8 ppb	14:52:21
1	Pb 220.353†	2124.3	1946.6	519.63 µg/L	519.63 ppb	14:52:21
1	S 181.975 Axial†	258.7	234.1	1025.7 µg/L	1025.7 ppb	14:52:21
1	Sb 206.836†	589.1	539.9	533.84 µg/L	533.84 ppb	14:52:21
1	Se 196.026†	360.1	330.7	511.73 µg/L	511.73 ppb	14:52:21
1	SiO2†	26768.3	24503.7	5277.0 µg/L	5277.0 ppb	14:52:00
1	Si 251.611†	31600.0	30089.3	2473.5 µg/L	2473.5 ppb	14:52:00
1	Sn 189.927†	1182.0	1138.1	523.47 µg/L	523.47 ppb	14:52:21
1	Ti 334.940†	213092.8	204899.2	492.55 µg/L	492.55 ppb	14:51:55
1	Tl 190.801†	347.4	358.5	506.37 µg/L	506.37 ppb	14:52:21
1	U 409.014†	5696.3	5534.0	500.04 µg/L	500.04 ppb	14:52:00
1	V 292.402†	48064.4	46286.7	499.57 µg/L	499.57 ppb	14:52:00
1	Zn 213.857†	21219.3	19939.4	494.39 µg/L	494.39 ppb	14:52:00
2	Sc RADIAL	56818.7	56818.7	104 %		14:50:57
2	Al 396.153Radial†	6864.1	6603.1	4910.8 µg/L	4910.8 ppb	14:50:57
2	Ca 317.933Radial†	5535.1	5137.3	4837.1 µg/L	4837.1 ppb	14:51:17
2	Fe 238.204 Radial†	615.6	576.8	4899.1 µg/L	4899.1 ppb	14:51:17
2	K 766.490 Radial†	7426.8	7005.0	4979.1 µg/L	4979.1 ppb	14:50:57
2	Mg 279.077 IEC†	575.7	541.7	5044.4 µg/L	5044.4 ppb	14:51:17
2	Na 589.592 Radial†	31604.5	29814.2	9814.9 µg/L	9814.9 ppb	14:50:57
2	Sr 421.552†	48545.6	46588.5	482.94 µg/L	482.94 ppb	14:50:57
2	Sc 361.383	1982851.3	1982851.3	103.82 %		14:52:28
2	Y 371.029	1354649.3	1354649.3	103.41 %		14:52:28
2	Ag 328.068†	64081.0	62286.0	497.83 µg/L	497.83 ppb	14:52:34
2	As 188.979†	276.6	265.3	517.47 µg/L	517.47 ppb	14:52:54
2	B 249.677†	12111.5	11334.1	493.59 µg/L	493.59 ppb	14:52:34
2	Ba 233.527†	19855.9	19150.8	499.56 µg/L	499.56 ppb	14:52:34
2	Be 313.107†	767601.6	742777.9	484.89 µg/L	484.89 ppb	14:52:28
2	Cd 226.502†	18724.1	18176.8	501.42 µg/L	501.42 ppb	14:52:34
2	Co 228.616†	10623.9	10241.5	503.47 µg/L	503.47 ppb	14:52:34
2	Cr 267.716†	23965.4	23135.3	509.20 µg/L	509.20 ppb	14:52:34
2	Cu 324.752†	76944.2	71624.9	501.00 µg/L	501.00 ppb	14:52:34
2	Mn 257.610†	147951.6	142747.9	494.77 µg/L	494.77 ppb	14:52:28
2	Mo 202.031†	5059.8	4881.0	521.09 µg/L	521.09 ppb	14:52:54
2	Ni 231.604†	9897.9	9231.3	504.18 µg/L	504.18 ppb	14:52:34
2	P 214.914†	1254.5	1180.6	2487.4 µg/L	2487.4 ppb	14:52:54
2	Pb 220.353†	2113.7	1938.7	517.51 µg/L	517.51 ppb	14:52:54

2	S 181.975 Axial†	253.9	229.7	1006.6 µg/L	1006.6 ppb	14:52:54
2	Sb 206.836†	570.0	522.0	516.18 µg/L	516.18 ppb	14:52:54
2	Se 196.026†	357.5	328.5	508.28 µg/L	508.28 ppb	14:52:54
2	SiO2†	27016.3	24771.5	5334.7 µg/L	5334.7 ppb	14:52:34
2	Si 251.611†	31927.7	30439.2	2502.3 µg/L	2502.3 ppb	14:52:34
2	Sn 189.927†	1183.2	1140.5	524.61 µg/L	524.61 ppb	14:52:54
2	Ti 334.940†	211586.4	203679.4	489.61 µg/L	489.61 ppb	14:52:28
2	Tl 190.801†	345.3	356.8	503.93 µg/L	503.93 ppb	14:52:54
2	U 409.014†	5694.5	5538.4	500.46 µg/L	500.46 ppb	14:52:34
2	V 292.402†	48494.6	46753.2	504.55 µg/L	504.55 ppb	14:52:34
2	Zn 213.857†	21488.9	20222.1	501.41 µg/L	501.41 ppb	14:52:34
3	Sc RADIAL	57349.9	57349.9	105 %		14:51:23
3	Al 396.153Radial†	6954.4	6628.0	4931.1 µg/L	4931.1 ppb	14:51:23
3	Ca 317.933Radial†	5532.3	5085.5	4788.3 µg/L	4788.3 ppb	14:51:43
3	Fe 238.204 Radial†	617.1	572.8	4864.4 µg/L	4864.4 ppb	14:51:43
3	K 766.490 Radial†	7512.2	7020.2	4989.9 µg/L	4989.9 ppb	14:51:23
3	Mg 279.077 IEC†	569.2	530.4	4937.8 µg/L	4937.8 ppb	14:51:43
3	Na 589.592 Radial†	31885.8	29800.8	9810.5 µg/L	9810.5 ppb	14:51:23
3	Sr 421.552†	49101.8	46686.0	483.95 µg/L	483.95 ppb	14:51:23
3	Sc 361.383	1990626.4	1990626.4	104.23 %		14:53:01
3	Y 371.029	1359542.7	1359542.7	103.79 %		14:53:01
3	Ag 328.068†	60113.1	58238.1	465.39 µg/L	465.39 ppb	14:53:07
3	As 188.979†	235.3	224.6	438.16 µg/L	438.16 ppb	14:53:28
3	B 249.677†	11347.7	10555.7	459.50 µg/L	459.50 ppb	14:53:07
3	Ba 233.527†	18299.9	17583.2	458.65 µg/L	458.65 ppb	14:53:07
3	Be 313.107†	726470.7	700428.5	457.24 µg/L	457.24 ppb	14:53:01
3	Cd 226.502†	17137.6	16584.2	457.44 µg/L	457.44 ppb	14:53:07
3	Co 228.616†	9675.2	9291.3	456.68 µg/L	456.68 ppb	14:53:07
3	Cr 267.716†	21632.8	20807.2	457.96 µg/L	457.96 ppb	14:53:07
3	Cu 324.752†	71181.3	65806.4	460.35 µg/L	460.35 ppb	14:53:07
3	Mn 257.610†	140886.2	135412.6	469.36 µg/L	469.36 ppb	14:53:01
3	Mo 202.031†	4241.7	4077.1	435.30 µg/L	435.30 ppb	14:53:28
3	Ni 231.604†	9011.2	8343.3	455.69 µg/L	455.69 ppb	14:53:07
3	P 214.914†	1075.3	1004.1	2111.2 µg/L	2111.2 ppb	14:53:28
3	Pb 220.353†	1866.0	1693.1	451.84 µg/L	451.84 ppb	14:53:28
3	S 181.975 Axial†	232.5	208.2	912.40 µg/L	912.40 ppb	14:53:28
3	Sb 206.836†	504.7	457.3	451.62 µg/L	451.62 ppb	14:53:28
3	Se 196.026†	310.0	281.6	436.86 µg/L	436.86 ppb	14:53:28
3	SiO2†	25184.9	22912.8	4934.4 µg/L	4934.4 ppb	14:53:07
3	Si 251.611†	29623.3	28108.2	2310.6 µg/L	2310.6 ppb	14:53:07
3	Sn 189.927†	974.4	935.7	430.40 µg/L	430.40 ppb	14:53:28
3	Ti 334.940†	200395.3	192146.5	461.88 µg/L	461.88 ppb	14:53:01
3	Tl 190.801†	314.8	326.3	461.00 µg/L	461.00 ppb	14:53:28
3	U 409.014†	5084.0	4931.3	445.50 µg/L	445.50 ppb	14:53:07
3	V 292.402†	43900.0	42162.6	454.79 µg/L	454.79 ppb	14:53:07
3	Zn 213.857†	19753.8	18476.6	458.11 µg/L	458.11 ppb	14:53:07

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1986188.0	104.00 %	0.210			0.20%
Sc RADIAL	56990.9	104 %	0.6			0.55%
Y 371.029	1356632.4	103.57 %	0.197			0.19%
Ag 328.068†	60701.2	485.14 µg/L	17.336	485.14 ppb	17.336	3.57%
QC value within limits for Ag 328.068 Recovery = 97.03%						
Al 396.153Radial†	6604.9	4912.7 µg/L	17.49	4912.7 ppb	17.49	0.36%
QC value within limits for Al 396.153Radial Recovery = 98.25%						
As 188.979†	253.7	494.89 µg/L	49.467	494.89 ppb	49.467	10.00%
QC value within limits for As 188.979 Recovery = 98.98%						
B 249.677†	11061.0	481.62 µg/L	19.175	481.62 ppb	19.175	3.98%
QC value within limits for B 249.677 Recovery = 96.32%						
Ba 233.527†	18546.0	483.78 µg/L	21.996	483.78 ppb	21.996	4.55%
QC value within limits for Ba 233.527 Recovery = 96.76%						
Be 313.107†	730310.7	476.75 µg/L	16.971	476.75 ppb	16.971	3.56%
QC value within limits for Be 313.107 Recovery = 95.35%						
Ca 317.933Radial†	5133.4	4833.4 µg/L	43.35	4833.4 ppb	43.35	0.90%
QC value within limits for Ca 317.933Radial Recovery = 96.67%						
Cd 226.502†	17565.6	484.54 µg/L	23.706	484.54 ppb	23.706	4.89%
QC value within limits for Cd 226.502 Recovery = 96.91%						
Co 228.616†	9882.3	485.78 µg/L	25.392	485.78 ppb	25.392	5.23%

QC value within limits for Co 228.616 Recovery = 97.16%							
Cr 267.716†	22216.8	488.98 µg/L	27.276	488.98 ppb	27.276	5.58%	
QC value within limits for Cr 267.716 Recovery = 97.80%							
Cu 324.752†	69410.6	485.53 µg/L	21.996	485.53 ppb	21.996	4.53%	
QC value within limits for Cu 324.752 Recovery = 97.11%							
Fe 238.204 Radial†	576.9	4900.0 µg/L	36.10	4900.0 ppb	36.10	0.74%	
QC value within limits for Fe 238.204 Radial Recovery = 98.00%							
K 766.490 Radial†	7040.6	5004.4 µg/L	34.84	5004.4 ppb	34.84	0.70%	
QC value within limits for K 766.490 Radial Recovery = 100.09%							
Mg 279.077 IEC†	537.5	5005.5 µg/L	58.81	5005.5 ppb	58.81	1.17%	
QC value within limits for Mg 279.077 IEC Recovery = 100.11%							
Mn 257.610†	140632.1	487.44 µg/L	15.748	487.44 ppb	15.748	3.23%	
QC value within limits for Mn 257.610 Recovery = 97.49%							
Mo 202.031†	4617.8	493.00 µg/L	49.981	493.00 ppb	49.981	10.14%	
QC value within limits for Mo 202.031 Recovery = 98.60%							
Na 589.592 Radial†	29802.3	9811.0 µg/L	3.72	9811.0 ppb	3.72	0.04%	
QC value within limits for Na 589.592 Radial Recovery = 98.11%							
Ni 231.604†	8887.2	485.39 µg/L	26.026	485.39 ppb	26.026	5.36%	
QC value within limits for Ni 231.604 Recovery = 97.08%							
P 214.914†	1121.6	2361.8 µg/L	217.03	2361.8 ppb	217.03	9.19%	
QC value within limits for P 214.914 Recovery = 94.47%							
Pb 220.353†	1859.5	496.33 µg/L	38.539	496.33 ppb	38.539	7.76%	
QC value within limits for Pb 220.353 Recovery = 99.27%							
S 181.975 Axial†	224.0	981.57 µg/L	60.664	981.57 ppb	60.664	6.18%	
QC value within limits for S 181.975 Axial Recovery = 98.16%							
Sb 206.836†	506.4	500.55 µg/L	43.281	500.55 ppb	43.281	8.65%	
QC value within limits for Sb 206.836 Recovery = 100.11%							
Se 196.026†	313.6	485.62 µg/L	42.263	485.62 ppb	42.263	8.70%	
QC value within limits for Se 196.026 Recovery = 97.12%							
SiO2†	24062.6	5182.0 µg/L	216.38	5182.0 ppb	216.38	4.18%	
QC value within limits for SiO2 Recovery = 96.91%							
Si 251.611†	29545.6	2428.8 µg/L	103.33	2428.8 ppb	103.33	4.25%	
QC value within limits for Si 251.611 Recovery = 97.15%							
Sn 189.927†	1071.4	492.83 µg/L	54.065	492.83 ppb	54.065	10.97%	
QC value within limits for Sn 189.927 Recovery = 98.57%							
Sr 421.552†	46647.0	483.55 µg/L	0.535	483.55 ppb	0.535	0.11%	
QC value within limits for Sr 421.552 Recovery = 96.71%							
Ti 334.940†	200241.7	481.35 µg/L	16.923	481.35 ppb	16.923	3.52%	
QC value within limits for Ti 334.940 Recovery = 96.27%							
Tl 190.801†	347.2	490.43 µg/L	25.519	490.43 ppb	25.519	5.20%	
QC value within limits for Tl 190.801 Recovery = 98.09%							
U 409.014†	5334.6	482.00 µg/L	31.611	482.00 ppb	31.611	6.56%	
QC value within limits for U 409.014 Recovery = 96.40%							
V 292.402†	45067.5	486.30 µg/L	27.408	486.30 ppb	27.408	5.64%	
QC value within limits for V 292.402 Recovery = 97.26%							
Zn 213.857†	19546.0	484.64 µg/L	23.239	484.64 ppb	23.239	4.80%	
QC value within limits for Zn 213.857 Recovery = 96.93%							

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 14:53:37

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	56199.9	56199.9	103 %		14:54:10
1	Al 396.153Radial†	38.0	47.1	35.072 µg/L	35.072 ppb	14:54:10
1	Ca 317.933Radial†	231.4	45.6	42.930 µg/L	42.930 ppb	14:54:31
1	Fe 238.204 Radial†	23.4	8.2	69.822 µg/L	69.822 ppb	14:54:31
1	K 766.490 Radial†	243.5	108.1	76.828 µg/L	76.828 ppb	14:54:10
1	Mg 279.077 IEC†	18.5	6.7	62.643 µg/L	62.643 ppb	14:54:31
1	Na 589.592 Radial†	743.1	179.7	59.159 µg/L	59.159 ppb	14:54:10
1	Sr 421.552†	105.8	63.2	0.6552 µg/L	0.6552 ppb	14:54:10
1	Sc 361.383	1982476.6	1982476.6	103.80 %		14:55:33
1	Y 371.029	1357413.1	1357413.1	103.63 %		14:55:33
1	Ag 328.068†	-522.2	61.5	0.4946 µg/L	0.4946 ppb	14:55:38
1	As 188.979†	1.8	0.6	1.0901 µg/L	1.0901 ppb	14:55:59
1	B 249.677†	408.1	61.7	2.6625 µg/L	2.6625 ppb	14:55:59
1	Ba 233.527†	2.5	28.5	0.7415 µg/L	0.7415 ppb	14:55:59
1	Be 313.107†	-3213.4	344.8	0.2250 µg/L	0.2250 ppb	14:55:38
1	Cd 226.502†	-134.6	12.5	0.3368 µg/L	0.3368 ppb	14:55:59
1	Co 228.616†	-7.7	1.4	0.0712 µg/L	0.0712 ppb	14:55:59
1	Cr 267.716†	4.1	56.4	1.2401 µg/L	1.2401 ppb	14:55:59
1	Cu 324.752†	2752.9	165.9	1.1688 µg/L	1.1688 ppb	14:55:38
1	Mn 257.610†	-137.5	111.6	0.3934 µg/L	0.3934 ppb	14:55:59
1	Mo 202.031†	2.7	10.2	1.0859 µg/L	1.0859 ppb	14:55:59
1	Ni 231.604†	309.2	-4.3	-0.2339 µg/L	-0.2339 ppb	14:55:59
1	P 214.914†	25.1	-3.5	-7.5860 µg/L	-7.5860 ppb	14:55:59
1	Pb 220.353†	124.3	22.6	6.0147 µg/L	6.0147 ppb	14:55:59
1	S 181.975 Axial†	16.6	1.2	5.2644 µg/L	5.2644 ppb	14:55:59
1	Sb 206.836†	32.4	4.3	4.2069 µg/L	4.2069 ppb	14:55:59
1	Se 196.026†	17.5	1.0	1.6734 µg/L	1.6734 ppb	14:55:59
1	SiO2†	1299.2	1.6	0.3503 µg/L	0.3503 ppb	14:55:38
1	Si 251.611†	379.1	52.3	4.3027 µg/L	4.3027 ppb	14:55:59
1	Sn 189.927†	7.8	8.4	3.8780 µg/L	3.8780 ppb	14:55:59
1	Ti 334.940†	271.8	145.7	0.3462 µg/L	0.3462 ppb	14:55:38
1	Tl 190.801†	-19.8	5.2	7.2432 µg/L	7.2432 ppb	14:55:59
1	U 409.014†	-9.7	44.3	3.9980 µg/L	3.9980 ppb	14:55:38
1	V 292.402†	-10.8	33.8	0.3839 µg/L	0.3839 ppb	14:55:38
1	Zn 213.857†	539.3	44.0	1.0899 µg/L	1.0899 ppb	14:55:59
2	Sc RADIAL	56663.5	56663.5	104 %		14:54:36
2	Al 396.153Radial†	53.4	61.6	45.892 µg/L	45.892 ppb	14:54:36
2	Ca 317.933Radial†	224.0	36.6	34.458 µg/L	34.458 ppb	14:54:57
2	Fe 238.204 Radial†	18.3	3.1	26.399 µg/L	26.399 ppb	14:54:57
2	K 766.490 Radial†	257.1	119.2	84.727 µg/L	84.727 ppb	14:54:36
2	Mg 279.077 IEC†	17.6	5.7	53.162 µg/L	53.162 ppb	14:54:57
2	Na 589.592 Radial†	788.5	217.6	71.620 µg/L	71.620 ppb	14:54:36
2	Sr 421.552†	88.8	46.0	0.4764 µg/L	0.4764 ppb	14:54:36
2	Sc 361.383	1976808.7	1976808.7	103.51 %		14:56:05
2	Y 371.029	1355511.3	1355511.3	103.48 %		14:56:05
2	Ag 328.068†	-510.0	71.8	0.5752 µg/L	0.5752 ppb	14:56:10
2	As 188.979†	1.2	0.0	0.0279 µg/L	0.0279 ppb	14:56:31
2	B 249.677†	396.3	51.4	2.2364 µg/L	2.2364 ppb	14:56:31
2	Ba 233.527†	2.6	28.5	0.7438 µg/L	0.7438 ppb	14:56:31
2	Be 313.107†	-3268.6	282.6	0.1844 µg/L	0.1844 ppb	14:56:10
2	Cd 226.502†	-122.2	24.1	0.6618 µg/L	0.6618 ppb	14:56:31
2	Co 228.616†	-10.0	-0.8	-0.0395 µg/L	-0.0395 ppb	14:56:31
2	Cr 267.716†	5.1	57.3	1.2611 µg/L	1.2611 ppb	14:56:31
2	Cu 324.752†	2702.2	124.6	0.8738 µg/L	0.8738 ppb	14:56:10
2	Mn 257.610†	-107.9	139.8	0.4856 µg/L	0.4856 ppb	14:56:31
2	Mo 202.031†	-1.1	6.4	0.6888 µg/L	0.6888 ppb	14:56:31
2	Ni 231.604†	302.7	-9.7	-0.5298 µg/L	-0.5298 ppb	14:56:31
2	P 214.914†	20.2	-8.1	-17.441 µg/L	-17.441 ppb	14:56:31
2	Pb 220.353†	118.9	17.7	4.7183 µg/L	4.7183 ppb	14:56:31



2	S 181.975 Axial†	14.4	-0.9	-4.1582 µg/L	-4.1582 ppb	14:56:31
2	Sb 206.836†	28.3	0.4	0.3915 µg/L	0.3915 ppb	14:56:31
2	Se 196.026†	9.3	-6.9	-10.429 µg/L	-10.429 ppb	14:56:31
2	SiO2†	1222.9	-68.6	-14.765 µg/L	-14.765 ppb	14:56:10
2	Si 251.611†	359.0	34.0	2.7936 µg/L	2.7936 ppb	14:56:31
2	Sn 189.927†	7.1	7.7	3.5568 µg/L	3.5568 ppb	14:56:31
2	Ti 334.940†	232.6	108.6	0.2576 µg/L	0.2576 ppb	14:56:10
2	Tl 190.801†	-24.5	0.6	0.8244 µg/L	0.8244 ppb	14:56:31
2	U 409.014†	-107.5	-50.2	-4.5523 µg/L	-4.5523 ppb	14:56:10
2	V 292.402†	15.1	58.8	0.6333 µg/L	0.6333 ppb	14:56:10
2	Zn 213.857†	534.3	40.7	1.0126 µg/L	1.0126 ppb	14:56:31
3	Sc RADIAL	56320.6	56320.6	103 %		14:55:02
3	Al 396.153Radial†	8.5	18.4	13.663 µg/L	13.663 ppb	14:55:02
3	Ca 317.933Radial†	216.9	31.1	29.241 µg/L	29.241 ppb	14:55:23
3	Fe 238.204 Radial†	17.6	2.6	21.668 µg/L	21.668 ppb	14:55:23
3	K 766.490 Radial†	236.5	100.7	71.584 µg/L	71.584 ppb	14:55:02
3	Mg 279.077 IEC†	12.2	0.5	5.0859 µg/L	5.0859 ppb	14:55:23
3	Na 589.592 Radial†	760.7	195.3	64.287 µg/L	64.287 ppb	14:55:02
3	Sr 421.552†	71.7	29.9	0.3097 µg/L	0.3097 ppb	14:55:02
3	Sc 361.383	1993913.4	1993913.4	104.40 %		14:56:37
3	Y 371.029	1367504.2	1367504.2	104.40 %		14:56:37
3	Ag 328.068†	-498.3	87.2	0.6944 µg/L	0.6944 ppb	14:56:43
3	As 188.979†	0.4	-0.8	-1.5138 µg/L	-1.5138 ppb	14:57:03
3	B 249.677†	385.9	38.1	1.6564 µg/L	1.6564 ppb	14:57:03
3	Ba 233.527†	1.2	27.2	0.7082 µg/L	0.7082 ppb	14:57:03
3	Be 313.107†	-3126.9	445.4	0.2907 µg/L	0.2907 ppb	14:56:43
3	Cd 226.502†	-117.4	29.7	0.8162 µg/L	0.8162 ppb	14:57:03
3	Co 228.616†	-8.6	0.6	0.0304 µg/L	0.0304 ppb	14:57:03
3	Cr 267.716†	2.0	54.3	1.1938 µg/L	1.1938 ppb	14:57:03
3	Cu 324.752†	2701.6	101.6	0.7126 µg/L	0.7126 ppb	14:56:43
3	Mn 257.610†	-86.5	161.3	0.5611 µg/L	0.5611 ppb	14:57:03
3	Mo 202.031†	5.2	12.5	1.3355 µg/L	1.3355 ppb	14:57:03
3	Ni 231.604†	315.6	0.1	0.0043 µg/L	0.0043 ppb	14:57:03
3	P 214.914†	33.2	4.1	8.8077 µg/L	8.8077 ppb	14:57:03
3	Pb 220.353†	109.3	7.5	2.0114 µg/L	2.0114 ppb	14:57:03
3	S 181.975 Axial†	10.6	-4.7	-20.521 µg/L	-20.521 ppb	14:57:03
3	Sb 206.836†	25.8	-2.2	-2.1813 µg/L	-2.1813 ppb	14:57:03
3	Se 196.026†	17.8	1.2	1.8776 µg/L	1.8776 ppb	14:57:03
3	SiO2†	1292.2	-12.3	-2.6550 µg/L	-2.6550 ppb	14:56:43
3	Si 251.611†	371.3	42.8	3.5163 µg/L	3.5163 ppb	14:57:03
3	Sn 189.927†	-2.0	-1.0	-0.4777 µg/L	-0.4777 ppb	14:57:03
3	Ti 334.940†	313.8	184.5	0.4438 µg/L	0.4438 ppb	14:56:43
3	Tl 190.801†	-24.1	1.2	1.6892 µg/L	1.6892 ppb	14:57:03
3	U 409.014†	-22.6	31.9	2.8863 µg/L	2.8863 ppb	14:56:43
3	V 292.402†	-34.6	11.0	0.1363 µg/L	0.1363 ppb	14:56:43
3	Zn 213.857†	532.5	34.5	0.8590 µg/L	0.8590 ppb	14:57:03

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1984399.6	103.90 %	0.456			0.44%
Sc RADIAL	56394.7	103 %	0.4			0.43%
Y 371.029	1360142.9	103.83 %	0.492			0.47%
Ag 328.068†	73.5	0.5881 µg/L	0.10050	0.5881 ppb	0.10050	17.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	42.3	31.542 µg/L	16.4016	31.542 ppb	16.4016	52.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.1319 µg/L	1.30928	-0.1319 ppb	1.30928	992.68%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	50.4	2.1851 µg/L	0.50501	2.1851 ppb	0.50501	23.11%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	28.1	0.7312 µg/L	0.01993	0.7312 ppb	0.01993	2.73%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	357.6	0.2334 µg/L	0.05362	0.2334 ppb	0.05362	22.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	37.7	35.543 µg/L	6.9088	35.543 ppb	6.9088	19.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	22.1	0.6049 µg/L	0.24471	0.6049 ppb	0.24471	40.45%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.4	0.0207 µg/L	0.05597	0.0207 ppb	0.05597	270.39%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	56.0	1.2317 µg/L	0.03444 1.2317 ppb 0.03444 2.80%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	130.7	0.9184 µg/L	0.23134 0.9184 ppb 0.23134 25.19%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	4.6	39.296 µg/L	26.5417 39.296 ppb 26.5417 67.54%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	109.3	77.713 µg/L	6.6157 77.713 ppb 6.6157 8.51%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	4.3	40.297 µg/L	30.8602 40.297 ppb 30.8602 76.58%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	137.6	0.4800 µg/L	0.08402 0.4800 ppb 0.08402 17.50%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.7	1.0367 µg/L	0.32615 1.0367 ppb 0.32615 31.46%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	197.5	65.022 µg/L	6.2628 65.022 ppb 6.2628 9.63%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-4.6	-0.2531 µg/L	0.26755 -0.2531 ppb 0.26755 105.70%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-2.5	-5.4063 µg/L	13.25932 -5.4063 ppb 13.25932 245.25%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	15.9	4.2482 µg/L	2.04263 4.2482 ppb 2.04263 48.08%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.5	-6.4715 µg/L	13.04721 -6.4715 ppb 13.04721 201.61%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	0.8	0.8057 µg/L	3.21418 0.8057 ppb 3.21418 398.93%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-1.5	-2.2926 µg/L	7.04698 -2.2926 ppb 7.04698 307.37%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-26.4	-5.6898 µg/L	8.00142 -5.6898 ppb 8.00142 140.63%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	43.0	3.5375 µg/L	0.75475 3.5375 ppb 0.75475 21.34%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.0	2.3190 µg/L	2.42737 2.3190 ppb 2.42737 104.67%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	46.3	0.4804 µg/L	0.17278 0.4804 ppb 0.17278 35.96%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	146.3	0.3492 µg/L	0.09310 0.3492 ppb 0.09310 26.66%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.3	3.2523 µg/L	3.48319 3.2523 ppb 3.48319 107.10%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	8.7	0.7773 µg/L	4.64898 0.7773 ppb 4.64898 598.06%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	34.6	0.3845 µg/L	0.24848 0.3845 ppb 0.24848 64.62%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	39.7	0.9871 µg/L	0.11756 0.9871 ppb 0.11756 11.91%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/11/2010 15:08:34

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\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb  
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## Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 2/11/2010 13:51:13

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: 113

Sample ID: LR1

Date Collected: 2/11/2010 15:08:34

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	55775.1	55775.1	102 %		15:09:19
1	Al 396.153Radial†	-12.5	-2.1	-1.5477 µg/L	-1.5477 ppb	15:09:19
1	Ca 317.933Radial†	109.7	-71.8	-67.596 µg/L	-67.596 ppb	15:09:39
1	Fe 238.204 Radial†	12.5	-2.2	-18.859 µg/L	-18.859 ppb	15:09:39

1	K 766.490 Radial†	153.1	21.4	15.223 µg/L	15.223 ppb	15:09:19
1	Mg 279.077 IEC†	21.3	9.6	89.132 µg/L	89.132 ppb	15:09:39
1	Na 589.592 Radial†	561.6	7.7	2.5239 µg/L	2.5239 ppb	15:09:19
1	Sr 421.552†	60.6	19.8	0.2050 µg/L	0.2050 ppb	15:09:19
1	Sc 361.383	1979575.8	1979575.8	103.65 %		15:10:41
1	Y 371.029	1359463.7	1359463.7	103.78 %		15:10:41
1	Ag 328.068†	-475.7	105.6	0.7790 µg/L	0.7790 ppb	15:10:47
1	As 188.979†	3.5	2.2	4.2811 µg/L	4.2811 ppb	15:11:08
1	B 249.677†	236.6	-103.2	-4.4890 µg/L	-4.4890 ppb	15:10:47
1	Ba 233.527†	-43.0	-15.5	-0.4185 µg/L	-0.4185 ppb	15:11:08
1	Be 313.107†	-9167.3	-5403.9	-3.5311 µg/L	-3.5311 ppb	15:10:47
1	Cd 226.502†	-304.4	-151.6	-4.1785 µg/L	-4.1785 ppb	15:11:08
1	Co 228.616†	19.8	27.9	1.3617 µg/L	1.3617 ppb	15:11:08
1	Cr 267.716†	233.0	277.1	6.0903 µg/L	6.0903 ppb	15:10:47
1	Cu 324.752†	1310.7	-1221.6	-8.5355 µg/L	-8.5355 ppb	15:10:47
1	Mn 257.610†	14.0	257.6	0.8861 µg/L	0.8861 ppb	15:10:47
1	Mo 202.031†	-13.4	-5.4	-0.5763 µg/L	-0.5763 ppb	15:11:08
1	Ni 231.604†	324.2	10.6	0.5789 µg/L	0.5789 ppb	15:11:08
1	P 214.914†	39.4	10.4	23.307 µg/L	23.307 ppb	15:11:08
1	Pb 220.353†	132.9	31.0	-2.3589 µg/L	-2.3589 ppb	15:11:08
1	S 181.975 Axial†	17.0	1.6	6.9914 µg/L	6.9914 ppb	15:11:08
1	Sb 206.836†	24.0	-3.8	-3.8211 µg/L	-3.8211 ppb	15:11:08
1	Se 196.026†	11.2	-5.0	-7.7508 µg/L	-7.7508 ppb	15:11:08
1	SiO2†	1260.6	-33.8	-7.2860 µg/L	-7.2860 ppb	15:10:47
1	Si 251.611†	175.4	-143.6	-11.809 µg/L	-11.809 ppb	15:11:08
1	Sn 189.927†	6.2	6.9	3.1737 µg/L	3.1737 ppb	15:11:08
1	Ti 334.940†	2413.3	2212.1	5.3130 µg/L	5.3130 ppb	15:10:47
1	Tl 190.801†	-31.2	-5.9	4.3972 µg/L	4.3972 ppb	15:11:08
1	U 409.014†	117155.1	113081.6	10238 µg/L	10238 ppb	15:10:41
1	V 292.402†	-897.2	-821.4	1.8907 µg/L	1.8907 ppb	15:10:47
1	Zn 213.857†	499.8	6.6	0.1728 µg/L	0.1728 ppb	15:11:08
2	Sc RADIAL	55251.0	55251.0	101 %		15:09:44
2	Al 396.153Radial†	-27.7	-17.2	-12.820 µg/L	-12.820 ppb	15:09:44
2	Ca 317.933Radial†	107.7	-72.8	-68.561 µg/L	-68.561 ppb	15:10:05
2	Fe 238.204 Radial†	14.6	-0.1	-0.7560 µg/L	-0.7560 ppb	15:10:05
2	K 766.490 Radial†	163.9	33.5	23.798 µg/L	23.798 ppb	15:09:44
2	Mg 279.077 IEC†	21.5	10.0	92.921 µg/L	92.921 ppb	15:10:05
2	Na 589.592 Radial†	549.7	1.1	0.3683 µg/L	0.3683 ppb	15:09:44
2	Sr 421.552†	65.4	25.1	0.2600 µg/L	0.2600 ppb	15:09:44
2	Sc 361.383	1991488.7	1991488.7	104.28 %		15:11:14
2	Y 371.029	1367480.0	1367480.0	104.39 %		15:11:14
2	Ag 328.068†	-460.8	122.6	0.9153 µg/L	0.9153 ppb	15:11:20
2	As 188.979†	3.4	2.1	4.1976 µg/L	4.1976 ppb	15:11:40
2	B 249.677†	245.3	-96.3	-4.1987 µg/L	-4.1987 ppb	15:11:20
2	Ba 233.527†	-30.4	-3.2	-0.0984 µg/L	-0.0984 ppb	15:11:40
2	Be 313.107†	-9053.1	-5241.5	-3.4251 µg/L	-3.4251 ppb	15:11:20
2	Cd 226.502†	-307.5	-152.7	-4.2119 µg/L	-4.2119 ppb	15:11:40
2	Co 228.616†	2.2	10.9	0.5250 µg/L	0.5250 ppb	15:11:40
2	Cr 267.716†	184.1	229.0	5.0309 µg/L	5.0309 ppb	15:11:20
2	Cu 324.752†	1378.2	-1164.4	-8.1337 µg/L	-8.1337 ppb	15:11:20
2	Mn 257.610†	56.5	298.3	1.0291 µg/L	1.0291 ppb	15:11:20
2	Mo 202.031†	-9.4	-1.5	-0.1584 µg/L	-0.1584 ppb	15:11:40
2	Ni 231.604†	337.2	21.2	1.1562 µg/L	1.1562 ppb	15:11:40
2	P 214.914†	47.1	17.5	38.462 µg/L	38.462 ppb	15:11:40
2	Pb 220.353†	140.3	37.4	-0.6060 µg/L	-0.6060 ppb	15:11:40
2	S 181.975 Axial†	16.6	1.1	4.9128 µg/L	4.9128 ppb	15:11:40
2	Sb 206.836†	18.1	-9.6	-9.5490 µg/L	-9.5490 ppb	15:11:40
2	Se 196.026†	12.7	-3.7	-5.6705 µg/L	-5.6705 ppb	15:11:40
2	SiO2†	1277.1	-25.3	-5.4423 µg/L	-5.4423 ppb	15:11:20
2	Si 251.611†	186.7	-133.8	-10.999 µg/L	-10.999 ppb	15:11:40
2	Sn 189.927†	5.7	6.3	2.9120 µg/L	2.9120 ppb	15:11:40
2	Ti 334.940†	2507.4	2288.5	5.4964 µg/L	5.4964 ppb	15:11:20
2	Tl 190.801†	-28.7	-3.2	8.0207 µg/L	8.0207 ppb	15:11:40
2	U 409.014†	117240.7	112487.6	10184 µg/L	10184 ppb	15:11:14
2	V 292.402†	-895.5	-814.6	1.9102 µg/L	1.9102 ppb	15:11:20
2	Zn 213.857†	510.6	14.1	0.3551 µg/L	0.3551 ppb	15:11:40
3	Sc RADIAL	56112.5	56112.5	103 %		15:10:10
3	Al 396.153Radial†	-19.4	-8.8	-6.5548 µg/L	-6.5548 ppb	15:10:10
3	Ca 317.933Radial†	114.8	-67.5	-63.545 µg/L	-63.545 ppb	15:10:31
3	Fe 238.204 Radial†	16.7	1.7	14.838 µg/L	14.838 ppb	15:10:31
3	K 766.490 Radial†	156.5	23.8	16.907 µg/L	16.907 ppb	15:10:10

3	Mg 279.077 IEC†	18.3	6.5	60.273 µg/L	60.273 ppb	15:10:31
3	Na 589.592 Radial†	544.2	-12.6	-4.1463 µg/L	-4.1463 ppb	15:10:10
3	Sr 421.552†	60.1	18.9	0.1962 µg/L	0.1962 ppb	15:10:10
3	Sc 361.383	1998454.5	1998454.5	104.64 %		15:11:47
3	Y 371.029	1371253.2	1371253.2	104.68 %		15:11:47
3	Ag 328.068†	-504.4	82.5	0.6071 µg/L	0.6071 ppb	15:11:53
3	As 188.979†	2.1	0.9	1.6782 µg/L	1.6782 ppb	15:12:13
3	B 249.677†	284.2	-59.9	-2.6163 µg/L	-2.6163 ppb	15:11:53
3	Ba 233.527†	-15.1	11.6	0.2883 µg/L	0.2883 ppb	15:12:13
3	Be 313.107†	-8272.3	-4465.0	-2.9180 µg/L	-2.9180 ppb	15:11:53
3	Cd 226.502†	-264.9	-111.0	-3.0636 µg/L	-3.0636 ppb	15:12:13
3	Co 228.616†	14.5	22.7	1.1081 µg/L	1.1081 ppb	15:12:13
3	Cr 267.716†	231.8	273.9	6.0206 µg/L	6.0206 ppb	15:11:53
3	Cu 324.752†	1499.3	-1053.3	-7.3552 µg/L	-7.3552 ppb	15:11:53
3	Mn 257.610†	138.5	376.5	1.3032 µg/L	1.3032 ppb	15:11:53
3	Mo 202.031†	-2.6	5.1	0.5398 µg/L	0.5398 ppb	15:12:13
3	Ni 231.604†	337.9	20.7	1.1315 µg/L	1.1315 ppb	15:12:13
3	P 214.914†	49.3	19.5	42.611 µg/L	42.611 ppb	15:12:13
3	Pb 220.353†	138.7	35.4	-0.5823 µg/L	-0.5823 ppb	15:12:13
3	S 181.975 Axial†	15.8	0.3	1.1838 µg/L	1.1838 ppb	15:12:13
3	Sb 206.836†	21.8	-6.1	-6.0924 µg/L	-6.0924 ppb	15:12:13
3	Se 196.026†	12.8	-3.6	-5.5591 µg/L	-5.5591 ppb	15:12:13
3	SiO2†	1308.9	0.8	0.1805 µg/L	0.1805 ppb	15:11:53
3	Si 251.611†	268.0	-56.8	-4.6690 µg/L	-4.6690 ppb	15:12:13
3	Sn 189.927†	4.1	4.8	2.1976 µg/L	2.1976 ppb	15:12:13
3	Ti 334.940†	2521.6	2293.7	5.5115 µg/L	5.5115 ppb	15:11:53
3	Tl 190.801†	-25.5	-0.1	11.785 µg/L	11.785 ppb	15:12:13
3	U 409.014†	111497.5	106607.2	9651.9 µg/L	9651.9 ppb	15:11:47
3	V 292.402†	-762.7	-684.7	2.7514 µg/L	2.7514 ppb	15:11:53
3	Zn 213.857†	523.6	24.8	0.6223 µg/L	0.6223 ppb	15:12:13

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1989839.7	104.19 %	%	0.500			0.48%
Sc RADIAL	55712.9	102 %	%	0.8			0.78%
Y 371.029	1366065.6	104.29 %	%	0.460			0.44%
Ag 328.068†	103.5	0.7671 µg/L	µg/L	0.15443	0.7671 ppb	0.15443	20.13%
Al 396.153Radial†	-9.4	-6.9743 µg/L	µg/L	5.64801	-6.9743 ppb	5.64801	80.98%
As 188.979†	1.7	3.3856 µg/L	µg/L	1.47930	3.3856 ppb	1.47930	43.69%
B 249.677†	-86.4	-3.7680 µg/L	µg/L	1.00792	-3.7680 ppb	1.00792	26.75%
Ba 233.527†	-2.4	-0.0762 µg/L	µg/L	0.35392	-0.0762 ppb	0.35392	464.36%
Be 313.107†	-5036.8	-3.2914 µg/L	µg/L	0.32768	-3.2914 ppb	0.32768	9.96%
Ca 317.933Radial†	-70.7	-66.567 µg/L	µg/L	2.6618	-66.567 ppb	2.6618	4.00%
Cd 226.502†	-138.4	-3.8180 µg/L	µg/L	0.65352	-3.8180 ppb	0.65352	17.12%
Co 228.616†	20.5	0.9983 µg/L	µg/L	0.42901	0.9983 ppb	0.42901	42.97%
Cr 267.716†	260.0	5.7139 µg/L	µg/L	0.59254	5.7139 ppb	0.59254	10.37%
Cu 324.752†	-1146.4	-8.0081 µg/L	µg/L	0.60007	-8.0081 ppb	0.60007	7.49%
Fe 238.204 Radial†	-0.2	-1.5922 µg/L	µg/L	16.86410	-1.5922 ppb	16.86410	>999.9%
K 766.490 Radial†	26.2	18.643 µg/L	µg/L	4.5435	18.643 ppb	4.5435	24.37%
Mg 279.077 IEC†	8.7	80.775 µg/L	µg/L	17.8566	80.775 ppb	17.8566	22.11%
Mn 257.610†	310.8	1.0728 µg/L	µg/L	0.21196	1.0728 ppb	0.21196	19.76%
Mo 202.031†	-0.6	-0.0649 µg/L	µg/L	0.56388	-0.0649 ppb	0.56388	868.32%
Na 589.592 Radial†	-1.3	-0.4181 µg/L	µg/L	3.40391	-0.4181 ppb	3.40391	814.20%
Ni 231.604†	17.5	0.9555 µg/L	µg/L	0.32641	0.9555 ppb	0.32641	34.16%
P 214.914†	15.8	34.793 µg/L	µg/L	10.1611	34.793 ppb	10.1611	29.20%
Pb 220.353†	34.6	-1.1824 µg/L	µg/L	1.01895	-1.1824 ppb	1.01895	86.18%
S 181.975 Axial†	1.0	4.3627 µg/L	µg/L	2.94264	4.3627 ppb	2.94264	67.45%
Sb 206.836†	-6.5	-6.4875 µg/L	µg/L	2.88435	-6.4875 ppb	2.88435	44.46%
Se 196.026†	-4.1	-6.3268 µg/L	µg/L	1.23447	-6.3268 ppb	1.23447	19.51%
SiO2†	-19.4	-4.1826 µg/L	µg/L	3.88938	-4.1826 ppb	3.88938	92.99%
Si 251.611†	-111.4	-9.1588 µg/L	µg/L	3.90936	-9.1588 ppb	3.90936	42.68%
Sn 189.927†	6.0	2.7611 µg/L	µg/L	0.50522	2.7611 ppb	0.50522	18.30%
Sr 421.552†	21.3	0.2204 µg/L	µg/L	0.03458	0.2204 ppb	0.03458	15.69%
Ti 334.940†	2264.8	5.4403 µg/L	µg/L	0.11049	5.4403 ppb	0.11049	2.03%
Tl 190.801†	-3.0	8.0675 µg/L	µg/L	3.69388	8.0675 ppb	3.69388	45.79%
U 409.014†	110725.5	10025 µg/L	µg/L	324.0	10025 ppb	324.0	3.23%
V 292.402†	-773.6	2.1841 µg/L	µg/L	0.49139	2.1841 ppb	0.49139	22.50%
Zn 213.857†	15.2	0.3834 µg/L	µg/L	0.22607	0.3834 ppb	0.22607	58.97%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 2/11/2010 15:12:22

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	53713.3	53713.3	98.4 %		15:12:55
1	Al 396.153Radial†	-16.2	-6.3	-4.7161 µg/L	-4.7161 ppb	15:12:55
1	Ca 317.933Radial†	188.0	11.9	11.198 µg/L	11.198 ppb	15:13:15
1	Fe 238.204 Radial†	4.2	-10.3	23.498 µg/L	23.498 ppb	15:13:15
1	K 766.490 Radial†	165.7	39.9	28.393 µg/L	28.393 ppb	15:12:55
1	Mg 279.077 IEC†	10.1	-1.1	-9.7514 µg/L	-9.7514 ppb	15:13:15
1	Na 589.592 Radial†	614.8	82.8	27.252 µg/L	27.252 ppb	15:12:55
1	Sr 421.552†	64.3	25.8	0.2675 µg/L	0.2675 ppb	15:12:55
1	Sc 361.383	1941418.8	1941418.8	101.65 %		15:14:18
1	Y 371.029	1323859.1	1323859.1	101.06 %		15:14:18
1	Ag 328.068†	-525.2	47.9	0.3781 µg/L	0.3781 ppb	15:14:24
1	As 188.979†	-3.1	-4.2	-8.1869 µg/L	-8.1869 ppb	15:14:45
1	B 249.677†	750.9	407.3	17.845 µg/L	17.845 ppb	15:14:24
1	Ba 233.527†	-16.3	10.0	0.2610 µg/L	0.2610 ppb	15:14:45
1	Be 313.107†	-3458.2	38.5	0.0250 µg/L	0.0250 ppb	15:14:24
1	Cd 226.502†	-114.7	29.2	0.8189 µg/L	0.8189 ppb	15:14:45
1	Co 228.616†	107569.3	105828.5	5208.2 µg/L	5208.2 ppb	15:14:24
1	Cr 267.716†	-25.9	26.9	0.5925 µg/L	0.5925 ppb	15:14:45
1	Cu 324.752†	1814.1	-701.5	-4.9124 µg/L	-4.9124 ppb	15:14:24
1	Mn 257.610†	-161.2	85.5	0.2849 µg/L	0.2849 ppb	15:14:45
1	Mo 202.031†	-1.5	6.0	0.6418 µg/L	0.6418 ppb	15:14:45
1	Ni 231.604†	346.8	39.0	-4.0742 µg/L	-4.0742 ppb	15:14:45
1	P 214.914†	5345.7	5231.1	11233 µg/L	11233 ppb	15:14:24
1	Pb 220.353†	111.4	12.4	3.3090 µg/L	3.3090 ppb	15:14:45
1	S 181.975 Axial†	16.5	1.4	5.9830 µg/L	5.9830 ppb	15:14:45
1	Sb 206.836†	21.7	-5.6	-5.5036 µg/L	-5.5036 ppb	15:14:45
1	Se 196.026†	12.6	-3.4	-5.4894 µg/L	-5.4894 ppb	15:14:45
1	SiO2†	400045.4	392288.3	84482 µg/L	84482 ppb	15:14:18
1	Si 251.611†	483396.1	475220.4	39066 µg/L	39066 ppb	15:14:18
1	Sn 189.927†	3.3	4.1	1.8920 µg/L	1.8920 ppb	15:14:45
1	Ti 334.940†	305.9	184.8	0.4456 µg/L	0.4456 ppb	15:14:24
1	Tl 190.801†	-3.7	20.7	11.360 µg/L	11.360 ppb	15:14:45
1	U 409.014†	25.3	78.5	7.1194 µg/L	7.1194 ppb	15:14:24
1	V 292.402†	5.9	50.0	0.5361 µg/L	0.5361 ppb	15:14:24
1	Zn 213.857†	522.6	38.6	0.9665 µg/L	0.9665 ppb	15:14:45
2	Sc RADIAL	54832.8	54832.8	100 %		15:13:21
2	Al 396.153Radial†	1.7	11.8	8.7929 µg/L	8.7929 ppb	15:13:21
2	Ca 317.933Radial†	190.7	10.6	10.005 µg/L	10.005 ppb	15:13:42
2	Fe 238.204 Radial†	3.0	-11.5	14.135 µg/L	14.135 ppb	15:13:42
2	K 766.490 Radial†	204.4	75.0	53.328 µg/L	53.328 ppb	15:13:21
2	Mg 279.077 IEC†	11.2	-0.1	-0.6600 µg/L	-0.6600 ppb	15:13:42
2	Na 589.592 Radial†	630.7	85.9	28.272 µg/L	28.272 ppb	15:13:21
2	Sr 421.552†	34.5	-5.2	-0.0538 µg/L	-0.0538 ppb	15:13:21
2	Sc 361.383	1946646.9	1946646.9	101.93 %		15:14:51
2	Y 371.029	1327034.0	1327034.0	101.31 %		15:14:51
2	Ag 328.068†	-584.6	-9.0	-0.0733 µg/L	-0.0733 ppb	15:14:57
2	As 188.979†	-0.2	-1.3	-2.6409 µg/L	-2.6409 ppb	15:15:17
2	B 249.677†	783.8	437.5	19.174 µg/L	19.174 ppb	15:14:57
2	Ba 233.527†	-20.0	6.4	0.1666 µg/L	0.1666 ppb	15:15:17
2	Be 313.107†	-3481.4	24.9	0.0161 µg/L	0.0161 ppb	15:14:57
2	Cd 226.502†	-101.1	42.9	1.1972 µg/L	1.1972 ppb	15:15:17
2	Co 228.616†	108800.7	106752.3	5253.6 µg/L	5253.6 ppb	15:14:57
2	Cr 267.716†	-17.5	35.2	0.7745 µg/L	0.7745 ppb	15:15:17
2	Cu 324.752†	1718.5	-800.1	-5.6024 µg/L	-5.6024 ppb	15:14:57
2	Mn 257.610†	-163.9	83.3	0.2757 µg/L	0.2757 ppb	15:15:17
2	Mo 202.031†	-3.8	3.8	0.4036 µg/L	0.4036 ppb	15:15:17
2	Ni 231.604†	346.9	38.2	-4.1724 µg/L	-4.1724 ppb	15:15:17
2	P 214.914†	5358.7	5229.8	11230 µg/L	11230 ppb	15:14:57
2	Pb 220.353†	113.9	14.6	3.8918 µg/L	3.8918 ppb	15:15:17

2	S 181.975 Axial†	13.2	-1.8	-7.9889 µg/L	-7.9889 ppb	15:15:17
2	Sb 206.836†	30.6	3.1	3.0533 µg/L	3.0533 ppb	15:15:17
2	Se 196.026†	12.9	-3.2	-5.1244 µg/L	-5.1244 ppb	15:15:17
2	SiO2†	401576.7	392733.7	84577 µg/L	84577 ppb	15:14:51
2	Si 251.611†	485309.6	475820.6	39115 µg/L	39115 ppb	15:14:51
2	Sn 189.927†	3.1	3.9	1.7899 µg/L	1.7899 ppb	15:15:17
2	Ti 334.940†	323.3	201.1	0.4839 µg/L	0.4839 ppb	15:14:57
2	Tl 190.801†	-4.0	20.4	10.781 µg/L	10.781 ppb	15:15:17
2	U 409.014†	85.0	137.0	12.417 µg/L	12.417 ppb	15:14:57
2	V 292.402†	14.9	58.8	0.6334 µg/L	0.6334 ppb	15:14:57
2	Zn 213.857†	510.4	25.2	0.6333 µg/L	0.6333 ppb	15:15:17
3	Sc RADIAL	54620.7	54620.7	100 %		15:13:47
3	Al 396.153Radial†	15.7	25.8	19.227 µg/L	19.227 ppb	15:13:47
3	Ca 317.933Radial†	200.8	21.5	20.218 µg/L	20.218 ppb	15:14:07
3	Fe 238.204 Radial†	4.8	-9.7	21.721 µg/L	21.721 ppb	15:14:07
3	K 766.490 Radial†	161.9	33.3	23.669 µg/L	23.669 ppb	15:13:47
3	Mg 279.077 IEC†	10.5	-0.8	-6.9228 µg/L	-6.9228 ppb	15:14:07
3	Na 589.592 Radial†	616.0	73.6	24.220 µg/L	24.220 ppb	15:13:47
3	Sr 421.552†	73.7	34.1	0.3532 µg/L	0.3532 ppb	15:13:47
3	Sc 361.383	1935972.8	1935972.8	101.37 %		15:15:24
3	Y 371.029	1321116.1	1321116.1	100.85 %		15:15:24
3	Ag 328.068†	-522.4	49.2	0.3871 µg/L	0.3871 ppb	15:15:29
3	As 188.979†	-0.6	-1.7	-3.3886 µg/L	-3.3886 ppb	15:15:50
3	B 249.677†	727.0	385.8	16.903 µg/L	16.903 ppb	15:15:29
3	Ba 233.527†	-11.4	14.8	0.3862 µg/L	0.3862 ppb	15:15:50
3	Be 313.107†	-3553.1	-64.7	-0.0425 µg/L	-0.0425 ppb	15:15:29
3	Cd 226.502†	-114.3	29.4	0.8217 µg/L	0.8217 ppb	15:15:50
3	Co 228.616†	100765.6	99414.3	4892.5 µg/L	4892.5 ppb	15:15:29
3	Cr 267.716†	-15.7	36.9	0.8110 µg/L	0.8110 ppb	15:15:50
3	Cu 324.752†	1744.4	-765.3	-5.3569 µg/L	-5.3569 ppb	15:15:29
3	Mn 257.610†	-168.6	77.8	0.2588 µg/L	0.2588 ppb	15:15:50
3	Mo 202.031†	0.8	8.3	0.8836 µg/L	0.8836 ppb	15:15:50
3	Ni 231.604†	347.2	40.4	-3.6217 µg/L	-3.6217 ppb	15:15:50
3	P 214.914†	4995.9	4900.9	10524 µg/L	10524 ppb	15:15:29
3	Pb 220.353†	111.9	13.2	3.5300 µg/L	3.5300 ppb	15:15:50
3	S 181.975 Axial†	14.6	-0.4	-1.9121 µg/L	-1.9121 ppb	15:15:50
3	Sb 206.836†	26.4	-0.9	-0.9265 µg/L	-0.9265 ppb	15:15:50
3	Se 196.026†	6.2	-9.7	-15.059 µg/L	-15.059 ppb	15:15:50
3	SiO2†	389837.5	383325.3	82551 µg/L	82551 ppb	15:15:24
3	Si 251.611†	470845.5	464176.9	38158 µg/L	38158 ppb	15:15:24
3	Sn 189.927†	2.7	3.6	1.6476 µg/L	1.6476 ppb	15:15:50
3	Ti 334.940†	325.3	204.8	0.4935 µg/L	0.4935 ppb	15:15:29
3	Tl 190.801†	-3.6	20.7	12.467 µg/L	12.467 ppb	15:15:50
3	U 409.014†	27.1	80.3	7.2810 µg/L	7.2810 ppb	15:15:29
3	V 292.402†	-16.9	27.5	0.3000 µg/L	0.3000 ppb	15:15:29
3	Zn 213.857†	508.1	25.7	0.6443 µg/L	0.6443 ppb	15:15:50

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941346.1	101.65 %	%	0.279			0.27%
Sc RADIAL	54388.9	99.7 %	%	1.09			1.09%
Y 371.029	1324003.1	101.08 %	%	0.226			0.22%
Ag 328.068†	29.4	0.2306 µg/L	µg/L	0.26325	0.2306 ppb	0.26325	114.16%
Al 396.153Radial†	10.4	7.7681 µg/L	µg/L	12.00458	7.7681 ppb	12.00458	154.54%
As 188.979†	-2.4	-4.7388 µg/L	µg/L	3.00947	-4.7388 ppb	3.00947	63.51%
B 249.677†	410.2	17.974 µg/L	µg/L	1.1410	17.974 ppb	1.1410	6.35%
Ba 233.527†	10.4	0.2713 µg/L	µg/L	0.11018	0.2713 ppb	0.11018	40.61%
Be 313.107†	-0.4	-0.0005 µg/L	µg/L	0.03663	-0.0005 ppb	0.03663	>999.9%
Ca 317.933Radial†	14.7	13.807 µg/L	µg/L	5.5841	13.807 ppb	5.5841	40.44%
Cd 226.502†	33.8	0.9459 µg/L	µg/L	0.21761	0.9459 ppb	0.21761	23.01%
Co 228.616†	103998.4	5118.1 µg/L	µg/L	196.69	5118.1 ppb	196.69	3.84%
Cr 267.716†	33.0	0.7260 µg/L	µg/L	0.11700	0.7260 ppb	0.11700	16.12%
Cu 324.752†	-755.6	-5.2906 µg/L	µg/L	0.34975	-5.2906 ppb	0.34975	6.61%
Fe 238.204 Radial†	-10.5	19.785 µg/L	µg/L	4.9725	19.785 ppb	4.9725	25.13%
K 766.490 Radial†	49.4	35.130 µg/L	µg/L	15.9357	35.130 ppb	15.9357	45.36%
Mg 279.077 IEC†	-0.6	-5.7780 µg/L	µg/L	4.65251	-5.7780 ppb	4.65251	80.52%
Mn 257.610†	82.2	0.2731 µg/L	µg/L	0.01325	0.2731 ppb	0.01325	4.85%
Mo 202.031†	6.1	0.6430 µg/L	µg/L	0.24004	0.6430 ppb	0.24004	37.33%
Na 589.592 Radial†	80.7	26.581 µg/L	µg/L	2.1079	26.581 ppb	2.1079	7.93%

Ni 231.604†	39.2	-3.9561 µg/L	0.29375	-3.9561 ppb	0.29375	7.43%
P 214.914†	5120.6	10995 µg/L	408.6	10995 ppb	408.6	3.72%
Pb 220.353†	13.4	3.5769 µg/L	0.29424	3.5769 ppb	0.29424	8.23%
S 181.975 Axial†	-0.3	-1.3060 µg/L	7.00565	-1.3060 ppb	7.00565	536.41%
Sb 206.836†	-1.1	-1.1256 µg/L	4.28189	-1.1256 ppb	4.28189	380.41%
Se 196.026†	-5.5	-8.5576 µg/L	5.63334	-8.5576 ppb	5.63334	65.83%
SiO2†	389449.1	83870 µg/L	1143.1	83870 ppb	1143.1	1.36%
Si 251.611†	471739.3	38779 µg/L	538.9	38779 ppb	538.9	1.39%
Sn 189.927†	3.8	1.7765 µg/L	0.12277	1.7765 ppb	0.12277	6.91%
Sr 421.552†	18.2	0.1890 µg/L	0.21456	0.1890 ppb	0.21456	113.55%
Ti 334.940†	196.9	0.4743 µg/L	0.02534	0.4743 ppb	0.02534	5.34%
Tl 190.801†	20.6	11.536 µg/L	0.8566	11.536 ppb	0.8566	7.43%
U 409.014†	98.6	8.9390 µg/L	3.01276	8.9390 ppb	3.01276	33.70%
V 292.402†	45.5	0.4899 µg/L	0.17143	0.4899 ppb	0.17143	35.00%
Zn 213.857†	29.8	0.7480 µg/L	0.18929	0.7480 ppb	0.18929	25.31%



Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 15:15:59

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	54231.5	54231.5	99.4 %		15:16:36
1	Al 396.153Radial†	7106.2	7161.2	5326.1 µg/L	5326.1 ppb	15:16:36
1	Ca 317.933Radial†	5688.9	5545.7	5221.6 µg/L	5221.6 ppb	15:16:56
1	Fe 238.204 Radial†	634.7	624.2	5302.1 µg/L	5302.1 ppb	15:16:56
1	K 766.490 Radial†	7456.0	7374.7	5241.9 µg/L	5241.9 ppb	15:16:36
1	Mg 279.077 IEC†	577.6	570.0	5308.0 µg/L	5308.0 ppb	15:16:56
1	Na 589.592 Radial†	32401.3	32064.3	10556 µg/L	10556 ppb	15:16:36
1	Sr 421.552†	50354.2	50633.0	524.87 µg/L	524.87 ppb	15:16:36
1	Sc 361.383	1899310.9	1899310.9	99.449 %		15:17:59
1	Y 371.029	1297484.4	1297484.4	99.051 %		15:17:59
1	Ag 328.068†	65095.3	66020.7	527.69 µg/L	527.69 ppb	15:18:05
1	As 188.979†	283.8	284.2	554.43 µg/L	554.43 ppb	15:18:26
1	B 249.677†	12153.8	11889.7	517.70 µg/L	517.70 ppb	15:18:05
1	Ba 233.527†	20078.6	20215.9	527.34 µg/L	527.34 ppb	15:18:05
1	Be 313.107†	797857.7	805721.3	525.98 µg/L	525.98 ppb	15:17:59
1	Cd 226.502†	18953.5	19200.7	529.65 µg/L	529.65 ppb	15:18:05
1	Co 228.616†	10779.9	10848.5	533.28 µg/L	533.28 ppb	15:18:05
1	Cr 267.716†	24091.2	24277.1	534.33 µg/L	534.33 ppb	15:18:05
1	Cu 324.752†	77848.6	75794.1	530.18 µg/L	530.18 ppb	15:18:05
1	Mn 257.610†	153606.0	154701.7	536.20 µg/L	536.20 ppb	15:17:59
1	Mo 202.031†	5175.2	5211.4	556.37 µg/L	556.37 ppb	15:18:26
1	Ni 231.604†	10008.1	9761.4	533.14 µg/L	533.14 ppb	15:18:05
1	P 214.914†	1295.2	1274.7	2686.7 µg/L	2686.7 ppb	15:18:26
1	Pb 220.353†	2124.5	2039.1	544.31 µg/L	544.31 ppb	15:18:26
1	S 181.975 Axial†	260.7	247.3	1083.6 µg/L	1083.6 ppb	15:18:26
1	Sb 206.836†	587.4	563.7	557.41 µg/L	557.41 ppb	15:18:26
1	Se 196.026†	370.9	357.1	552.71 µg/L	552.71 ppb	15:18:26
1	SiO2†	27461.3	26363.5	5677.5 µg/L	5677.5 ppb	15:18:05
1	Si 251.611†	32393.9	32260.7	2652.0 µg/L	2652.0 ppb	15:18:05
1	Sn 189.927†	1213.6	1221.2	561.69 µg/L	561.69 ppb	15:18:26
1	Ti 334.940†	219433.8	220534.1	530.14 µg/L	530.14 ppb	15:17:59
1	Tl 190.801†	358.1	384.4	542.92 µg/L	542.92 ppb	15:18:26
1	U 409.014†	5858.6	5944.7	537.16 µg/L	537.16 ppb	15:18:05
1	V 292.402†	49239.4	49556.6	534.84 µg/L	534.84 ppb	15:18:05
1	Zn 213.857†	21646.0	21290.4	527.88 µg/L	527.88 ppb	15:18:05
2	Sc RADIAL	54850.6	54850.6	101 %		15:17:02
2	Al 396.153Radial†	7137.6	7111.8	5289.4 µg/L	5289.4 ppb	15:17:02
2	Ca 317.933Radial†	5661.7	5454.1	5135.3 µg/L	5135.3 ppb	15:17:22
2	Fe 238.204 Radial†	627.5	609.8	5179.7 µg/L	5179.7 ppb	15:17:22
2	K 766.490 Radial†	7509.6	7343.3	5219.6 µg/L	5219.6 ppb	15:17:02
2	Mg 279.077 IEC†	583.7	569.5	5303.7 µg/L	5303.7 ppb	15:17:22
2	Na 589.592 Radial†	32499.9	31794.4	10467 µg/L	10467 ppb	15:17:02
2	Sr 421.552†	50507.4	50213.6	520.52 µg/L	520.52 ppb	15:17:02
2	Sc 361.383	1912998.8	1912998.8	100.17 %		15:18:33
2	Y 371.029	1306161.3	1306161.3	99.713 %		15:18:33
2	Ag 328.068†	65237.5	65694.3	525.07 µg/L	525.07 ppb	15:18:38
2	As 188.979†	280.6	279.0	544.24 µg/L	544.24 ppb	15:18:59
2	B 249.677†	12200.8	11849.2	515.98 µg/L	515.98 ppb	15:18:38
2	Ba 233.527†	20133.5	20126.3	525.01 µg/L	525.01 ppb	15:18:38
2	Be 313.107†	793302.5	795433.1	519.26 µg/L	519.26 ppb	15:18:33
2	Cd 226.502†	18921.4	19032.3	525.02 µg/L	525.02 ppb	15:18:38
2	Co 228.616†	10784.1	10775.1	529.68 µg/L	529.68 ppb	15:18:38
2	Cr 267.716†	24047.5	24060.2	529.56 µg/L	529.56 ppb	15:18:38
2	Cu 324.752†	77783.7	75169.2	525.79 µg/L	525.79 ppb	15:18:38
2	Mn 257.610†	152510.0	152502.3	528.57 µg/L	528.57 ppb	15:18:33
2	Mo 202.031†	5149.2	5148.2	549.62 µg/L	549.62 ppb	15:18:59
2	Ni 231.604†	10009.6	9690.9	529.28 µg/L	529.28 ppb	15:18:38
2	P 214.914†	1298.8	1269.0	2674.9 µg/L	2674.9 ppb	15:18:59
2	Pb 220.353†	2130.1	2029.4	541.73 µg/L	541.73 ppb	15:18:59

2	S 181.975 Axial†	263.5	248.2	1087.5 µg/L	1087.5 ppb	15:18:59
2	Sb 206.836†	579.7	551.8	545.70 µg/L	545.70 ppb	15:18:59
2	Se 196.026†	360.4	343.9	532.32 µg/L	532.32 ppb	15:18:59
2	SiO2†	27531.6	26236.1	5650.1 µg/L	5650.1 ppb	15:18:38
2	Si 251.611†	32505.0	32138.5	2641.9 µg/L	2641.9 ppb	15:18:38
2	Sn 189.927†	1205.3	1204.2	553.89 µg/L	553.89 ppb	15:18:59
2	Ti 334.940†	218053.7	217577.6	523.03 µg/L	523.03 ppb	15:18:33
2	Tl 190.801†	351.0	374.7	529.24 µg/L	529.24 ppb	15:18:59
2	U 409.014†	5767.6	5811.7	525.14 µg/L	525.14 ppb	15:18:38
2	V 292.402†	49305.2	49268.0	531.68 µg/L	531.68 ppb	15:18:38
2	Zn 213.857†	21685.0	21173.7	524.99 µg/L	524.99 ppb	15:18:38
3	Sc RADIAL	55041.7	55041.7	101 %		15:17:27
3	Al 396.153Radial†	7150.5	7100.0	5282.4 µg/L	5282.4 ppb	15:17:27
3	Ca 317.933Radial†	5679.0	5451.7	5133.1 µg/L	5133.1 ppb	15:17:48
3	Fe 238.204 Radial†	630.1	610.3	5182.9 µg/L	5182.9 ppb	15:17:48
3	K 766.490 Radial†	7530.7	7338.3	5216.0 µg/L	5216.0 ppb	15:17:27
3	Mg 279.077 IEC†	585.8	569.6	5302.7 µg/L	5302.7 ppb	15:17:48
3	Na 589.592 Radial†	32646.4	31827.3	10478 µg/L	10478 ppb	15:17:27
3	Sr 421.552†	50673.8	50204.0	520.42 µg/L	520.42 ppb	15:17:27
3	Sc 361.383	1908268.1	1908268.1	99.918 %		15:19:06
3	Y 371.029	1302480.0	1302480.0	99.432 %		15:19:06
3	Ag 328.068†	61722.8	62338.2	498.13 µg/L	498.13 ppb	15:19:11
3	As 188.979†	239.2	238.3	464.88 µg/L	464.88 ppb	15:19:32
3	B 249.677†	11534.0	11212.0	488.05 µg/L	488.05 ppb	15:19:11
3	Ba 233.527†	18616.9	18658.3	486.70 µg/L	486.70 ppb	15:19:11
3	Be 313.107†	758183.0	762248.0	497.60 µg/L	497.60 ppb	15:19:06
3	Cd 226.502†	17482.4	17638.9	486.53 µg/L	486.53 ppb	15:19:11
3	Co 228.616†	9936.5	9953.5	489.22 µg/L	489.22 ppb	15:19:11
3	Cr 267.716†	21502.9	21573.0	474.82 µg/L	474.82 ppb	15:19:11
3	Cu 324.752†	71603.1	69176.0	483.93 µg/L	483.93 ppb	15:19:11
3	Mn 257.610†	146044.9	146409.3	507.47 µg/L	507.47 ppb	15:19:06
3	Mo 202.031†	4268.9	4280.0	456.96 µg/L	456.96 ppb	15:19:32
3	Ni 231.604†	9195.7	8901.1	486.15 µg/L	486.15 ppb	15:19:11
3	P 214.914†	1105.2	1078.5	2268.7 µg/L	2268.7 ppb	15:19:32
3	Pb 220.353†	1828.3	1732.6	462.41 µg/L	462.41 ppb	15:19:32
3	S 181.975 Axial†	232.1	217.5	952.80 µg/L	952.80 ppb	15:19:32
3	Sb 206.836†	493.7	467.1	461.46 µg/L	461.46 ppb	15:19:32
3	Se 196.026†	316.9	301.3	467.33 µg/L	467.33 ppb	15:19:32
3	SiO2†	25842.8	24614.0	5300.8 µg/L	5300.8 ppb	15:19:11
3	Si 251.611†	30435.2	30147.4	2478.3 µg/L	2478.3 ppb	15:19:11
3	Sn 189.927†	977.2	978.9	450.28 µg/L	450.28 ppb	15:19:32
3	Ti 334.940†	207237.8	207292.4	498.29 µg/L	498.29 ppb	15:19:06
3	Tl 190.801†	318.0	342.6	484.22 µg/L	484.22 ppb	15:19:32
3	U 409.014†	5210.6	5268.5	475.96 µg/L	475.96 ppb	15:19:11
3	V 292.402†	44791.7	44872.9	483.94 µg/L	483.94 ppb	15:19:11
3	Zn 213.857†	19890.6	19431.5	481.75 µg/L	481.75 ppb	15:19:11

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Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1906859.3	99.844 %	0.3640			0.36%
Sc RADIAL	54707.9	100 %	0.8			0.77%
Y 371.029	1302041.9	99.399 %	0.3325			0.33%
Ag 328.068†	64684.4	516.97 µg/L	16.362	516.97 ppb	16.362	3.16%
QC value within limits for Ag 328.068 Recovery = 103.39%						
Al 396.153Radial†	7124.3	5299.3 µg/L	23.43	5299.3 ppb	23.43	0.44%
QC value within limits for Al 396.153Radial Recovery = 105.99%						
As 188.979†	267.2	521.18 µg/L	49.028	521.18 ppb	49.028	9.41%
QC value within limits for As 188.979 Recovery = 104.24%						
B 249.677†	11650.3	507.24 µg/L	16.645	507.24 ppb	16.645	3.28%
QC value within limits for B 249.677 Recovery = 101.45%						
Ba 233.527†	19666.8	513.02 µg/L	22.823	513.02 ppb	22.823	4.45%
QC value within limits for Ba 233.527 Recovery = 102.60%						
Be 313.107†	787800.8	514.28 µg/L	14.831	514.28 ppb	14.831	2.88%
QC value within limits for Be 313.107 Recovery = 102.86%						
Ca 317.933Radial†	5483.8	5163.4 µg/L	50.50	5163.4 ppb	50.50	0.98%
QC value within limits for Ca 317.933Radial Recovery = 103.27%						
Cd 226.502†	18623.9	513.73 µg/L	23.671	513.73 ppb	23.671	4.61%
QC value within limits for Cd 226.502 Recovery = 102.75%						
Co 228.616†	10525.7	517.39 µg/L	24.470	517.39 ppb	24.470	4.73%

QC value within limits for Co 228.616 Recovery = 103.48%							
Cr 267.716†	23303.5	512.91 µg/L	33.067	512.91 ppb	33.067	6.45%	
QC value within limits for Cr 267.716 Recovery = 102.58%							
Cu 324.752†	73379.7	513.30 µg/L	25.529	513.30 ppb	25.529	4.97%	
QC value within limits for Cu 324.752 Recovery = 102.66%							
Fe 238.204 Radial†	614.8	5221.6 µg/L	69.73	5221.6 ppb	69.73	1.34%	
QC value within limits for Fe 238.204 Radial Recovery = 104.43%							
K 766.490 Radial†	7352.1	5225.8 µg/L	14.03	5225.8 ppb	14.03	0.27%	
QC value within limits for K 766.490 Radial Recovery = 104.52%							
Mg 279.077 IEC†	569.7	5304.8 µg/L	2.78	5304.8 ppb	2.78	0.05%	
QC value within limits for Mg 279.077 IEC Recovery = 106.10%							
Mn 257.610†	151204.4	524.08 µg/L	14.882	524.08 ppb	14.882	2.84%	
QC value within limits for Mn 257.610 Recovery = 104.82%							
Mo 202.031†	4879.9	520.98 µg/L	55.549	520.98 ppb	55.549	10.66%	
QC value within limits for Mo 202.031 Recovery = 104.20%							
Na 589.592 Radial†	31895.3	10500 µg/L	48.5	10500 ppb	48.5	0.46%	
QC value within limits for Na 589.592 Radial Recovery = 105.00%							
Ni 231.604†	9451.1	516.19 µg/L	26.085	516.19 ppb	26.085	5.05%	
QC value within limits for Ni 231.604 Recovery = 103.24%							
P 214.914†	1207.4	2543.4 µg/L	237.97	2543.4 ppb	237.97	9.36%	
QC value within limits for P 214.914 Recovery = 101.74%							
Pb 220.353†	1933.7	516.15 µg/L	46.558	516.15 ppb	46.558	9.02%	
QC value within limits for Pb 220.353 Recovery = 103.23%							
S 181.975 Axial†	237.7	1041.3 µg/L	76.67	1041.3 ppb	76.67	7.36%	
QC value within limits for S 181.975 Axial Recovery = 104.13%							
Sb 206.836†	527.5	521.52 µg/L	52.346	521.52 ppb	52.346	10.04%	
QC value within limits for Sb 206.836 Recovery = 104.30%							
Se 196.026†	334.1	517.45 µg/L	44.586	517.45 ppb	44.586	8.62%	
QC value within limits for Se 196.026 Recovery = 103.49%							
SiO2†	25737.9	5542.8 µg/L	210.05	5542.8 ppb	210.05	3.79%	
QC value within limits for SiO2 Recovery = 103.65%							
Si 251.611†	31515.5	2590.7 µg/L	97.53	2590.7 ppb	97.53	3.76%	
QC value within limits for Si 251.611 Recovery = 103.63%							
Sn 189.927†	1134.8	521.95 µg/L	62.194	521.95 ppb	62.194	11.92%	
QC value within limits for Sn 189.927 Recovery = 104.39%							
Sr 421.552†	50350.2	521.94 µg/L	2.539	521.94 ppb	2.539	0.49%	
QC value within limits for Sr 421.552 Recovery = 104.39%							
Ti 334.940†	215134.7	517.15 µg/L	16.720	517.15 ppb	16.720	3.23%	
QC value within limits for Ti 334.940 Recovery = 103.43%							
Tl 190.801†	367.2	518.79 µg/L	30.715	518.79 ppb	30.715	5.92%	
QC value within limits for Tl 190.801 Recovery = 103.76%							
U 409.014†	5675.0	512.76 µg/L	32.426	512.76 ppb	32.426	6.32%	
QC value within limits for U 409.014 Recovery = 102.55%							
V 292.402†	47899.1	516.82 µg/L	28.516	516.82 ppb	28.516	5.52%	
QC value within limits for V 292.402 Recovery = 103.36%							
Zn 213.857†	20631.8	511.54 µg/L	25.841	511.54 ppb	25.841	5.05%	
QC value within limits for Zn 213.857 Recovery = 102.31%							

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 15:19:41

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	53966.4	53966.4	98.9 %		15:20:14
1	Al 396.153Radial†	-26.0	-16.1	-12.005 µg/L	-12.005 ppb	15:20:14
1	Ca 317.933Radial†	184.6	7.5	7.0536 µg/L	7.0536 ppb	15:20:34
1	Fe 238.204 Radial†	14.2	-0.1	-0.8468 µg/L	-0.8468 ppb	15:20:34
1	K 766.490 Radial†	181.9	55.5	39.479 µg/L	39.479 ppb	15:20:14
1	Mg 279.077 IEC†	12.1	1.0	9.1967 µg/L	9.1967 ppb	15:20:34
1	Na 589.592 Radial†	657.2	122.7	40.408 µg/L	40.408 ppb	15:20:14
1	Sr 421.552†	65.1	26.3	0.2722 µg/L	0.2722 ppb	15:20:14
1	Sc 361.383	1911106.6	1911106.6	100.07 %		15:21:36
1	Y 371.029	1309549.6	1309549.6	99.972 %		15:21:36
1	Ag 328.068†	-559.4	5.5	0.0442 µg/L	0.0442 ppb	15:21:42
1	As 188.979†	-3.0	-4.1	-8.0395 µg/L	-8.0395 ppb	15:22:02
1	B 249.677†	346.9	15.2	0.6669 µg/L	0.6669 ppb	15:22:02
1	Ba 233.527†	-26.7	-0.7	-0.0185 µg/L	-0.0185 ppb	15:22:02
1	Be 313.107†	-3454.2	-11.4	-0.0075 µg/L	-0.0075 ppb	15:21:42
1	Cd 226.502†	-139.0	3.2	0.0893 µg/L	0.0893 ppb	15:22:02
1	Co 228.616†	-9.2	-0.3	-0.0170 µg/L	-0.0170 ppb	15:22:02
1	Cr 267.716†	-37.5	14.9	0.3282 µg/L	0.3282 ppb	15:21:42
1	Cu 324.752†	2557.0	69.2	0.4835 µg/L	0.4835 ppb	15:21:42
1	Mn 257.610†	-212.1	32.2	0.1110 µg/L	0.1110 ppb	15:22:02
1	Mo 202.031†	-8.5	-0.9	-0.1000 µg/L	-0.1000 ppb	15:22:02
1	Ni 231.604†	310.7	8.3	0.4558 µg/L	0.4558 ppb	15:22:02
1	P 214.914†	28.4	0.8	1.6386 µg/L	1.6386 ppb	15:22:02
1	Pb 220.353†	104.0	6.7	1.8057 µg/L	1.8057 ppb	15:22:02
1	S 181.975 Axial†	16.5	1.7	7.4394 µg/L	7.4394 ppb	15:22:02
1	Sb 206.836†	29.0	2.0	1.9993 µg/L	1.9993 ppb	15:22:02
1	Se 196.026†	21.9	6.0	9.1749 µg/L	9.1749 ppb	15:22:02
1	SiO2†	1293.6	42.7	9.2028 µg/L	9.2028 ppb	15:21:42
1	Si 251.611†	353.1	40.0	3.2887 µg/L	3.2887 ppb	15:22:02
1	Sn 189.927†	4.9	5.8	2.6719 µg/L	2.6719 ppb	15:22:02
1	Ti 334.940†	159.7	43.4	0.1039 µg/L	0.1039 ppb	15:21:42
1	Tl 190.801†	-23.8	0.5	0.6768 µg/L	0.6768 ppb	15:22:02
1	U 409.014†	-184.4	-130.7	-11.830 µg/L	-11.830 ppb	15:21:42
1	V 292.402†	-35.9	8.3	0.0760 µg/L	0.0760 ppb	15:21:42
1	Zn 213.857†	494.3	18.4	0.4572 µg/L	0.4572 ppb	15:22:02
2	Sc RADIAL	54869.8	54869.8	101 %		15:20:40
2	Al 396.153Radial†	13.7	23.8	17.738 µg/L	17.738 ppb	15:20:40
2	Ca 317.933Radial†	187.7	7.5	7.0950 µg/L	7.0950 ppb	15:21:00
2	Fe 238.204 Radial†	15.7	1.1	9.3064 µg/L	9.3064 ppb	15:21:00
2	K 766.490 Radial†	257.4	127.6	90.719 µg/L	90.719 ppb	15:20:40
2	Mg 279.077 IEC†	16.3	4.9	45.809 µg/L	45.809 ppb	15:21:00
2	Na 589.592 Radial†	606.0	60.8	20.024 µg/L	20.024 ppb	15:20:40
2	Sr 421.552†	22.5	-17.2	-0.1781 µg/L	-0.1781 ppb	15:20:40
2	Sc 361.383	1897412.4	1897412.4	99.349 %		15:22:08
2	Y 371.029	1298760.9	1298760.9	99.148 %		15:22:08
2	Ag 328.068†	-542.2	18.8	0.1523 µg/L	0.1523 ppb	15:22:14
2	As 188.979†	-3.1	-4.3	-8.3435 µg/L	-8.3435 ppb	15:22:34
2	B 249.677†	336.8	7.5	0.3241 µg/L	0.3241 ppb	15:22:34
2	Ba 233.527†	-16.5	9.4	0.2467 µg/L	0.2467 ppb	15:22:34
2	Be 313.107†	-3415.0	3.0	0.0019 µg/L	0.0019 ppb	15:22:14
2	Cd 226.502†	-128.8	12.5	0.3432 µg/L	0.3432 ppb	15:22:34
2	Co 228.616†	-5.7	3.1	0.1511 µg/L	0.1511 ppb	15:22:34
2	Cr 267.716†	-15.6	36.7	0.8074 µg/L	0.8074 ppb	15:22:14
2	Cu 324.752†	2549.9	80.5	0.5637 µg/L	0.5637 ppb	15:22:14
2	Mn 257.610†	-177.5	65.4	0.2260 µg/L	0.2260 ppb	15:22:34
2	Mo 202.031†	-7.3	0.2	0.0178 µg/L	0.0178 ppb	15:22:34
2	Ni 231.604†	306.5	6.3	0.3468 µg/L	0.3468 ppb	15:22:34
2	P 214.914†	31.7	4.3	9.0650 µg/L	9.0650 ppb	15:22:34
2	Pb 220.353†	106.2	9.7	2.5827 µg/L	2.5827 ppb	15:22:34

2	S 181.975 Axial†	17.2	2.5	10.929 µg/L	10.929 ppb	15:22:34
2	Sb 206.836†	25.7	-1.1	-1.0721 µg/L	-1.0721 ppb	15:22:34
2	Se 196.026†	18.6	2.9	4.4089 µg/L	4.4089 ppb	15:22:34
2	SiO2†	1247.0	5.2	1.1103 µg/L	1.1103 ppb	15:22:14
2	Si 251.611†	359.1	48.5	3.9904 µg/L	3.9904 ppb	15:22:34
2	Sn 189.927†	-1.6	-0.8	-0.3440 µg/L	-0.3440 ppb	15:22:34
2	Ti 334.940†	171.3	56.3	0.1319 µg/L	0.1319 ppb	15:22:14
2	Tl 190.801†	-21.8	2.3	3.2311 µg/L	3.2311 ppb	15:22:34
2	U 409.014†	-98.3	-45.3	-4.1055 µg/L	-4.1055 ppb	15:22:14
2	V 292.402†	-5.8	38.4	0.4080 µg/L	0.4080 ppb	15:22:14
2	Zn 213.857†	499.6	27.3	0.6761 µg/L	0.6761 ppb	15:22:34
3	Sc RADIAL	54385.0	54385.0	99.7 %		15:21:06
3	Al 396.153Radial†	-13.7	-3.6	-2.7248 µg/L	-2.7248 ppb	15:21:06
3	Ca 317.933Radial†	185.2	6.7	6.3429 µg/L	6.3429 ppb	15:21:26
3	Fe 238.204 Radial†	16.3	1.8	15.415 µg/L	15.415 ppb	15:21:26
3	K 766.490 Radial†	182.4	54.6	38.797 µg/L	38.797 ppb	15:21:06
3	Mg 279.077 IEC†	9.2	-2.0	-18.753 µg/L	-18.753 ppb	15:21:26
3	Na 589.592 Radial†	592.4	52.6	17.324 µg/L	17.324 ppb	15:21:06
3	Sr 421.552†	-3.5	-43.1	-0.4464 µg/L	-0.4464 ppb	15:21:06
3	Sc 361.383	1884488.6	1884488.6	98.673 %		15:22:40
3	Y 371.029	1291927.9	1291927.9	98.627 %		15:22:40
3	Ag 328.068†	-522.7	34.8	0.2806 µg/L	0.2806 ppb	15:22:46
3	As 188.979†	2.4	1.3	2.4649 µg/L	2.4649 ppb	15:23:06
3	B 249.677†	335.7	8.8	0.3768 µg/L	0.3768 ppb	15:23:06
3	Ba 233.527†	-11.8	14.1	0.3676 µg/L	0.3676 ppb	15:23:06
3	Be 313.107†	-3127.8	270.6	0.1766 µg/L	0.1766 ppb	15:22:46
3	Cd 226.502†	-124.4	16.0	0.4414 µg/L	0.4414 ppb	15:23:06
3	Co 228.616†	7.6	16.5	0.8149 µg/L	0.8149 ppb	15:23:06
3	Cr 267.716†	-23.5	28.6	0.6295 µg/L	0.6295 ppb	15:22:46
3	Cu 324.752†	2622.5	171.7	1.2017 µg/L	1.2017 ppb	15:22:46
3	Mn 257.610†	-142.0	100.2	0.3497 µg/L	0.3497 ppb	15:23:06
3	Mo 202.031†	3.2	10.8	1.1512 µg/L	1.1512 ppb	15:23:06
3	Ni 231.604†	306.2	8.2	0.4462 µg/L	0.4462 ppb	15:23:06
3	P 214.914†	29.6	2.4	5.0144 µg/L	5.0144 ppb	15:23:06
3	Pb 220.353†	103.4	7.6	2.0339 µg/L	2.0339 ppb	15:23:06
3	S 181.975 Axial†	18.5	3.9	17.268 µg/L	17.268 ppb	15:23:06
3	Sb 206.836†	29.4	2.8	2.8126 µg/L	2.8126 ppb	15:23:06
3	Se 196.026†	10.8	-4.9	-7.3717 µg/L	-7.3717 ppb	15:23:06
3	SiO2†	1294.7	62.1	13.372 µg/L	13.372 ppb	15:22:46
3	Si 251.611†	373.7	65.9	5.4177 µg/L	5.4177 ppb	15:23:06
3	Sn 189.927†	0.7	1.6	0.7177 µg/L	0.7177 ppb	15:23:06
3	Ti 334.940†	234.9	122.0	0.2950 µg/L	0.2950 ppb	15:22:46
3	Tl 190.801†	-24.9	-0.9	-1.2684 µg/L	-1.2684 ppb	15:23:06
3	U 409.014†	-88.3	-35.9	-3.2543 µg/L	-3.2543 ppb	15:22:46
3	V 292.402†	2.7	46.9	0.5091 µg/L	0.5091 ppb	15:22:46
3	Zn 213.857†	512.3	43.6	1.0859 µg/L	1.0859 ppb	15:23:06

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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	1897669.2	99.363 %	0.6970			0.70%
Sc RADIAL	54407.1	99.7 %	0.83			0.83%
Y 371.029	1300079.5	99.249 %	0.6782			0.68%
Ag 328.068†	19.7	0.1590 µg/L	0.11838	0.1590 ppb	0.11838	74.44%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.4	1.0028 µg/L	15.21758	1.0028 ppb	15.21758	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.4	-4.6394 µg/L	6.15437	-4.6394 ppb	6.15437	132.66%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	10.5	0.4560 µg/L	0.18460	0.4560 ppb	0.18460	40.49%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.6	0.1986 µg/L	0.19747	0.1986 ppb	0.19747	99.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	87.4	0.0570 µg/L	0.10368	0.0570 ppb	0.10368	181.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.3	6.8305 µg/L	0.42277	6.8305 ppb	0.42277	6.19%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.6	0.2913 µg/L	0.18170	0.2913 ppb	0.18170	62.37%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.4	0.3163 µg/L	0.43987	0.3163 ppb	0.43987	139.05%

Cr	267.716†	26.7	0.5884 µg/L	0.24227	0.5884 ppb	0.24227	41.18%
Cu	324.752†	107.2	0.7496 µg/L	0.39354	0.7496 ppb	0.39354	52.50%
Fe	238.204 Radial†	0.9	7.9581 µg/L	8.21418	7.9581 ppb	8.21418	103.22%
K	766.490 Radial†	79.3	56.332 µg/L	29.7823	56.332 ppb	29.7823	52.87%
Mg	279.077 IEC†	1.3	12.084 µg/L	32.3776	12.084 ppb	32.3776	267.93%
Mn	257.610†	65.9	0.2289 µg/L	0.11938	0.2289 ppb	0.11938	52.15%
Mo	202.031†	3.3	0.3563 µg/L	0.69086	0.3563 ppb	0.69086	193.88%
Na	589.592 Radial†	78.7	25.918 µg/L	12.6205	25.918 ppb	12.6205	48.69%
Ni	231.604†	7.6	0.4162 µg/L	0.06037	0.4162 ppb	0.06037	14.50%
P	214.914†	2.5	5.2393 µg/L	3.71831	5.2393 ppb	3.71831	70.97%
Pb	220.353†	8.0	2.1408 µg/L	0.39934	2.1408 ppb	0.39934	18.65%
S	181.975 Axial†	2.7	11.879 µg/L	4.9829	11.879 ppb	4.9829	41.95%
Sb	206.836†	1.3	1.2466 µg/L	2.04884	1.2466 ppb	2.04884	164.36%
Se	196.026†	1.4	2.0707 µg/L	8.51747	2.0707 ppb	8.51747	411.33%
SiO2†		36.7	7.8950 µg/L	6.23447	7.8950 ppb	6.23447	78.97%
Si	251.611†	51.5	4.2323 µg/L	1.08494	4.2323 ppb	1.08494	25.63%
Sn	189.927†	2.2	1.0152 µg/L	1.52977	1.0152 ppb	1.52977	150.68%
Sr	421.552†	-11.3	-0.1174 µg/L	0.36313	-0.1174 ppb	0.36313	309.29%
Ti	334.940†	73.9	0.1769 µg/L	0.10323	0.1769 ppb	0.10323	58.35%
Tl	190.801†	0.6	0.8799 µg/L	2.25661	0.8799 ppb	2.25661	256.47%
U	409.014†	-70.6	-6.3965 µg/L	4.72449	-6.3965 ppb	4.72449	73.86%
V	292.402†	31.2	0.3310 µg/L	0.22659	0.3310 ppb	0.22659	68.45%
Zn	213.857†	29.8	0.7397 µg/L	0.31916	0.7397 ppb	0.31916	43.15%

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.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 15:57:26

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	57410.8	57410.8	105 %		15:58:05
1	Al 396.153Radial†	6675.8	6356.1	4727.0 µg/L	4727.0 ppb	15:58:25
1	Ca 317.933Radial†	5505.2	5054.0	4758.7 µg/L	4758.7 ppb	15:58:25
1	Fe 238.204 Radial†	598.7	554.6	4711.3 µg/L	4711.3 ppb	15:58:25
1	K 766.490 Radial†	7251.0	6764.3	4808.0 µg/L	4808.0 ppb	15:58:05
1	Mg 279.077 IEC†	563.5	524.3	4883.2 µg/L	4883.2 ppb	15:58:25
1	Na 589.592 Radial†	31835.2	29720.5	9784.1 µg/L	9784.1 ppb	15:58:05
1	Sr 421.552†	47847.7	45444.2	471.08 µg/L	471.08 ppb	15:58:05
1	Sc 361.383	1983693.6	1983693.6	103.87 %		15:59:29
1	Y 371.029	1353410.2	1353410.2	103.32 %		15:59:29
1	Ag 328.068†	62797.6	61024.1	487.72 µg/L	487.72 ppb	15:59:34
1	As 188.979†	269.1	257.9	503.15 µg/L	503.15 ppb	15:59:55
1	B 249.677†	11717.3	10949.6	476.85 µg/L	476.85 ppb	15:59:34
1	Ba 233.527†	19343.1	18649.0	486.47 µg/L	486.47 ppb	15:59:34
1	Be 313.107†	754921.5	730256.0	476.72 µg/L	476.72 ppb	15:59:29
1	Cd 226.502†	18224.6	17688.2	487.95 µg/L	487.95 ppb	15:59:34
1	Co 228.616†	10367.0	9989.9	491.09 µg/L	491.09 ppb	15:59:34
1	Cr 267.716†	23052.3	22246.4	489.64 µg/L	489.64 ppb	15:59:34
1	Cu 324.752†	74680.1	69413.7	485.52 µg/L	485.52 ppb	15:59:34
1	Mn 257.610†	145483.3	140311.0	486.31 µg/L	486.31 ppb	15:59:29
1	Mo 202.031†	4926.8	4750.9	507.20 µg/L	507.20 ppb	15:59:55
1	Ni 231.604†	9598.3	8938.8	488.20 µg/L	488.20 ppb	15:59:34
1	P 214.914†	1237.2	1163.5	2452.0 µg/L	2452.0 ppb	15:59:55
1	Pb 220.353†	2038.1	1865.0	497.83 µg/L	497.83 ppb	15:59:55
1	S 181.975 Axial†	250.1	226.0	990.17 µg/L	990.17 ppb	15:59:55
1	Sb 206.836†	555.0	507.4	501.78 µg/L	501.78 ppb	15:59:55
1	Se 196.026†	350.7	321.8	497.82 µg/L	497.82 ppb	15:59:55
1	SiO2†	26261.5	24033.7	5175.8 µg/L	5175.8 ppb	15:59:34
1	Si 251.611†	31015.9	29548.3	2429.0 µg/L	2429.0 ppb	15:59:34
1	Sn 189.927†	1145.1	1103.3	507.48 µg/L	507.48 ppb	15:59:55
1	Ti 334.940†	207638.9	199792.4	480.28 µg/L	480.28 ppb	15:59:29
1	Tl 190.801†	339.0	350.7	495.21 µg/L	495.21 ppb	15:59:55
1	U 409.014†	5639.1	5482.7	495.44 µg/L	495.44 ppb	15:59:34
1	V 292.402†	47231.1	45516.9	491.19 µg/L	491.19 ppb	15:59:34
1	Zn 213.857†	20861.0	19608.8	486.21 µg/L	486.21 ppb	15:59:34
2	Sc RADIAL	56826.1	56826.1	104 %		15:58:31
2	Al 396.153Radial†	6645.2	6392.0	4754.0 µg/L	4754.0 ppb	15:58:51
2	Ca 317.933Radial†	5486.3	5089.8	4792.3 µg/L	4792.3 ppb	15:58:51
2	Fe 238.204 Radial†	599.8	561.5	4769.4 µg/L	4769.4 ppb	15:58:51
2	K 766.490 Radial†	7153.6	6741.7	4791.9 µg/L	4791.9 ppb	15:58:31
2	Mg 279.077 IEC†	560.2	526.7	4905.2 µg/L	4905.2 ppb	15:58:51
2	Na 589.592 Radial†	31532.3	29741.0	9790.8 µg/L	9790.8 ppb	15:58:31
2	Sr 421.552†	47455.8	45535.8	472.03 µg/L	472.03 ppb	15:58:31
2	Sc 361.383	1995410.5	1995410.5	104.48 %		16:00:02
2	Y 371.029	1361782.3	1361782.3	103.96 %		16:00:02
2	Ag 328.068†	62246.7	60141.9	480.68 µg/L	480.68 ppb	16:00:08
2	As 188.979†	257.7	245.5	478.82 µg/L	478.82 ppb	16:00:28
2	B 249.677†	11628.5	10798.3	470.20 µg/L	470.20 ppb	16:00:08
2	Ba 233.527†	19125.6	18331.5	478.19 µg/L	478.19 ppb	16:00:08
2	Be 313.107†	755807.0	726835.7	474.48 µg/L	474.48 ppb	16:00:02
2	Cd 226.502†	17996.1	17366.5	479.06 µg/L	479.06 ppb	16:00:08
2	Co 228.616†	10237.6	9807.4	482.11 µg/L	482.11 ppb	16:00:08
2	Cr 267.716†	22930.0	21999.0	484.19 µg/L	484.19 ppb	16:00:08
2	Cu 324.752†	74042.3	68381.0	478.32 µg/L	478.32 ppb	16:00:08
2	Mn 257.610†	145292.8	139306.3	482.84 µg/L	482.84 ppb	16:00:02
2	Mo 202.031†	4851.2	4650.7	496.51 µg/L	496.51 ppb	16:00:28
2	Ni 231.604†	9492.2	8782.9	479.69 µg/L	479.69 ppb	16:00:08
2	P 214.914†	1221.3	1141.3	2405.0 µg/L	2405.0 ppb	16:00:28
2	Pb 220.353†	1997.7	1814.9	484.45 µg/L	484.45 ppb	16:00:28

2	S 181.975 Axial†	253.2	227.5	996.93 µg/L	996.93 ppb	16:00:28
2	Sb 206.836†	551.9	501.3	495.60 µg/L	495.60 ppb	16:00:28
2	Se 196.026†	351.2	320.3	495.61 µg/L	495.61 ppb	16:00:28
2	SiO2†	26072.1	23704.0	5104.8 µg/L	5104.8 ppb	16:00:08
2	Si 251.611†	30669.0	29040.9	2387.3 µg/L	2387.3 ppb	16:00:08
2	Sn 189.927†	1132.5	1084.8	498.96 µg/L	498.96 ppb	16:00:28
2	Ti 334.940†	207816.1	198788.1	477.86 µg/L	477.86 ppb	16:00:02
2	Tl 190.801†	338.3	348.1	491.58 µg/L	491.58 ppb	16:00:28
2	U 409.014†	5511.6	5328.9	481.50 µg/L	481.50 ppb	16:00:08
2	V 292.402†	46887.0	44920.6	484.74 µg/L	484.74 ppb	16:00:08
2	Zn 213.857†	20639.1	19278.4	478.01 µg/L	478.01 ppb	16:00:08
3	Sc RADIAL	56910.2	56910.2	104 %		15:58:57
3	Al 396.153Radial†	6656.6	6393.5	4756.8 µg/L	4756.8 ppb	15:59:17
3	Ca 317.933Radial†	5495.6	5090.9	4793.4 µg/L	4793.4 ppb	15:59:17
3	Fe 238.204 Radial†	602.2	563.0	4781.1 µg/L	4781.1 ppb	15:59:17
3	K 766.490 Radial†	7220.2	6795.5	4830.2 µg/L	4830.2 ppb	15:58:57
3	Mg 279.077 IEC†	560.3	526.1	4897.6 µg/L	4897.6 ppb	15:59:17
3	Na 589.592 Radial†	31637.3	29796.9	9809.2 µg/L	9809.2 ppb	15:58:57
3	Sr 421.552†	47653.8	45658.4	473.30 µg/L	473.30 ppb	15:58:57
3	Sc 361.383	1998435.1	1998435.1	104.64 %		16:00:35
3	Y 371.029	1364968.8	1364968.8	104.20 %		16:00:35
3	Ag 328.068†	58612.3	56578.4	452.09 µg/L	452.09 ppb	16:00:41
3	As 188.979†	224.3	213.2	415.95 µg/L	415.95 ppb	16:01:01
3	B 249.677†	10895.6	10081.1	438.76 µg/L	438.76 ppb	16:00:41
3	Ba 233.527†	17588.9	16835.1	439.14 µg/L	439.14 ppb	16:00:41
3	Be 313.107†	714187.6	685966.5	447.80 µg/L	447.80 ppb	16:00:35
3	Cd 226.502†	16474.5	15886.3	438.17 µg/L	438.17 ppb	16:00:41
3	Co 228.616†	9303.8	8900.2	437.44 µg/L	437.44 ppb	16:00:41
3	Cr 267.716†	20256.0	19410.4	427.22 µg/L	427.22 ppb	16:00:41
3	Cu 324.752†	67621.8	62137.9	434.71 µg/L	434.71 ppb	16:00:41
3	Mn 257.610†	137721.9	131860.5	457.05 µg/L	457.05 ppb	16:00:35
3	Mo 202.031†	4037.0	3865.6	412.72 µg/L	412.72 ppb	16:01:01
3	Ni 231.604†	8629.5	7944.8	433.92 µg/L	433.92 ppb	16:00:41
3	P 214.914†	1036.7	963.1	2025.7 µg/L	2025.7 ppb	16:01:01
3	Pb 220.353†	1739.6	1565.3	417.74 µg/L	417.74 ppb	16:01:01
3	S 181.975 Axial†	221.7	197.0	863.32 µg/L	863.32 ppb	16:01:01
3	Sb 206.836†	474.2	426.2	421.04 µg/L	421.04 ppb	16:01:01
3	Se 196.026†	306.7	277.3	430.08 µg/L	430.08 ppb	16:01:01
3	SiO2†	24196.5	21873.8	4710.6 µg/L	4710.6 ppb	16:00:41
3	Si 251.611†	28513.0	26936.1	2214.3 µg/L	2214.3 ppb	16:00:41
3	Sn 189.927†	924.9	884.8	406.97 µg/L	406.97 ppb	16:01:01
3	Ti 334.940†	195303.4	186529.0	448.37 µg/L	448.37 ppb	16:00:35
3	Tl 190.801†	301.0	311.9	440.85 µg/L	440.85 ppb	16:01:01
3	U 409.014†	4905.4	4741.6	428.33 µg/L	428.33 ppb	16:00:41
3	V 292.402†	42233.7	40405.6	435.79 µg/L	435.79 ppb	16:00:41
3	Zn 213.857†	18819.8	17509.9	434.12 µg/L	434.12 ppb	16:00:41

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992513.1	104.33 %	0.408			0.39%
Sc RADIAL	57049.0	105 %	0.6			0.55%
Y 371.029	1360053.7	103.83 %	0.456			0.44%
Ag 328.068†	59248.1	473.50 µg/L	18.871	473.50 ppb	18.871	3.99%
QC value within limits for Ag 328.068 Recovery = 94.70%						
Al 396.153Radial†	6380.5	4745.9 µg/L	16.44	4745.9 ppb	16.44	0.35%
QC value within limits for Al 396.153Radial Recovery = 94.92%						
As 188.979†	238.9	465.97 µg/L	44.997	465.97 ppb	44.997	9.66%
QC value within limits for As 188.979 Recovery = 93.19%						
B 249.677†	10609.7	461.94 µg/L	20.345	461.94 ppb	20.345	4.40%
QC value within limits for B 249.677 Recovery = 92.39%						
Ba 233.527†	17938.5	467.93 µg/L	25.276	467.93 ppb	25.276	5.40%
QC value within limits for Ba 233.527 Recovery = 93.59%						
Be 313.107†	714352.7	466.33 µg/L	16.086	466.33 ppb	16.086	3.45%
QC value within limits for Be 313.107 Recovery = 93.27%						
Ca 317.933Radial†	5078.2	4781.5 µg/L	19.75	4781.5 ppb	19.75	0.41%
QC value within limits for Ca 317.933Radial Recovery = 95.63%						
Cd 226.502†	16980.3	468.39 µg/L	26.545	468.39 ppb	26.545	5.67%
QC value within limits for Cd 226.502 Recovery = 93.68%						
Co 228.616†	9565.8	470.21 µg/L	28.733	470.21 ppb	28.733	6.11%



QC value within limits for Co 228.616 Recovery = 94.04%							
Cr 267.716†	21218.6	467.02 µg/L	34.571	467.02 ppb	34.571	7.40%	
QC value within limits for Cr 267.716 Recovery = 93.40%							
Cu 324.752†	66644.2	466.19 µg/L	27.494	466.19 ppb	27.494	5.90%	
QC value within limits for Cu 324.752 Recovery = 93.24%							
Fe 238.204 Radial†	559.7	4753.9 µg/L	37.39	4753.9 ppb	37.39	0.79%	
QC value within limits for Fe 238.204 Radial Recovery = 95.08%							
K 766.490 Radial†	6767.2	4810.1 µg/L	19.19	4810.1 ppb	19.19	0.40%	
QC value within limits for K 766.490 Radial Recovery = 96.20%							
Mg 279.077 IEC†	525.7	4895.3 µg/L	11.18	4895.3 ppb	11.18	0.23%	
QC value within limits for Mg 279.077 IEC Recovery = 97.91%							
Mn 257.610†	137159.3	475.40 µg/L	15.982	475.40 ppb	15.982	3.36%	
QC value within limits for Mn 257.610 Recovery = 95.08%							
Mo 202.031†	4422.4	472.14 µg/L	51.737	472.14 ppb	51.737	10.96%	
QC value within limits for Mo 202.031 Recovery = 94.43%							
Na 589.592 Radial†	29752.8	9794.7 µg/L	13.02	9794.7 ppb	13.02	0.13%	
QC value within limits for Na 589.592 Radial Recovery = 97.95%							
Ni 231.604†	8555.5	467.27 µg/L	29.194	467.27 ppb	29.194	6.25%	
QC value within limits for Ni 231.604 Recovery = 93.45%							
P 214.914†	1089.3	2294.2 µg/L	233.77	2294.2 ppb	233.77	10.19%	
QC value within limits for P 214.914 Recovery = 91.77%							
Pb 220.353†	1748.4	466.67 µg/L	42.900	466.67 ppb	42.900	9.19%	
QC value within limits for Pb 220.353 Recovery = 93.33%							
S 181.975 Axial†	216.9	950.14 µg/L	75.264	950.14 ppb	75.264	7.92%	
QC value within limits for S 181.975 Axial Recovery = 95.01%							
Sb 206.836†	478.3	472.81 µg/L	44.937	472.81 ppb	44.937	9.50%	
QC value within limits for Sb 206.836 Recovery = 94.56%							
Se 196.026†	306.5	474.50 µg/L	38.486	474.50 ppb	38.486	8.11%	
QC value within limits for Se 196.026 Recovery = 94.90%							
SiO2†	23203.8	4997.1 µg/L	250.58	4997.1 ppb	250.58	5.01%	
QC value within limits for SiO2 Recovery = 93.45%							
Si 251.611†	28508.4	2343.5 µg/L	113.86	2343.5 ppb	113.86	4.86%	
QC value within limits for Si 251.611 Recovery = 93.74%							
Sn 189.927†	1024.3	471.14 µg/L	55.734	471.14 ppb	55.734	11.83%	
QC value within limits for Sn 189.927 Recovery = 94.23%							
Sr 421.552†	45546.1	472.14 µg/L	1.114	472.14 ppb	1.114	0.24%	
QC value within limits for Sr 421.552 Recovery = 94.43%							
Ti 334.940†	195036.5	468.84 µg/L	17.764	468.84 ppb	17.764	3.79%	
QC value within limits for Ti 334.940 Recovery = 93.77%							
Tl 190.801†	336.9	475.88 µg/L	30.390	475.88 ppb	30.390	6.39%	
QC value within limits for Tl 190.801 Recovery = 95.18%							
U 409.014†	5184.4	468.43 µg/L	35.417	468.43 ppb	35.417	7.56%	
QC value within limits for U 409.014 Recovery = 93.69%							
V 292.402†	43614.3	470.57 µg/L	30.297	470.57 ppb	30.297	6.44%	
QC value within limits for V 292.402 Recovery = 94.11%							
Zn 213.857†	18799.0	466.11 µg/L	28.010	466.11 ppb	28.010	6.01%	
QC value within limits for Zn 213.857 Recovery = 93.22%							

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:01:11

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	55658.0	55658.0	102 %			16:01:44
1	Al 396.153Radial†	-23.0	-12.4	-9.2620 µg/L		-9.2620 ppb	16:01:44
1	Ca 317.933Radial†	208.0	24.8	23.363 µg/L		23.363 ppb	16:02:05
1	Fe 238.204 Radial†	15.4	0.6	5.4204 µg/L		5.4204 ppb	16:02:05
1	K 766.490 Radial†	204.3	71.9	51.110 µg/L		51.110 ppb	16:01:44
1	Mg 279.077 IEC†	10.5	-1.0	-9.0434 µg/L		-9.0434 ppb	16:02:05
1	Na 589.592 Radial†	1039.6	477.5	157.20 µg/L		157.20 ppb	16:01:44
1	Sr 421.552†	56.9	16.2	0.1684 µg/L		0.1684 ppb	16:01:44
1	Sc 361.383	1982189.6	1982189.6	103.79 %			16:03:07
1	Y 371.029	1359337.0	1359337.0	103.77 %			16:03:07
1	Ag 328.068†	-578.1	7.5	0.0622 µg/L		0.0622 ppb	16:03:12
1	As 188.979†	-1.3	-2.4	-4.6084 µg/L		-4.6084 ppb	16:03:33
1	B 249.677†	325.8	-17.5	-0.7693 µg/L		-0.7693 ppb	16:03:33
1	Ba 233.527†	-23.3	3.6	0.0946 µg/L		0.0946 ppb	16:03:33
1	Be 313.107†	-3422.1	143.2	0.0935 µg/L		0.0935 ppb	16:03:12
1	Cd 226.502†	-146.3	1.2	0.0321 µg/L		0.0321 ppb	16:03:33
1	Co 228.616†	-12.7	-3.4	-0.1679 µg/L		-0.1679 ppb	16:03:33
1	Cr 267.716†	-41.9	12.0	0.2649 µg/L		0.2649 ppb	16:03:33
1	Cu 324.752†	2411.8	-162.3	-1.1332 µg/L		-1.1332 ppb	16:03:12
1	Mn 257.610†	-218.3	33.8	0.1180 µg/L		0.1180 ppb	16:03:33
1	Mo 202.031†	-10.7	-2.7	-0.2926 µg/L		-0.2926 ppb	16:03:33
1	Ni 231.604†	299.4	-13.7	-0.7472 µg/L		-0.7472 ppb	16:03:33
1	P 214.914†	42.9	13.7	29.528 µg/L		29.528 ppb	16:03:33
1	Pb 220.353†	92.5	-8.1	-2.1696 µg/L		-2.1696 ppb	16:03:33
1	S 181.975 Axial†	17.6	2.1	9.2574 µg/L		9.2574 ppb	16:03:33
1	Sb 206.836†	23.2	-4.6	-4.4961 µg/L		-4.4961 ppb	16:03:33
1	Se 196.026†	12.0	-4.3	-6.4748 µg/L		-6.4748 ppb	16:03:33
1	SiO2†	1238.2	-57.1	-12.288 µg/L		-12.288 ppb	16:03:12
1	Si 251.611†	320.8	-3.8	-0.3112 µg/L		-0.3112 ppb	16:03:33
1	Sn 189.927†	0.5	1.4	0.6395 µg/L		0.6395 ppb	16:03:33
1	Ti 334.940†	134.1	13.1	0.0325 µg/L		0.0325 ppb	16:03:12
1	Tl 190.801†	-24.9	0.3	0.4630 µg/L		0.4630 ppb	16:03:33
1	U 409.014†	-12.1	41.9	3.7948 µg/L		3.7948 ppb	16:03:12
1	V 292.402†	-10.2	34.4	0.3695 µg/L		0.3695 ppb	16:03:12
1	Zn 213.857†	479.7	-13.4	-0.3280 µg/L		-0.3280 ppb	16:03:33
2	Sc RADIAL	55313.8	55313.8	101 %			16:02:10
2	Al 396.153Radial†	-3.9	6.3	4.7164 µg/L		4.7164 ppb	16:02:10
2	Ca 317.933Radial†	201.6	19.8	18.599 µg/L		18.599 ppb	16:02:30
2	Fe 238.204 Radial†	15.1	0.4	3.5581 µg/L		3.5581 ppb	16:02:30
2	K 766.490 Radial†	165.7	35.0	24.913 µg/L		24.913 ppb	16:02:10
2	Mg 279.077 IEC†	9.2	-2.2	-20.801 µg/L		-20.801 ppb	16:02:30
2	Na 589.592 Radial†	1009.9	454.5	149.64 µg/L		149.64 ppb	16:02:10
2	Sr 421.552†	43.0	2.9	0.0298 µg/L		0.0298 ppb	16:02:10
2	Sc 361.383	2000056.5	2000056.5	104.72 %			16:03:39
2	Y 371.029	1371413.4	1371413.4	104.69 %			16:03:39
2	Ag 328.068†	-539.4	49.5	0.3929 µg/L		0.3929 ppb	16:03:44
2	As 188.979†	2.0	0.8	1.5259 µg/L		1.5259 ppb	16:04:05
2	B 249.677†	333.1	-13.4	-0.5861 µg/L		-0.5861 ppb	16:04:05
2	Ba 233.527†	-19.7	7.2	0.1863 µg/L		0.1863 ppb	16:04:05
2	Be 313.107†	-3284.4	304.2	0.1986 µg/L		0.1986 ppb	16:03:44
2	Cd 226.502†	-141.7	6.9	0.1883 µg/L		0.1883 ppb	16:04:05
2	Co 228.616†	-14.8	-5.3	-0.2603 µg/L		-0.2603 ppb	16:04:05
2	Cr 267.716†	-34.1	19.8	0.4350 µg/L		0.4350 ppb	16:04:05
2	Cu 324.752†	2452.1	-144.6	-1.0097 µg/L		-1.0097 ppb	16:03:44
2	Mn 257.610†	-201.5	51.7	0.1804 µg/L		0.1804 ppb	16:04:05
2	Mo 202.031†	-5.9	1.9	0.2060 µg/L		0.2060 ppb	16:04:05
2	Ni 231.604†	302.4	-13.4	-0.7317 µg/L		-0.7317 ppb	16:04:05
2	P 214.914†	22.4	-6.2	-13.288 µg/L		-13.288 ppb	16:04:05
2	Pb 220.353†	100.3	-1.4	-0.3652 µg/L		-0.3652 ppb	16:04:05

2	S 181.975 Axial†	18.4	2.7	12.047 µg/L	12.047 ppb	16:04:05
2	Sb 206.836†	25.7	-2.4	-2.3521 µg/L	-2.3521 ppb	16:04:05
2	Se 196.026†	11.2	-5.1	-7.8216 µg/L	-7.8216 ppb	16:04:05
2	SiO2†	1221.5	-83.6	-18.000 µg/L	-18.000 ppb	16:03:44
2	Si 251.611†	319.3	-8.0	-0.6538 µg/L	-0.6538 ppb	16:04:05
2	Sn 189.927†	1.8	2.6	1.1983 µg/L	1.1983 ppb	16:04:05
2	Ti 334.940†	170.3	46.5	0.1138 µg/L	0.1138 ppb	16:03:44
2	Tl 190.801†	-24.1	1.2	1.7367 µg/L	1.7367 ppb	16:04:05
2	U 409.014†	-68.4	-11.7	-1.0610 µg/L	-1.0610 ppb	16:03:44
2	V 292.402†	-47.0	-0.7	-0.0056 µg/L	-0.0056 ppb	16:03:44
2	Zn 213.857†	481.8	-15.5	-0.3808 µg/L	-0.3808 ppb	16:04:05
3	Sc RADIAL	56238.4	56238.4	103 %		16:02:36
3	Al 396.153Radial†	-4.5	5.7	4.2549 µg/L	4.2549 ppb	16:02:36
3	Ca 317.933Radial†	217.1	31.6	29.725 µg/L	29.725 ppb	16:02:56
3	Fe 238.204 Radial†	15.6	0.7	5.5166 µg/L	5.5166 ppb	16:02:56
3	K 766.490 Radial†	152.3	19.4	13.755 µg/L	13.755 ppb	16:02:36
3	Mg 279.077 IEC†	9.8	-1.7	-16.008 µg/L	-16.008 ppb	16:02:56
3	Na 589.592 Radial†	1347.3	765.5	252.01 µg/L	252.01 ppb	16:02:36
3	Sr 421.552†	41.3	0.5	0.0055 µg/L	0.0055 ppb	16:02:36
3	Sc 361.383	1997138.2	1997138.2	104.57 %		16:04:11
3	Y 371.029	1369234.6	1369234.6	104.53 %		16:04:11
3	Ag 328.068†	-498.6	87.7	0.6980 µg/L	0.6980 ppb	16:04:16
3	As 188.979†	2.9	1.6	3.1103 µg/L	3.1103 ppb	16:04:37
3	B 249.677†	327.9	-17.9	-0.7818 µg/L	-0.7818 ppb	16:04:37
3	Ba 233.527†	-15.6	11.1	0.2887 µg/L	0.2887 ppb	16:04:37
3	Be 313.107†	-3097.4	478.5	0.3124 µg/L	0.3124 ppb	16:04:16
3	Cd 226.502†	-131.7	16.2	0.4453 µg/L	0.4453 ppb	16:04:37
3	Co 228.616†	-2.6	6.4	0.3136 µg/L	0.3136 ppb	16:04:37
3	Cr 267.716†	-14.7	38.4	0.8440 µg/L	0.8440 ppb	16:04:37
3	Cu 324.752†	2433.5	-159.0	-1.1099 µg/L	-1.1099 ppb	16:04:16
3	Mn 257.610†	-172.9	78.8	0.2743 µg/L	0.2743 ppb	16:04:37
3	Mo 202.031†	-1.7	5.9	0.6314 µg/L	0.6314 ppb	16:04:37
3	Ni 231.604†	302.9	-12.6	-0.6873 µg/L	-0.6873 ppb	16:04:37
3	P 214.914†	28.9	0.0	0.1351 µg/L	0.1351 ppb	16:04:37
3	Pb 220.353†	98.8	-2.7	-0.7118 µg/L	-0.7118 ppb	16:04:37
3	S 181.975 Axial†	19.3	3.6	15.780 µg/L	15.780 ppb	16:04:37
3	Sb 206.836†	32.5	4.1	4.0170 µg/L	4.0170 ppb	16:04:37
3	Se 196.026†	15.5	-1.0	-1.5777 µg/L	-1.5777 ppb	16:04:37
3	SiO2†	1280.0	-25.9	-5.5874 µg/L	-5.5874 ppb	16:04:16
3	Si 251.611†	323.6	-3.4	-0.2805 µg/L	-0.2805 ppb	16:04:37
3	Sn 189.927†	1.4	2.2	1.0236 µg/L	1.0236 ppb	16:04:37
3	Ti 334.940†	204.8	79.7	0.1935 µg/L	0.1935 ppb	16:04:16
3	Tl 190.801†	-25.7	-0.3	-0.3909 µg/L	-0.3909 ppb	16:04:37
3	U 409.014†	-62.9	-6.5	-0.5917 µg/L	-0.5917 ppb	16:04:16
3	V 292.402†	-21.9	23.3	0.2547 µg/L	0.2547 ppb	16:04:16
3	Zn 213.857†	484.0	-12.7	-0.3127 µg/L	-0.3127 ppb	16:04:37

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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	1993128.1	104.36 %	0.502			0.48%
Sc RADIAL	55736.7	102 %	0.9			0.84%
Y 371.029	1366661.7	104.33 %	0.491			0.47%
Ag 328.068†	48.2	0.3844 µg/L	0.31802	0.3844 ppb	0.31802	82.74%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.1	-0.0969 µg/L	7.94054	-0.0969 ppb	7.94054	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.0	0.0093 µg/L	4.07671	0.0093 ppb	4.07671	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-16.3	-0.7124 µg/L	0.10959	-0.7124 ppb	0.10959	15.38%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.3	0.1899 µg/L	0.09711	0.1899 ppb	0.09711	51.15%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	308.6	0.2015 µg/L	0.10946	0.2015 ppb	0.10946	54.32%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	25.4	23.896 µg/L	5.5823	23.896 ppb	5.5823	23.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.1	0.2219 µg/L	0.20862	0.2219 ppb	0.20862	94.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0382 µg/L	0.30817	-0.0382 ppb	0.30817	806.94%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated				
	23.4	0.5146 µg/L	0.29767	0.5146 ppb	0.29767	57.84%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
	-155.3	-1.0843 µg/L	0.06563	-1.0843 ppb	0.06563	6.05%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
	0.6	4.8317 µg/L	1.10403	4.8317 ppb	1.10403	22.85%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
	42.1	29.926 µg/L	19.1758	29.926 ppb	19.1758	64.08%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
	-1.6	-15.284 µg/L	5.9121	-15.284 ppb	5.9121	38.68%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
	54.8	0.1909 µg/L	0.07866	0.1909 ppb	0.07866	41.20%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
	1.7	0.1816 µg/L	0.46249	0.1816 ppb	0.46249	254.69%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
	565.9	186.28 µg/L	57.047	186.28 ppb	57.047	30.62%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
	-13.2	-0.7220 µg/L	0.03109	-0.7220 ppb	0.03109	4.31%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
	2.5	5.4583 µg/L	21.89861	5.4583 ppb	21.89861	401.20%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
	-4.1	-1.0822 µg/L	0.95750	-1.0822 ppb	0.95750	88.48%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
	2.8	12.362 µg/L	3.2727	12.362 ppb	3.2727	26.48%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
	-1.0	-0.9437 µg/L	4.42784	-0.9437 ppb	4.42784	469.19%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
	-3.5	-5.2914 µg/L	3.28586	-5.2914 ppb	3.28586	62.10%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated				
	-55.5	-11.958 µg/L	6.2126	-11.958 ppb	6.2126	51.95%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated				
	-5.1	-0.4151 µg/L	0.20723	-0.4151 ppb	0.20723	49.92%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
	2.1	0.9538 µg/L	0.28585	0.9538 ppb	0.28585	29.97%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
	6.6	0.0679 µg/L	0.08784	0.0679 ppb	0.08784	129.36%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
	46.4	0.1133 µg/L	0.08046	0.1133 ppb	0.08046	71.03%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
	0.4	0.6030 µg/L	1.07067	0.6030 ppb	1.07067	177.57%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
	7.9	0.7140 µg/L	2.67833	0.7140 ppb	2.67833	375.09%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
	19.0	0.2062 µg/L	0.19224	0.2062 ppb	0.19224	93.23%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
	-13.9	-0.3405 µg/L	0.03570	-0.3405 ppb	0.03570	10.49%
	QC value within limits for Zn 213.857	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 16:37:49

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	57270.5	57270.5	105 %		16:38:25
1	Al 396.153Radial†	6958.1	6640.6	4939.3 µg/L	4939.3 ppb	16:38:25
1	Ca 317.933Radial†	5712.0	5263.9	4956.3 µg/L	4956.3 ppb	16:38:46
1	Fe 238.204 Radial†	619.2	575.5	4888.0 µg/L	4888.0 ppb	16:38:46
1	K 766.490 Radial†	7274.3	6803.4	4835.8 µg/L	4835.8 ppb	16:38:25
1	Mg 279.077 IEC†	580.4	541.8	5044.9 µg/L	5044.9 ppb	16:38:46
1	Na 589.592 Radial†	31721.9	29686.7	9772.9 µg/L	9772.9 ppb	16:38:25
1	Sr 421.552†	48411.5	46092.9	477.81 µg/L	477.81 ppb	16:38:25
1	Sc 361.383	2050041.7	2050041.7	107.34 %		16:39:49
1	Y 371.029	1400914.7	1400914.7	106.95 %		16:39:49
1	Ag 328.068†	63102.9	59351.9	474.38 µg/L	474.38 ppb	16:39:55
1	As 188.979†	273.7	253.8	495.14 µg/L	495.14 ppb	16:40:15
1	B 249.677†	11802.0	10663.4	464.23 µg/L	464.23 ppb	16:39:55
1	Ba 233.527†	19451.3	18147.1	473.37 µg/L	473.37 ppb	16:39:55
1	Be 313.107†	769937.6	720722.3	470.49 µg/L	470.49 ppb	16:39:49
1	Cd 226.502†	18413.9	17296.7	477.11 µg/L	477.11 ppb	16:39:55
1	Co 228.616†	10377.6	9676.7	475.69 µg/L	475.69 ppb	16:39:55
1	Cr 267.716†	23222.4	21686.6	477.32 µg/L	477.32 ppb	16:39:55
1	Cu 324.752†	74708.1	67112.7	469.48 µg/L	469.48 ppb	16:39:55
1	Mn 257.610†	148224.3	138331.4	479.47 µg/L	479.47 ppb	16:39:49
1	Mo 202.031†	4976.6	4643.8	495.78 µg/L	495.78 ppb	16:40:15
1	Ni 231.604†	9664.7	8701.5	475.25 µg/L	475.25 ppb	16:39:55
1	P 214.914†	1251.0	1137.8	2398.4 µg/L	2398.4 ppb	16:40:15
1	Pb 220.353†	2064.6	1826.2	487.49 µg/L	487.49 ppb	16:40:15
1	S 181.975 Axial†	253.0	220.8	967.55 µg/L	967.55 ppb	16:40:15
1	Sb 206.836†	561.9	496.5	490.97 µg/L	490.97 ppb	16:40:15
1	Se 196.026†	348.6	308.9	478.47 µg/L	478.47 ppb	16:40:15
1	SiO2†	26407.2	23351.2	5028.8 µg/L	5028.8 ppb	16:39:55
1	Si 251.611†	31109.3	28668.8	2356.7 µg/L	2356.7 ppb	16:39:55
1	Sn 189.927†	1168.8	1089.7	501.23 µg/L	501.23 ppb	16:40:15
1	Ti 334.940†	210704.4	196178.3	471.57 µg/L	471.57 ppb	16:39:49
1	Tl 190.801†	345.6	346.3	489.05 µg/L	489.05 ppb	16:40:15
1	U 409.014†	5635.8	5304.0	479.22 µg/L	479.22 ppb	16:39:55
1	V 292.402†	47452.9	44251.8	477.60 µg/L	477.60 ppb	16:39:55
1	Zn 213.857†	20929.0	19022.1	471.63 µg/L	471.63 ppb	16:39:55
2	Sc RADIAL	57824.5	57824.5	106 %		16:38:51
2	Al 396.153Radial†	6951.6	6571.0	4887.5 µg/L	4887.5 ppb	16:38:51
2	Ca 317.933Radial†	5692.9	5193.8	4890.3 µg/L	4890.3 ppb	16:39:12
2	Fe 238.204 Radial†	614.8	565.7	4804.8 µg/L	4804.8 ppb	16:39:12
2	K 766.490 Radial†	7297.3	6758.7	4804.0 µg/L	4804.0 ppb	16:38:51
2	Mg 279.077 IEC†	578.6	534.8	4980.5 µg/L	4980.5 ppb	16:39:12
2	Na 589.592 Radial†	31791.5	29462.7	9699.2 µg/L	9699.2 ppb	16:38:51
2	Sr 421.552†	48548.0	45779.7	474.56 µg/L	474.56 ppb	16:38:51
2	Sc 361.383	2050967.6	2050967.6	107.39 %		16:40:22
2	Y 371.029	1401478.7	1401478.7	106.99 %		16:40:22
2	Ag 328.068†	63066.7	59291.5	473.89 µg/L	473.89 ppb	16:40:28
2	As 188.979†	260.8	241.7	471.43 µg/L	471.43 ppb	16:40:49
2	B 249.677†	11773.8	10632.2	462.91 µg/L	462.91 ppb	16:40:28
2	Ba 233.527†	19468.8	18155.2	473.58 µg/L	473.58 ppb	16:40:28
2	Be 313.107†	769423.9	719920.1	469.97 µg/L	469.97 ppb	16:40:22
2	Cd 226.502†	18369.5	17247.6	475.77 µg/L	475.77 ppb	16:40:28
2	Co 228.616†	10387.8	9681.8	475.93 µg/L	475.93 ppb	16:40:28
2	Cr 267.716†	23230.7	21684.6	477.27 µg/L	477.27 ppb	16:40:28
2	Cu 324.752†	74607.6	66987.7	468.59 µg/L	468.59 ppb	16:40:28
2	Mn 257.610†	147653.6	137737.6	477.41 µg/L	477.41 ppb	16:40:22
2	Mo 202.031†	4936.1	4604.0	491.53 µg/L	491.53 ppb	16:40:49
2	Ni 231.604†	9650.2	8684.0	474.29 µg/L	474.29 ppb	16:40:28
2	P 214.914†	1239.1	1126.2	2373.7 µg/L	2373.7 ppb	16:40:49
2	Pb 220.353†	2036.6	1799.3	480.30 µg/L	480.30 ppb	16:40:49

2	S 181.975 Axial†	251.7	219.6	962.01 µg/L	962.01 ppb	16:40:49
2	Sb 206.836†	560.6	495.1	489.53 µg/L	489.53 ppb	16:40:49
2	Se 196.026†	352.8	312.7	484.04 µg/L	484.04 ppb	16:40:49
2	SiO2†	26423.9	23355.6	5029.8 µg/L	5029.8 ppb	16:40:28
2	Si 251.611†	31116.7	28662.7	2356.2 µg/L	2356.2 ppb	16:40:28
2	Sn 189.927†	1158.0	1079.2	496.40 µg/L	496.40 ppb	16:40:49
2	Ti 334.940†	210552.3	195948.0	471.02 µg/L	471.02 ppb	16:40:22
2	Tl 190.801†	346.0	346.5	489.25 µg/L	489.25 ppb	16:40:49
2	U 409.014†	5584.5	5253.8	474.70 µg/L	474.70 ppb	16:40:28
2	V 292.402†	47503.1	44278.6	477.84 µg/L	477.84 ppb	16:40:28
2	Zn 213.857†	20951.2	19034.0	471.94 µg/L	471.94 ppb	16:40:28
3	Sc RADIAL	57919.3	57919.3	106 %		16:39:17
3	Al 396.153Radial†	6873.3	6486.5	4826.1 µg/L	4826.1 ppb	16:39:17
3	Ca 317.933Radial†	5675.3	5168.4	4866.3 µg/L	4866.3 ppb	16:39:38
3	Fe 238.204 Radial†	612.6	562.7	4778.5 µg/L	4778.5 ppb	16:39:38
3	K 766.490 Radial†	7223.5	6677.9	4746.6 µg/L	4746.6 ppb	16:39:17
3	Mg 279.077 IEC†	577.0	532.4	4956.6 µg/L	4956.6 ppb	16:39:38
3	Na 589.592 Radial†	31537.3	29174.1	9604.2 µg/L	9604.2 ppb	16:39:17
3	Sr 421.552†	47945.0	45136.6	467.89 µg/L	467.89 ppb	16:39:17
3	Sc 361.383	2047169.0	2047169.0	107.19 %		16:40:56
3	Y 371.029	1398213.9	1398213.9	106.74 %		16:40:56
3	Ag 328.068†	59282.1	55869.9	446.44 µg/L	446.44 ppb	16:41:01
3	As 188.979†	231.4	214.7	418.91 µg/L	418.91 ppb	16:41:22
3	B 249.677†	11101.6	10025.4	436.32 µg/L	436.32 ppb	16:41:01
3	Ba 233.527†	17825.1	16655.3	434.45 µg/L	434.45 ppb	16:41:01
3	Be 313.107†	720453.0	675563.8	441.01 µg/L	441.01 ppb	16:40:56
3	Cd 226.502†	16836.0	15848.7	437.13 µg/L	437.13 ppb	16:41:01
3	Co 228.616†	9439.7	8815.3	433.29 µg/L	433.29 ppb	16:41:01
3	Cr 267.716†	20551.5	19225.2	423.15 µg/L	423.15 ppb	16:41:01
3	Cu 324.752†	68186.1	61125.9	427.64 µg/L	427.64 ppb	16:41:01
3	Mn 257.610†	138984.9	129905.6	450.28 µg/L	450.28 ppb	16:40:56
3	Mo 202.031†	4143.4	3873.0	413.51 µg/L	413.51 ppb	16:41:22
3	Ni 231.604†	8808.1	7915.1	432.30 µg/L	432.30 ppb	16:41:01
3	P 214.914†	1067.2	968.0	2036.9 µg/L	2036.9 ppb	16:41:22
3	Pb 220.353†	1797.4	1579.7	421.60 µg/L	421.60 ppb	16:41:22
3	S 181.975 Axial†	226.2	196.2	859.46 µg/L	859.46 ppb	16:41:22
3	Sb 206.836†	485.7	426.1	420.98 µg/L	420.98 ppb	16:41:22
3	Se 196.026†	307.9	271.4	421.09 µg/L	421.09 ppb	16:41:22
3	SiO2†	24533.6	21637.8	4659.8 µg/L	4659.8 ppb	16:41:01
3	Si 251.611†	28891.7	26640.7	2190.0 µg/L	2190.0 ppb	16:41:01
3	Sn 189.927†	954.7	891.5	410.08 µg/L	410.08 ppb	16:41:22
3	Ti 334.940†	196335.7	183048.9	440.00 µg/L	440.00 ppb	16:40:56
3	Tl 190.801†	308.7	312.2	441.18 µg/L	441.18 ppb	16:41:22
3	U 409.014†	5011.7	4729.1	427.20 µg/L	427.20 ppb	16:41:01
3	V 292.402†	42781.7	39956.1	430.99 µg/L	430.99 ppb	16:41:01
3	Zn 213.857†	19123.4	17365.0	430.51 µg/L	430.51 ppb	16:41:01

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049392.8	107.31 %	0.104			0.10%
Sc RADIAL	57671.4	106 %	0.6			0.61%
Y 371.029	1400202.5	106.89 %	0.133			0.12%
Ag 328.068†	58171.1	464.90 µg/L	15.993	464.90 ppb	15.993	3.44%
QC value within limits for Ag 328.068 Recovery = 92.98%						
Al 396.153Radial†	6566.1	4884.3 µg/L	56.67	4884.3 ppb	56.67	1.16%
QC value within limits for Al 396.153Radial Recovery = 97.69%						
As 188.979†	236.7	461.83 µg/L	39.012	461.83 ppb	39.012	8.45%
QC value within limits for As 188.979 Recovery = 92.37%						
B 249.677†	10440.3	454.49 µg/L	15.747	454.49 ppb	15.747	3.46%
QC value within limits for B 249.677 Recovery = 90.90%						
Ba 233.527†	17652.5	460.47 µg/L	22.535	460.47 ppb	22.535	4.89%
QC value within limits for Ba 233.527 Recovery = 92.09%						
Be 313.107†	705402.1	460.49 µg/L	16.871	460.49 ppb	16.871	3.66%
QC value within limits for Be 313.107 Recovery = 92.10%						
Ca 317.933Radial†	5208.7	4904.3 µg/L	46.59	4904.3 ppb	46.59	0.95%
QC value within limits for Ca 317.933Radial Recovery = 98.09%						
Cd 226.502†	16797.7	463.34 µg/L	22.703	463.34 ppb	22.703	4.90%
QC value within limits for Cd 226.502 Recovery = 92.67%						
Co 228.616†	9391.3	461.63 µg/L	24.552	461.63 ppb	24.552	5.32%

QC value within limits for Co 228.616 Recovery = 92.33%							
Cr 267.716†	20865.4	459.24 µg/L	31.262	459.24 ppb	31.262	6.81%	
QC value within limits for Cr 267.716 Recovery = 91.85%							
Cu 324.752†	65075.5	455.24 µg/L	23.902	455.24 ppb	23.902	5.25%	
QC value within limits for Cu 324.752 Recovery = 91.05%							
Fe 238.204 Radial†	568.0	4823.8 µg/L	57.17	4823.8 ppb	57.17	1.19%	
QC value within limits for Fe 238.204 Radial Recovery = 96.48%							
K 766.490 Radial†	6746.7	4795.5 µg/L	45.22	4795.5 ppb	45.22	0.94%	
QC value within limits for K 766.490 Radial Recovery = 95.91%							
Mg 279.077 IEC†	536.3	4994.0 µg/L	45.66	4994.0 ppb	45.66	0.91%	
QC value within limits for Mg 279.077 IEC Recovery = 99.88%							
Mn 257.610†	135324.9	469.05 µg/L	16.289	469.05 ppb	16.289	3.47%	
QC value within limits for Mn 257.610 Recovery = 93.81%							
Mo 202.031†	4373.6	466.94 µg/L	46.322	466.94 ppb	46.322	9.92%	
QC value within limits for Mo 202.031 Recovery = 93.39%							
Na 589.592 Radial†	29441.2	9692.1 µg/L	84.60	9692.1 ppb	84.60	0.87%	
QC value within limits for Na 589.592 Radial Recovery = 96.92%							
Ni 231.604†	8433.5	460.62 µg/L	24.525	460.62 ppb	24.525	5.32%	
QC value within limits for Ni 231.604 Recovery = 92.12%							
P 214.914†	1077.3	2269.6 µg/L	201.96	2269.6 ppb	201.96	8.90%	
QC value within limits for P 214.914 Recovery = 90.79%							
Pb 220.353†	1735.0	463.13 µg/L	36.146	463.13 ppb	36.146	7.80%	
QC value within limits for Pb 220.353 Recovery = 92.63%							
S 181.975 Axial†	212.2	929.67 µg/L	60.871	929.67 ppb	60.871	6.55%	
QC value within limits for S 181.975 Axial Recovery = 92.97%							
Sb 206.836†	472.6	467.16 µg/L	39.999	467.16 ppb	39.999	8.56%	
QC value within limits for Sb 206.836 Recovery = 93.43%							
Se 196.026†	297.7	461.20 µg/L	34.847	461.20 ppb	34.847	7.56%	
QC value within limits for Se 196.026 Recovery = 92.24%							
SiO2†	22781.6	4906.1 µg/L	213.31	4906.1 ppb	213.31	4.35%	
QC value within limits for SiO2 Recovery = 91.75%							
Si 251.611†	27990.8	2301.0 µg/L	96.11	2301.0 ppb	96.11	4.18%	
QC value within limits for Si 251.611 Recovery = 92.04%							
Sn 189.927†	1020.1	469.24 µg/L	51.288	469.24 ppb	51.288	10.93%	
QC value within limits for Sn 189.927 Recovery = 93.85%							
Sr 421.552†	45669.7	473.42 µg/L	5.054	473.42 ppb	5.054	1.07%	
QC value within limits for Sr 421.552 Recovery = 94.68%							
Ti 334.940†	191725.1	460.86 µg/L	18.074	460.86 ppb	18.074	3.92%	
QC value within limits for Ti 334.940 Recovery = 92.17%							
Tl 190.801†	335.0	473.16 µg/L	27.695	473.16 ppb	27.695	5.85%	
QC value within limits for Tl 190.801 Recovery = 94.63%							
U 409.014†	5095.6	460.37 µg/L	28.818	460.37 ppb	28.818	6.26%	
QC value within limits for U 409.014 Recovery = 92.07%							
V 292.402†	42828.8	462.14 µg/L	26.978	462.14 ppb	26.978	5.84%	
QC value within limits for V 292.402 Recovery = 92.43%							
Zn 213.857†	18473.7	458.03 µg/L	23.826	458.03 ppb	23.826	5.20%	
QC value within limits for Zn 213.857 Recovery = 91.61%							

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:41:31

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	58584.5	58584.5	107 %		16:42:04
1	Al 396.153Radial†	51.2	57.8	43.068 µg/L	43.068 ppb	16:42:04
1	Ca 317.933Radial†	241.7	46.0	43.344 µg/L	43.344 ppb	16:42:24
1	Fe 238.204 Radial†	14.5	-1.0	-8.1938 µg/L	-8.1938 ppb	16:42:24
1	K 766.490 Radial†	158.2	19.0	13.495 µg/L	13.495 ppb	16:42:04
1	Mg 279.077 IEC†	19.4	6.8	63.641 µg/L	63.641 ppb	16:42:24
1	Na 589.592 Radial†	1003.5	392.9	129.35 µg/L	129.35 ppb	16:42:04
1	Sr 421.552†	45.5	2.9	0.0298 µg/L	0.0298 ppb	16:42:04
1	Sc 361.383	2059865.1	2059865.1	107.86 %		16:43:26
1	Y 371.029	1412010.5	1412010.5	107.79 %		16:43:26
1	Ag 328.068†	-580.2	26.6	0.2127 µg/L	0.2127 ppb	16:43:32
1	As 188.979†	-2.2	-3.1	-6.1457 µg/L	-6.1457 ppb	16:43:52
1	B 249.677†	314.7	-39.7	-1.7298 µg/L	-1.7298 ppb	16:43:52
1	Ba 233.527†	-34.6	-6.1	-0.1574 µg/L	-0.1574 ppb	16:43:52
1	Be 313.107†	-3476.5	217.1	0.1418 µg/L	0.1418 ppb	16:43:32
1	Cd 226.502†	-142.5	10.0	0.2771 µg/L	0.2771 ppb	16:43:52
1	Co 228.616†	-11.6	-1.9	-0.0950 µg/L	-0.0950 ppb	16:43:52
1	Cr 267.716†	-40.1	15.2	0.3343 µg/L	0.3343 ppb	16:43:32
1	Cu 324.752†	2513.6	-155.6	-1.0878 µg/L	-1.0878 ppb	16:43:32
1	Mn 257.610†	-238.3	23.1	0.0765 µg/L	0.0765 ppb	16:43:52
1	Mo 202.031†	-4.7	3.2	0.3434 µg/L	0.3434 ppb	16:43:52
1	Ni 231.604†	310.9	-14.0	-0.7640 µg/L	-0.7640 ppb	16:43:52
1	P 214.914†	32.2	2.3	4.9663 µg/L	4.9663 ppb	16:43:52
1	Pb 220.353†	102.0	-2.6	-0.7002 µg/L	-0.7002 ppb	16:43:52
1	S 181.975 Axial†	19.3	3.1	13.368 µg/L	13.368 ppb	16:43:52
1	Sb 206.836†	23.2	-5.4	-5.3618 µg/L	-5.3618 ppb	16:43:52
1	Se 196.026†	20.8	3.4	5.1089 µg/L	5.1089 ppb	16:43:52
1	SiO2†	1256.8	-84.7	-18.250 µg/L	-18.250 ppb	16:43:32
1	Si 251.611†	299.6	-35.1	-2.8840 µg/L	-2.8840 ppb	16:43:52
1	Sn 189.927†	-1.9	-0.9	-0.4213 µg/L	-0.4213 ppb	16:43:52
1	Ti 334.940†	103.7	-20.0	-0.0524 µg/L	-0.0524 ppb	16:43:32
1	Tl 190.801†	-18.7	7.0	9.7650 µg/L	9.7650 ppb	16:43:52
1	U 409.014†	8.9	61.9	5.6031 µg/L	5.6031 ppb	16:43:32
1	V 292.402†	-13.8	31.5	0.3435 µg/L	0.3435 ppb	16:43:32
1	Zn 213.857†	488.8	-22.3	-0.5552 µg/L	-0.5552 ppb	16:43:52
2	Sc RADIAL	57826.0	57826.0	106 %		16:42:30
2	Al 396.153Radial†	36.0	44.1	32.860 µg/L	32.860 ppb	16:42:30
2	Ca 317.933Radial†	243.6	50.8	47.787 µg/L	47.787 ppb	16:42:50
2	Fe 238.204 Radial†	18.8	3.3	27.831 µg/L	27.831 ppb	16:42:50
2	K 766.490 Radial†	189.0	49.9	35.479 µg/L	35.479 ppb	16:42:30
2	Mg 279.077 IEC†	19.0	6.7	61.954 µg/L	61.954 ppb	16:42:50
2	Na 589.592 Radial†	991.6	394.0	129.71 µg/L	129.71 ppb	16:42:30
2	Sr 421.552†	62.3	19.3	0.1997 µg/L	0.1997 ppb	16:42:30
2	Sc 361.383	2019733.9	2019733.9	105.75 %		16:43:58
2	Y 371.029	1384706.2	1384706.2	105.71 %		16:43:58
2	Ag 328.068†	-558.4	36.5	0.2916 µg/L	0.2916 ppb	16:44:04
2	As 188.979†	-1.6	-2.7	-5.2610 µg/L	-5.2610 ppb	16:44:24
2	B 249.677†	316.8	-31.9	-1.4069 µg/L	-1.4069 ppb	16:44:24
2	Ba 233.527†	-28.3	-0.8	-0.0199 µg/L	-0.0199 ppb	16:44:24
2	Be 313.107†	-3437.1	190.3	0.1243 µg/L	0.1243 ppb	16:44:04
2	Cd 226.502†	-144.6	5.4	0.1447 µg/L	0.1447 ppb	16:44:24
2	Co 228.616†	-10.6	-1.2	-0.0595 µg/L	-0.0595 ppb	16:44:24
2	Cr 267.716†	-44.1	10.7	0.2350 µg/L	0.2350 ppb	16:44:04
2	Cu 324.752†	2441.7	-177.3	-1.2343 µg/L	-1.2343 ppb	16:44:04
2	Mn 257.610†	-221.2	34.9	0.1222 µg/L	0.1222 ppb	16:44:24
2	Mo 202.031†	-2.8	4.9	0.5203 µg/L	0.5203 ppb	16:44:24
2	Ni 231.604†	305.8	-13.1	-0.7134 µg/L	-0.7134 ppb	16:44:24
2	P 214.914†	32.5	3.1	6.8494 µg/L	6.8494 ppb	16:44:24
2	Pb 220.353†	110.5	7.3	1.9444 µg/L	1.9444 ppb	16:44:24



2	S 181.975 Axial†	18.0	2.2	9.5789 µg/L	9.5789 ppb	16:44:24
2	Sb 206.836†	26.9	-1.5	-1.5033 µg/L	-1.5033 ppb	16:44:24
2	Se 196.026†	9.1	-7.3	-11.082 µg/L	-11.082 ppb	16:44:24
2	SiO2†	1234.9	-82.3	-17.728 µg/L	-17.728 ppb	16:44:04
2	Si 251.611†	315.8	-14.3	-1.1723 µg/L	-1.1723 ppb	16:44:24
2	Sn 189.927†	-0.9	0.0	0.0122 µg/L	0.0122 ppb	16:44:24
2	Ti 334.940†	107.0	-14.9	-0.0400 µg/L	-0.0400 ppb	16:44:04
2	Tl 190.801†	-22.2	3.3	4.6398 µg/L	4.6398 ppb	16:44:24
2	U 409.014†	11.6	64.6	5.8396 µg/L	5.8396 ppb	16:44:04
2	V 292.402†	-47.1	-0.3	0.0106 µg/L	0.0106 ppb	16:44:04
2	Zn 213.857†	485.9	-16.1	-0.4022 µg/L	-0.4022 ppb	16:44:24
3	Sc RADIAL	58203.8	58203.8	107 %		16:42:56
3	Al 396.153Radial†	16.5	25.6	19.057 µg/L	19.057 ppb	16:42:56
3	Ca 317.933Radial†	234.3	40.6	38.198 µg/L	38.198 ppb	16:43:16
3	Fe 238.204 Radial†	16.0	0.5	4.0830 µg/L	4.0830 ppb	16:43:16
3	K 766.490 Radial†	180.9	41.2	29.300 µg/L	29.300 ppb	16:42:56
3	Mg 279.077 IEC†	18.0	5.6	52.283 µg/L	52.283 ppb	16:43:16
3	Na 589.592 Radial†	920.7	321.4	105.80 µg/L	105.80 ppb	16:42:56
3	Sr 421.552†	52.3	9.5	0.0985 µg/L	0.0985 ppb	16:42:56
3	Sc 361.383	1997484.6	1997484.6	104.59 %		16:44:31
3	Y 371.029	1369124.4	1369124.4	104.52 %		16:44:31
3	Ag 328.068†	-544.9	43.6	0.3481 µg/L	0.3481 ppb	16:44:36
3	As 188.979†	3.1	1.8	3.4746 µg/L	3.4746 ppb	16:44:57
3	B 249.677†	317.2	-28.2	-1.2336 µg/L	-1.2336 ppb	16:44:57
3	Ba 233.527†	-26.0	1.1	0.0301 µg/L	0.0301 ppb	16:44:57
3	Be 313.107†	-3380.0	208.8	0.1363 µg/L	0.1363 ppb	16:44:36
3	Cd 226.502†	-138.7	9.5	0.2617 µg/L	0.2617 ppb	16:44:57
3	Co 228.616†	-17.3	-7.7	-0.3772 µg/L	-0.3772 ppb	16:44:57
3	Cr 267.716†	-57.1	-2.2	-0.0487 µg/L	-0.0487 ppb	16:44:36
3	Cu 324.752†	2481.2	-113.8	-0.7943 µg/L	-0.7943 ppb	16:44:36
3	Mn 257.610†	-222.0	31.9	0.1088 µg/L	0.1088 ppb	16:44:57
3	Mo 202.031†	-5.2	2.6	0.2766 µg/L	0.2766 ppb	16:44:57
3	Ni 231.604†	300.3	-15.1	-0.8254 µg/L	-0.8254 ppb	16:44:57
3	P 214.914†	30.5	1.5	3.4004 µg/L	3.4004 ppb	16:44:57
3	Pb 220.353†	108.4	6.5	1.7342 µg/L	1.7342 ppb	16:44:57
3	S 181.975 Axial†	15.4	-0.1	-0.3301 µg/L	-0.3301 ppb	16:44:57
3	Sb 206.836†	27.4	-0.8	-0.7588 µg/L	-0.7588 ppb	16:44:57
3	Se 196.026†	19.0	2.4	3.5402 µg/L	3.5402 ppb	16:44:57
3	SiO2†	1246.0	-58.7	-12.639 µg/L	-12.639 ppb	16:44:36
3	Si 251.611†	309.0	-17.4	-1.4306 µg/L	-1.4306 ppb	16:44:57
3	Sn 189.927†	-0.1	0.8	0.3816 µg/L	0.3816 ppb	16:44:57
3	Ti 334.940†	122.3	0.8	-0.0015 µg/L	-0.0015 ppb	16:44:36
3	Tl 190.801†	-19.4	5.7	7.9510 µg/L	7.9510 ppb	16:44:57
3	U 409.014†	-119.0	-60.2	-5.4508 µg/L	-5.4508 ppb	16:44:36
3	V 292.402†	-13.3	31.5	0.3324 µg/L	0.3324 ppb	16:44:36
3	Zn 213.857†	491.8	-5.3	-0.1315 µg/L	-0.1315 ppb	16:44:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025694.5	106.07 %	1.655			1.56%
Sc RADIAL	58204.8	107 %	0.7			0.65%
Y 371.029	1388613.7	106.01 %	1.657			1.56%
Ag 328.068†	35.6	0.2841 µg/L	0.06799	0.2841 ppb	0.06799	23.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	42.5	31.661 µg/L	12.0501	31.661 ppb	12.0501	38.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-2.6440 µg/L	5.31733	-2.6440 ppb	5.31733	201.11%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-33.2	-1.4568 µg/L	0.25185	-1.4568 ppb	0.25185	17.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.9	-0.0491 µg/L	0.09709	-0.0491 ppb	0.09709	197.73%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	205.4	0.1341 µg/L	0.00896	0.1341 ppb	0.00896	6.68%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	45.8	43.110 µg/L	4.7990	43.110 ppb	4.7990	11.13%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.3	0.2278 µg/L	0.07242	0.2278 ppb	0.07242	31.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.1772 µg/L	0.17409	-0.1772 ppb	0.17409	98.23%

QC value within limits for Co 228.616 Recovery = Not calculated  
 Cr 267.716† 7.9 0.1735 µg/L 0.19876 0.1735 ppb 0.19876 114.54%  
 QC value within limits for Cr 267.716 Recovery = Not calculated  
 Cu 324.752† -148.9 -1.0388 µg/L 0.22407 -1.0388 ppb 0.22407 21.57%  
 QC value within limits for Cu 324.752 Recovery = Not calculated  
 Fe 238.204 Radial† 0.9 7.9067 µg/L 18.31420 7.9067 ppb 18.31420 231.63%  
 QC value within limits for Fe 238.204 Radial Recovery = Not calculated  
 K 766.490 Radial† 36.7 26.091 µg/L 11.3376 26.091 ppb 11.3376 43.45%  
 QC value within limits for K 766.490 Radial Recovery = Not calculated  
 Mg 279.077 IEC† 6.4 59.293 µg/L 6.1293 59.293 ppb 6.1293 10.34%  
 QC value within limits for Mg 279.077 IEC Recovery = Not calculated  
 Mn 257.610† 30.0 0.1025 µg/L 0.02350 0.1025 ppb 0.02350 22.92%  
 QC value within limits for Mn 257.610 Recovery = Not calculated  
 Mo 202.031† 3.6 0.3801 µg/L 0.12595 0.3801 ppb 0.12595 33.13%  
 QC value within limits for Mo 202.031 Recovery = Not calculated  
 Na 589.592 Radial† 369.4 121.62 µg/L 13.704 121.62 ppb 13.704 11.27%  
 QC value within limits for Na 589.592 Radial Recovery = Not calculated  
 Ni 231.604† -14.0 -0.7676 µg/L 0.05609 -0.7676 ppb 0.05609 7.31%  
 QC value within limits for Ni 231.604 Recovery = Not calculated  
 P 214.914† 2.3 5.0720 µg/L 1.72695 5.0720 ppb 1.72695 34.05%  
 QC value within limits for P 214.914 Recovery = Not calculated  
 Pb 220.353† 3.7 0.9928 µg/L 1.46997 0.9928 ppb 1.46997 148.06%  
 QC value within limits for Pb 220.353 Recovery = Not calculated  
 S 181.975 Axial† 1.7 7.5391 µg/L 7.07334 7.5391 ppb 7.07334 93.82%  
 QC value within limits for S 181.975 Axial Recovery = Not calculated  
 Sb 206.836† -2.6 -2.5413 µg/L 2.47086 -2.5413 ppb 2.47086 97.23%  
 QC value within limits for Sb 206.836 Recovery = Not calculated  
 Se 196.026† -0.5 -0.8111 µg/L 8.92964 -0.8111 ppb 8.92964 >999.9%  
 QC value within limits for Se 196.026 Recovery = Not calculated  
 SiO2† -75.3 -16.206 µg/L 3.0998 -16.206 ppb 3.0998 19.13%  
 QC value within limits for SiO2 Recovery = Not calculated  
 Si 251.611† -22.2 -1.8290 µg/L 0.92279 -1.8290 ppb 0.92279 50.45%  
 QC value within limits for Si 251.611 Recovery = Not calculated  
 Sn 189.927† -0.0 -0.0092 µg/L 0.40185 -0.0092 ppb 0.40185 >999.9%  
 QC value within limits for Sn 189.927 Recovery = Not calculated  
 Sr 421.552† 10.5 0.1093 µg/L 0.08548 0.1093 ppb 0.08548 78.18%  
 QC value within limits for Sr 421.552 Recovery = Not calculated  
 Ti 334.940† -11.4 -0.0313 µg/L 0.02652 -0.0313 ppb 0.02652 84.74%  
 QC value within limits for Ti 334.940 Recovery = Not calculated  
 Tl 190.801† 5.3 7.4520 µg/L 2.59879 7.4520 ppb 2.59879 34.87%  
 QC value within limits for Tl 190.801 Recovery = Not calculated  
 U 409.014† 22.1 1.9973 µg/L 6.45136 1.9973 ppb 6.45136 323.00%  
 QC value within limits for U 409.014 Recovery = Not calculated  
 V 292.402† 20.9 0.2288 µg/L 0.18906 0.2288 ppb 0.18906 82.63%  
 QC value within limits for V 292.402 Recovery = Not calculated  
 Zn 213.857† -14.6 -0.3630 µg/L 0.21454 -0.3630 ppb 0.21454 59.11%  
 QC value within limits for Zn 213.857 Recovery = Not calculated  
 All analyte(s) passed QC.

## =====

Analysis Begun

Start Time: 2/11/2010 16:58:42 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\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 1  
 Sample ID: CCV Date Collected: 2/11/2010 16:58:44  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

## -----

Replicate Data: CCV		Net	Corrected	Calib.	Sample	Analysis
Repl#	Analyte	Intensity	Intensity	Conc. Units	Conc. Units	Time
1	Sc RADIAL	58304.7	58304.7	107 %		16:59:20
1	Al 396.153Radial†	6786.5	6362.5	4732.0 µg/L	4732.0 ppb	16:59:20
1	Ca 317.933Radial†	5536.9	5003.5	4711.1 µg/L	4711.1 ppb	16:59:40
1	Fe 238.204 Radial†	610.2	556.6	4728.2 µg/L	4728.2 ppb	16:59:40
1	K 766.490 Radial†	7283.7	6689.2	4754.7 µg/L	4754.7 ppb	16:59:20
1	Mg 279.077 IEC†	569.3	521.6	4857.3 µg/L	4857.3 ppb	16:59:40
1	Na 589.592 Radial†	31197.2	28659.4	9434.8 µg/L	9434.8 ppb	16:59:20
1	Sr 421.552†	48428.4	45290.4	469.49 µg/L	469.49 ppb	16:59:20
1	Sc 361.383	2048192.0	2048192.0	107.24 %		17:00:43
1	Y 371.029	1396873.4	1396873.4	106.64 %		17:00:43
1	Ag 328.068†	62792.0	59115.0	472.54 µg/L	472.54 ppb	17:00:49
1	As 188.979†	276.2	256.4	500.17 µg/L	500.17 ppb	17:01:09
1	B 249.677†	11976.6	10836.1	471.87 µg/L	471.87 ppb	17:00:49
1	Ba 233.527†	19779.6	18469.6	481.79 µg/L	481.79 ppb	17:00:49
1	Be 313.107†	782023.1	732639.2	478.28 µg/L	478.28 ppb	17:00:43
1	Cd 226.502†	18757.9	17632.9	486.42 µg/L	486.42 ppb	17:00:49
1	Co 228.616†	10618.7	9910.3	487.18 µg/L	487.18 ppb	17:00:49
1	Cr 267.716†	23605.9	22063.7	485.62 µg/L	485.62 ppb	17:00:49
1	Cu 324.752†	75656.1	68059.5	476.07 µg/L	476.07 ppb	17:00:49
1	Mn 257.610†	150274.2	140367.5	486.51 µg/L	486.51 ppb	17:00:43
1	Mo 202.031†	4970.8	4642.6	495.64 µg/L	495.64 ppb	17:01:09
1	Ni 231.604†	9869.6	8900.8	486.13 µg/L	486.13 ppb	17:00:49
1	P 214.914†	1275.8	1162.0	2449.8 µg/L	2449.8 ppb	17:01:09
1	Pb 220.353†	2092.9	1854.3	494.97 µg/L	494.97 ppb	17:01:09
1	S 181.975 Axial†	258.0	225.7	989.09 µg/L	989.09 ppb	17:01:09
1	Sb 206.836†	558.6	493.9	488.34 µg/L	488.34 ppb	17:01:09
1	Se 196.026†	360.2	320.1	495.20 µg/L	495.20 ppb	17:01:09
1	SiO2†	26598.5	23551.8	5072.0 µg/L	5072.0 ppb	17:00:49
1	Si 251.611†	31394.2	28960.7	2380.7 µg/L	2380.7 ppb	17:00:49
1	Sn 189.927†	1171.7	1093.4	502.93 µg/L	502.93 ppb	17:01:09
1	Ti 334.940†	209687.5	195407.3	469.73 µg/L	469.73 ppb	17:00:43
1	Tl 190.801†	351.0	351.5	496.34 µg/L	496.34 ppb	17:01:09
1	U 409.014†	5705.8	5374.0	485.60 µg/L	485.60 ppb	17:00:49
1	V 292.402†	48262.6	45046.7	486.08 µg/L	486.08 ppb	17:00:49
1	Zn 213.857†	21405.2	19483.8	483.11 µg/L	483.11 ppb	17:00:49
2	Sc RADIAL	57809.4	57809.4	106 %		16:59:45
2	Al 396.153Radial†	6713.1	6347.6	4720.4 µg/L	4720.4 ppb	16:59:45
2	Ca 317.933Radial†	5573.2	5082.2	4785.2 µg/L	4785.2 ppb	17:00:06
2	Fe 238.204 Radial†	613.9	565.0	4800.0 µg/L	4800.0 ppb	17:00:06
2	K 766.490 Radial†	7246.0	6712.1	4770.9 µg/L	4770.9 ppb	16:59:45
2	Mg 279.077 IEC†	566.2	523.3	4873.4 µg/L	4873.4 ppb	17:00:06
2	Na 589.592 Radial†	31072.8	28792.1	9478.5 µg/L	9478.5 ppb	16:59:45
2	Sr 421.552†	48008.7	45282.6	469.41 µg/L	469.41 ppb	16:59:45
2	Sc 361.383	1951160.7	1951160.7	102.16 %		17:01:16
2	Y 371.029	1331856.8	1331856.8	101.67 %		17:01:16
2	Ag 328.068†	64120.5	63327.2	506.22 µg/L	506.22 ppb	17:01:22
2	As 188.979†	277.7	270.7	528.08 µg/L	528.08 ppb	17:01:43

2	B 249.677†	12297.9	11706.0	509.91 µg/L	509.91 ppb	17:01:22
2	Ba 233.527†	20306.8	19902.8	519.17 µg/L	519.17 ppb	17:01:22
2	Be 313.107†	802212.2	788663.9	514.85 µg/L	514.85 ppb	17:01:16
2	Cd 226.502†	19256.8	18991.1	523.92 µg/L	523.92 ppb	17:01:22
2	Co 228.616†	10882.2	10660.6	524.05 µg/L	524.05 ppb	17:01:22
2	Cr 267.716†	24198.0	23738.0	522.47 µg/L	522.47 ppb	17:01:22
2	Cu 324.752†	77364.3	73239.8	512.26 µg/L	512.26 ppb	17:01:22
2	Mn 257.610†	154462.4	151435.4	524.84 µg/L	524.84 ppb	17:01:16
2	Mo 202.031†	4974.0	4876.2	520.57 µg/L	520.57 ppb	17:01:43
2	Ni 231.604†	10143.4	9626.4	525.76 µg/L	525.76 ppb	17:01:22
2	P 214.914†	1278.9	1224.2	2579.9 µg/L	2579.9 ppb	17:01:43
2	Pb 220.353†	2103.7	1962.0	523.68 µg/L	523.68 ppb	17:01:43
2	S 181.975 Axial†	261.1	240.7	1054.7 µg/L	1054.7 ppb	17:01:43
2	Sb 206.836†	565.0	526.1	520.02 µg/L	520.02 ppb	17:01:43
2	Se 196.026†	363.5	340.0	525.72 µg/L	525.72 ppb	17:01:43
2	SiO2†	27321.6	25493.0	5490.1 µg/L	5490.1 ppb	17:01:22
2	Si 251.611†	32162.6	31168.6	2562.2 µg/L	2562.2 ppb	17:01:22
2	Sn 189.927†	1172.7	1148.8	528.40 µg/L	528.40 ppb	17:01:43
2	Ti 334.940†	216025.0	211334.0	508.04 µg/L	508.04 ppb	17:01:16
2	Tl 190.801†	350.8	367.7	519.30 µg/L	519.30 ppb	17:01:43
2	U 409.014†	5846.6	5776.4	522.02 µg/L	522.02 ppb	17:01:22
2	V 292.402†	49557.7	48552.4	523.76 µg/L	523.76 ppb	17:01:22
2	Zn 213.857†	21845.1	20906.9	518.41 µg/L	518.41 ppb	17:01:22
3	Sc RADIAL	58043.7	58043.7	106 %		17:00:11
3	Al 396.153Radial†	6748.6	6355.4	4728.2 µg/L	4728.2 ppb	17:00:11
3	Ca 317.933Radial†	5566.3	5054.5	4759.1 µg/L	4759.1 ppb	17:00:32
3	Fe 238.204 Radial†	616.6	565.2	4800.6 µg/L	4800.6 ppb	17:00:32
3	K 766.490 Radial†	7187.1	6629.1	4711.9 µg/L	4711.9 ppb	17:00:11
3	Mg 279.077 IEC†	562.5	517.6	4819.1 µg/L	4819.1 ppb	17:00:32
3	Na 589.592 Radial†	31179.2	28773.8	9472.4 µg/L	9472.4 ppb	17:00:11
3	Sr 421.552†	48277.8	45352.7	470.13 µg/L	470.13 ppb	17:00:11
3	Sc 361.383	2003631.8	2003631.8	104.91 %		17:01:50
3	Y 371.029	1367447.8	1367447.8	104.39 %		17:01:50
3	Ag 328.068†	59826.0	57590.0	460.26 µg/L	460.26 ppb	17:01:56
3	As 188.979†	236.7	224.5	438.03 µg/L	438.03 ppb	17:02:16
3	B 249.677†	11388.2	10523.6	458.12 µg/L	458.12 ppb	17:01:56
3	Ba 233.527†	18491.5	17651.9	460.45 µg/L	460.45 ppb	17:01:56
3	Be 313.107†	746381.1	714882.8	466.69 µg/L	466.69 ppb	17:01:50
3	Cd 226.502†	17452.2	16777.4	462.78 µg/L	462.78 ppb	17:01:56
3	Co 228.616†	9792.8	9343.2	459.24 µg/L	459.24 ppb	17:01:56
3	Cr 267.716†	21341.5	20394.9	448.89 µg/L	448.89 ppb	17:01:56
3	Cu 324.752†	70171.6	64400.7	450.52 µg/L	450.52 ppb	17:01:56
3	Mn 257.610†	143677.7	137196.1	475.54 µg/L	475.54 ppb	17:01:50
3	Mo 202.031†	4142.0	3955.7	422.34 µg/L	422.34 ppb	17:02:16
3	Ni 231.604†	9135.9	8406.0	459.11 µg/L	459.11 ppb	17:01:56
3	P 214.914†	1088.5	1009.9	2124.6 µg/L	2124.6 ppb	17:02:16
3	Pb 220.353†	1832.8	1649.8	440.26 µg/L	440.26 ppb	17:02:16
3	S 181.975 Axial†	227.5	202.0	885.22 µg/L	885.22 ppb	17:02:16
3	Sb 206.836†	480.8	431.3	425.93 µg/L	425.93 ppb	17:02:16
3	Se 196.026†	317.8	287.1	445.21 µg/L	445.21 ppb	17:02:16
3	SiO2†	25159.1	22731.4	4895.3 µg/L	4895.3 ppb	17:01:56
3	Si 251.611†	29597.8	27899.4	2293.5 µg/L	2293.5 ppb	17:01:56
3	Sn 189.927†	953.9	910.2	418.64 µg/L	418.64 ppb	17:02:16
3	Ti 334.940†	199390.2	189940.4	456.58 µg/L	456.58 ppb	17:01:50
3	Tl 190.801†	316.4	325.9	460.38 µg/L	460.38 ppb	17:02:16
3	U 409.014†	5187.8	4998.6	451.60 µg/L	451.60 ppb	17:01:56
3	V 292.402†	44415.7	42380.8	456.99 µg/L	456.99 ppb	17:01:56
3	Zn 213.857†	19887.4	18480.9	458.23 µg/L	458.23 ppb	17:01:56

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2000994.9	104.77 %	2.543			2.43%
Sc RADIAL	58052.6	106 %	0.5			0.43%
Y 371.029	1365392.6	104.23 %	2.485			2.38%
Ag 328.068†	60010.7	479.67 µg/L	23.794	479.67 ppb	23.794	4.96%
QC value within limits for Ag 328.068 Recovery = 95.93%						
Al 396.153Radial†	6355.1	4726.8 µg/L	5.90	4726.8 ppb	5.90	0.12%
QC value within limits for Al 396.153Radial Recovery = 94.54%						
As 188.979†	250.5	488.76 µg/L	46.092	488.76 ppb	46.092	9.43%

QC value within limits for As 188.979 Recovery = 97.75%						
B 249.677†	11021.9	479.97 µg/L	26.827	479.97 ppb	26.827	5.59%
QC value within limits for B 249.677 Recovery = 95.99%						
Ba 233.527†	18674.8	487.13 µg/L	29.727	487.13 ppb	29.727	6.10%
QC value within limits for Ba 233.527 Recovery = 97.43%						
Be 313.107†	745395.3	486.60 µg/L	25.138	486.60 ppb	25.138	5.17%
QC value within limits for Be 313.107 Recovery = 97.32%						
Ca 317.933Radial†	5046.7	4751.8 µg/L	37.61	4751.8 ppb	37.61	0.79%
QC value within limits for Ca 317.933Radial Recovery = 95.04%						
Cd 226.502†	17800.5	491.04 µg/L	30.831	491.04 ppb	30.831	6.28%
QC value within limits for Cd 226.502 Recovery = 98.21%						
Co 228.616†	9971.4	490.16 µg/L	32.508	490.16 ppb	32.508	6.63%
QC value within limits for Co 228.616 Recovery = 98.03%						
Cr 267.716†	22065.5	485.66 µg/L	36.788	485.66 ppb	36.788	7.57%
QC value within limits for Cr 267.716 Recovery = 97.13%						
Cu 324.752†	68566.7	479.62 µg/L	31.024	479.62 ppb	31.024	6.47%
QC value within limits for Cu 324.752 Recovery = 95.92%						
Fe 238.204 Radial†	562.3	4776.3 µg/L	41.61	4776.3 ppb	41.61	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 95.53%						
K 766.490 Radial†	6676.8	4745.8 µg/L	30.47	4745.8 ppb	30.47	0.64%
QC value within limits for K 766.490 Radial Recovery = 94.92%						
Mg 279.077 IEC†	520.8	4849.9 µg/L	27.89	4849.9 ppb	27.89	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 97.00%						
Mn 257.610†	142999.7	495.63 µg/L	25.888	495.63 ppb	25.888	5.22%
QC value within limits for Mn 257.610 Recovery = 99.13%						
Mo 202.031†	4491.5	479.52 µg/L	51.064	479.52 ppb	51.064	10.65%
QC value within limits for Mo 202.031 Recovery = 95.90%						
Na 589.592 Radial†	28741.7	9461.9 µg/L	23.68	9461.9 ppb	23.68	0.25%
QC value within limits for Na 589.592 Radial Recovery = 94.62%						
Ni 231.604†	8977.7	490.33 µg/L	33.521	490.33 ppb	33.521	6.84%
QC value within limits for Ni 231.604 Recovery = 98.07%						
P 214.914†	1132.0	2384.7 µg/L	234.53	2384.7 ppb	234.53	9.83%
QC value within limits for P 214.914 Recovery = 95.39%						
Pb 220.353†	1822.0	486.30 µg/L	42.376	486.30 ppb	42.376	8.71%
QC value within limits for Pb 220.353 Recovery = 97.26%						
S 181.975 Axial†	222.8	976.34 µg/L	85.462	976.34 ppb	85.462	8.75%
QC value within limits for S 181.975 Axial Recovery = 97.63%						
Sb 206.836†	483.8	478.10 µg/L	47.873	478.10 ppb	47.873	10.01%
QC value within limits for Sb 206.836 Recovery = 95.62%						
Se 196.026†	315.7	488.71 µg/L	40.646	488.71 ppb	40.646	8.32%
QC value within limits for Se 196.026 Recovery = 97.74%						
SiO2†	23925.4	5152.5 µg/L	305.42	5152.5 ppb	305.42	5.93%
QC value within limits for SiO2 Recovery = 96.35%						
Si 251.611†	29342.9	2412.1 µg/L	137.10	2412.1 ppb	137.10	5.68%
QC value within limits for Si 251.611 Recovery = 96.49%						
Sn 189.927†	1050.8	483.32 µg/L	57.445	483.32 ppb	57.445	11.89%
QC value within limits for Sn 189.927 Recovery = 96.66%						
Sr 421.552†	45308.6	469.68 µg/L	0.398	469.68 ppb	0.398	0.08%
QC value within limits for Sr 421.552 Recovery = 93.94%						
Ti 334.940†	198893.9	478.12 µg/L	26.734	478.12 ppb	26.734	5.59%
QC value within limits for Ti 334.940 Recovery = 95.62%						
Tl 190.801†	348.4	492.01 µg/L	29.696	492.01 ppb	29.696	6.04%
QC value within limits for Tl 190.801 Recovery = 98.40%						
U 409.014†	5383.0	486.40 µg/L	35.218	486.40 ppb	35.218	7.24%
QC value within limits for U 409.014 Recovery = 97.28%						
V 292.402†	45326.6	488.94 µg/L	33.478	488.94 ppb	33.478	6.85%
QC value within limits for V 292.402 Recovery = 97.79%						
Zn 213.857†	19623.9	486.59 µg/L	30.241	486.59 ppb	30.241	6.21%
QC value within limits for Zn 213.857 Recovery = 97.32%						
All analyte(s) passed QC.						

Sequence No.: 2  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/11/2010 17:02:26  
 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	56368.9	56368.9	103 %		17:03:01
1	Al 396.153Radial†	-30.7	-19.6	-14.585 µg/L	-14.585 ppb	17:03:01
1	Ca 317.933Radial†	198.1	12.6	11.864 µg/L	11.864 ppb	17:03:21
1	Fe 238.204 Radial†	17.2	2.2	18.515 µg/L	18.515 ppb	17:03:21
1	K 766.490 Radial†	209.8	74.8	53.133 µg/L	53.133 ppb	17:03:01
1	Mg 279.077 IEC†	16.1	4.3	39.936 µg/L	39.936 ppb	17:03:21
1	Na 589.592 Radial†	774.1	207.6	68.329 µg/L	68.329 ppb	17:03:01
1	Sr 421.552†	33.0	-7.6	-0.0789 µg/L	-0.0789 ppb	17:03:01
1	Sc 361.383	2029236.5	2029236.5	106.25 %		17:04:24
1	Y 371.029	1388942.8	1388942.8	106.03 %		17:04:24
1	Ag 328.068†	-592.1	7.2	0.0607 µg/L	0.0607 ppb	17:04:29
1	As 188.979†	-0.6	-1.7	-3.3695 µg/L	-3.3695 ppb	17:04:50
1	B 249.677†	324.7	-25.9	-1.1417 µg/L	-1.1417 ppb	17:04:50
1	Ba 233.527†	-22.4	4.9	0.1278 µg/L	0.1278 ppb	17:04:50
1	Be 313.107†	-3566.1	84.2	0.0549 µg/L	0.0549 ppb	17:04:29
1	Cd 226.502†	-151.8	-0.8	-0.0243 µg/L	-0.0243 ppb	17:04:50
1	Co 228.616†	-13.1	-3.5	-0.1727 µg/L	-0.1727 ppb	17:04:50
1	Cr 267.716†	-46.3	8.8	0.1931 µg/L	0.1931 ppb	17:04:50
1	Cu 324.752†	2496.7	-136.3	-0.9495 µg/L	-0.9495 ppb	17:04:29
1	Mn 257.610†	-248.9	9.9	0.0351 µg/L	0.0351 ppb	17:04:50
1	Mo 202.031†	-5.8	2.1	0.2273 µg/L	0.2273 ppb	17:04:50
1	Ni 231.604†	303.7	-16.3	-0.8932 µg/L	-0.8932 ppb	17:04:50
1	P 214.914†	32.7	3.2	6.8843 µg/L	6.8843 ppb	17:04:50
1	Pb 220.353†	96.4	-6.5	-1.7203 µg/L	-1.7203 ppb	17:04:50
1	S 181.975 Axial†	20.6	4.6	20.049 µg/L	20.049 ppb	17:04:50
1	Sb 206.836†	26.8	-1.7	-1.7124 µg/L	-1.7124 ppb	17:04:50
1	Se 196.026†	16.1	-0.6	-0.9715 µg/L	-0.9715 ppb	17:04:50
1	SiO2†	1235.6	-87.2	-18.769 µg/L	-18.769 ppb	17:04:29
1	Si 251.611†	286.6	-43.1	-3.5447 µg/L	-3.5447 ppb	17:04:50
1	Sn 189.927†	-4.0	-2.9	-1.3291 µg/L	-1.3291 ppb	17:04:50
1	Ti 334.940†	152.5	27.4	0.0631 µg/L	0.0631 ppb	17:04:29
1	Tl 190.801†	-22.1	3.5	4.9105 µg/L	4.9105 ppb	17:04:50
1	U 409.014†	-71.0	-13.2	-1.1992 µg/L	-1.1992 ppb	17:04:29
1	V 292.402†	-14.4	30.7	0.3301 µg/L	0.3301 ppb	17:04:29
1	Zn 213.857†	481.1	-22.7	-0.5654 µg/L	-0.5654 ppb	17:04:50
2	Sc RADIAL	56481.9	56481.9	103 %		17:03:27
2	Al 396.153Radial†	9.3	19.1	14.233 µg/L	14.233 ppb	17:03:27
2	Ca 317.933Radial†	192.6	6.9	6.5217 µg/L	6.5217 ppb	17:03:47
2	Fe 238.204 Radial†	14.6	-0.3	-2.9604 µg/L	-2.9604 ppb	17:03:47
2	K 766.490 Radial†	162.5	28.6	20.329 µg/L	20.329 ppb	17:03:27
2	Mg 279.077 IEC†	13.0	1.3	11.979 µg/L	11.979 ppb	17:03:47
2	Na 589.592 Radial†	797.1	228.3	75.169 µg/L	75.169 ppb	17:03:27
2	Sr 421.552†	46.5	5.4	0.0561 µg/L	0.0561 ppb	17:03:27
2	Sc 361.383	2012770.6	2012770.6	105.39 %		17:04:56
2	Y 371.029	1377597.1	1377597.1	105.17 %		17:04:56
2	Ag 328.068†	-578.5	15.6	0.1231 µg/L	0.1231 ppb	17:05:01
2	As 188.979†	2.2	1.0	1.9088 µg/L	1.9088 ppb	17:05:22
2	B 249.677†	310.5	-36.9	-1.6105 µg/L	-1.6105 ppb	17:05:22
2	Ba 233.527†	-26.6	0.8	0.0202 µg/L	0.0202 ppb	17:05:22
2	Be 313.107†	-3607.4	17.5	0.0114 µg/L	0.0114 ppb	17:05:01
2	Cd 226.502†	-140.3	9.0	0.2482 µg/L	0.2482 ppb	17:05:22
2	Co 228.616†	-20.8	-10.9	-0.5380 µg/L	-0.5380 ppb	17:05:22
2	Cr 267.716†	-50.1	4.9	0.1067 µg/L	0.1067 ppb	17:05:22
2	Cu 324.752†	2459.5	-152.4	-1.0650 µg/L	-1.0650 ppb	17:05:01
2	Mn 257.610†	-250.9	6.1	0.0201 µg/L	0.0201 ppb	17:05:22
2	Mo 202.031†	-3.2	4.5	0.4823 µg/L	0.4823 ppb	17:05:22
2	Ni 231.604†	300.2	-17.4	-0.9488 µg/L	-0.9488 ppb	17:05:22
2	P 214.914†	25.9	-3.0	-6.3600 µg/L	-6.3600 ppb	17:05:22
2	Pb 220.353†	99.5	-2.8	-0.7298 µg/L	-0.7298 ppb	17:05:22

2	S 181.975 Axial†	20.2	4.3	19.053 µg/L	19.053 ppb	17:05:22
2	Sb 206.836†	24.6	-3.6	-3.5810 µg/L	-3.5810 ppb	17:05:22
2	Se 196.026†	10.7	-5.7	-8.7427 µg/L	-8.7427 ppb	17:05:22
2	SiO2†	1253.5	-60.7	-13.065 µg/L	-13.065 ppb	17:05:01
2	Si 251.611†	291.0	-36.8	-3.0237 µg/L	-3.0237 ppb	17:05:22
2	Sn 189.927†	-0.9	-0.0	-0.0009 µg/L	-0.0009 ppb	17:05:22
2	Ti 334.940†	142.1	18.7	0.0441 µg/L	0.0441 ppb	17:05:01
2	Tl 190.801†	-21.2	4.2	5.8568 µg/L	5.8568 ppb	17:05:22
2	U 409.014†	-66.1	-9.1	-0.8270 µg/L	-0.8270 ppb	17:05:01
2	V 292.402†	-52.0	-5.1	-0.0519 µg/L	-0.0519 ppb	17:05:01
2	Zn 213.857†	477.8	-22.2	-0.5493 µg/L	-0.5493 ppb	17:05:22
3	Sc RADIAL	56062.3	56062.3	103 %		17:03:53
3	Al 396.153Radial†	-13.3	-2.8	-2.1100 µg/L	-2.1100 ppb	17:03:53
3	Ca 317.933Radial†	193.5	9.2	8.6834 µg/L	8.6834 ppb	17:04:13
3	Fe 238.204 Radial†	13.9	-1.0	-8.5236 µg/L	-8.5236 ppb	17:04:13
3	K 766.490 Radial†	145.6	13.3	9.4734 µg/L	9.4734 ppb	17:03:53
3	Mg 279.077 IEC†	12.4	0.8	7.7063 µg/L	7.7063 ppb	17:04:13
3	Na 589.592 Radial†	762.5	200.4	65.960 µg/L	65.960 ppb	17:03:53
3	Sr 421.552†	41.6	1.0	0.0099 µg/L	0.0099 ppb	17:03:53
3	Sc 361.383	1996457.8	1996457.8	104.54 %		17:05:28
3	Y 371.029	1367454.7	1367454.7	104.39 %		17:05:28
3	Ag 328.068†	-552.2	36.3	0.2878 µg/L	0.2878 ppb	17:05:33
3	As 188.979†	-1.4	-2.4	-4.7806 µg/L	-4.7806 ppb	17:05:54
3	B 249.677†	316.6	-28.6	-1.2466 µg/L	-1.2466 ppb	17:05:54
3	Ba 233.527†	-26.5	0.6	0.0163 µg/L	0.0163 ppb	17:05:54
3	Be 313.107†	-3498.2	94.1	0.0615 µg/L	0.0615 ppb	17:05:33
3	Cd 226.502†	-139.5	8.7	0.2407 µg/L	0.2407 ppb	17:05:54
3	Co 228.616†	-2.0	6.9	0.3417 µg/L	0.3417 ppb	17:05:54
3	Cr 267.716†	-37.2	16.7	0.3684 µg/L	0.3684 ppb	17:05:54
3	Cu 324.752†	2465.1	-128.0	-0.8950 µg/L	-0.8950 ppb	17:05:33
3	Mn 257.610†	-235.5	18.8	0.0637 µg/L	0.0637 ppb	17:05:54
3	Mo 202.031†	0.7	8.2	0.8795 µg/L	0.8795 ppb	17:05:54
3	Ni 231.604†	298.8	-16.4	-0.8963 µg/L	-0.8963 ppb	17:05:54
3	P 214.914†	31.0	2.0	4.4888 µg/L	4.4888 ppb	17:05:54
3	Pb 220.353†	112.9	10.8	2.8917 µg/L	2.8917 ppb	17:05:54
3	S 181.975 Axial†	16.6	1.1	4.7192 µg/L	4.7192 ppb	17:05:54
3	Sb 206.836†	24.2	-3.9	-3.7807 µg/L	-3.7807 ppb	17:05:54
3	Se 196.026†	10.9	-5.4	-8.2970 µg/L	-8.2970 ppb	17:05:54
3	SiO2†	1240.9	-63.0	-13.561 µg/L	-13.561 ppb	17:05:33
3	Si 251.611†	299.0	-26.9	-2.2074 µg/L	-2.2074 ppb	17:05:54
3	Sn 189.927†	0.3	1.1	0.5288 µg/L	0.5288 ppb	17:05:54
3	Ti 334.940†	59.1	-59.6	-0.1438 µg/L	-0.1438 ppb	17:05:33
3	Tl 190.801†	-24.5	0.9	1.2389 µg/L	1.2389 ppb	17:05:54
3	U 409.014†	-14.3	40.0	3.6190 µg/L	3.6190 ppb	17:05:33
3	V 292.402†	-38.2	7.6	0.0916 µg/L	0.0916 ppb	17:05:33
3	Zn 213.857†	475.0	-21.1	-0.5227 µg/L	-0.5227 ppb	17:05:54

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012821.6	105.39 %	0.858			0.81%
Sc RADIAL	56304.4	103 %	0.4			0.39%
Y 371.029	1377998.2	105.20 %	0.821			0.78%
Ag 328.068†	19.7	0.1572 µg/L	0.11730	0.1572 ppb	0.11730	74.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.1	-0.8207 µg/L	14.45235	-0.8207 ppb	14.45235	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.1	-2.0804 µg/L	3.52609	-2.0804 ppb	3.52609	169.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.5	-1.3329 µg/L	0.24603	-1.3329 ppb	0.24603	18.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.1	0.0547 µg/L	0.06331	0.0547 ppb	0.06331	115.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	65.3	0.0426 µg/L	0.02720	0.0426 ppb	0.02720	63.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.6	9.0232 µg/L	2.68752	9.0232 ppb	2.68752	29.78%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.7	0.1549 µg/L	0.15521	0.1549 ppb	0.15521	100.22%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.5	-0.1230 µg/L	0.44196	-0.1230 ppb	0.44196	359.31%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	10.1	0.2228 µg/L	0.13336	0.2228 ppb	0.13336	59.87%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-138.9	-0.9698 µg/L	0.08678	-0.9698 ppb	0.08678	8.95%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.3	2.3437 µg/L	14.27846	2.3437 ppb	14.27846	609.22%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	38.9	27.645 µg/L	22.7308	27.645 ppb	22.7308	82.22%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.1	19.874 µg/L	17.5054	19.874 ppb	17.5054	88.08%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	11.6	0.0396 µg/L	0.02217	0.0396 ppb	0.02217	55.91%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.0	0.5297 µg/L	0.32865	0.5297 ppb	0.32865	62.05%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	212.1	69.819 µg/L	4.7822	69.819 ppb	4.7822	6.85%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-16.7	-0.9128 µg/L	0.03120	-0.9128 ppb	0.03120	3.42%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	0.7	1.6710 µg/L	7.05748	1.6710 ppb	7.05748	422.34%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	0.5	0.1472 µg/L	2.42781	0.1472 ppb	2.42781	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.3	14.607 µg/L	8.5775	14.607 ppb	8.5775	58.72%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-3.1	-3.0247 µg/L	1.14085	-3.0247 ppb	1.14085	37.72%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.9	-6.0037 µg/L	4.36372	-6.0037 ppb	4.36372	72.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-70.3	-15.131 µg/L	3.1599	-15.131 ppb	3.1599	20.88%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-35.6	-2.9252 µg/L	0.67407	-2.9252 ppb	0.67407	23.04%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.6	-0.2671 µg/L	0.95712	-0.2671 ppb	0.95712	358.38%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-0.4	-0.0043 µg/L	0.06861	-0.0043 ppb	0.06861	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-4.5	-0.0122 µg/L	0.11438	-0.0122 ppb	0.11438	935.94%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.9	4.0021 µg/L	2.43930	4.0021 ppb	2.43930	60.95%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	5.9	0.5309 µg/L	2.68081	0.5309 ppb	2.68081	504.91%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	11.1	0.1233 µg/L	0.19295	0.1233 ppb	0.19295	156.48%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-22.0	-0.5458 µg/L	0.02154	-0.5458 ppb	0.02154	3.95%	
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: 1

Date Collected: 2/11/2010 17:27:43

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	59035.7	59035.7	108 %		17:28:20
1	Al 396.153Radial†	6783.5	6281.0	4671.2 µg/L	4671.2 ppb	17:28:41
1	Ca 317.933Radial†	5601.2	4998.8	4706.7 µg/L	4706.7 ppb	17:28:41
1	Fe 238.204 Radial†	616.0	555.0	4714.2 µg/L	4714.2 ppb	17:28:41
1	K 766.490 Radial†	7145.2	6476.8	4603.7 µg/L	4603.7 ppb	17:28:20
1	Mg 279.077 IEC†	569.6	515.2	4798.3 µg/L	4798.3 ppb	17:28:41
1	Na 589.592 Radial†	30872.0	27997.1	9216.7 µg/L	9216.7 ppb	17:28:20
1	Sr 421.552†	47604.8	43967.8	455.78 µg/L	455.78 ppb	17:28:20
1	Sc 361.383	2041194.6	2041194.6	106.88 %		17:29:44
1	Y 371.029	1394791.7	1394791.7	106.48 %		17:29:44
1	Ag 328.068†	63072.7	59578.4	476.23 µg/L	476.23 ppb	17:29:50
1	As 188.979†	267.6	249.3	486.27 µg/L	486.27 ppb	17:30:10
1	B 249.677†	11989.2	10886.2	474.07 µg/L	474.07 ppb	17:29:50
1	Ba 233.527†	19747.0	18502.3	482.64 µg/L	482.64 ppb	17:29:50
1	Be 313.107†	767703.3	721740.7	471.16 µg/L	471.16 ppb	17:29:44
1	Cd 226.502†	18704.8	17643.2	486.70 µg/L	486.70 ppb	17:29:50
1	Co 228.616†	10605.3	9931.7	488.25 µg/L	488.25 ppb	17:29:50
1	Cr 267.716†	23632.0	22163.6	487.82 µg/L	487.82 ppb	17:29:50
1	Cu 324.752†	76228.6	68837.1	481.50 µg/L	481.50 ppb	17:29:50
1	Mn 257.610†	148178.1	138886.7	481.38 µg/L	481.38 ppb	17:29:44
1	Mo 202.031†	4955.0	4643.6	495.75 µg/L	495.75 ppb	17:30:10
1	Ni 231.604†	9868.1	8930.9	487.78 µg/L	487.78 ppb	17:29:50
1	P 214.914†	1270.5	1161.1	2447.3 µg/L	2447.3 ppb	17:30:10
1	Pb 220.353†	2082.6	1851.4	494.18 µg/L	494.18 ppb	17:30:10
1	S 181.975 Axial†	249.9	219.0	959.68 µg/L	959.68 ppb	17:30:10
1	Sb 206.836†	563.4	500.2	494.49 µg/L	494.49 ppb	17:30:10
1	Se 196.026†	362.5	323.3	500.24 µg/L	500.24 ppb	17:30:10
1	SiO2†	26645.9	23681.2	5099.9 µg/L	5099.9 ppb	17:29:50
1	Si 251.611†	31439.9	29103.8	2392.5 µg/L	2392.5 ppb	17:29:50
1	Sn 189.927†	1158.8	1085.1	499.11 µg/L	499.11 ppb	17:30:10
1	Ti 334.940†	206788.8	193365.5	464.82 µg/L	464.82 ppb	17:29:44
1	Tl 190.801†	353.5	355.1	501.20 µg/L	501.20 ppb	17:30:10
1	U 409.014†	5796.1	5476.7	494.90 µg/L	494.90 ppb	17:29:50
1	V 292.402†	48354.5	45287.0	488.65 µg/L	488.65 ppb	17:29:50
1	Zn 213.857†	21383.2	19531.6	484.30 µg/L	484.30 ppb	17:29:50
2	Sc RADIAL	57479.6	57479.6	105 %		17:28:46
2	Al 396.153Radial†	6775.5	6443.2	4792.2 µg/L	4792.2 ppb	17:29:07
2	Ca 317.933Radial†	5568.2	5107.6	4809.2 µg/L	4809.2 ppb	17:29:07
2	Fe 238.204 Radial†	613.4	567.9	4823.2 µg/L	4823.2 ppb	17:29:07
2	K 766.490 Radial†	7368.3	6867.5	4881.4 µg/L	4881.4 ppb	17:28:46
2	Mg 279.077 IEC†	569.1	529.1	4927.1 µg/L	4927.1 ppb	17:29:07
2	Na 589.592 Radial†	31686.3	29543.0	9725.6 µg/L	9725.6 ppb	17:28:46
2	Sr 421.552†	49060.1	46540.9	482.45 µg/L	482.45 ppb	17:28:46
2	Sc 361.383	2046028.0	2046028.0	107.13 %		17:30:18
2	Y 371.029	1397859.6	1397859.6	106.71 %		17:30:18
2	Ag 328.068†	62181.8	58607.4	468.48 µg/L	468.48 ppb	17:30:23
2	As 188.979†	270.5	251.3	490.33 µg/L	490.33 ppb	17:30:44
2	B 249.677†	11883.0	10760.6	468.51 µg/L	468.51 ppb	17:30:23
2	Ba 233.527†	19447.6	18179.1	474.21 µg/L	474.21 ppb	17:30:23
2	Be 313.107†	766991.4	719379.3	469.62 µg/L	469.62 ppb	17:30:18
2	Cd 226.502†	18417.3	17333.6	478.14 µg/L	478.14 ppb	17:30:23
2	Co 228.616†	10411.2	9727.0	478.18 µg/L	478.18 ppb	17:30:23
2	Cr 267.716†	23232.1	21738.1	478.45 µg/L	478.45 ppb	17:30:23
2	Cu 324.752†	75095.1	67610.5	472.94 µg/L	472.94 ppb	17:30:23
2	Mn 257.610†	147694.9	138108.1	478.69 µg/L	478.69 ppb	17:30:18
2	Mo 202.031†	4924.2	4604.0	491.52 µg/L	491.52 ppb	17:30:44
2	Ni 231.604†	9689.5	8742.4	477.48 µg/L	477.48 ppb	17:30:23
2	P 214.914†	1255.9	1144.7	2412.6 µg/L	2412.6 ppb	17:30:44
2	Pb 220.353†	2059.1	1824.8	487.10 µg/L	487.10 ppb	17:30:44

2	S 181.975 Axial†	252.0	220.4	965.86 µg/L	965.86 ppb	17:30:44
2	Sb 206.836†	552.5	488.7	483.25 µg/L	483.25 ppb	17:30:44
2	Se 196.026†	360.1	320.3	495.71 µg/L	495.71 ppb	17:30:44
2	SiO2†	26270.0	23271.4	5011.6 µg/L	5011.6 ppb	17:30:23
2	Si 251.611†	31001.1	28624.7	2353.1 µg/L	2353.1 ppb	17:30:23
2	Sn 189.927†	1147.6	1072.1	493.14 µg/L	493.14 ppb	17:30:44
2	Ti 334.940†	206329.6	192479.8	462.68 µg/L	462.68 ppb	17:30:18
2	Tl 190.801†	343.3	344.8	486.80 µg/L	486.80 ppb	17:30:44
2	U 409.014†	5690.4	5365.3	484.79 µg/L	484.79 ppb	17:30:23
2	V 292.402†	47623.9	44498.2	480.19 µg/L	480.19 ppb	17:30:23
2	Zn 213.857†	21043.3	19167.1	475.24 µg/L	475.24 ppb	17:30:23
3	Sc RADIAL	58545.2	58545.2	107 %		17:29:12
3	Al 396.153Radial†	6838.5	6384.8	4750.3 µg/L	4750.3 ppb	17:29:33
3	Ca 317.933Radial†	5643.2	5081.3	4784.4 µg/L	4784.4 ppb	17:29:33
3	Fe 238.204 Radial†	621.5	564.8	4796.6 µg/L	4796.6 ppb	17:29:33
3	K 766.490 Radial†	7265.1	6643.9	4722.5 µg/L	4722.5 ppb	17:29:12
3	Mg 279.077 IEC†	574.9	524.6	4884.3 µg/L	4884.3 ppb	17:29:33
3	Na 589.592 Radial†	31113.3	28461.2	9369.5 µg/L	9369.5 ppb	17:29:12
3	Sr 421.552†	48089.7	44788.5	464.29 µg/L	464.29 ppb	17:29:12
3	Sc 361.383	2017377.3	2017377.3	105.63 %		17:30:51
3	Y 371.029	1378304.1	1378304.1	105.22 %		17:30:51
3	Ag 328.068†	59471.1	56865.5	454.46 µg/L	454.46 ppb	17:30:57
3	As 188.979†	229.9	216.5	422.47 µg/L	422.47 ppb	17:31:17
3	B 249.677†	11339.4	10403.4	452.85 µg/L	452.85 ppb	17:30:57
3	Ba 233.527†	18247.7	17301.0	451.29 µg/L	451.29 ppb	17:30:57
3	Be 313.107†	738207.7	702297.7	458.47 µg/L	458.47 ppb	17:30:51
3	Cd 226.502†	17185.8	16411.8	452.68 µg/L	452.68 ppb	17:30:57
3	Co 228.616†	9649.4	9143.9	449.43 µg/L	449.43 ppb	17:30:57
3	Cr 267.716†	20989.9	19923.4	438.52 µg/L	438.52 ppb	17:30:57
3	Cu 324.752†	69862.4	63652.3	445.29 µg/L	445.29 ppb	17:30:57
3	Mn 257.610†	142669.2	135308.3	469.00 µg/L	469.00 ppb	17:30:51
3	Mo 202.031†	4082.7	3872.6	413.47 µg/L	413.47 ppb	17:31:17
3	Ni 231.604†	8980.8	8199.9	447.86 µg/L	447.86 ppb	17:30:57
3	P 214.914†	1067.7	983.2	2067.7 µg/L	2067.7 ppb	17:31:17
3	Pb 220.353†	1798.7	1605.6	428.46 µg/L	428.46 ppb	17:31:17
3	S 181.975 Axial†	223.6	196.9	862.47 µg/L	862.47 ppb	17:31:17
3	Sb 206.836†	480.2	427.6	422.29 µg/L	422.29 ppb	17:31:17
3	Se 196.026†	311.3	278.8	432.49 µg/L	432.49 ppb	17:31:17
3	SiO2†	24862.0	22286.7	4799.6 µg/L	4799.6 ppb	17:30:57
3	Si 251.611†	29262.2	27389.5	2251.6 µg/L	2251.6 ppb	17:30:57
3	Sn 189.927†	942.0	892.7	410.61 µg/L	410.61 ppb	17:31:17
3	Ti 334.940†	197920.3	187254.0	450.12 µg/L	450.12 ppb	17:30:51
3	Tl 190.801†	315.4	322.9	456.18 µg/L	456.18 ppb	17:31:17
3	U 409.014†	5127.6	4907.9	443.39 µg/L	443.39 ppb	17:30:57
3	V 292.402†	43917.4	41620.5	448.79 µg/L	448.79 ppb	17:30:57
3	Zn 213.857†	19595.2	18075.2	448.15 µg/L	448.15 ppb	17:30:57

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Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034866.6	106.55 %	0.803			0.75%
Sc RADIAL	58353.5	107 %	1.5			1.36%
Y 371.029	1390318.5	106.14 %	0.803			0.76%
Ag 328.068†	58350.4	466.39 µg/L	11.039	466.39 ppb	11.039	2.37%
QC value within limits for Ag 328.068 Recovery = 93.28%						
Al 396.153Radial†	6369.7	4737.9 µg/L	61.46	4737.9 ppb	61.46	1.30%
QC value within limits for Al 396.153Radial Recovery = 94.76%						
As 188.979†	239.1	466.36 µg/L	38.059	466.36 ppb	38.059	8.16%
QC value within limits for As 188.979 Recovery = 93.27%						
B 249.677†	10683.4	465.15 µg/L	11.003	465.15 ppb	11.003	2.37%
QC value within limits for B 249.677 Recovery = 93.03%						
Ba 233.527†	17994.1	469.38 µg/L	16.223	469.38 ppb	16.223	3.46%
QC value within limits for Ba 233.527 Recovery = 93.88%						
Be 313.107†	714472.6	466.42 µg/L	6.926	466.42 ppb	6.926	1.48%
QC value within limits for Be 313.107 Recovery = 93.28%						
Ca 317.933Radial†	5062.6	4766.7 µg/L	53.48	4766.7 ppb	53.48	1.12%
QC value within limits for Ca 317.933Radial Recovery = 95.33%						
Cd 226.502†	17129.5	472.51 µg/L	17.696	472.51 ppb	17.696	3.75%
QC value within limits for Cd 226.502 Recovery = 94.50%						
Co 228.616†	9600.9	471.95 µg/L	20.142	471.95 ppb	20.142	4.27%

QC value within limits for Co 228.616 Recovery = 94.39%							
Cr 267.716†	21275.0	468.26 µg/L	26.182	468.26 ppb	26.182	5.59%	
QC value within limits for Cr 267.716 Recovery = 93.65%							
Cu 324.752†	66699.9	466.58 µg/L	18.924	466.58 ppb	18.924	4.06%	
QC value within limits for Cu 324.752 Recovery = 93.32%							
Fe 238.204 Radial†	562.6	4778.0 µg/L	56.85	4778.0 ppb	56.85	1.19%	
QC value within limits for Fe 238.204 Radial Recovery = 95.56%							
K 766.490 Radial†	6662.7	4735.8 µg/L	139.33	4735.8 ppb	139.33	2.94%	
QC value within limits for K 766.490 Radial Recovery = 94.72%							
Mg 279.077 IEC†	523.0	4869.9 µg/L	65.60	4869.9 ppb	65.60	1.35%	
QC value within limits for Mg 279.077 IEC Recovery = 97.40%							
Mn 257.610†	137434.4	476.36 µg/L	6.514	476.36 ppb	6.514	1.37%	
QC value within limits for Mn 257.610 Recovery = 95.27%							
Mo 202.031†	4373.4	466.91 µg/L	46.335	466.91 ppb	46.335	9.92%	
QC value within limits for Mo 202.031 Recovery = 93.38%							
Na 589.592 Radial†	28667.1	9437.3 µg/L	261.13	9437.3 ppb	261.13	2.77%	
QC value within limits for Na 589.592 Radial Recovery = 94.37%							
Ni 231.604†	8624.4	471.04 µg/L	20.725	471.04 ppb	20.725	4.40%	
QC value within limits for Ni 231.604 Recovery = 94.21%							
P 214.914†	1096.3	2309.2 µg/L	209.89	2309.2 ppb	209.89	9.09%	
QC value within limits for P 214.914 Recovery = 92.37%							
Pb 220.353†	1760.6	469.91 µg/L	36.070	469.91 ppb	36.070	7.68%	
QC value within limits for Pb 220.353 Recovery = 93.98%							
S 181.975 Axial†	212.1	929.34 µg/L	57.991	929.34 ppb	57.991	6.24%	
QC value within limits for S 181.975 Axial Recovery = 92.93%							
Sb 206.836†	472.2	466.68 µg/L	38.846	466.68 ppb	38.846	8.32%	
QC value within limits for Sb 206.836 Recovery = 93.34%							
Se 196.026†	307.5	476.15 µg/L	37.872	476.15 ppb	37.872	7.95%	
QC value within limits for Se 196.026 Recovery = 95.23%							
SiO2†	23079.8	4970.4 µg/L	154.36	4970.4 ppb	154.36	3.11%	
QC value within limits for SiO2 Recovery = 92.95%							
Si 251.611†	28372.7	2332.4 µg/L	72.71	2332.4 ppb	72.71	3.12%	
QC value within limits for Si 251.611 Recovery = 93.30%							
Sn 189.927†	1016.6	467.62 µg/L	49.463	467.62 ppb	49.463	10.58%	
QC value within limits for Sn 189.927 Recovery = 93.52%							
Sr 421.552†	45099.0	467.50 µg/L	13.625	467.50 ppb	13.625	2.91%	
QC value within limits for Sr 421.552 Recovery = 93.50%							
Ti 334.940†	191033.1	459.21 µg/L	7.946	459.21 ppb	7.946	1.73%	
QC value within limits for Ti 334.940 Recovery = 91.84%							
Tl 190.801†	340.9	481.40 µg/L	22.992	481.40 ppb	22.992	4.78%	
QC value within limits for Tl 190.801 Recovery = 96.28%							
U 409.014†	5250.0	474.36 µg/L	27.295	474.36 ppb	27.295	5.75%	
QC value within limits for U 409.014 Recovery = 94.87%							
V 292.402†	43801.9	472.54 µg/L	21.006	472.54 ppb	21.006	4.45%	
QC value within limits for V 292.402 Recovery = 94.51%							
Zn 213.857†	18924.6	469.23 µg/L	18.806	469.23 ppb	18.806	4.01%	
QC value within limits for Zn 213.857 Recovery = 93.85%							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 17:31:26

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	57249.4	57249.4	105 %		17:32:01
1	Al 396.153Radial†	-19.1	-8.1	-6.0314 µg/L	-6.0314 ppb	17:32:01
1	Ca 317.933Radial†	186.6	-1.3	-1.1941 µg/L	-1.1941 ppb	17:32:21
1	Fe 238.204 Radial†	16.2	0.9	8.0275 µg/L	8.0275 ppb	17:32:21
1	K 766.490 Radial†	205.8	67.8	48.166 µg/L	48.166 ppb	17:32:01
1	Mg 279.077 IEC†	11.8	-0.0	-0.3578 µg/L	-0.3578 ppb	17:32:21
1	Na 589.592 Radial†	713.1	137.9	45.390 µg/L	45.390 ppb	17:32:01
1	Sr 421.552†	47.1	5.3	0.0553 µg/L	0.0553 ppb	17:32:01
1	Sc 361.383	2021263.0	2021263.0	105.83 %		17:33:23
1	Y 371.029	1385458.4	1385458.4	105.77 %		17:33:23
1	Ag 328.068†	-548.3	46.5	0.3696 µg/L	0.3696 ppb	17:33:29
1	As 188.979†	-3.1	-4.1	-8.0437 µg/L	-8.0437 ppb	17:33:50
1	B 249.677†	328.8	-20.8	-0.9109 µg/L	-0.9109 ppb	17:33:50
1	Ba 233.527†	-23.9	3.4	0.0895 µg/L	0.0895 ppb	17:33:50
1	Be 313.107†	-3534.2	101.1	0.0660 µg/L	0.0660 ppb	17:33:29
1	Cd 226.502†	-135.6	14.0	0.3833 µg/L	0.3833 ppb	17:33:50
1	Co 228.616†	-7.8	1.5	0.0715 µg/L	0.0715 ppb	17:33:50
1	Cr 267.716†	-39.7	14.9	0.3275 µg/L	0.3275 ppb	17:33:29
1	Cu 324.752†	2441.6	-179.0	-1.2495 µg/L	-1.2495 ppb	17:33:29
1	Mn 257.610†	-227.7	28.9	0.1013 µg/L	0.1013 ppb	17:33:50
1	Mo 202.031†	-11.3	-3.1	-0.3352 µg/L	-0.3352 ppb	17:33:50
1	Ni 231.604†	297.1	-21.4	-1.1721 µg/L	-1.1721 ppb	17:33:50
1	P 214.914†	29.1	-0.1	-0.1206 µg/L	-0.1206 ppb	17:33:50
1	Pb 220.353†	93.1	-9.2	-2.4716 µg/L	-2.4716 ppb	17:33:50
1	S 181.975 Axial†	17.0	1.2	5.2600 µg/L	5.2600 ppb	17:33:50
1	Sb 206.836†	21.2	-7.0	-6.8579 µg/L	-6.8579 ppb	17:33:50
1	Se 196.026†	17.1	0.4	0.5587 µg/L	0.5587 ppb	17:33:50
1	SiO2†	1257.7	-61.7	-13.286 µg/L	-13.286 ppb	17:33:29
1	Si 251.611†	315.2	-15.0	-1.2350 µg/L	-1.2350 ppb	17:33:50
1	Sn 189.927†	-0.7	0.2	0.0875 µg/L	0.0875 ppb	17:33:50
1	Ti 334.940†	99.4	-22.2	-0.0533 µg/L	-0.0533 ppb	17:33:29
1	Tl 190.801†	-25.0	0.6	0.8769 µg/L	0.8769 ppb	17:33:50
1	U 409.014†	-2.8	50.9	4.6107 µg/L	4.6107 ppb	17:33:29
1	V 292.402†	-42.3	4.3	0.0496 µg/L	0.0496 ppb	17:33:29
1	Zn 213.857†	478.9	-23.0	-0.5682 µg/L	-0.5682 ppb	17:33:50
2	Sc RADIAL	57058.0	57058.0	105 %		17:32:27
2	Al 396.153Radial†	-2.2	8.1	5.9887 µg/L	5.9887 ppb	17:32:27
2	Ca 317.933Radial†	185.4	-1.8	-1.6973 µg/L	-1.6973 ppb	17:32:47
2	Fe 238.204 Radial†	16.9	1.6	13.808 µg/L	13.808 ppb	17:32:47
2	K 766.490 Radial†	159.2	23.8	16.947 µg/L	16.947 ppb	17:32:27
2	Mg 279.077 IEC†	16.4	4.4	41.355 µg/L	41.355 ppb	17:32:47
2	Na 589.592 Radial†	724.2	150.8	49.634 µg/L	49.634 ppb	17:32:27
2	Sr 421.552†	-4.4	-43.8	-0.4540 µg/L	-0.4540 ppb	17:32:27
2	Sc 361.383	2001081.9	2001081.9	104.78 %		17:33:56
2	Y 371.029	1372125.9	1372125.9	104.75 %		17:33:56
2	Ag 328.068†	-553.2	36.5	0.2946 µg/L	0.2946 ppb	17:34:01
2	As 188.979†	-0.6	-1.7	-3.3761 µg/L	-3.3761 ppb	17:34:22
2	B 249.677†	320.5	-25.5	-1.1231 µg/L	-1.1231 ppb	17:34:22
2	Ba 233.527†	-11.0	15.5	0.4048 µg/L	0.4048 ppb	17:34:22
2	Be 313.107†	-3526.3	74.9	0.0489 µg/L	0.0489 ppb	17:34:01
2	Cd 226.502†	-133.8	14.4	0.3950 µg/L	0.3950 ppb	17:34:22
2	Co 228.616†	-11.0	-1.6	-0.0801 µg/L	-0.0801 ppb	17:34:22
2	Cr 267.716†	-44.3	10.1	0.2231 µg/L	0.2231 ppb	17:34:01
2	Cu 324.752†	2455.1	-143.0	-0.9967 µg/L	-0.9967 ppb	17:34:01
2	Mn 257.610†	-230.3	24.3	0.0842 µg/L	0.0842 ppb	17:34:22
2	Mo 202.031†	-2.3	5.3	0.5710 µg/L	0.5710 ppb	17:34:22
2	Ni 231.604†	304.4	-11.7	-0.6402 µg/L	-0.6402 ppb	17:34:22
2	P 214.914†	29.3	0.4	0.8548 µg/L	0.8548 ppb	17:34:22
2	Pb 220.353†	101.4	-0.5	-0.1165 µg/L	-0.1165 ppb	17:34:22

2	S 181.975 Axial†	19.4	3.7	16.024 µg/L	16.024 ppb	17:34:22
2	Sb 206.836†	27.6	-0.6	-0.5726 µg/L	-0.5726 ppb	17:34:22
2	Se 196.026†	16.9	0.3	0.5139 µg/L	0.5139 ppb	17:34:22
2	SiO2†	1231.1	-75.1	-16.163 µg/L	-16.163 ppb	17:34:01
2	Si 251.611†	308.3	-18.6	-1.5330 µg/L	-1.5330 ppb	17:34:22
2	Sn 189.927†	-2.5	-1.5	-0.6783 µg/L	-0.6783 ppb	17:34:22
2	Ti 334.940†	155.7	32.5	0.0749 µg/L	0.0749 ppb	17:34:01
2	Tl 190.801†	-24.6	0.8	1.0677 µg/L	1.0677 ppb	17:34:22
2	U 409.014†	-70.7	-13.8	-1.2553 µg/L	-1.2553 ppb	17:34:01
2	V 292.402†	13.1	56.7	0.6099 µg/L	0.6099 ppb	17:34:01
2	Zn 213.857†	482.3	-15.3	-0.3800 µg/L	-0.3800 ppb	17:34:22
3	Sc RADIAL	57391.7	57391.7	105 %		17:32:53
3	Al 396.153Radial†	-24.1	-12.7	-9.5161 µg/L	-9.5161 ppb	17:32:53
3	Ca 317.933Radial†	189.2	0.7	0.6854 µg/L	0.6854 ppb	17:33:13
3	Fe 238.204 Radial†	14.2	-1.0	-8.3318 µg/L	-8.3318 ppb	17:33:13
3	K 766.490 Radial†	170.0	33.2	23.601 µg/L	23.601 ppb	17:32:53
3	Mg 279.077 IEC†	13.6	1.6	15.113 µg/L	15.113 ppb	17:33:13
3	Na 589.592 Radial†	706.7	130.1	42.833 µg/L	42.833 ppb	17:32:53
3	Sr 421.552†	21.4	-19.2	-0.1993 µg/L	-0.1993 ppb	17:32:53
3	Sc 361.383	2035877.5	2035877.5	106.60 %		17:34:28
3	Y 371.029	1396783.1	1396783.1	106.63 %		17:34:28
3	Ag 328.068†	-558.0	41.1	0.3273 µg/L	0.3273 ppb	17:34:33
3	As 188.979†	-5.7	-6.5	-12.714 µg/L	-12.714 ppb	17:34:54
3	B 249.677†	310.2	-40.5	-1.7628 µg/L	-1.7628 ppb	17:34:54
3	Ba 233.527†	-23.8	3.7	0.0975 µg/L	0.0975 ppb	17:34:54
3	Be 313.107†	-3295.5	348.9	0.2278 µg/L	0.2278 ppb	17:34:33
3	Cd 226.502†	-134.4	16.1	0.4439 µg/L	0.4439 ppb	17:34:54
3	Co 228.616†	-16.8	-6.9	-0.3385 µg/L	-0.3385 ppb	17:34:54
3	Cr 267.716†	-31.9	22.4	0.4933 µg/L	0.4933 ppb	17:34:33
3	Cu 324.752†	2431.1	-205.5	-1.4364 µg/L	-1.4364 ppb	17:34:33
3	Mn 257.610†	-224.1	33.9	0.1156 µg/L	0.1156 ppb	17:34:54
3	Mo 202.031†	2.2	9.6	1.0266 µg/L	1.0266 ppb	17:34:54
3	Ni 231.604†	311.7	-9.8	-0.5337 µg/L	-0.5337 ppb	17:34:54
3	P 214.914†	26.4	-2.8	-5.9346 µg/L	-5.9346 ppb	17:34:54
3	Pb 220.353†	98.3	-5.0	-1.3370 µg/L	-1.3370 ppb	17:34:54
3	S 181.975 Axial†	14.7	-1.0	-4.4979 µg/L	-4.4979 ppb	17:34:54
3	Sb 206.836†	25.7	-2.9	-2.8125 µg/L	-2.8125 ppb	17:34:54
3	Se 196.026†	12.1	-4.5	-6.8217 µg/L	-6.8217 ppb	17:34:54
3	SiO2†	1207.8	-117.0	-25.202 µg/L	-25.202 ppb	17:34:33
3	Si 251.611†	320.7	-12.0	-0.9854 µg/L	-0.9854 ppb	17:34:54
3	Sn 189.927†	3.6	4.2	1.9540 µg/L	1.9540 ppb	17:34:54
3	Ti 334.940†	152.2	26.6	0.0629 µg/L	0.0629 ppb	17:34:33
3	Tl 190.801†	-31.1	-4.8	-6.7573 µg/L	-6.7573 ppb	17:34:54
3	U 409.014†	18.4	70.9	6.4223 µg/L	6.4223 ppb	17:34:33
3	V 292.402†	-21.9	23.7	0.2672 µg/L	0.2672 ppb	17:34:33
3	Zn 213.857†	481.8	-23.6	-0.5847 µg/L	-0.5847 ppb	17:34:54

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019407.5	105.74 %	0.915			0.87%
Sc RADIAL	57233.0	105 %	0.3			0.29%
Y 371.029	1384789.1	105.72 %	0.942			0.89%
Ag 328.068†	41.4	0.3305 µg/L	0.03757	0.3305 ppb	0.03757	11.37%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.3	-3.1863 µg/L	8.13450	-3.1863 ppb	8.13450	255.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.1	-8.0447 µg/L	4.66908	-8.0447 ppb	4.66908	58.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-28.9	-1.2656 µg/L	0.44348	-1.2656 ppb	0.44348	35.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.6	0.1973 µg/L	0.17977	0.1973 ppb	0.17977	91.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	175.0	0.1143 µg/L	0.09874	0.1143 ppb	0.09874	86.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.8	-0.7353 µg/L	1.25585	-0.7353 ppb	1.25585	170.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.8	0.4074 µg/L	0.03216	0.4074 ppb	0.03216	7.89%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.4	-0.1157 µg/L	0.20732	-0.1157 ppb	0.20732	179.23%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	15.8	0.3480 µg/L	0.13629	0.3480 ppb	0.13629	39.17%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-175.8	-1.2276 µg/L	0.22068	-1.2276 ppb	0.22068	17.98%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.5	4.5012 µg/L	11.48343	4.5012 ppb	11.48343	255.12%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	41.6	29.571 µg/L	16.4438	29.571 ppb	16.4438	55.61%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.0	18.703 µg/L	21.0870	18.703 ppb	21.0870	112.74%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	29.0	0.1004 µg/L	0.01570	0.1004 ppb	0.01570	15.64%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.9	0.4208 µg/L	0.69318	0.4208 ppb	0.69318	164.72%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	139.6	45.952 µg/L	3.4354	45.952 ppb	3.4354	7.48%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-14.3	-0.7820 µg/L	0.34199	-0.7820 ppb	0.34199	43.73%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.9	-1.7335 µg/L	3.67082	-1.7335 ppb	3.67082	211.76%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.9	-1.3084 µg/L	1.17784	-1.3084 ppb	1.17784	90.02%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.3	5.5955 µg/L	10.26528	5.5955 ppb	10.26528	183.46%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-3.5	-3.4143 µg/L	3.18555	-3.4143 ppb	3.18555	93.30%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.3	-1.9164 µg/L	4.24816	-1.9164 ppb	4.24816	221.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-84.6	-18.217 µg/L	6.2180	-18.217 ppb	6.2180	34.13%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-15.2	-1.2511 µg/L	0.27411	-1.2511 ppb	0.27411	21.91%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.0	0.4544 µg/L	1.35398	0.4544 ppb	1.35398	297.95%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-19.2	-0.1993 µg/L	0.25463	-0.1993 ppb	0.25463	127.74%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	12.3	0.0282 µg/L	0.07081	0.0282 ppb	0.07081	251.28%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.2	-1.6042 µg/L	4.46370	-1.6042 ppb	4.46370	278.25%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	36.0	3.2592 µg/L	4.01326	3.2592 ppb	4.01326	123.13%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	28.2	0.3089 µg/L	0.28245	0.3089 ppb	0.28245	91.44%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-20.6	-0.5110 µg/L	0.11370	-0.5110 ppb	0.11370	22.25%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:03:46

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	57726.1	57726.1	106 %		18:04:22
1	Al 396.153Radial†	6766.7	6407.4	4765.2 µg/L	4765.2 ppb	18:04:22
1	Ca 317.933Radial†	5597.5	5112.8	4814.0 µg/L	4814.0 ppb	18:04:43
1	Fe 238.204 Radial†	618.0	569.7	4839.6 µg/L	4839.6 ppb	18:04:43
1	K 766.490 Radial†	7228.2	6705.1	4766.0 µg/L	4766.0 ppb	18:04:22
1	Mg 279.077 IEC†	567.3	525.0	4889.6 µg/L	4889.6 ppb	18:04:43
1	Na 589.592 Radial†	31079.1	28840.4	9494.4 µg/L	9494.4 ppb	18:04:22
1	Sr 421.552†	47930.5	45274.1	469.32 µg/L	469.32 ppb	18:04:22
1	Sc 361.383	1995865.2	1995865.2	104.50 %		18:05:46
1	Y 371.029	1362757.5	1362757.5	104.03 %		18:05:46
1	Ag 328.068†	63483.9	61312.1	490.10 µg/L	490.10 ppb	18:05:52
1	As 188.979†	273.1	260.2	507.53 µg/L	507.53 ppb	18:06:12
1	B 249.677†	12082.3	11230.0	489.06 µg/L	489.06 ppb	18:05:52
1	Ba 233.527†	19988.9	19153.3	499.62 µg/L	499.62 ppb	18:05:52
1	Be 313.107†	781981.3	751717.1	490.73 µg/L	490.73 ppb	18:05:46
1	Cd 226.502†	18909.7	18236.8	503.08 µg/L	503.08 ppb	18:05:52
1	Co 228.616†	10693.9	10241.8	503.48 µg/L	503.48 ppb	18:05:52
1	Cr 267.716†	23838.7	22863.6	503.22 µg/L	503.22 ppb	18:05:52
1	Cu 324.752†	76544.4	70759.2	494.94 µg/L	494.94 ppb	18:05:52
1	Mn 257.610†	150825.0	144568.3	501.07 µg/L	501.07 ppb	18:05:46
1	Mo 202.031†	4977.2	4770.3	509.27 µg/L	509.27 ppb	18:06:12
1	Ni 231.604†	9935.5	9205.0	502.75 µg/L	502.75 ppb	18:05:52
1	P 214.914†	1265.8	1183.6	2494.1 µg/L	2494.1 ppb	18:06:12
1	Pb 220.353†	2092.9	1905.5	508.60 µg/L	508.60 ppb	18:06:12
1	S 181.975 Axial†	254.0	228.2	999.80 µg/L	999.80 ppb	18:06:12
1	Sb 206.836†	555.5	504.6	498.91 µg/L	498.91 ppb	18:06:12
1	Se 196.026†	366.1	334.5	517.42 µg/L	517.42 ppb	18:06:12
1	SiO2†	26867.3	24459.3	5267.4 µg/L	5267.4 ppb	18:05:52
1	Si 251.611†	31625.0	29949.0	2462.0 µg/L	2462.0 ppb	18:05:52
1	Sn 189.927†	1151.3	1102.5	507.11 µg/L	507.11 ppb	18:06:12
1	Ti 334.940†	210462.3	201274.9	483.84 µg/L	483.84 ppb	18:05:46
1	Tl 190.801†	351.8	360.9	509.62 µg/L	509.62 ppb	18:06:12
1	U 409.014†	5780.2	5584.7	504.65 µg/L	504.65 ppb	18:05:52
1	V 292.402†	48773.6	46715.6	504.04 µg/L	504.04 ppb	18:05:52
1	Zn 213.857†	21610.6	20203.6	500.98 µg/L	500.98 ppb	18:05:52
2	Sc RADIAL	58137.3	58137.3	107 %		18:04:48
2	Al 396.153Radial†	6794.0	6387.8	4750.7 µg/L	4750.7 ppb	18:04:48
2	Ca 317.933Radial†	5592.3	5070.5	4774.2 µg/L	4774.2 ppb	18:05:09
2	Fe 238.204 Radial†	618.1	565.7	4805.7 µg/L	4805.7 ppb	18:05:09
2	K 766.490 Radial†	7287.3	6712.3	4771.1 µg/L	4771.1 ppb	18:04:48
2	Mg 279.077 IEC†	568.2	522.1	4862.2 µg/L	4862.2 ppb	18:05:09
2	Na 589.592 Radial†	31238.6	28782.3	9475.2 µg/L	9475.2 ppb	18:04:48
2	Sr 421.552†	48291.3	45292.3	469.51 µg/L	469.51 ppb	18:04:48
2	Sc 361.383	2007163.9	2007163.9	105.10 %		18:06:19
2	Y 371.029	1370434.0	1370434.0	104.62 %		18:06:19
2	Ag 328.068†	63627.6	61107.0	488.46 µg/L	488.46 ppb	18:06:25
2	As 188.979†	273.7	259.2	505.75 µg/L	505.75 ppb	18:06:46
2	B 249.677†	12114.9	11196.0	487.59 µg/L	487.59 ppb	18:06:25
2	Ba 233.527†	19979.9	19037.1	496.59 µg/L	496.59 ppb	18:06:25
2	Be 313.107†	784264.0	749676.9	489.40 µg/L	489.40 ppb	18:06:19
2	Cd 226.502†	18871.7	18098.7	499.27 µg/L	499.27 ppb	18:06:25
2	Co 228.616†	10694.5	10184.8	500.67 µg/L	500.67 ppb	18:06:25
2	Cr 267.716†	23892.4	22786.3	501.52 µg/L	501.52 ppb	18:06:25
2	Cu 324.752†	76884.7	70670.6	494.32 µg/L	494.32 ppb	18:06:25
2	Mn 257.610†	151108.1	144025.3	499.18 µg/L	499.18 ppb	18:06:19
2	Mo 202.031†	4921.9	4690.8	500.79 µg/L	500.79 ppb	18:06:46
2	Ni 231.604†	9959.3	9174.2	501.07 µg/L	501.07 ppb	18:06:25
2	P 214.914†	1267.5	1178.4	2483.0 µg/L	2483.0 ppb	18:06:46
2	Pb 220.353†	2074.4	1876.6	500.89 µg/L	500.89 ppb	18:06:46

2	S 181.975 Axial†	247.1	220.3	965.20 µg/L	965.20 ppb	18:06:46
2	Sb 206.836†	553.1	499.3	493.56 µg/L	493.56 ppb	18:06:46
2	Se 196.026†	362.2	328.8	508.76 µg/L	508.76 ppb	18:06:46
2	SiO2†	26954.0	24397.1	5254.0 µg/L	5254.0 ppb	18:06:25
2	Si 251.611†	31693.0	29843.4	2453.3 µg/L	2453.3 ppb	18:06:25
2	Sn 189.927†	1148.2	1093.4	502.92 µg/L	502.92 ppb	18:06:46
2	Ti 334.940†	211069.7	200719.2	482.51 µg/L	482.51 ppb	18:06:19
2	Tl 190.801†	350.2	357.5	504.86 µg/L	504.86 ppb	18:06:46
2	U 409.014†	5713.5	5490.1	496.10 µg/L	496.10 ppb	18:06:25
2	V 292.402†	48839.6	46515.7	501.83 µg/L	501.83 ppb	18:06:25
2	Zn 213.857†	21586.8	20064.5	497.52 µg/L	497.52 ppb	18:06:25
3	Sc RADIAL	57420.7	57420.7	105 %		18:05:14
3	Al 396.153Radial†	6887.1	6555.8	4877.6 µg/L	4877.6 ppb	18:05:14
3	Ca 317.933Radial†	5594.0	5137.6	4837.4 µg/L	4837.4 ppb	18:05:34
3	Fe 238.204 Radial†	619.5	574.3	4877.2 µg/L	4877.2 ppb	18:05:34
3	K 766.490 Radial†	7272.3	6783.4	4821.6 µg/L	4821.6 ppb	18:05:14
3	Mg 279.077 IEC†	569.6	530.1	4935.2 µg/L	4935.2 ppb	18:05:34
3	Na 589.592 Radial†	31447.7	29346.9	9661.1 µg/L	9661.1 ppb	18:05:14
3	Sr 421.552†	48895.8	46432.5	481.33 µg/L	481.33 ppb	18:05:14
3	Sc 361.383	2010251.9	2010251.9	105.26 %		18:06:53
3	Y 371.029	1371909.0	1371909.0	104.73 %		18:06:53
3	Ag 328.068†	59865.9	57440.1	459.05 µg/L	459.05 ppb	18:06:58
3	As 188.979†	229.2	216.7	422.67 µg/L	422.67 ppb	18:07:19
3	B 249.677†	11370.0	10470.6	455.76 µg/L	455.76 ppb	18:06:58
3	Ba 233.527†	18395.6	17502.7	456.55 µg/L	456.55 ppb	18:06:58
3	Be 313.107†	741644.3	708039.7	462.22 µg/L	462.22 ppb	18:06:53
3	Cd 226.502†	17275.3	16554.5	456.62 µg/L	456.62 ppb	18:06:58
3	Co 228.616†	9741.1	9263.3	455.31 µg/L	455.31 ppb	18:06:58
3	Cr 267.716†	21256.7	20247.3	445.64 µg/L	445.64 ppb	18:06:58
3	Cu 324.752†	70381.9	64380.2	450.39 µg/L	450.39 ppb	18:06:58
3	Mn 257.610†	143060.5	136158.7	471.95 µg/L	471.95 ppb	18:06:53
3	Mo 202.031†	4127.0	3928.4	419.43 µg/L	419.43 ppb	18:07:19
3	Ni 231.604†	9089.8	8333.5	455.16 µg/L	455.16 ppb	18:06:58
3	P 214.914†	1084.0	1002.2	2108.1 µg/L	2108.1 ppb	18:07:19
3	Pb 220.353†	1818.2	1630.2	435.03 µg/L	435.03 ppb	18:07:19
3	S 181.975 Axial†	224.4	198.4	869.26 µg/L	869.26 ppb	18:07:19
3	Sb 206.836†	480.4	429.5	424.14 µg/L	424.14 ppb	18:07:19
3	Se 196.026†	313.7	282.2	437.85 µg/L	437.85 ppb	18:07:19
3	SiO2†	25019.5	22519.8	4849.8 µg/L	4849.8 ppb	18:06:58
3	Si 251.611†	29405.8	27624.1	2270.8 µg/L	2270.8 ppb	18:06:58
3	Sn 189.927†	955.0	908.2	417.73 µg/L	417.73 ppb	18:07:19
3	Ti 334.940†	198942.9	188889.6	454.05 µg/L	454.05 ppb	18:06:53
3	Tl 190.801†	316.9	325.4	459.73 µg/L	459.73 ppb	18:07:19
3	U 409.014†	5179.0	4973.9	449.35 µg/L	449.35 ppb	18:06:58
3	V 292.402†	44254.0	42087.7	453.84 µg/L	453.84 ppb	18:06:58
3	Zn 213.857†	19673.0	18214.8	451.59 µg/L	451.59 ppb	18:06:58

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004427.0	104.95 %	0.397			0.38%
Sc RADIAL	57761.4	106 %	0.7			0.62%
Y 371.029	1368366.8	104.46 %	0.375			0.36%
Ag 328.068†	59953.1	479.20 µg/L	17.470	479.20 ppb	17.470	3.65%
QC value within limits for Ag 328.068 Recovery = 95.84%						
Al 396.153Radial†	6450.3	4797.9 µg/L	69.48	4797.9 ppb	69.48	1.45%
QC value within limits for Al 396.153Radial Recovery = 95.96%						
As 188.979†	245.3	478.65 µg/L	48.486	478.65 ppb	48.486	10.13%
QC value within limits for As 188.979 Recovery = 95.73%						
B 249.677†	10965.6	477.47 µg/L	18.814	477.47 ppb	18.814	3.94%
QC value within limits for B 249.677 Recovery = 95.49%						
Ba 233.527†	18564.4	484.26 µg/L	24.039	484.26 ppb	24.039	4.96%
QC value within limits for Ba 233.527 Recovery = 96.85%						
Be 313.107†	736477.9	480.78 µg/L	16.091	480.78 ppb	16.091	3.35%
QC value within limits for Be 313.107 Recovery = 96.16%						
Ca 317.933Radial†	5106.9	4808.5 µg/L	31.95	4808.5 ppb	31.95	0.66%
QC value within limits for Ca 317.933Radial Recovery = 96.17%						
Cd 226.502†	17630.0	486.32 µg/L	25.796	486.32 ppb	25.796	5.30%
QC value within limits for Cd 226.502 Recovery = 97.26%						
Co 228.616†	9896.7	486.49 µg/L	27.038	486.49 ppb	27.038	5.56%



QC value within limits for Co 228.616 Recovery = 97.30%							
Cr 267.716†	21965.7	483.46 µg/L	32.763	483.46 ppb	32.763	6.78%	
QC value within limits for Cr 267.716 Recovery = 96.69%							
Cu 324.752†	68603.3	479.88 µg/L	25.545	479.88 ppb	25.545	5.32%	
QC value within limits for Cu 324.752 Recovery = 95.98%							
Fe 238.204 Radial†	569.9	4840.8 µg/L	35.77	4840.8 ppb	35.77	0.74%	
QC value within limits for Fe 238.204 Radial Recovery = 96.82%							
K 766.490 Radial†	6733.6	4786.2 µg/L	30.77	4786.2 ppb	30.77	0.64%	
QC value within limits for K 766.490 Radial Recovery = 95.72%							
Mg 279.077 IEC†	525.8	4895.7 µg/L	36.85	4895.7 ppb	36.85	0.75%	
QC value within limits for Mg 279.077 IEC Recovery = 97.91%							
Mn 257.610†	141584.1	490.73 µg/L	16.295	490.73 ppb	16.295	3.32%	
QC value within limits for Mn 257.610 Recovery = 98.15%							
Mo 202.031†	4463.2	476.50 µg/L	49.601	476.50 ppb	49.601	10.41%	
QC value within limits for Mo 202.031 Recovery = 95.30%							
Na 589.592 Radial†	28989.9	9543.6 µg/L	102.24	9543.6 ppb	102.24	1.07%	
QC value within limits for Na 589.592 Radial Recovery = 95.44%							
Ni 231.604†	8904.3	486.32 µg/L	27.004	486.32 ppb	27.004	5.55%	
QC value within limits for Ni 231.604 Recovery = 97.26%							
P 214.914†	1121.4	2361.7 µg/L	219.74	2361.7 ppb	219.74	9.30%	
QC value within limits for P 214.914 Recovery = 94.47%							
Pb 220.353†	1804.1	481.51 µg/L	40.435	481.51 ppb	40.435	8.40%	
QC value within limits for Pb 220.353 Recovery = 96.30%							
S 181.975 Axial†	215.6	944.76 µg/L	67.630	944.76 ppb	67.630	7.16%	
QC value within limits for S 181.975 Axial Recovery = 94.48%							
Sb 206.836†	477.8	472.20 µg/L	41.713	472.20 ppb	41.713	8.83%	
QC value within limits for Sb 206.836 Recovery = 94.44%							
Se 196.026†	315.2	488.01 µg/L	43.651	488.01 ppb	43.651	8.94%	
QC value within limits for Se 196.026 Recovery = 97.60%							
SiO2†	23792.0	5123.7 µg/L	237.37	5123.7 ppb	237.37	4.63%	
QC value within limits for SiO2 Recovery = 95.82%							
Si 251.611†	29138.9	2395.4 µg/L	107.92	2395.4 ppb	107.92	4.51%	
QC value within limits for Si 251.611 Recovery = 95.81%							
Sn 189.927†	1034.7	475.92 µg/L	50.437	475.92 ppb	50.437	10.60%	
QC value within limits for Sn 189.927 Recovery = 95.18%							
Sr 421.552†	45666.3	473.38 µg/L	6.879	473.38 ppb	6.879	1.45%	
QC value within limits for Sr 421.552 Recovery = 94.68%							
Ti 334.940†	196961.2	473.47 µg/L	16.830	473.47 ppb	16.830	3.55%	
QC value within limits for Ti 334.940 Recovery = 94.69%							
Tl 190.801†	348.0	491.40 µg/L	27.532	491.40 ppb	27.532	5.60%	
QC value within limits for Tl 190.801 Recovery = 98.28%							
U 409.014†	5349.6	483.37 µg/L	29.770	483.37 ppb	29.770	6.16%	
QC value within limits for U 409.014 Recovery = 96.67%							
V 292.402†	45106.3	486.57 µg/L	28.365	486.57 ppb	28.365	5.83%	
QC value within limits for V 292.402 Recovery = 97.31%							
Zn 213.857†	19494.3	483.36 µg/L	27.567	483.36 ppb	27.567	5.70%	
QC value within limits for Zn 213.857 Recovery = 96.67%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:07:29

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	56532.0	56532.0	104 %		18:08:03
1	Al 396.153Radial†	-15.4	-4.8	-3.5570 µg/L	-3.5570 ppb	18:08:03
1	Ca 317.933Radial†	184.3	-1.2	-1.1516 µg/L	-1.1516 ppb	18:08:24
1	Fe 238.204 Radial†	15.7	0.7	5.7821 µg/L	5.7821 ppb	18:08:24
1	K 766.490 Radial†	164.9	30.8	21.873 µg/L	21.873 ppb	18:08:03
1	Mg 279.077 IEC†	16.1	4.2	39.497 µg/L	39.497 ppb	18:08:24
1	Na 589.592 Radial†	629.4	65.8	21.647 µg/L	21.647 ppb	18:08:03
1	Sr 421.552†	25.1	-15.3	-0.1589 µg/L	-0.1589 ppb	18:08:03
1	Sc 361.383	1970116.9	1970116.9	103.16 %		18:09:26
1	Y 371.029	1351478.3	1351478.3	103.17 %		18:09:26
1	Ag 328.068†	-586.1	-3.7	-0.0267 µg/L	-0.0267 ppb	18:09:32
1	As 188.979†	0.4	-0.7	-1.4081 µg/L	-1.4081 ppb	18:09:52
1	B 249.677†	319.9	-21.4	-0.9375 µg/L	-0.9375 ppb	18:09:52
1	Ba 233.527†	-23.6	3.1	0.0818 µg/L	0.0818 ppb	18:09:52
1	Be 313.107†	-3504.0	43.7	0.0286 µg/L	0.0286 ppb	18:09:32
1	Cd 226.502†	-151.5	-4.7	-0.1322 µg/L	-0.1322 ppb	18:09:52
1	Co 228.616†	-11.0	-1.8	-0.0886 µg/L	-0.0886 ppb	18:09:52
1	Cr 267.716†	-63.6	-9.3	-0.2036 µg/L	-0.2036 ppb	18:09:32
1	Cu 324.752†	2393.3	-166.0	-1.1590 µg/L	-1.1590 ppb	18:09:32
1	Mn 257.610†	-254.5	-2.6	-0.0100 µg/L	-0.0100 ppb	18:09:52
1	Mo 202.031†	-8.7	-0.9	-0.0948 µg/L	-0.0948 ppb	18:09:52
1	Ni 231.604†	290.0	-21.0	-1.1506 µg/L	-1.1506 ppb	18:09:52
1	P 214.914†	32.8	4.2	9.1562 µg/L	9.1562 ppb	18:09:52
1	Pb 220.353†	95.7	-4.4	-1.1812 µg/L	-1.1812 ppb	18:09:52
1	S 181.975 Axial†	14.0	-1.2	-5.3162 µg/L	-5.3162 ppb	18:09:52
1	Sb 206.836†	31.3	3.4	3.3775 µg/L	3.3775 ppb	18:09:52
1	Se 196.026†	11.2	-4.9	-7.5535 µg/L	-7.5535 ppb	18:09:52
1	SiO2†	1234.7	-53.1	-11.434 µg/L	-11.434 ppb	18:09:32
1	Si 251.611†	295.0	-26.9	-2.2136 µg/L	-2.2136 ppb	18:09:52
1	Sn 189.927†	1.4	2.3	1.0452 µg/L	1.0452 ppb	18:09:52
1	Ti 334.940†	70.3	-48.0	-0.1186 µg/L	-0.1186 ppb	18:09:32
1	Tl 190.801†	-29.3	-4.1	-5.6836 µg/L	-5.6836 ppb	18:09:52
1	U 409.014†	-64.3	-8.7	-0.7862 µg/L	-0.7862 ppb	18:09:32
1	V 292.402†	-16.1	28.6	0.3039 µg/L	0.3039 ppb	18:09:32
1	Zn 213.857†	475.3	-14.8	-0.3645 µg/L	-0.3645 ppb	18:09:52
2	Sc RADIAL	55658.7	55658.7	102 %		18:08:29
2	Al 396.153Radial†	8.4	18.4	13.722 µg/L	13.722 ppb	18:08:29
2	Ca 317.933Radial†	182.4	-0.3	-0.2942 µg/L	-0.2942 ppb	18:08:50
2	Fe 238.204 Radial†	17.1	2.3	19.276 µg/L	19.276 ppb	18:08:50
2	K 766.490 Radial†	186.5	54.5	38.722 µg/L	38.722 ppb	18:08:29
2	Mg 279.077 IEC†	15.0	3.4	31.500 µg/L	31.500 ppb	18:08:50
2	Na 589.592 Radial†	680.0	124.9	41.106 µg/L	41.106 ppb	18:08:29
2	Sr 421.552†	30.6	-9.6	-0.0993 µg/L	-0.0993 ppb	18:08:29
2	Sc 361.383	2007038.7	2007038.7	105.09 %		18:09:58
2	Y 371.029	1377314.4	1377314.4	105.15 %		18:09:58
2	Ag 328.068†	-493.3	95.1	0.7576 µg/L	0.7576 ppb	18:10:04
2	As 188.979†	-1.7	-2.7	-5.3378 µg/L	-5.3378 ppb	18:10:25
2	B 249.677†	329.1	-18.3	-0.8077 µg/L	-0.8077 ppb	18:10:25
2	Ba 233.527†	-25.2	2.0	0.0533 µg/L	0.0533 ppb	18:10:25
2	Be 313.107†	-3351.2	251.6	0.1643 µg/L	0.1643 ppb	18:10:04
2	Cd 226.502†	-144.2	4.9	0.1335 µg/L	0.1335 ppb	18:10:25
2	Co 228.616†	-14.3	-4.7	-0.2334 µg/L	-0.2334 ppb	18:10:25
2	Cr 267.716†	-47.8	6.9	0.1524 µg/L	0.1524 ppb	18:10:04
2	Cu 324.752†	2466.3	-139.3	-0.9702 µg/L	-0.9702 ppb	18:10:04
2	Mn 257.610†	-245.5	10.5	0.0378 µg/L	0.0378 ppb	18:10:25
2	Mo 202.031†	-7.5	0.4	0.0445 µg/L	0.0445 ppb	18:10:25
2	Ni 231.604†	299.7	-17.0	-0.9313 µg/L	-0.9313 ppb	18:10:25
2	P 214.914†	31.3	2.2	4.7306 µg/L	4.7306 ppb	18:10:25
2	Pb 220.353†	108.5	6.1	1.6290 µg/L	1.6290 ppb	18:10:25

2	S 181.975 Axial†	16.7	1.1	4.8755 µg/L	4.8755 ppb	18:10:25
2	Sb 206.836†	20.8	-7.2	-7.0445 µg/L	-7.0445 ppb	18:10:25
2	Se 196.026†	16.5	-0.1	-0.1477 µg/L	-0.1477 ppb	18:10:25
2	SiO2†	1217.3	-91.6	-19.736 µg/L	-19.736 ppb	18:10:04
2	Si 251.611†	298.1	-29.3	-2.4046 µg/L	-2.4046 ppb	18:10:25
2	Sn 189.927†	0.2	1.0	0.4758 µg/L	0.4758 ppb	18:10:25
2	Ti 334.940†	145.5	22.4	0.0513 µg/L	0.0513 ppb	18:10:04
2	Tl 190.801†	-26.0	-0.5	-0.6548 µg/L	-0.6548 ppb	18:10:25
2	U 409.014†	-106.1	-47.3	-4.2862 µg/L	-4.2862 ppb	18:10:04
2	V 292.402†	-24.2	21.2	0.2243 µg/L	0.2243 ppb	18:10:04
2	Zn 213.857†	472.5	-25.9	-0.6440 µg/L	-0.6440 ppb	18:10:25
3	Sc RADIAL	55952.9	55952.9	103 %		18:08:56
3	Al 396.153Radial†	-23.9	-13.2	-9.8258 µg/L	-9.8258 ppb	18:08:56
3	Ca 317.933Radial†	192.5	8.6	8.1332 µg/L	8.1332 ppb	18:09:16
3	Fe 238.204 Radial†	17.2	2.3	19.451 µg/L	19.451 ppb	18:09:16
3	K 766.490 Radial†	199.1	65.8	46.778 µg/L	46.778 ppb	18:08:56
3	Mg 279.077 IEC†	13.0	1.4	13.321 µg/L	13.321 ppb	18:09:16
3	Na 589.592 Radial†	622.9	65.7	21.628 µg/L	21.628 ppb	18:08:56
3	Sr 421.552†	22.5	-17.6	-0.1825 µg/L	-0.1825 ppb	18:08:56
3	Sc 361.383	1969215.9	1969215.9	103.11 %		18:10:31
3	Y 371.029	1350905.5	1350905.5	103.13 %		18:10:31
3	Ag 328.068†	-575.5	6.4	0.0513 µg/L	0.0513 ppb	18:10:36
3	As 188.979†	-0.8	-1.9	-3.6705 µg/L	-3.6705 ppb	18:10:57
3	B 249.677†	315.0	-25.9	-1.1434 µg/L	-1.1434 ppb	18:10:57
3	Ba 233.527†	-24.5	2.2	0.0583 µg/L	0.0583 ppb	18:10:57
3	Be 313.107†	-3286.5	253.0	0.1652 µg/L	0.1652 ppb	18:10:36
3	Cd 226.502†	-133.6	12.5	0.3430 µg/L	0.3430 ppb	18:10:57
3	Co 228.616†	-14.1	-4.9	-0.2403 µg/L	-0.2403 ppb	18:10:57
3	Cr 267.716†	-66.1	-11.7	-0.2584 µg/L	-0.2584 ppb	18:10:36
3	Cu 324.752†	2477.5	-83.3	-0.5792 µg/L	-0.5792 ppb	18:10:36
3	Mn 257.610†	-225.9	25.1	0.0888 µg/L	0.0888 ppb	18:10:57
3	Mo 202.031†	-9.8	-2.0	-0.2112 µg/L	-0.2112 ppb	18:10:57
3	Ni 231.604†	298.6	-12.6	-0.6902 µg/L	-0.6902 ppb	18:10:57
3	P 214.914†	27.1	-1.4	-2.9216 µg/L	-2.9216 ppb	18:10:57
3	Pb 220.353†	95.5	-4.6	-1.2298 µg/L	-1.2298 ppb	18:10:57
3	S 181.975 Axial†	18.9	3.5	15.355 µg/L	15.355 ppb	18:10:57
3	Sb 206.836†	19.3	-8.3	-8.1417 µg/L	-8.1417 ppb	18:10:57
3	Se 196.026†	11.7	-4.5	-6.8172 µg/L	-6.8172 ppb	18:10:57
3	SiO2†	1221.9	-65.0	-13.993 µg/L	-13.993 ppb	18:10:36
3	Si 251.611†	305.8	-16.3	-1.3398 µg/L	-1.3398 ppb	18:10:57
3	Sn 189.927†	-1.0	-0.1	-0.0571 µg/L	-0.0571 ppb	18:10:57
3	Ti 334.940†	185.2	63.5	0.1517 µg/L	0.1517 ppb	18:10:36
3	Tl 190.801†	-28.1	-3.0	-4.1975 µg/L	-4.1975 ppb	18:10:57
3	U 409.014†	-9.8	44.1	3.9892 µg/L	3.9892 ppb	18:10:36
3	V 292.402†	-52.5	-6.8	-0.0677 µg/L	-0.0677 ppb	18:10:36
3	Zn 213.857†	470.6	-19.2	-0.4765 µg/L	-0.4765 ppb	18:10:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1982123.8	103.78 %	1.130			1.09%
Sc RADIAL	56047.9	103 %	0.8			0.79%
Y 371.029	1359899.4	103.82 %	1.152			1.11%
Ag 328.068†	32.6	0.2608 µg/L	0.43206	0.2608 ppb	0.43206	165.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.1	0.1130 µg/L	12.19532	0.1130 ppb	12.19532	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.8	-3.4721 µg/L	1.97235	-3.4721 ppb	1.97235	56.80%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-21.9	-0.9628 µg/L	0.16927	-0.9628 ppb	0.16927	17.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.5	0.0645 µg/L	0.01519	0.0645 ppb	0.01519	23.57%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	182.7	0.1193 µg/L	0.07861	0.1193 ppb	0.07861	65.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.4	2.2291 µg/L	5.13097	2.2291 ppb	5.13097	230.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.3	0.1147 µg/L	0.23817	0.1147 ppb	0.23817	207.57%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.8	-0.1875 µg/L	0.08565	-0.1875 ppb	0.08565	45.69%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-4.7 -0.1032 µg/L	0.22302 -0.1032 ppb	0.22302 216.06%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-129.5 -0.9028 µg/L	0.29572 -0.9028 ppb	0.29572 32.76%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.8 14.837 µg/L	7.8419 14.837 ppb	7.8419 52.86%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	50.4 35.791 µg/L	12.7089 35.791 ppb	12.7089 35.51%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	3.0 28.106 µg/L	13.4141 28.106 ppb	13.4141 47.73%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	11.0 0.0389 µg/L	0.04940 0.0389 ppb	0.04940 127.06%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	-0.8 -0.0872 µg/L	0.12800 -0.0872 ppb	0.12800 146.84%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	85.4 28.127 µg/L	11.2402 28.127 ppb	11.2402 39.96%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-16.9 -0.9240 µg/L	0.23026 -0.9240 ppb	0.23026 24.92%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	1.7 3.6551 µg/L	6.11031 3.6551 ppb	6.11031 167.17%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-1.0 -0.2607 µg/L	1.63670 -0.2607 ppb	1.63670 627.82%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.1 4.9715 µg/L	10.33607 4.9715 ppb	10.33607 207.91%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-4.0 -3.9362 µg/L	6.35757 -3.9362 ppb	6.35757 161.51%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.2 -4.8394 µg/L	4.07986 -4.8394 ppb	4.07986 84.30%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-69.9 -15.054 µg/L	4.2514 -15.054 ppb	4.2514 28.24%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-24.2 -1.9860 µg/L	0.56769 -1.9860 ppb	0.56769 28.58%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.1 0.4880 µg/L	0.55125 0.4880 ppb	0.55125 112.97%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-14.2 -0.1469 µg/L	0.04288 -0.1469 ppb	0.04288 29.20%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	12.6 0.0281 µg/L	0.13664 0.0281 ppb	0.13664 485.55%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.5 -3.5120 µg/L	2.58356 -3.5120 ppb	2.58356 73.56%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-4.0 -0.3611 µg/L	4.15405 -0.3611 ppb	4.15405 >999.9%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	14.4 0.1535 µg/L	0.19568 0.1535 ppb	0.19568 127.50%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-20.0 -0.4950 µg/L	0.14064 -0.4950 ppb	0.14064 28.41%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:32:46

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	55441.9	55441.9	102 %		18:33:25
1	Al 396.153Radial†	6917.9	6819.8	5072.2 µg/L	5072.2 ppb	18:33:25
1	Ca 317.933Radial†	5691.9	5423.7	5106.8 µg/L	5106.8 ppb	18:33:45
1	Fe 238.204 Radial†	625.4	601.1	5105.5 µg/L	5105.5 ppb	18:33:45
1	K 766.490 Radial†	7360.4	7116.9	5058.6 µg/L	5058.6 ppb	18:33:25
1	Mg 279.077 IEC†	579.1	558.7	5203.2 µg/L	5203.2 ppb	18:33:45
1	Na 589.592 Radial†	31674.9	30637.4	10086 µg/L	10086 ppb	18:33:25
1	Sr 421.552†	48916.5	48111.6	498.73 µg/L	498.73 ppb	18:33:25
1	Sc 361.383	1949198.7	1949198.7	102.06 %		18:34:49
1	Y 371.029	1332613.7	1332613.7	101.73 %		18:34:49
1	Ag 328.068†	63737.9	63015.4	503.72 µg/L	503.72 ppb	18:34:54
1	As 188.979†	273.4	266.7	520.31 µg/L	520.31 ppb	18:35:15
1	B 249.677†	12085.6	11510.1	501.18 µg/L	501.18 ppb	18:34:54
1	Ba 233.527†	19929.9	19553.5	510.07 µg/L	510.07 ppb	18:34:54
1	Be 313.107†	791453.2	778912.4	508.48 µg/L	508.48 ppb	18:34:49
1	Cd 226.502†	18764.5	18527.7	511.09 µg/L	511.09 ppb	18:34:54
1	Co 228.616†	10683.8	10476.9	515.03 µg/L	515.03 ppb	18:34:54
1	Cr 267.716†	23886.3	23456.4	516.27 µg/L	516.27 ppb	18:34:54
1	Cu 324.752†	77115.4	73072.1	511.13 µg/L	511.13 ppb	18:34:54
1	Mn 257.610†	152507.4	149672.0	518.76 µg/L	518.76 ppb	18:34:49
1	Mo 202.031†	5014.5	4920.8	525.34 µg/L	525.34 ppb	18:35:15
1	Ni 231.604†	9902.4	9400.2	513.41 µg/L	513.41 ppb	18:34:54
1	P 214.914†	1289.3	1235.7	2604.5 µg/L	2604.5 ppb	18:35:15
1	Pb 220.353†	2098.8	1959.2	522.95 µg/L	522.95 ppb	18:35:15
1	S 181.975 Axial†	252.9	233.0	1020.8 µg/L	1020.8 ppb	18:35:15
1	Sb 206.836†	562.5	524.2	518.28 µg/L	518.28 ppb	18:35:15
1	Se 196.026†	361.5	338.4	523.78 µg/L	523.78 ppb	18:35:15
1	SiO2†	26807.5	25016.2	5387.4 µg/L	5387.4 ppb	18:34:54
1	Si 251.611†	31683.4	30730.8	2526.2 µg/L	2526.2 ppb	18:34:54
1	Sn 189.927†	1171.2	1148.4	528.25 µg/L	528.25 ppb	18:35:15
1	Ti 334.940†	213415.9	208990.5	502.38 µg/L	502.38 ppb	18:34:49
1	Tl 190.801†	344.1	361.4	510.53 µg/L	510.53 ppb	18:35:15
1	U 409.014†	5808.1	5744.4	519.06 µg/L	519.06 ppb	18:34:54
1	V 292.402†	48900.4	47957.2	517.47 µg/L	517.47 ppb	18:34:54
1	Zn 213.857†	21532.1	20621.7	511.32 µg/L	511.32 ppb	18:34:54
2	Sc RADIAL	56230.3	56230.3	103 %		18:33:51
2	Al 396.153Radial†	6941.0	6746.8	5018.0 µg/L	5018.0 ppb	18:33:51
2	Ca 317.933Radial†	5664.7	5318.7	5007.9 µg/L	5007.9 ppb	18:34:11
2	Fe 238.204 Radial†	623.7	590.8	5018.6 µg/L	5018.6 ppb	18:34:11
2	K 766.490 Radial†	7345.4	7000.7	4976.0 µg/L	4976.0 ppb	18:33:51
2	Mg 279.077 IEC†	581.5	553.1	5150.5 µg/L	5150.5 ppb	18:34:11
2	Na 589.592 Radial†	31761.7	30284.4	9969.7 µg/L	9969.7 ppb	18:33:51
2	Sr 421.552†	49439.7	47944.2	497.00 µg/L	497.00 ppb	18:33:51
2	Sc 361.383	1968654.4	1968654.4	103.08 %		18:35:22
2	Y 371.029	1345275.7	1345275.7	102.70 %		18:35:22
2	Ag 328.068†	64265.9	62910.5	502.88 µg/L	502.88 ppb	18:35:28
2	As 188.979†	279.7	270.2	527.15 µg/L	527.15 ppb	18:35:48
2	B 249.677†	12199.0	11503.1	500.92 µg/L	500.92 ppb	18:35:28
2	Ba 233.527†	20118.0	19543.0	509.79 µg/L	509.79 ppb	18:35:28
2	Be 313.107†	797156.7	776781.8	507.09 µg/L	507.09 ppb	18:35:22
2	Cd 226.502†	19012.6	18586.7	512.73 µg/L	512.73 ppb	18:35:28
2	Co 228.616†	10795.4	10481.7	515.26 µg/L	515.26 ppb	18:35:28
2	Cr 267.716†	24075.5	23408.6	515.22 µg/L	515.22 ppb	18:35:28
2	Cu 324.752†	77661.1	72854.9	509.61 µg/L	509.61 ppb	18:35:28
2	Mn 257.610†	153284.1	148948.8	516.25 µg/L	516.25 ppb	18:35:22
2	Mo 202.031†	4982.7	4841.3	516.86 µg/L	516.86 ppb	18:35:48
2	Ni 231.604†	10038.8	9436.7	515.40 µg/L	515.40 ppb	18:35:28
2	P 214.914†	1275.2	1209.5	2548.3 µg/L	2548.3 ppb	18:35:48
2	Pb 220.353†	2089.9	1930.2	515.20 µg/L	515.20 ppb	18:35:48

2	S 181.975 Axial†	253.9	231.5	1014.3 µg/L	1014.3 ppb	18:35:48
2	Sb 206.836†	566.6	522.7	516.68 µg/L	516.68 ppb	18:35:48
2	Se 196.026†	362.7	336.1	520.05 µg/L	520.05 ppb	18:35:48
2	SiO2†	27183.9	25121.8	5410.1 µg/L	5410.1 ppb	18:35:28
2	Si 251.611†	31985.4	30716.9	2525.1 µg/L	2525.1 ppb	18:35:28
2	Sn 189.927†	1162.1	1128.3	518.97 µg/L	518.97 ppb	18:35:48
2	Ti 334.940†	214911.2	208374.5	500.90 µg/L	500.90 ppb	18:35:22
2	Tl 190.801†	347.2	361.1	510.11 µg/L	510.11 ppb	18:35:48
2	U 409.014†	5833.8	5713.1	516.25 µg/L	516.25 ppb	18:35:28
2	V 292.402†	49382.2	47951.1	517.33 µg/L	517.33 ppb	18:35:28
2	Zn 213.857†	21765.8	20640.0	511.77 µg/L	511.77 ppb	18:35:28
3	Sc RADIAL	56202.6	56202.6	103 %		18:34:17
3	Al 396.153Radial†	7002.2	6809.5	5066.3 µg/L	5066.3 ppb	18:34:17
3	Ca 317.933Radial†	5645.9	5303.2	4993.3 µg/L	4993.3 ppb	18:34:37
3	Fe 238.204 Radial†	622.2	589.7	5007.8 µg/L	5007.8 ppb	18:34:37
3	K 766.490 Radial†	7390.9	7048.4	5010.0 µg/L	5010.0 ppb	18:34:17
3	Mg 279.077 IEC†	576.6	548.6	5107.8 µg/L	5107.8 ppb	18:34:37
3	Na 589.592 Radial†	31993.1	30524.4	10049 µg/L	10049 ppb	18:34:17
3	Sr 421.552†	49671.5	48193.0	499.58 µg/L	499.58 ppb	18:34:17
3	Sc 361.383	1949854.5	1949854.5	102.10 %		18:35:55
3	Y 371.029	1332440.6	1332440.6	101.72 %		18:35:55
3	Ag 328.068†	60532.1	59854.4	478.35 µg/L	478.35 ppb	18:36:01
3	As 188.979†	230.7	224.8	438.55 µg/L	438.55 ppb	18:36:21
3	B 249.677†	11478.3	10911.2	474.98 µg/L	474.98 ppb	18:36:01
3	Ba 233.527†	18573.8	18218.6	475.23 µg/L	475.23 ppb	18:36:01
3	Be 313.107†	747182.5	735289.5	480.01 µg/L	480.01 ppb	18:35:55
3	Cd 226.502†	17437.8	17222.1	475.04 µg/L	475.04 ppb	18:36:01
3	Co 228.616†	9818.6	9625.9	473.13 µg/L	473.13 ppb	18:36:01
3	Cr 267.716†	21497.4	21108.6	464.60 µg/L	464.60 ppb	18:36:01
3	Cu 324.752†	71198.9	67251.7	470.46 µg/L	470.46 ppb	18:36:01
3	Mn 257.610†	144456.6	141736.2	491.27 µg/L	491.27 ppb	18:35:55
3	Mo 202.031†	4165.5	4087.6	436.42 µg/L	436.42 ppb	18:36:21
3	Ni 231.604†	9187.6	8696.9	475.00 µg/L	475.00 ppb	18:36:01
3	P 214.914†	1084.2	1034.3	2175.1 µg/L	2175.1 ppb	18:36:21
3	Pb 220.353†	1818.3	1683.8	449.34 µg/L	449.34 ppb	18:36:21
3	S 181.975 Axial†	223.4	204.0	893.71 µg/L	893.71 ppb	18:36:21
3	Sb 206.836†	482.5	445.7	440.11 µg/L	440.11 ppb	18:36:21
3	Se 196.026†	316.7	294.4	456.49 µg/L	456.49 ppb	18:36:21
3	SiO2†	25304.0	23534.7	5068.3 µg/L	5068.3 ppb	18:36:01
3	Si 251.611†	29685.2	28763.1	2364.5 µg/L	2364.5 ppb	18:36:01
3	Sn 189.927†	961.6	942.7	433.62 µg/L	433.62 ppb	18:36:21
3	Ti 334.940†	200490.3	196259.8	471.76 µg/L	471.76 ppb	18:35:55
3	Tl 190.801†	316.1	333.9	471.83 µg/L	471.83 ppb	18:36:21
3	U 409.014†	5179.3	5126.6	463.15 µg/L	463.15 ppb	18:36:01
3	V 292.402†	44764.1	43889.7	473.25 µg/L	473.25 ppb	18:36:01
3	Zn 213.857†	19900.8	19016.9	471.49 µg/L	471.49 ppb	18:36:01

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1955902.5	102.41 %	0.578			0.56%
Sc RADIAL	55958.3	103 %	0.8			0.80%
Y 371.029	1336776.6	102.05 %	0.562			0.55%
Ag 328.068†	61926.8	494.98 µg/L	14.414	494.98 ppb	14.414	2.91%
QC value within limits for Ag 328.068 Recovery = 99.00%						
Al 396.153Radial†	6792.0	5052.2 µg/L	29.77	5052.2 ppb	29.77	0.59%
QC value within limits for Al 396.153Radial Recovery = 101.04%						
As 188.979†	253.9	495.34 µg/L	49.299	495.34 ppb	49.299	9.95%
QC value within limits for As 188.979 Recovery = 99.07%						
B 249.677†	11308.1	492.36 µg/L	15.053	492.36 ppb	15.053	3.06%
QC value within limits for B 249.677 Recovery = 98.47%						
Ba 233.527†	19105.0	498.36 µg/L	20.034	498.36 ppb	20.034	4.02%
QC value within limits for Ba 233.527 Recovery = 99.67%						
Be 313.107†	763661.2	498.53 µg/L	16.055	498.53 ppb	16.055	3.22%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	5348.5	5036.0 µg/L	61.72	5036.0 ppb	61.72	1.23%
QC value within limits for Ca 317.933Radial Recovery = 100.72%						
Cd 226.502†	18112.2	499.62 µg/L	21.301	499.62 ppb	21.301	4.26%
QC value within limits for Cd 226.502 Recovery = 99.92%						
Co 228.616†	10194.8	501.14 µg/L	24.256	501.14 ppb	24.256	4.84%

QC value within limits for Co 228.616 Recovery = 100.23%

Cr 267.716† 22657.9 498.70 µg/L 29.533 498.70 ppb 29.533 5.92%

QC value within limits for Cr 267.716 Recovery = 99.74%

Cu 324.752† 71059.6 497.07 µg/L 23.052 497.07 ppb 23.052 4.64%

QC value within limits for Cu 324.752 Recovery = 99.41%

Fe 238.204 Radial† 593.9 5044.0 µg/L 53.59 5044.0 ppb 53.59 1.06%

QC value within limits for Fe 238.204 Radial Recovery = 100.88%

K 766.490 Radial† 7055.3 5014.9 µg/L 41.51 5014.9 ppb 41.51 0.83%

QC value within limits for K 766.490 Radial Recovery = 100.30%

Mg 279.077 IEC† 553.5 5153.8 µg/L 47.82 5153.8 ppb 47.82 0.93%

QC value within limits for Mg 279.077 IEC Recovery = 103.08%

Mn 257.610† 146785.7 508.76 µg/L 15.198 508.76 ppb 15.198 2.99%

QC value within limits for Mn 257.610 Recovery = 101.75%

Mo 202.031† 4616.6 492.88 µg/L 49.074 492.88 ppb 49.074 9.96%

QC value within limits for Mo 202.031 Recovery = 98.58%

Na 589.592 Radial† 30482.1 10035 µg/L 59.3 10035 ppb 59.3 0.59%

QC value within limits for Na 589.592 Radial Recovery = 100.35%

Ni 231.604† 9177.9 501.27 µg/L 22.771 501.27 ppb 22.771 4.54%

QC value within limits for Ni 231.604 Recovery = 100.25%

P 214.914† 1159.8 2442.6 µg/L 233.37 2442.6 ppb 233.37 9.55%

QC value within limits for P 214.914 Recovery = 97.71%

Pb 220.353† 1857.7 495.83 µg/L 40.446 495.83 ppb 40.446 8.16%

QC value within limits for Pb 220.353 Recovery = 99.17%

S 181.975 Axial† 222.8 976.27 µg/L 71.572 976.27 ppb 71.572 7.33%

QC value within limits for S 181.975 Axial Recovery = 97.63%

Sb 206.836† 497.5 491.69 µg/L 44.681 491.69 ppb 44.681 9.09%

QC value within limits for Sb 206.836 Recovery = 98.34%

Se 196.026† 322.9 500.11 µg/L 37.818 500.11 ppb 37.818 7.56%

QC value within limits for Se 196.026 Recovery = 100.02%

SiO2† 24557.5 5288.6 µg/L 191.11 5288.6 ppb 191.11 3.61%

QC value within limits for SiO2 Recovery = 98.90%

Si 251.611† 30070.3 2471.9 µg/L 93.06 2471.9 ppb 93.06 3.76%

QC value within limits for Si 251.611 Recovery = 98.88%

Sn 189.927† 1073.1 493.61 µg/L 52.162 493.61 ppb 52.162 10.57%

QC value within limits for Sn 189.927 Recovery = 98.72%

Sr 421.552† 48082.9 498.44 µg/L 1.315 498.44 ppb 1.315 0.26%

QC value within limits for Sr 421.552 Recovery = 99.69%

Ti 334.940† 204541.6 491.68 µg/L 17.266 491.68 ppb 17.266 3.51%

QC value within limits for Ti 334.940 Recovery = 98.34%

Tl 190.801† 352.2 497.49 µg/L 22.222 497.49 ppb 22.222 4.47%

QC value within limits for Tl 190.801 Recovery = 99.50%

U 409.014† 5528.1 499.49 µg/L 31.500 499.49 ppb 31.500 6.31%

QC value within limits for U 409.014 Recovery = 99.90%

V 292.402† 46599.3 502.68 µg/L 25.490 502.68 ppb 25.490 5.07%

QC value within limits for V 292.402 Recovery = 100.54%

Zn 213.857† 20092.9 498.19 µg/L 23.129 498.19 ppb 23.129 4.64%

QC value within limits for Zn 213.857 Recovery = 99.64%

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:36:31

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	56577.3	56577.3	104 %		18:37:06
1	Al 396.153Radial†	-31.7	-20.5	-15.254 µg/L	-15.254 ppb	18:37:06
1	Ca 317.933Radial†	178.1	-7.3	-6.9019 µg/L	-6.9019 ppb	18:37:27
1	Fe 238.204 Radial†	15.3	0.2	1.9399 µg/L	1.9399 ppb	18:37:27
1	K 766.490 Radial†	151.5	17.7	12.611 µg/L	12.611 ppb	18:37:06
1	Mg 279.077 IEC†	8.3	-3.3	-30.287 µg/L	-30.287 ppb	18:37:27
1	Na 589.592 Radial†	633.9	69.6	22.897 µg/L	22.897 ppb	18:37:06
1	Sr 421.552†	44.5	3.3	0.0346 µg/L	0.0346 ppb	18:37:06
1	Sc 361.383	1997175.6	1997175.6	104.57 %		18:38:28
1	Y 371.029	1371834.1	1371834.1	104.73 %		18:38:28
1	Ag 328.068†	-518.3	68.9	0.5460 µg/L	0.5460 ppb	18:38:34
1	As 188.979†	-0.7	-1.8	-3.4701 µg/L	-3.4701 ppb	18:38:54
1	B 249.677†	333.0	-13.0	-0.5696 µg/L	-0.5696 ppb	18:38:54
1	Ba 233.527†	-20.3	6.6	0.1716 µg/L	0.1716 ppb	18:38:54
1	Be 313.107†	-3492.3	100.9	0.0658 µg/L	0.0658 ppb	18:38:34
1	Cd 226.502†	-135.3	12.8	0.3518 µg/L	0.3518 ppb	18:38:54
1	Co 228.616†	-16.0	-6.4	-0.3169 µg/L	-0.3169 ppb	18:38:54
1	Cr 267.716†	-59.9	-4.9	-0.1071 µg/L	-0.1071 ppb	18:38:34
1	Cu 324.752†	2440.0	-152.8	-1.0669 µg/L	-1.0669 ppb	18:38:34
1	Mn 257.610†	-253.9	1.3	0.0061 µg/L	0.0061 ppb	18:38:54
1	Mo 202.031†	-12.2	-4.2	-0.4445 µg/L	-0.4445 ppb	18:38:54
1	Ni 231.604†	302.8	-12.6	-0.6910 µg/L	-0.6910 ppb	18:38:54
1	P 214.914†	25.9	-2.9	-6.0063 µg/L	-6.0063 ppb	18:38:54
1	Pb 220.353†	96.6	-4.8	-1.2749 µg/L	-1.2749 ppb	18:38:54
1	S 181.975 Axial†	16.8	1.3	5.5555 µg/L	5.5555 ppb	18:38:54
1	Sb 206.836†	26.1	-2.0	-1.9561 µg/L	-1.9561 ppb	18:38:54
1	Se 196.026†	17.3	0.7	1.1140 µg/L	1.1140 ppb	18:38:54
1	SiO2†	1249.6	-55.1	-11.856 µg/L	-11.856 ppb	18:38:34
1	Si 251.611†	302.7	-23.4	-1.9253 µg/L	-1.9253 ppb	18:38:54
1	Sn 189.927†	1.0	1.9	0.8554 µg/L	0.8554 ppb	18:38:54
1	Ti 334.940†	152.6	29.8	0.0741 µg/L	0.0741 ppb	18:38:34
1	Tl 190.801†	-22.3	3.0	4.1717 µg/L	4.1717 ppb	18:38:54
1	U 409.014†	-116.8	-58.1	-5.2596 µg/L	-5.2596 ppb	18:38:34
1	V 292.402†	-54.7	-8.1	-0.0953 µg/L	-0.0953 ppb	18:38:34
1	Zn 213.857†	472.6	-23.6	-0.5840 µg/L	-0.5840 ppb	18:38:54
2	Sc RADIAL	55383.9	55383.9	101 %		18:37:32
2	Al 396.153Radial†	-17.3	-7.0	-5.1964 µg/L	-5.1964 ppb	18:37:32
2	Ca 317.933Radial†	188.8	6.9	6.4546 µg/L	6.4546 ppb	18:37:52
2	Fe 238.204 Radial†	14.1	-0.6	-4.8767 µg/L	-4.8767 ppb	18:37:52
2	K 766.490 Radial†	126.5	-3.8	-2.6779 µg/L	-2.6779 ppb	18:37:32
2	Mg 279.077 IEC†	12.6	1.1	10.292 µg/L	10.292 ppb	18:37:52
2	Na 589.592 Radial†	623.8	72.8	23.955 µg/L	23.955 ppb	18:37:32
2	Sr 421.552†	31.5	-8.5	-0.0883 µg/L	-0.0883 ppb	18:37:32
2	Sc 361.383	2013350.1	2013350.1	105.42 %		18:39:00
2	Y 371.029	1381993.5	1381993.5	105.50 %		18:39:00
2	Ag 328.068†	-537.9	54.3	0.4351 µg/L	0.4351 ppb	18:39:06
2	As 188.979†	2.2	1.0	1.8812 µg/L	1.8812 ppb	18:39:26
2	B 249.677†	318.3	-29.5	-1.2874 µg/L	-1.2874 ppb	18:39:26
2	Ba 233.527†	-25.9	1.4	0.0380 µg/L	0.0380 ppb	18:39:26
2	Be 313.107†	-3437.1	180.0	0.1176 µg/L	0.1176 ppb	18:39:06
2	Cd 226.502†	-146.1	3.5	0.0976 µg/L	0.0976 ppb	18:39:26
2	Co 228.616†	-6.0	3.1	0.1553 µg/L	0.1553 ppb	18:39:26
2	Cr 267.716†	-56.6	-1.3	-0.0276 µg/L	-0.0276 ppb	18:39:06
2	Cu 324.752†	2488.4	-125.7	-0.8785 µg/L	-0.8785 ppb	18:39:06
2	Mn 257.610†	-244.3	12.4	0.0419 µg/L	0.0419 ppb	18:39:26
2	Mo 202.031†	-1.5	6.1	0.6511 µg/L	0.6511 ppb	18:39:26
2	Ni 231.604†	301.7	-16.0	-0.8752 µg/L	-0.8752 ppb	18:39:26
2	P 214.914†	26.3	-2.6	-5.5596 µg/L	-5.5596 ppb	18:39:26
2	Pb 220.353†	100.7	-1.7	-0.4405 µg/L	-0.4405 ppb	18:39:26



2	S 181.975 Axial†	19.5	3.7	16.100 µg/L	16.100 ppb	18:39:26
2	Sb 206.836†	25.7	-2.6	-2.5687 µg/L	-2.5687 ppb	18:39:26
2	Se 196.026†	18.4	1.6	2.4087 µg/L	2.4087 ppb	18:39:26
2	SiO2†	1290.6	-25.8	-5.5589 µg/L	-5.5589 ppb	18:39:06
2	Si 251.611†	298.6	-29.7	-2.4388 µg/L	-2.4388 ppb	18:39:26
2	Sn 189.927†	1.6	2.4	1.0965 µg/L	1.0965 ppb	18:39:26
2	Ti 334.940†	143.9	20.4	0.0483 µg/L	0.0483 ppb	18:39:06
2	Tl 190.801†	-19.4	5.9	8.2322 µg/L	8.2322 ppb	18:39:26
2	U 409.014†	-143.2	-82.3	-7.4471 µg/L	-7.4471 ppb	18:39:06
2	V 292.402†	19.9	63.0	0.6686 µg/L	0.6686 ppb	18:39:06
2	Zn 213.857†	478.6	-21.5	-0.5326 µg/L	-0.5326 ppb	18:39:26
3	Sc RADIAL	56905.3	56905.3	104 %		18:37:58
3	Al 396.153Radial†	-1.7	8.5	6.3212 µg/L	6.3212 ppb	18:37:58
3	Ca 317.933Radial†	181.4	-5.2	-4.9145 µg/L	-4.9145 ppb	18:38:18
3	Fe 238.204 Radial†	13.2	-1.8	-15.607 µg/L	-15.607 ppb	18:38:18
3	K 766.490 Radial†	186.8	50.7	36.048 µg/L	36.048 ppb	18:37:58
3	Mg 279.077 IEC†	11.5	-0.3	-2.5813 µg/L	-2.5813 ppb	18:38:18
3	Na 589.592 Radial†	645.3	77.0	25.346 µg/L	25.346 ppb	18:37:58
3	Sr 421.552†	17.2	-23.1	-0.2393 µg/L	-0.2393 ppb	18:37:58
3	Sc 361.383	1996384.7	1996384.7	104.53 %		18:39:32
3	Y 371.029	1369220.3	1369220.3	104.53 %		18:39:32
3	Ag 328.068†	-541.0	47.0	0.3741 µg/L	0.3741 ppb	18:39:38
3	As 188.979†	-1.0	-2.1	-4.0939 µg/L	-4.0939 ppb	18:39:59
3	B 249.677†	333.0	-12.9	-0.5555 µg/L	-0.5555 ppb	18:39:59
3	Ba 233.527†	-17.3	9.5	0.2478 µg/L	0.2478 ppb	18:39:59
3	Be 313.107†	-3308.4	275.5	0.1799 µg/L	0.1799 ppb	18:39:38
3	Cd 226.502†	-144.0	4.4	0.1228 µg/L	0.1228 ppb	18:39:59
3	Co 228.616†	-11.0	-1.7	-0.0836 µg/L	-0.0836 ppb	18:39:59
3	Cr 267.716†	-55.8	-1.0	-0.0220 µg/L	-0.0220 ppb	18:39:38
3	Cu 324.752†	2440.9	-151.0	-1.0572 µg/L	-1.0572 ppb	18:39:38
3	Mn 257.610†	-222.1	31.7	0.1077 µg/L	0.1077 ppb	18:39:59
3	Mo 202.031†	-3.2	4.5	0.4771 µg/L	0.4771 ppb	18:39:59
3	Ni 231.604†	303.2	-12.1	-0.6637 µg/L	-0.6637 ppb	18:39:59
3	P 214.914†	30.5	1.6	3.5034 µg/L	3.5034 ppb	18:39:59
3	Pb 220.353†	89.5	-11.6	-3.0790 µg/L	-3.0790 ppb	18:39:59
3	S 181.975 Axial†	17.8	2.2	9.6185 µg/L	9.6185 ppb	18:39:59
3	Sb 206.836†	27.7	-0.5	-0.4700 µg/L	-0.4700 ppb	18:39:59
3	Se 196.026†	15.0	-1.5	-2.2806 µg/L	-2.2806 ppb	18:39:59
3	SiO2†	1247.6	-56.5	-12.175 µg/L	-12.175 ppb	18:39:38
3	Si 251.611†	300.0	-25.8	-2.1244 µg/L	-2.1244 ppb	18:39:59
3	Sn 189.927†	3.2	3.9	1.8070 µg/L	1.8070 ppb	18:39:59
3	Ti 334.940†	156.9	34.0	0.0818 µg/L	0.0818 ppb	18:39:38
3	Tl 190.801†	-23.6	1.7	2.3286 µg/L	2.3286 ppb	18:39:59
3	U 409.014†	-48.9	6.8	0.6203 µg/L	0.6203 ppb	18:39:38
3	V 292.402†	-14.3	30.6	0.3283 µg/L	0.3283 ppb	18:39:38
3	Zn 213.857†	478.7	-17.6	-0.4352 µg/L	-0.4352 ppb	18:39:59

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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	2002303.4	104.84 %	0.501			0.48%
Sc RADIAL	56288.9	103 %	1.5			1.42%
Y 371.029	1374349.3	104.92 %	0.515			0.49%
Ag 328.068†	56.7	0.4517 µg/L	0.08717	0.4517 ppb	0.08717	19.30%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.3	-4.7097 µg/L	10.79578	-4.7097 ppb	10.79578	229.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.8943 µg/L	3.28450	-1.8943 ppb	3.28450	173.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-18.5	-0.8042 µg/L	0.41854	-0.8042 ppb	0.41854	52.05%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.8	0.1525 µg/L	0.10621	0.1525 ppb	0.10621	69.66%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	185.5	0.1211 µg/L	0.05710	0.1211 ppb	0.05710	47.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-1.7872 µg/L	7.20651	-1.7872 ppb	7.20651	403.22%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1907 µg/L	0.14008	0.1907 ppb	0.14008	73.44%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0817 µg/L	0.23614	-0.0817 ppb	0.23614	288.95%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-2.4	-0.0522 µg/L	0.04756	-0.0522 ppb	0.04756	91.05%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-143.2	-1.0009 µg/L	0.10608	-1.0009 ppb	0.10608	10.60%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.7	-6.1811 µg/L	8.84567	-6.1811 ppb	8.84567	143.11%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	21.6	15.327 µg/L	19.5055	15.327 ppb	19.5055	127.26%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.8	-7.5253 µg/L	20.73608	-7.5253 ppb	20.73608	275.55%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	15.1	0.0519 µg/L	0.05154	0.0519 ppb	0.05154	99.29%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.1	0.2279 µg/L	0.58875	0.2279 ppb	0.58875	258.32%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	73.1	24.066 µg/L	1.2283	24.066 ppb	1.2283	5.10%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.6	-0.7433 µg/L	0.11501	-0.7433 ppb	0.11501	15.47%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.3	-2.6875 µg/L	5.36613	-2.6875 ppb	5.36613	199.67%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.0	-1.5981 µg/L	1.34866	-1.5981 ppb	1.34866	84.39%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.4	10.425 µg/L	5.3180	10.425 ppb	5.3180	51.01%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.7	-1.6649 µg/L	1.07918	-1.6649 ppb	1.07918	64.82%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.3	0.4141 µg/L	2.42173	0.4141 ppb	2.42173	584.88%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-45.8	-9.8634 µg/L	3.73124	-9.8634 ppb	3.73124	37.83%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-26.3	-2.1628 µg/L	0.25893	-2.1628 ppb	0.25893	11.97%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.7	1.2530 µg/L	0.49474	1.2530 ppb	0.49474	39.49%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-9.4	-0.0977 µg/L	0.13720	-0.0977 ppb	0.13720	140.50%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	28.1	0.0681 µg/L	0.01753	0.0681 ppb	0.01753	25.76%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.5	4.9108 µg/L	3.02042	4.9108 ppb	3.02042	61.51%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-44.5	-4.0288 µg/L	4.17218	-4.0288 ppb	4.17218	103.56%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	28.5	0.3005 µg/L	0.38270	0.3005 ppb	0.38270	127.35%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-20.9	-0.5173 µg/L	0.07558	-0.5173 ppb	0.07558	14.61%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:12:25

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	55671.1	55671.1	102 %		19:13:03
1	Al 396.153Radial†	7032.4	6904.0	5134.7 µg/L	5134.7 ppb	19:13:03
1	Ca 317.933Radial†	5628.4	5338.4	5026.4 µg/L	5026.4 ppb	19:13:23
1	Fe 238.204 Radial†	628.5	601.6	5110.3 µg/L	5110.3 ppb	19:13:23
1	K 766.490 Radial†	7390.7	7116.7	5058.5 µg/L	5058.5 ppb	19:13:03
1	Mg 279.077 IEC†	581.4	558.7	5202.9 µg/L	5202.9 ppb	19:13:23
1	Na 589.592 Radial†	32145.4	30970.2	10196 µg/L	10196 ppb	19:13:03
1	Sr 421.552†	49522.9	48507.7	502.84 µg/L	502.84 ppb	19:13:03
1	Sc 361.383	1951144.3	1951144.3	102.16 %		19:14:27
1	Y 371.029	1335064.4	1335064.4	101.92 %		19:14:27
1	Ag 328.068†	64845.5	64037.3	511.83 µg/L	511.83 ppb	19:14:32
1	As 188.979†	275.5	268.5	523.78 µg/L	523.78 ppb	19:14:53
1	B 249.677†	12049.2	11462.7	499.11 µg/L	499.11 ppb	19:14:32
1	Ba 233.527†	20008.0	19610.4	511.55 µg/L	511.55 ppb	19:14:32
1	Be 313.107†	795598.6	782196.8	510.62 µg/L	510.62 ppb	19:14:27
1	Cd 226.502†	18839.6	18582.9	512.61 µg/L	512.61 ppb	19:14:32
1	Co 228.616†	10676.1	10458.9	514.13 µg/L	514.13 ppb	19:14:32
1	Cr 267.716†	23927.2	23473.1	516.64 µg/L	516.64 ppb	19:14:32
1	Cu 324.752†	77230.7	73109.7	511.40 µg/L	511.40 ppb	19:14:32
1	Mn 257.610†	153022.2	150027.0	519.99 µg/L	519.99 ppb	19:14:27
1	Mo 202.031†	5147.6	5046.1	538.72 µg/L	538.72 ppb	19:14:53
1	Ni 231.604†	9909.1	9397.1	513.24 µg/L	513.24 ppb	19:14:32
1	P 214.914†	1284.0	1229.2	2590.7 µg/L	2590.7 ppb	19:14:53
1	Pb 220.353†	2100.1	1958.5	522.80 µg/L	522.80 ppb	19:14:53
1	S 181.975 Axial†	260.7	240.4	1053.2 µg/L	1053.2 ppb	19:14:53
1	Sb 206.836†	579.1	539.9	533.92 µg/L	533.92 ppb	19:14:53
1	Se 196.026†	368.4	344.8	533.59 µg/L	533.59 ppb	19:14:53
1	SiO2†	27092.9	25269.3	5441.9 µg/L	5441.9 ppb	19:14:32
1	Si 251.611†	31889.8	30901.8	2540.3 µg/L	2540.3 ppb	19:14:32
1	Sn 189.927†	1200.9	1176.4	541.09 µg/L	541.09 ppb	19:14:53
1	Ti 334.940†	218380.7	213641.7	513.57 µg/L	513.57 ppb	19:14:27
1	Tl 190.801†	350.6	367.5	519.14 µg/L	519.14 ppb	19:14:53
1	U 409.014†	5814.6	5745.1	519.13 µg/L	519.13 ppb	19:14:32
1	V 292.402†	48982.0	47989.3	517.92 µg/L	517.92 ppb	19:14:32
1	Zn 213.857†	21483.0	20552.7	509.59 µg/L	509.59 ppb	19:14:32
2	Sc RADIAL	56100.7	56100.7	103 %		19:13:29
2	Al 396.153Radial†	6945.6	6766.8	5032.6 µg/L	5032.6 ppb	19:13:29
2	Ca 317.933Radial†	5631.2	5298.9	4989.2 µg/L	4989.2 ppb	19:13:49
2	Fe 238.204 Radial†	627.7	596.1	5063.7 µg/L	5063.7 ppb	19:13:49
2	K 766.490 Radial†	7341.2	7013.0	4984.8 µg/L	4984.8 ppb	19:13:29
2	Mg 279.077 IEC†	586.0	558.8	5203.5 µg/L	5203.5 ppb	19:13:49
2	Na 589.592 Radial†	31976.7	30564.8	10062 µg/L	10062 ppb	19:13:29
2	Sr 421.552†	49170.9	47793.6	495.44 µg/L	495.44 ppb	19:13:29
2	Sc 361.383	1954250.3	1954250.3	102.33 %		19:15:00
2	Y 371.029	1335611.5	1335611.5	101.96 %		19:15:00
2	Ag 328.068†	65212.5	64295.1	513.88 µg/L	513.88 ppb	19:15:06
2	As 188.979†	274.4	267.0	520.94 µg/L	520.94 ppb	19:15:26
2	B 249.677†	12164.5	11556.6	503.24 µg/L	503.24 ppb	19:15:06
2	Ba 233.527†	20057.8	19628.0	512.01 µg/L	512.01 ppb	19:15:06
2	Be 313.107†	786582.3	772147.7	504.06 µg/L	504.06 ppb	19:15:00
2	Cd 226.502†	18912.0	18624.4	513.76 µg/L	513.76 ppb	19:15:06
2	Co 228.616†	10732.8	10497.7	516.05 µg/L	516.05 ppb	19:15:06
2	Cr 267.716†	24011.5	23518.2	517.63 µg/L	517.63 ppb	19:15:06
2	Cu 324.752†	77632.9	73382.6	513.30 µg/L	513.30 ppb	19:15:06
2	Mn 257.610†	151747.3	148542.9	514.85 µg/L	514.85 ppb	19:15:00
2	Mo 202.031†	5096.3	4988.0	532.52 µg/L	532.52 ppb	19:15:26
2	Ni 231.604†	9986.9	9457.7	516.55 µg/L	516.55 ppb	19:15:06
2	P 214.914†	1269.9	1213.4	2556.6 µg/L	2556.6 ppb	19:15:26
2	Pb 220.353†	2103.2	1958.2	522.70 µg/L	522.70 ppb	19:15:26

2	S 181.975 Axial†	261.6	240.8	1055.1 µg/L	1055.1 ppb	19:15:26
2	Sb 206.836†	583.1	542.9	536.77 µg/L	536.77 ppb	19:15:26
2	Se 196.026†	358.4	334.4	517.63 µg/L	517.63 ppb	19:15:26
2	SiO2†	27219.9	25351.3	5459.5 µg/L	5459.5 ppb	19:15:06
2	Si 251.611†	32020.8	30980.3	2546.7 µg/L	2546.7 ppb	19:15:06
2	Sn 189.927†	1194.0	1167.7	537.13 µg/L	537.13 ppb	19:15:26
2	Ti 334.940†	216182.4	211153.6	507.58 µg/L	507.58 ppb	19:15:00
2	Tl 190.801†	351.8	368.1	519.85 µg/L	519.85 ppb	19:15:26
2	U 409.014†	5813.7	5735.2	518.24 µg/L	518.24 ppb	19:15:06
2	V 292.402†	49127.5	48055.3	518.57 µg/L	518.57 ppb	19:15:06
2	Zn 213.857†	21549.0	20583.8	510.35 µg/L	510.35 ppb	19:15:06
3	Sc RADIAL	56646.4	56646.4	104 %		19:13:55
3	Al 396.153Radial†	6990.5	6744.9	5018.4 µg/L	5018.4 ppb	19:13:55
3	Ca 317.933Radial†	5597.5	5213.6	4908.9 µg/L	4908.9 ppb	19:14:15
3	Fe 238.204 Radial†	629.8	592.2	5029.2 µg/L	5029.2 ppb	19:14:15
3	K 766.490 Radial†	7441.3	7040.7	5004.5 µg/L	5004.5 ppb	19:13:55
3	Mg 279.077 IEC†	585.3	552.6	5144.3 µg/L	5144.3 ppb	19:14:15
3	Na 589.592 Radial†	32200.7	30481.0	10034 µg/L	10034 ppb	19:13:55
3	Sr 421.552†	49653.3	47797.6	495.48 µg/L	495.48 ppb	19:13:55
3	Sc 361.383	1989206.7	1989206.7	104.16 %		19:15:33
3	Y 371.029	1360871.5	1360871.5	103.89 %		19:15:33
3	Ag 328.068†	60452.0	58604.6	468.29 µg/L	468.29 ppb	19:15:39
3	As 188.979†	231.4	221.0	431.16 µg/L	431.16 ppb	19:15:59
3	B 249.677†	11200.8	10422.4	453.57 µg/L	453.57 ppb	19:15:39
3	Ba 233.527†	18155.6	17457.3	455.37 µg/L	455.37 ppb	19:15:39
3	Be 313.107†	746723.2	720370.4	470.26 µg/L	470.26 ppb	19:15:33
3	Cd 226.502†	17034.9	16497.4	455.02 µg/L	455.02 ppb	19:15:39
3	Co 228.616†	9575.0	9201.8	452.26 µg/L	452.26 ppb	19:15:39
3	Cr 267.716†	20898.9	20117.4	442.78 µg/L	442.78 ppb	19:15:39
3	Cu 324.752†	69759.8	64490.4	451.18 µg/L	451.18 ppb	19:15:39
3	Mn 257.610†	144303.8	138790.3	481.07 µg/L	481.07 ppb	19:15:33
3	Mo 202.031†	4187.5	4027.9	430.06 µg/L	430.06 ppb	19:15:59
3	Ni 231.604†	8969.1	8309.0	453.82 µg/L	453.82 ppb	19:15:39
3	P 214.914†	1074.2	1003.7	2111.2 µg/L	2111.2 ppb	19:15:59
3	Pb 220.353†	1799.2	1630.2	435.08 µg/L	435.08 ppb	19:15:59
3	S 181.975 Axial†	224.9	201.1	880.92 µg/L	880.92 ppb	19:15:59
3	Sb 206.836†	494.9	448.2	442.71 µg/L	442.71 ppb	19:15:59
3	Se 196.026†	304.8	276.8	429.75 µg/L	429.75 ppb	19:15:59
3	SiO2†	24880.7	22637.9	4875.2 µg/L	4875.2 ppb	19:15:39
3	Si 251.611†	29305.2	27823.1	2287.2 µg/L	2287.2 ppb	19:15:39
3	Sn 189.927†	959.0	921.6	423.93 µg/L	423.93 ppb	19:15:59
3	Ti 334.940†	203896.7	195645.3	470.28 µg/L	470.28 ppb	19:15:33
3	Tl 190.801†	305.5	317.6	449.03 µg/L	449.03 ppb	19:15:59
3	U 409.014†	5068.3	4919.7	444.42 µg/L	444.42 ppb	19:15:39
3	V 292.402†	43582.6	41887.9	451.80 µg/L	451.80 ppb	19:15:39
3	Zn 213.857†	19376.0	18127.3	449.39 µg/L	449.39 ppb	19:15:39

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1964867.1	102.88 %	1.107			1.08%
Sc RADIAL	56139.4	103 %	0.9			0.87%
Y 371.029	1343849.1	102.59 %	1.126			1.10%
Ag 328.068†	62312.3	498.00 µg/L	25.750	498.00 ppb	25.750	5.17%
QC value within limits for Ag 328.068 Recovery = 99.60%						
Al 396.153Radial†	6805.2	5061.9 µg/L	63.45	5061.9 ppb	63.45	1.25%
QC value within limits for Al 396.153Radial Recovery = 101.24%						
As 188.979†	252.2	491.96 µg/L	52.673	491.96 ppb	52.673	10.71%
QC value within limits for As 188.979 Recovery = 98.39%						
B 249.677†	11147.2	485.30 µg/L	27.561	485.30 ppb	27.561	5.68%
QC value within limits for B 249.677 Recovery = 97.06%						
Ba 233.527†	18898.6	492.97 µg/L	32.570	492.97 ppb	32.570	6.61%
QC value within limits for Ba 233.527 Recovery = 98.59%						
Be 313.107†	758238.3	494.98 µg/L	21.658	494.98 ppb	21.658	4.38%
QC value within limits for Be 313.107 Recovery = 99.00%						
Ca 317.933Radial†	5283.6	4974.8 µg/L	60.06	4974.8 ppb	60.06	1.21%
QC value within limits for Ca 317.933Radial Recovery = 99.50%						
Cd 226.502†	17901.6	493.80 µg/L	33.585	493.80 ppb	33.585	6.80%
QC value within limits for Cd 226.502 Recovery = 98.76%						
Co 228.616†	10052.8	494.14 µg/L	36.289	494.14 ppb	36.289	7.34%

QC value within limits for Co 228.616 Recovery = 98.83%							
Cr 267.716†	22369.6	492.35 µg/L	42.929	492.35 ppb	42.929	8.72%	
QC value within limits for Cr 267.716 Recovery = 98.47%							
Cu 324.752†	70327.6	491.96 µg/L	35.329	491.96 ppb	35.329	7.18%	
QC value within limits for Cu 324.752 Recovery = 98.39%							
Fe 238.204 Radial†	596.7	5067.7 µg/L	40.70	5067.7 ppb	40.70	0.80%	
QC value within limits for Fe 238.204 Radial Recovery = 101.35%							
K 766.490 Radial†	7056.8	5015.9 µg/L	38.15	5015.9 ppb	38.15	0.76%	
QC value within limits for K 766.490 Radial Recovery = 100.32%							
Mg 279.077 IEC†	556.7	5183.6 µg/L	33.98	5183.6 ppb	33.98	0.66%	
QC value within limits for Mg 279.077 IEC Recovery = 103.67%							
Mn 257.610†	145786.8	505.31 µg/L	21.142	505.31 ppb	21.142	4.18%	
QC value within limits for Mn 257.610 Recovery = 101.06%							
Mo 202.031†	4687.4	500.43 µg/L	61.026	500.43 ppb	61.026	12.19%	
QC value within limits for Mo 202.031 Recovery = 100.09%							
Na 589.592 Radial†	30672.0	10097 µg/L	86.1	10097 ppb	86.1	0.85%	
QC value within limits for Na 589.592 Radial Recovery = 100.97%							
Ni 231.604†	9054.6	494.54 µg/L	35.300	494.54 ppb	35.300	7.14%	
QC value within limits for Ni 231.604 Recovery = 98.91%							
P 214.914†	1148.8	2419.5 µg/L	267.56	2419.5 ppb	267.56	11.06%	
QC value within limits for P 214.914 Recovery = 96.78%							
Pb 220.353†	1849.0	493.53 µg/L	50.614	493.53 ppb	50.614	10.26%	
QC value within limits for Pb 220.353 Recovery = 98.71%							
S 181.975 Axial†	227.4	996.40 µg/L	100.008	996.40 ppb	100.008	10.04%	
QC value within limits for S 181.975 Axial Recovery = 99.64%							
Sb 206.836†	510.3	504.47 µg/L	53.501	504.47 ppb	53.501	10.61%	
QC value within limits for Sb 206.836 Recovery = 100.89%							
Se 196.026†	318.7	493.66 µg/L	55.921	493.66 ppb	55.921	11.33%	
QC value within limits for Se 196.026 Recovery = 98.73%							
SiO2†	24419.5	5258.9 µg/L	332.39	5258.9 ppb	332.39	6.32%	
QC value within limits for SiO2 Recovery = 98.34%							
Si 251.611†	29901.8	2458.1 µg/L	148.02	2458.1 ppb	148.02	6.02%	
QC value within limits for Si 251.611 Recovery = 98.32%							
Sn 189.927†	1088.6	500.71 µg/L	66.525	500.71 ppb	66.525	13.29%	
QC value within limits for Sn 189.927 Recovery = 100.14%							
Sr 421.552†	48033.0	497.92 µg/L	4.262	497.92 ppb	4.262	0.86%	
QC value within limits for Sr 421.552 Recovery = 99.58%							
Ti 334.940†	206813.5	497.14 µg/L	23.455	497.14 ppb	23.455	4.72%	
QC value within limits for Ti 334.940 Recovery = 99.43%							
Tl 190.801†	351.1	496.01 µg/L	40.687	496.01 ppb	40.687	8.20%	
QC value within limits for Tl 190.801 Recovery = 99.20%							
U 409.014†	5466.7	493.93 µg/L	42.881	493.93 ppb	42.881	8.68%	
QC value within limits for U 409.014 Recovery = 98.79%							
V 292.402†	45977.5	496.10 µg/L	38.364	496.10 ppb	38.364	7.73%	
QC value within limits for V 292.402 Recovery = 99.22%							
Zn 213.857†	19754.6	489.78 µg/L	34.976	489.78 ppb	34.976	7.14%	
QC value within limits for Zn 213.857 Recovery = 97.96%							
All analyte(s) passed QC.							

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 19:16:08

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	55600.7	55600.7	102 %		19:16:41
1	Al 396.153Radial†	-4.5	5.7	4.2256 µg/L	4.2256 ppb	19:16:41
1	Ca 317.933Radial†	176.7	-5.7	-5.4036 µg/L	-5.4036 ppb	19:17:01
1	Fe 238.204 Radial†	16.9	2.1	17.440 µg/L	17.440 ppb	19:17:01
1	K 766.490 Radial†	120.8	-9.9	-7.0161 µg/L	-7.0161 ppb	19:16:41
1	Mg 279.077 IEC†	10.9	-0.6	-5.3345 µg/L	-5.3345 ppb	19:17:01
1	Na 589.592 Radial†	652.7	98.7	32.500 µg/L	32.500 ppb	19:16:41
1	Sr 421.552†	22.7	-17.3	-0.1790 µg/L	-0.1790 ppb	19:16:41
1	Sc 361.383	1934829.6	1934829.6	101.31 %		19:18:03
1	Y 371.029	1327190.7	1327190.7	101.32 %		19:18:03
1	Ag 328.068†	-516.6	54.6	0.4388 µg/L	0.4388 ppb	19:18:09
1	As 188.979†	1.2	0.0	0.0845 µg/L	0.0845 ppb	19:18:29
1	B 249.677†	321.4	-14.2	-0.6284 µg/L	-0.6284 ppb	19:18:29
1	Ba 233.527†	-23.7	2.6	0.0683 µg/L	0.0683 ppb	19:18:29
1	Be 313.107†	-3408.1	76.3	0.0498 µg/L	0.0498 ppb	19:18:09
1	Cd 226.502†	-144.3	-0.3	-0.0100 µg/L	-0.0100 ppb	19:18:29
1	Co 228.616†	-6.0	2.9	0.1456 µg/L	0.1456 ppb	19:18:29
1	Cr 267.716†	-15.9	36.7	0.8069 µg/L	0.8069 ppb	19:18:09
1	Cu 324.752†	2442.5	-75.1	-0.5222 µg/L	-0.5222 ppb	19:18:09
1	Mn 257.610†	-225.9	21.1	0.0756 µg/L	0.0756 ppb	19:18:29
1	Mo 202.031†	-2.6	4.9	0.5275 µg/L	0.5275 ppb	19:18:29
1	Ni 231.604†	310.8	4.6	0.2529 µg/L	0.2529 ppb	19:18:29
1	P 214.914†	22.3	-5.6	-12.052 µg/L	-12.052 ppb	19:18:29
1	Pb 220.353†	97.2	-1.3	-0.3391 µg/L	-0.3391 ppb	19:18:29
1	S 181.975 Axial†	15.8	0.7	3.2436 µg/L	3.2436 ppb	19:18:29
1	Sb 206.836†	30.1	2.8	2.7305 µg/L	2.7305 ppb	19:18:29
1	Se 196.026†	14.9	-1.1	-1.6720 µg/L	-1.6720 ppb	19:18:29
1	SiO2†	1241.8	-24.3	-5.2260 µg/L	-5.2260 ppb	19:18:09
1	Si 251.611†	314.2	-2.7	-0.2249 µg/L	-0.2249 ppb	19:18:29
1	Sn 189.927†	3.0	3.9	1.7687 µg/L	1.7687 ppb	19:18:29
1	Ti 334.940†	129.2	11.4	0.0278 µg/L	0.0278 ppb	19:18:09
1	Tl 190.801†	-22.4	2.2	3.0821 µg/L	3.0821 ppb	19:18:29
1	U 409.014†	-44.2	10.0	0.9045 µg/L	0.9045 ppb	19:18:09
1	V 292.402†	22.3	66.2	0.7146 µg/L	0.7146 ppb	19:18:09
1	Zn 213.857†	480.2	-1.5	-0.0391 µg/L	-0.0391 ppb	19:18:29
2	Sc RADIAL	55841.1	55841.1	102 %		19:17:07
2	Al 396.153Radial†	-0.2	10.0	7.4245 µg/L	7.4245 ppb	19:17:07
2	Ca 317.933Radial†	185.5	2.1	1.9861 µg/L	1.9861 ppb	19:17:27
2	Fe 238.204 Radial†	13.8	-1.1	-8.9579 µg/L	-8.9579 ppb	19:17:27
2	K 766.490 Radial†	118.8	-12.3	-8.7251 µg/L	-8.7251 ppb	19:17:07
2	Mg 279.077 IEC†	12.4	0.9	8.1129 µg/L	8.1129 ppb	19:17:27
2	Na 589.592 Radial†	684.6	127.2	41.869 µg/L	41.869 ppb	19:17:07
2	Sr 421.552†	48.5	7.8	0.0810 µg/L	0.0810 ppb	19:17:07
2	Sc 361.383	1955516.9	1955516.9	102.39 %		19:18:35
2	Y 371.029	1342161.2	1342161.2	102.46 %		19:18:35
2	Ag 328.068†	-513.3	63.2	0.5022 µg/L	0.5022 ppb	19:18:41
2	As 188.979†	-5.0	-6.0	-11.703 µg/L	-11.703 ppb	19:19:01
2	B 249.677†	317.0	-21.8	-0.9495 µg/L	-0.9495 ppb	19:19:01
2	Ba 233.527†	-19.8	6.7	0.1743 µg/L	0.1743 ppb	19:19:01
2	Be 313.107†	-3409.1	110.9	0.0724 µg/L	0.0724 ppb	19:18:41
2	Cd 226.502†	-125.7	19.4	0.5362 µg/L	0.5362 ppb	19:19:01
2	Co 228.616†	-4.9	4.1	0.1998 µg/L	0.1998 ppb	19:19:01
2	Cr 267.716†	-35.7	17.5	0.3848 µg/L	0.3848 ppb	19:18:41
2	Cu 324.752†	2432.5	-110.5	-0.7728 µg/L	-0.7728 ppb	19:18:41
2	Mn 257.610†	-217.1	32.1	0.1097 µg/L	0.1097 ppb	19:19:01
2	Mo 202.031†	-0.2	7.4	0.7857 µg/L	0.7857 ppb	19:19:01
2	Ni 231.604†	307.3	-2.1	-0.1144 µg/L	-0.1144 ppb	19:19:01
2	P 214.914†	26.8	-1.4	-2.9443 µg/L	-2.9443 ppb	19:19:01
2	Pb 220.353†	98.0	-1.5	-0.3841 µg/L	-0.3841 ppb	19:19:01

2	S 181.975 Axial†	16.0	0.8	3.5945 µg/L	3.5945 ppb	19:19:01
2	Sb 206.836†	19.9	-7.6	-7.4359 µg/L	-7.4359 ppb	19:19:01
2	Se 196.026†	24.3	7.9	11.982 µg/L	11.982 ppb	19:19:01
2	SiO2†	1252.6	-26.7	-5.7496 µg/L	-5.7496 ppb	19:18:41
2	Si 251.611†	335.5	14.8	1.2146 µg/L	1.2146 ppb	19:19:01
2	Sn 189.927†	0.8	1.7	0.7658 µg/L	0.7658 ppb	19:19:01
2	Ti 334.940†	159.2	39.3	0.0940 µg/L	0.0940 ppb	19:18:41
2	Tl 190.801†	-19.6	5.1	7.1712 µg/L	7.1712 ppb	19:19:01
2	U 409.014†	-39.3	15.2	1.3764 µg/L	1.3764 ppb	19:18:41
2	V 292.402†	-32.1	12.8	0.1441 µg/L	0.1441 ppb	19:18:41
2	Zn 213.857†	480.1	-6.6	-0.1635 µg/L	-0.1635 ppb	19:19:01
3	Sc RADIAL	54991.0	54991.0	101 %		19:17:32
3	Al 396.153Radial†	-25.8	-15.4	-11.501 µg/L	-11.501 ppb	19:17:32
3	Ca 317.933Radial†	179.1	-1.4	-1.2826 µg/L	-1.2826 ppb	19:17:53
3	Fe 238.204 Radial†	16.1	1.5	12.918 µg/L	12.918 ppb	19:17:53
3	K 766.490 Radial†	157.4	27.8	19.781 µg/L	19.781 ppb	19:17:32
3	Mg 279.077 IEC†	9.1	-2.2	-20.551 µg/L	-20.551 ppb	19:17:53
3	Na 589.592 Radial†	624.4	77.8	25.618 µg/L	25.618 ppb	19:17:32
3	Sr 421.552†	39.8	-0.1	-0.0009 µg/L	-0.0009 ppb	19:17:32
3	Sc 361.383	1967438.1	1967438.1	103.02 %		19:19:07
3	Y 371.029	1348776.4	1348776.4	102.97 %		19:19:07
3	Ag 328.068†	-543.2	37.2	0.2976 µg/L	0.2976 ppb	19:19:13
3	As 188.979†	-2.4	-3.5	-6.8853 µg/L	-6.8853 ppb	19:19:33
3	B 249.677†	305.4	-35.0	-1.5334 µg/L	-1.5334 ppb	19:19:33
3	Ba 233.527†	-26.9	-0.1	-0.0009 µg/L	-0.0009 ppb	19:19:33
3	Be 313.107†	-3287.9	248.8	0.1624 µg/L	0.1624 ppb	19:19:13
3	Cd 226.502†	-133.1	12.9	0.3539 µg/L	0.3539 ppb	19:19:33
3	Co 228.616†	-14.2	-5.0	-0.2450 µg/L	-0.2450 ppb	19:19:33
3	Cr 267.716†	-20.7	32.3	0.7108 µg/L	0.7108 ppb	19:19:13
3	Cu 324.752†	2481.8	-76.9	-0.5355 µg/L	-0.5355 ppb	19:19:13
3	Mn 257.610†	-209.8	40.5	0.1427 µg/L	0.1427 ppb	19:19:33
3	Mo 202.031†	-10.0	-2.2	-0.2320 µg/L	-0.2320 ppb	19:19:33
3	Ni 231.604†	301.2	-9.8	-0.5340 µg/L	-0.5340 ppb	19:19:33
3	P 214.914†	26.0	-2.4	-5.0576 µg/L	-5.0576 ppb	19:19:33
3	Pb 220.353†	96.7	-3.3	-0.8887 µg/L	-0.8887 ppb	19:19:33
3	S 181.975 Axial†	14.9	-0.4	-1.5487 µg/L	-1.5487 ppb	19:19:33
3	Sb 206.836†	32.3	4.4	4.3137 µg/L	4.3137 ppb	19:19:33
3	Se 196.026†	14.2	-2.1	-3.1442 µg/L	-3.1442 ppb	19:19:33
3	SiO2†	1256.2	-30.6	-6.5854 µg/L	-6.5854 ppb	19:19:13
3	Si 251.611†	309.4	-12.5	-1.0288 µg/L	-1.0288 ppb	19:19:33
3	Sn 189.927†	-1.0	-0.1	-0.0403 µg/L	-0.0403 ppb	19:19:33
3	Ti 334.940†	153.9	33.3	0.0816 µg/L	0.0816 ppb	19:19:13
3	Tl 190.801†	-21.2	3.7	5.1463 µg/L	5.1463 ppb	19:19:33
3	U 409.014†	-6.3	47.5	4.3005 µg/L	4.3005 ppb	19:19:13
3	V 292.402†	-20.0	24.8	0.2699 µg/L	0.2699 ppb	19:19:13
3	Zn 213.857†	479.8	-9.8	-0.2409 µg/L	-0.2409 ppb	19:19:33

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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	1952594.9	102.24 %	0.864			0.84%
Sc RADIAL	55477.6	102 %	0.8			0.79%
Y 371.029	1339376.1	102.25 %	0.844			0.83%
Ag 328.068†	51.7	0.4129 µg/L	0.10471	0.4129 ppb	0.10471	25.36%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.1	0.0498 µg/L	10.13010	0.0498 ppb	10.13010	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.2	-6.1678 µg/L	5.92624	-6.1678 ppb	5.92624	96.08%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-23.7	-1.0371 µg/L	0.45878	-1.0371 ppb	0.45878	44.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.1	0.0805 µg/L	0.08826	0.0805 ppb	0.08826	109.58%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	145.3	0.0949 µg/L	0.05957	0.0949 ppb	0.05957	62.77%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.7	-1.5667 µg/L	3.70306	-1.5667 ppb	3.70306	236.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.7	0.2934 µg/L	0.27809	0.2934 ppb	0.27809	94.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.7	0.0335 µg/L	0.24267	0.0335 ppb	0.24267	724.80%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	28.8	0.6341 µg/L	0.22120	0.6341 ppb	0.22120	34.88%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-87.5	-0.6102 µg/L	0.14102	-0.6102 ppb	0.14102	23.11%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.8	7.1335 µg/L	14.11778	7.1335 ppb	14.11778	197.91%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	1.9	1.3465 µg/L	15.98731	1.3465 ppb	15.98731	>999.9%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.6	-5.9243 µg/L	14.34120	-5.9243 ppb	14.34120	242.07%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	31.2	0.1094 µg/L	0.03354	0.1094 ppb	0.03354	30.67%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.4	0.3604 µg/L	0.52901	0.3604 ppb	0.52901	146.78%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	101.2	33.329 µg/L	8.1571	33.329 ppb	8.1571	24.47%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-2.4	-0.1318 µg/L	0.39372	-0.1318 ppb	0.39372	298.69%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-3.1	-6.6846 µg/L	4.76680	-6.6846 ppb	4.76680	71.31%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-2.0	-0.5373 µg/L	0.30511	-0.5373 ppb	0.30511	56.78%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.4	1.7632 µg/L	2.87351	1.7632 ppb	2.87351	162.97%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.1	-0.1306 µg/L	6.37594	-0.1306 ppb	6.37594	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.6	2.3884 µg/L	8.34041	2.3884 ppb	8.34041	349.20%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-27.2	-5.8537 µg/L	0.68563	-5.8537 ppb	0.68563	11.71%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-0.2	-0.0130 µg/L	1.13664	-0.0130 ppb	1.13664	>999.9%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.8	0.8314 µg/L	0.90630	0.8314 ppb	0.90630	109.01%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-3.2	-0.0330 µg/L	0.13293	-0.0330 ppb	0.13293	403.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	28.0	0.0678 µg/L	0.03518	0.0678 ppb	0.03518	51.88%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.7	5.1332 µg/L	2.04457	5.1332 ppb	2.04457	39.83%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	24.2	2.1938 µg/L	1.83966	2.1938 ppb	1.83966	83.86%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	34.6	0.3762 µg/L	0.29972	0.3762 ppb	0.29972	79.67%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-6.0	-0.1478 µg/L	0.10182	-0.1478 ppb	0.10182	68.87%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.



Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:41:26

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	56419.4	56419.4	103 %		19:42:04
1	Al 396.153Radial†	6864.6	6650.3	4946.1 µg/L	4946.1 ppb	19:42:25
1	Ca 317.933Radial†	5559.4	5198.4	4894.6 µg/L	4894.6 ppb	19:42:25
1	Fe 238.204 Radial†	616.6	581.9	4942.5 µg/L	4942.5 ppb	19:42:25
1	K 766.490 Radial†	7352.0	6983.2	4963.6 µg/L	4963.6 ppb	19:42:04
1	Mg 279.077 IEC†	570.1	540.2	5030.2 µg/L	5030.2 ppb	19:42:25
1	Na 589.592 Radial†	31600.6	30025.3	9884.4 µg/L	9884.4 ppb	19:42:04
1	Sr 421.552†	48468.4	46843.8	485.59 µg/L	485.59 ppb	19:42:04
1	Sc 361.383	2003108.1	2003108.1	104.88 %		19:43:28
1	Y 371.029	1370730.2	1370730.2	104.64 %		19:43:28
1	Ag 328.068†	64726.1	62276.9	497.74 µg/L	497.74 ppb	19:43:34
1	As 188.979†	267.5	253.9	495.37 µg/L	495.37 ppb	19:43:54
1	B 249.677†	12041.2	11149.1	485.46 µg/L	485.46 ppb	19:43:34
1	Ba 233.527†	19842.7	18944.8	494.19 µg/L	494.19 ppb	19:43:34
1	Be 313.107†	766666.1	734409.3	479.43 µg/L	479.43 ppb	19:43:28
1	Cd 226.502†	18686.6	17958.6	495.39 µg/L	495.39 ppb	19:43:34
1	Co 228.616†	10595.4	10110.9	497.04 µg/L	497.04 ppb	19:43:34
1	Cr 267.716†	23720.3	22668.2	498.92 µg/L	498.92 ppb	19:43:34
1	Cu 324.752†	76984.9	70914.3	496.04 µg/L	496.04 ppb	19:43:34
1	Mn 257.610†	147751.2	141115.8	489.12 µg/L	489.12 ppb	19:43:28
1	Mo 202.031†	5026.0	4799.5	512.40 µg/L	512.40 ppb	19:43:54
1	Ni 231.604†	9826.5	9066.7	495.20 µg/L	495.20 ppb	19:43:34
1	P 214.914†	1254.6	1168.6	2461.8 µg/L	2461.8 ppb	19:43:54
1	Pb 220.353†	2050.1	1857.4	495.79 µg/L	495.79 ppb	19:43:54
1	S 181.975 Axial†	255.6	228.9	1003.0 µg/L	1003.0 ppb	19:43:54
1	Sb 206.836†	570.4	516.9	511.09 µg/L	511.09 ppb	19:43:54
1	Se 196.026†	360.0	327.4	506.74 µg/L	506.74 ppb	19:43:54
1	SiO2†	26928.3	24424.4	5259.9 µg/L	5259.9 ppb	19:43:34
1	Si 251.611†	31785.6	29992.7	2465.6 µg/L	2465.6 ppb	19:43:34
1	Sn 189.927†	1167.3	1113.9	512.34 µg/L	512.34 ppb	19:43:54
1	Ti 334.940†	210971.9	201032.6	483.25 µg/L	483.25 ppb	19:43:28
1	Tl 190.801†	351.0	358.9	506.83 µg/L	506.83 ppb	19:43:54
1	U 409.014†	5847.6	5628.9	508.64 µg/L	508.64 ppb	19:43:34
1	V 292.402†	48650.0	46429.0	501.02 µg/L	501.02 ppb	19:43:34
1	Zn 213.857†	21378.5	19907.5	493.60 µg/L	493.60 ppb	19:43:34
2	Sc RADIAL	57083.7	57083.7	105 %		19:42:30
2	Al 396.153Radial†	6804.1	6515.2	4845.3 µg/L	4845.3 ppb	19:42:51
2	Ca 317.933Radial†	5545.5	5122.6	4823.3 µg/L	4823.3 ppb	19:42:51
2	Fe 238.204 Radial†	613.4	571.9	4857.7 µg/L	4857.7 ppb	19:42:51
2	K 766.490 Radial†	7292.4	6843.5	4864.3 µg/L	4864.3 ppb	19:42:30
2	Mg 279.077 IEC†	572.7	536.3	4994.3 µg/L	4994.3 ppb	19:42:51
2	Na 589.592 Radial†	31703.2	29767.7	9799.6 µg/L	9799.6 ppb	19:42:30
2	Sr 421.552†	48760.9	46577.9	482.83 µg/L	482.83 ppb	19:42:30
2	Sc 361.383	1956478.6	1956478.6	102.44 %		19:44:02
2	Y 371.029	1338013.6	1338013.6	102.14 %		19:44:02
2	Ag 328.068†	63625.9	62673.7	500.90 µg/L	500.90 ppb	19:44:07
2	As 188.979†	268.7	261.1	509.35 µg/L	509.35 ppb	19:44:28
2	B 249.677†	11834.0	11220.4	488.63 µg/L	488.63 ppb	19:44:07
2	Ba 233.527†	19447.5	19009.9	495.89 µg/L	495.89 ppb	19:44:07
2	Be 313.107†	783080.7	767854.0	501.26 µg/L	501.26 ppb	19:44:02
2	Cd 226.502†	18262.0	17968.8	495.68 µg/L	495.68 ppb	19:44:07
2	Co 228.616†	10399.7	10160.6	499.45 µg/L	499.45 ppb	19:44:07
2	Cr 267.716†	23262.6	22760.4	500.95 µg/L	500.95 ppb	19:44:07
2	Cu 324.752†	75552.4	71265.3	498.48 µg/L	498.48 ppb	19:44:07
2	Mn 257.610†	151080.8	147723.5	511.99 µg/L	511.99 ppb	19:44:02
2	Mo 202.031†	4987.4	4876.0	520.56 µg/L	520.56 ppb	19:44:28
2	Ni 231.604†	9658.6	9126.2	498.44 µg/L	498.44 ppb	19:44:07
2	P 214.914†	1238.9	1181.7	2490.0 µg/L	2490.0 ppb	19:44:28
2	Pb 220.353†	2049.2	1903.2	508.02 µg/L	508.02 ppb	19:44:28

2	S 181.975 Axial†	249.6	228.9	1002.7 µg/L	1002.7 ppb	19:44:28
2	Sb 206.836†	564.1	523.7	517.93 µg/L	517.93 ppb	19:44:28
2	Se 196.026†	358.2	333.9	516.45 µg/L	516.45 ppb	19:44:28
2	SiO2†	26483.3	24601.9	5298.2 µg/L	5298.2 ppb	19:44:07
2	Si 251.611†	31145.7	30090.4	2473.6 µg/L	2473.6 ppb	19:44:07
2	Sn 189.927†	1159.9	1133.1	521.19 µg/L	521.19 ppb	19:44:28
2	Ti 334.940†	215458.6	210206.4	505.32 µg/L	505.32 ppb	19:44:02
2	Tl 190.801†	341.6	357.7	505.37 µg/L	505.37 ppb	19:44:28
2	U 409.014†	5729.0	5646.0	510.20 µg/L	510.20 ppb	19:44:07
2	V 292.402†	47728.9	46635.3	503.28 µg/L	503.28 ppb	19:44:07
2	Zn 213.857†	20977.4	20001.8	495.95 µg/L	495.95 ppb	19:44:07
3	Sc RADIAL	57202.6	57202.6	105 %		19:42:56
3	Al 396.153Radial†	6841.2	6537.0	4863.4 µg/L	4863.4 ppb	19:43:17
3	Ca 317.933Radial†	5579.2	5143.7	4843.1 µg/L	4843.1 ppb	19:43:17
3	Fe 238.204 Radial†	619.6	576.6	4896.7 µg/L	4896.7 ppb	19:43:17
3	K 766.490 Radial†	7296.8	6833.1	4856.9 µg/L	4856.9 ppb	19:42:56
3	Mg 279.077 IEC†	570.0	532.5	4957.7 µg/L	4957.7 ppb	19:43:17
3	Na 589.592 Radial†	31651.4	29655.3	9762.6 µg/L	9762.6 ppb	19:42:56
3	Sr 421.552†	48633.6	46359.5	480.57 µg/L	480.57 ppb	19:42:56
3	Sc 361.383	1968483.8	1968483.8	103.07 %		19:44:35
3	Y 371.029	1347474.9	1347474.9	102.87 %		19:44:35
3	Ag 328.068†	60287.4	59055.9	471.87 µg/L	471.87 ppb	19:44:40
3	As 188.979†	225.2	217.3	423.99 µg/L	423.99 ppb	19:45:01
3	B 249.677†	11150.7	10487.1	456.47 µg/L	456.47 ppb	19:44:40
3	Ba 233.527†	17981.9	17472.2	455.76 µg/L	455.76 ppb	19:44:40
3	Be 313.107†	731612.9	713257.7	465.62 µg/L	465.62 ppb	19:44:35
3	Cd 226.502†	16841.2	16481.6	454.60 µg/L	454.60 ppb	19:44:40
3	Co 228.616†	9509.8	9235.4	453.92 µg/L	453.92 ppb	19:44:40
3	Cr 267.716†	20728.9	20163.7	443.80 µg/L	443.80 ppb	19:44:40
3	Cu 324.752†	69473.8	64918.0	454.15 µg/L	454.15 ppb	19:44:40
3	Mn 257.610†	141487.4	137516.4	476.65 µg/L	476.65 ppb	19:44:35
3	Mo 202.031†	4166.6	4050.0	432.41 µg/L	432.41 ppb	19:45:01
3	Ni 231.604†	8868.9	8302.5	453.46 µg/L	453.46 ppb	19:44:40
3	P 214.914†	1068.6	1009.2	2122.7 µg/L	2122.7 ppb	19:45:01
3	Pb 220.353†	1791.6	1641.0	437.94 µg/L	437.94 ppb	19:45:01
3	S 181.975 Axial†	225.5	204.0	893.82 µg/L	893.82 ppb	19:45:01
3	Sb 206.836†	488.9	447.4	442.01 µg/L	442.01 ppb	19:45:01
3	Se 196.026†	320.0	294.7	456.84 µg/L	456.84 ppb	19:45:01
3	SiO2†	24830.7	22841.0	4918.9 µg/L	4918.9 ppb	19:44:40
3	Si 251.611†	29062.2	27883.6	2292.2 µg/L	2292.2 ppb	19:44:40
3	Sn 189.927†	952.2	924.7	425.35 µg/L	425.35 ppb	19:45:01
3	Ti 334.940†	200541.4	194450.9	467.42 µg/L	467.42 ppb	19:44:35
3	Tl 190.801†	313.2	328.1	463.67 µg/L	463.67 ppb	19:45:01
3	U 409.014†	5147.7	5048.0	456.05 µg/L	456.05 ppb	19:44:40
3	V 292.402†	43287.8	42042.5	453.47 µg/L	453.47 ppb	19:44:40
3	Zn 213.857†	19269.8	18220.2	451.73 µg/L	451.73 ppb	19:44:40

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1976023.5	103.47 %	1.268			1.23%
Sc RADIAL	56901.9	104 %	0.8			0.74%
Y 371.029	1352072.9	103.22 %	1.285			1.25%
Ag 328.068†	61335.5	490.17 µg/L	15.926	490.17 ppb	15.926	3.25%
QC value within limits for Ag 328.068 Recovery = 98.03%						
Al 396.153Radial†	6567.5	4884.9 µg/L	53.78	4884.9 ppb	53.78	1.10%
QC value within limits for Al 396.153Radial Recovery = 97.70%						
As 188.979†	244.1	476.24 µg/L	45.784	476.24 ppb	45.784	9.61%
QC value within limits for As 188.979 Recovery = 95.25%						
B 249.677†	10952.2	476.85 µg/L	17.725	476.85 ppb	17.725	3.72%
QC value within limits for B 249.677 Recovery = 95.37%						
Ba 233.527†	18475.6	481.94 µg/L	22.693	481.94 ppb	22.693	4.71%
QC value within limits for Ba 233.527 Recovery = 96.39%						
Be 313.107†	738507.0	482.10 µg/L	17.970	482.10 ppb	17.970	3.73%
QC value within limits for Be 313.107 Recovery = 96.42%						
Ca 317.933Radial†	5154.9	4853.7 µg/L	36.83	4853.7 ppb	36.83	0.76%
QC value within limits for Ca 317.933Radial Recovery = 97.07%						
Cd 226.502†	17469.7	481.89 µg/L	23.632	481.89 ppb	23.632	4.90%
QC value within limits for Cd 226.502 Recovery = 96.38%						
Co 228.616†	9835.6	483.47 µg/L	25.623	483.47 ppb	25.623	5.30%

QC value within limits for Co 228.616 Recovery = 96.69%							
Cr 267.716†	21864.1	481.23 µg/L	32.425	481.23 ppb	32.425	6.74%	
QC value within limits for Cr 267.716 Recovery = 96.25%							
Cu 324.752†	69032.5	482.89 µg/L	24.920	482.89 ppb	24.920	5.16%	
QC value within limits for Cu 324.752 Recovery = 96.58%							
Fe 238.204 Radial†	576.8	4899.0 µg/L	42.44	4899.0 ppb	42.44	0.87%	
QC value within limits for Fe 238.204 Radial Recovery = 97.98%							
K 766.490 Radial†	6886.6	4894.9 µg/L	59.56	4894.9 ppb	59.56	1.22%	
QC value within limits for K 766.490 Radial Recovery = 97.90%							
Mg 279.077 IEC†	536.3	4994.1 µg/L	36.28	4994.1 ppb	36.28	0.73%	
QC value within limits for Mg 279.077 IEC Recovery = 99.88%							
Mn 257.610†	142118.5	492.59 µg/L	17.923	492.59 ppb	17.923	3.64%	
QC value within limits for Mn 257.610 Recovery = 98.52%							
Mo 202.031†	4575.2	488.46 µg/L	48.709	488.46 ppb	48.709	9.97%	
QC value within limits for Mo 202.031 Recovery = 97.69%							
Na 589.592 Radial†	29816.1	9815.6 µg/L	62.45	9815.6 ppb	62.45	0.64%	
QC value within limits for Na 589.592 Radial Recovery = 98.16%							
Ni 231.604†	8831.8	482.37 µg/L	25.085	482.37 ppb	25.085	5.20%	
QC value within limits for Ni 231.604 Recovery = 96.47%							
P 214.914†	1119.8	2358.2 µg/L	204.40	2358.2 ppb	204.40	8.67%	
QC value within limits for P 214.914 Recovery = 94.33%							
Pb 220.353†	1800.5	480.58 µg/L	37.434	480.58 ppb	37.434	7.79%	
QC value within limits for Pb 220.353 Recovery = 96.12%							
S 181.975 Axial†	220.6	966.52 µg/L	62.959	966.52 ppb	62.959	6.51%	
QC value within limits for S 181.975 Axial Recovery = 96.65%							
Sb 206.836†	496.0	490.35 µg/L	41.996	490.35 ppb	41.996	8.56%	
QC value within limits for Sb 206.836 Recovery = 98.07%							
Se 196.026†	318.6	493.35 µg/L	31.983	493.35 ppb	31.983	6.48%	
QC value within limits for Se 196.026 Recovery = 98.67%							
SiO2†	23955.8	5159.0 µg/L	208.79	5159.0 ppb	208.79	4.05%	
QC value within limits for SiO2 Recovery = 96.48%							
Si 251.611†	29322.2	2410.4 µg/L	102.50	2410.4 ppb	102.50	4.25%	
QC value within limits for Si 251.611 Recovery = 96.42%							
Sn 189.927†	1057.2	486.29 µg/L	52.962	486.29 ppb	52.962	10.89%	
QC value within limits for Sn 189.927 Recovery = 97.26%							
Sr 421.552†	46593.7	483.00 µg/L	2.514	483.00 ppb	2.514	0.52%	
QC value within limits for Sr 421.552 Recovery = 96.60%							
Ti 334.940†	201896.6	485.33 µg/L	19.033	485.33 ppb	19.033	3.92%	
QC value within limits for Ti 334.940 Recovery = 97.07%							
Tl 190.801†	348.3	491.96 µg/L	24.505	491.96 ppb	24.505	4.98%	
QC value within limits for Tl 190.801 Recovery = 98.39%							
U 409.014†	5441.0	491.63 µg/L	30.821	491.63 ppb	30.821	6.27%	
QC value within limits for U 409.014 Recovery = 98.33%							
V 292.402†	45035.6	485.92 µg/L	28.129	485.92 ppb	28.129	5.79%	
QC value within limits for V 292.402 Recovery = 97.18%							
Zn 213.857†	19376.5	480.43 µg/L	24.881	480.43 ppb	24.881	5.18%	
QC value within limits for Zn 213.857 Recovery = 96.09%							
All analyte(s) passed QC.							

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 19:45:10

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	56376.8	56376.8	103 %		19:45:43
1	Al 396.153Radial†	-19.0	-8.3	-6.1741 µg/L	-6.1741 ppb	19:45:43
1	Ca 317.933Radial†	190.5	5.3	4.9933 µg/L	4.9933 ppb	19:46:03
1	Fe 238.204 Radial†	14.9	-0.1	-0.5495 µg/L	-0.5495 ppb	19:46:03
1	K 766.490 Radial†	145.1	12.1	8.5950 µg/L	8.5950 ppb	19:45:43
1	Mg 279.077 IEC†	10.6	-1.0	-9.5449 µg/L	-9.5449 ppb	19:46:03
1	Na 589.592 Radial†	582.4	21.9	7.2091 µg/L	7.2091 ppb	19:45:43
1	Sr 421.552†	18.5	-21.6	-0.2243 µg/L	-0.2243 ppb	19:45:43
1	Sc 361.383	1992362.0	1992362.0	104.32 %		19:47:05
1	Y 371.029	1368353.4	1368353.4	104.46 %		19:47:05
1	Ag 328.068†	-598.5	-9.1	-0.0730 µg/L	-0.0730 ppb	19:47:10
1	As 188.979†	-0.0	-1.2	-2.2711 µg/L	-2.2711 ppb	19:47:31
1	B 249.677†	346.6	0.7	0.0326 µg/L	0.0326 ppb	19:47:31
1	Ba 233.527†	-24.2	2.9	0.0744 µg/L	0.0744 ppb	19:47:31
1	Be 313.107†	-3339.3	239.4	0.1563 µg/L	0.1563 ppb	19:47:10
1	Cd 226.502†	-124.4	22.9	0.6311 µg/L	0.6311 ppb	19:47:31
1	Co 228.616†	-16.5	-7.0	-0.3445 µg/L	-0.3445 ppb	19:47:31
1	Cr 267.716†	-47.2	7.2	0.1575 µg/L	0.1575 ppb	19:47:31
1	Cu 324.752†	2430.9	-155.9	-1.0892 µg/L	-1.0892 ppb	19:47:10
1	Mn 257.610†	-240.7	13.4	0.0467 µg/L	0.0467 ppb	19:47:31
1	Mo 202.031†	-8.3	-0.4	-0.0415 µg/L	-0.0415 ppb	19:47:31
1	Ni 231.604†	297.2	-17.3	-0.9473 µg/L	-0.9473 ppb	19:47:31
1	P 214.914†	35.0	6.0	12.897 µg/L	12.897 ppb	19:47:31
1	Pb 220.353†	95.0	-6.2	-1.6460 µg/L	-1.6460 ppb	19:47:31
1	S 181.975 Axial†	14.6	-0.8	-3.7140 µg/L	-3.7140 ppb	19:47:31
1	Sb 206.836†	19.5	-8.3	-8.1804 µg/L	-8.1804 ppb	19:47:31
1	Se 196.026†	15.6	-0.9	-1.2950 µg/L	-1.2950 ppb	19:47:31
1	SiO2†	1248.6	-53.2	-11.446 µg/L	-11.446 ppb	19:47:10
1	Si 251.611†	306.0	-19.6	-1.6096 µg/L	-1.6096 ppb	19:47:31
1	Sn 189.927†	-6.1	-5.0	-2.2944 µg/L	-2.2944 ppb	19:47:31
1	Ti 334.940†	214.1	89.1	0.2152 µg/L	0.2152 ppb	19:47:10
1	Tl 190.801†	-21.4	3.7	5.2299 µg/L	5.2299 ppb	19:47:31
1	U 409.014†	10.3	63.5	5.7486 µg/L	5.7486 ppb	19:47:10
1	V 292.402†	-52.5	-6.1	-0.0596 µg/L	-0.0596 ppb	19:47:10
1	Zn 213.857†	478.7	-16.6	-0.4092 µg/L	-0.4092 ppb	19:47:31
2	Sc RADIAL	56044.6	56044.6	103 %		19:46:09
2	Al 396.153Radial†	-6.3	4.0	2.9768 µg/L	2.9768 ppb	19:46:09
2	Ca 317.933Radial†	183.8	-0.2	-0.1847 µg/L	-0.1847 ppb	19:46:29
2	Fe 238.204 Radial†	14.3	-0.6	-4.7213 µg/L	-4.7213 ppb	19:46:29
2	K 766.490 Radial†	167.1	34.3	24.398 µg/L	24.398 ppb	19:46:09
2	Mg 279.077 IEC†	11.1	-0.4	-4.0659 µg/L	-4.0659 ppb	19:46:29
2	Na 589.592 Radial†	618.2	60.1	19.792 µg/L	19.792 ppb	19:46:09
2	Sr 421.552†	69.0	27.6	0.2866 µg/L	0.2866 ppb	19:46:09
2	Sc 361.383	1989518.4	1989518.4	104.17 %		19:47:37
2	Y 371.029	1365606.7	1365606.7	104.25 %		19:47:37
2	Ag 328.068†	-547.2	39.3	0.3111 µg/L	0.3111 ppb	19:47:43
2	As 188.979†	-3.9	-4.9	-9.5988 µg/L	-9.5988 ppb	19:48:03
2	B 249.677†	322.6	-21.8	-0.9478 µg/L	-0.9478 ppb	19:48:03
2	Ba 233.527†	-14.9	11.7	0.3048 µg/L	0.3048 ppb	19:48:03
2	Be 313.107†	-3365.6	209.6	0.1369 µg/L	0.1369 ppb	19:47:43
2	Cd 226.502†	-135.4	12.1	0.3352 µg/L	0.3352 ppb	19:48:03
2	Co 228.616†	-12.8	-3.4	-0.1669 µg/L	-0.1669 ppb	19:48:03
2	Cr 267.716†	-34.1	19.6	0.4310 µg/L	0.4310 ppb	19:48:03
2	Cu 324.752†	2392.5	-189.4	-1.3239 µg/L	-1.3239 ppb	19:47:43
2	Mn 257.610†	-233.6	19.8	0.0682 µg/L	0.0682 ppb	19:48:03
2	Mo 202.031†	1.3	8.8	0.9388 µg/L	0.9388 ppb	19:48:03
2	Ni 231.604†	308.4	-6.2	-0.3371 µg/L	-0.3371 ppb	19:48:03
2	P 214.914†	38.1	8.9	19.315 µg/L	19.315 ppb	19:48:03
2	Pb 220.353†	86.4	-14.2	-3.7968 µg/L	-3.7968 ppb	19:48:03

2	S 181.975 Axial†	18.4	2.9	12.528 µg/L	12.528 ppb	19:48:03
2	Sb 206.836†	29.9	1.8	1.7421 µg/L	1.7421 ppb	19:48:03
2	Se 196.026†	17.4	0.9	1.3573 µg/L	1.3573 ppb	19:48:03
2	SiO2†	1243.9	-56.0	-12.052 µg/L	-12.052 ppb	19:47:43
2	Si 251.611†	297.9	-26.9	-2.2125 µg/L	-2.2125 ppb	19:48:03
2	Sn 189.927†	-3.7	-2.7	-1.2451 µg/L	-1.2451 ppb	19:48:03
2	Ti 334.940†	113.7	-7.0	-0.0165 µg/L	-0.0165 ppb	19:47:43
2	Tl 190.801†	-21.7	3.4	4.7734 µg/L	4.7734 ppb	19:48:03
2	U 409.014†	-37.3	17.8	1.6161 µg/L	1.6161 ppb	19:47:43
2	V 292.402†	-50.7	-4.5	-0.0381 µg/L	-0.0381 ppb	19:47:43
2	Zn 213.857†	476.3	-18.3	-0.4528 µg/L	-0.4528 ppb	19:48:03
3	Sc RADIAL	56131.1	56131.1	103 %		19:46:34
3	Al 396.153Radial†	10.7	20.5	15.284 µg/L	15.284 ppb	19:46:34
3	Ca 317.933Radial†	181.6	-2.5	-2.4004 µg/L	-2.4004 ppb	19:46:55
3	Fe 238.204 Radial†	13.6	-1.3	-10.669 µg/L	-10.669 ppb	19:46:55
3	K 766.490 Radial†	173.8	40.6	28.846 µg/L	28.846 ppb	19:46:34
3	Mg 279.077 IEC†	10.5	-1.0	-9.5132 µg/L	-9.5132 ppb	19:46:55
3	Na 589.592 Radial†	587.6	29.4	9.6947 µg/L	9.6947 ppb	19:46:34
3	Sr 421.552†	41.1	0.4	0.0044 µg/L	0.0044 ppb	19:46:34
3	Sc 361.383	1993278.2	1993278.2	104.37 %		19:48:09
3	Y 371.029	1367625.5	1367625.5	104.41 %		19:48:09
3	Ag 328.068†	-556.8	31.0	0.2472 µg/L	0.2472 ppb	19:48:15
3	As 188.979†	0.5	-0.7	-1.3924 µg/L	-1.3924 ppb	19:48:35
3	B 249.677†	311.8	-32.7	-1.4217 µg/L	-1.4217 ppb	19:48:35
3	Ba 233.527†	-24.9	2.1	0.0565 µg/L	0.0565 ppb	19:48:35
3	Be 313.107†	-3343.9	236.6	0.1544 µg/L	0.1544 ppb	19:48:15
3	Cd 226.502†	-139.6	8.3	0.2308 µg/L	0.2308 ppb	19:48:35
3	Co 228.616†	-13.5	-4.1	-0.2026 µg/L	-0.2026 ppb	19:48:35
3	Cr 267.716†	-29.8	23.8	0.5241 µg/L	0.5241 ppb	19:48:35
3	Cu 324.752†	2398.4	-188.1	-1.3155 µg/L	-1.3155 ppb	19:48:15
3	Mn 257.610†	-235.9	18.1	0.0616 µg/L	0.0616 ppb	19:48:35
3	Mo 202.031†	-7.4	0.5	0.0513 µg/L	0.0513 ppb	19:48:35
3	Ni 231.604†	308.0	-7.0	-0.3852 µg/L	-0.3852 ppb	19:48:35
3	P 214.914†	25.9	-2.8	-5.9057 µg/L	-5.9057 ppb	19:48:35
3	Pb 220.353†	95.4	-5.8	-1.5343 µg/L	-1.5343 ppb	19:48:35
3	S 181.975 Axial†	16.1	0.6	2.8080 µg/L	2.8080 ppb	19:48:35
3	Sb 206.836†	23.7	-4.2	-4.1849 µg/L	-4.1849 ppb	19:48:35
3	Se 196.026†	19.8	3.2	4.8107 µg/L	4.8107 ppb	19:48:35
3	SiO2†	1250.9	-51.4	-11.079 µg/L	-11.079 ppb	19:48:15
3	Si 251.611†	298.1	-27.3	-2.2426 µg/L	-2.2426 ppb	19:48:35
3	Sn 189.927†	2.3	3.1	1.4084 µg/L	1.4084 ppb	19:48:35
3	Ti 334.940†	175.4	51.9	0.1256 µg/L	0.1256 ppb	19:48:15
3	Tl 190.801†	-26.8	-1.4	-1.9510 µg/L	-1.9510 ppb	19:48:35
3	U 409.014†	-48.8	6.9	0.6237 µg/L	0.6237 ppb	19:48:15
3	V 292.402†	-16.2	28.7	0.3071 µg/L	0.3071 ppb	19:48:15
3	Zn 213.857†	476.7	-18.8	-0.4644 µg/L	-0.4644 ppb	19:48:35

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1991719.6	104.29 %	0.103			0.10%
Sc RADIAL	56184.2	103 %	0.3			0.31%
Y 371.029	1367195.2	104.37 %	0.109			0.10%
Ag 328.068†	20.4	0.1617 µg/L	0.20583	0.1617 ppb	0.20583	127.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.4	4.0289 µg/L	10.76761	4.0289 ppb	10.76761	267.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.3	-4.4208 µg/L	4.50578	-4.4208 ppb	4.50578	101.92%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-17.9	-0.7790 µg/L	0.74170	-0.7790 ppb	0.74170	95.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.6	0.1452 µg/L	0.13851	0.1452 ppb	0.13851	95.38%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	228.6	0.1492 µg/L	0.01069	0.1492 ppb	0.01069	7.17%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.9	0.8027 µg/L	3.79444	0.8027 ppb	3.79444	472.69%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.5	0.3990 µg/L	0.20768	0.3990 ppb	0.20768	52.05%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.8	-0.2380 µg/L	0.09392	-0.2380 ppb	0.09392	39.46%

Cr	267.716†	16.9	0.3709 µg/L	0.19057	0.3709 ppb	0.19057	51.38%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cu	324.752†	-177.8	-1.2429 µg/L	0.13310	-1.2429 ppb	0.13310	10.71%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.6	-5.3132 µg/L	5.08561	-5.3132 ppb	5.08561	95.72%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	29.0	20.613 µg/L	10.6427	20.613 ppb	10.6427	51.63%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.8	-7.7080 µg/L	3.15418	-7.7080 ppb	3.15418	40.92%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	17.1	0.0589 µg/L	0.01100	0.0589 ppb	0.01100	18.69%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	3.0	0.3162 µg/L	0.54117	0.3162 ppb	0.54117	171.13%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	37.2	12.232 µg/L	6.6641	12.232 ppb	6.6641	54.48%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-10.2	-0.5566 µg/L	0.33928	-0.5566 ppb	0.33928	60.96%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	4.0	8.7689 µg/L	13.10740	8.7689 ppb	13.10740	149.48%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-8.7	-2.3257 µg/L	1.27525	-2.3257 ppb	1.27525	54.83%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	0.9	3.8739 µg/L	8.17318	3.8739 ppb	8.17318	210.98%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-3.6	-3.5411 µg/L	4.99248	-3.5411 ppb	4.99248	140.99%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	1.1	1.6243 µg/L	3.06159	1.6243 ppb	3.06159	188.48%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-53.5	-11.526 µg/L	0.4912	-11.526 ppb	0.4912	4.26%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-24.6	-2.0216 µg/L	0.35706	-2.0216 ppb	0.35706	17.66%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-1.5	-0.7104 µg/L	1.90848	-0.7104 ppb	1.90848	268.66%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	2.1	0.0222 µg/L	0.25591	0.0222 ppb	0.25591	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	44.7	0.1081 µg/L	0.11683	0.1081 ppb	0.11683	108.05%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.9	2.6841 µg/L	4.02062	2.6841 ppb	4.02062	149.79%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	29.4	2.6628 µg/L	2.71803	2.6628 ppb	2.71803	102.07%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	6.0	0.0698 µg/L	0.20578	0.0698 ppb	0.20578	294.74%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-17.9	-0.4421 µg/L	0.02911	-0.4421 ppb	0.02911	6.58%
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: 7

Date Collected: 2/11/2010 20:06:44

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	56942.5	56942.5	104 %		20:07:20
1	Al 396.153Radial†	6750.2	6479.6	4819.0 µg/L	4819.0 ppb	20:07:41
1	Ca 317.933Radial†	5453.5	5047.5	4752.6 µg/L	4752.6 ppb	20:07:41
1	Fe 238.204 Radial†	600.4	561.0	4764.9 µg/L	4764.9 ppb	20:07:41
1	K 766.490 Radial†	7140.8	6715.4	4773.3 µg/L	4773.3 ppb	20:07:20
1	Mg 279.077 IEC†	558.8	524.3	4882.8 µg/L	4882.8 ppb	20:07:41
1	Na 589.592 Radial†	31379.2	29532.3	9722.1 µg/L	9722.1 ppb	20:07:20
1	Sr 421.552†	47923.4	45890.8	475.71 µg/L	475.71 ppb	20:07:20
1	Sc 361.383	1997110.3	1997110.3	104.57 %		20:08:44
1	Y 371.029	1366245.8	1366245.8	104.30 %		20:08:44
1	Ag 328.068†	63028.6	60838.9	486.24 µg/L	486.24 ppb	20:08:50
1	As 188.979†	264.1	251.4	490.37 µg/L	490.37 ppb	20:09:10
1	B 249.677†	11700.4	10857.6	472.80 µg/L	472.80 ppb	20:08:50
1	Ba 233.527†	19297.5	18480.3	482.07 µg/L	482.07 ppb	20:08:50
1	Be 313.107†	767522.7	737423.7	481.39 µg/L	481.39 ppb	20:08:44
1	Cd 226.502†	18128.7	17478.6	482.15 µg/L	482.15 ppb	20:08:50
1	Co 228.616†	10328.3	9885.8	485.96 µg/L	485.96 ppb	20:08:50
1	Cr 267.716†	23066.4	22110.8	486.65 µg/L	486.65 ppb	20:08:50
1	Cu 324.752†	74922.7	69162.6	483.78 µg/L	483.78 ppb	20:08:50
1	Mn 257.610†	148210.1	141977.7	492.09 µg/L	492.09 ppb	20:08:44
1	Mo 202.031†	4970.4	4760.7	508.25 µg/L	508.25 ppb	20:09:10
1	Ni 231.604†	9599.0	8877.3	484.85 µg/L	484.85 ppb	20:08:50
1	P 214.914†	1239.8	1158.0	2440.4 µg/L	2440.4 ppb	20:09:10
1	Pb 220.353†	2032.4	1846.4	492.88 µg/L	492.88 ppb	20:09:10
1	S 181.975 Axial†	252.7	226.8	993.68 µg/L	993.68 ppb	20:09:10
1	Sb 206.836†	559.2	507.8	502.18 µg/L	502.18 ppb	20:09:10
1	Se 196.026†	353.9	322.6	499.11 µg/L	499.11 ppb	20:09:10
1	SiO2†	26266.3	23868.5	5140.2 µg/L	5140.2 ppb	20:08:50
1	Si 251.611†	30881.9	29219.5	2402.0 µg/L	2402.0 ppb	20:08:50
1	Sn 189.927†	1160.9	1111.0	511.04 µg/L	511.04 ppb	20:09:10
1	Ti 334.940†	211075.5	201735.7	484.95 µg/L	484.95 ppb	20:08:44
1	Tl 190.801†	335.9	345.5	488.04 µg/L	488.04 ppb	20:09:10
1	U 409.014†	5659.0	5465.3	493.86 µg/L	493.86 ppb	20:08:50
1	V 292.402†	47264.8	45243.6	488.29 µg/L	488.29 ppb	20:08:50
1	Zn 213.857†	20837.6	19451.4	482.30 µg/L	482.30 ppb	20:08:50
2	Sc RADIAL	56409.7	56409.7	103 %		20:07:46
2	Al 396.153Radial†	6758.8	6549.0	4870.9 µg/L	4870.9 ppb	20:08:07
2	Ca 317.933Radial†	5494.9	5136.9	4836.7 µg/L	4836.7 ppb	20:08:07
2	Fe 238.204 Radial†	605.0	570.8	4848.5 µg/L	4848.5 ppb	20:08:07
2	K 766.490 Radial†	7175.4	6813.5	4843.0 µg/L	4843.0 ppb	20:07:46
2	Mg 279.077 IEC†	565.5	535.8	4989.7 µg/L	4989.7 ppb	20:08:07
2	Na 589.592 Radial†	31167.2	29611.2	9748.1 µg/L	9748.1 ppb	20:07:46
2	Sr 421.552†	47693.8	46102.5	477.91 µg/L	477.91 ppb	20:07:46
2	Sc 361.383	1996473.0	1996473.0	104.54 %		20:09:17
2	Y 371.029	1365976.8	1365976.8	104.28 %		20:09:17
2	Ag 328.068†	63356.2	61171.5	488.90 µg/L	488.90 ppb	20:09:23
2	As 188.979†	265.4	252.7	492.96 µg/L	492.96 ppb	20:09:43
2	B 249.677†	11790.3	10947.2	476.67 µg/L	476.67 ppb	20:09:23
2	Ba 233.527†	19374.2	18559.5	484.14 µg/L	484.14 ppb	20:09:23
2	Be 313.107†	761432.1	731831.7	477.74 µg/L	477.74 ppb	20:09:17
2	Cd 226.502†	18272.2	17621.4	486.09 µg/L	486.09 ppb	20:09:23
2	Co 228.616†	10339.5	9899.7	486.64 µg/L	486.64 ppb	20:09:23
2	Cr 267.716†	23187.0	22233.3	489.35 µg/L	489.35 ppb	20:09:23
2	Cu 324.752†	75285.0	69532.0	486.37 µg/L	486.37 ppb	20:09:23
2	Mn 257.610†	147018.2	140882.8	488.30 µg/L	488.30 ppb	20:09:17
2	Mo 202.031†	4907.1	4701.7	501.95 µg/L	501.95 ppb	20:09:43
2	Ni 231.604†	9622.8	8903.0	486.25 µg/L	486.25 ppb	20:09:23
2	P 214.914†	1220.2	1139.7	2400.7 µg/L	2400.7 ppb	20:09:43
2	Pb 220.353†	2020.4	1835.5	489.96 µg/L	489.96 ppb	20:09:43

2	S 181.975 Axial†	249.1	223.5	979.20 µg/L	979.20 ppb	20:09:43
2	Sb 206.836†	560.4	509.1	503.33 µg/L	503.33 ppb	20:09:43
2	Se 196.026†	351.0	319.9	495.14 µg/L	495.14 ppb	20:09:43
2	SiO2†	26327.8	23935.4	5154.6 µg/L	5154.6 ppb	20:09:23
2	Si 251.611†	31017.5	29358.7	2413.4 µg/L	2413.4 ppb	20:09:23
2	Sn 189.927†	1146.8	1097.9	505.00 µg/L	505.00 ppb	20:09:43
2	Ti 334.940†	209321.5	200122.3	481.06 µg/L	481.06 ppb	20:09:17
2	Tl 190.801†	343.4	352.8	498.21 µg/L	498.21 ppb	20:09:43
2	U 409.014†	5590.8	5401.8	488.10 µg/L	488.10 ppb	20:09:23
2	V 292.402†	47490.4	45473.8	490.70 µg/L	490.70 ppb	20:09:23
2	Zn 213.857†	20893.3	19511.1	483.77 µg/L	483.77 ppb	20:09:23
3	Sc RADIAL	57472.2	57472.2	105 %		20:08:12
3	Al 396.153Radial†	6740.6	6410.8	4769.5 µg/L	4769.5 ppb	20:08:33
3	Ca 317.933Radial†	5456.3	5002.0	4709.7 µg/L	4709.7 ppb	20:08:33
3	Fe 238.204 Radial†	608.4	563.2	4782.9 µg/L	4782.9 ppb	20:08:33
3	K 766.490 Radial†	7228.0	6735.1	4787.3 µg/L	4787.3 ppb	20:08:12
3	Mg 279.077 IEC†	560.3	520.7	4848.2 µg/L	4848.2 ppb	20:08:33
3	Na 589.592 Radial†	31427.6	29301.1	9646.0 µg/L	9646.0 ppb	20:08:12
3	Sr 421.552†	48320.2	45844.2	475.23 µg/L	475.23 ppb	20:08:12
3	Sc 361.383	1990939.7	1990939.7	104.25 %		20:09:51
3	Y 371.029	1362789.8	1362789.8	104.04 %		20:09:51
3	Ag 328.068†	59813.6	57941.7	462.97 µg/L	462.97 ppb	20:09:56
3	As 188.979†	228.8	218.3	425.89 µg/L	425.89 ppb	20:10:17
3	B 249.677†	11049.5	10268.0	446.94 µg/L	446.94 ppb	20:09:56
3	Ba 233.527†	17851.9	17150.7	447.37 µg/L	447.37 ppb	20:09:56
3	Be 313.107†	719449.8	693583.9	452.78 µg/L	452.78 ppb	20:09:51
3	Cd 226.502†	16778.6	16237.3	447.87 µg/L	447.87 ppb	20:09:56
3	Co 228.616†	9445.5	9069.5	445.78 µg/L	445.78 ppb	20:09:56
3	Cr 267.716†	20616.8	19829.4	436.45 µg/L	436.45 ppb	20:09:56
3	Cu 324.752†	68837.1	63547.0	444.55 µg/L	444.55 ppb	20:09:56
3	Mn 257.610†	138989.4	133571.8	462.98 µg/L	462.98 ppb	20:09:51
3	Mo 202.031†	4137.7	3976.7	424.58 µg/L	424.58 ppb	20:10:17
3	Ni 231.604†	8822.5	8161.0	445.73 µg/L	445.73 ppb	20:09:56
3	P 214.914†	1060.6	989.8	2082.0 µg/L	2082.0 ppb	20:10:17
3	Pb 220.353†	1778.7	1609.0	429.41 µg/L	429.41 ppb	20:10:17
3	S 181.975 Axial†	221.0	197.1	863.74 µg/L	863.74 ppb	20:10:17
3	Sb 206.836†	483.5	436.9	431.61 µg/L	431.61 ppb	20:10:17
3	Se 196.026†	316.1	287.4	445.59 µg/L	445.59 ppb	20:10:17
3	SiO2†	24611.0	22358.5	4815.0 µg/L	4815.0 ppb	20:09:56
3	Si 251.611†	28930.7	27439.4	2255.7 µg/L	2255.7 ppb	20:09:56
3	Sn 189.927†	943.6	906.1	416.76 µg/L	416.76 ppb	20:10:17
3	Ti 334.940†	196865.3	188730.0	453.67 µg/L	453.67 ppb	20:09:51
3	Tl 190.801†	309.3	321.0	453.52 µg/L	453.52 ppb	20:10:17
3	U 409.014†	5049.6	4897.5	442.45 µg/L	442.45 ppb	20:09:56
3	V 292.402†	42971.8	41265.5	445.08 µg/L	445.08 ppb	20:09:56
3	Zn 213.857†	19124.6	17870.0	443.04 µg/L	443.04 ppb	20:09:56

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Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1994841.0	104.45 %	0.178			0.17%
Sc RADIAL	56941.5	104 %	1.0			0.93%
Y 371.029	1365004.1	104.21 %	0.147			0.14%
Ag 328.068†	59984.0	479.37 µg/L	14.264	479.37 ppb	14.264	2.98%
QC value within limits for Ag 328.068 Recovery = 95.87%						
Al 396.153Radial†	6479.8	4819.8 µg/L	50.70	4819.8 ppb	50.70	1.05%
QC value within limits for Al 396.153Radial Recovery = 96.40%						
As 188.979†	240.8	469.74 µg/L	37.997	469.74 ppb	37.997	8.09%
QC value within limits for As 188.979 Recovery = 93.95%						
B 249.677†	10690.9	465.47 µg/L	16.165	465.47 ppb	16.165	3.47%
QC value within limits for B 249.677 Recovery = 93.09%						
Ba 233.527†	18063.5	471.19 µg/L	20.654	471.19 ppb	20.654	4.38%
QC value within limits for Ba 233.527 Recovery = 94.24%						
Be 313.107†	720946.5	470.64 µg/L	15.576	470.64 ppb	15.576	3.31%
QC value within limits for Be 313.107 Recovery = 94.13%						
Ca 317.933Radial†	5062.2	4766.3 µg/L	64.62	4766.3 ppb	64.62	1.36%
QC value within limits for Ca 317.933Radial Recovery = 95.33%						
Cd 226.502†	17112.5	472.04 µg/L	21.023	472.04 ppb	21.023	4.45%
QC value within limits for Cd 226.502 Recovery = 94.41%						
Co 228.616†	9618.4	472.79 µg/L	23.399	472.79 ppb	23.399	4.95%



QC value within limits for Co 228.616 Recovery = 94.56%							
Cr	267.716†	21391.1	470.82 µg/L	29.796	470.82 ppb	29.796	6.33%
QC value within limits for Cr 267.716 Recovery = 94.16%							
Cu	324.752†	67413.9	471.57 µg/L	23.430	471.57 ppb	23.430	4.97%
QC value within limits for Cu 324.752 Recovery = 94.31%							
Fe	238.204 Radial†	565.0	4798.8 µg/L	43.99	4798.8 ppb	43.99	0.92%
QC value within limits for Fe 238.204 Radial Recovery = 95.98%							
K	766.490 Radial†	6754.7	4801.2 µg/L	36.89	4801.2 ppb	36.89	0.77%
QC value within limits for K 766.490 Radial Recovery = 96.02%							
Mg	279.077 IEC†	527.0	4906.9 µg/L	73.74	4906.9 ppb	73.74	1.50%
QC value within limits for Mg 279.077 IEC Recovery = 98.14%							
Mn	257.610†	138810.8	481.12 µg/L	15.825	481.12 ppb	15.825	3.29%
QC value within limits for Mn 257.610 Recovery = 96.22%							
Mo	202.031†	4479.7	478.26 µg/L	46.598	478.26 ppb	46.598	9.74%
QC value within limits for Mo 202.031 Recovery = 95.65%							
Na	589.592 Radial†	29481.5	9705.4 µg/L	53.07	9705.4 ppb	53.07	0.55%
QC value within limits for Na 589.592 Radial Recovery = 97.05%							
Ni	231.604†	8647.1	472.28 µg/L	23.002	472.28 ppb	23.002	4.87%
QC value within limits for Ni 231.604 Recovery = 94.46%							
P	214.914†	1095.8	2307.7 µg/L	196.48	2307.7 ppb	196.48	8.51%
QC value within limits for P 214.914 Recovery = 92.31%							
Pb	220.353†	1763.7	470.75 µg/L	35.831	470.75 ppb	35.831	7.61%
QC value within limits for Pb 220.353 Recovery = 94.15%							
S	181.975 Axial†	215.8	945.54 µg/L	71.212	945.54 ppb	71.212	7.53%
QC value within limits for S 181.975 Axial Recovery = 94.55%							
Sb	206.836†	484.6	479.04 µg/L	41.080	479.04 ppb	41.080	8.58%
QC value within limits for Sb 206.836 Recovery = 95.81%							
Se	196.026†	310.0	479.95 µg/L	29.823	479.95 ppb	29.823	6.21%
QC value within limits for Se 196.026 Recovery = 95.99%							
SiO2†		23387.4	5036.6 µg/L	192.04	5036.6 ppb	192.04	3.81%
QC value within limits for SiO2 Recovery = 94.19%							
Si	251.611†	28672.5	2357.0 µg/L	87.98	2357.0 ppb	87.98	3.73%
QC value within limits for Si 251.611 Recovery = 94.28%							
Sn	189.927†	1038.3	477.60 µg/L	52.775	477.60 ppb	52.775	11.05%
QC value within limits for Sn 189.927 Recovery = 95.52%							
Sr	421.552†	45945.8	476.28 µg/L	1.427	476.28 ppb	1.427	0.30%
QC value within limits for Sr 421.552 Recovery = 95.26%							
Ti	334.940†	196862.7	473.23 µg/L	17.050	473.23 ppb	17.050	3.60%
QC value within limits for Ti 334.940 Recovery = 94.65%							
Tl	190.801†	339.7	479.92 µg/L	23.425	479.92 ppb	23.425	4.88%
QC value within limits for Tl 190.801 Recovery = 95.98%							
U	409.014†	5254.9	474.80 µg/L	28.164	474.80 ppb	28.164	5.93%
QC value within limits for U 409.014 Recovery = 94.96%							
V	292.402†	43994.3	474.69 µg/L	25.672	474.69 ppb	25.672	5.41%
QC value within limits for V 292.402 Recovery = 94.94%							
Zn	213.857†	18944.2	469.70 µg/L	23.098	469.70 ppb	23.098	4.92%
QC value within limits for Zn 213.857 Recovery = 93.94%							

All analyte(s) passed QC.

Sequence No.: 54

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 20:10:26

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	56659.4	56659.4	104 %		20:10:59
1	Al 396.153Radial†	-34.5	-23.1	-17.229 µg/L	-17.229 ppb	20:10:59
1	Ca 317.933Radial†	185.2	-0.8	-0.7364 µg/L	-0.7364 ppb	20:11:19
1	Fe 238.204 Radial†	15.5	0.4	3.7111 µg/L	3.7111 ppb	20:11:19
1	K 766.490 Radial†	206.6	70.6	50.163 µg/L	50.163 ppb	20:10:59
1	Mg 279.077 IEC†	8.1	-3.5	-32.649 µg/L	-32.649 ppb	20:11:19
1	Na 589.592 Radial†	618.2	53.6	17.641 µg/L	17.641 ppb	20:10:59
1	Sr 421.552†	7.1	-32.7	-0.3390 µg/L	-0.3390 ppb	20:10:59
1	Sc 361.383	1969865.1	1969865.1	103.14 %		20:12:22
1	Y 371.029	1352232.0	1352232.0	103.23 %		20:12:22
1	Ag 328.068†	-590.3	-7.8	-0.0586 µg/L	-0.0586 ppb	20:12:27
1	As 188.979†	-2.7	-3.7	-7.3059 µg/L	-7.3059 ppb	20:12:48
1	B 249.677†	327.3	-14.1	-0.6180 µg/L	-0.6180 ppb	20:12:48
1	Ba 233.527†	-20.7	5.9	0.1552 µg/L	0.1552 ppb	20:12:48
1	Be 313.107†	-3325.3	216.5	0.1414 µg/L	0.1414 ppb	20:12:27
1	Cd 226.502†	-131.0	15.1	0.4157 µg/L	0.4157 ppb	20:12:48
1	Co 228.616†	-10.2	-1.0	-0.0509 µg/L	-0.0509 ppb	20:12:48
1	Cr 267.716†	-35.9	17.6	0.3870 µg/L	0.3870 ppb	20:12:48
1	Cu 324.752†	2456.0	-104.9	-0.7325 µg/L	-0.7325 ppb	20:12:27
1	Mn 257.610†	-254.6	-2.7	-0.0075 µg/L	-0.0075 ppb	20:12:48
1	Mo 202.031†	-3.1	4.5	0.4855 µg/L	0.4855 ppb	20:12:48
1	Ni 231.604†	302.7	-8.8	-0.4785 µg/L	-0.4785 ppb	20:12:48
1	P 214.914†	28.8	0.3	0.6377 µg/L	0.6377 ppb	20:12:48
1	Pb 220.353†	100.4	0.1	0.0373 µg/L	0.0373 ppb	20:12:48
1	S 181.975 Axial†	15.9	0.6	2.7080 µg/L	2.7080 ppb	20:12:48
1	Sb 206.836†	20.6	-7.0	-6.8374 µg/L	-6.8374 ppb	20:12:48
1	Se 196.026†	19.3	2.8	4.3630 µg/L	4.3630 ppb	20:12:48
1	SiO2†	1240.9	-46.9	-10.106 µg/L	-10.106 ppb	20:12:27
1	Si 251.611†	312.6	-9.8	-0.8084 µg/L	-0.8084 ppb	20:12:48
1	Sn 189.927†	-1.6	-0.7	-0.3378 µg/L	-0.3378 ppb	20:12:48
1	Ti 334.940†	146.3	25.8	0.0645 µg/L	0.0645 ppb	20:12:27
1	Tl 190.801†	-19.3	5.6	7.7671 µg/L	7.7671 ppb	20:12:48
1	U 409.014†	-42.1	12.8	1.1542 µg/L	1.1542 ppb	20:12:27
1	V 292.402†	-0.1	44.1	0.4765 µg/L	0.4765 ppb	20:12:27
1	Zn 213.857†	476.2	-13.8	-0.3400 µg/L	-0.3400 ppb	20:12:48
2	Sc RADIAL	56311.6	56311.6	103 %		20:11:25
2	Al 396.153Radial†	-11.1	-0.7	-0.4964 µg/L	-0.4964 ppb	20:11:25
2	Ca 317.933Radial†	182.9	-1.9	-1.7833 µg/L	-1.7833 ppb	20:11:45
2	Fe 238.204 Radial†	16.1	1.1	8.9693 µg/L	8.9693 ppb	20:11:45
2	K 766.490 Radial†	135.0	2.4	1.7375 µg/L	1.7375 ppb	20:11:25
2	Mg 279.077 IEC†	9.0	-2.6	-24.083 µg/L	-24.083 ppb	20:11:45
2	Na 589.592 Radial†	609.7	49.0	16.131 µg/L	16.131 ppb	20:11:25
2	Sr 421.552†	43.9	3.0	0.0309 µg/L	0.0309 ppb	20:11:25
2	Sc 361.383	1993246.1	1993246.1	104.37 %		20:12:54
2	Y 371.029	1369824.9	1369824.9	104.57 %		20:12:54
2	Ag 328.068†	-496.4	88.9	0.7074 µg/L	0.7074 ppb	20:12:59
2	As 188.979†	-2.4	-3.4	-6.6828 µg/L	-6.6828 ppb	20:13:20
2	B 249.677†	317.7	-27.1	-1.1866 µg/L	-1.1866 ppb	20:13:20
2	Ba 233.527†	-24.2	2.8	0.0739 µg/L	0.0739 ppb	20:13:20
2	Be 313.107†	-3271.8	305.5	0.1995 µg/L	0.1995 ppb	20:12:59
2	Cd 226.502†	-139.8	8.1	0.2223 µg/L	0.2223 ppb	20:13:20
2	Co 228.616†	-3.3	5.7	0.2808 µg/L	0.2808 ppb	20:13:20
2	Cr 267.716†	-45.4	8.9	0.1956 µg/L	0.1956 ppb	20:13:20
2	Cu 324.752†	2435.6	-152.4	-1.0631 µg/L	-1.0631 ppb	20:12:59
2	Mn 257.610†	-234.4	19.5	0.0698 µg/L	0.0698 ppb	20:13:20
2	Mo 202.031†	-9.1	-1.2	-0.1266 µg/L	-0.1266 ppb	20:13:20
2	Ni 231.604†	294.8	-19.7	-1.0788 µg/L	-1.0788 ppb	20:13:20
2	P 214.914†	30.0	1.1	2.4718 µg/L	2.4718 ppb	20:13:20
2	Pb 220.353†	93.1	-8.0	-2.1208 µg/L	-2.1208 ppb	20:13:20

2	S 181.975 Axial†	16.5	1.0	4.2685 µg/L	4.2685 ppb	20:13:20
2	Sb 206.836†	17.7	-10.0	-9.8534 µg/L	-9.8534 ppb	20:13:20
2	Se 196.026†	12.6	-3.8	-5.7175 µg/L	-5.7175 ppb	20:13:20
2	SiO2†	1249.7	-52.6	-11.333 µg/L	-11.333 ppb	20:12:59
2	Si 251.611†	320.2	-6.0	-0.4973 µg/L	-0.4973 ppb	20:13:20
2	Sn 189.927†	2.8	3.5	1.6248 µg/L	1.6248 ppb	20:13:20
2	Ti 334.940†	188.9	64.9	0.1579 µg/L	0.1579 ppb	20:12:59
2	Tl 190.801†	-28.5	-3.0	-4.1956 µg/L	-4.1956 ppb	20:13:20
2	U 409.014†	-69.7	-13.1	-1.1905 µg/L	-1.1905 ppb	20:12:59
2	V 292.402†	-23.7	21.5	0.2285 µg/L	0.2285 ppb	20:12:59
2	Zn 213.857†	474.3	-21.1	-0.5199 µg/L	-0.5199 ppb	20:13:20
3	Sc RADIAL	56279.9	56279.9	103 %		20:11:51
3	Al 396.153Radial†	-12.9	-2.4	-1.8112 µg/L	-1.8112 ppb	20:11:51
3	Ca 317.933Radial†	188.4	3.5	3.3406 µg/L	3.3406 ppb	20:12:11
3	Fe 238.204 Radial†	17.4	2.4	20.436 µg/L	20.436 ppb	20:12:11
3	K 766.490 Radial†	198.2	63.7	45.307 µg/L	45.307 ppb	20:11:51
3	Mg 279.077 IEC†	8.4	-3.1	-29.101 µg/L	-29.101 ppb	20:12:11
3	Na 589.592 Radial†	580.8	21.4	7.0316 µg/L	7.0316 ppb	20:11:51
3	Sr 421.552†	36.6	-4.1	-0.0421 µg/L	-0.0421 ppb	20:11:51
3	Sc 361.383	2002874.1	2002874.1	104.87 %		20:13:26
3	Y 371.029	1375774.7	1375774.7	105.03 %		20:13:26
3	Ag 328.068†	-572.9	18.2	0.1450 µg/L	0.1450 ppb	20:13:32
3	As 188.979†	-1.7	-2.8	-5.4427 µg/L	-5.4427 ppb	20:13:52
3	B 249.677†	315.7	-30.5	-1.3417 µg/L	-1.3417 ppb	20:13:52
3	Ba 233.527†	-28.2	-0.8	-0.0221 µg/L	-0.0221 ppb	20:13:52
3	Be 313.107†	-3166.3	421.2	0.2751 µg/L	0.2751 ppb	20:13:32
3	Cd 226.502†	-127.4	20.6	0.5649 µg/L	0.5649 ppb	20:13:52
3	Co 228.616†	-19.4	-9.7	-0.4770 µg/L	-0.4770 ppb	20:13:52
3	Cr 267.716†	-37.3	16.8	0.3689 µg/L	0.3689 ppb	20:13:52
3	Cu 324.752†	2426.7	-172.1	-1.1996 µg/L	-1.1996 ppb	20:13:32
3	Mn 257.610†	-224.6	30.0	0.1076 µg/L	0.1076 ppb	20:13:52
3	Mo 202.031†	-4.1	3.6	0.3852 µg/L	0.3852 ppb	20:13:52
3	Ni 231.604†	290.3	-25.4	-1.3870 µg/L	-1.3870 ppb	20:13:52
3	P 214.914†	33.5	4.4	9.4816 µg/L	9.4816 ppb	20:13:52
3	Pb 220.353†	90.7	-10.7	-2.8672 µg/L	-2.8672 ppb	20:13:52
3	S 181.975 Axial†	18.5	2.8	12.161 µg/L	12.161 ppb	20:13:52
3	Sb 206.836†	24.3	-3.8	-3.7594 µg/L	-3.7594 ppb	20:13:52
3	Se 196.026†	15.9	-0.7	-0.9888 µg/L	-0.9888 ppb	20:13:52
3	SiO2†	1207.7	-98.4	-21.190 µg/L	-21.190 ppb	20:13:32
3	Si 251.611†	302.6	-24.3	-2.0003 µg/L	-2.0003 ppb	20:13:52
3	Sn 189.927†	0.7	1.5	0.6894 µg/L	0.6894 ppb	20:13:52
3	Ti 334.940†	101.8	-19.1	-0.0435 µg/L	-0.0435 ppb	20:13:32
3	Tl 190.801†	-25.1	0.4	0.5052 µg/L	0.5052 ppb	20:13:52
3	U 409.014†	-6.5	47.4	4.2901 µg/L	4.2901 ppb	20:13:32
3	V 292.402†	-56.7	-9.8	-0.0938 µg/L	-0.0938 ppb	20:13:32
3	Zn 213.857†	464.1	-33.0	-0.8147 µg/L	-0.8147 ppb	20:13:52

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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	1988661.8	104.13 %	0.889			0.85%
Sc RADIAL	56417.0	103 %	0.4			0.37%
Y 371.029	1365943.9	104.28 %	0.935			0.90%
Ag 328.068†	33.1	0.2646 µg/L	0.39674	0.2646 ppb	0.39674	149.94%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-8.7	-6.5121 µg/L	9.30422	-6.5121 ppb	9.30422	142.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.3	-6.4771 µg/L	0.94849	-6.4771 ppb	0.94849	14.64%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-23.9	-1.0488 µg/L	0.38103	-1.0488 ppb	0.38103	36.33%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.6	0.0690 µg/L	0.08875	0.0690 ppb	0.08875	128.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	314.4	0.2053 µg/L	0.06705	0.2053 ppb	0.06705	32.66%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.3	0.2736 µg/L	2.70720	0.2736 ppb	2.70720	989.37%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.6	0.4010 µg/L	0.17178	0.4010 ppb	0.17178	42.84%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0824 µg/L	0.37989	-0.0824 ppb	0.37989	461.28%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	14.4	0.3172 µg/L	0.10569	0.3172 ppb	0.10569	33.32%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-143.1	-0.9984 µg/L	0.24020	-0.9984 ppb	0.24020	24.06%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.3	11.039 µg/L	8.5525	11.039 ppb	8.5525	77.48%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	45.6	32.402 µg/L	26.6673	32.402 ppb	26.6673	82.30%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-3.1	-28.611 µg/L	4.3042	-28.611 ppb	4.3042	15.04%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	15.6	0.0566 µg/L	0.05870	0.0566 ppb	0.05870	103.64%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.3	0.2480 µg/L	0.32829	0.2480 ppb	0.32829	132.36%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	41.3	13.602 µg/L	5.7396	13.602 ppb	5.7396	42.20%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-18.0	-0.9814 µg/L	0.46200	-0.9814 ppb	0.46200	47.08%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	1.9	4.1970 µg/L	4.66758	4.1970 ppb	4.66758	111.21%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.2	-1.6502 µg/L	1.50832	-1.6502 ppb	1.50832	91.40%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.5	6.3791 µg/L	5.06750	6.3791 ppb	5.06750	79.44%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-6.9	-6.8167 µg/L	3.04704	-6.8167 ppb	3.04704	44.70%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.5	-0.7811 µg/L	5.04348	-0.7811 ppb	5.04348	645.70%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-66.0	-14.210 µg/L	6.0766	-14.210 ppb	6.0766	42.76%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-13.4	-1.1020 µg/L	0.79337	-1.1020 ppb	0.79337	71.99%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.4	0.6588 µg/L	0.98163	0.6588 ppb	0.98163	149.00%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-11.3	-0.1167 µg/L	0.19593	-0.1167 ppb	0.19593	167.87%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	23.9	0.0596 µg/L	0.10080	0.0596 ppb	0.10080	168.98%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.0	1.3589 µg/L	6.02688	1.3589 ppb	6.02688	443.51%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	15.7	1.4179 µg/L	2.74983	1.4179 ppb	2.74983	193.94%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	18.6	0.2037 µg/L	0.28596	0.2037 ppb	0.28596	140.37%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-22.6	-0.5582 µg/L	0.23967	-0.5582 ppb	0.23967	42.93%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 55

Sample ID: 1202033915|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 341

Date Collected: 2/11/2010 20:14:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033915|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55874.5	55874.5	102 %		20:14:39
1	Al 396.153Radial†	-8.2	2.1	1.5875 µg/L	1.5875 ppb	20:14:39
1	Ca 317.933Radial†	211.1	27.1	25.496 µg/L	25.496 ppb	20:14:59
1	Fe 238.204 Radial†	18.3	3.3	28.236 µg/L	28.236 ppb	20:14:59
1	K 766.490 Radial†	129.1	-2.3	-1.6448 µg/L	-1.6448 ppb	20:14:39
1	Mg 279.077 IEC†	9.8	-1.7	-15.551 µg/L	-15.551 ppb	20:14:59
1	Na 589.592 Radial†	634.2	77.6	25.531 µg/L	25.531 ppb	20:14:39
1	Sr 421.552†	47.5	6.8	0.0706 µg/L	0.0706 ppb	20:14:39
1	Sc 361.383	1988912.3	1988912.3	104.14 %		20:16:01
1	Y 371.029	1361710.6	1361710.6	103.95 %		20:16:01
1	Ag 328.068†	-556.2	30.4	0.2455 µg/L	0.2455 ppb	20:16:07
1	As 188.979†	3.5	2.2	4.2732 µg/L	4.2732 ppb	20:16:27
1	B 249.677†	318.7	-25.4	-1.1247 µg/L	-1.1247 ppb	20:16:27
1	Ba 233.527†	-20.2	6.6	0.1718 µg/L	0.1718 ppb	20:16:27
1	Be 313.107†	-3488.6	90.5	0.0590 µg/L	0.0590 ppb	20:16:07
1	Cd 226.502†	-133.5	14.0	0.3809 µg/L	0.3809 ppb	20:16:27
1	Co 228.616†	-9.2	0.0	0.0005 µg/L	0.0005 ppb	20:16:27
1	Cr 267.716†	-38.1	15.8	0.3474 µg/L	0.3474 ppb	20:16:07
1	Cu 324.752†	2450.1	-133.4	-0.9277 µg/L	-0.9277 ppb	20:16:07
1	Mn 257.610†	-164.9	85.8	0.3015 µg/L	0.3015 ppb	20:16:27
1	Mo 202.031†	-2.6	5.1	0.5442 µg/L	0.5442 ppb	20:16:27
1	Ni 231.604†	299.3	-14.8	-0.8080 µg/L	-0.8080 ppb	20:16:27
1	P 214.914†	28.6	-0.1	-0.2154 µg/L	-0.2154 ppb	20:16:27
1	Pb 220.353†	96.2	-4.8	-1.2854 µg/L	-1.2854 ppb	20:16:27
1	S 181.975 Axial†	13.7	-1.6	-7.0850 µg/L	-7.0850 ppb	20:16:27
1	Sb 206.836†	13.0	-14.5	-14.275 µg/L	-14.275 ppb	20:16:27
1	Se 196.026†	4.6	-11.4	-17.290 µg/L	-17.290 ppb	20:16:27
1	SiO2†	1327.2	24.4	5.2522 µg/L	5.2522 ppb	20:16:07
1	Si 251.611†	428.6	98.7	8.1131 µg/L	8.1131 ppb	20:16:27
1	Sn 189.927†	1.1	1.9	0.8667 µg/L	0.8667 ppb	20:16:27
1	Ti 334.940†	219.6	94.8	0.2296 µg/L	0.2296 ppb	20:16:07
1	Tl 190.801†	-21.5	3.6	5.0804 µg/L	5.0804 ppb	20:16:27
1	U 409.014†	-78.7	-22.0	-1.9953 µg/L	-1.9953 ppb	20:16:07
1	V 292.402†	-15.2	29.6	0.3214 µg/L	0.3214 ppb	20:16:07
1	Zn 213.857†	564.5	66.5	1.6661 µg/L	1.6661 ppb	20:16:27
2	Sc RADIAL	56075.7	56075.7	103 %		20:15:05
2	Al 396.153Radial†	-2.4	7.8	5.7923 µg/L	5.7923 ppb	20:15:05
2	Ca 317.933Radial†	217.4	32.4	30.548 µg/L	30.548 ppb	20:15:25
2	Fe 238.204 Radial†	17.4	2.4	20.723 µg/L	20.723 ppb	20:15:25
2	K 766.490 Radial†	145.6	13.2	9.4096 µg/L	9.4096 ppb	20:15:05
2	Mg 279.077 IEC†	14.3	2.6	24.624 µg/L	24.624 ppb	20:15:25
2	Na 589.592 Radial†	594.2	36.4	11.991 µg/L	11.991 ppb	20:15:05
2	Sr 421.552†	57.9	16.8	0.1740 µg/L	0.1740 ppb	20:15:05
2	Sc 361.383	1999481.8	1999481.8	104.69 %		20:16:33
2	Y 371.029	1369592.1	1369592.1	104.56 %		20:16:33
2	Ag 328.068†	-572.7	17.5	0.1386 µg/L	0.1386 ppb	20:16:39
2	As 188.979†	1.4	0.2	0.4072 µg/L	0.4072 ppb	20:17:00
2	B 249.677†	318.2	-27.6	-1.2151 µg/L	-1.2151 ppb	20:17:00
2	Ba 233.527†	-15.8	10.9	0.2840 µg/L	0.2840 ppb	20:17:00
2	Be 313.107†	-3410.1	183.2	0.1196 µg/L	0.1196 ppb	20:16:39
2	Cd 226.502†	-138.1	10.2	0.2788 µg/L	0.2788 ppb	20:17:00
2	Co 228.616†	-12.0	-2.7	-0.1309 µg/L	-0.1309 ppb	20:17:00
2	Cr 267.716†	-44.9	9.5	0.2088 µg/L	0.2088 ppb	20:16:39
2	Cu 324.752†	2426.3	-168.6	-1.1747 µg/L	-1.1747 ppb	20:16:39
2	Mn 257.610†	-163.6	87.9	0.3060 µg/L	0.3060 ppb	20:17:00
2	Mo 202.031†	-9.1	-1.2	-0.1254 µg/L	-0.1254 ppb	20:17:00
2	Ni 231.604†	301.5	-14.2	-0.7782 µg/L	-0.7782 ppb	20:17:00
2	P 214.914†	29.6	0.7	1.6224 µg/L	1.6224 ppb	20:17:00
2	Pb 220.353†	93.6	-7.8	-2.0997 µg/L	-2.0997 ppb	20:17:00

2	S 181.975 Axial†	15.8	0.2	1.0821 µg/L	1.0821 ppb	20:17:00
2	Sb 206.836†	21.3	-6.6	-6.5463 µg/L	-6.5463 ppb	20:17:00
2	Se 196.026†	14.8	-1.7	-2.5946 µg/L	-2.5946 ppb	20:17:00
2	SiO2†	1345.7	35.3	7.6065 µg/L	7.6065 ppb	20:16:39
2	Si 251.611†	428.9	96.8	7.9537 µg/L	7.9537 ppb	20:17:00
2	Sn 189.927†	3.6	4.3	1.9852 µg/L	1.9852 ppb	20:17:00
2	Ti 334.940†	177.5	53.4	0.1270 µg/L	0.1270 ppb	20:16:39
2	Tl 190.801†	-23.8	1.6	2.2328 µg/L	2.2328 ppb	20:17:00
2	U 409.014†	55.2	106.3	9.6210 µg/L	9.6210 ppb	20:16:39
2	V 292.402†	-67.2	-20.0	-0.2010 µg/L	-0.2010 ppb	20:16:39
2	Zn 213.857†	562.0	61.3	1.5327 µg/L	1.5327 ppb	20:17:00
3	Sc RADIAL	56267.6	56267.6	103 %		20:15:31
3	Al 396.153Radial†	0.3	10.4	7.7755 µg/L	7.7755 ppb	20:15:31
3	Ca 317.933Radial†	217.5	31.8	29.914 µg/L	29.914 ppb	20:15:51
3	Fe 238.204 Radial†	15.6	0.6	5.4997 µg/L	5.4997 ppb	20:15:51
3	K 766.490 Radial†	111.3	-20.5	-14.563 µg/L	-14.563 ppb	20:15:31
3	Mg 279.077 IEC†	6.0	-5.5	-51.066 µg/L	-51.066 ppb	20:15:51
3	Na 589.592 Radial†	616.5	56.0	18.449 µg/L	18.449 ppb	20:15:31
3	Sr 421.552†	75.9	34.1	0.3534 µg/L	0.3534 ppb	20:15:31
3	Sc 361.383	1987623.0	1987623.0	104.07 %		20:17:06
3	Y 371.029	1363179.9	1363179.9	104.07 %		20:17:06
3	Ag 328.068†	-612.7	-24.2	-0.1919 µg/L	-0.1919 ppb	20:17:11
3	As 188.979†	-0.4	-1.5	-3.0033 µg/L	-3.0033 ppb	20:17:32
3	B 249.677†	322.2	-21.9	-0.9597 µg/L	-0.9597 ppb	20:17:32
3	Ba 233.527†	-20.9	5.9	0.1539 µg/L	0.1539 ppb	20:17:32
3	Be 313.107†	-3442.2	132.9	0.0867 µg/L	0.0867 ppb	20:17:11
3	Cd 226.502†	-138.2	9.3	0.2550 µg/L	0.2550 ppb	20:17:32
3	Co 228.616†	-8.8	0.4	0.0184 µg/L	0.0184 ppb	20:17:32
3	Cr 267.716†	-37.4	16.5	0.3625 µg/L	0.3625 ppb	20:17:11
3	Cu 324.752†	2472.2	-110.7	-0.7722 µg/L	-0.7722 ppb	20:17:11
3	Mn 257.610†	-174.8	76.1	0.2664 µg/L	0.2664 ppb	20:17:32
3	Mo 202.031†	-6.5	1.3	0.1380 µg/L	0.1380 ppb	20:17:32
3	Ni 231.604†	297.0	-16.8	-0.9201 µg/L	-0.9201 ppb	20:17:32
3	P 214.914†	19.5	-8.9	-19.097 µg/L	-19.097 ppb	20:17:32
3	Pb 220.353†	94.3	-6.6	-1.7586 µg/L	-1.7586 ppb	20:17:32
3	S 181.975 Axial†	21.0	5.4	23.467 µg/L	23.467 ppb	20:17:32
3	Sb 206.836†	27.1	-0.9	-0.8949 µg/L	-0.8949 ppb	20:17:32
3	Se 196.026†	13.6	-2.8	-4.1429 µg/L	-4.1429 ppb	20:17:32
3	SiO2†	1352.4	49.5	10.650 µg/L	10.650 ppb	20:17:11
3	Si 251.611†	416.8	87.7	7.2061 µg/L	7.2061 ppb	20:17:32
3	Sn 189.927†	-2.9	-1.9	-0.8663 µg/L	-0.8663 ppb	20:17:32
3	Ti 334.940†	199.2	75.3	0.1856 µg/L	0.1856 ppb	20:17:11
3	Tl 190.801†	-24.6	0.6	0.8935 µg/L	0.8935 ppb	20:17:32
3	U 409.014†	-8.3	45.6	4.1299 µg/L	4.1299 ppb	20:17:11
3	V 292.402†	-51.1	-4.9	-0.0455 µg/L	-0.0455 ppb	20:17:11
3	Zn 213.857†	552.7	55.5	1.3948 µg/L	1.3948 ppb	20:17:32

Mean Data: 1202033915|949338|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992005.7	104.30 %		0.341			0.33%
Sc RADIAL	56072.6	103 %		0.4			0.35%
Y 371.029	1364827.5	104.19 %		0.320			0.31%
Ag 328.068†	7.9	0.0640 µg/L		0.22801	0.0640 ppb	0.22801	356.02%
Al 396.153Radial†	6.8	5.0517 µg/L		3.15974	5.0517 ppb	3.15974	62.55%
As 188.979†	0.3	0.5590 µg/L		3.64066	0.5590 ppb	3.64066	651.23%
B 249.677†	-25.0	-1.0999 µg/L		0.12950	-1.0999 ppb	0.12950	11.77%
Ba 233.527†	7.8	0.2032 µg/L		0.07053	0.2032 ppb	0.07053	34.70%
Be 313.107†	135.6	0.0885 µg/L		0.03031	0.0885 ppb	0.03031	34.26%
Ca 317.933Radial†	30.4	28.653 µg/L		2.7525	28.653 ppb	2.7525	9.61%
Cd 226.502†	11.2	0.3049 µg/L		0.06692	0.3049 ppb	0.06692	21.95%
Co 228.616†	-0.8	-0.0373 µg/L		0.08152	-0.0373 ppb	0.08152	218.27%
Cr 267.716†	13.9	0.3062 µg/L		0.08474	0.3062 ppb	0.08474	27.67%
Cu 324.752†	-137.5	-0.9582 µg/L		0.20302	-0.9582 ppb	0.20302	21.19%
Fe 238.204 Radial†	2.1	18.153 µg/L		11.5842	18.153 ppb	11.5842	63.81%
K 766.490 Radial†	-3.2	-2.2662 µg/L		11.99851	-2.2662 ppb	11.99851	529.47%
Mg 279.077 IEC†	-1.5	-13.998 µg/L		37.8689	-13.998 ppb	37.8689	270.54%
Mn 257.610†	83.3	0.2913 µg/L		0.02168	0.2913 ppb	0.02168	7.44%
Mo 202.031†	1.7	0.1856 µg/L		0.33735	0.1856 ppb	0.33735	181.77%
Na 589.592 Radial†	56.7	18.657 µg/L		6.7722	18.657 ppb	6.7722	36.30%

Ni 231.604†	-15.3	-0.8354 µg/L	0.07481	-0.8354 ppb	0.07481	8.95%
P 214.914†	-2.8	-5.8966 µg/L	11.46863	-5.8966 ppb	11.46863	194.49%
Pb 220.353†	-6.4	-1.7146 µg/L	0.40894	-1.7146 ppb	0.40894	23.85%
S 181.975 Axial†	1.3	5.8215 µg/L	15.81796	5.8215 ppb	15.81796	271.72%
Sb 206.836†	-7.4	-7.2388 µg/L	6.71707	-7.2388 ppb	6.71707	92.79%
Se 196.026†	-5.3	-8.0093 µg/L	8.07484	-8.0093 ppb	8.07484	100.82%
SiO2†	36.4	7.8362 µg/L	2.70617	7.8362 ppb	2.70617	34.53%
Si 251.611†	94.4	7.7576 µg/L	0.48425	7.7576 ppb	0.48425	6.24%
Sn 189.927†	1.4	0.6619 µg/L	1.43671	0.6619 ppb	1.43671	217.07%
Sr 421.552†	19.2	0.1993 µg/L	0.14306	0.1993 ppb	0.14306	71.77%
Ti 334.940†	74.5	0.1807 µg/L	0.05144	0.1807 ppb	0.05144	28.46%
Tl 190.801†	2.0	2.7356 µg/L	2.13823	2.7356 ppb	2.13823	78.16%
U 409.014†	43.3	3.9185 µg/L	5.81102	3.9185 ppb	5.81102	148.30%
V 292.402†	1.6	0.0249 µg/L	0.26825	0.0249 ppb	0.26825	>999.9%
Zn 213.857†	61.1	1.5312 µg/L	0.13566	1.5312 ppb	0.13566	8.86%

Sequence No.: 56

Sample ID: 1202033916|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 342

Date Collected: 2/11/2010 20:17:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033916|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57137.3	57137.3	105 %		20:18:14
1	Al 396.153Radial†	7205.9	6892.8	5126.9 µg/L	5126.9 ppb	20:18:14
1	Ca 317.933Radial†	5721.9	5286.0	4977.1 µg/L	4977.1 ppb	20:18:34
1	Fe 238.204 Radial†	637.1	594.0	5045.2 µg/L	5045.2 ppb	20:18:34
1	K 766.490 Radial†	7617.2	7147.1	5080.1 µg/L	5080.1 ppb	20:18:14
1	Mg 279.077 IEC†	586.0	548.4	5106.9 µg/L	5106.9 ppb	20:18:34
1	Na 589.592 Radial†	16698.2	15407.3	5072.1 µg/L	5072.1 ppb	20:18:14
1	Sr 421.552†	50524.7	48218.8	499.84 µg/L	499.84 ppb	20:18:14
1	Sc 361.383	1994632.1	1994632.1	104.44 %		20:19:38
1	Y 371.029	1364385.0	1364385.0	104.16 %		20:19:38
1	Ag 328.068†	64390.0	62217.3	497.30 µg/L	497.30 ppb	20:19:43
1	As 188.979†	276.9	264.0	515.03 µg/L	515.03 ppb	20:20:04
1	B 249.677†	12086.2	11241.0	489.42 µg/L	489.42 ppb	20:19:43
1	Ba 233.527†	20170.0	19338.6	504.45 µg/L	504.45 ppb	20:19:43
1	Be 313.107†	788592.5	758509.8	495.16 µg/L	495.16 ppb	20:19:38
1	Cd 226.502†	18613.6	17964.5	495.54 µg/L	495.54 ppb	20:19:43
1	Co 228.616†	10518.0	10079.8	495.49 µg/L	495.49 ppb	20:19:43
1	Cr 267.716†	23642.9	22690.3	499.41 µg/L	499.41 ppb	20:19:43
1	Cu 324.752†	77419.6	71642.4	501.14 µg/L	501.14 ppb	20:19:43
1	Mn 257.610†	151343.9	145154.3	503.12 µg/L	503.12 ppb	20:19:38
1	Mo 202.031†	4986.3	4781.9	510.52 µg/L	510.52 ppb	20:20:04
1	Ni 231.604†	9890.8	9168.1	500.74 µg/L	500.74 ppb	20:19:43
1	P 214.914†	284.5	244.8	478.14 µg/L	478.14 ppb	20:20:04
1	Pb 220.353†	2090.8	1904.7	508.39 µg/L	508.39 ppb	20:20:04
1	S 181.975 Axial†	1232.2	1165.0	5104.4 µg/L	5104.4 ppb	20:20:04
1	Sb 206.836†	570.3	519.1	513.24 µg/L	513.24 ppb	20:20:04
1	Se 196.026†	349.8	319.1	494.27 µg/L	494.27 ppb	20:20:04
1	SiO2†	51590.3	48147.2	10369 µg/L	10369 ppb	20:19:43
1	Si 251.611†	61612.5	58680.5	4823.8 µg/L	4823.8 ppb	20:19:43
1	Sn 189.927†	1228.1	1176.7	541.25 µg/L	541.25 ppb	20:20:04
1	Ti 334.940†	214339.2	205111.5	493.06 µg/L	493.06 ppb	20:19:38
1	Tl 190.801†	353.6	362.8	512.43 µg/L	512.43 ppb	20:20:04
1	U 409.014†	5956.7	5757.1	520.23 µg/L	520.23 ppb	20:19:43
1	V 292.402†	48839.3	46807.4	505.06 µg/L	505.06 ppb	20:19:43
1	Zn 213.857†	20991.1	19623.2	486.46 µg/L	486.46 ppb	20:19:43
2	Sc RADIAL	57901.8	57901.8	106 %		20:18:40
2	Al 396.153Radial†	7061.3	6665.7	4957.7 µg/L	4957.7 ppb	20:18:40
2	Ca 317.933Radial†	5727.2	5218.9	4913.9 µg/L	4913.9 ppb	20:19:00
2	Fe 238.204 Radial†	636.2	585.2	4970.0 µg/L	4970.0 ppb	20:19:00
2	K 766.490 Radial†	7550.0	6987.7	4966.8 µg/L	4966.8 ppb	20:18:40
2	Mg 279.077 IEC†	589.2	544.0	5066.1 µg/L	5066.1 ppb	20:19:00
2	Na 589.592 Radial†	16626.7	15129.4	4980.6 µg/L	4980.6 ppb	20:18:40
2	Sr 421.552†	50230.2	47304.2	490.36 µg/L	490.36 ppb	20:18:40
2	Sc 361.383	2013873.9	2013873.9	105.45 %		20:20:11
2	Y 371.029	1378189.6	1378189.6	105.21 %		20:20:11
2	Ag 328.068†	64481.5	61715.0	493.29 µg/L	493.29 ppb	20:20:17
2	As 188.979†	279.5	263.9	514.86 µg/L	514.86 ppb	20:20:37
2	B 249.677†	12129.8	11171.7	486.43 µg/L	486.43 ppb	20:20:17
2	Ba 233.527†	20147.0	19132.2	499.07 µg/L	499.07 ppb	20:20:17
2	Be 313.107†	788587.5	751290.6	490.45 µg/L	490.45 ppb	20:20:11
2	Cd 226.502†	18596.6	17778.0	490.40 µg/L	490.40 ppb	20:20:17
2	Co 228.616†	10481.8	9949.2	489.07 µg/L	489.07 ppb	20:20:17
2	Cr 267.716†	23674.7	22504.0	495.31 µg/L	495.31 ppb	20:20:17
2	Cu 324.752†	77662.0	71164.0	497.79 µg/L	497.79 ppb	20:20:17
2	Mn 257.610†	151439.8	143860.7	498.63 µg/L	498.63 ppb	20:20:11
2	Mo 202.031†	4993.3	4742.9	506.36 µg/L	506.36 ppb	20:20:37
2	Ni 231.604†	9888.4	9075.4	495.68 µg/L	495.68 ppb	20:20:17
2	P 214.914†	288.8	246.3	481.67 µg/L	481.67 ppb	20:20:37
2	Pb 220.353†	2123.9	1917.0	511.65 µg/L	511.65 ppb	20:20:37



2	S 181.975 Axial†	1239.9	1161.1	5087.0 µg/L	5087.0 ppb	20:20:37
2	Sb 206.836†	578.1	521.3	515.31 µg/L	515.31 ppb	20:20:37
2	Se 196.026†	356.3	322.1	498.75 µg/L	498.75 ppb	20:20:37
2	SiO2†	51611.2	47695.0	10271 µg/L	10271 ppb	20:20:17
2	Si 251.611†	61706.3	58205.7	4784.8 µg/L	4784.8 ppb	20:20:17
2	Sn 189.927†	1227.7	1165.2	535.93 µg/L	535.93 ppb	20:20:37
2	Ti 334.940†	214247.2	203063.4	488.13 µg/L	488.13 ppb	20:20:11
2	Tl 190.801†	351.2	357.3	504.65 µg/L	504.65 ppb	20:20:37
2	U 409.014†	6018.0	5760.7	520.57 µg/L	520.57 ppb	20:20:17
2	V 292.402†	48953.4	46468.8	501.40 µg/L	501.40 ppb	20:20:17
2	Zn 213.857†	21115.3	19548.9	484.64 µg/L	484.64 ppb	20:20:17
3	Sc RADIAL	57252.0	57252.0	105 %		20:19:06
3	Al 396.153Radial†	7090.0	6768.5	5035.2 µg/L	5035.2 ppb	20:19:06
3	Ca 317.933Radial†	5710.3	5264.1	4956.4 µg/L	4956.4 ppb	20:19:26
3	Fe 238.204 Radial†	638.7	594.4	5047.8 µg/L	5047.8 ppb	20:19:26
3	K 766.490 Radial†	7487.4	7008.8	4981.8 µg/L	4981.8 ppb	20:19:06
3	Mg 279.077 IEC†	585.5	546.8	5091.3 µg/L	5091.3 ppb	20:19:26
3	Na 589.592 Radial†	16647.2	15326.7	5045.6 µg/L	5045.6 ppb	20:19:06
3	Sr 421.552†	50351.5	47957.1	497.13 µg/L	497.13 ppb	20:19:06
3	Sc 361.383	1986096.3	1986096.3	103.99 %		20:20:44
3	Y 371.029	1358639.8	1358639.8	103.72 %		20:20:44
3	Ag 328.068†	63881.3	61993.1	495.44 µg/L	495.44 ppb	20:20:50
3	As 188.979†	256.9	245.8	479.65 µg/L	479.65 ppb	20:21:11
3	B 249.677†	11984.0	11192.4	487.28 µg/L	487.28 ppb	20:20:50
3	Ba 233.527†	19664.6	18935.6	493.93 µg/L	493.93 ppb	20:20:50
3	Be 313.107†	776464.6	750092.7	489.67 µg/L	489.67 ppb	20:20:44
3	Cd 226.502†	18144.8	17590.3	485.21 µg/L	485.21 ppb	20:20:50
3	Co 228.616†	10196.4	9813.8	482.37 µg/L	482.37 ppb	20:20:50
3	Cr 267.716†	22808.0	21984.7	483.88 µg/L	483.88 ppb	20:20:50
3	Cu 324.752†	75447.0	70064.1	490.12 µg/L	490.12 ppb	20:20:50
3	Mn 257.610†	149533.7	144036.4	499.25 µg/L	499.25 ppb	20:20:44
3	Mo 202.031†	4526.2	4359.9	465.49 µg/L	465.49 ppb	20:21:11
3	Ni 231.604†	9594.0	8923.5	487.38 µg/L	487.38 ppb	20:20:50
3	P 214.914†	260.5	222.9	431.52 µg/L	431.52 ppb	20:21:11
3	Pb 220.353†	1951.8	1779.7	474.93 µg/L	474.93 ppb	20:21:11
3	S 181.975 Axial†	1152.5	1093.4	4790.5 µg/L	4790.5 ppb	20:21:11
3	Sb 206.836†	529.0	481.8	475.91 µg/L	475.91 ppb	20:21:11
3	Se 196.026†	332.2	303.6	470.77 µg/L	470.77 ppb	20:21:11
3	SiO2†	50752.3	47553.6	10241 µg/L	10241 ppb	20:20:50
3	Si 251.611†	60572.6	57934.0	4762.5 µg/L	4762.5 ppb	20:20:50
3	Sn 189.927†	1099.7	1058.3	486.78 µg/L	486.78 ppb	20:21:11
3	Ti 334.940†	210914.9	202700.7	487.26 µg/L	487.26 ppb	20:20:44
3	Tl 190.801†	325.5	337.3	476.72 µg/L	476.72 ppb	20:21:11
3	U 409.014†	5821.9	5651.9	510.71 µg/L	510.71 ppb	20:20:50
3	V 292.402†	47440.7	45663.4	492.48 µg/L	492.48 ppb	20:20:50
3	Zn 213.857†	20491.7	19229.4	476.70 µg/L	476.70 ppb	20:20:50

Mean Data: 1202033916|949338|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1998200.7	104.63 %	%	0.745			0.71%
Sc RADIAL	57430.4	105 %	%	0.8			0.72%
Y 371.029	1367071.5	104.36 %	%	0.767			0.73%
Ag 328.068†	61975.1	495.34 µg/L	µg/L	2.009	495.34 ppb	2.009	0.41%
Al 396.153Radial†	6775.7	5040.0 µg/L	µg/L	84.77	5040.0 ppb	84.77	1.68%
As 188.979†	257.9	503.18 µg/L	µg/L	20.377	503.18 ppb	20.377	4.05%
B 249.677†	11201.7	487.71 µg/L	µg/L	1.544	487.71 ppb	1.544	0.32%
Ba 233.527†	19135.5	499.15 µg/L	µg/L	5.258	499.15 ppb	5.258	1.05%
Be 313.107†	753297.7	491.76 µg/L	µg/L	2.972	491.76 ppb	2.972	0.60%
Ca 317.933Radial†	5256.3	4949.2 µg/L	µg/L	32.24	4949.2 ppb	32.24	0.65%
Cd 226.502†	17777.6	490.38 µg/L	µg/L	5.168	490.38 ppb	5.168	1.05%
Co 228.616†	9947.6	488.98 µg/L	µg/L	6.560	488.98 ppb	6.560	1.34%
Cr 267.716†	22393.0	492.87 µg/L	µg/L	8.047	492.87 ppb	8.047	1.63%
Cu 324.752†	70956.8	496.35 µg/L	µg/L	5.651	496.35 ppb	5.651	1.14%
Fe 238.204 Radial†	591.2	5021.0 µg/L	µg/L	44.18	5021.0 ppb	44.18	0.88%
K 766.490 Radial†	7047.9	5009.6 µg/L	µg/L	61.57	5009.6 ppb	61.57	1.23%
Mg 279.077 IEC†	546.4	5088.1 µg/L	µg/L	20.57	5088.1 ppb	20.57	0.40%
Mn 257.610†	144350.5	500.33 µg/L	µg/L	2.432	500.33 ppb	2.432	0.49%
Mo 202.031†	4628.2	494.12 µg/L	µg/L	24.884	494.12 ppb	24.884	5.04%
Na 589.592 Radial†	15287.8	5032.8 µg/L	µg/L	47.08	5032.8 ppb	47.08	0.94%

Ni 231.604†	9055.7	494.60 µg/L	6.746	494.60 ppb	6.746	1.36%
P 214.914†	238.0	463.78 µg/L	27.988	463.78 ppb	27.988	6.03%
Pb 220.353†	1867.1	498.32 µg/L	20.326	498.32 ppb	20.326	4.08%
S 181.975 Axial†	1139.8	4994.0 µg/L	176.40	4994.0 ppb	176.40	3.53%
Sb 206.836†	507.4	501.49 µg/L	22.178	501.49 ppb	22.178	4.42%
Se 196.026†	314.9	487.93 µg/L	15.026	487.93 ppb	15.026	3.08%
SiO2†	47798.6	10294 µg/L	66.8	10294 ppb	66.8	0.65%
Si 251.611†	58273.4	4790.4 µg/L	31.06	4790.4 ppb	31.06	0.65%
Sn 189.927†	1133.4	521.32 µg/L	30.030	521.32 ppb	30.030	5.76%
Sr 421.552†	47826.7	495.78 µg/L	4.883	495.78 ppb	4.883	0.98%
Ti 334.940†	203625.2	489.48 µg/L	3.126	489.48 ppb	3.126	0.64%
Tl 190.801†	352.5	497.94 µg/L	18.779	497.94 ppb	18.779	3.77%
U 409.014†	5723.3	517.17 µg/L	5.597	517.17 ppb	5.597	1.08%
V 292.402†	46313.2	499.65 µg/L	6.473	499.65 ppb	6.473	1.30%
Zn 213.857†	19467.2	482.60 µg/L	5.188	482.60 ppb	5.188	1.08%

Sequence No.: 57

Sample ID: 246056001|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 343

Date Collected: 2/11/2010 20:21:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246056001|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56296.4	56296.4	103 %		20:21:53
1	Al 396.153Radial†	137.2	143.2	106.70 µg/L	106.70 ppb	20:21:53
1	Ca 317.933Radial†	245.7	59.0	55.591 µg/L	55.591 ppb	20:22:13
1	Fe 238.204 Radial†	23.7	8.5	71.805 µg/L	71.805 ppb	20:22:13
1	K 766.490 Radial†	393.1	252.7	179.61 µg/L	179.61 ppb	20:21:53
1	Mg 279.077 IEC†	9.9	-1.6	-15.253 µg/L	-15.253 ppb	20:22:13
1	Na 589.592 Radial†	1148.5	571.5	188.15 µg/L	188.15 ppb	20:21:53
1	Sr 421.552†	45.9	4.9	0.0512 µg/L	0.0512 ppb	20:21:53
1	Sc 361.383	1999099.5	1999099.5	104.67 %		20:23:15
1	Y 371.029	1369234.7	1369234.7	104.53 %		20:23:15
1	Ag 328.068†	-506.2	81.0	0.6506 µg/L	0.6506 ppb	20:23:21
1	As 188.979†	-1.4	-2.5	-4.8556 µg/L	-4.8556 ppb	20:23:41
1	B 249.677†	927.0	554.1	24.182 µg/L	24.182 ppb	20:23:21
1	Ba 233.527†	39.1	63.3	1.6501 µg/L	1.6501 ppb	20:23:41
1	Be 313.107†	-3284.8	302.3	0.1962 µg/L	0.1962 ppb	20:23:21
1	Cd 226.502†	-138.3	10.0	0.2677 µg/L	0.2677 ppb	20:23:41
1	Co 228.616†	-4.6	4.5	0.2139 µg/L	0.2139 ppb	20:23:41
1	Cr 267.716†	76.0	125.0	2.7501 µg/L	2.7501 ppb	20:23:41
1	Cu 324.752†	2660.4	55.6	0.3981 µg/L	0.3981 ppb	20:23:21
1	Mn 257.610†	516.0	737.0	2.5624 µg/L	2.5624 ppb	20:23:41
1	Mo 202.031†	2.1	9.6	1.0268 µg/L	1.0268 ppb	20:23:41
1	Ni 231.604†	306.7	-9.2	-0.5006 µg/L	-0.5006 ppb	20:23:41
1	P 214.914†	30.9	1.9	4.0684 µg/L	4.0684 ppb	20:23:41
1	Pb 220.353†	95.5	-6.0	-1.5886 µg/L	-1.5886 ppb	20:23:41
1	S 181.975 Axial†	22.4	6.6	28.872 µg/L	28.872 ppb	20:23:41
1	Sb 206.836†	25.5	-2.6	-2.5994 µg/L	-2.5994 ppb	20:23:41
1	Se 196.026†	18.4	1.7	2.8564 µg/L	2.8564 ppb	20:23:41
1	SiO2†	19399.1	17282.9	3722.0 µg/L	3722.0 ppb	20:23:21
1	Si 251.611†	22398.8	21085.8	1733.4 µg/L	1733.4 ppb	20:23:21
1	Sn 189.927†	0.3	1.1	0.5148 µg/L	0.5148 ppb	20:23:41
1	Ti 334.940†	1573.4	1387.0	3.3385 µg/L	3.3385 ppb	20:23:21
1	Tl 190.801†	-24.5	0.9	1.2407 µg/L	1.2407 ppb	20:23:41
1	U 409.014†	-73.6	-16.7	-1.5212 µg/L	-1.5212 ppb	20:23:21
1	V 292.402†	7.1	50.9	0.5641 µg/L	0.5641 ppb	20:23:21
1	Zn 213.857†	573.4	72.2	1.8020 µg/L	1.8020 ppb	20:23:41
2	Sc RADIAL	57057.8	57057.8	105 %		20:22:19
2	Al 396.153Radial†	133.1	137.5	102.45 µg/L	102.45 ppb	20:22:19
2	Ca 317.933Radial†	244.7	54.9	51.704 µg/L	51.704 ppb	20:22:39
2	Fe 238.204 Radial†	24.8	9.3	78.518 µg/L	78.518 ppb	20:22:39
2	K 766.490 Radial†	382.8	237.7	168.97 µg/L	168.97 ppb	20:22:19
2	Mg 279.077 IEC†	13.0	1.2	10.926 µg/L	10.926 ppb	20:22:39
2	Na 589.592 Radial†	1075.2	486.6	160.18 µg/L	160.18 ppb	20:22:19
2	Sr 421.552†	93.1	49.5	0.5134 µg/L	0.5134 ppb	20:22:19
2	Sc 361.383	2009331.3	2009331.3	105.21 %		20:23:47
2	Y 371.029	1376929.5	1376929.5	105.12 %		20:23:47
2	Ag 328.068†	-562.2	30.1	0.2455 µg/L	0.2455 ppb	20:23:53
2	As 188.979†	0.8	-0.4	-0.8316 µg/L	-0.8316 ppb	20:24:13
2	B 249.677†	922.8	545.6	23.807 µg/L	23.807 ppb	20:23:53
2	Ba 233.527†	29.1	53.7	1.3977 µg/L	1.3977 ppb	20:24:13
2	Be 313.107†	-3228.2	372.1	0.2418 µg/L	0.2418 ppb	20:23:53
2	Cd 226.502†	-136.1	12.7	0.3427 µg/L	0.3427 ppb	20:24:13
2	Co 228.616†	-6.0	3.2	0.1493 µg/L	0.1493 ppb	20:24:13
2	Cr 267.716†	61.9	111.2	2.4456 µg/L	2.4456 ppb	20:24:13
2	Cu 324.752†	2686.2	67.1	0.4798 µg/L	0.4798 ppb	20:23:53
2	Mn 257.610†	508.7	727.6	2.5297 µg/L	2.5297 ppb	20:24:13
2	Mo 202.031†	-6.3	1.5	0.1675 µg/L	0.1675 ppb	20:24:13
2	Ni 231.604†	319.7	1.7	0.0937 µg/L	0.0937 ppb	20:24:13
2	P 214.914†	25.9	-3.0	-6.6078 µg/L	-6.6078 ppb	20:24:13
2	Pb 220.353†	99.1	-3.0	-0.8101 µg/L	-0.8101 ppb	20:24:13

2	S 181.975 Axial†	22.8	6.9	30.189 µg/L	30.189 ppb	20:24:13
2	Sb 206.836†	25.8	-2.4	-2.4340 µg/L	-2.4340 ppb	20:24:13
2	Se 196.026†	11.0	-5.4	-8.0417 µg/L	-8.0417 ppb	20:24:13
2	SiO2†	19555.5	17337.2	3733.7 µg/L	3733.7 ppb	20:23:53
2	Si 251.611†	22623.6	21190.5	1742.0 µg/L	1742.0 ppb	20:23:53
2	Sn 189.927†	1.7	2.5	1.1256 µg/L	1.1256 ppb	20:24:13
2	Ti 334.940†	1552.0	1359.0	3.2689 µg/L	3.2689 ppb	20:23:53
2	Tl 190.801†	-20.4	4.9	6.8577 µg/L	6.8577 ppb	20:24:13
2	U 409.014†	-18.7	35.8	3.2301 µg/L	3.2301 ppb	20:23:53
2	V 292.402†	-25.2	20.2	0.2352 µg/L	0.2352 ppb	20:23:53
2	Zn 213.857†	565.1	61.6	1.5331 µg/L	1.5331 ppb	20:24:13
3	Sc RADIAL	56953.5	56953.5	104 %		20:22:45
3	Al 396.153Radial†	129.2	134.0	99.822 µg/L	99.822 ppb	20:22:45
3	Ca 317.933Radial†	246.4	56.9	53.605 µg/L	53.605 ppb	20:23:05
3	Fe 238.204 Radial†	24.4	8.9	75.075 µg/L	75.075 ppb	20:23:05
3	K 766.490 Radial†	389.0	244.3	173.66 µg/L	173.66 ppb	20:22:45
3	Mg 279.077 IEC†	11.1	-0.6	-6.0969 µg/L	-6.0969 ppb	20:23:05
3	Na 589.592 Radial†	1090.9	503.4	165.73 µg/L	165.73 ppb	20:22:45
3	Sr 421.552†	87.2	44.0	0.4559 µg/L	0.4559 ppb	20:22:45
3	Sc 361.383	2016528.2	2016528.2	105.59 %		20:24:19
3	Y 371.029	1380317.1	1380317.1	105.37 %		20:24:19
3	Ag 328.068†	-528.9	63.6	0.5130 µg/L	0.5130 ppb	20:24:25
3	As 188.979†	-1.7	-2.8	-5.4248 µg/L	-5.4248 ppb	20:24:45
3	B 249.677†	918.6	538.5	23.500 µg/L	23.500 ppb	20:24:25
3	Ba 233.527†	28.3	52.8	1.3754 µg/L	1.3754 ppb	20:24:45
3	Be 313.107†	-3258.6	354.3	0.2301 µg/L	0.2301 ppb	20:24:25
3	Cd 226.502†	-133.3	15.9	0.4296 µg/L	0.4296 ppb	20:24:45
3	Co 228.616†	-10.2	-0.8	-0.0463 µg/L	-0.0463 ppb	20:24:45
3	Cr 267.716†	55.5	104.9	2.3077 µg/L	2.3077 ppb	20:24:45
3	Cu 324.752†	2583.6	-39.2	-0.2634 µg/L	-0.2634 ppb	20:24:25
3	Mn 257.610†	450.2	670.5	2.3321 µg/L	2.3321 ppb	20:24:45
3	Mo 202.031†	-0.0	7.5	0.8045 µg/L	0.8045 ppb	20:24:45
3	Ni 231.604†	318.5	-0.6	-0.0310 µg/L	-0.0310 ppb	20:24:45
3	P 214.914†	38.6	8.9	19.181 µg/L	19.181 ppb	20:24:45
3	Pb 220.353†	102.3	-0.3	-0.0696 µg/L	-0.0696 ppb	20:24:45
3	S 181.975 Axial†	22.3	6.3	27.789 µg/L	27.789 ppb	20:24:45
3	Sb 206.836†	29.6	1.1	1.0449 µg/L	1.0449 ppb	20:24:45
3	Se 196.026†	19.9	3.0	4.7336 µg/L	4.7336 ppb	20:24:45
3	SiO2†	18954.3	16701.5	3596.8 µg/L	3596.8 ppb	20:24:25
3	Si 251.611†	21830.5	20362.7	1673.9 µg/L	1673.9 ppb	20:24:25
3	Sn 189.927†	0.5	1.3	0.5938 µg/L	0.5938 ppb	20:24:45
3	Ti 334.940†	1584.6	1384.6	3.3320 µg/L	3.3320 ppb	20:24:25
3	Tl 190.801†	-23.4	2.2	3.0709 µg/L	3.0709 ppb	20:24:45
3	U 409.014†	-96.9	-38.1	-3.4657 µg/L	-3.4657 ppb	20:24:25
3	V 292.402†	7.1	51.0	0.5599 µg/L	0.5599 ppb	20:24:25
3	Zn 213.857†	552.0	47.2	1.1763 µg/L	1.1763 ppb	20:24:45

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Mean Data: 246056001|949338|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008319.7	105.16 %	0.459			0.44%
Sc RADIAL	56769.2	104 %	0.8			0.73%
Y 371.029	1375493.8	105.01 %	0.434			0.41%
Ag 328.068†	58.2	0.4697 µg/L	0.20600	0.4697 ppb	0.20600	43.86%
Al 396.153Radial†	138.2	102.99 µg/L	3.469	102.99 ppb	3.469	3.37%
As 188.979†	-1.9	-3.7040 µg/L	2.50383	-3.7040 ppb	2.50383	67.60%
B 249.677†	546.1	23.830 µg/L	0.3416	23.830 ppb	0.3416	1.43%
Ba 233.527†	56.6	1.4744 µg/L	0.15257	1.4744 ppb	0.15257	10.35%
Be 313.107†	342.9	0.2227 µg/L	0.02369	0.2227 ppb	0.02369	10.64%
Ca 317.933Radial†	57.0	53.634 µg/L	1.9437	53.634 ppb	1.9437	3.62%
Cd 226.502†	12.9	0.3467 µg/L	0.08103	0.3467 ppb	0.08103	23.37%
Co 228.616†	2.3	0.1056 µg/L	0.13548	0.1056 ppb	0.13548	128.28%
Cr 267.716†	113.7	2.5011 µg/L	0.22633	2.5011 ppb	0.22633	9.05%
Cu 324.752†	27.8	0.2048 µg/L	0.40754	0.2048 ppb	0.40754	198.96%
Fe 238.204 Radial†	8.9	75.133 µg/L	3.3565	75.133 ppb	3.3565	4.47%
K 766.490 Radial†	244.9	174.08 µg/L	5.333	174.08 ppb	5.333	3.06%
Mg 279.077 IEC†	-0.4	-3.4749 µg/L	13.28508	-3.4749 ppb	13.28508	382.32%
Mn 257.610†	711.7	2.4748 µg/L	0.12460	2.4748 ppb	0.12460	5.03%
Mo 202.031†	6.2	0.6663 µg/L	0.44606	0.6663 ppb	0.44606	66.95%
Na 589.592 Radial†	520.5	171.35 µg/L	14.809	171.35 ppb	14.809	8.64%

Ni 231.604†	-2.7	-0.1460 µg/L	0.31337	-0.1460 ppb	0.31337	214.71%
P 214.914†	2.6	5.5473 µg/L	12.95797	5.5473 ppb	12.95797	233.59%
Pb 220.353†	-3.1	-0.8228 µg/L	0.75957	-0.8228 ppb	0.75957	92.32%
S 181.975 Axial†	6.6	28.950 µg/L	1.2016	28.950 ppb	1.2016	4.15%
Sb 206.836†	-1.3	-1.3295 µg/L	2.05793	-1.3295 ppb	2.05793	154.79%
Se 196.026†	-0.2	-0.1506 µg/L	6.89807	-0.1506 ppb	6.89807	>999.9%
SiO2†	17107.2	3684.1 µg/L	75.90	3684.1 ppb	75.90	2.06%
Si 251.611†	20879.6	1716.4 µg/L	37.06	1716.4 ppb	37.06	2.16%
Sn 189.927†	1.6	0.7447 µg/L	0.33221	0.7447 ppb	0.33221	44.61%
Sr 421.552†	32.8	0.3402 µg/L	0.25190	0.3402 ppb	0.25190	74.05%
Ti 334.940†	1376.9	3.3132 µg/L	0.03843	3.3132 ppb	0.03843	1.16%
Tl 190.801†	2.6	3.7231 µg/L	2.86477	3.7231 ppb	2.86477	76.95%
U 409.014†	-6.3	-0.5856 µg/L	3.44452	-0.5856 ppb	3.44452	588.18%
V 292.402†	40.7	0.4531 µg/L	0.18872	0.4531 ppb	0.18872	41.65%
Zn 213.857†	60.3	1.5038 µg/L	0.31390	1.5038 ppb	0.31390	20.87%

Sequence No.: 58

Sample ID: 1202033917|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 344

Date Collected: 2/11/2010 20:24:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033917|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56899.2	56899.2	104 %		20:25:27
1	Al 396.153Radial†	141.8	146.1	108.90 µg/L	108.90 ppb	20:25:27
1	Ca 317.933Radial†	244.1	55.0	51.794 µg/L	51.794 ppb	20:25:47
1	Fe 238.204 Radial†	25.0	9.5	80.308 µg/L	80.308 ppb	20:25:47
1	K 766.490 Radial†	402.2	257.3	182.90 µg/L	182.90 ppb	20:25:27
1	Mg 279.077 IEC†	17.0	5.0	46.582 µg/L	46.582 ppb	20:25:47
1	Na 589.592 Radial†	1112.0	524.7	172.73 µg/L	172.73 ppb	20:25:27
1	Sr 421.552†	70.9	28.5	0.2950 µg/L	0.2950 ppb	20:25:27
1	Sc 361.383	1993226.5	1993226.5	104.37 %		20:26:49
1	Y 371.029	1363824.5	1363824.5	104.12 %		20:26:49
1	Ag 328.068†	-550.5	37.0	0.3007 µg/L	0.3007 ppb	20:26:55
1	As 188.979†	-3.5	-4.5	-8.8244 µg/L	-8.8244 ppb	20:27:15
1	B 249.677†	938.6	567.9	24.777 µg/L	24.777 ppb	20:26:55
1	Ba 233.527†	32.5	57.2	1.4893 µg/L	1.4893 ppb	20:27:15
1	Be 313.107†	-3364.5	216.7	0.1390 µg/L	0.1390 ppb	20:26:55
1	Cd 226.502†	-139.6	8.3	0.2205 µg/L	0.2205 ppb	20:27:15
1	Co 228.616†	-2.7	6.3	0.2956 µg/L	0.2956 ppb	20:27:15
1	Cr 267.716†	22.2	73.7	1.6207 µg/L	1.6207 ppb	20:27:15
1	Cu 324.752†	2632.2	36.0	0.2625 µg/L	0.2625 ppb	20:26:55
1	Mn 257.610†	482.1	706.0	2.4536 µg/L	2.4536 ppb	20:27:15
1	Mo 202.031†	-10.1	-2.1	-0.2264 µg/L	-0.2264 ppb	20:27:15
1	Ni 231.604†	303.2	-11.7	-0.6392 µg/L	-0.6392 ppb	20:27:15
1	P 214.914†	28.4	-0.4	-0.8824 µg/L	-0.8824 ppb	20:27:15
1	Pb 220.353†	94.3	-6.9	-1.8331 µg/L	-1.8331 ppb	20:27:15
1	S 181.975 Axial†	21.6	5.9	25.830 µg/L	25.830 ppb	20:27:15
1	Sb 206.836†	26.3	-1.8	-1.7912 µg/L	-1.7912 ppb	20:27:15
1	Se 196.026†	17.5	1.0	1.6197 µg/L	1.6197 ppb	20:27:15
1	SiO2†	19864.7	17783.7	3829.8 µg/L	3829.8 ppb	20:26:55
1	Si 251.611†	23015.4	21739.7	1787.1 µg/L	1787.1 ppb	20:26:55
1	Sn 189.927†	1.1	2.0	0.9002 µg/L	0.9002 ppb	20:27:15
1	Ti 334.940†	2955.6	2715.9	6.5300 µg/L	6.5300 ppb	20:26:55
1	Tl 190.801†	-28.4	-2.9	-3.9373 µg/L	-3.9373 ppb	20:27:15
1	U 409.014†	-25.1	29.6	2.6648 µg/L	2.6648 ppb	20:26:55
1	V 292.402†	-16.6	28.4	0.3164 µg/L	0.3164 ppb	20:26:55
1	Zn 213.857†	543.7	45.4	1.1288 µg/L	1.1288 ppb	20:27:15
2	Sc RADIAL	57701.8	57701.8	106 %		20:25:53
2	Al 396.153Radial†	119.1	122.8	91.515 µg/L	91.515 ppb	20:25:53
2	Ca 317.933Radial†	233.8	42.0	39.550 µg/L	39.550 ppb	20:26:13
2	Fe 238.204 Radial†	23.0	7.2	61.233 µg/L	61.233 ppb	20:26:13
2	K 766.490 Radial†	350.1	202.7	144.07 µg/L	144.07 ppb	20:25:53
2	Mg 279.077 IEC†	16.4	4.2	39.475 µg/L	39.475 ppb	20:26:13
2	Na 589.592 Radial†	1115.6	513.2	168.95 µg/L	168.95 ppb	20:25:53
2	Sr 421.552†	71.3	27.8	0.2885 µg/L	0.2885 ppb	20:25:53
2	Sc 361.383	2032144.2	2032144.2	106.40 %		20:27:21
2	Y 371.029	1391589.3	1391589.3	106.23 %		20:27:21
2	Ag 328.068†	-508.5	86.6	0.6914 µg/L	0.6914 ppb	20:27:27
2	As 188.979†	-1.0	-2.0	-3.9993 µg/L	-3.9993 ppb	20:27:47
2	B 249.677†	950.2	561.5	24.511 µg/L	24.511 ppb	20:27:27
2	Ba 233.527†	31.0	55.2	1.4369 µg/L	1.4369 ppb	20:27:47
2	Be 313.107†	-3417.4	228.7	0.1482 µg/L	0.1482 ppb	20:27:27
2	Cd 226.502†	-144.5	6.3	0.1662 µg/L	0.1662 ppb	20:27:47
2	Co 228.616†	-15.0	-5.2	-0.2631 µg/L	-0.2631 ppb	20:27:47
2	Cr 267.716†	32.6	83.1	1.8269 µg/L	1.8269 ppb	20:27:47
2	Cu 324.752†	2658.7	12.6	0.0965 µg/L	0.0965 ppb	20:27:27
2	Mn 257.610†	482.8	697.9	2.4232 µg/L	2.4232 ppb	20:27:47
2	Mo 202.031†	-4.4	3.4	0.3670 µg/L	0.3670 ppb	20:27:47
2	Ni 231.604†	308.6	-12.2	-0.6647 µg/L	-0.6647 ppb	20:27:47
2	P 214.914†	25.2	-4.0	-8.5791 µg/L	-8.5791 ppb	20:27:47
2	Pb 220.353†	101.4	-1.9	-0.5114 µg/L	-0.5114 ppb	20:27:47

2	S 181.975 Axial†	20.6	4.5	19.915 µg/L	19.915 ppb	20:27:47
2	Sb 206.836†	21.8	-6.4	-6.3504 µg/L	-6.3504 ppb	20:27:47
2	Se 196.026†	17.0	0.1	0.2794 µg/L	0.2794 ppb	20:27:47
2	SiO2†	20053.2	17596.3	3789.5 µg/L	3789.5 ppb	20:27:27
2	Si 251.611†	23243.4	21531.7	1770.0 µg/L	1770.0 ppb	20:27:27
2	Sn 189.927†	-0.3	0.6	0.2639 µg/L	0.2639 ppb	20:27:47
2	Ti 334.940†	1498.9	1292.6	3.1067 µg/L	3.1067 ppb	20:27:27
2	Tl 190.801†	-23.8	1.9	2.7343 µg/L	2.7343 ppb	20:27:47
2	U 409.014†	-91.4	-32.3	-2.9368 µg/L	-2.9368 ppb	20:27:27
2	V 292.402†	-41.5	5.2	0.0668 µg/L	0.0668 ppb	20:27:27
2	Zn 213.857†	547.7	39.2	0.9769 µg/L	0.9769 ppb	20:27:47
3	Sc RADIAL	57723.9	57723.9	106 %		20:26:19
3	Al 396.153Radial†	154.4	156.1	116.34 µg/L	116.34 ppb	20:26:19
3	Ca 317.933Radial†	238.0	45.9	43.187 µg/L	43.187 ppb	20:26:39
3	Fe 238.204 Radial†	25.0	9.1	77.361 µg/L	77.361 ppb	20:26:39
3	K 766.490 Radial†	390.3	240.6	171.03 µg/L	171.03 ppb	20:26:19
3	Mg 279.077 IEC†	11.6	-0.3	-2.6211 µg/L	-2.6211 ppb	20:26:39
3	Na 589.592 Radial†	1065.3	465.3	153.17 µg/L	153.17 ppb	20:26:19
3	Sr 421.552†	87.9	43.6	0.4515 µg/L	0.4515 ppb	20:26:19
3	Sc 361.383	1997268.7	1997268.7	104.58 %		20:27:53
3	Y 371.029	1367305.1	1367305.1	104.38 %		20:27:53
3	Ag 328.068†	-530.9	56.9	0.4587 µg/L	0.4587 ppb	20:27:59
3	As 188.979†	2.9	1.6	3.1253 µg/L	3.1253 ppb	20:28:19
3	B 249.677†	890.5	520.1	22.690 µg/L	22.690 ppb	20:27:59
3	Ba 233.527†	35.1	59.6	1.5515 µg/L	1.5515 ppb	20:28:19
3	Be 313.107†	-3329.3	256.9	0.1666 µg/L	0.1666 ppb	20:27:59
3	Cd 226.502†	-134.0	14.0	0.3765 µg/L	0.3765 ppb	20:28:19
3	Co 228.616†	-14.9	-5.4	-0.2699 µg/L	-0.2699 ppb	20:28:19
3	Cr 267.716†	29.1	80.2	1.7633 µg/L	1.7633 ppb	20:28:19
3	Cu 324.752†	2668.4	65.5	0.4684 µg/L	0.4684 ppb	20:27:59
3	Mn 257.610†	469.1	692.7	2.4090 µg/L	2.4090 ppb	20:28:19
3	Mo 202.031†	1.9	9.3	1.0004 µg/L	1.0004 ppb	20:28:19
3	Ni 231.604†	303.3	-12.1	-0.6620 µg/L	-0.6620 ppb	20:28:19
3	P 214.914†	28.0	-0.8	-1.8252 µg/L	-1.8252 ppb	20:28:19
3	Pb 220.353†	100.3	-1.3	-0.3488 µg/L	-0.3488 ppb	20:28:19
3	S 181.975 Axial†	20.8	5.1	22.372 µg/L	22.372 ppb	20:28:19
3	Sb 206.836†	23.0	-4.9	-4.8566 µg/L	-4.8566 ppb	20:28:19
3	Se 196.026†	11.6	-4.7	-7.0281 µg/L	-7.0281 ppb	20:28:19
3	SiO2†	19350.5	17253.5	3715.6 µg/L	3715.6 ppb	20:27:59
3	Si 251.611†	22381.7	21089.1	1733.6 µg/L	1733.6 ppb	20:27:59
3	Sn 189.927†	4.4	5.1	2.3175 µg/L	2.3175 ppb	20:28:19
3	Ti 334.940†	1468.8	1288.4	3.0999 µg/L	3.0999 ppb	20:27:59
3	Tl 190.801†	-23.0	2.3	3.2580 µg/L	3.2580 ppb	20:28:19
3	U 409.014†	-50.5	5.4	0.4722 µg/L	0.4722 ppb	20:27:59
3	V 292.402†	-9.5	35.1	0.3959 µg/L	0.3959 ppb	20:27:59
3	Zn 213.857†	545.9	46.4	1.1583 µg/L	1.1583 ppb	20:28:19

Mean Data: 1202033917|949338|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2007546.5	105.12 %	1.120			1.07%
Sc RADIAL	57441.7	105 %	0.9			0.82%
Y 371.029	1374239.7	104.91 %	1.155			1.10%
Ag 328.068†	60.2	0.4836 µg/L	0.19650	0.4836 ppb	0.19650	40.63%
Al 396.153Radial†	141.7	105.58 µg/L	12.740	105.58 ppb	12.740	12.07%
As 188.979†	-1.7	-3.2328 µg/L	6.01158	-3.2328 ppb	6.01158	185.96%
B 249.677†	549.8	23.993 µg/L	1.1362	23.993 ppb	1.1362	4.74%
Ba 233.527†	57.3	1.4926 µg/L	0.05735	1.4926 ppb	0.05735	3.84%
Be 313.107†	234.1	0.1513 µg/L	0.01403	0.1513 ppb	0.01403	9.27%
Ca 317.933Radial†	47.6	44.844 µg/L	6.2882	44.844 ppb	6.2882	14.02%
Cd 226.502†	9.5	0.2544 µg/L	0.10920	0.2544 ppb	0.10920	42.92%
Co 228.616†	-1.4	-0.0791 µg/L	0.32452	-0.0791 ppb	0.32452	410.02%
Cr 267.716†	79.0	1.7370 µg/L	0.10563	1.7370 ppb	0.10563	6.08%
Cu 324.752†	38.0	0.2758 µg/L	0.18630	0.2758 ppb	0.18630	67.55%
Fe 238.204 Radial†	8.6	72.967 µg/L	10.2680	72.967 ppb	10.2680	14.07%
K 766.490 Radial†	233.5	166.00 µg/L	19.900	166.00 ppb	19.900	11.99%
Mg 279.077 IEC†	3.0	27.812 µg/L	26.5942	27.812 ppb	26.5942	95.62%
Mn 257.610†	698.8	2.4286 µg/L	0.02278	2.4286 ppb	0.02278	0.94%
Mo 202.031†	3.5	0.3803 µg/L	0.61350	0.3803 ppb	0.61350	161.30%
Na 589.592 Radial†	501.1	164.95 µg/L	10.377	164.95 ppb	10.377	6.29%

Ni 231.604†	-12.0	-0.6553 µg/L	0.01398	-0.6553 ppb	0.01398	2.13%
P 214.914†	-1.7	-3.7622 µg/L	4.19805	-3.7622 ppb	4.19805	111.58%
Pb 220.353†	-3.4	-0.8978 µg/L	0.81407	-0.8978 ppb	0.81407	90.68%
S 181.975 Axial†	5.2	22.706 µg/L	2.9716	22.706 ppb	2.9716	13.09%
Sb 206.836†	-4.4	-4.3328 µg/L	2.32430	-4.3328 ppb	2.32430	53.64%
Se 196.026†	-1.2	-1.7097 µg/L	4.65442	-1.7097 ppb	4.65442	272.24%
SiO2†	17544.5	3778.3 µg/L	57.90	3778.3 ppb	57.90	1.53%
Si 251.611†	21453.5	1763.6 µg/L	27.31	1763.6 ppb	27.31	1.55%
Sn 189.927†	2.5	1.1605 µg/L	1.05125	1.1605 ppb	1.05125	90.58%
Sr 421.552†	33.3	0.3450 µg/L	0.09228	0.3450 ppb	0.09228	26.75%
Ti 334.940†	1765.6	4.2455 µg/L	1.97838	4.2455 ppb	1.97838	46.60%
Tl 190.801†	0.4	0.6850 µg/L	4.01159	0.6850 ppb	4.01159	585.63%
U 409.014†	0.9	0.0668 µg/L	2.82276	0.0668 ppb	2.82276	>999.9%
V 292.402†	22.9	0.2597 µg/L	0.17171	0.2597 ppb	0.17171	66.13%
Zn 213.857†	43.7	1.0880 µg/L	0.09735	1.0880 ppb	0.09735	8.95%



Sequence No.: 59

Sample ID: 1202033918|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 345

Date Collected: 2/11/2010 20:28:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033918|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57118.9	57118.9	105 %		20:29:02
1	Al 396.153Radial†	7277.4	6963.3	5179.7 µg/L	5179.7 ppb	20:29:02
1	Ca 317.933Radial†	5635.9	5205.6	4901.4 µg/L	4901.4 ppb	20:29:22
1	Fe 238.204 Radial†	635.7	592.9	5035.5 µg/L	5035.5 ppb	20:29:22
1	K 766.490 Radial†	7780.6	7305.6	5192.8 µg/L	5192.8 ppb	20:29:02
1	Mg 279.077 IEC†	578.3	541.3	5040.5 µg/L	5040.5 ppb	20:29:22
1	Na 589.592 Radial†	17148.4	15842.6	5215.4 µg/L	5215.4 ppb	20:29:02
1	Sr 421.552†	50433.6	48147.4	499.10 µg/L	499.10 ppb	20:29:02
1	Sc 361.383	2029372.2	2029372.2	106.26 %		20:30:25
1	Y 371.029	1386984.1	1386984.1	105.88 %		20:30:25
1	Ag 328.068†	63499.8	60324.1	482.18 µg/L	482.18 ppb	20:30:31
1	As 188.979†	272.1	254.9	497.35 µg/L	497.35 ppb	20:30:52
1	B 249.677†	12579.6	11507.1	501.04 µg/L	501.04 ppb	20:30:31
1	Ba 233.527†	19915.2	18768.2	489.57 µg/L	489.57 ppb	20:30:31
1	Be 313.107†	788939.4	745910.5	486.94 µg/L	486.94 ppb	20:30:25
1	Cd 226.502†	18250.2	17317.3	477.67 µg/L	477.67 ppb	20:30:31
1	Co 228.616†	10351.9	9751.0	479.31 µg/L	479.31 ppb	20:30:31
1	Cr 267.716†	23453.1	22124.0	486.95 µg/L	486.95 ppb	20:30:31
1	Cu 324.752†	76892.0	69876.9	488.81 µg/L	488.81 ppb	20:30:31
1	Mn 257.610†	152727.9	143976.2	499.04 µg/L	499.04 ppb	20:30:25
1	Mo 202.031†	4988.2	4701.9	501.99 µg/L	501.99 ppb	20:30:52
1	Ni 231.604†	9727.6	8852.4	483.50 µg/L	483.50 ppb	20:30:31
1	P 214.914†	277.5	233.5	455.14 µg/L	455.14 ppb	20:30:52
1	Pb 220.353†	2118.5	1896.5	506.23 µg/L	506.23 ppb	20:30:52
1	S 181.975 Axial†	1228.5	1141.3	5000.4 µg/L	5000.4 ppb	20:30:52
1	Sb 206.836†	577.9	516.9	511.08 µg/L	511.08 ppb	20:30:52
1	Se 196.026†	341.6	305.6	473.79 µg/L	473.79 ppb	20:30:52
1	SiO2†	69252.0	63922.9	13766 µg/L	13766 ppb	20:30:31
1	Si 251.611†	83147.8	77937.4	6406.9 µg/L	6406.9 ppb	20:30:31
1	Sn 189.927†	1227.2	1155.8	531.61 µg/L	531.61 ppb	20:30:52
1	Ti 334.940†	216139.1	203292.2	488.68 µg/L	488.68 ppb	20:30:25
1	Tl 190.801†	355.9	359.2	507.37 µg/L	507.37 ppb	20:30:52
1	U 409.014†	5832.7	5542.7	500.82 µg/L	500.82 ppb	20:30:31
1	V 292.402†	48175.1	45381.7	489.75 µg/L	489.75 ppb	20:30:31
1	Zn 213.857†	20743.0	19045.7	472.14 µg/L	472.14 ppb	20:30:31
2	Sc RADIAL	57669.7	57669.7	106 %		20:29:28
2	Al 396.153Radial†	7198.1	6821.8	5074.3 µg/L	5074.3 ppb	20:29:28
2	Ca 317.933Radial†	5729.8	5243.1	4936.7 µg/L	4936.7 ppb	20:29:48
2	Fe 238.204 Radial†	647.1	597.9	5077.9 µg/L	5077.9 ppb	20:29:48
2	K 766.490 Radial†	7663.1	7123.4	5063.3 µg/L	5063.3 ppb	20:29:28
2	Mg 279.077 IEC†	590.8	547.9	5101.5 µg/L	5101.5 ppb	20:29:48
2	Na 589.592 Radial†	17069.2	15611.2	5139.3 µg/L	5139.3 ppb	20:29:28
2	Sr 421.552†	50046.4	47320.7	490.53 µg/L	490.53 ppb	20:29:28
2	Sc 361.383	2025971.4	2025971.4	106.08 %		20:30:59
2	Y 371.029	1385445.4	1385445.4	105.77 %		20:30:59
2	Ag 328.068†	64076.6	60968.2	487.34 µg/L	487.34 ppb	20:31:04
2	As 188.979†	272.1	255.4	498.21 µg/L	498.21 ppb	20:31:25
2	B 249.677†	12708.3	11648.4	507.20 µg/L	507.20 ppb	20:31:04
2	Ba 233.527†	20163.4	19033.7	496.49 µg/L	496.49 ppb	20:31:04
2	Be 313.107†	784151.3	742643.2	484.80 µg/L	484.80 ppb	20:30:59
2	Cd 226.502†	18466.4	17550.0	484.10 µg/L	484.10 ppb	20:31:04
2	Co 228.616†	10407.2	9819.5	482.68 µg/L	482.68 ppb	20:31:04
2	Cr 267.716†	23732.1	22424.1	493.55 µg/L	493.55 ppb	20:31:04
2	Cu 324.752†	77602.2	70667.9	494.34 µg/L	494.34 ppb	20:31:04
2	Mn 257.610†	151905.4	143442.1	497.19 µg/L	497.19 ppb	20:30:59
2	Mo 202.031†	4936.7	4661.3	497.65 µg/L	497.65 ppb	20:31:25
2	Ni 231.604†	9899.7	9030.0	493.21 µg/L	493.21 ppb	20:31:04
2	P 214.914†	268.8	225.8	437.83 µg/L	437.83 ppb	20:31:25
2	Pb 220.353†	2097.3	1879.9	501.75 µg/L	501.75 ppb	20:31:25

2	S 181.975 Axial†	1220.8	1136.0	4977.4 µg/L	4977.4 ppb	20:31:25
2	Sb 206.836†	577.2	517.2	511.19 µg/L	511.19 ppb	20:31:25
2	Se 196.026†	344.9	309.3	479.41 µg/L	479.41 ppb	20:31:25
2	SiO2†	69875.2	64619.9	13916 µg/L	13916 ppb	20:31:04
2	Si 251.611†	83881.2	78760.1	6474.5 µg/L	6474.5 ppb	20:31:04
2	Sn 189.927†	1214.2	1145.5	526.88 µg/L	526.88 ppb	20:31:25
2	Ti 334.940†	214642.3	202222.6	486.11 µg/L	486.11 ppb	20:30:59
2	Tl 190.801†	350.8	355.0	501.44 µg/L	501.44 ppb	20:31:25
2	U 409.014†	5895.7	5611.4	507.03 µg/L	507.03 ppb	20:31:04
2	V 292.402†	48734.6	45985.3	496.18 µg/L	496.18 ppb	20:31:04
2	Zn 213.857†	20858.1	19186.9	475.61 µg/L	475.61 ppb	20:31:04
3	Sc RADIAL	57562.1	57562.1	105 %		20:29:53
3	Al 396.153Radial†	7270.9	6903.7	5135.9 µg/L	5135.9 ppb	20:29:53
3	Ca 317.933Radial†	5662.0	5189.0	4885.7 µg/L	4885.7 ppb	20:30:14
3	Fe 238.204 Radial†	642.2	594.3	5047.6 µg/L	5047.6 ppb	20:30:14
3	K 766.490 Radial†	7708.8	7180.3	5103.7 µg/L	5103.7 ppb	20:29:53
3	Mg 279.077 IEC†	579.0	537.7	5006.2 µg/L	5006.2 ppb	20:30:14
3	Na 589.592 Radial†	17094.6	15665.4	5157.1 µg/L	5157.1 ppb	20:29:53
3	Sr 421.552†	50093.9	47454.3	491.92 µg/L	491.92 ppb	20:29:53
3	Sc 361.383	1982766.8	1982766.8	103.82 %		20:31:32
3	Y 371.029	1356385.0	1356385.0	103.55 %		20:31:32
3	Ag 328.068†	63496.6	61725.7	493.32 µg/L	493.32 ppb	20:31:38
3	As 188.979†	253.8	243.3	474.75 µg/L	474.75 ppb	20:31:58
3	B 249.677†	12503.7	11712.3	510.00 µg/L	510.00 ppb	20:31:38
3	Ba 233.527†	19632.9	18936.8	493.96 µg/L	493.96 ppb	20:31:38
3	Be 313.107†	770870.5	745958.1	486.97 µg/L	486.97 ppb	20:31:32
3	Cd 226.502†	18088.9	17565.7	484.53 µg/L	484.53 ppb	20:31:38
3	Co 228.616†	10138.0	9773.9	480.41 µg/L	480.41 ppb	20:31:38
3	Cr 267.716†	22848.3	22060.3	485.55 µg/L	485.55 ppb	20:31:38
3	Cu 324.752†	75559.2	70294.0	491.72 µg/L	491.72 ppb	20:31:38
3	Mn 257.610†	149432.1	144180.0	499.75 µg/L	499.75 ppb	20:31:32
3	Mo 202.031†	4526.0	4367.0	466.25 µg/L	466.25 ppb	20:31:58
3	Ni 231.604†	9575.0	8920.7	487.23 µg/L	487.23 ppb	20:31:38
3	P 214.914†	263.2	225.9	438.02 µg/L	438.02 ppb	20:31:58
3	Pb 220.353†	1955.3	1786.2	476.67 µg/L	476.67 ppb	20:31:58
3	S 181.975 Axial†	1163.2	1105.6	4844.2 µg/L	4844.2 ppb	20:31:58
3	Sb 206.836†	529.7	483.2	477.34 µg/L	477.34 ppb	20:31:58
3	Se 196.026†	334.1	306.0	474.42 µg/L	474.42 ppb	20:31:58
3	SiO2†	68637.7	64863.1	13969 µg/L	13969 ppb	20:31:38
3	Si 251.611†	82479.4	79132.9	6505.1 µg/L	6505.1 ppb	20:31:38
3	Sn 189.927†	1119.7	1079.4	496.47 µg/L	496.47 ppb	20:31:58
3	Ti 334.940†	210858.0	202986.4	487.95 µg/L	487.95 ppb	20:31:32
3	Tl 190.801†	330.3	342.5	483.99 µg/L	483.99 ppb	20:31:58
3	U 409.014†	5683.6	5528.2	499.50 µg/L	499.50 ppb	20:31:38
3	V 292.402†	47331.5	45634.9	492.17 µg/L	492.17 ppb	20:31:38
3	Zn 213.857†	20384.9	19159.6	474.96 µg/L	474.96 ppb	20:31:38

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Mean Data: 1202033918|949338|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012703.5	105.39 %	1.360			1.29%
Sc RADIAL	57450.2	105 %	0.5			0.51%
Y 371.029	1376271.5	105.07 %	1.316			1.25%
Ag 328.068†	61006.0	487.61 µg/L	5.575	487.61 ppb	5.575	1.14%
Al 396.153Radial†	6896.3	5130.0 µg/L	52.94	5130.0 ppb	52.94	1.03%
As 188.979†	251.2	490.10 µg/L	13.305	490.10 ppb	13.305	2.71%
B 249.677†	11622.6	506.08 µg/L	4.584	506.08 ppb	4.584	0.91%
Ba 233.527†	18912.9	493.34 µg/L	3.504	493.34 ppb	3.504	0.71%
Be 313.107†	744837.3	486.24 µg/L	1.241	486.24 ppb	1.241	0.26%
Ca 317.933Radial†	5212.6	4908.0 µg/L	26.12	4908.0 ppb	26.12	0.53%
Cd 226.502†	17477.7	482.10 µg/L	3.840	482.10 ppb	3.840	0.80%
Co 228.616†	9781.5	480.80 µg/L	1.721	480.80 ppb	1.721	0.36%
Cr 267.716†	22202.8	488.68 µg/L	4.275	488.68 ppb	4.275	0.87%
Cu 324.752†	70279.6	491.62 µg/L	2.767	491.62 ppb	2.767	0.56%
Fe 238.204 Radial†	595.1	5053.7 µg/L	21.85	5053.7 ppb	21.85	0.43%
K 766.490 Radial†	7203.1	5119.9 µg/L	66.26	5119.9 ppb	66.26	1.29%
Mg 279.077 IEC†	542.3	5049.4 µg/L	48.25	5049.4 ppb	48.25	0.96%
Mn 257.610†	143866.1	498.66 µg/L	1.319	498.66 ppb	1.319	0.26%
Mo 202.031†	4576.8	488.63 µg/L	19.504	488.63 ppb	19.504	3.99%
Na 589.592 Radial†	15706.4	5170.6 µg/L	39.83	5170.6 ppb	39.83	0.77%

Ni 231.604†	8934.4	487.98 µg/L	4.896	487.98 ppb	4.896	1.00%
P 214.914†	228.4	443.66 µg/L	9.943	443.66 ppb	9.943	2.24%
Pb 220.353†	1854.2	494.89 µg/L	15.933	494.89 ppb	15.933	3.22%
S 181.975 Axial†	1127.7	4940.7 µg/L	84.32	4940.7 ppb	84.32	1.71%
Sb 206.836†	505.8	499.87 µg/L	19.513	499.87 ppb	19.513	3.90%
Se 196.026†	306.9	475.88 µg/L	3.078	475.88 ppb	3.078	0.65%
SiO2†	64468.6	13884 µg/L	105.1	13884 ppb	105.1	0.76%
Si 251.611†	78610.2	6462.2 µg/L	50.28	6462.2 ppb	50.28	0.78%
Sn 189.927†	1126.9	518.32 µg/L	19.072	518.32 ppb	19.072	3.68%
Sr 421.552†	47640.8	493.85 µg/L	4.600	493.85 ppb	4.600	0.93%
Ti 334.940†	202833.7	487.58 µg/L	1.328	487.58 ppb	1.328	0.27%
Tl 190.801†	352.2	497.60 µg/L	12.153	497.60 ppb	12.153	2.44%
U 409.014†	5560.8	502.45 µg/L	4.021	502.45 ppb	4.021	0.80%
V 292.402†	45667.3	492.70 µg/L	3.245	492.70 ppb	3.245	0.66%
Zn 213.857†	19130.7	474.24 µg/L	1.845	474.24 ppb	1.845	0.39%

Sequence No.: 60

Sample ID: 1202032560|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 346

Date Collected: 2/11/2010 20:32:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032560|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56242.3	56242.3	103 %			20:32:40
1	Al 396.153Radial†	-7.5	2.9	2.1521 µg/L		2.1521 ppb	20:32:40
1	Ca 317.933Radial†	197.0	12.0	11.324 µg/L		11.324 ppb	20:33:00
1	Fe 238.204 Radial†	16.7	1.7	14.543 µg/L		14.543 ppb	20:33:00
1	K 766.490 Radial†	220.6	85.7	60.889 µg/L		60.889 ppb	20:32:40
1	Mg 279.077 IEC†	10.7	-0.9	-7.9778 µg/L		-7.9778 ppb	20:33:00
1	Na 589.592 Radial†	705.3	142.5	46.902 µg/L		46.902 ppb	20:32:40
1	Sr 421.552†	19.8	-20.4	-0.2111 µg/L		-0.2111 ppb	20:32:40
1	Sc 361.383	2007389.7	2007389.7	105.11 %			20:34:02
1	Y 371.029	1377633.9	1377633.9	105.17 %			20:34:02
1	Ag 328.068†	-550.2	41.1	0.3277 µg/L		0.3277 ppb	20:34:07
1	As 188.979†	1.3	0.1	0.2221 µg/L		0.2221 ppb	20:34:28
1	B 249.677†	446.9	93.7	4.0871 µg/L		4.0871 ppb	20:34:28
1	Ba 233.527†	-3.5	22.7	0.5911 µg/L		0.5911 ppb	20:34:28
1	Be 313.107†	-3184.3	410.9	0.2680 µg/L		0.2680 ppb	20:34:07
1	Cd 226.502†	-138.2	10.7	0.2916 µg/L		0.2916 ppb	20:34:28
1	Co 228.616†	-22.9	-12.9	-0.6372 µg/L		-0.6372 ppb	20:34:28
1	Cr 267.716†	-23.8	29.7	0.6533 µg/L		0.6533 ppb	20:34:28
1	Cu 324.752†	2472.5	-133.7	-0.9320 µg/L		-0.9320 ppb	20:34:07
1	Mn 257.610†	-86.6	161.7	0.5623 µg/L		0.5623 ppb	20:34:28
1	Mo 202.031†	-2.5	5.2	0.5549 µg/L		0.5549 ppb	20:34:28
1	Ni 231.604†	304.1	-12.8	-0.7000 µg/L		-0.7000 ppb	20:34:28
1	P 214.914†	27.1	-1.9	-3.8906 µg/L		-3.8906 ppb	20:34:28
1	Pb 220.353†	98.7	-3.3	-0.8735 µg/L		-0.8735 ppb	20:34:28
1	S 181.975 Axial†	12.7	-2.8	-12.095 µg/L		-12.095 ppb	20:34:28
1	Sb 206.836†	25.2	-3.0	-2.9402 µg/L		-2.9402 ppb	20:34:28
1	Se 196.026†	14.0	-2.5	-3.8420 µg/L		-3.8420 ppb	20:34:28
1	SiO2†	5020.9	3526.8	759.53 µg/L		759.53 ppb	20:34:07
1	Si 251.611†	4882.0	4331.9	356.11 µg/L		356.11 ppb	20:34:07
1	Sn 189.927†	4.9	5.6	2.5639 µg/L		2.5639 ppb	20:34:28
1	Ti 334.940†	467.1	328.3	0.7905 µg/L		0.7905 ppb	20:34:07
1	Tl 190.801†	-22.8	2.6	3.6700 µg/L		3.6700 ppb	20:34:28
1	U 409.014†	-44.1	11.6	1.0507 µg/L		1.0507 ppb	20:34:07
1	V 292.402†	-32.1	13.6	0.1538 µg/L		0.1538 ppb	20:34:07
1	Zn 213.857†	491.1	-8.4	-0.2044 µg/L		-0.2044 ppb	20:34:28
2	Sc RADIAL	56494.1	56494.1	104 %			20:33:06
2	Al 396.153Radial†	14.4	24.1	17.946 µg/L		17.946 ppb	20:33:06
2	Ca 317.933Radial†	203.2	17.1	16.139 µg/L		16.139 ppb	20:33:26
2	Fe 238.204 Radial†	17.9	2.8	23.549 µg/L		23.549 ppb	20:33:26
2	K 766.490 Radial†	161.7	27.8	19.760 µg/L		19.760 ppb	20:33:06
2	Mg 279.077 IEC†	13.2	1.4	13.398 µg/L		13.398 ppb	20:33:26
2	Na 589.592 Radial†	680.9	115.9	38.139 µg/L		38.139 ppb	20:33:06
2	Sr 421.552†	37.5	-3.3	-0.0344 µg/L		-0.0344 ppb	20:33:06
2	Sc 361.383	1996995.6	1996995.6	104.56 %			20:34:34
2	Y 371.029	1369030.1	1369030.1	104.51 %			20:34:34
2	Ag 328.068†	-488.5	97.3	0.7743 µg/L		0.7743 ppb	20:34:39
2	As 188.979†	0.8	-0.4	-0.7992 µg/L		-0.7992 ppb	20:35:00
2	B 249.677†	440.9	90.2	3.9297 µg/L		3.9297 ppb	20:35:00
2	Ba 233.527†	-7.7	18.6	0.4856 µg/L		0.4856 ppb	20:35:00
2	Be 313.107†	-3370.5	217.0	0.1415 µg/L		0.1415 ppb	20:34:39
2	Cd 226.502†	-138.9	9.3	0.2526 µg/L		0.2526 ppb	20:35:00
2	Co 228.616†	-16.0	-6.5	-0.3210 µg/L		-0.3210 ppb	20:35:00
2	Cr 267.716†	-12.7	40.2	0.8850 µg/L		0.8850 ppb	20:35:00
2	Cu 324.752†	2458.3	-135.1	-0.9404 µg/L		-0.9404 ppb	20:34:39
2	Mn 257.610†	-92.3	155.8	0.5421 µg/L		0.5421 ppb	20:35:00
2	Mo 202.031†	-3.0	4.7	0.4979 µg/L		0.4979 ppb	20:35:00
2	Ni 231.604†	300.7	-14.6	-0.7984 µg/L		-0.7984 ppb	20:35:00
2	P 214.914†	38.7	9.3	20.180 µg/L		20.180 ppb	20:35:00
2	Pb 220.353†	93.2	-8.0	-2.1411 µg/L		-2.1411 ppb	20:35:00

2	S 181.975 Axial†	14.9	-0.5	-2.2892 µg/L	-2.2892 ppb	20:35:00
2	Sb 206.836†	28.8	0.6	0.5973 µg/L	0.5973 ppb	20:35:00
2	Se 196.026†	13.5	-2.9	-4.3469 µg/L	-4.3469 ppb	20:35:00
2	SiO2†	4956.1	3489.8	751.55 µg/L	751.55 ppb	20:34:39
2	Si 251.611†	4896.1	4369.6	359.20 µg/L	359.20 ppb	20:34:39
2	Sn 189.927†	2.5	3.2	1.4877 µg/L	1.4877 ppb	20:35:00
2	Ti 334.940†	420.0	285.6	0.6862 µg/L	0.6862 ppb	20:34:39
2	Tl 190.801†	-26.7	-1.2	-1.7022 µg/L	-1.7022 ppb	20:35:00
2	U 409.014†	-10.3	43.8	3.9611 µg/L	3.9611 ppb	20:34:39
2	V 292.402†	-40.5	5.5	0.0713 µg/L	0.0713 ppb	20:34:39
2	Zn 213.857†	496.0	-1.2	-0.0259 µg/L	-0.0259 ppb	20:35:00
3	Sc RADIAL	56398.2	56398.2	103 %		20:33:31
3	Al 396.153Radial†	10.3	20.1	15.002 µg/L	15.002 ppb	20:33:31
3	Ca 317.933Radial†	202.2	16.5	15.518 µg/L	15.518 ppb	20:33:52
3	Fe 238.204 Radial†	15.6	0.6	4.7587 µg/L	4.7587 ppb	20:33:52
3	K 766.490 Radial†	197.7	62.9	44.729 µg/L	44.729 ppb	20:33:31
3	Mg 279.077 IEC†	12.2	0.5	4.9239 µg/L	4.9239 ppb	20:33:52
3	Na 589.592 Radial†	721.6	156.4	51.494 µg/L	51.494 ppb	20:33:31
3	Sr 421.552†	30.7	-9.8	-0.1021 µg/L	-0.1021 ppb	20:33:31
3	Sc 361.383	2026962.5	2026962.5	106.13 %		20:35:06
3	Y 371.029	1389827.1	1389827.1	106.10 %		20:35:06
3	Ag 328.068†	-504.1	89.5	0.7130 µg/L	0.7130 ppb	20:35:11
3	As 188.979†	-0.7	-1.8	-3.5252 µg/L	-3.5252 ppb	20:35:32
3	B 249.677†	431.2	74.8	3.2682 µg/L	3.2682 ppb	20:35:32
3	Ba 233.527†	-15.3	11.6	0.3035 µg/L	0.3035 ppb	20:35:32
3	Be 313.107†	-3164.9	458.4	0.2991 µg/L	0.2991 ppb	20:35:11
3	Cd 226.502†	-136.2	13.8	0.3788 µg/L	0.3788 ppb	20:35:32
3	Co 228.616†	-16.8	-7.0	-0.3440 µg/L	-0.3440 ppb	20:35:32
3	Cr 267.716†	-27.3	26.7	0.5871 µg/L	0.5871 ppb	20:35:32
3	Cu 324.752†	2455.3	-172.6	-1.2053 µg/L	-1.2053 ppb	20:35:11
3	Mn 257.610†	-103.8	146.3	0.5072 µg/L	0.5072 ppb	20:35:32
3	Mo 202.031†	-8.1	-0.1	-0.0091 µg/L	-0.0091 ppb	20:35:32
3	Ni 231.604†	300.6	-18.9	-1.0341 µg/L	-1.0341 ppb	20:35:32
3	P 214.914†	21.3	-7.6	-16.198 µg/L	-16.198 ppb	20:35:32
3	Pb 220.353†	99.7	-3.2	-0.8563 µg/L	-0.8563 ppb	20:35:32
3	S 181.975 Axial†	18.6	2.7	12.021 µg/L	12.021 ppb	20:35:32
3	Sb 206.836†	26.0	-2.5	-2.4662 µg/L	-2.4662 ppb	20:35:32
3	Se 196.026†	13.3	-3.3	-4.9621 µg/L	-4.9621 ppb	20:35:32
3	SiO2†	4843.7	3313.8	713.65 µg/L	713.65 ppb	20:35:11
3	Si 251.611†	4687.8	4104.1	337.38 µg/L	337.38 ppb	20:35:11
3	Sn 189.927†	-0.2	0.7	0.3038 µg/L	0.3038 ppb	20:35:32
3	Ti 334.940†	469.5	326.2	0.7846 µg/L	0.7846 ppb	20:35:11
3	Tl 190.801†	-19.8	5.6	7.8024 µg/L	7.8024 ppb	20:35:32
3	U 409.014†	-68.5	-10.9	-0.9876 µg/L	-0.9876 ppb	20:35:11
3	V 292.402†	-10.3	34.5	0.3689 µg/L	0.3689 ppb	20:35:11
3	Zn 213.857†	495.7	-8.5	-0.2055 µg/L	-0.2055 ppb	20:35:32

Mean Data: 1202032560|949338|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2010449.2	105.27 %		0.797			0.76%
Sc RADIAL	56378.2	103 %		0.2			0.23%
Y 371.029	1378830.3	105.26 %		0.798			0.76%
Ag 328.068†	76.0	0.6050 µg/L		0.24212	0.6050 ppb	0.24212	40.02%
Al 396.153Radial†	15.7	11.700 µg/L		8.3985	11.700 ppb	8.3985	71.78%
As 188.979†	-0.7	-1.3674 µg/L		1.93720	-1.3674 ppb	1.93720	141.67%
B 249.677†	86.2	3.7617 µg/L		0.43457	3.7617 ppb	0.43457	11.55%
Ba 233.527†	17.7	0.4601 µg/L		0.14554	0.4601 ppb	0.14554	31.63%
Be 313.107†	362.1	0.2362 µg/L		0.08349	0.2362 ppb	0.08349	35.35%
Ca 317.933Radial†	15.2	14.327 µg/L		2.6192	14.327 ppb	2.6192	18.28%
Cd 226.502†	11.2	0.3076 µg/L		0.06462	0.3076 ppb	0.06462	21.00%
Co 228.616†	-8.8	-0.4341 µg/L		0.17631	-0.4341 ppb	0.17631	40.62%
Cr 267.716†	32.2	0.7085 µg/L		0.15643	0.7085 ppb	0.15643	22.08%
Cu 324.752†	-147.1	-1.0259 µg/L		0.15544	-1.0259 ppb	0.15544	15.15%
Fe 238.204 Radial†	1.7	14.284 µg/L		9.3979	14.284 ppb	9.3979	65.79%
K 766.490 Radial†	58.8	41.793 µg/L		20.7215	41.793 ppb	20.7215	49.58%
Mg 279.077 IEC†	0.4	3.4479 µg/L		10.76396	3.4479 ppb	10.76396	312.18%
Mn 257.610†	154.6	0.5372 µg/L		0.02792	0.5372 ppb	0.02792	5.20%
Mo 202.031†	3.3	0.3479 µg/L		0.31050	0.3479 ppb	0.31050	89.25%
Na 589.592 Radial†	138.2	45.512 µg/L		6.7850	45.512 ppb	6.7850	14.91%

Ni 231.604†	-15.5	-0.8442 µg/L	0.17168	-0.8442 ppb	0.17168	20.34%
P 214.914†	-0.0	0.0304 µg/L	18.50296	0.0304 ppb	18.50296	>999.9%
Pb 220.353†	-4.8	-1.2903 µg/L	0.73684	-1.2903 ppb	0.73684	57.11%
S 181.975 Axial†	-0.2	-0.7875 µg/L	12.12803	-0.7875 ppb	12.12803	>999.9%
Sb 206.836†	-1.6	-1.6031 µg/L	1.92021	-1.6031 ppb	1.92021	119.78%
Se 196.026†	-2.9	-4.3836 µg/L	0.56097	-4.3836 ppb	0.56097	12.80%
SiO2†	3443.5	741.58 µg/L	24.512	741.58 ppb	24.512	3.31%
Si 251.611†	4268.5	350.89 µg/L	11.808	350.89 ppb	11.808	3.37%
Sn 189.927†	3.2	1.4518 µg/L	1.13048	1.4518 ppb	1.13048	77.87%
Sr 421.552†	-11.2	-0.1159 µg/L	0.08916	-0.1159 ppb	0.08916	76.95%
Ti 334.940†	313.4	0.7537 µg/L	0.05861	0.7537 ppb	0.05861	7.78%
Tl 190.801†	2.3	3.2568 µg/L	4.76577	3.2568 ppb	4.76577	146.33%
U 409.014†	14.8	1.3414 µg/L	2.48714	1.3414 ppb	2.48714	185.42%
V 292.402†	17.9	0.1980 µg/L	0.15362	0.1980 ppb	0.15362	77.59%
Zn 213.857†	-6.0	-0.1453 µg/L	0.10340	-0.1453 ppb	0.10340	71.18%

Sequence No.: 61

Sample ID: 1202033919|949338|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 347

Date Collected: 2/11/2010 20:35:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202033919|949338|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57324.5	57324.5	105 %		20:36:14
1	Al 396.153Radial†	-18.3	-7.3	-5.4289 µg/L	-5.4289 ppb	20:36:14
1	Ca 317.933Radial†	243.5	52.6	49.565 µg/L	49.565 ppb	20:36:34
1	Fe 238.204 Radial†	17.4	2.0	17.265 µg/L	17.265 ppb	20:36:34
1	K 766.490 Radial†	365.0	219.0	155.69 µg/L	155.69 ppb	20:36:14
1	Mg 279.077 IEC†	11.4	-0.5	-4.2800 µg/L	-4.2800 ppb	20:36:34
1	Na 589.592 Radial†	945.4	358.2	117.92 µg/L	117.92 ppb	20:36:14
1	Sr 421.552†	76.5	33.3	0.3450 µg/L	0.3450 ppb	20:36:14
1	Sc 361.383	1998891.5	1998891.5	104.66 %		20:37:36
1	Y 371.029	1369120.9	1369120.9	104.52 %		20:37:36
1	Ag 328.068†	-577.7	12.5	0.1014 µg/L	0.1014 ppb	20:37:42
1	As 188.979†	3.3	2.0	3.8359 µg/L	3.8359 ppb	20:38:02
1	B 249.677†	961.1	586.8	25.635 µg/L	25.635 ppb	20:37:42
1	Ba 233.527†	-18.2	8.6	0.2251 µg/L	0.2251 ppb	20:38:02
1	Be 313.107†	-3361.7	228.5	0.1491 µg/L	0.1491 ppb	20:37:42
1	Cd 226.502†	-134.1	14.0	0.3847 µg/L	0.3847 ppb	20:38:02
1	Co 228.616†	-9.7	-0.4	-0.0217 µg/L	-0.0217 ppb	20:38:02
1	Cr 267.716†	-29.5	24.2	0.5326 µg/L	0.5326 ppb	20:37:42
1	Cu 324.752†	2608.6	6.3	0.0466 µg/L	0.0466 ppb	20:37:42
1	Mn 257.610†	-129.4	120.5	0.4196 µg/L	0.4196 ppb	20:38:02
1	Mo 202.031†	-9.5	-1.6	-0.1674 µg/L	-0.1674 ppb	20:38:02
1	Ni 231.604†	311.0	-5.1	-0.2766 µg/L	-0.2766 ppb	20:38:02
1	P 214.914†	22.2	-6.5	-13.897 µg/L	-13.897 ppb	20:38:02
1	Pb 220.353†	100.4	-1.2	-0.3265 µg/L	-0.3265 ppb	20:38:02
1	S 181.975 Axial†	19.6	3.9	17.244 µg/L	17.244 ppb	20:38:02
1	Sb 206.836†	27.3	-0.8	-0.8373 µg/L	-0.8373 ppb	20:38:02
1	Se 196.026†	16.1	-0.4	-0.6048 µg/L	-0.6048 ppb	20:38:02
1	SiO2†	18678.6	16596.4	3574.1 µg/L	3574.1 ppb	20:37:42
1	Si 251.611†	21454.9	20186.2	1659.4 µg/L	1659.4 ppb	20:37:42
1	Sn 189.927†	-3.9	-2.8	-1.3086 µg/L	-1.3086 ppb	20:38:02
1	Ti 334.940†	212.7	87.1	0.2106 µg/L	0.2106 ppb	20:37:42
1	Tl 190.801†	-24.3	1.1	1.5184 µg/L	1.5184 ppb	20:38:02
1	U 409.014†	-99.8	-41.7	-3.7810 µg/L	-3.7810 ppb	20:37:42
1	V 292.402†	-34.8	11.0	0.1151 µg/L	0.1151 ppb	20:37:42
1	Zn 213.857†	563.6	63.0	1.5733 µg/L	1.5733 ppb	20:38:02
2	Sc RADIAL	56496.0	56496.0	104 %		20:36:40
2	Al 396.153Radial†	28.0	37.2	27.741 µg/L	27.741 ppb	20:36:40
2	Ca 317.933Radial†	246.1	58.6	55.190 µg/L	55.190 ppb	20:37:00
2	Fe 238.204 Radial†	15.9	0.9	7.3734 µg/L	7.3734 ppb	20:37:00
2	K 766.490 Radial†	384.7	243.2	172.83 µg/L	172.83 ppb	20:36:40
2	Mg 279.077 IEC†	16.4	4.6	42.895 µg/L	42.895 ppb	20:37:00
2	Na 589.592 Radial†	961.7	387.1	127.45 µg/L	127.45 ppb	20:36:40
2	Sr 421.552†	63.8	22.1	0.2292 µg/L	0.2292 ppb	20:36:40
2	Sc 361.383	1987427.5	1987427.5	104.06 %		20:38:08
2	Y 371.029	1361732.2	1361732.2	103.96 %		20:38:08
2	Ag 328.068†	-575.7	11.3	0.0888 µg/L	0.0888 ppb	20:38:14
2	As 188.979†	-3.7	-4.7	-9.1775 µg/L	-9.1775 ppb	20:38:34
2	B 249.677†	925.9	558.3	24.397 µg/L	24.397 ppb	20:38:14
2	Ba 233.527†	-12.8	13.7	0.3572 µg/L	0.3572 ppb	20:38:34
2	Be 313.107†	-3457.8	117.6	0.0767 µg/L	0.0767 ppb	20:38:14
2	Cd 226.502†	-142.4	5.3	0.1442 µg/L	0.1442 ppb	20:38:34
2	Co 228.616†	-15.4	-5.9	-0.2929 µg/L	-0.2929 ppb	20:38:34
2	Cr 267.716†	-26.0	27.3	0.6015 µg/L	0.6015 ppb	20:38:14
2	Cu 324.752†	2643.4	54.2	0.3793 µg/L	0.3793 ppb	20:38:14
2	Mn 257.610†	-141.1	108.5	0.3750 µg/L	0.3750 ppb	20:38:34
2	Mo 202.031†	-10.2	-2.3	-0.2452 µg/L	-0.2452 ppb	20:38:34
2	Ni 231.604†	304.5	-9.6	-0.5254 µg/L	-0.5254 ppb	20:38:34
2	P 214.914†	23.7	-4.8	-10.396 µg/L	-10.396 ppb	20:38:34
2	Pb 220.353†	98.5	-2.5	-0.6716 µg/L	-0.6716 ppb	20:38:34

2	S 181.975 Axial†	19.6	4.1	17.756 µg/L	17.756 ppb	20:38:34
2	Sb 206.836†	24.6	-3.3	-3.2895 µg/L	-3.2895 ppb	20:38:34
2	Se 196.026†	15.7	-0.8	-1.2264 µg/L	-1.2264 ppb	20:38:34
2	SiO2†	18507.0	16534.4	3560.8 µg/L	3560.8 ppb	20:38:14
2	Si 251.611†	21397.2	20249.0	1664.6 µg/L	1664.6 ppb	20:38:14
2	Sn 189.927†	-1.1	-0.2	-0.0732 µg/L	-0.0732 ppb	20:38:34
2	Ti 334.940†	220.6	95.8	0.2280 µg/L	0.2280 ppb	20:38:14
2	Tl 190.801†	-22.6	2.6	3.6090 µg/L	3.6090 ppb	20:38:34
2	U 409.014†	-81.4	-24.6	-2.2338 µg/L	-2.2338 ppb	20:38:14
2	V 292.402†	-59.5	-13.0	-0.1401 µg/L	-0.1401 ppb	20:38:14
2	Zn 213.857†	558.0	60.6	1.5131 µg/L	1.5131 ppb	20:38:34
3	Sc RADIAL	56383.9	56383.9	103 %		20:37:06
3	Al 396.153Radial†	-8.8	1.6	1.1774 µg/L	1.1774 ppb	20:37:06
3	Ca 317.933Radial†	245.0	58.0	54.580 µg/L	54.580 ppb	20:37:26
3	Fe 238.204 Radial†	16.5	1.5	12.503 µg/L	12.503 ppb	20:37:26
3	K 766.490 Radial†	346.8	207.3	147.34 µg/L	147.34 ppb	20:37:06
3	Mg 279.077 IEC†	10.3	-1.3	-12.154 µg/L	-12.154 ppb	20:37:26
3	Na 589.592 Radial†	973.4	400.3	131.77 µg/L	131.77 ppb	20:37:06
3	Sr 421.552†	76.9	34.9	0.3614 µg/L	0.3614 ppb	20:37:06
3	Sc 361.383	1987586.3	1987586.3	104.07 %		20:38:40
3	Y 371.029	1361044.1	1361044.1	103.90 %		20:38:40
3	Ag 328.068†	-602.4	-14.3	-0.1130 µg/L	-0.1130 ppb	20:38:46
3	As 188.979†	2.2	1.0	1.8831 µg/L	1.8831 ppb	20:39:06
3	B 249.677†	950.8	582.2	25.436 µg/L	25.436 ppb	20:38:46
3	Ba 233.527†	-10.0	16.4	0.4275 µg/L	0.4275 ppb	20:39:06
3	Be 313.107†	-3378.3	194.3	0.1264 µg/L	0.1264 ppb	20:38:46
3	Cd 226.502†	-146.4	1.5	0.0391 µg/L	0.0391 ppb	20:39:06
3	Co 228.616†	-9.0	0.2	0.0068 µg/L	0.0068 ppb	20:39:06
3	Cr 267.716†	-24.9	28.5	0.6259 µg/L	0.6259 ppb	20:38:46
3	Cu 324.752†	2609.5	21.3	0.1507 µg/L	0.1507 ppb	20:38:46
3	Mn 257.610†	-122.9	126.1	0.4387 µg/L	0.4387 ppb	20:39:06
3	Mo 202.031†	-6.5	1.3	0.1348 µg/L	0.1348 ppb	20:39:06
3	Ni 231.604†	303.2	-10.8	-0.5909 µg/L	-0.5909 ppb	20:39:06
3	P 214.914†	37.2	8.2	17.487 µg/L	17.487 ppb	20:39:06
3	Pb 220.353†	103.6	2.4	0.6250 µg/L	0.6250 ppb	20:39:06
3	S 181.975 Axial†	22.3	6.6	28.814 µg/L	28.814 ppb	20:39:06
3	Sb 206.836†	26.7	-1.3	-1.3017 µg/L	-1.3017 ppb	20:39:06
3	Se 196.026†	8.5	-7.7	-11.706 µg/L	-11.706 ppb	20:39:06
3	SiO2†	18096.8	16138.9	3475.6 µg/L	3475.6 ppb	20:38:46
3	Si 251.611†	20742.7	19618.4	1612.7 µg/L	1612.7 ppb	20:38:46
3	Sn 189.927†	0.3	1.1	0.5255 µg/L	0.5255 ppb	20:39:06
3	Ti 334.940†	690.8	547.6	1.3191 µg/L	1.3191 ppb	20:38:46
3	Tl 190.801†	-19.7	5.4	7.4826 µg/L	7.4826 ppb	20:39:06
3	U 409.014†	-12.6	41.6	3.7570 µg/L	3.7570 ppb	20:38:46
3	V 292.402†	-50.7	-4.5	-0.0403 µg/L	-0.0403 ppb	20:38:46
3	Zn 213.857†	560.2	62.7	1.5681 µg/L	1.5681 ppb	20:39:06

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Mean Data: 1202033919|949338|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1991301.8	104.27 %	%	0.344			0.33%
Sc RADIAL	56734.8	104 %	%	0.9			0.91%
Y 371.029	1363965.8	104.13 %	%	0.342			0.33%
Ag 328.068†	3.2	0.0257 µg/L	µg/L	0.12033	0.0257 ppb	0.12033	467.56%
Al 396.153Radial†	10.5	7.8300 µg/L	µg/L	17.55733	7.8300 ppb	17.55733	224.23%
As 188.979†	-0.6	-1.1528 µg/L	µg/L	7.01785	-1.1528 ppb	7.01785	608.76%
B 249.677†	575.8	25.156 µg/L	µg/L	0.6647	25.156 ppb	0.6647	2.64%
Ba 233.527†	12.9	0.3366 µg/L	µg/L	0.10278	0.3366 ppb	0.10278	30.53%
Be 313.107†	180.1	0.1174 µg/L	µg/L	0.03704	0.1174 ppb	0.03704	31.55%
Ca 317.933Radial†	56.4	53.112 µg/L	µg/L	3.0866	53.112 ppb	3.0866	5.81%
Cd 226.502†	6.9	0.1894 µg/L	µg/L	0.17717	0.1894 ppb	0.17717	93.56%
Co 228.616†	-2.1	-0.1026 µg/L	µg/L	0.16541	-0.1026 ppb	0.16541	161.21%
Cr 267.716†	26.7	0.5866 µg/L	µg/L	0.04835	0.5866 ppb	0.04835	8.24%
Cu 324.752†	27.3	0.1922 µg/L	µg/L	0.17020	0.1922 ppb	0.17020	88.54%
Fe 238.204 Radial†	1.5	12.380 µg/L	µg/L	4.9469	12.380 ppb	4.9469	39.96%
K 766.490 Radial†	223.2	158.62 µg/L	µg/L	12.997	158.62 ppb	12.997	8.19%
Mg 279.077 IEC†	0.9	8.8204 µg/L	µg/L	29.77109	8.8204 ppb	29.77109	337.53%
Mn 257.610†	118.3	0.4111 µg/L	µg/L	0.03270	0.4111 ppb	0.03270	7.95%
Mo 202.031†	-0.9	-0.0926 µg/L	µg/L	0.20074	-0.0926 ppb	0.20074	216.72%
Na 589.592 Radial†	381.9	125.71 µg/L	µg/L	7.083	125.71 ppb	7.083	5.63%



Ni 231.604†	-8.5	-0.4643 µg/L	0.16582	-0.4643 ppb	0.16582	35.71%
P 214.914†	-1.0	-2.2689 µg/L	17.19830	-2.2689 ppb	17.19830	758.00%
Pb 220.353†	-0.5	-0.1244 µg/L	0.67152	-0.1244 ppb	0.67152	539.86%
S 181.975 Axial†	4.9	21.271 µg/L	6.5369	21.271 ppb	6.5369	30.73%
Sb 206.836†	-1.8	-1.8095 µg/L	1.30257	-1.8095 ppb	1.30257	71.99%
Se 196.026†	-3.0	-4.5125 µg/L	6.23776	-4.5125 ppb	6.23776	138.23%
SiO2†	16423.3	3536.8 µg/L	53.45	3536.8 ppb	53.45	1.51%
Si 251.611†	20017.9	1645.6 µg/L	28.56	1645.6 ppb	28.56	1.74%
Sn 189.927†	-0.6	-0.2855 µg/L	0.93531	-0.2855 ppb	0.93531	327.66%
Sr 421.552†	30.1	0.3119 µg/L	0.07205	0.3119 ppb	0.07205	23.11%
Ti 334.940†	243.5	0.5859 µg/L	0.63501	0.5859 ppb	0.63501	108.38%
Tl 190.801†	3.0	4.2033 µg/L	3.02620	4.2033 ppb	3.02620	72.00%
U 409.014†	-8.3	-0.7526 µg/L	3.98130	-0.7526 ppb	3.98130	529.01%
V 292.402†	-2.2	-0.0218 µg/L	0.12861	-0.0218 ppb	0.12861	590.65%
Zn 213.857†	62.1	1.5515 µg/L	0.03334	1.5515 ppb	0.03334	2.15%

Sequence No.: 62  
 Sample ID: 246056002|949338|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 348  
 Date Collected: 2/11/2010 20:39:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246056002|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55741.4	55741.4	102 %		20:39:49
1	Al 396.153Radial†	357.5	360.1	268.42 µg/L	268.42 ppb	20:39:49
1	Ca 317.933Radial†	306.6	121.0	113.93 µg/L	113.93 ppb	20:40:09
1	Fe 238.204 Radial†	31.7	16.5	140.10 µg/L	140.10 ppb	20:40:09
1	K 766.490 Radial†	463.9	325.8	231.55 µg/L	231.55 ppb	20:39:49
1	Mg 279.077 IEC†	15.5	3.9	35.903 µg/L	35.903 ppb	20:40:09
1	Na 589.592 Radial†	1157.7	591.6	194.75 µg/L	194.75 ppb	20:39:49
1	Sr 421.552†	85.0	43.7	0.4526 µg/L	0.4526 ppb	20:39:49
1	Sc 361.383	1992867.6	1992867.6	104.35 %		20:41:11
1	Y 371.029	1365197.0	1365197.0	104.22 %		20:41:11
1	Ag 328.068†	-537.1	49.8	0.4080 µg/L	0.4080 ppb	20:41:17
1	As 188.979†	-2.2	-3.2	-6.3322 µg/L	-6.3322 ppb	20:41:37
1	B 249.677†	928.2	558.1	24.318 µg/L	24.318 ppb	20:41:17
1	Ba 233.527†	64.2	87.5	2.2793 µg/L	2.2793 ppb	20:41:37
1	Be 313.107†	-3349.6	230.4	0.1487 µg/L	0.1487 ppb	20:41:17
1	Cd 226.502†	-143.0	5.1	0.1241 µg/L	0.1241 ppb	20:41:37
1	Co 228.616†	-13.8	-4.4	-0.2265 µg/L	-0.2265 ppb	20:41:37
1	Cr 267.716†	-6.6	46.1	1.0139 µg/L	1.0139 ppb	20:41:37
1	Cu 324.752†	2630.3	34.7	0.2617 µg/L	0.2617 ppb	20:41:17
1	Mn 257.610†	508.2	731.1	2.5490 µg/L	2.5490 ppb	20:41:37
1	Mo 202.031†	-8.1	-0.2	-0.0155 µg/L	-0.0155 ppb	20:41:37
1	Ni 231.604†	317.5	2.1	0.1144 µg/L	0.1144 ppb	20:41:37
1	P 214.914†	25.4	-3.2	-7.0353 µg/L	-7.0353 ppb	20:41:37
1	Pb 220.353†	100.0	-1.3	-0.3488 µg/L	-0.3488 ppb	20:41:37
1	S 181.975 Axial†	21.0	5.3	23.194 µg/L	23.194 ppb	20:41:37
1	Sb 206.836†	26.5	-1.5	-1.5169 µg/L	-1.5169 ppb	20:41:37
1	Se 196.026†	11.2	-5.1	-7.4707 µg/L	-7.4707 ppb	20:41:37
1	SiO2†	23333.4	21111.2	4546.4 µg/L	4546.4 ppb	20:41:17
1	Si 251.611†	27148.6	25704.7	2113.1 µg/L	2113.1 ppb	20:41:17
1	Sn 189.927†	-1.1	-0.2	-0.1120 µg/L	-0.1120 ppb	20:41:37
1	Ti 334.940†	2158.2	1952.1	4.6947 µg/L	4.6947 ppb	20:41:17
1	Tl 190.801†	-25.0	0.4	0.5740 µg/L	0.5740 ppb	20:41:37
1	U 409.014†	-76.0	-19.3	-1.7701 µg/L	-1.7701 ppb	20:41:17
1	V 292.402†	8.8	52.6	0.5778 µg/L	0.5778 ppb	20:41:17
1	Zn 213.857†	583.8	83.9	2.0863 µg/L	2.0863 ppb	20:41:37
2	Sc RADIAL	56192.0	56192.0	103 %		20:40:15
2	Al 396.153Radial†	361.3	361.1	269.11 µg/L	269.11 ppb	20:40:15
2	Ca 317.933Radial†	302.5	114.6	107.94 µg/L	107.94 ppb	20:40:35
2	Fe 238.204 Radial†	35.2	19.7	167.20 µg/L	167.20 ppb	20:40:35
2	K 766.490 Radial†	421.5	280.9	199.68 µg/L	199.68 ppb	20:40:15
2	Mg 279.077 IEC†	17.4	5.6	51.999 µg/L	51.999 ppb	20:40:35
2	Na 589.592 Radial†	1114.9	540.9	178.07 µg/L	178.07 ppb	20:40:15
2	Sr 421.552†	104.7	62.1	0.6441 µg/L	0.6441 ppb	20:40:15
2	Sc 361.383	2004295.6	2004295.6	104.95 %		20:41:43
2	Y 371.029	1372960.9	1372960.9	104.81 %		20:41:43
2	Ag 328.068†	-544.7	45.5	0.3745 µg/L	0.3745 ppb	20:41:49
2	As 188.979†	-6.6	-7.4	-14.535 µg/L	-14.535 ppb	20:42:09
2	B 249.677†	937.9	562.2	24.485 µg/L	24.485 ppb	20:41:49
2	Ba 233.527†	55.5	78.8	2.0539 µg/L	2.0539 ppb	20:42:09
2	Be 313.107†	-3392.6	207.7	0.1337 µg/L	0.1337 ppb	20:41:49
2	Cd 226.502†	-142.9	5.9	0.1445 µg/L	0.1445 ppb	20:42:09
2	Co 228.616†	-21.2	-11.4	-0.5708 µg/L	-0.5708 ppb	20:42:09
2	Cr 267.716†	-13.1	39.9	0.8782 µg/L	0.8782 ppb	20:42:09
2	Cu 324.752†	2638.8	28.3	0.2212 µg/L	0.2212 ppb	20:41:49
2	Mn 257.610†	504.2	724.6	2.5292 µg/L	2.5292 ppb	20:42:09
2	Mo 202.031†	-5.7	2.1	0.2325 µg/L	0.2325 ppb	20:42:09
2	Ni 231.604†	311.9	-5.0	-0.2701 µg/L	-0.2701 ppb	20:42:09
2	P 214.914†	37.2	7.8	16.629 µg/L	16.629 ppb	20:42:09
2	Pb 220.353†	102.4	0.4	0.1030 µg/L	0.1030 ppb	20:42:09

2	S 181.975 Axial†	21.9	6.1	26.574 µg/L	26.574 ppb	20:42:09
2	Sb 206.836†	23.6	-4.5	-4.4043 µg/L	-4.4043 ppb	20:42:09
2	Se 196.026†	20.0	3.2	5.2593 µg/L	5.2593 ppb	20:42:09
2	SiO2†	23183.0	20840.5	4488.1 µg/L	4488.1 ppb	20:41:49
2	Si 251.611†	27050.5	25462.8	2093.2 µg/L	2093.2 ppb	20:41:49
2	Sn 189.927†	-1.5	-0.5	-0.2527 µg/L	-0.2527 ppb	20:42:09
2	Ti 334.940†	2295.1	2070.8	4.9788 µg/L	4.9788 ppb	20:41:49
2	Tl 190.801†	-21.6	3.7	5.2375 µg/L	5.2375 ppb	20:42:09
2	U 409.014†	-7.8	46.2	4.1496 µg/L	4.1496 ppb	20:41:49
2	V 292.402†	-4.3	40.2	0.4557 µg/L	0.4557 ppb	20:41:49
2	Zn 213.857†	591.9	88.5	2.1992 µg/L	2.1992 ppb	20:42:09
3	Sc RADIAL	56387.3	56387.3	103 %		20:40:40
3	Al 396.153Radial†	345.9	345.0	257.10 µg/L	257.10 ppb	20:40:40
3	Ca 317.933Radial†	301.0	112.2	105.64 µg/L	105.64 ppb	20:41:01
3	Fe 238.204 Radial†	33.6	18.1	153.12 µg/L	153.12 ppb	20:41:01
3	K 766.490 Radial†	392.1	251.1	178.50 µg/L	178.50 ppb	20:40:40
3	Mg 279.077 IEC†	10.7	-0.9	-8.4148 µg/L	-8.4148 ppb	20:41:01
3	Na 589.592 Radial†	1144.8	566.1	186.38 µg/L	186.38 ppb	20:40:40
3	Sr 421.552†	136.6	92.7	0.9607 µg/L	0.9607 ppb	20:40:40
3	Sc 361.383	1988619.2	1988619.2	104.12 %		20:42:15
3	Y 371.029	1361853.4	1361853.4	103.96 %		20:42:15
3	Ag 328.068†	-552.8	33.6	0.2799 µg/L	0.2799 ppb	20:42:21
3	As 188.979†	-2.3	-3.4	-6.5893 µg/L	-6.5893 ppb	20:42:41
3	B 249.677†	899.6	532.5	23.193 µg/L	23.193 ppb	20:42:21
3	Ba 233.527†	57.7	81.4	2.1209 µg/L	2.1209 ppb	20:42:41
3	Be 313.107†	-3424.7	151.4	0.0972 µg/L	0.0972 ppb	20:42:21
3	Cd 226.502†	-136.7	10.9	0.2819 µg/L	0.2819 ppb	20:42:41
3	Co 228.616†	-14.1	-4.7	-0.2381 µg/L	-0.2381 ppb	20:42:41
3	Cr 267.716†	-5.8	46.8	1.0292 µg/L	1.0292 ppb	20:42:41
3	Cu 324.752†	2653.5	62.3	0.4566 µg/L	0.4566 ppb	20:42:21
3	Mn 257.610†	466.1	691.7	2.4160 µg/L	2.4160 ppb	20:42:41
3	Mo 202.031†	-5.1	2.7	0.2909 µg/L	0.2909 ppb	20:42:41
3	Ni 231.604†	303.1	-11.1	-0.6023 µg/L	-0.6023 ppb	20:42:41
3	P 214.914†	25.0	-3.6	-7.7954 µg/L	-7.7954 ppb	20:42:41
3	Pb 220.353†	91.6	-9.2	-2.4556 µg/L	-2.4556 ppb	20:42:41
3	S 181.975 Axial†	22.1	6.4	27.957 µg/L	27.957 ppb	20:42:41
3	Sb 206.836†	22.4	-5.5	-5.4203 µg/L	-5.4203 ppb	20:42:41
3	Se 196.026†	9.5	-6.7	-9.7795 µg/L	-9.7795 ppb	20:42:41
3	SiO2†	22758.2	20606.6	4437.7 µg/L	4437.7 ppb	20:42:21
3	Si 251.611†	26567.8	25202.5	2071.8 µg/L	2071.8 ppb	20:42:21
3	Sn 189.927†	0.4	1.2	0.5455 µg/L	0.5455 ppb	20:42:41
3	Ti 334.940†	2022.4	1826.2	4.3951 µg/L	4.3951 ppb	20:42:21
3	Tl 190.801†	-22.9	2.3	3.2577 µg/L	3.2577 ppb	20:42:41
3	U 409.014†	-69.9	-13.6	-1.2552 µg/L	-1.2552 ppb	20:42:21
3	V 292.402†	10.0	53.8	0.5946 µg/L	0.5946 ppb	20:42:21
3	Zn 213.857†	589.3	90.4	2.2515 µg/L	2.2515 ppb	20:42:41

## Mean Data: 246056002|949338|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1995260.8	104.47 %	%	0.425			0.41%
Sc RADIAL	56106.9	103 %	%	0.6			0.59%
Y 371.029	1366670.4	104.33 %	%	0.435			0.42%
Ag 328.068†	43.0	0.3541 µg/L	µg/L	0.06647	0.3541 ppb	0.06647	18.77%
Al 396.153Radial†	355.4	264.88 µg/L	µg/L	6.744	264.88 ppb	6.744	2.55%
As 188.979†	-4.7	-9.1520 µg/L	µg/L	4.66325	-9.1520 ppb	4.66325	50.95%
B 249.677†	550.9	23.999 µg/L	µg/L	0.7026	23.999 ppb	0.7026	2.93%
Ba 233.527†	82.6	2.1513 µg/L	µg/L	0.11573	2.1513 ppb	0.11573	5.38%
Be 313.107†	196.5	0.1265 µg/L	µg/L	0.02648	0.1265 ppb	0.02648	20.93%
Ca 317.933Radial†	115.9	109.17 µg/L	µg/L	4.282	109.17 ppb	4.282	3.92%
Cd 226.502†	7.3	0.1835 µg/L	µg/L	0.08583	0.1835 ppb	0.08583	46.78%
Co 228.616†	-6.8	-0.3451 µg/L	µg/L	0.19553	-0.3451 ppb	0.19553	56.65%
Cr 267.716†	44.3	0.9738 µg/L	µg/L	0.08311	0.9738 ppb	0.08311	8.54%
Cu 324.752†	41.8	0.3131 µg/L	µg/L	0.12586	0.3131 ppb	0.12586	40.20%
Fe 238.204 Radial†	18.1	153.47 µg/L	µg/L	13.552	153.47 ppb	13.552	8.83%
K 766.490 Radial†	285.9	203.24 µg/L	µg/L	26.704	203.24 ppb	26.704	13.14%
Mg 279.077 IEC†	2.9	26.496 µg/L	µg/L	31.2862	26.496 ppb	31.2862	118.08%
Mn 257.610†	715.8	2.4981 µg/L	µg/L	0.07177	2.4981 ppb	0.07177	2.87%
Mo 202.031†	1.5	0.1693 µg/L	µg/L	0.16268	0.1693 ppb	0.16268	96.10%
Na 589.592 Radial†	566.2	186.40 µg/L	µg/L	8.343	186.40 ppb	8.343	4.48%

Ni 231.604†	-4.7	-0.2527 µg/L	0.35863	-0.2527 ppb	0.35863	141.94%
P 214.914†	0.3	0.5996 µg/L	13.88738	0.5996 ppb	13.88738	>999.9%
Pb 220.353†	-3.4	-0.9005 µg/L	1.36558	-0.9005 ppb	1.36558	151.65%
S 181.975 Axial†	5.9	25.909 µg/L	2.4503	25.909 ppb	2.4503	9.46%
Sb 206.836†	-3.8	-3.7805 µg/L	2.02508	-3.7805 ppb	2.02508	53.57%
Se 196.026†	-2.9	-3.9970 µg/L	8.09882	-3.9970 ppb	8.09882	202.62%
SiO2†	20852.8	4490.8 µg/L	54.39	4490.8 ppb	54.39	1.21%
Si 251.611†	25456.6	2092.7 µg/L	20.65	2092.7 ppb	20.65	0.99%
Sn 189.927†	0.2	0.0603 µg/L	0.42610	0.0603 ppb	0.42610	707.14%
Sr 421.552†	66.2	0.6858 µg/L	0.25663	0.6858 ppb	0.25663	37.42%
Ti 334.940†	1949.7	4.6895 µg/L	0.29188	4.6895 ppb	0.29188	6.22%
Tl 190.801†	2.1	3.0231 µg/L	2.34057	3.0231 ppb	2.34057	77.42%
U 409.014†	4.4	0.3748 µg/L	3.27920	0.3748 ppb	3.27920	875.04%
V 292.402†	48.9	0.5427 µg/L	0.07583	0.5427 ppb	0.07583	13.97%
Zn 213.857†	87.6	2.1790 µg/L	0.08445	2.1790 ppb	0.08445	3.88%

Sequence No.: 63

Sample ID: 246056003|949338|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 349

Date Collected: 2/11/2010 20:42:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246056003|949338|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56577.5	56577.5	104 %		20:43:24
1	Al 396.153Radial†	-24.9	-13.9	-10.359 µg/L	-10.359 ppb	20:43:24
1	Ca 317.933Radial†	220.9	33.9	31.931 µg/L	31.931 ppb	20:43:44
1	Fe 238.204 Radial†	13.5	-1.5	-12.505 µg/L	-12.505 ppb	20:43:44
1	K 766.490 Radial†	324.9	185.0	131.49 µg/L	131.49 ppb	20:43:24
1	Mg 279.077 IEC†	9.3	-2.3	-21.131 µg/L	-21.131 ppb	20:43:44
1	Na 589.592 Radial†	929.0	354.2	116.61 µg/L	116.61 ppb	20:43:24
1	Sr 421.552†	39.7	-1.3	-0.0135 µg/L	-0.0135 ppb	20:43:24
1	Sc 361.383	1996748.3	1996748.3	104.55 %		20:44:46
1	Y 371.029	1367998.9	1367998.9	104.43 %		20:44:46
1	Ag 328.068†	-578.5	11.2	0.0872 µg/L	0.0872 ppb	20:44:52
1	As 188.979†	-3.0	-4.0	-7.8671 µg/L	-7.8671 ppb	20:45:12
1	B 249.677†	946.7	574.0	25.094 µg/L	25.094 ppb	20:44:52
1	Ba 233.527†	-13.4	13.2	0.3437 µg/L	0.3437 ppb	20:45:12
1	Be 313.107†	-3363.5	223.3	0.1457 µg/L	0.1457 ppb	20:44:52
1	Cd 226.502†	-138.1	10.0	0.2777 µg/L	0.2777 ppb	20:45:12
1	Co 228.616†	-9.4	-0.2	-0.0087 µg/L	-0.0087 ppb	20:45:12
1	Cr 267.716†	-42.4	11.8	0.2594 µg/L	0.2594 ppb	20:45:12
1	Cu 324.752†	2572.1	-25.9	-0.1828 µg/L	-0.1828 ppb	20:44:52
1	Mn 257.610†	-139.5	110.7	0.3825 µg/L	0.3825 ppb	20:45:12
1	Mo 202.031†	-9.9	-1.9	-0.2037 µg/L	-0.2037 ppb	20:45:12
1	Ni 231.604†	301.5	-13.8	-0.7545 µg/L	-0.7545 ppb	20:45:12
1	P 214.914†	24.7	-4.0	-8.5764 µg/L	-8.5764 ppb	20:45:12
1	Pb 220.353†	110.2	8.2	2.1857 µg/L	2.1857 ppb	20:45:12
1	S 181.975 Axial†	19.8	4.2	18.230 µg/L	18.230 ppb	20:45:12
1	Sb 206.836†	23.7	-4.3	-4.2249 µg/L	-4.2249 ppb	20:45:12
1	Se 196.026†	15.5	-1.0	-1.5257 µg/L	-1.5257 ppb	20:45:12
1	SiO2†	18382.9	16332.8	3517.4 µg/L	3517.4 ppb	20:44:52
1	Si 251.611†	21124.5	19892.2	1635.2 µg/L	1635.2 ppb	20:44:52
1	Sn 189.927†	-2.7	-1.7	-0.7902 µg/L	-0.7902 ppb	20:45:12
1	Ti 334.940†	241.6	115.0	0.2788 µg/L	0.2788 ppb	20:44:52
1	Tl 190.801†	-25.2	0.2	0.2777 µg/L	0.2777 ppb	20:45:12
1	U 409.014†	-141.4	-81.6	-7.3863 µg/L	-7.3863 ppb	20:44:52
1	V 292.402†	-58.4	-11.6	-0.1338 µg/L	-0.1338 ppb	20:44:52
1	Zn 213.857†	542.6	43.5	1.0907 µg/L	1.0907 ppb	20:45:12
2	Sc RADIAL	56270.3	56270.3	103 %		20:43:50
2	Al 396.153Radial†	15.0	24.7	18.396 µg/L	18.396 ppb	20:43:50
2	Ca 317.933Radial†	216.7	31.0	29.173 µg/L	29.173 ppb	20:44:10
2	Fe 238.204 Radial†	14.4	-0.5	-4.2539 µg/L	-4.2539 ppb	20:44:10
2	K 766.490 Radial†	342.7	203.9	144.95 µg/L	144.95 ppb	20:43:50
2	Mg 279.077 IEC†	12.0	0.3	3.1583 µg/L	3.1583 ppb	20:44:10
2	Na 589.592 Radial†	904.4	335.2	110.36 µg/L	110.36 ppb	20:43:50
2	Sr 421.552†	47.2	6.3	0.0648 µg/L	0.0648 ppb	20:43:50
2	Sc 361.383	1989577.5	1989577.5	104.18 %		20:45:18
2	Y 371.029	1364107.6	1364107.6	104.14 %		20:45:18
2	Ag 328.068†	-538.6	47.5	0.3752 µg/L	0.3752 ppb	20:45:24
2	As 188.979†	2.5	1.2	2.3899 µg/L	2.3899 ppb	20:45:45
2	B 249.677†	962.1	592.1	25.878 µg/L	25.878 ppb	20:45:24
2	Ba 233.527†	-14.9	11.7	0.3043 µg/L	0.3043 ppb	20:45:45
2	Be 313.107†	-3364.7	210.6	0.1375 µg/L	0.1375 ppb	20:45:24
2	Cd 226.502†	-134.3	13.2	0.3643 µg/L	0.3643 ppb	20:45:45
2	Co 228.616†	-12.9	-3.5	-0.1734 µg/L	-0.1734 ppb	20:45:45
2	Cr 267.716†	-25.3	28.0	0.6167 µg/L	0.6167 ppb	20:45:45
2	Cu 324.752†	2583.2	-6.4	-0.0454 µg/L	-0.0454 ppb	20:45:24
2	Mn 257.610†	-127.3	121.9	0.4214 µg/L	0.4214 ppb	20:45:45
2	Mo 202.031†	-8.1	-0.2	-0.0259 µg/L	-0.0259 ppb	20:45:45
2	Ni 231.604†	295.3	-18.7	-1.0245 µg/L	-1.0245 ppb	20:45:45
2	P 214.914†	34.9	5.9	12.716 µg/L	12.716 ppb	20:45:45
2	Pb 220.353†	98.9	-2.3	-0.5970 µg/L	-0.5970 ppb	20:45:45

2	S 181.975 Axial†	21.4	5.7	25.010 µg/L	25.010 ppb	20:45:45
2	Sb 206.836†	28.3	0.2	0.1520 µg/L	0.1520 ppb	20:45:45
2	Se 196.026†	14.8	-1.6	-2.4885 µg/L	-2.4885 ppb	20:45:45
2	SiO2†	18308.5	16324.7	3515.6 µg/L	3515.6 ppb	20:45:24
2	Si 251.611†	21020.2	19864.9	1633.0 µg/L	1633.0 ppb	20:45:24
2	Sn 189.927†	0.5	1.3	0.6213 µg/L	0.6213 ppb	20:45:45
2	Ti 334.940†	235.6	110.0	0.2649 µg/L	0.2649 ppb	20:45:24
2	Tl 190.801†	-25.0	0.3	0.4087 µg/L	0.4087 ppb	20:45:45
2	U 409.014†	-127.9	-69.2	-6.2620 µg/L	-6.2620 ppb	20:45:24
2	V 292.402†	-66.6	-19.7	-0.2162 µg/L	-0.2162 ppb	20:45:24
2	Zn 213.857†	544.2	46.8	1.1741 µg/L	1.1741 ppb	20:45:45
3	Sc RADIAL	56516.8	56516.8	104 %		20:44:16
3	Al 396.153Radial†	22.5	31.9	23.754 µg/L	23.754 ppb	20:44:16
3	Ca 317.933Radial†	215.6	29.1	27.359 µg/L	27.359 ppb	20:44:36
3	Fe 238.204 Radial†	17.4	2.3	19.131 µg/L	19.131 ppb	20:44:36
3	K 766.490 Radial†	352.3	211.8	150.54 µg/L	150.54 ppb	20:44:16
3	Mg 279.077 IEC†	9.5	-2.1	-19.473 µg/L	-19.473 ppb	20:44:36
3	Na 589.592 Radial†	947.6	373.2	122.84 µg/L	122.84 ppb	20:44:16
3	Sr 421.552†	59.0	17.4	0.1806 µg/L	0.1806 ppb	20:44:16
3	Sc 361.383	2004035.9	2004035.9	104.93 %		20:45:51
3	Y 371.029	1374463.9	1374463.9	104.93 %		20:45:51
3	Ag 328.068†	-521.7	67.4	0.5337 µg/L	0.5337 ppb	20:45:56
3	As 188.979†	-4.0	-4.9	-9.6004 µg/L	-9.6004 ppb	20:46:17
3	B 249.677†	913.0	538.6	23.529 µg/L	23.529 ppb	20:45:56
3	Ba 233.527†	-10.5	16.0	0.4173 µg/L	0.4173 ppb	20:46:17
3	Be 313.107†	-3507.8	97.5	0.0636 µg/L	0.0636 ppb	20:45:56
3	Cd 226.502†	-146.6	2.4	0.0645 µg/L	0.0645 ppb	20:46:17
3	Co 228.616†	-13.3	-3.8	-0.1890 µg/L	-0.1890 ppb	20:46:17
3	Cr 267.716†	-35.1	18.9	0.4157 µg/L	0.4157 ppb	20:46:17
3	Cu 324.752†	2560.2	-46.2	-0.3202 µg/L	-0.3202 ppb	20:45:56
3	Mn 257.610†	-135.3	115.2	0.4021 µg/L	0.4021 ppb	20:46:17
3	Mo 202.031†	-6.4	1.5	0.1567 µg/L	0.1567 ppb	20:46:17
3	Ni 231.604†	303.8	-12.7	-0.6929 µg/L	-0.6929 ppb	20:46:17
3	P 214.914†	28.7	-0.3	-0.4982 µg/L	-0.4982 ppb	20:46:17
3	Pb 220.353†	103.4	1.3	0.3498 µg/L	0.3498 ppb	20:46:17
3	S 181.975 Axial†	24.4	8.4	36.951 µg/L	36.951 ppb	20:46:17
3	Sb 206.836†	20.0	-7.9	-7.7769 µg/L	-7.7769 ppb	20:46:17
3	Se 196.026†	16.8	0.2	0.3352 µg/L	0.3352 ppb	20:46:17
3	SiO2†	17862.7	15773.0	3396.8 µg/L	3396.8 ppb	20:45:56
3	Si 251.611†	20508.1	19231.3	1580.9 µg/L	1580.9 ppb	20:45:56
3	Sn 189.927†	1.3	2.1	0.9501 µg/L	0.9501 ppb	20:46:17
3	Ti 334.940†	168.9	44.8	0.1098 µg/L	0.1098 ppb	20:45:56
3	Tl 190.801†	-22.4	2.9	4.0991 µg/L	4.0991 ppb	20:46:17
3	U 409.014†	-12.2	42.0	3.7971 µg/L	3.7971 ppb	20:45:56
3	V 292.402†	-77.0	-29.1	-0.3022 µg/L	-0.3022 ppb	20:45:56
3	Zn 213.857†	537.7	36.8	0.9235 µg/L	0.9235 ppb	20:46:17

## Mean Data: 246056003|949338|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1996787.2	104.55 %		0.379			0.36%
Sc RADIAL	56454.9	103 %		0.3			0.29%
Y 371.029	1368856.8	104.50 %		0.399			0.38%
Ag 328.068†	42.0	0.3320 µg/L		0.22638	0.3320 ppb	0.22638	68.18%
Al 396.153Radial†	14.2	10.597 µg/L		18.3453	10.597 ppb	18.3453	173.12%
As 188.979†	-2.6	-5.0259 µg/L		6.48042	-5.0259 ppb	6.48042	128.94%
B 249.677†	568.2	24.834 µg/L		1.1956	24.834 ppb	1.1956	4.81%
Ba 233.527†	13.7	0.3551 µg/L		0.05734	0.3551 ppb	0.05734	16.15%
Be 313.107†	177.1	0.1156 µg/L		0.04520	0.1156 ppb	0.04520	39.10%
Ca 317.933Radial†	31.3	29.488 µg/L		2.3023	29.488 ppb	2.3023	7.81%
Cd 226.502†	8.6	0.2355 µg/L		0.15433	0.2355 ppb	0.15433	65.53%
Co 228.616†	-2.5	-0.1237 µg/L		0.09990	-0.1237 ppb	0.09990	80.76%
Cr 267.716†	19.6	0.4306 µg/L		0.17911	0.4306 ppb	0.17911	41.60%
Cu 324.752†	-26.2	-0.1828 µg/L		0.13741	-0.1828 ppb	0.13741	75.16%
Fe 238.204 Radial†	0.1	0.7907 µg/L		16.40990	0.7907 ppb	16.40990	>999.9%
K 766.490 Radial†	200.2	142.33 µg/L		9.791	142.33 ppb	9.791	6.88%
Mg 279.077 IEC†	-1.3	-12.482 µg/L		13.5702	-12.482 ppb	13.5702	108.72%
Mn 257.610†	115.9	0.4020 µg/L		0.01945	0.4020 ppb	0.01945	4.84%
Mo 202.031†	-0.2	-0.0243 µg/L		0.18020	-0.0243 ppb	0.18020	740.89%
Na 589.592 Radial†	354.2	116.61 µg/L		6.239	116.61 ppb	6.239	5.35%

Ni 231.604†	-15.1	-0.8240 µg/L	0.17636	-0.8240 ppb	0.17636	21.40%
P 214.914†	0.6	1.2137 µg/L	10.74876	1.2137 ppb	10.74876	885.62%
Pb 220.353†	2.4	0.6462 µg/L	1.41485	0.6462 ppb	1.41485	218.96%
S 181.975 Axial†	6.1	26.730 µg/L	9.4783	26.730 ppb	9.4783	35.46%
Sb 206.836†	-4.0	-3.9499 µg/L	3.97161	-3.9499 ppb	3.97161	100.55%
Se 196.026†	-0.8	-1.2263 µg/L	1.43548	-1.2263 ppb	1.43548	117.05%
SiO2†	16143.5	3476.6 µg/L	69.10	3476.6 ppb	69.10	1.99%
Si 251.611†	19662.8	1616.4 µg/L	30.74	1616.4 ppb	30.74	1.90%
Sn 189.927†	0.6	0.2604 µg/L	0.92461	0.2604 ppb	0.92461	355.09%
Sr 421.552†	7.5	0.0773 µg/L	0.09762	0.0773 ppb	0.09762	126.27%
Ti 334.940†	90.0	0.2178 µg/L	0.09382	0.2178 ppb	0.09382	43.07%
Tl 190.801†	1.1	1.5952 µg/L	2.16950	1.5952 ppb	2.16950	136.00%
U 409.014†	-36.2	-3.2837 µg/L	6.15788	-3.2837 ppb	6.15788	187.53%
V 292.402†	-20.2	-0.2174 µg/L	0.08421	-0.2174 ppb	0.08421	38.73%
Zn 213.857†	42.4	1.0628 µg/L	0.12761	1.0628 ppb	0.12761	12.01%

Sequence No.: 64

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 20:46:27

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	56474.3	56474.3	103 %		20:47:00
1	Al 396.153Radial†	6882.5	6661.1	4953.9 µg/L	4953.9 ppb	20:47:20
1	Ca 317.933Radial†	5576.9	5210.2	4905.7 µg/L	4905.7 ppb	20:47:20
1	Fe 238.204 Radial†	617.9	582.7	4949.1 µg/L	4949.1 ppb	20:47:20
1	K 766.490 Radial†	7295.6	6921.7	4919.9 µg/L	4919.9 ppb	20:47:00
1	Mg 279.077 IEC†	569.9	539.5	5023.9 µg/L	5023.9 ppb	20:47:20
1	Na 589.592 Radial†	31693.2	30085.2	9904.1 µg/L	9904.1 ppb	20:47:00
1	Sr 421.552†	48526.2	46854.1	485.70 µg/L	485.70 ppb	20:47:00
1	Sc 361.383	1969766.4	1969766.4	103.14 %		20:48:24
1	Y 371.029	1349469.7	1349469.7	103.02 %		20:48:24
1	Ag 328.068†	64638.9	63236.9	505.40 µg/L	505.40 ppb	20:48:29
1	As 188.979†	270.9	261.5	510.13 µg/L	510.13 ppb	20:48:50
1	B 249.677†	11951.3	11256.3	490.15 µg/L	490.15 ppb	20:48:29
1	Ba 233.527†	19812.5	19235.8	501.78 µg/L	501.78 ppb	20:48:29
1	Be 313.107†	787697.5	767173.8	500.82 µg/L	500.82 ppb	20:48:24
1	Cd 226.502†	18626.8	18202.3	502.12 µg/L	502.12 ppb	20:48:29
1	Co 228.616†	10610.2	10296.2	506.13 µg/L	506.13 ppb	20:48:29
1	Cr 267.716†	23688.0	23019.7	506.66 µg/L	506.66 ppb	20:48:29
1	Cu 324.752†	76554.2	71739.1	501.80 µg/L	501.80 ppb	20:48:29
1	Mn 257.610†	151751.7	147379.1	510.81 µg/L	510.81 ppb	20:48:24
1	Mo 202.031†	5063.6	4917.1	524.95 µg/L	524.95 ppb	20:48:50
1	Ni 231.604†	9812.3	9211.6	503.10 µg/L	503.10 ppb	20:48:29
1	P 214.914†	1256.8	1191.0	2509.5 µg/L	2509.5 ppb	20:48:50
1	Pb 220.353†	2075.8	1915.5	511.31 µg/L	511.31 ppb	20:48:50
1	S 181.975 Axial†	254.0	231.5	1014.1 µg/L	1014.1 ppb	20:48:50
1	Sb 206.836†	579.8	535.2	529.23 µg/L	529.23 ppb	20:48:50
1	Se 196.026†	357.1	330.4	511.32 µg/L	511.32 ppb	20:48:50
1	SiO2†	26850.8	24783.9	5337.3 µg/L	5337.3 ppb	20:48:29
1	Si 251.611†	31677.4	30400.8	2499.1 µg/L	2499.1 ppb	20:48:29
1	Sn 189.927†	1180.8	1145.7	527.00 µg/L	527.00 ppb	20:48:50
1	Ti 334.940†	216451.7	209750.5	504.22 µg/L	504.22 ppb	20:48:24
1	Tl 190.801†	350.6	364.2	514.43 µg/L	514.43 ppb	20:48:50
1	U 409.014†	5817.1	5693.8	514.51 µg/L	514.51 ppb	20:48:29
1	V 292.402†	48437.0	47007.6	507.31 µg/L	507.31 ppb	20:48:29
1	Zn 213.857†	21306.3	20182.6	500.43 µg/L	500.43 ppb	20:48:29
2	Sc RADIAL	56929.0	56929.0	104 %		20:47:26
2	Al 396.153Radial†	6879.6	6605.2	4912.6 µg/L	4912.6 ppb	20:47:46
2	Ca 317.933Radial†	5572.1	5162.4	4860.8 µg/L	4860.8 ppb	20:47:46
2	Fe 238.204 Radial†	615.7	575.7	4890.2 µg/L	4890.2 ppb	20:47:46
2	K 766.490 Radial†	7442.4	7006.1	4979.9 µg/L	4979.9 ppb	20:47:26
2	Mg 279.077 IEC†	573.0	538.1	5010.8 µg/L	5010.8 ppb	20:47:46
2	Na 589.592 Radial†	31917.4	30055.4	9894.3 µg/L	9894.3 ppb	20:47:26
2	Sr 421.552†	49046.4	46978.2	486.98 µg/L	486.98 ppb	20:47:26
2	Sc 361.383	1986760.5	1986760.5	104.03 %		20:48:57
2	Y 371.029	1360289.6	1360289.6	103.85 %		20:48:57
2	Ag 328.068†	64302.0	62376.9	498.53 µg/L	498.53 ppb	20:49:03
2	As 188.979†	269.0	257.5	502.27 µg/L	502.27 ppb	20:49:23
2	B 249.677†	11933.8	11140.3	485.11 µg/L	485.11 ppb	20:49:03
2	Ba 233.527†	19673.2	18937.6	494.00 µg/L	494.00 ppb	20:49:03
2	Be 313.107†	779149.7	752424.2	491.19 µg/L	491.19 ppb	20:48:57
2	Cd 226.502†	18553.1	17976.9	495.90 µg/L	495.90 ppb	20:49:03
2	Co 228.616†	10504.4	10106.5	496.80 µg/L	496.80 ppb	20:49:03
2	Cr 267.716†	23530.3	22671.7	499.00 µg/L	499.00 ppb	20:49:03
2	Cu 324.752†	76408.8	70964.4	496.38 µg/L	496.38 ppb	20:49:03
2	Mn 257.610†	150339.7	144763.2	501.74 µg/L	501.74 ppb	20:48:57
2	Mo 202.031†	4981.6	4796.2	512.05 µg/L	512.05 ppb	20:49:23
2	Ni 231.604†	9763.3	9083.1	496.09 µg/L	496.09 ppb	20:49:03
2	P 214.914†	1249.1	1173.1	2471.6 µg/L	2471.6 ppb	20:49:23
2	Pb 220.353†	2059.8	1882.9	502.60 µg/L	502.60 ppb	20:49:23



2	S 181.975 Axial†	253.4	228.8	1002.3 µg/L	1002.3 ppb	20:49:23
2	Sb 206.836†	569.1	520.1	514.22 µg/L	514.22 ppb	20:49:23
2	Se 196.026†	365.2	335.2	518.58 µg/L	518.58 ppb	20:49:23
2	SiO2†	26785.2	24498.1	5275.8 µg/L	5275.8 ppb	20:49:03
2	Si 251.611†	31541.2	30007.2	2466.7 µg/L	2466.7 ppb	20:49:03
2	Sn 189.927†	1159.7	1115.7	513.17 µg/L	513.17 ppb	20:49:23
2	Ti 334.940†	214144.4	205737.4	494.57 µg/L	494.57 ppb	20:48:57
2	Tl 190.801†	346.1	357.0	504.21 µg/L	504.21 ppb	20:49:23
2	U 409.014†	5733.9	5565.5	502.91 µg/L	502.91 ppb	20:49:03
2	V 292.402†	48250.8	46426.9	500.98 µg/L	500.98 ppb	20:49:03
2	Zn 213.857†	21239.7	19941.8	494.46 µg/L	494.46 ppb	20:49:03
3	Sc RADIAL	56570.4	56570.4	104 %		20:47:52
3	Al 396.153Radial†	6906.3	6672.8	4964.3 µg/L	4964.3 ppb	20:48:12
3	Ca 317.933Radial†	5590.6	5214.2	4909.5 µg/L	4909.5 ppb	20:48:12
3	Fe 238.204 Radial†	617.4	581.2	4935.7 µg/L	4935.7 ppb	20:48:12
3	K 766.490 Radial†	7331.6	6944.5	4936.1 µg/L	4936.1 ppb	20:47:52
3	Mg 279.077 IEC†	575.4	543.8	5063.1 µg/L	5063.1 ppb	20:48:12
3	Na 589.592 Radial†	31713.1	30052.3	9893.3 µg/L	9893.3 ppb	20:47:52
3	Sr 421.552†	48658.3	46902.0	486.19 µg/L	486.19 ppb	20:47:52
3	Sc 361.383	1944517.1	1944517.1	101.82 %		20:49:30
3	Y 371.029	1331415.3	1331415.3	101.64 %		20:49:30
3	Ag 328.068†	61510.4	60978.0	487.23 µg/L	487.23 ppb	20:49:36
3	As 188.979†	230.8	225.5	439.92 µg/L	439.92 ppb	20:49:56
3	B 249.677†	11371.1	10836.9	471.76 µg/L	471.76 ppb	20:49:36
3	Ba 233.527†	18358.8	18057.4	471.02 µg/L	471.02 ppb	20:49:36
3	Be 313.107†	733933.1	724285.1	472.82 µg/L	472.82 ppb	20:49:30
3	Cd 226.502†	17239.0	17073.7	470.95 µg/L	470.95 ppb	20:49:36
3	Co 228.616†	9685.1	9521.2	467.98 µg/L	467.98 ppb	20:49:36
3	Cr 267.716†	21173.7	20848.5	458.88 µg/L	458.88 ppb	20:49:36
3	Cu 324.752†	70788.1	67039.6	468.97 µg/L	468.97 ppb	20:49:36
3	Mn 257.610†	141701.1	139418.3	483.24 µg/L	483.24 ppb	20:49:30
3	Mo 202.031†	4221.8	4154.0	443.51 µg/L	443.51 ppb	20:49:56
3	Ni 231.604†	9018.0	8555.0	467.25 µg/L	467.25 ppb	20:49:36
3	P 214.914†	1078.2	1031.3	2168.8 µg/L	2168.8 ppb	20:49:56
3	Pb 220.353†	1819.7	1690.1	451.04 µg/L	451.04 ppb	20:49:56
3	S 181.975 Axial†	224.9	206.1	902.90 µg/L	902.90 ppb	20:49:56
3	Sb 206.836†	498.0	462.2	456.55 µg/L	456.55 ppb	20:49:56
3	Se 196.026†	317.7	296.2	459.21 µg/L	459.21 ppb	20:49:56
3	SiO2†	25297.8	23596.6	5081.7 µg/L	5081.7 ppb	20:49:36
3	Si 251.611†	29639.1	28797.7	2367.3 µg/L	2367.3 ppb	20:49:36
3	Sn 189.927†	969.5	953.0	438.37 µg/L	438.37 ppb	20:49:56
3	Ti 334.940†	200950.0	197250.3	474.15 µg/L	474.15 ppb	20:49:30
3	Tl 190.801†	318.5	337.1	476.24 µg/L	476.24 ppb	20:49:56
3	U 409.014†	5106.5	5069.1	457.95 µg/L	457.95 ppb	20:49:36
3	V 292.402†	44222.1	43477.7	468.89 µg/L	468.89 ppb	20:49:36
3	Zn 213.857†	19674.7	18848.3	467.32 µg/L	467.32 ppb	20:49:36

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1967014.7	102.99 %	1.113			1.08%
Sc RADIAL	56657.9	104 %	0.4			0.42%
Y 371.029	1347058.2	102.84 %	1.114			1.08%
Ag 328.068†	62197.3	497.05 µg/L	9.176	497.05 ppb	9.176	1.85%
QC value within limits for Ag 328.068 Recovery = 99.41%						
Al 396.153Radial†	6646.3	4943.6 µg/L	27.38	4943.6 ppb	27.38	0.55%
QC value within limits for Al 396.153Radial Recovery = 98.87%						
As 188.979†	248.2	484.11 µg/L	38.466	484.11 ppb	38.466	7.95%
QC value within limits for As 188.979 Recovery = 96.82%						
B 249.677†	11077.8	482.34 µg/L	9.505	482.34 ppb	9.505	1.97%
QC value within limits for B 249.677 Recovery = 96.47%						
Ba 233.527†	18743.6	488.93 µg/L	15.990	488.93 ppb	15.990	3.27%
QC value within limits for Ba 233.527 Recovery = 97.79%						
Be 313.107†	747961.0	488.27 µg/L	14.224	488.27 ppb	14.224	2.91%
QC value within limits for Be 313.107 Recovery = 97.65%						
Ca 317.933Radial†	5195.6	4892.0 µg/L	27.10	4892.0 ppb	27.10	0.55%
QC value within limits for Ca 317.933Radial Recovery = 97.84%						
Cd 226.502†	17751.0	489.65 µg/L	16.497	489.65 ppb	16.497	3.37%
QC value within limits for Cd 226.502 Recovery = 97.93%						
Co 228.616†	9974.7	490.31 µg/L	19.888	490.31 ppb	19.888	4.06%

QC value within limits for Co 228.616 Recovery = 98.06%							
Cr	267.716†	22179.9	488.18 µg/L	25.663	488.18 ppb	25.663	5.26%
QC value within limits for Cr 267.716 Recovery = 97.64%							
Cu	324.752†	69914.4	489.05 µg/L	17.599	489.05 ppb	17.599	3.60%
QC value within limits for Cu 324.752 Recovery = 97.81%							
Fe	238.204 Radial†	579.8	4925.0 µg/L	30.85	4925.0 ppb	30.85	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 98.50%							
K	766.490 Radial†	6957.5	4945.3 µg/L	31.04	4945.3 ppb	31.04	0.63%
QC value within limits for K 766.490 Radial Recovery = 98.91%							
Mg	279.077 IEC†	540.4	5032.6 µg/L	27.21	5032.6 ppb	27.21	0.54%
QC value within limits for Mg 279.077 IEC Recovery = 100.65%							
Mn	257.610†	143853.5	498.60 µg/L	14.052	498.60 ppb	14.052	2.82%
QC value within limits for Mn 257.610 Recovery = 99.72%							
Mo	202.031†	4622.5	493.50 µg/L	43.772	493.50 ppb	43.772	8.87%
QC value within limits for Mo 202.031 Recovery = 98.70%							
Na	589.592 Radial†	30064.3	9897.3 µg/L	5.97	9897.3 ppb	5.97	0.06%
QC value within limits for Na 589.592 Radial Recovery = 98.97%							
Ni	231.604†	8949.9	488.82 µg/L	19.001	488.82 ppb	19.001	3.89%
QC value within limits for Ni 231.604 Recovery = 97.76%							
P	214.914†	1131.8	2383.3 µg/L	186.72	2383.3 ppb	186.72	7.83%
QC value within limits for P 214.914 Recovery = 95.33%							
Pb	220.353†	1829.5	488.32 µg/L	32.571	488.32 ppb	32.571	6.67%
QC value within limits for Pb 220.353 Recovery = 97.66%							
S	181.975 Axial†	222.1	973.11 µg/L	61.093	973.11 ppb	61.093	6.28%
QC value within limits for S 181.975 Axial Recovery = 97.31%							
Sb	206.836†	505.8	500.00 µg/L	38.372	500.00 ppb	38.372	7.67%
QC value within limits for Sb 206.836 Recovery = 100.00%							
Se	196.026†	320.6	496.37 µg/L	32.386	496.37 ppb	32.386	6.52%
QC value within limits for Se 196.026 Recovery = 99.27%							
SiO2†		24292.9	5231.6 µg/L	133.45	5231.6 ppb	133.45	2.55%
QC value within limits for SiO2 Recovery = 97.83%							
Si	251.611†	29735.3	2444.4 µg/L	68.68	2444.4 ppb	68.68	2.81%
QC value within limits for Si 251.611 Recovery = 97.78%							
Sn	189.927†	1071.5	492.85 µg/L	47.680	492.85 ppb	47.680	9.67%
QC value within limits for Sn 189.927 Recovery = 98.57%							
Sr	421.552†	46911.4	486.29 µg/L	0.649	486.29 ppb	0.649	0.13%
QC value within limits for Sr 421.552 Recovery = 97.26%							
Ti	334.940†	204246.0	490.98 µg/L	15.354	490.98 ppb	15.354	3.13%
QC value within limits for Ti 334.940 Recovery = 98.20%							
Tl	190.801†	352.8	498.29 µg/L	19.770	498.29 ppb	19.770	3.97%
QC value within limits for Tl 190.801 Recovery = 99.66%							
U	409.014†	5442.8	491.79 µg/L	29.873	491.79 ppb	29.873	6.07%
QC value within limits for U 409.014 Recovery = 98.36%							
V	292.402†	45637.4	492.39 µg/L	20.599	492.39 ppb	20.599	4.18%
QC value within limits for V 292.402 Recovery = 98.48%							
Zn	213.857†	19657.6	487.40 µg/L	17.646	487.40 ppb	17.646	3.62%
QC value within limits for Zn 213.857 Recovery = 97.48%							
All analyte(s) passed QC.							

Sequence No.: 65

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 20:50:06

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	54706.8	54706.8	100 %		20:50:39
1	Al 396.153Radial†	-19.8	-9.6	-7.1597 µg/L	-7.1597 ppb	20:50:39
1	Ca 317.933Radial†	193.4	13.8	12.965 µg/L	12.965 ppb	20:50:59
1	Fe 238.204 Radial†	14.9	0.4	3.4407 µg/L	3.4407 ppb	20:50:59
1	K 766.490 Radial†	190.2	61.4	43.615 µg/L	43.615 ppb	20:50:39
1	Mg 279.077 IEC†	9.5	-1.8	-16.574 µg/L	-16.574 ppb	20:50:59
1	Na 589.592 Radial†	611.6	68.2	22.458 µg/L	22.458 ppb	20:50:39
1	Sr 421.552†	50.1	10.4	0.1083 µg/L	0.1083 ppb	20:50:39
1	Sc 361.383	1948940.3	1948940.3	102.05 %		20:52:01
1	Y 371.029	1338791.3	1338791.3	102.20 %		20:52:01
1	Ag 328.068†	-518.1	56.9	0.4517 µg/L	0.4517 ppb	20:52:07
1	As 188.979†	-3.1	-4.2	-8.2613 µg/L	-8.2613 ppb	20:52:27
1	B 249.677†	321.1	-16.9	-0.7379 µg/L	-0.7379 ppb	20:52:27
1	Ba 233.527†	-19.0	7.4	0.1920 µg/L	0.1920 ppb	20:52:27
1	Be 313.107†	-3344.6	162.9	0.1064 µg/L	0.1064 ppb	20:52:07
1	Cd 226.502†	-137.8	7.1	0.1949 µg/L	0.1949 ppb	20:52:27
1	Co 228.616†	-12.1	-3.0	-0.1485 µg/L	-0.1485 ppb	20:52:27
1	Cr 267.716†	-42.4	10.8	0.2378 µg/L	0.2378 ppb	20:52:27
1	Cu 324.752†	2394.6	-139.5	-0.9740 µg/L	-0.9740 ppb	20:52:07
1	Mn 257.610†	-249.9	-0.8	-0.0017 µg/L	-0.0017 ppb	20:52:27
1	Mo 202.031†	-8.7	-0.9	-0.1000 µg/L	-0.1000 ppb	20:52:27
1	Ni 231.604†	301.5	-6.7	-0.3676 µg/L	-0.3676 ppb	20:52:27
1	P 214.914†	26.4	-1.8	-3.6502 µg/L	-3.6502 ppb	20:52:27
1	Pb 220.353†	98.6	-0.6	-0.1521 µg/L	-0.1521 ppb	20:52:27
1	S 181.975 Axial†	17.7	2.5	11.004 µg/L	11.004 ppb	20:52:27
1	Sb 206.836†	24.9	-2.6	-2.5691 µg/L	-2.5691 ppb	20:52:27
1	Se 196.026†	8.7	-7.3	-11.073 µg/L	-11.073 ppb	20:52:27
1	SiO2†	1238.9	-36.0	-7.7460 µg/L	-7.7460 ppb	20:52:07
1	Si 251.611†	302.0	-17.0	-1.3942 µg/L	-1.3942 ppb	20:52:27
1	Sn 189.927†	9.5	10.2	4.7018 µg/L	4.7018 ppb	20:52:27
1	Ti 334.940†	104.4	-13.8	-0.0316 µg/L	-0.0316 ppb	20:52:07
1	Tl 190.801†	-21.8	3.0	4.1170 µg/L	4.1170 ppb	20:52:27
1	U 409.014†	-88.2	-32.9	-2.9763 µg/L	-2.9763 ppb	20:52:07
1	V 292.402†	-41.1	4.0	0.0394 µg/L	0.0394 ppb	20:52:07
1	Zn 213.857†	463.2	-21.7	-0.5372 µg/L	-0.5372 ppb	20:52:27
2	Sc RADIAL	55545.4	55545.4	102 %		20:51:05
2	Al 396.153Radial†	-16.1	-5.7	-4.2110 µg/L	-4.2110 ppb	20:51:05
2	Ca 317.933Radial†	186.7	4.3	4.0381 µg/L	4.0381 ppb	20:51:25
2	Fe 238.204 Radial†	16.2	1.4	11.802 µg/L	11.802 ppb	20:51:25
2	K 766.490 Radial†	153.7	22.6	16.081 µg/L	16.081 ppb	20:51:05
2	Mg 279.077 IEC†	9.8	-1.6	-15.368 µg/L	-15.368 ppb	20:51:25
2	Na 589.592 Radial†	544.7	-6.7	-2.2003 µg/L	-2.2003 ppb	20:51:05
2	Sr 421.552†	59.3	18.7	0.1934 µg/L	0.1934 ppb	20:51:05
2	Sc 361.383	1967179.8	1967179.8	103.00 %		20:52:34
2	Y 371.029	1351401.4	1351401.4	103.17 %		20:52:34
2	Ag 328.068†	-518.5	61.1	0.4858 µg/L	0.4858 ppb	20:52:39
2	As 188.979†	2.4	1.2	2.4080 µg/L	2.4080 ppb	20:53:00
2	B 249.677†	304.5	-35.8	-1.5724 µg/L	-1.5724 ppb	20:53:00
2	Ba 233.527†	-31.4	-4.5	-0.1163 µg/L	-0.1163 ppb	20:53:00
2	Be 313.107†	-3388.2	151.0	0.0986 µg/L	0.0986 ppb	20:52:39
2	Cd 226.502†	-143.3	3.0	0.0812 µg/L	0.0812 ppb	20:53:00
2	Co 228.616†	-19.1	-9.7	-0.4782 µg/L	-0.4782 ppb	20:53:00
2	Cr 267.716†	-45.2	8.4	0.1859 µg/L	0.1859 ppb	20:53:00
2	Cu 324.752†	2403.2	-152.9	-1.0665 µg/L	-1.0665 ppb	20:52:39
2	Mn 257.610†	-235.5	15.4	0.0556 µg/L	0.0556 ppb	20:53:00
2	Mo 202.031†	-9.6	-1.8	-0.1876 µg/L	-0.1876 ppb	20:53:00
2	Ni 231.604†	301.1	-9.9	-0.5406 µg/L	-0.5406 ppb	20:53:00
2	P 214.914†	31.5	2.9	6.3715 µg/L	6.3715 ppb	20:53:00
2	Pb 220.353†	96.4	-3.6	-0.9646 µg/L	-0.9646 ppb	20:53:00

2	S 181.975 Axial†	17.0	1.7	7.3749 µg/L	7.3749 ppb	20:53:00
2	Sb 206.836†	23.7	-4.0	-3.8982 µg/L	-3.8982 ppb	20:53:00
2	Se 196.026†	13.2	-3.0	-4.6016 µg/L	-4.6016 ppb	20:53:00
2	SiO2†	1267.4	-19.5	-4.2043 µg/L	-4.2043 ppb	20:52:39
2	Si 251.611†	307.1	-14.7	-1.2068 µg/L	-1.2068 ppb	20:53:00
2	Sn 189.927†	-2.7	-1.7	-0.7888 µg/L	-0.7888 ppb	20:53:00
2	Ti 334.940†	114.9	-4.6	-0.0097 µg/L	-0.0097 ppb	20:52:39
2	Tl 190.801†	-25.9	-0.8	-1.1281 µg/L	-1.1281 ppb	20:53:00
2	U 409.014†	-31.0	23.5	2.1267 µg/L	2.1267 ppb	20:52:39
2	V 292.402†	-45.0	0.5	0.0082 µg/L	0.0082 ppb	20:52:39
2	Zn 213.857†	466.4	-22.7	-0.5635 µg/L	-0.5635 ppb	20:53:00
3	Sc RADIAL	55281.5	55281.5	101 %		20:51:31
3	Al 396.153Radial†	-7.4	2.8	2.0809 µg/L	2.0809 ppb	20:51:31
3	Ca 317.933Radial†	186.8	5.2	4.9356 µg/L	4.9356 ppb	20:51:51
3	Fe 238.204 Radial†	12.0	-2.6	-22.268 µg/L	-22.268 ppb	20:51:51
3	K 766.490 Radial†	146.8	16.5	11.758 µg/L	11.758 ppb	20:51:31
3	Mg 279.077 IEC†	12.2	0.8	7.3154 µg/L	7.3154 ppb	20:51:51
3	Na 589.592 Radial†	565.6	16.5	5.4427 µg/L	5.4427 ppb	20:51:31
3	Sr 421.552†	36.3	-3.7	-0.0387 µg/L	-0.0387 ppb	20:51:31
3	Sc 361.383	1964978.1	1964978.1	102.89 %		20:53:06
3	Y 371.029	1348711.1	1348711.1	102.96 %		20:53:06
3	Ag 328.068†	-619.2	-37.3	-0.3009 µg/L	-0.3009 ppb	20:53:11
3	As 188.979†	-1.0	-2.1	-4.0762 µg/L	-4.0762 ppb	20:53:32
3	B 249.677†	324.6	-16.0	-0.6866 µg/L	-0.6866 ppb	20:53:32
3	Ba 233.527†	-26.7	0.1	0.0007 µg/L	0.0007 ppb	20:53:32
3	Be 313.107†	-3356.9	177.8	0.1161 µg/L	0.1161 ppb	20:53:11
3	Cd 226.502†	-138.4	7.6	0.2128 µg/L	0.2128 ppb	20:53:32
3	Co 228.616†	-11.5	-2.3	-0.1147 µg/L	-0.1147 ppb	20:53:32
3	Cr 267.716†	-35.2	18.1	0.3984 µg/L	0.3984 ppb	20:53:32
3	Cu 324.752†	2382.4	-170.5	-1.1944 µg/L	-1.1944 ppb	20:53:11
3	Mn 257.610†	-236.2	14.6	0.0471 µg/L	0.0471 ppb	20:53:32
3	Mo 202.031†	0.3	7.8	0.8326 µg/L	0.8326 ppb	20:53:32
3	Ni 231.604†	304.6	-6.2	-0.3373 µg/L	-0.3373 ppb	20:53:32
3	P 214.914†	22.1	-6.2	-13.070 µg/L	-13.070 ppb	20:53:32
3	Pb 220.353†	100.7	0.7	0.1833 µg/L	0.1833 ppb	20:53:32
3	S 181.975 Axial†	11.7	-3.5	-15.265 µg/L	-15.265 ppb	20:53:32
3	Sb 206.836†	24.9	-2.7	-2.6972 µg/L	-2.6972 ppb	20:53:32
3	Se 196.026†	17.0	0.7	0.9259 µg/L	0.9259 ppb	20:53:32
3	SiO2†	1197.6	-86.0	-18.530 µg/L	-18.530 ppb	20:53:11
3	Si 251.611†	306.8	-14.7	-1.2090 µg/L	-1.2090 ppb	20:53:32
3	Sn 189.927†	0.4	1.2	0.5738 µg/L	0.5738 ppb	20:53:32
3	Ti 334.940†	124.6	5.0	0.0115 µg/L	0.0115 ppb	20:53:11
3	Tl 190.801†	-28.2	-3.1	-4.3588 µg/L	-4.3588 ppb	20:53:32
3	U 409.014†	-57.7	-2.5	-0.2220 µg/L	-0.2220 ppb	20:53:11
3	V 292.402†	-97.5	-50.6	-0.5347 µg/L	-0.5347 ppb	20:53:11
3	Zn 213.857†	466.4	-22.2	-0.5507 µg/L	-0.5507 ppb	20:53:32

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1960366.0	102.65 %	0.521			0.51%
Sc RADIAL	55177.9	101 %	0.8			0.78%
Y 371.029	1346301.3	102.78 %	0.507			0.49%
Ag 328.068†	26.9	0.2122 µg/L	0.44466	0.2122 ppb	0.44466	209.57%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.1	-3.0966 µg/L	4.72006	-3.0966 ppb	4.72006	152.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.7	-3.3098 µg/L	5.37581	-3.3098 ppb	5.37581	162.42%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-22.9	-0.9990 µg/L	0.49729	-0.9990 ppb	0.49729	49.78%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.0	0.0254 µg/L	0.15564	0.0254 ppb	0.15564	611.86%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	163.9	0.1070 µg/L	0.00876	0.1070 ppb	0.00876	8.18%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.8	7.3128 µg/L	4.91522	7.3128 ppb	4.91522	67.21%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.9	0.1629 µg/L	0.07138	0.1629 ppb	0.07138	43.81%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.0	-0.2471 µg/L	0.20084	-0.2471 ppb	0.20084	81.28%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	12.5	0.2740 µg/L	0.11079	0.2740 ppb	0.11079	40.43%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-154.3	-1.0783 µg/L	0.11069	-1.0783 ppb	0.11069	10.26%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.3	-2.3417 µg/L	17.75545	-2.3417 ppb	17.75545	758.23%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	33.5	23.818 µg/L	17.2807	23.818 ppb	17.2807	72.55%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.9	-8.2086 µg/L	13.45771	-8.2086 ppb	13.45771	163.95%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	9.7	0.0337 µg/L	0.03095	0.0337 ppb	0.03095	91.90%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.7	0.1817 µg/L	0.56541	0.1817 ppb	0.56541	311.22%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	26.0	8.5668 µg/L	12.62253	8.5668 ppb	12.62253	147.34%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.6	-0.4152 µg/L	0.10971	-0.4152 ppb	0.10971	26.42%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.7	-3.4496 µg/L	9.72242	-3.4496 ppb	9.72242	281.84%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-1.2	-0.3112 µg/L	0.59024	-0.3112 ppb	0.59024	189.70%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.2	1.0380 µg/L	14.23518	1.0380 ppb	14.23518	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-3.1	-3.0549 µg/L	0.73318	-3.0549 ppb	0.73318	24.00%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.2	-4.9162 µg/L	6.00561	-4.9162 ppb	6.00561	122.16%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-47.2	-10.160 µg/L	7.4615	-10.160 ppb	7.4615	73.44%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	-15.4	-1.2700 µg/L	0.10757	-1.2700 ppb	0.10757	8.47%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.3	1.4956 µg/L	2.85898	1.4956 ppb	2.85898	191.16%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	8.5	0.0877 µg/L	0.11742	0.0877 ppb	0.11742	133.92%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-4.5	-0.0100 µg/L	0.02156	-0.0100 ppb	0.02156	216.62%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.3	-0.4566 µg/L	4.27758	-0.4566 ppb	4.27758	936.77%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-3.9	-0.3572 µg/L	2.55415	-0.3572 ppb	2.55415	715.01%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-15.4	-0.1623 µg/L	0.32282	-0.1623 ppb	0.32282	198.86%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-22.2	-0.5505 µg/L	0.01313	-0.5505 ppb	0.01313	2.38%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

## ICPMS#3 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Tuesday, March 02, 2010 11:39:48

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.6354

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	262.8	262.802	8.871	3.4
Mg	24.0	5622.7	5622.708	214.590	3.8
Co	58.9	20267.4	20267.367	110.511	0.5
Rh	102.9	47250.4	47250.423	640.204	1.4
In	114.9	58973.3	58973.302	995.807	1.7
Pb	208.0	40734.2	40734.195	337.700	0.8
[> Ba	137.9	51392.5	51392.459	810.051	1.6
[ Ba++	69.0	1577.5	0.031	0.001	3.0
[> Ce	139.9	67080.9	67080.932	484.847	0.7
[ CeO	155.9	1309.6	0.020	0.001	3.9
Bkgd	220.0	3.4	3.400	1.475	43.4

### Current Optimization File Data

Current Value	Description
1.02	Nebulizer Gas Flow
7.20	Lens Voltage
1450.00	ICP RF Power
-1855.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.3	839.7
Co	59	21	9.3	14398.6
In	115	21	10.3	73454.0

## ICPMS#3 Instrument Tuning Report

File Name: 100302.tun  
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	587	2060	0.644
Be	9.0	9.0	2058	2060	0.608
Mg	24.0	24.0	5708	2110	0.590
Mg	25.0	24.9	5886	2020	0.673
Mg	26.0	26.0	6217	2140	0.658
Co	58.9	58.9	14199	2115	0.662
Rh	102.9	102.9	24906	2165	0.668
In	114.9	114.9	27822	2180	0.663
Ce	139.9	139.9	33907	2220	0.635
Pb	206.0	205.9	49992	2280	0.660
Pb	207.0	206.9	50272	2310	0.706
Pb	208.0	208.0	50474	2300	0.649
U	238.1	238.0	57832	2340	0.685

## ICPMS#3 - Summary Report

Sample ID: Blank  
Sample Date/Time: Tuesday, March 02, 2010 14:11:00  
Sample Type:  
Sample Description:  
Number of Replicates: 3  
Batch ID:  
Method File: c:\elandata\Method\misc 5.mth  
Dataset File: C:\elandata\Dataset\100302\Blank.073

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge	74	ug/L		109388	
Se	77	ug/L		1585	
Se	82	ug/L		4	
Kr	83	ug/L		34	
[> Lu	175	ug/L		122246	
Tl	205	ug/L		284	
Pb	208	ug/L		140	
U	238	ug/L		62	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
Pb	208Linear Thru Zero	
U	238Linear Thru Zero	

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge	74				
Se	77				
Se	82				
Kr	83				
[> Lu	175				
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#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, March 02, 2010 14:13:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\Standard 1.074

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		112607	112607.439
	Se 77		ug/L		1907	0.002
	Se 82	10.000	ug/L	10.002	312	0.003
	Kr 83		ug/L		30	-0.000
[>	Lu 175		ug/L		124485	124485.085
	Tl 205	10.000	ug/L	4.412	58301	0.466
	Pb 208	10.000	ug/L	2.319	68673	0.551
	U 238	10.000	ug/L	1.643	82457	0.662

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74					
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175					
	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

Sample ID: Standard 1

Report Date/Time: Tuesday, March 02, 2010 14:13:41

Page 1

## ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, March 02, 2010 14:15:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\Standard 2.075

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		114254	114253.713
	Se 77		ug/L		4046	0.021
	Se 82	99.976	ug/L	3.389	3051	0.027
	Kr 83		ug/L		35	-0.000
[>	Lu 175		ug/L		125981	125980.987
	Tl 205	99.979	ug/L	4.700	574332	4.562
	Pb 208	99.999	ug/L	3.723	692744	5.503
	U 238	99.985	ug/L	1.873	820725	6.518

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74					
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175					
	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

Sample ID: Standard 2

Report Date/Time: Tuesday, March 02, 2010 14:15:45

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, March 02, 2010 14:17:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 1.076

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		113942	113941.725
	Se 77		ug/L		2898	0.011
	Se 82	53.014	ug/L	9.611	1614	0.014
	Kr 83		ug/L		31	-0.000
[>	Lu 175		ug/L		128270	128269.983
	Tl 205	49.573	ug/L	4.572	290200	2.262
	Pb 208	50.937	ug/L	3.300	359473	2.803
	U 238	53.472	ug/L	1.208	447063	3.486

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			104.2		
	Se 77					
	Se 82	106.029				
	Kr 83					
[>	Lu 175			104.9		
	Tl 205	99.145				
	Pb 208	101.874				
	U 238	106.945				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, March 02, 2010 14:17:50

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, March 02, 2010 14:19:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 2.077

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		111750	111749.787
	Se 77		ug/L		1615	-0.000
	Se 82	0.499	ug/L	37.731	19	0.000
	Kr 83		ug/L		32	-0.000
[>	Lu 175		ug/L		124800	124800.325
	Tl 205	0.201	ug/L	14.323	1436	0.009
	Pb 208	0.009	ug/L	13.058	203	0.000
	U 238	0.013	ug/L	18.779	166	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge 74		102.2			
Se 77					
Se 82					
Kr 83					
[> Lu 175		102.1			
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

Sample ID: QC Std 2

Report Date/Time: Tuesday, March 02, 2010 14:19:59

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, March 02, 2010 14:21:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 3.078

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		110533	110533.114
	Se 77		ug/L		1765	0.001
	Se 82	5.978	ug/L	8.377	181	0.002
	Kr 83		ug/L		31	-0.000
[>	Lu 175		ug/L		123007	123007.124
	Tl 205	1.129	ug/L	5.877	6617	0.052
	Pb 208	2.225	ug/L	3.555	15193	0.122
	U 238	0.251	ug/L	1.358	2075	0.016

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			101.0		
	Se 77					
	Se 82	119.564				
	Kr 83					
[>	Lu 175			100.6		
	Tl 205	112.881				
	Pb 208	111.229				
	U 238	125.522				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, March 02, 2010 14:22:04

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, March 02, 2010 14:23:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 4.079

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge	74		ug/L		97573	97572.599
Se	77		ug/L		2065	0.007
Se	82	-0.148	ug/L	220.576	0	-0.000
Kr	83		ug/L		63	0.000
[> Lu	175		ug/L		111332	111332.024
Tl	205	0.036	ug/L	15.198	441	0.002
Pb	208	0.214	ug/L	4.205	1441	0.012
U	238	0.000	ug/L	417.433	58	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge	74			89.2		
Se	77					
Se	82					
Kr	83					
[> Lu	175			91.1		
Tl	205					
Pb	208	113.403				
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, March 02, 2010 14:24:10

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, March 02, 2010 14:25:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 5.080

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		99347	99347.013
	Se 77		ug/L		2503	0.011
	Se 82	20.476	ug/L	5.262	547	0.005
	Kr 83		ug/L		72	0.000
[>	Lu 175		ug/L		113314	113313.887
	Tl 205	19.009	ug/L	2.226	98512	0.867
	Pb 208	19.608	ug/L	5.554	122237	1.079
	U 238	22.463	ug/L	0.206	165985	1.464

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			90.8		
	Se 77					
	Se 82	102.382				
	Kr 83					
[>	Lu 175			92.7		
	Tl 205	95.047				
	Pb 208	97.120				
	U 238	112.315				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Tuesday, March 02, 2010 14:26:16

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, March 02, 2010 14:27:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 6.081

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge 74		ug/L		110174	110174.414
Se 77		ug/L		2704	0.010
Se 82	51.408	ug/L	4.101	1514	0.014
Kr 83		ug/L		29	-0.000
[> Lu 175		ug/L		122479	122479.377
Tl 205	49.393	ug/L	3.995	276322	2.254
Pb 208	50.166	ug/L	2.180	338252	2.761
U 238	50.469	ug/L	0.651	403008	3.290

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge 74		100.7			
Se 77					
Se 82	102.816				
Kr 83					
[> Lu 175		100.2			
Tl 205	98.787				
Pb 208	100.332				
U 238	100.938				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, March 02, 2010 14:28:24

Page 1



## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, March 02, 2010 14:29:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 7.082

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		110351	110350.577
	Se 77		ug/L		1609	0.000
	Se 82	0.468	ug/L	80.622	18	0.000
	Kr 83		ug/L		30	-0.000
[>	Lu 175		ug/L		119726	119726.266
	Tl 205	0.286	ug/L	11.038	1835	0.013
	Pb 208	0.010	ug/L	18.796	201	0.001
	U 238	0.013	ug/L	5.370	160	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		100.9			
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175		97.9			
	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

Sample ID: QC Std 7

Report Date/Time: Tuesday, March 02, 2010 14:30:33

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202034073

Sample Date/Time: Tuesday, March 02, 2010 14:32:52

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\1202034073.083

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		114331	114330.625
	Se 77		ug/L		4990	0.029
	Se 82	0.095	ug/L	357.347	7	0.000
	Kr 83		ug/L		37	0.000
[>	Lu 175		ug/L		119505	119504.809
	Tl 205	0.038	ug/L	25.644	482	0.002
	Pb 208	0.012	ug/L	31.340	213	0.001
	U 238	0.002	ug/L	152.832	72	0.000

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge 74		104.5			
Se 77					
Se 82					
Kr 83					
[> Lu 175		97.8			
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

Sample ID: 1202034073

Report Date/Time: Tuesday, March 02, 2010 14:33:28

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202034074

Sample Date/Time: Tuesday, March 02, 2010 14:34:58

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\1202034074.084

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		122066	122065.703
	Se 77		ug/L		6321	0.037
	Se 82	50.181	ug/L	5.476	1637	0.013
	Kr 83		ug/L		36	-0.000
[>	Lu 175		ug/L		124567	124566.578
	Tl 205	48.342	ug/L	3.070	274972	2.206
	Pb 208	51.986	ug/L	3.550	356366	2.861
	U 238	55.094	ug/L	1.816	447533	3.591

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		111.6			
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175		101.9			
	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

Sample ID: 1202034074

Report Date/Time: Tuesday, March 02, 2010 14:35:34

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246056002

Sample Date/Time: Tuesday, March 02, 2010 14:45:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\246056002.089

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		120800	120800.347
	Se 77		ug/L		6875	0.042
	Se 82	0.405	ug/L	86.904	18	0.000
	Kr 83		ug/L		30	-0.000
[>	Lu 175		ug/L		119770	119770.355
	Tl 205	0.413	ug/L	2.420	2535	0.019
	Pb 208	0.130	ug/L	10.564	991	0.007
	U 238	0.025	ug/L	11.320	254	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			110.4		
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175			98.0		
	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

Sample ID: 246056002

Report Date/Time: Tuesday, March 02, 2010 14:46:14

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246056003

Sample Date/Time: Tuesday, March 02, 2010 14:47:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\246056003.090

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		120014	120014.102
	Se 77		ug/L		6007	0.036
	Se 82	0.179	ug/L	340.310	10	0.000
	Kr 83		ug/L		30	-0.000
[>	Lu 175		ug/L		118480	118480.076
	Tl 205	0.190	ug/L	10.565	1303	0.009
	Pb 208	0.458	ug/L	2.942	3122	0.025
	U 238	0.143	ug/L	5.535	1164	0.009

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge 74		109.7			
Se 77					
Se 82					
Kr 83					
[> 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

Sample ID: 246056003

Report Date/Time: Tuesday, March 02, 2010 14:48:20

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246056004

Sample Date/Time: Tuesday, March 02, 2010 14:49:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\246056004.091

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		121571	121571.338
	Se 77		ug/L		6340	0.038
	Se 82	-0.267	ug/L	154.506	-4	-0.000
	Kr 83		ug/L		38	0.000
[>	Lu 175		ug/L		117747	117747.268
	Tl 205	0.133	ug/L	7.675	986	0.006
	Pb 208	3.136	ug/L	3.909	20445	0.173
	U 238	0.026	ug/L	1.955	257	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			111.1		
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175			96.3		
	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

Sample ID: 246056004

Report Date/Time: Tuesday, March 02, 2010 14:50:27

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, March 02, 2010 14:51:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 6.092

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		114912	114911.825
	Se 77		ug/L		3234	0.014
	Se 82	48.422	ug/L	10.624	1486	0.013
	Kr 83		ug/L		37	0.000
[>	Lu 175		ug/L		122489	122488.787
	Tl 205	48.856	ug/L	2.831	273238	2.229
	Pb 208	50.057	ug/L	5.943	336982	2.755
	U 238	50.291	ug/L	0.545	401663	3.278

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		105.1			
	Se 77					
	Se 82	96.843				
	Kr 83					
[>	Lu 175		100.2			
	Tl 205	97.712				
	Pb 208	100.113				
	U 238	100.582				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, March 02, 2010 14:52:35

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, March 02, 2010 14:54:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 7.093

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		113316	113316.374
	Se 77		ug/L		1817	0.002
	Se 82	0.453	ug/L	58.840	18	0.000
	Kr 83		ug/L		34	-0.000
[>	Lu 175		ug/L		120449	120449.431
	Tl 205	0.401	ug/L	9.900	2488	0.018
	Pb 208	0.010	ug/L	24.782	204	0.001
	U 238	0.015	ug/L	4.528	177	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		103.6			
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175		98.5			
	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

Sample ID: QC Std 7

Report Date/Time: Tuesday, March 02, 2010 14:54:44

Page 1



## ICPMS#3 - Summary Report

Sample ID: 246056001

Sample Date/Time: Tuesday, March 02, 2010 14:56:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\246056001.094

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		114588	114587.994
	Se 77		ug/L		5781	0.036
	Se 82	0.276	ug/L	59.303	13	0.000
	Kr 83		ug/L		33	-0.000
[>	Lu 175		ug/L		115690	115690.083
	Tl 205	0.122	ug/L	9.235	910	0.006
	Pb 208	1.209	ug/L	4.417	7820	0.067
	U 238	0.046	ug/L	4.735	404	0.003

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge 74		104.8			
Se 77					
Se 82					
Kr 83					
[> Lu 175		94.6			
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

Sample ID: 246056001

Report Date/Time: Tuesday, March 02, 2010 14:57:04

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202034075

Sample Date/Time: Tuesday, March 02, 2010 14:58:34

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\unisc 5.mth

Dataset File: C:\elandata\Dataset\100302\1202034075.095

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		122327	122326.768
	Se 77		ug/L		7576	0.047
	Se 82	0.109	ug/L	95.305	8	0.000
	Kr 83		ug/L		31	-0.000
[>	Lu 175		ug/L		118903	118902.686
	Tl 205	0.075	ug/L	4.848	683	0.003
	Pb 208	1.091	ug/L	5.070	7268	0.060
	U 238	0.034	ug/L	2.787	321	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74			111.8		
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175			97.3		
	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

Sample ID: 1202034075

Report Date/Time: Tuesday, March 02, 2010 14:59:11

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202034076

Sample Date/Time: Tuesday, March 02, 2010 15:00:42

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 949400|1|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\1202034076.096

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge 74		ug/L		124512	124512.292
	Se 77		ug/L		6072	0.034
	Se 82	19.474	ug/L	4.483	652	0.005
	Kr 83		ug/L		38	-0.000
>	Lu 175		ug/L		123660	123659.666
	Tl 205	96.021	ug/L	3.312	541651	4.381
	Pb 208	43.778	ug/L	5.672	297669	2.409
	U 238	56.687	ug/L	0.791	456917	3.695

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge 74		113.8			
	Se 77					
	Se 82					
	Kr 83					
>	Lu 175		101.2			
	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

Sample ID: 1202034076

Report Date/Time: Tuesday, March 02, 2010 15:01:19

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202034077

Sample Date/Time: Tuesday, March 02, 2010 15:02:50

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 949400|5|prb

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\1202034077.097

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Ge	74		ug/L		115392	115392.071
Se	77		ug/L		3216	0.013
Se	82	-0.068	ug/L	395.507	2	-0.000
Kr	83		ug/L		39	0.000
[> Lu	175		ug/L		121346	121346.470
Tl	205	1.533	ug/L	10.263	8781	0.070
Pb	208	0.271	ug/L	3.175	1948	0.015
U	238	0.040	ug/L	15.682	381	0.003

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Ge	74		105.5			
Se	77					
Se	82					
Kr	83					
[> Lu	175		99.3			
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

Sample ID: 1202034077

Report Date/Time: Tuesday, March 02, 2010 15:03:28

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, March 02, 2010 15:04:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 6.098

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		113341	113340.647
	Se 77		ug/L		3132	0.013
	Se 82	48.944	ug/L	0.708	1485	0.013
	Kr 83		ug/L		34	-0.000
[>	Lu 175		ug/L		121213	121212.889
	Tl 205	49.109	ug/L	3.521	271705	2.241
	Pb 208	49.772	ug/L	3.023	332007	2.739
	U 238	50.490	ug/L	1.206	398905	3.291

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		103.6			
	Se 77					
	Se 82	97.887				
	Kr 83					
[>	Lu 175		99.2			
	Tl 205	98.218				
	Pb 208	99.543				
	U 238	100.980				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, March 02, 2010 15:05:37

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, March 02, 2010 15:07:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc 5.mth

Dataset File: C:\elandata\Dataset\100302\QC Std 7.099

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Ge 74		ug/L		113666	113666.163
	Se 77		ug/L		1789	0.001
	Se 82	0.506	ug/L	95.745	20	0.000
	Kr 83		ug/L		30	-0.000
[>	Lu 175		ug/L		120454	120453.666
	Tl 205	0.622	ug/L	7.720	3694	0.028
	Pb 208	0.011	ug/L	13.192	210	0.001
	U 238	0.014	ug/L	14.101	171	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Ge 74		103.9			
	Se 77					
	Se 82					
	Kr 83					
[>	Lu 175		98.5			
	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

Sample ID: QC Std 7

Report Date/Time: Tuesday, March 02, 2010 15:07:46

Page 1

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Monday, March 01, 2010 12:25:26

### Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.622

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	7525.6	7525.582	135.286	1.8
Mg	24.0	72300.7	72300.704	497.743	0.7
Co	58.9	133496.1	133496.074	1093.688	0.8
Rh	102.9	255466.5	255466.461	1864.846	0.7
In	114.9	337077.4	337077.383	2800.835	0.8
Pb	208.0	312424.1	312424.149	2662.214	0.9
[> Ba	137.9	318495.2	318495.162	2411.981	0.8
[ Ba++	69.0	5411.1	0.017	0.000	1.1
[> Ce	139.9	391005.4	391005.356	2825.949	0.7
[ CeO	155.9	10623.4	0.027	0.000	1.2
Bkgd	220.0	21.8	21.800	1.643	7.5

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.00	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	11	6.0	7652.4
Co	59	11	6.5	131008.3
In	115	11	7.3	323061.4

## 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	596	2050	0.668
Be	9.0	9.0	2053	2075	0.630
Mg	24.0	24.0	5687	2080	0.612
Mg	25.0	25.0	5939	2080	0.622
Mg	26.0	26.0	6166	2080	0.632
Co	58.9	59.0	14193	2110	0.618
Rh	102.9	102.9	24880	2160	0.626
In	114.9	114.9	27794	2180	0.626
Ce	139.9	139.9	33866	2200	0.630
Pb	206.0	205.9	49936	2295	0.593
Pb	207.0	207.0	50171	2240	0.630
Pb	208.0	207.9	50439	2265	0.690
U	238.1	238.0	57728	2275	0.727



## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, March 02, 2010 04:26:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\Blank.216

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7		ug/L		98	
	Be	9		ug/L		11	
	B	11		ug/L		495	
	Na	23		ug/L		14675	
	Mg	24		ug/L		1667	
	Al	27		ug/L		3000	
	P	31		ug/L		5465	
	K	39		ug/L		498563	
	Ca	43		ug/L		155	
>	Sc	45		ug/L		954088	
	Ti	47		ug/L		248	
	V	51		ug/L		714	
	Cr	52		ug/L		147	
	Cr	53		ug/L		59674	
	Mn	55		ug/L		1334	
	Fe	57		ug/L		4550	
	Co	59		ug/L		90	
	Ni	60		ug/L		76	
	Cu	63		ug/L		214	
	Cu	65		ug/L		91	
[	Zn	66		ug/L		566	
	Zn	67		ug/L		8994	
	Zn	68		ug/L		1240	
>	Ge	74		ug/L		401149	
	As	75		ug/L		117	
	Se	77		ug/L		3041	
	Se	82		ug/L		1	
	Kr	83		ug/L		114	
[	Sr	88		ug/L		166	
	Y	89		ug/L		89	
	Mo	98		ug/L		65	
	Ag	107		ug/L		47	
	Cd	111		ug/L		26	
	Cd	114		ug/L		39	
>	In	115		ug/L		271118	
	Sn	120		ug/L		271	
	Sb	121		ug/L		461	
	Sb	123		ug/L		356	
[	Ba	135		ug/L		36	
	Ba	137		ug/L		51	
	Ho	165		ug/L		17	
>	Lu	175		ug/L		549592	
	Tl	205		ug/L		607	
	Pb	208		ug/L		474	
	Bi	209		ug/L		218	
	Th	232		ug/L		710	
	U	238		ug/L		405	

Sample ID: Blank

Report Date/Time: Tuesday, March 02, 2010 04:29:40

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: Blank

Report Date/Time: Tuesday, March 02, 2010 04:29:40

Page 2

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
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: Standard 1

Sample Date/Time: Tuesday, March 02, 2010 04:33:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\Standard 1.217

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.727	23199	0.024
Be	9	10.000	ug/L	2.623	4975	0.005
B	11	20.000	ug/L	4.384	9131	0.009
Na	23	1000.000	ug/L	4.201	3848739	4.054
Mg	24	1000.000	ug/L	4.405	2591055	2.736
Al	27	1000.000	ug/L	10.833	3354156	3.538
P	31	1000.000	ug/L	2.522	202895	0.209
K	39	1000.000	ug/L	3.834	4749888	4.497
Ca	43	1000.000	ug/L	2.288	11511	0.012
> Sc	45		ug/L		946198	946197.926
Ti	47	10.000	ug/L	2.647	5772	0.006
V	51	10.000	ug/L	6.154	65515	0.069
Cr	52	10.000	ug/L	2.257	49508	0.052
Cr	53		ug/L		64792	0.006
Mn	55	10.000	ug/L	1.799	85680	0.089
Fe	57	1000.000	ug/L	2.274	175101	0.180
Co	59	10.000	ug/L	1.937	65368	0.069
Ni	60	10.000	ug/L	2.246	14130	0.015
Cu	63		ug/L		34050	0.036
Cu	65	10.000	ug/L	0.456	16805	0.018
Zn	66	10.000	ug/L	2.597	12743	0.030
Zn	67		ug/L		10657	0.004
Zn	68		ug/L		10086	0.022
> Ge	74		ug/L		399716	399716.143
As	75	10.000	ug/L	2.611	11476	0.028
Se	77		ug/L		4080	0.003
Se	82	10.000	ug/L	2.947	1197	0.003
Kr	83		ug/L		109	-0.000
Sr	88	10.000	ug/L	1.753	148917	0.546
Y	89		ug/L		101	0.000
Mo	98	10.000	ug/L	2.203	35466	0.130
Ag	107	10.000	ug/L	2.368	62250	0.228
Cd	111	10.000	ug/L	3.620	15951	0.058
Cd	114		ug/L		37894	0.139
> In	115		ug/L		272684	272683.965
Sn	120	10.000	ug/L	2.333	69278	0.253
Sb	121	10.000	ug/L	4.683	55005	0.200
Sb	123		ug/L		43596	0.159
Ba	135		ug/L		17907	0.033
Ba	137	10.000	ug/L	1.511	31618	0.058
Ho	165		ug/L		19	0.000
> Lu	175		ug/L		547564	547564.381
Tl	205	10.000	ug/L	1.485	244118	0.445
Pb	208	10.000	ug/L	0.810	411532	0.751
Bi	209		ug/L		282	0.000
Th	232	10.000	ug/L	2.069	529396	0.966
U	238	10.000	ug/L	3.157	556142	1.015

Sample ID: Standard 1

Report Date/Time: Tuesday, March 02, 2010 04:35:43

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 1

Report Date/Time: Tuesday, March 02, 2010 04:35:43

Page 2

## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Tuesday, March 02, 2010 04:35:43

Page 3

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, March 02, 2010 04:39:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\Standard 2.218

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.983	ug/L	0.769	233495	0.240
Be	9	99.976	ug/L	1.559	49791	0.051
B	11	200.020	ug/L	3.628	90204	0.092
Na	23	9993.780	ug/L	1.270	37080326	38.140
Mg	24	9999.072	ug/L	8.069	26346427	27.102
Al	27	10004.146	ug/L	5.074	35896729	36.931
P	31	9991.510	ug/L	0.772	1873917	1.923
K	39	10006.882	ug/L	6.328	47462848	48.322
Ca	43	10000.088	ug/L	1.791	116920	0.120
> Sc	45		ug/L		971825	971824.647
Ti	47	100.001	ug/L	1.687	57104	0.059
V	51	99.948	ug/L	1.756	633387	0.651
Cr	52	99.955	ug/L	1.228	485097	0.499
Cr	53		ug/L		118712	0.060
Mn	55	99.941	ug/L	1.227	819361	0.842
Fe	57	9988.867	ug/L	2.473	1579866	1.621
Co	59	99.924	ug/L	2.342	622687	0.641
Ni	60	99.939	ug/L	0.707	136116	0.140
Cu	63		ug/L		325134	0.334
Cu	65	99.943	ug/L	0.401	162413	0.167
Zn	66	99.954	ug/L	1.896	117629	0.291
Zn	67		ug/L		27247	0.045
Zn	68		ug/L		86077	0.211
> Ge	74		ug/L		401895	401894.698
As	75	100.003	ug/L	2.451	114580	0.285
Se	77		ug/L		12540	0.024
Se	82	99.985	ug/L	1.028	11856	0.029
Kr	83		ug/L		191	0.000
Sr	88	99.950	ug/L	2.147	1382707	5.194
Y	89		ug/L		185	0.000
Mo	98	100.008	ug/L	1.920	348371	1.308
Ag	107	99.961	ug/L	1.703	584487	2.196
Cd	111	99.994	ug/L	1.701	154599	0.581
Cd	114		ug/L		365294	1.372
> In	115		ug/L		266224	266223.581
Sn	120	99.968	ug/L	1.870	653179	2.453
Sb	121	100.030	ug/L	1.261	549636	2.063
Sb	123		ug/L		430165	1.614
Ba	135		ug/L		172384	0.320
Ba	137	99.994	ug/L	1.184	308840	0.573
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		539023	539023.162
Tl	205	99.789	ug/L	0.919	1976252	3.665
Pb	208	99.860	ug/L	1.807	3544809	6.576
Bi	209		ug/L		854	0.001
Th	232	99.826	ug/L	0.926	4425385	8.209
U	238	99.845	ug/L	0.391	4731447	8.777

Sample ID: Standard 2

Report Date/Time: Tuesday, March 02, 2010 04:41:48

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

Sample ID: Standard 2

Report Date/Time: Tuesday, March 02, 2010 04:41:48

Page 2



## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, March 02, 2010 04:41:48

Page 3

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, March 02, 2010 04:45:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 1.219

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.804	ug/L	0.698	124041	0.124
Be	9	52.194	ug/L	1.385	26646	0.027
B	11	108.412	ug/L	0.642	50337	0.050
Na	23	5448.890	ug/L	3.683	20721358	20.795
Mg	24	5307.752	ug/L	3.035	14327484	14.386
Al	27	5138.018	ug/L	1.110	18894337	18.967
P	31	5386.800	ug/L	2.802	1037850	1.036
K	39	5083.509	ug/L	7.323	24980447	24.548
Ca	43	5010.155	ug/L	1.592	60112	0.060
> Sc	45		ug/L		996002	996001.589
Ti	47	51.530	ug/L	0.792	30282	0.030
V	51	51.149	ug/L	2.203	332571	0.333
Cr	52	52.824	ug/L	1.180	262796	0.264
Cr	53		ug/L		93739	0.032
Mn	55	53.863	ug/L	1.063	453187	0.454
Fe	57	5311.207	ug/L	1.856	863043	0.862
Co	59	51.999	ug/L	1.889	332094	0.333
Ni	60	53.448	ug/L	1.654	74633	0.075
Cu	63		ug/L		179561	0.180
Cu	65	53.153	ug/L	0.809	88565	0.089
Zn	66	52.014	ug/L	1.929	63266	0.152
Zn	67		ug/L		19184	0.024
Zn	68		ug/L		46652	0.110
> Ge	74		ug/L		413505	413505.415
As	75	49.365	ug/L	2.125	58278	0.141
Se	77		ug/L		8431	0.013
Se	82	51.928	ug/L	0.633	6336	0.015
Kr	83		ug/L		144	0.000
Sr	88	54.086	ug/L	1.394	772240	2.811
Y	89		ug/L		124	0.000
Mo	98	50.431	ug/L	0.653	181317	0.660
Ag	107	51.781	ug/L	0.965	312472	1.137
Cd	111	51.487	ug/L	0.989	82155	0.299
Cd	114		ug/L		196149	0.714
> In	115		ug/L		274695	274695.272
Sn	120	51.786	ug/L	1.419	349304	1.271
Sb	121	51.311	ug/L	0.341	291156	1.058
Sb	123		ug/L		228783	0.832
Ba	135		ug/L		92481	0.168
Ba	137	52.226	ug/L	1.720	164280	0.299
Ho	165		ug/L		46	0.000
> Lu	175		ug/L		548963	548962.803
Tl	205	54.917	ug/L	0.905	1107852	2.017
Pb	208	55.034	ug/L	1.694	1989706	3.624
Bi	209		ug/L		605	0.001
Th	232	51.776	ug/L	2.688	2337577	4.258
U	238	54.390	ug/L	2.884	2624509	4.781

Sample ID: QC Std 1

Report Date/Time: Tuesday, March 02, 2010 04:47:53

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	103.609				
Be	9	104.388				
B	11	108.412				
Na	23	108.978				
Mg	24	106.155				
Al	27	101.743				
P	31	107.736				
K	39	101.670				
Ca	43	100.203				
> Sc	45		104.4			
Ti	47	103.059				
V	51	102.297				
Cr	52	105.647				
Cr	53					
Mn	55	107.725				
Fe	57	106.224				
Co	59	103.998				
Ni	60	106.896				
Cu	63					
Cu	65	106.306				
Zn	66	104.028				
Zn	67					
Zn	68					
> Ge	74		103.1			
As	75	98.730				
Se	77					
Se	82	103.856				
Kr	83					
Sr	88	108.172				
Y	89					
Mo	98	100.863				
Ag	107	103.562				
Cd	111	102.974				
Cd	114					
> In	115		101.3			
Sn	120	103.572				
Sb	121	102.623				
Sb	123					
Ba	135					
Ba	137	104.452				
Ho	165					
> Lu	175		99.9			
Tl	205	109.833				
Pb	208	110.068				
Bi	209					
Th	232	103.553				
U	238	108.779				

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message  
 QC Std 1 Pb 208ICV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, March 02, 2010 04:51:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 2.220

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.013	ug/L	60.884	128	0.000
Be	9	0.013	ug/L	73.836	18	0.000
B	11	5.441	ug/L	15.458	2899	0.003
Na	23	-0.017	ug/L	4796.377	14674	-0.000
Mg	24	0.641	ug/L	35.182	3334	0.002
Al	27	0.285	ug/L	525.885	4001	0.001
P	31	1.131	ug/L	19.574	5689	0.000
K	39	2.225	ug/L	89.589	510292	0.011
Ca	43	0.435	ug/L	799.408	161	0.000
> Sc	45		ug/L		956747	956747.264
Ti	47	-0.007	ug/L	426.415	245	-0.000
V	51	-0.228	ug/L	66.083	-711	-0.001
Cr	52	0.144	ug/L	44.281	833	0.001
Cr	53		ug/L		61732	0.002
Mn	55	-0.025	ug/L	14.632	1139	-0.000
Fe	57	0.992	ug/L	9.118	4717	0.000
Co	59	0.005	ug/L	8.052	122	0.000
Ni	60	0.017	ug/L	39.216	99	0.000
Cu	63		ug/L		270	0.000
Cu	65	0.005	ug/L	203.858	100	0.000
Zn	66	-0.020	ug/L	121.696	545	-0.000
Zn	67		ug/L		8927	-0.000
Zn	68		ug/L		1233	-0.000
> Ge	74		ug/L		402710	402709.690
As	75	-0.155	ug/L	210.627	-57	-0.000
Se	77		ug/L		3587	0.001
Se	82	0.020	ug/L	469.174	3	0.000
Kr	83		ug/L		114	0.000
Sr	88	0.002	ug/L	85.519	188	0.000
Y	89		ug/L		70	-0.000
Mo	98	0.037	ug/L	18.213	195	0.000
Ag	107	0.002	ug/L	38.356	61	0.000
Cd	111	-0.005	ug/L	109.063	17	-0.000
Cd	114		ug/L		39	0.000
> In	115		ug/L		269543	269542.514
Sn	120	0.027	ug/L	21.440	448	0.001
Sb	121	0.527	ug/L	18.087	3390	0.011
Sb	123		ug/L		2698	0.009
Ba	135		ug/L		48	0.000
Ba	137	0.004	ug/L	76.039	64	0.000
Ho	165		ug/L		20	0.000
> Lu	175		ug/L		539279	539279.113
Tl	205	0.047	ug/L	19.893	1518	0.002
Pb	208	0.002	ug/L	32.979	544	0.000
Bi	209		ug/L		218	0.000
Th	232	0.039	ug/L	20.557	2427	0.003
U	238	0.006	ug/L	26.936	661	0.000

Sample ID: QC Std 2

Report Date/Time: Tuesday, March 02, 2010 04:54:02

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 2

Report Date/Time: Tuesday, March 02, 2010 04:54:02

Page 2

## QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Li	7				
	Be	9				
	B	11				
	Na	23				
	Mg	24				
	Al	27				
	P	31				
	K	39				
	Ca	43				
>	Sc	45	100.3			
	Ti	47				
	V	51				
	Cr	52				
	Cr	53				
	Mn	55				
	Fe	57				
	Co	59				
	Ni	60				
	Cu	63				
	Cu	65				
[	Zn	66				
	Zn	67				
	Zn	68				
>	Ge	74	100.4			
	As	75				
	Se	77				
	Se	82				
	Kr	83				
[	Sr	88				
	Y	89				
	Mo	98				
	Ag	107				
	Cd	111				
	Cd	114				
>	In	115	99.4			
	Sn	120				
	Sb	121				
	Sb	123				
[	Ba	135				
	Ba	137				
	Ho	165				
>	Lu	175	98.1			
	Tl	205				
	Pb	208				
	Bi	209				
	Th	232				
	U	238				

## QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Tuesday, March 02, 2010 04:54:02

Page 3

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, March 02, 2010 04:57:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 3.221

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.781	ug/L	1.624	27474	0.028
Be	9	0.597	ug/L	2.277	307	0.000
B	11	18.504	ug/L	2.495	8760	0.009
Na	23	269.620	ug/L	2.581	1010168	1.029
Mg	24	18.093	ug/L	25.382	49087	0.049
Al	27	38.395	ug/L	17.329	140028	0.142
P	31	64.177	ug/L	3.914	17488	0.012
K	39	331.659	ug/L	5.339	2055414	1.602
Ca	43	227.911	ug/L	1.432	2806	0.003
> Sc	45		ug/L		967431	967431.196
Ti	47	9.519	ug/L	3.064	5639	0.006
V	51	11.865	ug/L	4.102	75472	0.077
Cr	52	11.866	ug/L	0.453	57458	0.059
Cr	53		ug/L		69814	0.010
Mn	55	6.238	ug/L	1.409	52177	0.053
Fe	57	128.410	ug/L	2.072	24768	0.021
Co	59	1.205	ug/L	1.919	7565	0.008
Ni	60	2.414	ug/L	0.756	3348	0.003
Cu	63		ug/L		4327	0.004
Cu	65	1.266	ug/L	2.330	2139	0.002
Zn	66	11.864	ug/L	0.537	14672	0.035
Zn	67		ug/L		11336	0.005
Zn	68		ug/L		11389	0.025
> Ge	74		ug/L		407647	407647.436
As	75	5.791	ug/L	3.614	6846	0.016
Se	77		ug/L		4106	0.002
Se	82	5.991	ug/L	1.329	721	0.002
Kr	83		ug/L		105	-0.000
Sr	88	12.352	ug/L	2.878	177363	0.642
Y	89		ug/L		87	-0.000
Mo	98	0.592	ug/L	1.746	2204	0.008
Ag	107	1.092	ug/L	2.560	6673	0.024
Cd	111	1.135	ug/L	2.558	1846	0.007
Cd	114		ug/L		4266	0.015
> In	115		ug/L		276087	276086.570
Sn	120	5.584	ug/L	1.396	38104	0.137
Sb	121	3.229	ug/L	3.118	18858	0.067
Sb	123		ug/L		15006	0.053
Ba	135		ug/L		4065	0.007
Ba	137	2.250	ug/L	2.772	7207	0.013
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		555246	555246.175
Tl	205	1.324	ug/L	1.577	27605	0.049
Pb	208	2.533	ug/L	0.807	93101	0.167
Bi	209		ug/L		230	0.000
Th	232	1.333	ug/L	1.537	61595	0.110
U	238	0.291	ug/L	0.973	14612	0.026

Sample ID: QC Std 3

Report Date/Time: Tuesday, March 02, 2010 05:00:08

Page 1



## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	117.807				
	Be	9	119.386				
	B	11	123.357				
	Na	23	107.848				
	Mg	24	120.622				
	Al	27	127.983				
	P	31	128.353				
	K	39	110.553				
	Ca	43	113.956				
>	Sc	45		101.4			
	Ti	47	95.194				
	V	51	118.653				
	Cr	52	118.663				
	Cr	53					
	Mn	55	124.760				
	Fe	57	128.410				
	Co	59	120.512				
	Ni	60	120.692				
	Cu	63					
	Cu	65	126.638				
	Zn	66	118.639				
	Zn	67					
	Zn	68					
>	Ge	74		101.6			
	As	75	115.820				
	Se	77					
	Se	82	119.817				
	Kr	83					
	Sr	88	123.516				
	Y	89					
	Mo	98	118.363				
	Ag	107	109.249				
	Cd	111	113.520				
	Cd	114					
>	In	115		101.8			
	Sn	120	111.683				
	Sb	121	107.638				
	Sb	123					
	Ba	135					
	Ba	137	112.483				
	Ho	165					
>	Lu	175		101.0			
	Tl	205	132.353				
	Pb	208	126.663				
	Bi	209					
	Th	232	133.335				
	U	238	145.496				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

## QC Action

Sample ID: QC Std 3  
 Report Date/Time: Tuesday, March 02, 2010 05:00:08  
 Page 3

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, March 02, 2010 05:03:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 4.222

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.071	ug/L	10.620	263	0.000
Be	9	0.096	ug/L	18.860	59	0.000
B	11	2.021	ug/L	12.386	1397	0.001
Na	23	104663.921	ug/L	3.766	384825227	399.433
Mg	24	97342.298	ug/L	3.364	254165531	263.840
Al	27	95673.764	ug/L	0.194	340215264	353.183
P	31	102206.985	ug/L	0.558	18949441	19.666
K	39	99963.466	ug/L	5.578	465597091	482.711
Ca	43	96594.292	ug/L	0.507	1118006	1.161
> Sc	45		ug/L		963266	963266.127
Ti	47	1691.855	ug/L	1.150	953565	0.990
V	51	0.433	ug/L	105.596	3427	0.003
Cr	52	2.498	ug/L	2.176	12159	0.012
Cr	53		ug/L		57594	-0.003
Mn	55	6.166	ug/L	1.505	51370	0.052
Fe	57	114269.158	ug/L	1.773	17863512	18.541
Co	59	0.328	ug/L	4.481	2114	0.002
Ni	60	3.403	ug/L	2.125	4668	0.005
Cu	63		ug/L		8684	0.009
Cu	65	3.423	ug/L	3.411	5601	0.006
Zn	66	3.896	ug/L	3.087	4923	0.011
Zn	67		ug/L		8902	0.001
Zn	68		ug/L		1999	0.002
> Ge	74		ug/L		385633	385632.881
As	75	0.118	ug/L	136.208	242	0.000
Se	77		ug/L		5927	0.008
Se	82	-1.113	ug/L	10.683	-126	-0.000
Kr	83		ug/L		299	0.000
Sr	88	3.371	ug/L	2.829	43796	0.175
Y	89		ug/L		513	0.002
Mo	98	1961.619	ug/L	1.385	6394017	25.665
Ag	107	0.111	ug/L	0.112	649	0.002
Cd	111	0.464	ug/L	17.474	696	0.003
Cd	114		ug/L		9180	0.037
> In	115		ug/L		249155	249154.606
Sn	120	0.276	ug/L	4.303	1935	0.007
Sb	121	0.193	ug/L	17.807	1416	0.004
Sb	123		ug/L		1111	0.003
Ba	135		ug/L		1314	0.003
Ba	137	0.770	ug/L	2.059	2171	0.004
Ho	165		ug/L		10256	0.021
> Lu	175		ug/L		482363	482362.661
Tl	205	0.015	ug/L	8.638	790	0.001
Pb	208	0.242	ug/L	2.044	8109	0.016
Bi	209		ug/L		6007	0.012
Th	232	0.051	ug/L	32.852	2639	0.004
U	238	-0.002	ug/L	23.463	262	-0.000

Sample ID: QC Std 4

Report Date/Time: Tuesday, March 02, 2010 05:06:13

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23	104.664				
Mg	24	97.342				
Al	27	95.674				
P	31	102.207				
K	39	99.963				
Ca	43	96.594				
Sc	45		101.0			
Ti	47	84.593				
V	51					
Cr	52	75.695				
Cr	53					
Mn	55	106.316				
Fe	57	114.269				
Co	59	139.371				
Ni	60	102.818				
Cu	63					
Cu	65	102.488				
Zn	66	103.605				
Zn	67					
Zn	68					
Ge	74		96.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	113.900				
Y	89					
Mo	98	98.081				
Ag	107					
Cd	111	104.586				
Cd	114					
In	115		91.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	96.429				
Ho	165					
Lu	175		87.8			
Tl	205					
Pb	208	128.148				
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, March 02, 2010 05:09:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 5.223

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.773	ug/L	0.436	45014	0.047
Be	9	19.268	ug/L	1.376	9347	0.010
B	11	20.088	ug/L	1.567	9256	0.009
Na	23	103987.511	ug/L	6.284	375321446	396.851
Mg	24	102373.777	ug/L	4.494	262431077	277.477
Al	27	99143.390	ug/L	2.553	346108756	365.991
P	31	102551.866	ug/L	0.833	18666776	19.732
K	39	99741.712	ug/L	5.397	455989227	481.640
Ca	43	96694.947	ug/L	1.742	1098789	1.162
> Sc	45		ug/L		945712	945712.028
Ti	47	1712.423	ug/L	0.425	947619	1.002
V	51	22.060	ug/L	1.120	136591	0.144
Cr	52	24.185	ug/L	0.729	114327	0.121
Cr	53		ug/L		68809	0.010
Mn	55	27.836	ug/L	0.692	223032	0.234
Fe	57	116178.934	ug/L	0.957	17831832	18.851
Co	59	21.467	ug/L	0.826	130240	0.138
Ni	60	23.522	ug/L	0.270	31232	0.033
Cu	63		ug/L		71812	0.076
Cu	65	23.007	ug/L	0.589	36451	0.038
Zn	66	22.966	ug/L	1.674	26050	0.067
Zn	67		ug/L		11989	0.009
Zn	68		ug/L		17582	0.043
> Ge	74		ug/L		381152	381152.403
As	75	21.047	ug/L	2.032	22971	0.060
Se	77		ug/L		7467	0.012
Se	82	19.858	ug/L	3.571	2233	0.006
Kr	83		ug/L		298	0.000
Sr	88	27.144	ug/L	0.269	349456	1.411
Y	89		ug/L		467	0.002
Mo	98	1958.064	ug/L	0.861	6343851	25.619
Ag	107	20.314	ug/L	0.398	110534	0.446
Cd	111	20.614	ug/L	0.700	29665	0.120
Cd	114		ug/L		78351	0.316
> In	115		ug/L		247629	247628.852
Sn	120	22.005	ug/L	1.609	133942	0.540
Sb	121	22.080	ug/L	0.744	113182	0.455
Sb	123		ug/L		89331	0.359
Ba	135		ug/L		34295	0.072
Ba	137	22.103	ug/L	1.545	60413	0.127
Ho	165		ug/L		10235	0.021
> Lu	175		ug/L		476711	476710.540
Tl	205	22.842	ug/L	1.461	400501	0.839
Pb	208	22.700	ug/L	0.578	712996	1.495
Bi	209		ug/L		6523	0.013
Th	232	25.005	ug/L	0.391	980865	2.056
U	238	25.736	ug/L	1.496	1078811	2.262

Sample ID: QC Std 5

Report Date/Time: Tuesday, March 02, 2010 05:12:20

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 5

Report Date/Time: Tuesday, March 02, 2010 05:12:20

Page 2



### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	98.866				
Be	9	96.342				
B	11	100.440				
Na	23	103.988				
Mg	24	102.374				
Al	27	99.143				
P	31	102.552				
K	39	99.742				
Ca	43	96.695				
> Sc	45		99.1			
Ti	47	85.621				
V	51	110.302				
Cr	52	103.798				
Cr	53					
Mn	55	107.891				
Fe	57	116.179				
Co	59	106.089				
Ni	60	100.908				
Cu	63					
Cu	65	98.571				
Zn	66	96.659				
Zn	67					
Zn	68					
> Ge	74		95.0			
As	75	105.237				
Se	77					
Se	82	99.292				
Kr	83					
Sr	88	118.224				
Y	89					
Mo	98	97.903				
Ag	107	101.569				
Cd	111	100.833				
Cd	114					
> In	115		91.3			
Sn	120	110.024				
Sb	121	110.402				
Sb	123					
Ba	135					
Ba	137	106.276				
Ho	165					
> Lu	175		86.7			
Tl	205	114.211				
Pb	208	112.438				
Bi	209					
Th	232	125.024				
U	238	128.680				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Th	232	ICSAB is out of limits
QC Std 5	U	238	ICSAB is out of limits

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, March 02, 2010 05:15:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 6.224

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.785	ug/L	4.132	122700	0.124
Be	9	52.164	ug/L	3.496	26359	0.027
B	11	100.753	ug/L	2.800	46344	0.046
Na	23	4821.267	ug/L	6.179	18165270	18.400
Mg	24	5149.524	ug/L	7.839	13762457	13.957
Al	27	4843.987	ug/L	12.900	17602345	17.882
P	31	5349.226	ug/L	3.104	1020313	1.029
K	39	4668.103	ug/L	7.148	22725601	22.542
Ca	43	5045.129	ug/L	1.823	59930	0.061
> Sc	45		ug/L		986348	986348.396
Ti	47	52.681	ug/L	2.809	30638	0.031
V	51	52.095	ug/L	2.888	335255	0.339
Cr	52	53.924	ug/L	2.345	265573	0.269
Cr	53		ug/L		94973	0.034
Mn	55	54.646	ug/L	3.971	455014	0.460
Fe	57	5444.645	ug/L	3.062	875675	0.883
Co	59	53.984	ug/L	4.184	341226	0.346
Ni	60	54.584	ug/L	3.116	75448	0.076
Cu	63		ug/L		178207	0.181
Cu	65	54.192	ug/L	3.502	89369	0.091
Zn	66	52.603	ug/L	2.172	63619	0.153
Zn	67		ug/L		18651	0.023
Zn	68		ug/L		46299	0.110
> Ge	74		ug/L		411186	411186.194
As	75	50.193	ug/L	1.788	58916	0.143
Se	77		ug/L		8905	0.014
Se	82	52.734	ug/L	1.006	6398	0.016
Kr	83		ug/L		111	-0.000
Sr	88	54.243	ug/L	2.863	773542	2.819
Y	89		ug/L		159	0.000
Mo	98	51.552	ug/L	2.278	185135	0.674
Ag	107	52.662	ug/L	4.452	317318	1.157
Cd	111	51.890	ug/L	0.901	82722	0.301
Cd	114		ug/L		197022	0.718
> In	115		ug/L		274484	274483.660
Sn	120	52.905	ug/L	2.186	356455	1.298
Sb	121	51.052	ug/L	3.196	289329	1.053
Sb	123		ug/L		225349	0.820
Ba	135		ug/L		92506	0.169
Ba	137	52.614	ug/L	4.889	165069	0.301
Ho	165		ug/L		54	0.000
> Lu	175		ug/L		548316	548316.089
Tl	205	56.804	ug/L	5.587	1142544	2.086
Pb	208	55.898	ug/L	4.836	2015637	3.681
Bi	209		ug/L		643	0.001
Th	232	52.912	ug/L	6.211	2381725	4.351
U	238	54.719	ug/L	5.782	2632958	4.810

Sample ID: QC Std 6

Report Date/Time: Tuesday, March 02, 2010 05:18:27

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	103.570				
Be	9	104.329				
B	11	100.753				
Na	23	96.425				
Mg	24	102.990				
Al	27	95.921				
P	31	106.985				
K	39	93.362				
Ca	43	100.903				
> Sc	45		103.4			
Ti	47	105.362				
V	51	104.190				
Cr	52	107.848				
Cr	53					
Mn	55	109.293				
Fe	57	108.893				
Co	59	107.968				
Ni	60	109.167				
Cu	63					
Cu	65	108.385				
Zn	66	105.205				
Zn	67					
Zn	68					
> Ge	74		102.5			
As	75	100.387				
Se	77					
Se	82	105.467				
Kr	83					
Sr	88	108.487				
Y	89					
Mo	98	103.104				
Ag	107	105.323				
Cd	111	103.781				
Cd	114					
> In	115		101.2			
Sn	120	105.810				
Sb	121	102.105				
Sb	123					
Ba	135					
Ba	137	105.229				
Ho	165					
> Lu	175		99.8			
Tl	205	113.608				
Pb	208	111.796				
Bi	209					
Th	232	105.824				
U	238	109.437				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)
QC Std 6	Pb	208	CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, March 02, 2010 05:21:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 7.225

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.033	ug/L	7.038	182	0.000
Be	9	0.005	ug/L	152.458	14	0.000
B	11	3.049	ug/L	14.403	1913	0.001
Na	23	2.832	ug/L	57.335	26025	0.011
Mg	24	1.968	ug/L	101.702	7002	0.005
Al	27	1.230	ug/L	87.662	7669	0.005
P	31	-1.851	ug/L	22.943	5341	-0.000
K	39	-5.743	ug/L	43.039	492001	-0.028
Ca	43	1.790	ug/L	168.693	183	0.000
> Sc	45		ug/L		994202	994201.787
Ti	47	0.092	ug/L	45.860	312	0.000
V	51	-0.357	ug/L	108.990	-1586	-0.002
Cr	52	0.089	ug/L	13.389	592	0.000
Cr	53		ug/L		64408	0.002
Mn	55	-0.056	ug/L	11.790	922	-0.000
Fe	57	3.217	ug/L	41.556	5259	0.001
Co	59	0.000	ug/L	649.293	97	0.000
Ni	60	0.010	ug/L	51.885	93	0.000
Cu	63		ug/L		287	0.000
Cu	65	0.012	ug/L	47.170	115	0.000
Zn	66	-0.020	ug/L	70.691	567	-0.000
Zn	67		ug/L		8632	-0.002
Zn	68		ug/L		1190	-0.000
> Ge	74		ug/L		419092	419091.641
As	75	-0.211	ug/L	5.420	-129	-0.001
Se	77		ug/L		3983	0.002
Se	82	0.075	ug/L	129.072	10	0.000
Kr	83		ug/L		109	-0.000
Sr	88	0.002	ug/L	33.028	205	0.000
Y	89		ug/L		85	-0.000
Mo	98	0.074	ug/L	11.328	341	0.001
Ag	107	0.004	ug/L	46.910	72	0.000
Cd	111	-0.003	ug/L	99.467	21	-0.000
Cd	114		ug/L		53	0.000
> In	115		ug/L		282774	282774.414
Sn	120	0.020	ug/L	28.899	422	0.000
Sb	121	0.280	ug/L	25.623	2114	0.006
Sb	123		ug/L		1698	0.005
Ba	135		ug/L		37	0.000
Ba	137	0.005	ug/L	59.363	69	0.000
Ho	165		ug/L		18	0.000
> Lu	175		ug/L		574177	574176.587
Tl	205	0.063	ug/L	19.243	1959	0.002
Pb	208	0.001	ug/L	92.874	524	0.000
Bi	209		ug/L		215	-0.000
Th	232	0.037	ug/L	15.360	2474	0.003
U	238	0.003	ug/L	38.233	597	0.000

Sample ID: QC Std 7

Report Date/Time: Tuesday, March 02, 2010 05:24:36

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		104.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		104.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		104.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, March 02, 2010 05:27:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 10.226

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	895.149	ug/L	1.707	1984578	2.150
Be	9	955.841	ug/L	2.181	452008	0.490
B	11	2.133	ug/L	10.592	1386	0.001
Na	23	50769.277	ug/L	6.476	179013841	193.753
Mg	24	48788.970	ug/L	1.451	122088998	132.239
Al	27	49769.442	ug/L	2.170	169661155	183.725
P	31	25661.032	ug/L	1.273	4562730	4.938
K	39	48149.095	ug/L	4.337	215216154	232.506
Ca	43	48872.788	ug/L	1.471	542116	0.587
> Sc	45		ug/L		923172	923172.248
Ti	47	46.080	ug/L	3.132	25116	0.027
V	51	882.706	ug/L	1.370	5307584	5.749
Cr	52	902.737	ug/L	2.541	4159240	4.507
Cr	53		ug/L		612256	0.601
Mn	55	940.962	ug/L	1.288	7316421	7.925
Fe	57	57917.304	ug/L	1.634	8678142	9.398
Co	59	880.632	ug/L	2.162	5210522	5.646
Ni	60	898.817	ug/L	2.925	1161839	1.259
Cu	63		ug/L		2676848	2.899
Cu	65	868.290	ug/L	2.255	1339366	1.451
Zn	66	2298.975	ug/L	2.305	2583096	6.701
Zn	67		ug/L		412435	1.048
Zn	68		ug/L		1671839	4.335
> Ge	74		ug/L		385415	385414.631
As	75	892.491	ug/L	1.441	980054	2.543
Se	77		ug/L		46681	0.114
Se	82	492.787	ug/L	1.310	56028	0.145
Kr	83		ug/L		212	0.000
Sr	88	998.130	ug/L	3.581	13160823	51.870
Y	89		ug/L		461	0.001
Mo	98	975.753	ug/L	1.567	3239840	12.766
Ag	107	226.335	ug/L	2.648	1261527	4.971
Cd	111	892.205	ug/L	0.914	1314862	5.181
Cd	114		ug/L		3117880	12.285
> In	115		ug/L		253801	253800.638
Sn	120	866.349	ug/L	1.492	5394621	21.257
Sb	121	233.742	ug/L	0.475	1223879	4.821
Sb	123		ug/L		982150	3.869
Ba	135		ug/L		1438358	2.798
Ba	137	892.865	ug/L	0.187	2630107	5.115
Ho	165		ug/L		146	0.000
> Lu	175		ug/L		514161	514161.425
Tl	205	468.372	ug/L	1.933	8845102	17.203
Pb	208	4725.749	ug/L	0.999	160001371	311.197
Bi	209		ug/L		4791	0.009
Th	232	2514.058	ug/L	0.747	106296336	206.743
U	238	5297.744	ug/L	1.129	239432230	465.697

Sample ID: QC Std 10

Report Date/Time: Tuesday, March 02, 2010 05:30:41

Page 1



## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	89.515				
Be	9	95.584				
B	11					
Na	23	101.539				
Mg	24	97.578				
Al	27	99.539				
P	31	102.644				
K	39	96.298				
Ca	43	97.746				
> Sc	45		96.8			
Ti	47					
V	51	88.271				
Cr	52	90.274				
Cr	53					
Mn	55	94.096				
Fe	57	115.835				
Co	59	88.063				
Ni	60	89.882				
Cu	63					
Cu	65	86.829				
Zn	66	91.959				
Zn	67					
Zn	68					
> Ge	74		96.1			
As	75	89.249				
Se	77					
Se	82	98.557				
Kr	83					
Sr	88	99.813				
Y	89					
Mo	98	97.575				
Ag	107	90.534				
Cd	111	89.221				
Cd	114					
> In	115		93.6			
Sn	120	86.635				
Sb	121	93.497				
Sb	123					
Ba	135					
Ba	137	89.287				
Ho	165					
> Lu	175		93.6			
Tl	205	93.674				
Pb	208	94.515				
Bi	209					
Th	232	100.562				
U	238	105.955				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Li	7	7LRS is out of limits (+/- 10%)
QC Std 10	V	51	51LRS is out of limits (+/- 10%)
QC Std 10	Fe	57	57LRS is out of limits (+/- 10%)
QC Std 10	Co	59	59LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	60LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	65LRS is out of limits (+/- 10%)
QC Std 10	As	75	75LRS is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Tuesday, March 02, 2010 05:30:41

Page 3

QC Std 10	Cd	111LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, March 02, 2010 05:34:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 11.227

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.298	ug/L	1.152	124463	0.126
Be	9	52.599	ug/L	1.351	26691	0.027
B	11	102.994	ug/L	1.550	47558	0.048
Na	23	5581.540	ug/L	13.123	21074342	21.301
Mg	24	5431.464	ug/L	6.200	14566948	14.722
Al	27	5103.957	ug/L	12.820	18626451	18.841
P	31	5415.153	ug/L	1.629	1037116	1.042
K	39	4954.887	ug/L	2.912	24211817	23.927
Ca	43	5102.096	ug/L	2.759	60843	0.061
> Sc	45		ug/L		990132	990131.619
Ti	47	53.128	ug/L	1.795	31024	0.031
V	51	53.157	ug/L	3.458	343391	0.346
Cr	52	54.183	ug/L	1.526	267930	0.270
Cr	53		ug/L		94881	0.033
Mn	55	54.475	ug/L	0.529	455615	0.459
Fe	57	5436.328	ug/L	3.275	877756	0.882
Co	59	53.838	ug/L	3.704	341661	0.345
Ni	60	55.170	ug/L	2.967	76561	0.077
Cu	63		ug/L		182221	0.184
Cu	65	54.406	ug/L	0.546	90113	0.091
Zn	66	52.914	ug/L	3.103	64296	0.154
Zn	67		ug/L		19518	0.025
Zn	68		ug/L		47457	0.112
> Ge	74		ug/L		413175	413175.255
As	75	50.411	ug/L	2.459	59447	0.144
Se	77		ug/L		8430	0.013
Se	82	53.041	ug/L	3.108	6464	0.016
Kr	83		ug/L		128	0.000
Sr	88	55.452	ug/L	1.961	794228	2.882
Y	89		ug/L		102	0.000
Mo	98	52.071	ug/L	2.620	187764	0.681
Ag	107	52.934	ug/L	2.609	320377	1.163
Cd	111	52.801	ug/L	2.824	84495	0.307
Cd	114		ug/L		199063	0.722
> In	115		ug/L		275636	275636.336
Sn	120	53.157	ug/L	3.251	359561	1.304
Sb	121	52.879	ug/L	2.629	300937	1.091
Sb	123		ug/L		238210	0.863
Ba	135		ug/L		95020	0.172
Ba	137	53.160	ug/L	2.144	168399	0.305
Ho	165		ug/L		47	0.000
> Lu	175		ug/L		552859	552859.191
Tl	205	56.746	ug/L	1.433	1152842	2.084
Pb	208	55.795	ug/L	1.694	2031524	3.674
Bi	209		ug/L		585	0.001
Th	232	54.243	ug/L	0.284	2466801	4.461
U	238	56.037	ug/L	1.138	2723700	4.926

Sample ID: QC Std 11

Report Date/Time: Tuesday, March 02, 2010 05:36:46

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	104.596				
Be	9	105.197				
B	11	102.994				
Na	23	111.631				
Mg	24	108.629				
Al	27	101.068				
P	31	108.303				
K	39	99.098				
Ca	43	102.042				
> Sc	45		103.8			
Ti	47	106.257				
V	51	106.314				
Cr	52	108.366				
Cr	53					
Mn	55	108.949				
Fe	57	108.727				
Co	59	107.675				
Ni	60	110.340				
Cu	63					
Cu	65	108.811				
Zn	66	105.829				
Zn	67					
Zn	68					
> Ge	74		103.0			
As	75	100.822				
Se	77					
Se	82	106.083				
Kr	83					
Sr	88	110.904				
Y	89					
Mo	98	104.142				
Ag	107	105.869				
Cd	111	105.602				
Cd	114					
> In	115		101.7			
Sn	120	106.313				
Sb	121	105.758				
Sb	123					
Ba	135					
Ba	137	106.321				
Ho	165					
> Lu	175		100.6			
Tl	205	113.492				
Pb	208	111.591				
Bi	209					
Th	232	108.487				
U	238	112.074				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)
QC Std 11	Ni	60	CCV is out of limits (+/- 10%)
QC Std 11	Sr	88	CCV is out of limits (+/- 10%)
QC Std 11	Tl	205	CCV is out of limits (+/- 10%)
QC Std 11	Pb	208	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

Sample ID: QC Std 11

Report Date/Time: Tuesday, March 02, 2010 05:36:46

Page 3

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, March 02, 2010 05:40:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 12.228

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.077	ug/L	15.134	285	0.000
Be	9	0.026	ug/L	28.722	25	0.000
B	11	3.148	ug/L	18.829	1955	0.001
Na	23	1.174	ug/L	27.967	19680	0.004
Mg	24	1.092	ug/L	19.228	4667	0.003
Al	27	0.879	ug/L	35.366	6335	0.003
P	31	-3.028	ug/L	24.560	5100	-0.001
K	39	4.654	ug/L	193.627	540055	0.022
Ca	43	2.807	ug/L	96.380	195	0.000
> Sc	45		ug/L		991138	991138.107
Ti	47	0.056	ug/L	95.691	290	0.000
V	51	-0.154	ug/L	333.068	-254	-0.001
Cr	52	0.035	ug/L	68.641	326	0.000
Cr	53		ug/L		63745	0.002
Mn	55	-0.037	ug/L	12.186	1077	-0.000
Fe	57	1.029	ug/L	16.304	4892	0.000
Co	59	0.029	ug/L	17.652	280	0.000
Ni	60	0.033	ug/L	17.882	125	0.000
Cu	63		ug/L		413	0.000
Cu	65	0.024	ug/L	8.676	134	0.000
Zn	66	-0.013	ug/L	156.283	572	-0.000
Zn	67		ug/L		9166	-0.000
Zn	68		ug/L		1298	0.000
> Ge	74		ug/L		416845	416845.322
As	75	-0.149	ug/L	90.110	-56	-0.000
Se	77		ug/L		3662	0.001
Se	82	-0.121	ug/L	128.031	-14	-0.000
Kr	83		ug/L		132	0.000
Sr	88	0.009	ug/L	24.736	294	0.000
Y	89		ug/L		66	-0.000
Mo	98	0.120	ug/L	15.464	504	0.002
Ag	107	0.003	ug/L	47.048	69	0.000
Cd	111	0.002	ug/L	357.143	29	0.000
Cd	114		ug/L		66	0.000
> In	115		ug/L		278820	278819.610
Sn	120	0.135	ug/L	14.793	1202	0.003
Sb	121	0.765	ug/L	18.041	4864	0.016
Sb	123		ug/L		3922	0.013
Ba	135		ug/L		54	0.000
Ba	137	0.010	ug/L	14.463	85	0.000
Ho	165		ug/L		16	-0.000
> Lu	175		ug/L		562966	562966.110
Tl	205	0.252	ug/L	11.452	5823	0.009
Pb	208	0.038	ug/L	7.568	1910	0.003
Bi	209		ug/L		233	0.000
Th	232	0.096	ug/L	9.076	5175	0.008
U	238	0.056	ug/L	8.273	3198	0.005

Sample ID: QC Std 12

Report Date/Time: Tuesday, March 02, 2010 05:42:55

Page 1



## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		103.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		103.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		102.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.4			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 12

Report Date/Time: Tuesday, March 02, 2010 05:42:55

Page 3

## ICPMS#5 - Summary Report

Sample ID: 1202034073

Sample Date/Time: Tuesday, March 02, 2010 05:46:18

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 9494001|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\1202034073.229

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.178	ug/L	2.693	491	0.000
Be	9	0.015	ug/L	96.002	18	0.000
B	11	1.427	ug/L	19.304	1089	0.001
Na	23	7.132	ug/L	28.867	39389	0.027
Mg	24	0.553	ug/L	72.944	3000	0.001
Al	27	5.203	ug/L	42.817	20683	0.019
P	31	0.338	ug/L	147.950	5359	0.000
K	39	18.728	ug/L	13.583	567036	0.090
Ca	43	23.941	ug/L	4.561	417	0.000
> Sc	45		ug/L		925078	925078.116
Ti	47	0.529	ug/L	13.156	526	0.000
V	51	-3.577	ug/L	19.835	-20856	-0.023
Cr	52	-0.477	ug/L	24.276	-2060	-0.002
Cr	53		ug/L		177703	0.130
Mn	55	0.155	ug/L	8.797	2504	0.001
Fe	57	9.720	ug/L	4.594	5871	0.002
Co	59	0.025	ug/L	3.487	237	0.000
Ni	60	0.126	ug/L	9.209	237	0.000
Cu	63		ug/L		696	0.001
Cu	65	0.100	ug/L	10.491	242	0.000
Zn	66	1.342	ug/L	1.739	2026	0.004
Zn	67		ug/L		36812	0.074
Zn	68		ug/L		3662	0.007
> Ge	74		ug/L		380677	380677.257
As	75	-0.305	ug/L	79.254	-219	-0.001
Se	77		ug/L		11237	0.022
Se	82	0.083	ug/L	7.513	10	0.000
Kr	83		ug/L		116	0.000
Sr	88	0.102	ug/L	4.041	1542	0.005
Y	89		ug/L		93	0.000
Mo	98	0.074	ug/L	11.286	314	0.001
Ag	107	0.001	ug/L	304.268	48	0.000
Cd	111	0.001	ug/L	547.409	26	0.000
Cd	114		ug/L		33	-0.000
> In	115		ug/L		259899	259898.533
Sn	120	0.465	ug/L	20.022	3223	0.011
Sb	121	0.507	ug/L	26.229	3159	0.010
Sb	123		ug/L		2519	0.008
Ba	135		ug/L		132	0.000
Ba	137	0.053	ug/L	13.178	217	0.000
Ho	165		ug/L		20	0.000
> Lu	175		ug/L		544812	544811.611
Tl	205	0.105	ug/L	1.206	2709	0.004
Pb	208	0.026	ug/L	11.635	1387	0.002
Bi	209		ug/L		259	0.000
Th	232	0.100	ug/L	16.704	5170	0.008
U	238	0.023	ug/L	23.025	1490	0.002

Sample ID: 1202034073

Report Date/Time: Tuesday, March 02, 2010 05:49:00

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Li	7						
Be	9						
B	11						
Na	23						
Mg	24						
Al	27						
P	31						
K	39						
Ca	43						
> Sc	45		97.0				
Ti	47						
V	51						
Cr	52						
Cr	53						
Mn	55						
Fe	57						
Co	59						
Ni	60						
Cu	63						
Cu	65						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		94.9				
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Mo	98						
Ag	107						
Cd	111						
Cd	114						
> In	115		95.9				
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175		99.1				
Tl	205						
Pb	208						
Bi	209						
Th	232						
U	238						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202034074

Sample Date/Time: Tuesday, March 02, 2010 05:52:24

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 949400|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\1202034074.230

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.183	ug/L	1.514	115559	0.125
Be	9	54.901	ug/L	0.256	25925	0.028
B	11	109.245	ug/L	1.355	46913	0.050
Na	23	2089.241	ug/L	2.300	7359101	7.973
Mg	24	2030.699	ug/L	3.624	5071795	5.504
Al	27	2090.713	ug/L	1.230	7112932	7.718
P	31	2306.407	ug/L	1.415	414095	0.444
K	39	2155.227	ug/L	3.549	10070242	10.407
Ca	43	2130.017	ug/L	2.293	23724	0.026
Sc	45		ug/L		921250	921249.680
Ti	47	48.508	ug/L	1.265	26381	0.028
V	51	49.946	ug/L	2.993	300388	0.325
Cr	52	54.237	ug/L	0.744	249579	0.271
Cr	53		ug/L		217886	0.174
Mn	55	56.244	ug/L	0.636	437667	0.474
Fe	57	2385.257	ug/L	1.095	360937	0.387
Co	59	55.701	ug/L	1.072	329046	0.357
Ni	60	56.081	ug/L	1.275	72435	0.079
Cu	63		ug/L		175312	0.190
Cu	65	56.369	ug/L	1.207	86873	0.094
Zn	66	55.071	ug/L	1.370	61487	0.161
Zn	67		ug/L		50872	0.112
Zn	68		ug/L		45896	0.118
Ge	74		ug/L		379737	379736.831
As	75	52.941	ug/L	3.326	57371	0.151
Se	77		ug/L		16735	0.037
Se	82	56.193	ug/L	2.640	6295	0.017
Kr	83		ug/L		132	0.000
Sr	88	55.566	ug/L	2.937	748862	2.888
Y	89		ug/L		140	0.000
Mo	98	51.897	ug/L	1.199	176157	0.679
Ag	107	55.763	ug/L	1.379	317663	1.225
Cd	111	52.634	ug/L	1.484	79283	0.306
Cd	114		ug/L		192083	0.741
In	115		ug/L		259352	259352.448
Sn	120	54.209	ug/L	2.453	345156	1.330
Sb	121	56.857	ug/L	1.929	304500	1.173
Sb	123		ug/L		241768	0.931
Ba	135		ug/L		90465	0.165
Ba	137	50.786	ug/L	3.048	159724	0.291
Ho	165		ug/L		51	0.000
Lu	175		ug/L		549055	549055.101
Tl	205	53.781	ug/L	2.548	1084731	1.975
Pb	208	56.242	ug/L	3.212	2033023	3.704
Bi	209		ug/L		1622348	2.955
Th	232	52.196	ug/L	1.907	2356822	4.292
U	238	54.325	ug/L	2.536	2621377	4.775

Sample ID: 1202034074

Report Date/Time: Tuesday, March 02, 2010 05:55:06

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		96.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202034074

Report Date/Time: Tuesday, March 02, 2010 05:55:06

Page 3



## ICPMS#5 - Summary Report

Sample ID: 246056001

Sample Date/Time: Tuesday, March 02, 2010 05:58:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\246056001.231

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.457	ug/L	3.682	1095	0.001
Be	9	0.015	ug/L	109.326	18	0.000
B	11	31.788	ug/L	1.324	13841	0.015
Na	23	200.123	ug/L	1.868	710235	0.764
Mg	24	23.699	ug/L	7.965	60127	0.064
Al	27	135.279	ug/L	6.537	457905	0.499
P	31	3.584	ug/L	48.782	5850	0.001
K	39	175.236	ug/L	2.137	1247529	0.846
Ca	43	73.767	ug/L	15.771	955	0.001
> Sc	45		ug/L		911494	911494.318
Ti	47	3.631	ug/L	1.381	2173	0.002
V	51	-3.086	ug/L	78.969	-17632	-0.020
Cr	52	1.443	ug/L	2.405	6706	0.007
Cr	53		ug/L		189389	0.145
Mn	55	2.999	ug/L	2.564	24299	0.025
Fe	57	99.644	ug/L	1.782	19082	0.016
Co	59	0.060	ug/L	13.071	435	0.000
Ni	60	0.409	ug/L	4.302	594	0.001
Cu	63		ug/L		6130	0.007
Cu	65	1.861	ug/L	1.389	2922	0.003
Zn	66	3.356	ug/L	2.418	4220	0.010
Zn	67		ug/L		41600	0.088
Zn	68		ug/L		5577	0.012
> Ge	74		ug/L		377005	377004.920
As	75	-0.977	ug/L	35.252	-939	-0.003
Se	77		ug/L		11794	0.024
Se	82	0.049	ug/L	77.464	6	0.000
Kr	83		ug/L		105	-0.000
Sr	88	0.447	ug/L	1.402	6175	0.023
Y	89		ug/L		1008	0.004
Mo	98	0.059	ug/L	0.852	262	0.001
Ag	107	0.012	ug/L	31.060	114	0.000
Cd	111	0.014	ug/L	83.202	45	0.000
Cd	114		ug/L		28	-0.000
> In	115		ug/L		259211	259211.304
Sn	120	1.341	ug/L	1.745	8789	0.033
Sb	121	0.073	ug/L	17.103	832	0.002
Sb	123		ug/L		692	0.001
Ba	135		ug/L		2878	0.005
Ba	137	1.555	ug/L	0.474	4929	0.009
Ho	165		ug/L		95	0.000
> Lu	175		ug/L		547639	547638.687
Tl	205	0.616	ug/L	18.091	12996	0.023
Pb	208	1.368	ug/L	1.424	49787	0.090
Bi	209		ug/L		791	0.001
Th	232	0.091	ug/L	20.057	4807	0.007
U	238	0.054	ug/L	5.937	2991	0.005

Sample ID: 246056001

Report Date/Time: Tuesday, March 02, 2010 06:01:12

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246056001

Report Date/Time: Tuesday, March 02, 2010 06:01:12

Page 3

## ICPMS#5 - Summary Report

Sample ID: 1202034076

Sample Date/Time: Tuesday, March 02, 2010 06:10:43

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 9494001|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\1202034076.233

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.556	ug/L	0.877	115033	0.131
Be	9	56.406	ug/L	1.458	25357	0.029
B	11	139.716	ug/L	3.075	56983	0.064
Na	23	2300.258	ug/L	1.805	7714519	8.779
Mg	24	2173.050	ug/L	3.230	5171347	5.890
Al	27	2180.830	ug/L	4.616	7059913	8.051
P	31	2260.844	ug/L	1.504	386556	0.435
K	39	2444.682	ug/L	5.033	10805845	11.805
Ca	43	2220.772	ug/L	0.397	23547	0.027
> Sc	45		ug/L		877260	877260.428
Ti	47	52.371	ug/L	0.942	27100	0.031
V	51	47.830	ug/L	4.912	273759	0.312
Cr	52	58.480	ug/L	2.575	256183	0.292
Cr	53		ug/L		216055	0.184
Mn	55	63.770	ug/L	2.634	472184	0.537
Fe	57	4326.658	ug/L	2.470	619805	0.702
Co	59	57.492	ug/L	0.935	323366	0.369
Ni	60	58.074	ug/L	2.115	71406	0.081
Cu	63		ug/L		178656	0.203
Cu	65	59.703	ug/L	1.271	87594	0.100
Zn	66	56.211	ug/L	2.141	60051	0.164
Zn	67		ug/L		50163	0.116
Zn	68		ug/L		45426	0.122
> Ge	74		ug/L		363452	363451.732
As	75	85.983	ug/L	1.627	89139	0.245
Se	77		ug/L		13854	0.031
Se	82	22.845	ug/L	0.320	2450	0.007
Kr	83		ug/L		131	0.000
Sr	88	57.705	ug/L	1.364	758457	2.999
Y	89		ug/L		1031	0.004
Mo	98	52.572	ug/L	1.820	173980	0.688
Ag	107	55.483	ug/L	1.654	308200	1.219
Cd	111	11.502	ug/L	2.505	16910	0.067
Cd	114		ug/L		38488	0.152
> In	115		ug/L		252924	252923.663
Sn	120	55.751	ug/L	1.344	346155	1.368
Sb	121	214.803	ug/L	1.653	1120589	4.430
Sb	123		ug/L		907421	3.587
Ba	135		ug/L		103266	0.188
Ba	137	58.113	ug/L	1.087	182820	0.333
Ho	165		ug/L		394	0.001
> Lu	175		ug/L		548965	548964.931
Tl	205	101.742	ug/L	3.145	2051672	3.737
Pb	208	48.597	ug/L	1.222	1757084	3.200
Bi	209		ug/L		946	0.001
Th	232	54.994	ug/L	1.567	2483412	4.522
U	238	56.100	ug/L	1.821	2707314	4.931

Sample ID: 1202034076

Report Date/Time: Tuesday, March 02, 2010 06:13:26

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202034076

Report Date/Time: Tuesday, March 02, 2010 06:13:26

Page 3

## ICPMS#5 - Summary Report

Sample ID: 1202034077

Sample Date/Time: Tuesday, March 02, 2010 06:16:51

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 949400|5|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\1202034077.234

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.074	ug/L	2.104	252	0.000
Be	9	0.008	ug/L	111.715	14	0.000
B	11	9.231	ug/L	7.398	4287	0.004
Na	23	34.803	ug/L	6.288	132951	0.133
Mg	24	5.538	ug/L	34.836	15008	0.015
Al	27	27.026	ug/L	9.660	92299	0.100
P	31	1.881	ug/L	120.999	5463	0.000
K	39	36.075	ug/L	34.792	624764	0.174
Ca	43	17.563	ug/L	7.125	335	0.000
> Sc	45		ug/L		896828	896827.959
Ti	47	0.874	ug/L	1.472	691	0.001
V	51	-1.252	ug/L	62.328	-6661	-0.008
Cr	52	0.532	ug/L	7.263	2520	0.003
Cr	53		ug/L		93016	0.041
Mn	55	0.582	ug/L	2.949	5649	0.005
Fe	57	21.212	ug/L	6.807	7363	0.003
Co	59	0.022	ug/L	7.593	209	0.000
Ni	60	0.117	ug/L	3.255	219	0.000
Cu	63		ug/L		1638	0.002
Cu	65	0.381	ug/L	2.971	656	0.001
Zn	66	1.117	ug/L	4.266	1748	0.003
Zn	67		ug/L		14611	0.017
Zn	68		ug/L		2496	0.004
> Ge	74		ug/L		374515	374514.785
As	75	-0.273	ug/L	32.839	-181	-0.001
Se	77		ug/L		5849	0.008
Se	82	0.059	ug/L	183.629	7	0.000
Kr	83		ug/L		101	-0.000
Sr	88	0.091	ug/L	2.456	1397	0.005
Y	89		ug/L		224	0.001
Mo	98	0.030	ug/L	12.165	165	0.000
Ag	107	0.001	ug/L	153.630	54	0.000
Cd	111	-0.005	ug/L	87.825	17	-0.000
Cd	114		ug/L		22	-0.000
> In	115		ug/L		262489	262489.101
Sn	120	0.270	ug/L	3.941	1999	0.007
Sb	121	0.009	ug/L	137.650	493	0.000
Sb	123		ug/L		403	0.000
Ba	135		ug/L		582	0.001
Ba	137	0.304	ug/L	1.289	1001	0.002
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		545356	545355.871
Tl	205	1.324	ug/L	16.773	27153	0.049
Pb	208	0.276	ug/L	2.986	10384	0.018
Bi	209		ug/L		319	0.000
Th	232	0.022	ug/L	18.380	1711	0.002
U	238	0.007	ug/L	3.374	738	0.001

Sample ID: 1202034077

Report Date/Time: Tuesday, March 02, 2010 06:19:34

Page 1

# Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

Sample ID: 1202034077

Report Date/Time: Tuesday, March 02, 2010 06:19:34

Page 2



## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		93.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202034077

Report Date/Time: Tuesday, March 02, 2010 06:19:34

Page 3

## ICPMS#5 - Summary Report

Sample ID: 246056002

Sample Date/Time: Tuesday, March 02, 2010 06:22:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\246056002.235

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.312	ug/L	1.981	713	0.001
Be	9	0.004	ug/L	211.468	12	0.000
B	11	30.600	ug/L	3.205	12241	0.014
Na	23	149.328	ug/L	7.314	489254	0.570
Mg	24	5.984	ug/L	26.583	15008	0.016
Al	27	12.312	ug/L	19.735	40726	0.045
P	31	2.799	ug/L	21.355	5243	0.001
K	39	168.747	ug/L	16.917	1117993	0.815
Ca	43	50.333	ug/L	14.026	641	0.001
> Sc	45		ug/L		836523	836523.485
Ti	47	1.033	ug/L	2.134	723	0.001
V	51	-1.831	ug/L	48.195	-9377	-0.012
Cr	52	0.812	ug/L	10.216	3517	0.004
Cr	53		ug/L		179545	0.152
Mn	55	0.444	ug/L	2.882	4296	0.004
Fe	57	22.020	ug/L	4.626	6977	0.004
Co	59	0.020	ug/L	9.488	187	0.000
Ni	60	0.158	ug/L	12.313	251	0.000
Cu	63		ug/L		4816	0.006
Cu	65	1.505	ug/L	0.230	2184	0.003
Zn	66	1.894	ug/L	5.253	2465	0.006
Zn	67		ug/L		37503	0.083
Zn	68		ug/L		4085	0.008
> Ge	74		ug/L		355653	355652.760
As	75	-0.091	ug/L	800.956	14	-0.000
Se	77		ug/L		12066	0.026
Se	82	0.088	ug/L	138.483	10	0.000
Kr	83		ug/L		94	-0.000
Sr	88	0.205	ug/L	4.191	2839	0.011
Y	89		ug/L		137	0.000
Mo	98	0.026	ug/L	5.177	147	0.000
Ag	107	0.002	ug/L	5.324	56	0.000
Cd	111	-0.006	ug/L	61.459	14	-0.000
Cd	114		ug/L		34	-0.000
> In	115		ug/L		251662	251662.361
Sn	120	0.305	ug/L	2.817	2135	0.007
Sb	121	-0.007	ug/L	58.556	391	-0.000
Sb	123		ug/L		294	-0.000
Ba	135		ug/L		402	0.001
Ba	137	0.201	ug/L	4.904	679	0.001
Ho	165		ug/L		23	0.000
> Lu	175		ug/L		544563	544562.741
Tl	205	0.453	ug/L	8.585	9663	0.017
Pb	208	0.151	ug/L	2.180	5873	0.010
Bi	209		ug/L		247	0.000
Th	232	0.016	ug/L	22.296	1437	0.001
U	238	0.030	ug/L	4.667	1831	0.003

Sample ID: 246056002

Report Date/Time: Tuesday, March 02, 2010 06:25:39

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

Sample ID: 246056002

Report Date/Time: Tuesday, March 02, 2010 06:25:39

Page 2

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		87.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		88.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246056002

Report Date/Time: Tuesday, March 02, 2010 06:25:39

Page 3

## ICPMS#5 - Summary Report

Sample ID: 246056003

Sample Date/Time: Tuesday, March 02, 2010 06:29:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\246056003.236

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.471	ug/L	1.915	1039	0.001
Be	9	0.044	ug/L	16.612	29	0.000
B	11	28.460	ug/L	1.068	11494	0.013
Na	23	209.829	ug/L	8.057	687569	0.801
Mg	24	44.799	ug/L	9.411	103711	0.121
Al	27	325.828	ug/L	1.496	1015531	1.203
P	31	3.024	ug/L	24.702	5313	0.001
K	39	236.316	ug/L	5.436	1400854	1.141
Ca	43	115.031	ug/L	2.580	1301	0.001
> Sc	45		ug/L		842088	842087.540
Ti	47	4.992	ug/L	2.678	2677	0.003
V	51	-3.541	ug/L	33.263	-18804	-0.023
Cr	52	1.419	ug/L	2.938	6095	0.007
Cr	53		ug/L		181833	0.153
Mn	55	2.914	ug/L	2.806	21841	0.025
Fe	57	204.268	ug/L	2.583	31922	0.033
Co	59	0.094	ug/L	1.988	587	0.001
Ni	60	0.501	ug/L	3.534	658	0.001
Cu	63		ug/L		6017	0.007
Cu	65	1.950	ug/L	5.784	2823	0.003
Zn	66	2.089	ug/L	4.229	2645	0.006
Zn	67		ug/L		38372	0.086
Zn	68		ug/L		4292	0.009
> Ge	74		ug/L		352651	352650.817
As	75	-0.796	ug/L	28.780	-697	-0.002
Se	77		ug/L		12300	0.027
Se	82	0.050	ug/L	347.111	6	0.000
Kr	83		ug/L		107	0.000
Sr	88	0.754	ug/L	2.999	9951	0.039
Y	89		ug/L		2313	0.009
Mo	98	0.042	ug/L	3.475	197	0.001
Ag	107	0.007	ug/L	22.429	84	0.000
Cd	111	0.001	ug/L	103.120	25	0.000
Cd	114		ug/L		28	-0.000
> In	115		ug/L		250256	250255.631
Sn	120	0.505	ug/L	3.158	3349	0.012
Sb	121	-0.021	ug/L	17.006	315	-0.000
Sb	123		ug/L		264	-0.000
Ba	135		ug/L		3854	0.007
Ba	137	2.152	ug/L	4.753	6815	0.012
Ho	165		ug/L		211	0.000
> Lu	175		ug/L		549001	549001.409
Tl	205	0.271	ug/L	6.993	6072	0.010
Pb	208	0.533	ug/L	2.594	19721	0.035
Bi	209		ug/L		312	0.000
Th	232	0.097	ug/L	1.479	5088	0.008
U	238	0.170	ug/L	3.155	8626	0.015

Sample ID: 246056003

Report Date/Time: Tuesday, March 02, 2010 06:31:45

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		88.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246056003

Report Date/Time: Tuesday, March 02, 2010 06:31:45

Page 3

## ICPMS#5 - Summary Report

Sample ID: 246056004

Sample Date/Time: Tuesday, March 02, 2010 06:35:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 949400|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\246056004.237

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.302	ug/L	1.455	686	0.001
Be	9	0.021	ug/L	62.914	19	0.000
B	11	28.848	ug/L	1.360	11467	0.013
Na	23	133.804	ug/L	2.299	436230	0.511
Mg	24	7.547	ug/L	28.924	18346	0.020
Al	27	13.104	ug/L	13.947	42731	0.048
P	31	3.889	ug/L	34.985	5371	0.001
K	39	155.724	ug/L	17.638	1055802	0.752
Ca	43	50.133	ug/L	2.935	635	0.001
> Sc	45		ug/L		829346	829346.443
Ti	47	1.139	ug/L	6.290	768	0.001
V	51	-4.482	ug/L	18.277	-23543	-0.029
Cr	52	0.922	ug/L	14.718	3942	0.005
Cr	53		ug/L		182611	0.158
Mn	55	0.685	ug/L	4.825	5944	0.006
Fe	57	23.074	ug/L	7.367	7057	0.004
Co	59	0.022	ug/L	8.493	197	0.000
Ni	60	0.218	ug/L	11.255	319	0.000
Cu	63		ug/L		4772	0.006
Cu	65	1.519	ug/L	2.668	2183	0.003
Zn	66	2.822	ug/L	4.098	3364	0.008
Zn	67		ug/L		38459	0.088
Zn	68		ug/L		4701	0.010
> Ge	74		ug/L		349209	349208.751
As	75	-0.419	ug/L	192.553	-323	-0.001
Se	77		ug/L		12554	0.028
Se	82	0.157	ug/L	107.931	17	0.000
Kr	83		ug/L		86	-0.000
Sr	88	0.209	ug/L	1.602	2836	0.011
Y	89		ug/L		225	0.001
Mo	98	0.032	ug/L	8.207	164	0.000
Ag	107	0.004	ug/L	9.069	65	0.000
Cd	111	-0.002	ug/L	437.336	21	-0.000
Cd	114		ug/L		39	0.000
> In	115		ug/L		247670	247669.712
Sn	120	1.008	ug/L	1.233	6373	0.025
Sb	121	-0.021	ug/L	21.066	316	-0.000
Sb	123		ug/L		247	-0.000
Ba	135		ug/L		722	0.001
Ba	137	0.401	ug/L	5.079	1295	0.002
Ho	165		ug/L		31	0.000
> Lu	175		ug/L		541200	541199.996
Tl	205	0.190	ug/L	4.076	4365	0.007
Pb	208	3.580	ug/L	1.846	128039	0.236
Bi	209		ug/L		464	0.000
Th	232	0.005	ug/L	19.691	926	0.000
U	238	0.032	ug/L	5.256	1908	0.003

Sample ID: 246056004

Report Date/Time: Tuesday, March 02, 2010 06:37:51

Page 1



## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		86.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		87.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.5			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246056004

Report Date/Time: Tuesday, March 02, 2010 06:37:51

Page 3

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, March 02, 2010 06:41:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 8.238

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.298	ug/L	1.014	110932	0.128
Be	9	51.534	ug/L	1.143	22871	0.026
B	11	95.043	ug/L	2.272	38419	0.044
Na	23	4590.575	ug/L	3.710	15180732	17.519
Mg	24	4566.365	ug/L	4.387	10713998	12.377
Al	27	4585.965	ug/L	4.348	14655598	16.929
P	31	5063.105	ug/L	1.672	848417	0.974
K	39	4996.980	ug/L	6.270	21344470	24.130
Ca	43	4992.265	ug/L	1.152	52079	0.060
> Sc	45		ug/L		865871	865870.850
Ti	47	51.430	ug/L	2.373	26271	0.030
V	51	51.087	ug/L	2.246	288707	0.333
Cr	52	52.870	ug/L	2.291	228634	0.264
Cr	53		ug/L		95614	0.048
Mn	55	54.119	ug/L	1.946	395800	0.456
Fe	57	5468.927	ug/L	1.916	772351	0.887
Co	59	53.490	ug/L	2.591	296976	0.343
Ni	60	53.867	ug/L	1.680	65396	0.075
Cu	63		ug/L		155280	0.179
Cu	65	52.437	ug/L	1.635	75950	0.088
Zn	66	51.375	ug/L	3.404	55435	0.150
Zn	67		ug/L		18972	0.029
Zn	68		ug/L		40978	0.109
> Ge	74		ug/L		366868	366868.282
As	75	48.797	ug/L	1.872	51101	0.139
Se	77		ug/L		8595	0.016
Se	82	53.045	ug/L	2.178	5741	0.016
Kr	83		ug/L		119	0.000
Sr	88	53.226	ug/L	1.196	696704	2.766
Y	89		ug/L		132	0.000
Mo	98	49.736	ug/L	2.354	163920	0.651
Ag	107	52.175	ug/L	1.873	288621	1.146
Cd	111	51.554	ug/L	2.855	75401	0.299
Cd	114		ug/L		182038	0.723
> In	115		ug/L		251844	251844.497
Sn	120	52.232	ug/L	2.626	322937	1.282
Sb	121	49.960	ug/L	3.054	259894	1.030
Sb	123		ug/L		204360	0.810
Ba	135		ug/L		85839	0.159
Ba	137	49.232	ug/L	2.505	151872	0.282
Ho	165		ug/L		45	0.000
> Lu	175		ug/L		538357	538356.844
Tl	205	55.497	ug/L	1.018	1097978	2.038
Pb	208	55.502	ug/L	2.203	1967829	3.655
Bi	209		ug/L		601	0.001
Th	232	52.167	ug/L	0.147	2310214	4.290
U	238	54.166	ug/L	1.191	2563576	4.761

Sample ID: QC Std 8

Report Date/Time: Tuesday, March 02, 2010 06:43:59

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	106.597				
Be	9	103.068				
B	11	95.043				
Na	23	91.812				
Mg	24	91.327				
Al	27	90.811				
P	31	101.262				
K	39	99.940				
Ca	43	99.845				
> Sc	45		90.8			
Ti	47	102.860				
V	51	102.175				
Cr	52	105.740				
Cr	53					
Mn	55	108.238				
Fe	57	109.379				
Co	59	106.979				
Ni	60	107.735				
Cu	63					
Cu	65	104.874				
Zn	66	102.750				
Zn	67					
Zn	68					
> Ge	74		91.5			
As	75	97.593				
Se	77					
Se	82	106.091				
Kr	83					
Sr	88	106.452				
Y	89					
Mo	98	99.472				
Ag	107	104.351				
Cd	111	103.108				
Cd	114					
> In	115		92.9			
Sn	120	104.463				
Sb	121	99.920				
Sb	123					
Ba	135					
Ba	137	98.465				
Ho	165					
> Lu	175		98.0			
Tl	205	110.993				
Pb	208	111.004				
Bi	209					
Th	232	104.335				
U	238	108.332				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Tl	205	CCV is out of limits (+/- 10%)
QC Std 8	Pb	208	CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, March 02, 2010 06:47:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100301\QC Std 9.239

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.003	ug/L	203.434	94	0.000
Be	9	0.028	ug/L	38.173	22	0.000
B	11	3.201	ug/L	21.089	1698	0.001
Na	23	0.392	ug/L	376.161	14341	0.001
Mg	24	0.079	ug/L	318.614	1667	0.000
Al	27	0.312	ug/L	208.213	3667	0.001
P	31	-2.629	ug/L	18.923	4440	-0.001
K	39	0.773	ug/L	452.470	447577	0.004
Ca	43	2.503	ug/L	61.321	164	0.000
> Sc	45		ug/L		850336	850335.672
Ti	47	0.181	ug/L	1.795	311	0.000
V	51	-0.024	ug/L	1300.310	509	-0.000
Cr	52	0.206	ug/L	8.340	1007	0.001
Cr	53		ug/L		62948	0.011
Mn	55	-0.038	ug/L	6.512	918	-0.000
Fe	57	1.245	ug/L	94.208	4226	0.000
Co	59	0.011	ug/L	13.199	143	0.000
Ni	60	0.022	ug/L	40.229	94	0.000
Cu	63		ug/L		426	0.000
Cu	65	0.012	ug/L	19.185	97	0.000
Zn	66	-0.034	ug/L	30.556	483	-0.000
Zn	67		ug/L		8918	0.002
Zn	68		ug/L		1216	0.000
> Ge	74		ug/L		367999	367998.880
As	75	-0.302	ug/L	77.212	-207	-0.001
Se	77		ug/L		3938	0.003
Se	82	0.044	ug/L	84.610	6	0.000
Kr	83		ug/L		108	0.000
Sr	88	0.003	ug/L	15.744	190	0.000
Y	89		ug/L		67	-0.000
Mo	98	0.036	ug/L	6.644	179	0.000
Ag	107	0.003	ug/L	26.407	62	0.000
Cd	111	-0.001	ug/L	367.440	22	-0.000
Cd	114		ug/L		53	0.000
> In	115		ug/L		252232	252231.529
Sn	120	0.033	ug/L	6.964	457	0.001
Sb	121	0.362	ug/L	21.321	2313	0.007
Sb	123		ug/L		1801	0.006
Ba	135		ug/L		35	0.000
Ba	137	0.005	ug/L	67.472	65	0.000
Ho	165		ug/L		16	-0.000
> Lu	175		ug/L		536782	536781.941
Tl	205	0.175	ug/L	13.493	4032	0.006
Pb	208	0.003	ug/L	22.824	555	0.000
Bi	209		ug/L		187	-0.000
Th	232	0.045	ug/L	18.621	2673	0.004
U	238	0.006	ug/L	26.360	668	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, March 02, 2010 06:50:08

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear 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	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		91.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Tuesday, March 02, 2010 06:50:08

Page 3



=====  
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\020510W1.SIF

Batch ID:

Results Data Set: 020510W1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====  
Method Loaded

Method Name: WATER

Method Last Saved: 12/28/2009 15:47:50

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/5/2010 09:03:54

Analyst:

Data Type: Original

-----  
Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0006	0.0003	09:04:56	Yes
2		[0.00]	0.0002	-0.0003	0.0002	09:05:30	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	20.18				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/5/2010 09:05:49

Analyst:

Data Type: Original

-----  
Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0019	0.0085	0.0021	09:06:50	Yes
2		[0.2]	0.0019	0.0079	0.0021	09:07:24	Yes
Mean:		[0.2]	0.0019				
SD:		0.0	0.0000				
%RSD:		0.0	0.42				

Standard number 1 applied. [0.2]  
Correlation Coef.: 1.000000 Slope: 0.00933 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/5/2010 09:07:43

Analyst:

Data Type: Original

-----  
Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0047	0.0201	0.0049	09:08:45	Yes
2		[0.5]	0.0048	0.0214	0.0050	09:09:19	Yes
Mean:		[0.5]	0.0047				
SD:		0.0	0.0001				
%RSD:		0.0	1.87				

Standard number 2 applied. [0.5]  
Correlation Coef.: 0.999967 Slope: 0.00950 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/5/2010 09:09:39

Analyst:

Data Type: Original

-----  
Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0191	0.0825	0.0194	09:10:40	Yes
2		[2.0]	0.0190	0.0814	0.0192	09:11:15	Yes
Mean:		[2.0]	0.0190				
SD:		0.0	0.0001				
%RSD:		0.0	0.73				

Standard number 3 applied. [2.0]  
Correlation Coef.: 0.999998 Slope: 0.00953 Intercept: -0.00002

Sequence No.: 5  
Sample ID: S5.0  
Analyst:

Autosampler Location: 5  
Date Collected: 2/5/2010 09:11:35  
Data Type: Original

-----  
Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0473	0.2057	0.0476	09:12:37	Yes
2		[5.0]	0.0469	0.2028	0.0471	09:13:12	Yes
Mean:		[5.0]	0.0471				
SD:		0.0	0.0003				
%RSD:		0.0	0.72				

Standard number 4 applied. [5.0]  
Correlation Coef.: 0.999989 Slope: 0.00942 Intercept: 0.00004

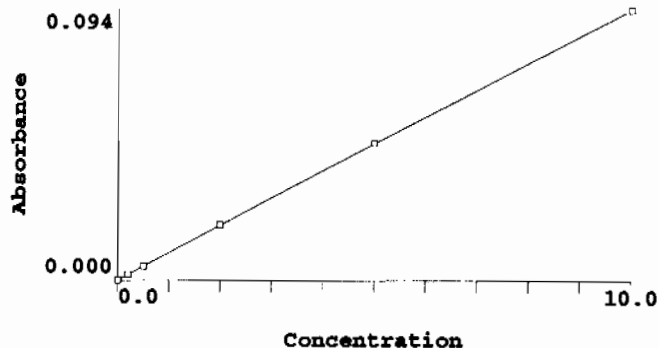
Sequence No.: 6  
Sample ID: S10.0  
Analyst:

Autosampler Location: 6  
Date Collected: 2/5/2010 09:13:32  
Data Type: Original

-----  
Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0944	0.4143	0.0947	09:14:32	Yes
2		[10.0]	0.0937	0.4076	0.0940	09:15:07	Yes
Mean:		[10.0]	0.0941				
SD:		0.0	0.0005				
%RSD:		0.0	0.53				

Standard number 5 applied. [10.0]  
Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006

-----  
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.006	0.00	20.2
S0.2	0.0019	0.2	0.192	0.00	0.4
S0.5	0.0047	0.5	0.498	0.00	1.9
S2.0	0.0190	2.0	2.019	0.00	0.7

S5.0	0.0471	5.0	5.001	0.00	0.7
S10.0	0.0941	10.0	9.996	0.00	0.5

Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 2/5/2010 09:15:26

Data Type: Original

## Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.965	4.965	0.0468	0.2021	0.0470	09:16:27	Yes
2	4.945	4.945	0.0466	0.2010	0.0468	09:17:02	Yes
Mean:	4.955	4.955	0.0467				
SD:	0.014	0.014	0.0001				
%RSD:	0.281	0.281	0.28				

QC value within limits for Hg 253.7 Recovery = 99.10%  
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 2/5/2010 09:17:22

Data Type: Original

## Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	-0.0008	0.0002	09:18:23	Yes
2	-0.012	-0.012	-0.0000	-0.0006	0.0002	09:18:58	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	11.89	11.89	23.69				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 2/5/2010 09:19:18

Data Type: Original

## Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.191	0.191	0.0019	0.0082	0.0021	09:20:19	Yes
2	0.191	0.191	0.0019	0.0082	0.0021	09:20:54	Yes
Mean:	0.191	0.191	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.034	0.034	0.03				

QC value within limits for Hg 253.7 Recovery = 95.30%  
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/5/2010 09:21:14

Data Type: Original

## Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.014	5.014	0.0472	0.2051	0.0475	09:22:14	Yes
2	4.974	4.974	0.0468	0.2038	0.0471	09:22:50	Yes
Mean:	4.994	4.994	0.0470				
SD:	0.029	0.029	0.0003				
%RSD:	0.577	0.577	0.58				

QC value within limits for Hg 253.7 Recovery = 99.88%  
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/5/2010 09:23:09

Data Type: Original

## Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0000	-0.0002	0.0002	09:24:10	Yes
2	-0.006	-0.006	0.0000	0.0002	0.0002	09:24:45	Yes
Mean:	-0.009	-0.009	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	42.32	42.32	156.50				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202029931|947628|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/5/2010 09:25:04

Data Type: Original

## Replicate Data: 1202029931|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0000	-0.0005	0.0002	09:26:06	Yes
2	-0.005	-0.005	0.0000	-0.0001	0.0002	09:26:40	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	44.19	44.19	224.20				

Sequence No.: 13

Sample ID: 1202029932|947628|1

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/5/2010 09:27:01

Data Type: Original

## Replicate Data: 1202029932|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.022	2.022	0.0191	0.0835	0.0193	09:28:02	Yes
2	2.026	2.026	0.0191	0.0827	0.0193	09:28:37	Yes
Mean:	2.024	2.024	0.0191				
SD:	0.003	0.003	0.0000				
%RSD:	0.144	0.144	0.14				

Sequence No.: 14

Sample ID: 245601001|947628|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/5/2010 09:28:58

Data Type: Original

## Replicate Data: 245601001|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0002	0.0002	09:29:58	Yes
2	0.002	0.002	0.0001	0.0008	0.0003	09:30:33	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	299.4	299.4	87.21				

Sequence No.: 15

Sample ID: 245614001|947628|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/5/2010 09:30:52

Data Type: Original

## Replicate Data: 245614001|947628|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

-----  
Replicate Data: 1202029937|947628|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	09:41:26	Yes
2	-0.008	-0.008	-0.0000	-0.0004	0.0002	09:42:01	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.270	1.270	5.82				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 1202033203|949020|1

Date Collected: 2/5/2010 09:42:20

Analyst: JXL

Data Type: Original  
-----

## Replicate Data: 1202033203|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0001	0.0006	0.0003	09:43:21	Yes
2	0.003	0.003	0.0001	0.0014	0.0003	09:43:56	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	53.61	53.61	15.02				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 09:44:15

Analyst:

Data Type: Original  
-----

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.947	4.947	0.0466	0.2056	0.0468	09:45:17	Yes
2	4.906	4.906	0.0462	0.2030	0.0464	09:45:52	Yes
Mean:	4.927	4.927	0.0464				
SD:	0.029	0.029	0.0003				
%RSD:	0.589	0.589	0.59				

QC value within limits for Hg 253.7 Recovery = 98.53%  
All analyte(s) passed QC.  
-----

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 09:46:11

Analyst:

Data Type: Original  
-----

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	-0.0000	0.0003	0.0002	09:47:12	Yes
2	0.006	0.006	0.0001	0.0006	0.0003	09:47:46	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	>999.9%	>999.9%	153.08				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.  
-----

Sequence No.: 24

Autosampler Location: 22

Sample ID: 1202033204|949020|1

Date Collected: 2/5/2010 09:48:06

Analyst: JXL

Data Type: Original  
-----

## Replicate Data: 1202033204|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.013	2.013	0.0190	0.0852	0.0192	09:49:07	Yes
2	2.004	2.004	0.0189	0.0839	0.0191	09:49:42	Yes

Mean: 2.009 2.009 0.0190  
SD: 0.006 0.006 0.0001  
%RSD: 0.312 0.312 0.31

Sequence No.: 25

Sample ID: 245911001|949020|1

Analyst: JXL

Autosampler Location: 23

Date Collected: 2/5/2010 09:50:02

Data Type: Original

Replicate Data: 245911001|949020|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0022	0.0004	09:51:03	Yes
2	0.017	0.017	0.0002	0.0028	0.0005	09:51:38	Yes
Mean:	0.016	0.016	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	7.972	7.972	5.75				

Sequence No.: 26

Sample ID: 245922001|949020|1

Analyst: JXL

Autosampler Location: 24

Date Collected: 2/5/2010 09:51:58

Data Type: Original

Replicate Data: 245922001|949020|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0001	0.0012	0.0003	09:53:00	Yes
2	0.007	0.007	0.0001	0.0009	0.0004	09:53:35	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	44.12	44.12	20.60				

Sequence No.: 27

Sample ID: 245939001|949020|1

Analyst: JXL

Autosampler Location: 25

Date Collected: 2/5/2010 09:53:55

Data Type: Original

Replicate Data: 245939001|949020|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0002	0.0030	0.0005	09:54:57	Yes
2	0.022	0.022	0.0003	0.0034	0.0005	09:55:32	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	14.54	14.54	11.04				

Sequence No.: 28

Sample ID: 245939002|949020|1

Analyst: JXL

Autosampler Location: 26

Date Collected: 2/5/2010 09:55:52

Data Type: Original

Replicate Data: 245939002|949020|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0001	0.0010	0.0003	09:56:53	Yes
2	0.006	0.006	0.0001	0.0011	0.0003	09:57:28	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	80.46	80.46	31.18				

Sequence No.: 29

Sample ID: 245953001|949020|1

Analyst: JXL

Autosampler Location: 27

Date Collected: 2/5/2010 09:57:47

Data Type: Original

Replicate Data: 245953001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	-0.0001	0.0003	09:58:48	Yes
2	0.005	0.005	0.0001	0.0008	0.0003	09:59:23	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	292.1	292.1	59.58				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 245965001|949020|1

Date Collected: 2/5/2010 09:59:42

Analyst: JXL

Data Type: Original

Replicate Data: 245965001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0007	0.0003	10:00:43	Yes
2	0.004	0.004	0.0001	0.0002	0.0003	10:01:18	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	33.02	33.02	15.09				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 245975001|949020|1

Date Collected: 2/5/2010 10:01:37

Analyst: JXL

Data Type: Original

Replicate Data: 245975001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0001	0.0010	0.0003	10:02:38	Yes
2	0.004	0.004	0.0001	0.0015	0.0003	10:03:12	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	165.2	165.2	34.46				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 245981001|949020|1

Date Collected: 2/5/2010 10:03:32

Analyst: JXL

Data Type: Original

Replicate Data: 245981001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0002	0.0021	0.0004	10:04:32	Yes
2	0.019	0.019	0.0002	0.0034	0.0005	10:05:07	Yes
Mean:	0.015	0.015	0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	43.49	43.49	30.52				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246000001|949020|1

Date Collected: 2/5/2010 10:05:26

Analyst: JXL

Data Type: Original

Replicate Data: 246000001|949020|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0018	0.0003	10:06:27	Yes
2	0.012	0.012	0.0002	0.0024	0.0004	10:07:02	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	42.51	42.51	25.13				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:07:22

Analyst:

Data Type: Original

-----  
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.069	5.069	0.0477	0.2135	0.0480	10:08:22	Yes
2	5.033	5.033	0.0474	0.2110	0.0476	10:08:58	Yes
Mean:	5.051	5.051	0.0476				
SD:	0.025	0.025	0.0002				
%RSD:	0.502	0.502	0.50				

QC value within limits for Hg 253.7 Recovery = 101.01%  
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 10:09:16

Analyst:

Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0004	0.0003	10:10:17	Yes
2	0.005	0.005	0.0001	0.0009	0.0003	10:10:52	Yes
Mean:	0.001	0.001	0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	>999.9%	>999.9%	94.99				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 246010001|949020|1

Date Collected: 2/5/2010 10:11:11

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246010001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	0.0000	0.0003	0.0002	10:12:12	Yes
2	-0.004	-0.004	0.0000	0.0007	0.0002	10:12:47	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	17.81	17.81	51.51				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 246056001|949020|1

Date Collected: 2/5/2010 10:13:07

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 246056001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0000	0.0004	0.0003	10:14:08	Yes
2	0.002	0.002	0.0001	0.0012	0.0003	10:14:43	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	>999.9%	>999.9%	65.75				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202033205|949020|1

Date Collected: 2/5/2010 10:15:03

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202033205|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0008	0.0002	10:16:04	Yes



2	0.005	0.005	0.0001	0.0017	0.0003	10:16:39	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	>999.9%	>999.9%	95.21				

Sequence No.: 39

Autosampler Location: 35

Sample ID: 1202033206|949020|1

Date Collected: 2/5/2010 10:16:59

Analyst: JXL

Data Type: Original

Replicate Data: 1202033206|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.503	1.503	0.0142	0.0680	0.0144	10:18:00	Yes
2	1.495	1.495	0.0141	0.0670	0.0143	10:18:35	Yes
Mean:	1.499	1.499	0.0142				
SD:	0.006	0.006	0.0001				
%RSD:	0.393	0.393	0.39				

Sequence No.: 40

Autosampler Location: 36

Sample ID: 1202033207|949020|5

Date Collected: 2/5/2010 10:18:55

Analyst: JXL

Data Type: Original

Replicate Data: 1202033207|949020|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	10:19:57	Yes
2	-0.002	-0.002	0.0000	0.0011	0.0003	10:20:32	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	84.26	84.26	326.78				

Sequence No.: 41

Autosampler Location: 37

Sample ID: 246056002|949020|1

Date Collected: 2/5/2010 10:20:52

Analyst: JXL

Data Type: Original

Replicate Data: 246056002|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	0.0000	0.0010	0.0003	10:21:54	Yes
2	-0.003	-0.003	0.0000	0.0008	0.0003	10:22:29	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	8.003	8.003	5.22				

Sequence No.: 42

Autosampler Location: 38

Sample ID: 246056003|949020|1

Date Collected: 2/5/2010 10:22:49

Analyst: JXL

Data Type: Original

Replicate Data: 246056003|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0002	0.0024	0.0005	10:23:50	Yes
2	0.023	0.023	0.0003	0.0022	0.0005	10:24:25	Yes
Mean:	0.021	0.021	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	10.47	10.47	8.06				

Sequence No.: 43

Autosampler Location: 39

Sample ID: 246056004|949020|1

Date Collected: 2/5/2010 10:24:44

Analyst: JXL

Data Type: Original

## Replicate Data: 246056004|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.037	0.037	0.0004	0.0044	0.0006	10:25:45	Yes
2	0.016	0.016	0.0002	0.0017	0.0004	10:26:21	Yes
Mean:	0.026	0.026	0.0003				
SD:	0.015	0.015	0.0001				
%RSD:	56.65	56.65	45.73				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202033224|949028|1

Date Collected: 2/5/2010 10:26:40

Analyst: JXL

Data Type: Original

## Replicate Data: 1202033224|949028|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0003	0.0022	0.0005	10:27:41	Yes
2	0.017	0.017	0.0002	0.0020	0.0005	10:28:17	Yes
Mean:	0.019	0.019	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	11.82	11.82	8.89				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202033226|949028|1

Date Collected: 2/5/2010 10:28:36

Analyst: JXL

Data Type: Original

## Replicate Data: 1202033226|949028|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.106	2.106	0.0199	0.0883	0.0201	10:29:37	Yes
2	2.076	2.076	0.0196	0.0876	0.0198	10:30:12	Yes
Mean:	2.091	2.091	0.0197				
SD:	0.022	0.022	0.0002				
%RSD:	1.033	1.033	1.03				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:30:32

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	0.0481	0.2129	0.0484	10:31:32	Yes
2	5.088	5.088	0.0479	0.2132	0.0481	10:32:08	Yes
Mean:	5.099	5.099	0.0480				
SD:	0.016	0.016	0.0001				
%RSD:	0.309	0.309	0.31				

QC value within limits for Hg 253.7 Recovery = 101.99%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 10:32:26

Analyst:

Data Type: Original

## Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0010	0.0002	10:33:27	Yes
2	-0.005	-0.005	0.0000	0.0011	0.0002	10:34:02	Yes
Mean:	-0.004	-0.004	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	7.051	7.051	16.61				

QC value within limits for Hg 253.7 Recovery = Not calculated

# Miscellaneous

# Prep LogBook

Analyst: BXA1  
 Batch: 949337  
 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	Spike Amount	Spike Units
MB	1202033915		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
LCS	1202033916		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
SAMPLE	246056001		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
DUP	1202033917	246056001	SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
MS	1202033918	246056001	SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
SDILT	1202033919	246056001	SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
SAMPLE	246056002		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
SAMPLE	246056003		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		
SAMPLE	246056004		SW846 3005A	10-FEB-2010 16:40	<2	50 mL	50 mL	1		

## Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: BXA1  
 Batch: 949399  
 Lab SOP: GL-MA-E-006 REV# 9

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202034073		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
LCS	1202034074		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
SAMPLE	246056001		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
DUP	1202034075	246056001	SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
MS	1202034076	246056001	SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
SDILT	1202034077	246056001	SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
SAMPLE	246056002		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
SAMPLE	246056003		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		
SAMPLE	246056004		SW846 3005A	10-FEB-2010 16:48	<2	50 mL	50 mL	1		

## Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: TXB3  
 Batch: 949018  
 Lab SOP: GL-MA-E-010 REV# 23

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Type	Sample Id	Lot. Id	Prep Factor	Spike Amount	Spike Units
MB	1202033203		SW846 7470A Prep	04-FEB-2010 12:15	<2	LCS	1202033204	WHG100204-13	2		mL
LCS	1202033204		SW846 7470A Prep	04-FEB-2010 12:15	<2	MS	1202033206	WHG100204-13	2		mL
SAMPLE	245911001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245922001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245939001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245939002		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245953001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245965001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245975001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	245981001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246000001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246010001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246056001		SW846 7470A Prep	04-FEB-2010 12:15	<2						
DUP	1202033205	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2						
MS	1202033206	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2						
SDIL-T	1202033207	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246056002		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246056003		SW846 7470A Prep	04-FEB-2010 12:15	<2						
SAMPLE	246056004		SW846 7470A Prep	04-FEB-2010 12:15	<2						

Comments Digestion Start Date: 04-FEB-10 12:15  
 Digestion End Date: 04-FEB-10 14:15

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
WHG100204-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100204-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100204-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100204-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100204-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100204-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

# 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 ICSA SOLN A      **Received:** 22-APR-09      **Catalog Number :** 160005-01-03  
**Type:** Source Material      **Expires:** 04-MAY-10      **Lot Number :** 1013357  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** o2si  
**Description:** TRACE ICP ICSA SOLN A mg/L +/-0.5%IN5%HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

**Serial ID:** UI090612-02      **Opened:** 12-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **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:** Q2SI  
**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%H<sub>2</sub>O(NH<sub>4</sub>)<sub>2</sub>SiF<sub>6</sub>  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L +/-0.3%in H<sub>2</sub>O(NH<sub>4</sub>)<sub>2</sub>SiF<sub>6</sub>  
**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 :** HNO<sub>3</sub>  
**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:** 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:** 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:** UI100114-48      **Opened:** 22-JAN-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSAB      **Received:** 18-JAN-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 22-JAN-11      **Lot Number :** 1018466  
**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:** UI100114-49.16      **Opened:** 11-FEB-10      **Amount :** 100 ml  
**Name:** Trace ICP ICSAB      **Received:** 18-JAN-10      **Catalog Number :** 160066-04  
**Type:** Source Material      **Expires:** 12-FEB-10      **Lot Number :** 1018458  
**Employee:** Helen Camello      **Solvent :** 3% HCl + 1% HNO3  
**Supplier:** O2SI  
**Description:** Trace ICP Inteferent Check Standard AB  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

**Serial ID:** UI100120-01      **Opened:** 20-JAN-10      **Lot Number :** 1018095  
**Name:** METALSPIKE-1      **Received:** 20-JAN-10  
**Type:** Source Material      **Expires:** 20-JAN-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:** UI100120-06      **Opened:** 20-JAN-10      **Lot Number :** 1018096  
**Name:** METALSPIKE-2      **Received:** 20-JAN-10  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

## Standard Logbook

**Serial ID:** UI100120-A      **Opened:** 20-JAN-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 20-JAN-10      **Lot Number :** 1018097  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** Q2si  
**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:** UI100120-B      **Opened:** 20-JAN-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 20-JAN-10      **Lot Number :** 1017644  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** Q2si  
**Description:** MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI100128-40      **Opened:** 28-JAN-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 28-JAN-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 28-JAN-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5% in 2% HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None



# Standard Logbook

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:** UI100128-41      **Opened:** 28-JAN-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 28-JAN-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 28-JAN-11      **Lot Number :** 1018409  
**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:** 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:** 11-FEB-11      **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

# Standard Logbook

**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  
**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

# Standard Logbook

**Serial ID:** UI100219-60      **Opened:** 19-FEB-10      **Amount :** .5 mL  
**Name:** ICPMS High Range Standard      **Received:** 19-FEB-10      **Catalog Number :** 160212-02-01  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018890  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3 + Tr HF  
**Supplier:** O2SI  
**Description:** Linear Range Standard A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

**Serial ID:** UI100219-61      **Opened:** 19-FEB-10      **Amount :** .5 mL  
**Name:** ICPMS High Range Standard      **Received:** 19-FEB-10      **Catalog Number :** 160212-02-01  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018890  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3 + Tr HF  
**Supplier:** O2SI  
**Description:** Linear Range Standard B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

**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      **Expres:** 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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

**Serial ID:** IHG100204-01      **Opened:** 04-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 04-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 05-FEB-10      **Solvent :** 1mL HNO3 + Typel H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

# Standard Logbook

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: IHG100204-02      Opened: 04-FEB-10      Pipet Id : Minou1  
 Name: MHGINTER2      Received: 04-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Intermediate      Expires: 05-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: WHG100204-01a      Opened: 04-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL0.2CRA      Received: 04-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 11-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.
IHG100204-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100204-02      Opened: 04-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL0.5      Received: 04-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 11-FEB-10  
 Employee: Tara Griffin  
 Supplier: GEL  
 Description: Mercury Working 1st Source CAL 0.5  
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100204-03      Opened: 04-FEB-10      Pipet Id : Hg1289245  
 Name: MHGWORKCAL2.0      Received: 04-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 11-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL  
 Description: Mercury Working 1st Source CAL 2.0  
 Comments: None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

**Serial ID:** WHG100204-04      **Opened:** 04-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL5.0CCV      **Received:** 04-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 11-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.
IHG100204-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100204-05      **Opened:** 04-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL10.0      **Received:** 04-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 11-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.
IHG100204-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

**Serial ID:** WHG100204-06      **Opened:** 04-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORK5.0ICV      **Received:** 04-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 11-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 2nd Source 5.0/ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100204-13      **Opened:** 04-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGLIQLCSMSSPIKE      **Received:** 04-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 11-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury working intermediate standard for LCS/MS  
**Comments:** None

# Standard Logbook

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Aliquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** WI100211-42      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 12-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1266496  
**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.
WI100211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

**Serial ID:** WI100211-43      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1266496  
**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
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



# Standard Logbook

**Serial ID:** WI100211-44      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1266496  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

# Standard Logbook

**Serial ID:** WI100211-45      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1266496  
**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:** WI100211-46      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1266496  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

**Serial ID:** W1100211-47      **Opened:** 11-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-FEB-10      **Solvent :** 3%HCL & 1%HNO3-1266496  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100301-04      **Opened:** 01-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 01-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 02-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.	Allquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100301-04A      **Opened:** 01-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 01-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 2%HNO3/1%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.
WMS100301-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100301-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100301-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100301-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100301-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

# Standard Logbook

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Aliquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
WMS100301-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

<b>Serial ID:</b> <u>WMS100301-05</u>	<b>Opened:</b> <u>01-MAR-10</u>	<b>Balance Id :</b> <u>40245216</u>
<b>Name:</b> <u>ICPMS ICV</u>	<b>Received:</b> <u>01-MAR-10</u>	<b>Pipet Id :</b> <u>3541598</u>
<b>Type:</b> <u>Working</u>	<b>Expires:</b> <u>02-MAR-10</u>	<b>Solvent :</b> <u>2%HNO3/1%HCl - 1276824</u>
<b>Employee:</b> <u>Paul Boyd</u>		
<b>Supplier:</b> <u>GEL</u>		
<b>Description:</b> <u>ICPMS ICV</u>		
<b>Comments:</b> <u>None</u>		

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
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

# Standard Logbook

**Serial ID:** WMS100301-06      **Opened:** 01-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 01-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 02-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
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

# Standard Logbook

**Serial ID:** WMS100301-07      **Opened:** 01-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 01-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 02-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

**Serial ID:** WMS100301-08      **Opened:** 01-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 01-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 02-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



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100301-70      **Opened:** 01-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS LINEAR RANGE ST      **Received:** 01-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 02-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** 02SI  
**Description:** ICPMS LINEAR RANGE STANDARD  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

**Serial ID:** WMS100302-04      **Opened:** 02-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 02-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 03-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
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:** WMS100302-04A      **Opened:** 02-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 02-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 03-MAR-10      **Solvent :** 2%HNO3/1%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.
WMS100302-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100302-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100302-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100302-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100302-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100302-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100302-05      **Opened:** 02-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 02-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 03-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
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:** WMS100302-06      **Opened:** 02-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 02-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 03-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
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:** WMS100302-07      **Opened:** 02-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 02-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 03-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

**Serial ID:** WMS100302-08      **Opened:** 02-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 02-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 03-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

# 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:** 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

**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

# Standard Logbook

**Serial ID:** 1156689-A      **Opened:** 20-JUL-09      **Lot Number :** 41226920  
**Name:** B-KMnO4(VWR)-MER      **Received:** 20-JUL-09  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin      **Verified:** 07-AUG-07  
**Supplier:** VWR  
**Description:** Potassium Permanganate  
**Comments:** None

**Serial ID:** 1176183      **Opened:** 24-AUG-09      **Lot Number :** H20001  
**Name:** B-H2SO4-MER      **Received:** 24-AUG-09  
**Type:** Reagent/Solvent      **Expires:** 24-AUG-10  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt  
**Description:** Sulfuric Acid, Concentrated  
**Comments:** None

**Serial ID:** 1215906      **Opened:** 06-NOV-09      **Lot Number :** H44465  
**Name:** B-K2S2O8S-MER      **Received:** 06-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 06-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** J.T BAKER  
**Description:** Potassium Persulfate Concentrate  
**Comments:** None

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCl-MER      **Received:** 12-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 12-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** Fisher Scientific  
**Description:** Hydroxylamine Hydrochloride  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A



# Standard Logbook

**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-K2S2O8-MER	N/A	50 g	1000 mL	N/A

**Serial ID:** 1264396      **Opened:** 03-FEB-10      **Lot Number :** H51025 L  
**Name:** I-HNO3      **Received:** 02-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 03-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric 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

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

## Standard Logbook

Comments: None

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Serial ID: 1266496      Opened: 08-FEB-10      Amount : 20 L  
Name: B-ICP-RINSE SOLN      Received: 20-JAN-10      Lot Number : H04040+G34050  
Type: Reagent/Solvent      Expires: 14-FEB-10      Solvent : 3%HCL+1%HNO3  
Employee: Helen Camello  
Supplier: GEL  
Description: 3%HCL+1%HNO3 RINSE SOLN.  
Comments: None

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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

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# **General Chemistry Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1545**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 948946      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 948945      **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>
246055001	RE15-10-8170
246055002	RE15-10-8169
246055003	RE15-10-8171
246055004	RE15-10-8168
246055005	RE15-10-8222
246055006	RE15-10-8221
246055007	RE15-10-8220
246055008	RE15-10-8223
246055009	RE15-10-8224
1202033017	Method Blank (MB)
1202033018	246012007(RE46-10-12028) Sample Duplicate (DUP)
1202033019	246012008(RE46-10-12029) Sample Duplicate (DUP)
1202033020	246012007(RE46-10-12028) Matrix Spike (MS)
1202033021	246012008(RE46-10-12029) Matrix Spike (MS)
1202033022	246012007(RE46-10-12028) Matrix Spike Duplicate (MSD)
1202033023	246012008(RE46-10-12029) Matrix Spike Duplicate (MSD)
1202033024	Laboratory Control Sample (LCS)

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

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

**Preparation/Analytical Method Verification**

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

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

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

The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**

The following samples were selected for QC analysis: 246012007 (RE46-10-12028) and 246012008 (RE46-10-12029).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**

The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202033020 (RE46-10-12028).

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

The MSD recoveries for this sample set were within the required acceptance limits.

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

The RPDs between the spike and spike duplicate met the acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**

The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**

All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The following sample in this sample group was diluted due to high concentration: 1202033024 (LCS).

**Sample Re-analysis**

The following sample was re-analyzed due to instrument failure: 246055009 (RE15-10-8224).

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

The following DERs were generated for this SDG: 791229 791230 1202033020 (RE46-10-12028).

**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**

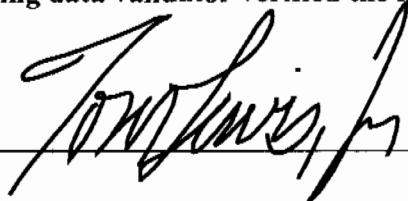
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**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: \_\_\_\_\_

02March10



# 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: 10-1545 GEL Work Order: 246055

**The Qualifiers in this report are defined as follows:**

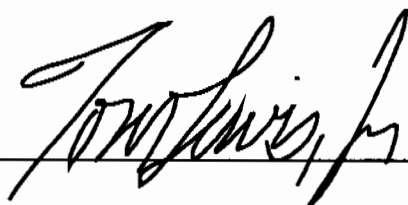
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

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 "Tom Davis, Jr.", 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8170  
Sample ID: 246055001  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 17.6%

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	69.9	257	ug/kg	1	AXC2	02/12/10	1256	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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  
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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8169  
Sample ID: 246055002  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 14.9%

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	78.3	288	ug/kg	1	AXC2	02/12/10	1257	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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  
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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8171  
Sample ID: 246055003  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 12%

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	02/12/10	1258	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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  
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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8168  
Sample ID: 246055004  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 20.6%

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	77.9	286	ug/kg	1	AXC2	02/12/10	1259	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8222  
Sample ID: 246055005  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 25.8%

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	80.3	295	ug/kg	1	AXC2	02/12/10	1300	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8221  
Sample ID: 246055006  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 12.8%

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	78.0	287	ug/kg	1	AXC2	02/12/10	1301	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	



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

Report Date: February 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8220  
Sample ID: 246055007  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 8.71%

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	71.6	263	ug/kg	1	AXC2	02/12/10	1302	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8223  
Sample ID: 246055008  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 19.5%

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	72.8	268	ug/kg	1	AXC2	02/12/10	1306	948946	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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 23, 2010

Client SDG: 10-1545

Client Sample ID: RE15-10-8224  
Sample ID: 246055009  
Matrix: R  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client  
Moisture: 15.9%

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	77.8	286	ug/kg	1	AXC2	02/12/10	1319	948946	I

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	1531	948945

### 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 23, 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: 246055

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	948946										
QC1202033018	246012007	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/12/10	12:44
QC1202033019	246012008	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/12/10	12:48
QC1202033024	LCS										
Cyanide, Total	67900				39300	ug/kg	57.8	(32%-157%)		02/12/10	12:42
QC1202033017	MB										
Cyanide, Total			U		250	ug/kg				02/12/10	12:41
QC1202033020	246012007	MS									
Cyanide, Total	4940	U	ND		3350	ug/kg	67.8	(26%-158%)		02/12/10	12:45
QC1202033021	246012008	MS									
Cyanide, Total	4830	U	ND		4230	ug/kg	87.6	(26%-158%)		02/12/10	12:49
QC1202033022	246012007	MSD									
Cyanide, Total	5030	U	ND		4170	ug/kg	21.9	82.9	(0%-30%)	02/12/10	12:46
QC1202033023	246012008	MSD									
Cyanide, Total	5220	U	ND		4410	ug/kg	4.09	84.5	(0%-30%)	02/12/10	12:49

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

\*\* Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

A The TIC is a suspected aldol-condensation product

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

BD Results are either below the MDC or tracer recovery is low

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range

E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

E Organics--Concentration of the target analyte exceeds the instrument calibration range

F Estimated Value

H Analytical holding time was exceeded

J Value is estimated

M M if above MDC and less than LLD

M Matrix Related Failure

N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based

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**Workorder: 246055**

Page 2 of 2

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
		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 OC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 23-FEB-2010 18:46

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1545**

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>12-FEB-2010 12:36:27</b>	<b>OM_2-12-2010_12-28-33</b>	<b>138</b>	<b>150</b>	<b>92</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	12-FEB-2010 12:50:44	OM_2-12-2010_12-28-33	102	100	102	(90%-110%)	Yes
CCV	12-FEB-2010 13:03:08	OM_2-12-2010_12-28-33	102	100	102	(90%-110%)	Yes
CCV	12-FEB-2010 13:15:31	OM_2-12-2010_12-28-33	102	100	102	(90%-110%)	Yes
CCV	12-FEB-2010 13:28:04	OM_2-12-2010_12-28-33	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>12-FEB-2010 12:38:17</b>	<b>OM_2-12-2010_12-28-33</b>	<b>-1.76</b>	<b>10</b>	<b>Yes</b>
CCB	12-FEB-2010 12:52:34	OM_2-12-2010_12-28-33	-1.77	10	Yes
CCB	12-FEB-2010 13:04:59	OM_2-12-2010_12-28-33	-1.83	10	Yes
CCB	12-FEB-2010 13:17:22	OM_2-12-2010_12-28-33	-1.94	10	Yes
CCB	12-FEB-2010 13:29:53	OM_2-12-2010_12-28-33	-1.75	10	Yes



# Cyanide, Total

# Prep LogBook

Analyst: AXS5  
 Batch: 948945  
 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	1202033017		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.5 g	25 mL	50	.25	g
LCS	1202033024		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	246012007		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.52 g	25 mL	48.07692	.025	mL
DUP	1202033018	246012007	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.52 g	25 mL	48.07692	.025	mL
MS	1202033020	246012007	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.54 g	25 mL	46.2963	.025	mL
MSD	1202033022	246012007	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	246012008		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.54 g	25 mL	46.2963	.025	mL
DUP	1202033019	246012008	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.55 g	25 mL	45.45455	.025	mL
MS	1202033021	246012008	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.54 g	25 mL	46.2963	.025	mL
MSD	1202033023	246012008	SW846 9010B Prep	11-FEB-2010 15:31	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	246012009		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	246012010		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	246012011		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	246055001		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.59 g	25 mL	42.37288	.025	mL
SAMPLE	246055002		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	246055003		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	246055004		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	246055005		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	246055006		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	246055007		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	246055008		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	246055009		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	246066001		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	246066002		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	246066003		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	246066004		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	246066005		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	246066006		SW846 9010B Prep	11-FEB-2010 15:31	>12	0.54 g	25 mL	46.2963	.025	mL

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	
WCN100211-07	.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	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/12/2010 12:29:18	OM_2-12-2010_12-28-33
150 ppb		1	axc2	2/12/2010 12:30:11	OM_2-12-2010_12-28-33
100 ppb		1	axc2	2/12/2010 12:31:03	OM_2-12-2010_12-28-33
50 ppb		1	axc2	2/12/2010 12:31:56	OM_2-12-2010_12-28-33
10 ppb		1	axc2	2/12/2010 12:32:49	OM_2-12-2010_12-28-33
CRDL 5.0 ppb		1	axc2	2/12/2010 12:33:43	OM_2-12-2010_12-28-33
ICAL-00		1	axc2	2/12/2010 12:34:37	OM_2-12-2010_12-28-33
ICV		1	axc2	2/12/2010 12:36:27	OM_2-12-2010_12-28-33
ICB		1	axc2	2/12/2010 12:38:17	OM_2-12-2010_12-28-33
		1	axc2	2/12/2010 12:40:07	OM_2-12-2010_12-28-33
1202033017	948946	1	axc2	2/12/2010 12:41:56	OM_2-12-2010_12-28-33
1202033024	948946	25	axc2	2/12/2010 12:42:50	OM_2-12-2010_12-28-33
246012007	948946	1	axc2	2/12/2010 12:43:43	OM_2-12-2010_12-28-33
1202033018	948946	1	axc2	2/12/2010 12:44:36	OM_2-12-2010_12-28-33
1202033020	948946	1	axc2	2/12/2010 12:45:29	OM_2-12-2010_12-28-33
1202033022	948946	1	axc2	2/12/2010 12:46:22	OM_2-12-2010_12-28-33
246012008	948946	1	axc2	2/12/2010 12:47:15	OM_2-12-2010_12-28-33
1202033019	948946	1	axc2	2/12/2010 12:48:07	OM_2-12-2010_12-28-33
1202033021	948946	1	axc2	2/12/2010 12:49:00	OM_2-12-2010_12-28-33
1202033023	948946	1	axc2	2/12/2010 12:49:52	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010 12:50:44	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010 12:52:34	OM_2-12-2010_12-28-33
246012009	948946	1	axc2	2/12/2010 12:54:22	OM_2-12-2010_12-28-33
246012010	948946	1	axc2	2/12/2010 12:55:14	OM_2-12-2010_12-28-33
246012011	948946	1	axc2	2/12/2010 12:56:06	OM_2-12-2010_12-28-33
246055001	948946	1	axc2	2/12/2010 12:56:58	OM_2-12-2010_12-28-33
246055002	948946	1	axc2	2/12/2010 12:57:50	OM_2-12-2010_12-28-33
246055003	948946	1	axc2	2/12/2010 12:58:43	OM_2-12-2010_12-28-33
246055004	948946	1	axc2	2/12/2010 12:59:37	OM_2-12-2010_12-28-33
246055005	948946	1	axc2	2/12/2010 13:00:30	OM_2-12-2010_12-28-33
246055006	948946	1	axc2	2/12/2010 13:01:23	OM_2-12-2010_12-28-33
246055007	948946	1	axc2	2/12/2010 13:02:16	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010 13:03:08	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010 13:04:59	OM_2-12-2010_12-28-33
246055008	948946	1	axc2	2/12/2010 13:06:48	OM_2-12-2010_12-28-33
246055009*	948946	1	axc2	2/12/2010 13:07:41	OM_2-12-2010_12-28-33
246066001	948946	1	axc2	2/12/2010 13:08:34	OM_2-12-2010_12-28-33
246066002	948946	1	axc2	2/12/2010 13:09:27	OM_2-12-2010_12-28-33
246066003	948946	1	axc2	2/12/2010 13:10:18	OM_2-12-2010_12-28-33
246066004	948946	1	axc2	2/12/2010 13:11:11	OM_2-12-2010_12-28-33
246066005	948946	1	axc2	2/12/2010 13:12:03	OM_2-12-2010_12-28-33
246066006	948946	1	axc2	2/12/2010 13:12:55	OM_2-12-2010_12-28-33
1202036012	950194	1	axc2	2/12/2010 13:13:47	OM_2-12-2010_12-28-33
1202036019	950194	25	axc2	2/12/2010 13:14:39	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010 13:15:31	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010 13:17:22	OM_2-12-2010_12-28-33
246055009	948946	1	axc2	2/12/2010 13:19:11	OM_2-12-2010_12-28-33
246262001	950194	1	axc2	2/12/2010 13:20:05	OM_2-12-2010_12-28-33
246280005	950194	1	axc2	2/12/2010 13:20:59	OM_2-12-2010_12-28-33
246280006	950194	1	axc2	2/12/2010 13:21:52	OM_2-12-2010_12-28-33
1202036013	950194	1	axc2	2/12/2010 13:22:46	OM_2-12-2010_12-28-33
1202036015	950194	1	axc2	2/12/2010 13:23:39	OM_2-12-2010_12-28-33
1202036017	950194	1	axc2	2/12/2010 13:24:32	OM_2-12-2010_12-28-33
246280007	950194	1	axc2	2/12/2010 13:25:25	OM_2-12-2010_12-28-33
1202036014	950194	1	axc2	2/12/2010 13:26:18	OM_2-12-2010_12-28-33
1202036016	950194	1	axc2	2/12/2010 13:27:11	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010 13:28:04	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010 13:29:53	OM_2-12-2010_12-28-33

1202036018	950194	1	axc2	2/12/2010	13:31:43	OM_2-12-2010_12-28-33
246280008	950194	1	axc2	2/12/2010	13:32:35	OM_2-12-2010_12-28-33
246280009	950194	1	axc2	2/12/2010	13:33:28	OM_2-12-2010_12-28-33
246280010	950194	1	axc2	2/12/2010	13:34:20	OM_2-12-2010_12-28-33
246291001	950194	1	axc2	2/12/2010	13:35:12	OM_2-12-2010_12-28-33
246291002	950194	1	axc2	2/12/2010	13:36:04	OM_2-12-2010_12-28-33
246291003	950194	1	axc2	2/12/2010	13:36:58	OM_2-12-2010_12-28-33
246291004	950194	1	axc2	2/12/2010	13:37:52	OM_2-12-2010_12-28-33
246291005	950194	1	axc2	2/12/2010	13:38:46	OM_2-12-2010_12-28-33
246291006	950194	1	axc2	2/12/2010	13:39:40	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	13:40:32	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	13:42:22	OM_2-12-2010_12-28-33
246291007	950194	1	axc2	2/12/2010	13:44:12	OM_2-12-2010_12-28-33
246291008	950194	1	axc2	2/12/2010	13:45:05	OM_2-12-2010_12-28-33
246305001	950194	1	axc2	2/12/2010	13:45:59	OM_2-12-2010_12-28-33
246305002	950194	1	axc2	2/12/2010	13:46:51	OM_2-12-2010_12-28-33
246305003	950194	1	axc2	2/12/2010	13:47:43	OM_2-12-2010_12-28-33
246305004	950194	1	axc2	2/12/2010	13:48:36	OM_2-12-2010_12-28-33
246312001	950194	1	axc2	2/12/2010	13:49:30	OM_2-12-2010_12-28-33
1202036056	950207	1	axc2	2/12/2010	13:50:21	OM_2-12-2010_12-28-33
1202036069	950207	1	axc2	2/12/2010	13:51:14	OM_2-12-2010_12-28-33
246191004	950207	1	axc2	2/12/2010	13:52:06	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	13:52:58	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	13:54:48	OM_2-12-2010_12-28-33
1202036058	950207	1	axc2	2/12/2010	13:56:36	OM_2-12-2010_12-28-33
1202036062	950207	1	axc2	2/12/2010	13:57:30	OM_2-12-2010_12-28-33
1202036066	950207	1	axc2	2/12/2010	13:58:25	OM_2-12-2010_12-28-33
246304002	950207	1	axc2	2/12/2010	13:59:20	OM_2-12-2010_12-28-33
1202036059	950207	1	axc2	2/12/2010	14:00:12	OM_2-12-2010_12-28-33
1202036063	950207	1	axc2	2/12/2010	14:01:07	OM_2-12-2010_12-28-33
1202036067*	950207	1	axc2	2/12/2010	14:01:59	OM_2-12-2010_12-28-33
246304003	950207	1	axc2	2/12/2010	14:02:53	OM_2-12-2010_12-28-33
246352001	950207	1	axc2	2/12/2010	14:03:46	OM_2-12-2010_12-28-33
246352003	950207	1	axc2	2/12/2010	14:04:39	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	14:05:32	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	14:07:23	OM_2-12-2010_12-28-33
246364002	950207	1	axc2	2/12/2010	14:09:11	OM_2-12-2010_12-28-33
246364003	950207	1	axc2	2/12/2010	14:10:04	OM_2-12-2010_12-28-33
246419002	950207	1	axc2	2/12/2010	14:10:57	OM_2-12-2010_12-28-33
1202036057	950207	1	axc2	2/12/2010	14:11:49	OM_2-12-2010_12-28-33
1202036061	950207	1	axc2	2/12/2010	14:12:42	OM_2-12-2010_12-28-33
1202036065	950207	1	axc2	2/12/2010	14:13:34	OM_2-12-2010_12-28-33
246431001	950207	1	axc2	2/12/2010	14:14:29	OM_2-12-2010_12-28-33
246431002	950207	1	axc2	2/12/2010	14:15:22	OM_2-12-2010_12-28-33
246431003	950207	1	axc2	2/12/2010	14:16:17	OM_2-12-2010_12-28-33
246431004	950207	1	axc2	2/12/2010	14:17:10	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	14:18:03	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	14:19:53	OM_2-12-2010_12-28-33
246472002	950207	1	axc2	2/12/2010	14:21:43	OM_2-12-2010_12-28-33
1202036060	950207	1	axc2	2/12/2010	14:22:36	OM_2-12-2010_12-28-33
1202036064	950207	1	axc2	2/12/2010	14:23:30	OM_2-12-2010_12-28-33
1202036068	950207	1	axc2	2/12/2010	14:24:23	OM_2-12-2010_12-28-33
246474001	950207	1	axc2	2/12/2010	14:25:16	OM_2-12-2010_12-28-33
246476001	950207	1	axc2	2/12/2010	14:26:09	OM_2-12-2010_12-28-33
246480001	950207	1	axc2	2/12/2010	14:27:02	OM_2-12-2010_12-28-33
1202033014	948944	1	axc2	2/12/2010	14:27:55	OM_2-12-2010_12-28-33
1202033015	948944	1	axc2	2/12/2010	14:28:48	OM_2-12-2010_12-28-33
1202033016	948944	1	axc2	2/12/2010	14:29:40	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	14:30:33	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	14:32:23	OM_2-12-2010_12-28-33

246114001	948944	1	axc2	2/12/2010	14:34:11	OM_2-12-2010_12-28-33
246114002	948944	1	axc2	2/12/2010	14:35:05	OM_2-12-2010_12-28-33
246114003	948944	1	axc2	2/12/2010	14:36:00	OM_2-12-2010_12-28-33
246114004	948944	1	axc2	2/12/2010	14:36:54	OM_2-12-2010_12-28-33
246114005	948944	1	axc2	2/12/2010	14:37:48	OM_2-12-2010_12-28-33
246114006	948944	1	axc2	2/12/2010	14:38:42	OM_2-12-2010_12-28-33
246114007	948944	1	axc2	2/12/2010	14:39:37	OM_2-12-2010_12-28-33
1202031536	948330	1	axc2	2/12/2010	14:40:30	OM_2-12-2010_12-28-33
1202031540	948330	25	axc2	2/12/2010	14:41:24	OM_2-12-2010_12-28-33
245957001	948330	1	axc2	2/12/2010	14:42:18	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	14:43:10	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	14:45:00	OM_2-12-2010_12-28-33
1202031537	948330	1	axc2	2/12/2010	14:46:50	OM_2-12-2010_12-28-33
1202031538	948330	1	axc2	2/12/2010	14:47:43	OM_2-12-2010_12-28-33
1202031539	948330	1	axc2	2/12/2010	14:48:36	OM_2-12-2010_12-28-33
245957002	948330	1	axc2	2/12/2010	14:49:28	OM_2-12-2010_12-28-33
245957003	948330	1	axc2	2/12/2010	14:50:22	OM_2-12-2010_12-28-33
245957004	948330	1	axc2	2/12/2010	14:51:14	OM_2-12-2010_12-28-33
245957005	948330	1	axc2	2/12/2010	14:52:09	OM_2-12-2010_12-28-33
245957006	948330	1	axc2	2/12/2010	14:53:03	OM_2-12-2010_12-28-33
246058001	948330	1	axc2	2/12/2010	14:53:58	OM_2-12-2010_12-28-33
1202033025	948330	1	axc2	2/12/2010	14:54:52	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	14:55:44	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	14:57:35	OM_2-12-2010_12-28-33
1202033026	948330	1	axc2	2/12/2010	14:59:25	OM_2-12-2010_12-28-33
1202033027	948330	1	axc2	2/12/2010	15:00:20	OM_2-12-2010_12-28-33
246058002	948330	1	axc2	2/12/2010	15:01:13	OM_2-12-2010_12-28-33
246058003	948330	1	axc2	2/12/2010	15:02:07	OM_2-12-2010_12-28-33
246060001	948330	1	axc2	2/12/2010	15:03:01	OM_2-12-2010_12-28-33
246060002	948330	1	axc2	2/12/2010	15:03:54	OM_2-12-2010_12-28-33
246062001	948330	1	axc2	2/12/2010	15:04:48	OM_2-12-2010_12-28-33
246062002	948330	1	axc2	2/12/2010	15:05:41	OM_2-12-2010_12-28-33
246066007	948330	1	axc2	2/12/2010	15:06:34	OM_2-12-2010_12-28-33
246066008	948330	1	axc2	2/12/2010	15:07:27	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	15:08:19	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	15:10:09	OM_2-12-2010_12-28-33
246066009	948330	1	axc2	2/12/2010	15:11:58	OM_2-12-2010_12-28-33
246066010	948330	1	axc2	2/12/2010	15:12:53	OM_2-12-2010_12-28-33
246066011	948330	1	axc2	2/12/2010	15:13:48	OM_2-12-2010_12-28-33
246066012	948330	1	axc2	2/12/2010	15:14:43	OM_2-12-2010_12-28-33
246066013	948330	1	axc2	2/12/2010	15:15:37	OM_2-12-2010_12-28-33
246114007	948944	5	axc2	2/12/2010	15:16:31	OM_2-12-2010_12-28-33
1202033028	948949	1	axc2	2/12/2010	15:17:25	OM_2-12-2010_12-28-33
1202033035	948949	25	axc2	2/12/2010	15:18:19	OM_2-12-2010_12-28-33
246066014	948949	1	axc2	2/12/2010	15:19:14	OM_2-12-2010_12-28-33
1202033029	948949	1	axc2	2/12/2010	15:20:08	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	15:21:00	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	15:22:50	OM_2-12-2010_12-28-33
1202033031	948949	1	axc2	2/12/2010	15:24:40	OM_2-12-2010_12-28-33
1202033033	948949	1	axc2	2/12/2010	15:25:34	OM_2-12-2010_12-28-33
246066015	948949	1	axc2	2/12/2010	15:26:27	OM_2-12-2010_12-28-33
1202033030	948949	1	axc2	2/12/2010	15:27:21	OM_2-12-2010_12-28-33
1202033032	948949	1	axc2	2/12/2010	15:28:14	OM_2-12-2010_12-28-33
1202033034	948949	1	axc2	2/12/2010	15:29:07	OM_2-12-2010_12-28-33
246066016	948949	1	axc2	2/12/2010	15:29:59	OM_2-12-2010_12-28-33
246066017	948949	1	axc2	2/12/2010	15:30:54	OM_2-12-2010_12-28-33
246066018	948949	1	axc2	2/12/2010	15:31:49	OM_2-12-2010_12-28-33
246066019	948949	1	axc2	2/12/2010	15:32:44	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	15:33:36	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	15:35:27	OM_2-12-2010_12-28-33

246066020	948949	1	axc2	2/12/2010	15:37:18	OM_2-12-2010_12-28-33
246070001	948949	1	axc2	2/12/2010	15:38:12	OM_2-12-2010_12-28-33
246070002	948949	1	axc2	2/12/2010	15:39:06	OM_2-12-2010_12-28-33
246070003	948949	1	axc2	2/12/2010	15:40:01	OM_2-12-2010_12-28-33
246070004	948949	1	axc2	2/12/2010	15:40:55	OM_2-12-2010_12-28-33
246070005	948949	1	axc2	2/12/2010	15:41:49	OM_2-12-2010_12-28-33
246070006	948949	1	axc2	2/12/2010	15:42:43	OM_2-12-2010_12-28-33
246070007	948949	1	axc2	2/12/2010	15:43:36	OM_2-12-2010_12-28-33
246070008	948949	1	axc2	2/12/2010	15:44:30	OM_2-12-2010_12-28-33
246070009	948949	1	axc2	2/12/2010	15:45:23	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	15:46:16	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	15:48:06	OM_2-12-2010_12-28-33
246070010	948949	1	axc2	2/12/2010	15:49:56	OM_2-12-2010_12-28-33
246070011	948949	1	axc2	2/12/2010	15:50:49	OM_2-12-2010_12-28-33
246070012	948949	1	axc2	2/12/2010	15:51:44	OM_2-12-2010_12-28-33
246070013	948949	1	axc2	2/12/2010	15:52:39	OM_2-12-2010_12-28-33
1202036067	950207	1	axc2	2/12/2010	15:53:33	OM_2-12-2010_12-28-33
CCV		1	axc2	2/12/2010	15:54:25	OM_2-12-2010_12-28-33
CCB		1	axc2	2/12/2010	15:56:16	OM_2-12-2010_12-28-33

Original Run Filename: OM\_2-12-2010\_12-28-33.OMN created 2/12/2010 12:28:33  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-12-2010\_12-28-33.OMN last modified 2/12/2010 15:57:21  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100212-01	1	S1	200	9.01	2/12/2010@12:29:18			200 ppb
WCN100212-02	1	S2	150	7.03	2/12/2010@12:30:11			150 ppb
WCN100212-03	1	S3	100	4.55	2/12/2010@12:31:03			100 ppb
WCN100212-04	1	S4	50.0	2.30	2/12/2010@12:31:56			50 ppb
WCN100212-05	1	S5	10.0	0.695	2/12/2010@12:32:49			10 ppb
WCN100212-06	1	S6	5.00	0.468	2/12/2010@12:33:43			CRDL 5.0 ppb
WCN100212-08	1	S7	0.00	0.0810	2/12/2010@12:34:37			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99951 > 0.99500					
Message			Pass					
Action			Continue					
WCN100212-07	1	S8	138	6.34	2/12/2010@12:36:27			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-7.8 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-7.8 < 10.0					
Message			ICV Passed					
Action			Continue					
WCN100212-08	1	S7	-1.76	0.0866	2/12/2010@12:38:17			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.76 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.76 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100212-06	1	S6	6.96	0.476	2/12/2010@12:40:07			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.96 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.96 > 2.50					
Message			Pass					
Action			None					
1202033017 948946 MB	1	1	-3.58	0.00565	2/12/2010@12:41:56			
1202033024 LCS	1	2	15.7	0.864	2/12/2010@12:42:50		25.00	
246012007	1	3	-2.00	0.0759	2/12/2010@12:43:43			
1202033018 DUP	1	4	-2.22	0.0662	2/12/2010@12:44:36			
1202033020 MS	1	5	67.8	3.19	2/12/2010@12:45:29			
1202033022 MSD	1	6	82.9	3.86	2/12/2010@12:46:22			
246012008	1	7	-2.80	0.0402	2/12/2010@12:47:15			
1202033019 DUP	1	8	-3.66	0.00214	2/12/2010@12:48:07			
1202033021 MS	1	9	87.6	4.08	2/12/2010@12:49:00			
1202033023 MSD	1	10	84.5	3.94	2/12/2010@12:49:52			
WCN100212-03	1	S3	102	4.71	2/12/2010@12:50:44			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					
WCN100212-08	1	S7	-1.77	0.0863	2/12/2010@12:52:34			
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.77 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.77 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246012009	1	11	-2.54	0.0522	2/12/2010@12:54:22			
246012010	1	12	-2.33	0.0614	2/12/2010@12:55:14			
246012011	1	13	-0.520	0.142	2/12/2010@12:56:06			
246055001	1	14	-1.07	0.118	2/12/2010@12:56:58			
246055002	1	15	-2.20	0.0671	2/12/2010@12:57:50			
246055003	1	16	-0.671	0.135	2/12/2010@12:58:43			
246055004	1	17	-2.40	0.0584	2/12/2010@12:59:37			
246055005	1	18	-0.466	0.145	2/12/2010@13:00:30			
246055006	1	19	-2.01	0.0756	2/12/2010@13:01:23			
246055007	1	20	-2.73	0.0433	2/12/2010@13:02:16			
WCN100212-03	1	S3	102	4.71	2/12/2010@13:03:08			
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100212-08	1	S7	-1.83	0.0834	2/12/2010@13:04:59			
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.83 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.83 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246055008	1	21	0.133	0.171	2/12/2010@13:06:48			
246055009	1	22	5.24	0.399	2/12/2010@13:07:41			
246066001	1	23	-1.42	0.102	2/12/2010@13:08:34			
246066002	1	24	-2.08	0.0726	2/12/2010@13:09:27			
246066003	1	25	-1.22	0.111	2/12/2010@13:10:18			
246066004	1	26	-2.10	0.0716	2/12/2010@13:11:11			
246066005	1	27	-2.39	0.0588	2/12/2010@13:12:03			
246066006	1	28	-1.91	0.0800	2/12/2010@13:12:55			
1202036012 950194 MB	1	29	-3.70	2.81e-4	2/12/2010@13:13:47			
1202036019 LCS	1	30	16.1	0.885	2/12/2010@13:14:39	25.00		
WCN100212-03	1	S3	102	4.70	2/12/2010@13:15:31			
		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					
WCN100212-08	1	S7	-1.94	0.0787	2/12/2010@13:17:22			
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								

			Result:	-1.94 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.94 > -5.00				
			Message	CCB Passed				
			Action	Continue				
246055009 948946	1	22		-1.69	0.0901	2/12/2010@13:19:11		
246262001 950194	1	31		-3.04	0.0298	2/12/2010@13:20:05		
246280005	1	32		-3.07	0.0283	2/12/2010@13:20:59		
246280006	1	33		-2.76	0.0423	2/12/2010@13:21:52		
1202036013  DUP	1	34		-2.82	0.0394	2/12/2010@13:22:46		
1202036015  MS	1	35		84.6	3.94	2/12/2010@13:23:39		
1202036017  MSD	1	36		82.4	3.84	2/12/2010@13:24:32		
246280007	1	37		-2.99	0.0317	2/12/2010@13:25:25		
1202036014  DUP	1	38		-2.89	0.0363	2/12/2010@13:26:18		
1202036016  MS	1	39		86.8	4.04	2/12/2010@13:27:11		
WCN100212-03	1	S3		102	4.71	2/12/2010@13:28:04		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				
WCN100212-08	1	S7		-1.75	0.0870	2/12/2010@13:29:53		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.75 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.75 > -5.00				
			Message	CCB Passed				
			Action	Continue				
1202036018  MSD	1	40		81.5	3.80	2/12/2010@13:31:43		
246280008	1	41		-2.69	0.0453	2/12/2010@13:32:35		
246280009	1	42		-2.56	0.0510	2/12/2010@13:33:28		
246280010	1	43		-2.69	0.0454	2/12/2010@13:34:20		
246291001	1	44		-2.74	0.0432	2/12/2010@13:35:12		
246291002	1	45		-3.65	0.00256	2/12/2010@13:36:04		
246291003	1	46		-4.03	-0.0144	2/12/2010@13:36:58		
246291004	1	47		-2.33	0.0612	2/12/2010@13:37:52		
246291005	1	48		-2.37	0.0594	2/12/2010@13:38:46		
246291006	1	49		-3.71	-1.56e-4	2/12/2010@13:39:40		
WCN100212-03	1	S3		102	4.73	2/12/2010@13:40:32		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				
WCN100212-08	1	S7		-1.78	0.0858	2/12/2010@13:42:22		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.78 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.78 > -5.00				
			Message	CCB Passed				
			Action	Continue				
246291007	1	50		-3.12	0.0260	2/12/2010@13:44:12		

246291008	1	51	-2.58	0.0501	2/12/2010@13:45:05		
246305001	1	52	-3.71	-1.63e-4	2/12/2010@13:45:59		
246305002	1	53	-3.09	0.0274	2/12/2010@13:46:51		
246305003	1	54	-3.16	0.0243	2/12/2010@13:47:43		
246305004	1	55	-2.73	0.0437	2/12/2010@13:48:36		
246312001	1	56	-3.71	-1.36e-4	2/12/2010@13:49:30		
1202036056 950207 MB	1	57	-3.11	0.0266	2/12/2010@13:50:21		
1202036069 LCS	1	58	49.7	2.38	2/12/2010@13:51:14		
246191004	1	59	20.8	1.10	2/12/2010@13:52:06		
WCN100212-03	1	S3	103	4.74	2/12/2010@13:52:58		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.5 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.5 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100212-08	1	S7	-1.83	0.0834	2/12/2010@13:54:48		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.83 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.83 > -5.00				
Message			CCB Passed				
Action			Continue				
1202036058 DUP	1	60	19.2	1.02	2/12/2010@13:56:36		
1202036062 MS	1	61	114	5.25	2/12/2010@13:57:30		
1202036066 MSD	1	62	108	4.96	2/12/2010@13:58:25		
246304002	1	63	-2.90	0.0358	2/12/2010@13:59:20		
1202036059 DUP	1	64	-3.87	-0.00751	2/12/2010@14:00:12		
1202036063 MS	1	65	94.0	4.36	2/12/2010@14:01:07		
1202036067 MSD	1	66	61.7	2.92	2/12/2010@14:01:59		
246304003	1	67	-3.22	0.0214	2/12/2010@14:02:53		
246352001	1	68	2.39	0.272	2/12/2010@14:03:46		
246352003	1	69	-3.35	0.0156	2/12/2010@14:04:39		
WCN100212-03	1	S3	102	4.73	2/12/2010@14:05:32		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				
WCN100212-08	1	S7	-1.78	0.0858	2/12/2010@14:07:23		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.78 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.78 > -5.00				
Message			CCB Passed				
Action			Continue				
246364002	1	70	-2.64	0.0473	2/12/2010@14:09:11		
246364003	1	71	-2.89	0.0362	2/12/2010@14:10:04		
246419002	1	72	-2.96	0.0332	2/12/2010@14:10:57		
1202036057 DUP	1	73	-2.54	0.0519	2/12/2010@14:11:49		
1202036061 MS	1	74	92.0	4.27	2/12/2010@14:12:42		
1202036065 MSD	1	75	95.0	4.40	2/12/2010@14:13:34		
246431001	1	76	-2.82	0.0393	2/12/2010@14:14:29		
246431002	1	77	-3.11	0.0264	2/12/2010@14:15:22		
246431003	1	78	-3.11	0.0264	2/12/2010@14:16:17		

246431004	1	79	-3.68	0.00125	2/12/2010@14:17:10		
WCN100212-03	1	S3	102	4.73	2/12/2010@14:18:03		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	2.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	2.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100212-08	1	S7	-2.11	0.0711	2/12/2010@14:19:53		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-2.11 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.11 > -5.00				
		Message	CCB Passed				
		Action	Continue				
246472002	1	80	-2.85	0.0382	2/12/2010@14:21:43		
1202036060  DUP	1	81	-2.81	0.0398	2/12/2010@14:22:36		
1202036064  MS	1	82	87.2	4.06	2/12/2010@14:23:30		
1202036068  MSD	1	83	91.2	4.23	2/12/2010@14:24:23		
246474001	1	84	-3.13	0.0258	2/12/2010@14:25:16		
246476001	1	85	-3.29	0.0185	2/12/2010@14:26:09		
246480001	1	86	-3.74	-0.00167	2/12/2010@14:27:02		
1202033014 948944 MB	1	87	-3.05	0.0294	2/12/2010@14:27:55		
1202033015  LCS	1	88	49.2	2.36	2/12/2010@14:28:48		
1202033016  LCSD	1	89	49.0	2.35	2/12/2010@14:29:40		
WCN100212-03	1	S3	102	4.73	2/12/2010@14:30:33		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				
WCN100212-08	1	S7	-1.90	0.0803	2/12/2010@14:32:23		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.90 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.90 > -5.00				
		Message	CCB Passed				
		Action	Continue				
246114001	1	90	175	7.95	2/12/2010@14:34:11		
246114002	1	91	73.9	3.46	2/12/2010@14:35:05		
246114003	1	92	145	6.63	2/12/2010@14:36:00		
246114004	1	93	175	7.96	2/12/2010@14:36:54		
246114005	1	94	110	5.09	2/12/2010@14:37:48		
246114006	1	95	89.4	4.16	2/12/2010@14:38:42		
246114007	1	96	216	9.79	2/12/2010@14:39:37		
1202031536 948330 MB	1	97	-3.71	-1.72e-4	2/12/2010@14:40:30		
1202031540  LCS	1	98	31.2	1.56	2/12/2010@14:41:24	25.00	
245957001	1	99	-1.60	0.0940	2/12/2010@14:42:18		
WCN100212-03	1	S3	102	4.71	2/12/2010@14:43:10		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				
WCN100212-08	1	S7	-1.81	0.0845	2/12/2010@14:45:00		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.81 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.81 > -5.00				
		Message	CCB Passed				
		Action	Continue				
		Calibration:	Table/Fig. 1				
1202031537  DUP	1	100	-2.50	0.0538	2/12/2010@14:46:50		
1202031538  MS	1	101	92.9	4.31	2/12/2010@14:47:43		
1202031539  MSD	1	102	91.8	4.26	2/12/2010@14:48:36		
245957002	1	103	-3.12	0.0261	2/12/2010@14:49:28		
245957003	1	104	-3.70	2.38e-4	2/12/2010@14:50:22		
245957004	1	105	-2.36	0.0601	2/12/2010@14:51:14		
245957005	1	106	0.227	0.175	2/12/2010@14:52:09		
245957006	1	107	-1.85	0.0829	2/12/2010@14:53:03		
246058001	1	108	-3.71	-1.37e-4	2/12/2010@14:53:58		
1202033025  DUP	1	109	-3.08	0.0280	2/12/2010@14:54:52		
WCN100212-03	1	S3	103	4.76	2/12/2010@14:55:44		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	3.1 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	3.1 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100212-08	1	S7	1.33	0.225	2/12/2010@14:57:35		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	1.33 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	1.33 > -5.00				
		Message	CCB Passed				
		Action	Continue				
1202033026  MS	1	110	103	4.76	2/12/2010@14:59:25		
1202033027  MSD	1	111	94.0	4.36	2/12/2010@15:00:20		
246058002	1	112	1.53	0.234	2/12/2010@15:01:13		
246058003	1	113	-2.59	0.0499	2/12/2010@15:02:07		
246060001	1	114	-2.71	0.0443	2/12/2010@15:03:01		
246060002	1	115	-2.22	0.0664	2/12/2010@15:03:54		
246062001	1	116	-2.63	0.0479	2/12/2010@15:04:48		
246062002	1	117	-2.48	0.0548	2/12/2010@15:05:41		
246066007	1	118	-2.71	0.0443	2/12/2010@15:06:34		
246066008	1	119	-1.12	0.115	2/12/2010@15:07:27		
WCN100212-03	1	S3	102	4.73	2/12/2010@15:08:19		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	2.4 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	2.4 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100212-08	1	S7	1.87	0.249	2/12/2010@15:10:09		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	1.87 < 5.00				

		Message		CCB Passed							
		Action		Continue							
				DQM Test: < - Concentration Limit							
		Result:		1.87 > -5.00							
		Message		CCB Passed							
		Action		Continue							
246066009	1	120		-0.539	0.141	2/12/2010@15:11:58					
246066010	1	121		-0.313	0.151	2/12/2010@15:12:53					
246066011	1	122		-1.20	0.112	2/12/2010@15:13:48					
246066012	1	123		-2.18	0.0678	2/12/2010@15:14:43					
246066013	1	124		-0.449	0.145	2/12/2010@15:15:37					
246114007 948944	1	96		34.1	1.69	2/12/2010@15:16:31			5.00		
1202033028 948949 MB	1	125		-1.73	0.0881	2/12/2010@15:17:25					
1202033035 LCS	1	126		17.3	0.937	2/12/2010@15:18:19			25.00		
246066014	1	127		-0.746	0.132	2/12/2010@15:19:14					
1202033029 DUP	1	128		-1.77	0.0862	2/12/2010@15:20:08					
WCN100212-03	1	S3		101	4.69	2/12/2010@15:21:00				CCV	
		Known Conc:		100							
				DQM Test: > + Percent Relative Difference							
		Result:		1.4 < 10.0							
		Message		CCV Passed							
		Action		Continue							
				DQM Test: < - Percent Relative Difference							
		Result:		1.4 < 10.0							
		Message		CCV Passed							
		Action		Continue							
WCN100212-08	1	S7		0.945	0.207	2/12/2010@15:22:50				CCB	
		Known Conc:		0.00							
				DQM Test: > + Concentration Limit							
		Result:		0.945 < 5.00							
		Message		CCB Passed							
		Action		Continue							
				DQM Test: < - Concentration Limit							
		Result:		0.945 > -5.00							
		Message		CCB Passed							
		Action		Continue							
1202033031 MS	1	129		50.7	2.43	2/12/2010@15:24:40					
1202033033 MSD	1	130		58.2	2.76	2/12/2010@15:25:34					
246066015	1	131		0.134	0.171	2/12/2010@15:26:27					
1202033030 DUP	1	132		-1.80	0.0851	2/12/2010@15:27:21					
1202033032 MS	1	133		88.9	4.13	2/12/2010@15:28:14					
1202033034 MSD	1	134		91.1	4.23	2/12/2010@15:29:07					
246066016	1	135		0.247	0.176	2/12/2010@15:29:59					
246066017	1	136		-1.83	0.0837	2/12/2010@15:30:54					
246066018	1	137		-2.44	0.0563	2/12/2010@15:31:49					
246066019	1	138		-2.25	0.0648	2/12/2010@15:32:44					
WCN100212-03	1	S3		101	4.67	2/12/2010@15:33:36				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							
WCN100212-08	1	S7		1.50	0.232	2/12/2010@15:35:27				CCB	
		Known Conc:		0.00							
				DQM Test: > + Concentration Limit							
		Result:		1.50 < 5.00							
		Message		CCB Passed							
		Action		Continue							
				DQM Test: < - Concentration Limit							
		Result:		1.50 > -5.00							
		Message		CCB Passed							
		Action		Continue							
246066020	1	139		1.84	0.247	2/12/2010@15:37:18					
246070001	1	140		-0.620	0.138	2/12/2010@15:38:12					

246070002	1	141	-1.35	0.105	2/12/2010@15:39:06		
246070003	1	142	1.64	0.238	2/12/2010@15:40:01		
246070004	1	143	-1.26	0.109	2/12/2010@15:40:55		
246070005	1	144	-2.53	0.0525	2/12/2010@15:41:49		
246070006	1	145	-1.81	0.0845	2/12/2010@15:42:43		
246070007	1	146	-3.06	0.0285	2/12/2010@15:43:36		
246070008	1	147	-1.95	0.0782	2/12/2010@15:44:30		
246070009	1	148	-2.76	0.0423	2/12/2010@15:45:23		
WCN100212-03	1	S3	101	4.68	2/12/2010@15:46:16		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							
WCN100212-08	1	S7	1.50	0.232	2/12/2010@15:48:06		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: 1.50 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: 1.50 > -5.00							
Message CCB Passed							
Action Continue							
246070010	1	149	-2.40	0.0582	2/12/2010@15:49:56		
246070011	1	150	-2.53	0.0525	2/12/2010@15:50:49		
246070012	1	151	-2.54	0.0520	2/12/2010@15:51:44		
246070013	1	152	-2.83	0.0390	2/12/2010@15:52:39		
1202036067/950207/MSD	1	66	86.4	4.02	2/12/2010@15:53:33		
WCN100212-03	1	S3	105	4.84	2/12/2010@15:54:25		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 4.8 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 4.8 < 10.0							
Message CCV Passed							
Action Continue							
WCN100212-08	1	S7	1.28	0.222	2/12/2010@15:56:16		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: 1.28 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: 1.28 > -5.00							
Message CCB Passed							
Action Continue							

Analyte Properties Table for OM\_2-12-2010\_12-28-33.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False

Inject to Peak Start	22
Peak Base Width	39

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.01	0.594	0.9	2/12/2010	12:30:21
2	150	1	7.03	0.467	-2.6	2/12/2010	12:31:13
3	100	1	4.55	0.301	1.6	2/12/2010	12:32:06
4	50.0	1	2.30	0.151	4.0	2/12/2010	12:32:59
5	10.0	1	0.695	0.0440	-13.2	2/12/2010	12:33:52
6	5.00	1	0.468	0.0313	-19.5	2/12/2010	12:34:46
7	0.00	1	0.0810	0.00430		2/12/2010	12:35:40

Area = 0.0446 \* Conc + 0.168  
 Conc = 22.4 \* Area - 3.70  
 Correlation Coefficient (r) = 0.99951  
 No Weighting



# Miscellaneous

### DATA EXCEPTION REPORT

Mo. Day Yr.  
16-FEB-10

Division:

Quality Criteria:

Type:

Instrument Type:

Test / Method:  
SW846 9012A

Matrix Type:  
Solid

Client Code:  
LANL

Batch ID:  
948946

Sample Numbers:  
See Below

Potentially affected work order(s)(SDG): 246012(10-1523),246055(10-1545),246066(10-1543)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements  
Exception Description:

DER Disposition:

1. Failed Recovery for MS:

QC 1202033020MS

1. The spike recovery falls outside of the client specified acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.

Originator's Name:

Ashley Earl

16-FEB-10

Data Validator/Group Leader:

Elzbieta Szulc

22-FEB-10

# **General Chemistry**

## **Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1545-1**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 948940      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 948939      **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>
246056001	RE15-10-8233
246056002	RE15-10-8231
246056003	RE15-10-8230
246056004	RE15-10-8232
1202033006	Method Blank (MB)
1202033007	246004001(RE16-10-11766) Sample Duplicate (DUP)
1202033008	245926003(CAMO-10-9289) Sample Duplicate (DUP)
1202033009	246004001(RE16-10-11766) Matrix Spike (MS)
1202033010	245926003(CAMO-10-9289) Matrix Spike (MS)
1202033011	246004001(RE16-10-11766) Matrix Spike Duplicate (MSD)
1202033012	245926003(CAMO-10-9289) Matrix Spike Duplicate (MSD)
1202033013	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: 245926003 (CAMO-10-9289) and 246004001 (RE16-10-11766).

**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. 1202033008 (CAMO-10-9289).

**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**

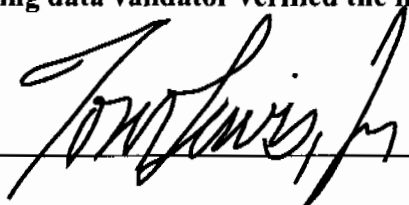
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**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: \_\_\_\_\_

02March10



# 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: 10-1545-1 GEL Work Order: 246056

**The Qualifiers in this report are defined as follows:**

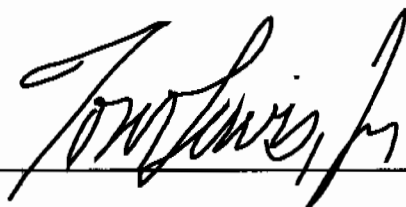
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

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, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: February 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8233  
Sample ID: 246056001  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-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	02/08/10	1510	948940	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

### 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  
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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8231  
Sample ID: 246056002  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-FEB-10  
Collector: Client

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 "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/08/10	1511	948940	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	02/05/10	1408	948939

### 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  
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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8230  
Sample ID: 246056003  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-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	02/08/10	1512	948940	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

### 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  
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 12, 2010

Client SDG: 10-1545-1

Client Sample ID: RE15-10-8232  
Sample ID: 246056004  
Matrix: W  
Collect Date: 29-JAN-10 12:00  
Receive Date: 03-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	02/08/10	1513	948940	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# **Quality Control Summary**

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: February 12, 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: 246056

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	948940										
QC1202033007	246004001	DUP									
Cyanide, Total			U	ND	U	ND	ug/L	N/A	AXC2	02/08/10	15:01
QC1202033008	245926003	DUP									
Cyanide, Total			U	ND	U	ND	ug/L	N/A		02/08/10	14:44
QC1202033013	LCS										
Cyanide, Total	50.0			51.4	ug/L		103	(90%-110%)		02/08/10	14:37
QC1202033006	MB										
Cyanide, Total			U	5.00	ug/L					02/08/10	14:36
QC1202033009	246004001	MS									
Cyanide, Total	100	U	ND	96.2	ug/L		96.2	(60%-144%)		02/08/10	15:02
QC1202033010	245926003	MS									
Cyanide, Total	100	U	ND	93.6	ug/L		92.2	(60%-144%)		02/08/10	14:45
QC1202033011	246004001	MSD									
Cyanide, Total	100	U	ND	94.3	ug/L	1.99	94.3	(0%-20%)		02/08/10	15:03
QC1202033012	245926003	MSD									
Cyanide, Total	100	U	ND	94.0	ug/L	0.426	92.6	(0%-20%)		02/08/10	14:46

### 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

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### QC Summary

Workorder: 246056

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: 12-FEB-2010 13:10

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1545-1**

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
<b>ICV</b>	<b>08-FEB-2010 13:22:34</b>	<b>OM_2-8-2010_13-14-40</b>	<b>151</b>	<b>150</b>	<b>101</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	08-FEB-2010 14:26:41	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:39:11	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:51:47	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 15:04:19	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes
CCV	08-FEB-2010 15:16:55	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>08-FEB-2010 13:24:24</b>	<b>OM_2-8-2010_13-14-40</b>	<b>-1.45</b>	<b>10</b>	<b>Yes</b>
CCB	08-FEB-2010 14:28:32	OM_2-8-2010_13-14-40	-1.47	10	Yes
CCB	08-FEB-2010 14:41:01	OM_2-8-2010_13-14-40	-1.57	10	Yes
CCB	08-FEB-2010 14:53:37	OM_2-8-2010_13-14-40	-1.83	10	Yes
CCB	08-FEB-2010 15:06:09	OM_2-8-2010_13-14-40	-1.82	10	Yes
CCB	08-FEB-2010 15:18:45	OM_2-8-2010_13-14-40	-1.49	10	Yes

# Cyanide, Total

# Prep LogBook

Analyst: AXS5  
 Batch: 948939  
 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	1202033006		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.0125	mL
LCS	1202033013		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	245926001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926002		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926003		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
DUP	1202033008	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
MS	1202033010	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
MSD	1202033012	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926004		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926005		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926006		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245926007		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	245939001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.0125	mL
SAMPLE	245939002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	245953001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	245965001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	245975001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	245981001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246000001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246004001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
DUP	1202033007	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
MS	1202033009	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
MSD	1202033011	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246056001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246056002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246056003		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246056004		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	246080001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	.025	mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100205-07	.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

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/8/2010 13:15:25	OM_2-8-2010_13-14-40
150 ppb		1	axc2	2/8/2010 13:16:17	OM_2-8-2010_13-14-40
100 ppb		1	axc2	2/8/2010 13:17:10	OM_2-8-2010_13-14-40
50 ppb		1	axc2	2/8/2010 13:18:03	OM_2-8-2010_13-14-40
10 ppb		1	axc2	2/8/2010 13:18:56	OM_2-8-2010_13-14-40
CRDL 5.0 ppb		1	axc2	2/8/2010 13:19:50	OM_2-8-2010_13-14-40
ICAL-00		1	axc2	2/8/2010 13:20:43	OM_2-8-2010_13-14-40
ICV		1	axc2	2/8/2010 13:22:34	OM_2-8-2010_13-14-40
ICB		1	axc2	2/8/2010 13:24:24	OM_2-8-2010_13-14-40
CRDL		1	axc2	2/8/2010 13:26:14	OM_2-8-2010_13-14-40
1202029242*	947315	1	axc2	2/8/2010 13:28:03	OM_2-8-2010_13-14-40
1202029249	947315	25	axc2	2/8/2010 13:28:57	OM_2-8-2010_13-14-40
245682001	947315	1	axc2	2/8/2010 13:29:50	OM_2-8-2010_13-14-40
245682002	947315	1	axc2	2/8/2010 13:30:43	OM_2-8-2010_13-14-40
245682003	947315	1	axc2	2/8/2010 13:31:36	OM_2-8-2010_13-14-40
245682004	947315	1	axc2	2/8/2010 13:32:29	OM_2-8-2010_13-14-40
245682005	947315	1	axc2	2/8/2010 13:33:21	OM_2-8-2010_13-14-40
245682006	947315	1	axc2	2/8/2010 13:34:14	OM_2-8-2010_13-14-40
245682007	947315	1	axc2	2/8/2010 13:35:07	OM_2-8-2010_13-14-40
245682008	947315	1	axc2	2/8/2010 13:35:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:36:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:38:42	OM_2-8-2010_13-14-40
1202029242	947315	1	axc2	2/8/2010 13:40:30	OM_2-8-2010_13-14-40
245682009	947315	1	axc2	2/8/2010 13:41:23	OM_2-8-2010_13-14-40
245682010	947315	1	axc2	2/8/2010 13:42:15	OM_2-8-2010_13-14-40
245688011	947315	1	axc2	2/8/2010 13:43:06	OM_2-8-2010_13-14-40
1202029243	947315	1	axc2	2/8/2010 13:43:58	OM_2-8-2010_13-14-40
1202029245	947315	1	axc2	2/8/2010 13:44:50	OM_2-8-2010_13-14-40
1202029247	947315	1	axc2	2/8/2010 13:45:44	OM_2-8-2010_13-14-40
245688012	947315	1	axc2	2/8/2010 13:46:37	OM_2-8-2010_13-14-40
1202029244	947315	1	axc2	2/8/2010 13:47:31	OM_2-8-2010_13-14-40
1202029246	947315	1	axc2	2/8/2010 13:48:24	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:49:17	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:51:07	OM_2-8-2010_13-14-40
1202029248	947315	1	axc2	2/8/2010 13:52:56	OM_2-8-2010_13-14-40
245688013	947315	1	axc2	2/8/2010 13:53:50	OM_2-8-2010_13-14-40
245688014	947315	1	axc2	2/8/2010 13:54:42	OM_2-8-2010_13-14-40
245797001	947315	1	axc2	2/8/2010 13:55:35	OM_2-8-2010_13-14-40
245797002	947315	1	axc2	2/8/2010 13:56:27	OM_2-8-2010_13-14-40
245797003	947315	1	axc2	2/8/2010 13:57:20	OM_2-8-2010_13-14-40
245797004	947315	1	axc2	2/8/2010 13:58:12	OM_2-8-2010_13-14-40
245797005	947315	1	axc2	2/8/2010 13:59:04	OM_2-8-2010_13-14-40
245797006	947315	1	axc2	2/8/2010 13:59:57	OM_2-8-2010_13-14-40
1202029230	947312	1	axc2	2/8/2010 14:00:48	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:01:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:03:31	OM_2-8-2010_13-14-40
1202029237	947312	25	axc2	2/8/2010 14:05:20	OM_2-8-2010_13-14-40
245612007	947312	1	axc2	2/8/2010 14:06:13	OM_2-8-2010_13-14-40
1202029231	947312	1	axc2	2/8/2010 14:07:07	OM_2-8-2010_13-14-40
1202029233	947312	1	axc2	2/8/2010 14:08:01	OM_2-8-2010_13-14-40
1202029235	947312	1	axc2	2/8/2010 14:08:54	OM_2-8-2010_13-14-40
245612008	947312	1	axc2	2/8/2010 14:09:48	OM_2-8-2010_13-14-40
1202029232	947312	1	axc2	2/8/2010 14:10:41	OM_2-8-2010_13-14-40
1202029234	947312	1	axc2	2/8/2010 14:11:33	OM_2-8-2010_13-14-40
1202029236	947312	1	axc2	2/8/2010 14:12:26	OM_2-8-2010_13-14-40
245612009	947312	1	axc2	2/8/2010 14:13:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:14:12	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:16:04	OM_2-8-2010_13-14-40

245612010	947312	1	axc2	2/8/2010	14:17:52	OM_2-8-2010_13-14-40
245612011	947312	1	axc2	2/8/2010	14:18:45	OM_2-8-2010_13-14-40
245612012	947312	1	axc2	2/8/2010	14:19:37	OM_2-8-2010_13-14-40
245612013	947312	1	axc2	2/8/2010	14:20:29	OM_2-8-2010_13-14-40
245612014	947312	1	axc2	2/8/2010	14:21:22	OM_2-8-2010_13-14-40
245612015	947312	1	axc2	2/8/2010	14:22:13	OM_2-8-2010_13-14-40
245612016	947312	1	axc2	2/8/2010	14:23:07	OM_2-8-2010_13-14-40
245688001	947312	1	axc2	2/8/2010	14:24:02	OM_2-8-2010_13-14-40
245688002	947312	1	axc2	2/8/2010	14:24:55	OM_2-8-2010_13-14-40
245688003	947312	1	axc2	2/8/2010	14:25:50	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:26:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:28:32	OM_2-8-2010_13-14-40
245688004	947312	1	axc2	2/8/2010	14:30:23	OM_2-8-2010_13-14-40
245688005	947312	1	axc2	2/8/2010	14:31:15	OM_2-8-2010_13-14-40
245688006	947312	1	axc2	2/8/2010	14:32:08	OM_2-8-2010_13-14-40
245688007	947312	1	axc2	2/8/2010	14:33:01	OM_2-8-2010_13-14-40
245688008	947312	1	axc2	2/8/2010	14:33:55	OM_2-8-2010_13-14-40
245688009	947312	1	axc2	2/8/2010	14:34:47	OM_2-8-2010_13-14-40
245688010	947312	1	axc2	2/8/2010	14:35:40	OM_2-8-2010_13-14-40
1202033006	948940	1	axc2	2/8/2010	14:36:34	OM_2-8-2010_13-14-40
1202033013	948940	1	axc2	2/8/2010	14:37:26	OM_2-8-2010_13-14-40
245926001	948940	1	axc2	2/8/2010	14:38:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:39:11	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:41:01	OM_2-8-2010_13-14-40
245926002	948940	1	axc2	2/8/2010	14:42:50	OM_2-8-2010_13-14-40
245926003	948940	1	axc2	2/8/2010	14:43:43	OM_2-8-2010_13-14-40
1202033008	948940	1	axc2	2/8/2010	14:44:35	OM_2-8-2010_13-14-40
1202033010	948940	1	axc2	2/8/2010	14:45:29	OM_2-8-2010_13-14-40
1202033012	948940	1	axc2	2/8/2010	14:46:24	OM_2-8-2010_13-14-40
245926004	948940	1	axc2	2/8/2010	14:47:19	OM_2-8-2010_13-14-40
245926005	948940	1	axc2	2/8/2010	14:48:12	OM_2-8-2010_13-14-40
245926006	948940	1	axc2	2/8/2010	14:49:06	OM_2-8-2010_13-14-40
245926007	948940	1	axc2	2/8/2010	14:50:01	OM_2-8-2010_13-14-40
245939001	948940	1	axc2	2/8/2010	14:50:54	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:51:47	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:53:37	OM_2-8-2010_13-14-40
245939002*	948940	1	axc2	2/8/2010	14:55:27	OM_2-8-2010_13-14-40
245953001*	948940	1	axc2	2/8/2010	14:56:21	OM_2-8-2010_13-14-40
245965001*	948940	1	axc2	2/8/2010	14:57:14	OM_2-8-2010_13-14-40
245975001	948940	1	axc2	2/8/2010	14:58:06	OM_2-8-2010_13-14-40
245981001	948940	1	axc2	2/8/2010	14:59:00	OM_2-8-2010_13-14-40
246000001	948940	1	axc2	2/8/2010	14:59:52	OM_2-8-2010_13-14-40
246004001	948940	1	axc2	2/8/2010	15:00:45	OM_2-8-2010_13-14-40
1202033007	948940	1	axc2	2/8/2010	15:01:38	OM_2-8-2010_13-14-40
1202033009	948940	1	axc2	2/8/2010	15:02:32	OM_2-8-2010_13-14-40
1202033011	948940	1	axc2	2/8/2010	15:03:27	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:04:19	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:06:09	OM_2-8-2010_13-14-40
245939002	948940	1	axc2	2/8/2010	15:07:59	OM_2-8-2010_13-14-40
245953001	948940	1	axc2	2/8/2010	15:08:53	OM_2-8-2010_13-14-40
245965001	948940	1	axc2	2/8/2010	15:09:46	OM_2-8-2010_13-14-40
246056001	948940	1	axc2	2/8/2010	15:10:41	OM_2-8-2010_13-14-40
246056002	948940	1	axc2	2/8/2010	15:11:35	OM_2-8-2010_13-14-40
246056003	948940	1	axc2	2/8/2010	15:12:29	OM_2-8-2010_13-14-40
246056004	948940	1	axc2	2/8/2010	15:13:23	OM_2-8-2010_13-14-40
246080001	948940	1	axc2	2/8/2010	15:14:17	OM_2-8-2010_13-14-40
1202029252	947318	1	axc2	2/8/2010	15:15:10	OM_2-8-2010_13-14-40
1202029259	947318	25	axc2	2/8/2010	15:16:03	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:16:55	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:18:45	OM_2-8-2010_13-14-40



245797007	947318	1	axc2	2/8/2010	15:20:34	OM_2-8-2010_13-14-40
1202029253	947318	1	axc2	2/8/2010	15:21:26	OM_2-8-2010_13-14-40
1202029255	947318	1	axc2	2/8/2010	15:22:20	OM_2-8-2010_13-14-40
1202029257	947318	1	axc2	2/8/2010	15:23:14	OM_2-8-2010_13-14-40
245797008	947318	1	axc2	2/8/2010	15:24:08	OM_2-8-2010_13-14-40
1202029254	947318	1	axc2	2/8/2010	15:25:02	OM_2-8-2010_13-14-40
1202029256	947318	1	axc2	2/8/2010	15:25:56	OM_2-8-2010_13-14-40
1202029258	947318	1	axc2	2/8/2010	15:26:50	OM_2-8-2010_13-14-40
245797009	947318	1	axc2	2/8/2010	15:27:43	OM_2-8-2010_13-14-40
245797010	947318	1	axc2	2/8/2010	15:28:36	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:29:29	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:31:18	OM_2-8-2010_13-14-40
245797011	947318	1	axc2	2/8/2010	15:33:08	OM_2-8-2010_13-14-40
245797012	947318	1	axc2	2/8/2010	15:34:00	OM_2-8-2010_13-14-40
245797013	947318	1	axc2	2/8/2010	15:34:53	OM_2-8-2010_13-14-40
245797014	947318	1	axc2	2/8/2010	15:35:46	OM_2-8-2010_13-14-40
245797015	947318	1	axc2	2/8/2010	15:36:38	OM_2-8-2010_13-14-40
245797016	947318	1	axc2	2/8/2010	15:37:31	OM_2-8-2010_13-14-40
245797017	947318	1	axc2	2/8/2010	15:38:23	OM_2-8-2010_13-14-40
245797018	947318	1	axc2	2/8/2010	15:39:17	OM_2-8-2010_13-14-40
245797019	947318	1	axc2	2/8/2010	15:40:11	OM_2-8-2010_13-14-40
245806001	947318	1	axc2	2/8/2010	15:41:06	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:41:58	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:43:48	OM_2-8-2010_13-14-40
245806002	947318	1	axc2	2/8/2010	15:45:38	OM_2-8-2010_13-14-40
245806003	947318	1	axc2	2/8/2010	15:46:33	OM_2-8-2010_13-14-40
245806004	947318	1	axc2	2/8/2010	15:47:26	OM_2-8-2010_13-14-40
245806005	947318	1	axc2	2/8/2010	15:48:19	OM_2-8-2010_13-14-40
245806006	947318	1	axc2	2/8/2010	15:49:13	OM_2-8-2010_13-14-40
245806007	947318	1	axc2	2/8/2010	15:50:06	OM_2-8-2010_13-14-40
1202034313	949504	1	axc2	2/8/2010	15:51:00	OM_2-8-2010_13-14-40
1202034315	949504	250	axc2	2/8/2010	15:51:53	OM_2-8-2010_13-14-40
246078001	949504	1	axc2	2/8/2010	15:52:47	OM_2-8-2010_13-14-40
1202034314	949504	1	axc2	2/8/2010	15:53:40	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:54:33	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:56:23	OM_2-8-2010_13-14-40
246078002	949504	1	axc2	2/8/2010	15:58:12	OM_2-8-2010_13-14-40
246078003	949504	1	axc2	2/8/2010	15:59:05	OM_2-8-2010_13-14-40
246078004	949504	1	axc2	2/8/2010	15:59:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	16:00:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	16:02:41	OM_2-8-2010_13-14-40

Author: axc2

Date : 2/8/2010

Original Run Filename: OM\_2-8-2010\_13-14-40.OMN created 2/8/2010 13:14:40  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-8-2010\_13-14-40.OMN last modified 2/8/2010 16:03:46  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100208-01	1	S1	200	8.74	2/8/2010@13:15:25			200 ppb
WCN100208-02	1	S2	150	6.63	2/8/2010@13:16:17			150 ppb
WCN100208-03	1	S3	100	4.52	2/8/2010@13:17:10			100 ppb
WCN100208-04	1	S4	50.0	2.28	2/8/2010@13:18:03			50 ppb
WCN100208-05	1	S5	10.0	0.511	2/8/2010@13:18:56			10 ppb
WCN100208-06	1	S6	5.00	0.321	2/8/2010@13:19:50			CRDL 5.0 ppb
WCN100208-08	1	S7	0.00	0.00906	2/8/2010@13:20:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100208-07	1	S8	151	6.65	2/8/2010@13:22:34			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100208-08	1	S7	-1.45	0.0181	2/8/2010@13:24:24			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.45 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.45 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100208-06	1	S6	5.53	0.322	2/8/2010@13:26:14			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.53 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.53 > 2.50					
Message			CRDL Passed					
Action			Continue					
1202029242 947315 MB	1	1	441	19.3	2/8/2010@13:28:03			
1202029249 LCS	1	2	26.6	1.24	2/8/2010@13:28:57		25.00	
245682001	1	3	-0.713	0.0500	2/8/2010@13:29:50			
245682002	1	4	-0.651	0.0528	2/8/2010@13:30:43			
245682003	1	5	0.833	0.117	2/8/2010@13:31:36			
245682004	1	6	-1.86	-1.22e-4	2/8/2010@13:32:29			
245682005	1	7	-0.452	0.0614	2/8/2010@13:33:21			
245682006	1	8	-0.944	0.0400	2/8/2010@13:34:14			
245682007	1	9	-1.19	0.0293	2/8/2010@13:35:07			
245682008	1	10	6.00	0.343	2/8/2010@13:35:58			
WCN100208-03	1	S3	105	4.68	2/8/2010@13:36:51			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.4 < 10.0					

Message			CCV Passed					
Action			Continue					
Result:			DQM Test: < - Percent Relative Difference					
Message			5.4 < 10.0					
Action			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.40	0.0203	2/8/2010@13:38:42			CCB
Known Conc:			0.00					
Result:			DQM Test: > + Concentration Limit					
Message			-1.40 < 5.00					
Action			CCB Passed					
Action			Continue					
Result:			DQM Test: < - Concentration Limit					
Message			-1.40 > -5.00					
Action			CCB Passed					
Action			Continue					
1202029242 947315 MB	1	1	-1.06	0.0348	2/8/2010@13:40:30			
245682009	1	11	-0.822	0.0453	2/8/2010@13:41:23			
245682010	1	12	1.86	0.162	2/8/2010@13:42:15			
245688011	1	13	-0.777	0.0473	2/8/2010@13:43:06			
1202029243 DUP	1	14	-2.01	-0.00640	2/8/2010@13:43:58			
1202029245 MS	1	15	86.6	3.85	2/8/2010@13:44:50			
1202029247 MSD	1	16	78.4	3.50	2/8/2010@13:45:44			
245688012	1	17	0.261	0.0925	2/8/2010@13:46:37			
1202029244 DUP	1	18	0.738	0.113	2/8/2010@13:47:31			
1202029246 MS	1	19	69.2	3.10	2/8/2010@13:48:24			
WCN100208-03	1	S3	105	4.67	2/8/2010@13:49:17			CCV
Known Conc:			100					
Result:			DQM Test: > + Percent Relative Difference					
Message			5.2 < 10.0					
Action			CCV Passed					
Action			Continue					
Result:			DQM Test: < - Percent Relative Difference					
Message			5.2 < 10.0					
Action			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.92	-0.00263	2/8/2010@13:51:07			CCB
Known Conc:			0.00					
Result:			DQM Test: > + Concentration Limit					
Message			-1.92 < 5.00					
Action			CCB Passed					
Action			Continue					
Result:			DQM Test: < - Concentration Limit					
Message			-1.92 > -5.00					
Action			CCB Passed					
Action			Continue					
1202029248 MSD	1	20	71.4	3.19	2/8/2010@13:52:56			
245688013	1	21	-1.01	0.0373	2/8/2010@13:53:50			
245688014	1	22	0.338	0.0958	2/8/2010@13:54:42			
245797001	1	23	-0.979	0.0385	2/8/2010@13:55:35			
245797002	1	24	-0.863	0.0435	2/8/2010@13:56:27			
245797003	1	25	-0.309	0.0676	2/8/2010@13:57:20			
245797004	1	26	0.938	0.122	2/8/2010@13:58:12			
245797005	1	27	2.23	0.178	2/8/2010@13:59:04			
245797006	1	28	-0.105	0.0766	2/8/2010@13:59:57			
1202029230 947312 MB	1	29	-1.23	0.0277	2/8/2010@14:00:48			
WCN100208-03	1	S3	105	4.66	2/8/2010@14:01:41			CCV
Known Conc:			100					
Result:			DQM Test: > + Percent Relative Difference					
Message			5.1 < 10.0					
Action			CCV Passed					
Action			Continue					
Result:			DQM Test: < - Percent Relative Difference					
Message			5.1 < 10.0					
Action			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.86	0.00	2/8/2010@14:03:31			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit							
Result:		-1.86 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.86 > -5.00					
Message		CCB Passed					
Action		Continue					
1202029237  LCS	1	30	28.0	1.30	2/8/2010@14:05:20	25.00	
245612007	1	31	-0.913	0.0414	2/8/2010@14:06:13		
1202029231  DUP	1	32	-1.27	0.0256	2/8/2010@14:07:07		
1202029233  MS	1	33	89.8	3.99	2/8/2010@14:08:01		
1202029235  MSD	1	34	85.3	3.80	2/8/2010@14:08:54		
245612008	1	35	-0.535	0.0578	2/8/2010@14:09:48		
1202029232  DUP	1	36	-1.07	0.0347	2/8/2010@14:10:41		
1202029234  MS	1	37	86.4	3.85	2/8/2010@14:11:33		
1202029236  MSD	1	38	84.8	3.78	2/8/2010@14:12:26		
245612009	1	39	-0.656	0.0526	2/8/2010@14:13:19		
WCN100208-03	1	S3	105	4.65	2/8/2010@14:14:12		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					
WCN100208-08	1	S7	-1.95	-0.00373	2/8/2010@14:16:04		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					
245612010	1	40	-0.280	0.0689	2/8/2010@14:17:52		
245612011	1	41	-1.09	0.0336	2/8/2010@14:18:45		
245612012	1	42	-1.19	0.0295	2/8/2010@14:19:37		
245612013	1	43	1.77	0.158	2/8/2010@14:20:29		
245612014	1	44	-0.868	0.0433	2/8/2010@14:21:22		
245612015	1	45	-0.814	0.0457	2/8/2010@14:22:13		
245612016	1	46	-1.07	0.0344	2/8/2010@14:23:07		
245688001	1	47	0.570	0.106	2/8/2010@14:24:02		
245688002	1	48	-0.480	0.0602	2/8/2010@14:24:55		
245688003	1	49	-0.404	0.0635	2/8/2010@14:25:50		
WCN100208-03	1	S3	105	4.64	2/8/2010@14:26:41		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					
WCN100208-08	1	S7	-1.47	0.0172	2/8/2010@14:28:32		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.47 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.47 > -5.00					
Message		CCB Passed					
Action		Continue					

245688004	1	50	-0.636	0.0534	2/8/2010@14:30:23		
245688005	1	51	-0.336	0.0665	2/8/2010@14:31:15		
245688006	1	52	1.16	0.131	2/8/2010@14:32:08		
245688007	1	53	-0.543	0.0575	2/8/2010@14:33:01		
245688008	1	54	-1.27	0.0259	2/8/2010@14:33:55		
245688009	1	55	-0.570	0.0563	2/8/2010@14:34:47		
245688010	1	56	-0.384	0.0644	2/8/2010@14:35:40		
1202033006 948940 MB	1	85	-1.45	0.0179	2/8/2010@14:36:34		
1202033013 LCS	1	86	51.4	2.32	2/8/2010@14:37:26		
245926001	1	87	14.3	0.704	2/8/2010@14:38:19		
WCN100208-03	1	S3	105	4.67	2/8/2010@14:39:11		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.57	0.0127	2/8/2010@14:41:01		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.57 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.57 > -5.00				
Message			CCB Passed				
Action			Continue				
245926002	1	88	13.4	0.665	2/8/2010@14:42:50		
245926003	1	89	1.37	0.141	2/8/2010@14:43:43		
1202033008 DUP	1	90	-1.19	0.0293	2/8/2010@14:44:35		
1202033010 MS	1	91	93.6	4.16	2/8/2010@14:45:29		
1202033012 MSD	1	92	94.0	4.18	2/8/2010@14:46:24		
245926004	1	93	-1.04	0.0356	2/8/2010@14:47:19		
245926005	1	94	-1.86	-1.28e-4	2/8/2010@14:48:12		
245926006	1	95	-1.99	-0.00557	2/8/2010@14:49:06		
245926007	1	96	-1.18	0.0298	2/8/2010@14:50:01		
245939001	1	97	-1.20	0.0290	2/8/2010@14:50:54		
WCN100208-03	1	S3	105	4.66	2/8/2010@14:51:47		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				
WCN100208-08	1	S7	-1.83	0.00132	2/8/2010@14:53:37		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.83 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.83 > -5.00				
Message			CCB Passed				
Action			Continue				
245939002	1	98	81.1	3.62	2/8/2010@14:55:27		
245953001	1	99	-11.0	-0.399	2/8/2010@14:56:21		
245965001	1	100	257	11.3	2/8/2010@14:57:14		
245975001	1	101	-1.84	9.46e-4	2/8/2010@14:58:06		
245981001	1	102	-1.72	0.00598	2/8/2010@14:59:00		
246000001	1	103	-1.86	2.83e-4	2/8/2010@14:59:52		
246004001	1	104	-2.03	-0.00731	2/8/2010@15:00:45		
1202033007 DUP	1	105	-1.87	-2.30e-4	2/8/2010@15:01:38		

1202033009	MS	1	106	96.2	4.27	2/8/2010@15:02:32		
1202033011	MSD	1	107	94.3	4.19	2/8/2010@15:03:27		
WCN100208-03		1	S3	104	4.63	2/8/2010@15:04:19		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	4.5 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	4.5 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100208-08		1	S7	-1.82	0.00202	2/8/2010@15:06:09		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.82 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.82 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245939002		1	98	-1.86	1.33e-4	2/8/2010@15:07:59		
245953001		1	99	-1.90	-0.00162	2/8/2010@15:08:53		
245965001		1	100	-1.86	-1.03e-4	2/8/2010@15:09:46		
246056001		1	108	-1.29	0.0251	2/8/2010@15:10:41		
246056002		1	109	-2.00	-0.00595	2/8/2010@15:11:35		
246056003		1	110	-1.42	0.0194	2/8/2010@15:12:29		
246056004		1	111	-2.00	-0.00588	2/8/2010@15:13:23		
246080001		1	112	-1.45	0.0179	2/8/2010@15:14:17		
1202029252	947318 MB	1	57	-1.86	-1.18e-4	2/8/2010@15:15:10		
1202029259	LCS	1	58	29.0	1.35	2/8/2010@15:16:03	25.00	
WCN100208-03		1	S3	104	4.62	2/8/2010@15:16:55		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	4.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	4.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100208-08		1	S7	-1.49	0.0161	2/8/2010@15:18:45		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-1.49 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-1.49 > -5.00				
			Message	CCB Passed				
			Action	Continue				
245797007		1	59	-0.787	0.0468	2/8/2010@15:20:34		
1202029253	DUP	1	60	-0.616	0.0543	2/8/2010@15:21:26		
1202029255	MS	1	61	83.5	3.72	2/8/2010@15:22:20		
1202029257	MSD	1	62	84.4	3.76	2/8/2010@15:23:14		
245797008		1	63	3.82	0.248	2/8/2010@15:24:08		
1202029254	DUP	1	64	1.23	0.135	2/8/2010@15:25:02		
1202029256	MS	1	65	89.1	3.96	2/8/2010@15:25:56		
1202029258	MSD	1	66	78.7	3.51	2/8/2010@15:26:50		
245797009		1	67	-0.647	0.0529	2/8/2010@15:27:43		
245797010		1	68	-0.409	0.0633	2/8/2010@15:28:36		
WCN100208-03		1	S3	105	4.66	2/8/2010@15:29:29		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	5.1 < 10.0				
			Message	CCV Passed				
			Action	Continue				

DQM Test: < - Percent Relative Difference						
Result:		5.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.86	2.47e-4	2/8/2010@15:31:18	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.86 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.86 > -5.00				
Message		CCB Passed				
Action		Continue				
245797011	1	69	1.59	0.150	2/8/2010@15:33:08	
245797012	1	70	-0.296	0.0682	2/8/2010@15:34:00	
245797013	1	71	-0.166	0.0739	2/8/2010@15:34:53	
245797014	1	72	5.34	0.314	2/8/2010@15:35:46	
245797015	1	73	0.400	0.0985	2/8/2010@15:36:38	
245797016	1	74	0.789	0.115	2/8/2010@15:37:31	
245797017	1	75	0.157	0.0880	2/8/2010@15:38:23	
245797018	1	76	3.07	0.215	2/8/2010@15:39:17	
245797019	1	77	-0.779	0.0472	2/8/2010@15:40:11	
245806001	1	78	-1.11	0.0326	2/8/2010@15:41:06	
WCN100208-03	1	S3	105	4.65	2/8/2010@15:41:58	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				
WCN100208-08	1	S7	-1.82	0.00186	2/8/2010@15:43:48	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.82 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.82 > -5.00				
Message		CCB Passed				
Action		Continue				
245806002	1	79	0.0705	0.0842	2/8/2010@15:45:38	
245806003	1	80	-0.264	0.0696	2/8/2010@15:46:33	
245806004	1	81	-0.767	0.0477	2/8/2010@15:47:26	
245806005	1	82	-0.805	0.0461	2/8/2010@15:48:19	
245806006	1	83	-0.580	0.0559	2/8/2010@15:49:13	
245806007	1	84	0.973	0.124	2/8/2010@15:50:06	
1202034313 949504 MB	1	113	-1.24	0.0270	2/8/2010@15:51:00	
1202034315 LCS	1	114	107	4.74	2/8/2010@15:51:53	250.00
246078001	1	115	-1.01	0.0370	2/8/2010@15:52:47	
1202034314 DUP	1	116	-1.86	1.40e-4	2/8/2010@15:53:40	
WCN100208-03	1	S3	105	4.67	2/8/2010@15:54:33	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				
WCN100208-08	1	S7	-1.93	-0.00287	2/8/2010@15:56:23	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.93 < 5.00				

Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.93 > -5.00					
Message		CCB Passed					
Action		Continue					
246078002	1	117	-0.783	0.0470	2/8/2010@15:58:12		
246078003	1	118	-1.88	-6.47e-4	2/8/2010@15:59:05		
246078004	1	119	17.8	0.856	2/8/2010@15:59:58		
WCN100208-03	1	S3	105	4.64	2/8/2010@16:00:51		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		4.6 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		4.6 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.52	0.0147	2/8/2010@16:02:41		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.52 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.52 > -5.00					
Message		CCB Passed					
Action		Continue					

Analyte Properties Table for OM\_2-8-2010\_13-14-40.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

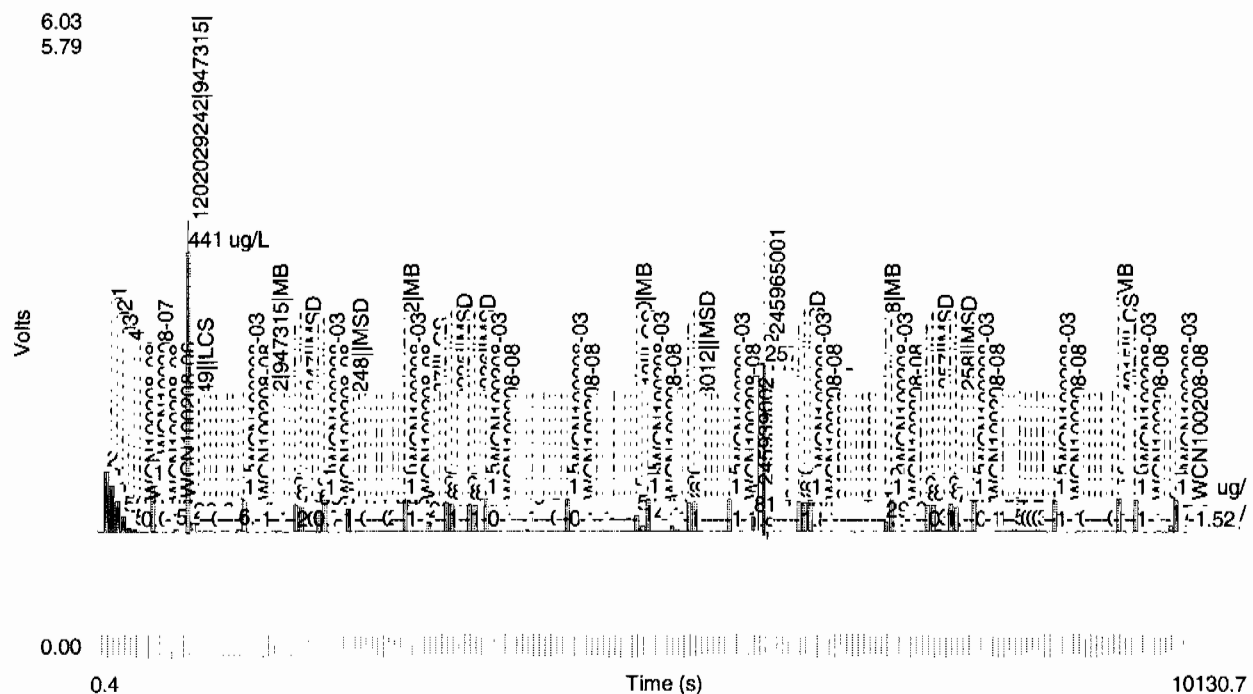


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.74	0.574	0.7	2/8/2010	13:16:28
2	150	1	6.63	0.438	-0.3	2/8/2010	13:17:20
3	100	1	4.52	0.298	-1.8	2/8/2010	13:18:12
4	50.0	1	2.28	0.149	-0.9	2/8/2010	13:19:05
5	10.0	1	0.511	0.0326	1.3	2/8/2010	13:19:59
6	5.00	1	0.321	0.0198	-7.0	2/8/2010	13:20:52
7	0.00	1	0.00906	0.00212		2/8/2010	13:21:47

Figure 1: TCYANIDE

